



Michael Baker
INTERNATIONAL

SAN TAN VALLEY SPECIAL AREA PLAN



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

DATE ISSUED: October 31, 2018

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INTRODUCTION



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

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PURPOSE

A Comprehensive Plan is a common vision or framework for development and growth within a County. It sets forth the principles, policies, physical plan and recommended strategies that have been embraced by a County to shape its future.

The purpose of a Special Area Plan is to expand on the specific elements of a Comprehensive Plan to be more closely associated with community goals and actions that are specific to a defined area. It effectively acts as a link between implementing the broad policies of a Comprehensive Plan and providing further guidance to individual development in a particular location. The San Tan Valley Special Area Plan (STV SAP) explicitly examines the unique issues, concerns, and needs of the San Tan Valley area in order to establish public policy and guidance for future growth in this distinctive portion of Pinal County.

PLANNING AREA

Located in the northwest portion of Pinal County, the San Tan Valley Area Plan encompasses over 70 square miles and extends roughly from the CAP Canal on the east to the San Tan Mountains on the west and from Germann Road on the north to Arizona Farms Road on the south.

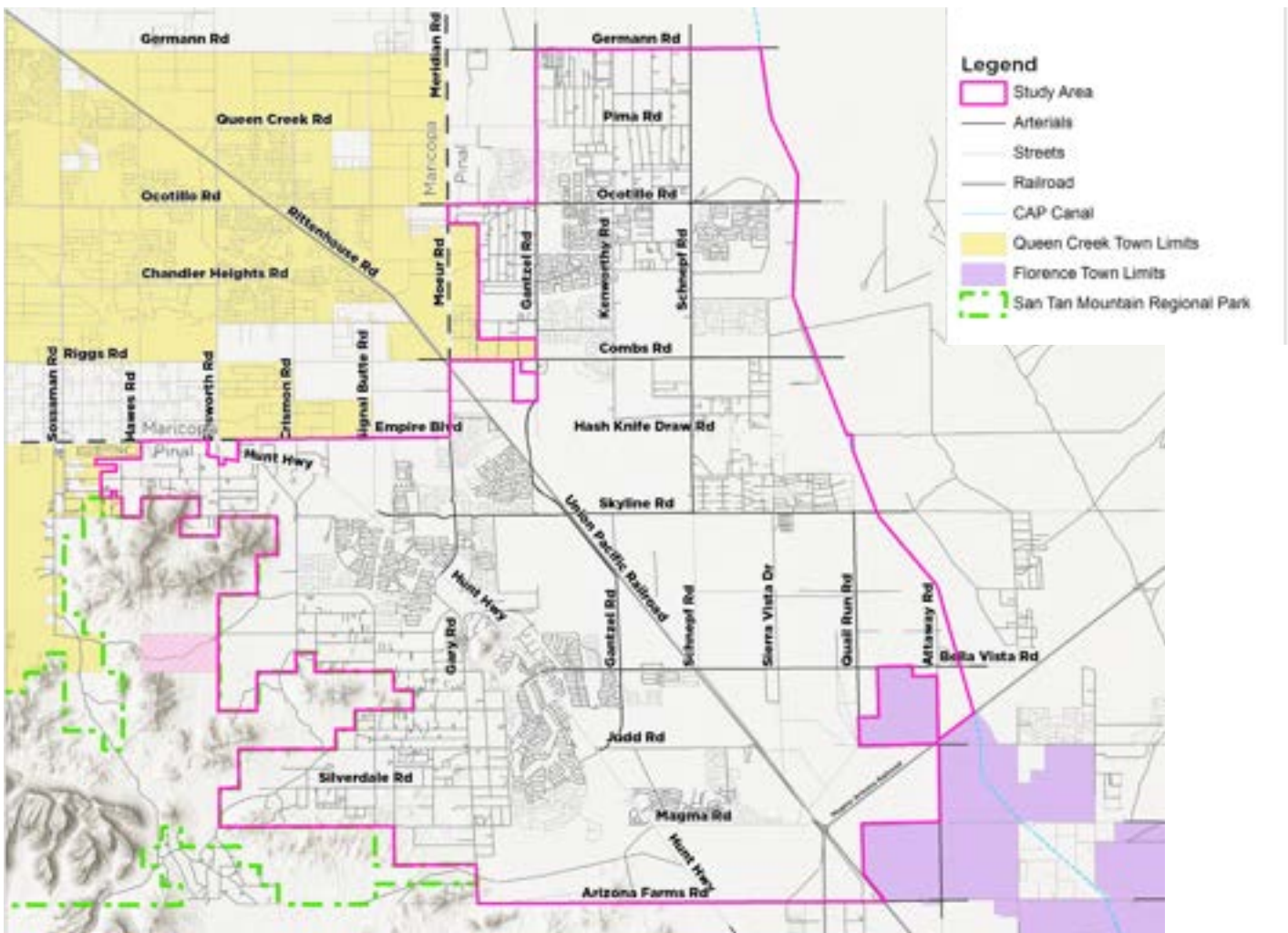


FIG 1.1 PLAN AREA

SPECIAL AREA PLAN AUTHORITY

This plan serves as the primary policy guide for Pinal County Staff, the Planning & Zoning Commission, Board of Supervisors and other government entities as they assess the extent, intensity, location, and character of public investments and private development proposals within the San Tan Valley planning area. Land use decisions should be made in a consistent manner with this plan to ensure that the community's long-term vision for San Tan Valley will be achieved as intended.

It is key to note, this Special Area Plan is a policy document, while the Pinal County Zoning Code is a regulatory ordinance. As such, this plan does not immediately change any existing zoning or PAD entitlement on how land can be used or developed within the planning area. Rather, this plan should be used to guide development decisions, to inform zoning changes or PAD amendments, and to plan infrastructure improvements in the area. Further, as a policy document, any issue or development standard not covered in this plan shall be subject to the applicable regulatory standards including but not limited to; the Pinal County Development Services Code, the Pinal County Comprehensive Plan, the Pinal County Subdivision & Infrastructure Design Manual, the Pinal County Regionally Significant Routes for Safety & Mobility, the Pinal County Access Management Manual, the Pinal County Open Space and Trails Plan, and the Open Space and Recreation Area Guideline Manual. Where conflict occurs within this Area Plan or between the policies of this Area Plan and any other code, standards, regulation, ordinance, or guideline, the more restrictive policy shall control, as determined by the Community Development Director, unless otherwise specified herein.

AMENDING THE PLAN

To keep this Area Plan up to date or to address new issues or opportunities that arise, it will be necessary to make amendments to this plan from time to time. A Major Amendment to this Plan shall be heard once per calendar year consistent with the published Pinal County Comprehensive Plan Major Amendment Process Schedule. Minor Amendments to this plan shall be performed on an as needed basis throughout the calendar year. The following criteria shall be utilized to categorize an amendment as major or minor. A proposed amendment will be a Major Amendment if it meets any of the following:

- Any change from a Rural Living place type to a Suburban Neighborhood place type, or vice versa, of 320 or more contiguous acres.
- Any change from a Rural Living or Suburban Neighborhood place type to any other place type of 160 or more contiguous acres.
- Any change from an Urban Transitional place type to any other place type of 160 or more contiguous acres.
- Any change in Community Center to any other place type of 50 or more contiguous acres to another land use classification.
- Any change in Urban Center to any other place type of 20 or more contiguous acres to another land use classification.
- Any change in Employment Center to any other place type of 50 or more contiguous acres to another land use classification.
- Any proposed deletion of a planned freeway, high capacity roadway, enhanced parkway, parkway, or principal arterials or any proposed two-step change in the functional roadway classification
- Comprehensive Plan text changes that conflict with or alter the Plan's goals and policies.
- Any proposed realignment of a Planned Freeway or a High Capacity Corridor
- Any proposed realignment of an Enhanced Parkway, Parkway or Principal Arterial if the realignment is greater than one half mile in total length, excluding the proposed development site.
- Any proposed realignment of a Regional Trail greater than a mile and a half in any direction or any part of a National, Historic Scenic or National Recreation Trail

Non-Major (i.e. Minor) Amendments are changes to the San Tan Valley Special Area Plan that do not fall under the "Major Amendment" criteria listed above.

RELEVANT PLANS AND DOCUMENTS

To inform this Area Plan effort, many recent plans and documents were reviewed to develop a better understanding of previous policies and decisions that impact San Tan Valley today and into the future. As the planning team moved from analysis, to scenarios, and then ultimately recommendations, these previous plans were continuously referenced for guidance and to ensure continuity. This review effort is a critical part of the overall planning process because the intent of this Area Plan is not to replace these plans, but rather to supplement them where needed, to ultimately define a unified vision for the San Tan Valley area as a whole. Plans and Documents reviewed included:

- Pinal County Comprehensive Plan
- Pinal County Development Services Code
- Pinal County Subdivision & Infrastructure Design Manual
- Pinal County Open Space and Trails Master Plan
- Pinal County CAP Trail Master Plan
- Pinal County Open Space and Recreation Area Guideline Manual
- Pinal County Community Health Assessment
- Pinal County Activity Center Development Guidelines
- Town of Queen Creek General Plan
- Town of Florence General Plan
- Superstitions Vista Area Plan
- San Tan Valley Approved PAD's
- Pinal Regional Significant Routes for Safety and Mobility (RSRSM)
- Pinal County Access Management Manual
- ADOT North-South Corridor Study
- Pinal County Transit Study
- ADOT Passenger Rail Study
- Pinal County Transportation Improvement and Maintenance Program
- MAC Freight Transportation Framework Study
- Phoenix - Mesa Gateway Airport Master Plan/ Airport Land Use Compatibility Plan Update
- Meridian Road Corridor Study
- Germann Road Corridor Improvement Study
- MAC 2040 Regional Transportation Plan
- CAG Regional Transportation Plan - 2015
- Pinal Regional Transportation Authority/Plan

+ Health Impact Assessment

Concurrent to this community based planning effort, the Pinal County Public Health Services District (PCPHSD) received funding from the Arizona Department of Health Services to conduct a Health Impact Assessment (HIA) on the San Tan Valley Special Area Plan.

An HIA is a tool to evaluate the potential positive and negative impacts to health from a proposed project, policy, or plan. HIAs are conducted to inform decision-makers by using existing research, baseline health data, and input from stakeholders to determine potential effects, and then provide recommendations that in turn mitigate negative health impacts and increase health benefits.

Given the development context and expansive nature of the San Tan Valley Special Area Plan, initial recognition was given to the need to focus this HIA effort on those determinants of health that were most relevant to local planning and decision-making. Consequently, through collaboration with County staff, guidance from the HIA Technical Advisory Committee and input from the community, determination was made that the greatest impact to health in the STV area could be achieved through a focus on promoting Physical Activity. Physical activity is an essential component of a healthy lifestyle and can help prevent a range of health outcomes, including the three leading causes of death - heart disease, cancer, and stroke.

After extended research, community workshops, and HIA committee meetings a set of recommendations that included land use guidance and planning policies were developed to positively impact physical activity in the STV community. In the interest of promoting a future state that supports more opportunities for healthy choices within San Tan Valley, the guidance and recommendations that resulted from the HIA process were used to underpin the entire Special Area Plan and thus are incorporated throughout this plan.

Further discussion about the HIA process and results can be found in the San Tan Valley Special Area Plan - Health Impact Assessment report.

PUBLIC OUTREACH

This section describes the extensive and successful outreach efforts of the overall planning process. The campaign for maximizing communication and opportunities for public input included:



Technical Advisory Committees

To help guide the overall planning process and ensure resident voices were heard and technical issues properly considered, the project team conducted an ongoing series of conversations, reaching out to key stakeholders through the formation of the following Technical Advisory Committee's: General Advisory, Transportation & Infrastructure, Business & Economy, and Health Impact Assessment. Each committee was comprised of 20-30 members that consisted of applicable public agency representatives, business industry members, health specialists, and involved citizens. Over the course of the project, a total of three technical advisory conversations were held with each committee. The first conversations involved issue identification and information sharing. The second conversation reviewed existing conditions and assessed alternative scenarios. The final conversation focused on validating the preferred land use plan and defining plan policy.

Community Workshops

The project team hosted two sets of community workshops during the planning process. The first series of workshops, held in the north and south sections of the planning area to increase participation, focused on introducing the community to the Special Area Plan project and obtaining their opinion regarding various assets, issues, and opportunities within the San Tan Valley area relative to four primary topic areas: Neighborhoods and Community Character, Business and Economic Development, Transportation and Infrastructure, and Healthy Lifestyle. Over 500 residents and other interested individuals participated in these initial interactive workshops.

The second series of workshops received over 150 participants and were held again in the north and south sections of the planning area. During these workshops, the project team shared three alternative land use scenarios that were developed based on feedback obtained during workshop one. A matrix of performance indicators was also provided to help inform participants regarding the potential land use and health impacts of each scenario. Benefited with this information, participants were then asked to provide their preferences amongst the three scenarios. This feedback was then used to inform the development of the preferred land use plan and recommended area plan policies.

Digital Engagement

To offer an opportunity for the public to participate on their schedule, an informative project website and Facebook page was created. These interactive websites allowed viewers to stay updated on project process and events, review plan documents, provide feedback, and utilize web based GIS mapping tools to conduct their own review of existing planning conditions in the San Tan Valley area.



Mainstream Media

Traditional print and online news articles were also published that provided opportunities to communicate the plan's purpose, objectives and emerging recommendations.



EXISTING CONDITIONS



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

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BASELINE DATA

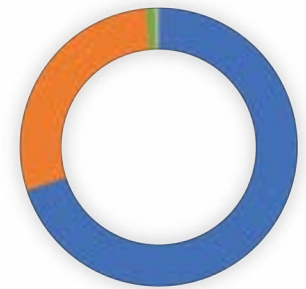
Land Composition & Jurisdictional Boundaries

The type and distribution of land ownership within the study area is a leading determinant of how, when, and in what manner land may be used or developed in the future. The large majority of land within the San Tan Valley Special Area Plan boundary is either privately owned (70%) or State Trust land (28.6%). The small remaining portion of the study area is comprised of Bureau of Land Management (1.0%) and Bureau of Reclamation (0.4%) lands.

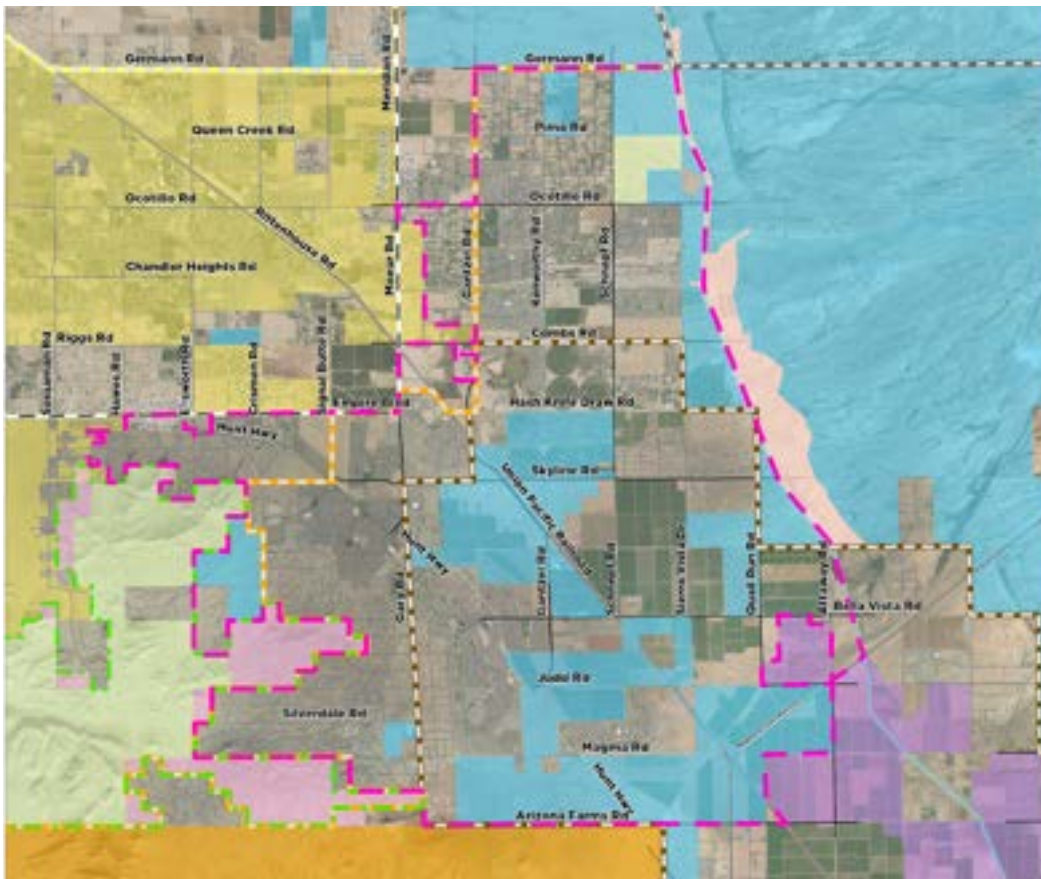
The municipal and jurisdictional boundaries of the study area along with the communities that surround it also have an impact on and play a role in the future planning of the San Tan Valley area. As indicated in Figure 2.2, portions of Queen Creek's and Florence's incorporated town limits stretch into the northern and southern portions of the San Tan Valley region. Consequently, the study area boundary for this Area Plan naturally excludes land that is not under the governmental authority of Pinal County.

While the study area only includes unincorporated land within Pinal County, large portions of the study area are located within the Queen Creek and Florence planning boundaries. These planning boundaries indicate the future growth limits of these communities. The timetable for annexation of these unincorporated lands is unknown, however, as of the timing of this planning process, Queen Creek is actively annexing two portions of the study area into their town limits.

FIG 2.1 LAND OWNERSHIP



- State Trust (28.55%)
- Private (69.97%)
- Bureau of Land Management (1.07%)
- Bureau of Reclamation (0.41%)



- Legend**
- Study Area
 - Arterials
 - Streets
 - Railroad
 - CAP Canal
 - Jurisdictional Boundaries**
 - Mesa Planning Boundary
 - Apache Junction Planning Boundary
 - Queen Creek Planning Boundary
 - Florence Planning Boundary
 - Queen Creek Town Limits
 - Florence Town Limits
 - San Tan Mountain Regional Park
 - Land Ownership**
 - County Land
 - BLM
 - State Trust
 - Gila River Indian Reservation
 - Bureau of Reclamation

FIG 2.2 CONTEXT MAP

Population & Growth

Examining past and projected population growth is essential to effectively plan for the housing, social services, economic development, and infrastructure needs that are directly associated with such change.

In the decade from 2000-2010, San Tan Valley grew from a rural area of 4,976 residents to an urban community of 86,665 people, or equivalent to the 12th largest community in Arizona at that time. Over the most recent years, San Tan Valley growth has slowed with the population expanding from 93,367 people in 2014 to 102,539 people in 2016. This dramatic 10% growth rate took San Tan Valley from accounting for just 3% of Pinal County's total population in 2000 to accounting for over 25% of the County's population today.

As Figure 2.4 shows, while San Tan Valley's growth rate has consistently outpaced the overall growth rate for Maricopa and Pinal Counties, the rate of growth in San Tan Valley is projected to slow slightly in the near future. Looking further towards the future, the Maricopa Association of Governments (MAG) population projections show that San Tan Valley is expected to continue to grow, reaching approximately 119,186 residents by 2030 and an estimated 157,860 residents by the year 2050. This equates to a total population increase of 54% in San Tan Valley over the next 34 years.



Given the changes in the composition of the population that is already occurring nationally, along with the affordability of housing in the planning area, San Tan Valley will most likely continue to attract the two largest generations, Baby Boomers and Millennials. According to studies completed by the American Planning Association, these two groups demand similar things. They want walkable neighborhoods, smaller homes, places that create unique experiences, and multiple transportation choices.

FIG 2.3 POPULATION GROWTH

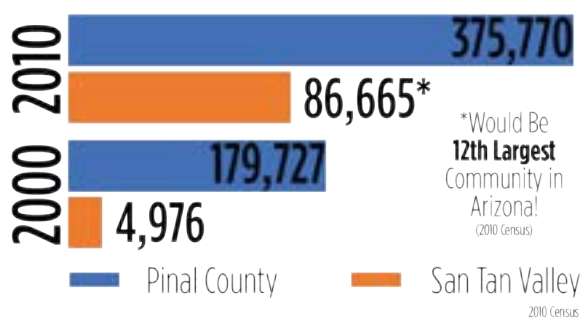
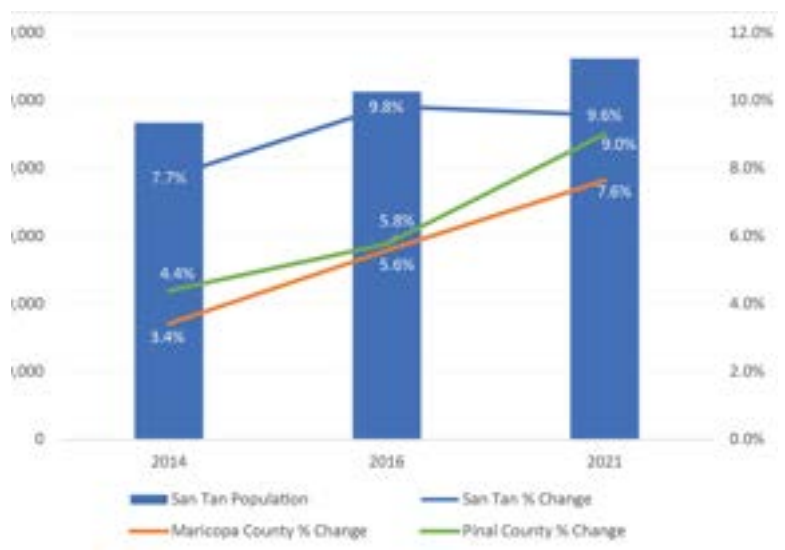


FIG 2.4 POPULATION PROJECTION



Population Characteristics

Understanding the composition of San Tan Valley’s population is necessary because the relationship residents have with, and thus needs they place on, their community changes with their stage of life.

Assessment of the age distribution within San Tan Valley shows 42% of residents are in their prime working years of 25-55 years of age, which is greater than all of Maricopa County at 40%. San Tan Valley residents are also younger, with a median age of 29.7 compared to Maricopa County at 35.4.

Relative to race and ethnicity, the population of San Tan Valley is predominantly White at 66 percent followed by Hispanic at 22 percent. When comparing San Tan Valley to Maricopa County and the State of Arizona as a whole, San Tan has a higher percentage of White and Pacific Islander population and a lower percentage of Hispanic and Asian population.

The relatively young make-up of the overall population in San Tan Valley typically translates to a higher number of first-time home buyers with increased demands for quality-of-life amenities such as restaurants, retail shops, cultural events and youth related facilities. This younger demographic also exhibits prime entrepreneurial-age adults that can contribute to the local job market by developing the types of opportunities that lead to career level employment.



FIG 2.5 POPULATION BY AGE

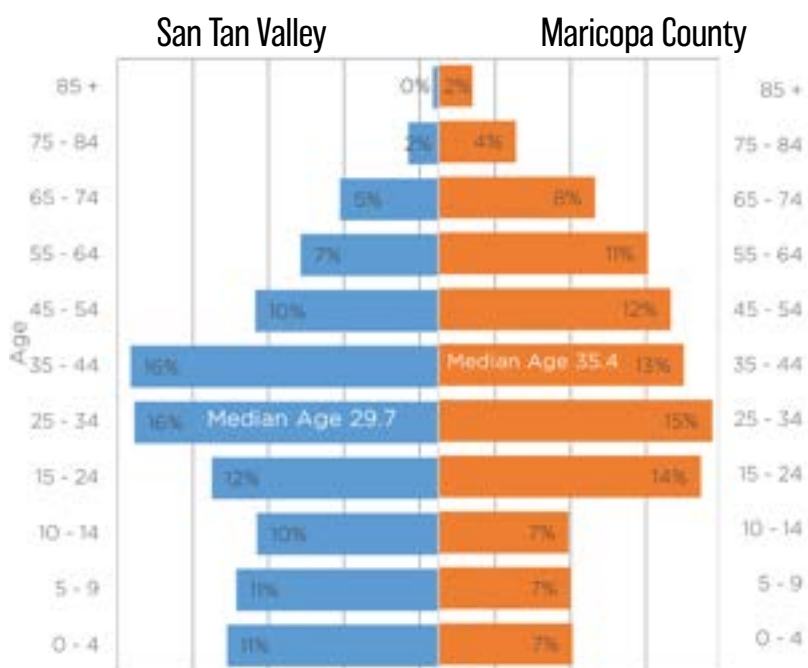
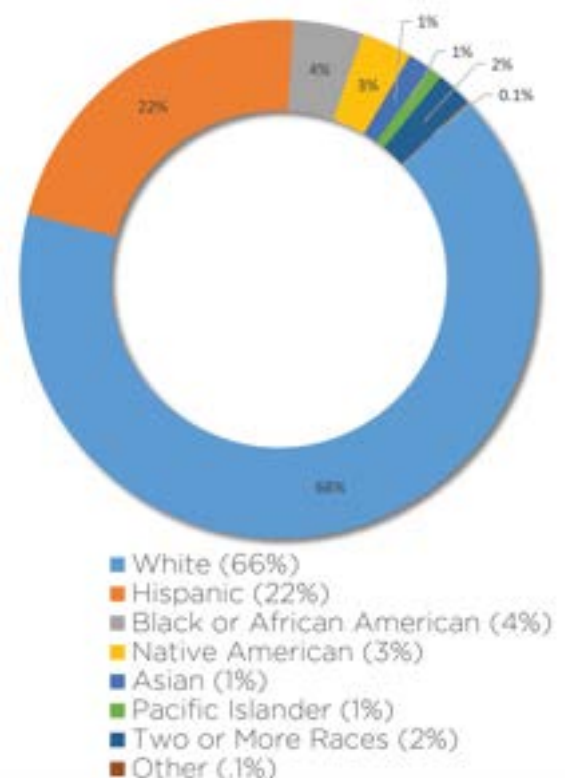


FIG 2.6 RACE AND ETHNICITY



NEIGHBORHOODS & COMMUNITY CHARACTER

Long Range Plan

Within the San Tan Valley study area, the Comprehensive Plan's Land Use Plan Map (see Figure 2.7) designates large swaths of the community for Moderate Low Density Residential uses at 1-3.5 dwelling units per acre. However, to provide flexibility, alternative land uses including Medium and High Density Residential, Commercial, and Employment may also be allowed in Moderate Low Density Residential areas if certain guidelines are met. The Land Use Plan also accounts for Mixed Use Activity Centers and large nodes for Employment uses within the study area. Conversely, the unique rural nature of the San Tan Foothills Area is maintained through lower density residential land use designations and individual goals, objectives and policies. See the San Tan Valley Special Area Plan - Existing Conditions Report for further discussion regarding the Town of Florence and Town of Queen Creek General Plans.



While the Comprehensive Land Use Plan provides for flexibility to account for changing market demands, lack of a clear development pattern can make long-term planning for necessary transportation, community services and infrastructure demands more challenging.

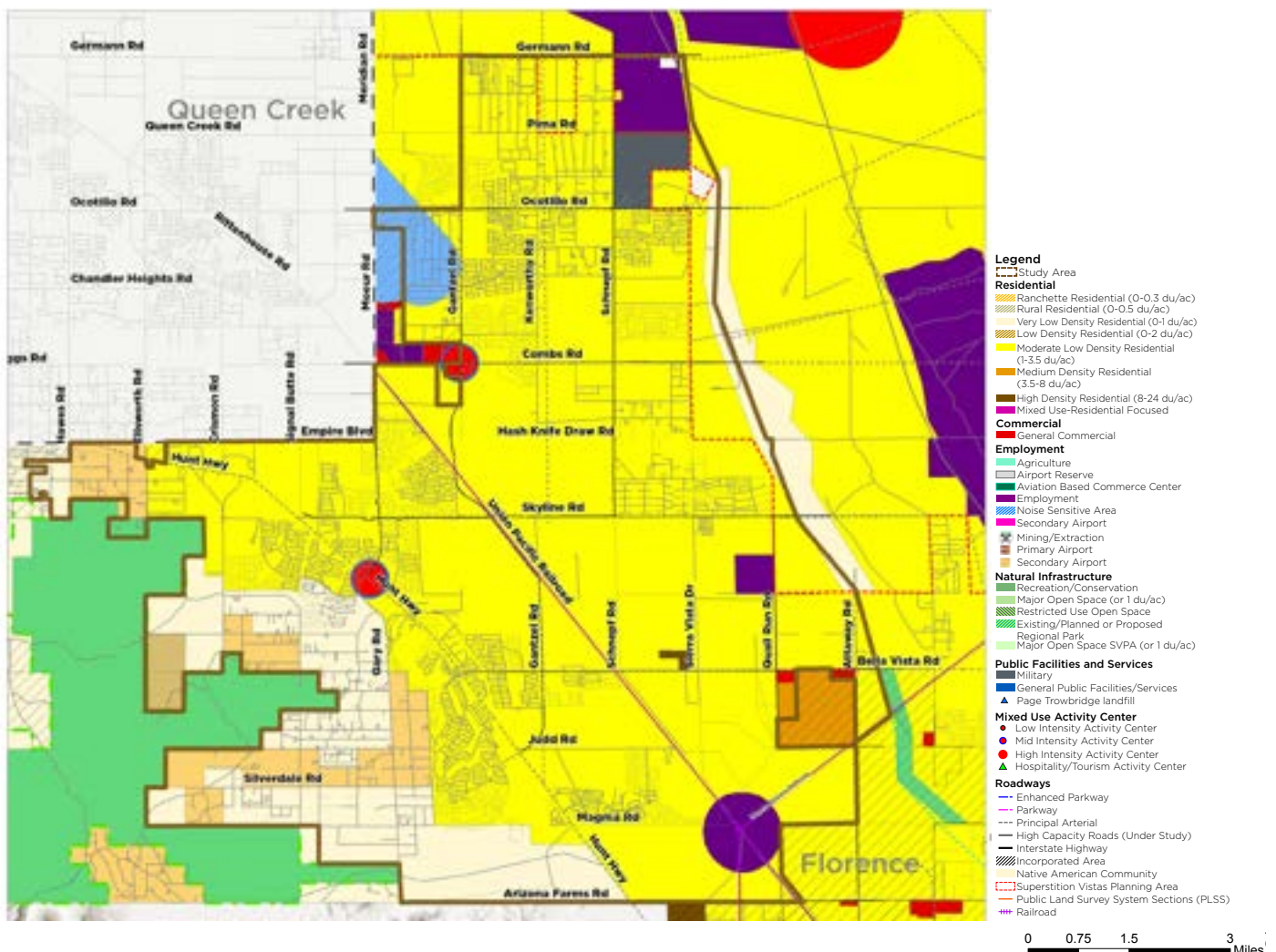


FIG 2.7 COMPREHENSIVE PLAN

Zoning & Development Status

Planned Area Development (or PAD) zoning is a “tool” within the County Zoning Ordinance that allows flexibility in meeting the Zoning Ordinances set standards in exchange for the application of more imaginative and innovative approaches to development. Since development can generally move to construction plan approval once PAD zoning is in place, understanding the existing pattern of PAD development within the study area is extremely important because it provides the most detailed insight into what type and how much of a particular land use may physically be developed within San Tan Valley in the future.

As of 2016, the combined zoning entitlement for all approved PAD’s within the San Tan Valley planning area totaled approximately 60,583 single family residential units. This is almost twice the amount of the 36,488 housing units that existed in San Tan Valley in 2016. Since 1990, approximately 43,140 of those entitled lots have been platted into actual parcels to allow for the physical development of individual single-family homes. Currently, those platted lots are distributed through 84 individual PAD’s or subdivisions within the planning area. When we compare the total number of platted lots to the total number of existing housing units in San Tan Valley, we also see a general approximation that there are still roughly 6,652 platted lots within the planning area that have yet to be built on. This is in addition to the approximate 17,443 lots that have been entitled as part of an approved PAD, but have yet to be platted.

The trend to utilize the PAD zoning option so extensively within the San Tan Valley planning area, reflects a need by the development community for flexible zoning to respond to market fluctuations. Further, if growth continues as projected, the existing sizeable supply of entitled, but yet to be platted or built single-family residential lots within the planning area indicates a potential long term need for alternative housing types within the planning area as San Tan Valley continues to become more urbanized.



FIG 2.8 DEVELOPMENT STATUS

Entitled vs. Platted Lots

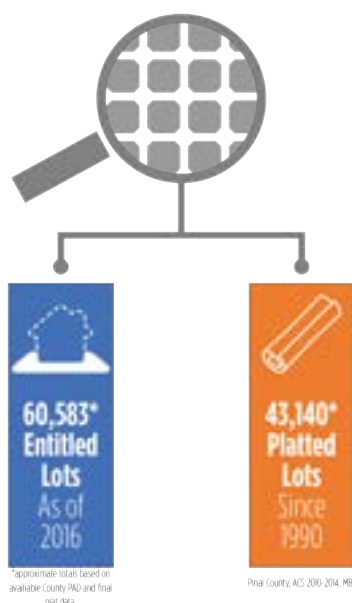


FIG 2.9 PLANNED DEVELOPMENT

84 number of approved PAD’s & subdivisions within the San Tan Valley Study Area



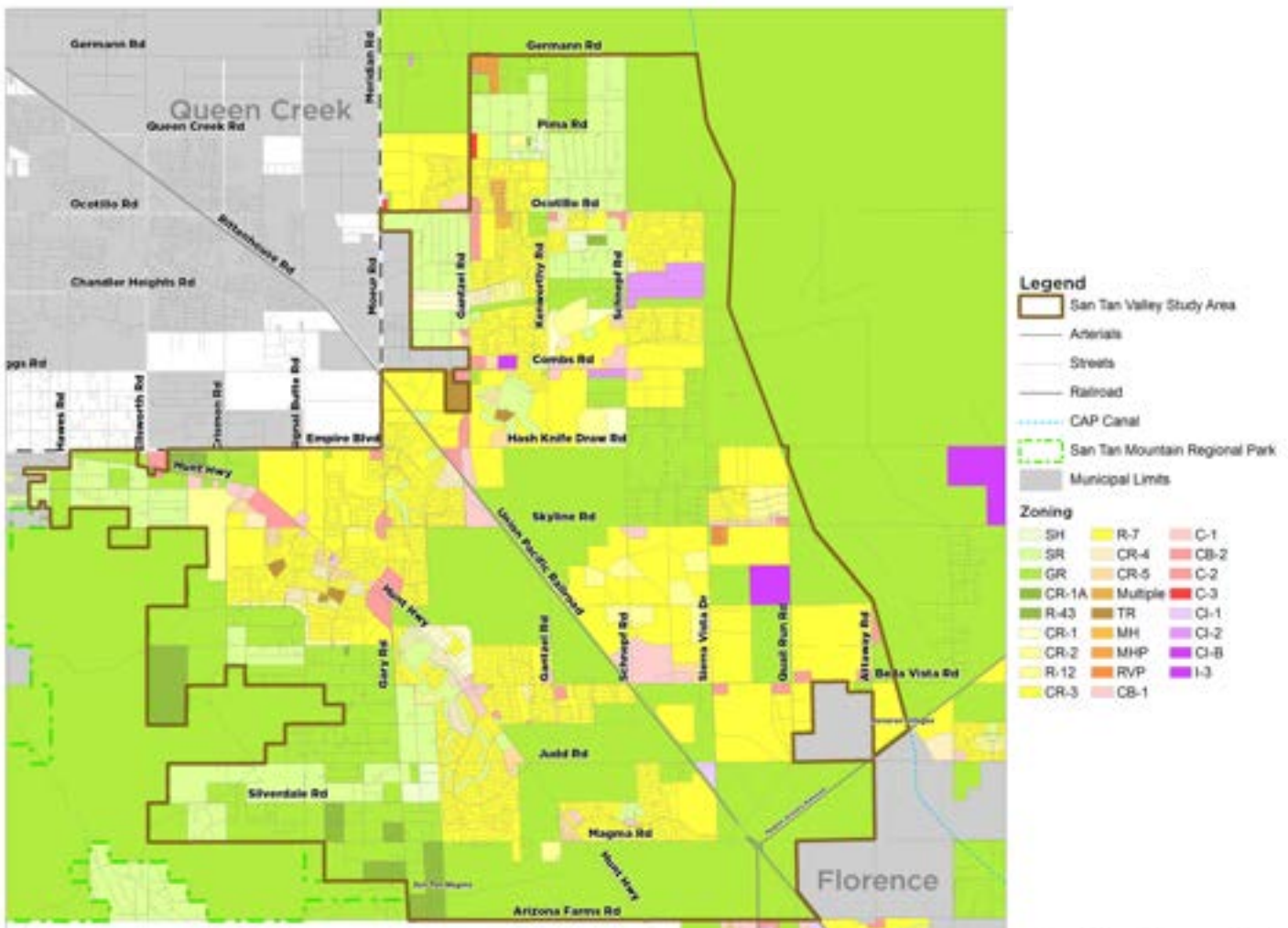


FIG 2.10 ZONING MAP

Existing Land Use

Analyzing existing land use types, locations, and patterns are the primary metrics used to understand and gain insight into the current and future land use needs of a community.

The existing land uses in San Tan Valley include agriculture, rural (large-lot) residential, suburban (single-family detached) residential, commercial, industrial, public/semi-public, open space (parks/golf course), and vacant land. The majority of the developed area in San Tan Valley is devoted to suburban residential and rural residential development with limited amounts of public/semi-public and neighborhood parks/ golf courses distributed within these areas. Agriculture and vacant land is still a prominent land use in the central and southern portions of the study area. The San Tan Valley area lacks significant commercial or industrial areas, but there are primary clusters located at Hunt Highway and Gary Road, Hunt Highway and Bella Vista Rd., Hunt Highway and Copper Mine Rd., Combs Rd. and Cantzel Rd. as well as Ocotillo Rd. and Ironwood Rd.



The high percentage of moderate to low density residential uses illustrates the strong adherence to the land use vision of the Pinal County Comprehensive Plan, but also magnifies the lack of proximate access to commercial goods and services and to recreational amenities that are essential to a high quality of life. In addition, the large amount of agriculture and undeveloped land represents areas under pressure for future growth and development, however, the low percentages of employment based uses are indicative of the transportation and public facility challenges that are often felt in emerging “greenfield” development areas that experience rapid growth.

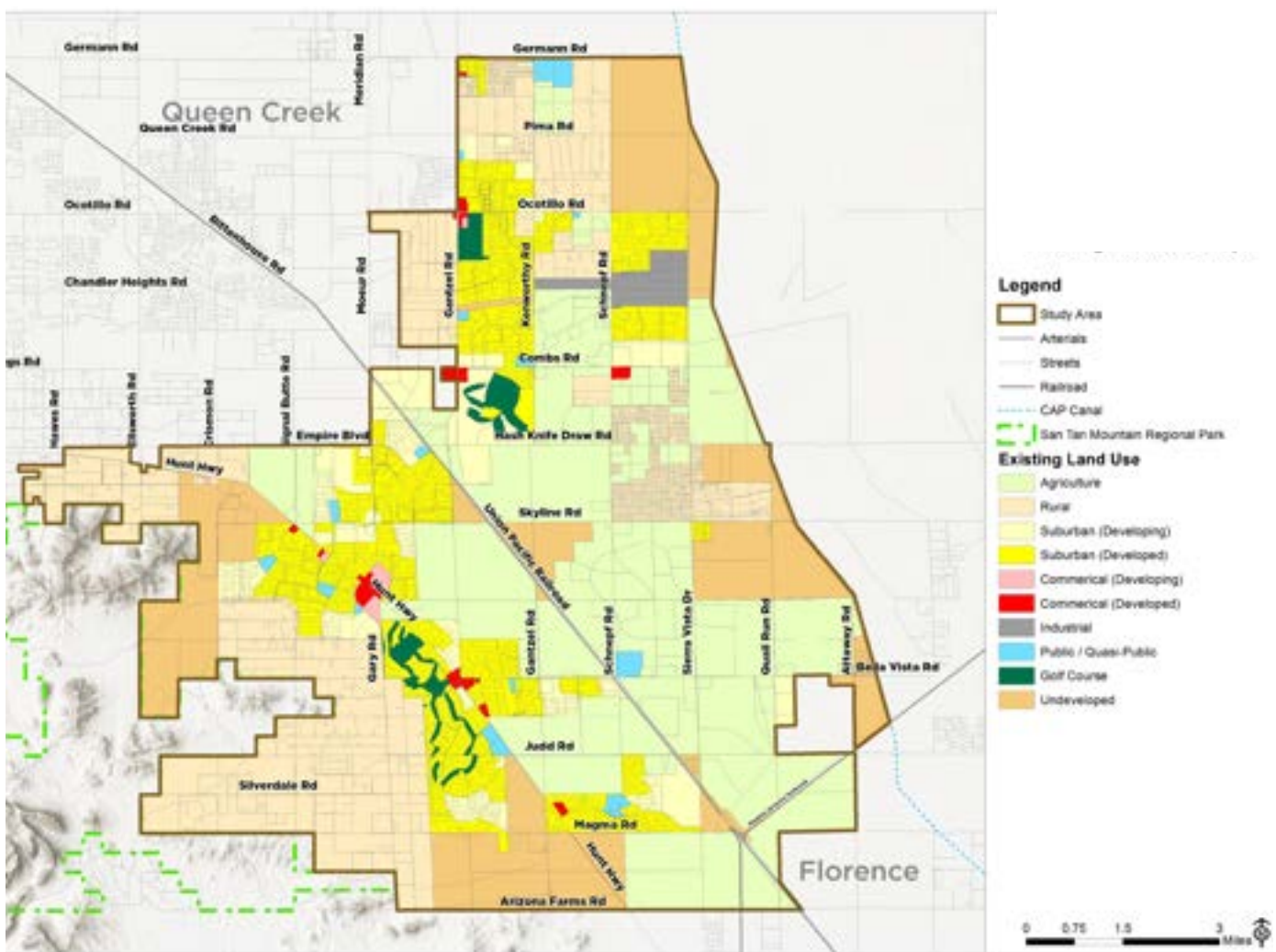


FIG 2.11 EXISTING LAND USE MAP

Housing

Examining the characteristics of San Tan Valley’s housing stock is central to the task of embracing existing neighborhoods, while preparing for the diverse needs of future residents.

At present, there are 36,488 housing units in San Tan Valley, which accounts for 21% of all housing units in Pinal County. A larger percentage of these housing units are owner occupied at 63% compared to Maricopa County at 53%, while 22% are renter occupied and 16% are vacant. The distribution of housing types in San Tan Valley is dramatically skewed with detached, single-family homes accounting for 99.5% of all units, leaving only 0.5% dedicated to multi-family units, such as duplexes, town homes, and apartments. Household size in San Tan Valley is quite large, averaging 3.34 persons per household compared to Maricopa County at 2.69. Housing in San Tan Valley is also quite affordable with a median home value of \$147,589, compared to Maricopa County at \$219,742.



The strong majority of owner occupied unit’s in San Tan Valley signals stability in the market by showing a less transient population, while the fact that the planning area is bucking the regional and national trend toward smaller household sizes can be attributed to the large dedication of single-family homes and the younger population base in San Tan Valley overall.

FIG 2.12 TOTAL HOUSING UNITS

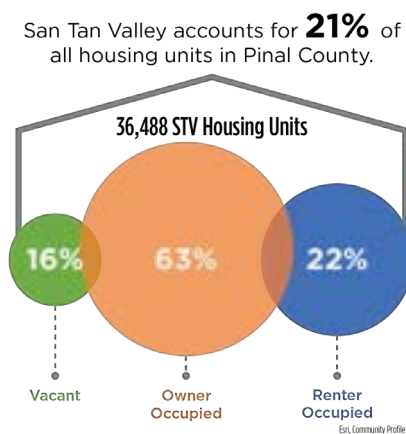


FIG 2.13 HOUSING TYPE

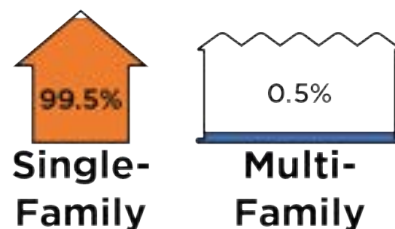
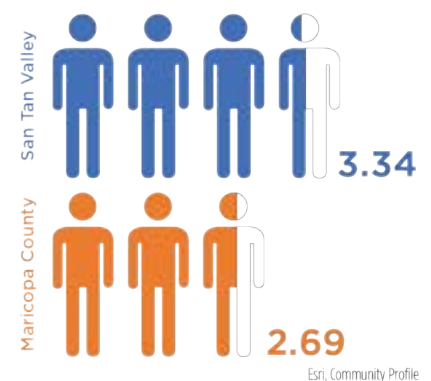


FIG 2.14 AVERAGE HOUSEHOLD SIZE



Urban Form & Character

The urban form and character of San Tan Valley is defined by many factors including natural features, the type and architectural style of buildings, along with the quality of public spaces, which includes street patterns and dimensions, landscape design, and types of materials used. By evaluating the urban form we can begin to identify challenges and opportunities related to the continued evolution of San Tan Valley.

Natural Features

Natural features within San Tan Valley play a signature role in shaping and influencing the urban form of the community. Beyond name recognition, the San Tan Mountains provide a signature backdrop to the planning area. The historic impact and continued presence of agriculture production in the community also influences much of the architecture style and choice of building materials utilized in San Tan Valley. Queen Creek runs east-west through the northern portion of the community, however, intermittent flows and significant sand and gravel operations have impacted its visual quality and impact within the community.



Built Environment

The character of the built environment within San Tan Valley is homogenous in some respects and varies widely in others. Much of the large lot residential development follows the historic rural history of the community, reflecting adobe or ranch style homes with various types of material and typically unpaved driveways.



Several of the residential subdivisions within the community exhibit some of these same agrarian ranch style design elements in their entry features and common spaces, however, the preponderance of residential and commercial architecture reflects traditional southwestern style design. This includes stucco facades, tile roofs, and promotion of earth tone color palettes. In contrast, more recent public facilities like the Banner Ironwood Medical Center and Central Arizona College, San Tan Campus implemented a more modern design with extensive use of glass and modern building materials.



Streetscape

Given the lack of consistency in building form, street patterns and landscaping serve as the character-giving aspect for most of the community. San Tan Valley is largely dependent on a small number of major streets for through connections. These streets are typically improved in concert with adjacent development and therefore often lack a consistent cross-section and unified landscape design along their entire length. Most collector streets are improved with detached sidewalks and street trees on either side of the street, but lack striped bike lanes. Local residential streets typically have an attached sidewalk on one side of the street and are dependent on adjacent private front yards for landscape plantings.

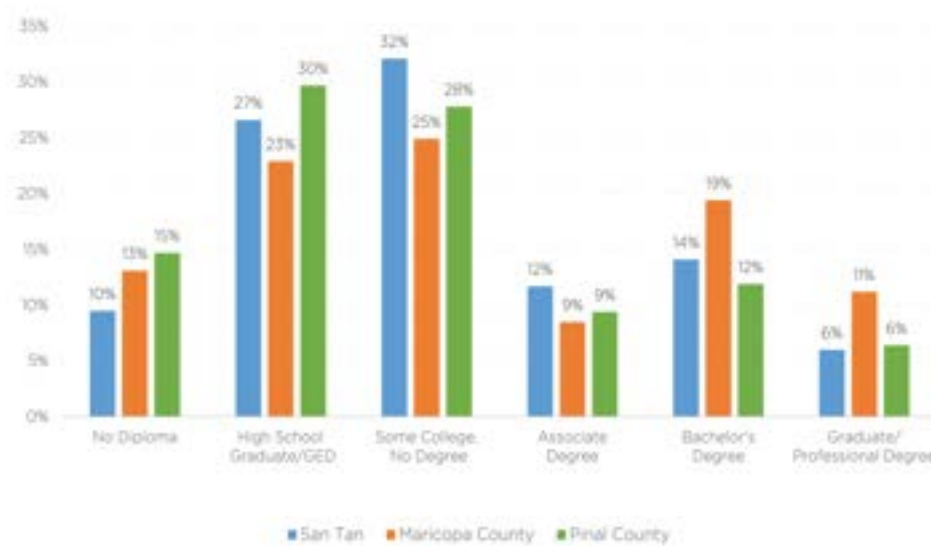


BUSINESS & ECONOMIC DEVELOPMENT

Education

Educational attainment is directly tied to income potential, and the key to increasing income is the attainment of higher education. Residents in San Tan Valley currently lag Maricopa County in the attainment of a Bachelor's or Graduate Degree, but exceed Pinal County. Presently, residents of San Tan Valley who have earned either a Bachelor's or Graduate Degree amount to 20 percent, compared to Maricopa County at 31 percent. This is an important consideration for business who may consider San Tan as a future location.

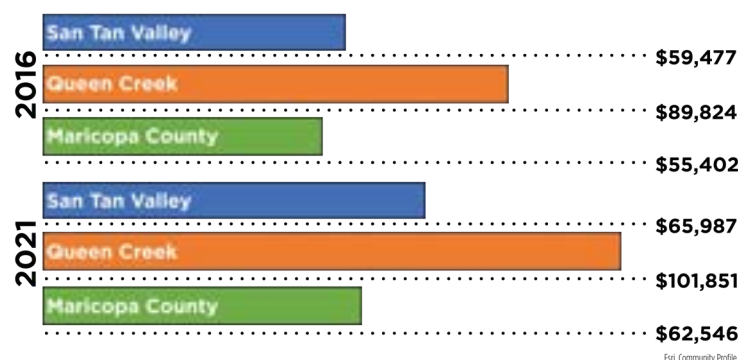
FIG 2.15 EDUCATIONAL ATTAINMENT



Income

San Tan Valley has a median household income of \$59,477, which is higher than Maricopa County at \$55,402. The median income of San Tan Valley residents is projected to increase 11 percent by 2021, which is slightly less than the projected increase for Maricopa County. Creating higher wage jobs will help San Tan Valley keep pace with the County.

FIG 2.16 MEDIAN HOUSEHOLD INCOME

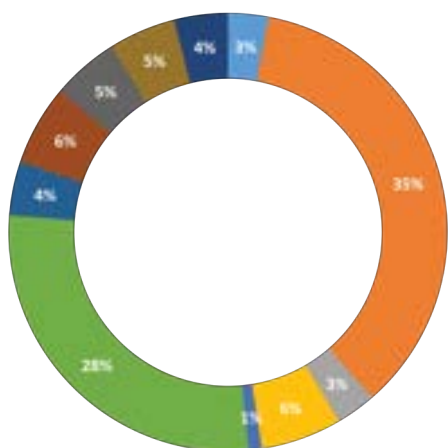


Employment Characteristics

An examination of employment characteristics reveals that of the 32,552 employed San Tan Valley residents, the vast majority (98%) commute to higher paying jobs outside of San Tan Valley. Of those, 80 percent are working in Maricopa County. These jobs are within a diverse mix of industries such as manufacturing (13%), professional services (13%), healthcare (13%) and retail, accommodation and food services (23%).

The 2,257 jobs that are located in San Tan Valley are highly concentrated in retail, accommodations and food services (36%) and education sectors (28%). The majority of these jobs (69%) are filled by workers who commute into San Tan Valley for employment. See the San Tan Valley Special Area Plan - Existing Conditions Report for further discussion regarding employment characteristics and commute patterns.

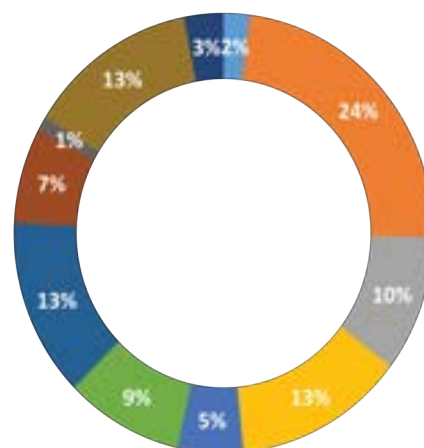
FIG 2.17 EMPLOYMENT IN SAN TAN VALLEY



- Arts/Entertainment/Recreation (3%)
- Retail/Accommodation/Food Service (36%)
- Information/Finance/Insurance/Real Estate/Mgmt (3%)
- Professional Services/Admin & Support (6%)
- Government (1%)
- Education (28%)
- Health Care (4%)
- Utilities/Construction (6%)
- Agriculture/Mining (5%)
- Manufacturing/Wholesale Trade/Transportation (5%)
- Other Services (4%)

U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2014)

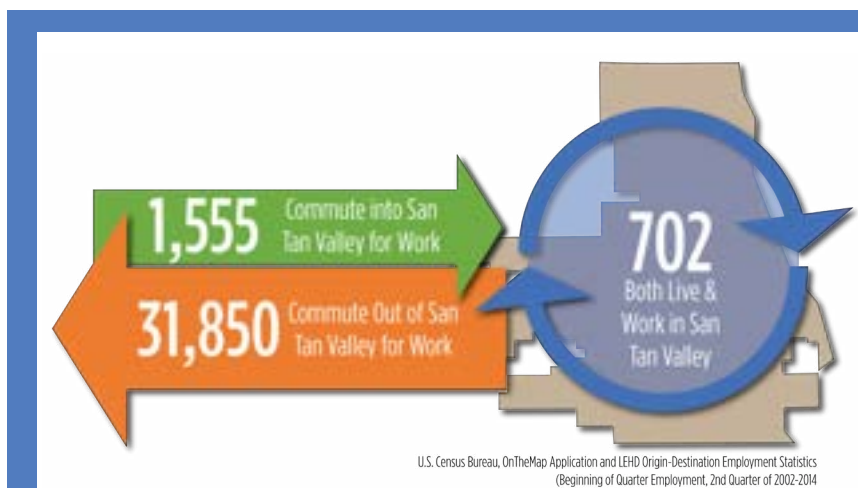
FIG 2.18 INDUSTRIES SAN TAN VALLEY RESIDENTS ARE EMPLOYED IN



- Arts/Entertainment/Recreation (2%)
- Retail/Accommodation/Food Service (23%)
- Information/Finance/Insurance/Real Estate/Mgmt (10%)
- Professional Services/Admin & Support (13%)
- Government (5%)
- Education (9%)
- Health Care (13%)
- Utilities/Construction (7%)
- Agriculture/Mining (1%)
- Manufacturing/Wholesale Trade/Transportation (13%)
- Other Services (3%)

U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2014)

FIG 2.19 WORKFORCE TRAVEL PATTERN



The lack of employment opportunities within San Tan Valley can be revealed through an analysis of workforce travel patterns. When examining the inflow and outflow of workers to and from San Tan Valley, the most recent data reveals that of the 32,552 employed San Tan Valley residents, 98 percent commute to jobs outside of San Tan Valley, while 1,555 workers commute into San Tan Valley. Another 702 both live and work in San Tan Valley, as depicted in the following image.

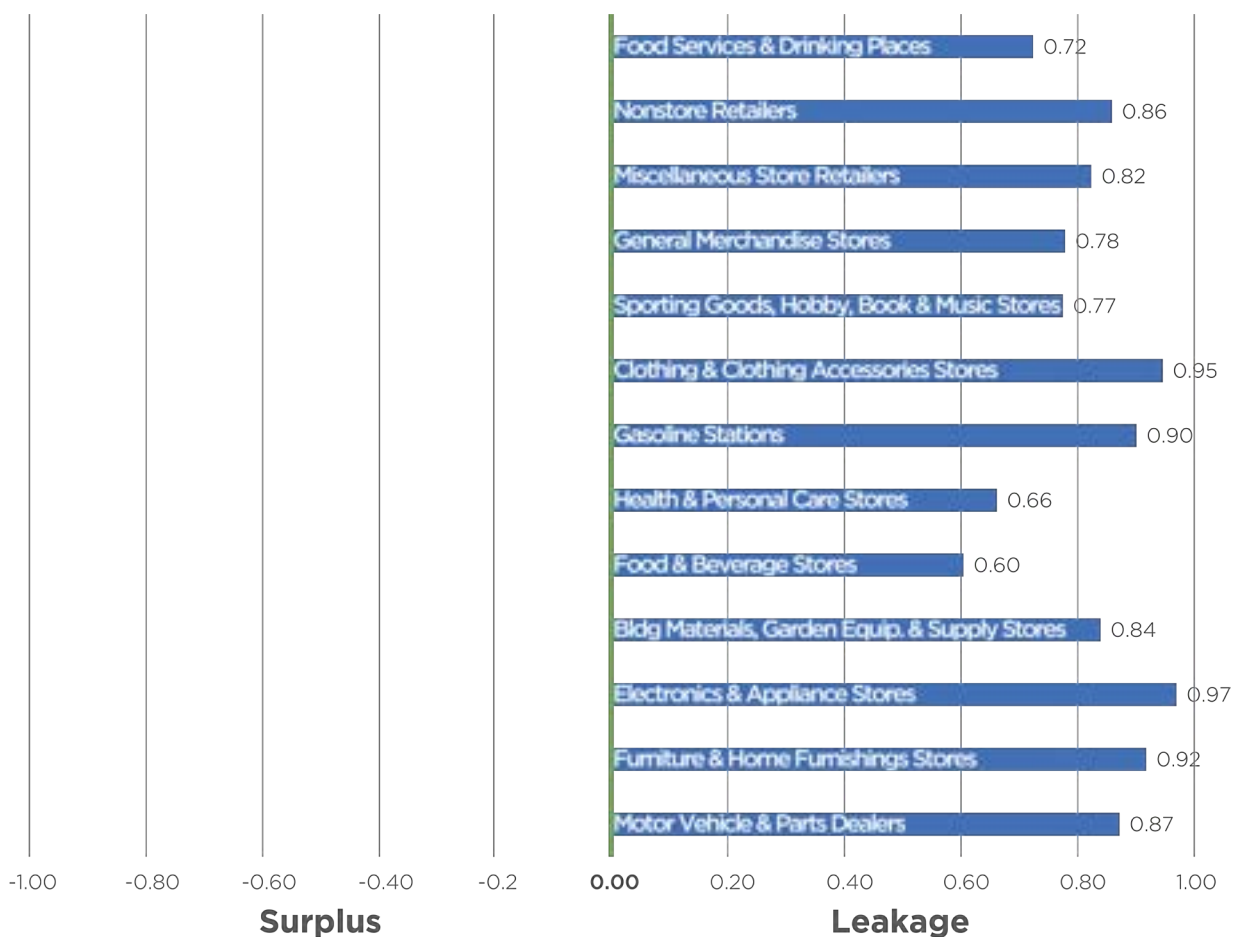
Household Spending

Figure 2.20 depicts the leakage/surplus index for San Tan Valley. Within all retail categories the demand exceeds sales by 79 percent, meaning that significant retail trade leakage is occurring. Equilibrium in a market is 0. Anything below 0 means you are attracting shoppers from outside your area. Conversely, anything above 0 means leakage is taking place. A value of .72 means that demand exceeds sales by 72 percent. Every retail item in the chart below shows that consumers are leaving the area to shop.

The potential spending of residents in San Tan Valley is estimated at \$1.13 billion. However, due to the limited offerings of general merchandise, food and beverage stores and restaurants, the ability to purchase locally is extremely restricted, therefore resulting in over \$900 million in trade leakage.



FIG 2.20 SAN TAN VALLEY LEAKAGE/ SURPLUS INDEX



TRANSPORTATION & UTILITY INFRASTRUCTURE

Preceding Transportation Plans

San Tan Valley has been a component of several thoughtful transportation planning efforts in the recent past. To build on this collaborative progress all relevant transportation plans were thoroughly reviewed and key aspects are detailed in the San Tan Valley Special Area Plan - Existing Conditions Report. A list of these plans includes the following:

- Pinal Regional Significant Routes for Safety and Mobility (RSRSM)
- ADOT North-South Corridor Study
- Pinal County Transit Study
- ADOT Passenger Rail Study
- Pinal County Transportation Improvement and Maintenance Program
- MAG Freight Transportation Framework Study
- Phoenix - Mesa Gateway Airport Master Plan/ Airport Land Use Compatibility Plan Update
- Meridian Road Corridor Study
- MAG 2040 Regional Transportation Plan
- CAG Regional Transportation Plan - 2015
- Pinal Regional Transportation Authority/Plan

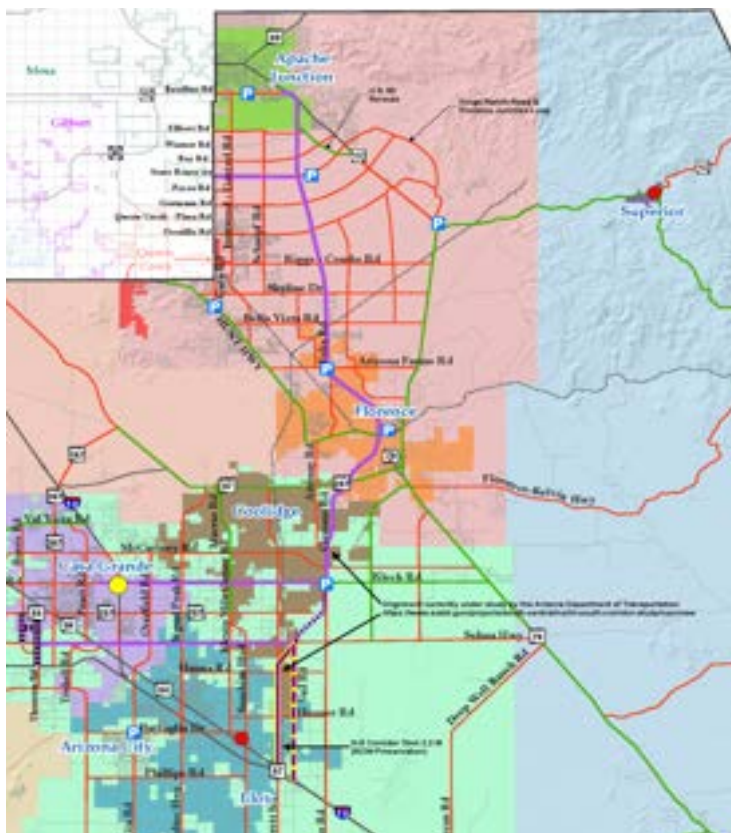


FIG 2.21 REGIONALLY SIGNIFICANT ROUTES FOR SAFETY & MOBILITY (RSRM)

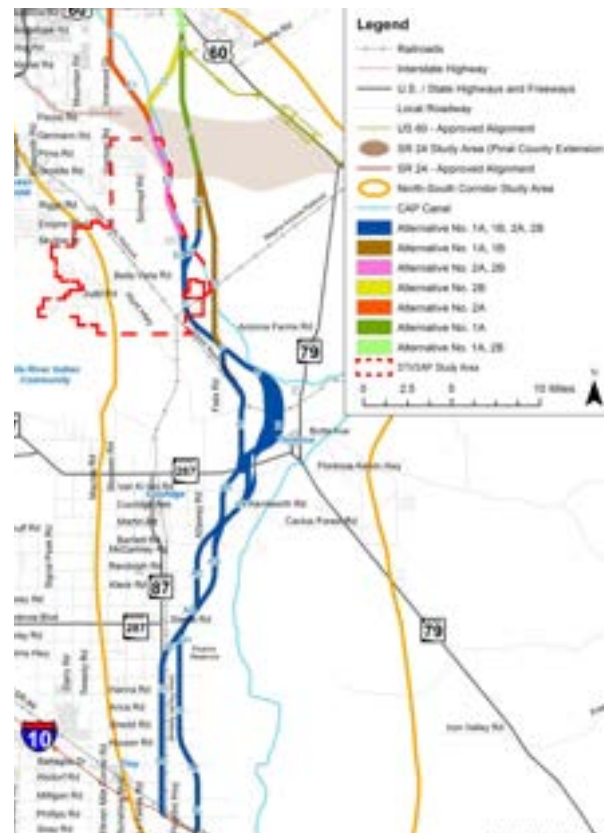


FIG 2.22 ADOT NORTH- SOUTH STUDY MAP

Transportation System

Providing a well-connected network of roads can help distribute traffic congestion, reduce travel distances and times, as well as improve emergency response.

Five major roadways; Hunt Highway, Ironwood Road, Gary Road, Ocotillo Road and Combs Road provide the primary north-south and east-west connections into the San Tan Valley community. Other major roadways that provide important connections within and through San Tan Valley include Gantzel Road, Bella Vista Road, Arizona Farms Road, Germann Road, and Schnepf Road. There are then a number of collector and local streets that feed into these major roadways creating a relatively well-connected street network, however, generally only at the individual subdivision level.



The lack of arterial and above roadway connectivity into and out of, as well as within, the planning area forces motorists to rely on select major roadway corridors for both internal and external trips. This dynamic creates unwanted congestion and is highly susceptible to extreme traffic delays and detours following even minor interruptions to roadway conditions.

Travel Patterns & Traffic Volume

San Tan Valley's workforce is extremely dependent on the automobile. According to the American Community Survey; 2000-2014, 80 percent of the region's workforce drove alone to work on a daily basis, another 12 percent carpoled, resulting in over 92 percent of the workforce using an automobile to get to and from work. This notion is further supported by the fact that 99 percent of households in San Tan Valley have access to at least one vehicle.

Like all expanding suburban areas, San Tan Valley has experienced increased traffic volumes as growth has occurred. A review of MAG's Transportation Data Management System indicates peak hour traffic generally occurs during weekday PM periods. As previously stated, the combination of traffic growth with a relatively limited network of major roads creates unwanted congestion, particularly during weekday peak periods. The impacts of this condition can partially be seen through an analysis of average commute times. In San Tan Valley, workers' commute time averaged 36 minutes, which is 7 minutes longer than average commute times for workers in Pinal County as a whole and over 12 minutes longer than average commute times for workers in Maricopa County. Spending more time in the car also impacts the health and mental well being of residents in San Tan Valley by reducing time that could be spent exercising or playing at the park with family.

FIG 2.23 COMMUTING MODES

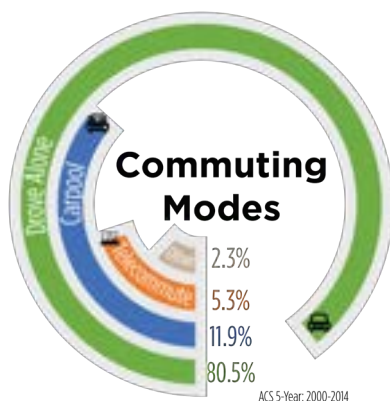
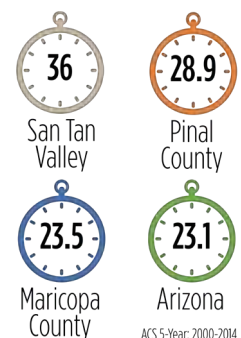


FIG 2.24 VEHICLE OWNERSHIP

99%
of San Tan Valley
households have access
to 1 or more vehicles
ACS 5-Year, 2000-2014

**FIG 2.25 COMMUTE TIME
IN MINUTES**



Pedestrian & Bicycle Facilities

A 2012 study by the Brookings Institute found that “real estate values increase as neighborhoods became more walkable, where every day needs, including working, can be met by walking, transit or biking.”

Although sidewalk connectivity within most developed subdivisions in San Tan Valley is fairly complete, they are frequently only on one side of the street. Sidewalk gaps are most pronounced on major roadways and result in restricting pedestrian connectivity between common desired destination points.

As shown in Figure 2.6, San Tan Valley also currently has a limited number of striped, on road bicycle facilities. Presently these limited facilities do not constitute a bicycle network, but merely offer isolated bicycle facilities within select developed subdivisions.



The fragmented nature of the existing pedestrian and bicycle network creates gaps in the system where users have no choice but to drive, or walk/ride on unsuitable and often unsafe roadways, to reach desired destination points outside their immediate neighborhood.



FIG 2.26 BICYCLE FACILITIES MAP

Utility Facilities

Water Services

Water service within the planning area is provided by the Town of Queen Creek, Diversified Water Utilities, Johnson Utilities, and Sun Valley Farms Unit VI Water Company. Queen Creek’s water service area covers the majority of the northern portion of the planning area, along with Diversified Water Utilities and Sun Valley Farms Unit VI Water Company’s water service areas. Johnson Utilities water service area covers the remaining southern portion of the San Tan Valley community.

Wastewater Services

Johnson Utilities collects and treats wastewater from businesses and residents within their sewer service area, which encompasses the majority of the planned and developed subdivisions in San Tan Valley. Queen Creek’s sewer service area covers a small portion of the northern portion of the planning area between Meridian Road and Gantzel Road. The remaining rural areas of the San Tan Valley community are on private septic systems.

Electricity Services

SRP provides electrical services to the plan area. Service is primarily transmitted over existing overhead lines along arterial streets and underground along collector and local streets. To meet increased electricity demand and growth in the greater area, SRP plans (by 2021) to construct an approximately 20-mile, double-circuit, 230-kilovolt (kV) transmission line through the planning area. The line will generally be located along the existing Union Pacific Railroad alignment.

Gas Services

Natural gas service in the San Tan Valley area is provided by the City of Mesa. The planning area is located in the Magma service area.

Telecommunication

Existing telecommunication providers within the San Tan Valley community include Cox, Century Link, and Media Com.

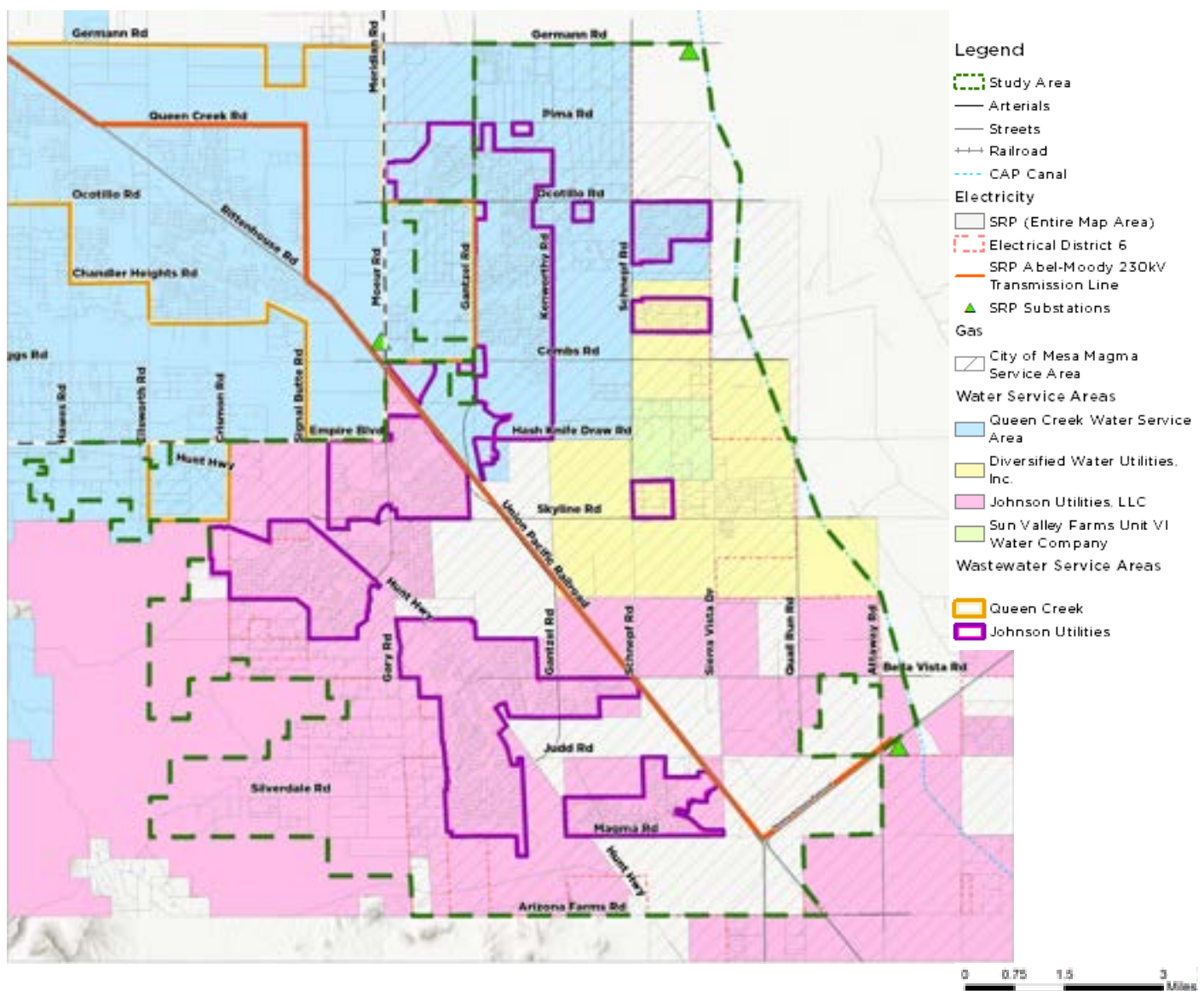


FIG 2.27 UTILITY INFRASTRUCTURE MAP

COMMUNITY SERVICES & HEALTH

Recreation & Park Facilities

Lying just outside the planning area, the San Tan Mountain Regional Park is one of the most prominent destinations within the region. While the park is located within Pinal County, it is managed and operated through an intergovernmental agreement with the Maricopa County Parks and Recreation Department. Consisting of 10,198 acres, the park is rich with unique wildlife and cultural resources as well as offers a variety of recreation activities such as camping, hiking, equestrian riding, and mountain biking.

Beyond the San Tan Mountain Regional Park and Copper Basin YMCA, there are no public recreation or park facilities located within the planning area. Generally, all existing recreation and park facilities in San Tan Valley are owned and maintained by individual subdivision homeowners associations (HOA) for the private use of their residents. Private recreation and park facilities typically consist of neighborhood type park amenities such as playgrounds, picnic benches, community swimming pools, and sport courts. Access to these private neighborhood parks within each subdivision is fairly abundant throughout the planning area, with most homes being located within a walkable ¼-mile distance of these facilities. However, access to larger community parks that provide ballfield facilities, such as soccer fields or baseball fields, is extremely limited. The area is also served by several privately-owned golf courses that are open to the public.

In addition to the private park facilities, a number of private organizations also fulfill recreational needs in San Tan Valley by offering youth and adult sports programming. Given the large family size and younger demographic of the planning area, these organizations have come to play an important role in contributing to the quality of life in San Tan Valley.



The planning areas preponderance of private park facilities and lack of public community park facilities that can support youth and adult sports programs is a challenge for the community.

Community Facilities

Schools

The planning area is served by two public school districts. The school districts can be found on Figure 2.28 and include J.O. Combs Unified School District and Florence Unified School District. J.O. Combs Unified has one high school and one middle school along with five elementary schools in the northern portion of the planning area. Florence Unified has two high schools, and four elementary schools in the southern portion of the planning area.

Police Protection

The Pinal County Sheriff's Office provides police protection services to the San Tan Valley community. The Adam (A) Region patrols the San Tan Valley area and operates out of two substations. Adam Region currently maintains approximately 40 deputies, which is below the national benchmark of 2.5 officers for every 1,000 people. On average A Region responds to about 3,000 calls per month that generally consist of domestic violence, traffic related, theft, and drug activity.

Fire Protection

Rural Metro provides fire protection and emergency medical services (EMS) to the San Tan Valley community. Rural Metro operates on an individual subscription basis, which means fire and EMS services are not paid for through taxes and residents are responsible for establishing a service account directly with Rural Metro. Currently, Rural Metro averages a 30-35% subscriber rate. To service the planning area, Rural Metro operates three responding fire stations located in or near the Johnson Ranch, Copper Basin, and Encanterra subdivisions. There are 10 firefighters on duty at all times in the San Tan Valley area, including at least three paramedics.

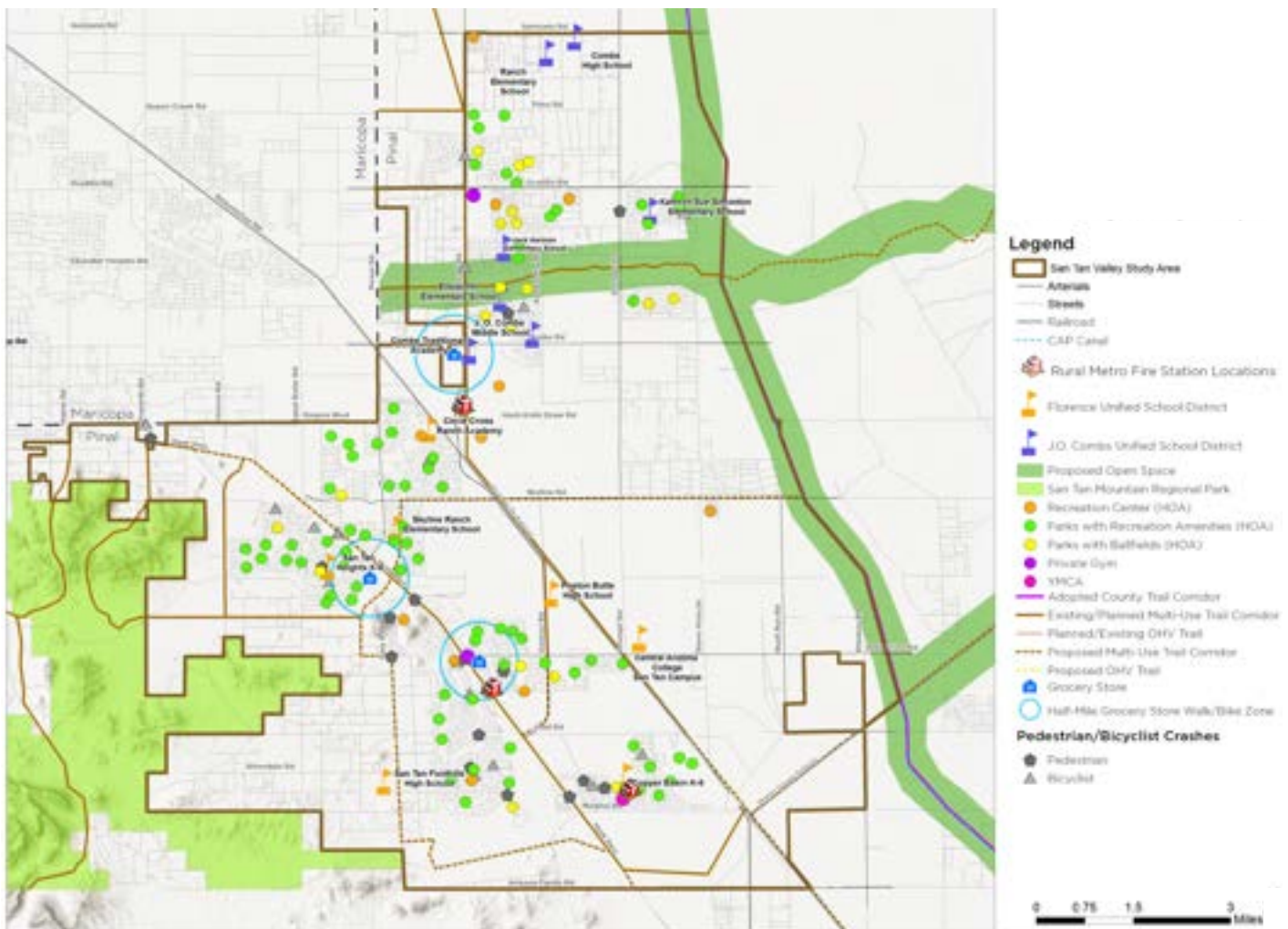


FIG 2.28 HEALTHY LIFESTYLE MAP

HEALTH ASSESSMENT

The CDC - Behavioral Risk Factor Surveillance System indicates 33% of adults in Pinal County are obese. This is over 5% higher than the national average and 8% higher than the State average. A review of the CDC - Youth Risk Behavior Surveillance System also showed only 21.7% of Arizona students in grades 9-12 achieve 1 hour or more of moderate to vigorous intensity physical activity daily, which is lower than the national average of 27.1%.

Analysis of hospital discharge data from 2010-2014 for patients whose home of record was within the San Tan Valley boundaries, identified cardiovascular disease hospital admissions at 668 per 100,000 residents per year compared to Pinal County as a whole, which totaled 1,498 per 100,000 residents per year. While this data suggests an improved health condition in San Tan Valley relative to Pinal County and Arizona, the lower rate of hospitalizations due to cardiovascular disease can be attributed to the fact that San Tan Valley is comprised of a younger population (median age 29.7 vs. 36.4 in Pinal County). Further examination of mortality rates in San Tan Valley confirmed the second leading cause of death within the planning area (behind malignant neoplasms - cancer) is disease of the circulatory system (cardiovascular disease) at 24.8%.

Only 8.5% of San Tan Valley housing units are located within a half-mile distance of a grocery store. Conversely, over 91% of all housing units within the planning area are not within a typical walking or biking distance to healthy food options.

FIG 2.29 ADULT OBESITY

The **Percentage of Obese Adults** is an indicator of the overall health and lifestyle of a community.



Source: CDC - Behavioral Risk Factor Surveillance System (2010)

FIG 2.30 DAILY PHYSICAL ACTIVITY



Percent of Students in grades 9-12 who achieve 1 hour or more of moderate-and/or vigorous-intensity **physical activity** daily.

Arizona 21.7%
USA 27.1%

Source: CDC - Youth Risk Behavior Surveillance System (2013)



Source: CDC - Youth Risk Behavior Surveillance System, 2010

FIG 2.31 ACCESS TO HEALTHY FOOD



of STV housing units are within a 1/2 mile distance of a grocery store.

ACS 5-Year, 2000-2014

ACTIVE TRANSPORTATION ASSESSMENT

As previously discussed, San Tan Valley is strongly dependent on the automobile. Examining commute modal share, 92.4% of trips are made by automobile, while only 2.3% of trips are made by walking or bicycle. A review of Walkscore.com, which utilizes available data to measure the walkability of a neighborhood on a scale of 0 to 100, with 100 being the most walkable, provided a Walk Score of 11 for the San Tan Valley community. This score reflects an environment where almost all errands require a car.

In regard to safety, there were 15 pedestrian and 19 bicycle collisions between 2013 and 2015 within the planning area. Over 59% of these collisions occurred on roads with speed limits below 30 miles per hour. Furthermore, nearly 58% of bicycle collisions occurred on streets without a striped bike lane.



Community planning and public health are undeniably intertwined. The effects from how San Tan Valley is designed and built are directly attributable to many chronic diseases such as type 2 diabetes, cancer, and heart disease. In fact, physical inactivity and poor diet is the second leading cause of death in the United States.

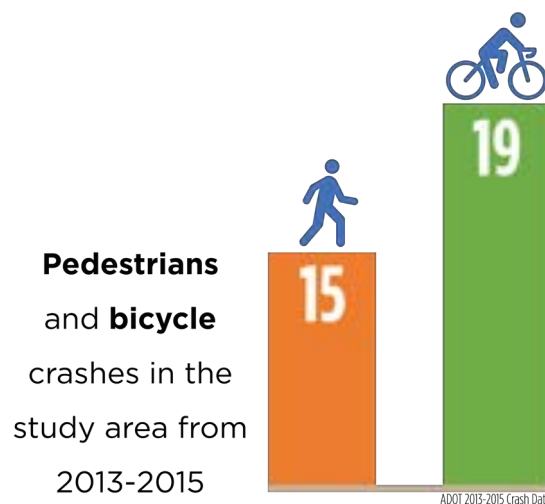
FIG 2.32 WALK SCORE



Almost all errands require a car.

* Walkscore.com measures the walkability of a neighborhood.

FIG 2.33 NON-VEHICULAR CRASHES



LAND USE STRATEGY



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

DATE ISSUED: 2018

This land use strategy section lays out a planning framework for the San Tan Valley community. The provided existing conditions analysis and public feedback were used to help define the overall direction of the San Tan Valley Area Plan. These important inputs were then considered and categorized into the following four Principle Themes that represent the foundation upon which the Area Plan is formed. These Themes are critical for decision-makers and for the public to understand because they capture the broad-sweeping overall direction of the Area Plan.

PRINCIPLE THEMES

+ STRENGTHEN THE COMMUNITY

Preserve and Enhance Existing Neighborhood Character

San Tan Valley contains an array of newer suburban neighborhoods intermixed with established rural enclaves. Facilitating a long-range plan that supports not just individual neighborhood needs, but recognizes the importance of creating a cohesive collection of high-quality places where residents can build social networks and integrate into a balanced community that is distinctly “home” must be addressed.

Foster More Housing Diversity

The make-up of San Tan Valley’s population has changed over the years. Today the community has more young families and a growing number of adults living longer lives. These changes create different housing priorities than those of the past. Developing places where residents can find a home at all stages of their lives supports the opportunity for residents to age in place and maintain community bonds.

Develop High Quality Places for Residents to Congregate and Experience

San Tan Valley lacks places where people can meet, interact, and simply enjoy the community they live in. National trends show that young families and retirees are often looking to live in environments with easy access to jobs, services, and entertainment. Creating vibrant places where generations can interact with common and diverse options is key to fostering a sense of community.

+ BROADEN ECONOMIC OPPORTUNITY

Enhance Local Spending

The lack of a variety of restaurants and retail stores, especially sit-down restaurants and locally owned businesses in San Tan Valley reduces the ability to create a stronger sense of community and capture the vast spending power of the residents. With a more targeted approach to identifying the site location requirements of desired retail and restaurants, opportunities to increase the number, location, and variety of establishments throughout San Tan Valley could be accomplished.

Encourage Investment in the Local Economy

There is a significant lack of diversity of job-producing uses, namely office and research and development uses in San Tan Valley. Promoting employment uses that require large footprints or major freight infrastructure could help to diversify the economy and advance the long-term economic position of the community.

+ IMPROVE TRANSPORTATION SYSTEMS

Provide a Full, Viable Range of Multimodal Transportation Alternatives

A transportation system that is well planned, interconnected and that offers multiple modes of transportation options can positively affect the overall quality of life of a community. This general notion was strongly supported during outreach events where residents expressed a common desire to reduce congestion and enhance mobility choices within San Tan Valley. San Tan Valley's neighborhoods, retail centers, schools, and parks should be linked by a balanced transportation network that not only integrates motor vehicles, but pedestrians and bicycles.

Guide New Land Development to Create Greater Proximity and Ease of Access Between People and Their Destinations

San Tan Valley's traditional suburban development pattern has been strongly influenced by the current transportation network that exists within the greater region. Consequently, this land use pattern and transportation network has also had a large impact on defining resident's mobility. Defining a future for San Tan Valley that includes increased linkages and/or bringing services and choices in closer proximity will encourage biking, walking, and possible transit use. This also helps to reduce congestion and promote a more active, healthier lifestyle.

Support High Quality Infrastructure Services and Systems

Within San Tan Valley, infrastructure and utility decisions are generally not controlled by the County, yet they have widespread impact on housing, development, investment patterns, and quality of life. Further, as San Tan Valley continues to grow, so too does the demand on these systems. Supporting well-maintained infrastructure, utilities, and fire services are essential for achieving broader development objectives.

+ LIVE HEALTHY

Connect Destinations and Open Space Through a Multimodal Network of Trails and Streetscapes.

The value of community amenities increases as these assets become better connected. While San Tan Valley's predominantly spread out land use pattern is more suitable for automobile travel, at the neighborhood scale, an enhanced connected network of amenities would increase the use of the overall system as well as its individual parts.

Support Development that Promotes a Healthy Lifestyle

There is now a large body of research that supports the understanding that health is shaped by the places where we live, work, learn, and play. This growing awareness can be addressed by planning for more walkable urban environments and offering a higher degree of active recreation options, which help to promote easy, healthy choices for all residents of San Tan Valley.

PLANNING SCENARIOS

To develop a land use plan that carries forward the Principle Themes of this Area Plan and promotes the community's preferred future state, three development scenarios were created for the planning area. Each scenario was developed to depict varying types, distributions, and intensities of land uses.

A modeling process was then used to test how well each of the three development scenarios performed across a series of indicators tied to the Principle Themes. In association with the Health Impact Assessment conducted for this Area Plan, indicators of health, or ways of measuring the effects of how each land use scenario could impact the physical activity levels of residents in the planning area were also created and tested.

These scenarios and their performance on each indicator were then shared with the public to help community members better understand projected development outcomes at build-out. Based on community feedback, a hybrid "preferred" scenario that infused elements of Scenario B and C was derived for the planning area.



To run each scenario model, a series of assumptions about how intensely land is developed (e.g. people per household, residential density, vacancy rates, Floor Area Ratio, etc.) and the relative percentages of different types of uses within more defined land use categories were made. Refer to Appendix A for a summary of detailed modeling assumptions and Appendix B for a description of each health indicator and associated evidence of how these indicators impact a community's health.

+ Scenario A Business As Usual

This scenario assumes no change in existing development policies. Under this condition, suburban residential growth with minimal commercial development would continue to expand into currently undeveloped areas. Most residents would continue to commute to jobs outside of the San Tan Valley area. Employment opportunities in San Tan would remain limited to service related jobs, such as food services, education, and local trade professions. Vehicular travel would also continue to be the predominate mode of transportation within the community.

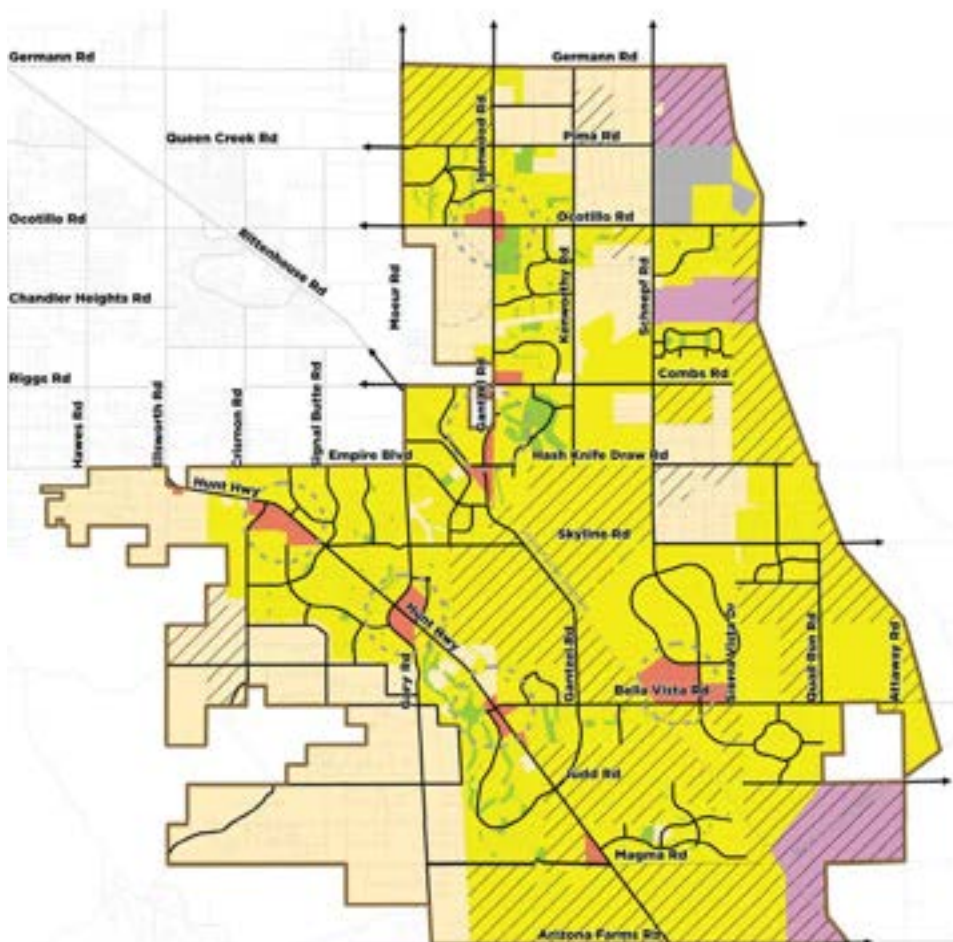
+ Scenario B Community Node

This scenario places increased residential density around existing commercial nodes to encourage developed neighborhoods to be more walkable. This enhanced mixture of residential land uses would also help to foster commercial growth by creating a higher concentration of consumer demand in each node. Strategically placed office type land uses near planned transportation corridors would increase professional employment opportunities in the area. However, most residents would still commute to jobs outside the San Tan Valley area. While vehicle travel would still be the primary mode of transportation, improved walkability would remove some trips from local roadways.

+ Scenario C Community Core

This scenario focuses on the establishment of a Community Core that would function as the economic and social hub of the San Tan Valley area. While traditional suburban residential and commercial growth would continue to expand in undeveloped areas; higher density residential, regional retail, and office uses would be encouraged to concentrate in a central urban environment. By integrating land uses, this core area would be more walkable, vibrant and foster a sense of community. People living, shopping, and recreating in the core would also bring professional employment opportunities and increased transportation options such as transit.

PLANNING SCENARIO A

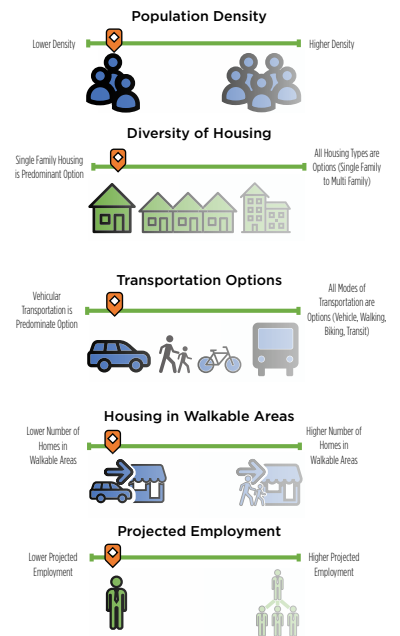








Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)

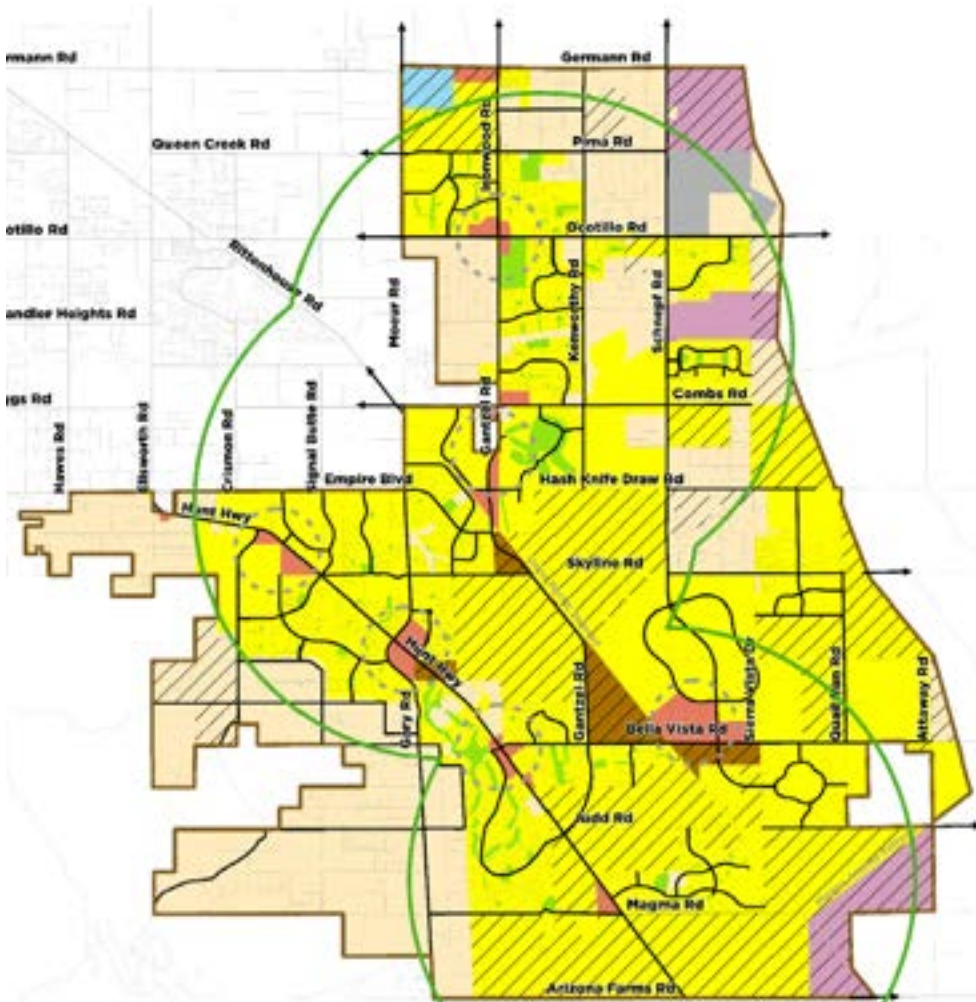
FIG 3.1 PLANNING SCENARIO A MAP

Scenario Indicators



Health Indicator	Health Assessment Scenario A (at buildout)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	7,385
Projected Population within 1/4 mile of trails	68,060
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

PLANNING SCENARIO B



Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)

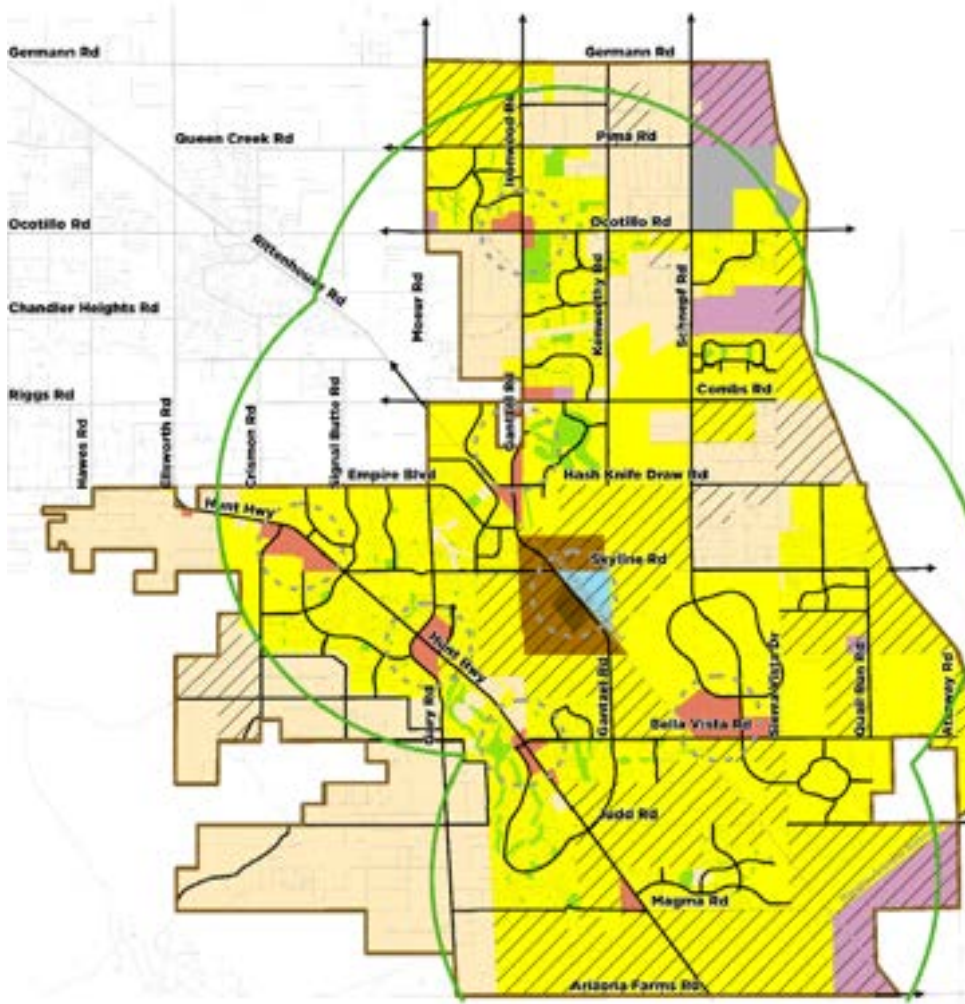
Scenario Indicators



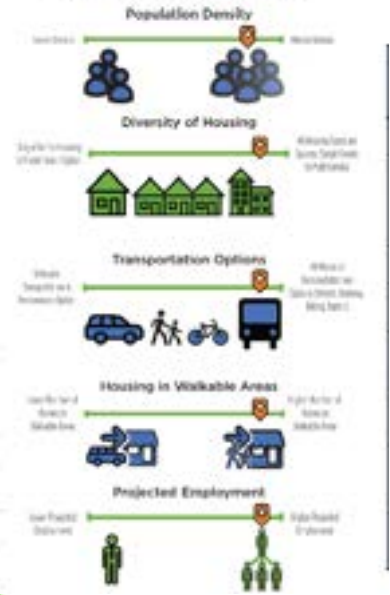
Health Indicator	Health Assessment Scenario B (AT Buildout)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	11,452
Projected Population within 1/4 mile of trails	74,345
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

FIG 3.2 PLANNING SCENARIO B MAP

PLANNING SCENARIO C




Scenario Indicators



Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)

FIG 3.3 PLANNING SCENARIO C MAP

Health Indicator	Health Assessment Scenario C (All Burdens)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	23,042
Projected Population within 1/4 mile of trails	74,855
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

STRENGTHEN THE COMMUNITY



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

.....
DATE ISSUED: 2018

LAND USE PLAN

The Land Use Plan (Plan) established in this section incorporates parameters that County officials and staff, along with private landowners and public service providers can use when making decisions about development, redevelopment, preservation and related infrastructure investments within San Tan Valley. The Plan identifies the preferred future development patterns or “Place Types” for the planning area, while the ensuing subsections describe the specific characteristics, design, and policy conditions that guide the application of these patterns in a way that mitigates undesirable impacts and maximizes community benefit.

The intent of the Plan is to define a broad pattern of desired development types across the San Tan Valley area. It is not intended to designate very specific land uses for individual parcels of land. Rather, the Plan provides a certain degree of flexibility to accommodate market demands and future unanticipated opportunities, while maintaining an organized, cohesive, and sustainable built environment.

The character of development within San Tan Valley today is overwhelmingly suburban, with auto-dependent low-density single-family housing, located in a series of isolated and disconnected residential subdivisions. In the near term, it is anticipated that growth in the area will continue to reflect this low-density suburban residential character served by small scale neighborhood commercial centers. However, the collective scale (both in population and land area) of San Tan Valley also establishes opportunities to create regional commercial centers with supporting moderate density residential as well as a more intense central mixed-use core. Consequently, the San Tan Valley Land Use Plan is organized around a series of interconnected commercial nodes that surround a central gathering space, which functions as the vibrant heart of the larger community. These more urban development types then complement surrounding suburban development by serving as compact walkable nodes that act as live, work, shop and play destinations.

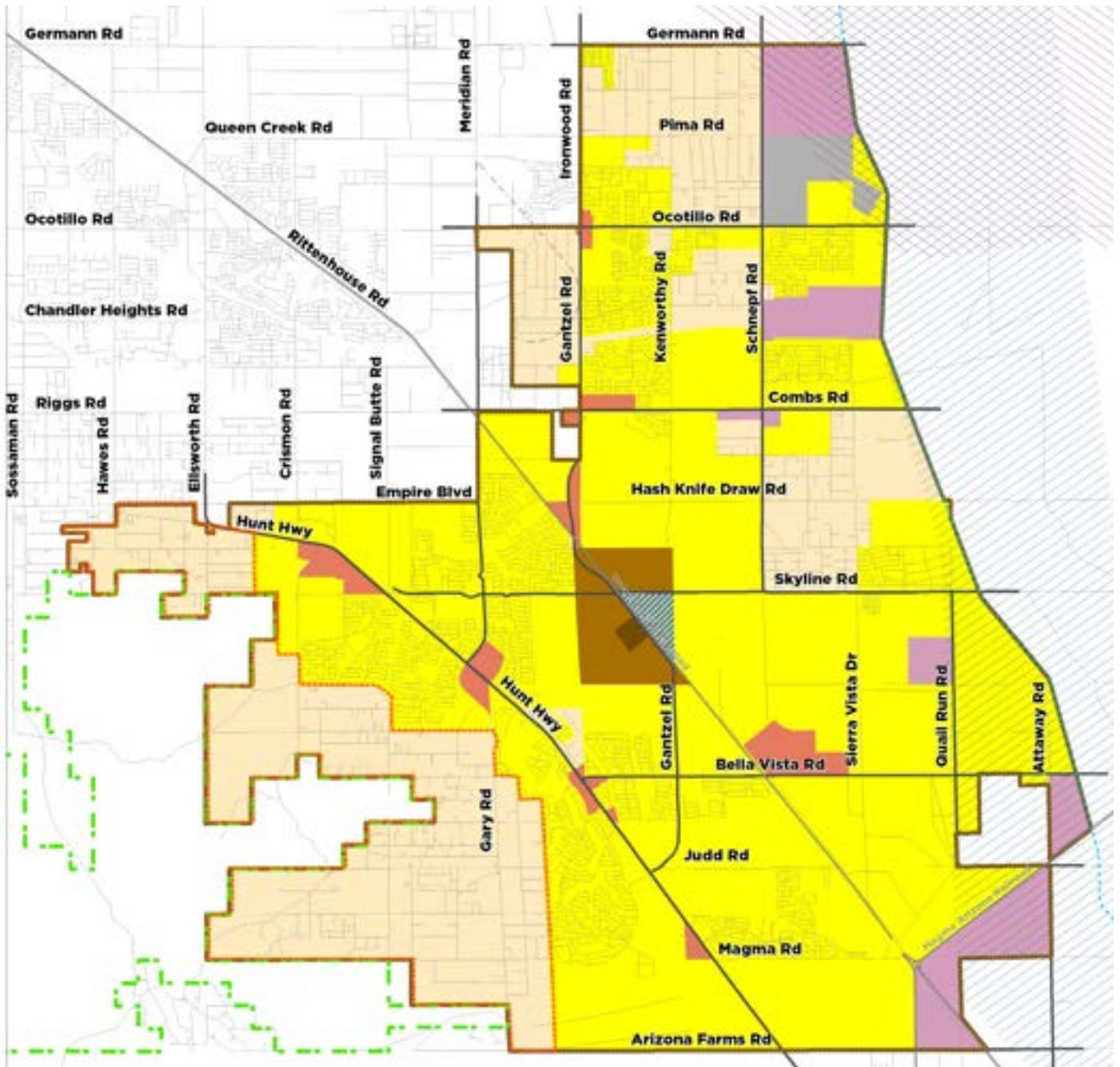


FIG 4.1 LAND USE PLAN MAP



Legend	
	San Tan Valley Study Area
	San Tan Mountain Regional Park
	San Tan Foothills Sub-Area
	Greenfield
	Noise Sensitive Area
	CAP Canal
	Railroad
	Parkway/ Arterials
	Local Streets
	North/ South Corridor Study Area
	SR-24 Corridor Study Area
Place Types	
	Rural Living
	Suburban Neighborhood
	Urban Transitional
	Urban Center
	Community Center
	Suburban Office
	Suburban Office/ Urban Center
	Employment Center
	Military

PLACE TYPES

Place Types are the different development patterns within a community where various compatible land uses share common features that combine to create a discernible character. This land use planning approach focuses more on shaping the development of a geographic area based on the desired lifestyle or look and feel of a place, rather than focusing on a conventional planning approach of defining very specific land use categories to individual parcels of land. Thus, each Place Type has their own unique set of development characteristics. The development characteristics used to describe Place Types within this Area Plan include the following: suitable land uses, development intensity, compatibility, and form (see inset for further descriptions of these development characteristics).

These Place Types, their accompanying development characteristics, and the following zoning compatibility table should be collectively used by decision makers and property owners to identify the appropriate intensity and placement of specific land uses within San Tan Valley.

Those areas that are shown with a hatch land use pattern shall be considered appropriate for either Place Type displayed within the specific hatch pattern.

For land use policy pertaining to Military and Green Energy Land Uses or Noise Sensitive Areas, specific guidance shall be obtained from the Pinal County Comprehensive Plan.

+ Development Characteristics

SUITABLE LAND USE establishes the representative land uses that may be appropriate within a Place Type when consistent with all development characteristics and the zoning compatibility table.

DEVELOPMENT INTENSITY is the measure of the degree of development for a defined site. In residential areas, development intensity is measured by dwelling units per acre. Intensity for non-residential uses is measured by floor area ratio or FAR, which is calculated by dividing building area by site area.

COMPATIBILITY guidelines seek to minimize and mitigate potential conflicts (i.e. noise, height, traffic, privacy, aesthetics) between noncompatible land uses.

FORM defines how development should be physically designed, including the street pattern, type of infrastructure required, how buildings relate to each other and the street, as well as buildings scale and massing.

RURAL LIVING

This place type provides a rural setting that is distinctly separate from more developed areas. The natural character of the area is preserved through the placement of relatively low-density residential and rural focused commercial uses with minimal access to urban services.

COMPATIBILITY



Stories (residential): 1-2



A small amount of commercial uses to serve rural residents is appropriate; uses shall be a maximum of 5 individual or combined acres in size and located along collector or above roadway classifications.



Buffers should be provided between applicable land uses in compliance with the requirements of the PCDCS.

SUITABLE LAND USE

- Single Family - Detached (Large Lot)
- Rural Focused Commercial
- Parks
- Civic/Public Facilities

DEVELOPMENT INTENSITY

Residential:

- 0-1 du/ac

Non-Residential:

- 0.30 FAR



RURAL LIVING

FORM

- Aesthetics of development should be consistent with the rural area to include more emphasis on large setbacks, open space areas, and appropriate architectural style.
- Dwelling units should have detailing appropriate to the architectural style, with an emphasis on “four-sided architecture”.
- All building heights should be respectful of the surrounding view shed.
- Vehicular connectivity should be limited with large block lengths and infrequent intersections to be consistent with large parcel sizes and to preserve the natural character, while incorporating traffic calming techniques where appropriate.
- Residential developments should include a trail system, where appropriate, to accommodate pedestrian, bike and equestrian linkages to adjacent development, public lands, or the regional trail system.



SAN TAN FOOTHILLS (Specific to the San Tan Foothills Sub Area)

- Building envelopes should be minimized to retain native vegetation and natural washes in their current place as much as possible.
- Development shall maintain low-water native desert landscaping.
- Hillside preservation regulations shall be maintained in compliance with the requirements of the PCDSC and the Subdivision & Infrastructure Design Manual.
- Cut and fill regulations shall be maintained in compliance with the requirements of the PCDSC.
- Where appropriate, low density local street and paved all-weather public access road design standards (per the Subdivision & Infrastructure Design Manual) should be applied to minimize particulates and dust as well as limit damage due to floods and other drainage issues.
- In the future, consideration should be given to expanding the San Tan Foothills Sub Area to encompass any lands that may be deemed appropriate through the minor general plan amendment process.



This place type is distinguished by its traditional suburban neighborhoods of single family detached and limited single-family attached houses, neighborhood-scaled shopping facilities, and civic uses (such as parks, places of worship, recreation facilities, or schools), which are most often placed within large scale planned area developments with full access to urban services.

COMPATIBILITY

- ✓ Stories (residential): 1-2
- ✓ Schools, parks, and other civic/public facilities that will generate significant amounts of traffic should be located on collector or arterial roads designed to accommodate higher traffic volume in a safe manner.
- ✓ Single family attached projects can be established which allow for smaller lot sizes in exchange for greater open space, with the additional open space devoted to maintaining the suburban character and buffering adjacent properties and roads.
- ✓ Neighborhood commercial development should be located along arterial or above roadway classifications.
- ✓ No neighborhood commercial development shall individually exceed 15 acres or a maximum of 25 acres when combined with adjacent commercial development (adjacent shall include all four corners of an intersection).
- ✓ Buffers should be provided between applicable land uses in compliance with the requirements of the PCDSC.
- ✓ Lands adjacent to the San Tan Foothills Sub Area shall be subject to the further consideration of meeting the compatibility and form characteristics provided under the Rural Living/San Tan Foothills Sub Area place type.

SUITABLE LAND USE

- Single Family - Detached
- Single Family - Attached
- Neighborhood Commercial
- Parks
- Civic/Public Facilities

DEVELOPMENT INTENSITY

Residential:

- 1-4 du/ac = (Single Family Detached)
- 4-8 du/ac = (Single Family Attached)

Non-Residential:

- 0.35 FAR



FORM

- Individual dwelling units should be harmonious, but distinguishable from one another through the use of compatible architectural styles, massing, colors, materials and rooflines.
- Dwelling units should have detailing appropriate to the architectural style, with an emphasis on “four-sided architecture”.
- Residential front yard setbacks shall be varied to create a different and unique streetscape. The front yard setback for front entry garages shall be a minimum of twenty (20) feet. The minimum front yard setback for side entry garages and/or covered front porches shall be fifteen (15) feet.
- The collector and local street network may be rectilinear or curvilinear, but it should always connect to the section line grid system of major streets.
- The use of cul-de-sacs should be kept to a minimum and used only when topography or other natural constraints prohibit the reasonable connection of streets.
- When located adjacent to, residential dwelling units should face park space to increase usership, community building, and safety.
- New subdivisions should be connected to existing adjacent developments, or provide stub streets to future development areas, to allow for strong internal pedestrian, bicycle, and automobile connectivity.
- Walls adjacent to public right-of-way should be articulated, with offsets and have architectural details, which may include but is not limited to: columns, caps, decorative material patterns or finish materials that echo the surrounding architectural style.
- Walls surrounding developments should include appropriately placed gaps to promote public walking and biking connectivity between neighborhoods and destinations.
- The incorporation of tree lined “complete streets” should be utilized to enable safe, attractive, and comfortable travel for all users, including automobiles, pedestrians and bicyclists.
- All residential development shall include active and passive open space areas designed in accordance with the PCDCS and Open Space and Recreation Area Guideline Manual. Attention should be given to designing open space areas that can serve multiple age groups and activity levels.
- In addition to on-street sidewalks, access walkways and/or off-street trails should be provided to adjacent development and community destinations such as open space, parks and schools, and neighborhood commercial centers, to enhance safe pedestrian and bike movement.
- Non-residential development shall be complementary to adjacent uses by respecting the scale and architectural form of the surrounding neighborhood. This may be accomplished by employing similar architectural styles and materials, building scale, building massing, and roof forms.



This place type includes various housing types that establish a smooth transition from lower to higher intensity residential development; while also accommodating a cross section of incomes, life styles, and life cycles. Although smaller lot detached and attached homes are predominant, limited civic uses (such as places of worship, recreation facilities, or schools) are also provided along with all urban services.

COMPATIBILITY



Stories (residential): 1-3



The transition from one land use to another should be achieved through gradual increases. For example: transitioning from single-family detached to single-family attached to multi-family development. However, the gradual transition of intensity of uses should occur at a small enough scale to ensure inclusion of a range of land uses within roughly a quarter square mile.



Multi-family buildings shall be located along, and oriented toward, a proposed or existing collector or arterial roadway or adjacent to neighboring commercial or employment uses.



All building heights should be appropriate in scale and transition (e.g. step down) in relation to surrounding developments.

SUITABLE LAND USE

- Single Family - Detached
- Single Family - Attached
- Multi-Family
- Parks
- Public/Civic Facilities

DEVELOPMENT INTENSITY

Residential:

- 4-10 du/ac

Non-Residential

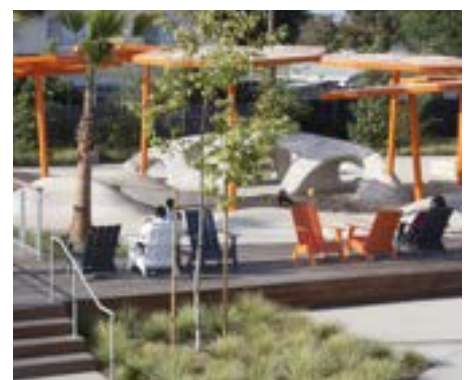
- 0.35 FAR



URBAN TRANSITIONAL

FORM

- The street frontage shall not be dominated by garages or driveways. Variation in garage and driveway placement along the street should include recessed, auto court, and alley loaded garages for both single family detached and attached development. The front yard setback for front entry garages shall be a minimum of twenty (20) feet. The minimum front yard setback for side entry garages and/or covered front porches shall be fifteen (15) feet.
- The main entrance of single-family dwellings units should relate to and address the primary street. The relationship between public and private spaces along residential streets should also be preserved by incorporating covered front porches, defined courtyards or other semi-private zones.
- A traditional or modified grid pattern street network that incorporates shorter block lengths is encouraged to promote increased pedestrian and bicycle connectivity. The design and application of cul-de-sacs, limited street connectivity, or security gating is discouraged.
- Off-street parking should be located to the sides or rear of residential and non-residential buildings. All off-street parking areas must be screened from the public view.
- Required walls surrounding developments should include appropriately placed gaps to promote public walking and biking connectivity between neighborhoods and destinations. The application of security gating is discouraged.
- All residential development shall include active and passive open space areas designed, located, and oriented to provide high pedestrian accessibility within and around the development, and buffer between less developed and more urban developed areas.
- Access walkways and/or off-street trails should be provided to community destinations such as open spaces, parks and schools, and neighborhood commercial centers from the neighborhood, to enhance the pedestrian and bike movement and safety.
- The incorporation of “complete street” elements such as slower vehicle speeds, on-street parking, street trees, curb bump-outs, and bicycle and pedestrian networks should be utilized to enable safe, attractive, and comfortable travel for all users. Major streets should also be designed to accommodate transit (e.g. bus bays).



COMMUNITY CENTER

This place type incorporates every day and special shopping, eating or entertainment needs, serving several neighborhoods. Development may also contain offices or large footprint uses that are regional draws. Stand-alone multi-family residential uses can be placed to support these uses, but commercial is the dominant use.

COMPATIBILITY

- ✓ Stories (residential): 1-3
- ✓ Community Center development should be located along arterial and collector street or above intersections and should be designed so no direct vehicular access is shared with adjacent streets that serve single-family residential development.
- ✓ Compatibility between community centers and adjacent residential areas should be achieved by stepping down building heights and by using enhanced landscape buffers that fit within the neighborhood context.
- ✓ Higher intensity and or less compatible commercial uses because of height, bulk, parking, lighting, noise, traffic generation, or hours of operation should locate in the interior of commercial areas and not adjacent or in close proximity to single-family residential neighborhoods.
- ✓ Buffers should be provided between applicable land uses in compliance with the requirements of the PCDCS.

SUITABLE LAND USE

- Community Commercial
- Single Family -Attached
- Multi-Family (stand alone)
- Parks
- Public Facilities

DEVELOPMENT INTENSITY

Residential:

- 8-16 du/ac

Non-Residential:

- 0.50 FAR



COMMUNITY CENTER

FORM

- These locations should be predominantly developed for commercial use and not be developed exclusively for residential use. Residential development should support commercial development by locating integrated housing options adjacent to commercial uses.
- Buildings should share similar design characteristics and design vocabulary. Precise replication is not desirable. Utilization of similar colors, materials and textures as well as repeating patterns, rhythms and proportions found within the architecture of other buildings in the center should be utilized to achieve unity and promote a more human scale.
- Public plazas, squares or other gathering spaces shall be distributed throughout the development to provide places for both formal and informal community activities.
- The incorporation of tree lined “complete streets” should be utilized to enable safe, attractive, and comfortable travel for all users, including automobiles, pedestrians and bicyclists.
- A finer-grain network of collector streets, bike routes, and pedestrian connections should be provided to offer more travel options for customers and residents to travel to and around these centers without utilizing major streets for short trips.



This place type is a central destination where residents, employees and visitors can gather and feel part of the greater community. Designed to be pedestrian friendly, this area generally consists of the highest density development and the widest range of mixed retail, restaurant, entertainment, and office uses, combined with civic and education institutions.

COMPATIBILITY



Stories: 1-5



Development patterns should promote a more human scale that places emphasis on the vertical and horizontal integration and mixing of land uses, resulting in enhanced walkability and reduced parking demand.



Taller buildings or portions of a building should be located internally to a site with buildings stepping down in height as they reach the edges of the core that are adjoined by smaller scaled development or as they connect to adjacent residential uses.



Buffers should be provided between applicable land uses in compliance with the requirements of the PCDSC.

SUITABLE LAND USE

- Vertical & Horizontal Mixed Use
- Regional Commercial
- Office
- Single Family -Attached
- Multi-Family
- Civic/Public Facilities

DEVELOPMENT INTENSITY

Residential:

- 10+ du/ac

Non-Residential:

- 0.35 - 1.35 FAR



FORM

- Buildings should be oriented in close proximity to each other with minimal setbacks and located on both sides of the street to facilitate a more compact urban footprint.
- Streets should follow urban patterns, such as small blocks within a grid system. The development should be connected internally and to surrounding streets.
- Multi-family development should be integrated into the overall plan as part of a vertical or horizontal mixed-use project. Approximately 200 square feet of publicly accessible open space per dwelling unit should be provided within “parklets” or other small green open space gathering areas.
- Ground floor spaces should be preserved for retail uses and present a pedestrian façade. Ground floors of mixed-use buildings should be preserved for retail and dining uses and have taller floor to ceiling heights (14 to 18 feet) with high amounts of window transparency (60 to 70% of the front facade).
- Parking shall be situated on-street, in parking garages, or to the side and rear of buildings.
- Public plazas, squares or other gathering spaces shall be distributed throughout the development to provide places for both formal and informal community activities.
- Sidewalks shall be wide and developed with street trees and streetscape improvements on all streets. Amenities such as bump-outs, planter strips, pavers, benches, lighting, public art, and fountains should be included as part of the streetscape.
- The incorporation of “complete street” elements such as slower vehicle speeds, on-street parking, street trees, curb bump-outs, bicycle and pedestrian networks, and bicycle parking and bicycle racks should be utilized to enable safe, attractive, and comfortable travel for all users. As the most likely place type to support transit service in the future, development should also be designed to accommodate potential transit expansion (e.g. bus stops).



SUBURBAN OFFICE

This place type includes primarily large employment centers that incorporate professional office buildings, corporate offices, regional offices, high-tech and research facilities, and light industrial uses often developed in a campus like setting.

COMPATIBILITY

- ✓ Stories: 1-3
- ✓ Office uses should be focused close to community centers or urban centers to promote opportunities for compact live/work activity centers. Office uses should not be sited adjacent to rural living place types.
- ✓ Office uses shall be located on or with direct non-residential access to major transportation connections and have a high level of both vehicular and non-vehicular access.
- ✓ Large parcel sizes should be maintained as they provide a competitive advantage for attracting new companies and retaining companies that need to expand.
- ✓ Small scale commercial development is appropriate provided that it supports/strengthens major employment uses and does not restrict future large-scale employment-generating development opportunities.
- ✓ Buffers should be provided between applicable land uses in compliance with the requirements of the PCDC.

SUITABLE LAND USE

- Office
- Light Assembly
- Service Commercial
- Public Facilities

DEVELOPMENT INTENSITY

- Non-Residential:
- 0.55 FAR



FORM

- Buildings should be placed in a campus like setting and have an internal pedestrian circulation system that makes travel between buildings convenient.
- Buildings located on the edge of the Suburban Office boundary, should be held to higher design standards to ensure compatibility between office uses and possible adjacent residential uses.
- Long, unbroken building facades on large scale buildings should be avoided, especially when adjacent to residential areas, arterial streets, or other highly visible public viewing areas.
- Parking and truck loading/unloading areas or service bays should be located to the rear and sides and screened from public view.
- Accessory, temporary, outdoor storage of material, vehicles, or retail goods should be shielded from public view.



EMPLOYMENT CENTER

This place type provides for a wide range of small to large office, industrial, manufacturing, and warehousing uses; including those not desirable in other place types due to their objectionable impacts or appearance.

COMPATIBILITY

- ✓ Employment Centers shall be located close to major transportation connections and have a high level of access.
- ✓ Less intensive manufacturing and fabrication uses utilizing indoor spaces for all operations may be located adjacent to suburban neighborhoods or more intense place types.
- ✓ More intensive manufacturing and fabrication uses that utilize outdoor spaces for their processing and/or operations shall not be permitted adjacent to any suburban neighborhood or less intense place type, without appropriate landscape screening, open space setbacks, building orientation or other similar buffers or combinations thereof.
- ✓ Buffers should be provided between applicable land uses in compliance with the requirements of the PCDC.

SUITABLE LAND USE

- Manufacturing
- Warehousing
- Office
- Public Facilities

DEVELOPMENT INTENSITY

- 0.40; 0.55 FAR for uses with a limited number of employees and customers, such as warehouses



EMPLOYMENT CENTER

FORM

- Long, unbroken building facades on large scale buildings should be avoided, especially when adjacent to residential areas, arterial streets, or other highly visible public viewing areas.
- Screening of industrial outdoor storage or fabrication areas should use a combination of elements including solid masonry walls, berms, and landscaping. The method of screening should be architecturally integrated with the adjacent building in terms of materials, colors, and texture



FIG 4.2 PLACE TYPE AND ZONING COMPATIBILITY TABLE- AS OF FEBRUARY 18, 2012


		PLACE TYPES						
		RURAL LIVING	SUBURBAN NEIGHBORHOOD	SUBURBAN TRANSITIONAL	COMMUNITY CENTER	URBAN CORE	SUBURBAN OFFICE	EMPLOYMENT CENTER
ZONING DISTRICTS (As of February 18, 2012)	PERMITTED 							
	CAR	+						
	SR	+						
	SH	+						
	GR	+						
	CR1-A	+						
	CR-1	+	+					
	CR-2		+					
	CR-3		+	+				
	CR-4			+	+	+		
	CR-5			+	+	+		
	MH		+					
	RV		+					
	MHP		+					
	PM/RVP		+					
	TR					+	+	
	CB-1		+			+	+	+
	CB-2					+	+	
	CI-B						+	+
CI-1							+	
CI-2							+	

FIG 4.3 PLACE TYPE AND ZONING COMPATIBILITY TABLE- PRE FEBRUARY 18, 2012

ZONING DISTRICTS (Existing Before February 18, 2012)	PLACE TYPES						
	RURAL LIVING	SUBURBAN NEIGHBORHOOD	SUBURBAN TRANSITIONAL	COMMUNITY CENTER	URBAN CORE	SUBURBAN OFFICE	EMPLOYMENT CENTER
PERMITTED +							
RU-10	+						
RU-5	+						
RU3.3	+						
RU-2	+						
RU-1.25	+						
RU-C	+						
R-43	+						
R-35	+	+					
R-20		+					
R-12		+					
R-9		+					
R-7		+	+				
MD		+	+	+	+		
MR			+	+	+		
AC-1				+	+		
AC-2				+	+		
AC-3					+		
O-1						+	
O-2						+	+
C-1		+		+	+	+	+
C-2				+	+		
C-3				+	+		
I-1						+	+
I-2							+
I-3							+
MH-8		+					
MHP-435		+					
PM/RV-435		+					

BROADEN ECONOMIC OPPORTUNITY



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

DATE ISSUED: 2018

San Tan Valley’s current population of over 100,000 represents a sizeable community that can conceivably support a broad concentration of economic development, however, it has yet to fully realize this robust economic potential. In the future, as San Tan Valley continues to grow in population, a more strategic approach to attracting the desired mix of service oriented businesses and employment generating industry must be undertaken.

BUILD-OUT ANALYSIS

In order to discover what San Tan Valley’s economic composition might look like in the future, it is important to understand the future land use plan because this plan influences how land can be used throughout the community –including what can be built, where it can be built, and how much can be built.

A “build-out analysis” which projects the amount and location of development that may occur in San Tan Valley is shown in FIG 5.1. This information includes dwelling unit and population projections based on residential land use density, and employment projections for commercial, mixed use, office and industrial space based on square footage of space.

Housing units are projected based on the estimated land use acres times the number of dwelling units per acre. Population is derived off the number of acres times the persons per household.

Employment was computed based on the number of employment land use acres divided by an applicable floor to area (FAR) ratio to estimate the amount of square feet. A square foot per job generation factor for retail, office and industrial was then multiplied by the building square footage to derive the total number of jobs.

FIG 5.1 BUILD-OUT ANALYSIS TABLE

		DWELLING UNITS	POPULATION	SQUARE FEET	EMPLOYMENT
RESIDENTIAL	LARGE LOT RESIDENTIAL	18,450	49,631	--	--
	SINGLE FAMILY DETACHED	79,702	214,98	--	--
	SINGLE FAMILY ATTACHED	13,912	37,423	--	--
	MUTLI-FAMILY	6,240	8,674	--	--
	MIXED USE	120	167	--	--
EMPLOYMENT	NEIGHBORHOOD RETAIL	--	--	2,722,500	5,445
	COMMUNITY RETAIL	--	--	6,011,280	12,023
	URBAN RETAIL	--	--	740,520	1,481
	MIXED USE RETAIL	--	--	81,675	0
	MIXED USE OFFICE	--	--	27,225	0
	OFFICE	--	--	3,049,200	15,246
	MANUFACTURING/ WAREHOUSE	--	--	16,901,280	16,901
	ENERGY/ RESOURCE PRODUCTION	--	--	158,776	106
TOTALS		118,424	310,293	29,692,456	51,202

At build out, San Tan Valley will have a projected population of 310,293 people and 51,202 jobs. The total number of dwelling units is estimated at 118,424 representing a jobs to housing ratio of 0.43. The total square feet of commercial, office and industrial space is estimated at 29.6 million. This jobs to housing ratio is considerably higher than San Tan Valley's current jobs to housing ratio of 0.06, but is tempered when compared to projected jobs to housing ratios for Queen Creek of 0.72 and Florence of 0.73 based on 2016 MAG Socioeconomic Projections for the year 2050.

It is customary for retail and office development to follow residential population in growth areas, so the current limited employment opportunities in San Tan Valley is not unique. In the future, this growth disparity is projected to lessen, with employment expected to increase at a higher rate than the population. In fact, since 2010, San Tan Valley employment has grown exponentially faster (165%) than the population. However, due to the lack of access to high capacity transportation corridors and the presence of well-established employment centers within the East Valley, the project team in coordination with the Technical Advisory Committees defined a more conservative employment projection for the planning area.



FISCAL ANALYSIS

With growth anticipated to continue within the planning area, it is important to examine the link between future land use (i.e. build-out projections) and its resulting impact on public finances in order to allow staff, as well as elected and appointed officials, to make informed decisions in the future that benefit San Tan Valley.

This fiscal analysis assumes that the future land use plan for San Tan Valley is built out today as presented in the build out summary in FIG 5.2. For purposes of this high-level analysis, infrastructure capital costs, debt service, and annual maintenance and capital replacement costs are not included in the fiscal analysis. Also important to note, street construction and maintenance and flood control is not included within the general fund revenue and expenditure budget and is accounted for under "special revenue" within the County's budget.

Based on general fund revenue and expenditure multiplier rates used in this analysis, combined with the various assumptions noted earlier, the estimated revenue at build out for San Tan Valley is \$916.9 million with expenditures of \$153.8 million for a surplus of \$763 million, as presented in FIG 5.2. For every \$1.00 of general fund expenditures, the County will receive \$6.00 in general fund revenue.

Construction sales tax revenue is included in this analysis and it is worth pointing out that communities and counties with significant construction activity have been the beneficiary of substantial construction sales tax dollars over the years. This one time influx of money fuels the general fund budget and allows counties to fund programs and deliver services that they may not otherwise have been able to. To illustrate the significance of this revenue source to Pinal County, construction tax is the second largest source of general fund revenue after property taxes and is estimated at \$158.3 million over the build out period of the future land use scenario.

FIG 5.2 FISCAL ANALYSIS TABLE

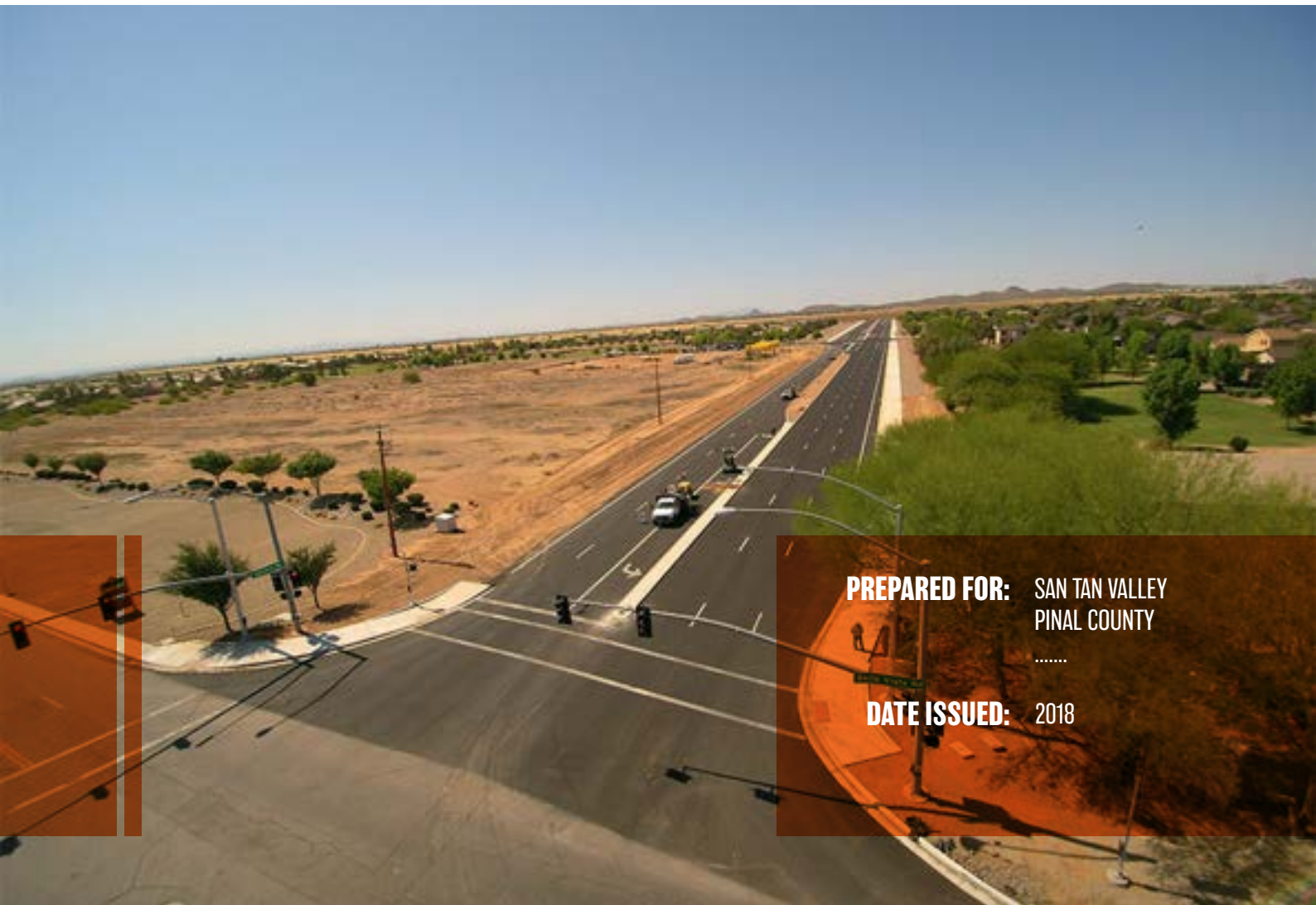
REVENUE (General Fund)	Revenues	EXPENDITURES (General Funds)	Expenses
Taxes		Board of Supervisors	\$1,058,169
Retail	\$29,655,326	County Manager	\$367,519
Restaurant/Bar	\$3,376,816	Communications / News & Information	\$116,837
Occupancy	\$4,262,077	Human Resources & Info Tech	\$10,047,968
Construction	\$158,311,810	County Clerk & Elections	\$1,522,794
All Other	\$4,000,658	County Attorney	\$7,817,972
Property tax		Justice and Law	\$22,259,191
Primary Property Tax	\$676,817,760	Finance, Audit, Budget & Research	\$2,354,683
Licenses & Permits		Sheriff	\$40,898,159
Liquor License	\$14,712	Air Quality	\$9,817
Utility Franchise	\$316,151	Community Development	\$2,199,124
Alarm Permits-Business	\$37,510	Economic Development	\$212,851
Planning Permits	\$25,320	Public Works	\$123,064
Building Permits	\$2,088,870	Parks, Recreation, Library, Social Services	\$148,922
Mechanical/Plumbing/Electric	\$53,533		\$137,658
Sanitation Fees	\$53,804	Non-departmental (gen fund expenditures)	\$41,720,489
Intergovernmental:		Housing	\$50,176
Federal grant & aid	\$28,604	Correctional Health Services	\$1,558,123
State Grants & aid	\$99,947	General Government	\$20,551,199
State Shared Revenue	\$28,776,700	Superintendent of Schools	\$661,526
Local Government in lieu	\$2,987,411	TOTAL EXPENSES	\$153,816,242
Federal payments in Lieu	\$823,894		
Charges for Services	\$2,881,903	NET IMPACT	\$763,093,437
Fines & Forfeits	\$366,990		
Investments earnings	\$109,624		
Misc.	\$1,820,259		
TOTAL REVENUE	\$916,909,676		

While this fiscal analysis suggests that if projected growth continues, planned development will have the ability to offset the required improvements and services needed to support that growth, it is important to place some perspective on these findings. This analysis is very high level and represents a snapshot in time. No adjustment for inflation, or modifications to the existing tax rate structure has been included. There are many variables and assumptions that are used to derive revenues and expenditures. If these assumptions were modified in any way, the findings of the analysis would change.

For example:

- Modifying the percentage of square feet of space leased versus owned would change the occupancy tax revenue generation.
- Escalating the sales per square foot for retail and restaurant/bar and changing the ratio of real estate occupied by restaurant/bar versus retail would increase sales tax revenue.
- Changing the sales and primary property tax rates, which were held constant, would modify the revenue generation and ultimately the findings.
- Altering the number of dwelling units per acre, the average unit size and construction cost per square foot would change the primary property tax revenue.
- Including the cost of street maintenance and flood control would increase expenditures.
- The projected build-out conditions and analyzed financial performance of San Tan Valley has much to offer in the future, but it will take a broad range of strategies, incentives, investments, and public-private partnerships to reverse the economic trends that exist today.

IMPROVE TRANSPORTATION & UTILITY SYSTEMS



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

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DATE ISSUED: 2018

TRANSPORTATION SYSTEMS

The San Tan Valley's circulation system provides vital connections linking neighborhoods, services, and employment centers throughout the community and region. The system currently experiences traffic congestion, lack of pedestrian and bike connectivity, and no public transit services. These challenges have a negative impact on the quality of life in San Tan Valley by increasing time spent in a vehicle, which reduces air quality and increases the odds for obesity.

As San Tan Valley evolves, it is imperative to advance the circulation system to a comprehensive transportation network of roadways, multi-use trails and bike paths, bus transit, and commuter rail that will provide local and regional mobility options to residents and businesses as well as have a positive impact on increasing physical activity levels. This section provides goals and policies that enhance resident mobility options, serve community values, mitigate traffic impacts, and elevate the role of pedestrians and cyclists; as well as recommendations to facilitate planning for the ultimate location and capacity of transportation improvements to enhance economic strength and quality of life in San Tan Valley.

Roadway Network

The transportation facilities explored in this section were based on the Pinal County Regionally Significant Routes for Safety and Mobility (RSRM), Pinal County Subdivision and Infrastructure Design Manual, and the Pinal County Access Management Manual for consistency. Figure 6.1 shows the transportation elements specific to the San Tan Valley Special Area Plan and how the areas within San Tan Valley will be served with streets designed to accommodate anticipated trips generated from new development.

The RSRM provides specific information regarding transportation needs (infrastructure and funding) to guide future transportation investment for the Pinal County based on the projected demand. Ultimately the necessary improvements and anticipated demand are based on the projected population growth and the land use pattern that the transportation facilities will serve. In order to assess potential impacts to the adopted RSRM transportation system upon build-out of the San Tan Valley Preferred Plan, a baseline roadway capacity analysis of the expected traffic impacts was conducted. This high-level analysis found that the RSRM primary roadway network as defined will provide sufficient capacity to support the estimated trips generated by existing and proposed land uses.

The preferred circulation plan depicted in Figure 6 .1, illustrates Germann Road, Ocotillo Road, Combs Road, Skyline Road, Bella Vista Road, and Arizona Farms Road as east-west arterial roadway corridors; and Meridian Road, Ironwood/Gantzel Road, Schnepf Road, Quail Run Road, and Attaway Road as north-south arterial roadway corridors. Hunt Highway is also identified to be improved as a parkway. In addition to the arterial roads, existing and planned collector roads are shown for reference. Existing collectors depict those roads that are currently constructed, while planned collectors identify roadway alignments as defined within approved PAD's or plats. Final alignments, classifications, and design of all roadways within the planning area shall be determined per the guidelines of the Pinal County Subdivision and Infrastructure Design Manual and the Pinal County Access Management Manual.



In essence, the proposed major roadway network can accommodate future growth and development within the planning area. Thus, identification of new roadway alignments is not a primary need. However, in order for the proposed system to work, existing gaps in the arterial network need to be bridged. For example, Germann Road does not exist between Meridian Road and Ironwood Road. Other gaps include Meridian Road from Combs to Pima Road, and Magma Road from Hunt Highway to Gary Road.

Although outside the study area, this plan also recognizes the potential impact the ongoing ADOT SR 24 and North - South Corridor planning, design, and construction efforts will have on the study area. Consequently, the defined planning corridors for these facilities are shown on Figure 6.1 for coordination purposes. While present growth continues in San Tan Valley and thus requires this planning effort to account for anticipated near term development, as these high capacity regional corridors develop in the long-term future they will undoubtedly have an impact on the development pattern of the area. This will create a need to reassess the land use composition of the planning area as more detailed plans for these corridors are defined to ensure the impacts of these facilities are appropriately accommodated in a manner that is consistent with the overall vision for the San Tan Valley community.

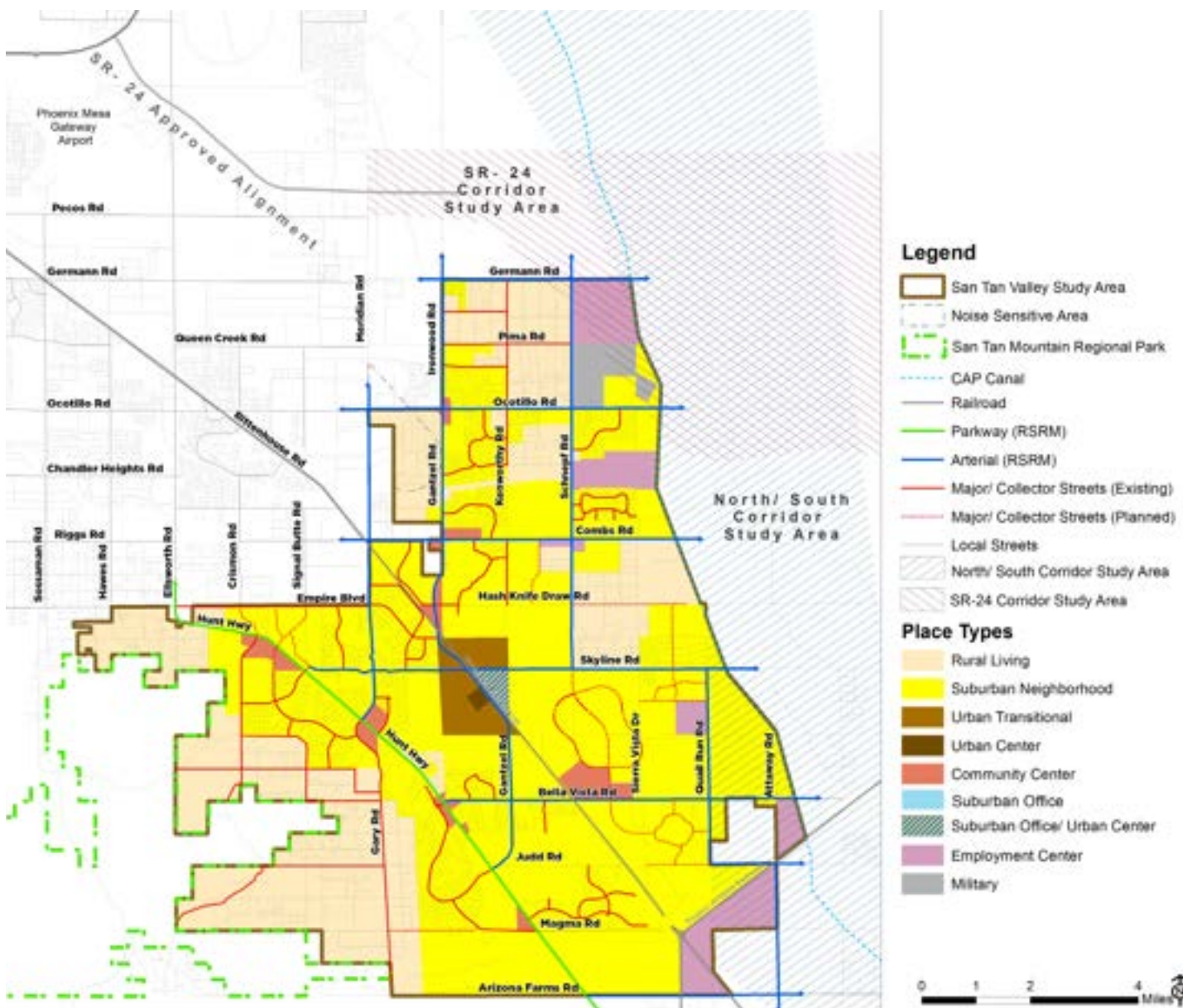







FIG 6.1 CIRCULATION PLAN

Roadway Classification & Design

The Pinal County Subdivision and Infrastructure Design Manual includes street classifications for all streets. The street classification types (existing and proposed) within San Tan Valley include:

- Major Arterial;
- Minor Arterial;
- Major Collector;
- Minor Collector;
- Local Street;
- Low Density Local Street; and
- Paved All-Weather Public Access Road

Each of these classifications has specific design standards. The designs are based on the desired function and demand for each facility type. As noted in the Pinal County Subdivision and Infrastructure Design Manual, the design for each type is based on an overall standardization of key characteristics to provide consistency, but to also provide for a degree of flexibility because the actual design of a roadway can vary among segments depending upon adjacent land uses and demands. Among all street types though, there are some basic provisions that are inherent in all designs, which include:

-  All streets shall conform to Pinal County standards, specifications and requirements, and with due consideration to their relation to existing and other planned streets.
-  The subdivider is responsible for construction of all street improvements along the subdivision's frontage to the ultimate grade and alignment for the said perimeter street.
-  All subdivision projects need to provide a paved interior street system adequate to ensure that all lots, tracts, parcels, or facilities within the subdivision shall have improved access to the balance of the public street system.
-  Sidewalks are required on both sides of the street for all streets classifications except for low density local streets and paved all-weather public access roads.
-  Alleys are not permitted unless approved by the County Engineer.

In addition to the basic provisions listed above, the Pinal County Subdivision and Infrastructure Design Manual includes cross sections, minimum rights-of-way, minimum pavement sections, curb and gutter requirements, alignment requirements, and sidewalk design guidelines for each street classification.



Notwithstanding the basic street design guidelines, alternative "complete street" designs should be considered during land use master planning and development phases, where enhancements to bicycle and pedestrian facilities and improved aesthetic components of the street (i.e. street trees, landscaping, street lighting) are included. Flexibility should be considered relative to on-street parking designs on Arterial and Collector streets in promotion of improved safety for bike lanes and sidewalks, especially within and adjacent to the Urban Center and Community Center place types. MAC's "Complete Streets Guide (2014)" should be referenced for further street design implementation measures that help to balance all modes of travel.

PEDESTRIAN/ BIKEWAY NETWORK

The San Tan Valley Circulation Plan includes multi-purpose trails, sidewalks, and bike lanes along collector and arterial streets. A combination of these facilities will serve San Tan Valley and will provide connections to existing and planned facilities. All pedestrian, bicycle, and trail facilities are intended to meet the non-motorized transportation needs of the residents, but will also serve as recreational amenities as well - this is especially true of the off-street trail system - creating a healthier, more active resident base. The pedestrian, bicycle and trail components ensure interconnectivity between all the non-motorized transportation facilities, and also ensures that major pedestrian and bicycle destinations and activity centers, such as the schools, local parks, urban core, community centers, CAP Canal, and the San Tan Mountain Regional Park are accessible.

Pedestrian facilities consist of sidewalks within public rights-of-way and multi-purpose off-street trails. Sidewalks are required to be constructed to the standards and specifications found in the Pinal County Subdivision and Infrastructure Design Manual and are mandatory components of parkways, arterial streets, collectors streets, and local streets with lots less than one acre. The off-street trails shown on the San Tan Valley Trails and Open Space Plan (see Figure 7.1) will supplement and connect with the mandatory sidewalks for interconnectivity between residential neighborhoods and public destinations.

Bicycle facilities consist of shared roadways (same lanes on local streets), designated bike lanes within public rights-of-way for collector and arterial streets, and multi-purpose off-street trails. Bike lanes constructed within public streets are required to be constructed to the standards and specifications found in the Pinal County Subdivision and Infrastructure Design Manual and are mandatory components of parkways, arterial streets, and major collector streets. The off-street trails shown on the San Tan Valley Trails and Open Space Plan (see Figure 7.1) will supplement and connect with the mandatory sidewalks for interconnectivity between residential neighborhoods and public destinations.

TRANSIT NETWORK

Although the existing demand for public transit service is low, the preferred alternative projects higher population densities, more diverse housing options, concentrations of more intense commercial nodes, and a set of wider transportation choices, which are all elements that increase demand and support public transportation. Expanding the transit network also has the potential of improving air quality and increasing active transportation between residential areas and transit stops. Both of which are good for health. Thus, prior understanding of public transit options, alignments, and what destinations should be serviced are essential.

The most profound public transit option anticipated for the San Tan Valley is the preferred alignment for the proposed commuter rail service between Tucson and Phoenix derived from the ADOT Passenger Rail Study. Figure 6.2 shows the alignment of the preferred alternative which also identifies San Tan Valley with a proposed station. The ADOT Passenger Rail Study currently suggests the station to be located at Bella Vista Road and the Union Pacific Railroad; however, the report defines the proposed station locations mainly as general vicinities, and were only evaluated as means to assist gauging the performance and alignment of the potential commuter rail routes. Meaning, the location of the proposed station is approximate. Thus, it is crucial for the San Tan Valley Specific Area Plan to recommend any future commuter rail station to be located within or adjacent to the proposed Urban Center on the east side of Cantzel Road just south of Skyline Road.

Another significant potential transit route is the proposed express bus route from the Pinal County Transit Feasibility Study which connects Maricopa County to Apache Junction and San Tan Valley. This transit service route is also referred to as X5 in Figure 6.3. The route would run between the proposed San Tan Valley Park-and-Ride located along Hunt Highway and the Apache Junction Park-and-Ride via Hunt Highway to Village Lane to Skyline Drive to Charbray Drive to Empire Road to Cantzel Road to Ironwood Drive. From Apache Junction Park-and-Ride, the route would operate via US 60 to the Superstition Springs Park-and-Ride where connections could be made to an Arterial BRT and connecting express services to Mesa, Tempe, and Phoenix. It is recommended the express route would provide three to four northbound trips in the morning and three to four southbound trips in the afternoon or evening.

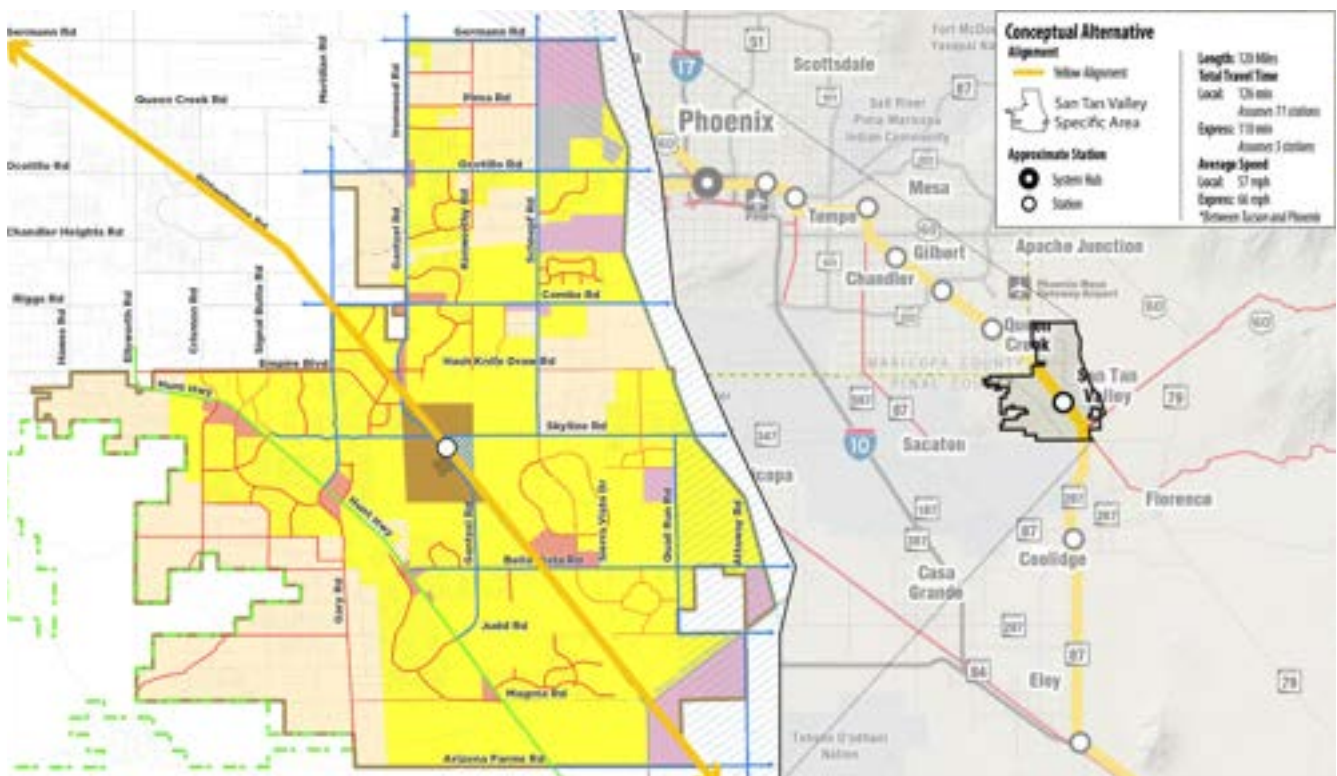


FIG 6.2 COMMUTER RAIL MAP

The X5 route alignment was proposed and adopted in 2011 and the route could be modified for cohesiveness with the San Tan Valley Special Area Plan. For instance, the San Tan Valley Park-and-Ride would more appropriately be located within the Urban Center, which would also be a more desirable location for the southern terminus of the route due to the route directness to the north via Cantzel/Ironwood Road. In addition, as more regional public transit options serve San Tan Valley, one or two local level circulator type public transit routes could be introduced to the transit network to further support the regional transit systems. The circulator routes would connect the transit hub/urban center with the surrounding residential uses and other adjacent commercial nodes.

While these assessments are fairly generalized, the results are consistent with San Tan Valley's overall land use pattern where uses are predominantly spread out at distances more suitable for automobile travel. However, at the local neighborhood scale, several developed locations within San Tan Valley are potentially quite suitable for pedestrians and cyclists by offering a mixture of land use types, a connected street system, and convenient park and school locations.

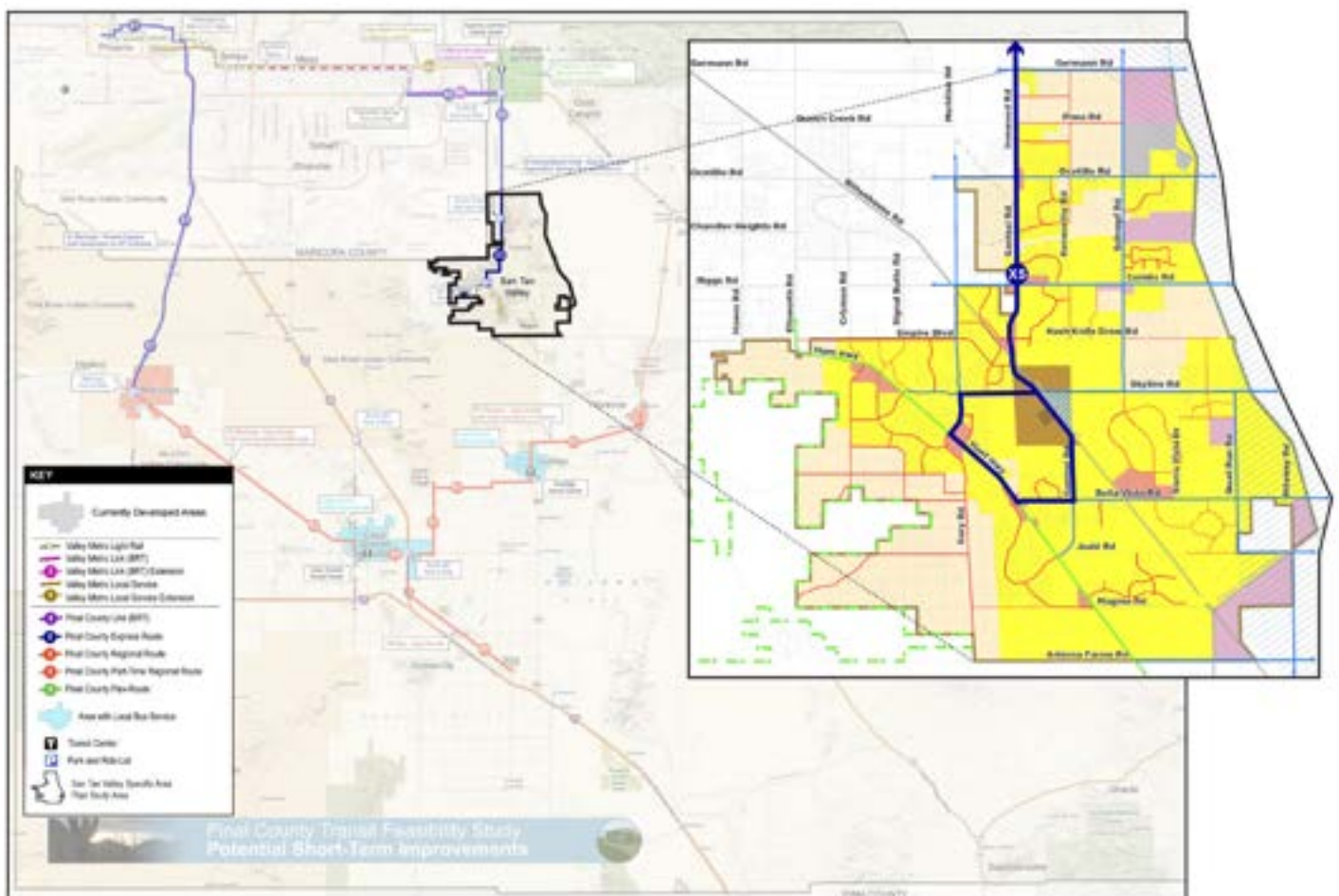


FIG 6.3 TRANSIT ROUTE MAP

UTILITY SYSTEMS

A combination of public and private providers are the major suppliers of utility services (i.e. potable water, wastewater services, electric, gas) to the majority of the planning area. Given Pinal County's limited control of these services or providers, this Area Plan does not establish policy that directly impacts the management and provision of these utilities.

However, due to the pressure rapid growth has placed on these providers within the planning area, particularly water and wastewater services, it is recognized that utility service issues will continue to be a primary issue in the community as development occurs. Consequently, the collective intent of this plan is to provide a more detailed vision of planned development and build-out projections for the San Tan Valley community to better support these utility service providers in updating their master planning efforts and system improvement projects to better meet the needs of current and future residents.

LIVE HEALTHY



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

DATE ISSUED: 2018

This section of the area plan addresses the concept of healthy living. More specifically, this section has been formulated around the recommendations of the San Tan Valley Health Impact Assessment, which was completed in tandem with this planning effort and focused on aspects that promote increased physical activity within the planning area. Physical activity is an essential component of a healthy lifestyle and can help prevent a range of health outcomes, including the three leading causes of death - heart disease, cancer, and stroke.



BUILT ENVIRONMENT AND HEALTH

Often genetics and health care are the most common factors that are associated with determining one's overall health. However, there is now a large body of research that supports the understanding that these factors only contribute to a small part of our overall health, and in fact social, behavioral and physical environments play a much larger role in determining a person's health and likelihood of becoming sick or dying prematurely.

These combined factors are commonly referred to as the determinates of health because they have a direct impact on individual or communitywide health outcomes (e.g. asthma, diabetes, obesity, heart disease, and mental health). This growing awareness that health is shaped by the places where we live, work, learn, and play has led community leaders, planners, and health professionals to embrace a more holistic approach to promoting a built environment that supports easy, healthy choices for all people.

PARKS & OPEN SPACE

Connected, high-quality parks and open space are a key component of a built environment that encourages physical activity and creates a healthier place for current and future San Tan Valley residents. While current development policy is effective in integrating open space as part of the planning and development process, there is still room for improvement.

The National Recreation and Park Association (NRPA) no longer identifies a one-size-fits-all standard for the amount of park land a community should maintain, but a common benchmark is 10 acres per 1,000 people. Comparing this benchmark with existing open space in San Tan Valley, which was largely developed under the County's current requirement that at least 15% of the total area of all Planned Area Developments (PAD) be designated as open space, shows the planning area meets minimum standards in terms of acres of park land per capita. But residents still identify a lack of active amenities within this provided park land and thus, despite adequate per capita park acres, existing parks do not meet recreation demand. In addition, all parks within the planning area are developed, maintained, and operated by private development or associations for use by their residents, further restricting the public use of the few active recreational amenities that do exist.

In 2012, the County established the Open Space and Recreation Area Guideline Manual (OSRAM) to, in part, address this active recreation level of service issue countywide. The manual establishes suggested minimum facilities for recreation areas within proposed developments to meet the active and passive recreation needs of its anticipated population. While the park and open space framework in this area plan shall utilize the OSRAM manual to guide the design and programming of recreation facilities in San Tan Valley, the following park classifications should also be utilized by new development to encourage healthy lifestyles by creating development patterns which increase access to opportunities for physical activity.

Local/ Neighborhood Parks

Local or neighborhood scale parks form the foundation of the San Tan Valley park system and serve as the recreational and social focus of most neighborhoods. These parks can be less than 1 acre in size or as large as 10 acres and are designed for ¼ to ½ mile radius of service. These parks are generally a walk-to type park where off-street parking is not provided, but on-street parking may be supplied based on scope of activities offered. Their primary purpose is to provide recreation to residents where major roads do not have to be crossed. The amenities provided can center on play apparatus for young children; however, some also include amenities for adults and seniors depending on the needs of the surrounding neighborhood, like space for field games or ball courts. Other amenities typically include gazebos, benches, picnic tables, and walking paths.



Community Parks

With the current population and projected future growth in the study area, there is a significant need for additional community scale parks. Community parks are diverse in nature, serving a broader purpose than local or neighborhood parks. They typically serve several neighborhoods and usually have both day and evening activities which can result in lighted fields. Community parks include a mix of active and passive activities and attract users of all ages. Large play structures, baseball diamonds, softball fields, soccer fields, ball courts, community buildings and swimming pools can all be part of a community park. Community parks generally range in size from 15 to 50 acres and are designed for a 1 to 3-mile radius of service. They are also easily accessible by multiple modes of transportation with on-site parking available.



While the exact locations of these parks will depend on land availability and sequence of development, Figure 7.1 reflects recommended spacing and typical service area for these community parks. Due to the size and piecemeal nature of planned development, the required amount of open space dedication for any single residential development may be smaller than the ideal community park size. One approach to assembling larger pieces of land could include requesting that developers locate dedicated open space at the edge or corner of development, so that adjacent developments can combine several smaller parcels of dedicated open space to form one larger community park facility.



MULTI-USE TRAILS

Many health studies have identified the potential for bicycle and pedestrian amenities to increase physical activity, reduce vehicle trips, enhance social cohesion, and improve overall health outcomes (i.e. reduce obesity, diabetes, and cardiovascular disease levels). This understanding, coupled with the feedback shared by residents regarding their active lifestyles, confirms the need for a multi-use trail system to be an integral part of San Tan Valley.

Figure 7.1 utilizes the Pinal County Open Space and Trails Master Plan as a foundation to define a network of on-street and off-street trails that allow easy access to recreational areas and major destinations within or adjacent to the planning area. The trail system consists of a combination of paved and unpaved trails that provide alternative routes and allows a range of users choices between distance, comfort, and experience levels for recreation and utilitarian purposes.

Like the Pinal County Open Space and Trails Master Plan, these trails are categorized into three types; Adopted County Trail Corridor or the CAP Canal Trail that provides regional connectivity throughout Pinal County; Existing/Planned Multi-Use Trails that indicate trails that have been developed or are planned as part of additional supporting planning documents; and Proposed Multi-Use Trails that are proposed connections to establish links between existing/planned trail corridors. The specific cross-section of each trail type is further defined by the OSRAM manual, which defines four classifications of trails that reflect the setting in which the trails will be found as well as details specific design guidelines that should be applied when planning and designing each trail alignment. Since these trails run through various Place Types (i.e. Urban Center, Suburban Neighborhood, Rural Living), their design classification should reflect these differing conditions. For example, trail alignments located in Suburban Neighborhood Place Types should reflect the Suburban trail setting guidelines in the OSRAM manual.



WALKABLE DESTINATIONS

Considering the overreliance on automobiles for daily tasks within the planning area, residents expressed the support for, and participants in the Health Impact Assessment stressed the need to incorporate, measures to improve walkability in San Tan Valley. Providing increased trail connectivity certainly encourages this desire, but a walkable community requires much more than sidewalks or paths. Walkability requires a comprehensive approach to community design that ensures that pedestrians are safe, comfortable, and have a range of destinations to which they can (and desire to) walk. Some measures that promote walkability include:

Destinations

For walking to be a useful mode of transportation, there must be places to walk to. Horizontal and vertical mixed-use areas, with multiple options for both daily and specialty shopping, restaurants and entertainment venues, schools and daycare facilities, places of employment, and recreation should be located near residential uses.

Amount of Housing

The more housing that is located near commercial areas, creates the potential for more people to walk to their desired local shops. In turn, car trips are replaced with walking trips, making roads less congested and more pedestrian friendly. In addition, most retail establishments require a large customer base to be successful. By placing more homes in closer proximity to retail areas, improves the viability of businesses in these areas.

Street Trees

Street trees, set in a planter strip between the road and the sidewalk, help make a walk substantially more comfortable, especially during San Tan Valley's hotter months. They provide a sense of safety, provide shade and a visual canopy helps to create a more attractive streetscape and stronger sense of place. In order to promote planting of street trees closer to the sidewalk edge, varieties that are less likely to cause damage and other hazards on the sidewalk. In addition, sufficient resources need to be provided to maintain the trees, to ensure that branches don't inhibit travel or impede sight visibility lines.

Pedestrian Amenities (benches, lighting, trash cans, etc.)

Providing benches ensures that pedestrians have a place to rest, this is particularly important for pedestrians with limited mobility. Trash cans, lighting, and other pedestrian amenities help to ensure that a walk is comfortable and safe.

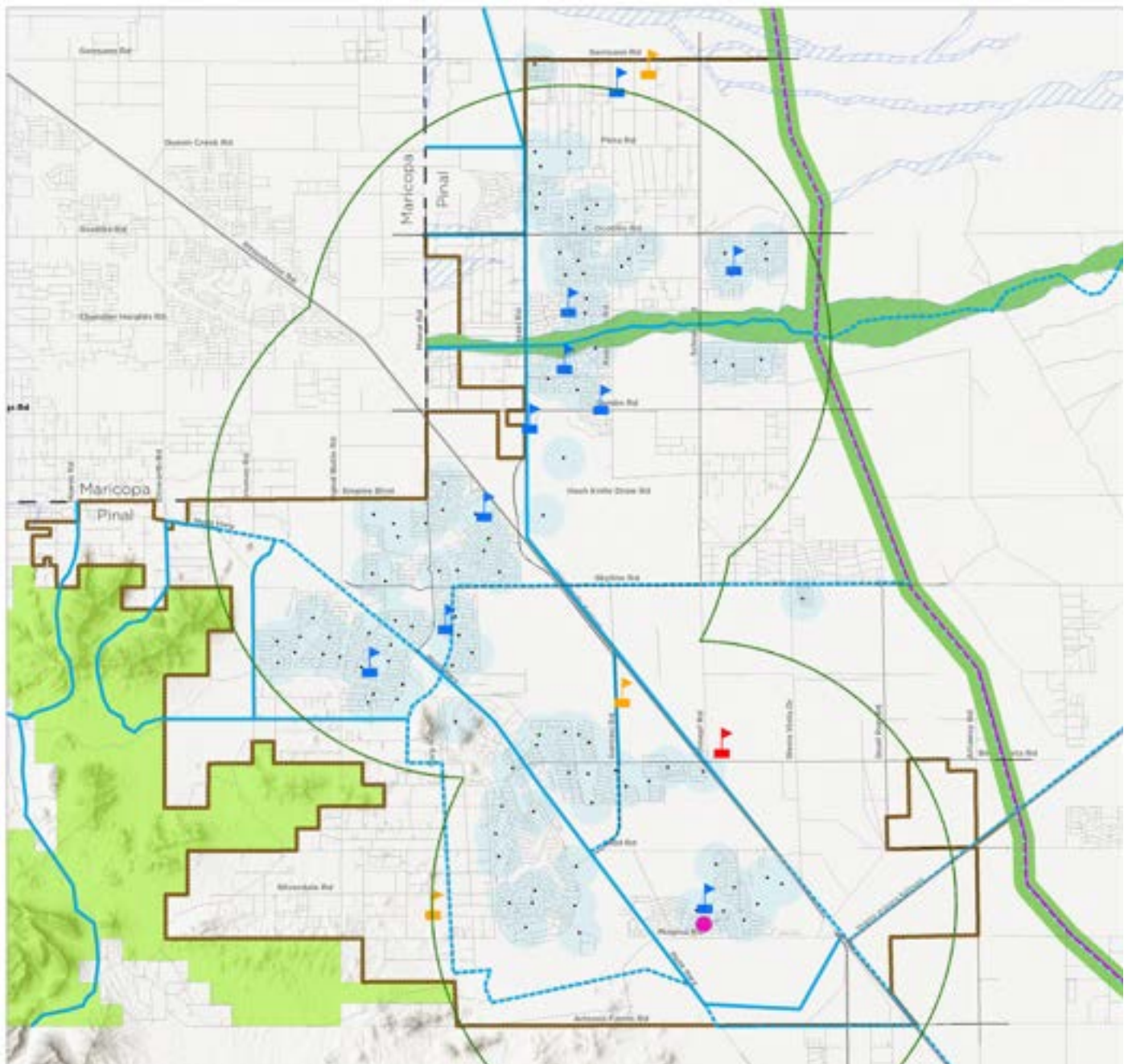
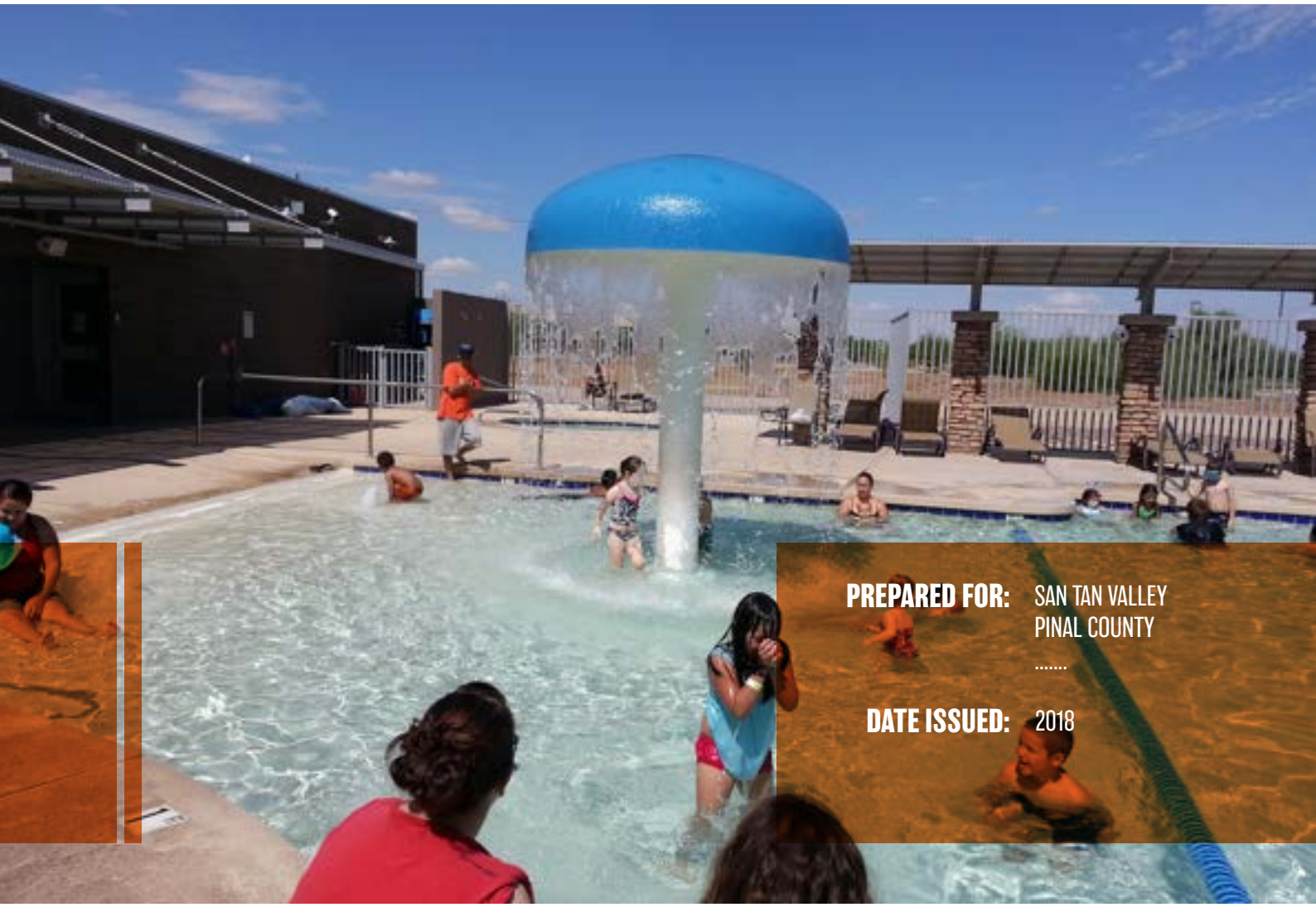


FIG 7.1 TRAILS AND OPEN SPACE PLAN

Legend

- | | |
|---|---|
|  San Tan Valley Study Area |  YMCA |
|  CAP Canal |  K-8 |
|  Adopted County Trail Corridor |  High School |
|  Existing/Planned Multi-Use Trail Corridor |  College |
|  Proposed Multi-Use Trail Corridor | |
|  Proposed Open Space | |
|  Local / Neighborhood Park (1/4 mile service area) | |
|  Community Park (Proposed Service Area) | |

IMPLEMENTATION



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

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DATE ISSUED: 2018

The below information provides additional implementation guidance to further support the San Tan Valley Special Area Plan. The Goals and Strategies are organized according to the Plans Principal Themes. **Goals**, provide general direction to guide efforts in achieving each Principal Theme. **Strategies**, indicate administrative or development actions that support implementation of each Goal.

GOALS & STRATEGIES

+ STRENGTHEN THE COMMUNITY

Goal 1.1 Preserve and Enhance Existing Neighborhood Character

Strategies

- Work with existing permitted, vested, or proposed developments to ensure future growth supports the preferred land use vision when possible.
- Encourage residential development that creates a harmonious, but distinguishable streetscape character. (e.g. varied front yard setbacks, alternative garage placement, front porches, etc.)
- Minimize land use conflicts through the application of appropriate buffers, landscaping, and site/building design elements
- Continue to protect established rural living place types from encroachment.
- Regularly meet with HOA's, school districts and Third-Party groups to define/develop community enhancement opportunities (e.g. seasonal concert program, public art campaign, etc.).

Responsible Partners

- Community Development
- Community Development
- Community Development
- Community Development
- STV Chamber of Commerce

Goal 1.2 Foster More Housing Diversity

Strategies

- Encourage a greater diversity of housing and dwelling sizes to include both smaller and larger homes.
- Encourage appropriately designed small lot and multi-family housing to enable San Tan Valley to support various income levels, lifestyles, and age groups.
- Guide higher density housing development into Community Center, Urban Transitional, and Urban Center place types that provide proximity to walkable commercial areas.
- Minimize higher density housing development within areas where access to existing or planned commercial areas is limited.
- Support conversion of commercial land use to other appropriate uses such as multi-family residential in areas where retail use is no longer viable

Responsible Partners

- Community Development
- Community Development
- Community Development
- Community Development
- Commercial Development

Goal 1.3 Develop High Quality Places for Residents to Congregate and Experience

Strategies

- Support the placement of Community Center and Urban Center place types toward areas that offer high connectivity and accessibility for all modes.
- In Community Center and Urban Center place types, discourage single-use development and encourage horizontal and vertical mixed-use development that:
 - Provides a different mix of retail and commercial uses that service both residents and visitors
 - Offers well-designed public spaces that create opportunities for spontaneous and planned gatherings (e.g. plazas, event lawns, amphitheaters, activity fountains, etc.)
 - Implements urban design standards that promote an attractive, pedestrian-oriented environment (e.g. natural building materials, wide sidewalks, shade, ample seating, lighting)
- Create a strong sense of place by incorporating public vistas of the San Tan Mountains and public art that highlights the cultural heritage of the area into development.

Responsible Partners

- Community Development
- Community Development
- Community Development

+ BROADEN ECONOMIC OPPORTUNITY

Goal 2.1 Enhance Local Spending

Strategies

- Based on the findings of this Plan, work with the San Tan Valley Chamber of Commerce to develop a Retail Attraction Program (i.e. inventory available space and shovel ready property, meet with broker-end users, identify requirements, define marketing material).
- Locate more housing near existing retail areas in support of neighborhood retail.

Responsible Partners

- Economic Development/
STV Chamber of Commerce
- Community Development

Goal 2.2 Encourage Investment in the Local Economy

Strategies

- Based on the findings of this Plan, work with the San Tan Valley Chamber of Commerce to conduct market surveys, identify target industries and shovel ready sites.
- Preserve larger-scale sites within Suburban Office and Employment place types to protect future potential for research and development, technology, manufacturing or distribution development activities.
- Continue to evaluate commercial development impact fees to ensure equity in encouraging economic growth and accommodating the costs of that growth.

Responsible Partners

- Economic Development/
STV Chamber of Commerce
- Community Development
- Board of Supervisors

- Provide incentives, such as expedited permitting, for priority business sectors.
- Enhance recreation assets and market lifestyle advantages to attract skilled employees and desired employers
- Work with utility providers to align infrastructure investments with economic development needs

Community Development
Open Space & Trails/
Economic Development
Economic Development/
Community Development

IMPROVE TRANSPORTATION SYSTEMS

Goal 3.1: Provide a full, viable range of multimodal transportation alternatives

Strategies

- Continue to promote the application of the RSRM Plan to reduce congestion and provide appropriate internal and external connectivity for the San Tan Valley Area.
- Based on the foundation of this Plan, consider the development of an area-wide transportation master plan to assist in identifying and programming strategic near, mid, and long-term transportation improvements.
- Continue to actively coordinate with local and State agencies to promote the planning, design, and construction of the North/South and State Route 24 freeway corridors.
- Promote internal and external connectivity between mobility modes to create an integrated transportation system that benefits San Tan Valley and the region.
- Incorporate “complete streets” concepts to encourage multimodal opportunities on San Tan Valley’s existing and planned arterial streets.
- Increase streetscape landscape standards to promote enhanced tree cover along sidewalks to establish a more comfortable walking environment. Particularly along arterial and collector roadways that provide access to existing or future key destinations (e.g. shopping centers, parks, schools, etc.)
- Ensure standard road maintenance practices are completed in a manner that supports non-vehicular circulation. (e.g. encourage resurfacing projects to include restriping for bike lanes where feasible).
- Encourage the introduction of the X5 Valley Metro express bus transit route into San Tan Valley.

Responsible Partners

Public Works/PRTA

Public Works/Community
Development

Public Works/PRTA

Community Development/
Public Works/Open Space
& Trails
Community Development

Community Development/
Public Works

Public Works/Community
Development

Public Works/Community
Development

Goal 3.2: Guide new land development to create greater proximity and ease of access between people and their destinations

Strategies

- Offer more pedestrian and bicycle travel options by encouraging the placement of higher density residential uses in close proximity to desired non-residential destinations.
- In Community Center place types promote the design of collector roads that offer customers and residents the ability to travel to and around these centers without utilizing major streets for short trips.
- In Urban and Transitional place types encourage a traditional neighborhood design approach that utilizes a grid pattern with short block sizes to increase connectivity.
- Promote the appropriate application of the trail classifications within the OSRAM manual and the trail alignments provided in this Plan to promote off-street pedestrian and cyclist comfort between transportation systems, residential neighborhoods, regional centers, activity areas, corridors, canals, schools, and parks.

Responsible Partners

- Community Development
- Community Development
- Community Development
- Open Space & Trails/
Community Development

Goal 3.3 Support high quality infrastructure services and systems.

Strategies

- Continue to work with existing utility providers to collectively promote an efficient and economic water and wastewater system that meets or exceeds state and federal health standards.
- Encourage utility providers to utilize this area plan to assist in the planning, design, and siting of distribution and support facilities to increase service capacity as demand increases.

Responsible Partners

- Community Development
- Community Development

LIVE HEALTHY

Goal 4.1 Connect Destinations and Open Space through a multimodal network of trails and streetscapes

Strategies

- Ensure walls surrounding developments include appropriately placed gaps to promote public walking and biking connectivity between neighborhoods and desired destinations.
- Create a coordinated network of safe pedestrian and bike routes to nearby destinations such as schools, the San Tan Mountain Regional Park, community centers, hospitals, retail centers, and the Central Arizona College campus.

Responsible Partners

- Community Development
- Community Development/
Open Space & Trails

- Prioritize pedestrian and bike infrastructure investments based on the location of common destinations in the community like schools, regional park, community centers, hospitals, retail centers, and the college.
- Where possible, establish “one-off” routes for cyclists and pedestrians that are parallel to major arterial streets, and offer slower, lighter traffic.
- Integrate Safe Routes to Schools design principles (comfort, convenience, safety, and access).
- Consider incentives for developers or businesses that support the use of biking and walking (e.g. fast-track permitting, etc.).

Community Development/
Open Space & Trails

Community Development/
Open Space & Trails

Community Development

Community Development

Goal 4.2 Support development that promotes a healthy lifestyle

Strategies

- Encourage new housing to face parks and open space to increase usership, community building, and safety.
- Support the creation of appropriately placed community parks over the application of multiple local/neighborhood sized parks. Consider working with developers to locate dedicated open space at the edge or corner of development, so that adjacent developments can combine several smaller parcels of dedicated open space to form one larger community park facility.
- Continue to examine County Park and Open Space management policies to address active recreation needs of the study area.
- Explore the development of formal joint use agreements between school district(s) and Pinal County to allow for enhanced public access to both outdoor and indoor recreational facilities after school hours.
- Incorporate a Recreation Needs Assessment into the Open Space and Trails Master Plan to address community inequities and preferred programming.
- Regularly meet with HOA's and Third-Party groups to define/develop efforts that support recreation within developed areas (e.g. plant a tree day, adopt a trail program, etc.).

Responsible Partners

Community Development/
Open Space & Trails

Community Development/
Open Space & Trails

Community Development/
Open Space & Trails

Community Development/
School Districts

Community Development/
Open Space & Trails

Open Space & Trails/STV
Chamber of Commerce

APPENDIX



PREPARED FOR: SAN TAN VALLEY
PINAL COUNTY

DATE ISSUED: 2018

APPENDIX A



Inputs	Scenario Assumptions
Demographic	
population (MAG 2050 Projection)	157,860
Land Use	
persons per household - single family large lot	2.69
persons per household - single family detached	2.69
persons per household - single family attached	2.69
persons per household - multi-family	1.39
persons per household - mixed use	1.39
Average DU/AC - single family large lot	1.5
Average DU/AC - single family detached	3.5
Average DU/AC - single family attached	8
Average DU/AC - multi-family	16
Average DU/AC - mixed use	24
Vacancy Rate	0.16
Employment	
FAR - neighborhood retail	0.25
FAR - community retail	0.25
FAR - urban retail	0.5
FAR - Mixed Use	0.5
FAR - office	0.35
FAR - manufacturing / warehousing	0.5
FAR - energy / resource production	0.003
sq. ft. per job - retail	500
sq. ft. per job - office	200
sq. ft. per job - manufacturing / warehousing	1000
sq. ft. per job - energy / resource production	1500
sq. ft. per job - mixed use	500
Transportation	
Average vehicle miles traveled - business as usual	25000 - 30000
Average vehicle miles traveled - community node	-5%
Average vehicle miles traveled - community center	-10%
Water	
Average Water Use - single family large lot	450
Average Water Use - single family detached	390
Average Water Use - single family attached	250
Average Water Use - multi-family	230
Average Water Use - mixed use	2200
Average Water Use - neighborhood retail	0.8
Average Water Use - community retail	0.8
Average Water Use - urban retail	0.8
Average Water Use - office (Light Industrial)	1000
Average Water Use - manufacturing (Heavy Ind)	2000
Health	
Acres of park land per 1,000 population	

Place Type	Land Use	Preferred Scenario (Build Out)		Preferred Total Acreage (Build Out)	Verified Preferred Total Acreage (Build Out)
		Acreage	% of Study Area		
Rural Living	Large Lot Residential	12,300.00	28.22%	12,444	12,444
	OS/Parks (Queen Creek)	144.00	0.33%		
Suburban Neighborhood	Single-Family Detached	22,772.00	52.24%	26,672	26,672
	Single-Family Attached	1,000.00	2.29%		
	Neighborhood Retail	250.00	0.57%		
	Neighborhood Parks/Local Parks	2,500.00	5.73%		
	Community Parks	150.00	0.34%		
Community Center	Community Retail	552.00	1.27%	922	922
	Single-Family Attached	262.00	0.60%		
	Multi-Family	100.00	0.23%		
	Neighborhood Parks/Local Parks	8.00	0.02%		
Urban Transition	Multi-Family	280.00	0.64%	777	777
	Single-Family Attached	477.00	1.09%		
	Neighborhood Parks/Local Parks	20.00	0.05%		
Urban Center	Mixed Use (Commercial) 1st floor	5.00	0.01%	50	50
	Mixed Use (Residential) 2nd floor	5.00	0.01%		
	Urban Retail	34.00	0.08%		
	Multi-Family	10.00	0.02%		
	Neighborhood Parks/Local Parks	1.00	0.00%		
Suburban Office	Office	150.00	0.34%	150	150
	Live/Work	0.00	0.00%		
Employment Center	Manufacturing/Warehousing	776.00	1.78%	2,041	2,041
	Energy/Resource Production	1,215.00	2.79%		
	Office	50.00	0.11%		
Military	Military	537.00	1.23%	537	537
Total		43,593.00	100%	43,593	43,593

Jobs/Housing Ratio		0.43
--------------------	--	------

Outputs	Preferred Scenario (Build Out)
Residential	
Housing Units - Large Lot Residential	18,450.00
Housing Units - Single Family Detached	79,702.00
Housing Units - Single Family Attached	13,912.00
Housing Units - Multi-Family	6,240.00
Housing Units - Mixed Use	120.00
Housing Units Total	118,424.00
Total Housing Units (16% Vacancy)	99,476.16
Population - Large Lot Residential	49,630.50
Population - Single Family Detached	214,398.38
Population - Single Family Attached	37,423.28
Population - Multi-Family	8,673.60
Population - Mixed Use	166.80
Population Total	310,292.56
Population Total (16% Vacancy)	260,645.75
Employment	
Total Building Square Footage - Neighborhood Retail	2,722,500.00
Total Building Square Footage - Community Retail	6,011,280.00
Total Building Square Footage - Urban Retail	740,520.00
Total Building Square Footage - Mixed Use	108,900.00
Total Building Square Footage - Office	3,049,200.00
Total Building Square Footage - Manufacturing/Warehousing	16,901,280.00
Total Building Square Footage - Energy/Resource Production	158,776.20
Jobs - Neighborhood Retail	5,445.00
Jobs - Community Retail	12,022.56
Jobs - Urban Retail	1,481.04
Jobs - Mixed Use	217.80
Jobs - Office	15,246.00
Jobs - Manufacturing/Warehousing	16,901.28
Jobs - Energy/Resource Production	105.85
Jobs Total	51,419.53
Transportation	
Average vehicle miles traveled per household	22500-27000
Water	
Average Water Use - single family large lot	8,302,500.00
Average Water Use - single family detached	31,083,780.00
Average Water Use - single family attached	3,478,000.00
Average Water Use - multi-family	1,435,200.00
Average Water Use - mixed use	11,000.00
Average Water Use - neighborhood retail	2,178,000.00
Average Water Use - community retail	4,809,024.00
Average Water Use - urban retail	592,416.00
Average Water Use - office (Light Industrial)	200,000.00
Average Water Use - manufacturing (Heavy Ind)	1,552,000.00
Gallons Per Day	53,641,920.00
Health	

APPENDIX B





SAN TAN VALLEY

HEALTH IMPACT ASSESSMENT



PREPARED FOR: Pinal County
Public Health
Services District

DATE ISSUED: June 8, 2018

Acknowledgements

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Executive Summary



Between December 2016 and May 2018, the Pinal County Community Development Department coordinated the development of a Special Area Plan (SAP) for the growing community of San Tan Valley (STV). A SAP is a plan that is developed for a clearly defined area and gives more detailed recommendations than those provided in the County's broader county-wide Comprehensive Plan.

The STV SAP builds upon the goals, policies, and implementation strategies in the County's Comprehensive Plan in six specific areas: Land Use; Housing; Economic Vitality; Transportation; Parks, Trails and Open Space; and Public Facilities and Services.

Concurrent to this community based planning effort, the Pinal County Public Health Services District received funding from the Arizona Department of Health Services to conduct a Health Impact Assessment (HIA) on the STV SAP. The overall intent of the HIA was to explore how the STV SAP might impact the community's health and make recommendations that in turn mitigate negative health impacts and increase health benefits.

Given the development context and expansive nature of the STV SAP, initial recognition was given to the need to focus this HIA effort on those determinants of health that were most relevant

to local planning and decision-making. Consequently, through collaboration with County staff, guidance from the HIA Technical Advisory Committee and input from the community, determination was made that the greatest impact to health in the STV area could be achieved through a focus on promoting Physical Activity. Physical Activity is an essential component of a healthy lifestyle and can help prevent a range of health outcomes, including the three leading causes of death - heart disease, cancer, and stroke.

After extended research, community workshops, and HIA committee meetings, a set of recommendations that included land use guidance and planning policies were developed to positively impact Physical Activity in the STV community. These recommendations included the following:



RECOMMENDATIONS

Enhance design standards for new residential and commercial development

- Ensure walls surrounding developments include appropriately placed gaps to promote public walking and biking connectivity between neighborhoods.
- In Urban and Transitional place types encourage a traditional neighborhood design approach that utilizes a grid pattern with short block sizes to increase connectivity.
- Encourage new housing to face parks and open space to increase usership, community building, and safety.

Develop a policy for Complete Streets that accommodates all users – motorists, pedestrians, cyclists, and transit

- Mandate sidewalks on both sides of the street for all development in urban areas and any developments with lots less than one acre in area. (PADs should never allow for a sidewalk to not be built in return for adding some other feature to the site).
- Develop streetscape standards that emphasize pedestrian and bike safety (lighting and traffic calming measures).
- Incorporate concepts from Complete Streets into standard road maintenance practice. (encourage resurfacing projects to include restriping for bike lanes).
- Increase streetscape landscape standards to promote enhanced tree cover and a more comfortable walking environment.
- Prioritize roads and corridors that provide the greatest ease of access via sidewalks and bike routes to the greatest amount of uses.

Expand accessibility to active recreation facilities

- Continue to examine County Park and Open space management policies to address active recreation needs of the study area.
- Increase the percentage of active park space required of residential developments to meet a level of service comparable to community park amenities.

- Explore the development of formal joint use agreements between school district(s) and Pinal County to allow for enhanced public access to both outdoor and indoor recreational facilities after school hours.
- Incorporate a Recreation Needs Assessment into the Open Space and Trails Master Plan to address community inequities and preferred programming.

Provide an interconnected system of on- and off-street trails that connect desired destinations

- Continue to expand trail network consistent with Open Space and Trail Department Strategic Business Plan (49% increase in miles of county regional trails acquired by 2021).
- Include trail connections in the design of new neighborhoods, preferably that connect to the established regional trail system.
- Work with HOA's and Third-Party groups to define/develop off-street trail connections within developed areas (adopt a trail program, etc.).

Develop land uses and transportation networks that support safety and comfort for pedestrians and bicyclists

- Create a corridor network of safe pedestrian and bike routes to nearby destinations such as schools, regional park, community centers, hospitals, retail centers, and the college.
- Prioritize pedestrian and bike infrastructure investments based on the location of common destinations in the community like schools, regional park, community centers, hospitals, retail centers, and the college.
- Where possible, establish “one-off” routes for cyclists and pedestrians that are parallel to major arterial streets, and offer slower, lighter traffic.
- Integrate Safe Routes to Schools design principles (comfort, convenience, safety, and access)
- Consider incentives for developers or businesses that support the use of biking and walking (fast-track permitting, etc.).

Introduction



SAN TAN VALLEY SPECIAL AREA PLAN

A Comprehensive Plan is a common vision or framework for development and growth within a County. It sets forth the principles, policies, physical plan and recommended strategies that have been embraced by a County to shape its future.

The purpose of a Special Area Plan (SAP) is to expand on the specific elements of a Comprehensive Plan to be more closely associated with community goals and actions that are specific to a defined area. It effectively acts as a link between implementing the broad policies of a Comprehensive Plan and providing further guidance to individual development in a particular location. The San Tan Valley Special Area Plan (STV SAP) explicitly examines the unique issues, concerns, and needs of the San Tan Valley area in order to establish public policy and guidance for future growth in this distinctive portion of Pinal County.

Located in the northwest portion of Pinal County, the San Tan Valley Area Plan encompasses over 70 square miles and extends from the CAP Canal on the east to the San Tan Mountains on the west and from Germann Road on the north to Arizona Farms Road on the south.

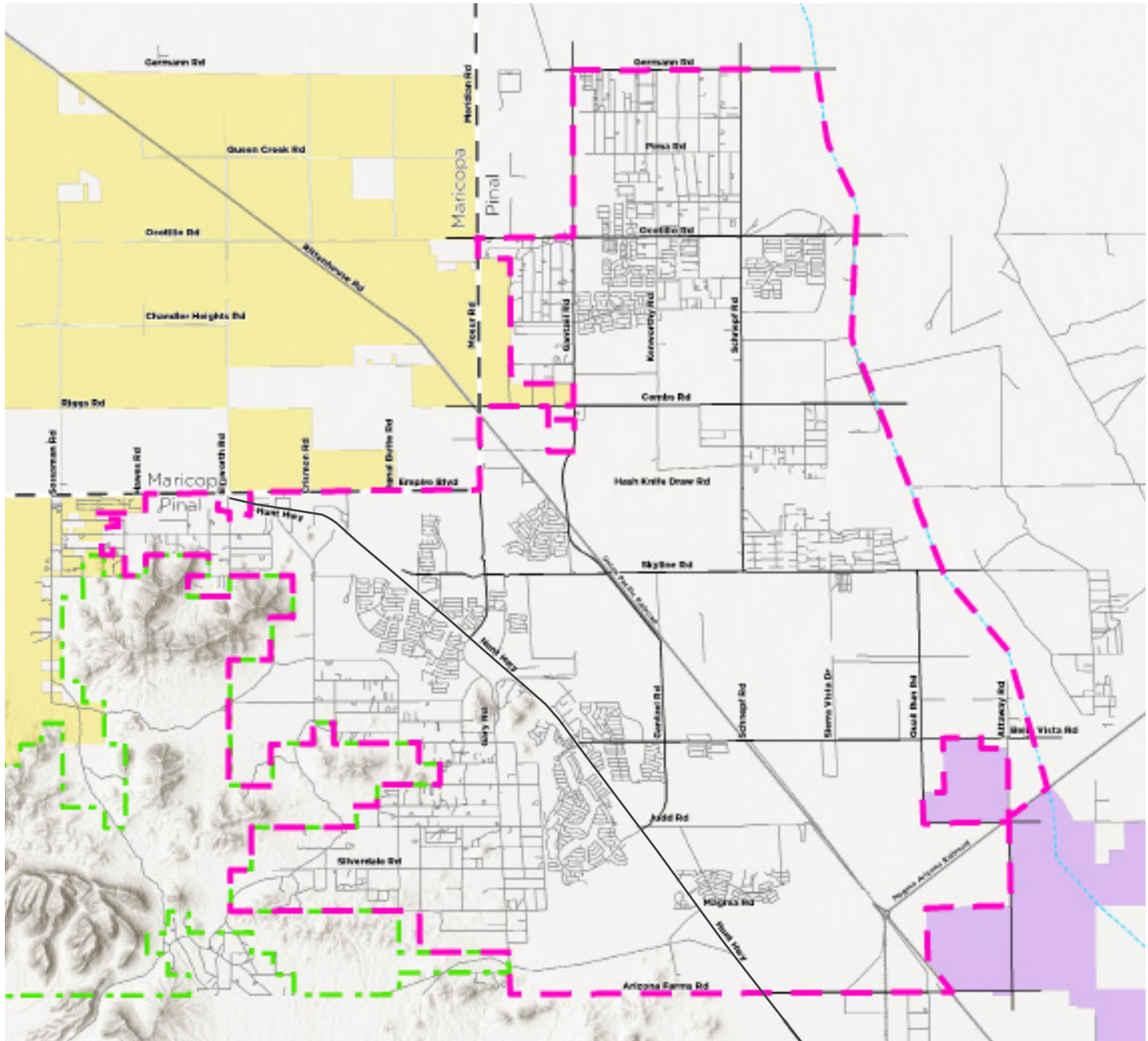


Figure 1: San Tan Valley Planning Area

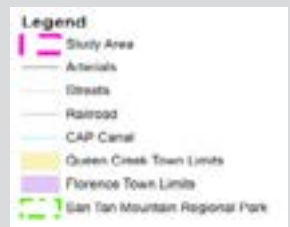
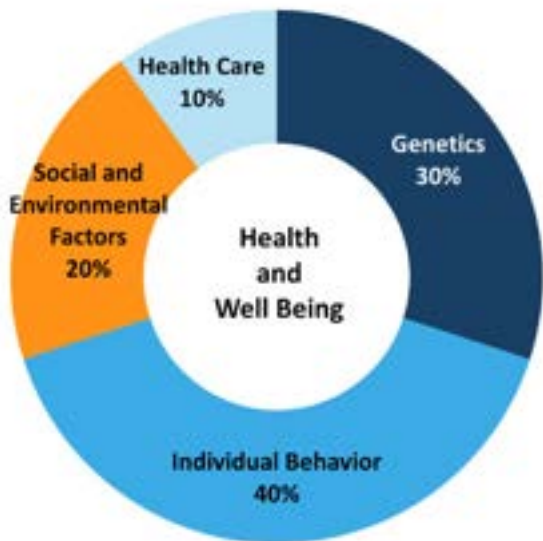


Figure 2: Determinants of Health¹



BUILT ENVIRONMENT AND HEALTH

Often genetics and health care are the most common factors that are associated with determining one’s overall health. However, there is now a large body of research that supports the understanding that these factors only contribute to a small part of our overall health, and in fact social, behavioral and physical environments play a much larger role in determining a person’s health and likelihood of becoming sick or dying prematurely.

These combined factors are commonly referred to as the determinates of health because they have a direct impact on individual or community wide health outcomes (e.g. asthma, diabetes, obesity, heart disease, and mental health). This growing awareness that health is shaped by the places where we live, work, learn, and play has led community leaders, planners, and health professionals to embrace a more holistic approach to promoting a built environment that supports easy, healthy choices for all people.



HIA OVERVIEW

A Health Impact Assessment (HIA) is a tool to evaluate the potential positive and negative impacts to health from a proposed project, policy, or plan. HIAs are conducted to inform decision-makers by using existing research, baseline health data, and input from stakeholders to determine potential effects, and then provide recommendations that in turn mitigate negative health impacts and increase health benefits. The standard steps of an HIA are further discussed in the “HIA Components” Section of this document.

In the interest of promoting a future state that supports healthy choices within San Tan Valley, the Pinal County Public Health Services District (PCPHSD) undertook this HIA to identify ways to make health a part of the STV SAP decision-making process. In comparison with more comprehensive HIA efforts, this HIA is not as extensive and is therefore referred to as a “rapid” HIA. This rapid HIA directly integrated health into the planning process by assessing the condition of the existing built-environment, predicting health consequences of alternative land planning outcomes, informing decision makers and the public about these health impacts, and providing realistic recommendations to prevent or mitigate negative health outcomes that were directly included into the final STV SAP.

Methodology



+ Guiding Principles

The methodology conducted for this HIA encompassed an assortment of research. This included quantitative and qualitative data collection as well as literature review to determine current health related conditions in the San Tan Valley area and to examine the potential health impact of various build-out scenarios relative to the Special Area Plan planning effort.

+ Advisory Committee

In addition to this research framework, this HIA used community engagement to inform the process at key milestones. Intrinsic to this engagement effort was the formation of a Technical Advisory Committee (TAC). The HIA TAC included representatives from the public health, county planning, local education and healthcare sectors as well as San Tan Valley area community advocates. The HIA TAC provided guidance on key activities including defining the scope of the HIA, organization of Community Workshops as well as identification of final recommendations.

+ Community Participation

The STV SAP project team hosted two community workshops during the HIA process. The first workshop focused on introducing the community to the STV SAP project and obtaining their opinion regarding various assets, issues, and opportunities within San Tan Valley area relative to four primary topic areas: Neighborhoods and Community Character, Business and Economic Development, Transportation and Infrastructure, and Healthy Lifestyle. The second workshop shared three alternative land use scenarios that were developed based on feedback obtained during workshop one. A matrix of performance indicators was also provided to help inform participants regarding the potential health impacts of each scenario. Benefited with this information, participants were then asked to provide their preferences amongst the three scenarios.

+ HIA Components

The structure of this HIA effort adhered to the standard process that consists of 6 distinct steps²:



Screening — determines if an in-depth assessment is necessary and if HIA will add value to the decision-making process



Scoping — identifies the particular issues that should be addressed in the HIA and develops a plan for completing the assessment



Assessment — uses qualitative and quantitative information to create a profile of existing health conditions, and evaluates potential health impacts



Recommendations — suggests alternatives that could be implemented to improve health or, identifies actions that could be taken to manage health effects



Reporting — circulates the results of the HIA to decision makers, individuals implementing the plan/policy, and community stakeholders



Monitoring and Evaluation — reviews the effectiveness of the HIA process and evaluates the actual health outcomes as a result of the recommendations or project

Screening & Scoping

SCREENING

The HIA TAC conducted the initial screening for this HIA in December 2016. During this meeting, HIA TAC members were led through a list of five (5) pre-determined questions that were prepared to screen or determine if the completion of an HIA in association with the STV SAP was necessary and if an HIA would add value to the plans overall decision-making process.

The HIA TAC members had the opportunity to identify their preferred response to each question by using electronic hand-held polling devices. These hand-held pollers ensured for a 100% participation level. From the real-time responses, the HIA committee was then able to discuss the choices and provide further input as desired.

Based on group polling responses, and resulting discussion, the committee collectively determined that conducting an HIA as part of the STV Special Area Plan would be viable because the overall planning effort had the potential to impact a broad range of health outcomes, the HIA aligned with the project time line creating opportunity for collaboration, and there was strong belief that decision makers would support recommendations from the process.



SCOPING

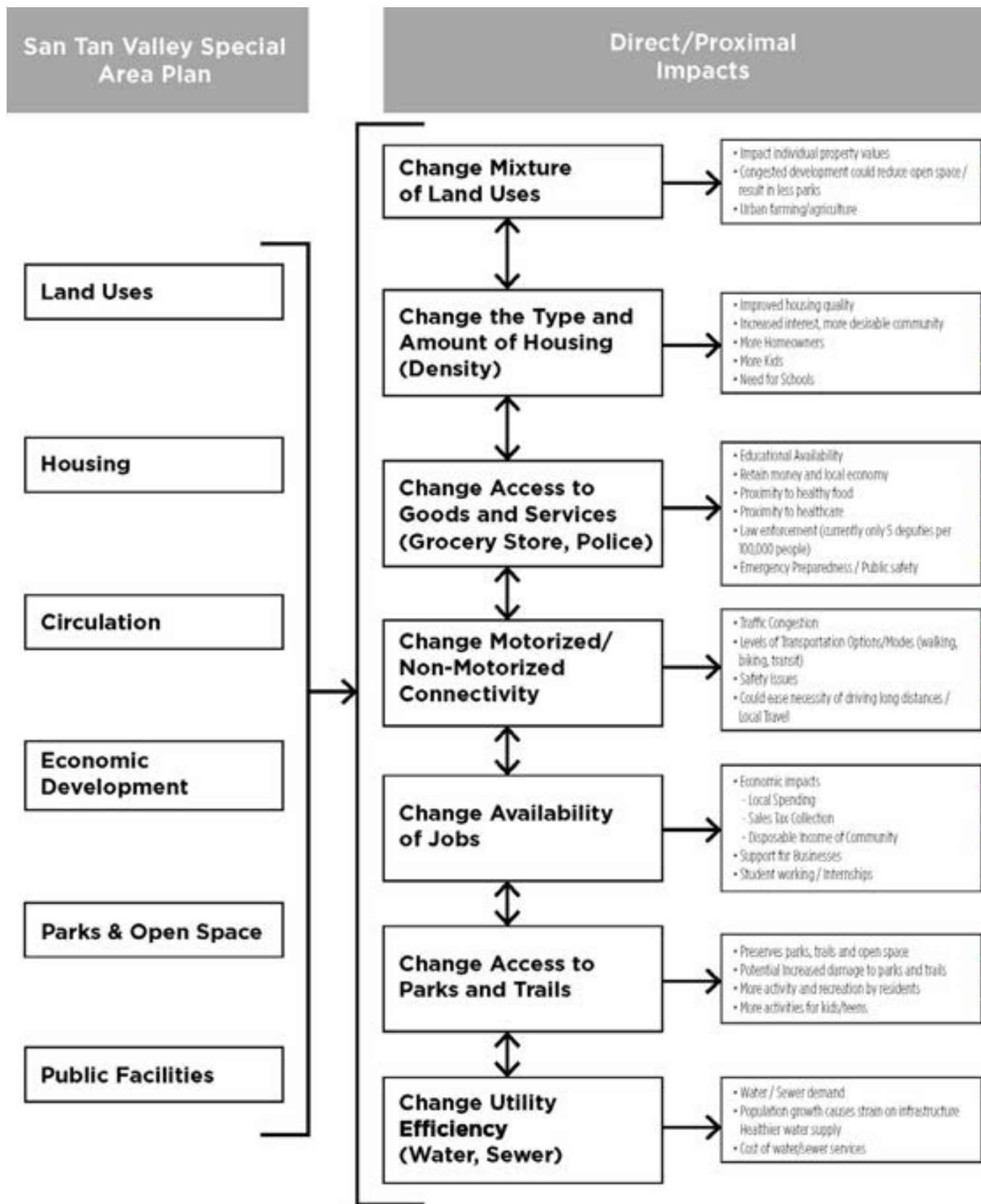
After completing the screening phase, the HIA team took the TAC through a scoping exercise. The goal of the scoping exercise was to identify the “universe” of health-related issues that could be impacted by the broad STV project and then determine what specific health issue(s) the HIA should focus on to keep the effort manageable and attainable. To facilitate this effort, a pathway diagram was constructed to hypothesize the connections between key issues identified by HIA TAC members and potential health outcomes. See Figure 3: Pathway Diagram on following page.

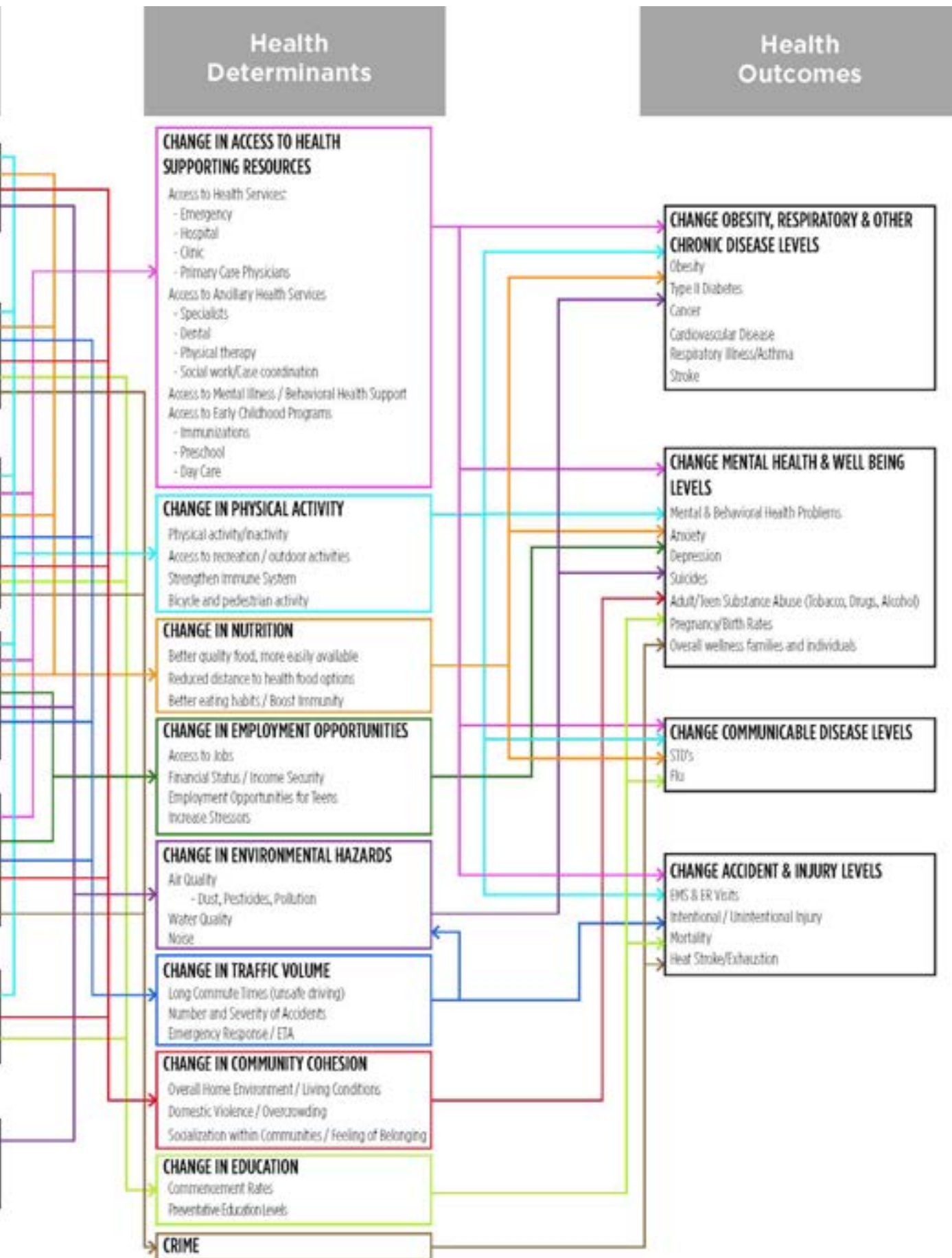
To cull the results of the Pathway Diagram and identify one or two health impacts/outcomes that the HIA should focus on, the committee considered the availability of data, identified the health issues that were of greatest concern to the community, and reviewed the health issues that had the highest potential for change within the scope of the STV SAP project.

Main themes that were discussed included “mental illness and services”, “obesity and chronic disease”, “access to goods and services”, and “access to parks and public facilities”. However, based on group discussion, the consensus amongst HIA TAC members identified “improving physical activity” within the study area (with an emphasis on children) as the best opportunity to affect change in the community. Potential community-wide improvement within this health focus could also have a positive “trickle down” effect and address several other health impacts/outcomes that were identified within the Pathway Diagram.

In addition, committee members agreed, the way we plan our communities can have a strong impact on the amount of activity residents engage in; therefore, how the built environment influences this widespread health issue was further identified as the primary impact to guide the assessment.

Figure 3: Pathway Diagram





Assessment



The assessment portion of this HIA focused on the connection between the built environment and health, specifically relating to physical activity. This analysis was broken down into two stages: 1) understanding the existing conditions of the community and 2) evaluating what the implications of different future states (build-out scenarios) developed through the SAP planning process would mean for physical activity levels within the San Tan Valley community.

PHYSICAL ACTIVITY PATHWAY EXISTING CONDITION ASSESSMENT

+ Demographics

The composition of an area's population such as its overall size, age distribution, and racial or ethnic mix may require different targeted strategies to encourage physical activity. To understand this relationship, this section provides a demographic overview of the STV, and is the basis for understanding the concentrations, size, and makeup of the community's population.

Over the last decade San Tan Valley has experienced remarkable population growth. In the decade from 2000 - 2010, San Tan Valley grew from a rural area of 4,976 residents to a suburban community of 86,665. As of 2016, San Tan Valley is now home to approximately 102,539. This dramatic 122% annual growth rate over the last 16 years is projected to continue in the future, although to a much lesser degree. The average household size in San Tan Valley is much higher at 3.34 people compared to Maricopa County at 2.69. Over 66% of residents are White, while only 22% self-identify as Hispanic, this is above and below the State averages respectively. San Tan Valley residents are also younger, with a median age of 29.7 compared to Maricopa County at 35.4 and Pinal County at 36.4.

+ Health Outcomes

Hospitalizations - Hospital discharge data can be a strong indicator of health factors in a defined area. Analysis of hospital discharge data from 2010-2014 for patients whose home of record was within the San Tan Valley boundaries, identified cardiovascular disease hospital admissions at 668 per 100,000 residents per year compared to Pinal County as a whole, which totaled 1,498 per 100,000 residents per year. While this data suggests an improved health condition in San Tan Valley relative to Pinal County and Arizona, the lower rate of hospitalizations due to cardiovascular disease can be attributed to the fact that San Tan Valley is comprised of a younger population (median age 29.7 vs. 36.4 in Pinal County).

Mortality - Examination of mortality rates in San Tan Valley confirmed the second leading cause of death within the planning area (behind malignant neoplasms - cancer) is disease of the circulatory system (cardiovascular disease) at 24.8%. The percent of deaths caused by accidents and injuries (external causes) in San Tan Valley is comparable to the rest of Pinal County at 8.2%.

Figure 4: Population Growth

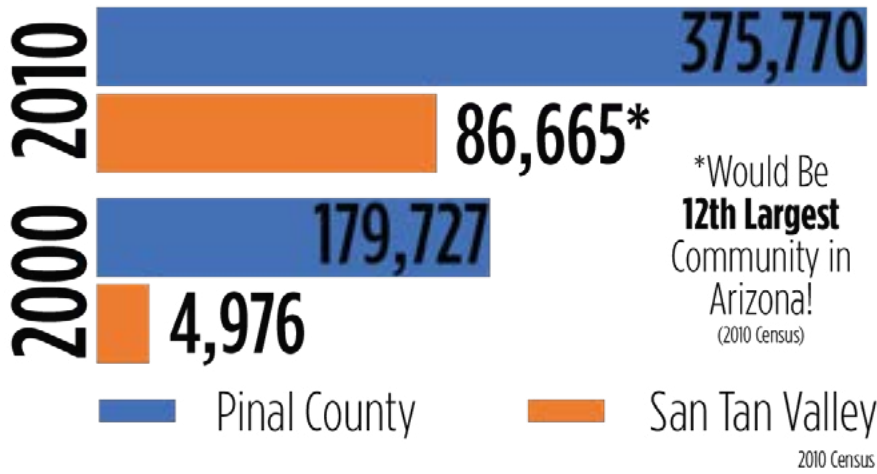
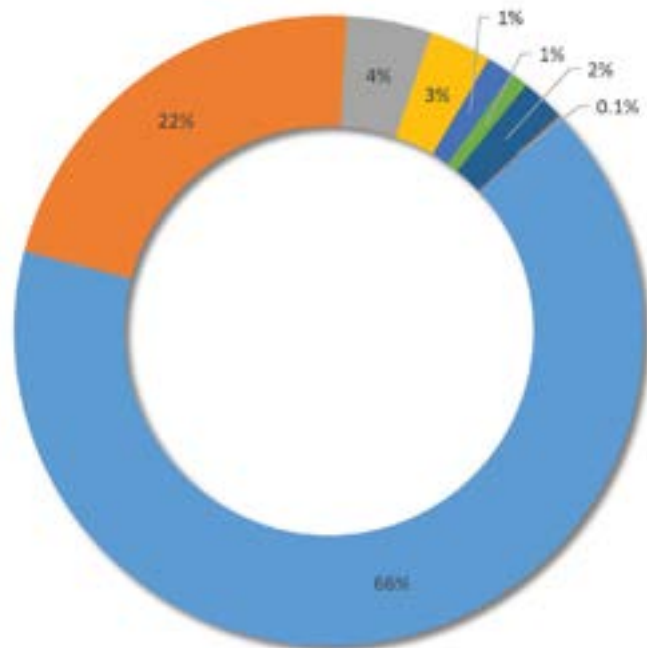


Figure 5: Median Age



Figure 6: Race and Ethnicity

- White (66%)
- Hispanic (22%)
- Black or African American (4%)
- Native American (3%)
- Asian (1%)
- Pacific Islander (1%)
- Two or More Races (2%)
- Other (.1%)



+ Health Factors

Obesity & Physical Activity - Regular physical activity reduces the risk of obesity and many other chronic diseases, including cancer and heart disease³. The Centers for Disease Control and Prevention (CDC) recommends a minimum of 150 minutes per week of physical activity for adults, with additional health benefits gained from 300 minutes per week. It's recommended that children and adolescents engage in physical activity 60 minutes each day.

The CDC - Behavioral Risk Factor Surveillance System indicates 33% of adults in Pinal County are obese. This is over 5% higher than the national average and 8% higher than the State average. A review of the CDC - Youth Risk Behavior Surveillance System also showed only 21.7% of Arizona students in grades 9-12 achieve 1 hour or more of moderate to vigorous intensity physical activity daily, which is lower than the national average of 27.1%.

Motor Vehicle Crash Data - Many studies have identified lack of neighborhood safety (both in terms of crime and roadway safety levels) as a potential barrier to physical activity. Analysis of crash data within San Tan Valley showed there were 15 pedestrian and 19 bicycle collisions between 2013 and 2015 within the planning area. Over 59% of these collisions occurred on roads with speed limits below 30 miles per hour. Furthermore, nearly 47% of bicycle collisions occurred on streets without a striped bike lane.

+ Physical Environment

Land Use & Transportation - The layout of cities and communities and their transportation infrastructure are important factors in determining whether people walk or drive as a means of transportation^{4,5}. For example, connectivity, density, and land use have all been found to influence the levels of pedestrian travel within cities.

The majority of the existing land use pattern in the STV area is dedicated to detached single-family residential development. In fact, approximately 99.5 percent of the existing housing stock in San Tan Valley is comprised of single-family units and only 0.5 percent is dedicated to multi-family units. There is also currently limited access to retail, commercial services, or areas of employment. This strong residential presence promotes dependence on the automobile and reduces the density of destinations that promote alternative modes of transportation. A review of commute modal share shows, 92.4% of trips are made by automobile, while only 2.3% of trips are made by walking or bicycle.

While these assessments are generalized, the results are consistent with data that shows San Tan Valley's predominantly spread out land use pattern is more suitable for automobile travel. However, at the local neighborhood scale, several developed locations within San Tan Valley are potentially quite suitable for pedestrians and cyclists by offering a mixture of land use types, a connected street system, and convenient park and school locations.

Figure 7: Adult Obesity

The **Percentage of Obese Adults** is an indicator of the overall health and lifestyle of a community.



Source: CDC - Behavioral Risk Factor Surveillance System (2010)

Figure 8: Daily Physical Activity



Percent of Students in grades 9-12 who achieve 1 hour or more of moderate-and/or vigorous-intensity **physical activity** daily.

Arizona 21.7%
USA 27.1%

Source: CDC - Youth Risk Behavior Surveillance System (2013)



Figure 9: Non- Vehicular Crashes

Crashes in study area from 2013-2015

1,754

9 were fatalities

ADOT, 2013-2015
Crash Data



19



15

ADOT, 2013-2015 Crash Data

Pedestrians and **bicycle** crashes in the study area from 2013-2015

Figure 10: Total Housing Units

San Tan Valley accounts for **21%** of all housing units in Pinal County.

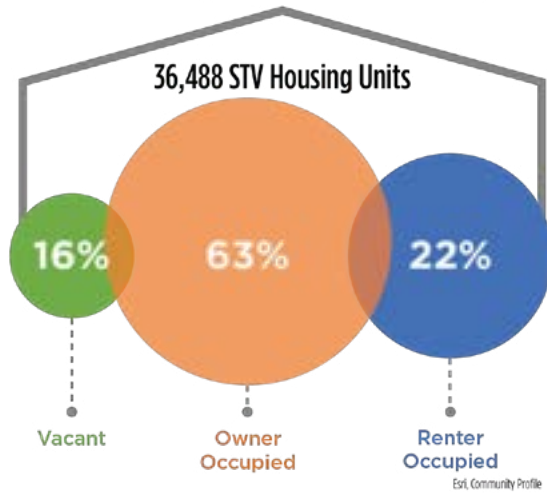


Figure 12: Commuting Modes

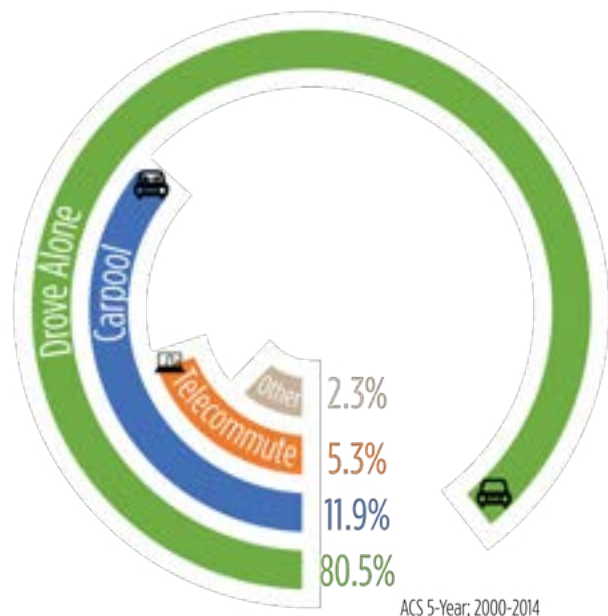
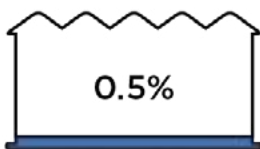


Figure 11: Housing Type



99.5%

Single-Family



0.5%

Multi-Family

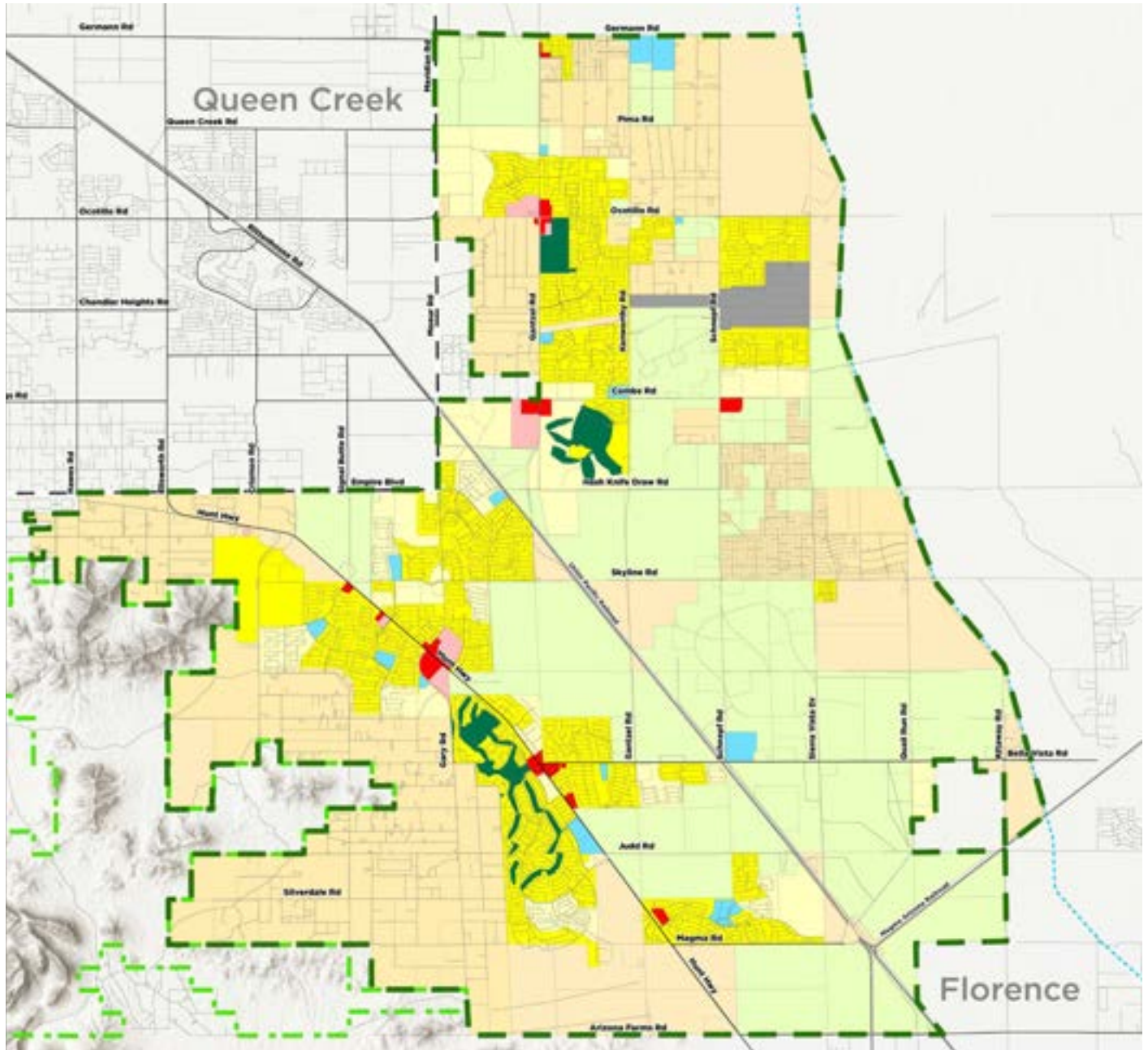


Figure 13: Existing Land Use



Pedestrian & Bicycle Facilities - The provision, design and condition of pedestrian and bicycle infrastructure in a community can have an impact on physical health. Research has shown that the presence of sidewalks, crosswalks, and bicycle lanes has a positive impact on increased physical activity⁶.

There are barriers to walking or bicycling in San Tan Valley. Although sidewalk connectivity within most developed subdivisions in San Tan Valley is fairly complete, they are frequently only on one side of the street. Sidewalk gaps are most pronounced on major roadways and result in restricting pedestrian connectivity between common desired destination points. A review of Walkscore.com, which utilizes available data to measure the walkability of a neighborhood on a scale of 0 to 100, with 100 being the most walkable, provided a Walk Score of 11 for the San Tan Valley community. This score reflects an environment where almost all errands require a car. Figure 15, also displays the limited number of striped, on road bicycle facilities within the community. Presently these limited facilities do not constitute an interconnected network, but merely offer isolated pedestrian and bicycle facilities within select developed subdivisions.

Access to Healthy Food - A study in the American Journal of Preventive Medicine found that neighborhood access to healthy food and safe places for physical activity matters. The study showed that children living in neighborhoods with healthy food and safe places for play are 56 percent less likely to be obese than children in neighborhoods without these features⁷.

Only 8.5% of San Tan Valley housing units are located within a half-mile distance of a grocery store. Conversely, over 91% of all housing units within the planning area are not within a typical walking or biking distance to healthy food options.

Figure 14: Walk Score



Almost all errands require a car.

* Walkscore.com measures the walkability of a neighborhood.

Figure 15: Bicycle Facilities



Figure 16: Access to Healthy Food



of STV housing units are within a 1/2 mile distance of a grocery store.

Access to Recreational Facilities - Various studies have shown associations between access to parkland and increased physical activity and sense of wellbeing⁹. According to a study by the Centers for Disease Control and Prevention (CDC), access to parkland resulted in a 25 percent more people exercising 3 or more days a week⁹.

The San Tan Valley area has unique natural resources including the San Tan Mountain Regional Park, located just outside the study area. Beyond the San Tan Mountain Regional Park and Copper Basin YMCA, there are no public recreation or park facilities located within the planning area. Generally, all existing recreation and park facilities in San Tan Valley are owned and maintained by individual subdivision homeowners associations (HOA) for the private use of their residents. Private recreation and park facilities typically consist of neighborhood type park amenities such as playgrounds, picnic benches, community swimming pools, and sport courts. Only a select number of private park facilities include ballfields such as soccer fields or baseball fields. The area is also served by several privately-owned golf courses that are open to the public.



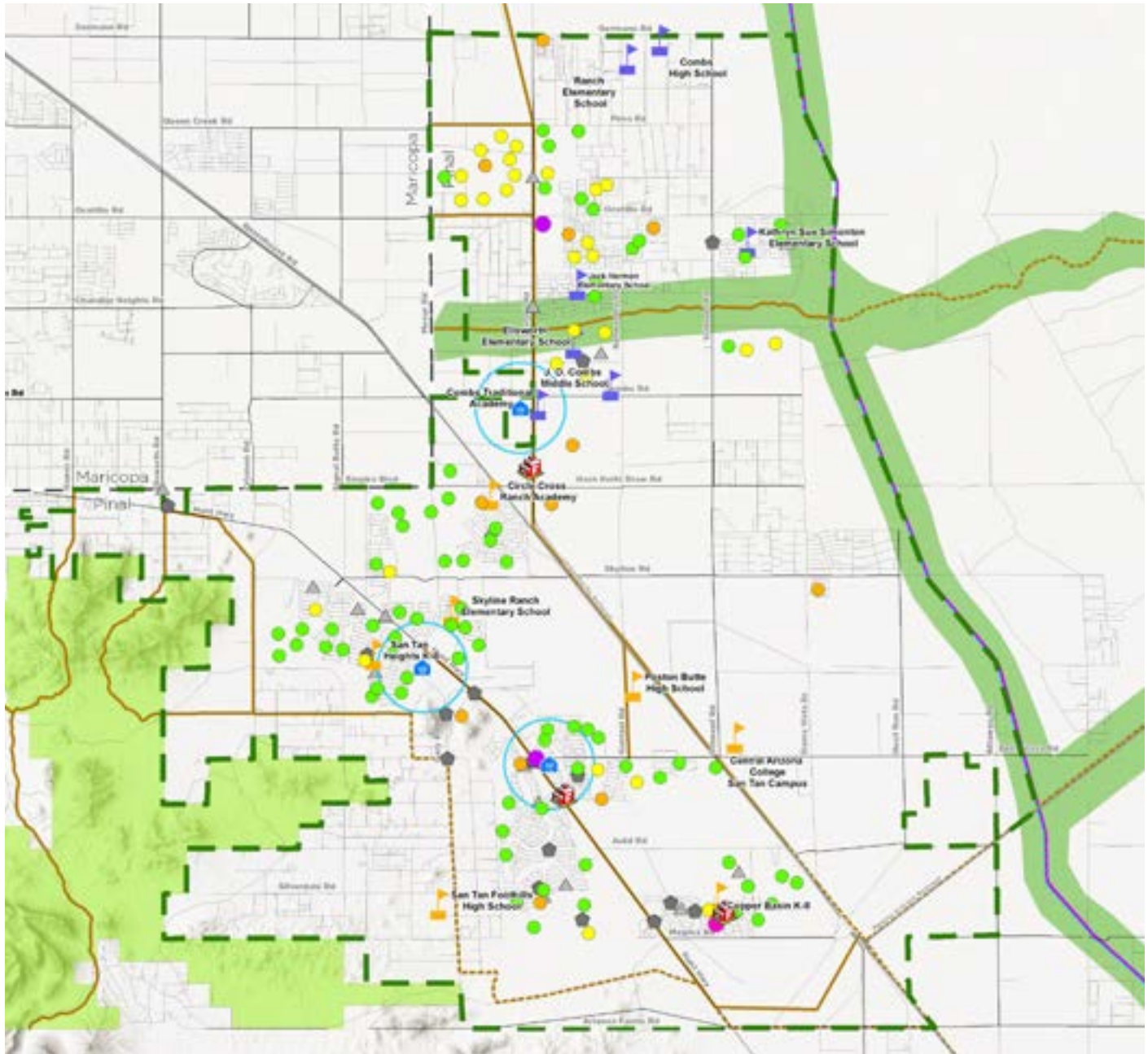


Figure 17: Recreational Facilities



+ Community Engagement

Community Workshop #1 - On February 22 & 23, 2017, a series of STV SAP workshops were hosted by the project team. Over the two meetings approximately 500 participants attended this open house style meeting. The following primary topic areas were reviewed with participants:

- Neighborhoods and Community Character
- Business and Economic Development
- Transportation and Infrastructure
- Healthy Lifestyle

Within each topic area participants were able to learn more about specific elements of the overall planning effort, pose questions to project team members, as well as provide direct feedback relative to predefined questions. A summary of participant responses is as follows:



Figure 18: Providing alternative transportation options (e.g. sidewalks, trails, bike lanes, etc.) is...

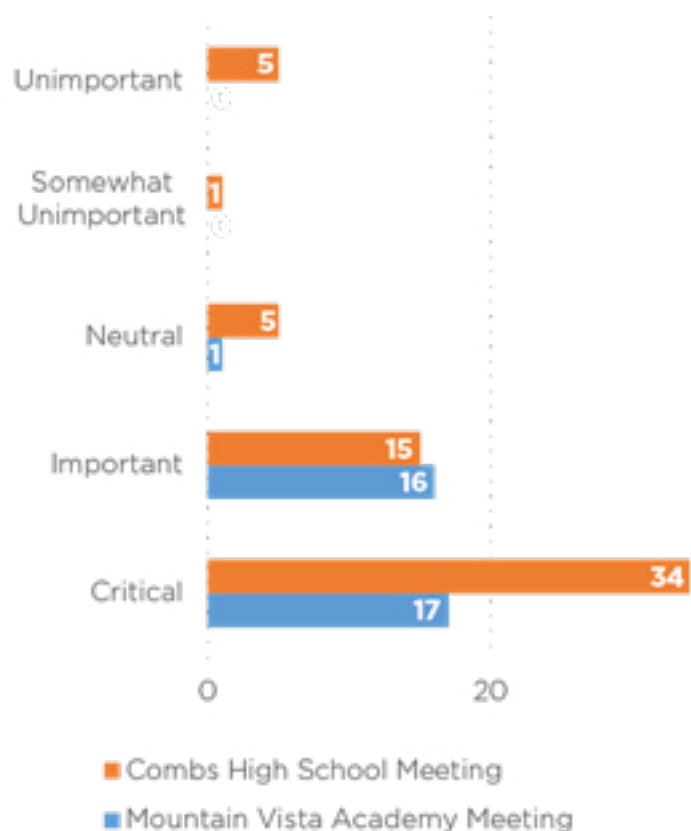


Figure 19: I feel safe to walk or bike in San Tan Valley...

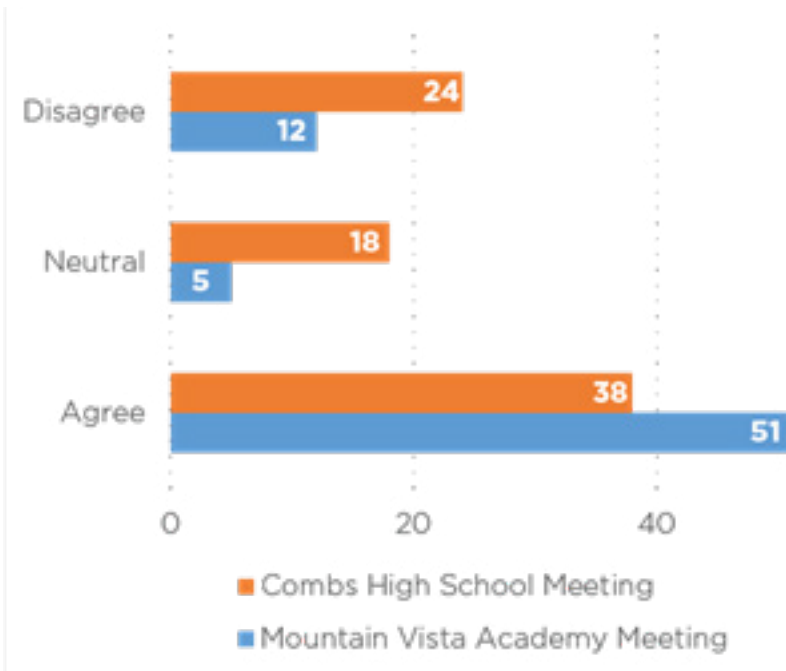


Figure 20: How often do you engage in some type of leisure physical activity?

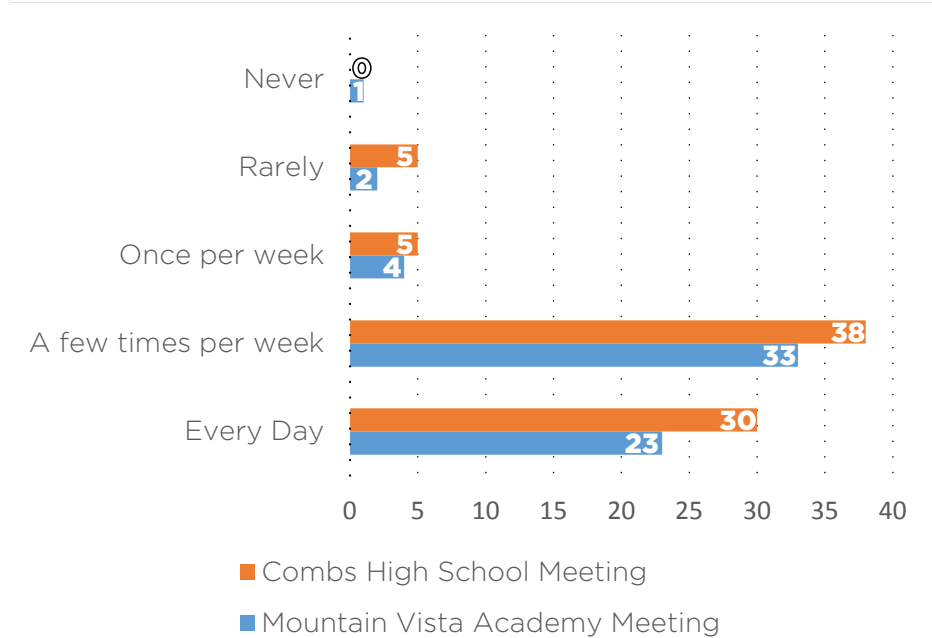


Figure 21: What do you feel are the greatest transportation infrastructure challenges facing STV?

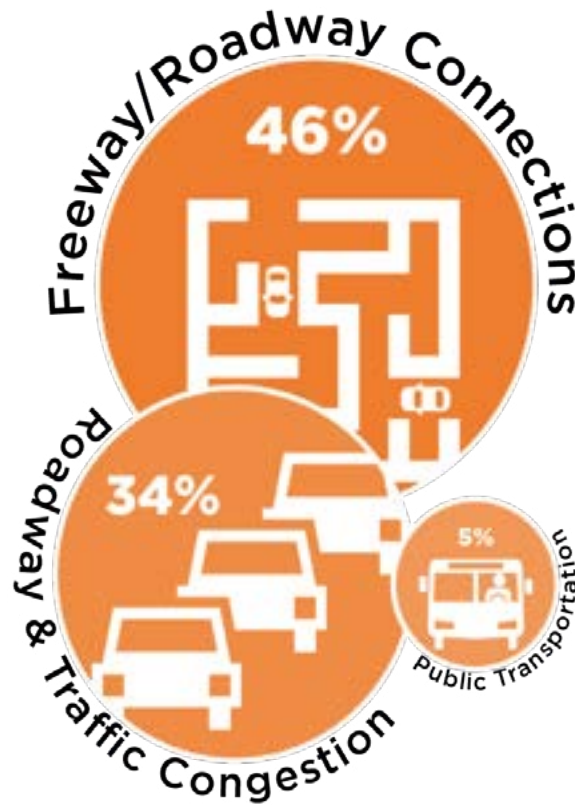
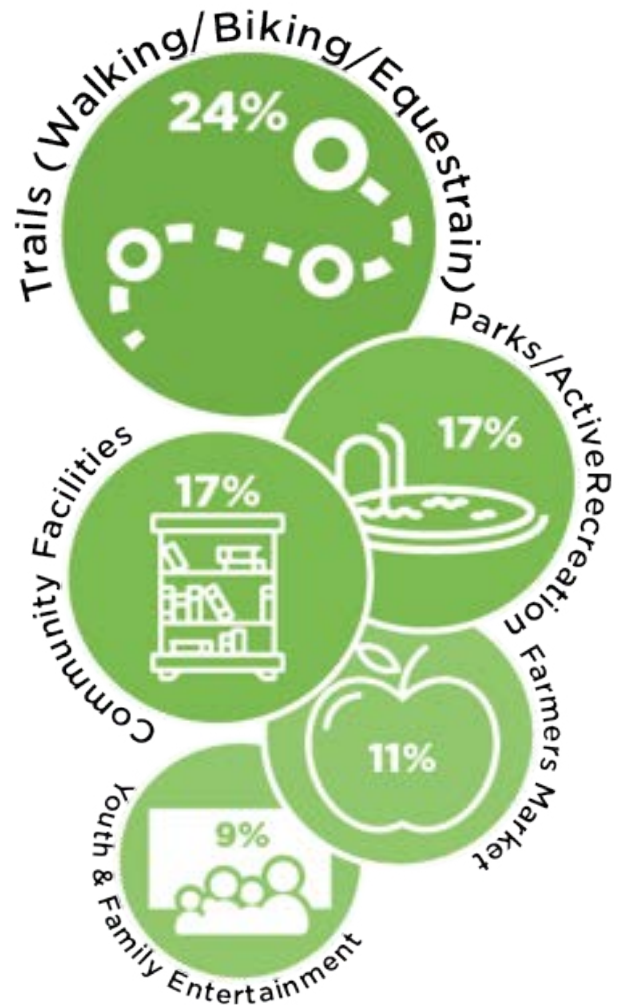


Figure 22: What Recreation Amenities/Services does San Tan Valley need more of?



PHYSICAL ACTIVITY PATHWAY SCENARIO ASSESSMENT

+ Scenario Development

With the assessment of existing conditions completed, the project team applied this background knowledge to the development of three future land use states or scenarios as part of the greater STV SAP planning process:

SCENARIO A

Business As Usual

This scenario assumes no change in existing development policies. Under this condition, suburban residential growth with minimal commercial development would continue to expand into currently undeveloped areas. Most residents would continue to commute to jobs outside of the San Tan Valley area. Employment opportunities in San Tan would remain limited to service related jobs, such as food services, education, and local trade professions. Vehicular travel would also continue to be the predominate mode of transportation within the community.

SCENARIO B

Community Node

This scenario places increased residential density around existing commercial nodes to encourage developed neighborhoods to be more walkable. This enhanced mixture of residential land uses would also help to foster commercial growth by creating a higher concentration of consumer demand in each node. Strategically placed office type land uses near planned transportation corridors would increase professional employment opportunities in the area. However, most residents would still commute to jobs outside the San Tan Valley area. While vehicle travel would still be the primary mode of transportation, improved walkability would remove some trips from local roadways.

SCENARIO C

Community Core

This scenario focuses on the establishment of a Community Core that would function as the economic and social hub of the San Tan Valley area. While traditional suburban residential and commercial growth would continue to expand in undeveloped areas; higher density residential, regional retail, and office uses would be encouraged to concentrate in a central urban environment. By integrating land uses, this core area would be more walkable, vibrant and foster a sense of community. People living, shopping, and recreating in the core would also bring professional employment opportunities and increased transportation options such as transit.

+ Health Indicators

To explicitly connect how the built environment may impact the health of residents within the study area, the project team along with the HIA TAC developed indicators of health, or ways of measuring the effects of how each land use scenario would impact physical activity levels. A description of each health indicator and associated evidence of how these indicators impact a community's health is as follows:

- Land Use Mix

Many studies have found a positive association between density and active transportation, indicating that a dense mix of land uses promotes physical activity. One study on the subject found more walking related to density, land use diversity, and urban design¹⁰. Another reported that density is among the most consistent positive correlates of walking and cycling. This reflects the consistent observation that more destinations closer together lead to more walking and cycling¹¹.

- Number of Housing Units in Walkable/ Bikeable Places

People who live in walkable neighborhoods (i.e. areas that are designed to foster walking and biking to nearby destinations) are 2 times as likely to get enough physical activity as those who don't¹².

- Projected Population within ¼ mile of trails
- Accessibility to Neighborhood Parks
- Accessibility to Community Parks
- Accessibility to Regional Parks

Adults who believe they have access to parks are almost twice as likely to meet physical activity recommendations¹³. Among children, higher numbers of parks and larger parks in a neighborhood correlate with increased physical activity. One study found that for each 1 percent increase in park area within a community, there was a 1.4 percent increase in physical activity¹⁴. In addition, living near a trail is associated with a 50% increase in the likelihood of meeting physical activity recommendations^{15,16}.

- Transportation Options
- Average Estimated Vehicle Miles Traveled

In a study of counties across the United States, researchers found that residents of the most sprawling counties walk less, weigh more, and have a greater prevalence of hypertension than their counterparts in more densely built counties¹⁷. Each additional hour per day spent in a car increases the odds of obesity by 6%, while each additional kilometer walked results in about a 5% reduction in the odds¹⁸.

+ Scenario Health Impact

Both qualitative data based upon research and quantitative data based on statistical land use model assumptions as well as GIS mapping was used to rate how each indicator impacted health. The performance of each indicator within each scenario was then evaluated against the other scenarios and rated based on the following scale:

- **Negative** Impact on Health

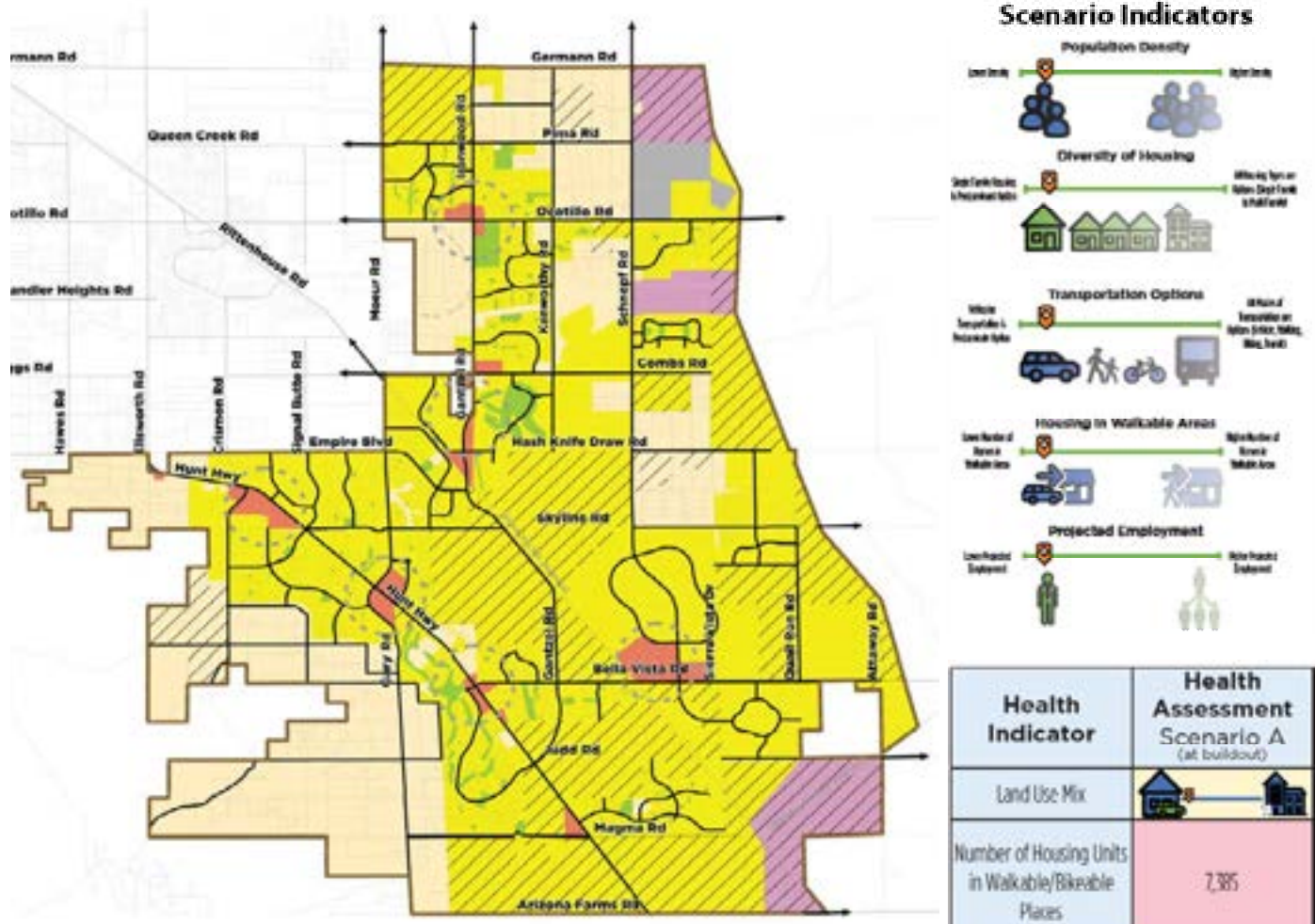
Land use patterns and development types discourage healthy activities like walking or biking and promote dependence on vehicular travel. This results in a higher likelihood of negative health outcomes like increased obesity, respiratory illness, and chronic disease levels.

- **Moderate** Impact on Health

Land use patterns and development types provide opportunities for walking and biking, but vehicular travel is still the primary means of transportation. This results in moderate improvements to health outcomes like lower levels of obesity, respiratory illness, and chronic disease.

- **Positive** Impact on Health

Land use patterns and development types encourage healthy activities like walking and biking and reduce dependency on vehicular travel. This results in the greatest potential for positive improvements to health outcomes like obesity, respiratory illness, and chronic disease levels.



Scenario Indicators

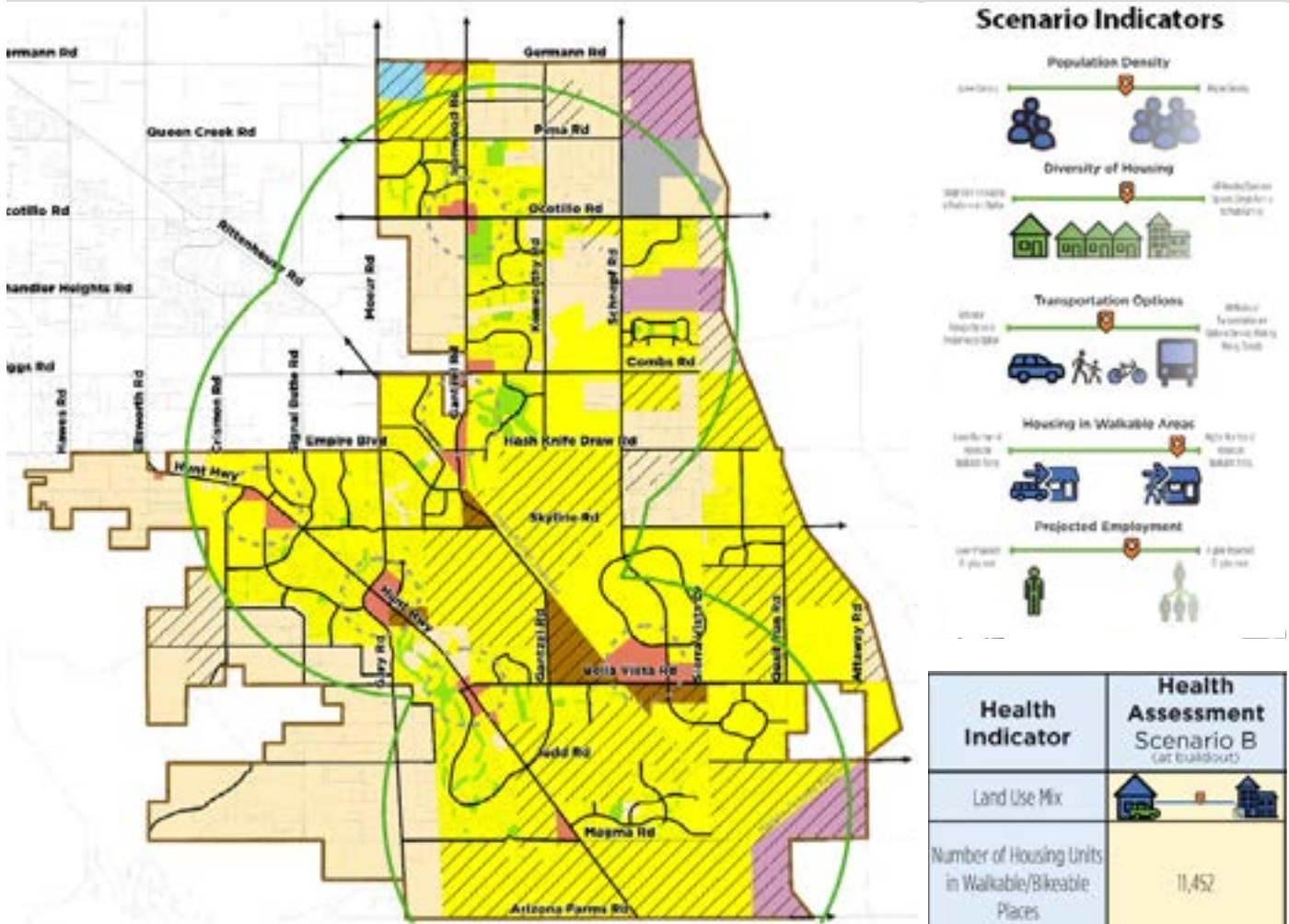


Health Indicator	Health Assessment Scenario A (at buildout)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	7,385
Projected Population within 1/4 mile of trails	68,060
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

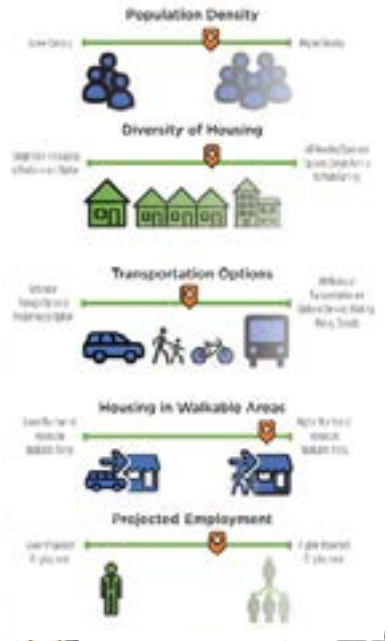
Figure 23: Scenario A - Business As Usual

Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)



Scenario Indicators



Health Indicator	Health Assessment Scenario B (at buildout)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	11,452
Projected Population within 1/4 mile of trails	74,345
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

Figure 24: Scenario B - Community Node

Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)

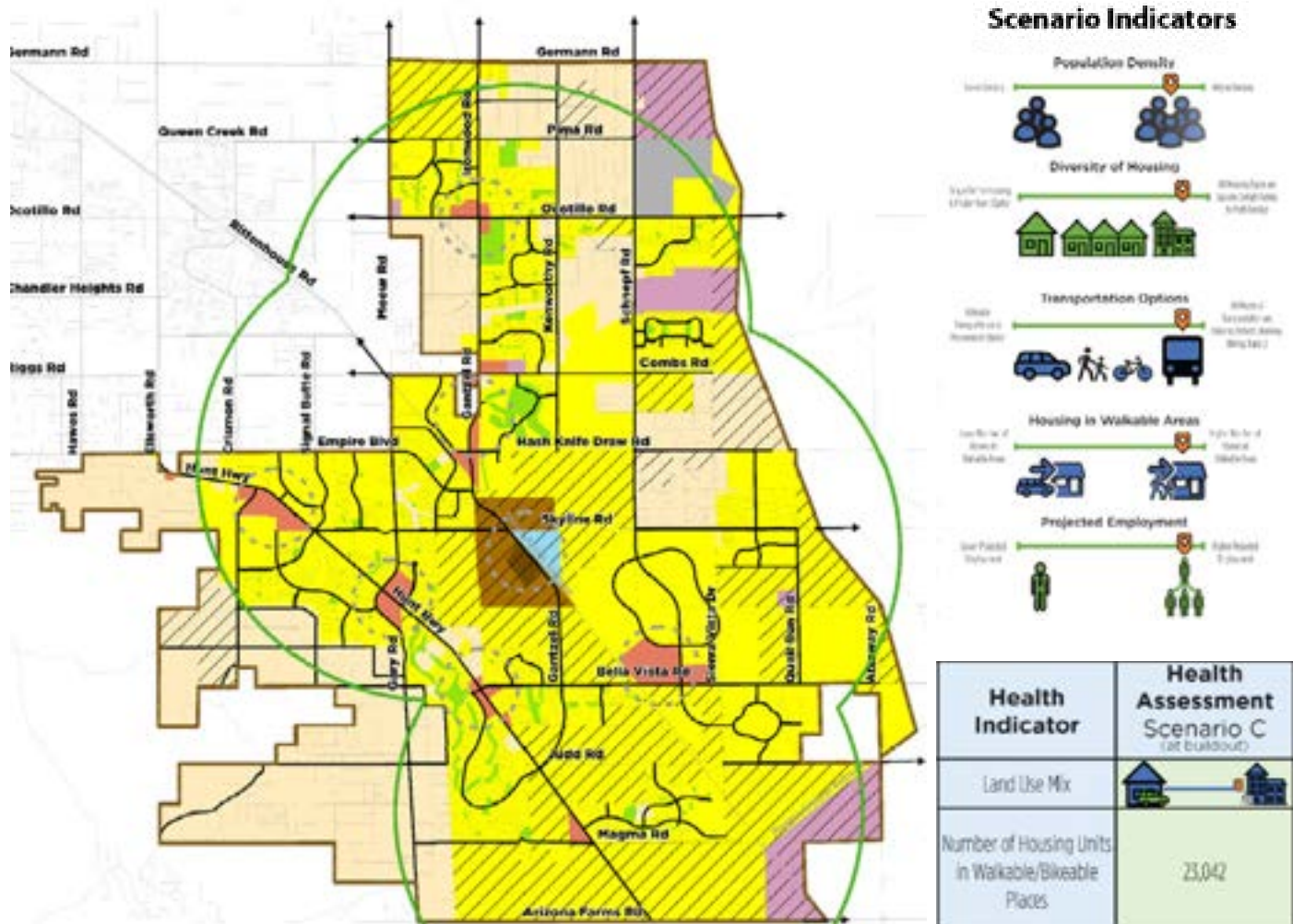


Figure 25: Scenario C - Community Core

Legend

- San Tan Valley Study Area
- Arterials
- Streets
- Railroad
- Noise Sensitive Area
- Rural Living
- Suburban Neighborhood
- Urban Transitional
- Community Center
- Suburban Office
- Employment Center
- Military
- Open Space
- Undeveloped Greenfield
- Walkable/Bikeable Zone (0.5 Miles)
- Community Park Service Area (3 Miles)

Health Indicator	Health Assessment Scenario C (at buildout)
Land Use Mix	
Number of Housing Units in Walkable/Bikeable Places	23,042
Projected Population within 1/4 mile of trails	74,855
Accessibility to Neighborhood Parks	
Accessibility to Community Parks	
Accessibility to Regional Parks	
Transportation Options	
Average Estimated Vehicle Miles Traveled	

+ Community Engagement

Community Workshop #2 - In November 2017 a second series of community workshops were held to share the three alternative land use scenarios along with their associated health indicators. Benefited with this information, participants were then asked to identify what they liked and disliked about each alternative. General comments shared included:



SCENARIO A

Business As Usual

- ✓ Like rural flavor, that is why I moved here
- ✗ No plan - vomiting housing development
- ✗ Not enough parks and trails

SCENARIO B

Community Node

- ✓ Rural living with community centers
- ✓ Rural suburban with trails (walkable, bikeable, horse rideable)
- ✗ Nodes should be connected by alternative transportation
- ✗ No Center
- ✗ Too much suburban, more employment and commercial first

SCENARIO C

Community Core

- ✓ Central community gathering location
- ✓ Walkability of community core
- ✓ Enhanced business and employment opportunities
- ✓ Focus on transportation options
- ✓ Parks and walking trails
- ✗ Too many houses
- ✗ Distribute employment
- ✗ Not enough open space

+ Preferred Plan

Based on health indicators and public feedback attained from Community Workshop 2, Scenario C - Community Core, was the most favored of the three scenarios. However, the distributed activity nodes presented in Scenario B - Community Nodes also received favorable recognition. Based on this collective feedback, a hybrid "preferred" scenario was derived for the study area. This land use plan maintains the desired mixed-use central gathering location as well as promotes more active community nodes to provide walkable destinations throughout the study area. Upon approval within the STV SAP, the resulting preferred scenario will be used to guide development and promote healthy choices in relation to physical activity within the overall study area.

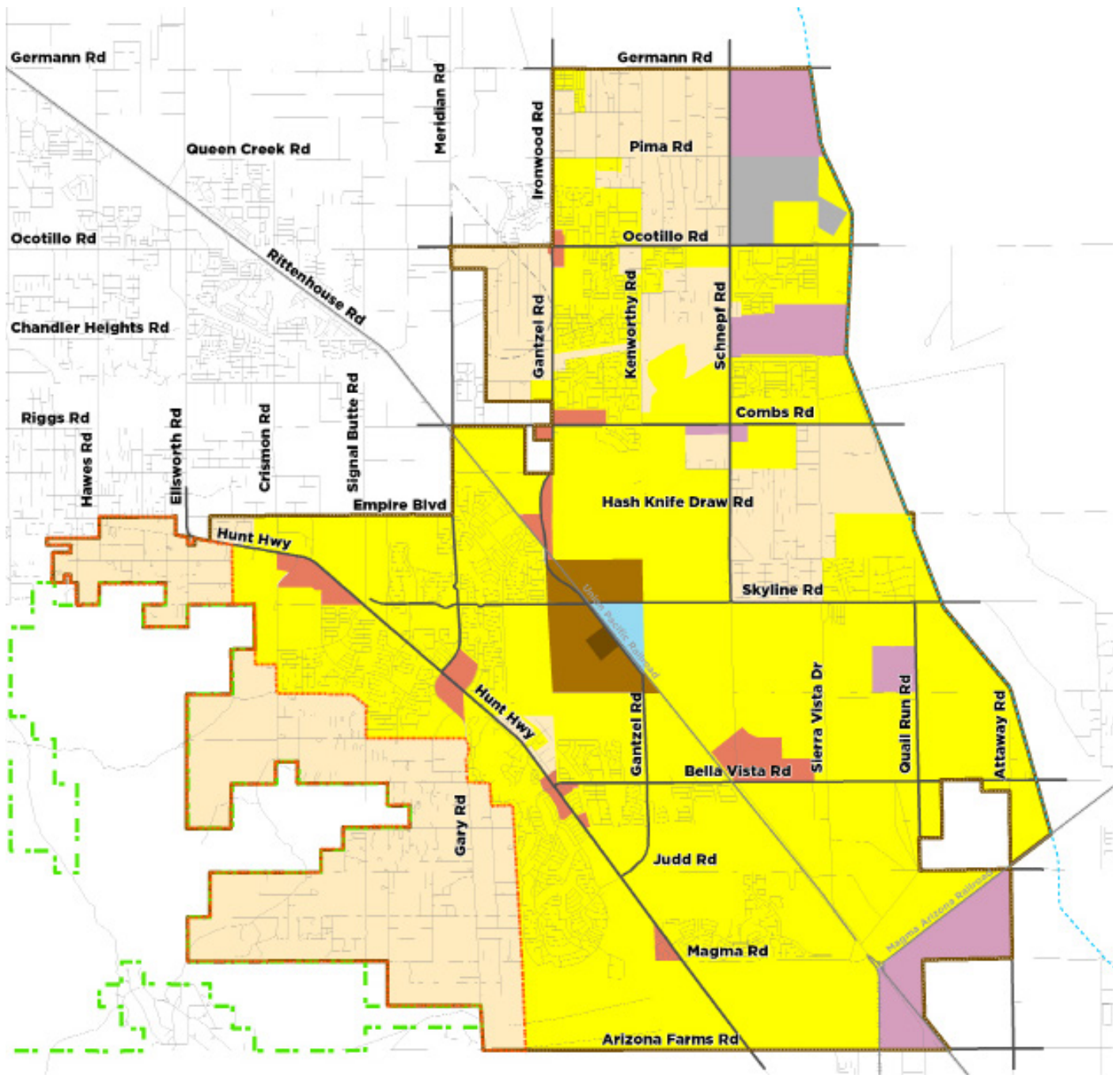
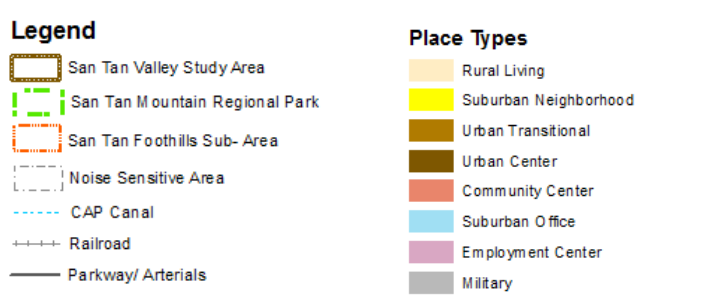


Figure 26: Preferred Land Use Plan



Findings & Recommendations



To help realize the anticipated benefits and positive changes to health outcomes within San Tan Valley, the following recommendations are provided. Recommendations were developed through research of best practices, healthy design guidance documents, and consultation with the HIA TAC.

+ Enhance design standards for new residential and commercial development

- Ensure walls surrounding developments include appropriately placed gaps to promote public walking and biking connectivity between neighborhoods.
- In Urban and Transitional place types encourage a traditional neighborhood design approach that utilizes a grid pattern with short block sizes to increase connectivity.
- Encourage new housing to face parks and open space to increase usership, community building, and safety.

+ Develop a policy for Complete Streets that accommodates all users - motorists, pedestrians, cyclists, and transit

- Mandate sidewalks on both sides of the street for all development in urban areas and any developments with lots less than one acre in area. (PADs should never allow for a sidewalk to not be built in return for adding some other feature to the site).
- Develop streetscape standards that emphasize pedestrian and bike safety (lighting and traffic calming measures).
- Incorporate concepts from Complete Streets into standard road maintenance practice. (encourage resurfacing projects to include restriping for bike lanes).
- Increase streetscape landscape standards to promote enhanced tree cover and a more comfortable walking environment.
- Prioritize roads and corridors that provide the greatest ease of access via sidewalks and bike routes to the greatest amount of uses.

+ Expand accessibility to active recreation facilities

- Continue to examine County Park and Open space management policies to address active recreation needs of the study area.
- Increase the percentage of active park space required of residential developments to meet a level of service comparable to community park amenities.
- Explore the development of formal joint use agreements between school district(s) and Pinal County to allow for enhanced public access to both outdoor and indoor recreational facilities after school hours.
- Incorporate a Recreation Needs Assessment into the Open Space and Trails Master Plan to address community inequities and preferred programming.

+ Provide an interconnected system of on- and off-street trails that connect desired destinations

- Continue to expand trail network consistent with Open Space and Trail Department Strategic Business Plan (49% increase in miles of county regional trails acquired by 2021).
- Include trail connections in the design of new neighborhoods, preferably that connect to the established regional trail system.
- Work with HOA's and Third-Party groups to define/develop off-street trail connections within developed areas (adopt a trail program, etc.).

+ Develop land uses and transportation networks that support safety and comfort for pedestrians and bicyclists

- Create a corridor network of safe pedestrian and bike routes to nearby destinations such as schools, regional park, community centers, hospitals, retail centers, and the college.
- Prioritize pedestrian and bike infrastructure investments based on the location of common destinations in the community like schools, regional park, community centers, hospitals, retail centers, and the college.
- Where possible, establish “one-off” routes for cyclists and pedestrians that are parallel to major arterial streets, and offer slower, lighter traffic.
- Integrate Safe Routes to Schools design principles (comfort, convenience, safety, and access)
- Consider incentives for developers or businesses that support the use of biking and walking (fast-track permitting, etc.).

Monitoring & Evaluation

This HIA was done concurrently with the STV SAP planning process. Consequently, the HIA directly affected the SAP land use planning and policy development outcomes. The HIA also provided the added value of increasing the understanding of connections between land use planning and health outcomes amongst the Pinal County Community Development Department, the Pinal County Health Services District, and other participating community stakeholders, which will certainly influence their work in the future.

Since the HIA recommendations have already been incorporated into the STV SAP, and thus monitoring the development plan document itself will not be necessary, monitoring the impact of this HIA should involve tracking those health indicators identified in the “Assessment” Section of this report relative to the implementation of the STV SAP goals, policies, and land use plan. To further help monitor the effectiveness of planning for physical activity in STV, Pinal County Community Development and Health Services District staff could develop short questionnaires that could be posted online or through social media as well as distributed at schools, health clinics, and various events.

Due to resource restriction and the long-term nature of the STV SAP, the HIA team was unable to conduct a separate outcome evaluation. However, by utilizing the existing conditions data presented in the “Assessment” Section as a baseline, Pinal County could analyze and compare current figures with actual conditions in 5-year intervals. This type of ongoing evaluation could help foster continued support for health based planning initiatives within the STV area. This data could also be used to support future grant opportunities for health based programs or improvements in STV.



Health Indicators

- Land Use Mix
- Number of Housing Units in Walkable/ Bikeable Places
- Population within ¼ mile of trails
- Total Acreage Neighborhood Parks per 1,000 Residents
- Total Acreage Community Parks per 1,000 Residents
- Total Acreage Regional Parks per 1,000 Residents
- Total Miles of Bike Lanes and Sidewalks
- Average Estimated Vehicle Miles Traveled

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