# COBRE VALLEY RAIL TRAIL

A 9.4 MILE MULTI-USE PATH CONNECTING MIAMI, TRI-CITIES, AND GLOBE, ARIZONA ALONG CREEKS, RAILWAYS, AND DOWNTOWN CORRIDORS

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# Introduction

The following design proposal is for the Cobre Valley Rail Trail - a 9.4 mile multiuse trail connecting Miami, Globe, and the Tri-Cities area in south-central Arizona. The analysis and design was completed in May 2019 by the second year Master of Landscape Architecture students at the University of Arizona under the guidance of Assistant Professor Kelly Cederberg.

The trail is designed to be economically feasible. Phasing options allow completion of this large-scale project in realistic pieces as funding becomes available. The trail primarily follows waterways and the existing rail-line, with offshoots that take visitors into existing and overlooked community assets.

The trail design focuses on providing cost-effective and accessible multi-modal transportation for a variety of user groups. Cultural and social spaces are connected across both Miami and Claypool, and efforts are made to increase the visibility of the unique historic character that defines this area.

Connecting the trail to the San Carlos Apache Reservation was considered, but ultimately the distance between residences on the Reservation and downtown Globe made this method of transportation less than ideal. While interest in the community has been raised to connect these two areas with a trail, ultimately it was decided that reintroducing the Copper Spike train line was the most useful option in facilitating movement between Globe and the Reservation.



# MIAMI, ARIZONA

**MASTER PLAN** 

WAYFINDING

**VISIBILITY** 

NEIGHBORHOOD HUBS

DOWNTOWN CORE





# CONNECTIVITY | WAYFINDING ENTRANCE SIGNAGE **ENTRANCE GATE** ORIENTATION MAP MIAMI MEMORIAL LIBRARY BULLION CENTER PLAZA MILEAGE MARKER ROUTE MARKER

Entrance and orientation signage marks the trailheads at community hubs and trail entrances. Route markers are included where the trail diverges, and mileage markers are recommended to be placed along significant intervals along the trail.

# MASTER PLAN | HUBS AND TRAILS



#### MIAMI TRAIL

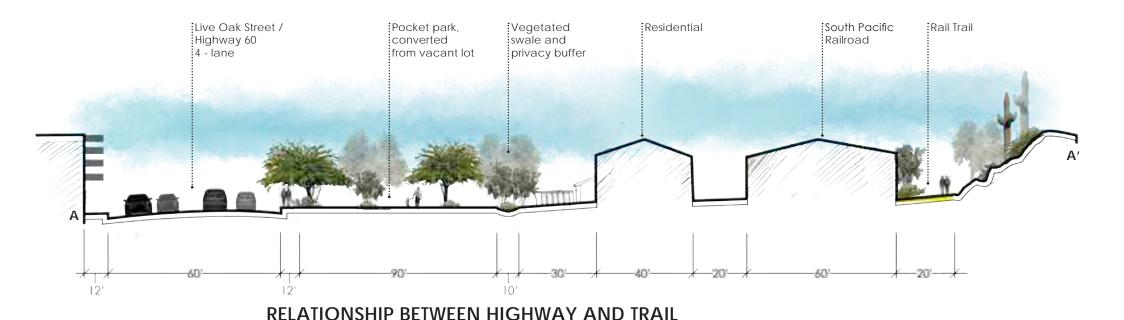
The trail through Miami makes a loop which connects community hubs, commercial cores, and neighborhoods. To the eastern end, the trail utilizes abandoned rail road tracks to connect to Claypool region.

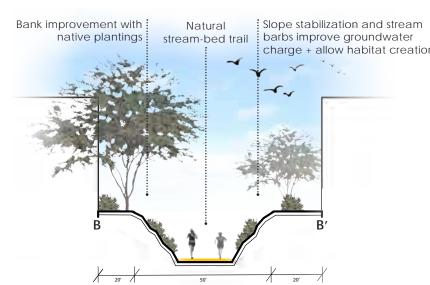
A major trailhead is at the Bullion Center on the southwest side of town. Here, there is an option to travel to the iconic M on a rustic trail. At the intersection of Highway 60 and Plaza Avenue. At this intersection, you are able to head southeast on Canyon Avenue. Following West Canyon Avenue, which becomes Railroad Avenue. The Railroad Avenue trail continues northeastward to Claypool. At Adonis Avenue, there is a connection to the Miami Memorial Library.

Major hubs have been identified for their existing use and future potential as major event spaces and community gathering places: Bullion Center Plaza, Miami Memorial Park, YMCA vacant lot, and Miami Memorial Library.

At Plaza Avenue and Highway 60, there is an entrance into the Bloody Tanks Wash. During the rainy seasons, when the Bloody Tanks portion of the trail will be inaccessible, an alternate route is recommended on the length of Sullivan Street. During the majority of the year people will be able to enjoy walking, jogging, or taking dogs for walks along the riparian trail. Design recommendations for the wash trail involve minimal interventions in the form of bank stabilization and stream barbs to improve the health of the wash. Otherwise the trail itself utilizes existing stream bed material (see Section BB').

Section AA' shows the relationship between the connective trail, which leads further west, and the existing Highway 60 / Live Oak St. This connective trail uses existing infrastructure and roadways to create a corridor that is accessible to residents on the south side of the highway. Section AA' also shows the utility of adding vegetation and seating to vacant lots along the highway: in addition human comfort and walkability, the sight of these comfortable spaces adds needed visibility along the major roadway.





DOWNTOWN WASH TRAIL

#### SYKES ALLEY

Sykes Alley, one block west of Sullivan Street, can be transformed with mural art, vegetation, bike parking, and night lighting to become a welcoming space for visitors and residents alike. This overlooked alleyway has potential to become a pedestrian and bicycler area, while allowing for cars to pass through. Adding art takes a throw away area and elevates it into an area of pride for the community of Miami. Taking advantage of existing characteristics, simple amendments will go a long way towards making this a crucial connective element in the Miami cultural corridor.

#### FOREST AVENUE TRAIL ENTRANCE

Forest Avenue is unique in terms of its relation to the wash. As visible below, the wash enters the roadway at level with the street and there is a raised pedestrian bridge. This unusual intersection with the wash is a great opportunity to create a more visible entrance which connects the wash trail with the Sykes Alley portion, just north of this photo. Simple additions of paint, perhaps a mural which highlights the presence of the wash, and shade trees are all that is needed to add interest and visibility to this portion of the trail.













### DOWNTOWN HUBS AND CONNECTIONS



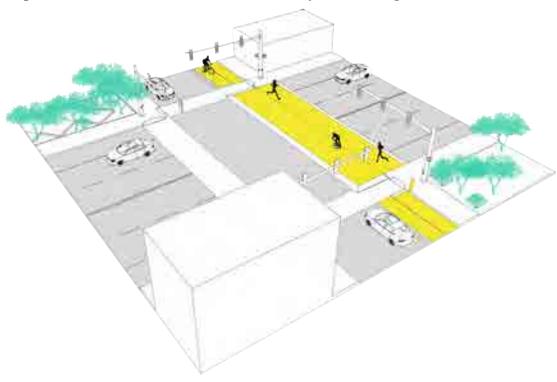
#### **EXTENDED MIAMI MEMORIAL PARK**

Extending the well-loved Miami Memorial Park across the wash and into the currently vacant lot to the southwest will enhance the already functioning elements of the park, and add much needed visibility to passengers traveling along Live Oak St. Pedestrians traveling along Live Oak St will also have an added opportunity to access the park. Furthermore, pedestrians traveling along the Bloody Tanks wash will have the delightful experience of being suddenly surrounded by a lovely park. A footprint extension in this fashion serves to reinforce the park's current status as a true gem of the town.

# MULTI-MODAL INTERSECTION

HWY 60 & ADONIS / KEYSTONE

At the intersection of Highway 60 and Adonis or Keystone, it is recommended that a painted pedestrian and bicycle crossing be implemented. Having push buttons at those intersections to signal when pedestrians and bikes can cross safely, and to signal car traffic as well.



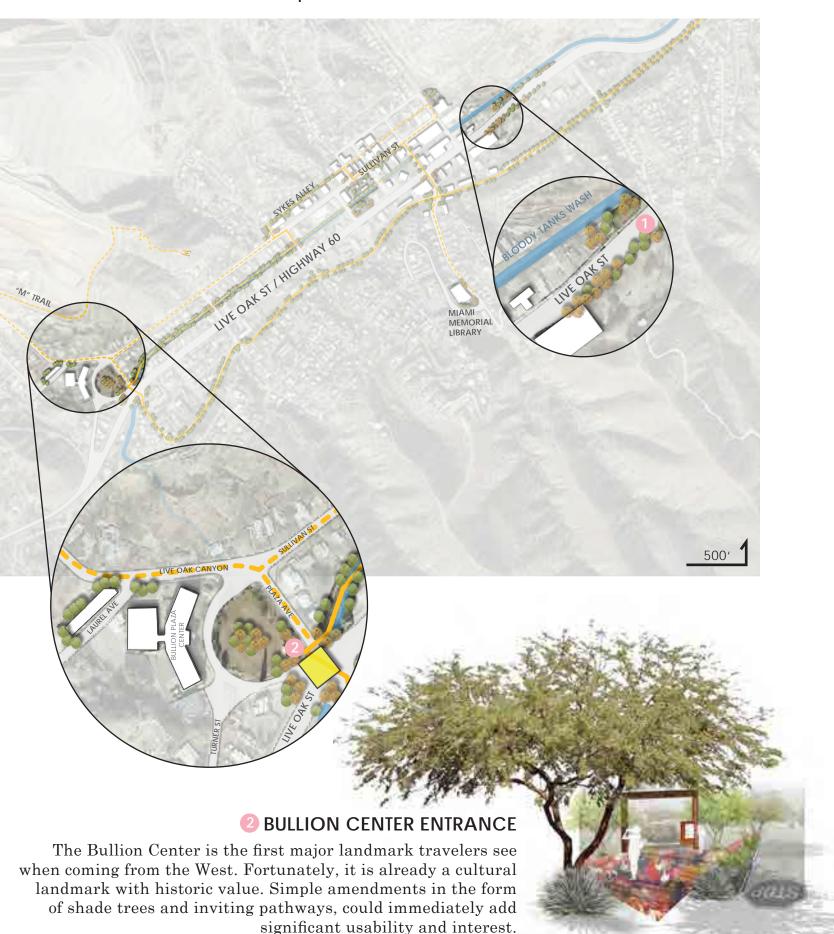
## CHISOLM AVENUE

Chisolm Avenue is where Sykes Alley takes a turn towards Miami Memorial Park. Adding artwork, space for food trucks and street vendors, and an entryway arch adds a welcoming environment for the community and visitors. The well loved and used park gains an entrance that beckons people to enter it. Food trucks add food and beverage amenities that will keep people in this hub of activity.





# COMMUNITY VISIBILITY | GATEWAYS & ENTRANCES





EXISTING

#### EAST GATEWAY

The entry to Miami from Claypool is marked by metal archways that signify the entrance to the town. Adding street trees, benches for seating, signs for each building and canopies over building entrances will encourage those passing through to stop and explore Miami and its unique art scene.



MULTI-MODAL INTERSECTION
HWY 60 & BULLION PLAZA

Multi-modal safety is integral to enhancing health and connectivity for residents of Miami. The complexity and visibility of the intersection at Bullion Plaza will make this a useful first step.



# MAM

# NEIGHBORHOOD HUBS | MIAMI MEMORIAL LIBRARY







# MEMORIAL LIBRARY COMMUNITY HUB

The Miami Memorial Library and pocket park are already poised to be a community hub. Existing conditions display minimal vegetation, which leads to higher temperatures and low levels of human comfort. This is easily improved with the addition of shaded elements that create a more comfortable place to rest and play. Shade can be accomplished through built structures or vegetation and trees; no matter the complexity of construction, a little shade will go a long way and will play to the strengths of this vibrant community center.

# NEIGHBORHOOD HUBS | LAUREL AVENUE







# **ULAUREL AVENUE COMMUNITY HUB**

A group of buildings on Laurel Avenue, adjacent to the west end of the Bullion Center, present a unique opportunity for mixed-use development in the town of Miami. The architecture and layout of these buildings is quite unique and easily fits into the artful aesthetic of the Miami downtown area. The size of the buildings is perfectly suited to accommodate a mixed-use function. Laurel Avenue's location is ideal for a new development as well: it is positioned adjacent to the Bullion Center and sits at the trailhead to the famous Miami "M".

# CLAYPOOL, ARIZONA

# CONNECTIVITY

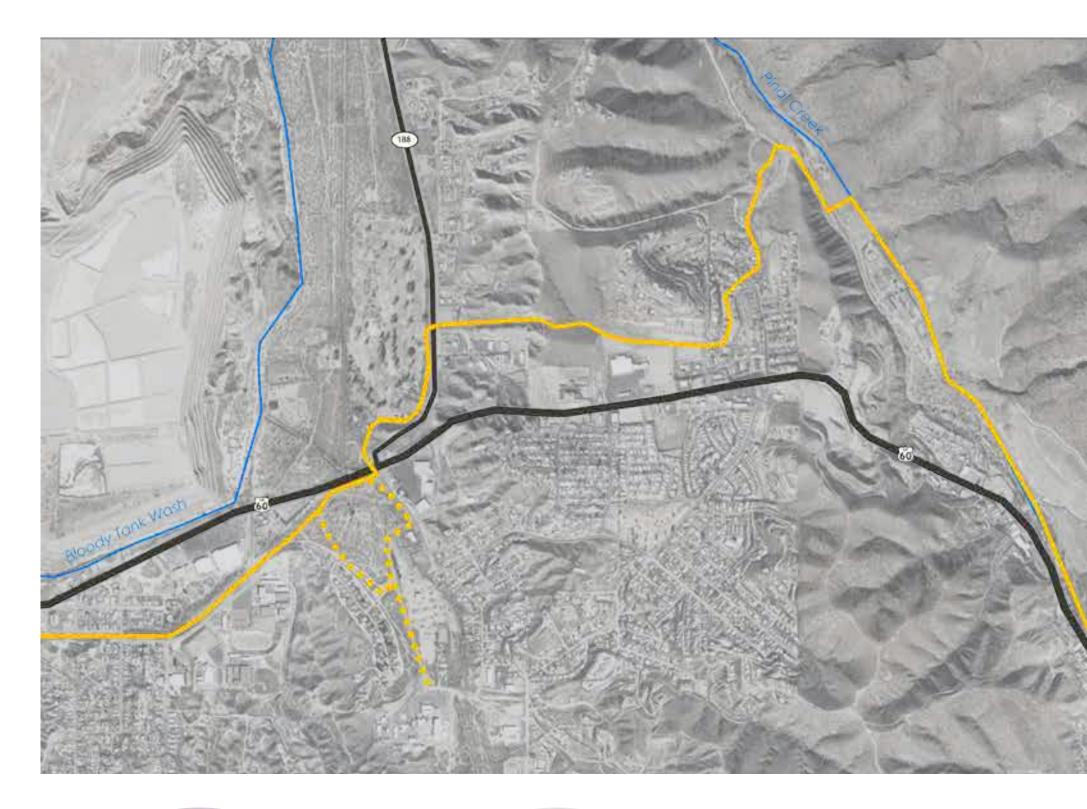
TRAIL SEGMENTS WAYFINDING

# **VISIBILITY**

TOWN ENTRYWAYS

# **COMMUNITY HUBS**

AQUATIC CENTER



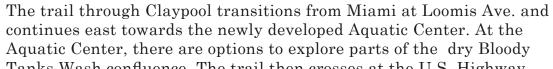






# **CONNECTIVITY | COMMUNITY HUBS AND TRAILS**

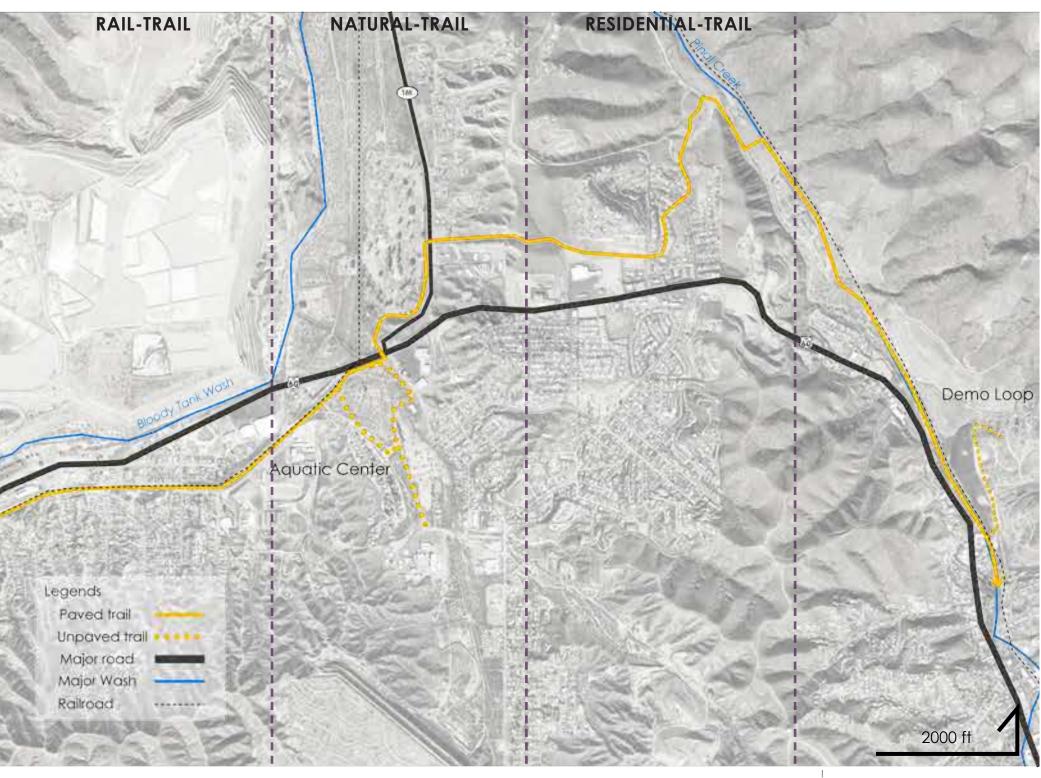




Tanks Wash confluence. The trail then crosses at the U.S. Highway 60 and Apache trail intersection and continues northeast through the Tri-cities until connecting to the demo-loop along the Pinal Creek.



# **CONNECTIVITY | TRAIL SEGMENTS**



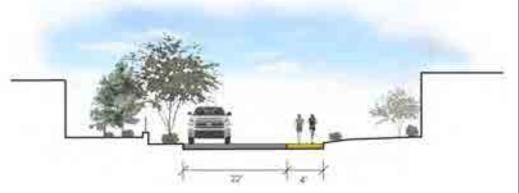
# RAIL-TRAIL 3/327=11-07

(A) two-way multi-use trail that is tightly aligned to the Arizona Eastern Railway tracks. This segment has delineated wooden frames and accent plants to buffer from the train.



(B) multi-use trail that is flanked with a wide mix of lush cottonwoods, pines, and mesquites on both sides. Greenery blocks views to back of commercial buildings and busy roadways.

### **RESIDENTIAL-TRAIL**

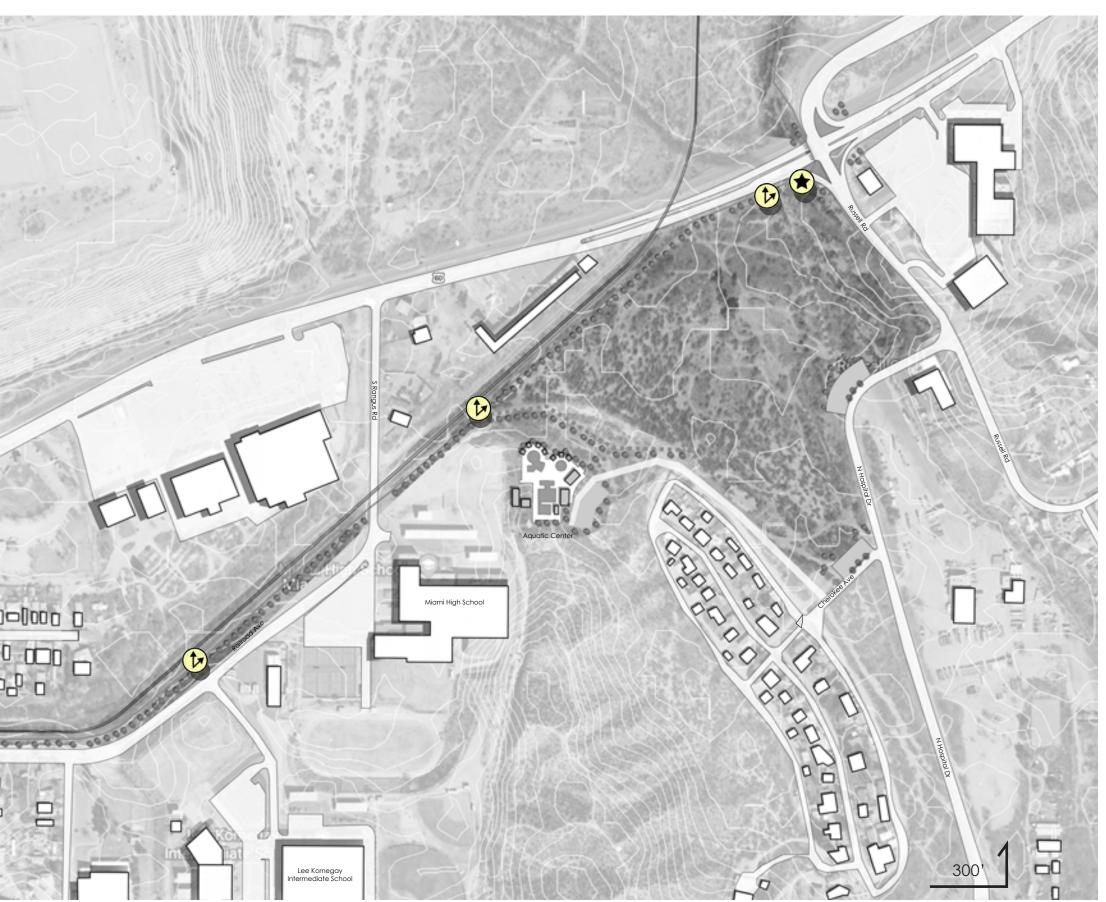


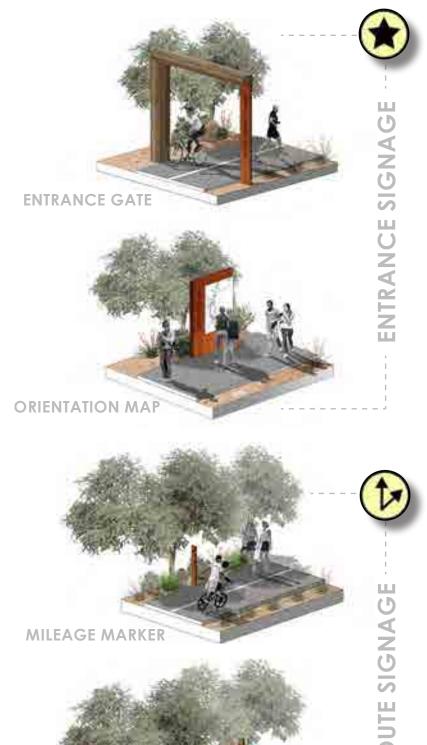
(C) narrow pathway along low-speed residential street that is clearly marked and is enhanced with shade trees.

### **CLAYPOOL TRAIL**

The trail at Claypool serves to connect both broadly the areas of Miami and Globe by utilizing existing infrastructure and green corridors. It incorporates different styles and compositions which include a rail-to-trail segment (A), a naturalistic segment (B), and a residential segment (C).

# **WAYFINDING | FOCUS AREA**

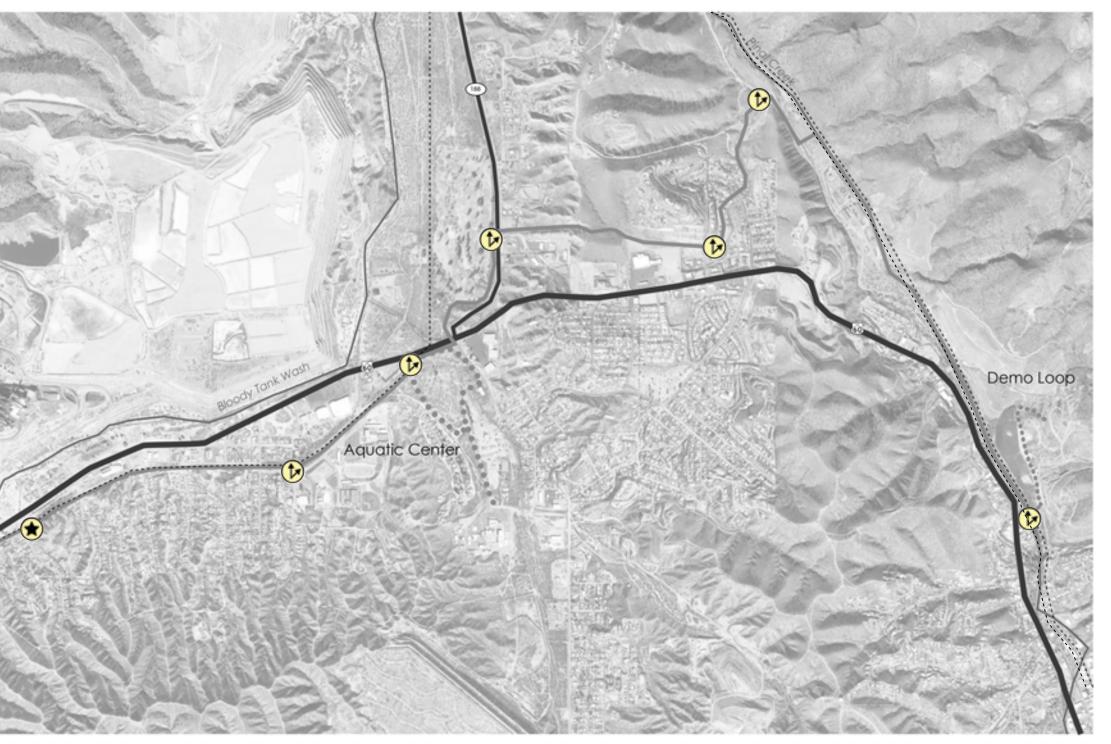


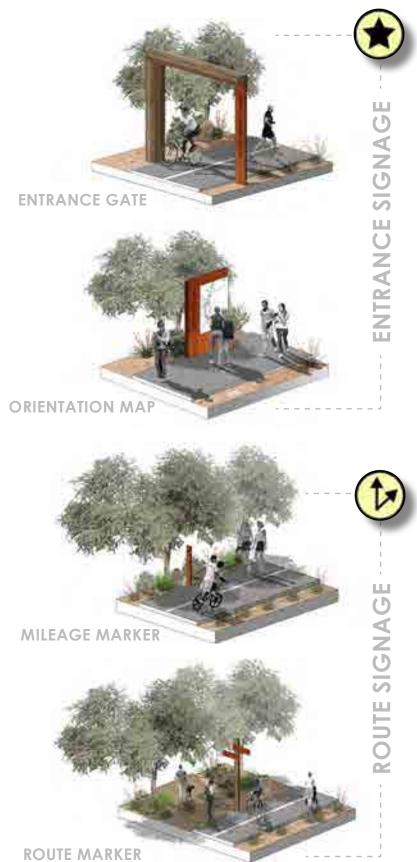


Entrance signage marks the start of a loop trail for the Aquatic Center to define the node. Route signage is included where the trail forks off connect with the trail towards the school, hospital, and aquatic center for the area.

**ROUTE MARKER** 

# CONNECTIVITY | WAYFINDING





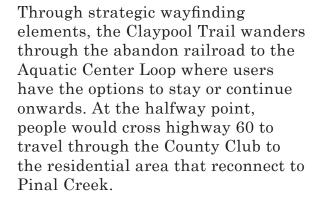
Entrance signage marks the start of the Claypool Trail segment leading north towards the connection point with Pinal Creek. Route signage is included where the trail forks off to the Aquatic Center, the Country Club and Hospital.

# CLAYPOOL

# CONNECTIVITY | NARRATIVE

















# **COMMUNITY HUBS | AQUATIC CENTER**









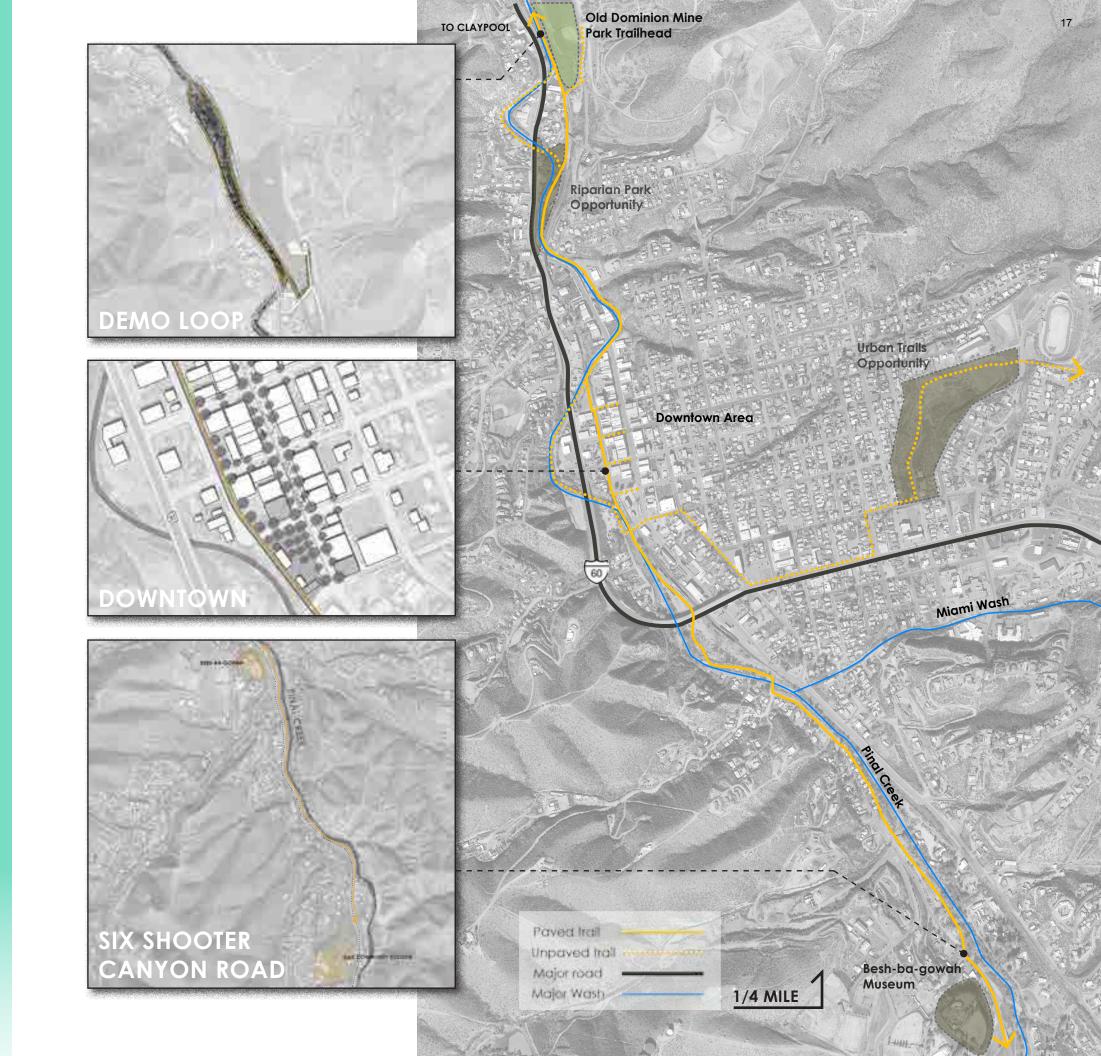
## **AQUATIC CENTER COMMUNITY HUB**

With the addition of a new Aquatic Center, Claypool has the potential to become a popular node that will attract visitors from all over the region, adding character and vibrancy to the area. With the feature placed along the midpoint of the trail, daily users will have a place to rest, hydrate and cool-off. The aquatic facility will also create a space full of opportunities for parents and children to play together and members of the community to gather and encourage daily interactions.

# GLOBE, ARIZONA

PINAL CREEK DEMO LOOP DOWNTOWN RAIL TRAIL COMMUNITY HUBS

BROAD STREET
HISTORIC TRAIN DEPOT



# **CONTEXT AND MASTERPLAN**







Located just west of Old Dominion Mine Park in Globe, the Demonstration Loop is the first phase of trail installation. The 1.27 mile loop follows Pinal Creek on both sides and benefits from the shade of the existing riparian vegetation. The loop connects to the parking lot of Old Dominion Mine Park, giving park visitors the opportunity to easily access the loop and experience Arizona's riparian corridors. This initial phase will connect at the north and south to the greater Cobre Valley Rail Trail in subsequent phases.

# CONNECTIVITY | WAYFINDING





Entrance signage marks the start of the Demonstration Loop leading south from the parking lot. It is also placed at the trailhead at the Dominion Mine Park parking lot. Route signage is included where the trail forks off to the Old Dominion Mine Park parking lot.

Existing parking and roads

Existing railroad

# ENTRANCE | NORTH TRAILHEAD EXISTING

# Old Dominion Mine Park PROPOSED Phase I TRAILHEAD Parking for the Demonstration Loop is loop Parking for the Loop III Loop III

800

Parking for the Demonstration Loop is located at the northwest of the site just off US-60. Entrance signage welcomes visitors to the trail, and provides an example for signage in later phases of trail development. A 10' buffer with native mesquites separates the trail from the highway and provides shade. The trail is paved and 10' wide, accomodating bother bicycle and pedestrian user.

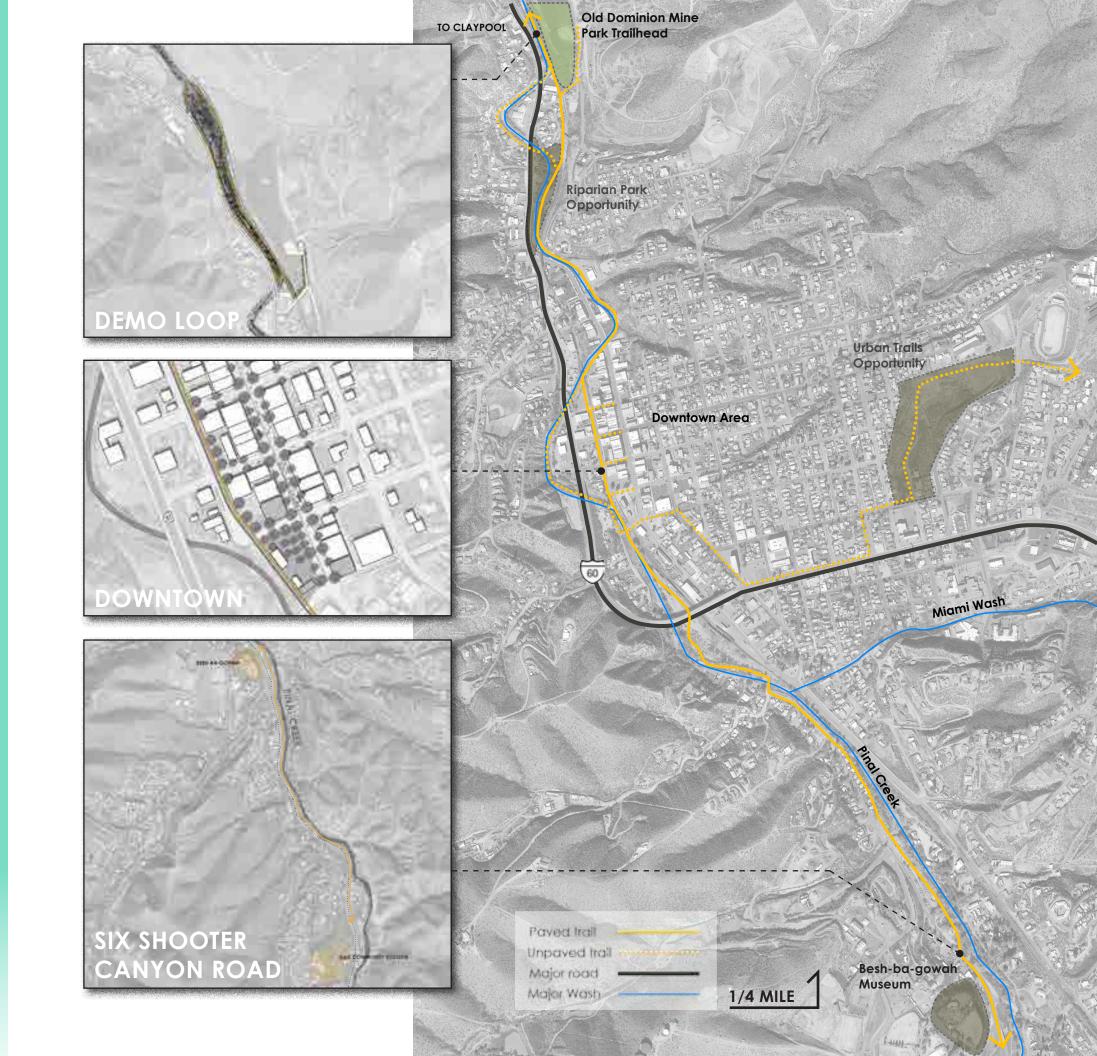
# **ENGAGING ECOLOGY | CREEK CROSSINGS**



# GLOBE, ARIZONA

PINAL CREEK DEMO LOOP DOWNTOWN RAIL TRAIL COMMUNITY HUBS

BROAD STREET
HISTORIC TRAIN DEPOT



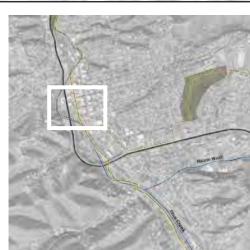
# GLOBE

# CONNECTIVITY | URBAN TRAIL AND COMMUNITY HUBS





The Globe portion of the Cobre Valley Rail Trail weaves the natural with the urban by exiting Pinal Creek to run along the existing rail line and bring visitors into the downtown core. Along this urban portion, streetscape enhancements on Cedar, Oak and Sycamore Streets provide gateways into Broad Street. Parklets, street trees, and roadway improvements such as a middle turning lane and shared bikeway add pedestrian comfort and traffic calming to the Broad Street commercial corridor. Anchoring the southern end, a revitalized, mixed-use Historic Train Depot and outdoor plaza provide a landmark tree grove with ample shade for eating and socializing.





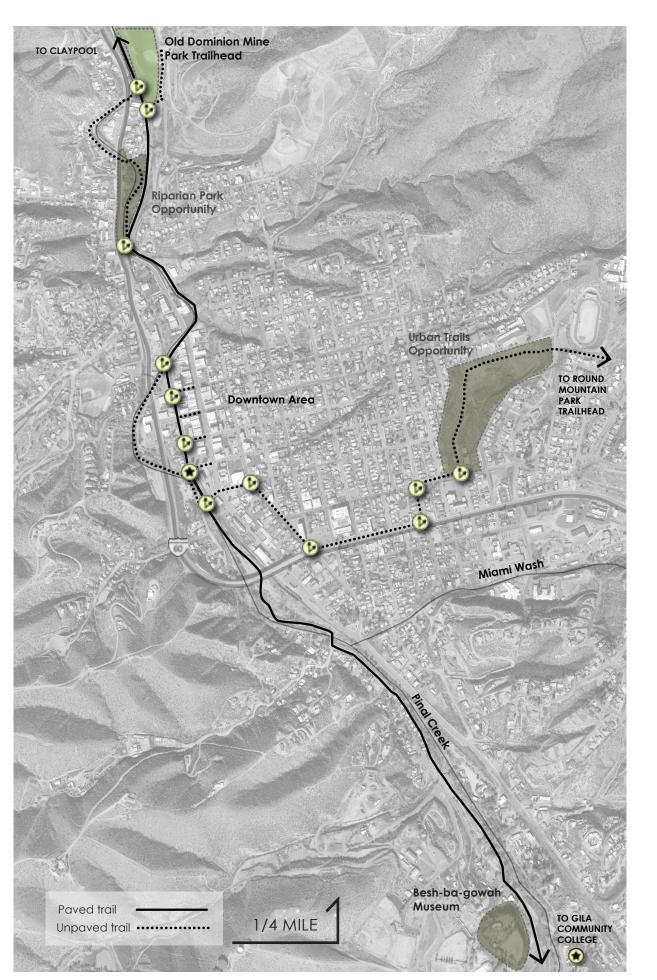
# GLOBE

SIGNAG

ENTRANCE

# **CONNECTIVITY | WAYFINDING**

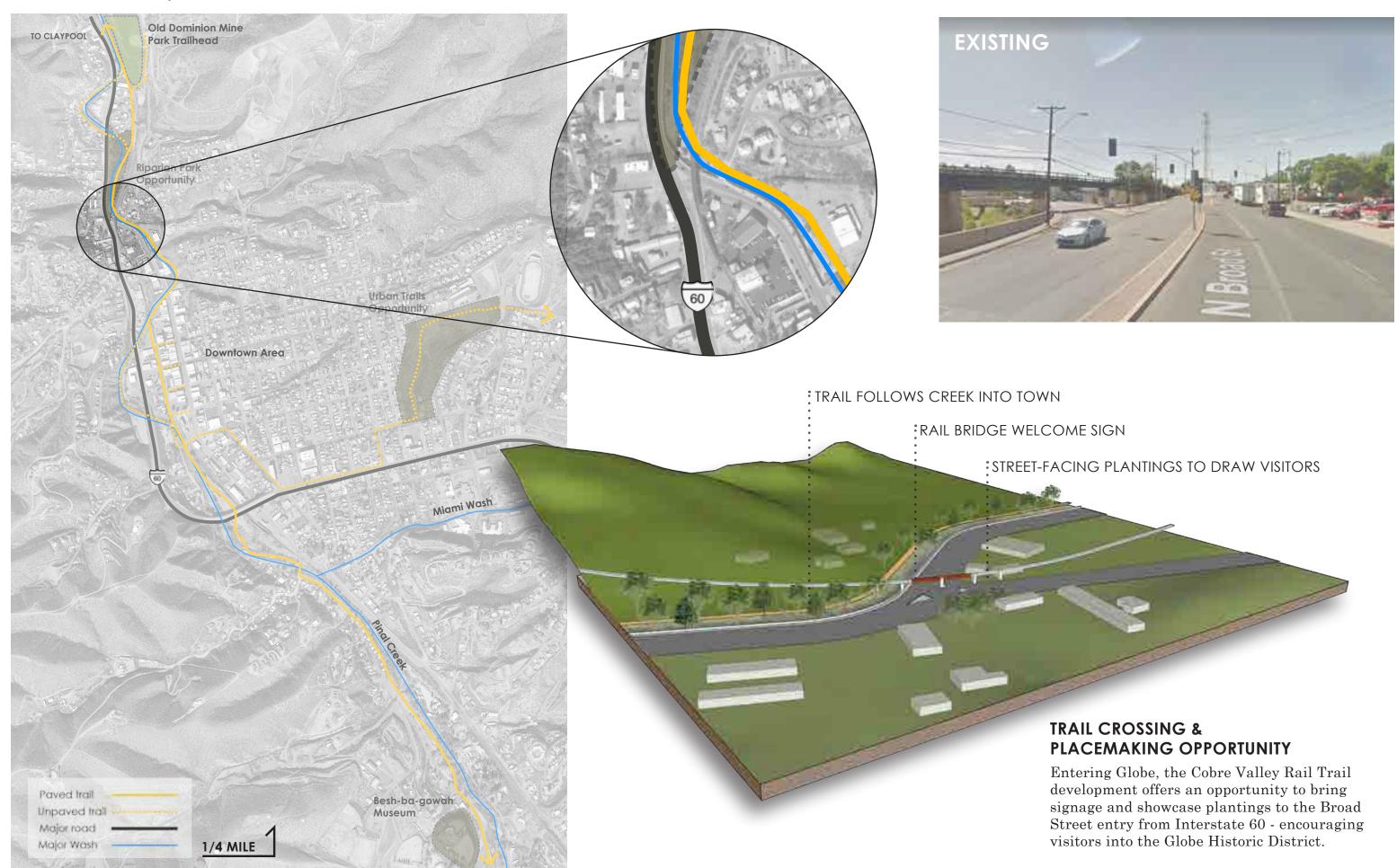






Entrance signage provides a primary trailhead at the downtown Historic Train Depot and plaza as well as at the southern terminus of Gila Community College. Along the route, signage provides mile markers and directional street signs for downtown stops and alternative routes - such as the community trail toward Round Mountain Park or the unpaved nature trail along Pinal Creek.

# GLOBE ENTRY | CREEK TRAIL AND PLACEMAKING



# GLOBE

# CONNECTIVITY | URBAN TRAIL AND COMMUNITY HUBS





## **URBAN TRAIL CONDITION**

Following the existing rail line right-of-way, the trail through downtown Globe creates a number of opportunities for trail users to easily enter or exit the trail from the commercial hub of Broad St. Pedestrian, rail and automobile conflict is minimized by elevating the trail to sidewalk height and provided a curb and planter buffer between the trail and the rail line.







# **DOWNTOWN HUB | HISTORIC TRAIN DEPOT**









#### HISTORIC TRAIN DEPOT AND DOWNTOWN PLAZA

The Historic Train Depot at 230 S Broad St offers an opportunity for downtown development directly connected to the proposed Cobre Valley Rail Trail. With its central location and timeless architecture, the Depot is perfectly suited for downtown mixed use with upper-story office space and lower story light commercial and restaurants. It's unique setback offers an opportunity for a downtown plaza that anchors the rail trail and invites visitors with its dense urban tree canopy.

# NEIGHBORHOOD HUBS | BROAD STREET IMPROVEMENTS







# **BROAD STREET PARKLETS**

As a multifunctional landscape element, parklets (1) provide outdoor patio seating where otherwise unavailable; (2) help with traffic calming along the busy Broad Street corridor; and (3) provide an opportunity for placemaking through custom materials and plant palettes.

# TRAIL CROSSINGS

# **DOWNTOWN STREET**

# HIGHWAY 60/TRAIL

- EXISTING STOP LIGHTS

- BIKE HAWK

# RAILROAD CROSSING

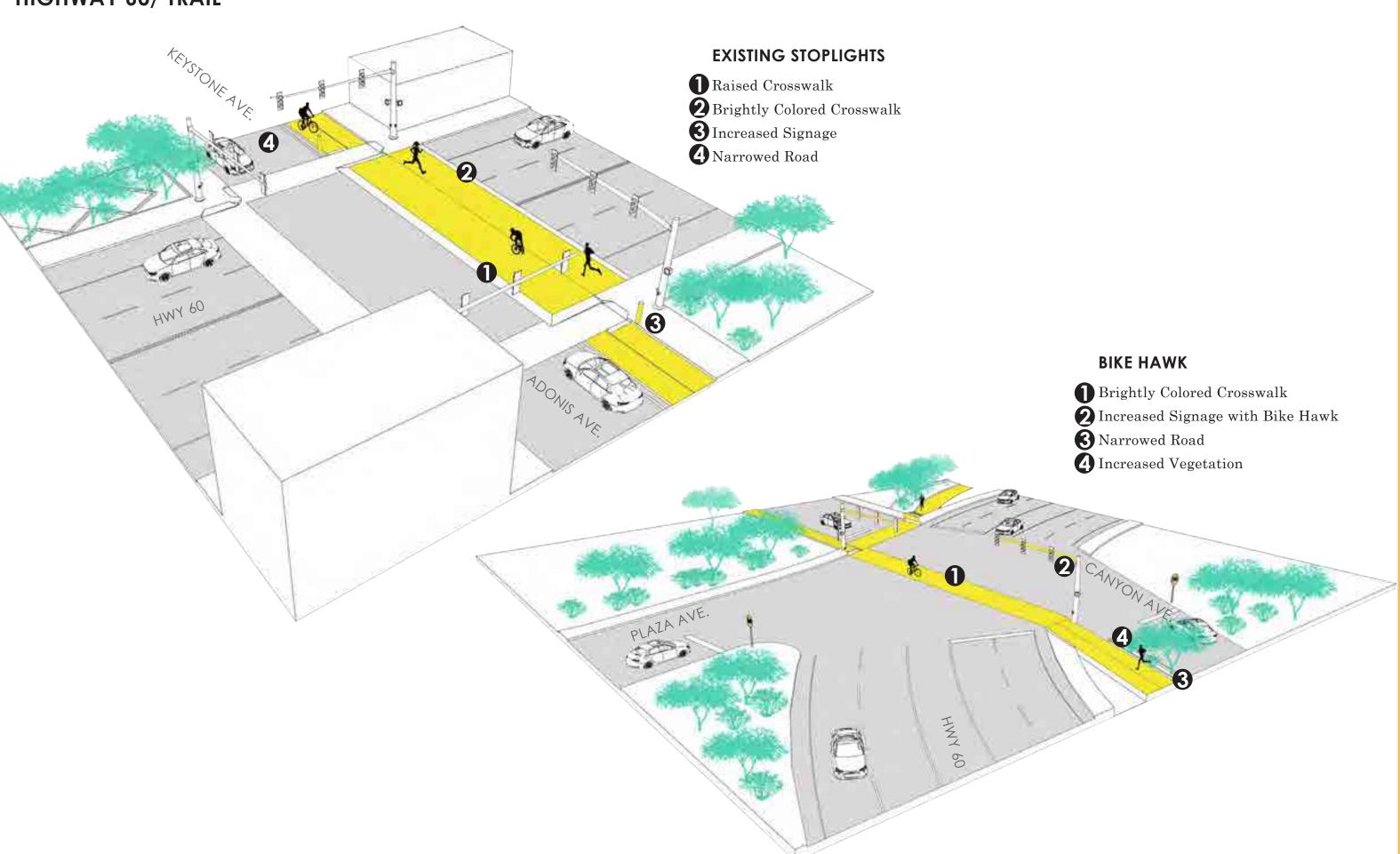
-TRAILS INTERSECTION

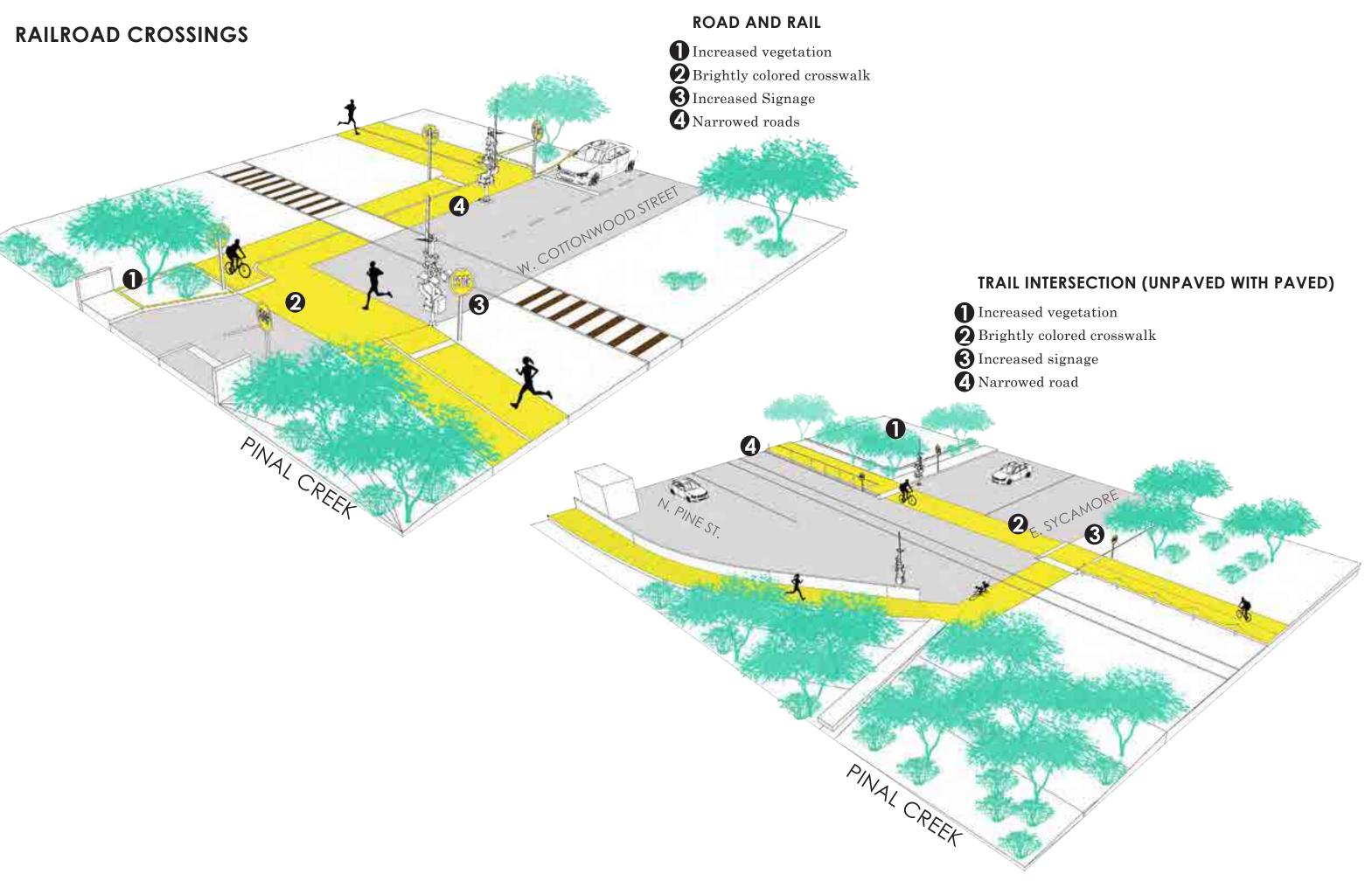
-ROAD/RAIL

# E. CEDAR ST. **DOWNTOWN STREET** Raised Crosswalk 2 Brightly Colored Crosswalk

- 3 Increased Signage
- Narrowed Road
- **5** Increased Vegetation

# HIGHWAY 60/ TRAIL





## RECREATIONAL TRAIL

## **SHARED-USE PATH**







GRAVEL

STONE DUST



# MATERIAL PALETTE





DESERT PLANTS

This trail is 10 feet wide and will be separated from the tracks by, depending on the section and funds, fencing, grade variations, vegetation, and other barriers. The surface treatment will be either bituminous pavement, stone dust, dirt or gravel. Along much of the corridor, the trail will be set back of 13.5 feet from track centerline. In a certain constrained areas, the trail will be narrowed and setbacks will be adjusted. For most of its length, cottonwood forests, and grass filled slopes will further accentuate the natural scenery of the area.









# MATERIAL PALETTE





H LIMESTONE SOIL CEMENT

The shared-use path is an 10 feet wide pathway with 3 feet shoulders that meanders within a 20 feet section of the right-of-way along the eastern edge of the railway. The surface material for the trail can range from concrete, ashpalt, cement, and crushed stone material such as limestone. The trail is setback at least 25 feet from the track centerline and separated by a 6 feet high fence (part chain link, part wrought iron). It is enhanced with shrubs, trees, and signs. The trail is lit and allows night use. The trail users will also be made aware of the grade, cross-slopes, surface and railway functions.

#### SWITCHBACK ACCESS





**ROAD SHOULDER** 



AIRY CONCRETE

**ASPHALT** 



## MATERIAL PALETTE



**DESERT PLANTS** 

These paths shall be between 5-10 feet wide shoulders along low-moderate traffic residential streets. Combinations of Sidewalks and walkways will become "pedestrian lanes" that provide acceptable walking, running, skating, and bike riding for several users throughout different neighborhoods. These trails will further provide access for all types of pedestrian travel: to and from home, work, parks, schools, and commercial areas. Less expensive material such as asphalt or crushed stone will be considered over concrete. Landscape strips will be used as buffers from the street when applicable.









# MATERIAL PALETTE



**DESERT PLANTS** 

These paths are zig-zag routes up the banks along Pinal Creek and help to reduce the elevation grade (the difficulty level) of the hike. The less-steep route path provides access to views of the creek and physical access to the edge of the water. Paved portions of the path will have hand railing and erosion control devices as needed. The trail shall be 8-10 feet wide and offer opportunities for walking, jogging and biking. Connectivity to other trails and parks around the area will be established and strategically placed parking lots will be placed throughout the length of the trail.

# **ENTRANCE SIGNAGE**

#### SIGNAGE

These different wayfinding elements all connect to the history of Globe-Miami. With ties to the railroad and mining, the signage needed to relate to the historical features. Corten steel is an slow weathering material that would relate to the copper mining in the region. As for the proposed wood, using rail wood ties would connect with the railroad and its function to the community.









RAILWOOD TIES











RAILWOOD TIES

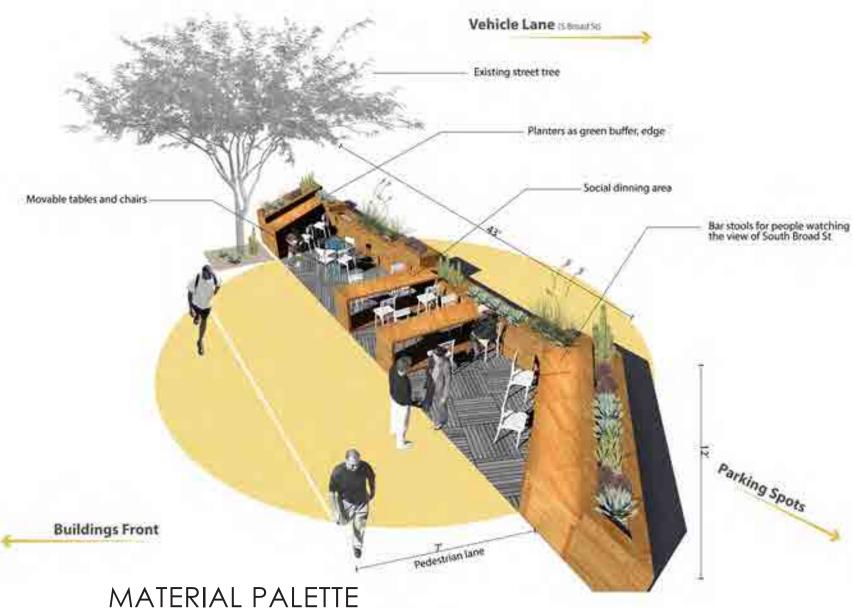


CORTEN STEEL



# **COMMERCIAL SPACE | PARKLET TYPOLOGIES DESIGN**





**PLASTIC** 

WOOD

# Movable Tables and Chain Social Dinning Area Intersection of Road Parking Spots



**DESERT PLANTS** 

#### PARKLET DESIGN IN COMMERICAL AREA

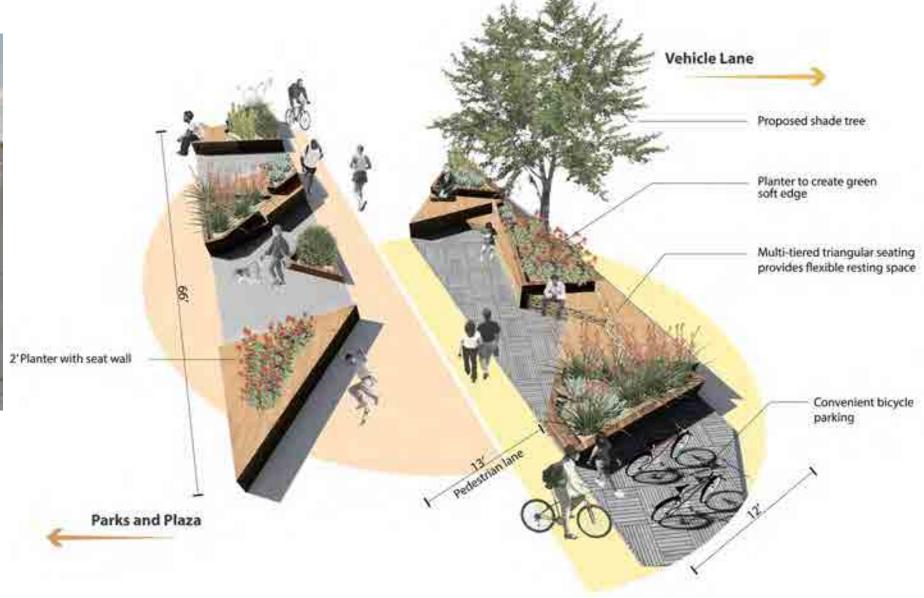
According to the site condition of traffic, some parklet areas can be transformed into an active area for people to use. This parklet design with primary function is extending dining space for the public. The fundamental structure of parklet ABBA PATIO C POSITE DECK looks simple because make sure its design dimension show personal comfort for people. It will typically link with some commercial buildings such as a cafe, and restaurant that is not only featuring the local area but also promoting the city economic development, exaltation the citizen live quality.

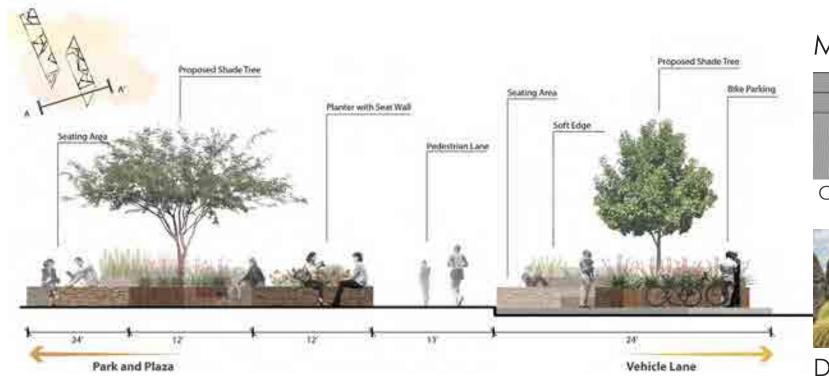
# **VACANT SPACE | PARKLET TYPOLOGIES DESIGN**



#### PARKLET DESIGN IN REACTIVATED AREA

The second parklet typology is more concern about reactivating vacant space into the place for public relaxing space. The central concept of this parking design breaks rules of the traditional mode to construct the multi-tiered triangular seating provide flexible resting space. Besides, remain existing pedestrian lane has enough safe space to minimize accidents between people.





# MATERIAL PALETTE









COMPOSITE DECK TILES

PLASTIC WOOD

STACKED STONE

CONCRETE







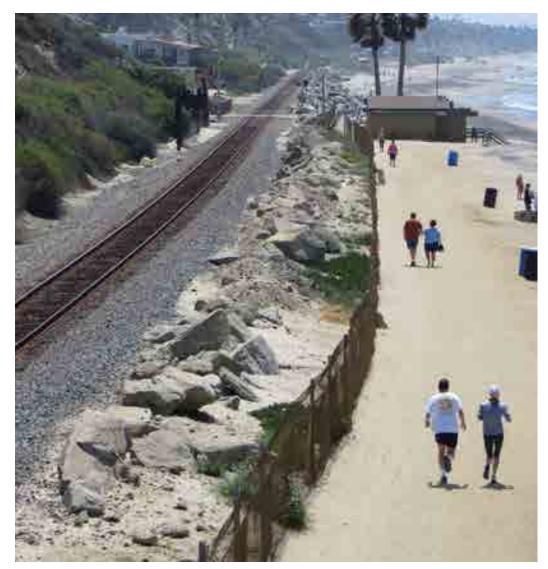
**DESERT PLANTS** 

#### **RAILS WITH TRAILS**

The Rails to Trails Conservancy (RTC) is widely known for its *Rails to Trails* program, which transforms abandoned railroads throughout the country into multi-use paths. A lesser known program is the Conservancy's *Rails with Trails* initiative which constructs multi-use paths within the right-of-way of active rail lines. Over the past 20 years, over 160 rails with trails have been constructed, each uniquely adapted its context. The program has proven to be very safe, with only one fatality occuring between a trail-user and train. Safety measures include a constructed fence between the trail and railroad, and appropriate distances between the trail and railroad.

This program is well-suited for lesser-used, class 2-3 railways such as the one that travels through the Miami-Globe area and has been incorporated into large segments of the trail. Aligning the Cobre Valley Rail Trail with the existing railroad right-of-way is a creative solution that avoids relying on numerous private property owners' to grant permission to construct a trail across their lands. The existing railway corridor also skirts the complex topography of the area, providing a relatively accessible and usable trail for many individuals.

A free *Rails with Trails* report by RTC is available online, and provides additional guidance and requirements for rails with trails.



San Clemente Beach Trail, CA



Schuylkill River Trail, PA



Charlotte Trolley Rail-with-Trail, NC



Santa Fe Rail Trail, NM

### PHASING OF TACTICAL URBANISM





BIKENWA.ORG









TACTICALURBANISMGUIDE.COM



ARCHPAPER.COM

Using street painting to designate pedestrian and bicycle ways is a way to narrow the street, slow traffic, enforce safe pedestrian and bicycle ways, and create interest in an area that is currently an underused opportunity.

Miami's and Globes dowtown streets are overlooked by people passing through. Putting in measures to force tourists and passerby to slow down enough to stop and look will increase the number of people visiting local businesses and encouraging locals to begin businesses.

Thinking about low cost, but high impact interventions can be an effective way for economic change to begin. These projects can be a community initiative that has a tangible, visible, and nearly immediate impact. Phasing from a low cost but high impact intervention to a high cost and high impact intervention can be accomplished over time.



**EASTBAYTIMES.COM** 



CHARLESTONCVB.COM



Sykes Alley in Miami, AZ has the potential to become a community and tourist corridor on the proposed trail. With historical and guirky buildings along its path, a proposed two block greening of the alley with plants and art work from local artisans and high school students is a way to bring interest further from the highway and closer to the local businesses.

The space is 20 feet wide, and an initial pilot projec that could invest in a simple intervention of art and clean up for two blocks. The additional blocks of Sykes Alley could be a second phase. The alley leads to an empty lot next to a YMCA building. This alley could be a catalyst for that lot and the YMCA to become a community hub of activity like farmers markets, entertainment, and larger community gatherings.

Greening alleyways is an intervention that could be utilized in other lower traffic areas where cars still need access, but can be mutli-modal for pedestrians and bicycles as well. A green alley can become an amenity rather than a purely functional space.

#### **GREEN ALLEYWAY PHASING**

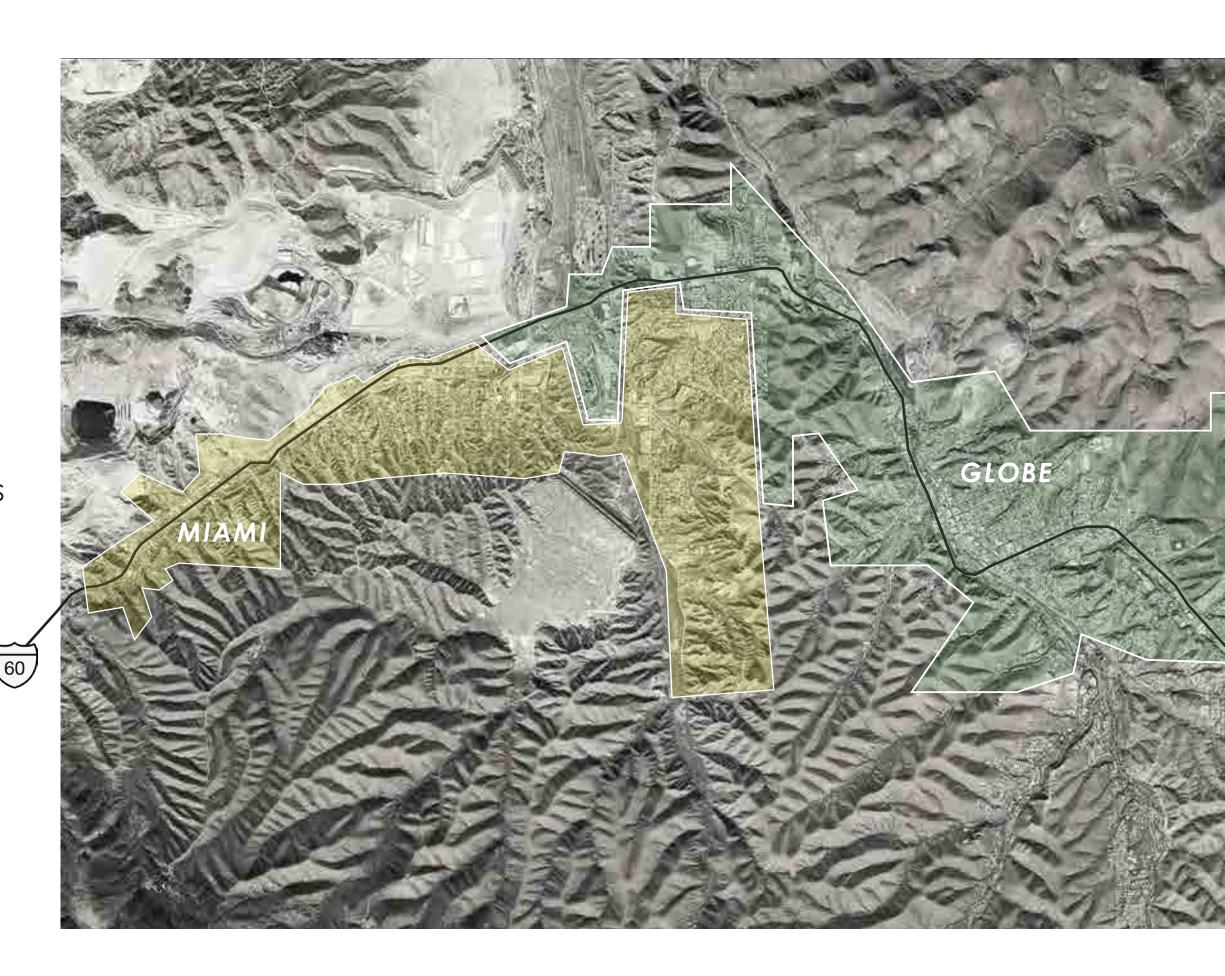








Globe - Miami Inventory and Analysis



**Physical Environment** 



### WATERSHED | COBRE VALLEY

#### **TOPOGRAPHY**

Miami-Globe is located within Cobre Valley - a 100 mi<sup>2</sup> watershed of the larger Salt River basin (Figure 1). This area is characterized by steep north-trending mountain ranges interlaced with alluvial basins and valleys. Elevations range from 2,000-7,800 ft, with the Miami-Globe area at an elevation of approximately 3,500 ft.

#### SURFACE HYDROLOGY

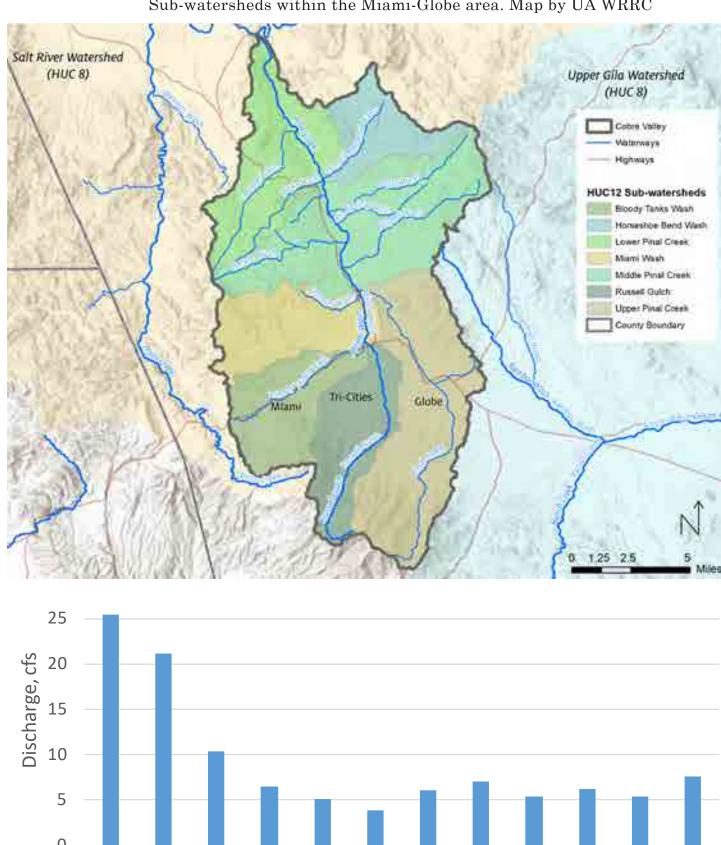
Waterflow is generally south to north, with Miami, the Tri-City area, and Globe each centered within a separate sub-watershed of the Cobre Valley (Figure 2). Pinal Creek runs through Globe and is the primary tributary for the surrounding sub-watershed. Similarly, Bloody Tanks Wash is the primary tributary for the Miami sub-watershed and Russell Gulch drains run-off from the Tri-City area. All three tributaries exhibit ephemeral flow.

Pinal Creek is of particular interest because it is adjacent to the proposed trail. Flow varies depending on the time of year, with largest flow recorded during the winter rainy season and spring snow melt (Figure 3). While crossing the creek is possible at many times of the year, high discharge rates impede creek crossing, and limited, widely-spaced bridges provide minimal cross-creek access during these periods. Locals note that river flooding is not a pressing issue, but structure damage due to flooding has occurred in the recent past.



The Cobre Valley is within the greater Salt River basin. Map by UA WRRC.

Sub-watersheds within the Miami-Globe area. Map by UA WRRC

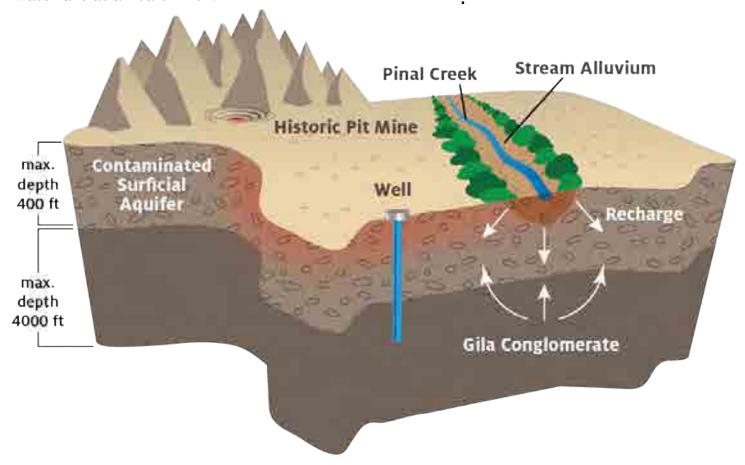


Pinal Creek mean monthly discharge, 1981-2018. Data source: USGS

#### SUB-SURFACE HYDROLOGY

Two aquifers exist within Cobre Valley (Figure 4). Surficial alluvial deposits comprise the top aquifer, which is contaminated with pathogens, heavy metals, and other toxins originating from insufficient management and treatment of mine tailings, human waste, and industrial activity. Most of the contamination is released through erosive processes and transported by runoff to inhabited areas. The worst contamination is found along Pinal Creek and Miami Wash, where contaminated run-off and sewage leakage is continuously infiltrated into the surficial aquifer.

The lower aquifer is uncontaminated and comprised of a semi-consolidated conglomerate. It is up to 400 ft below the surface, and all drinking wells should be connected to this aquifer. The municiple water system connects to this aquifer, and serves approximately 89% of residents of the valley. Over 500 private wells exist within the Miami-Globe area, and unfortunately many are contaminated. Individuals that rely on these wells for drinking water are at a health risk.



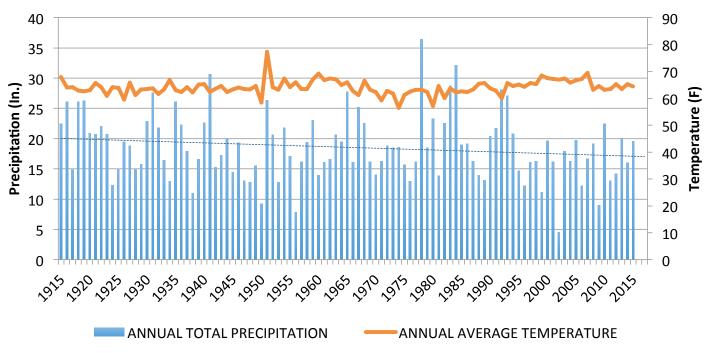
Simplified geology of Cobre Valley. Supplied by UA WRRC

#### HIGHLIGHTS AND TAKE AWAYS

- Consideration should be given to Pinal Creek crossing and access during rainy seasons
- Pinal Creek is significantly contaminated, and education about and mitigating some of these effects is important if adjacent recreation is to be encouraged
- Erosion control measures around tailings and dump sites could help slow toxic input to waterways.
- Remediation of surficial soils and/or appropriate crop selection is critical if local agriculture is to be encouraged

### **CLIMATE** | COBRE VALLEY

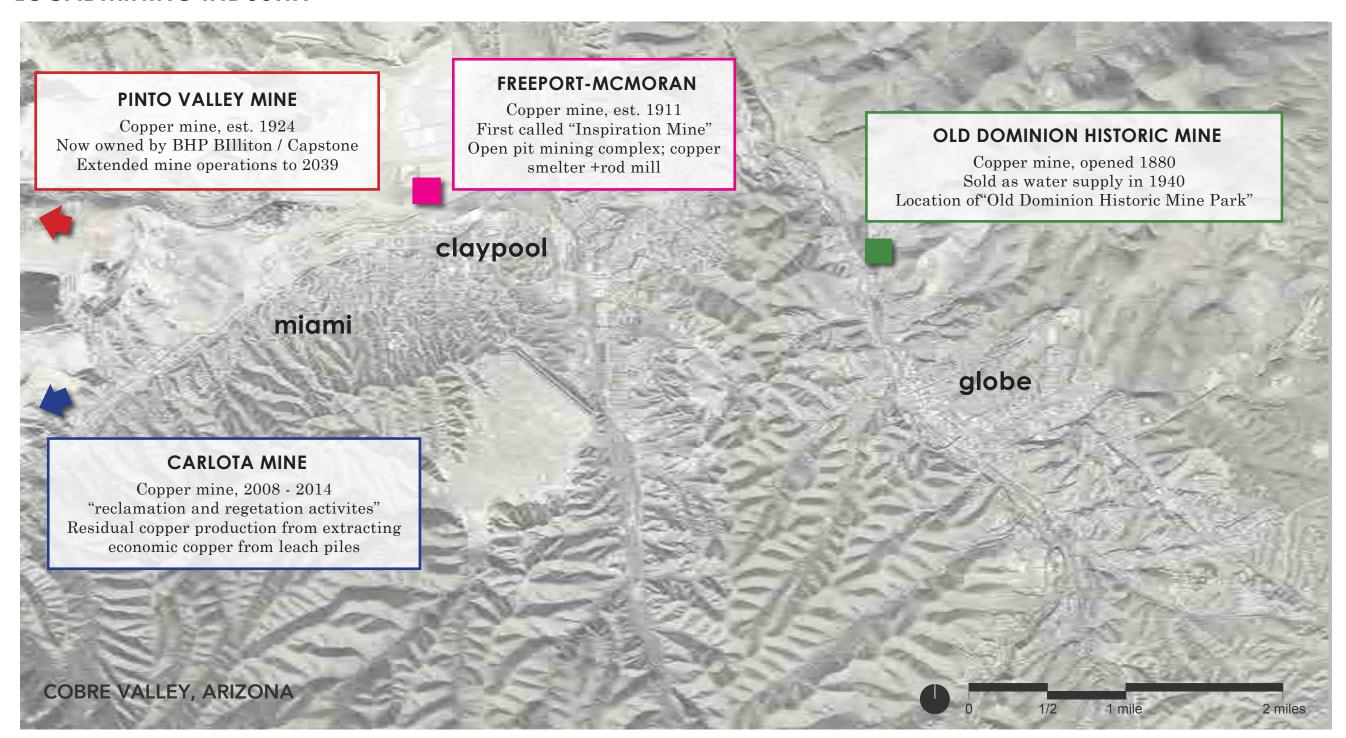
Due to its higher elevation, Cobre Valley exhibits cooler temperatures and more precipitation than Tucson and Phoenix. On average, annual precipitation is between 13.8 and 19.5", with 64% occurring during the winter rainy season. The majority of the remaining precipitation occurs with summer monsoons. Temperatures in the region have gradually increased over the last century, while precipitation has decreased (Figure 5).



Average temperature and total precipitaion, 1915-2015. Graph by UA WRRC

- Relatively cool, wet climate could make Globe-Miami attractive to nearby tourists, especially during the hot summer months.
- Decreasing precipitation and increasing temperatures suggest efforts should be made to increase water conservation, infiltration, and overall sustainability.

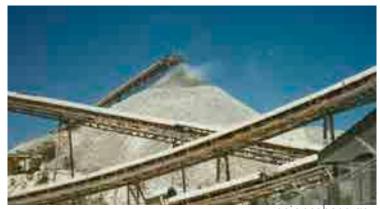
### LOCAL MINING INDUSTRY





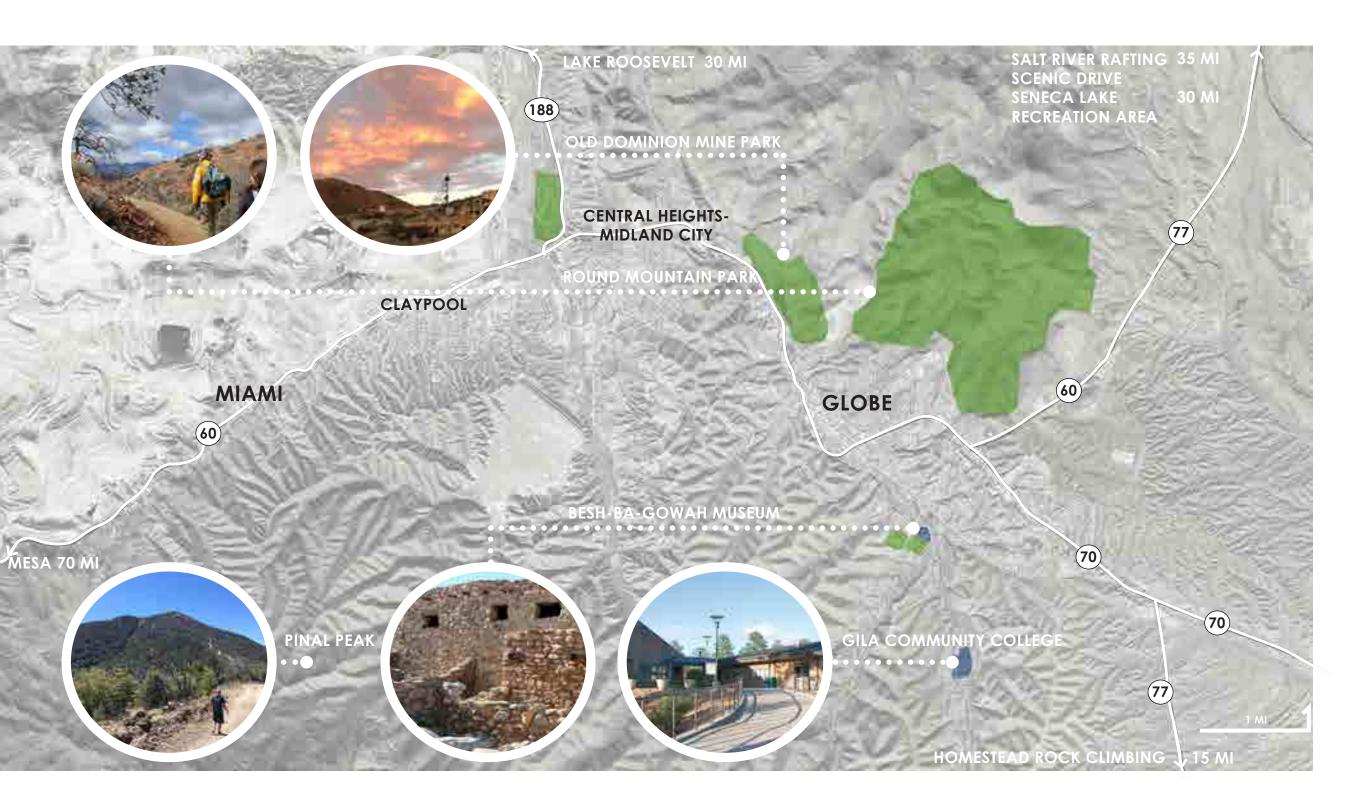


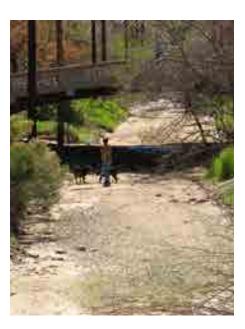




- Mining industry is centered around western region towards Miami
- Mines are major cultural landmarks for the community
- Limited lifespan of industrial processes
- Timely need for considering future use of these landscape elements

sciencebase.go





# COBRE VALLEY ASSETS

The Cobre Valley has many assets within reach of its visitors and citizens. Residents are within weekend get aways to river rafting, camping, hiking, and climbing. If the visitors would like more of an educational experience, Besh-ba-gowah museum and the Gila community college both offer educational experiences.

- Many vacant lots and buildings make the valley look like a Ghost town
- Numerous recreational activities are opportunities for hosting guests
- Historical mining towns with interesting remnants and museums useful for road trips or school groups





# **GLOBE**

A downtown historic district with many buildings on the National Register of Historic Places will draw you into this little town. You can shop for antiques til you drop in old relics such as the Pickle barrel trading post or take a tour in the haunted Gila county jail. you won't be disappointed by the astounding mexican food in this town either. All the recipes and restaurants originate from one family, so you can't go wrong.

- Many vacant lots and buildings
- Beautiful Pinal creek with Cottonwoods and Sycamores
- Great food!
- Unique historic district
- Several small parks and two larger parks with trails



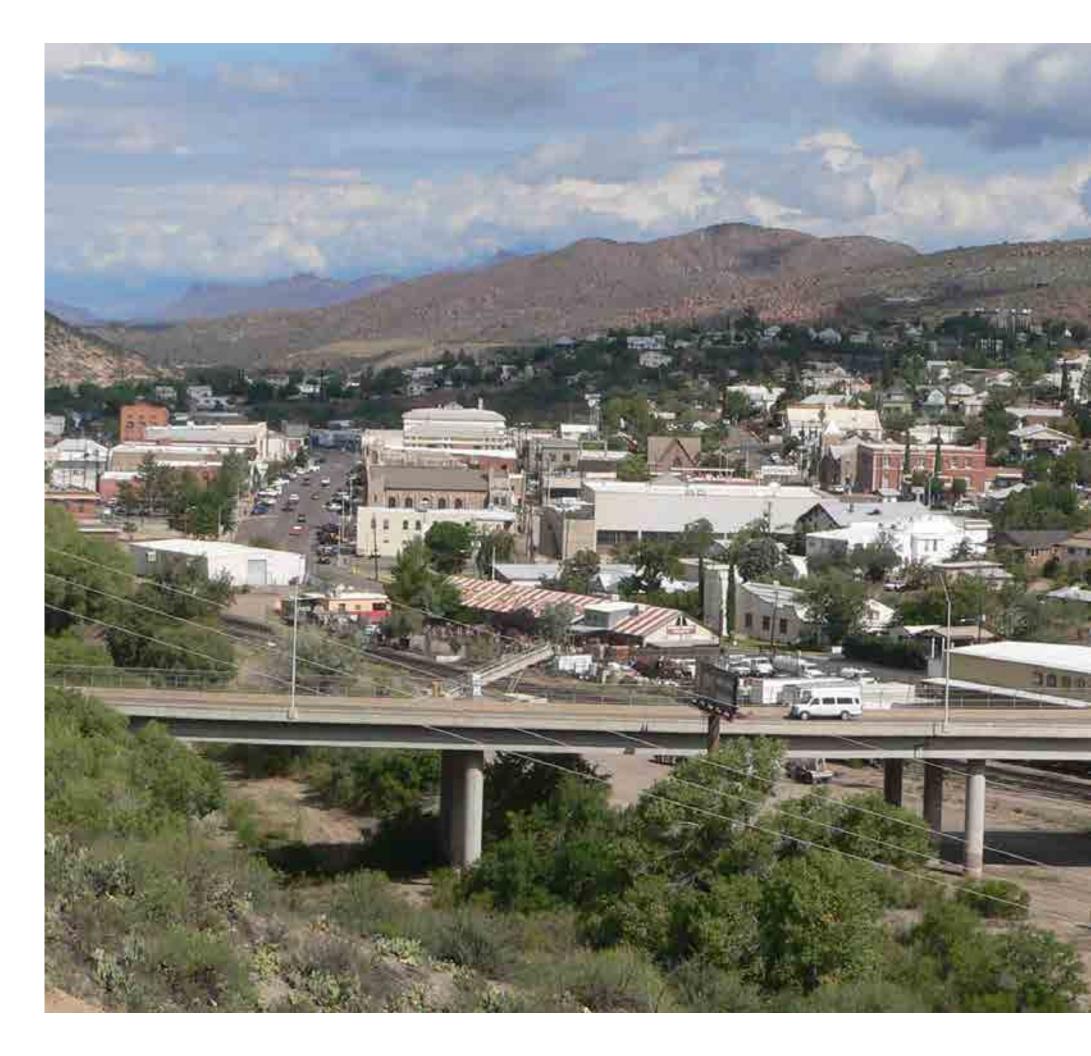


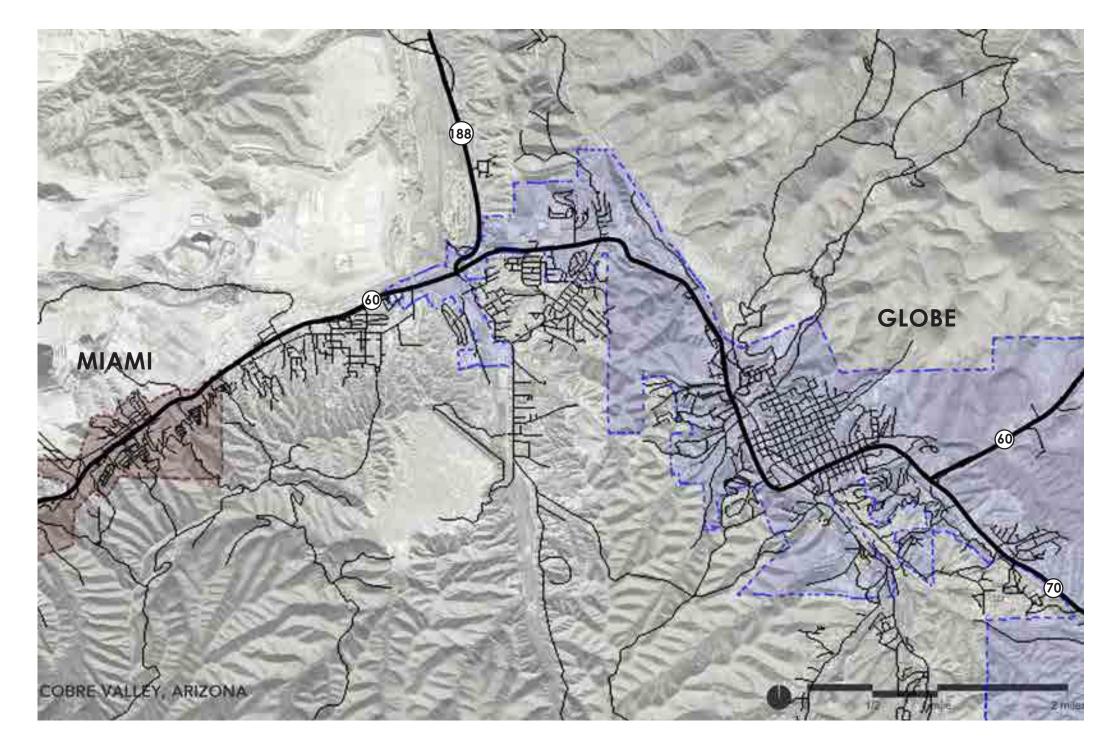
### **MIAMI**

Miami is small and surrounded by the BHP mines but still keeps its quaint look. There are 50s style candy shops and a cute Memorial Park with seating and a stage. The Historic District can feel like a ghost town with its vacant buildings but there is a cute series of cat murials that lead through the downtown street. Miami also boasts of several beautiful murals. There is a consistent walking crew that use the Bloody tanks wash, so Miami could use this asset to create a more permanent trail.

- Ghost town with vacant lots and buildings
- Beautiful well-used Memorial park
- Cute unique series of murals that tie the downtown together
- Bloody tanks wash

# Circulation











Roadway conditions. Source: Cobre valley transportation study, 2013

# STREET NETWORK | COBRE VALLEY

Located approximately 80 miles east of Phoenix, Arizona, Cobre Valley is an important copper mining center in central Arizona. The Cobre Valley study area consists of approximately 160 square miles in Gila County, and includes the communities of Globe and Miami, which were originally established as mining camps for the area's abundant copper mines. The study area is within the CAG planning area. Map above shows the Cobre Valley study area boundary.

Assessment of several street networks revealed insufficent sidewalks, inadequate street lighting, insufficient stormwater drainage, and poor pedestrian crosswalks throughout both Globe and Miami. Several streets lacked approriate tree canopy shading and conditions of concrete and asphalt wear and tear are pervasive.

- Insufficient bike and pedestrian routes
- Drainage issues allow for implementation of green infrastructure development
- Strong need to establish safety pedestrian crossing areas
- Enhance network of green spaces that encourage pedestrian connectivity
- Encourage multi-modal travel

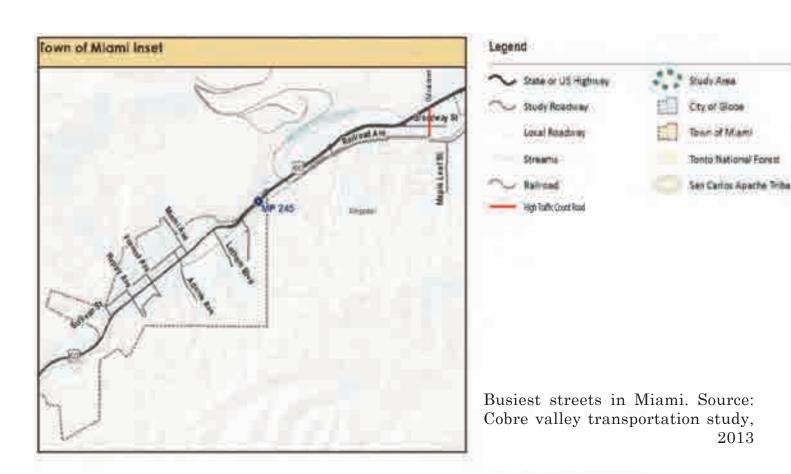
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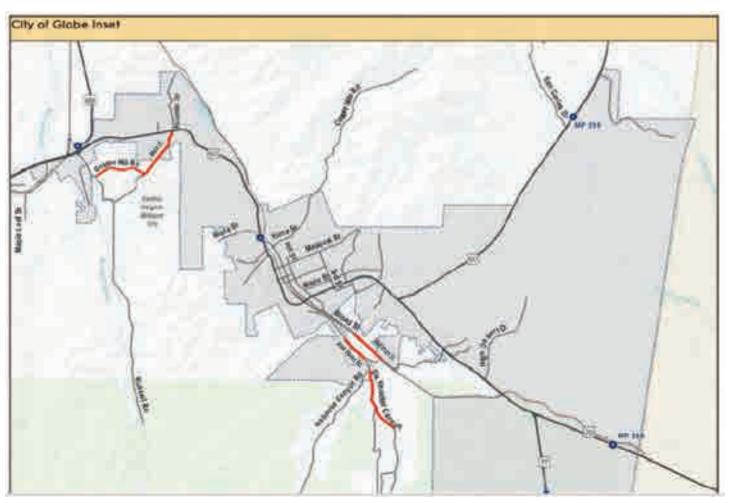
#### TRAFFIC VOLUMES

The roadway network is comprised of state highways and non-state roadways owned by Gila County, federal agencies, local jurisdictions, or private owners. Gila County owns or maintains a total of 764.9 miles of roadways (171.8 miles of paved roadways and 593.1 miles of unpaved roadways), of which approximately 500 miles are U.S. Forest Service (USFS) roadways.

Traffic volume information serves to indicate how close to capacity roadway segments or intersections may be.Roadways with traffic volumes in excess of 1,000 vehicles per day are shown in Table 10. The highest traffic volumes occur on segments of Golden Hill Road, Main Street, Jesse Hayes Road, and Houston Mesa Road located within Globe and Miami respectively. All of the roads on this table have two through lanes (one lane in each direction) which varying degrees of speed limits, ranging from 15-65 mph.

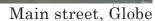
The 2011 ADOT report for the Cobre Valley study area reveals the highest traffic counts. Old Oak Street, segment between Locomotive drive and US 60, had a 2,028 traffic count; Six Shooter Canyon Road, segment between Cherokee Road and Icehouse Canyon road, has a 2,093 traffic count; Golden Hill Road, segment between Russel Road and Main Street, had a traffic count of 2,160; Walliman Road, segment between Bear Tree Crossing and 0.13 out east from Brea Tree Crossing, had a traffic count of 2,194; Main Street, segment between US 60 and 0.44 mi south from US 60 had a traffic count of 3,607; Jesse Hayes Road, segment between 0.09 mi northwest of SR 87 and Oil Circle Drive had a traffic count of 4, 178; Main Street, segment between Golden Hill Road and Short Avenue had a traffic count of 4,707.





Busiest streets in Globe. Source: Cobre valley transportation study, 2013







Golden Hill Road, Globe



Jesse Hayes Road, Globe

- prioritize improvements for circulation based on roads that are highly utilized
- preserve highly rated infrastructure within street network
- further analyze proposed roadway improvements and build from existing designs
- Enhance and utilize existing green scenery on road networks
- In addition to streets, consider reviewing bridge connections
- Develop major gateways into the City that are visually appealing



### **EXISTING TRAILS**

Round Mountain Hiking Park has 6 different trails that joggers or hikers can use with restroom facilities located on the west side. It was originally established by the UA landscape architecture program and the City of Globe now maintains it.

# Globe has two main hiking trails near town. Old Dominion Historic Mine park owned by BHP has a series of old mining road trails where you can bike, walk, or run and learn about how the old mine worked and explore its nooks and cranies.

GLOBE

# HIGHLIGHTS AND TAKE AWAYS Mine park owned by the state of old mining by th

- Easy access trails with good facilities
- Not much shade
- Hard to locate if you don't live in Globe





# **Social Environment**

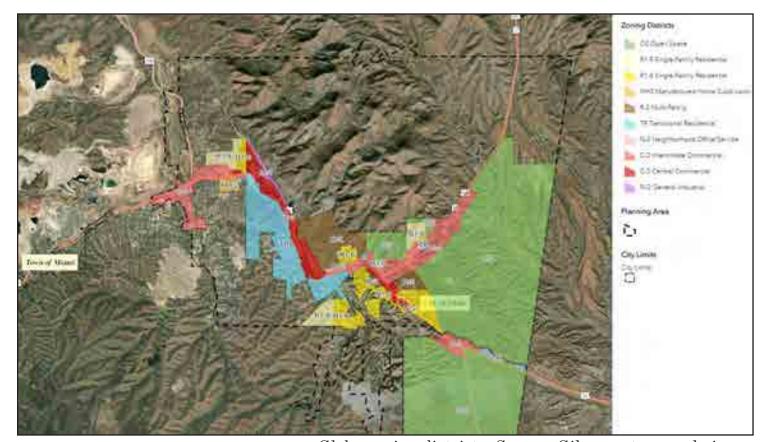




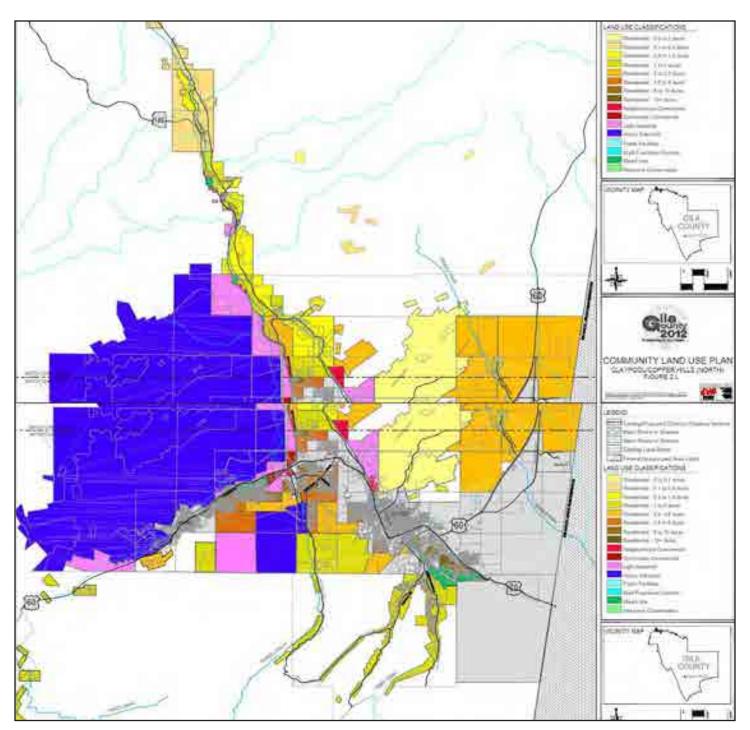
#### LAND USE | COBRE VALLEY

The existing land use pattern of Gila County can be traced to its historical settlement by early miners, ranchers and loggers. Communities in the southern portions of the county such as Hayden, Winkelman, Miami and Globe have their roots and their patterns of development linked to early mining and mineral exploration activities. The communities of Hayden, Winkelman, Miami and Globe generally have a compact development style organized around linear streets with a traditional downtown commercial core. Today, while mining and ranching are still significant components of the economy in certain areas of the county, other developing industries such as recreation and tourism are increasingly influencing the county's development pattern.

Private lands account for 4.07% of this area, (124,000 acres). The growth of Gila County is directly related to the availability, location and developability of these private lands. Developability includes factors such as physical and environmental conditions, as well as utility and infrastructure serviceability. Of the 124,000 acres of private lands in the county, roughly 18,500 acres are within incorporated cities and towns, such as Globe, Miami and Payson. The remaining 105,000 acres are scattered throughout the county as smaller parcels within United States Forest Service (USFS) and Bureau of Land Management (BLM) lands and as clusters unincorporated communities. In the unincorporated areas of southern Gila County, private lands are located primarily in the Claypool area in the vicinity of GlobeMiami, along State Route 77, or are under the ownership of large mining and ranching. The remaining 94% of the county's land area is comprised of holdings by the Fort Apache and San Carlos Apache Indian Reservations (38%), U.S.F.S. Tonto National Forest (55%), BLM and National Park Service (1.7%) and other local and state government agencies.



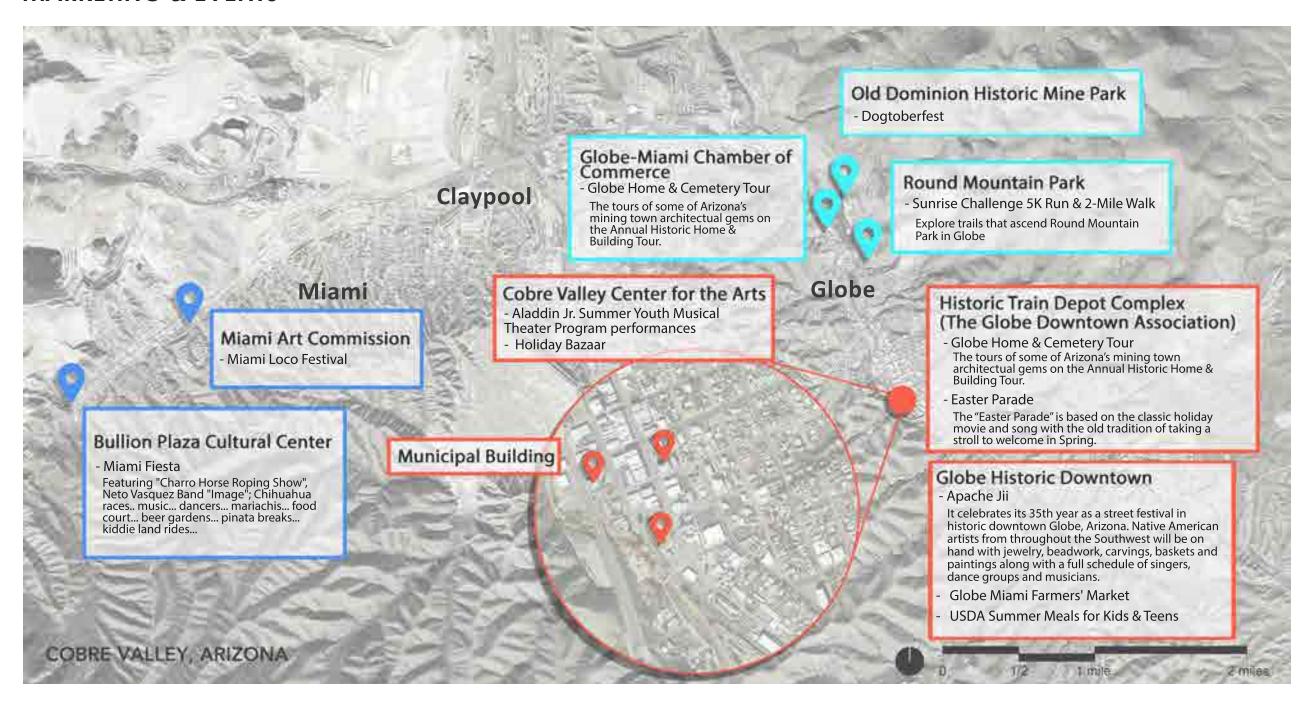
Globe zoning districts. Source: Gila county parcel viewer



Gila County Land Use map. Source: Gila county community land use plan, 2012

- identify planning areas compatible with mixed-use development
- mix of land uses is needed to sustain ecotourism and promote economic development
- protect and enhance both Globe and Miami historic downtowns
- further identify vacant lots to repurpose and revitilze
- review land ownership/use to ensure successful development implenetation

#### **MARKETING & EVENTS**













- The most active area to gather people is globe historic down.
- Some of the events frequently held each week such as Globe Miami farmers' market.
- Events tend to propagate a national culture that provide excellent opportunities for people more engage in diverse culture.

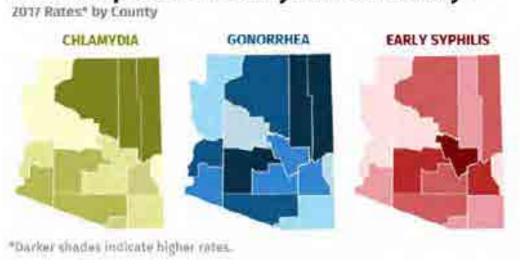




 ${\sf MYGILACOUNTY.COM}$ 



# STDs are present in every Arizona County.



Healthy communities and healthy living are a high priority ofr Gila County



Gila County has been developing health outcomes and determining the interventions.

### **HEALTH OUTCOMES IN GILA COUNTY**

Gila County has identified four priority public health issues:

- 1. Obesity
- 2. Substance Abuse
- 3. Access to Health Care and Mental Health Services
- 4. Sexual Health

In this county, 19.6% of the population are uninsured, specialist doctors are not in town, and diabetes and diabetes related health issues are some of the leading causes of death.

Along with a history of water pollution from mine tailings, like dioxins, which have been attributed to diabetes and hormone disruption; health concerns a high priority.

13.9% of the population infrequently eat fresh fruits and vegetables.

- Opportunities exist to implement programmed and non-programmed spaces to encourage exercise
- Adding spaces for vendors to sell fresh fruits and vegetables is a way to bring more people in contact with fresh fruit and vegetables
- Utilizing demonstration sites for community and school gardens is another way to introduce fresh foods
- There is a need to create spaces that are safe and welcoming for recreation

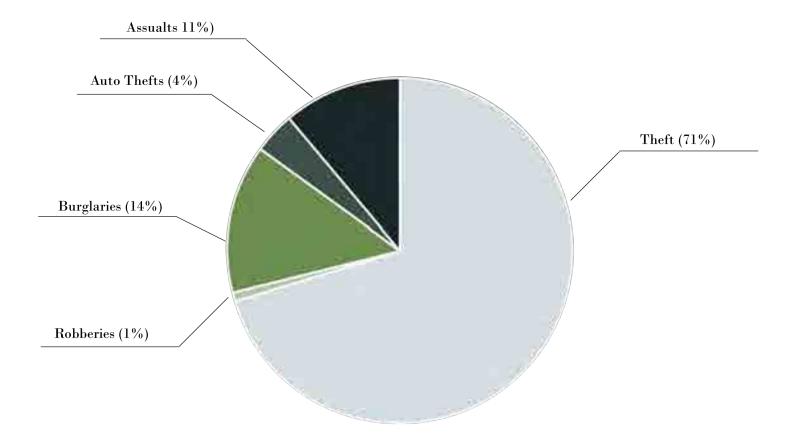
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#### **GLOBE-MIAMI CRIME**

The Globe-Miami area has been dealing with several different crime activities in the region. Looking at Figure 1 below, it illustrates the percentage of what crimes are reported in the Gila County. The highest is the number of theft in the city. Most of the crime happen at the central core of both cities. The occurring crime activity could be affected by the economy of the town as well as the issue of lighting and visibility throughout the town.

Looking to Figure 2 on the next page, it displays the reported incidents within Globe and Miami and how they relate to the state of Arizona and the United States. From the chart, the most common crime activities are violent crime and property theft.

According the Neighborhood Scout, Globe and Miami have one of the highest crime rates in America compared to all communities of all sizes - from the smallest towns to the very largest cities. In Globe, one's chance of becoming a victim of either violent or property crime here is one in 11 while in Miami the chance is one in 15. Within Arizona, more than 99% of the communities have a lower crime rate than Globe-Miami area.



Statistic	Reported Incidents	Miami	Arizona/ 100k people	National/ 100k people
Total Crime	123	6,933	3,432	2,745
Statistic	Reported Incidents	Miami	Arizona/ 100k people	National/ 100k people
Murder	0	0	5.9	5.3,41.7
Rape	0	0	51	98
Robbery	2	112.7	106	148.9
Assualt	29	1,643.70	345	383
Violent Crime	31	1,747	508	430.4
Burlary	53	2,987.60	536.3	1,694.40
Theft	33	1,860.20	2,107.60	1,694.40
Vehicle theft	6	338.2	272	237.4
Property crime	92	5,186	2,915	2,362
Statistic	Reported Incidents	Globe	Arizona/ 100k neonle	National / 100k neonle

		-,	3,12	_/
Statistic	Reported Incidents	Globe	Arizona/ 100k people	National/ 100k people
Murder	1	12.6	5.9	5.3,41.7
Rape	2	27.2	51	98
Robbery	7	95.3	106	148.9
Assualt	116	1,578.40	345	383
Violent Crime	126	1,715	508	430.4
Burlary	89	1,211.10	536.3	1,694.40
Theft	409	5,565.40	2,107.60	1,694.40
Vehicle theft	56	762	272	237.4
Property crime	554	7,538	2,915	2,362

3,423

2,745

9,253

#### HIGHLIGHTS AND TAKEAWAYS

680

**Total Crime** 

- In Miami you have a 1 in 15 chance of becoming a victim of any crime.
- The number of total year over year crimes in Miami has increased by 16%
- In Globe you have a 1 in 11 chance of becoming a victim of any crime.
- The number of total year over year crimes in Globe has increased by 5%.







60th ANNUAL GILA COUNTY

Donations:

\$3:00 Per Person \$5:00 Per Couple

Students & Children - FREE

OD OF CHILDREN'S ACTIVITIES 11 JERNONGTERRING HAR VINCORS

(AMONIT COURTMENT/TOOLS 11 NO SPECIAL RESPECTS

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**GEM & MINERAL** 

SHOW





Globe, AZ teenagers have few productive opportunites for their free time. globeschools.org

#### YOUTH OPPORTUNITIES IN GILA COUNTY

Gila County has the highest teen pregnancy rate in Arizona. In 2000, there were 147 teen births, in 2016 the number of teen births had decreased to 88, but was still the highest in Arizona. (www.paysonroundup.com May 22, 2018). One of the major impacts of teen pregnancy in Gila County is fewer than 2% of teen mothers will obtain a college degree.

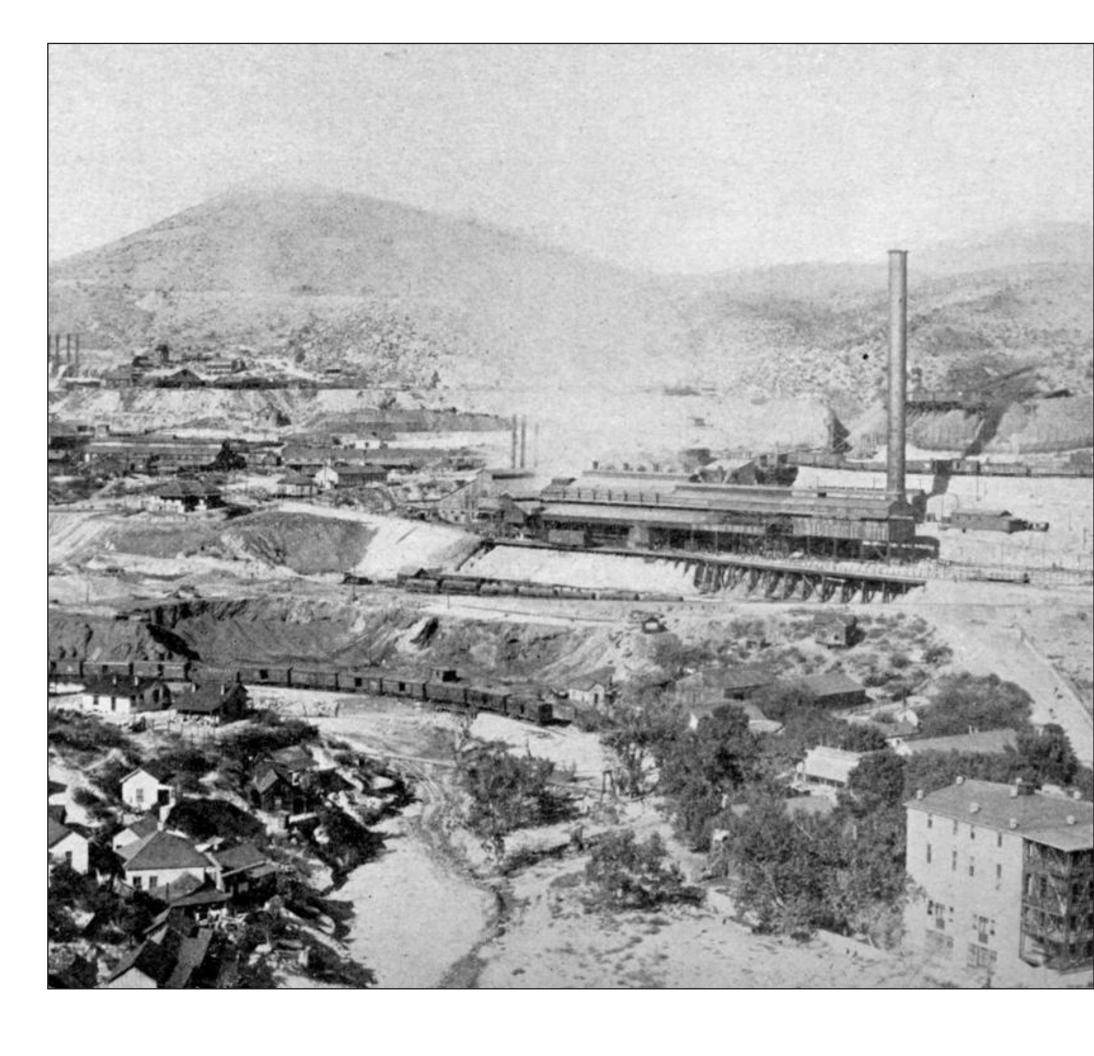
Teens in Gila County are 20% of the population, and are spending their free time drinking, smoking marijuana, and a small population are using methamphetamines.

In the past, there was a Boys and Girls Club, roller-skating rink, and bowling alley. (AZ Health Zone of Gila County, September 2018). Those were closed and now the few non-school related places to go are a few small parks, the forest, casino, a movie theatre, and a variety of bars and restaurants.

- Improving opportunities for youth activities will decrease undesireable behavior
- Youth activities should include: sports, arts, and outdoor activities.
- Highlighting some of the opportunties that are there (Summer Youth Musical Theatre Program) and expanding them will lead to more involvement of this population
- Establishing support systems for teen mothers to pursue educational and work opportunities will improve the outcomes for both mother and baby



# **Historical Context**



# BUILDING CHARACTER | ALONG HIGHWAY 60







# BUILDING CHARACTER | DOWNTOWN AREAS







- Downtown streets have walkable characteristics (shady, small/varied business facades)
- Walkable areas are invisible from vehicular throughways
- Throughway streets (Highway 60) have small storefronts but these are mostly vacant
- Demonstrated need to emphasize town character along the throughway
- Opportunities for small-scale facade revitalization

#### NATIVE AMERICAN HISTORY IN GILA COUNTY

The San Carlos Apache tribe in Gila County has been on their reservation since 1872. The reservation land currently encompasses 1.8 million acres of land that is mostly forest. Before the San Carlso Apache, this area was also home to the Salado people and the Hohokam people as well. It is estimated that the Salado first occupied the are from 900 AD to 1450 AD. During the past few years, the San Carlos Apache have protested the construction of a new mine, Oak Flats Copper Mine, by Rio Tinto. The proposed mine would be on a sacred site for the tribe. Adding to the legal issues are the historic dioxin sprayings of the area and the resulting health impacts that have been felt not only by the tribe, but citizens within the Globe-Miami area.



Time line of Gila County. (Globe 2035 Plan)



BESH BA GOWAH ARCHAEOLOGICAL RUINS in Globe, Arizona



Besh Ba Gowah







DESIGNINDABA.COM

TUCSON.COM San Carlos Apache Tribe

- Respecting and honoring the history of the San Carlos Apache tribe is a way to also show honor and respect for Gila County.
- The San Carlos Apaches have been protesting the addition of another copper mine in Gila County
- The tribe has a casino that can be a draw for tourism and activities that are commonly associated with tourism (restaurants, hotels, car rentals, and tangential activities like entertainment and outdoor activities.)

### COPPER SPIKE | GLOBE TO APACHE GOLD CASINO

The Copper Spike was a train service that ran from the downtown Globe train station to the Apache Gold Casino from 2008 to 2011. The 7.5-mile, hour and a half train ride offered one round trip daily Thursday to Saturday. A 1950's dome car, two coach cars, and a parlor car were pulled by a diesel engine, offering visitors a unique historic transportation experience. The historic 1916 Globe train station was also recently renovated and tied in to the historic train experience.

When the railway was bought by Genesee and Wyoming Inc. in 2011, the Copper Spike ceased running. Bringing some version of the Copper Spike back would be beneficial for both tourists and locals traveling between Globe and the San Carlos Apache Reservation. Twenty miles of bare, open desert currently separates downtown Globe from the center of the San Carlos Apache Reservation, making it difficult for locals to make this trip without a car. Many locals currently walk along the road and/or hitch-hike to travel between Globe and the Reservation, and public transit would make this journey safer and more convenient for those who make it. There is an opportunity to tie in tourist interests with local needs and existing infrastructure to provide a connection between Globe and the San Carlos Apache Reservation.



The train used in the pilot test of the Copper Spike in 2006

The Arizona-Eastern Depot in Globe was renovated to be the ticket office for the Copper Spike





- 20 miles of open desert between San Carlos and Globe make a public transit option necessary for locals
- Existing infrastructure, recently restored historic depot, and tourism opportunities could be tied to local transportation needs by bringing back a version of the Copper Spike that connects San Carlos to Globe

# **Assets and Opportunities**



# Miami

- Many vacant lots and buildings
- Beautiful well-used Memorial park
- Series of murals that tie downtown together
- · Bloody Tanks Wash

# Globe

- Many vacant lots and buildings
- · Pinal creek with Cottonwoods and Sycamores
- Great food!
- Cute historic district
- · Several small parks and two larger parks with trails

# **Cobre Valley**

- Many vacant lots and buildings make the valley look like a Ghost town
- Numerous recreational activities are opportunities for hosting guests
- Historical remnants and museums are great for road trips or school groups

# Goals and Objectives



# Enhance community health through access to activity + healthy food and water

- Promote local agriculture through school gardens and farmers markets
- Provide and encourage opportunities for free outdoor recreation
- Allow activities that once existed to return (roller skating, bowling alleys, and activities geared towards the younger populations)

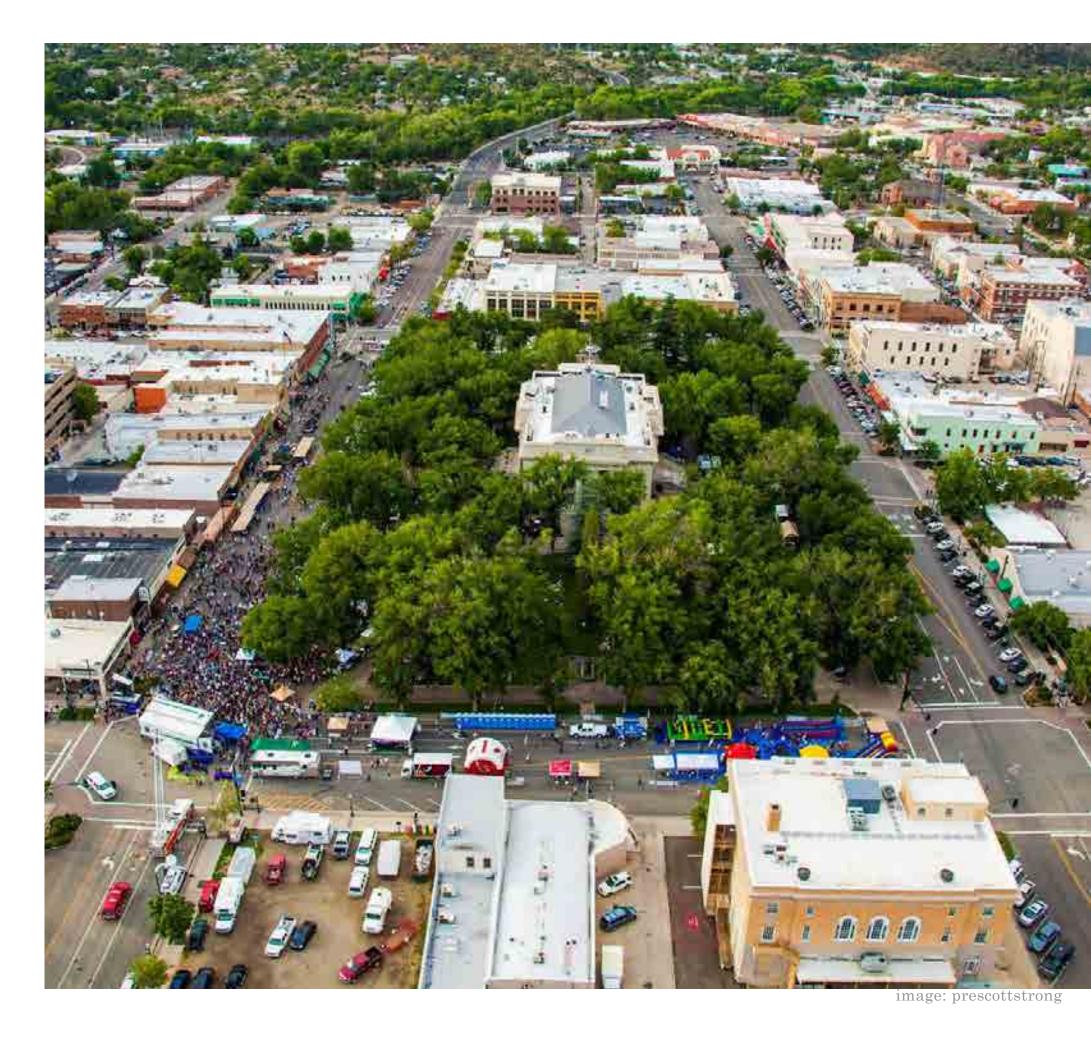
# Establish downtown core centers that strengthen culture and historic identity

- Develop spaces that encourage social activities and gatherings
- Retain and preserve established downtown buildings and residences
- · Provide open green spaces as needed
- Provide and encourage opportunities for free outdoor recreation

# Develop locations that will attract businesses to establish in Globe-Miami.

- · Create walkable, pedestrian and bicycle friendly roadways
- Develope infill spaces with amenities that the community will utilize for public and private functions
- Provide connectivity between Globe-Miami

# **Precedents**



### BOZEMAN TRAILS | BOZEMAN, MONTANA

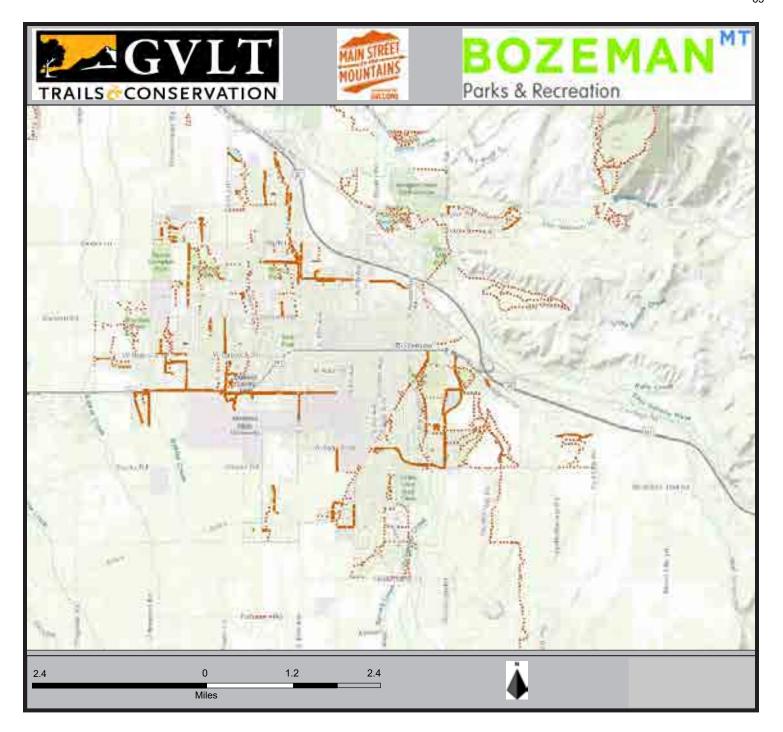
Bozeman has a series of trails throughout the city which are usually crushed stone paths. These trails lead to parks, Downtown, the Public Library, or Montana State University to give users a relaxing walk, bike, or run through the trees. In the 60s, residents started to get together to talk about building trail systems throughout the city of Bozeman. Currently there are 47,000 people residing in Bozeman and the neat thing about the trails in Bozeman is that they run along streams, through trees, behind people's backyards, through parks, and the people of Bozeman move there because of its recreational access.

One noteworth trail is the Gallagator. It is unique because it cuts diagonally through the city. In the 1930s the passenger train that went through town shut down and now it has been converted to a trail. The trail spans over 1.5 miles and connects the Museum of the Rockies to several parks and the University and finally to Downtown and the Public Library. Here one can keep going on trails up Peets hill to get a beautiful view of the valley. A huge part of why the trails in Bozeman exist is because of the Gallatin Valley Land Trust which helps Bozeman buy up land and turn it into recreation. Their new goal is the Bozeman360 which would connect all the trails and make a complete loop around the whole city, about 26 miles.









- 80 + miles of trails, paved and crushed stone
- Community and Gallatin Valley Land Trust driven with help from Bozeman Parks and Recreation.
- Rails to Trails initiative for the Gallagator trail (used 1000 Xs/day)
- Linked to several well-known places within the city such as Montana State University, The Public Library, Museum of the Rockies, and Peets Hill

## PASEO DEL BOSQUE TRAIL | ALBUQUERQUE, NEW MEXICO

Albuquerque's premiere multi-use trail, the Paseo del Bosque, spans from north to south across most of the metro area. The trail follows the Rio Grande, weaving through one of the city's dense bosques (riparian forest). As a multi-use trail, the path sees regular activity from people walking, trail running, riding bikes, roller blading, and skateboarding. In several of the most popular use areas, the trail has an upper and lower trail – the lower being unpaved and meandering along the river. This separation helps 1) bring a sense of escape from the urban environment, and 2) manage flows by keeping bikers on the busier paved path while walkers and trail runners (often with dogs) use the slower-paced unpaved trail along the river.



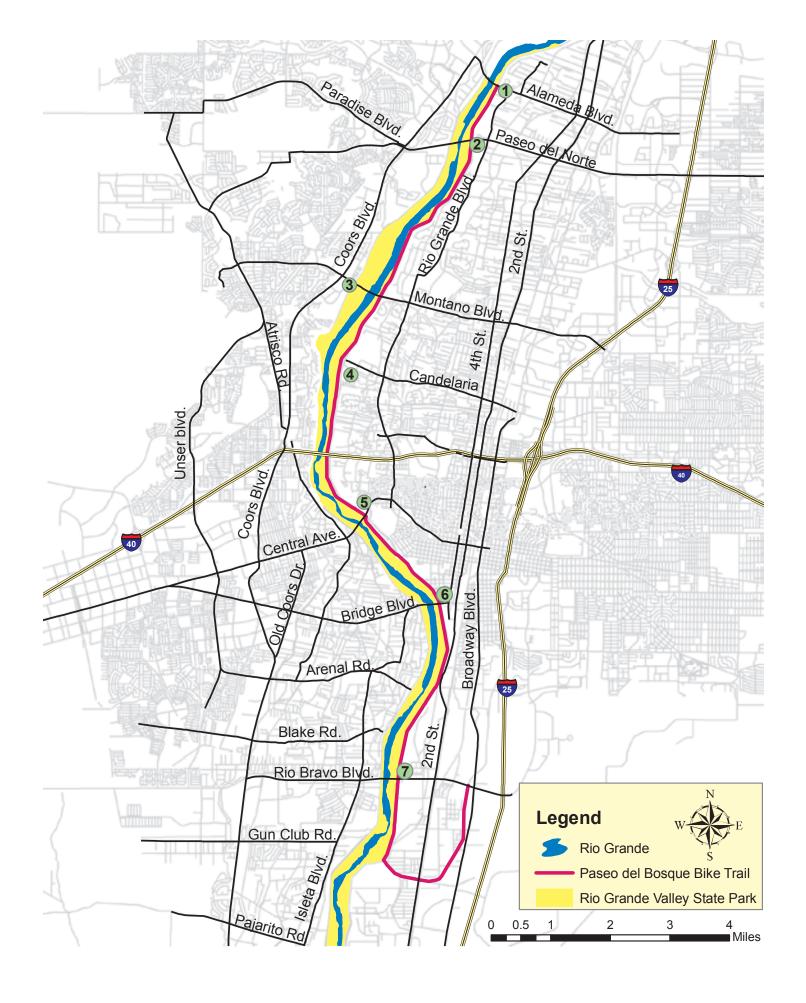








- 16 mile trail through the heart of the City and along the Rio Grande
- Major linkage for pedestrians and bikers in different parts of the city ie. People use it for different reasons in different areas
- Linked to major family destinations: the zoo, the bugarium and aquarium, river park, Tingley Beach (aka fishing ponds), the National Hispanic Cultural Center, the nature center
- Lower level trail = wild and unpaved, regular views of the river;
- upper = paved and faster-paced; occasional views of the river



#### MANITOU SPRINGS, COLORADO

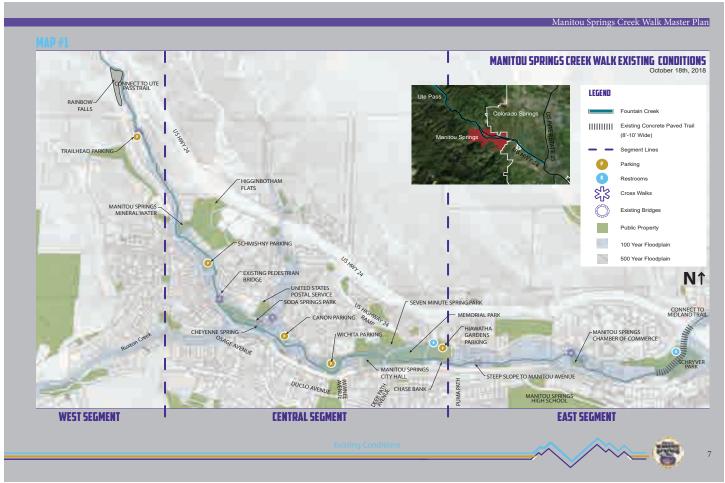
Manitou Springs, Colorado is located just outside of Colorado Springs, Colorado. The town was established as a health resort in 1872 and the original plan was designed in the style of a European health spa and resort town. Since then, the town has gone through a series of changes while maintaining the character of the buildings in the Queen Anne Victorian style.

Manitou Springs is located in a valley and had two major entry and exit points along Interstate 24. Circulation is mainly along one major road, with parking along the streets and public parking located behind businesses. Streets are geared towards pedestrians with wider sidewalks, numerous pedestrian crossings, and a reduced speed limit within the densest areas. The towns population is about 5,400 people.

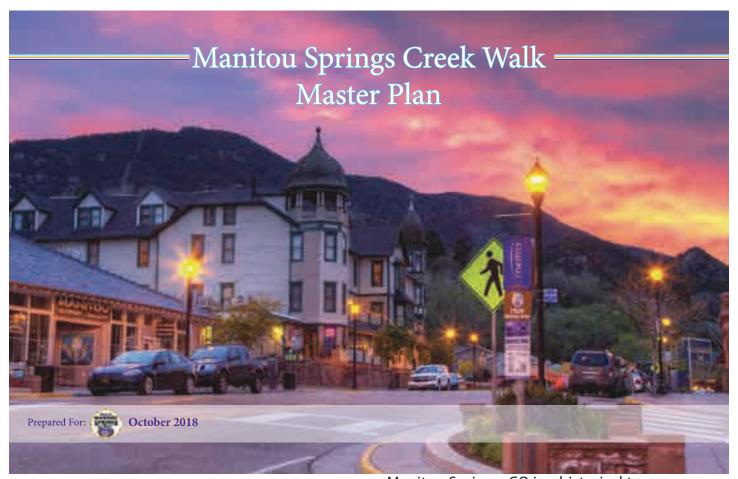
Activities from shopping, dining, and street festivals are planned, but in general, most people enjoy visiting nand walking through Manitou Springs because it is quaint, historical, and a beautiful place to visit.

Economic stability is due to a steady influx of tourists, closeness to skiing, universitites, and military bases. The creek that flows through the town has flooded in recent years and caused \$1.5 million dollars worth of damage. Thus, the city and residents determined a variety of city planning initiatives for prevention and for needed infrastructure improvements.

The plans for Manitou Springs include Water Management, Urban Renewal Plan, Manitou Springs Creek Walk Master Plan, and Wastewater Master Plan



Manitou Springs Creek Existing Conditions



Manitou Springs, CO is a historical town.



Manitou Springs Creek flows year round.

- Taking advantage of community assets, like the Creek, proximity to larger city amenities and historical architecture has been a useful strategy for Manitou Springs
- Collaborative working groups and a vested interest in improving the community and infrastructure of Manitou Springs was beneficial
- Strategic improvements and maintenance on systems

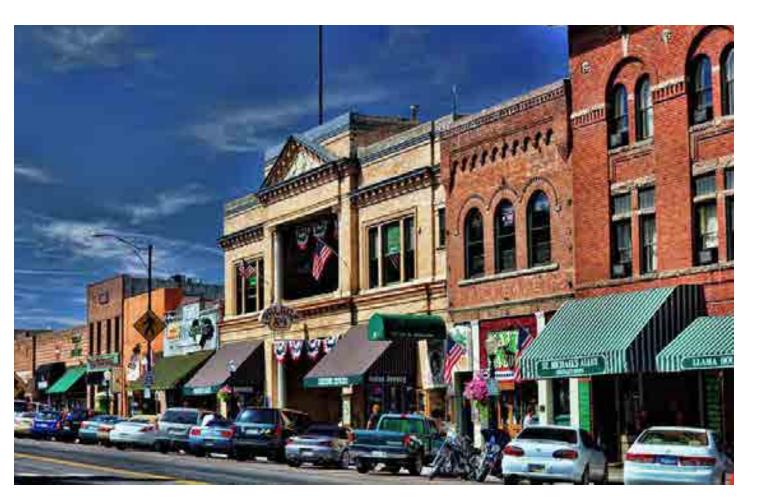
### PRESCOTT, AZ | TOURSIM

In the Growth Areas and Cost Development section of the general plan, the city highlighted areas suitable for infrastructure expansion, multi-modal transportation and other improvements intended to support a variety of land uses including recreational opportunities and tourism. Important sectors of the Prescott economy such as downtown is a notable tourist destination. During the redevelopment of downtown, the city emphasized on industrial parks and the regional commercial development along the Highway 69 corridor that is recognized as economic drivers for the City.

Destination Marketing Organization are charged with representing a specific destination and helping the long-term development of communities through a travel and tourism strategy. TO attract visitors, Prescott developed and maintained amenities and attractions- cultural heritage, golf course, parks, lakes, trails, and the Prescott National Forest. Community groups work with the City to create events to keep Prescott a center for entertainment and culture.

Visitor attractions include new events such as Whiskey Off-Race bicycle race, Prescott Film Festival, New Year's Eve Boot Drop, Chaparral Music Fest and Ghost Talk, Elks Opera House production, Sharlot Hall Museum, Prescott Frontier Days, Acker Night, the Bluegrass Festival, Phippen Memorial Art Show, the Oldies Rodeo and the Cowboy Poets gathering.









- Created long-term development through a travel and tourism strategy.
- Marketing the city for special events or a unique destination.
- Supporting local businesses and revamping the downtown core for tourism.
- Expanding infrastructure to support a variety of land uses such as tourism and recreational opportunities.

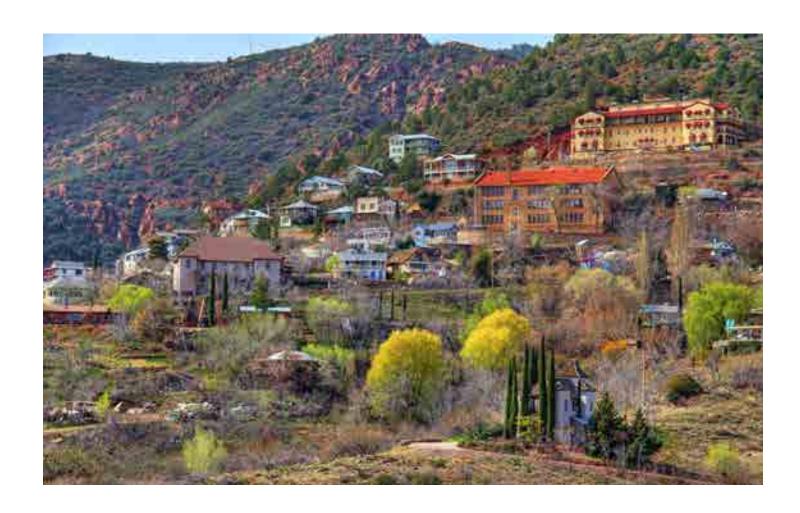
#### JEROME, AZ | MINING & TOURISM

Jerome is a mining landmark in Western region of the U.S. Cleopatra Jill and Woodchute Mountain are the first mining claims for gold in the 1875 until later used for copper mining. During the latter part of the nineteenth century, at least five major fires ravaged most of the hillside town. New building codes were established. Jerome prospered until the lack of high grade ores and the Depression signaled its decline which led to becoming a "ghost town."

While retaining its mining camp heritage, has undergone a personality change. Jerome is now a bustling tourist magnet and artistic community with a population of 444 (2010 U.S. Census).

The closing of the mines meant the loss of money and manpower needed to operate and maintain Town infrastructure. In addition, the water system, wastewater system, streets and sidewalks are in need of renovations and repair due to age.

Jerome's water system dates back to the late 1800s and remains a functional point of historical interest today. It is entirely a gravity-fed system with its source being a series of springs miles outside the town. Mining companies were the ones who maintained the intricate water system. In 1964, the water service was acquired by the town, thus beginning Jerome's ongoing challenge to repair and maintain an antiquated system. The steep topography, rocky conditions, high water pressure, and acidic soils resulting from mining activity contribute to difficult and expensive infrastructure maintenance.













The town currently has five water storage tanks which provide 750,000 gallons in storage, mainly for fire suppression. In a 2006 report submitted to Arizona Department of Water Resources, it was estimated that Jerome may be able to supply approximately 800 residents with its then available water supply (spring flow). However, since that report due to recent years of drought, or will be the new "normal" has yet to be determined. It may be a challenge to meet existing and future needs.

Jerome is serviced by a wetlands-type sewer treatment plant which is also gravity fed. It was designed with a 70,000 gallon per day maximum capacity, and treats on average 36,000 gallons per day. At times of high tourist visitation or heavy rains, the maximum capacity is sometimes approached. The Town's treatment facility was upgrade at its original site in the early 2000s to meet then- ADEQ and EPA standards.

- Taking measurements to water treatments and improving infrastructure
- Rehabilitation of Historic Buildings (respectfully)
- Historic properties should be protected from demolition
- Effort should be made to minimize the adverse physical impact of motorized vehicles

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Image credits right to left:

mindat.org; sciencebase.gov; freeportinarizona.com

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