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 Student reports are not peer reviewed for statistical or computational accuracy, or comprehensively fact-checked, in the same fashion as academic journal articles.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.
# TABLE OF CONTENTS

## PART 1
### GET ACQUAINTED WITH THE PROJECT
1. 4 Acknowledgements
2. 5 Foreword from Apache Junction’s Mayor
3. 6 About Project Cities
4. 7 About Apache Junction
5. 8 Map of Apache Junction and Greater Phoenix
6. 9 Executive Summary
7. 11 Course Goal and ideas:
   - Landscape Architecture Design Ideas to Spark a Unified Vision of Apache Junction

## PART 2
### GO IN-DEPTH: LANDSCAPE ARCHITECTURE
1. 17 Landscape Architecture Design Ideas to Spark a Unified Vision of Apache Junction
2. 18 Acknowledgements
3. 19 Introduction
4. 20 Problem
5. 20 Methods
6. 24 Findings
7. 27 Ideas
8. 39 Areas for Further Exploration
9. 40 Conclusion

## PART 3
### APPENDIX: STUDENT TEAM BOOKLETS
1. 1-1 Wild Nature Design
2. 2-1 Central Design Group
3. 3-1 Southwest Native Design
4. 4-1 Superstition Studios
5. 5-1 SPUR Landscape Architecture
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 wellbeing.
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 were extremely grateful for the opportunity to work on four projects with over one hundred-forty 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 a 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 residents and visitors. The city is already using the report's findings and recommendations to take the 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

Home of the Superstition Mountains
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 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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Sustainability Through Local Action  
sustainability.asu.edu/project-cities
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 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

Project Cities Project Director
Larry Kirch, Development Services Director

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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, and 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 entireties, 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 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. This vision also supports a thriving economy and draws new residents. It celebrates the city’s beautiful location as well as its parks and open land.

<table>
<thead>
<tr>
<th>Tourism and Recreation Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
</tr>
<tr>
<td><strong>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.</strong></td>
</tr>
<tr>
<td><strong>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.</strong></td>
</tr>
</tbody>
</table>
**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. It also envisions the city as a place where people come to experience art in all its forms.

<table>
<thead>
<tr>
<th>Culture and History Ideas</th>
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</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Create an artful signature attraction for this art district, which will help give Apache Junction a modern look while retaining its history.</td>
</tr>
<tr>
<td>Use Apache Junction’s history and features to design the ultimate art walk in this district.</td>
</tr>
<tr>
<td>Create a sense of place inspired by local history and the community of Apache Junction where arts and culture are vibrantly expressed and displayed.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Provide the necessities for comfort, including food, shade, and seating.</td>
</tr>
</tbody>
</table>
**Housing:** While this theme sounds less romantic, it supports a vision in that it is focused on quality of life of residents, which is an important function of any city. It imagines an Apache Junction in which residents are more self-sufficient, have access to affordable housing and communal open space, and have greater access to local retail space and amenities. Such a vision can emphasize sustainability, active and healthy living, and a strong community identity.

**Housing Ideas**

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).

Focus on environmentally conscious planning and development and responsible resource consumption.

**Healthy Communities:** Similar to the housing theme, this theme prioritizes the quality of life of residents, with the optional added aspect of creating a health-focused industry in the city. This vision recognizes that Arizona has a market for rehabilitation and therapy, and that Apache Junction’s location and cost of living makes it an ideal place to build a community around health and wellness.

**Healthy Community Ideas**

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.

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.
**Forestry:** This theme highlights the benefits of trees, which prevent unnecessary heat from being trapped in the city, provide shade for residents using alternative forms of transportation. This vision also includes urban agriculture.

**Forestry Ideas**

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

**Resource Conservation:** This theme focuses on the natural resources of the city in a different way than using them to attract visitors. Instead, its vision is to preserve resources such as land and water, which also improves the quality of life of residents and the sustainability of the city.

**Resource Conservation Ideas**

<table>
<thead>
<tr>
<th>Idea</th>
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<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Build a future community that works closely with natural processes to fully utilize water in a unique, efficient, and sustainable way.</td>
</tr>
<tr>
<td>Create a unified community conservation center that inspires visitors to adopt beneficial techniques that adhere to sustainable practices.</td>
</tr>
</tbody>
</table>
**Circulation:** Also known as mobility, this theme focuses on improving transportation opportunities for the Apache Junction community. This vision is intended to make the city more sustainable, improve the quality of life of residents, and attract new long-term residents.

<table>
<thead>
<tr>
<th>Circulation Ideas</th>
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<tbody>
<tr>
<td>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.”)</td>
</tr>
<tr>
<td>Give pedestrians convenient, affordable, and healthy options for travel.</td>
</tr>
<tr>
<td>Build bike stations to encourage a different, accessible way of travel.</td>
</tr>
<tr>
<td>Encourage community engagement by designing intersections of bike, transit, pedestrian, and automobile pathways at activity hubs.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Add a multi-use transit system with a bus route system connecting Apache Junction to nearby cities.</td>
</tr>
<tr>
<td>Create a bus hub with regular routes, local circulators, and express buses.</td>
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</tbody>
</table>
Landscape Architecture Design Ideas to Spark a Unified Vision of Apache Junction
ACKNOWLEDGEMENTS

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Denise Torlondi
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Guanyi Zhou
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 360/590 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, drawing conclusions about suitability for use and preservation, and identifying 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 entireties.
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 drainage infrastructure (SPUR Landscape Architecture, page 5-13).
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).

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, and four breakout sessions. During all of these engagements, they participated in events and used the

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

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 5-28). 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.
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. (page 1-11). 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, and constraints for building. Related to this, the city’s limited water resources were considered a constraint, as they inhibit expansion (Superstition Studios, page 4-63). (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 they 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. This vision also supports a thriving economy and draws new residents. It celebrates the city’s beautiful location as well as its parks and open land.

- 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, page 1-62).
• 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 3-22). 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 5-48).

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 (Page 28, Southwest Native Design).
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. It also envisions 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, page 2-43).
- 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, page 2-53).
- 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, page 2-46).

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, page 2-55).
Housing

This theme supports a vision that is focused on quality of life of residents, which is an important function of any city. According to one student, it is a vision of Apache Junction in which residents are more self-sufficient, and have access to communal space, affordable housing, local retail space, and amenities (Matthew Favazzo, Superstition Studios, page 4-54). Such a vision can emphasize sustainability, active and healthy living, and a strong community identity.

• 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 4-56).

• 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 4-58).
Healthy Communities

Similar to the housing theme, this theme prioritizes the quality of life of residents, with the optional added aspect of creating a health-focused industry in the city. This vision recognizes that Arizona has a market for rehabilitation and therapy, and that Apache Junction’s location and cost of living makes it an ideal place to build a community around health and wellness (Anthony Martin, Southwest Native Design, page 3-40).

• 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 3-51).
Forestry

This theme highlights the benefits of trees, which prevent unnecessary heat from being trapped in the city, provide shade for residents using alternative forms of transportation. This vision also includes urban agriculture.

- 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 3-72). 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 3-79).
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 (Katryn Squyres, Southwest Native Design, page 3-78).
Resource Conservation

This theme focuses on the natural resources of the city in a different way than using them to attract visitors. Instead, its vision is to preserve resources such as land and water, which also improves the quality of life of residents and the sustainability of the city.

- 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 built a community that identifies with natural processes. (Katherine Keane, Superstition Studios, page 4-61). 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 4-66).
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 4-65).
Circulation

Also known as mobility, this theme focuses on improving transportation opportunities for the Apache Junction community. This vision is intended to make the city more sustainable, improve the quality of life of residents, and attract 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 3-53).
- 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 4-75).
- 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 3-59).
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 4-80).
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, energy efficiency, modernization of the dwelling units and community amenities without wholesale displacement of the city’s long-term residents.

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.