

LAND-USE PLANNING

A FALL 2017 COLLABORATIVE REPORT OF
ARIZONA STATE UNIVERSITY'S PROJECT CITIES
& THE CITY OF APACHE JUNCTION



This report represents original work prepared for the City of Apache Junction by students participating in courses aligned with Arizona State University's Project Cities program. Findings, information, and recommendations are those of students and are not necessarily of Arizona State University. Student reports are not peer reviewed for statistical or computational accuracy, or comprehensively fact-checked, in the same fashion as academic journal articles. Project partners should use care when using student reports as justification for future actions. Text and images contained in this report may not be used without permission from Project Cities.

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All five student team booklets are available online at the bottom of the page at <https://sustainability.asu.edu/project-cities/partner-cities/2017-2018-partner-city-apache-junction>.

ACKNOWLEDGEMENTS

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On behalf of the ASU Wrigley Institute and the School of Sustainability, we extend a heartfelt thank you to the City of Apache Junction for enthusiastically engaging with students and faculty to confront difficult problems facing the community. Your real-world projects provide students with hands-on opportunities to apply knowledge that can create positive changes to Apache Junction's future livelihood and community well-being.



City of Apache Junction

300 East Superstition Boulevard • Apache Junction, Arizona 85119 • www.ajcity.net

February 20, 2018

Dear Apache Junction residents and community members,

On behalf of the City Council and the City of Apache Junction we wanted to let you know about our experience as the inaugural partner city for ASU's Project Cities program. We are extremely grateful for the opportunity to work on four projects with over 140 students, and eight university professors, in six courses. Each of the projects provided Apache Junction citizens with opportunities for involvement in community improvements.

As a smaller community, Apache Junction doesn't always have the resources to undertake every project that needs to be done. With a small investment in the Project Cities program, we can now work toward completing a few backlogged projects that have been identified in our city work programs and plans. The four projects that were undertaken in the Fall semester of 2017 (Positively AJ, Off-leash Dog Park, Sustainability and Solid Waste, and Understanding Homelessness), have been identified over a number of years as important issues in the Apache Junction Community. By engaging with ASU on the four projects, the city has been able to advance each project more quickly than we otherwise would have been able to do with city employees alone.

The research and recommendations for each project gave the city objective insights into some of our ongoing challenges as a city and how we can better serve our residents and visitors. The city is already using the report's findings and recommendations to take next logical steps in moving the projects forward. We look forward to working with ASU and the Project Cities program on future projects!

With gratitude,

Jeff Serdy, Mayor



Bryant Powell, City Manager



ABOUT PROJECT CITIES

Arizona State University's (ASU) Project Cities program is a university-community partnership. For an entire academic year, faculty and students work with a single city to co-create strategies for better environmental, economic, and social balance in the places we live. Students from multiple disciplines research difficult problems chosen by the city and propose innovative sustainability solutions that will help it achieve a better future. Project Cities is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), a growing network of more than 30 educational institutions partnering with cities throughout the United States and the world.

ABOUT SUSTAINABLE CITIES

Project Cities is a program of ASU's Sustainable Cities Network. This network was founded in 2008 to support communities in sharing knowledge and coordinating efforts to understand and solve sustainability problems. It is designed to foster partnerships, identify best practices, provide training and information, and connect ASU's research to the front-line challenges facing local communities. Network members come from Arizona cities, towns, counties, and Native American communities, and cover a broad range of professional disciplines. Together, these members work to create a more sustainable region and state. In 2012, the network was awarded the Pacific Southwest Region's 2012 Green Government Award by the U.S. EPA for its efforts. For more information, visit sustainablecities.asu.edu.

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Project Cities

Sustainability Through Local Action

projectcities.asu.edu

ABOUT APACHE JUNCTION

The City of Apache Junction is well-situated on the eastern edge of Greater Phoenix, the twelfth largest metropolis in the United States, yet it has a small-town, Western feel. This is both intentional and influenced by geography. Apache Junction sits at the base of the Superstition Mountains and Goldfield Mountains and is near attractions such as the Lost Dutchman State Park, Goldfield Ghost Town, Superstition Mountain Museum, Canyon Lake, Tortilla Flat, and the historic Apache Trail. Home to 39,000 residents, the city has a population that nearly doubles in the winter, when seasonal residents arrive to enjoy its pleasant weather and unique setting.

It was named Apache Junction because it is located at the intersection of US Route 60 and the historic Apache Trail, which was used by Native Americans and later stagecoaches to traverse the Superstition Mountains and for the construction of water-reclamation dams along the Salt River. The city also straddles Maricopa County and Pinal County. Incorporated in 1978, Apache Junction has arrived at another crossroads as it matures. While the city wants to retain its small-town character, it must prepare for an increasing population, and it has set out to develop greater economic opportunities. In the spring of 2005, Apache Junction debuted the first LEED-certified city hall in Arizona. It is Apache Junction's aspirations and potential for sustainability, and the unique challenges it is facing, that form the basis of its partnership with Arizona State University's Project Cities.

Apache Junction Team

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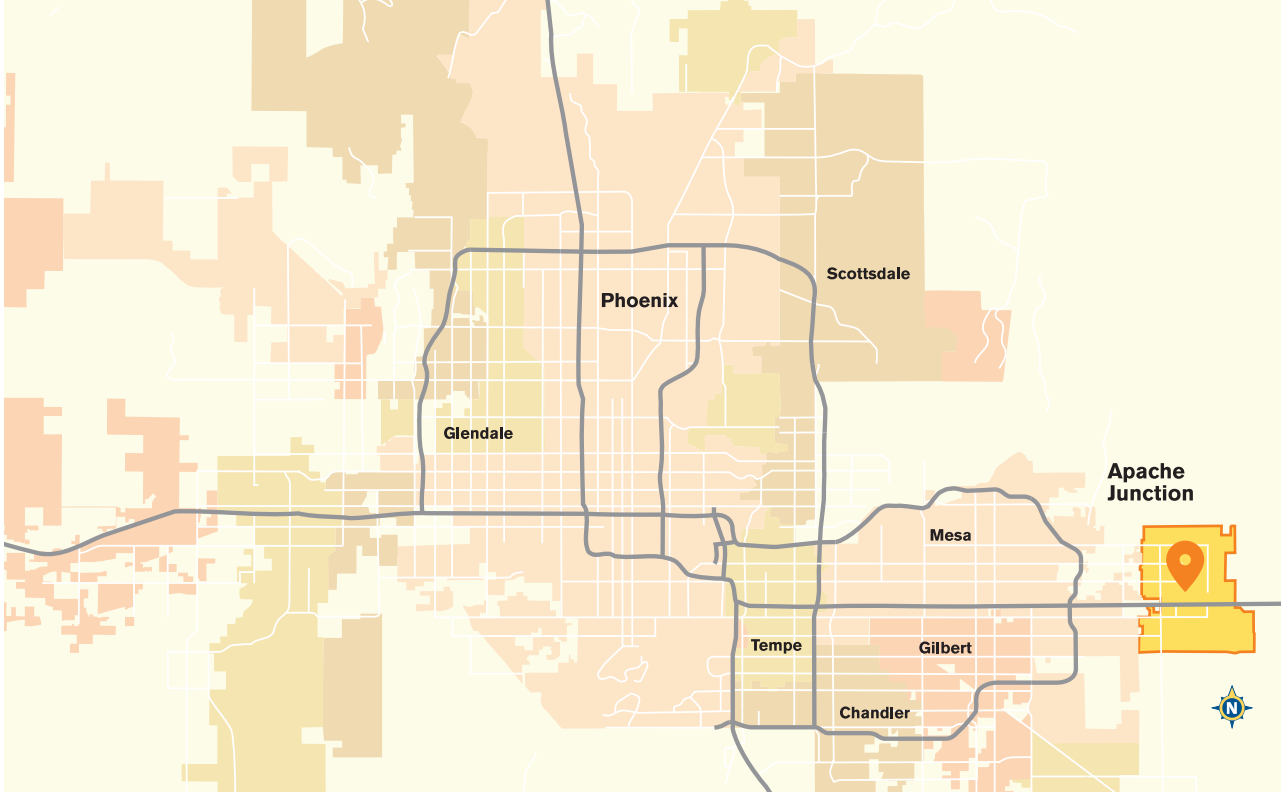
Heather Patel, Grants Administrator



Surrounded by Legends

ajcity.net

**Map of the City of Apache Junction
and Greater Phoenix, Arizona**



EXECUTIVE SUMMARY



Apache Junction is a young city, incorporated in 1978. It is still in the process of forming its identity and long-term growth strategy. At the same time, the city is figuring out how to stimulate its economy and improve the quality of life of its residents. Landscape architecture can help with this, as it connects physical contexts and community priorities to create cohesive visions for its land use. Its design process integrates the physical context of a space so that buildings, landscapes, and the things that connect them make the most of their environments while meeting the needs of urban communities.

To help the city envision how to maximize resources, enrich its community, and attract interest, the fall 2017 course LDE 361/590 focused on landscape architecture inventoried the natural and human characteristics of Apache Junction, visited the city for onsite fieldwork and community engagement, and conducted case studies. Student teams then identified opportunities and constraints. From this research emerged strategic themes for Apache Junction such as tourism and recreation, culture and history, and healthy communities. Students built upon these to produce multiple conceptual land-use plans. While these plans are specific to an area of Apache Junction, the most promising ideas from the plans can be extracted and considered for the entire city or other similar areas. Ideas students generated include creating an intricate chain of trails and parks that will give residents the ability to explore the outdoors, as well as creating an arts district that will highlight the city's culture and setting. Both concepts are intended to improve the quality of life of current residents while attracting visitors and new residents.

LDE 361 Landscape Architecture I and 590 Core Landscape Architecture Studio I: Professor Ken Brooks and Faculty Associate Kevin Kellogg led this combined undergraduate and graduate course that teaches the principles of site analysis and the basics of zoning, master planning, and community design. First, students were guided through a series of research methods including community participation, observation, case studies, inventorying, and analysis. After learning the basics of land-use planning and urban design, the students applied their imaginations and creativity to develop ideas for Apache Junction.

The ideas presented by these students are starting points for Apache Junction. The work is not comprehensive or cohesive, and any pursuit of the recommendations requires professional review and consideration. That being said, the course reports are meant to stimulate deeper conversations for managers and policy makers.

Next are the goal and ideas generated by the course. Following this is a summary of the final reports generated by the five student teams that includes the targeted problem, research methods used, findings, resulting ideas, and areas for further exploration. The report is followed by student project booklets in their entirety, which can be consulted for greater depth and more clarity on how the ideas were reached.

LANDSCAPE ARCHITECTURE GOAL & IDEAS

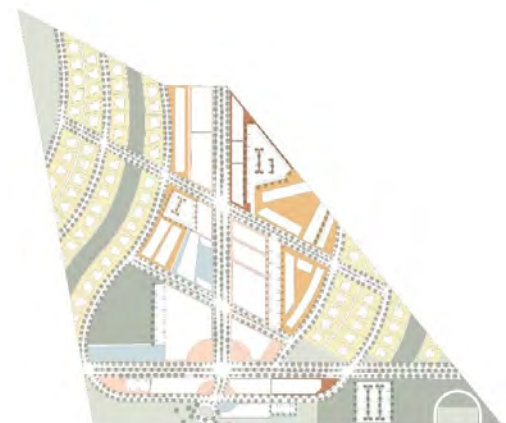


Goal

The goal of this course was to create overarching visions for Apache Junction in the context of all the Project Cities projects and to generate landscape architecture ideas related to these visions that will inspire Apache Junction.

While students considered partaking in one of the four formal projects of the Apache Junction and Project Cities fall 2017 partnership, they found that the greater overarching problem was the city's lack of a common vision or development themes.


CONCEPTUAL LAND-USE PLANS & MASTERPLAN IDEAS FOR APACHE JUNCTION



Clockwise from above: 1) a masterplan for the Tourism and Recreation theme inspired by Boston's "Emerald Necklace" that would have a path running throughout the city and linking Apache Junction neighborhoods, parks, and the OK Corral; 2) an outdoor theater celebrating the arts that is part of a masterplan for the Culture and History theme; 3) a masterplan focused on urban forestry.


Thematic Ideas

Tourism and Recreation: This theme envisions Apache Junction as a place designed to attract new and reoccurring visitors and provide residents with a range of outdoor recreation. The ideas presented support a thriving economy as a way to draws new residents. Celebrating the city's beautiful location as well as its parks and open land is central to the palette of presented options.


Tourism and Recreation Ideas	
<p>Add a recreational lodge to enhance the visitor experience for people who love nature and want to be in the wilderness. In this masterplan, imagine a lodge with a community pool and hot tub, and indoor-outdoor shooting range, indoor-outdoor spas, community grills and fire pits. Its shopping center would have a breakfast option, camping gear shops, tourist shops, coffee stations, and activities for all ages.</p>	
<p>Capture the beauty of Apache Junction and cater to its avid outdoor culture with an intricate chain of trails and parks. This will provide residents with more means to explore the outdoors, and attract visitors trying to escape the city. This highlights Apache Junction's natural beauty, such as the Superstition Mountains, and promotes community connectivity through recreation.</p>	
<p>To bolster adventure tourism in Apache Junction, create a hub for outdoor recreation connected to bike and trail systems for mountain biking and road cycling. The scale of the city's open spaces, and the open space surrounding it, is ideal for adventure tourists interested in cycling. For example, Flatiron Park is already used for bicycling gatherings, so a mixed-use development next to it could provide convenient accommodation for tourists and provide opportunities for new businesses that cater to them.</p>	

Culture and History: This theme celebrates Apache Junction's Western culture and history and makes it central to design choices, while allowing for the city to be modernized. Student work shows the city as a place where people come to experience art in all its forms.




Culture and History Ideas 
<p>Design city spaces that act as intersections of culture, arts, and the people that participate in them. Use these to attract younger generations to Apache Junction, make the city a destination, and highlight its outdoor beauty.</p>
<p>Create a modern, art-filled site like an art district that incorporates the historical background that makes Apache Junction an important historical landmark in Arizona.</p>
<p>Create an artful signature attraction for this art district, which will help give Apache Junction a modern look while retaining its history.</p>
<p>Use Apache Junction's history and features to design the ultimate art walk in this district.</p>
<p>Create a sense of place inspired by local history and the community of Apache Junction where arts and culture are vibrantly expressed and displayed.</p>
<p>To do so, develop a community hub with a multi-use land platform. An example is a multi-use community center with multi-story family housing, a commercial shopping plaza, a community recreation center, and a focal main street walk lined with restaurant and shops that open to a park and entertainment center.</p>
<p>Provide the necessities for comfort, including food, shade, and seating.</p>

Housing: While this theme sounds less romantic, it supports the idea that a high quality of life of residents is an important function for any city. Proposed solutions showcase Apache Junction as a place where residents are more self-sufficient, and have greater access to affordable housing, communal open space, local retail options, and other amenities. In support of the theme sustainability, active and healthy living, and a strong community identity are emphasized.


Housing Ideas 
<p>Create a simpler, more self-sufficient lifestyle for residents while providing more affordable housing options including a tiny-house community and high-density residential buildings, communal open space, and greater access to local retail space and amenities (including retail space on the first floor of the residential buildings).</p>
<p>Focus on environmentally conscious planning and development and responsible resource consumption.</p>

Healthy Communities: Similar to the housing theme, this theme prioritizes the quality of life of residents, with the added aspiration of developing a health-focused industry in the city. Recognizing that Arizona is a strong market for rehabilitation and therapy makes Apache Junction’s location and cost of living an ideal place to build a health and wellness community.


Healthy Community Ideas 
<p>Build Apache Junction into a health and recreation district. Include inpatient drug and alcohol addiction recovery with luxury private facilities; concierge healthcare; transitional living communities with treatment services and sober living houses; enriched retirement health opportunities; itinerant healthcare that serves the rural population and offers technical assistance, training, and employment; and commercial development including medical manufacturing.</p>
<p>Create commercial and recreational design that meets the need for affordable and convenient healthcare.</p>
<p>Take advantage of Apache Junction's close proximity to the Phoenix Mesa Gateway Airport and its open space.</p>

Forestry: This theme highlights the benefits of trees, which prevent unnecessary heat from being trapped in the city and shade alternative transportation users. Though not technically forest-related, urban agriculture is included as a part of this theme due to its similar regenerative nature.




Forestry Ideas	
Encourage a community that is actively aware of the benefits attained from a marriage between the urban and natural environments.	
Provide adequate housing that encourages outdoor recreation for families interested in migrating from Gilbert and Chandler.	
Create a diverse and friendly environment through the establishment of public outdoor gathering spaces.	
Establish a network of green pathways between areas of work, home, and play to allow easy access for cyclists, pedestrians, and horseback riders.	
Create an urban canopy of more than 30% within the Southwest quadrant of Apache Junction.	

Resource Conservation: This theme focuses on the natural resources of the city in a different way. Rather than using them to attract visitors, this theme finds ways to preserve resources such as land and water while also improving the residents' quality of life and the city's sustainability.

Resource Conservation Ideas	
Transform the city of Apache Junction into a proactive water-conserving community, as the distribution of water is a major constraint to expansion in the city. By seeing this instead as an opportunity, the city can be a leader in sustainable water conservation and built a community that identifies with natural processes.	
Build a future community that works closely with natural processes to fully utilize water in a unique, efficient, and sustainable way.	
Create a unified community conservation center that inspires visitors to adopt beneficial techniques that adhere to sustainable practices.	

Circulation: Also known as mobility, this theme focuses on improving transportation opportunities for the Apache Junction community. The intent of the proposed solutions is to provide more equitable access to opportunities for all socio-economic strata, thus improving the quality of life of existing residents and attracting new long-term residents.

Circulation Ideas	
Use design elements such as shade, sidewalks, bike lanes, bike racks, benches, and multi-modal connection points to encourage all modes of transportation, including biking, walking, and public transportation. (This is also known as “complete streets.”)	
Give pedestrians convenient, affordable, and healthy options for travel.	
Build bike stations to encourage a different, accessible way of travel.	
Encourage community engagement by designing intersections of bike, transit, pedestrian, and automobile pathways at activity hubs.	
Make roadways a better place for bicyclists and pedestrians by providing improved facilities such as shaded sidewalks and landscape rainwater collection basins while reducing the speeds and volumes of vehicular traffic.	
Add a multi-use transit system with a bus route system connecting Apache Junction to nearby cities.	
Create a bus hub with regular routes, local circulators, and express buses.	

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LDE 361/590 LANDSCAPE
ARCHITECTURE I
& CORE LANDSCAPE
ARCHITECTURE STUDIO I
FALL 2017

Landscape Architecture Design Ideas to Spark a Unified Vision of Apache Junction

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INTRODUCTION



Apache Junction has an abundance of natural assets, is affordable, and is well located at the cusp of Greater Phoenix and the rugged outdoors. However, it does not have a cohesive vision for its future. Through Project Cities, Apache Junction invited ASU courses to participate in four projects. These were related to solid waste management, an off-leash dog park, understanding homelessness, and its Positively AJ marketing campaign. The fall 2017 course LDE 361/590 signed up to support the city on all four projects. The faculty and students decided the best way to do so was to create overarching visions for Apache Junction in the context of all the Project Cities projects, and generate inspiring landscape architecture ideas related to these visions.

To do so, students divided into five teams and were assigned specific geographic sections of the city. They reviewed documents from the city's planning department and ASU archives of previous studies of Apache Junction. They pulled data from various agency sites, such as the Federal Emergency Management Agency (FEMA), on its flood risk, soils, geology, vegetation, wildlife, transportation, and more. Students attended the city's visioning town hall and local events, and drove, walked, and biked the city's streets and open spaces to immerse themselves in the physical and human environment.

The results of this mixed-methods research process are both analytical and speculative. They first analyzed the data they collected to draw conclusions about suitability for use and preservation and identify potential negative impacts. With that knowledge, they put their imaginations to work to invent future development scenarios that address both community vision and the physical opportunities and constraints. The students generated seven potential themes for an overarching vision for Apache Junction: Tourism and Recreation, Culture and History, Housing, Healthy Communities, Urban Forestry and Urban Agriculture, Resource Conservation, and Circulation. Then, based on a selected theme and the constraints and opportunities they identified, each student created conceptual land use plans and masterplans for their assigned section of the city. These resulted in ideas meant to inspire Apache Junction. These the most promising parts of the plans can be extracted and considered for the entire city or similar areas.

The remainder of this “Landscape Architecture Design Ideas to Spark a Unified Vision of Apache Junction” section explains the methods used by the students and their findings. It then delves into the most enlightening ideas. The report wraps up with areas for further exploration and a concise conclusion, followed by student team reports in their entirety.

PROBLEM

While students considered partaking in one of the four formal projects of the Apache Junction and Project Cities fall 2017 partnership, they found that the greater overarching problem was the city's lack of a common vision or overarching development themes.

METHODS

A design studio uses a synthetic process of research, engagement, experiential onsite fieldwork, data collection, and analysis for its approach. To begin, course faculty divided Apache Junction into four quadrants of 40 acres plus a fifth zone containing the Envisioned Downtown district (see Figure 1). Next, these were assigned to five student teams. Each team was tasked with engaging with, researching, and analyzing the existing conditions in Apache Junction and their assigned zones. The students then set out to gather data on the physical and social contexts for their proposals. They did so through inventorying and analyzing data, community engagement, and observation. They also performed case studies to gather ideas of good and poor practices for similar plots of land. The methods used by students are detailed next.

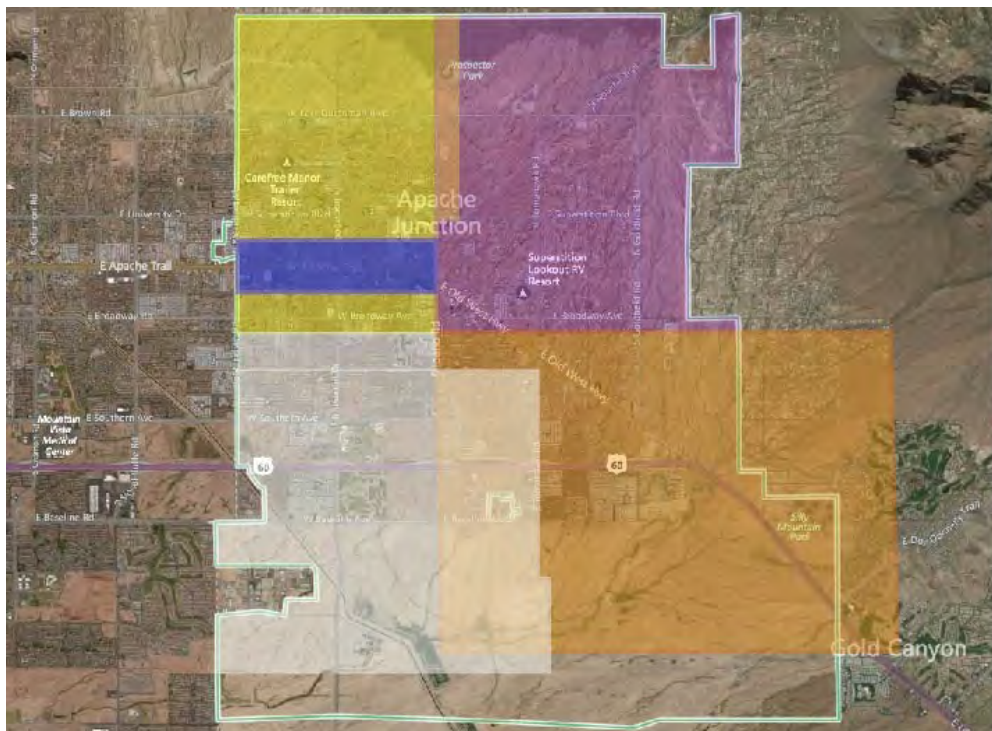


Figure 1. Sections of Apache Junction assigned to student teams.

Inventorying Data: This research method is used to collect natural factors and human factors that impact the uses of community land. For the natural factors, the student teams researched data related to Apache Junction and their zones through sources such as the U.S. Department of Agriculture (USDA), the Federal Emergency Management Agency (FEMA), and geographic information systems (GIS). A short list of what they inventoried includes mining, water, soils, sun angles, wildlife, and climate. Flood zones were also researched using documents such as flood insurance rate maps. Through this the students found that flooding is a significant factor in the city (Figure 2). They also researched human factors including traffic counts, transit, zoning, and existing land uses. By consulting aerial maps, like that available with Google Earth, students were able to see vacant and recent zoning cases. They also researched the area's history, demographics, land ownership, and services available such as public facilities.

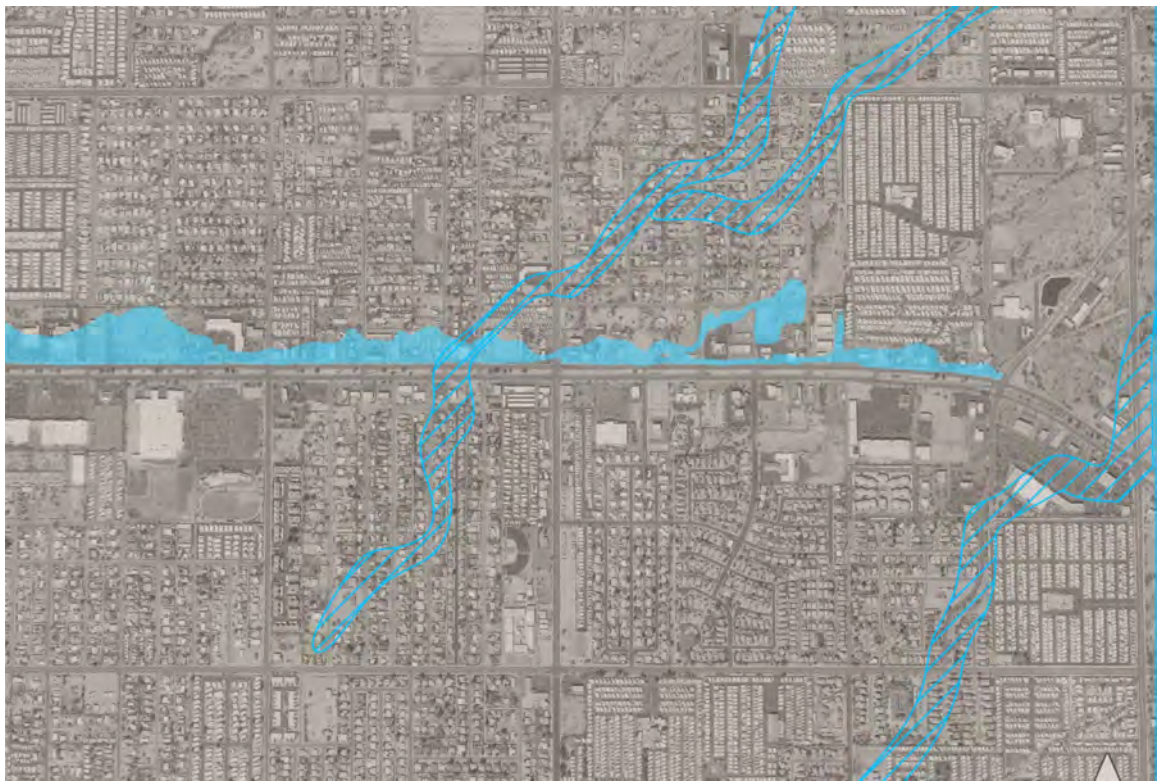


Figure 2. A mapping of the flood zone and washes in the downtown area. According to the student team, just north of Apache Trail is part of a 100-year floodplain that causes commercial buildings to conform to a large setback. However they are still at risk of flooding because of poor drain-age infrastructure (SPUR Landscape Architecture, page 3-13).

Onsite Fieldwork (Ground-Truthing and Observation): This method involves visiting a site and experiencing or observing it. The first way of doing so used by some students is referred to by designers as

“ground-truthing.” With this method, designers experience the place as if they lived there, seeking the truth of the place from the ground. The assignment in this case was to go to the city on a weekend day, park, and try to buy something at a store or bike to the park. The students found this experience to be profound. They were able to create a cognitive map of the city’s topography and its heat profile, which is where the city traps or mitigates heat hence creating hotter or cooler areas. (Urban cities often have high heat profiles due to less vegetation and more surfaces that absorb heat, as well as infrastructure that releases heat such as cars and air conditioners. This is called the “urban heat island effect.”) It also revealed that bicycling in the community is unsafe and hot. The second type of onsite fieldwork performed by students was observation. In this case, they were tasked with walking the four corners of their quadrants, taking pictures, and making records of what they saw (see Figures 3, 4, 5).



Figures 3, 4, and 5. Images from student observation of Apache Junction (SPUR Landscape Architecture, page 3-11).

Community Engagement: Only the LDE 590 graduate students used this method of research. To do so, four students attended the Project Cities kickoff meeting in Apache Junction, a town hall meeting, and four breakout sessions. During all of these engagements, they participated

in events and used the Socratic questioning method, which explores perspectives on a specific topic. It involves asking open-ended and broad questions and then working to clarify and deepen responses.

Case Studies: This research method involves investigating a specific instance or place. In this case, students studied parts of Phoenix and Tempe that had the same land area and physical qualities as their quadrants. The studied sites were 40 acres in area and located on major intersections. Then they narrowed in on 10 acres of the plot and documented the ways this land was used. The point of this method is to understand the relationships between land, land use, and public infrastructure. This method charts the results of the past: students learned what effect past policies, economic motives, and market demands had on existing neighborhoods by look at existing examples.

The point of using case studies was for students to understand the relationships between land, land use, and public infrastructure.

Assessment of Opportunities and Constraints: Based on the data students generated from researching natural and human factors of Apache Junction, they assessed opportunities and constraints of their quadrants. These can be internal or external. An example of a constraint is a canal, which is a physical barrier that must be taken into consideration in a land-use plan. However, this can also be seen as an opportunity, as it can be an attractive centerpiece for an urban community. An example of an external opportunity is the growing pressure on housing markets in neighboring cities like Gilbert, Mesa, and Chandler, which presents an opening for Apache Junction to attract new residents. Such constraints and opportunities are discussed further in the Findings section.

Land-use Suitability Analysis: This research method builds upon the results of previous methods. Based on the zoning and land-use data collected, they identified potential future land uses for their quadrants. For example, since the downtown area has mixed-use zoning, students located mixed commercial and residential uses there.

FINDINGS

This research is intended to create a strong foundation for conceptual land use plans they were to develop so that the plans responded to the features, opportunities, and constraints identified by the students and advanced the development goals of Apache Junction.

General Findings

Apache Junction’s natural beauty and its location at a crossroads and gateway to magnificent natural assets are strategic opportunities. The city has tremendous potential to advance a development agenda. However, if the city allows the rapid, non-inclusive, land-consumptive, ad-hoc development seen broadly in the Phoenix metropolitan area, it will likely result in traffic congestion, poor air quality, a lack of affordable housing, and long commutes. Therefore, **the city must take care to ensure its development reflects the values of all of its citizens and is built with sustainability best practices.**

As it stands, the **students perceived no consistent vision on the part of the city.** Without this, no design proposal can project an envisioned future. One student did find in public meetings that the city’s identity is tied to the land surrounding it (Sarah Gaughan, SPUR Landscape Architecture, page 3-28). However, more broadly, the students heard three differing narratives of overarching visions for the city that were presented in public meetings. These are listed in Figure 6.

One common theme was a concern that new development could bifurcate the city into the “old” and “new” Apache Junction. Care should be taken to integrate the community in future development.

Specific Findings

Upward pressure on home sales prices and rents in cities like Gilbert and Chandler could present an opportunity for Apache Junction. As homebuyers and renters are priced out of those areas, especially younger residents who are looking for more space for their growing families, they will look for monthly payments that they can afford.

THREE DIFFERING VISION NARRATIVES

1. Apache Junction has a poor reputation and is stigmatized in public opinion as a haven for low-level crime, the drug trade, and blight. Examples include unregulated developments and self-built dwellings, homeless encampments, sub-standard infrastructure, and accumulation of refuse and junk vehicles. The solution is to create and enforce laws and regulations that disallow these behaviors.
2. Apache Junction should become a year-round city with well-paying jobs, good schools, and development that supports family life. Gilbert and Chandler were cited as examples.
3. Apache Junction should become a tourism-based community that provides a gateway to spectacular natural assets in the vicinity. Scottsdale and Sedona were cited as examples.

Figure 6. Three different narratives for the city and its future presented at public gatherings and events.

One of the student groups, the Wild Nature Design team, focused on the southeast quadrant of the city. **It found large separations between residential areas, and communities without accessible roadways.** Further, they determined that this area lacks commercial zoning, and its schools, residential areas, and shopping centers are disorganized. Find the Wild Nature Design team's entire booklet online at static.sustainability.asu.edu/giosMS-uploads/sites/21/2017/11/17102432/Team-1-Wild-Nature-Design-Final-Booklet.pdf.) Additionally, the city's landfill is located within a wash zone, which can cause groundwater pollution and damage wildlife ecosystems. While the area has limited connections to the Phoenix metropolitan area, this can be seen as both a constraint and an opportunity, as it is something that can be further developed.

Another mixed opportunity and constraint is its winter visitor population. They could become long-term residents, but can also create problems like long waits at restaurants. An opportunity of the area is its generally flat topography, which is suitable for building and can be used to manipulate water to improve the city's existing green infrastructure. (Green infrastructure features vegetation and soil meant to naturally reduce flooding and filter storm water.)

According to the Southwest Native Design team and the Superstition Studios team, which looked at the southwest and northwest quadrants, the washes in their areas are constraints and opportunities. While the Weeks Wash in the Southwest quadrant regularly floods intersecting streets during heavy rainfall, it can actually be used as a resource to support agriculture. Because of this, the team proposed dedicating land use for agriculture in the related area. **The Superstition Studios team saw washes as opportunities for water resources but also as constraints for building.** Related to this, the city's limited water resources were considered a constraint, as they inhibit expansion (Superstition Studios, page 2-63). (Overuse of groundwater can also lead to land subsidence, as has happened in Apache Junction, which can harm developments.) However, this was interpreted as an opportunity to create a resource-aware, sustainable vision for the city.

Another feature that was both an opportunity and a constraint according to Southwest Studios is the downtown area, as it is good for attracting people but hard to change. Opportunities the students in this team identified were the park, which is good for connection, and green belts, which have possibilities for recreation.

The SPUR Landscape Team had a slightly different approach to the project as it focused on the downtown area. For this team, **opportunities presented in Apache Junction are its infill (vacant parcels in developed areas), views of the Superstition Mountains, open space, proximity to recreation, historical Western culture, design standards, and existing infrastructure.** Constraints they identified were that the city doesn't have a clear identity, it has homogenous business, residents perceive it as unsafe, and it has a high number of absentee owners. As for the specific downtown zone, one member of this team pointed to lower sales tax in neighboring municipalities, a lack of brick and mortar options, and pressure on local brick and mortar retailers from big-box online retailers as constraints.

IDEAS

The student teams used their findings regarding natural and human factors, zoning, land use, community insight, opportunities and constraints to identify overarching themes that the city could use as a cohesive vision. The overarching themes they came up with were Tourism and Recreation, Culture and History, Housing, Healthy Communities, Forestry, Resource Conservation, and Circulation.

Using one of these themes as an inspiration, each student developed a conceptual land use plan and masterplan of mixed-use community centers to guide future community development for their areas. For example, one student in the Central Design Group team chose walkability as her theme. Her stated mission was “to provide design solutions that will create a more walkable and bikeable community through case studies and study area of the northeast corner of Apache Junction.” Her resulting vision was to create a green belt corridor that utilizes Flatiron Park as a gateway to increase walkability and bikeability between the different land uses.

The ideas the students presented for their quadrants of the city are not meant to result in a cohesive list of recommendations. Instead, they are meant to inspire Apache Junction to select a vision and imagine how to pursue it. The following are explanations of each theme and highlighted thematic ideas the students generated.



Tourism and Recreation

This theme envisions Apache Junction as a place designed to attract new and reoccurring visitors and provide residents with a range of outdoor recreation. The ideas presented support a thriving economy as a way to draw new residents. Celebrating the city's beautiful location as well as its parks and open land is central to the palette of presented options.

- Add a recreational lodge to enhance the visitor experience for people who love nature and want to be in the wilderness. In this masterplan, imagine a lodge with a community pool and hot tub, and indoor-outdoor shooting range, indoor-outdoor spas, community grills and fire pits. Its shopping center would have a breakfast option, camping gear shops, tourist shops, coffee stations, and activities for all ages (Evan Meade, Wild Nature Design, online).

- Capture the beauty of Apache Junction and cater to its avid outdoor culture with an intricate chain of trails and parks. This will provide residents with more means to explore the outdoors and attract visitors trying to escape the city. This highlights Apache Junction's natural beauty, such as the Superstition Mountains, and promotes community connectivity through recreation (Denise Torloni, Southwest Native Design, page 1-22). See Figure 7.
- To bolster adventure tourism in Apache Junction, create a hub for outdoor recreation connected to bike and trail systems for mountain biking and road cycling. The scale of the city's open spaces, and the open space surrounding it, is ideal for adventure tourists interested in cycling. For example, Flatiron Park is already used for bicycling gatherings, so a mixed-use development next to it could provide convenient accommodation for tourists and provide opportunities for new businesses that cater to them (Mark Johnson, SPUR Landscape Architects, page 3-48).

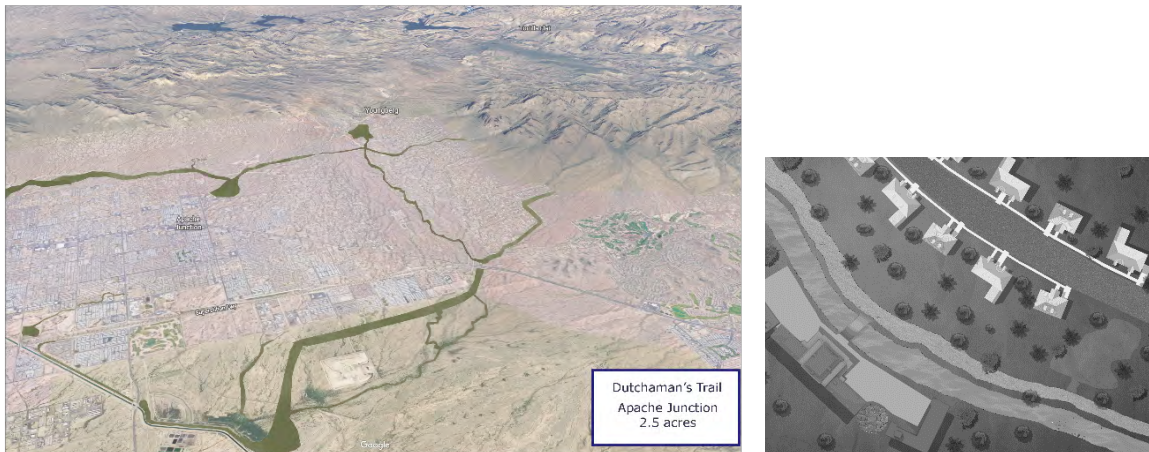


Figure 7. One student created a masterplan inspired by Boston's "Emerald Necklace," which would have a path running throughout the city and linking neighborhoods, parks, and the OK Corral, leading to one of the main Superstition Mountain trails. It would include two public gardens, multiple parks, a horse trail, a commercial district, a dining district, a horse corral, and an off-leash dog park (Southwest Native Design, page 1-28).



Culture and History

This theme celebrates Apache Junction's Western culture and history and makes it central to design choices, while allowing for the city to be modernized. Student work shows the city as a place where people come to experience art in all its forms.

- Design city spaces that act as intersections of culture, arts, and the people that participate in them. Use these to attract younger generations to Apache Junction, make the city a destination, and highlight its outdoor beauty. (See Figure 8.) (Lucas Ayers, Central Design Group. Find this team's entire booklet online at static.sustainability.asu.edu/giosMS-uploads/sites/21/2017/11/17102433/Team-2-Central-Design-Group-Final-Booklet-v2.pdf).
- Create a modern, art-filled site like an art district that incorporates the historical background that makes Apache Junction an important historical landmark in Arizona. (Nicholas Salazar, Central Design Group, online).
- Create an artful signature attraction for this art district, which will help give Apache Junction a modern look while retaining its history.
- Use Apache Junction's history and features to design the ultimate art walk in this district. See Figure 9.
- Create a sense of place inspired by local history and the community of Apache Junction where arts and culture are vibrantly expressed and displayed. (Dylan Mayo, Southwest Native Design, page 3-64).
- To do so, develop a community hub with a multi-use land platform. An example is a multi-use community center with multi-story family housing, a commercial shopping plaza, a community recreation center, and a focal main street walk lined with restaurant and shops that open to a park and entertainment center.
- Provide the necessities for comfort, such as food, shade, and seating.



Figure 8. An outdoor theater could be built in Apache Junction to celebrate the arts and draw new residents and visitors (Lucas Ayers, Central Design Group, online).



Figure 9. This illustration of an art district in Apache Junction has a maze of canyon-inspired walls featuring urban art (Nicholas Salazar, Central Design Group, online).



Housing

While this theme sounds less romantic, it supports the idea that a high quality of life of residents is an important function for any city. Proposed solutions showcase Apache Junction as a place where residents are more self-sufficient, and have greater access to affordable housing, communal open space, local retail options, and other amenities. In support of the theme sustainability, active and healthy living, and a strong community identity are emphasized.

- Create a simpler, more self-sufficient lifestyle for residents while providing more affordable housing options like a tiny-house community and high-density residential buildings, communal open space, and greater access to local retail space and amenities (including retail space on the first floor of the residential buildings). See Figure 10. (Matthew Favazzo, Superstition Studios, page 2-56).
- Focus on environmentally conscious planning and development and responsible resource consumption.



Figure 10. This conceptual design plan has a tiny-house community near the commercial core as an example for simpler, more affordable living and to encourage reducing waste. It also features higher density apartment buildings as affordable housing that is an alternative to trailer homes. A community open space and dog park promote a healthy lifestyle, while a community garden and farmer's market support the local economy. It has a commercial streetscape with storefronts and turns underused parcels into local retail space. Finally, it has foot and bike paths that connect community amenities and reduce vehicle dependence in the neighborhood. (Matthew Favazzo, Superstition Studios, page 2-58).



Healthy Communities

*Similar to the housing theme, this theme prioritizes the quality of life of residents, with the added aspiration of developing a health-focused industry in the city. Recognizing that Arizona is a strong market for rehabilitation and therapy makes Apache Junction's location and cost of living an ideal place to build a health and wellness community (Anthony Martin, *Southwest Native Design*, page 1-40).*

- Build Apache Junction into a health and recreation district, which will attract visitors and residents and bolster the economy. This multifaceted vision includes inpatient drug and alcohol addiction recovery with luxury private facilities; concierge healthcare; transitional living communities with treatment services and sober living houses; enriched retirement health opportunities; itinerant healthcare that serves the rural population and offers technical assistance, training, and employment; and commercial development including medical manufacturing. See Figure 11.
- Create commercial and recreational design that meets the need for affordable and convenient healthcare.
- Take advantage of Apache Junction's close proximity to the Phoenix Mesa Gateway Airport and its open space.



*Figure 11. This masterplan has a recreation center (1), medical center (2), circular retirement community (3), transitional living community (4), community center (5), and a canal reservoir (6) (Anthony Martin, *Southwest Native Design*, page 1-51).*



Forestry

This theme highlights the benefits of trees, which prevent unnecessary heat from being trapped in the city and shade alternative transportation users. Though not technically forest-related, urban agriculture is included as a part of this theme due to its similar regenerative nature.

- Encourage a community that is actively aware of the benefits attained from a marriage between the urban and natural environments (Katryn Squyres, Southwest Native Design, page 1-72). See Figure 13.
- Provide adequate housing that encourages outdoor recreation for families interested in migrating from Gilbert and Chandler.
- Create a diverse and friendly environment through the establishment of public outdoor gathering spaces.
- Establish a network of green pathways between areas of work, home, and play to allow easy access for cyclists, pedestrians, and horseback riders. See Figure 12.
- Create an urban canopy of more than 30% within the Southwest quadrant of Apache Junction.



Figure 12. This imagining of a Wash Trail System features pedestrian and equestrian friendly trails, wash-bed trails accessible during the dry season and marked with flood signage during wet season, native arroyo vegetation, and trail information signage (Katryn Squyres, Southwest Native Design, page 1-79).

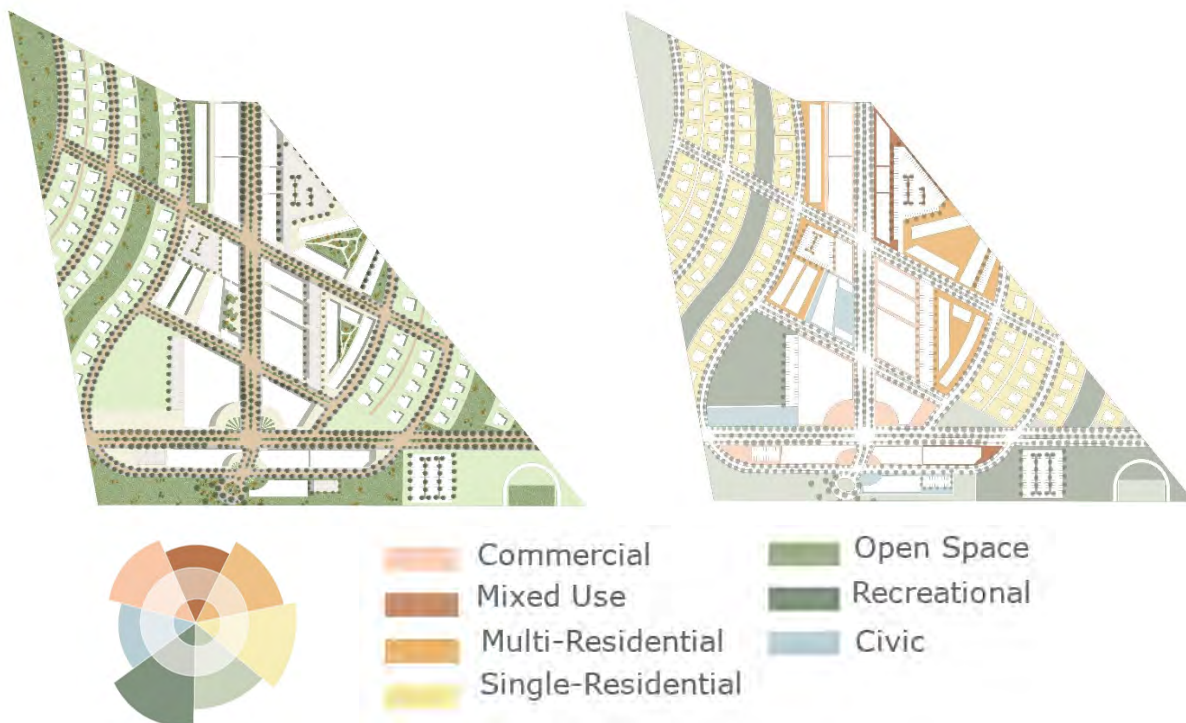


Figure 13. In this masterplan, a student envisioned a tree canopy featuring species native to the region, primarily palo verde, mesquite, and desert ironwood, with smaller tree species planted around intersections that provide shade but allow for visibility. It has backyard access to a trail system, community open spaces with opportunities for community gardens, public parks for community gatherings, and a public sports park. This was designed around Idaho Road. Where Idaho Road ends near Baseline Avenue, it becomes a pedestrian gateway between the urban and natural environments. However, this masterplan could apply to other parts of the city as well (Katrjn Squyres, *Southwest Native Design*, page 1-78).



Resource Conservation

This theme focuses on the natural resources of the city in a different way. Rather than using them to attract visitors, this theme finds ways to preserve resources such as land and water while also improving the residents' quality of life and the city's sustainability.

- Transform Apache Junction into a proactive water-conserving community, as the distribution of water is a major constraint to its expansion. By seeing this constraint as an opportunity, the city can become a leader in sustainable water conservation and build a community that identifies with natural processes. (Katherine Keane, Superstition Studios, page 2-61). See Figure 14.
- Build a community that works closely with natural processes to fully utilize water in a unique, efficient, and sustainable way. See Figure 13.
- Create a unified community conservation center that inspires visitors to adopt beneficial techniques that adhere to sustainable practices.



Figure 13. In this masterplan highlighting water conservation, multi-family residential housing would have rainwater harvesting, bioswales (which are landscaping elements designed to naturally filter pollution out of surface runoff), native plants, and would harvest condensate from large air conditioning units. Its no-curb system, which means it does not have raised curbs around paved areas, allows rainwater to run into landscaped or natural areas. (Katherine Keane, Superstition Studios, page 2-66).



Figure 14. Existing vegetation reveal the existing flows of water (upper figure), around which development is strategically located in the bottom figure (Katherine Keane, Superstition Studios, page 2-65).



Circulation

Also known as mobility, this theme focuses on improving transportation opportunities for the Apache Junction community. The intent of the proposed solutions is to provide more equitable access to opportunities for all socio-economic strata, thus improving the quality of life of existing residents and attracting new long-term residents.

- Use design elements such as shade, sidewalks, bike lanes, bike racks, benches, and multi-modal connection points to encourage all modes of transportation, including biking, walking, and public transportation. See Figure 15. (This is also known as “complete streets.”) (Shinye Kim, Southwest Native Design, page 1-53).
- Give pedestrians convenient, affordable, and healthy options for travel.
- Build bike stations to encourage a different, accessible way of travel.
- Encourage community engagement by designing intersections of bike, transit, pedestrian, and automobile pathways at activity hubs.
- Make roadways a better place for bicyclists and pedestrians by providing improved facilities such as shaded sidewalks and landscape rainwater collection basins while reducing the speeds and volumes of vehicular traffic (Sijie Chen, Superstition Studios, page 2-75).
- Add a multi-use transit system with a bus route system connecting Apache Junction to nearby cities (Shinye Kim).
- Create a bus hub with regular routes, local circulators, and express buses (Sijie Chen). See Figure 16.

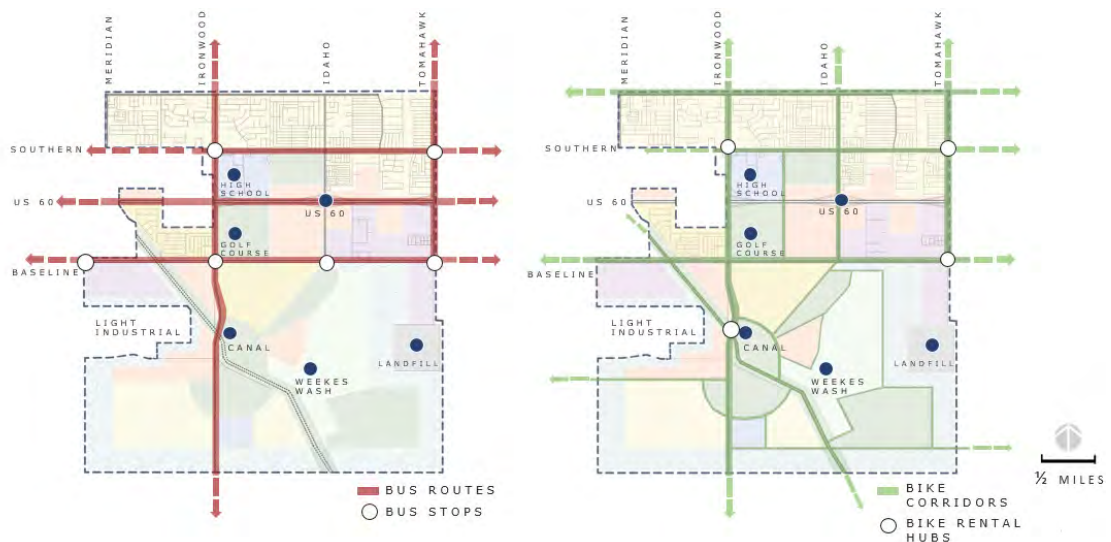


Figure 15. In this vision of the southwest quadrant of Apache Junction, bus routes are enhanced and a bike corridor gives residents and visitors an alternative way to travel through their community. Such accessible diversity of transportation encourages walking rather than driving (Shinye Kim, Southwest Native Design, page 1-59).



Figure 16. This transportation hub masterplan was located strategically to be within 10-minute walk from City Hall as well as a part of the city with lower incomes. It is located at the intersection of Apache Trail, the Old West Highway, and State Route 88 (North Apache Trail). (Sijie Chen, Superstition Studios, page 2-80).

AREAS FOR FURTHER EXPLORATION

Community Engagement and Unified Vision: Engage the community, including seasonal residents, in an extensive process to document the voices of all members of the community. Develop an organizing system for a sustainable communication and participation program. Analyze the input data to define the most important community challenges and opportunities. Verify conclusions with the community.

Data Gathering: Quantify the challenges and opportunities. The city has done a lot of work on high-level and observational studies, and a number of issues have been identified. In moving forward with solutions, it will be essential to collect accurate, relevant, and meaningful data on existing conditions. Future work should focus on establishing measurable benchmarks and objectives so that a logic model of inputs, outputs, activities, and outcomes can be tracked.

Downtown Infill Plan: The downtown area base zoning should be expanded with an urban design-specific plan to develop an imagined future character that fits the community vision. This plan should be paired with an economic implementation plan that identifies market demand, sources of capital, and development prototypes that fit the vision.

Mobile Home/Recreational Vehicle (RV) Parks:

These communities represent affordable living for seasonal and year-round residents alike. Efforts should be made to develop models for sustainability and future development of existing mobile home/RV communities. Liabilities include failing infrastructure, poor-quality dwelling units, and blight. See these parks as assets to the community and articulate strategies for upgrading infrastructure, improving energy efficiency, modernizing the dwelling units, and providing community amenities without wholesale displacement of the city's long-term residents.

See mobile home parks as assets to the community, and articulate strategies for upgrading infrastructure.

Transit Plan: Develop an affordable and sustainable transit strategy that links Apache Junction to job centers and airports in metropolitan Phoenix.

CONCLUSION

Apache Junction is well-positioned to plan and implement a sustainable, equitable future. It has natural assets, affordability, and a strategic location on the edge of metropolitan Phoenix and the greater outdoors. However, in order for the community to move forward, it will need a unifying vision. Possible themes for an overarching vision for the city include: Tourism and Recreation, Culture and History, Housing, Healthy Communities, Forestry, Resource Conservation, and Circulation. Based on these themes, the ideas students generated are meant to inspire Apache Junction. As the city moves forward with any overarching design, the best practices of walkable, sustainable and equitable urbanism should be applied, and its natural assets should be leveraged. Future success can be measured by community health; environmental preservation; economic prosperity across the income spectrum; access to knowledge, technology and education; and connectivity to job centers Maricopa County. If Apache Junction is able to attract public and private capital investments to fund its development, and makes sure this is to the benefit of its community, both visitors and residents will have positive perceptions of the city.

SELECT STUDENT MATERIALS

Following are three of the student team booklets produced for this report:

- 1-1 Southwest Native Design
- 2-1 Superstition Studios
- 3-1 SPUR Landscape Architecture

The other two student reports are available online:

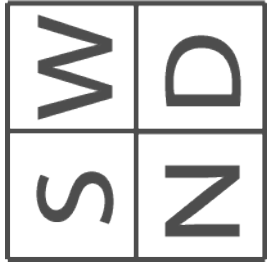
Wild Nature Design:

<https://static.sustainability.asu.edu/giosMS/uploads/sites/21/2017/11/17102432/Team-1-Wild-Nature-Design-Final-Booklet.pdf>

Central Design Group:

<https://static.sustainability.asu.edu/giosMS/uploads/sites/21/2017/11/17102433/Team-2-Central-Design-Group-Final-Booklet-v2.pdf>

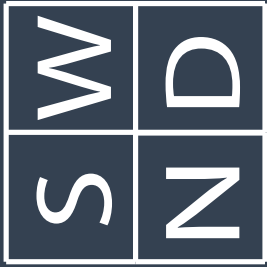
All five student team booklets are available online at the bottom of <https://sustainability.asu.edu/project-cities/partner-cities/2017-2018-partner-city-apache-junction>.



SOUTHWEST
NATIVE DESIGN

LANDSCAPE ARCHITECTS
AND PLANNERS

Southwest Apache Junction
Masterplan Community



SOUTHWEST NATIVE DESIGN

LANDSCAPE ARCHITECTS
AND PLANNERS

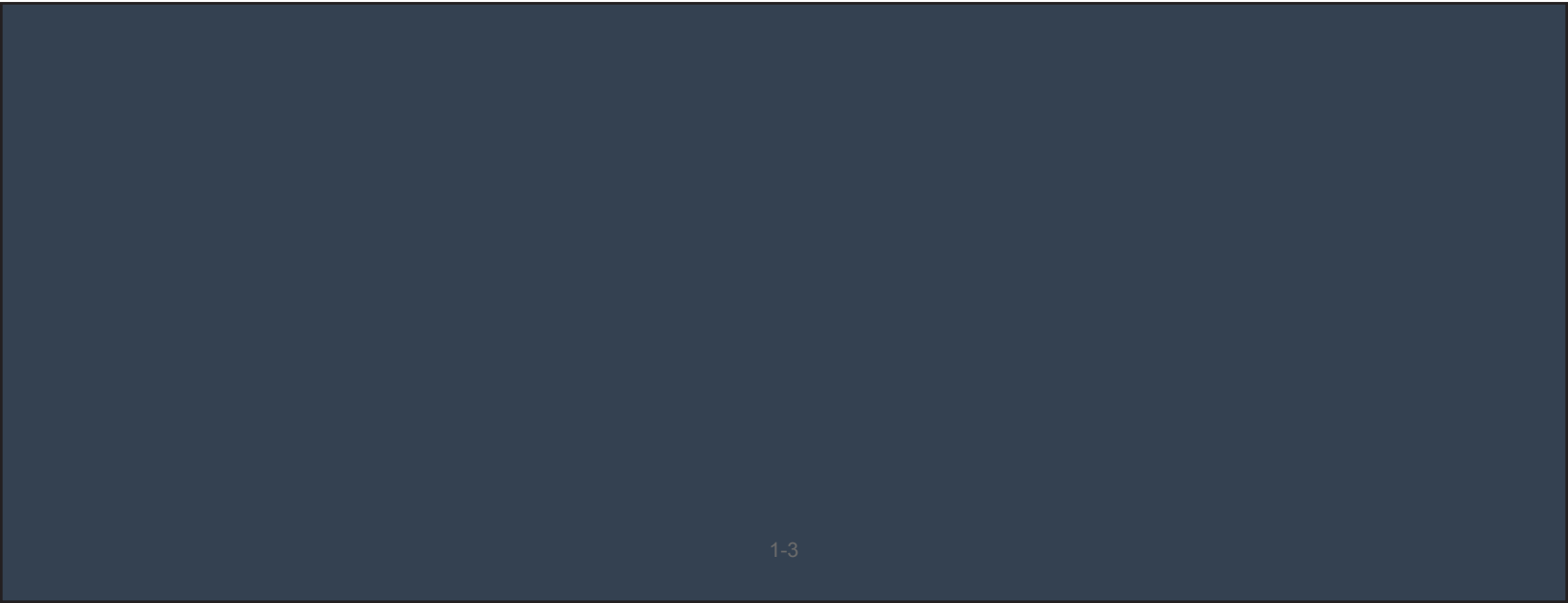
TIA BIAKAIDDY
SHINYE KIM
ANTHONY MARTIN
DYLAN MAYO
KATRYN SQUYRES
DENISE TORLONI

OUR MISSION

To create places inspired by local history and natural beauty of the surrounding environment to enhance the quality of life for the client, community, and local ecology now, and for the future.

This book contains all of the research conducted by Southwest Native Design prior to the start of the design process for the Southwest quadrant of Apache Junction. The final design concepts proposed by each group member are also included.

01 | Context





The City of Apache Junction is located thirty-six miles east of Phoenix, Arizona.



Our group focused on the Southwest quadrant of Apache Junction.

The site boundary ran east along 16th avenue, south down Tomahawk until connecting with the city limits and following the border west to Meridian road and connecting back up to 16th avenue.

1-5



1863

Arizona split from the Territory of New Mexico to form Arizona Territory



1893

Goldfield Minding Town was established



1891

Jacob Waltz dies and leaves location of Lost Dutchman Gold Mine Unknown

1912

Arizona became 48th State



1977

Lost Dutchman State Park is open and dedicated on December 5



2003

Central Arizona Aqueducts designed as a National Recreational Trail

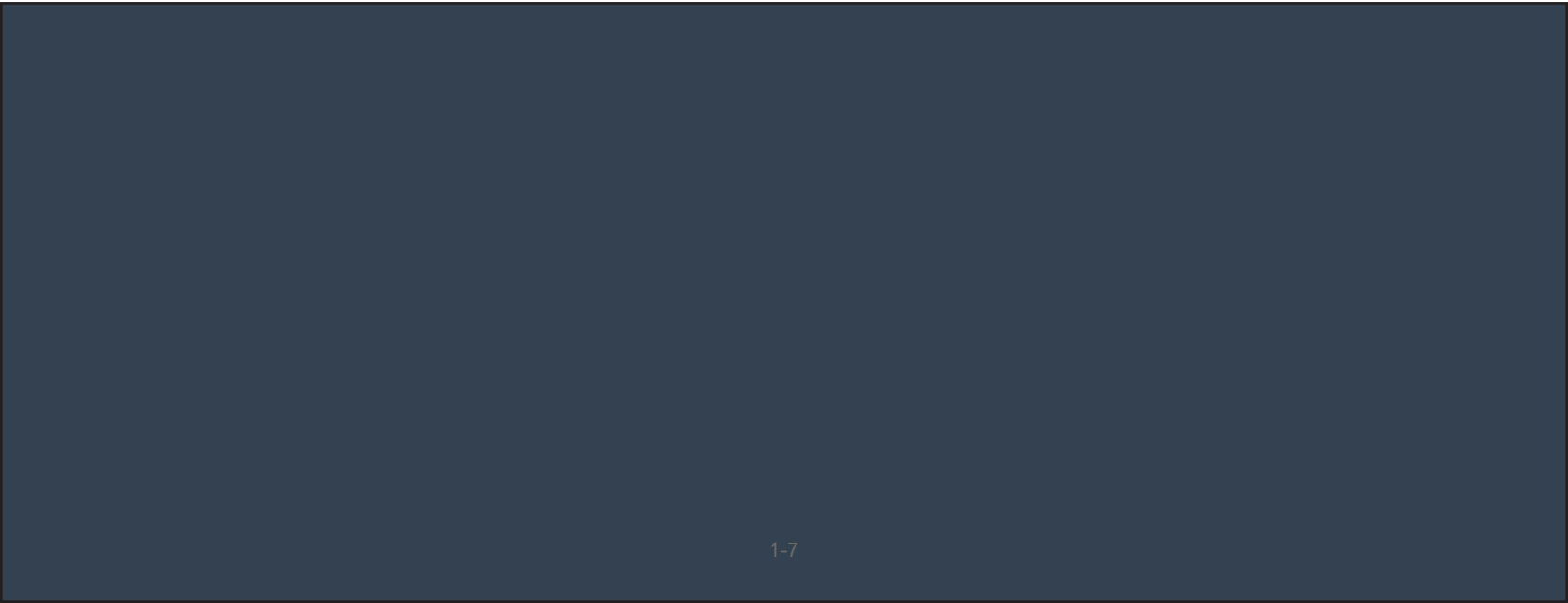


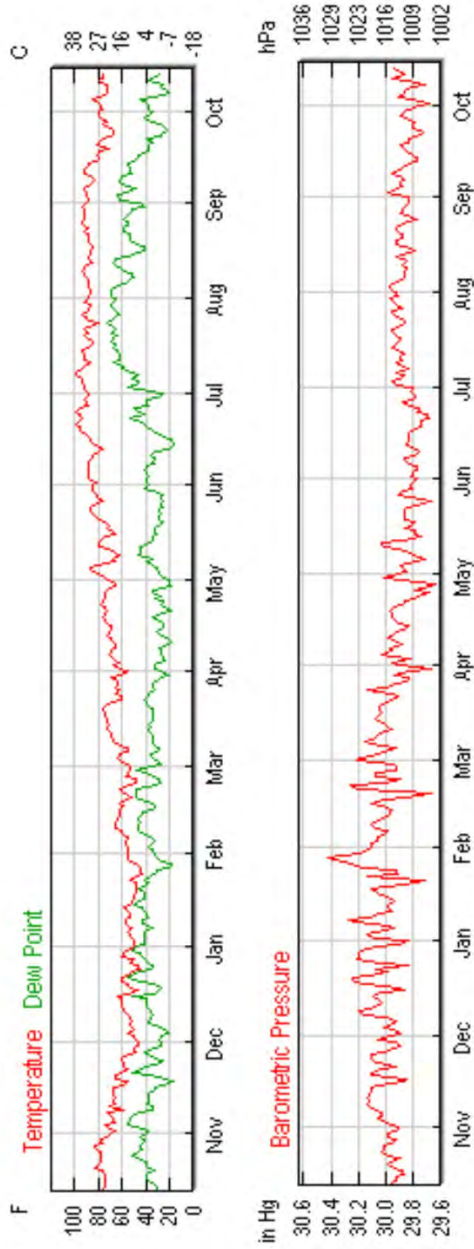
1978

Apache Junction established as a city on November 24

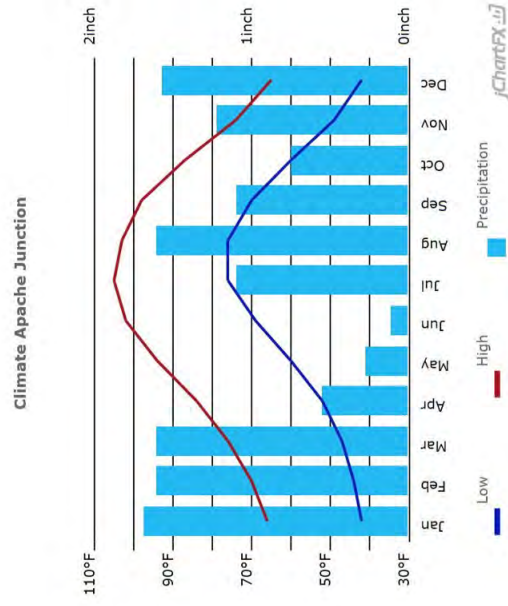


02 | INVENTORY



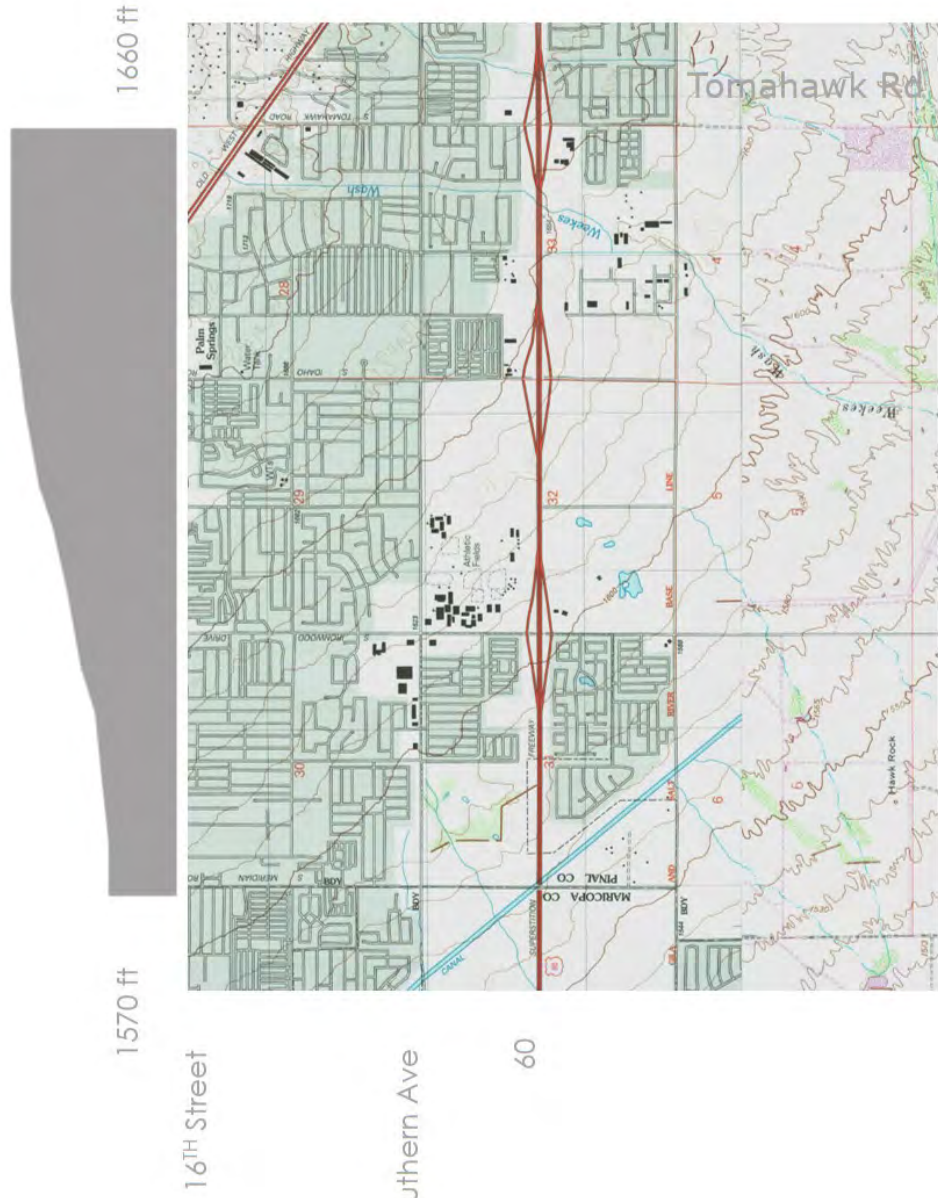


Apache Junction has an annual high temperature of 85.3 degrees F and an annual low temperature of 57.3 degrees F. Rainfall occurs the most during the winter months, as well as August during the monsoon season, receiving about 13.21 inches per year.



	Jan	Feb	Mar	Apr	May	Jun
Average high in °F:	66	70	76	84	94	102
Average low in °F:	42	44	47	52	60	69
Av. precipitation in inch:	1.69	1.61	1.61	0.55	0.28	0.12
Days with precipitation:	-	-	-	-	-	-
Hours of sunshine:	-	-	-	-	-	-

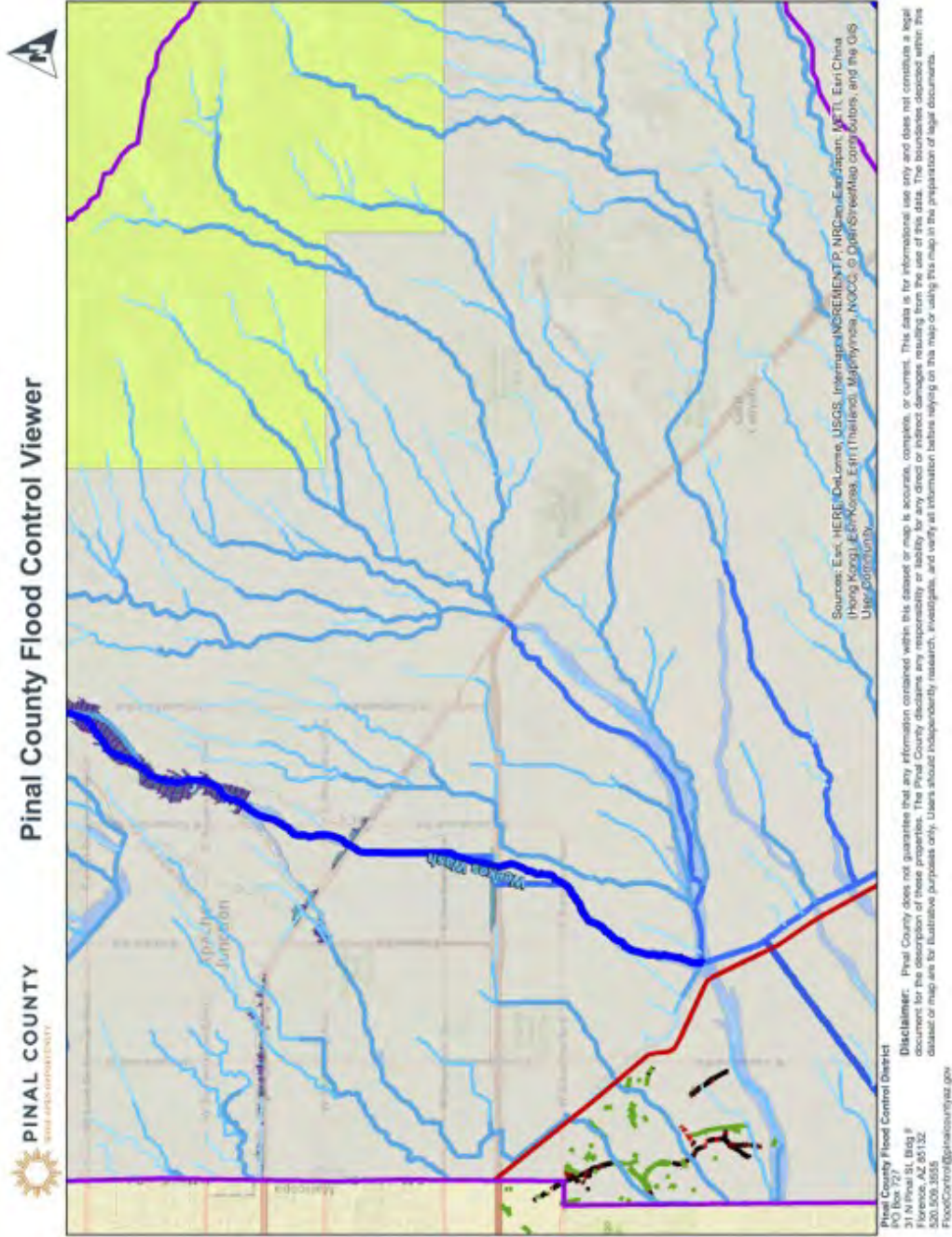
	Jul	Aug	Sep	Oct	Nov	Dec
Average high in °F:	105	103	98	87	74	65
Average low in °F:	76	76	70	60	49	42
Av. precipitation in inch:	1.1	1.61	1.1	0.75	1.22	1.57
Days with precipitation:	-	-	-	-	-	-
Hours of sunshine:	-	-	-	-	-	-



Apache Junction has a .5% Slope

MAJOR FEATURES

- Weekes Wash- regularly floods intersecting streets during heavy rainfall
- Central Arizona Project (CAP) Canal



BIRDS

- Gila Woodpecker
- Sparrows
- Quail

MAMMALS

- Several species of bats
- Antelope Jackrabbbit
- Kit fox
- Mule Deer

REPTILES

- Gila Monster
- Several species of snakes
- Sonoran Desert Tortoise



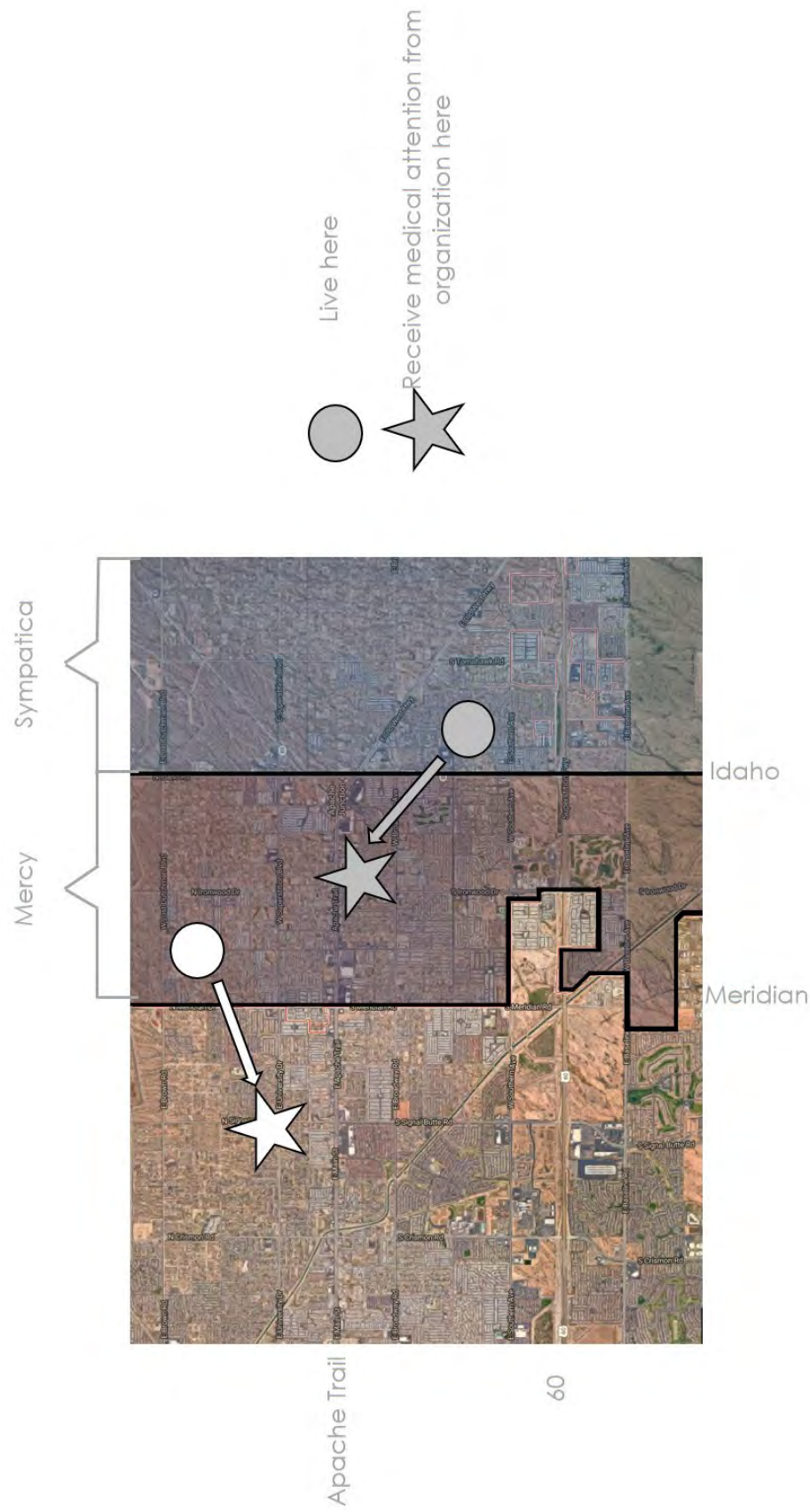


- Blue Palo Verde
- Saguaro
- Catclaw Acacia
- Ironwood

- Creosote
- White Bursage

- Barrel Cactus
- Ocotillo

- Blue Palo Verde
- Cholla
- Foothills Palo Verde
- Prickly Pear Cactus
- Saguaro
- Velvet Mesquite



Currently Apache Junction contains two main organizations that manage health opportunities for lower income families or homeless. If an individual lives in the east side of the city, their health organization will send them to another health facility on the other side

of the city division line. However, if an individual lives on the west side, their health organization sends them over the county line to find help in Maricopa County, making the entire process extremely confusing.



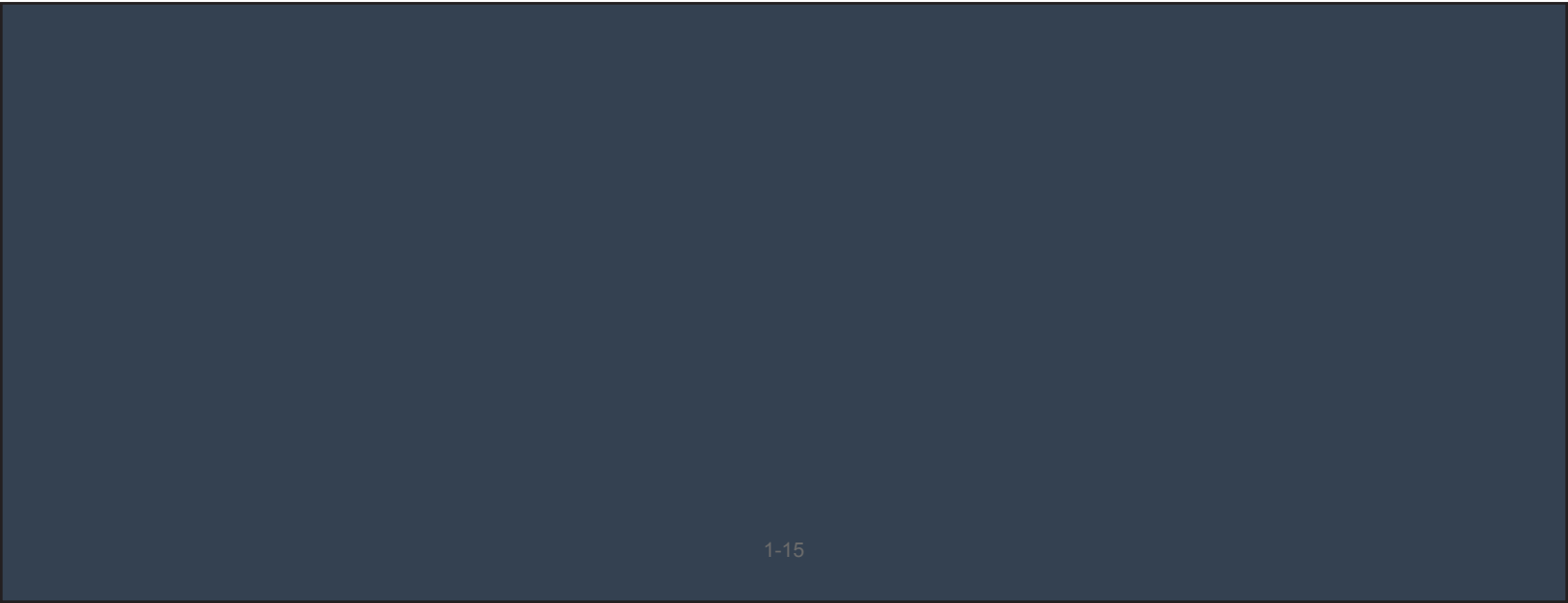


One of the unique characteristics of the Phoenix metro area that Apache Junction contains is one of the many canals running through the outskirts of the city, specifically in the Southwest quadrant.

The canal, if opened to the public, would provide a pedestrian connection from Apache Junction to the greater Phoenix-metro area through networks of miles of trails.

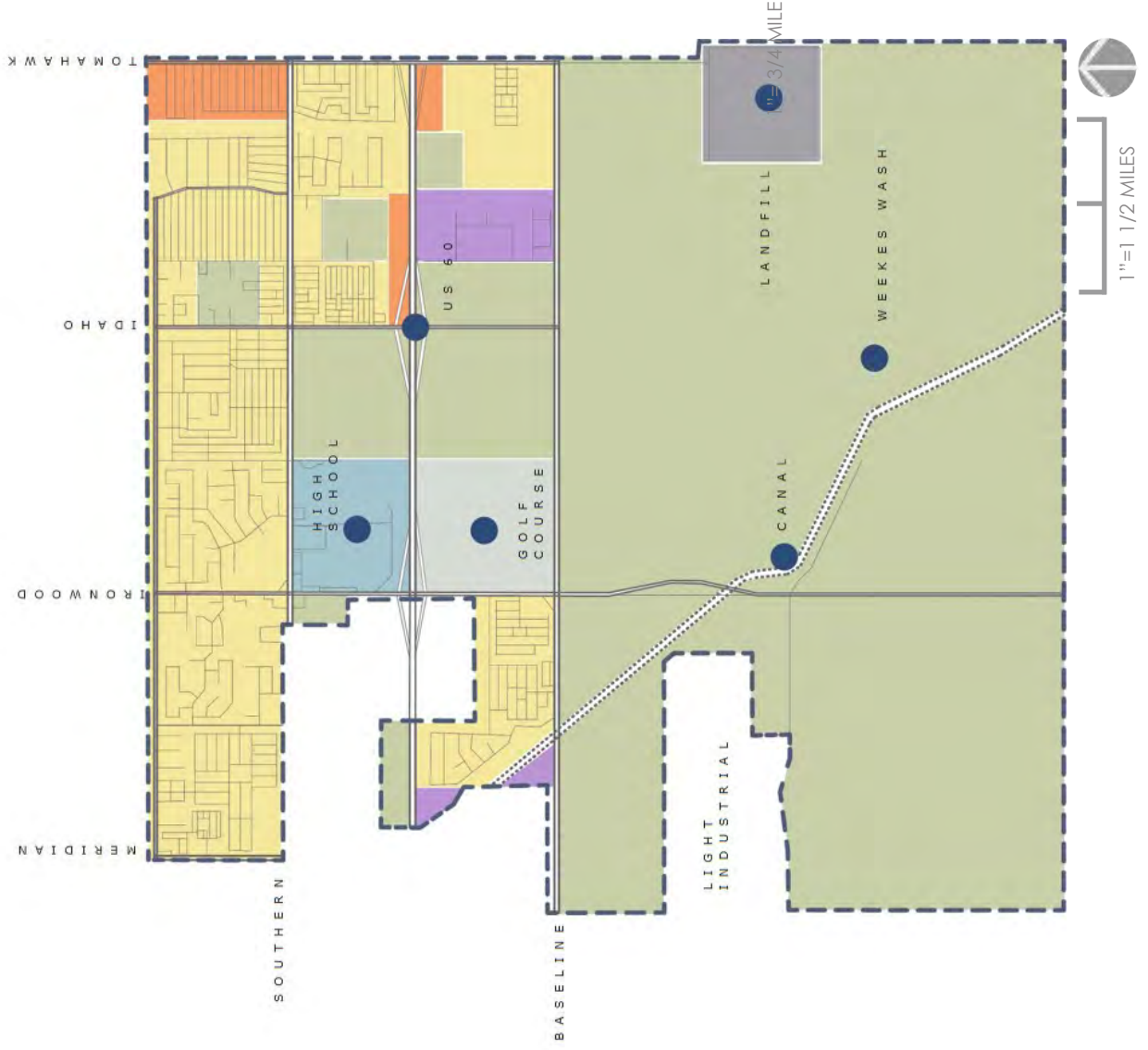


03 | LAND USE



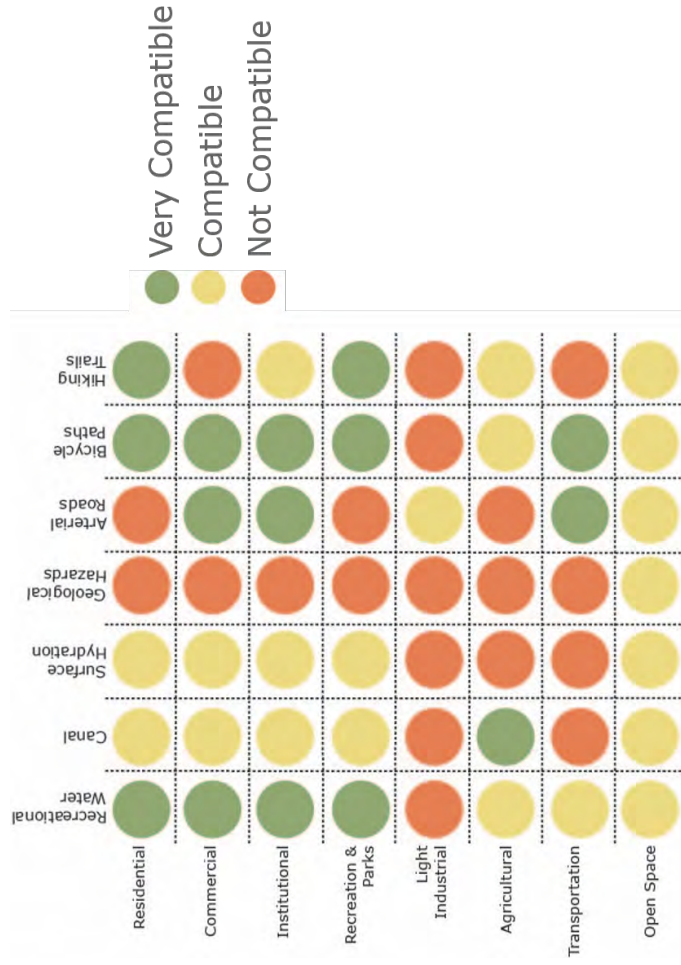


The majority of the Southwestern quadrant of Apache Junction is composed by open space, with the second largest zone being residential. The area also contains the city landfill, which will be closed down within the next decade. The area also hosts a school, a golf course, and some small light industrial areas. Commercial spaces are almost non-existent.

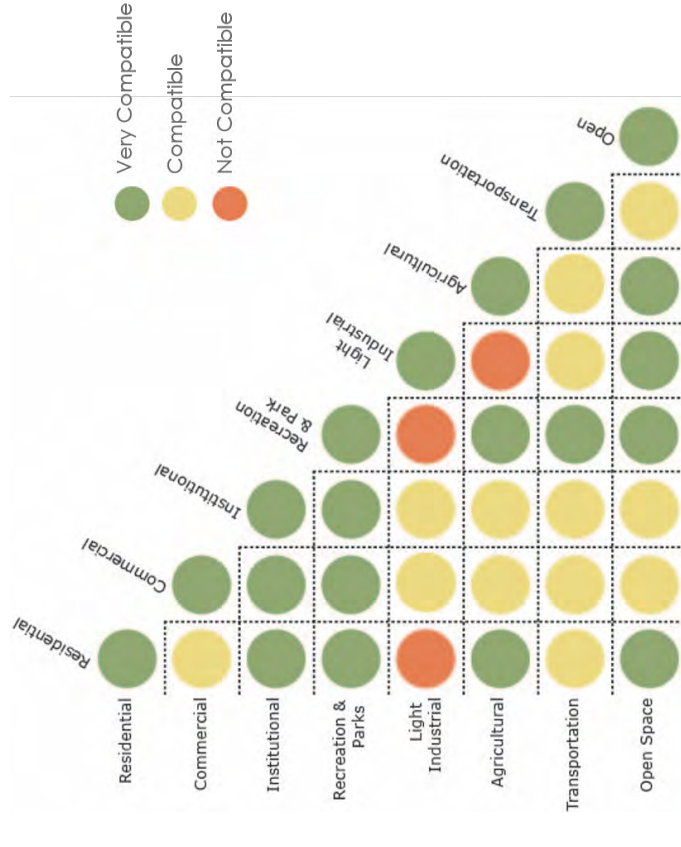


- Commercial
- Residential
- Open Land
- Special Use
- Institutional
- Light Industrial
- Civic/Infrastructure

LAND USE VS LAND USE



LAND USE VS HUMAN FACTORS



The majority of land uses are either compatible or very compatible. Really the only type of zoning to be aware of is light industrial.

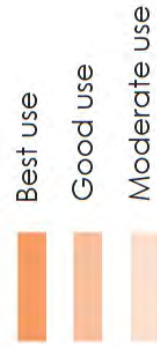
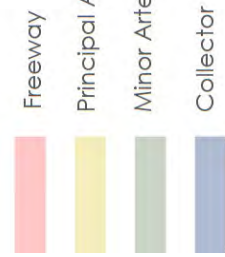
CIRCULATION

COMMERCIAL

RESIDENTIAL

LIGHT

INDUSTRIAL



AGRICULTURAL OPEN LAND RECREATIONAL TRANSPORTATION



- Bus routes
- Best Bike Station
- Moderate Bike Station

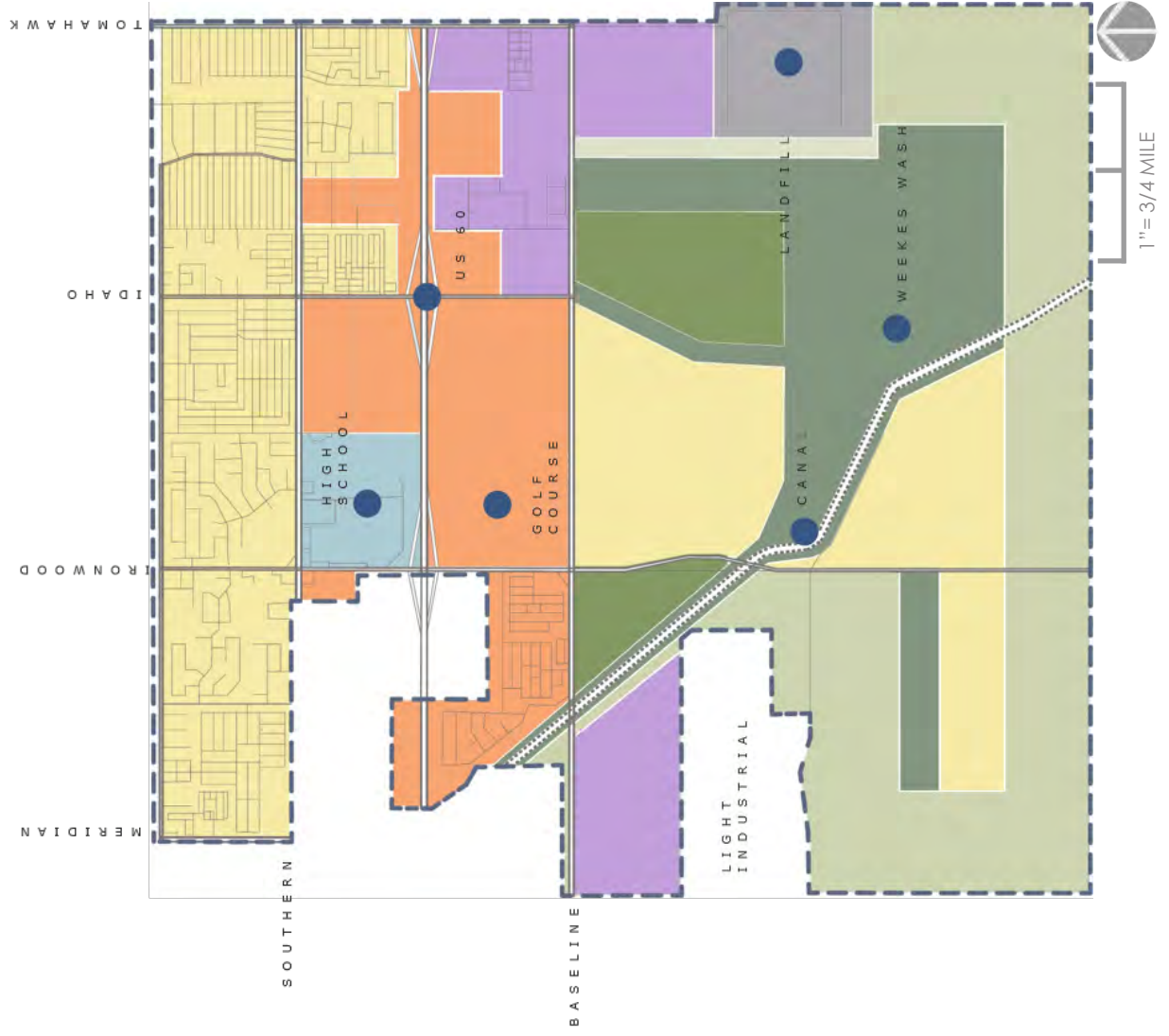
- Best use
- Good use
- Moderate use

- Best use
- Good use

- Best use
- Good use



Largest land use increase within the Southwestern quadrant of Apache Junction was commercial, centered around U.S. 60 to draw in visitors. Large amounts of residential were also proposed for potential future migrating middle-class families from nearby Gilbert and Chandler. Agricultural space was added because of the benefits of flooding from Weekes Wash.



- Light Industrial
- Commercial
- Residential
- Agricultural
- Open Land
- Recreational
- Institutional
- Civic/Infrastructure

04 | DESIGN PROPOSALS

COMMUNITY CONNECTIVITY THROUGH RECREATION

DENISE TORLONI

VISION

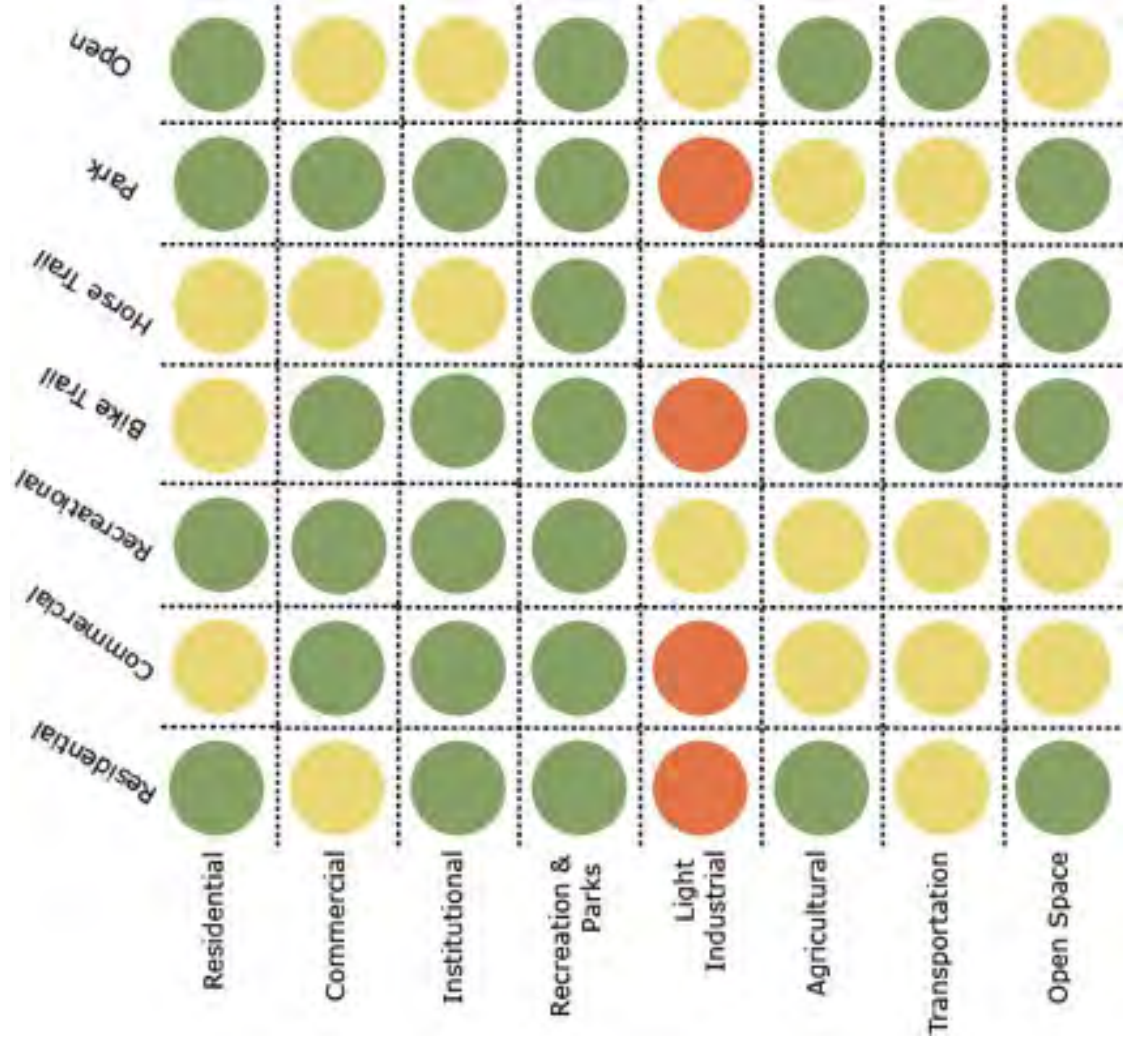
To capture the beauty of Apache Junction and cater to its avid outdoor culture. An intricate chain of trails and parks will provide residents with more means to explore the outdoors, and attract visitors trying to escape the city!

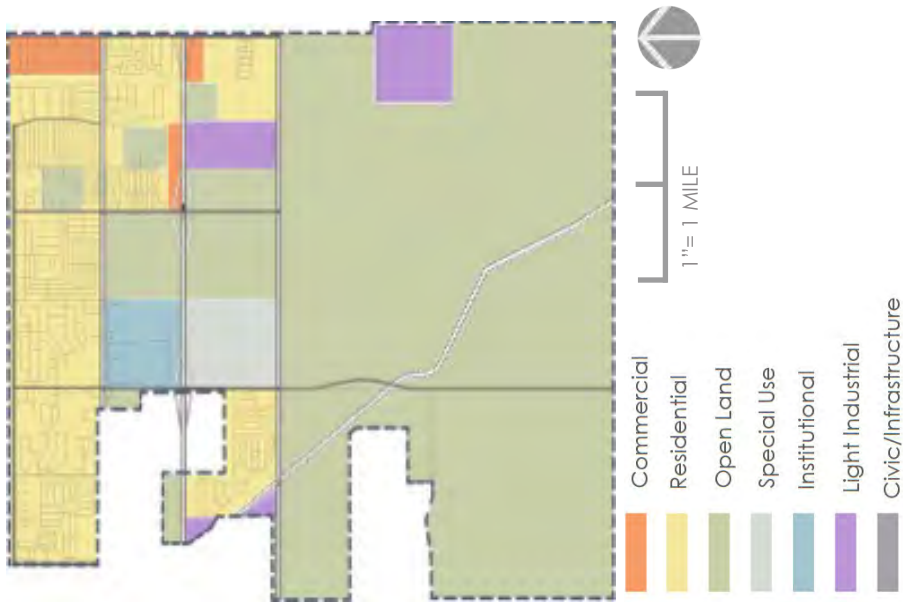
OBJECTIVES

1. Highlight Apache Junctions **Natural Beauty**-the Superstition Mountains
2. Promote **Community Connectivity** through recreation
3. Create an **Identity** for Apache Junction

Land Use Compatibility Matrix

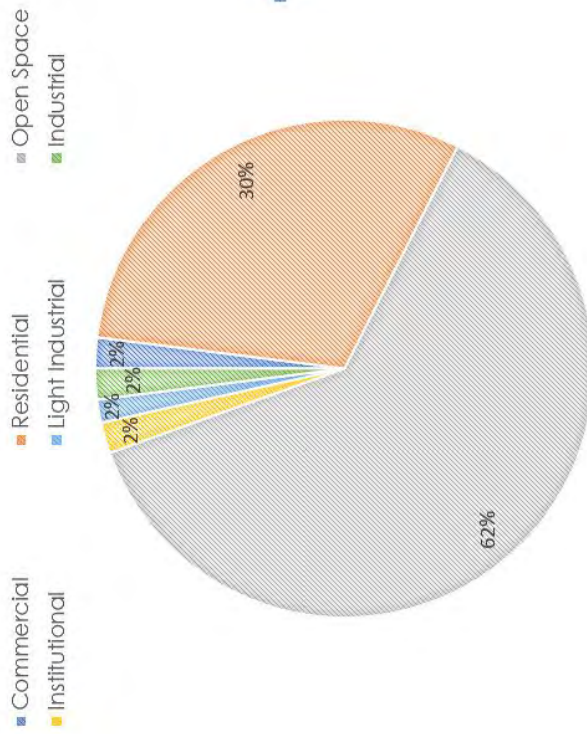
Looking at the data it is observed that the proposed (top) and the existing (left) don't have any major conflicting areas, with the exception of light industrial. Being that the 40 Acres that was chosen to focus on does not contain any major industrial buildings, there are no outstanding conflicts that need to be addressed.



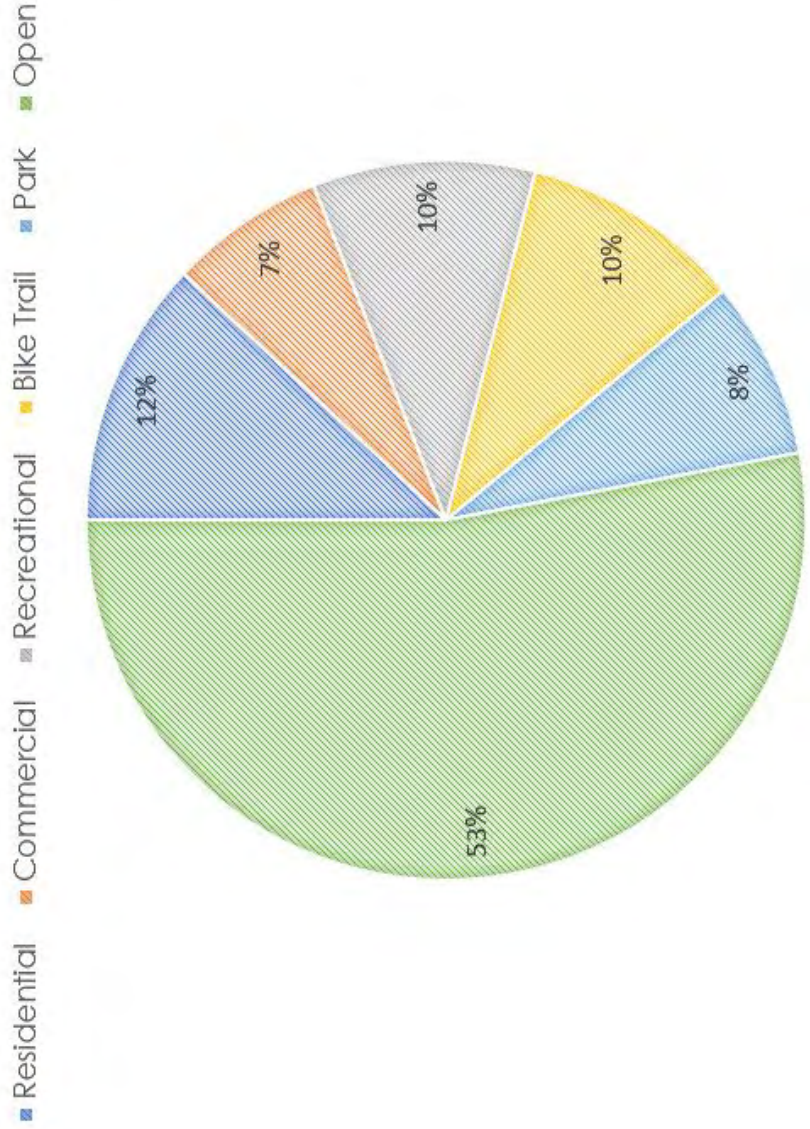


Comparing the existing (left) and proposed (right.) It can be observed that the major changes proposed is more residential space with recreational land/trails cutting through it to connect the neighborhoods with each other.

EXISTING LAND USE



PPROPOSED LAND USE



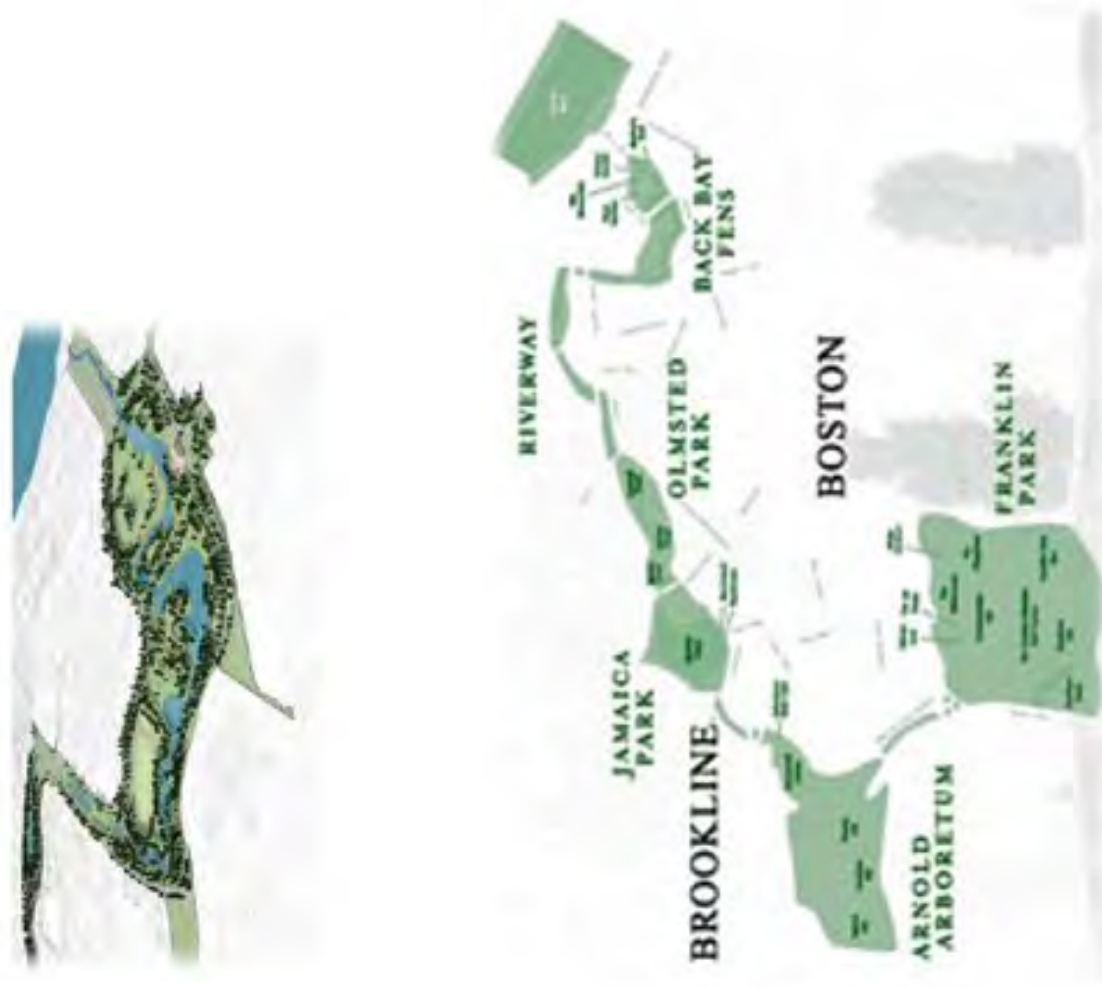
EMERALD NECKLACE

Inspiration for Dutchman's Necklace

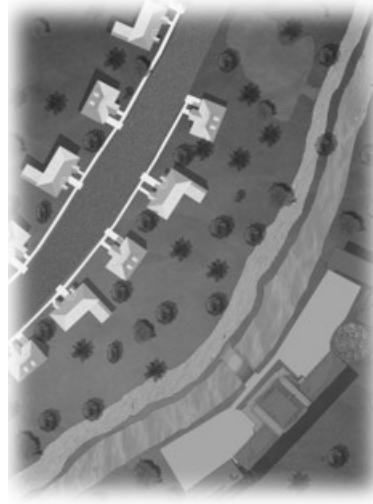
Boston | Fredrick Olmsted | 1,100 Acres

Includes;

- 3 Public Gardens
- Riverway
- Jamaica Pond
- Arboretum
- The Fens
- Boston Commons
- Multiple Gardens



Running its path throughout Apache Junction, it links neighborhoods, passes through existing parks and even the O.K Corral, leading to one of the main trails to The Superstition Mountains!





Residential
 Recreational
 Commercial

With multiple zones within close proximity, it makes for a community to feel more like home.

- Residential near recreational and Recreational close to Commercial.



DUTCHMAN'S TRAIL





05 | DESIGN PROPOSALS

URBAN AGRICULTURE

TIA BIAKAIDY

VISION

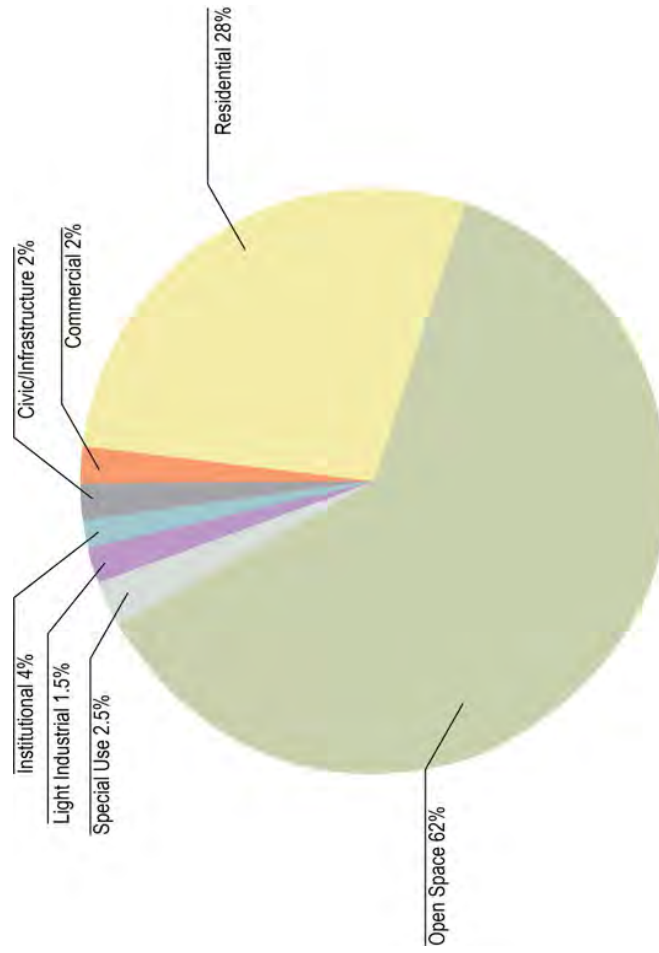
Create a healthy community that is fully aware of the food that is produced for their family and friends dinner table, while creating a fun and inviting natural desert community.

OBJECTIVES

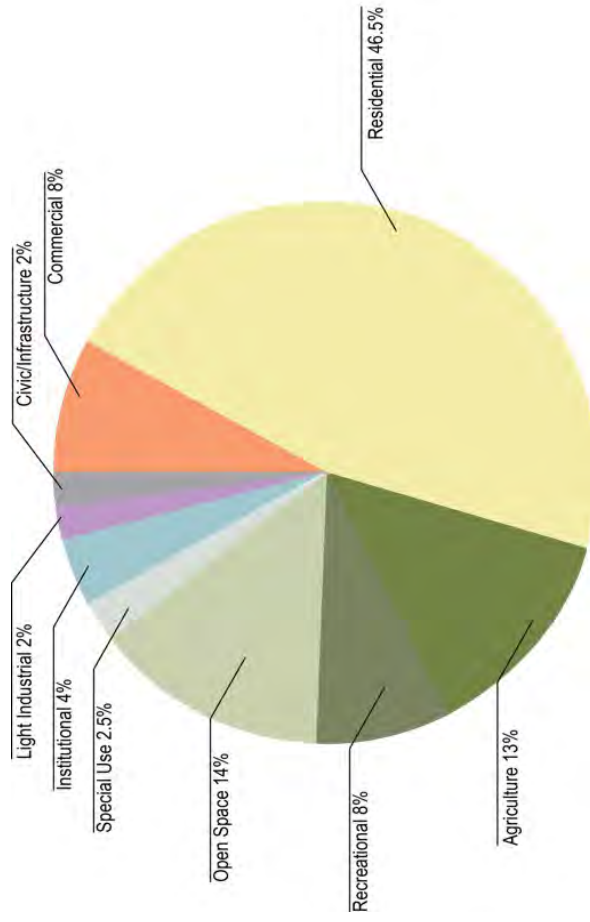
1. Create easy access to seasonally locally grown food
2. Provide opportunities for a new form of community engagement
3. Create a new business opportunity for the City of Apache Junction
4. Establish a new form of community living

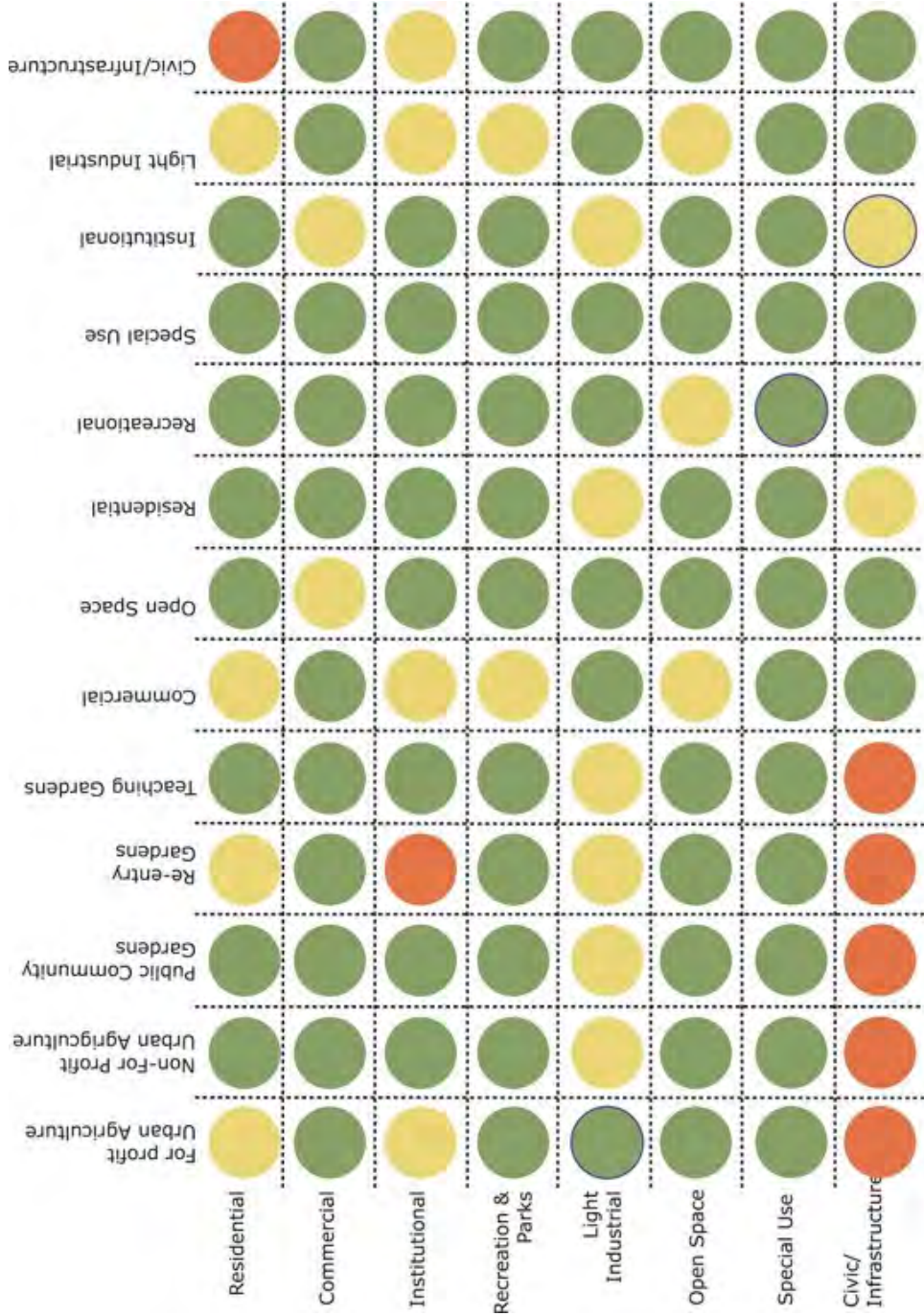


EXISTING



PROPOSED



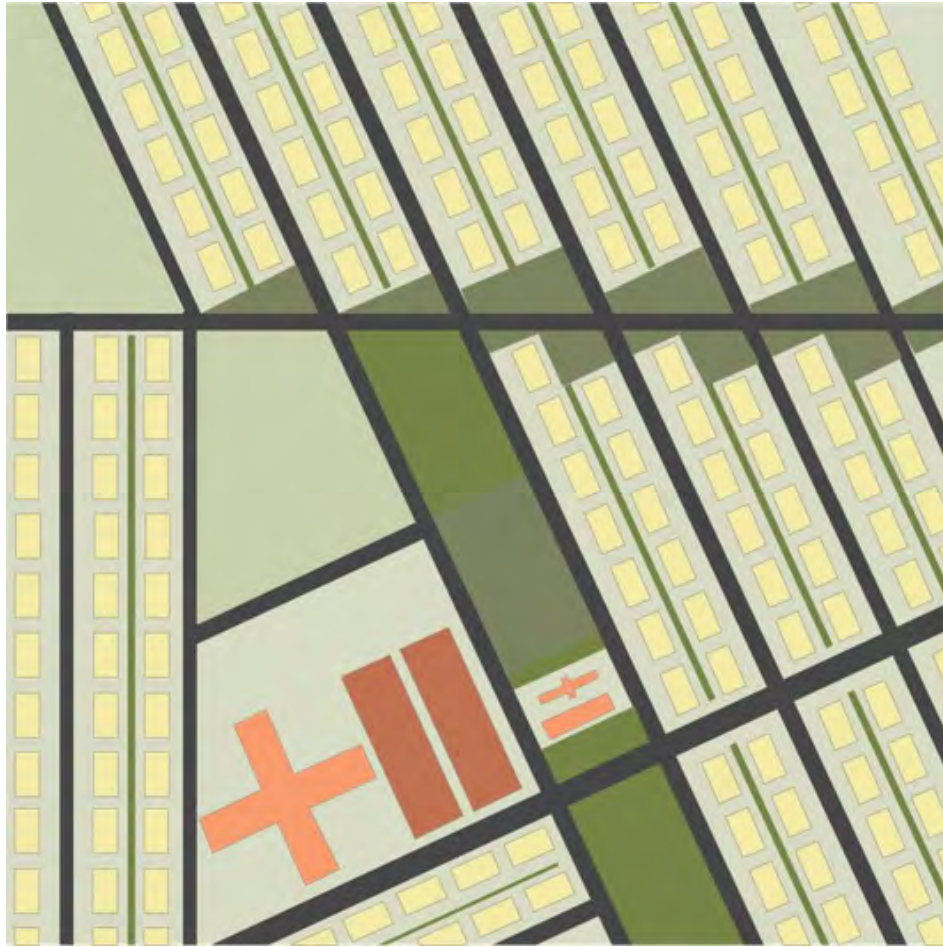




Proposed Land Use Allocation Plan

Commercial	8%
Residential	46.5%
Agriculture	13%
Recreational	8%
Open Space	14%
Special Use	2.5%
Institutional	4%
Light Industrial	2%
Civic/Infrastructure	2%



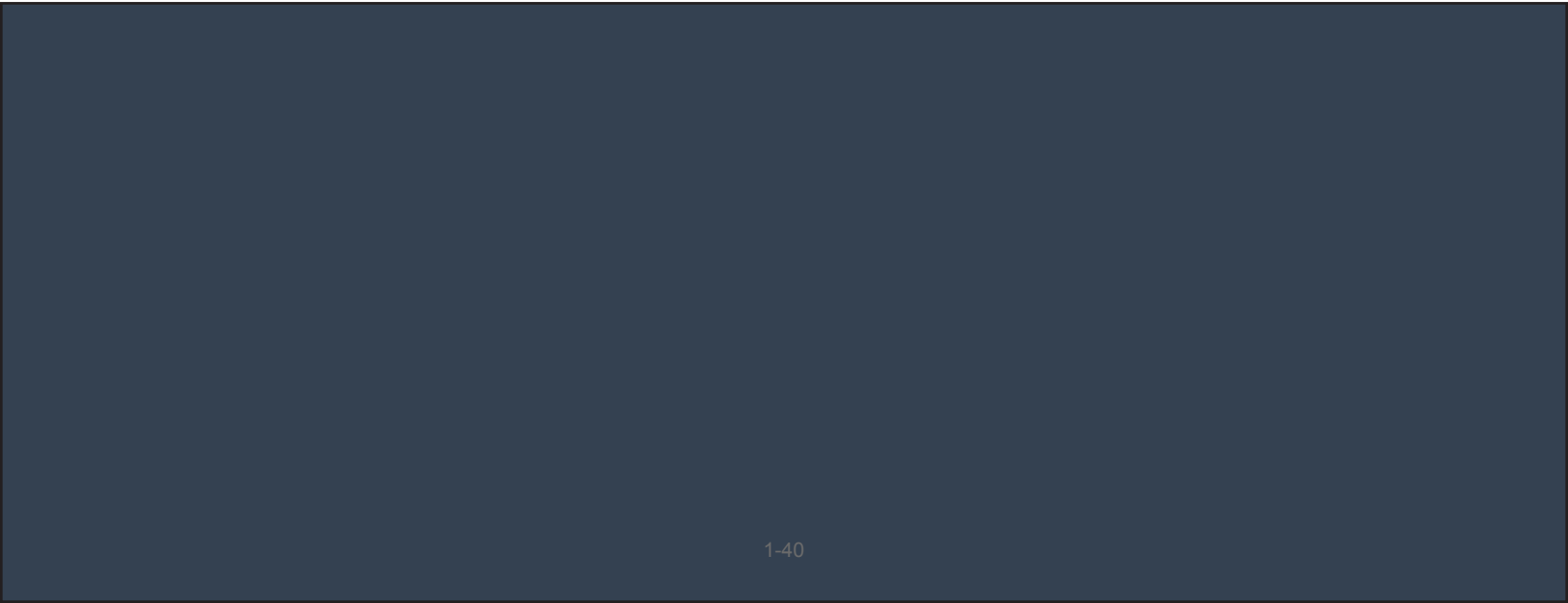




06 | DESIGN PROPOSALS

HEALTH SERVICES

ANTHONY MARTIN

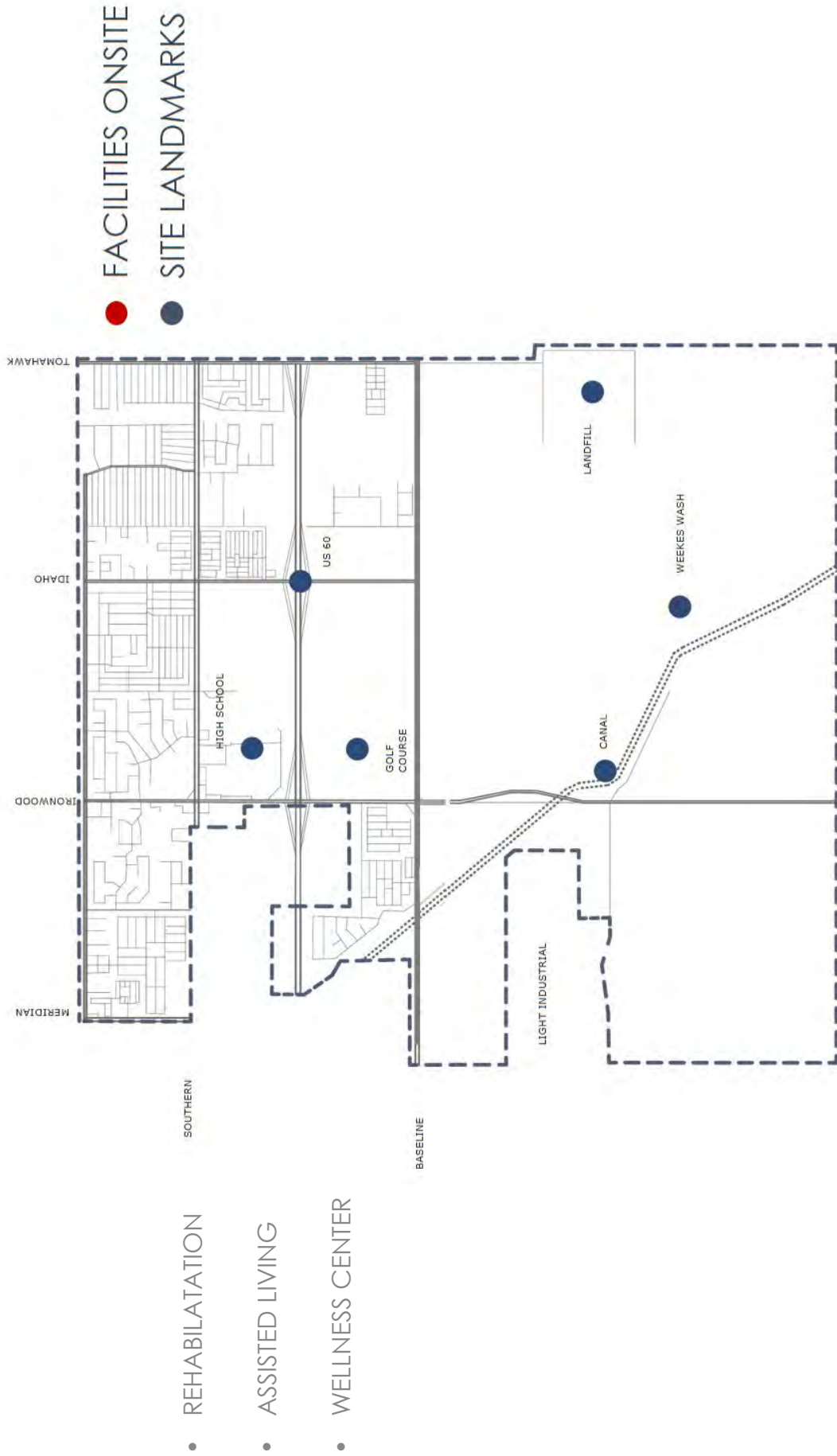


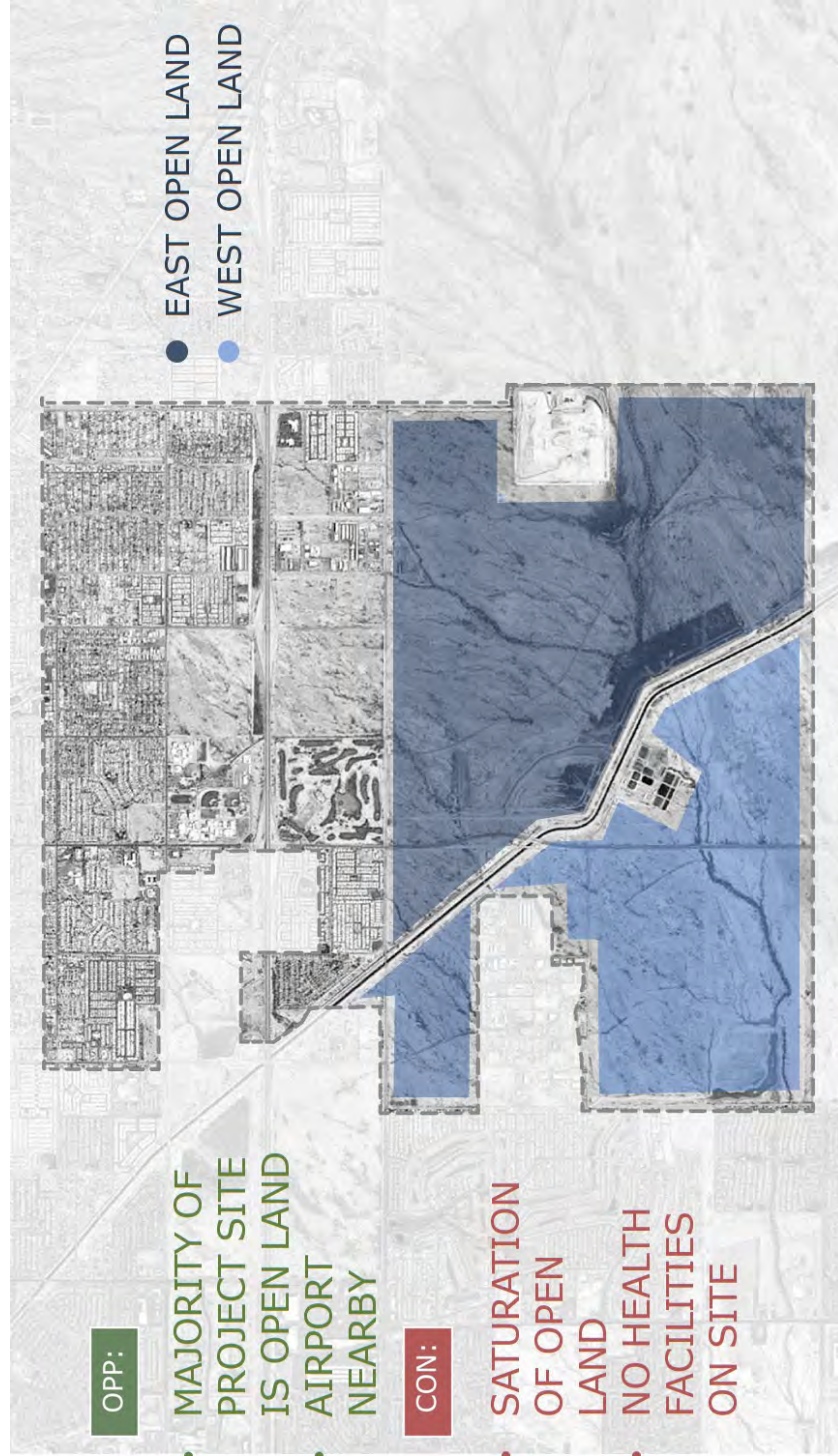
VISION

To design a healthy community that invites travelers as well as those in need to Apache Junction. To utilize Apache Junction's natural beauty and contributes to building a prosperous city. Arizona has a market for rehabilitation and therapy. Apache Junction's location and cost of living makes it an ideal place to build a community around health and wellness.

OBJECTIVES

1. Build Apache Junction to invite a Health and Recreation District.
2. Utilize the need for affordable and convenient health care by commercial and recreational design.
3. Attract passage to Apache Junction with nearby airport.



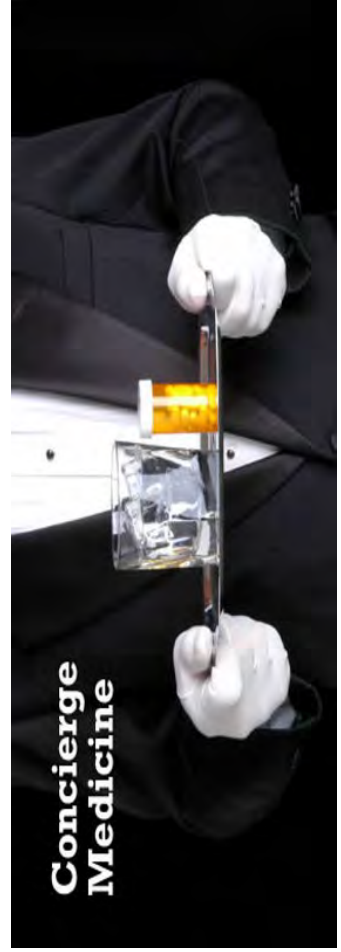
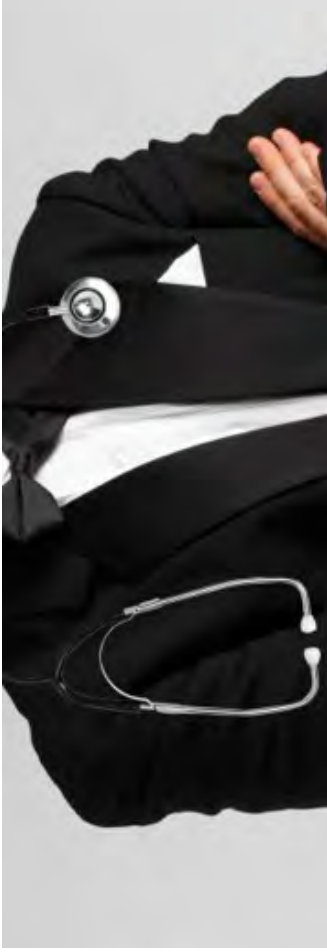


INPATIENT DRUG AND ALCOHOL

- luxury private facilities
- state funded or privately funded
- addiction and mental facilities



- Travel Medical Assistant
- Private Health Advisors
- Private Physician Practice
- Total Care Platform



TRANSITIONAL LIVING

ENRICHED RETIREMENT



- Treatment Services
- Sober Living Houses

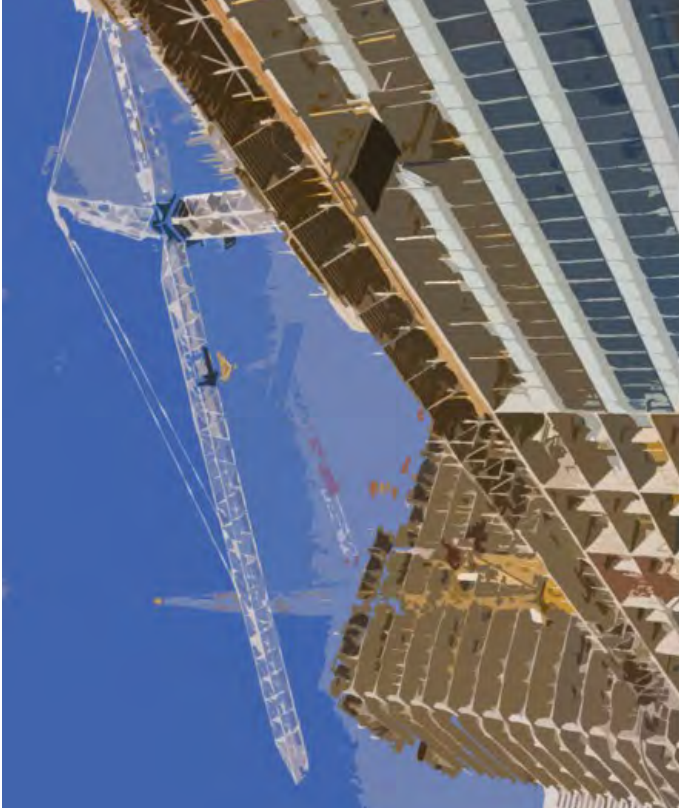


- Intellectual Wellness
- Physical Wellness
- Spiritual Wellness
- Emotional Wellness

ITINERANT HEALTHCARE

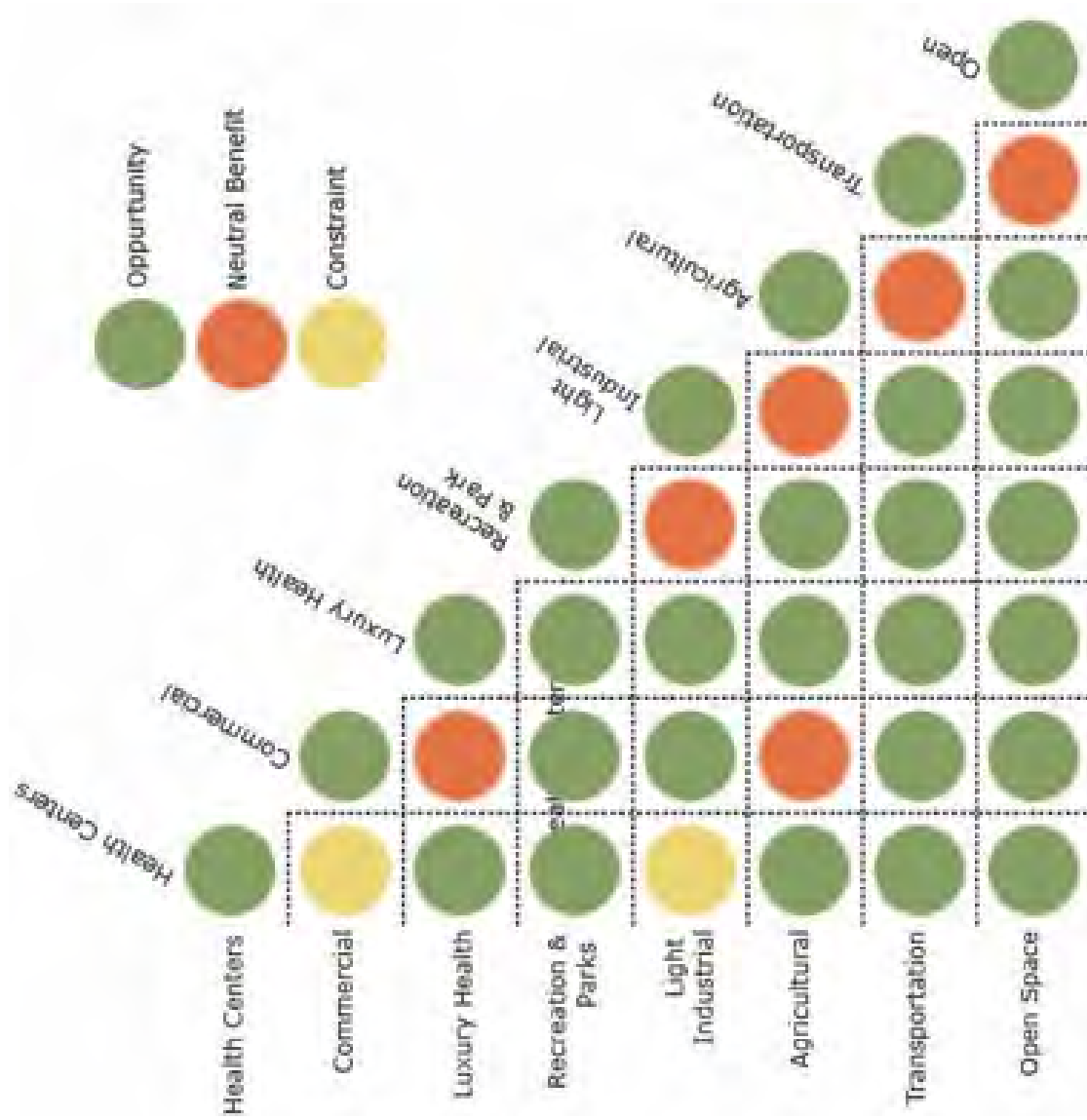


COMMERCIAL DEVELOPMENT



- Principally Community Organization
- Technical Assistance
- Rural Healthcare Delivery
- Training and Employment

- Medical Manufacturing
- Real Estate Development
- Economic Prosperity

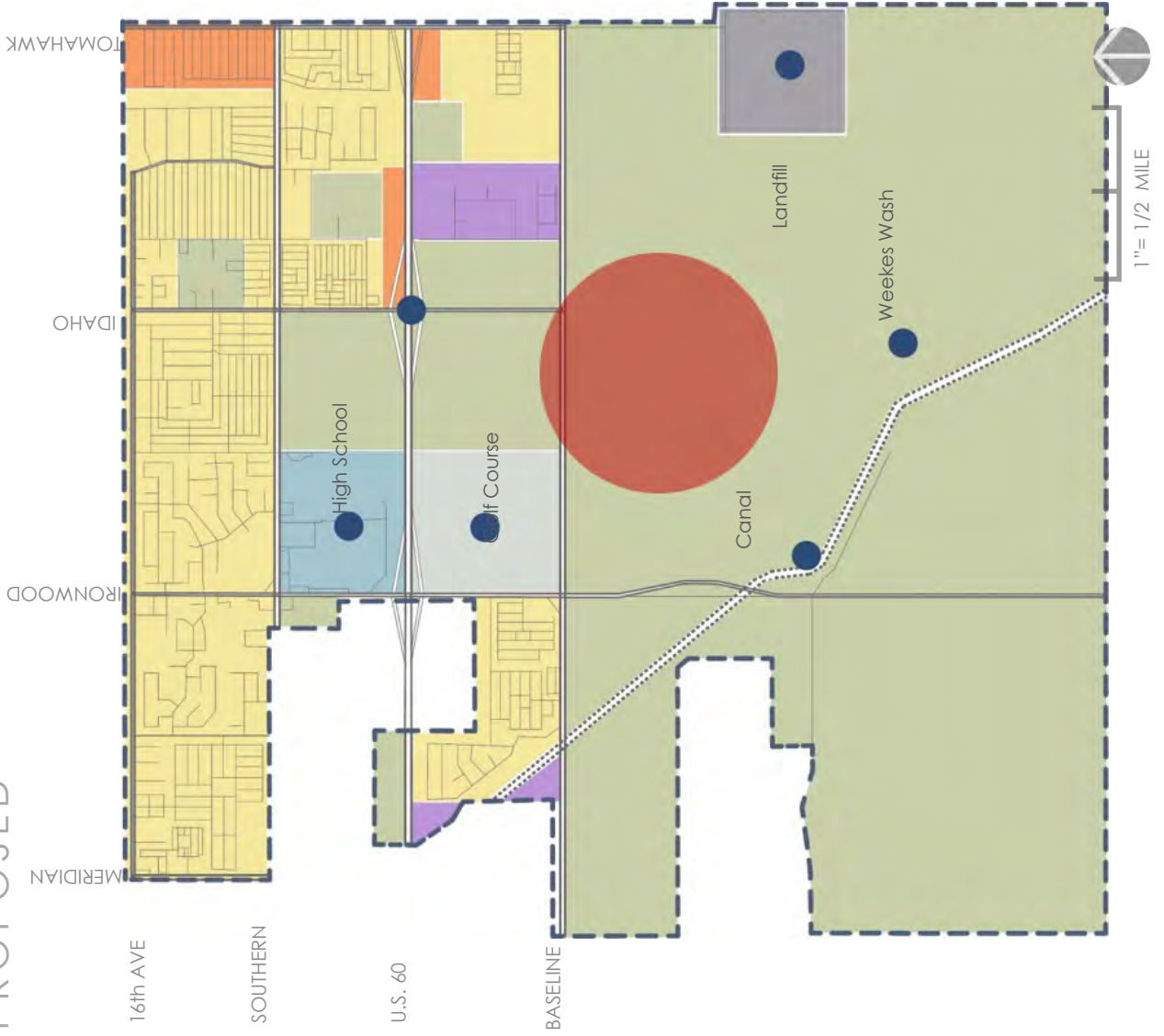


EXISTING

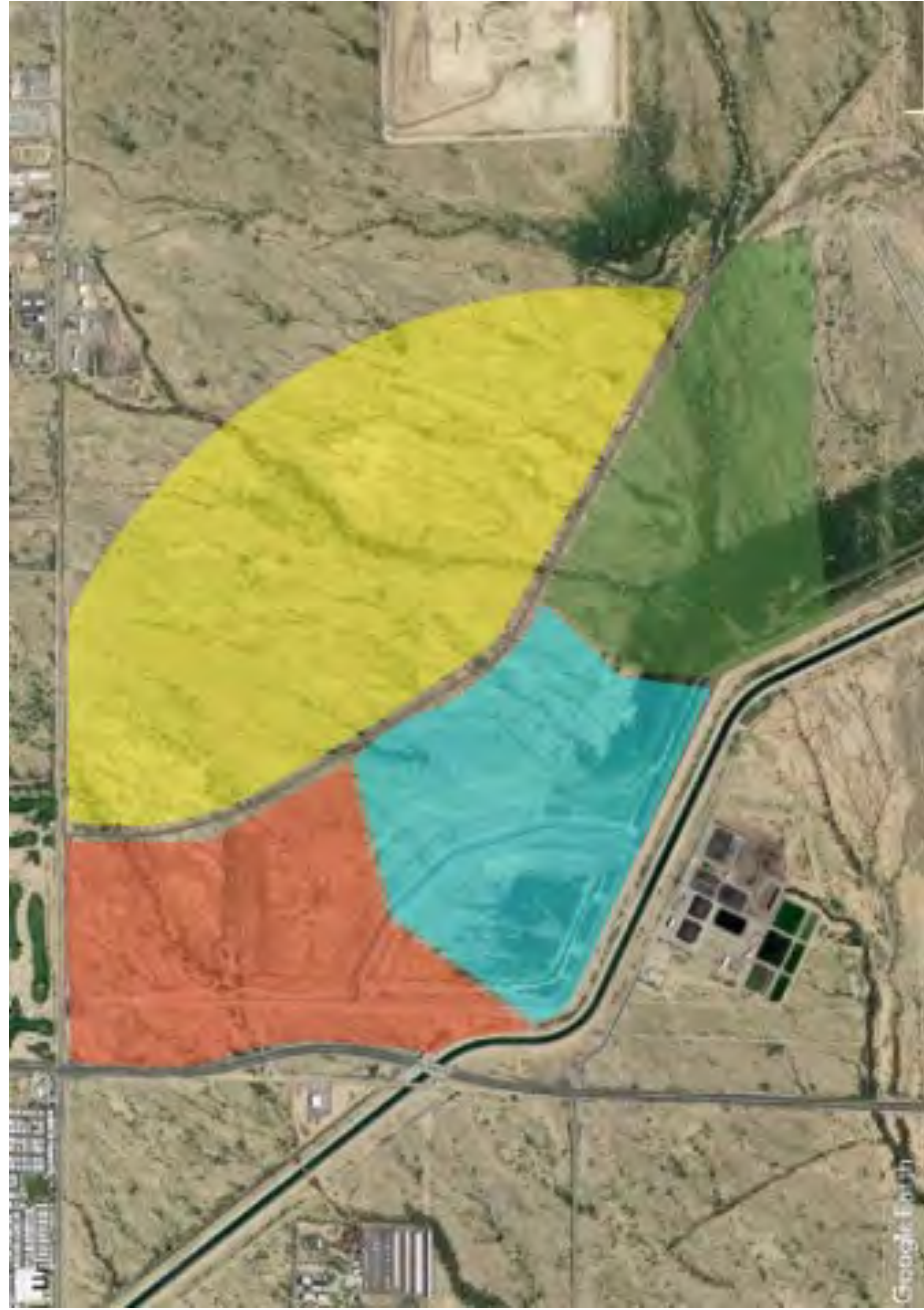


- Commercial
- Residential
- Open Land
- Special Use
- Institutional
- Light Industrial
- Civic/Infrastructure

PROPOSED



Health Centers
Retirement
Transitional Living
Recreation



1. Weekes Wash Recreation Center
2. Medical Center
3. Circular Retirement Community
4. Transitional Living Community
5. TLC Community Center
6. Weeks Canal Reservoir



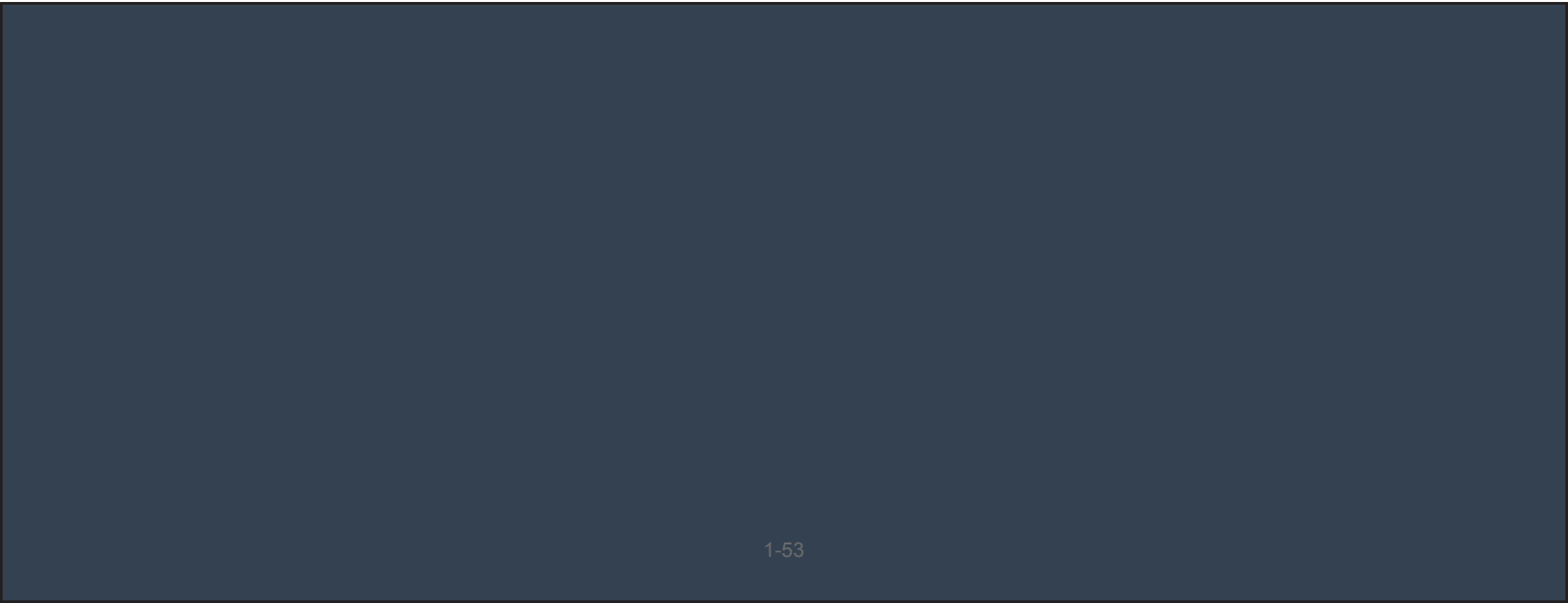


07 | DESIGN PROPOSALS



COMMUNITY WALKABILITY

SHINYE KIM



VISION

The purpose of this project is to develop a community within Apache Junction by providing complete streets that are safe, accessible, and pleasing to all age groups. All modes of transportation, including biking, walking, and public transportation, are encouraged by the design and give pedestrians convenient, affordable, and healthy options for travel.

OBJECTIVES

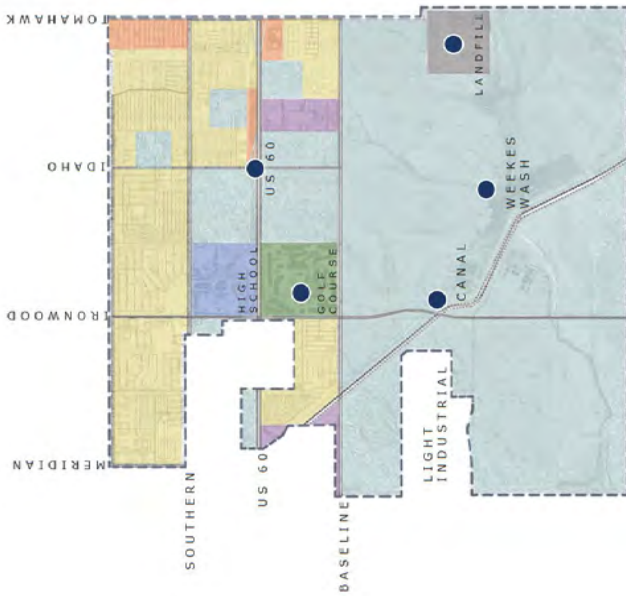
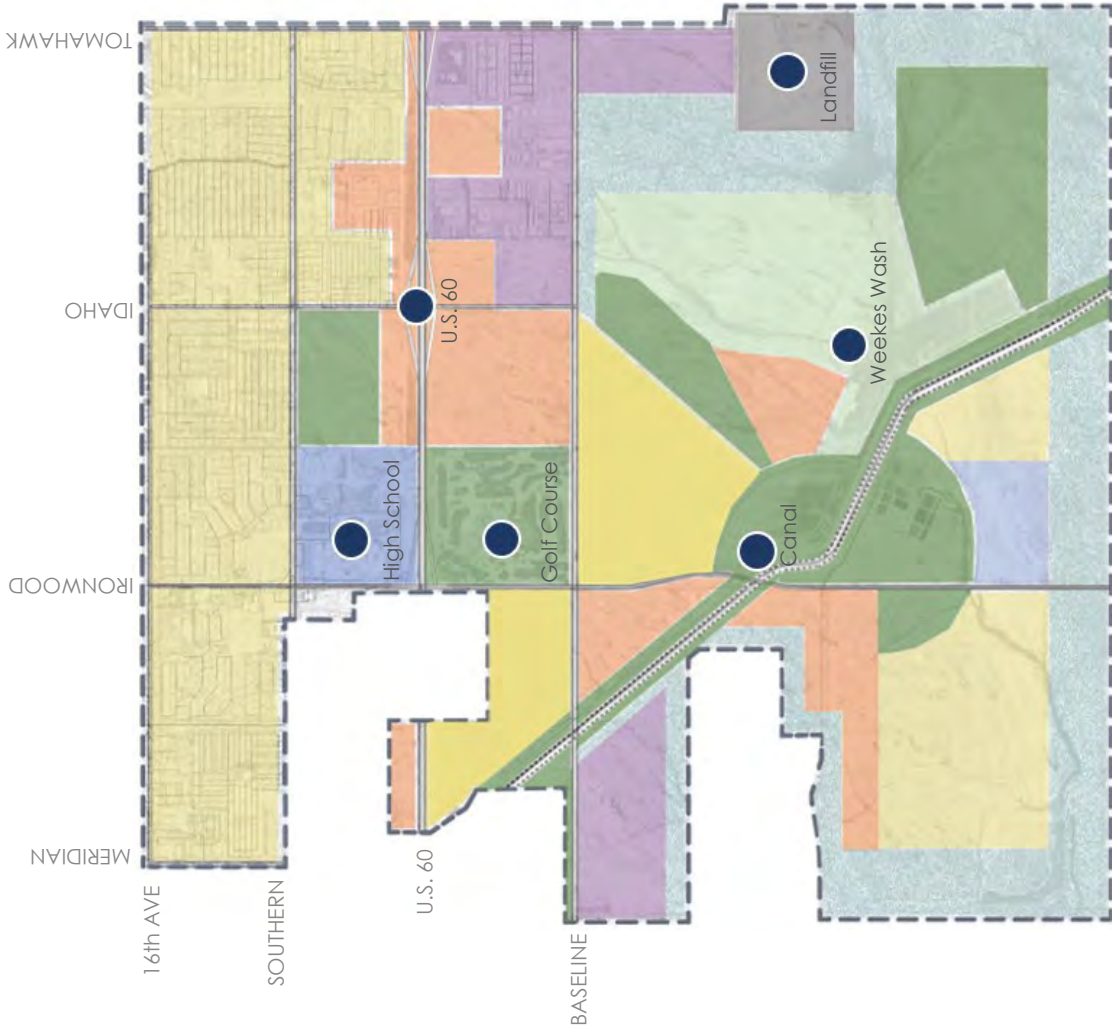
1. Provide multi-use transit system throughout Apache Junction by bringing in a bus route system that connects Apache Junction to nearby cities.
2. Build bike stations throughout the site to encourage a different mode of transportation for a more accessible way of travel.
3. Design mixed land use that will encourage community engagement through connections of varied sectors that interact at provided corridors.

SOUTHWEST APACHE JUNCTION
07 | COMMUNITY WALKABILITY

PROPOSED LAND USE

PROPOSED










EXISTING



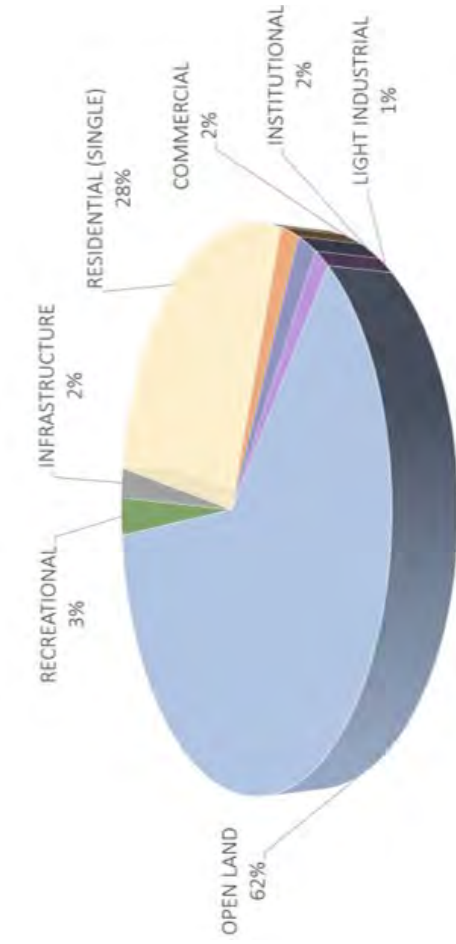
- Residential (Low)
- Residential (Medium)
- Commercial
- Institutional
- Light Industrial
- Agricultural
- Open Land
- Recreational
- Infrastructure



EXISTING LANDUSE PROPOSED LANDUSE

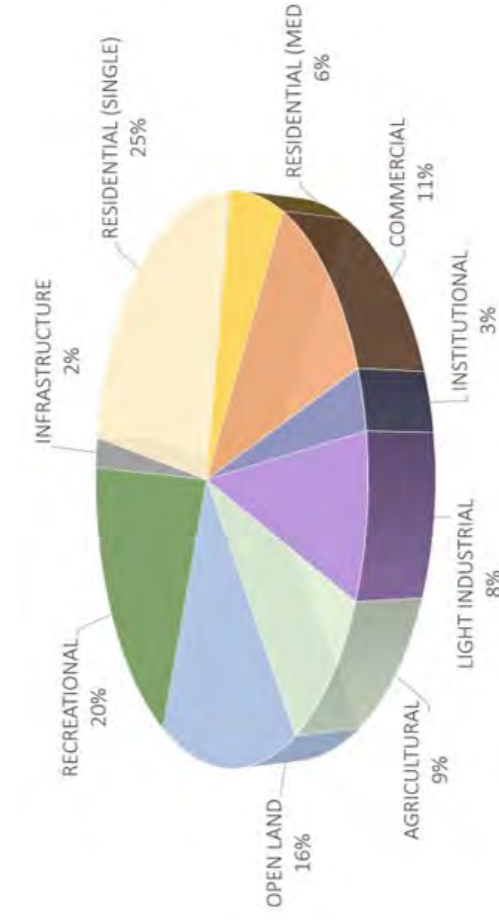
ZONE COLOR	LANDUSE	# OF ACRES	% OF ACRES	# OF ACRES	% OF ACRES
	Residential (Low)	1792 ACRES	28 %	1600 ACRES	25 %
	Residential (Medium)	0 ACRES	0 %	384 ACRES	6 %
	Commercial	128 ACRES	2 %	704 ACRES	11 %
	Institutional	128 ACRES	2 %	224 ACRES	3.5 %
	Light Industrial	96 ACRES	1.5 %	486.4 ACRES	7.6 %
	Agricultural	0 ACRES	0 %	544 ACRES	8.5 %
	Open Land	3968 ACRES	62 %	1049.6 ACRES	16.4 %
	Recreational	160 ACRES	2.5 %	1280 ACRES	20 %
	Infrastructure	128 ACRES	2 %	128 ACRES	2 %
TOTAL:		6,400 ACRES	100%	6,400 ACRES	100%

EXISTING



The majority of the existing landuse was covered by open land and 28% of residential space for single-family homes. There was only 2% of commercial landuse which was surprising due to having direct access to the U.S. 60 FWY. The beauty of having this part of the Apache Junction was because of that open space in the site. There was a lot of room for growth and to design it into a place where more of a community involvement can be achieved.

PROPOSED



The proposed landuse was distributed to bring in more of a walking friendly neighborhood. I have added medium density housing which include some townhomes and condos. I brought this into the site to offer different type of housing to Southwest quadrant and to accommodate mixed landuse in the area. A big portion of recreational space was designed to create walkable and bikeable corridor space.

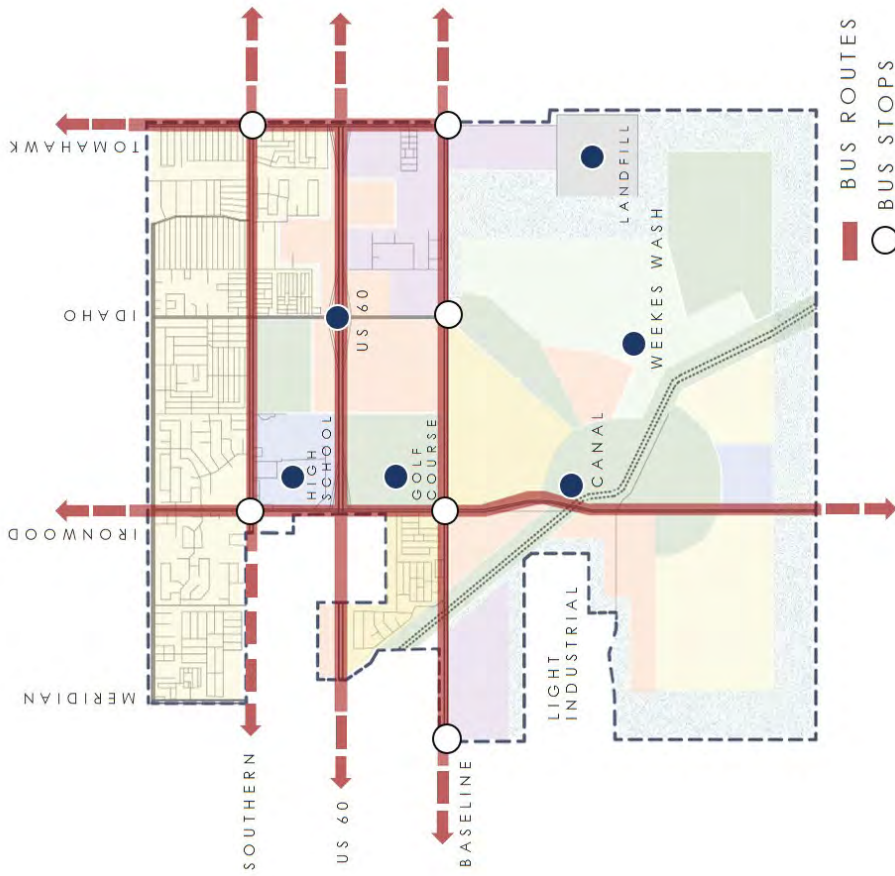


Currently there are no existing bus routes through Apache Junction. The closest one is located on Southern Ave. & Power Rd.

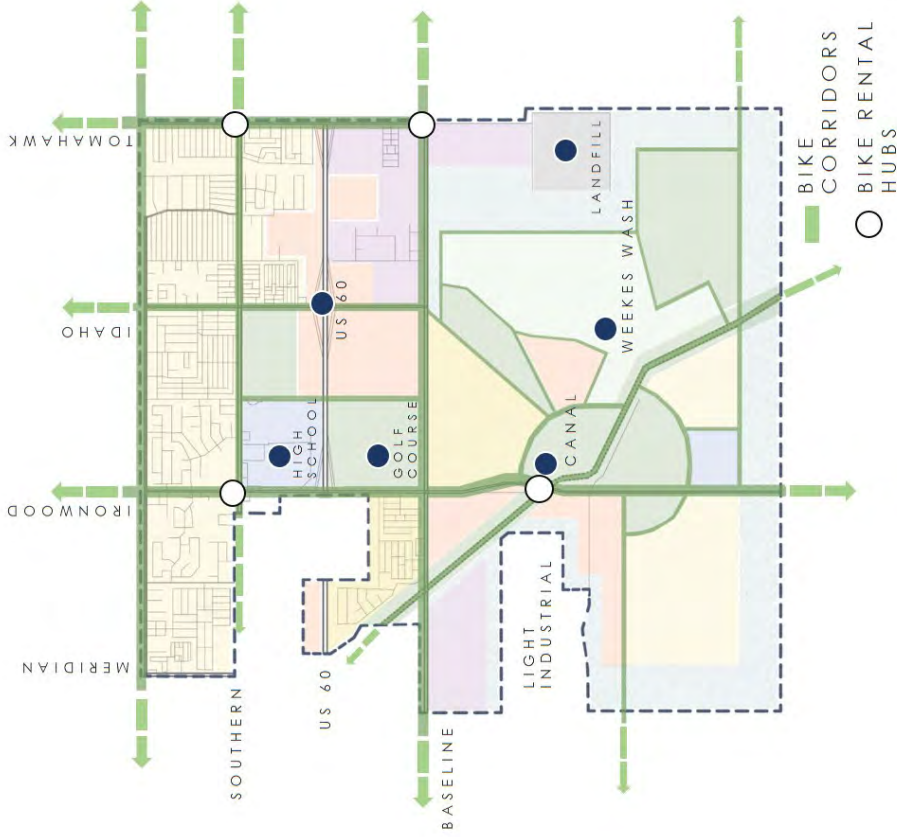


SOUTHWEST APACHE JUNCTION
07 | COMMUNITY WALKABILITY

TRANSPORTATION



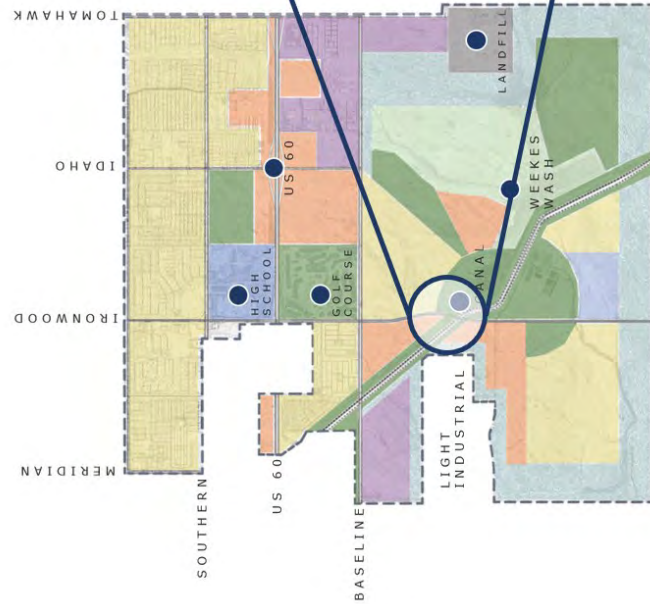
This is the proposed bus route system that can be incorporated into Southwest quadrant of Apache Junction. Southern Ave. travels straight through our site which was a great opportunity for my project since the closest stop of existing bus routes was Southern Ave & Power Rd.



The purpose of bike corridor was to help the residents and visitor to give them another option of travel through their community. It was designed to encourage people to increase their daily steps and to choose to walk rather than drive because it was accessible.



40 ACRES SITE

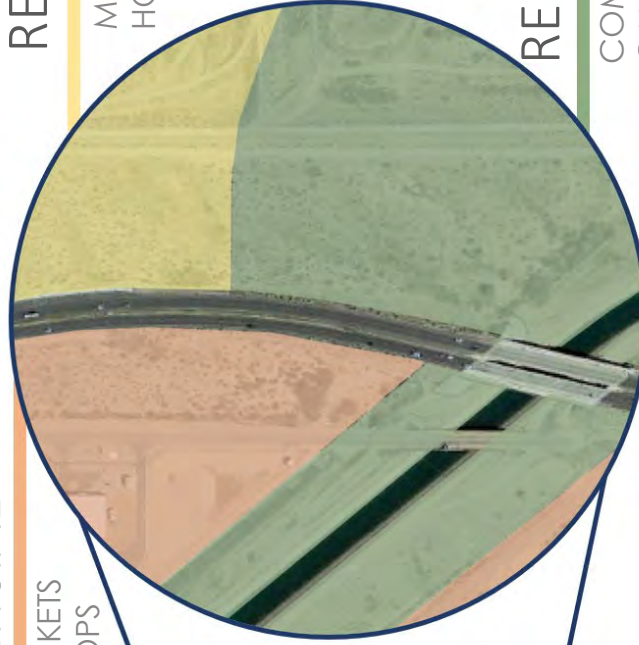


COMMERCIAL

- LOCAL MARKETS
- COFFEE SHOPS

RESIDENTIAL

- MEDIUM DENSITY HOUSING: CONDOS



RECREATIONAL

- COMMUNITY CENTER
- CANAL TRAIL SYSTEM
- DOG PARK

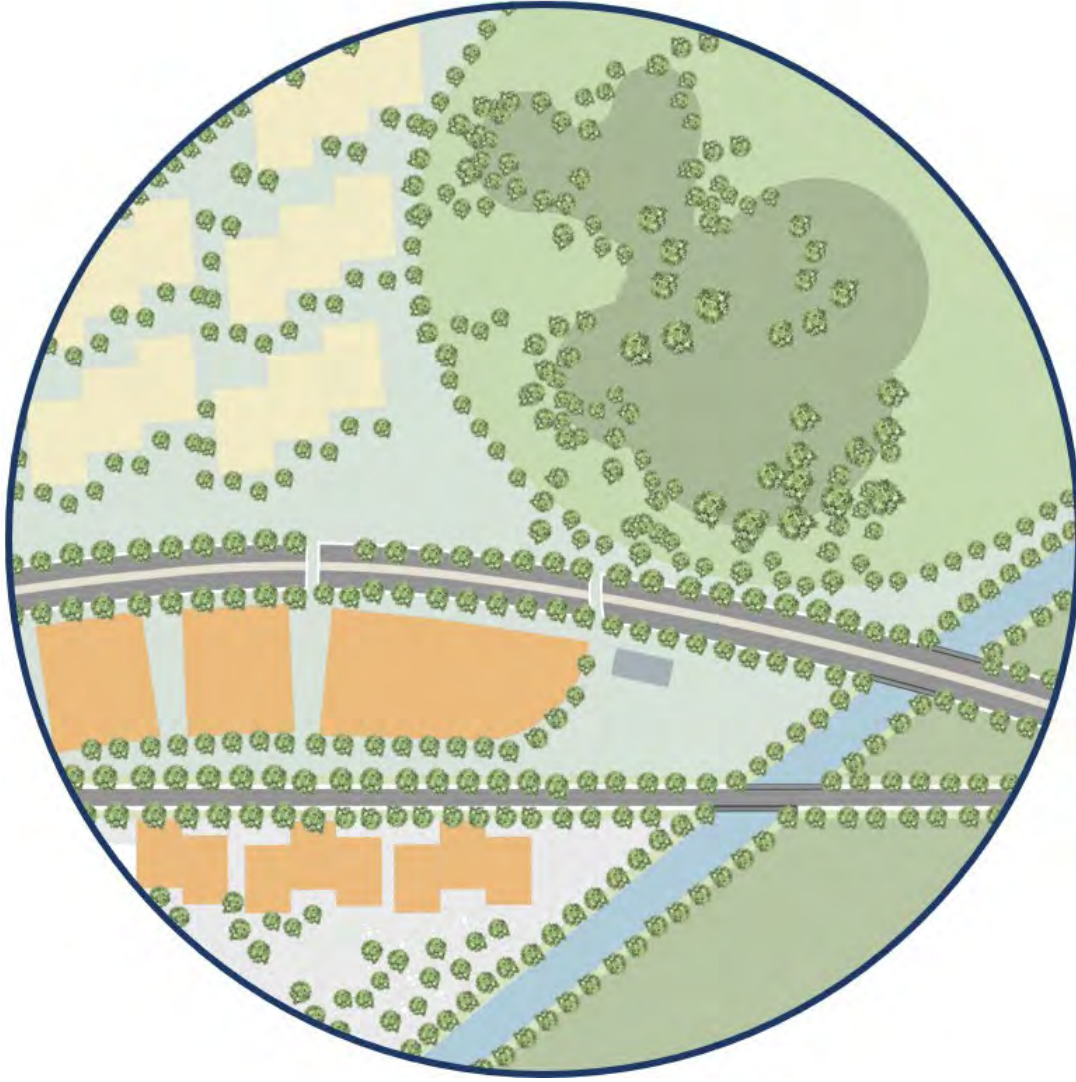


One of the bike station located in site to connect with trail systems and recreational area.

Local markets, coffee shops and outside seating areas with the view of the canal trail.

Recreational area in site include potential dog park and gathering open space for the community.

The trail system along the canal is a connecting routes to other parts of apache junction.





08 | DESIGN PROPOSALS

ARTS AND CULTURE

DYLAN MAYO

VISION

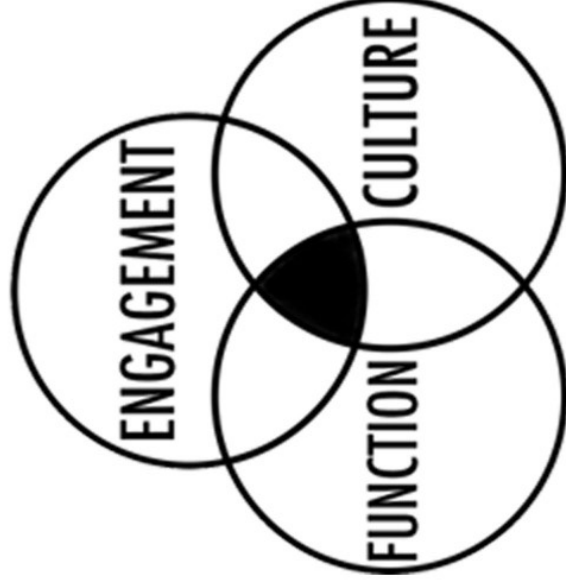
To create an environment and sense of place, inspired by the unique cultural influence of the community of Apache Junction whereas the arts and cultures are vibrantly expressed and displayed through the gathering of the community at a central community hub, also known as THE VILLAGE.

OBJECTIVES

1. Create an environment that develops a unique cultural sense of place
2. Provide the necessities for comfort: food, shade, seating, etc.
3. Develop a community hub that is capable of providing for a multi-use land platform

Simplistically, the perfect community is the meshing of three factors: **ENGAGEMENT, FUNCTION, AND CULTURE.** The active engagement of the local populace and the city itself, the cultural identity created by the unique character of the community, and the simple functionality providing for the basic needs of the local inhabitants creates the environment for a vibrant successful community.

COMMUNITY

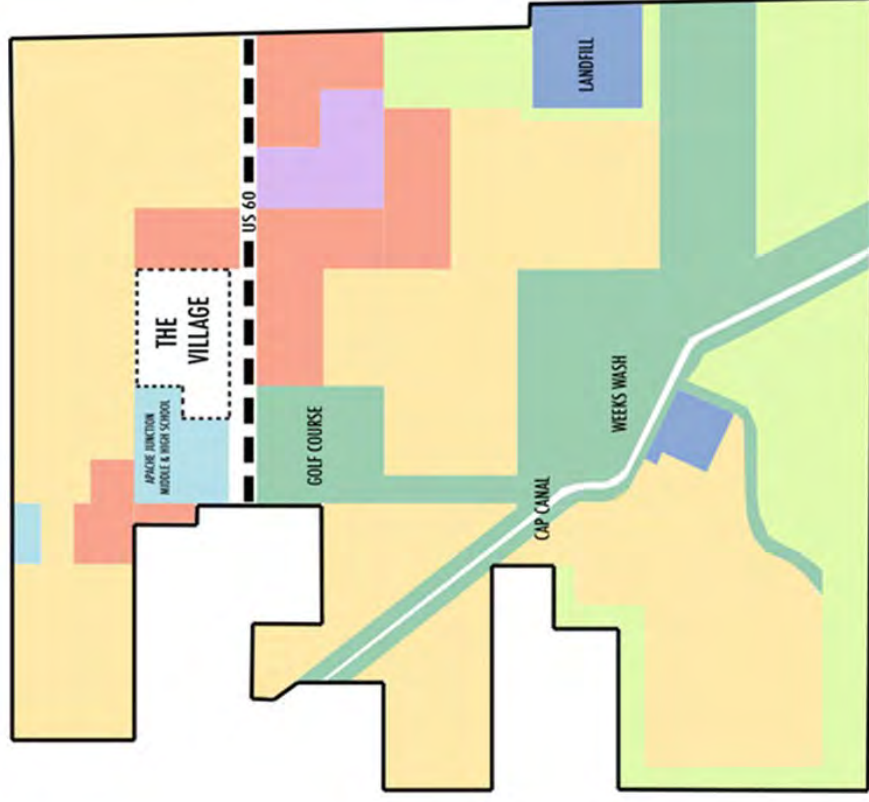


EXISTING

The current land use allocation for Southwest Apache Junction consists primarily of open space and residential with a few various other land uses. Looking forward into the future and seeing Apache Junction expanding, the

proposed land use projects more residential development and turning some of the open space into recreational space with connecting trails and corridors. Also along the US60, the development of a commercial shopping center is projected to provide for the incoming residents moving into the new neighborhood developments.

PROPOSED



- RESIDENTIAL
- COMMERCIAL
- LIGHT INDUSTRIAL
- INSTITUTIONAL
- RECREATIONAL
- OPEN SPACE
- CIVIC/INFRASTRUCTURE



The Village is a multi use community center that incorporates a multi story family housing complex for the families being attracted to the community, a commercial shopping plaza, a community rec center, and the focal point, the “main street” walk, lined with restaurants and shops that opens up to a park and entertainment center. All of these combined give enormous opportunity for culture and community engagement to develop.





Shops/Restaurants

Main Pedestrian Walkway

Shops/Restaurants



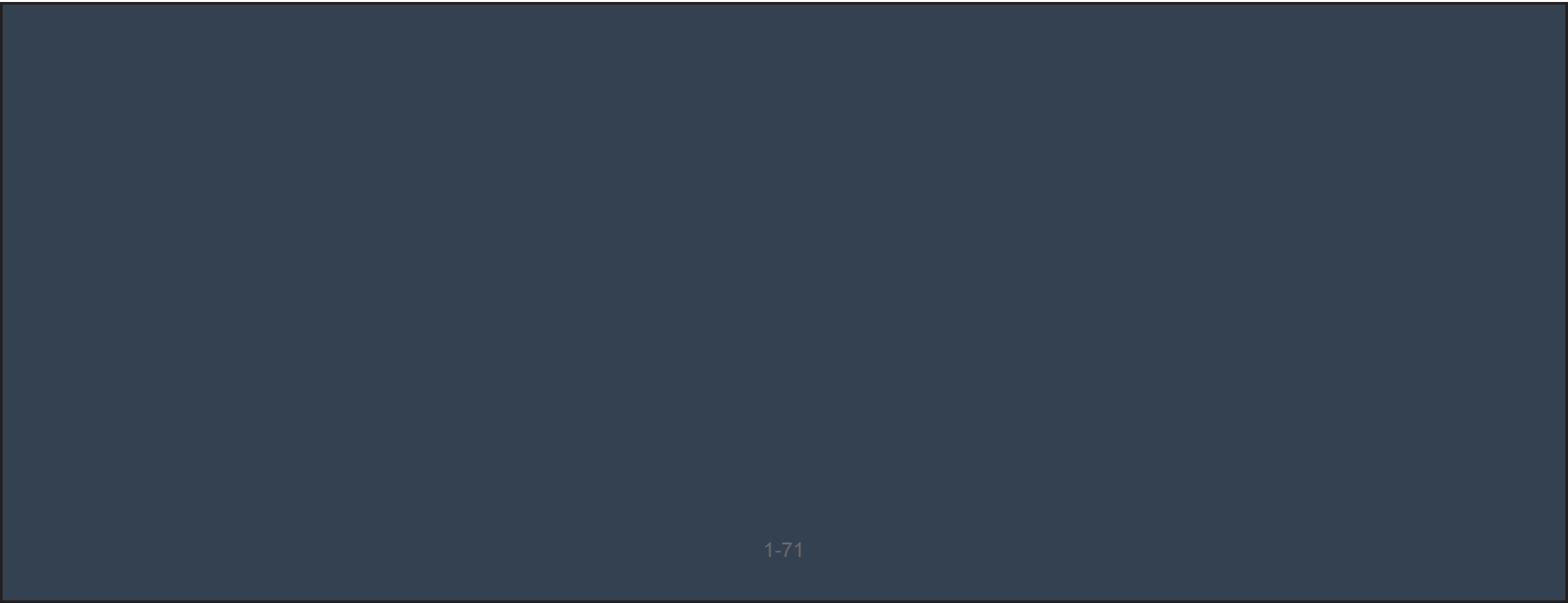


Perspective looking across park northwest
toward the Superstition Mountains.

09 | DESIGN PROPOSALS

URBAN FORESTRY

KATRYN SQUYRES



VISION

To create a community within Apache Junction rooted in a firm ecological understanding and sense of stewardship towards surrounding vegetated urban environments. community residents and visitors will benefit from a green, living environment, both physically and psychologically throughout their every day lives.

OBJECTIVES

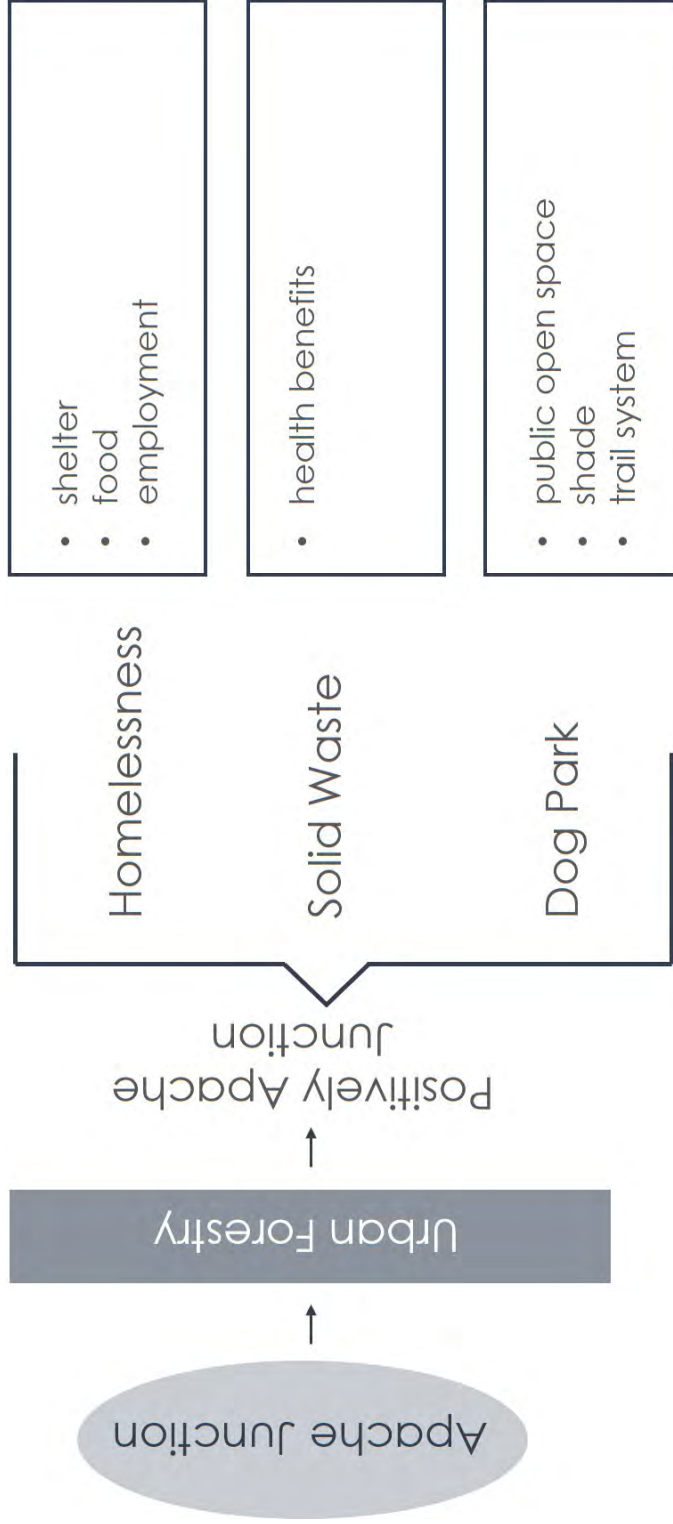
1. Create 40% Urban Canopy coverage
2. Use native trees with a high CO2 capture rate
3. Establish a network of green pedestrian, equestrian, and bike trail systems throughout the site
4. Provide adequate housing designed to encourage outdoor recreation
5. Encourage a community that is actively aware of the benefits attained from a marriage between the urban and natural environments

BENEFITS

Urban Forestry is composed of a number of living, green elements implemented within a community, including community gardens, bioswales, green roofs, and open spaces. However Trees are probably the most important element to implement within an urban environment. Trees have a vast number of benefits, a few of which include:

- absorbing and increasing oxygen levels with a site
- mitigate the urban heat island effect by producing natural shade
- act as a buffer and reduce noise pollution
- health benefits, including reducing stress and lengthening lifespans
- reduce stormwater runoff and erosion














Apache Junction asked for our group to think about solutions pertaining to four categories: Positively Apache Junction, Homelessness, Solid Waste, and Dog Parks. Before beginning the design process the Positively Apache Junction category was used to encompass the remaining categories. Each group was then viewed through the lens of Urban Forestry, and solutions for each were recognized.

EXISTING



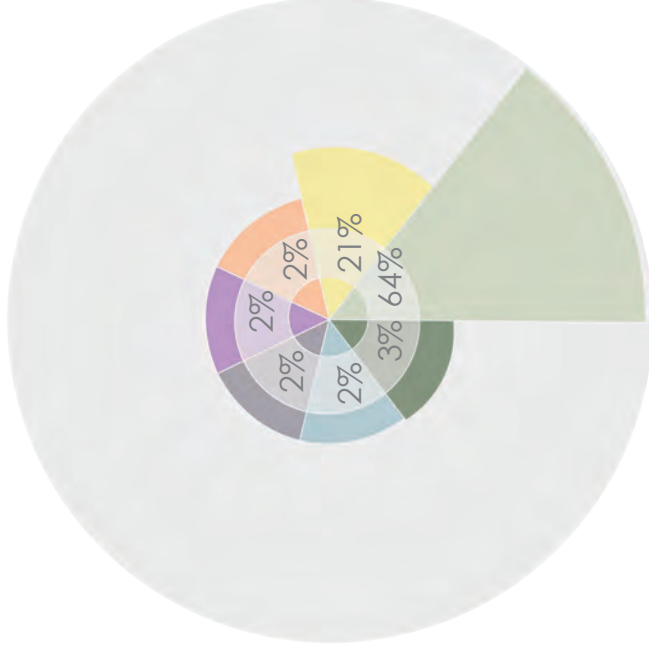
PROPOSED



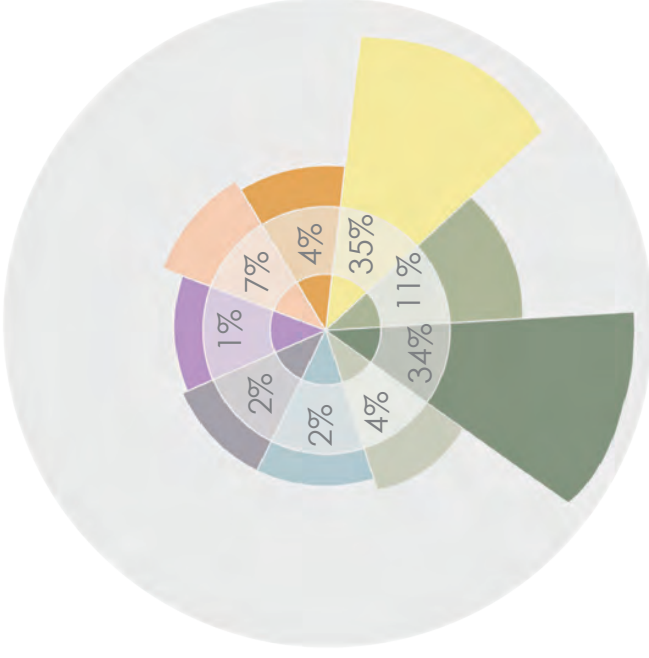
-  light industrial
-  commercial
-  mixed use
-  multi-family residential
-  single-family residential
-  agricultural
-  parks/recreational
-  institutional
-  civic/ infrastructure

EXISTING

Proposed zoning in Apache Junction was laid out in an attempt to preserve the unique element of this corner of the city: untouched native open land. Recreational trail spaces were increased dramatically to preserve the native ecosystems. Residential zoning was also increased to provide for future middle-class families migrating from Gilbert and Chandler—major technology driven centers to the west becoming increasingly more expensive to live in.

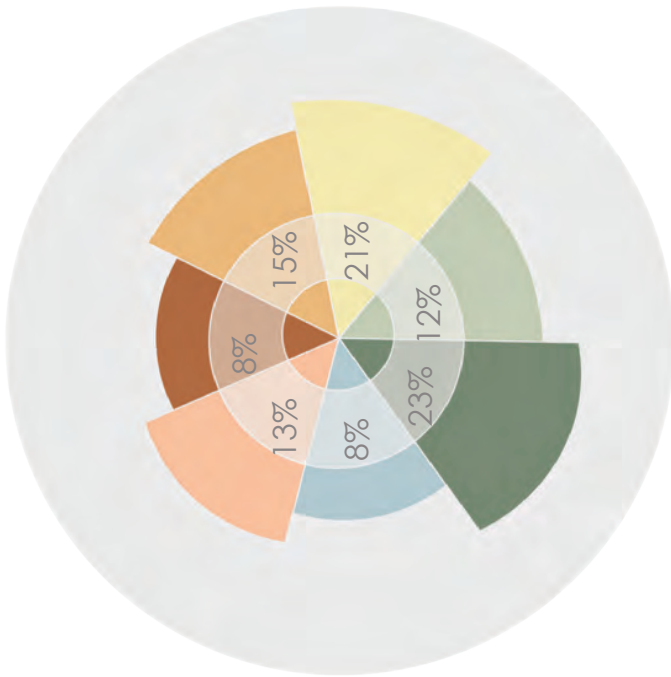


PROPOSED

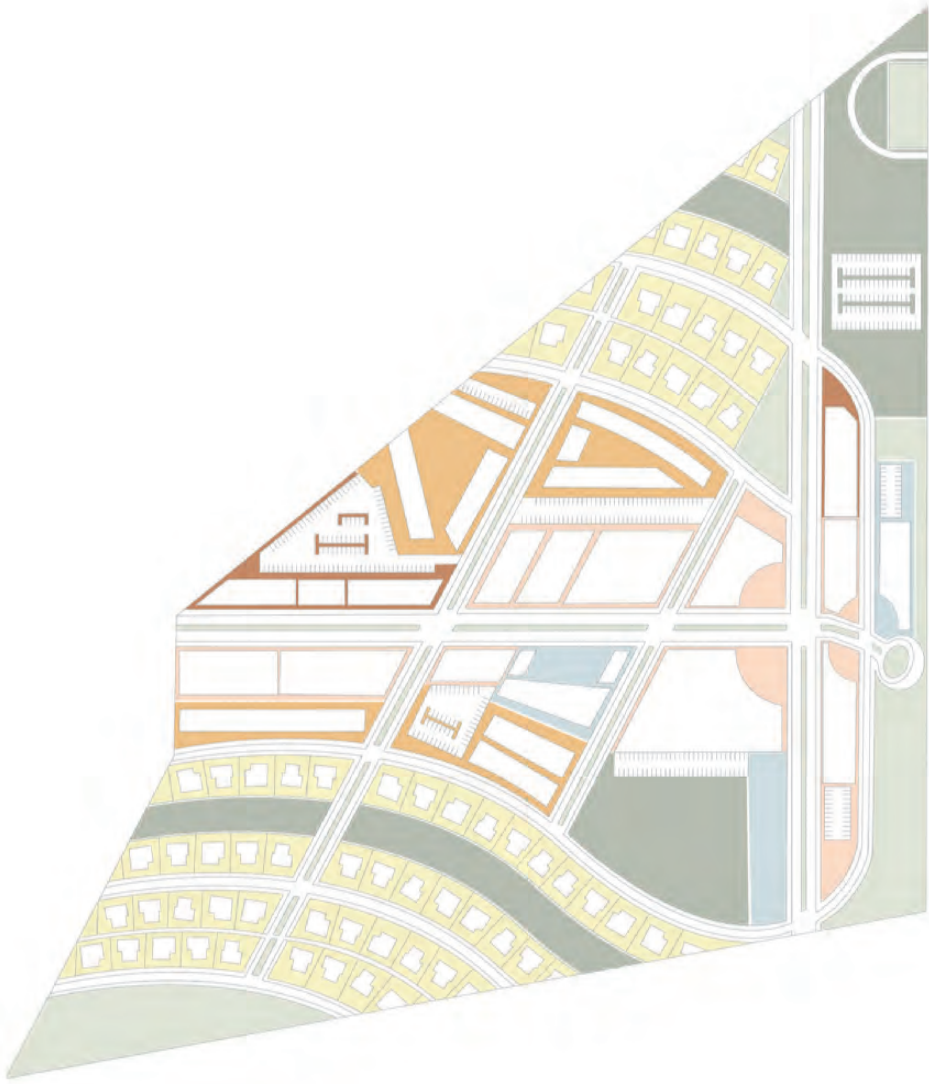


1. Tree pallet comprised of species native to the region; primarily Palo Verde, Mesquite, and Desert Ironwood
2. Backyard Access to native designed trail system
3. Smaller tree species planted around intersections to increase visibility
4. Community open spaces provide opportunities for community gardens
5. Public parks provide opportunities for community gatherings
6. Termination of Idaho Rd acts as a pedestrian gateway between urban and natural landscapes
7. Public sports park

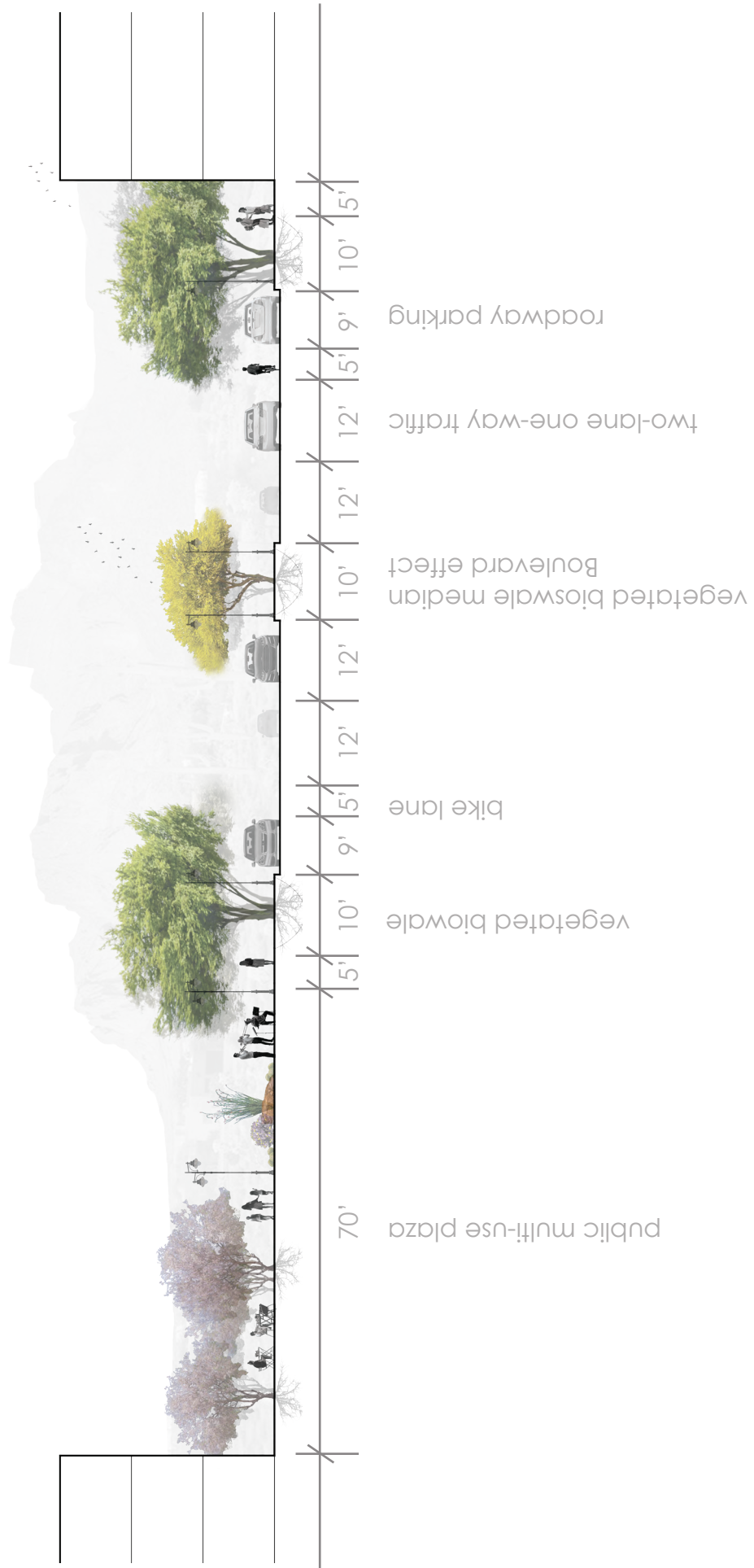




- commercial
- mixed use
- multi-family residential
- single-family residential
- agricultural
- parks/recreational
- institutional



ARTERIAL ROADWAY



SOUTHWEST APACHE JUNCTION

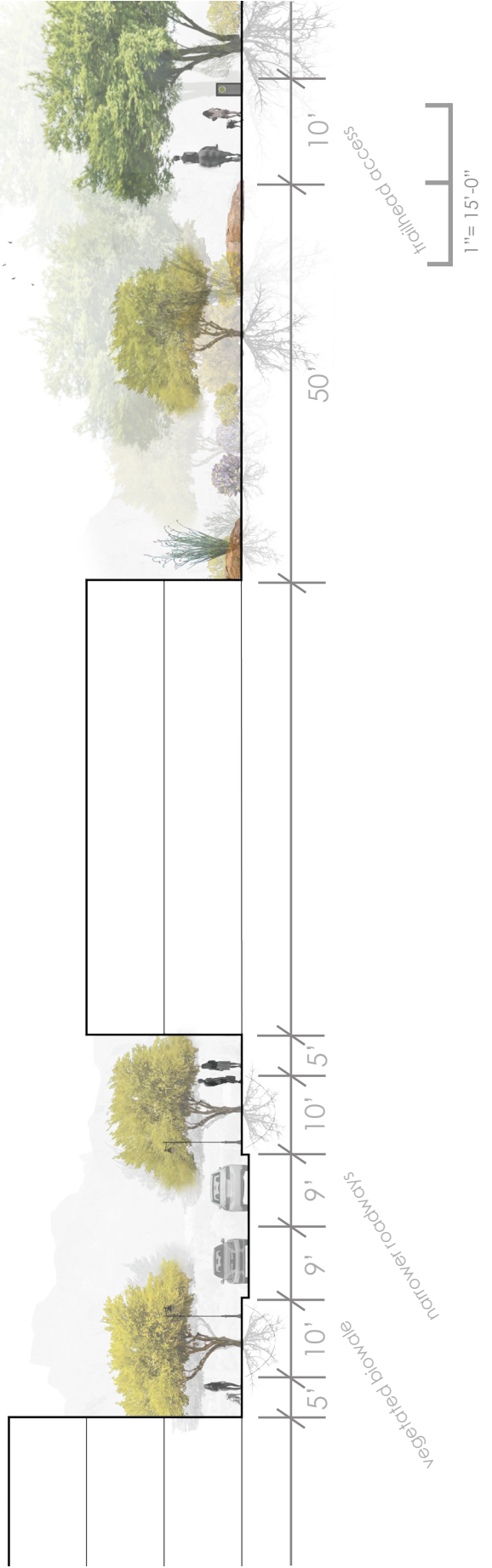
09 | URBAN FORESTRY

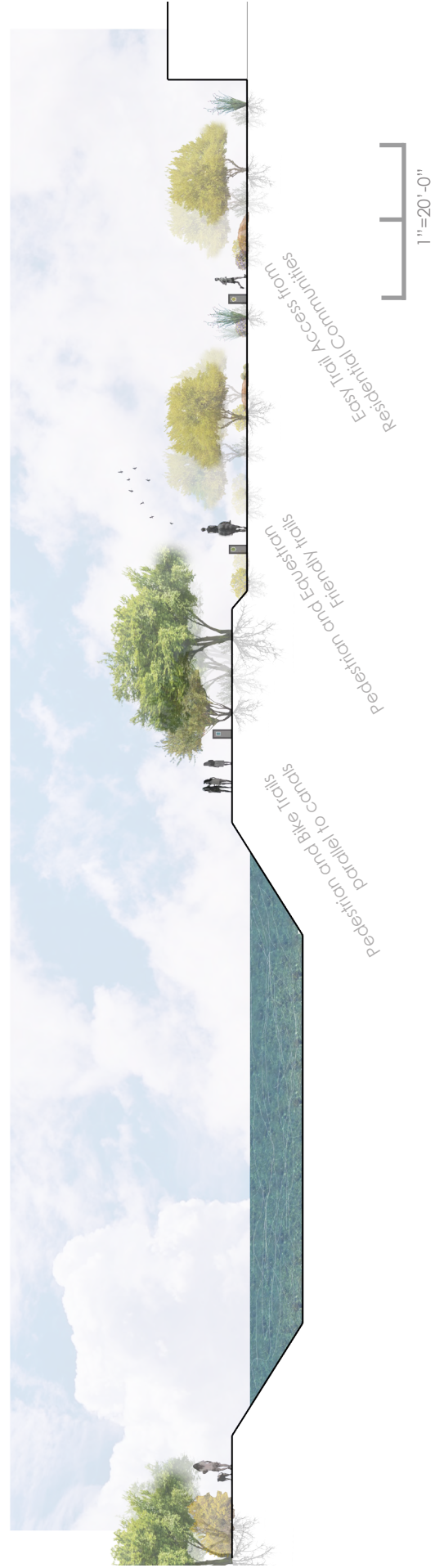
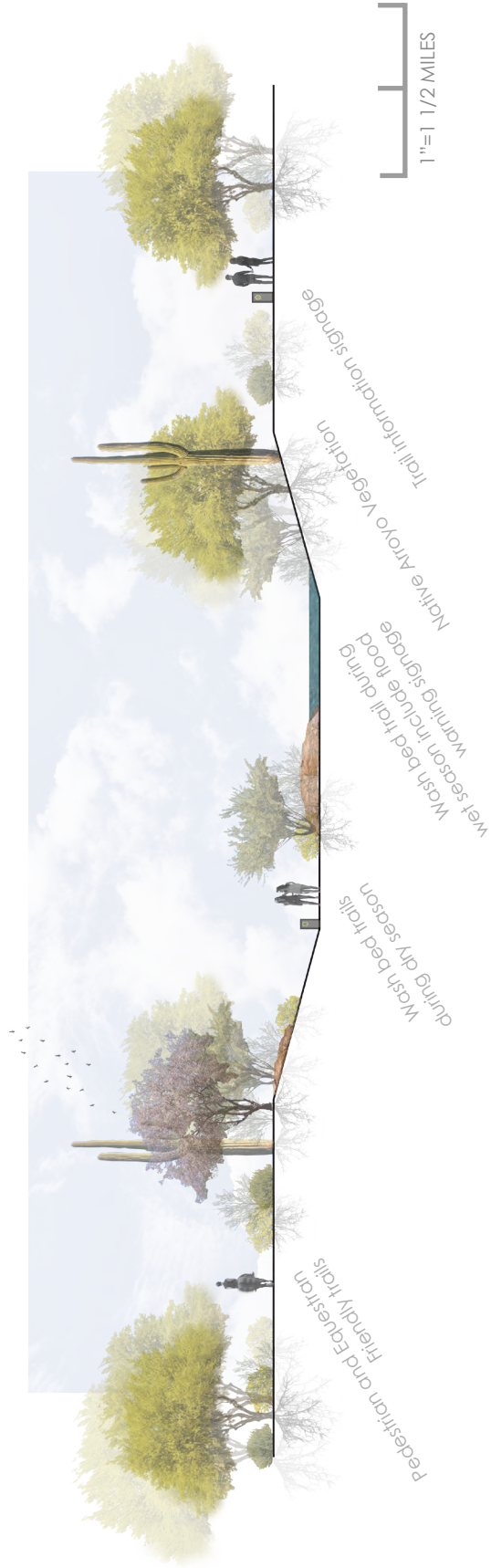
COLLECTOR ROADWAY

ROADWAY SECTIONS

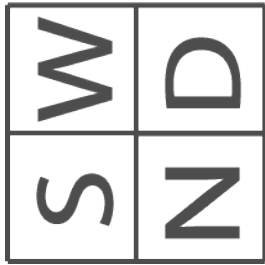


LOCAL ROADWAY









SOUTHWEST
NATIVE DESIGN

LANDSCAPE ARCHITECTS
AND PLANNERS

THANK YOU!



Fall 2017 Partnership with Apache Junction

ASU Project Cities Superstition Studio

LDE361/590 Landscape Architecture Design Studio 1
& HDA320 Herberger Design & Arts Corps
Students of Professors Ken Brooks / Kevin Kellogg / Stephani Woodson



Project Cities



Maria Maurer, Katherine
Keane, Sijie Chen, Matthew
Favazzo, Zac Pekala, Yifan Li

About Us

We are here to transform Apache Junction into an active community that has strong citizen engagement and ties its values together to create a proud identity.

2-2

Superstition Studios



Maria Maurer, Katherine Keane, Sijie Chen, Matthew Favazzo, Zac Pekala, Yifan Li



A desert landscape featuring prominent red rock formations in the background under a cloudy sky. The foreground is filled with yellow wildflowers and several saguaro cacti.

Chapter I

Apache Junction's Community Orientation, Conditions & Background

Site Location



State of Arizona



Our site

Apache Junction

Meridian

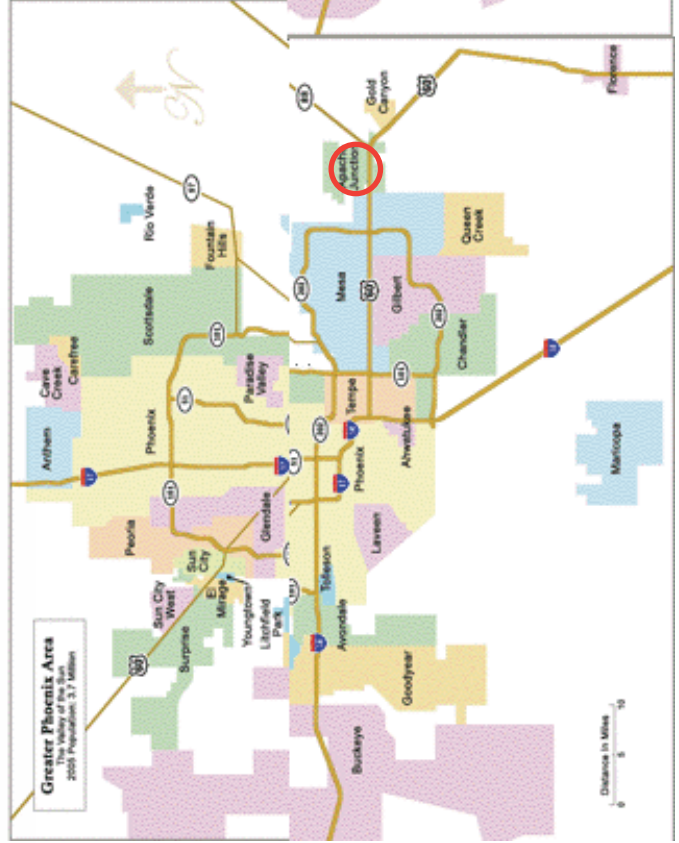


Mckellips Rd

Tamahawk Rd

Idaho Rd

16th Ave



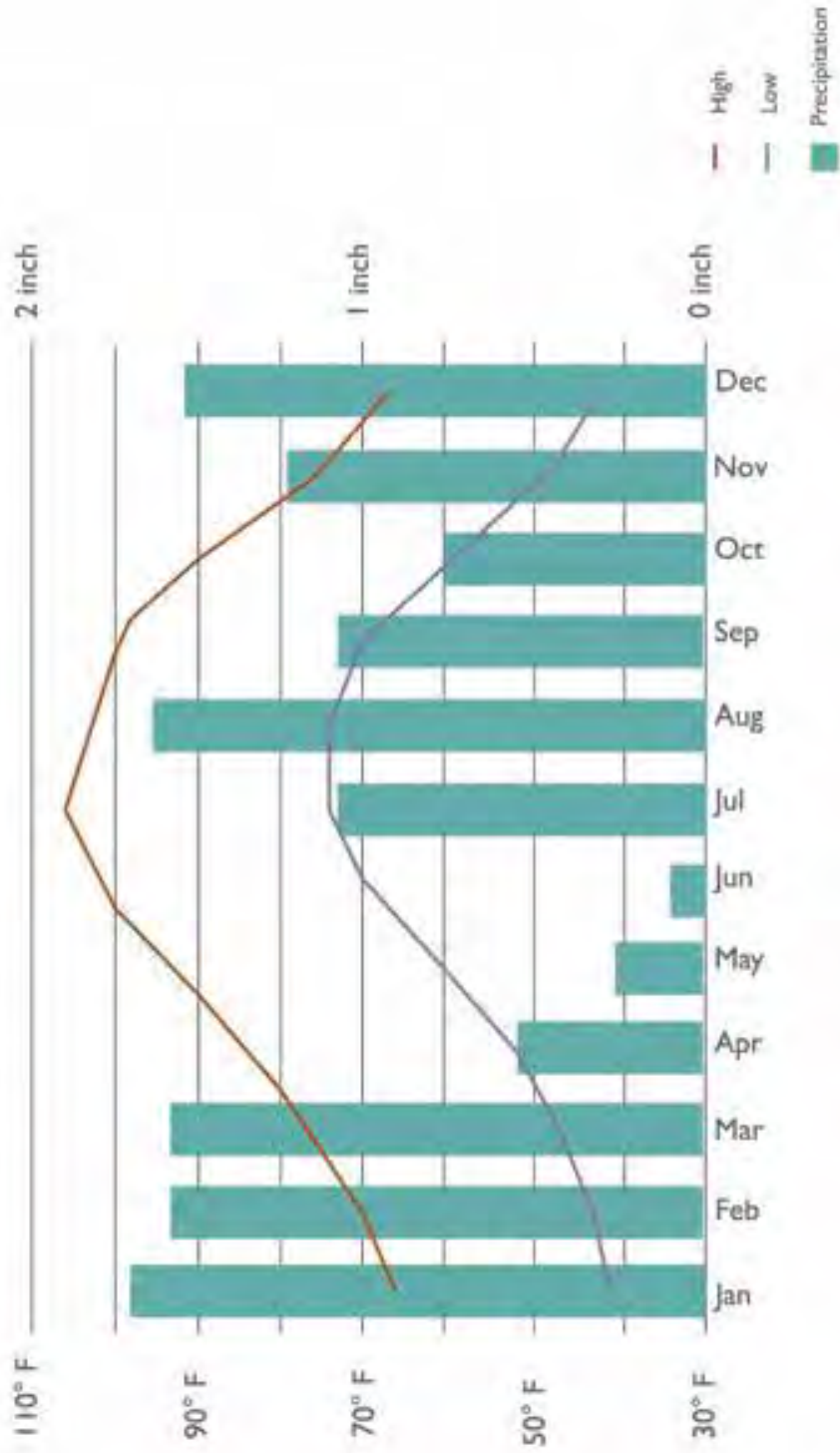
Supertition Studios

Our Site



Climate Statistics

Apache Junction Climate Graph



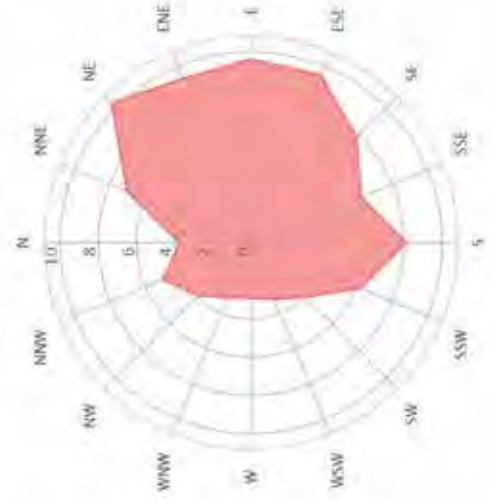
Wind Statistics

WIND STATISTICS

Statistics based on observations taken between 07/2013 - 09/2017 daily from 7am to 7pm local time. You can order the raw wind and weather data in Excel format from our historical weather data request page.

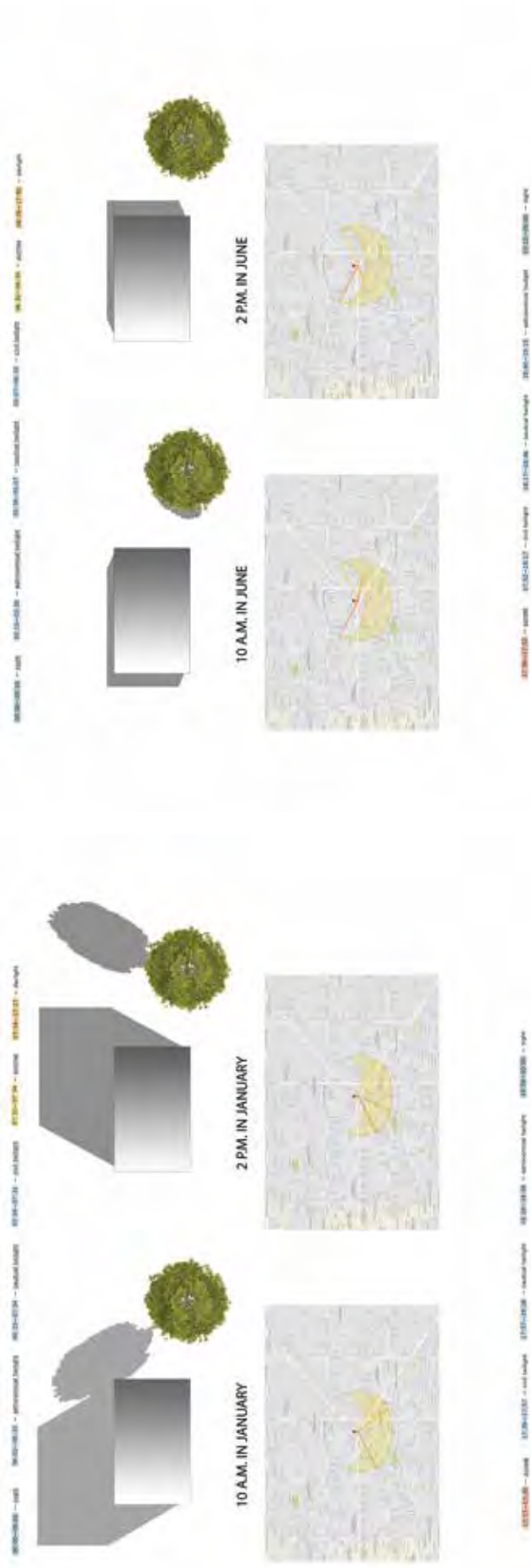
Month of year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
01	01	02	03	04	05	06	07	08	09	10	11	12	1-12
Dominant wind direction	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖
Wind probability >= 4 Beaufort (%)	1	0	1	1	1	0	0	1	1	1	1	1	1
Average Wind speed (mph)	1	2	2	3	3	3	3	3	2	2	2	1	2
Average air temp. (°F)	54	59	64	70	77	80	90	88	84	78	63	52	71

Wind direction distribution in (%)



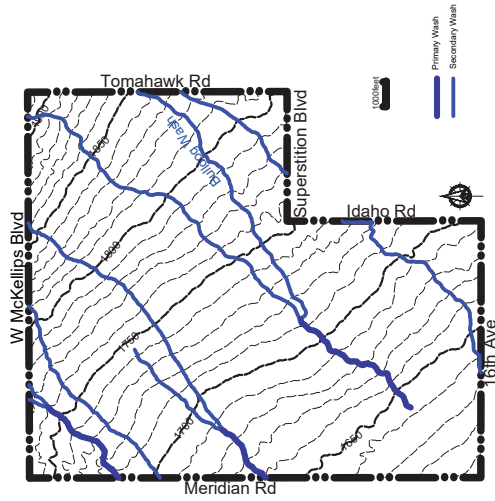
Supertition Studios

Sun Angles & Exposure

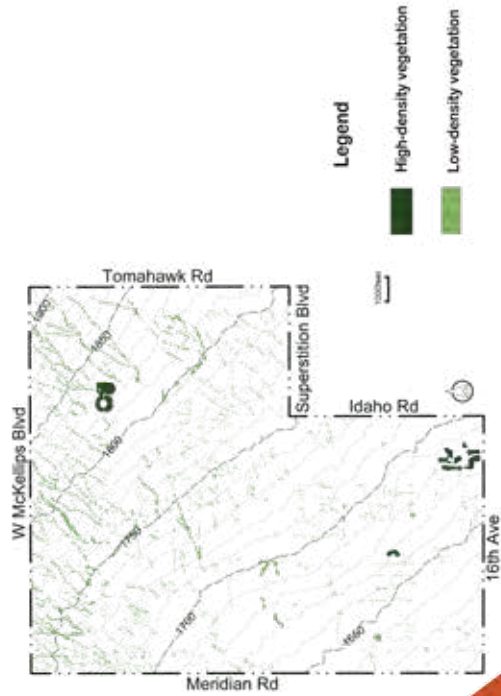


Inventory Maps

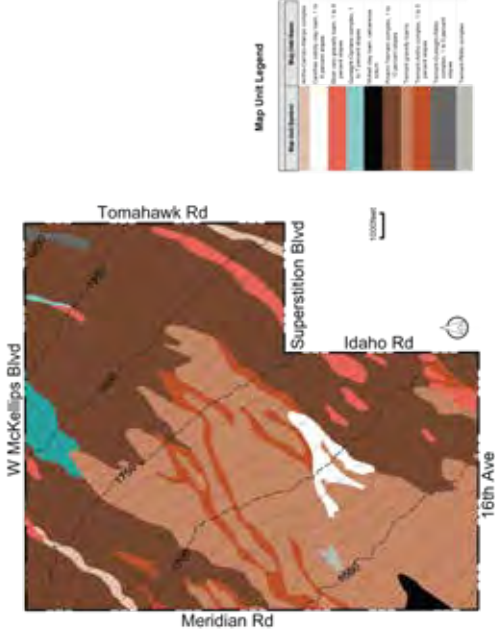
Hydrology



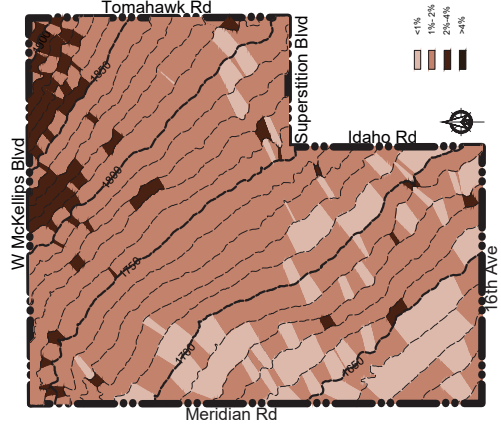
Vegetation



Geology



Slope



Topography



Composite





Birds

Costa's hummingbird
Gilder Flicker
Gila and ladder-backed woodpeckers
Cactus and Rock Wrens



Phainopepla
Verdin
Black-tailed gnatcatcher
Gambel's quail
Curve-billed thrasher
Harris's and red-tailed hawks



Mammals

Mule deer
Javelina
Gray fox

Mountain lion
Round-tailed and Harris' antelope squirrel
Desert cottontail



Reptiles

- Tiger whiptail
- Desert spiny lizard
- Common side-blotched lizard
- Gophersnake -Coachwhip



- Western patch-nosed snake
- Nightsnake
- Gila monster
- 3 species of rattlesnakes

History

Area originally inhabited for mining gold, under the name Goldfield



Gold veins ran dry, the area was abandoned... until the construction of the Apache Trail

Apache Trail allowed access for the construction of the Roosevelt Dam



*Ghost town was reconstructed by ghost town enthusiasts, Robert & Lou Anne Shoose

History

Through the increase in access and water to Apache Junction, development of the city spread.



<http://activerain.com/blogsvew/4779051/custom-mountain-view-home-in-apache-junction>

Community Profile

Attractions:

- Historic Apache Trail
- Lost Dutchman State Park
- Goldfield Ghost Town
- Superstition Mountain Museum
- Salt River Lakes
- Tonto National Forest



Events:

- Lost Dutchman Marathon
- Lost Dutchman Days Celebration
- Renaissance Festival
- Antique Tractor Show
- Festival of the Superstitions
- Christmas Lights Parade



Building Footprints

Single Family Housing



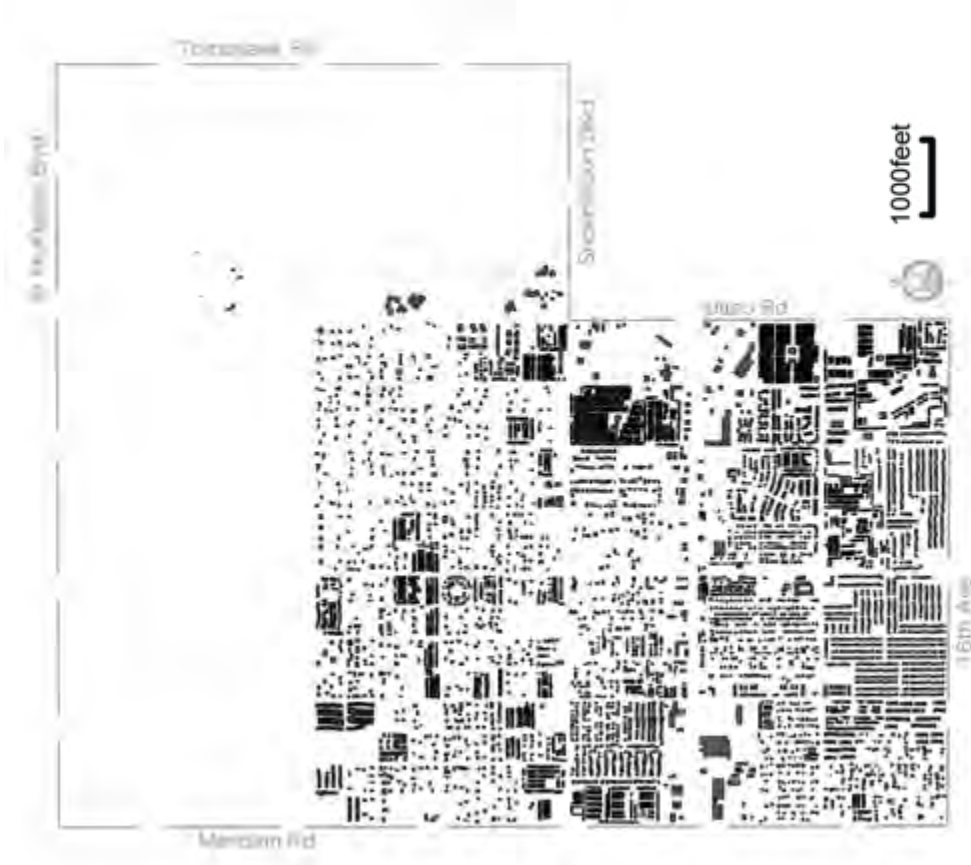
Commercial



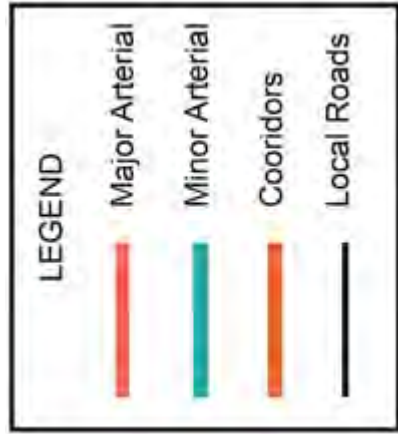
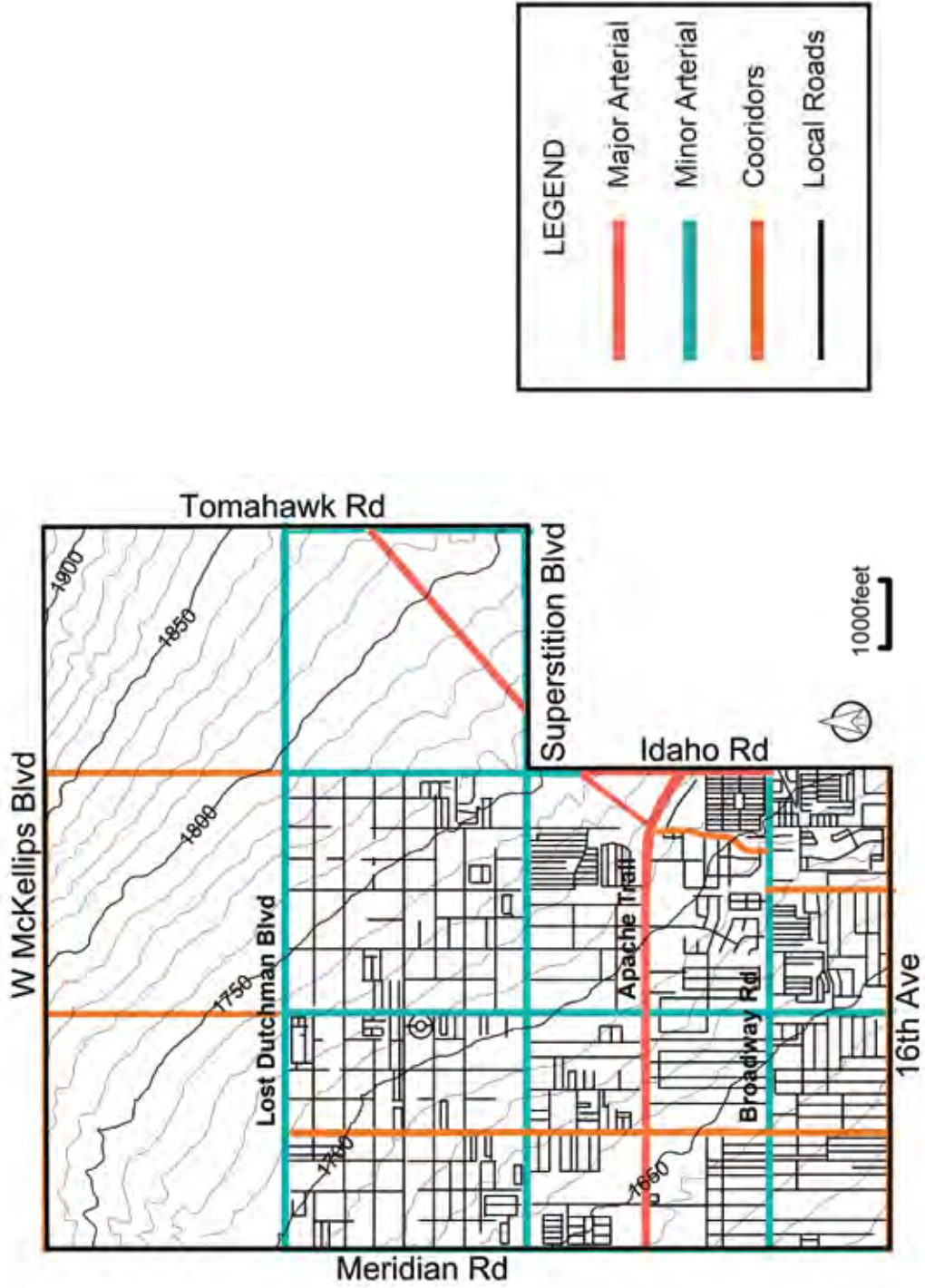
Public



Mobile Home Park

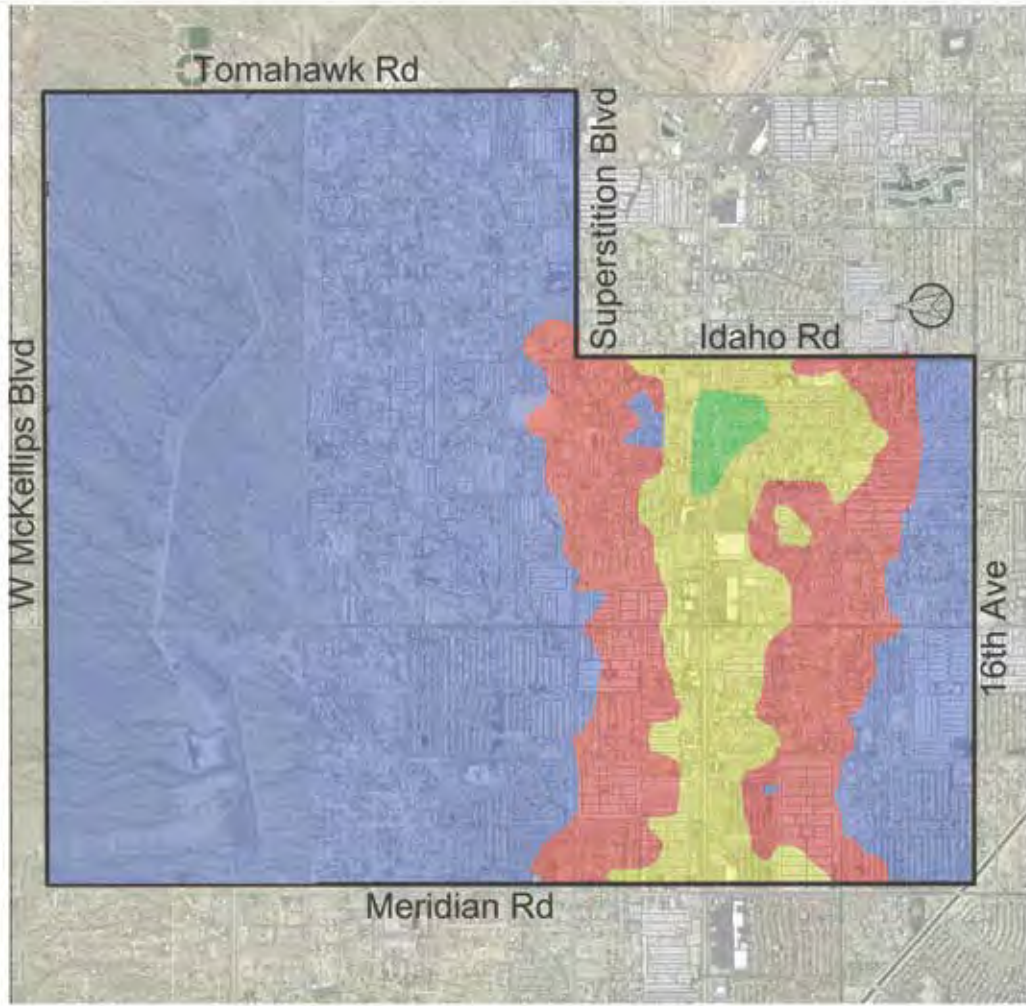


Circulation



Walkability

Walk Score: 16
Car dependent



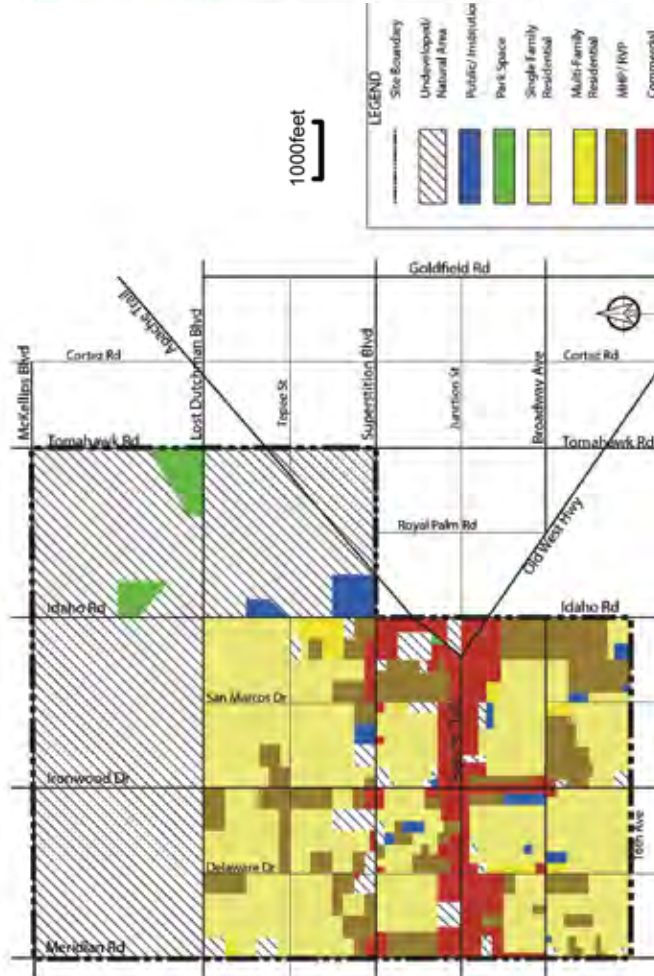
Current Land Use & Ownership

Land Ownership



Source: Apache Junction Comprehensive Transportation Study, 2012

Current Land Use



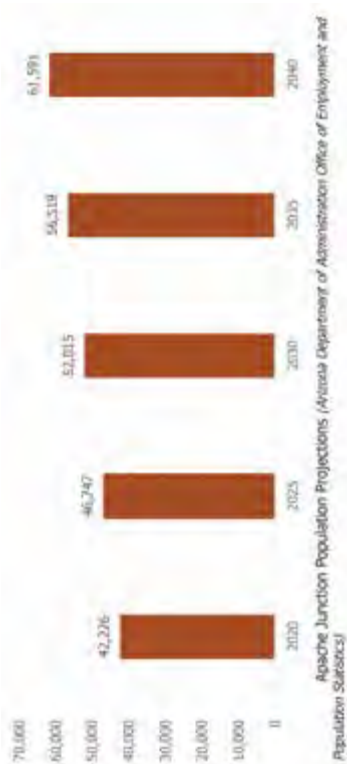
Population Density

Year-round Residents

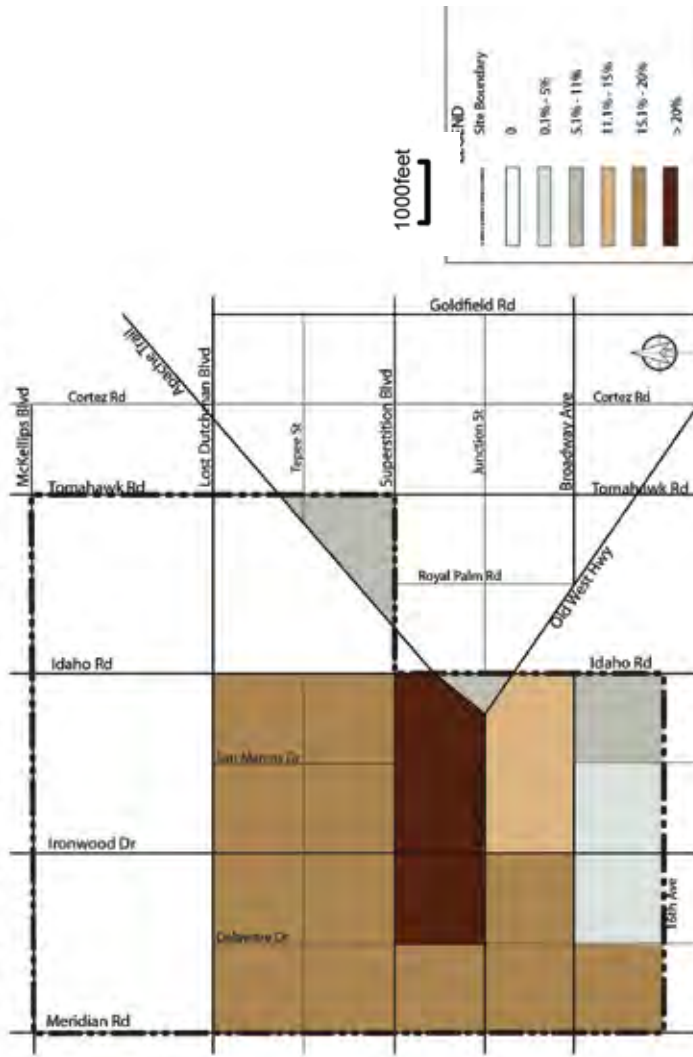
Apx. 38,074

Seasonal Residents

Apx. 35,000



BELOW POVERTY POPULATION



Population Overview

Religion:

Religious

Affiliation: 31.45%

Catholic: 18.21%

Baptist: 4.06%

Latter-Day Saints: 3.45%

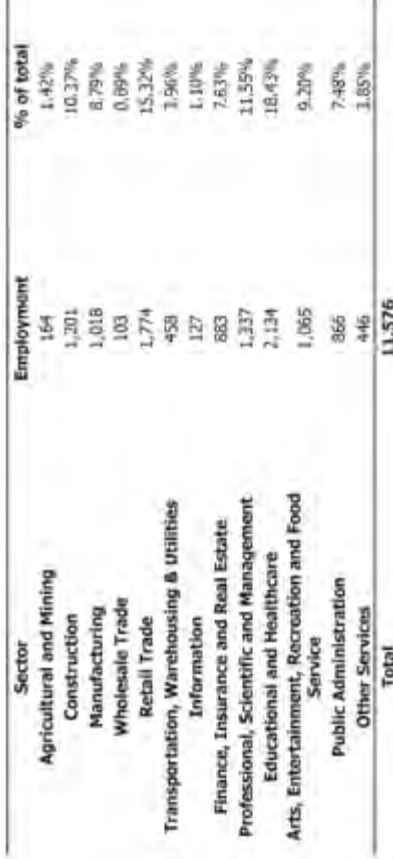
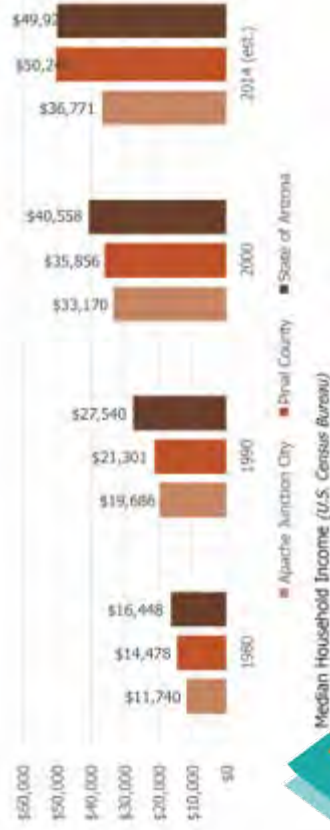
Other: 5.73%

Education Level	Apache Junction		Pinal County		State of Arizona	
	# of Persons	% of total	# of Persons	% of total	# of Persons	% of total
Less than High School	3,510	14.3%	38,794	15.6%	604,153	14.1%
High School Graduate	9,488	34.2%	77,330	25.9%	1,040,770	24.5%
Some College	8,011	29.2%	71,899	27.8%	1,100,757	25.9%
Associate Degree	2,406	8.8%	24,052	9.2%	359,821	8.4%
Bachelor's Degree or greater	3,527	12.9%	46,553	18.0%	1,181,174	27.1%
Total Population 25 yrs and over	27,343		258,629		4,284,776	

Educational Attainment for Population 25 years and Older (U.S. Census Bureau, American Community Survey 2010-2014 (Estimate))

Ethnic Group	Apache Junction City		Pinal County		State of Arizona	
	# of Persons	% of Total	# of Persons	% of Total	# of Persons	% of Total
White	32,092	89.5	242,692	73.7	4,667,121	73
Black	431	1.2	13,830	4.2	259,008	4.1
American Indian	398	1.1	18,111	5.5	296,529	4.6
Asian	279	0.8	5,598	1.7	176,695	2.8
Pacific Islander	26	0.1	1,317	0.4	12,648	0.2
Hispanic	5,153	14.4	95,167	28.9	1,895,149	29.6

Population by Ethnic Composition (Census Bureau, 2010 Census)



Apache Junction Employment by Industry Sector (Census Bureau, 2010 Census)

Utility Overview

Apache Junction Water District

Apache Junction Water Utilities Community Facilities District (AJWD) is a special district formed by the Apache Junction City Council on August 2, 1994.

The Water District is primarily responsible for providing water service in the City of Apache Junction within the District's water service area.

Currently, Apache Junction Water District serves approximately eight square miles and a population of 14,348, which accounts for more than one-third of the City of Apache Junction. The remaining area is served by Arizona Water Company.



Utility Overview

Arizona Water Company

Arizona Water Company is one of the largest investor-owned water utilities in Arizona. The Company, whose home office is located in Phoenix, Arizona, was organized in 1955 around a nucleus of ten water systems acquired from Arizona Public Service Company. Today it provides water service to a population of nearly 250,000 in eight counties and in more than thirty communities throughout Arizona.

Currently, Apache Junction Water District serves approximately eight square miles and a population of 14,348, which accounts for more than one-third of the City of Apache Junction. The remaining area is served by Arizona Water Company.

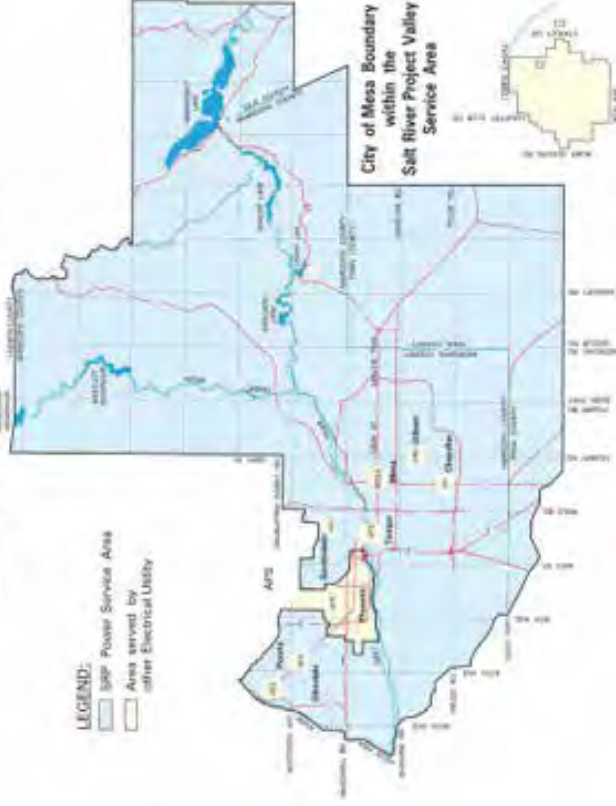


Utility Overview

The Salt River Project

SRP is the oldest multipurpose federal reclamation project in the United States and has been serving central Arizona since 1903. Today the SRP power district is one of the nation's largest public power utilities, providing electricity to 1 million customers

SRP ELECTRIC SERVICE AREA



APS Boundaries within the Salt River Project Valley Service Area



Sustainability



All three solid waste companies provide recycling services.

Strong Sustainable Community Initiative

Strengthening Neighborhoods, Sustaining Businesses, Celebrating Community

AJ picks one neighborhood per year to clean up and improve.



Selected by the EPA for assistance improving economic and environmental sustainability.



Creates outdoor pedestals for local artists



Median Beautification on Old West Highway

Local Art

Encourages community involvement in local projects



Designed by Nicholas T. Blake
Parks Superintendent for City of Apache Junction
Completed in 1996



Views On Site



A desert landscape featuring prominent red rock formations in the background and a field of yellow wildflowers in the foreground. The sky is overcast with grey clouds. The text is overlaid on the image.

Chapter II

Assessment, Evaluation and Land Use Suitability Analysis in Apache Junction



Process Summary

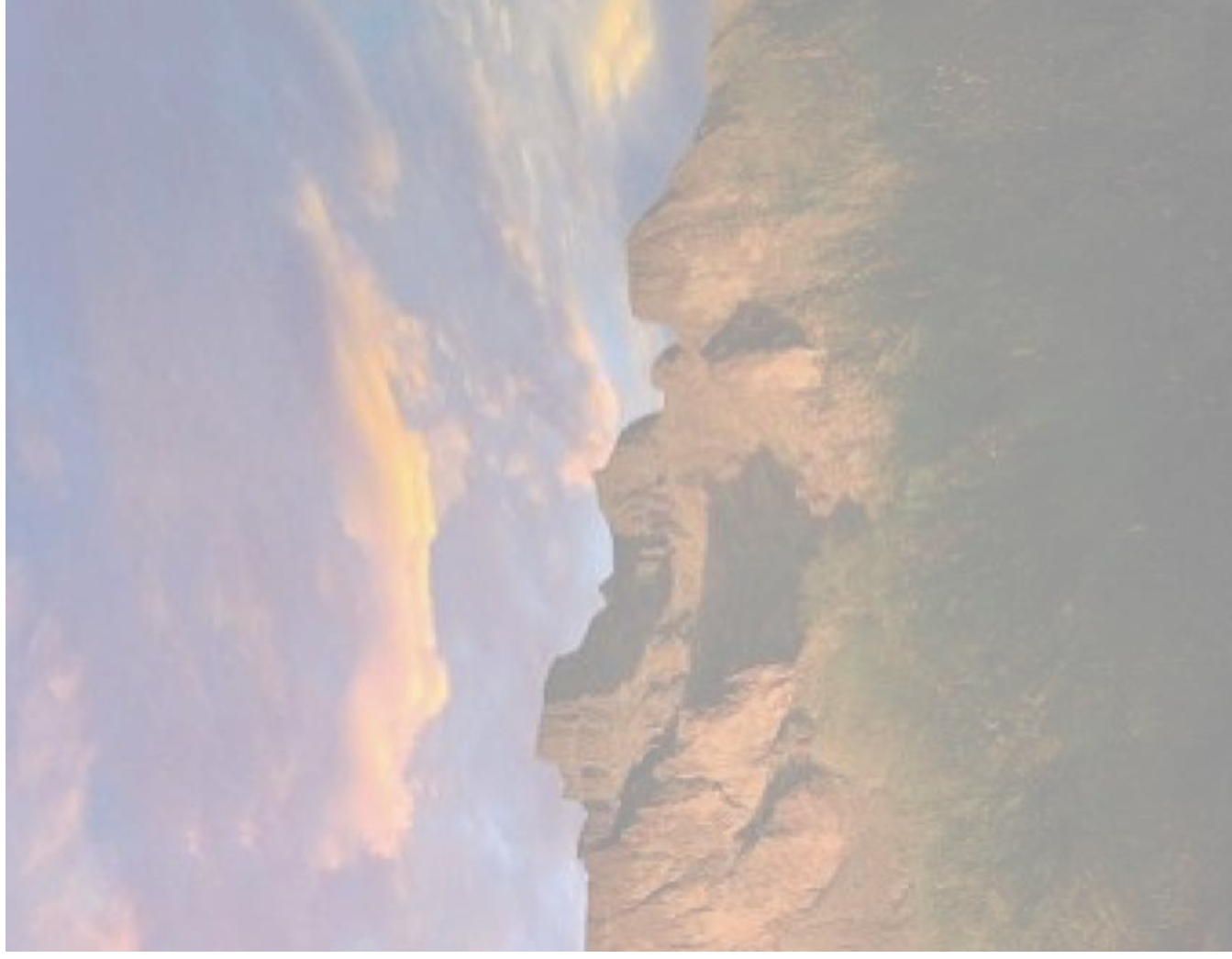
Land Use Compatibility Matrix

Land Use Suitability Matrix

Land Use Suitability Maps

- Commercial
- Residential
- Active Recreation
- Open Space Corridors
- Institutional
- Multi-Modal Circulation
- Village Core
- Urban Agriculture
- Light Industrial
- Wildlife Preservation
- Arterial Roads

Opportunities and Constraints



Land Use Compatibility & Suitability Matrix

Land Use Suitability Matrix

Land Use	Climate	Hydrology	Slope	Soils	Existing Infrastructure	Existing Circulation	Private Land	Bureau of Land Management	State Trust Land	Vegetation	Wildlife Preservation
Residential	High	High	High	High	High	High	High	High	High	High	High
Active Recreation	High	High	High	High	High	High	High	High	High	High	High
Commercial	High	High	High	High	High	High	High	High	High	High	High
Open Space Corridor	High	High	High	High	High	High	High	High	High	High	High
Institutional	High	High	High	High	High	High	High	High	High	High	High
Multi-Modal Circulation	High	High	High	High	High	High	High	High	High	High	High
Village Core	High	High	High	High	High	High	High	High	High	High	High
Urban Agriculture	High	High	High	High	High	High	High	High	High	High	High
Light Industrial	High	High	High	High	High	High	High	High	High	High	High
Wildlife Preservation	High	High	High	High	High	High	High	High	High	High	High
Arterial Roads	High	High	High	High	High	High	High	High	High	High	High

LEGEND

- High Compatibility (Green circle)
- Medium Compatibility (Yellow circle)
- Low Compatibility (Red circle)
- Not Applicable (x)

Land Use Compatibility Matrix

Land Use	Residential	Active Recreation	Commercial	Open Space Corridor	Institutional	Multi-Modal Circulation	Village Core	Urban Agriculture	Light Industrial	Wildlife Preservation	Arterial Roads
Residential	High	High	High	High	High	High	High	High	High	High	High
Active Recreation	High	High	High	High	High	High	High	High	High	High	High
Commercial	High	High	High	High	High	High	High	High	High	High	High
Open Space Corridor	High	High	High	High	High	High	High	High	High	High	High
Institutional	High	High	High	High	High	High	High	High	High	High	High
Multi-Modal Circulation	High	High	High	High	High	High	High	High	High	High	High
Village Core	High	High	High	High	High	High	High	High	High	High	High
Urban Agriculture	High	High	High	High	High	High	High	High	High	High	High
Light Industrial	High	High	High	High	High	High	High	High	High	High	High
Wildlife Preservation	High	High	High	High	High	High	High	High	High	High	High
Arterial Roads	High	High	High	High	High	High	High	High	High	High	High

LEGEND

- High Compatibility (Green circle)
- Medium Compatibility (Yellow circle)
- Low Compatibility (Red circle)



Advantage of undeveloped lots and existing commercial core
 Difficulties with proposed development on BLM and State Trust Land

Land ownership



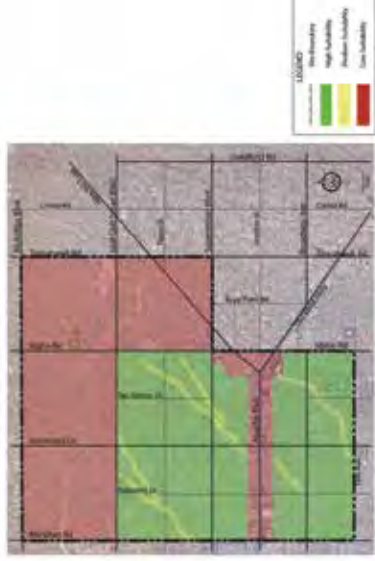
Circulation



Land Use Suitability

Residential:

Housing developments including low, medium, and high densities



Institutional:

Schools, libraries, churches, hospitals, police and fire stations, etc.



Multi-Modal Circulation:

Transportation routes with a hierarchy of roads, paths, and trails that consider and integrate the needs of vehicles, pedestrians, and bicyclists



Wildlife Preservation:

Land set aside for wildlife habitat



Land Use Suitability

Commercial:
Retail and office buildings



Open Space Corridors:
Natural areas, parkland, and urban public spaces that link the community to an open space system



Active Recreation:
Community, neighborhood, and specialty park spaces



Village Core:
Mixed use areas that function as a neighborhood or community center



Land Use Suitability

Urban Agriculture:
Growing plants and raising animals within and around the city through a process that is integrated into the urban economic and ecological system



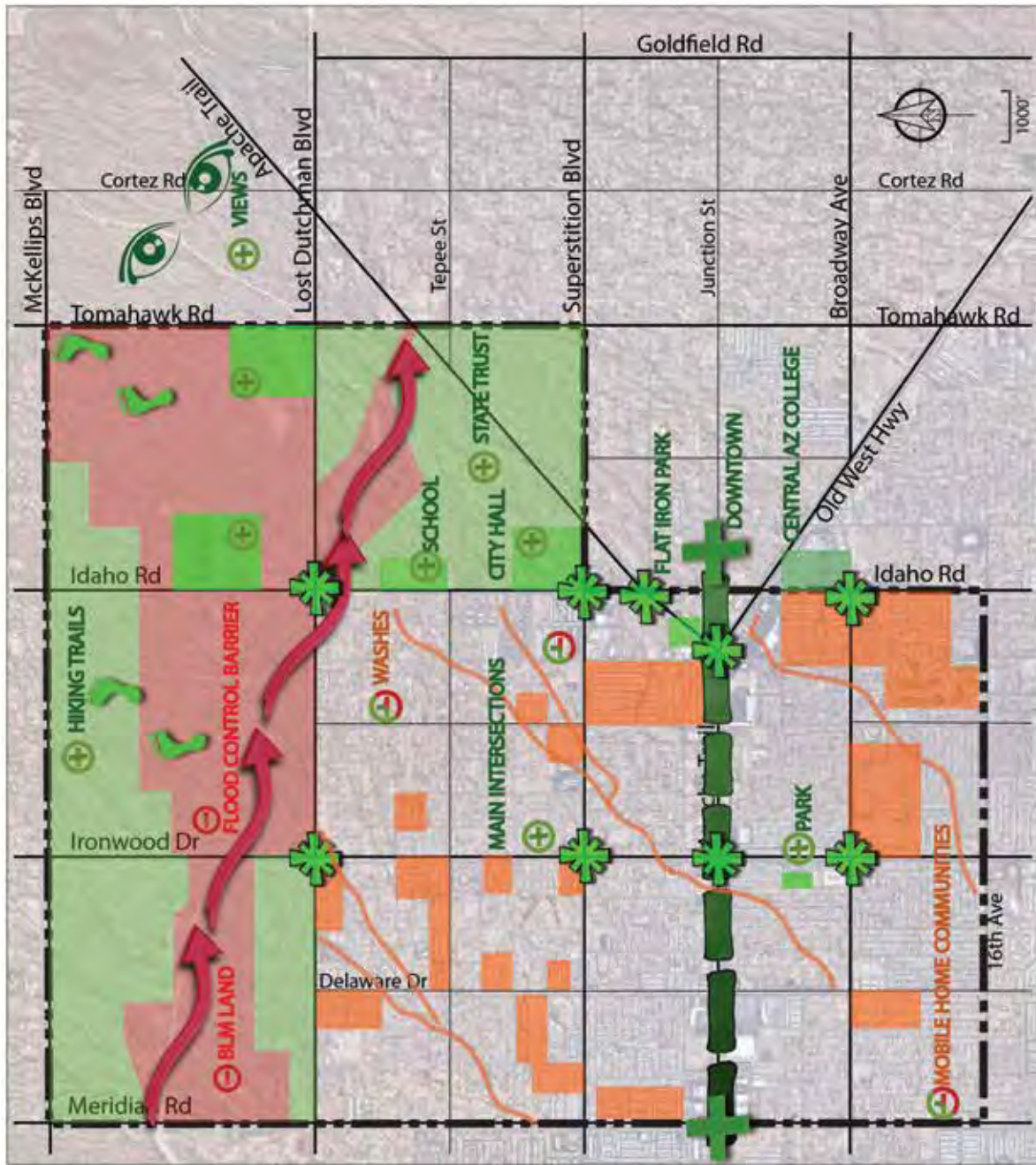
Light Industrial:
Warehouse and office spaces



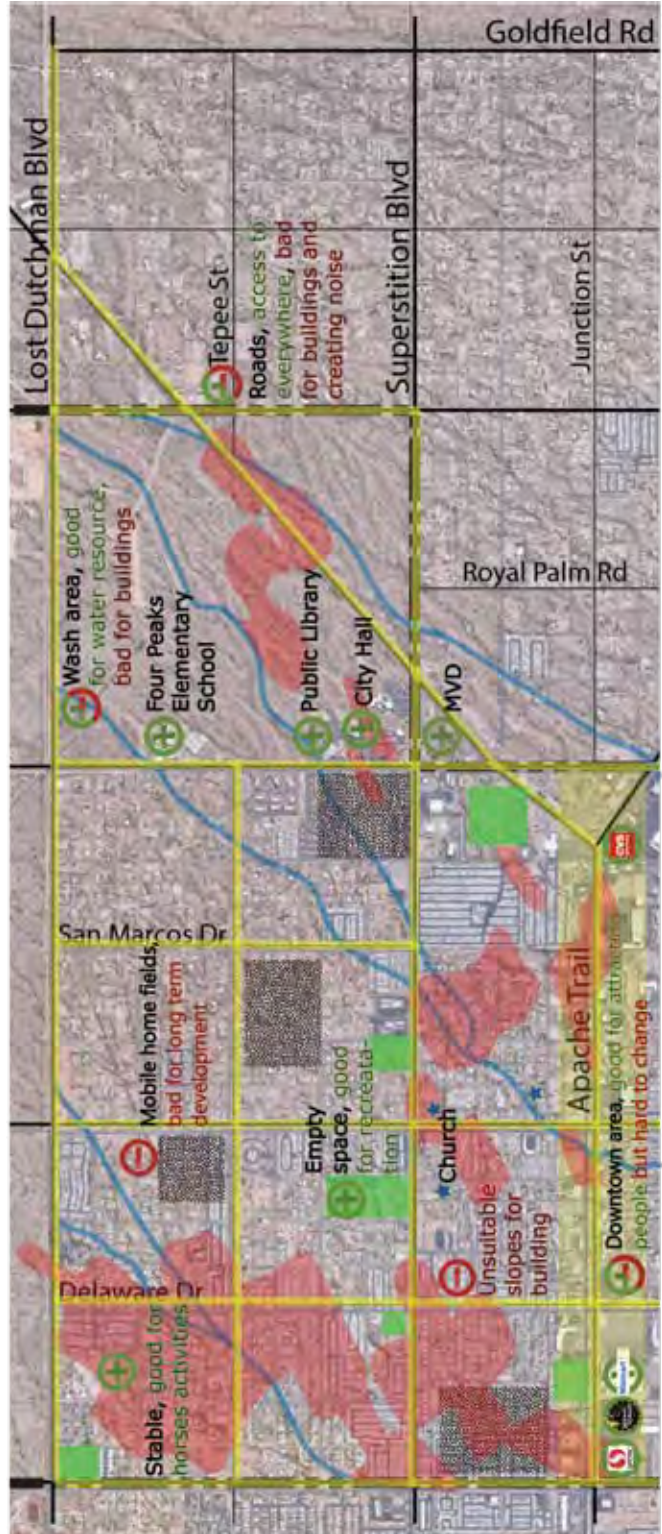
Arterial Roads:
Major circulation through and around the site



Opportunities and Constraints



Open Space & Residential Part



Downtown Part



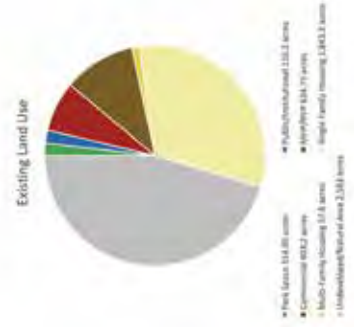
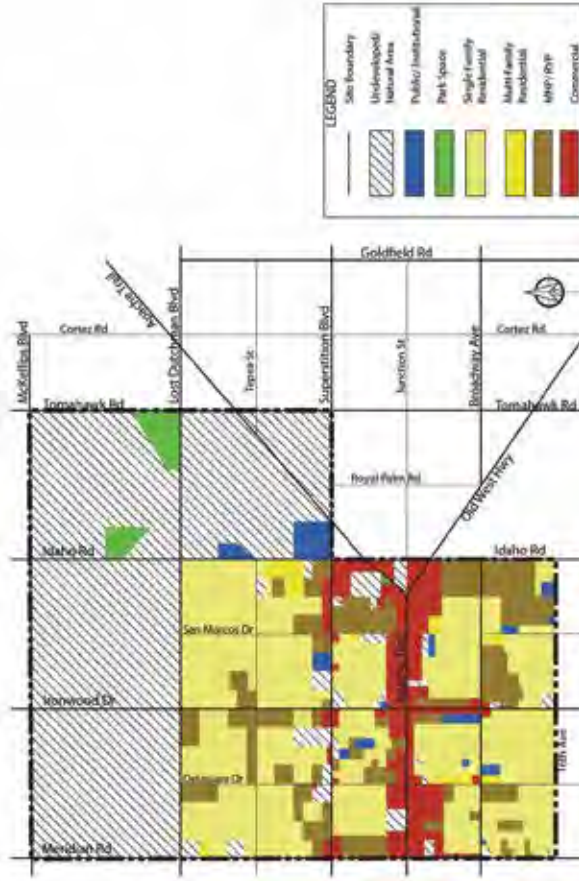
Superrition Studios

Chapter III

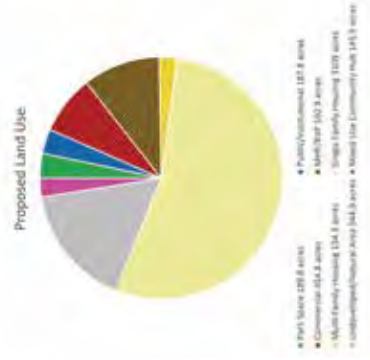
Community Center Development Master Plan and Six Themes for Future Apache Junction

Community Land Use Development Master Plan

Current Land Use



Proposed Land Use



Community Center Conceptual Designs

Six Themes:

Natural Recreation

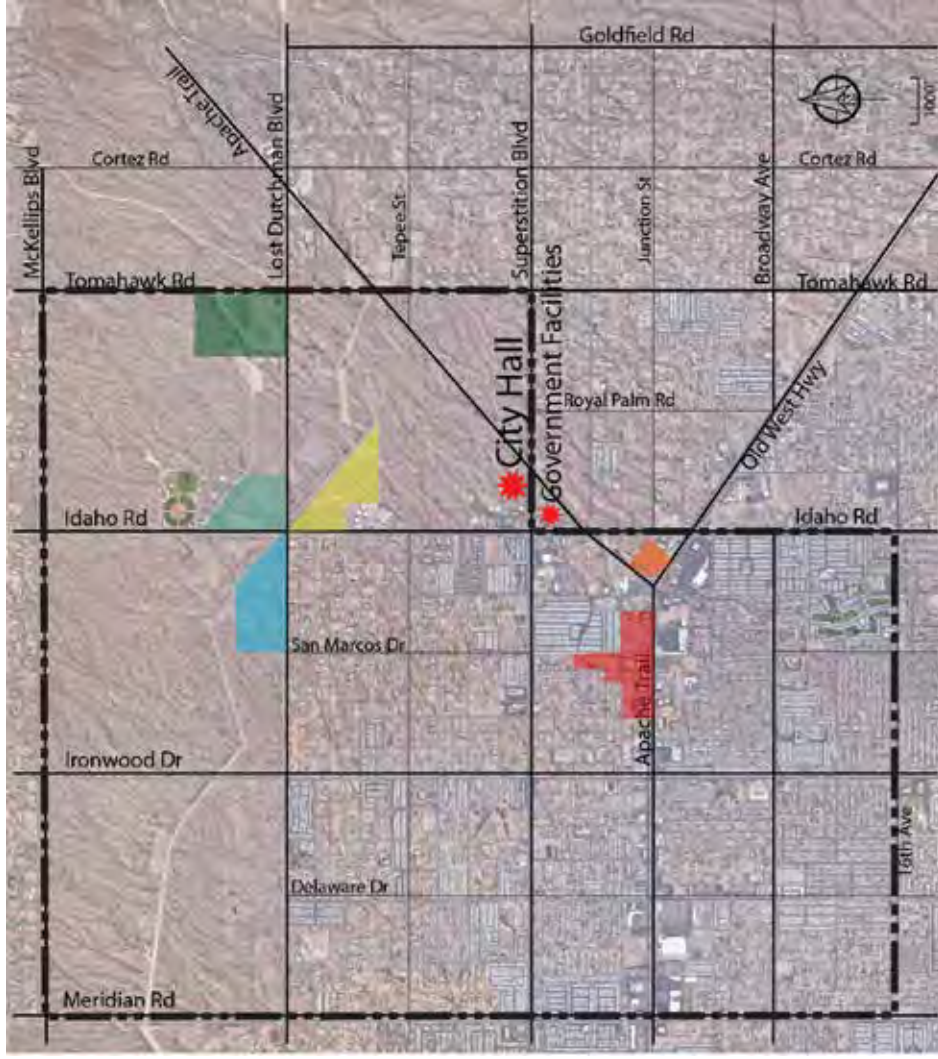
Smaller Living for a Bigger Community

Water Conservation

Recreational Tourism

Circulation/ Green Infrastructure

Eco Tourism



Natural Recreation

Conceptual Design Plan By Maria Maurer

Natural Recreation

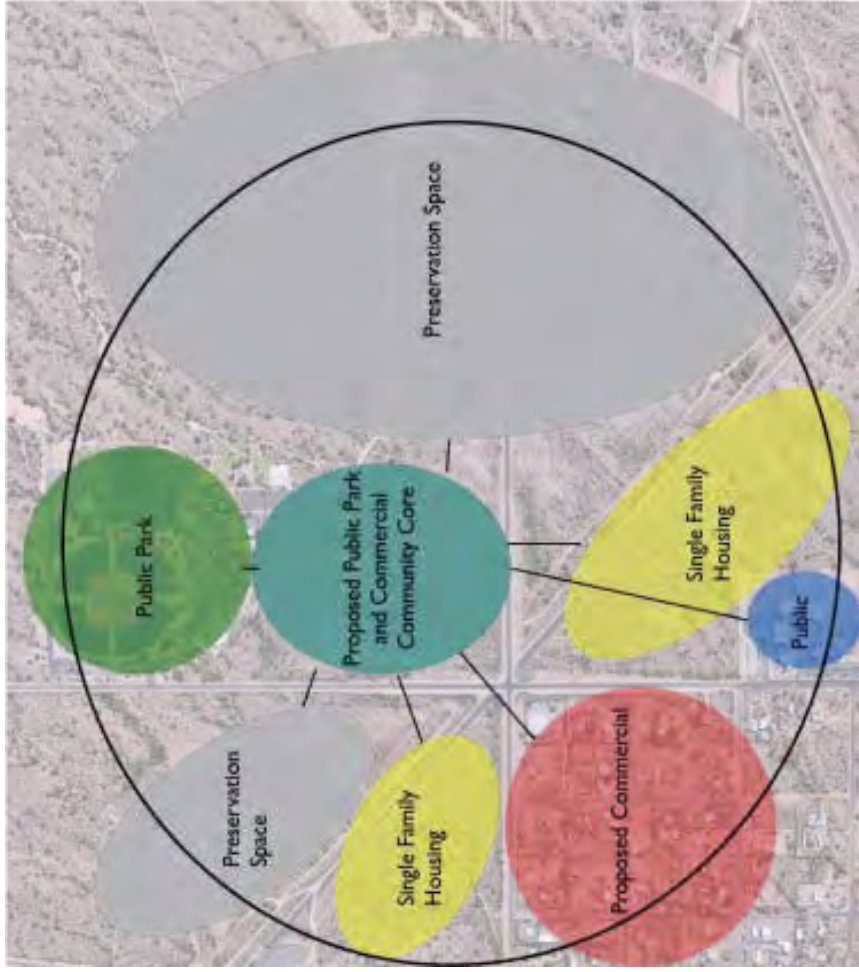
Conceptual Design Plan By Maria Maurer

By utilizing the city's open space and close proximity to the Lost Dutchman State Park, this community core will be focused on recreation that connects people to nature.



Natural Recreation

Compatibility Diagram



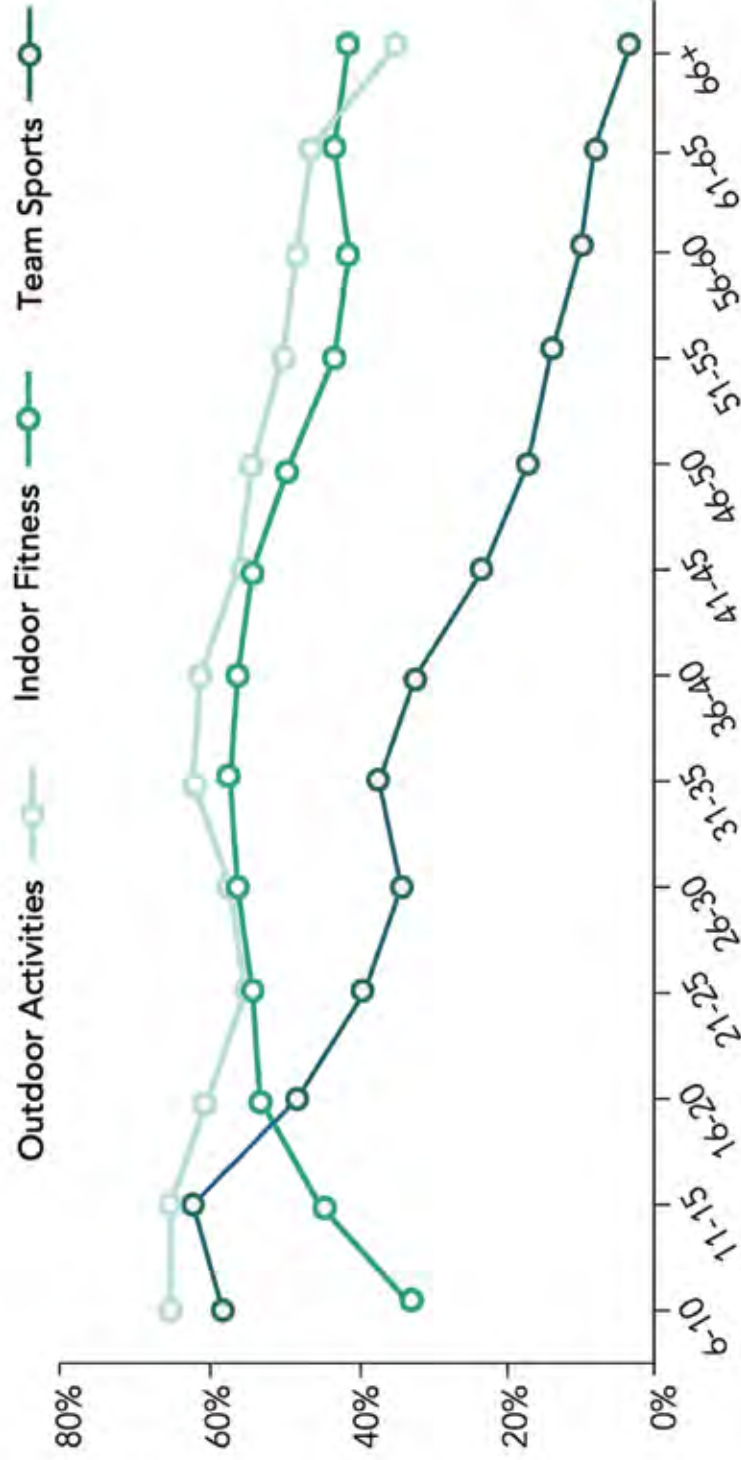
This diagram shows the different land uses that are surrounding the site and how they can bring in different types of users.

Site Context



Natural Recreation

Participation of Recreation Types in 2016



www.outdoorfoundation.org

Why natural recreation? Outdoor recreation is becoming very popular and in 2016, had the most participation out of other recreation types.



Natural Recreation

Goals

1. To create a formal access point to the adjacent trails for the community to utilize and engage with the wilderness.
2. The mixed land use within this community core provides a hub for people to gather before or after their time on the trails.
3. This space can also serve as a meeting spot for various clubs or groups for organized outdoor recreation events.



Conceptual Design Plan

LEGEND

- A. Recreation Pond
- B. Formal Trail-head
- C. Disk Golf Course
- D. Picnic Areas
- E. Horse Trailer Parking
- F. Off Leash Dog Park
- G. Children's Playground
- H. Retail/Restaurants
- I. Parking
- J. Dock with Pedal Boat Rental



Natural Recreation

SECTION 1

Sporting good stores and restaurants with take out so people can bring on the trails or have a picnic



Restaurants/Retail



Off-leash Dog Park

The city expressed a need for an off-leash dog park. This one is separated for large and small dogs and is located next to commercial spaces to generate more business.

SECTION 2

With a large equestrian community within Apache Junction, a separate area for people to park their horse trailers will encourage people to take their horses on the trail.

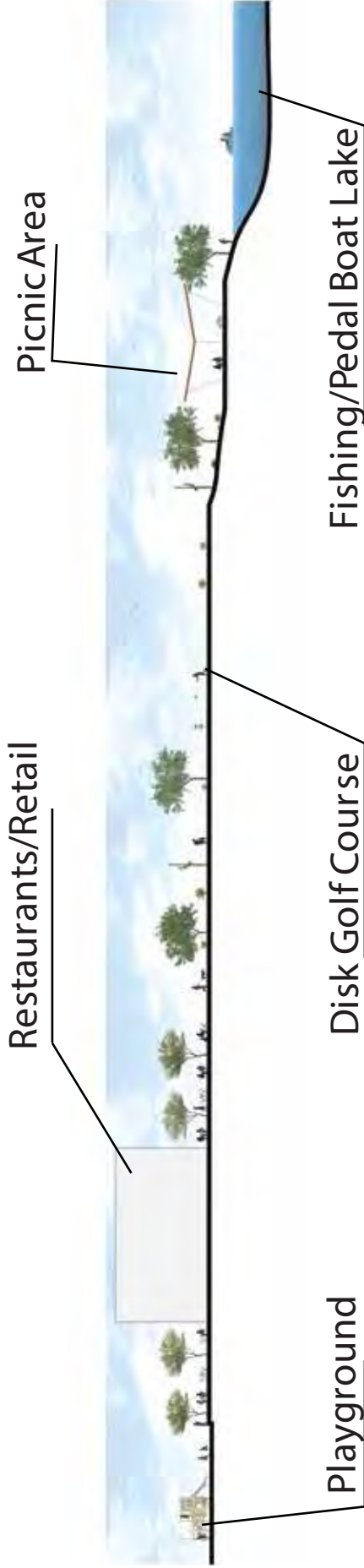
Horse Trailer Parking



Picnic Area with Horse Corral

Horse corrals accompanying the picnic areas gives people the opportunity to relax and enjoy the space without having to worry about their horse.

SECTION 3



A playground for children will give people an incentive to stay and enjoy the commercial space. They can watch their kids play while sitting at a cafe table enjoying their coffee

Disk Golf Course

If people don't want to hike the nearby trails, they can enjoy nature by playing a round of Frisbee golf.

Fishing/Pedal Boat Lake

This small lake gives people the opportunity to practice fishing before heading out to the nearby Roosevelt Lake. There will also be pedal boats to rent

Natural Recreation

With a love for the Sonoran Desert that brings people together, Apache Junction will become the city that preserves its natural land and uses it to partake in wilderness recreation which will engage its citizens and visitors with nature, physical activity and community engagement.



Smaller Living for a Bigger Community

Conceptual Design Plan By Matthew Favazzo

Smaller Living for a Bigger Community

Vision Statement & Goals

This project theme is focused on creating a simpler, more self-sufficient lifestyle for Apache Junction residents while also providing more affordable housing options, more communal open space, and greater access to local retail space and amenities.

Sustainable:

Grow into a city focused on environmentally conscious planning and development and responsible resource consumption.

Active:

Transform the city into an active and healthy community centered around access to its surrounding natural amenities.

Engaged:

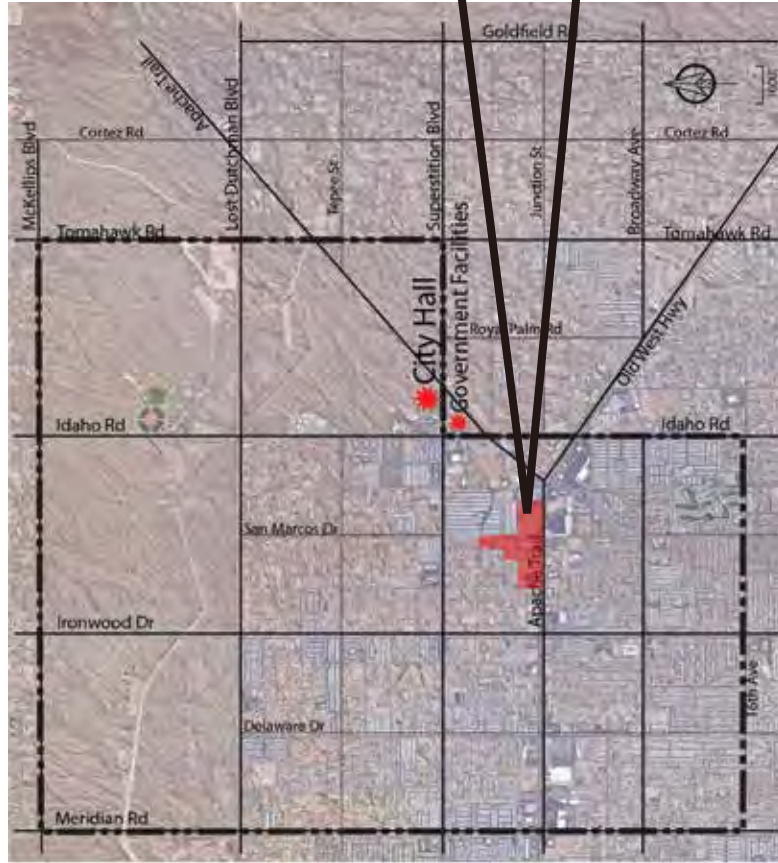
Maintain pride in the city's history and strengthen the passion for their community's identity and the value of the local environment.



Smaller Living for a Bigger Community

Project Location

Northwest Quadrant of Apache Junction



Proposed Development Site



The Handlebar
Pub and Grill

Chase Bank

Smaller Living for a Bigger Community

Program Elements

Tiny house community:
Build a tiny house community as an example for simpler, more affordable living and to encourage reducing waste.

High density residential with first floor retail space:
Develop higher density apartment buildings as an opportunity to transition some trailer homes and create affordable housing.

Park space:
Promote a healthy lifestyle by providing community open space for a dog park, community garden, and farmers market.

Commercial strip:
Improve the commercial streetscape and store fronts; infill with more local retail space.

Foot & bike paths:
Establish foot and bike paths that connect all community amenities and reduce vehicle dependence within the neighborhood.



Smaller Living for a Bigger Community

Concept Plan



Smaller Living for a Bigger Community

Concept Perspective



Smaller Living for a Bigger Community

Topics of Interest & Recommendations

Off-Leash Dog Park

A “bigger community” with more communal open space could help eliminate the need for a very large dog park and instead, smaller dog parks can be incorporated into more neighborhoods throughout the city. Also, more pet-friendly facilities can be proposed within mixed-use commercial areas, such as dog friendly patios and cat cafes.



Uncle Bear's Brewery



Matthew Favazzo & Jolteon



Recycled City



Phoenix Public Market

Solid Waste

“Smaller living” will encourage more responsible and more environmentally friendly resource consumption and, in turn, decrease waste. Possible sustainable waste features include communal composting, water recycling systems, and the use of more zero-waste materials.

Smaller Living for a Bigger Community

Topics of Interest & Recommendations

Homelessness

Tiny homes can provide low cost shelters with low maintenance needs and also provide an option for transitioning to affordable housing.



Positively AJ

The community core development will maintain a Southwest / Sonoran Desert vernacular while also paying homage to AJ's Old West, mining town history. This theme will help to create a positive identity of a sustainable, active, and engaged community.



Water Conservation

Conceptual Design Plan By Katherine Keane

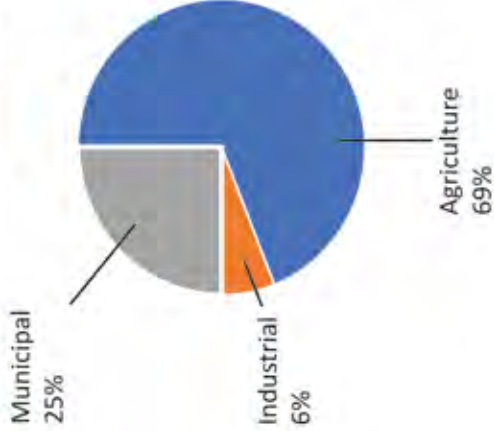


Water Conservation

Working With Water IN APACHE JUNCTION

FINAL PROJECT
by Katherine Keane
Fall 2017

ARIZONA WATER USAGE



Why is conserving water important?

THE FACTS

- The average American uses **88 gallons** of water a day.
- The average Arizona resident uses **147 gallons** of water a day.
- = 59 gallons above average per person

Where is all that extra water coming from?

As the Arizona Water Usage chart depicts, a large amount of water is dedicated to Agricultural purposes. However, the area of Apache Junction that we created our existing land use plan on does not have either agriculture or industrial present. Therefore, municipal usage is what I will be focusing on.

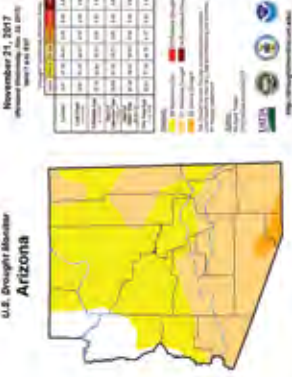
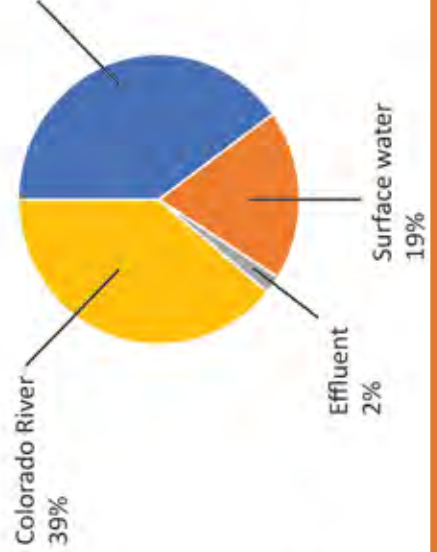
So where is all this water coming from if each resident is using 59 more gallons daily than the average American? Isn't Arizona currently withstanding a long term drought? As the water sources graph explains, 40% comes from groundwater.

Why is conserving water important to Apache Junction?

As the graphic below expresses, the practice of over-using groundwater can have very negative effects. Land subsidence can harm current developments, and in relation to Apache Junction, their most developed areas are suffering most from this problem which must be addressed.



Groundwater 40%



The most up to date information on the severity of the drought in Apache Junction is currently ranked as **Moderate**

Source: AZ Department of Water Resources



Water Conservation

Developing the Vision of Working With Water:

In one of the very first meetings we had with Apache Junction city representatives, it was stated that the major constraint to the expansion of Apache Junction was the distribution of ample water. So for my theme, I wanted to take that constraint and turn it into an opportunity for Apache Junction to be a leader in sustainable, water conserving practices.

VISION

Build a future community that identifies with working closely among natural processes to fully utilize water in a unique, efficient, and sustainable way.

GOALS & OBJECTIVES

1. TRANSFORM the city of Apache Junction into a water conserving community in a positive way.



Implement rainwater harvesting/storage to minimize wasteful runoff during peak rainfall seasons.



Develop no curb/no storm drain communities to eliminate wasteful runoff and preserve the natural hydrology patterns.



Utilize native, low water use plants within the landscape to enhance the desert community while benefitting the ecosystem.

2. ENCOURAGE awareness of natural processes concerning water in Apache Junction.

Offer educational landscapes throughout the city.

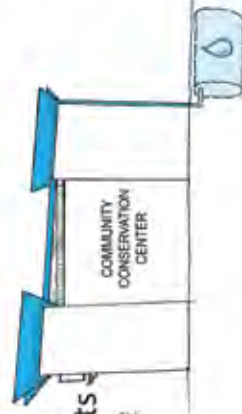
Establish a rebate program when practicing water conservation methods.



3. CREATE unified community conservation center(s) inspiring visitors to adopt beneficial techniques that

Expose visitors to different rainwater/greywater harvesting techniques.

Promote city rebate programs to participate in conservation methods.

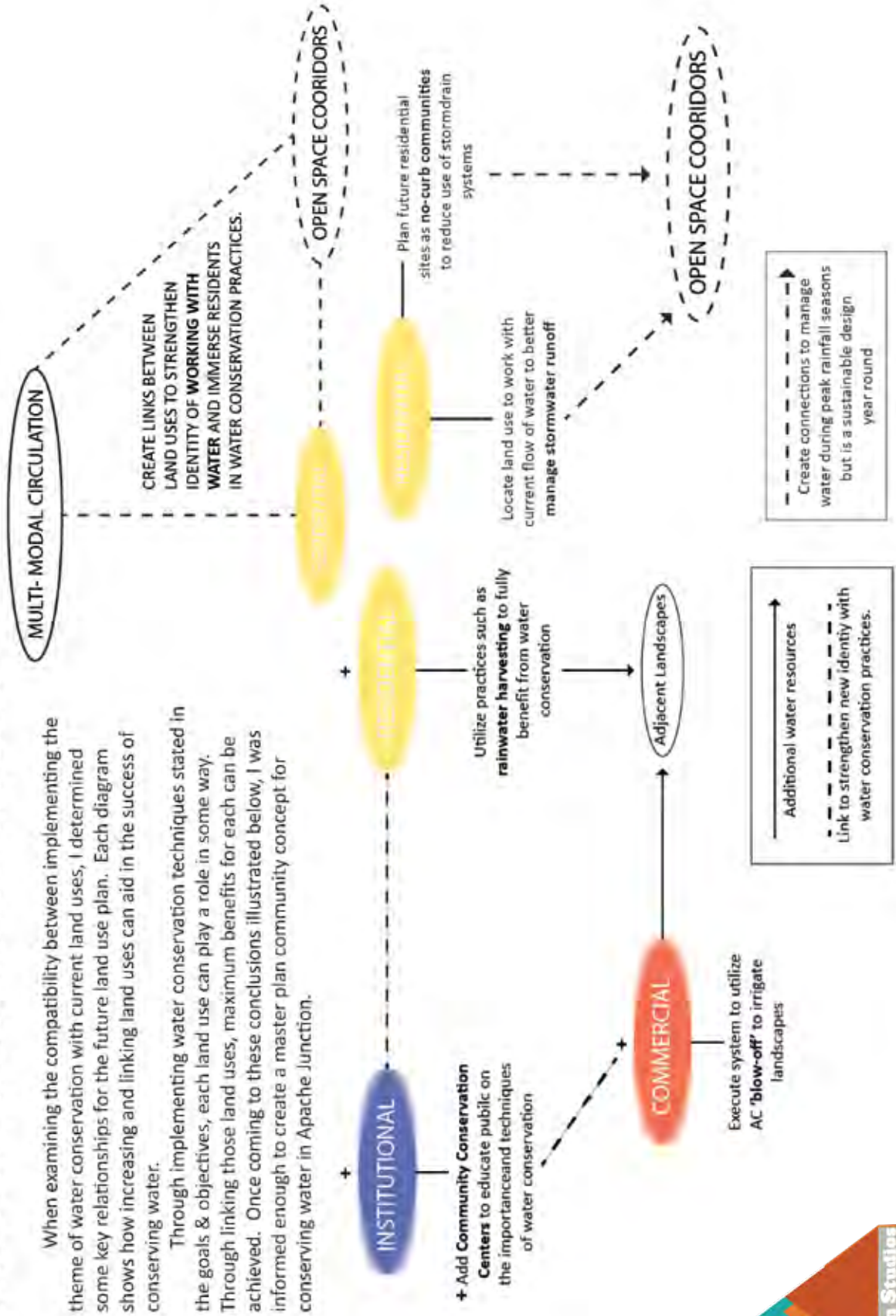


WATER CONSERVATION & LAND USE

FUNCTIONAL RELATIONSHIP DIAGRAMS

When examining the compatibility between implementing the theme of water conservation with current land uses, I determined some key relationships for the future land use plan. Each diagram shows how increasing and linking land uses can aid in the success of conserving water.

Through implementing water conservation techniques stated in the goals & objectives, each land use can play a role in some way. Through linking those land uses, maximum benefits for each can be achieved. Once coming to these conclusions illustrated below, I was informed enough to create a master plan community concept for conserving water in Apache Junction.



Water Conservation

SITE CONTEXT

*An example of the future development of Apache Junction

Located:

On the corner of
N Idaho Road &
W Lost Dutchman Blvd

Bounded by San Marcos Drive

Total of 49.7 ACRES



EXISTING VEGETATION = EXISTING FLOW OF WATER



FLOW OF DESIGNATED LAND USES WITHIN SITE



Low Density <-- High Density <-- Institutional <-- Commercial
Residential Residential CCC's

Some important factors to picking this location were the existing bands of vegetation placed throughout the area. As picture in Map 1, the existing vegetation is evidence of existing flows of water. This is important to conserving water because they do not require any irrigation as it so they should be preserved. It is also important for no storm drain communities to be away from where the water is going. Map 2 shows the breakdown of land uses.



MASTER PLAN



RESIDENTIAL: From high density to low density, all respecting the natural flow of water and encouraged to practice rainwater harvesting for home irrigation

Example of a Commercial center that practices harvesting AC condensate.

RESIDENTIAL EXAMPLE



COMMUNITY CENTER EXAMPLE



MULTI-FAMILY RESIDENTIAL EXAMPLE



Recreational Tourism

Conceptual Design Plan By Zachary Pekala

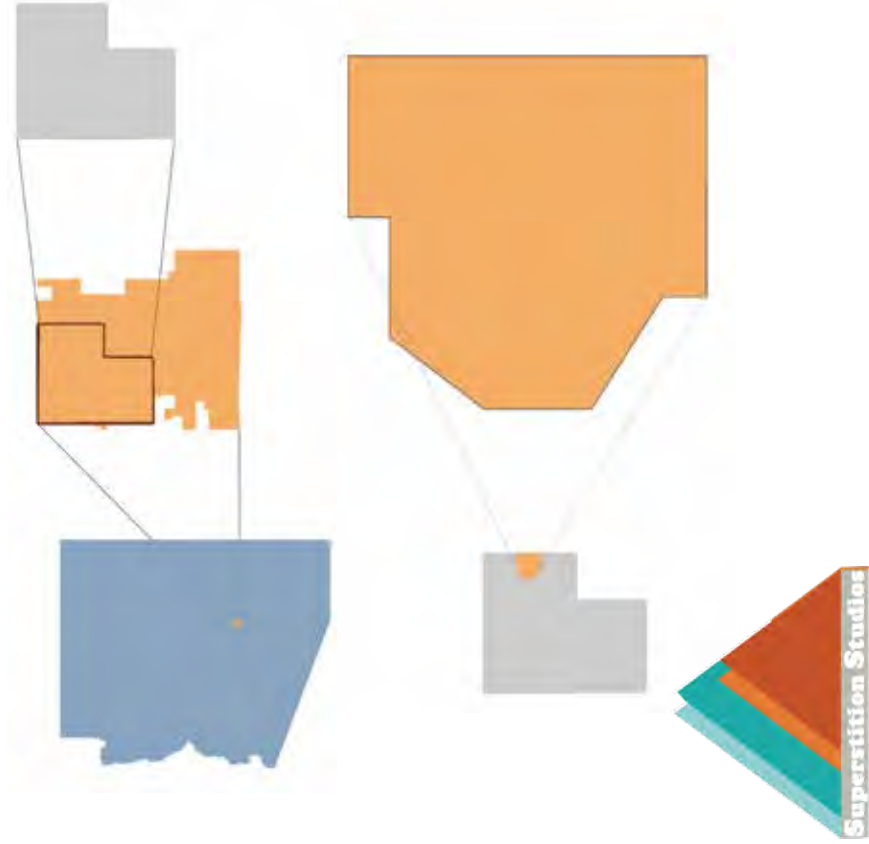
Vision Statement

Apache Junction contains magnificent views, acres of preserved open-space and miles of potential for greatness. Unfortunately, a large portion of the population is composed of seasonal residents during the winter months.

With that being said, a development of a large outdoor sports facility has been proposed. This complex has a wide range of elements which include a Spring time major league baseball field, hotel for players and guests, as well as a college for athletic trainers. The vision is to attract tourists and new full time residents to the city after the snow birds depart leading to a greater generated revenue for the city.

Site Context

Apache Junction, located on the Eastern side of Phoenix was split into sections and assigned to each group. Our group section is located on the North Western side of the city, and within this section we chose a site location. My site location is on the North Eastern part of the assigned section. This is just above the existing rodeo grounds on W. Lost Dutchman Blvd. and N. Tomahawk Rd.

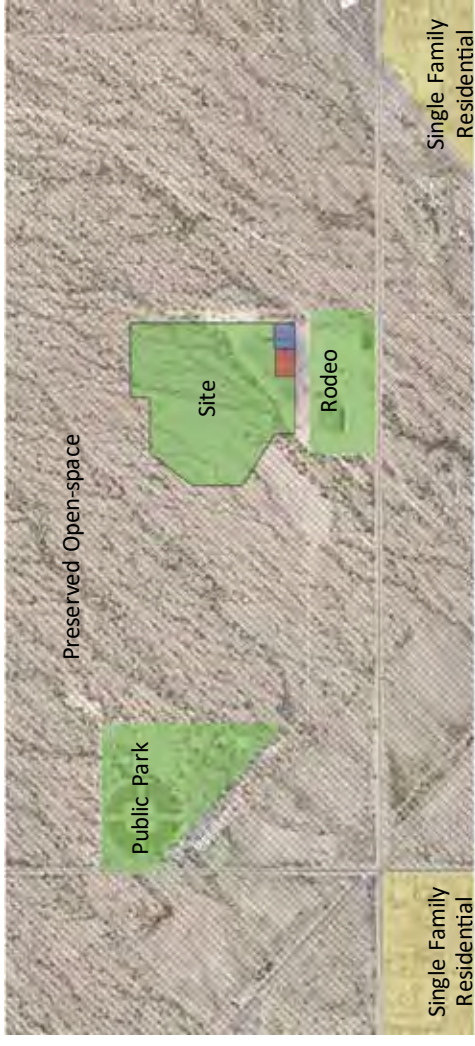
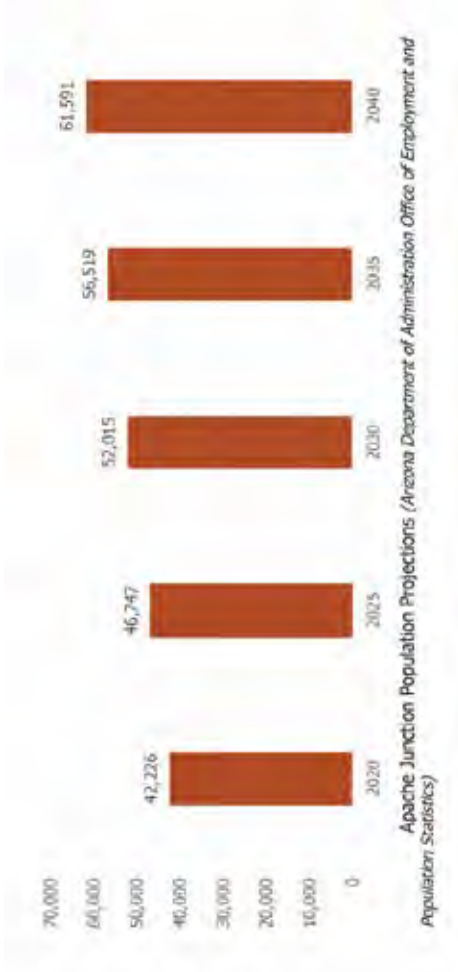


Recreational Tourism

Theme Reasoning

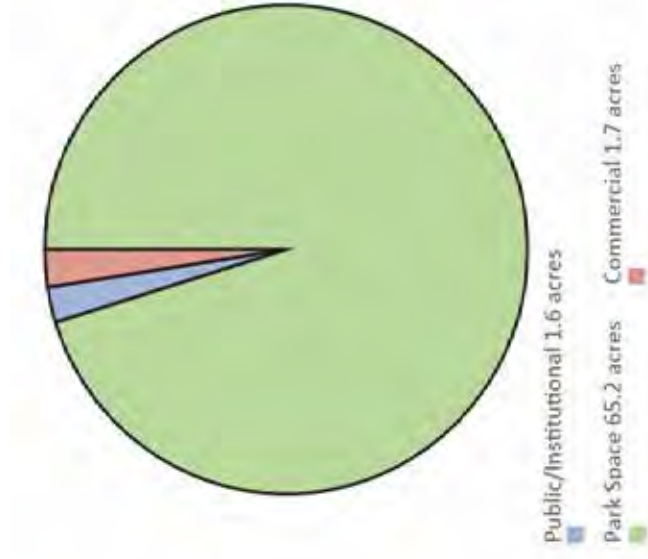
Currently there are 35,000 seasonal residents and 38,074 year round residents. The goal is to attract both more seasonal and year round residents to the city to increase both the population rate and the cities generated revenue.

The proposed site is located near an existing park and rodeo grounds. Eventually these three sites can tie into each other in the future. Also the site is located near single family housing for the use of nearby residents. Lastly, the open-space will be located on the perimeter to help users engage with the Sonoran landscape.



Site Breakdown

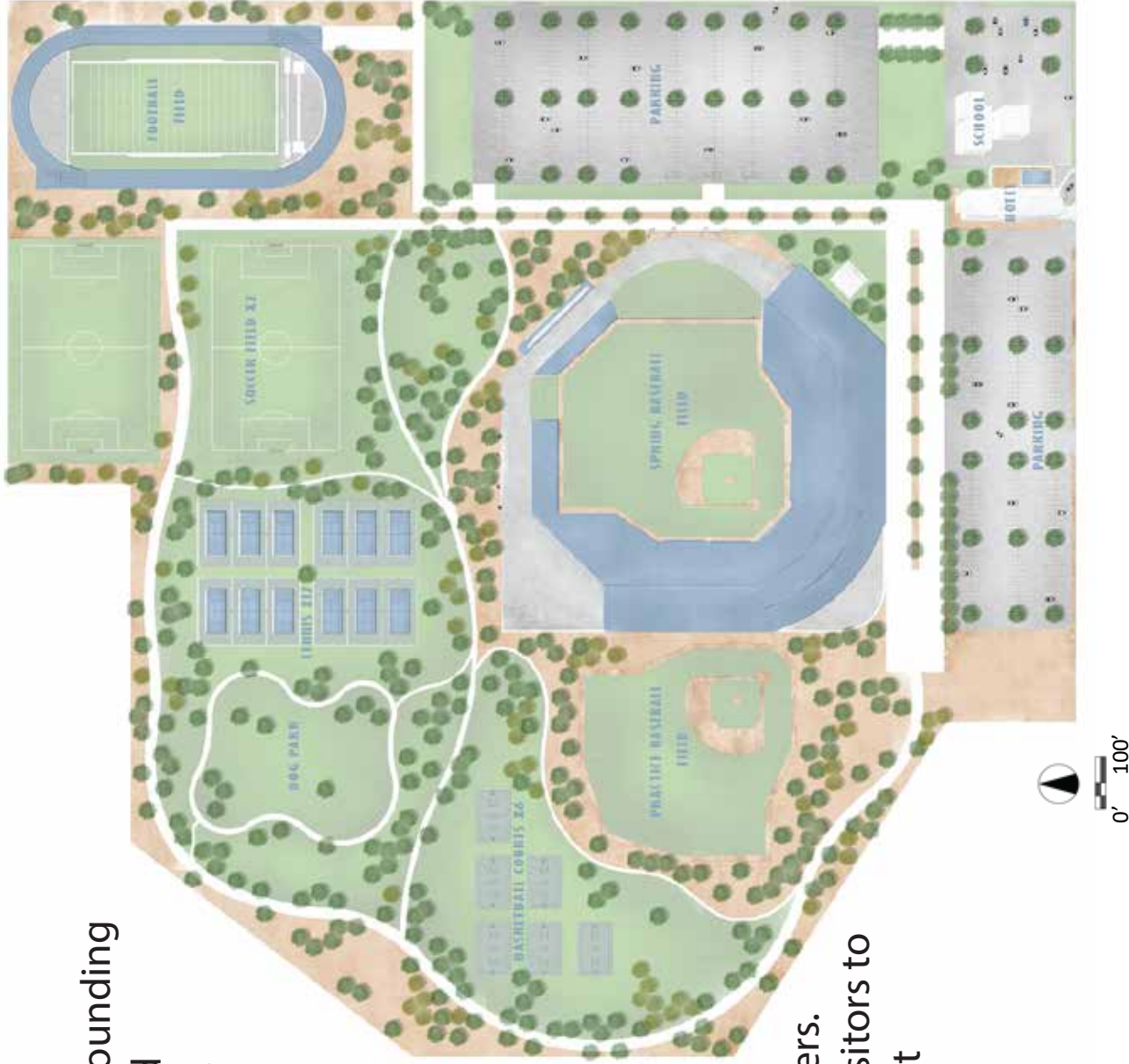
The site which contained 68.5 acres was broken down into three parts. A commercial zone, a public/ institutional zone and a park zone. These are represented in the following colors below and the pie chart indicated how large each portion is proposed.



Recreational Tourism

Conceptual Masterplan

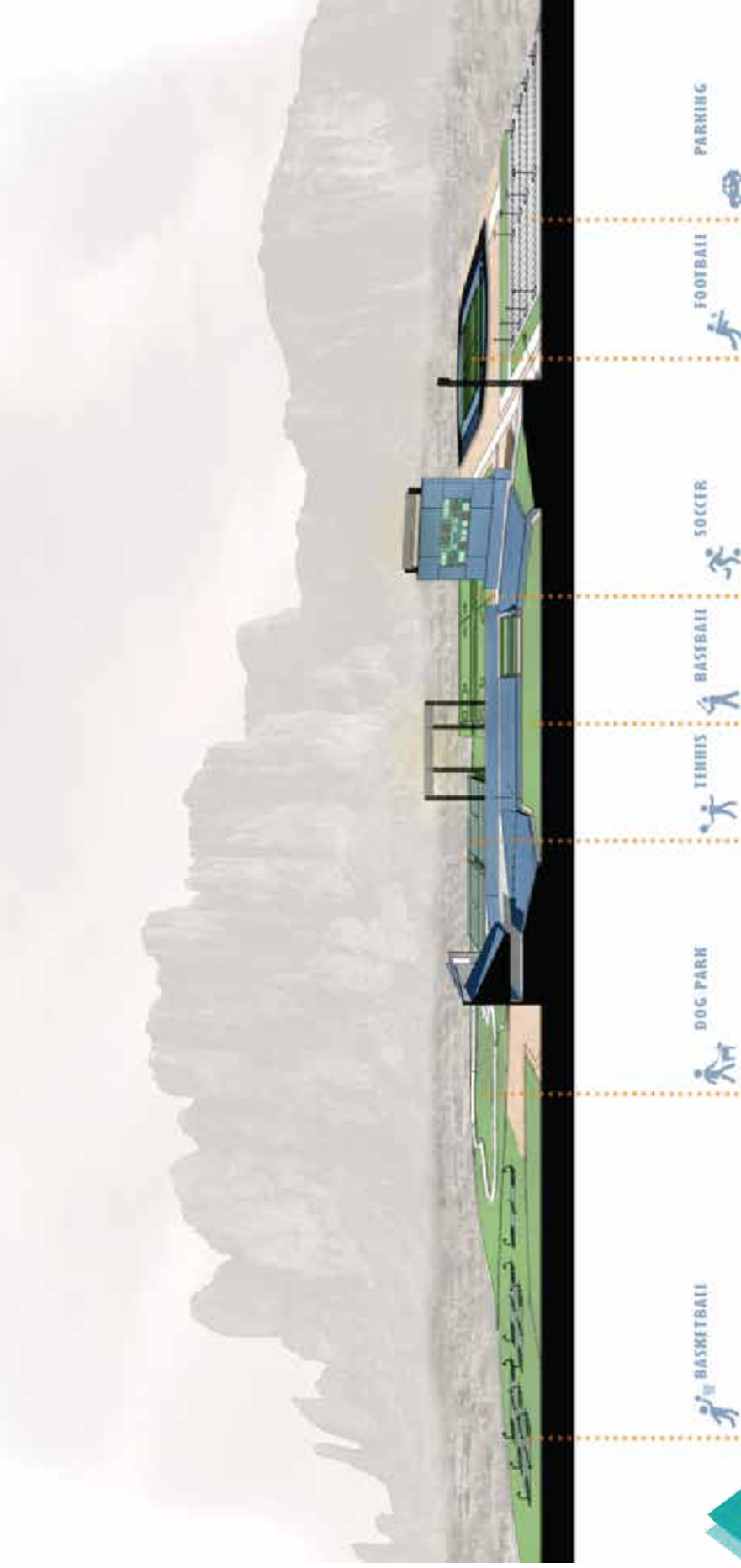
The existing land use map and the surrounding views helped determine the theme and location for my conceptual masterplan. Situated just above the existing rodeo grounds, this 68.5 acre site is mostly comprised of recreational open-space. The site contains a dog park, tennis courts, soccer fields, football field, spring training baseball stadium, practice baseball field, basketball courts, winding walkways for biking and natural/ enhanced planting. Also on the proposed site is the addition of a hotel for players and tourists, plus a major medical college for athletic trainers. The goal is to attract a wide range of visitors to the city and the proposed development through out the year.



Recreational Tourism

Conceptual Images

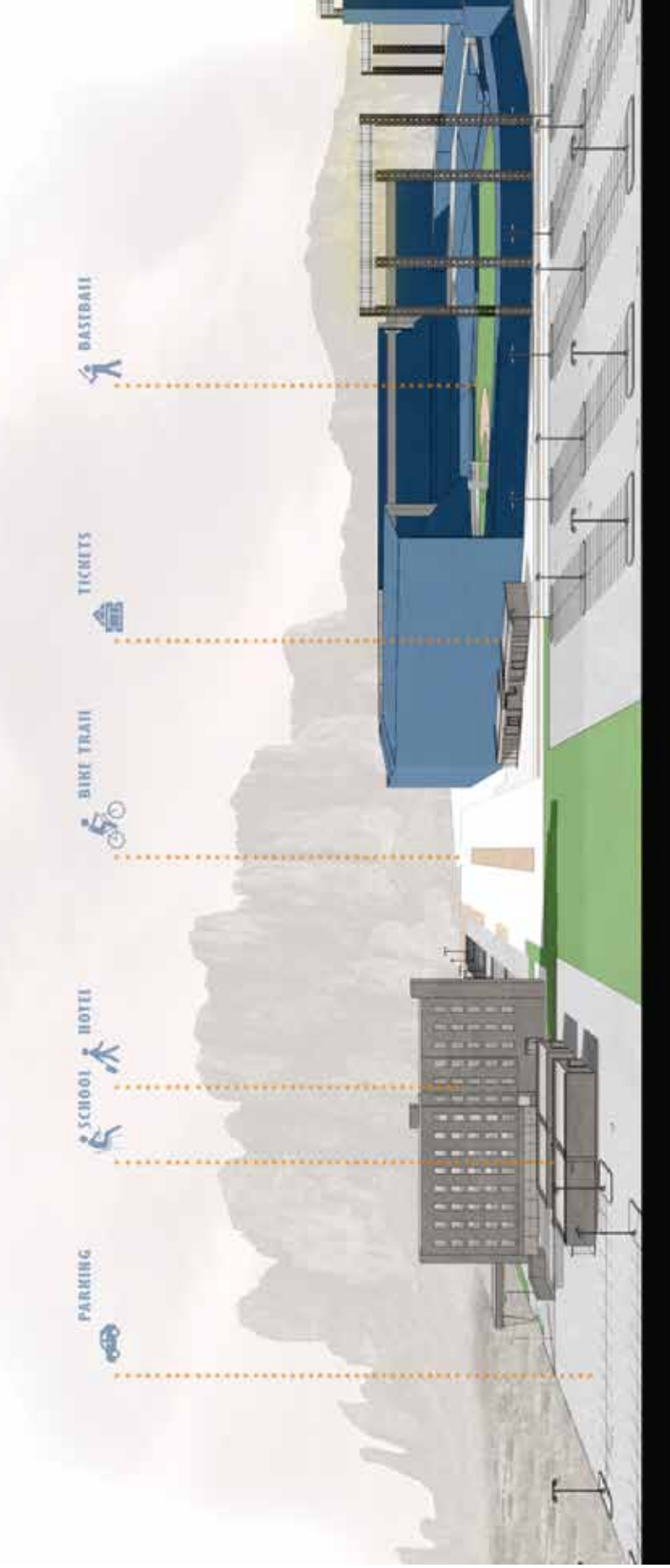
Section cuts give a new perspective of the proposed site. In the illustration below you will see the proposed basketball courts, dog park, tennis courts, baseball stadium, soccer fields, football field and parking. In the background is the Superstition Mountains and natural landscape.



Recreational Tourism

Conceptual Images

Section cuts give a new perspective of the proposed site. In the illustration below you will see the proposed parking, college, hotel, bike trails, ticket sales office, and again the stadium. In the background is the Superstition Mountains and natural landscape.



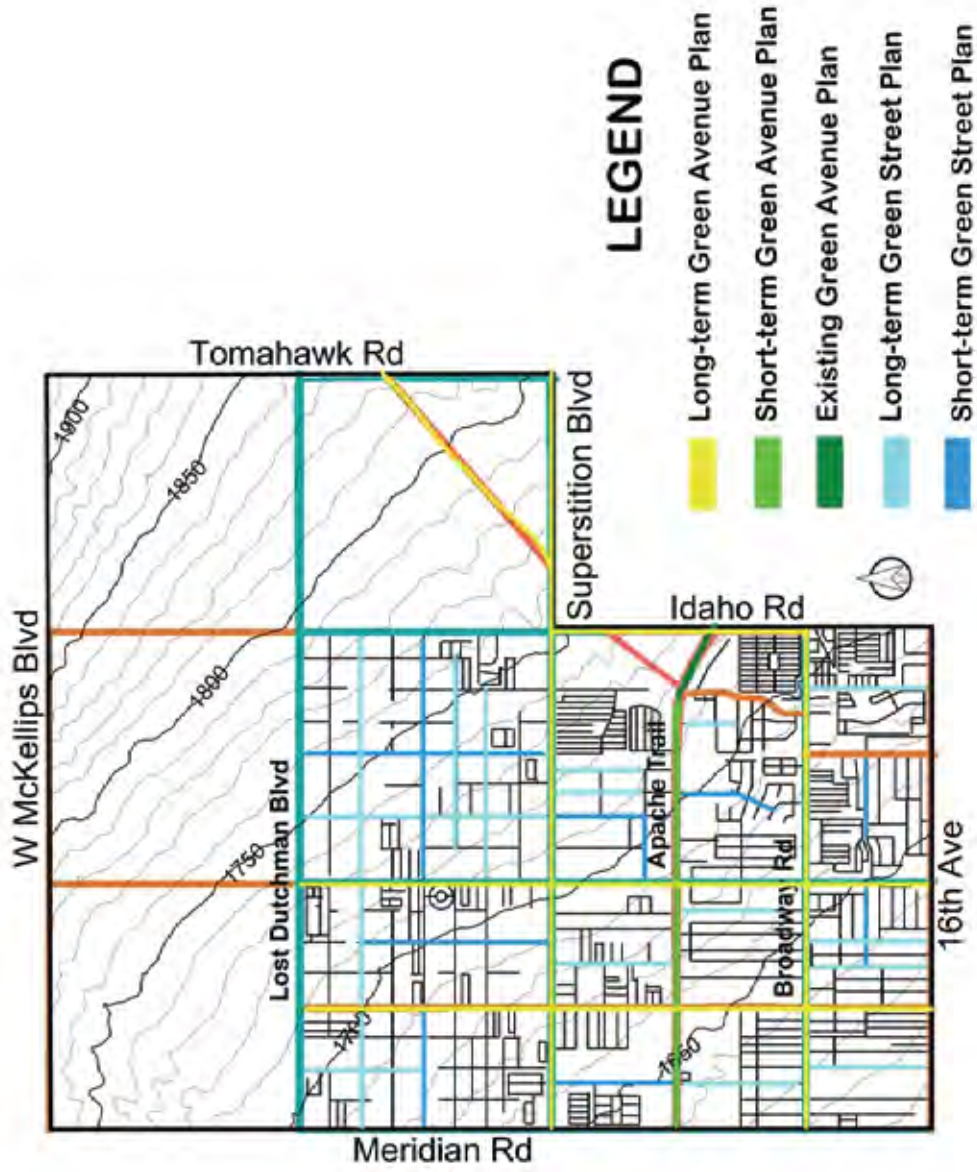
Circulation/Transportation & Green Infrastructure

Conceptual Design Plan By Sijie Chen

Green Street/ Avenue

The overall goal of the Green Street project is to make roadways a better place for bicyclists and pedestrians by providing improved facilities while reducing the speeds and volumes of vehicular traffic.

Master Plan



Green Street/ Avenue

Green Street



Before



Green Avenue

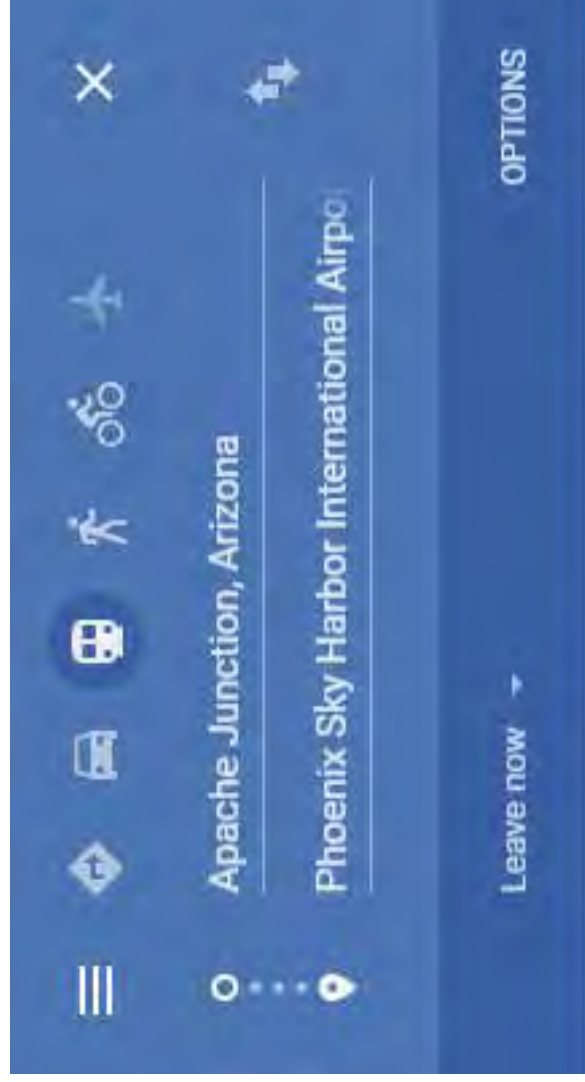


After



Public Transportation

Urban public transport is an important city infrastructure, people's production and social life are inseparable from urban public transport. Compared with the private transport, the urban public transport system has the advantages of large capacity, high efficiency, less energy consumption, less pollution and less occupied area.



Sorry, we could not calculate transit directions from "Apache Junction, Arizona" to "Phoenix Sky Harbor International Airport"



Apache Junction
Transportation
Center



Public Transportation

Before



After



Not just a transportation center



Public Transportation

Local Bus/Neighborhood Circulators

Local bus service hours and frequency vary by route, primarily serve residential.

Express Bus

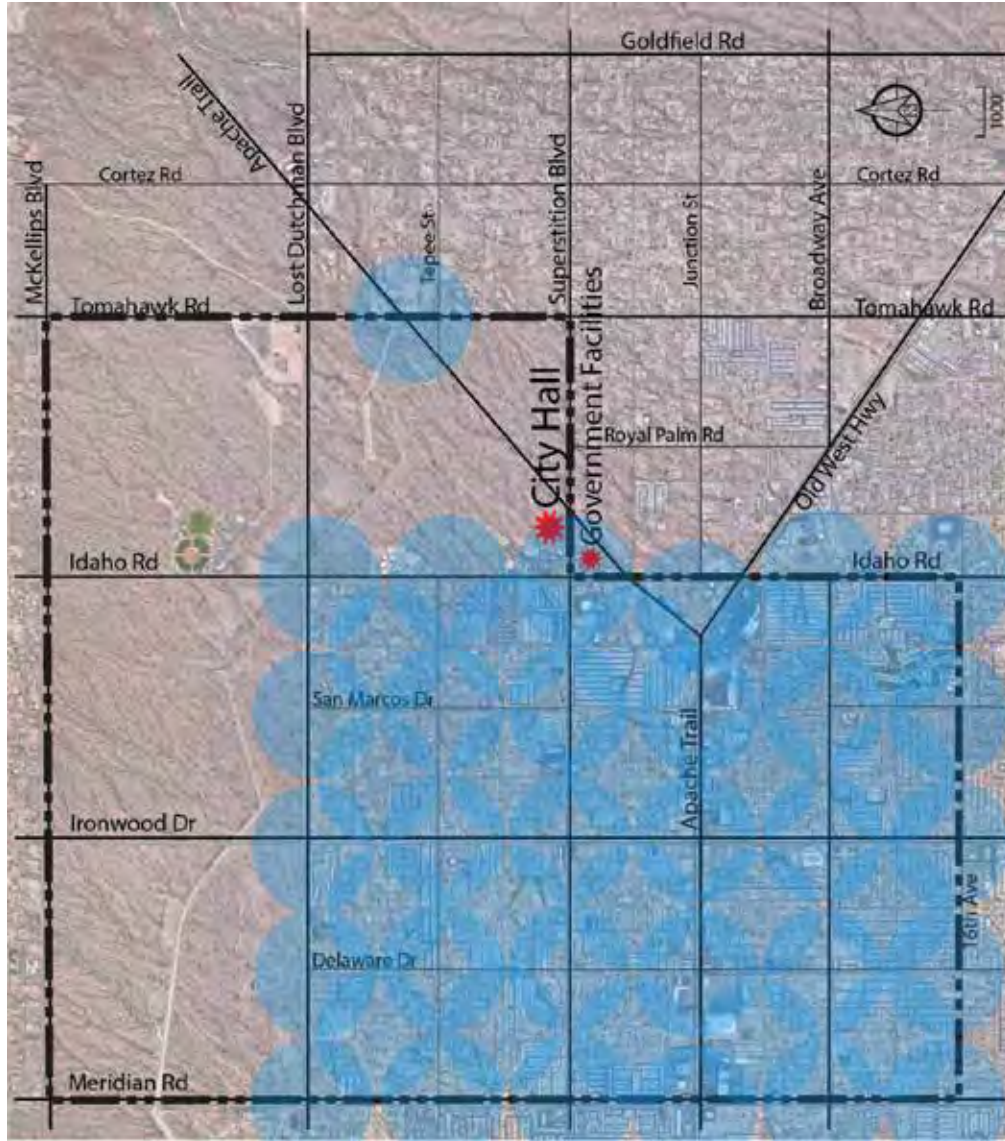
Link outside of town.



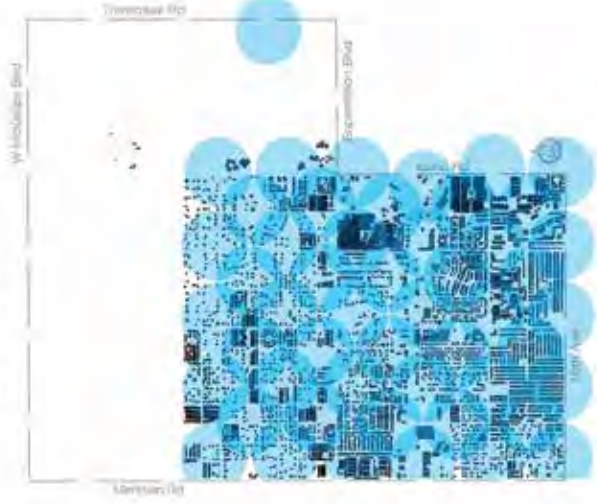
An average person's walking speed per 10 minutes is 1 km or 0.6 miles - per 10 minutes (1 kilometer or 0.6 miles- per ten minutes)

Public Transportation

Base Map X 10min walk



Building Footprint Map



Building Footprint X 10min walk

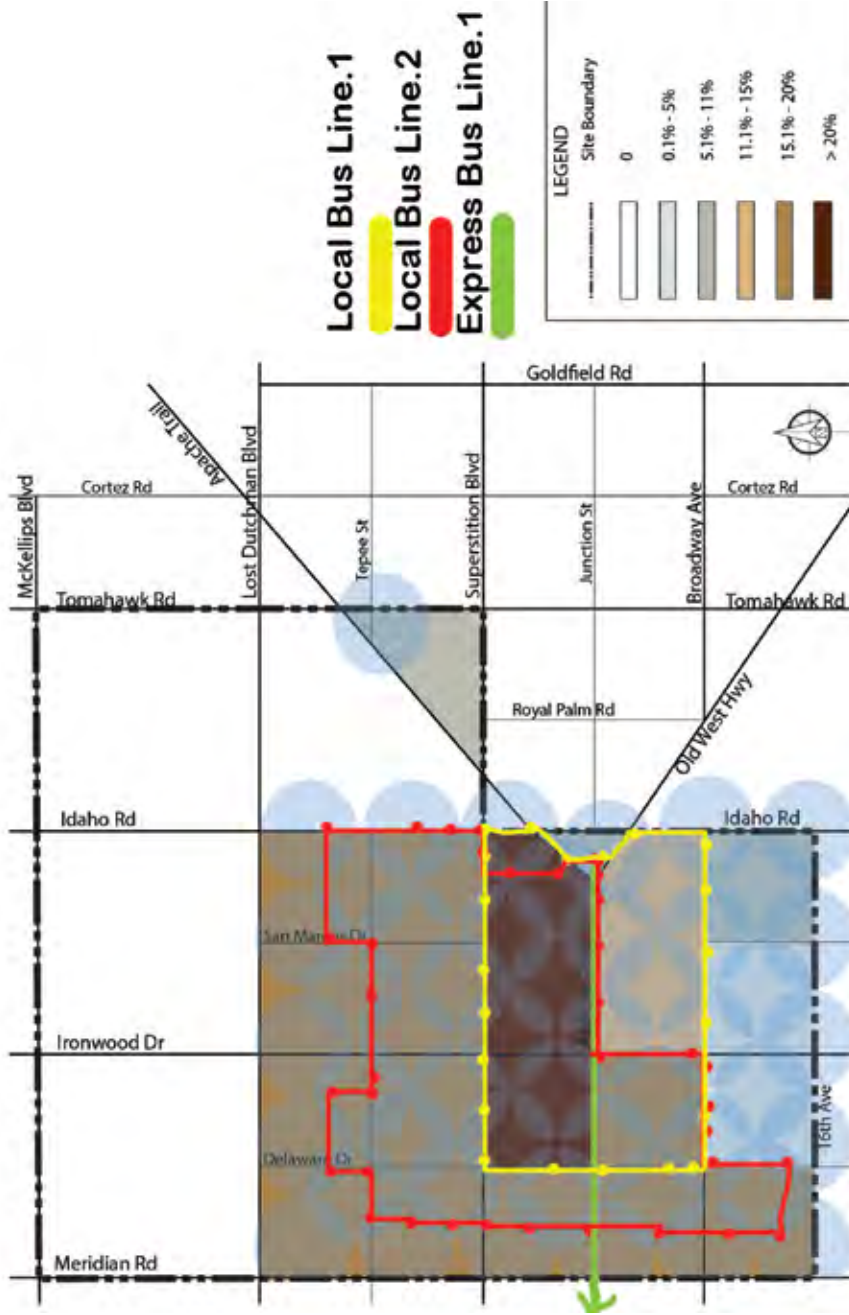


Circulation Map X 10min walk



Bus Line Plan(short-term)

BELOW POVERTY POPULATION



Source: Apache Junction Comprehensive Transportation Study, 2012

Eco-Tourism

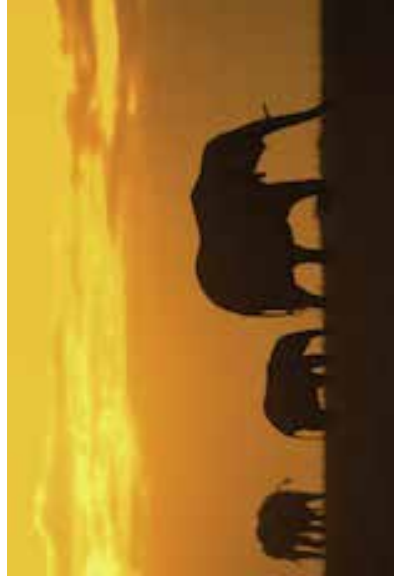
Conceptual Design Plan By Yifan Li

What is Eco-tourism?

The Definition:

Ecotourism is now defined as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (TIES, 2015). Education is meant to be inclusive of both staff and guests.

Conservation



Nature

Communities



People

Interpretation



Play & Learn

Theme

“Apache Junction” is not only a name of the land, it represented the amazing history and the loveable people live in this place. By creating a system of Eco-tourism, my design will dig the inner beauty of the Apache Junction. The historical Storm water management will become a tourist attraction. And the existing empty space will be filled with some wildlife habitats and parks. More people will come to settle here and their life quality will be greatly improved. The Eco-tourism will also increase the employment opportunities and citizen engagement. Finally, it will provide wonderful experiences for both visitors and hosts.

Goals

Create habitats & parks for native wildlife

Refine the canal system and surrounding trails

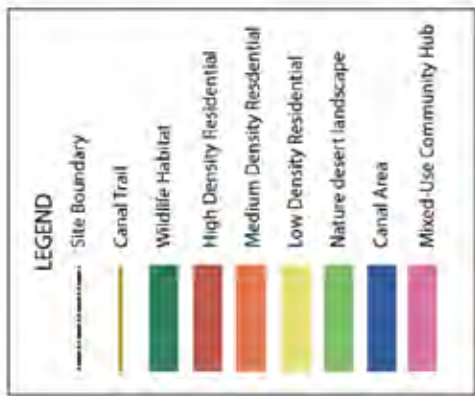
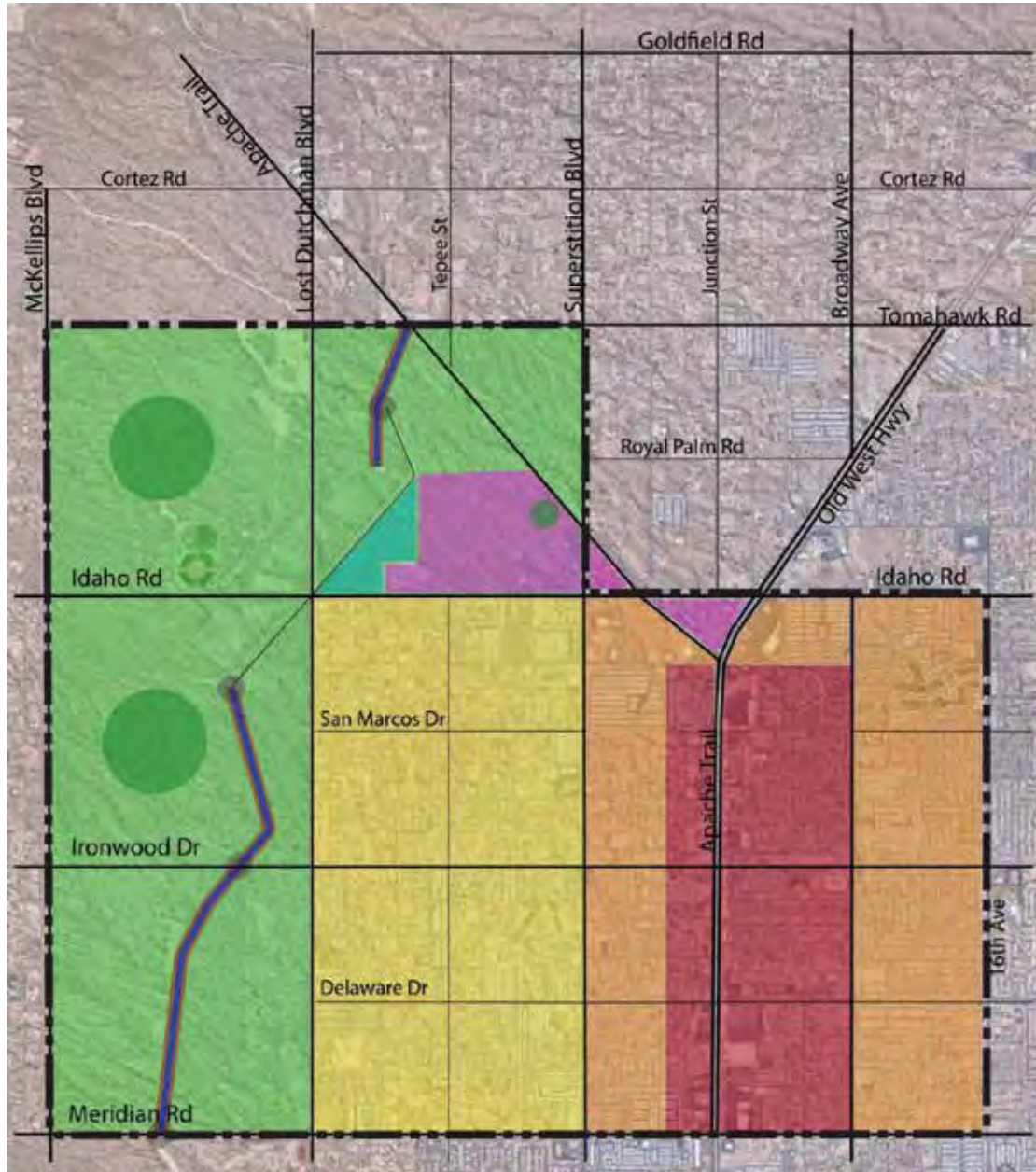
Build environmental & cultural awareness & respect

Play & Learn

Increase the landscape area and walkability

Minimize physical, social, behavioral & psychological impacts

Land Use Development Master Plan

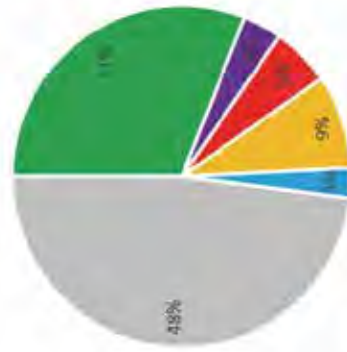


Community Center Master Plan



Total area of site is 44.51 acres.
Existing Contour differences is less than 5 feet.
Most area are open space with a few plants.





- Landscape area 13.8 acres
- Public/Institutional 1.65 acres
- Commercial 2.49 acres
- Single Family Housing 3.96 acres
- Water area 1.26 acres
- Other Usage 21.35 acres



Scientific Name	Common Name	Size	Comments
Simmondsia chinensis	Jojoba	6 to 12 feet height & width	Shrubs, Full sun, well-drained soil
Parkinsonia microphylla	Yellow Paloverde	20 feet height & width	Green truck tree
Parkinsonia florida	Blue pola verde	30 feet height & width	Green truck tree
Bauhinia purpurea	Purple orchid	30 to 35 feet height & width	Tree, Full sun, well-drained soil
Prosopis glandulosa	Honey mesquite	15 to 25 feet height & width	Tree, Full sun, well-drained soil
Phoradendron californicum	California mesquite mistletoe	3 to 5 feet height & width	Shrubs, Full sun, well-drained soil
Tipuana tipu	Tipu	35 feet height & width	Tree, regular water



The quantity of plants will be decided later.

- 300+ Parking space for Public
- 50+ Single Family Houses for 200+ people
- Landscape area will increase at least 20%
- 2 new tourist attractions.
- 200+ jobs will be created.
- 10+ restaurants & shops will be opened.



Community Center

A building that providing many services and resources, such as a food pantry, a clothing bank for community members. It also works as a homeless shelter and a tourist center.

The image is the Henderson Community Center in California.



Science Museum

A place opens for both community members and tourists, which exhibits the history of Apache Junction, local plants and wildlife habitats and Storm water management system.

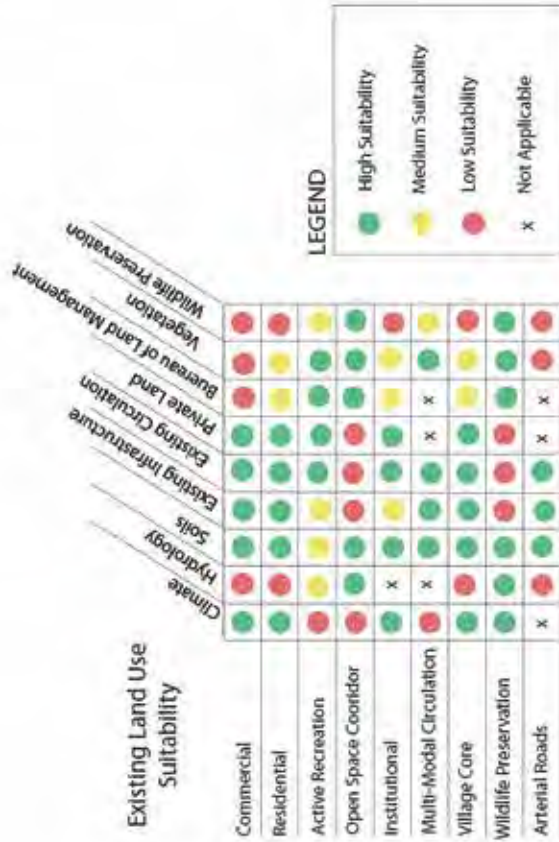
A building like the Science Museum of Minnesota is recommended.



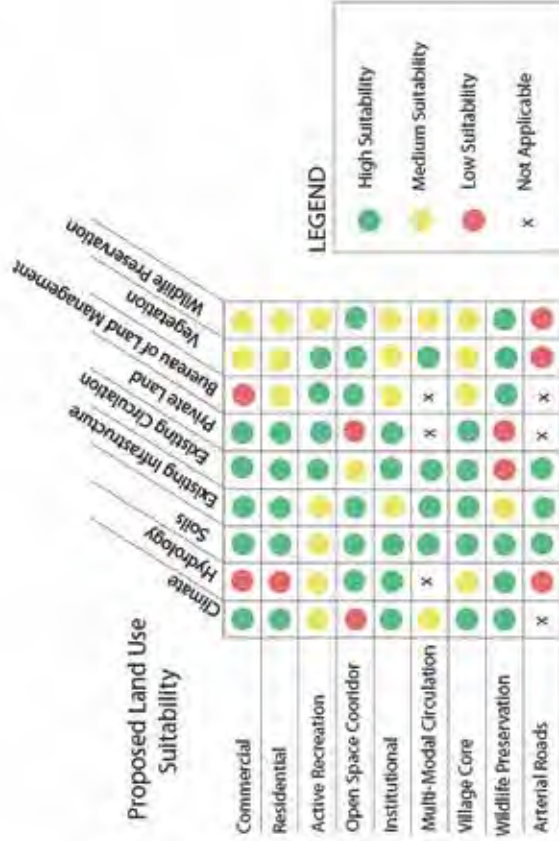
Mini Canal System

This tiny canal with recycling water allows kids to play with the water and get a better understanding of how the Storm water management system works.

Before



After

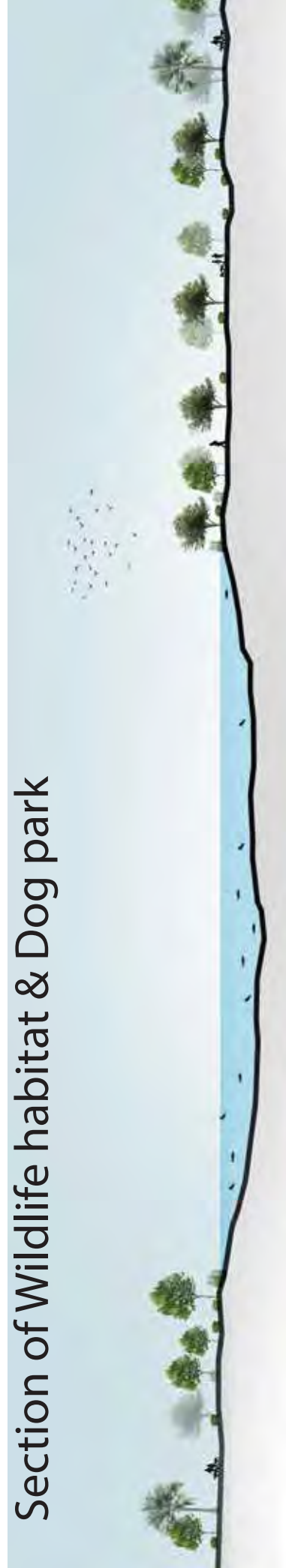


Section of Commercial Area & Community Center



2-94

Section of Wildlife habitat & Dog park



Works Cited

- <https://www.usclimatedata.com/climate/apache-junction/arizona/united-states/usaz0005>
- <https://www.flickr.com/photos/michaelpwilson/16188871363>
- <http://www.arizona-leisure.com/apache-junction-map.html>
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- <http://suncalc.net/#/33.415,-111.5496,12/2017.10.17/20:40>
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- <http://www.srpnet.com/about/servicearea.aspx>
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- https://myasucourses.asu.edu/bbcswbdev/pid-16862184-dt-content-rid-110203981_1/courses/2017Fall-T-LDE361-72294-73059/Proj%203%20Resource-AJ%20RFP%281%29.pdf
- https://www.google.com/destination/map/topsights?q=apache+junction+landmarks&client=safari&rls=en&site=search&output=search&dest_mid=/m/0qpgy&sa=X&ved=0ahUKewjrmLnKvc7WAhUM0mMKHWH3DE4Q6tEBCC4oBTAAsdest_mid=/m/0qpgy&trifp=t%3De
- <https://www.ajcity.net/193/Special-Events>

Revisioning Downtown

APACHE JUNCTION, AZ



SPUR
LANDSCAPE
ARCHITECTS



Prepared by SPUR Landscape Architects

Ren Andres, Sarah Gaughan, Mark Johnson, Mike Landon

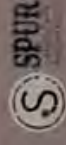
LDE 590: Landscape Architecture Studio I

Kenneth Brooks, Kevin Kellogg

The Design School | Herberger Institute for Design and the Arts
Arizona State University

Fall 2017

This book is a compilation of the work done by Master of Landscape Architecture students Ren Andres, Sarah Gaughan, Mark Johnson, and Mike Landon of The Design School at ASU for their Fall 2017 studio design course. This course was done in collaboration with the Project Cities initiative and focused on providing knowledge capital for the City of Apache Junction to improve their community and quality of life. The following includes the outcomes of in-depth research and analysis done by the group as well as individual design responses in accordance with a chosen theme.



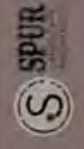




MARK JOHNSON | SARAH GAUGHAN | MIKE LANDON | REN ANDRES

We are SPUR Landscape Architects.

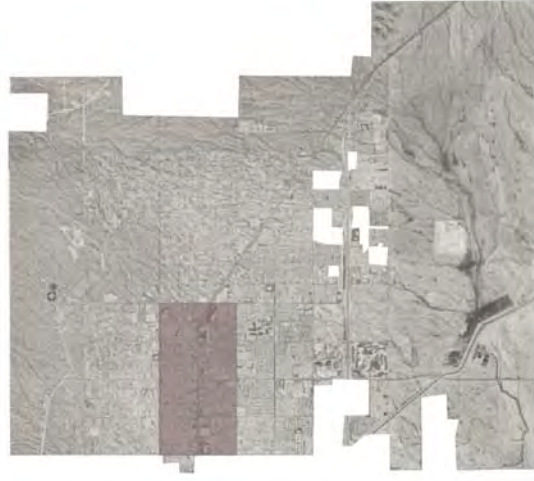
Our firm is named after the device on a cowboy's boot used to urge a horse forward. We were founded with the mission to spur positive community development through sound research, thoughtful planning, as well as client and site specific design. Our vision is to increase connectivity between a community's people and to bridge the gap between the built and natural environment.



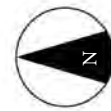
Location

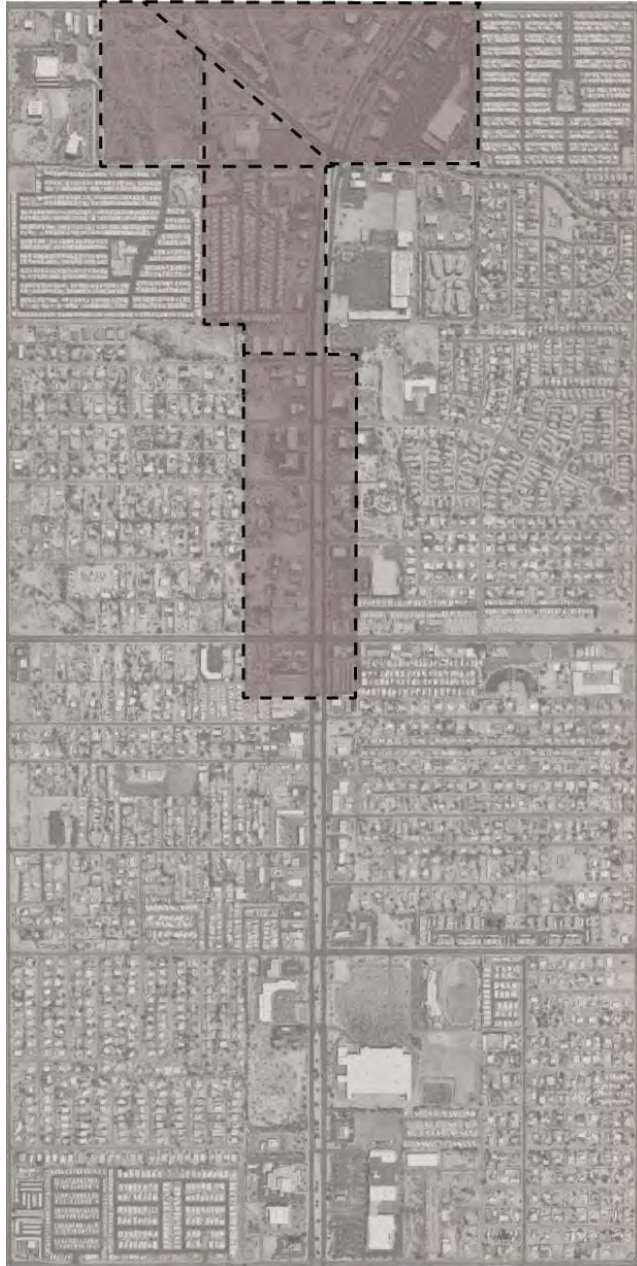


Greater Phoenix Metropolitan Area



City of Apache Junction



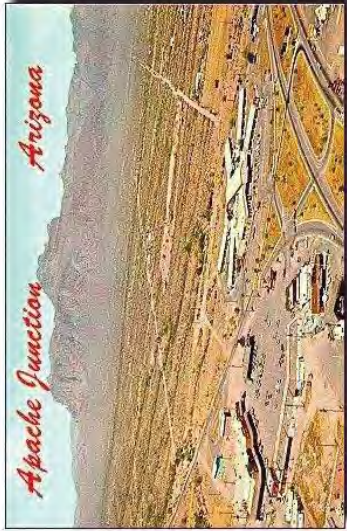


0.5 miles

Selected Downtown Core

Located in the eastern Phoenix valley, the City of Apache Junction sits at the foothills of the Superstition Mountains. Within city limits, a target area was designated as the "downtown corridor" for research purposes. As the research and analysis progressed, a more specific "downtown core" was chosen and divided up as the area of focus for each group member's outcome production.



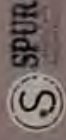


Images: Westward Ho Time Capsule
Goldfield Ghost Town

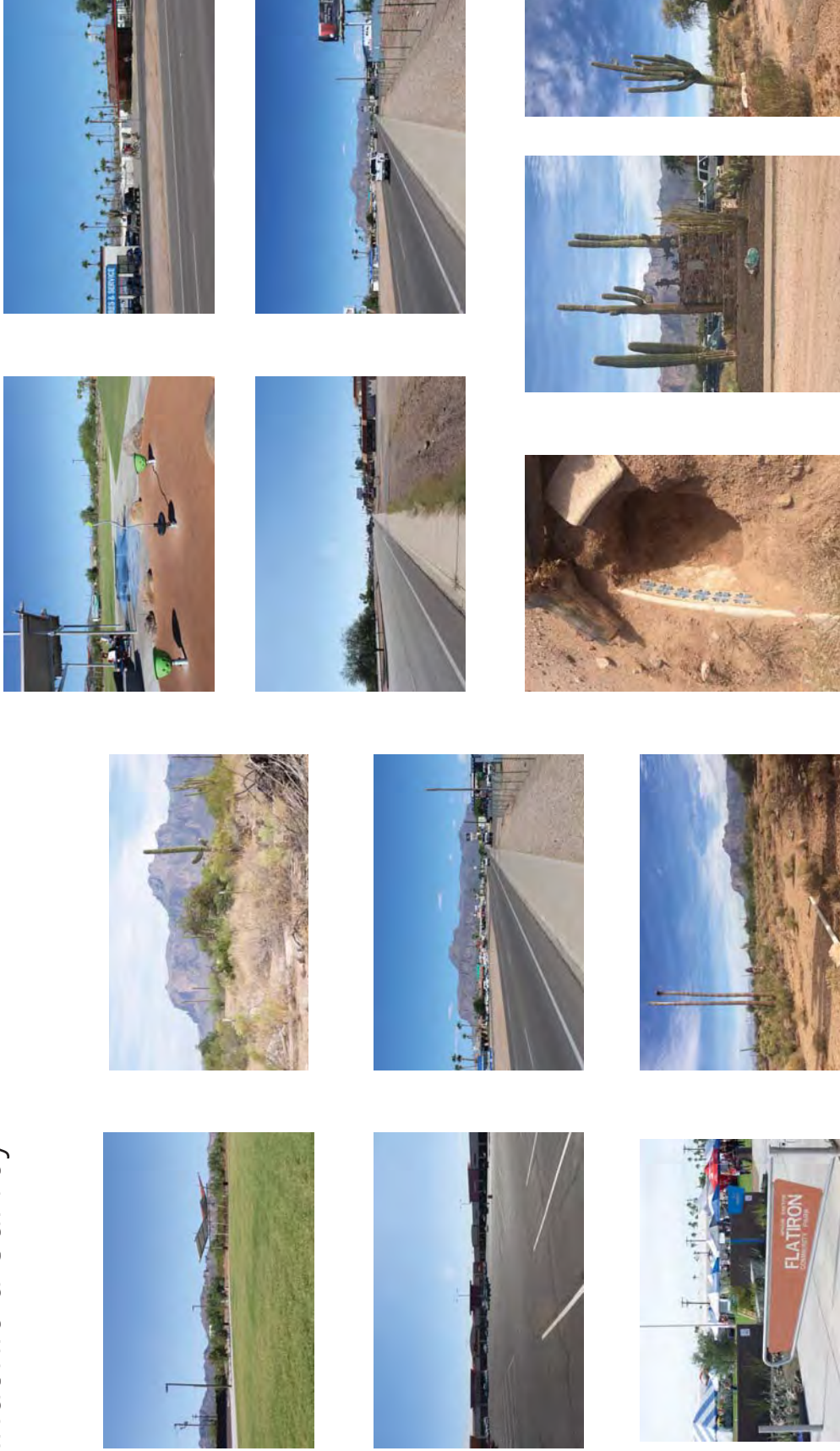
History

Apache Junction has a rich western history stemming from mining in the late 19th century myths surrounding the Superstition Mountains. The city was incorporated on November 24, 1978. It drew attention in the 1960's, and became the location for many western movies starring Glenn Ford, Elvis Presley, John Wayne, and Tom Mix. It was during this era Apache Junction became a sought after destination by many, and visitors stayed at the acclaimed Superstition Inn. Now, Apache Junction is known as the "Gateway to the Superstitions," and draws individuals seeking adventure and proximity to the untamed desert.

Source: "Apache Junction History", 2017. Apache Junction Public Library. <http://ajpl.org>



Windshield Survey



Images: Ren Andres
Mike Landon

Research Methods

SPUR conducted extensive research, including an in-depth literature review, data analysis, as well as field research. The team visited Apache Junction multiple times, attending a Town Hall meeting, exploring the city's walkability along Apache Trail, attending the Festival of the Superstitions, and conversing with city staff, business owners and citizens.

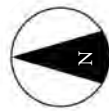


Physical Features

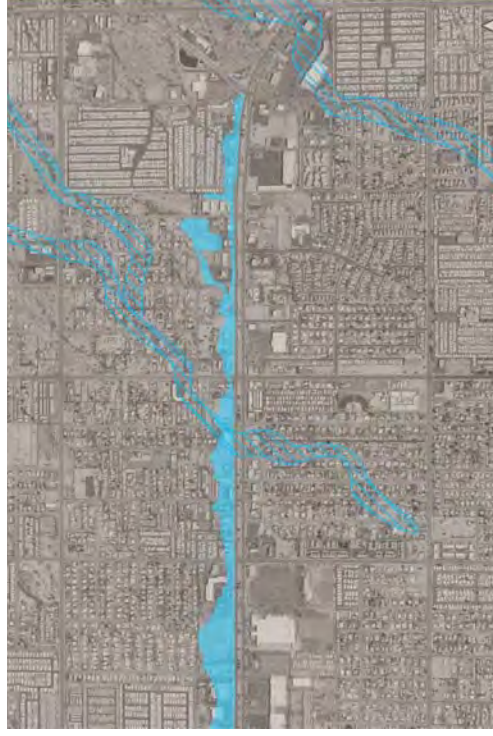
Wind Patterns



Winds enter Apache Junction from the northeast and southeast regions depending on the time of year. The winds bearing from the northeast range between 75-54 degrees on average, while those from the north range between 84-90 degrees. (National Weather Service)

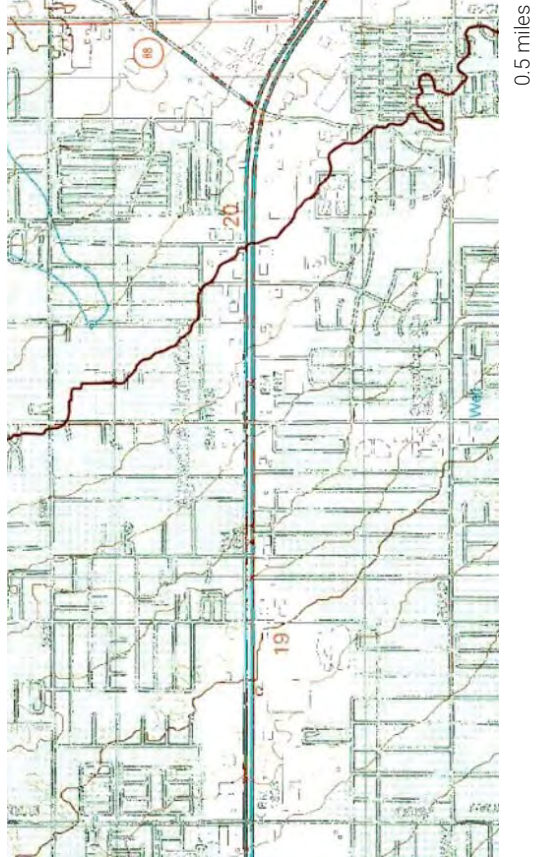


Flood Zone and Washes



Just north of Apache Trail is a part of a 100 year floodplain, causing commercial buildings to conform to a large setback. However they are still at risk of flooding because of poor drainage infrastructure.

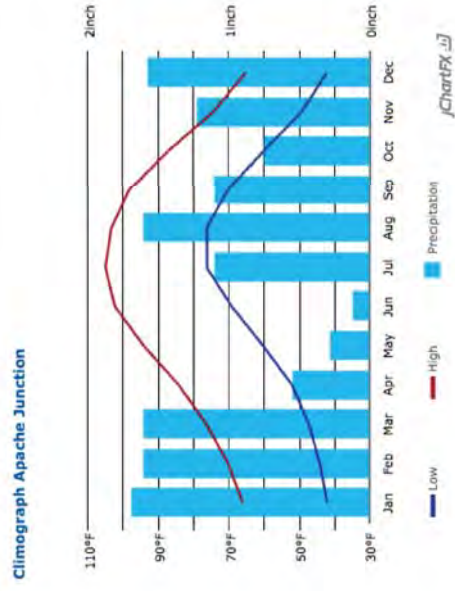
Topography



Apache Junction is located at the base of the Superstition mountains, but the change in grade in this area is approximately 1000 ft over the course of 2 miles, making this a relatively flat site with little topographic obstructions to development.

Source: USGS

Average Climate



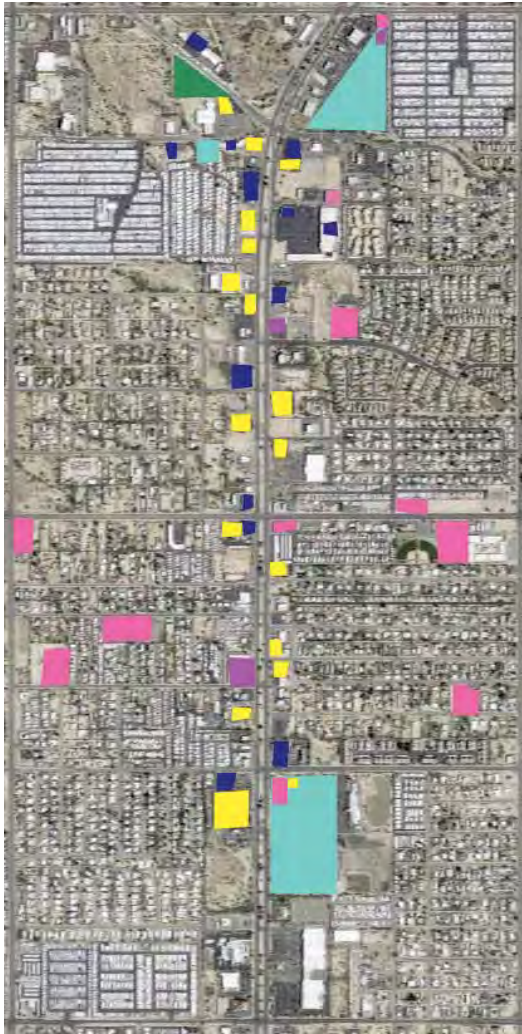
The above graph gives information about Apache Junction's high, low, and average rainfall as well as temperature.

Source: U.S. Climate Data



Cultural Features

Landmarks

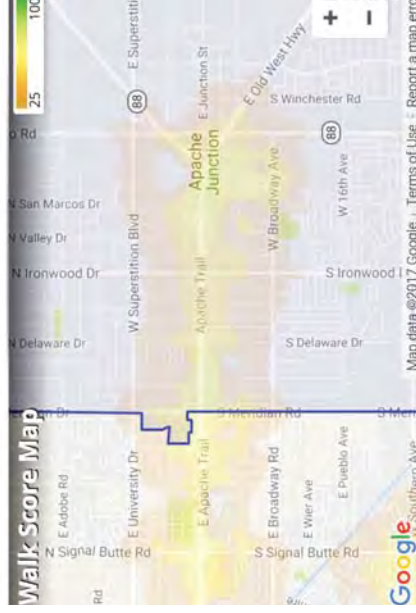


The downtown corridor along Apache Trail consists of 10 Churches, 1 Community Park, 3 Grocery Stores, 2 Schools, 12 Restaurants, and 17 Automotive related businesses.



Walk Score

Walk Score **16**
Almost all errands require a car.



The overall walk score of Apache Junction is 16 out of 100, very low ranking in comparison to other municipalities. As seen here, the walkscore does increase towards the downtown corridor, but it is still relatively low.

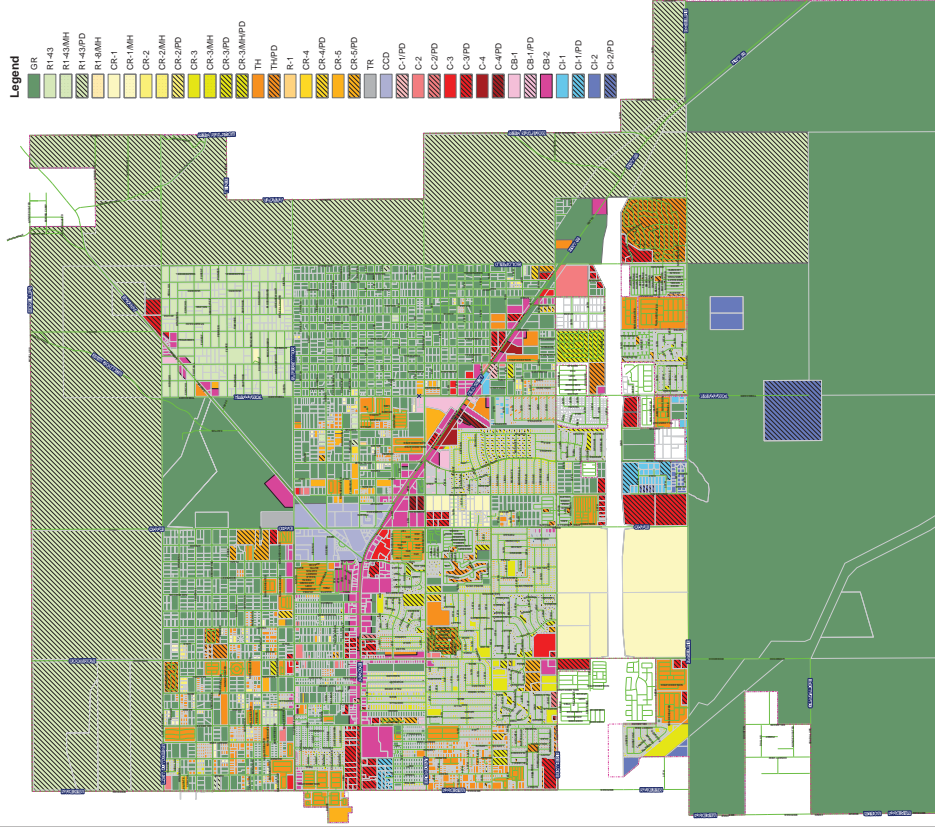
Source: WalkScore

Figure Ground



0.5 miles

Zoning



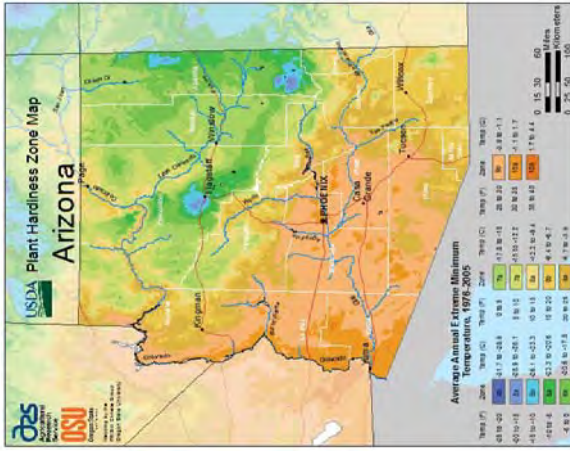
- Legend**
- OR
 - R1-43
 - R1-43MH
 - R1-43RPD
 - R1-43MH
 - CR-1
 - CR-1MH
 - CR-2
 - CR-2MH
 - CR-3
 - CR-3MH
 - CR-3RPD
 - CR-3AMHPD
 - TH
 - THPD
 - R-1
 - CR-4
 - CR-4RPD
 - CR-5
 - CR-5RPD
 - TR
 - CCD
 - C-1RPD
 - C-2
 - C-2RPD
 - C-3
 - C-3RPD
 - C-4
 - C-4RPD
 - CB-1
 - CB-1RPD
 - CB-2
 - C-1
 - C-1RPD
 - C-2
 - C-2RPD

Source: City of Apache Junction



Biological Features

Hardiness Zone



Apache Junctions, like the rest of the greater Phoenix valley, exists within plant hardiness zone 9b, which has relatively high minimum temperatures. This combined with other local factors determines the type of vegetation that thrives in this area.

Source: USDA

Vegetation

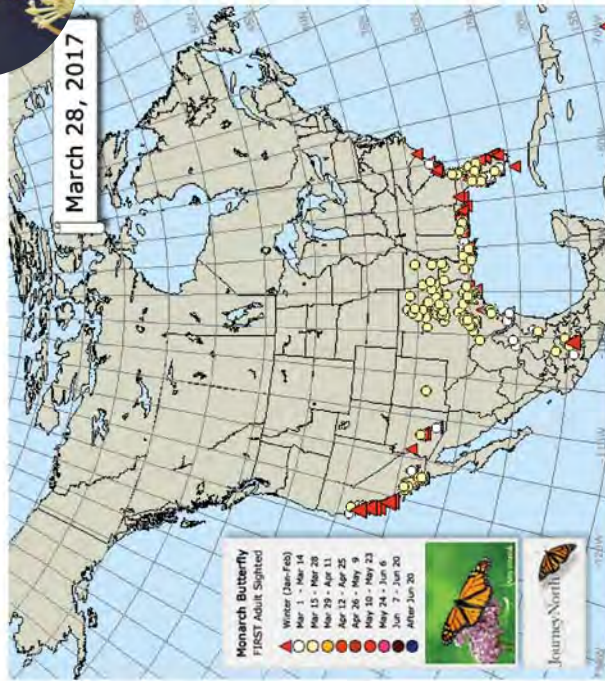


In response to this hardiness zone, some of the vegetation that grows in the area includes the mesquite tree, ironwood tree, ocotillo, hedgehog cactus, teddy bear cholla, golden poppy, buckhorn cholla, cane cholla, and barrel cactus. This is not a comprehensive list of local vegetation, but rather a sample of the most commonly sighted species.

Images: superstitionmountainhikes.com



Monarch Butterfly Migration



Birds



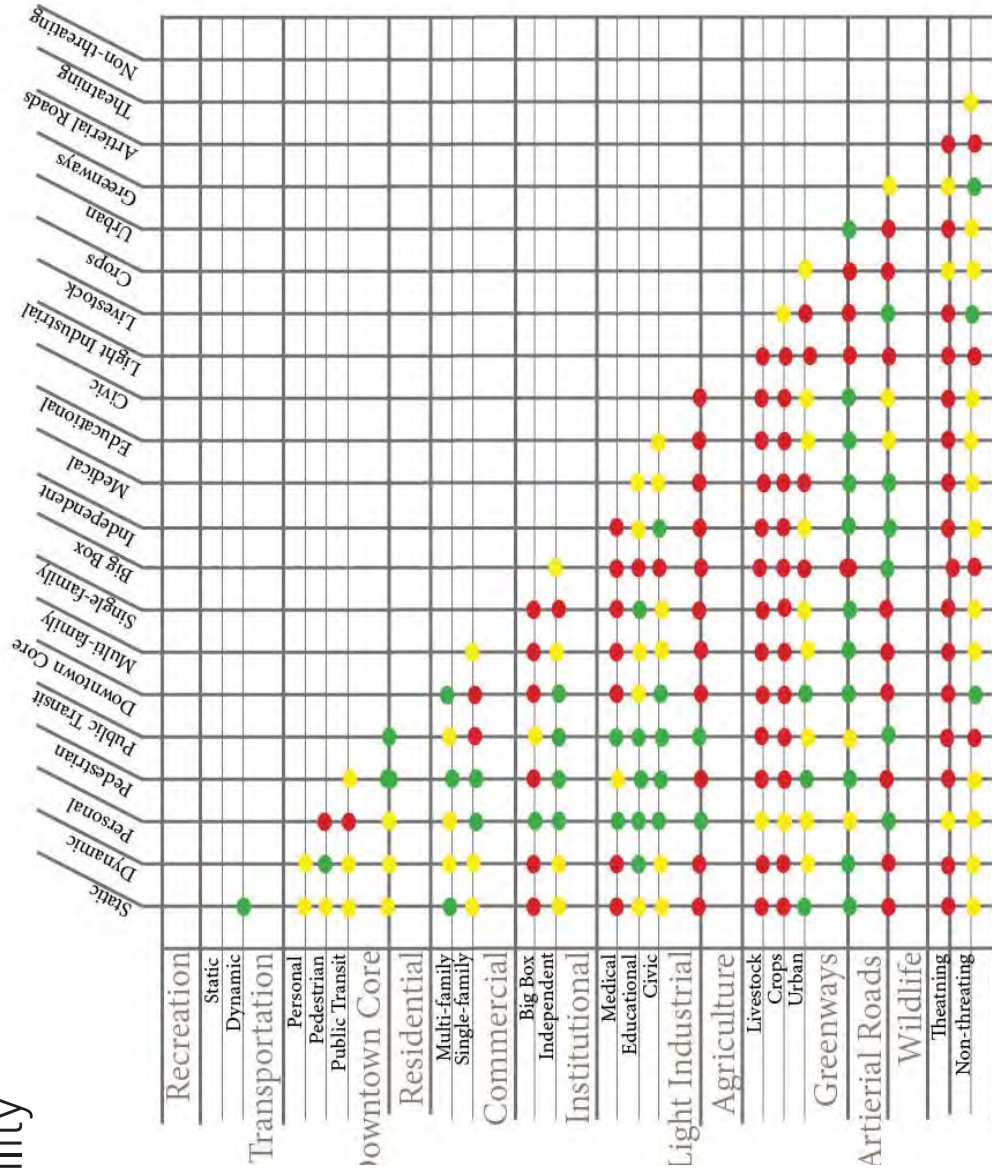
The urbanization of the downtown region in Apache Junction dentures most animals from entering the area. However habitats can be integrated to attract local, non-threatening species including Albert Towhee, Gilded Flicker, Gila Woodpecker and Arizona Bell Vireo, which are endangered species that breed in the area according to the National Fish and Wildlife department. Source: National Fish and Wildlife Department Image: Audubon Society

The monarch butterfly is also known to migrate and spend winters within the Sonoran Desert.

Source: lerner.org
Image: Mike Landon

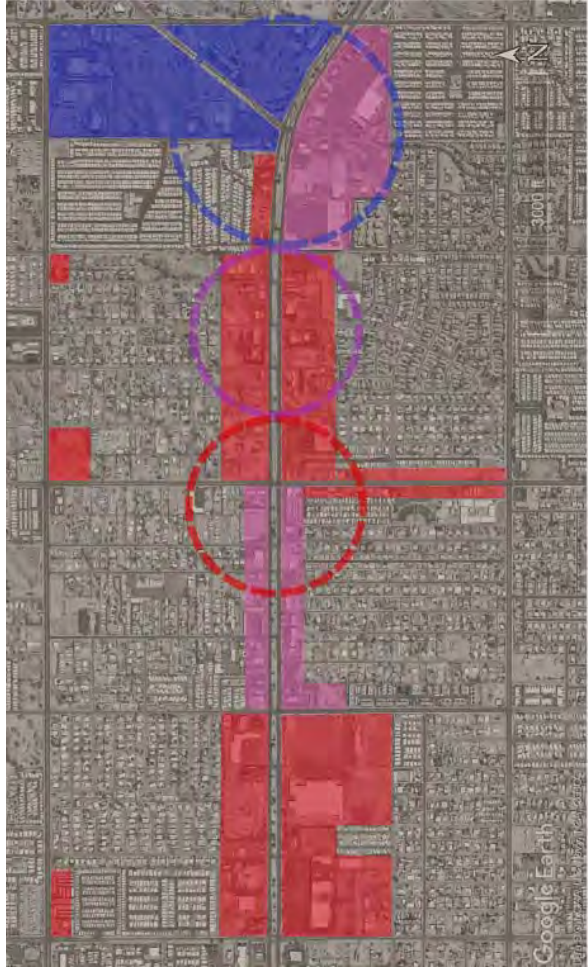


Land Use Compatibility & Suitability



Zoning

Business Zoning

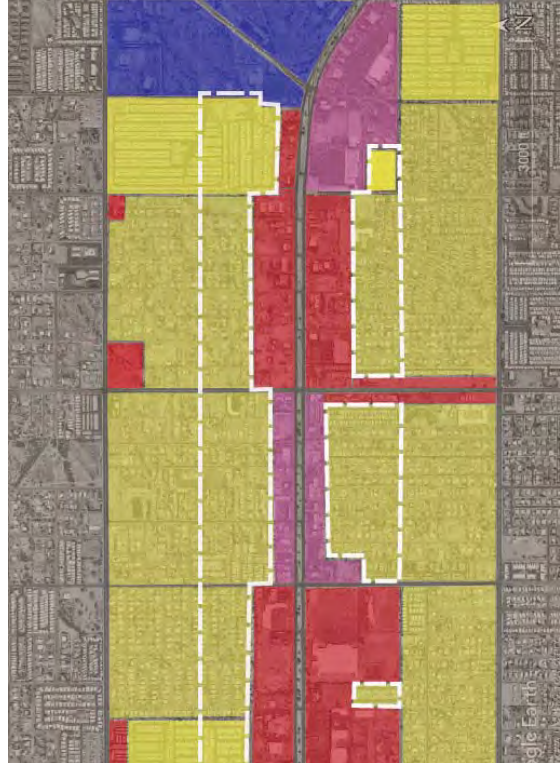


Apache Junction has 3 zones within the downtown corridor. General Commercial zoned area is intended for commercial uses that serve a local and regional market. Old West Commercial areas are intended for commercial uses located within the Downtown Transition Area. Finally, City Center zoned areas are intended for commercial, recreational and/

0.5 miles

or multi-family residential land uses located within the Core Downtown Area. Current zoning structure of downtown Apache Junction is not cohesively organized. Since each of these zones has its own specific guidelines for landscaping, signage, and setbacks, it would be beneficial to organize these zone cohesively around the downtown core.

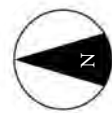
Housing Density



Currently the downtown corridor is made up almost exclusively of Medium & Medium/High Density Single Family Detached Residential. Only a small portion of the downtown corridor (approximately 6 acres) is made up of High Density Multiple Family Residential.

0.5 miles

An opportunity exists for Apache Junction to zone a larger portion of the downtown residential corridor as High Density Multiple Family Residential. This would allow more Apache Junction residents to live within a walkable distance of the downtown area.



Analysis

Circulation

Downtown Circulation



While visiting Apache Junction, our team walked through the downtown area to gauge it's level of walkability. One of the first things that became apparent was the amount of space Apache Trail (6 lanes) takes up cutting through the downtown area. Additionally, high speeds of 45 - 50 mph on this road cause this area to feel like a highway,

rather than a downtown area. After examining traffic counts in Apache Junction and the number of lanes, it became apparent that Apache Trail has a large amount of unused capacity. Cycling lanes within the downtown area are limited. Expanding these and providing larger buffers from traffic can promote cycling access to the downtown area.

0.5 miles

- Automobile Volume
- Bicycle Lanes

Informal Paths



The red lines indicate paths, trails, and sidewalks. The green areas represent open space.



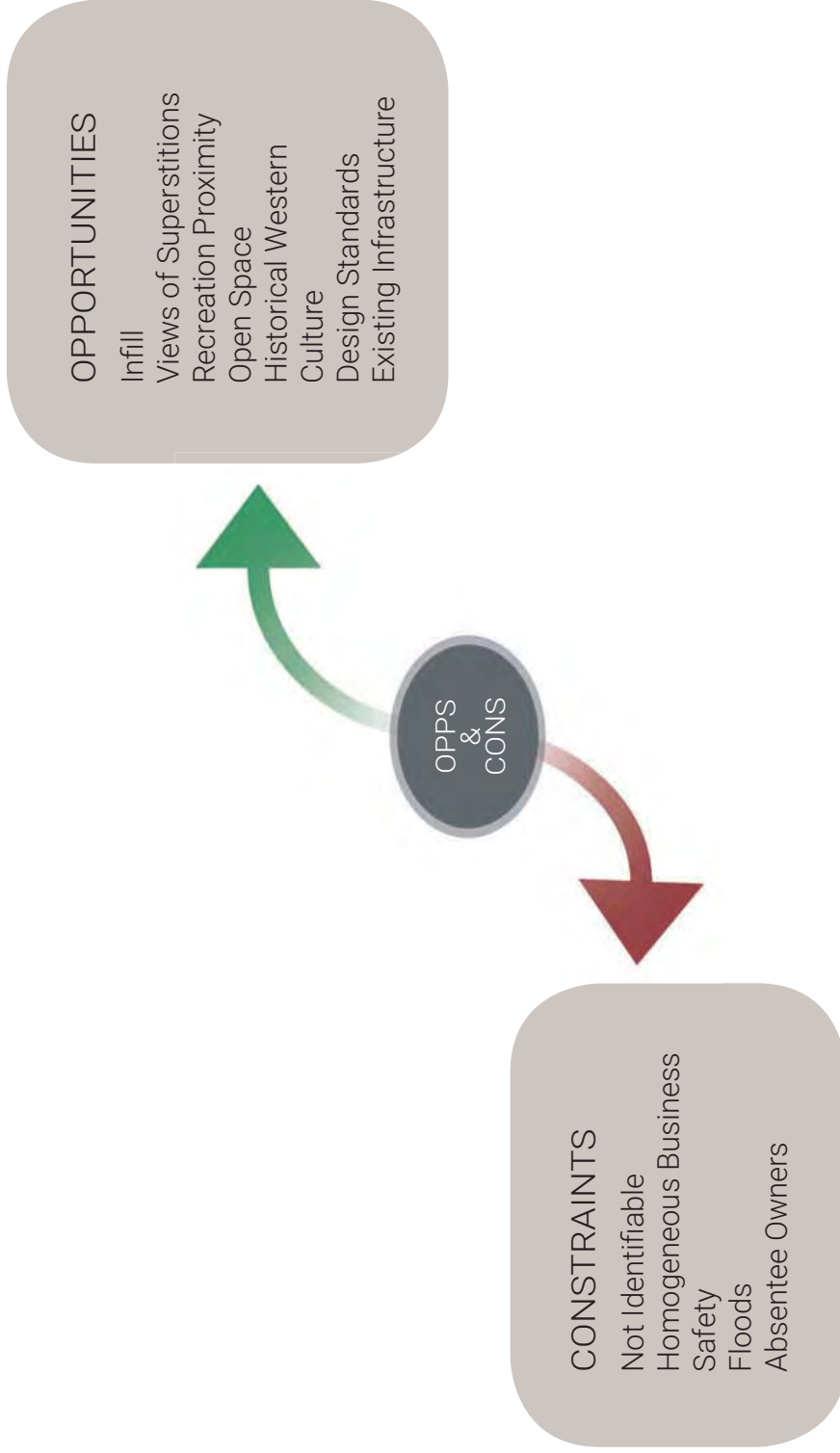
Open Space



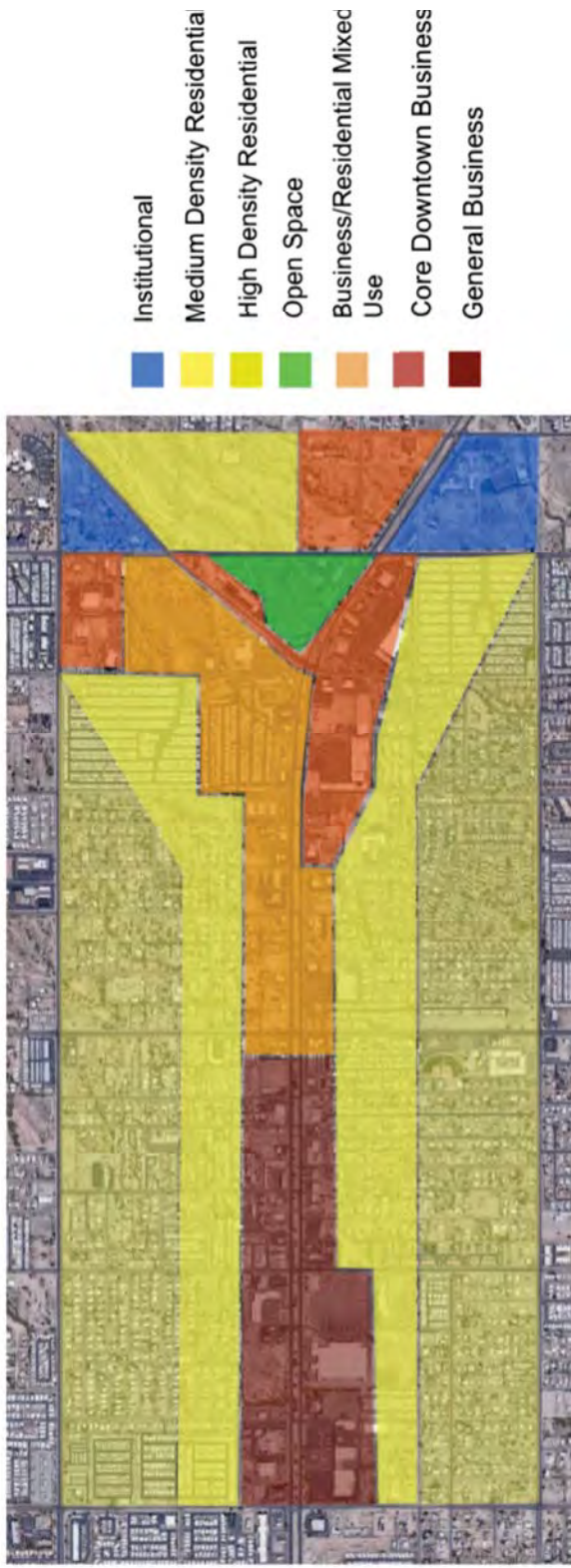
Undeveloped space

Analysis

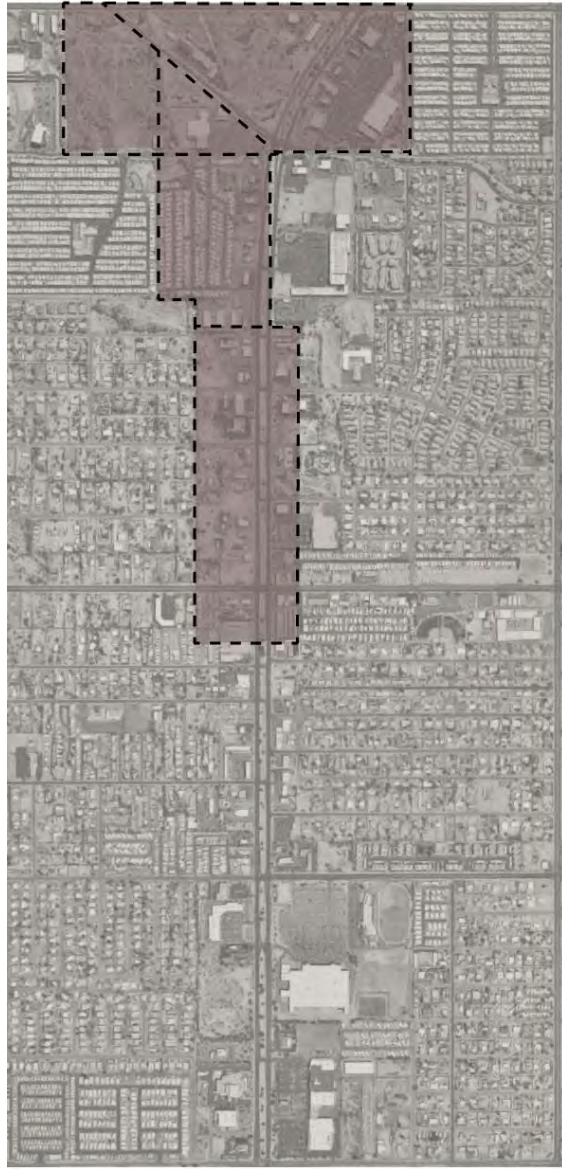
Opportunities & Constraints



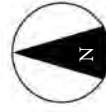
Master Plan



Individual Themed Plans

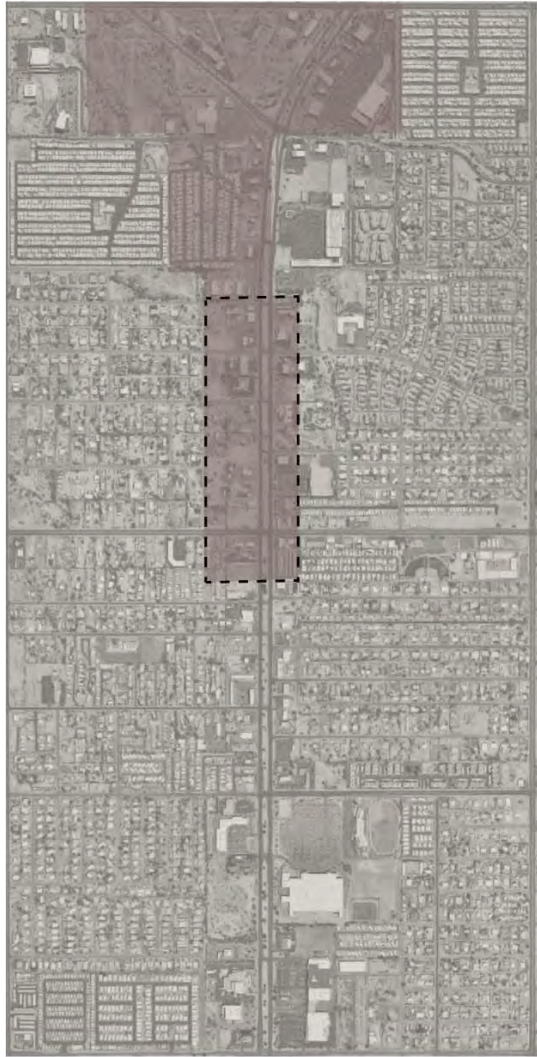


0.5 miles



Each member of SPUR chose a smaller portion within the downtown core to develop individually. During the development process, each member designed with guidance from a chosen specific theme.





0.5 miles

Design Outcomes

Theme: Preservation

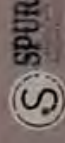
Sarah Gaughan

Attending a Town Hall meeting and conversing with the residents of Apache Junction generated insight to the city's unique qualities. While it is perceived to have a "lack of identity" these conversations resulted in the discovery the city's identity is tied to the very land that surrounds it.

With its proximity to the Superstition Mountains, Apache Junction is known as a gateway to the natural desert. Currently the city is surrounded a mile border of open desert, belonging to the state of Arizona, but as Apache Junction continues to grow this land will

become developed. In order to preserve the city's connection to the land the development of the downtown will integrate green spaces through protecting natural washes and using forested storm drainage. Along with weaving the natural desert throughout the downtown corridor

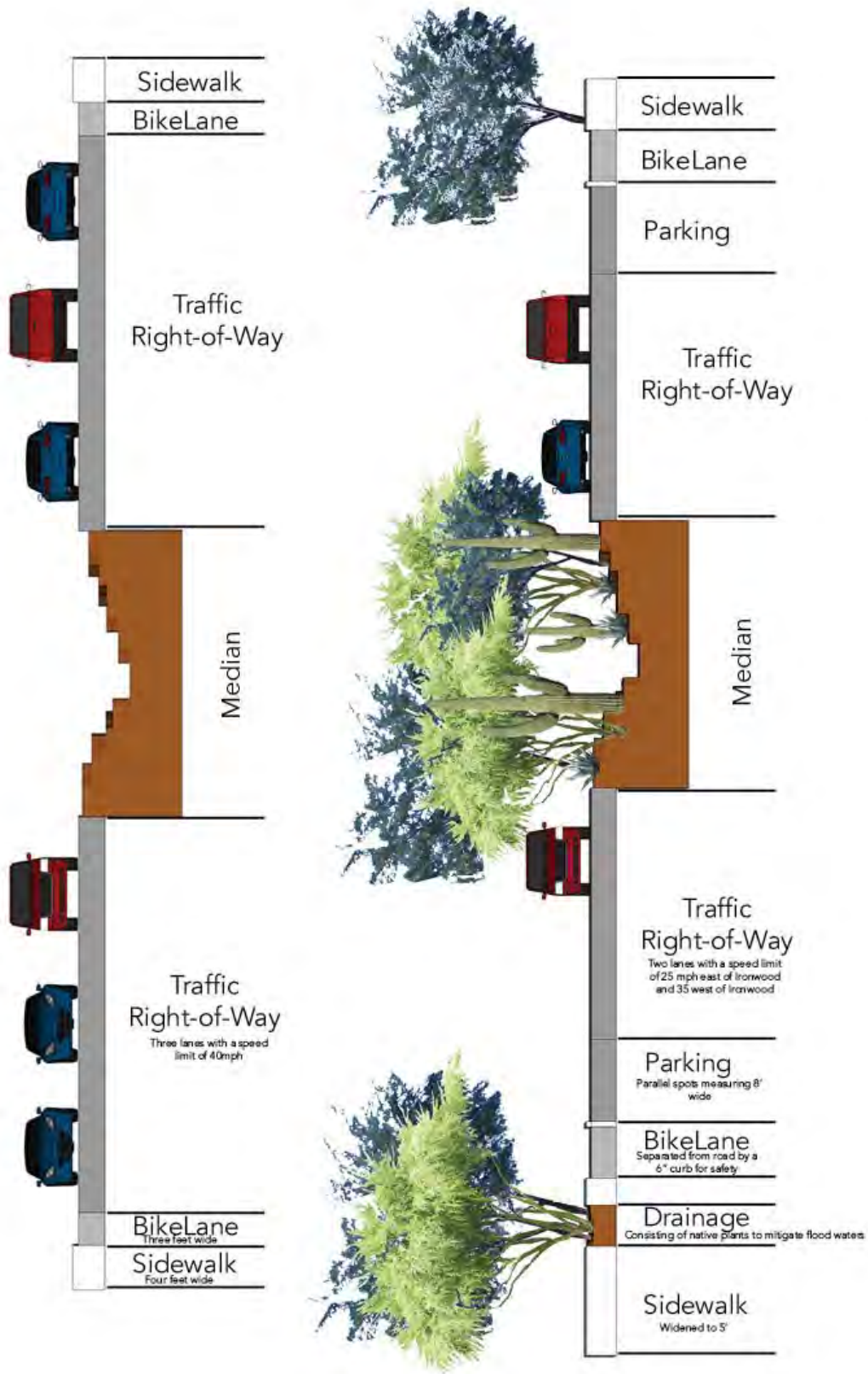
the downtown corridor this space will also incorporate housing and resources for varying incomes, institutional facilities such as a charter school and post office as well as shops and restaurants to promote walkability and sales based income for the city.

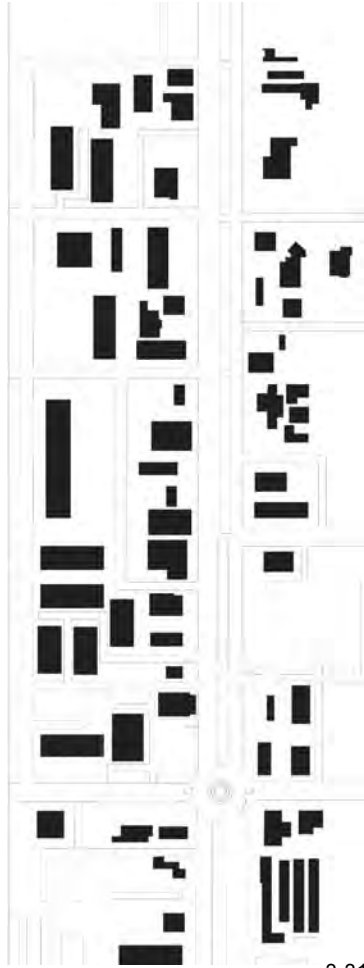




The intersection on Ironwood and Apache Trail, according to research, is the busiest intersection along the arterial road. Thus, the project is anchored around this area. In anticipation for Apache Junction's growth a roundabout will be integrated into the intersection. This will allow traffic to continue moving, diverting traffic that is seeking quick passage through town. Once drivers maneuver the roundabout, and continue on Apache Trail the roadway will narrow from six lanes to four, and the third lane will be converted into on-street parking. This is achievable because Apache Trail, as it is currently designed, holds 44,000 traffic, which is 9,000 - 11,000 times larger than Apache Junctions need. The speed will also be decreased from 40 mph to 35 mph as vehicles move into the main downtown core.

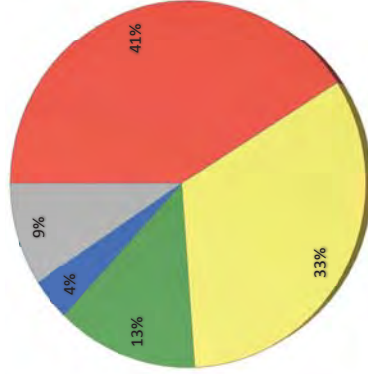
Design Outcomes





Landuse

- Commercial
- Residential
- Green Space
- Institutional
- Roadways



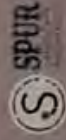
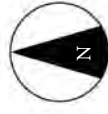
This node will designate a change traffic pattern as well as in the atmosphere of the space. East of Ironwood the building set back will decrease creating a greater sense of infill. The buildings added to the downtown corridor running along Apache Trail consists of mostly commercial use, with the intention of retail, restaurants and office buildings concentrated east of Ironwood while business west of Ironwood will cater to auto and construction related industries, which are the businesses currently within the area. These building will adhere to the current codes set by the city, retaining a lower profile allowing views of the Superstition Mountains.

The northern region of the project area is zoned to accommodate medium and high-density residences. The proximity of residences will aid in walkability to the main downtown core and will act as a transition between downtown and low-density single-family homes that surround the border of the project area. In amongst these developments will be an acre dedicated to a dog park. This is due the need of open space for dog owners with in apartment complexes as well as its central location and proximity to other developments outside the project site. The high density located at the corner of N. Ironwood Drive and W. Roosevelt Street will consist of affordable housing, allowing ease of access to recourses such as bus stops along Apache trail and Ironwood, which will also be implemented with this project. The stops along both streets will be every quarter mile, shown to be the optimal distance for higher ridership.

Two institutional amenities will also be included in this corridor. A charter school, already in place, and a post office located near the housing developments on the northwest corner of Apache Trail and Ironwood.



500 ft



Plant List:



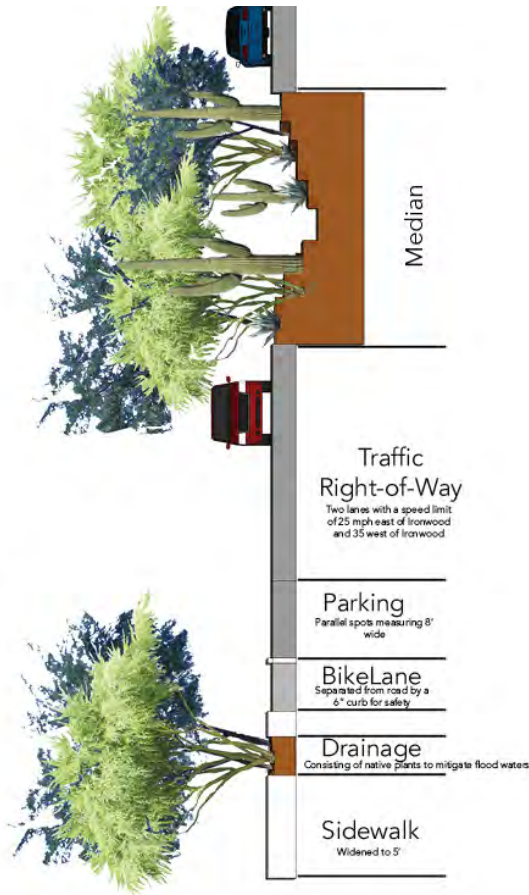
Saguaro Cactus



Mesquite



Palo Verde



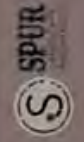
The 100 year flood plane is fed by multiple washes that will remain open space consisting of natural desert, allowing the desert to organically enter the city's downtown core. The flood waters will be diverted into a forested swale and the center median. The forested swale, located just north of Apache Trail will measure four feet wide, three feet deep. Plants integrated in the swale and the median are equipped to handle long periods of drought as well as absorb large amount of water when necessary.

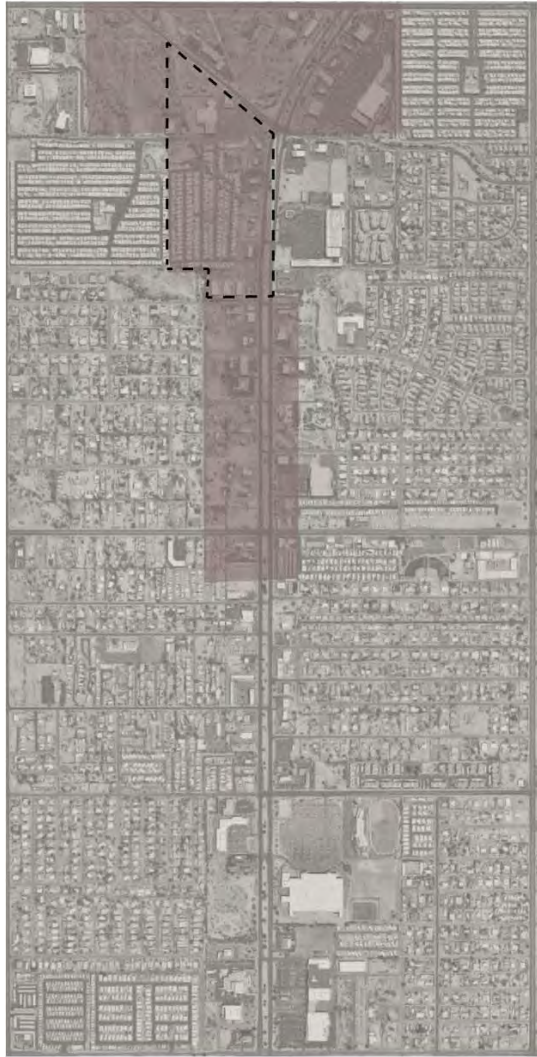
Design Outcomes



0.5 miles

The trees and other plants integrated into the forested median will decrease the urban heat island created through the presence of extensive asphalt and NW winds. Lastly, it will create an identifiable feature for individuals entering the city from the west, through Mesa.





0.5 miles

Design Outcomes

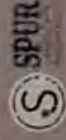
Theme: Connectivity

Mike Landon

The cornerstone of the new central business district lies at the crossroads of Apache Trail and Plaza Drive then stretches to west to Thunderbird Drive. Along the business district is found a modern pedestrian route, shops, and a more pleasant road configuration.

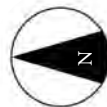
Theme:

To create access and “in-fill” the downtown corridor via connectivity. The new Apache Junction is woven with paths, greenways, and multi-modal transport encompassing multi-family dwellings and commercial/retail space.



The new Apache Junction is a place of connectivity and community. Visitors and residents will enjoy access to the majesty of the Superstition Mountains and the grandeur of the Sonoran Desert from the serenity of greenways and community spaces winding throughout the downtown corridor. Within walking distance of their home or hotel, Apache Junction shoppers will find cafés, retail spaces, and entertainment together in a cohesive locale.

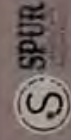




100'

Design Outcomes

The central downtown business corridor from North Plaza Drive to North Thunderbird Drive will be rezoned as mixed use. This will allow for a live/work community center where retail and commercial spaces coexist with professional offices and residences. A central "heart" of Apache Junction will become the cornerstone of a vibrant and thriving neighborhood.



A significant number of properties in the area are either unoccupied or underused. These could be incorporated into the new development plan. The properties provide ample space for exciting new greenways, parks, and pedestrian trails.



0.5 miles



The residents of the community have established a well-worn system of informal paths leading to and from the downtown. As the phases of the development plan come to fruition the informal paths could be permanently adopted as pedestrian trails.



Design Outcomes

Highlands Ranch, Colorado is an example of a city that has successfully threaded recreation trails, parks, and greenways throughout the community. Residences, schools, and business are connected via a network of easily navigated pathways.

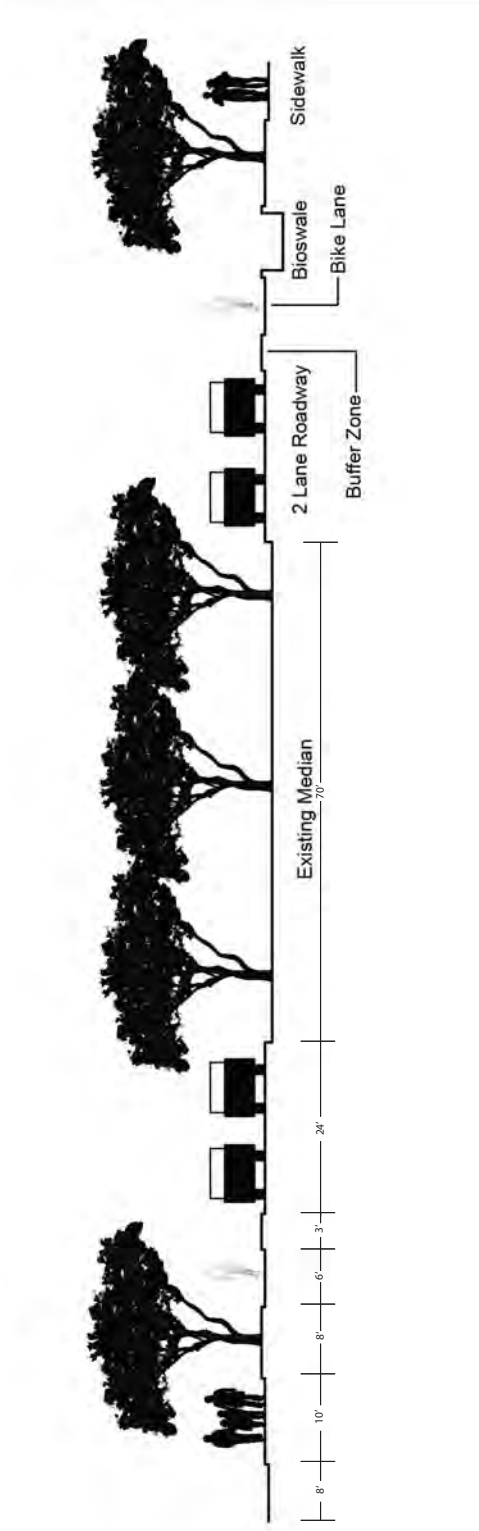


500'

The existing network of informal paths in Apache Junction will become thoughtfully designed connections to civic services, Flatiron Park, residential neighborhoods, and nearby businesses

0.25 miles

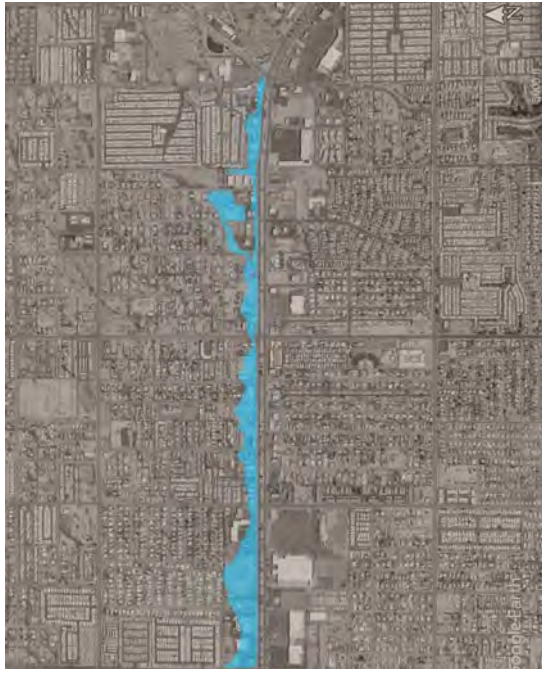




Currently, Apache Trail is configured to accommodate 44,000 vehicles per day¹. A 2016 traffic count reveals that the roadway actually experiences between 9000 and 12,000 vehicles per day². The lane count on Apache Trail can be safely reduced from six to four and the speed limit can be lowered from 45 miles per hour to 25 miles per hour. This will significantly calm the traffic and provide opportunity for the installation of a dedicated bike lane, improved storm water mitigation, shade trees, and increased sidewalk area. The speed limit reduction and new level of accessibility will invite patrons into the retail/ commercial destinations along the corridor.

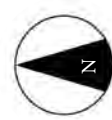
Source: 1 NTSB
2 City of Apache Junction

Design Outcomes



0.5 miles

The north side of Apache Trail from North Plaza Drive to North Meridian Drive is encumbered by a 100-year flood plain.



The use of bioswales as an integral component of a storm water management system along the north side of Apache Trail will help regulate the recurring storm water infiltration of the downtown corridor.



Image: Mike Landon



0.5 miles

Design Outcomes

Theme: Adventure Tourism

Mark Johnson

Adventure tourism is a fast growing segment of the tourism industry. With the expansive undeveloped open spaces surrounding Apache Junction, this town is well suited to appeal to these tourists.





Apache Junction is already successful at bringing in tourists to appreciate its rugged open space. The perfect example is the Lost Dutchman Marathon, which has taken place each February for 17 years.

Design Outcomes



1 mile



1 mile

Bicycle
Circulation



The scale of the open spaces, and the way in which the open space surrounds Apache Junction positions this city well to capitalize on Adventure Tourists with a special interest in cycling.





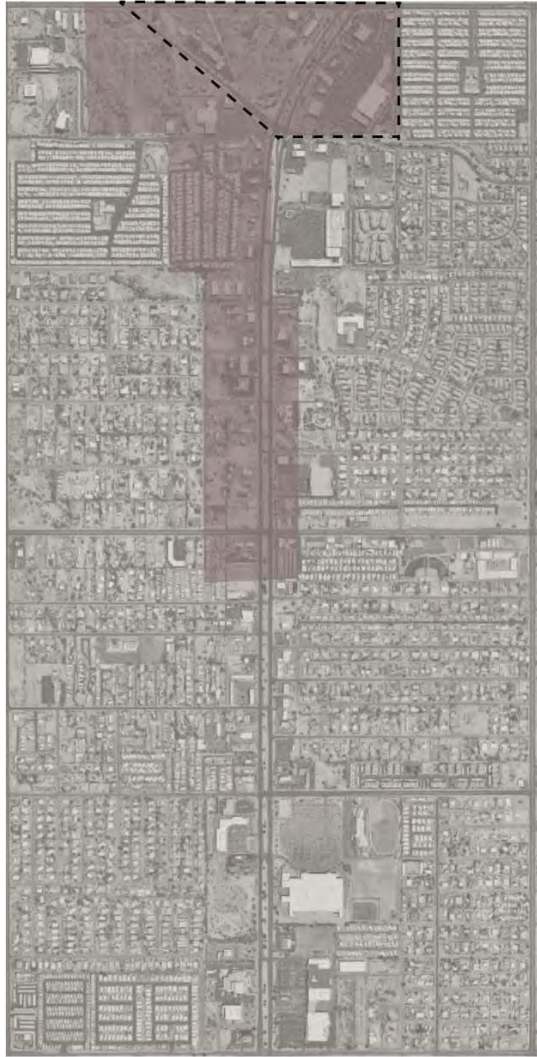
Cycling adventure would include both mountain biking, leveraging the extensive network of trails throughout Apache Junction open space, and road cycling.

Design Outcomes



Flatiron Park is already effectively being used for gatherings. A mixed use development next to it provides convenient accommodation for adventure tourists and positions businesses effectively to make sales to adventure tourists.





Design Outcomes

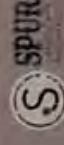
Theme: Placemaking

Ren Andres

VISION: To create a sense of place in the downtown core of Apache Junction through consideration of history, culture, the social community, and the arts as creative expression.

Placemaking refers to the process of connecting a exceptional contextual urban design. When a design community of people to each other and the public realm creates a sense of place, it also “facilitates creative they share through creating a sense of place, home, or patterns of use”, both staying unique to and helping to belonging. Every place is different and therefore every build a place’s identity (PPS, 2017). With that in mind, the placemaking process is different, but there are still purpose behind this project was to activate the space common factors that lead to successful placemaking. that exists behind the junction of Apache Trail and the According to James LaGro, a unique sense of place US 60, the very namesake of Apache Junction. The design “elegantly capitalizes on the site’s natural and cultural process itself was an investigation and an attempt at the attributes” (LaGro, 2013). Placemaking has strong practice of placemaking from a landscape architecture ties to a place’s culture and history, but it’s more than point of view.

Sources: LaGro, James (2013). Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design. Project for Public Spaces (2017). What is Placemaking?, https://www.pps.org/reference/what_is_placemaking/



Existing Conditions



This site east of the junction is rich with traces of Apache Junction history.



The footprint of the historic Superstition Inn still exists on the site and can be distinctly seen in plan view.



Image: Westward Ho Time Capsule



Looking west behind the marquee is an open unused space that is of prime location for a park.



Junction Park

Open Space

Unique shape pays homage to the historic Supersition Ho and also can be divided into sections for a variety of concurring events and activities. There is potential for annual community events, markets, civic gatherings, art installations, and various other uses.

Off-Leash Dog Park

A fenced-in area within Junction Park allows off-leash dog recreation and social interaction. It also makes use of a space behind the marquee that is already built for park activities.



Lost Dutchman Monument

The existing monument that honors the legendary Lost Dutchman would remain within the off-leash dog park as an interesting park feature and cultural reference.

The result of this investigation into placemaking from a landscape architecture point of view resulted in the conceptual design of a multi-use open space park named Junction Park.

Design Outcomes



Paved Sections

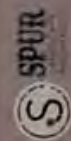
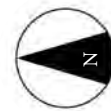
Configuration plays with the shape of the historic Superstition Ho building and facilitates events or installations that require flat ground.

Corridor

Physical connectivity contributes to cultural connectivity. This proposed corridor would provide a more easy and safe way to the future use of the "Old Fry's" and the neighboring commercial land uses.

Decreased Speed

A speed limit reduced to 25 mph allows drivers to notice and enjoy Junction Park, increases the safety of pedestrians and bicyclists, and encourages the social activity that makes up placemaking and building a sense of place.



Junction Park

Hills

Creates a noise and space barrier from the surrounding traffic, provides vista points to the Superstitions and the surrounding city, provides play for dog park and open space visitors alike, diversifies the open space possibilities.

Signage

This area east of the junction is rich with cultural heritage, as noted in several design features of this park. The creation of a sense of place through historical and cultural design attributes only works when there is awareness. Therefore, it is proposed that various signage in strategic parts of the park be placed to educate visitors about their town's heritage.

Altered Lanes

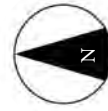
In continuation with the rest of SPUR Landscape Architecture's proposed plan for the Apache Junction downtown core, the outermost lane on each side of Apache Trail from Phelps Dr to Idaho Rd has been converted into a protected bicycle lane and a buffer with vegetated swales. A section to illustrate these changes is at bottom section of this poster.

Old Planter

Left behind from the hotel days, this uniquely shaped planter could be renewed as a historic and cultural feature to contain native desert plantings, or possibly a community garden.

Pool Remains

Left as is, the remains of the Superstition Ho pool can serve as a historic artifact and point of interest. It could also be uncovered and converted into a water feature. Several possibilities exist for this feature to create a sense of place.





Pictured is a rendering of what an off-leash dog park could look like as it activates the unused space behind the marquee. Part of the park's hills could be incorporated into the space for the dogs and their owners to run up and down.

Design Outcomes



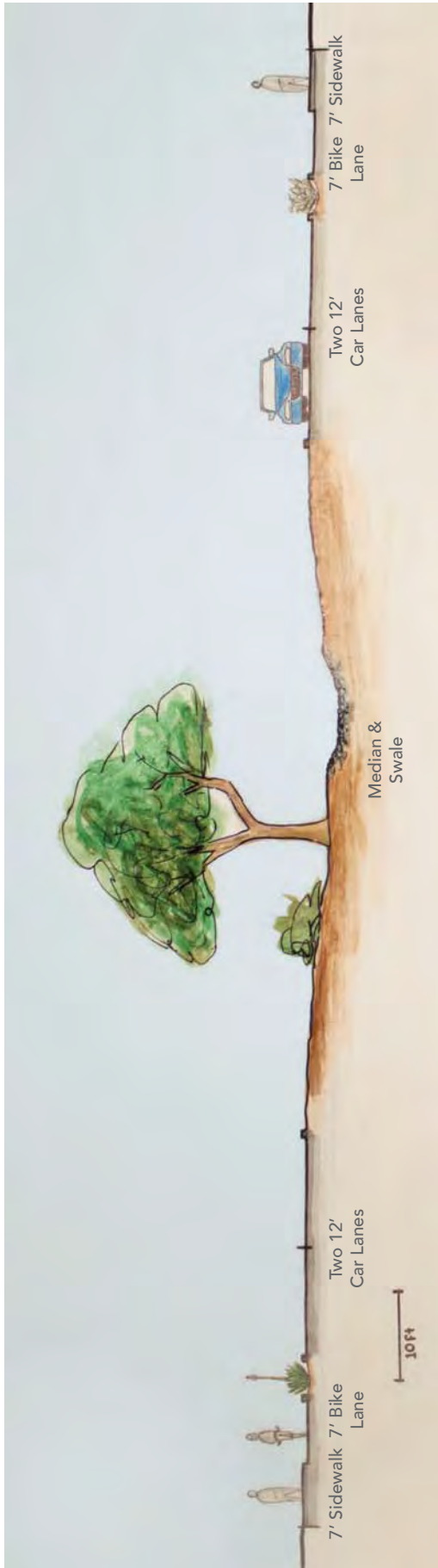
Junction Park as it could be seen from above.





Physical connectivity contributes to cultural connectivity. Therefore, a corridor extending down from the south side of the park down to the Old Fry's structure and it's future new use makes for a safer and more efficient route for pedestrians. There is also a proposed bus stop along this shaded corridor.

Design Outcomes



In continuation of the streetscapes proposed in the previous downtown sections, Apache Trail between Phelps Dr and Idaho Rd is proposed to have the outer lanes on each side converted to a protected bike lane and a buffer containing a vegetated swale. In order to maintain safety and build interest in the surrounding development, a slower speed limit of 25 mph is also proposed. The existing median has recently been redone to include more vegetation and a swale and would remain unchanged in this proposition.

