Revisioning Downtown

APACHE JUNCTION, AZ
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.
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

Context
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.
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.

Windshield Survey

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 75-84 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.
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

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

Source: U.S. Climate Data
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.

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
In response to this hardness 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.

Source: USDA

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

Source: lerner.org
Image: Mike Landon

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
Land Use Compatibility & Suitability
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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/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.

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. 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.
Circulation

While visiting Apache Junction, our team walked through the downtown area to gauge its 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.

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

Analysis
Opportunities & Constraints

CONSTRAINTS
- Not Identifiable
- Homogeneous Business
- Safety
- Floods
- Absentee Owners

OPPORTUNITIES
- Infill
- Views of Superstitions
- Recreation Proximity
- Open Space
- Historical Western Culture
- Design Standards
- Existing Infrastructure
Master Plan

Design Outcomes
Individual Themed Plans

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.
Design Outcomes
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
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.

Design Outcomes
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.
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 amounts of water when necessary.

**Plant List:**

- Saguaro Cactus
- Mesquite
- Palo Verde

**Design Outcomes**
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.
Design Outcomes
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 café’s, retail spaces, and entertainment together in a cohesive locale.
Design Outcomes
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.
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.

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.
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.

The existing network of informal paths in Apache Junction will become thoughtfully designed connections to civic services, Flatiron Park, residential neighborhoods, and nearby businesses.
Currently, Apache Trail is configured to accommodate 44,000 vehicles per day\(^1\). A 2016 traffic count reveals that the roadway actually experiences between 9000 and 12,000 vehicles per day\(^2\). 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
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.

The north side of Apache Trail from North Plaza Drive to North Meridian Drive is encumbered by a 100-year flood plain.
Design Outcomes
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 it’s rugged open space. The perfect example is the Lost Dutchman Marathon, which has taken place each February for 17 years.
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.
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 community of people to each other and the public realm they share through creating a sense of place, home, or belonging. Every place is different and therefore every placemaking process is different, but there are still common factors that lead to successful placemaking. According to James LaGro, a unique sense of place “elegantly capitalizes on the site’s natural and cultural attributes” (LaGro, 2013). Placemaking has strong ties to a place’s culture and history, but it’s more than exceptional contextual urban design. When a design creates a sense of place, it also “facilitates creative patterns of use”, both staying unique to and helping to build a place’s identity (PPS, 2017). With that in mind, the purpose behind this project was to activate the space that exists behind the junction of Apache Trail and the US 60, the very namesake of Apache Junction. The design process itself was an investigation and an attempt at the practice of placemaking from a landscape architecture point of view.

Existing Conditions

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

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

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
Junction Park

Open Space
Unique shape pays homage to the historic Superstition 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.

Design Outcomes

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.
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.
Design Outcomes

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 Archirctecture’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.
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.