Final Draft
1.2.2019

CITY OF APACHE JUNCTION

Active Transportation Plan

Apache Junction Active Transportation Plan

City of Apache Junction Vision Statement:

Apache Junction is a diverse community of natural beauty and heritage that offers prosperity, compassion, and forward thinking to its residents, businesses and visitors.

City of Apache Junction Mission Statement:

We will focus on and invest in quality of life and planned improvements for serving residents, businesses and visitors.

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Section 1: Introduction/Background

The City of Apache Junction (City) Active Transportation Plan (plan) is the first active transportation plan developed by the City. The plan will serve as the primary tool for deployment and integration of connected, comfortable facilities for bicyclists, pedestrians, equestrians, and other non-motorized modes within Apache Junction. As the region continues to grow and new development comes to the City, it is important to have a clear vision for a transportation network that meets the needs of all users.

Safety of active transportation users is paramount. In Apache Junction since 2009 there have been thirteen (13) active transportation fatalities: nine (9) pedestrian and four (4) bicyclist. During the preparation of this plan there have been two active transportation fatalities: one (1) pedestrian and one (1) bicyclist.

This plan focuses on near-term and mid-term needs (one-to-five years and six to ten years), while also identifying longer-term strategies—all built on the framework of an all ages and abilities network. The guiding principles of such a network focuses on improving mobility options for residents, regardless of age or ability, by prioritizing connectivity among destinations and services through facilities that are comfortable and appropriate for a wide range of user groups.

The Plan aims to respond to key concerns of the community and was developed in coordination with local agencies and stakeholders to include the preservation of the natural environment, while identifying an integrated network of paths, trails, sidewalks, bike lanes, and shared-use facilities that add to community health and security.

A. About the Plan

The Plan is organized into the following three sections:

- Section 1: Introduction/Background
- Section 2: Existing Conditions & Needs Analysis
- Section 3: Recommendations & Facility Standards
- Section 4: Implementation

Each section includes the key takeaways developed during the planning process and summarizes relevant inputs, findings, and recommendations. A series of appendices follow the plan, which include more detailed analyses, methods, and project information.

B. Plan Setting

Apache Junction is the eastern most community in the Phoenix metropolitan area and is home to over 40,000 full-time residents. It is located primarily in Pinal County, although a small portion along the western boundary and the Goldfield Mountains falls within Maricopa County. The Superstition Mountains bound the City on the north and east, while a number of state and federal open spaces to the south and east provide additional recreational opportunities for residents. Equestrian ownership and use are considerable throughout Apache Junction. The City also experiences a large seasonal increase in population, nearly doubling the population during the winter months.

The Apache Junction Active Transportation Plan includes areas currently within the city limits and the current planning boundary. The planning boundary extends beyond the city limits north and east up to the Tonto Forest boundary and south to the future State Route 24 (SR 24)/E Frye Road which defines the southern extents of Apache Junction's planning boundary based on existing agreements with the Town of Queen Creek.

C. Guiding Principles

In developing a network that provides for the needs of all residents and visitors, the plan was guided by the following three main principles:

1. 6 Es

The 6 Es provide a framework that recognizes that improved transportation networks are best achieved through a combination of infrastructure and non-infrastructure projects and programs. Together, the 6 Es can help communities create a lasting change for improved active transportation. *See Figure*

The 6 Es include:

- Education: Equipping people with the knowledge, skills, and confidence to participate in active transportation choices including biking, walking, horseback riding, and other non-motorized modes.
- Enforcement: Building safe and responsible behaviors on the road and building respect among all modes of transportation by partnering with law enforcement.
- Encouragement: Fostering a culture that supports and encourages active transportation.
- Engineering: Creating, building and improving the built environments to provide safe, connected, and comfortable places for active transportation choices.
- Equity: Increasing access and opportunity for all residents, including disabled, disadvantaged, minority, and low-income populations
- Evaluation: Monitoring the success and effectiveness of efforts to improve active transportation to assist with planning for the future.

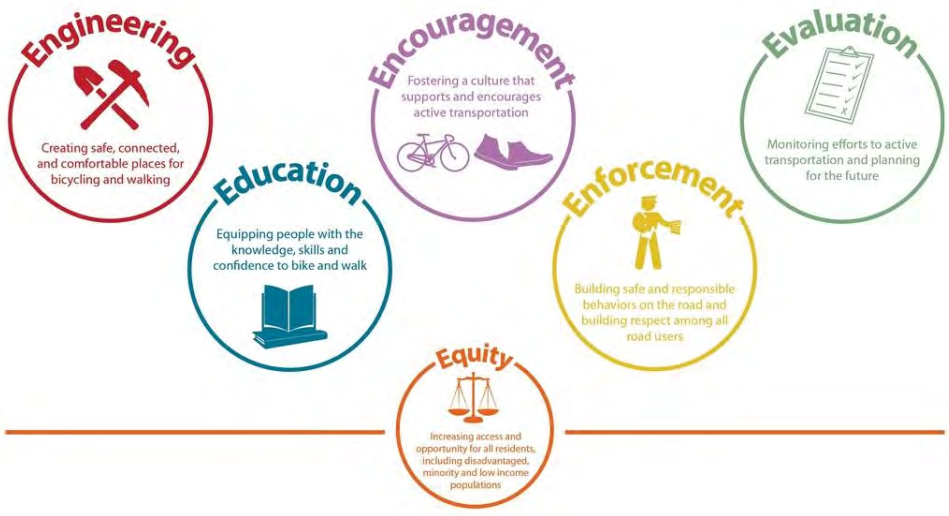

Figure 1. (Image Source: http://northwoodssaferoutestoschool.weebly.com/)

2. Bicycle and Walk Friendly Community

As a result of the implementation of this plan, the City of Apache Junction aspires to obtain a silver designation as a Bicycle Friendly Community from the League of American Bicyclists, and a bronze designation as a Walk Friendly Community.

Bicycle Friendly Community: The League of American Bicyclists is an organization that "represents bicyclists in the movement to create safer roads, stronger communities, and a bicycle-friendly America" as stated on their web site. One of their programs includes awarding communities as Bicycle-Friendly designations based on criteria related to the 5 Es (equity is not included in this list) and key outcomes including increasing ridership and safety. *See Figure*

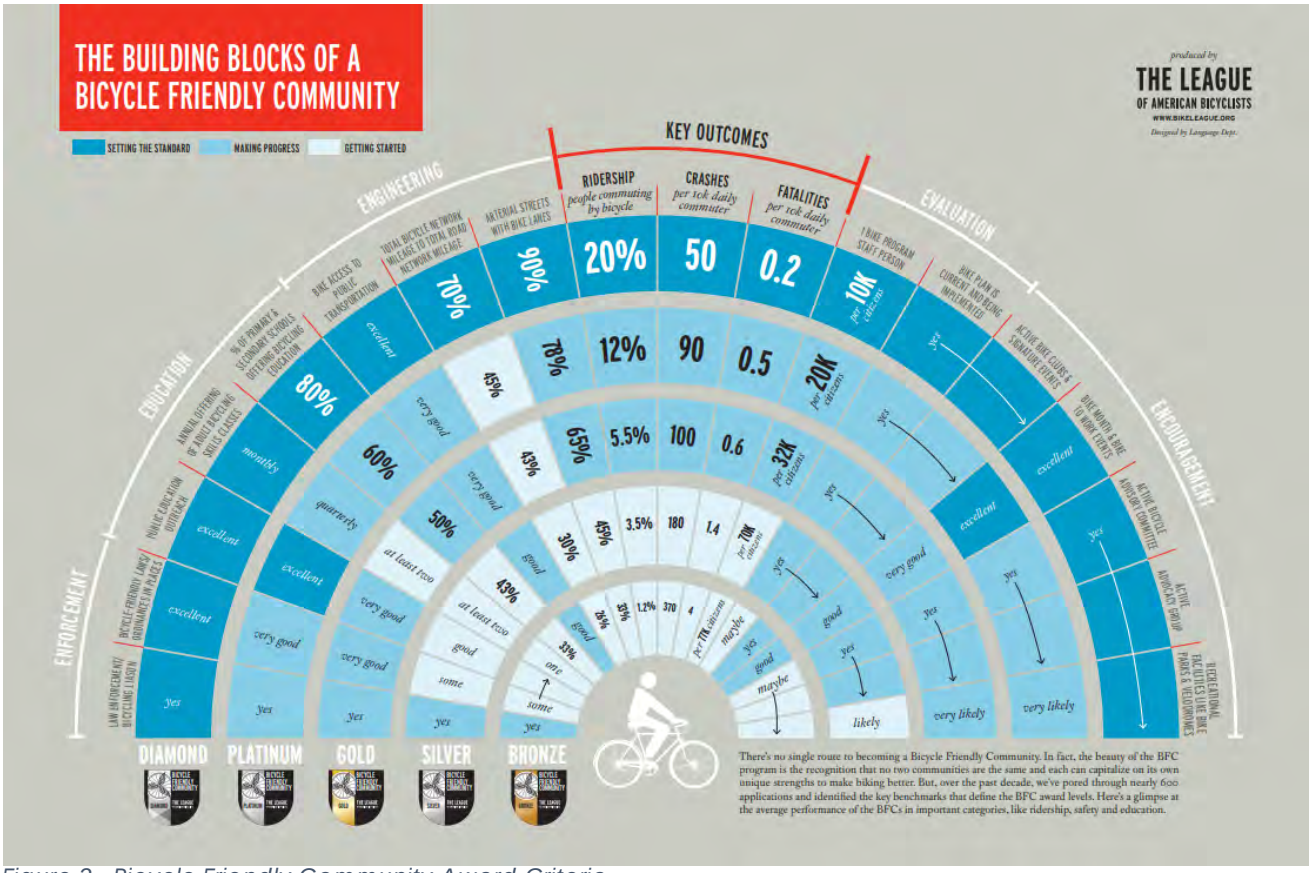

Figure 2 - Bicycle Friendly Community Award Criteria

Walk Friendly Communities: Similarly, Walk Friendly Communities awards communities based on walkability. The goal of this organization includes "encouraging U.S. towns and cities to support safer walking environments," according to their web site. As a pedestrian supplement to the League's ratings, Walk Friendly Communities recognize towns and cities that prioritize safer walking environments. Built on the 5 Es (equity is not included in this list), the program acknowledges benefits related to safety, health, equity, environment, and economy for communities committed to high quality pedestrian facilities.

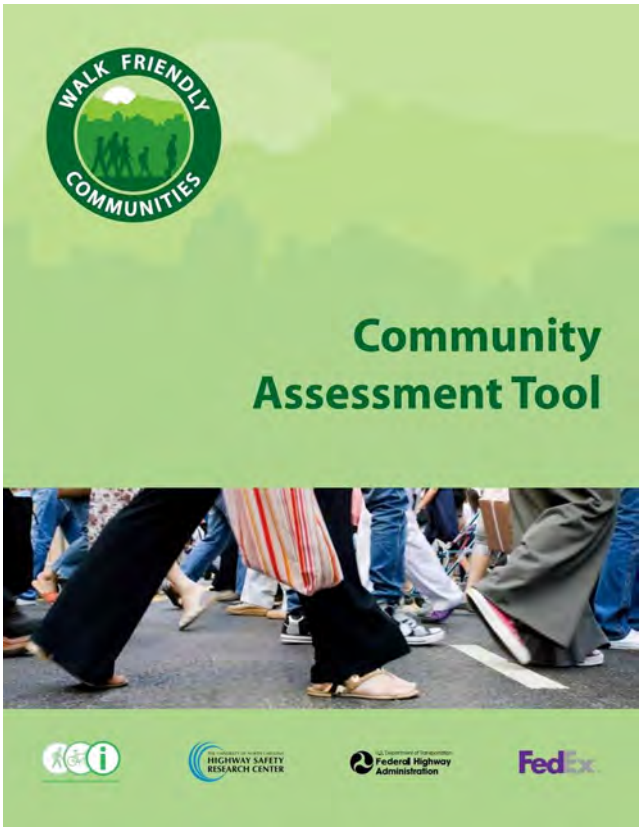

Figure 3: Walk Friendly Communities Community Assessment Tool helps communities evaluate current pedestrian accommodation.

Applications with both organizations share similar evaluation metrics and suggest forming partnerships with community advocates, businesses and organizations and forming an application team ahead of completing the application process. Application teams can include the community's planning or transportation department, Engineering or Public Works, Transit Agency, Law Enforcement Agency, School Districts, or Advocates and Community Groups. Applications for both ratings are accepted twice per year (on differing schedules) and applicants are provided feedback which can be used as a valuable tool for informing evaluation, goal setting and implementation.

3. National Trends in Active Transportation

Apache Junction has the opportunity to create a community that is safe and enjoyable for bicyclists, pedestrians, equestrians and those using other non-motorized modes. Whether for transportation or recreational purposes, the recommendations of this plan are informed by larger trends in active transportation and reflect the need to provide similar opportunities for Apache Junction residents.

- Mode Share:
    - Nationally, the number of people who commute by walking and bicycling has remained steady between 2007 and 2016, approximately 2.8% and 0.5% respectively.[1]
    - The percentage of children walking to and from school increased between 2007 and 2013; however, this number is still significantly less than figures from the 1960s.
- Equity:
    - Low- and moderate-income households typically spend a higher percentage of their income on transportation; access to active transportation facilities to meet basic needs and reach services can have a positive impact on these communities.[2]
    - Communities of color, low-income populations, children, seniors, and rural communities experience a greater rate of fatal collisions as pedestrians and bicyclists[3]
- Safety:
    - Pedestrian and bicycle fatalities have steadily increased since 2009, with bike and pedestrian deaths comprising 16.3% of all motor vehicle related fatalities in 2012.[4]
    - Studies from across the U.S. suggest that reduced speeds, infrastructure improvements, public education initiatives, and targeted enforcement lead to a safer environment for those walking and biking. [2]

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[1] Benchmarking Report 2016
[2] http://bikingandwalkingbenchmarks.org/#/make-your-case/connected-routes
[3] http://bikingandwalkingbenchmarks.org/#/make-your-case/safe-transportation
[4]https://www.transportation.gov/safer-people-safer-streets

- Equestrians:
    - Nationally there are an estimated 1.7 million jobs connected to the horse industry, with over 3 million horses estimated to be involved with recreation and working activities. Numerous organizations are working across the country in support of a growing tourism industry and protection of natural landscapes.[5] According to the Arizona Horse Council, there are over 177,000 horses in Arizona, contributing to a strong element of the Arizona economy.
    - A 2016 report from the US Department of Commerce indicated that the outdoor recreation industry had grown at a faster pace than the overall economy in the previous year, including equestrian use. [6]

[5] https://www.horsecouncil.org/resources/economics/
[6] https://www.bcha.org/blog/2018/05/02/back-country-horsemen-of-america-work-promotes-a-healthy-economy/

D. Goals

With input from the public, city staff, and advisory committees, the following Goals were developed to define the vision for the plan and capture the needs outlined by the community. These goals represent a commitment to developing policies around the 6 Es, seeking a Silver rating for both Walk Friendly Communities and Bike Friendly Communities, and responding to active transportation trends as they apply to Apache Junction. The plan goals inform the recommendations presented in subsequent sections.

- Connectivity
  - Provide a fully connected Active Transportation network of sidewalks, paths, trails and bikeways
  - Connect to destinations: Schools, Parks, Shopping, Dining, Work and Landmarks
  - Create a logical phased priority-based implementation program
  - Connect to: Adjacent communities (Mesa and Queen Creek), Tonto National Forest, Lost Dutchman State Park, Usery County Park, County islands/adjacent residents and the CAP Trail
  - Make walking and biking viable transportation by providing convenience, comfort, safety and a positive experience
- Safety
  - Decrease and strive for zero crashes between motor vehicles and pedestrians/bikes/horses
  - Provide safety education to all ages and modes
  - Provide separation buffers between motor vehicles and pedestrians/bikes/horses
  - Provide defined roadway crossings for pedestrians, bicycles and horses at locations of high demand and/or need to reduce conflicts with motor vehicles
  - Minimize roadway crossing distances for pedestrians/bikes/equestrians
  - Reduce speeds of motor vehicles in areas of conflict/adjacency to pedestrians/bikes/horses
- Health
  - Provide healthy transportation options for all users
  - Encourage walking and biking to schools, shopping, dining and work as a healthy lifestyle
- Capacity
  - Increase capacity for pedestrians/bicyclists/equestrians
  - Match the roadway size to the use demand, based on projected traffic counts / LOS (level of service)
- Experience

- Create signature destinations with the “Legends Loop” Trail, Old Apache Trail, named open space and named trails, paths, routes and trailheads
- Keep and enhance native desert character by providing aesthetically pleasing roads, sidewalks, paths and trails
- Keep rural areas rural in character
- Provide or increase landscape buffer areas for user comfort (calm, shade) and perceived safety
- Create an Apache Junction Walks – Bikes – Rides iconic brand
- Make Apache Junction the best active transportation community in the valley

Section 2: Existing System & Needs Analysis Summary

The first phase of the plan focused on understanding the context of Apache Junction, which includes community desires, existing networks, opportunities and constraints, and demographic considerations. Throughout the plan, a comprehensive public engagement process supplemented the plan process. Each of these topics is summarized below, with more detailed information provided in the Appendices.

A. Public Engagement

Beginning with project kick off and occurring throughout key plan milestones, stakeholders and the public were encouraged to provide input on the plan, including defining public needs, building support throughout the community, and responding to plan recommendations. Feedback was collected through stakeholder meetings, public outreach events, surveys, and an online comment map.

1. Stakeholders

Three advisory committees were formed to provide in-depth feedback on the plan. These committees were involved at each stage of the planning process, imparting insight into specific needs, existing conditions, existing plans and policies, and review of the proposed plan. The three committees were as follows:

- The City of Apache Junction Technical Advisory Committee (TAC) consisted of representatives from Public Works, Development Services, Police, Economic Development, Parks and Recreation, Communication, and GIS.
- The Citizen's Advisory Committee (CAC) represented advocacy groups for bicycle, pedestrian, and equestrian users.
- The Agency Team Committee consisted of members from Arizona Department of Transportation (ADOT), Maricopa County Department of Transportation (MCDOT), Maricopa County Department of Health, Pinal County Department of Health, City of Mesa, Town of Queen Creek, Maricopa Association of Governments (MAG), Maricopa County Flood Control District (FCDMC), State Land, Lost Dutchman State Park, and the Tonto National Forest.

2. Outreach Efforts

A series of outreach events encouraged community involvement and built support for the plan vision and recommendations. Participants were able to provide feedback through a variety of communication channels, including surveys, online and in-person mapping exercises, direct interviews, feedback forms, and event-specific questionnaires. Further, equestrian, walking, and biking events in addition to open house format events encouraged residents to engage with the project team and share knowledge about the City.

In total, there were:

26 Public/Stakeholder Outreach Events:

1. Lost Dutchman Marathon Health/Fitness Expo Outreach Booth, February 16-17, 2018
2. Lost Dutchman Days Rodeo Outreach Booth, February 24, 2018
3. Walking Event, May 5, 2018
4. Biking Event, May 5, 2018
5. Equestrian Trail Ride Event, May 19, 2018
6. TAC Kick-off/Goal setting, February 14, 2018
7. TAC #1, March 4, 2018
8. CAC #1, March 4, 2018
9. Public involvement Community Meeting #1 "Open House" Workshop, March 4, 2018
10. One -on-one interview meetings with key stakeholders, March 5, 2018
11. Community Youth Advisory Council workshop, April, 23, 2018
12. Agency Team Meeting #1, June 6, 2018
13. TAC #2, June 6, 2018
14. CAC #2, June 6, 2018
15. Engineering/Public Works/Planning Review of Proposed Standards, July 11, 2018
16. Downtown Advisory Committee, Downtown ATP Elements/Plan Review, July 18, 2018
17. TAC #3, August 8, 2018
18. CAC #3, August 8, 2018
19. Planning/Zoning and Parks Commissions, combined meeting, DRAFT Plan presentation, October 9, 2018
20. City Council Work Session, DRAFT Plan presentation, October 15, 2018
21. Festival of the Superstitions, Outreach Booth, Final Plan on display and open for public feedback, November 10, 2018
22. Community Outreach Wellness Event, Final Plan on display and open for public feedback, November 17, 2018
23. Community Outreach Superstition Area Land Trust (SALT), overview presentation and public feedback, November 28, 2018

24. Planning/Zoning and Parks Commissions, combined meeting, Final Plan presentation, January 8, 2019
25. City Council Work Session, January 14, 2019
26. City Council Adoption, January 15, 2019

- 50+ comments provided via the online map
- 500+ survey responses
- 50+ participants at the walk and fun run event
- 12 participants at the bike ride event
- 6 participants at the horse trail ride event

Summary of Survey Results

67% live in Apache Junction full or part time

79% are 45 yr.+

Most important active transportation facilities

#1 Trails

#2 Sidewalks/Shared Use Paths

#3 Bicycle Lanes

3. Key Findings

The results of these exercises informed plan recommendations and contributed to a more robust understanding of community needs, concerns, and context. Feedback included comments that ranged from specific modes of transportation to general comments on the larger network and system.

Overall, residents indicated the need for improved safety, greater opportunities for recreation, increased connectivity among facilities and destinations, and more facilities for all modes. The key findings are summarized below, with more detailed results in Appendix A.

GENERAL FEEDBACK:

- Connectivity among destinations and to recreational opportunities outside of city is needed.
- Preference for separated facilities was indicated, including trails, pathways, and sidewalks.
- The following options were identified as ways that residents would be encouraged to use active transportation options more frequently:
    - Increased connectivity (65% of respondents)
    - Safer bike facilities (50% of respondents)
    - Increase pedestrian safety (40%)
- Network gaps are prevalent where existing facilities meet private property.
- Lighting and streetscape improvements are desired throughout the city along facilities to increase the comfort and utility of active transportation options.
- Improved wayfinding signage is needed for all active modes.
- Recreational opportunities may be expanded through partnerships with area land trusts.
- Common barriers to use of active transportation included limited infrastructure, exposure to motor vehicle traffic, and unsafe crossings.
- New and improved trails, facilities along roadways, and improvements to SR 88 were the most frequently identified facility needs.

TRAILS:

- Improved trailheads could facilitate greater use, including increased parking options for horse trailers.
- Enforcement is needed along trails and open spaces for noise ordinances, gate trespass/vandalism and target practice.
- Wider trails and improved maintenance are needed, particularly in the north, northeast, and where trails have been washed out along the city perimeter.
- Illegal access and use of trails by ATV/dirt bike users.

EQUESTRIANS:

- Improved connections are needed between trails and city.

- Improved support facilities are needed, including hitching posts, mounting blocks, and trash cans.
- Equestrian-specific signage can improve crossing opportunities and help alert drivers to the presence of horses.
- Keeping Apache Junction horse friendly was noted by many residents as a high priority.

BICYCLISTS:

- Many residents indicated the need for more bike facilities in the city, including the more rural areas.
- Paved pathways were identified as a desired facility type.
- A comprehensive inventory of existing facilities was recommended.
- Bike lanes should be considered in areas where residents currently use unpaved shoulders for active travel.
- Recreational opportunities, such as a loop around the city for bicycling, should be considered.
- Bike lanes should be wide, separated from traffic where possible, have quality pavement, and feature traffic signal timing that is conducive to travel.
- Bicycle safety at intersections should be a priority.

PEDESTRIANS:

- Paved pathways were identified as a desired facility type.
- A comprehensive inventory of existing facilities was recommended.
- Sidewalks should be considered in areas where residents currently use unpaved shoulders for active travel.
- Recreational opportunities, such as a loop around the city, should be considered.
- Participants identified the need for a connected and complete network of sidewalks and pathways throughout the city.
- Pedestrian safety at intersections should be a priority.

Specific areas around the city were identified by users as being particularly unsafe or in need of improvement, including but not limited to:

- Near Central Arizona College
- Old West Highway
- Intersection of Old West Highway and Winchester
- Apache Trail/SR 88
- Apache Trail (former US 60)

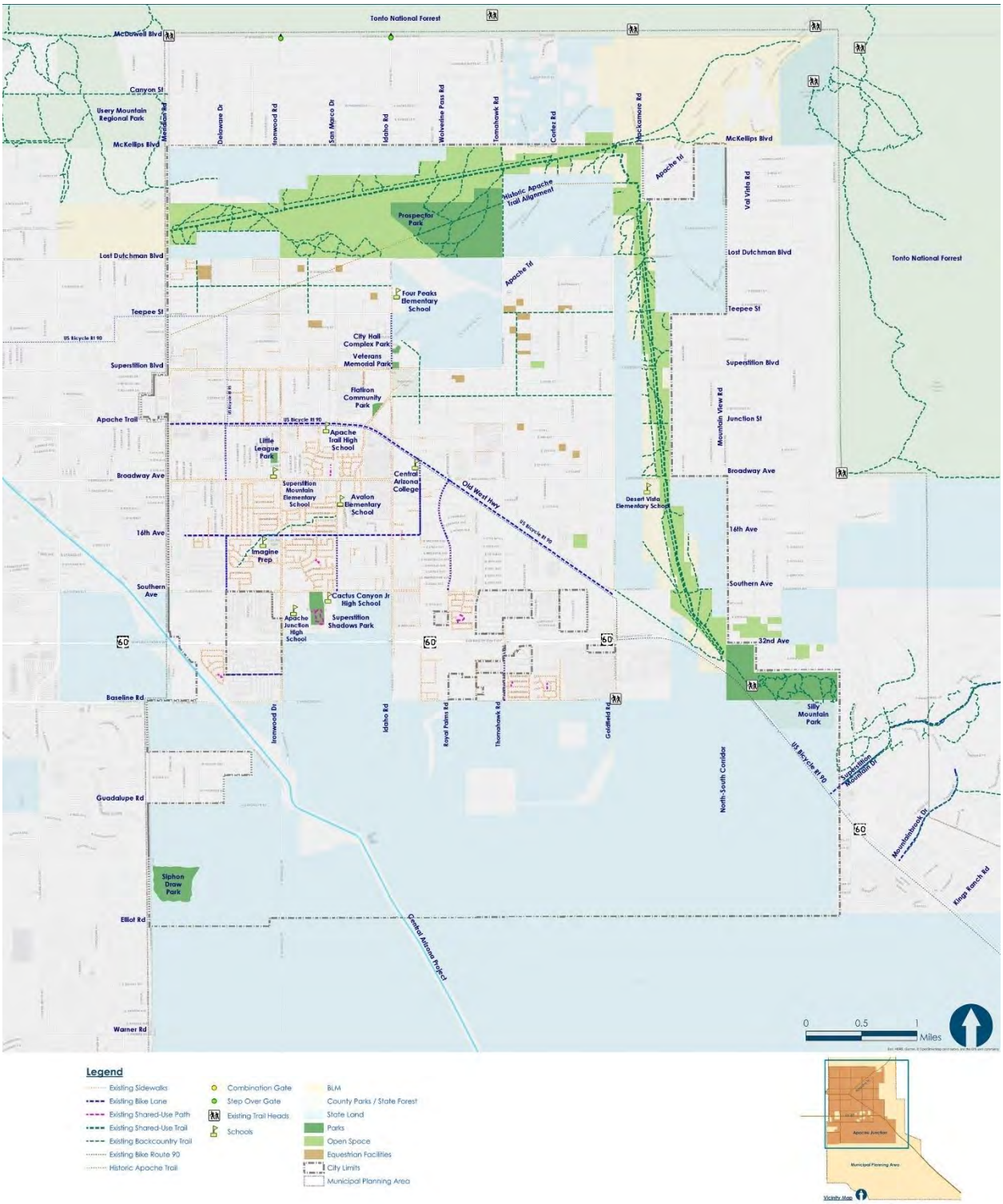
B. Plan & Policy Review

A number of plans and policies influence current practice for active transportation in Apache Junction. Current land use and comprehensive plans provide an overall vision for the City, while previous trail and multimodal plans outline the community vision for bicycle, pedestrian, and equestrian connectivity. A wide range of plans, data sources, and studies were used to inform the development of this plan, including plans for adjacent areas. Documents from Mesa, Arizona Department of Transportation, Queen Creek, and Pinal County--among others—were also included in this review.

C. Existing Facilities

An understanding of existing facilities was drawn from a review of Geographic Information Systems (GIS) data provided by the city, site visits, and advisory committee input. Figure 4 depicts existing facilities throughout Apache Junction.

Existing Facilities Map *(Figure 4)*



Apache Junction includes 412.8 miles of roadways, including private roads, with a total of 260.2 miles of active transportation facilities. Table below summarizes the available facilities by type.

TYPE	LENGTH (MILES)
Detached Sidewalk/Sidewalk and Curb	108.4
Bike Lanes	11.3
Bike Routes (along arterial or collector roadways)	43
Multi-Use Path (within parks and developments)	0.9
Unpaved Recreational Trails	85.8
Multi-Use Unpaved Trails	1.1
Equestrian Trails	18.6

SIDEWALKS: The greatest concentration of sidewalks is found near downtown and to the west and southwest of downtown. Sidewalks are limited outside of the central area of the city, with disconnected and incomplete facilities distributed throughout the city. Sidewalks are typically present along arterials and collectors in close proximity to schools; however, they are limited along local roadways leading to school grounds and are generally missing near schools located in the southern area of the city.

BIKEWAYS: Bike lanes are located along Old West Highway/Apache Trail (US Bike Route 90) and 16th Avenue, with shorted sections distributed across the city. Designated bike routes delineate several north-south routes through the city, with fewer continuous east-west routes.

EQUESTRIAN TRAILS: Equestrian trails and facilities are primarily concentrated in the more rural areas to the north and northeast area of the city. Further opportunities are located outside of city limits on state-owned lands.

BLM, state-owned land, and state-owned parks adjacent to Apache Junction include many recreational trails that expand recreational opportunities for area residents; while other areas outside of the study area feature additional equestrian trail opportunities.

As the area continues to develop, roadway standards and modification to existing roadway classifications can significantly impact the comfort and safety for bicyclists, pedestrians, and equestrians. After a thorough review of Apache Junction Engineering Guidelines, it is important to consider the following recommendations:

- Optimize pavement widths; right size motor vehicle lanes
- Provide buffers between automobiles and people/bikes

- Provide or increase landscape buffer areas to provide greater user comfort, shade, and perceived safety
- Match the roadway section to the use demand based on projected traffic counts and levels of service

D. Safety

In addition to public input regarding unsafe locations, a review of collisions involving bicycles, pedestrians, and equestrians can help identify locations in greater need of improved active transportation facilities. Using data from the Arizona Department of Transportation, City of Apache Junction fire and police data, and local information on equestrian-involved collisions, the project team assessed both location and severity of collisions occurring between 2009 and 2016. This information is shown in *Figures 5 & 6*.

It is important to note that while the data available provides insight into safety concerns within the city, pedestrian- and bicycle-involved collisions often are not reported if they do not result in a serious injury of fatality. For this reason, the data available likely under-represents these collisions and does not account for near-misses that negatively impact one's feeling of safety and comfort in the network.

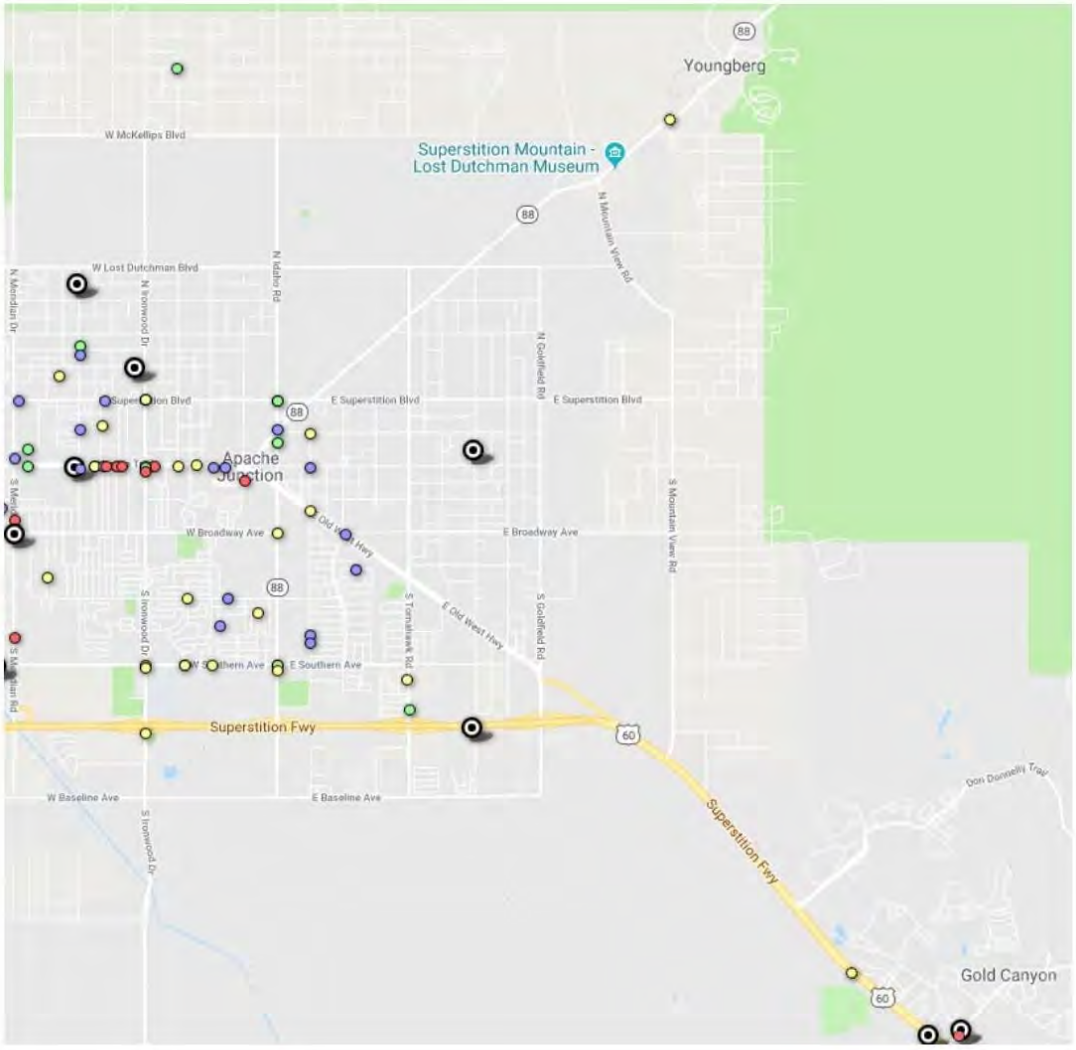
During the preparation of this plan in 2018 alone there have been two active transportation fatalities: one (1) pedestrian and one (1) bicyclist.

From 2009 to 2016, 71 pedestrian collisions were reported, resulting in 8 fatalities, 14 incapacitating injuries, 21 other injuries, and 18 possible injury incidents; 10 collisions did not result in injury. Of these collisions, over 60% (43 collisions) occurred on arterials, and nearly 75% (51 collisions) occurred while a pedestrian was crossing the roadway at an unmarked crossing. All 8 fatalities occurred at unmarked crossings. Most collisions occurred during daylight hours, near downtown and in the areas along Old West Highway/Apache Trail and Southern Avenue.

There were 102 reported bicycle collisions during the study period, resulting in 3 fatalities, 11 incapacitating injuries, 31 other injuries, and 34 possible injury incidents; 23 collisions did not result in injury. The distribution of bicycle collisions was similar to pedestrians, with the majority of incidents occurring near downtown along Old West Highway, Superstition Boulevard, and Southern Avenue. Most collisions occurred along arterials during daylight conditions. Many collisions, including those resulting in fatalities, occurred where bicyclists were crossing at a location other than an intersection.

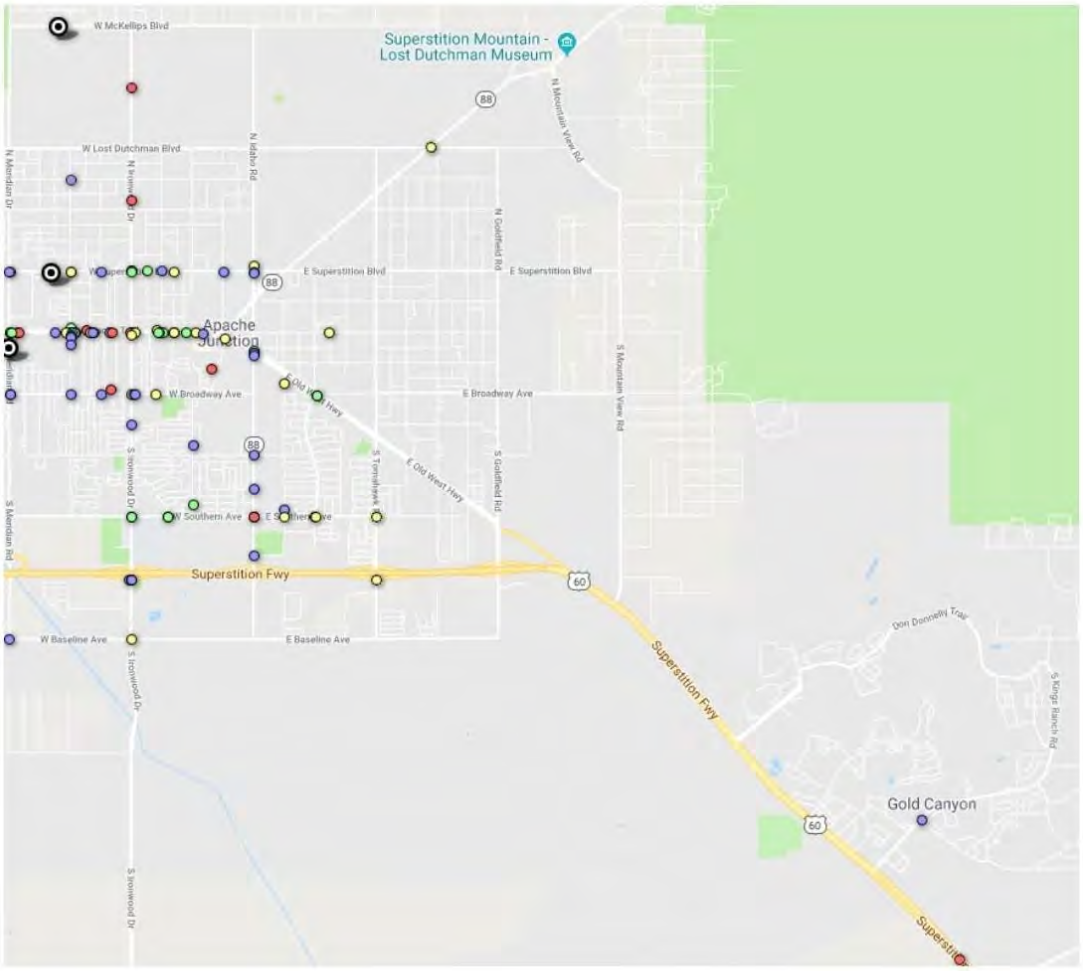
The pattern of collisions occurring where a bicyclist or pedestrian was crossings suggests that crossing improvements are needed throughout the City. Long block lengths and limited signalized crossings can discourage the use of signalized crossings, and mid-block crossings should be considered based on need and connectivity to destinations and services. In areas with greater pedestrian and bicycle activity, mid-block crossings can improve connectivity to destinations, services, and other network links.

Pedestrian Crashes *(Figure5)*



Pedestrian														
	Total	Type of Roadway				Crossing or In Roadway		Turning		Light Condition			Violation	
		Arterial	Collector	Local	Highway	Marked Crossing	Un-Marked Crossing or In Roadway	Straight	Turning	Day	Dark Lighted	Dark NOT Lighted	Driver Violation	No Violation
Total	**71**	**43**	**16**	**10**	**2**	**18**	**53**	**58**	**11**	**32**	**10**	**25**	**29**	**40**
Fatalities	**8**	3	2	1	2		8	8		2	1	5	2	6
Incapacitating Injury	**14**	11	3			3	11	10	2	4	1	7	5	9
Non-Incapacitating Injury	21	12	3	6		5	16	19	2	11	4	4	7	4
No Injury	10	8	1	1		6	4	6	4	7		3	7	11
Possible Injury	18	9	7	2		4	14	15	3	8	4	6	8	10

Bicycle Crashes *(Figure 6)*



Bicycle

	Total	Type of Roadway				Crossing or In Roadway		Turning		Light Condition			Violation	
		Arterial	Collector	Local	Highway	Crossing at Intersection	Crossing Not at Intersection	Straight	Turning	Day	Dark Lighted	Dark NOT Lighted	Driver Violation	No Violation
Total	**102**	**73**	**22**	**6**	**1**	**37**	**64**	**61**	**40**	**61**	**12**	**29**	**47**	**55**
Fatalities	3	3					3	3		1		2	2	1
Incapacitating Injury	11	8	1	2		1	10	9	2	5	3	3	8	3
Non-Incapacitating Injury	31	25	5		1	8	23	21	10	24	5	2	9	23
No Injury	23	19	4			12	11	16	7		1	22	10	13
Possible Injury	34	18	12	4		16	17	12	21	31	3		18	15

E. Health & Equity

While all communities offer a variety of ways to get around, not everyone has access to the same transportation options. Communities designed to promote safe and connected active transportation and recreational opportunities have greater levels of resident physical activity. Communities developed in this manner are associated with improved physical, mental, and socioeconomic health.[7,8] Investments in active transportation can help residents reach basic services, travel to work, and access healthy food options, while providing additional opportunities for increased physical activity.

A health and equity analysis was completed as part of this plan to inform recommendations, contribute to prioritization of active transportation infrastructure. Utilizing data available through the American Community Survey and the Arizona State Health Department, in conjunction with assistance provided by the Maricopa County Health Department, a series of indicators were assessed. The detailed analysis can be found in Appendix E.

Based on Primary Care Area (PCA) boundaries, Apache Junction has the fifth highest chronic disease prevalence in the state, with nearly double the number of residents in the city suffering from chronic disease as compared to the state.[9] Specifically, prevalence of chronic obstructive pulmonary disease, congestive heart failure, and adult asthma rank in the top 10% of the state. Contrarily, the Apache Junction PCA ranks better than average in Arizona for the number of individuals without health insurance and individuals experiencing short term complications from diabetes.

[7] Trust for America's Health, Robert Wood Johnson Foundation. (2015). High Impact Policy Opportunities. Retrieved from http://stateofobesity.org/policy/communities-and-healthy-weight/healthy-communities-access-to-healthy-food-and-active-living-efforts.

[8] Teschke, K., Reynolds, C., Ries, F., Gouge, B., & Winters, M. (2012). Bicycling: Health Risk or Benefits? UBC Medical Journal, 3(2). Retrieved from http://ojs.library.ubc.ca/index.php/ubcmj/article/view/2494.

[9] Arizona Department of Health Services. (2015). Community Profiles Dashboard. Retrieved from https://www.azdhs.gov/gis/community-profiles-dashboard/index.php

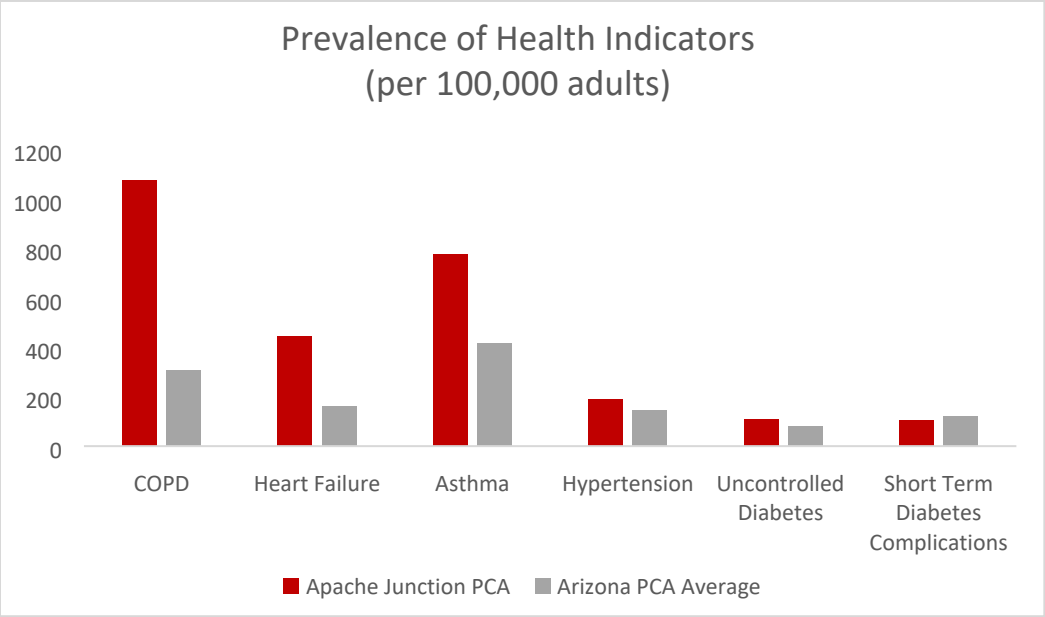


Figure 7: Prevalence of Health Indicators

Eight equity indicators were assessed at the block group level for the Apache Junction study area: children, older adults, people of color, and people without access to a motor vehicle, people with limited English proficiency, people with disabilities, people without a high school degree, and low-income individuals. Compared to the state, Apache Junction has a higher percentage of older adults and people with disabilities; further, there is also a larger community of low-income individuals.

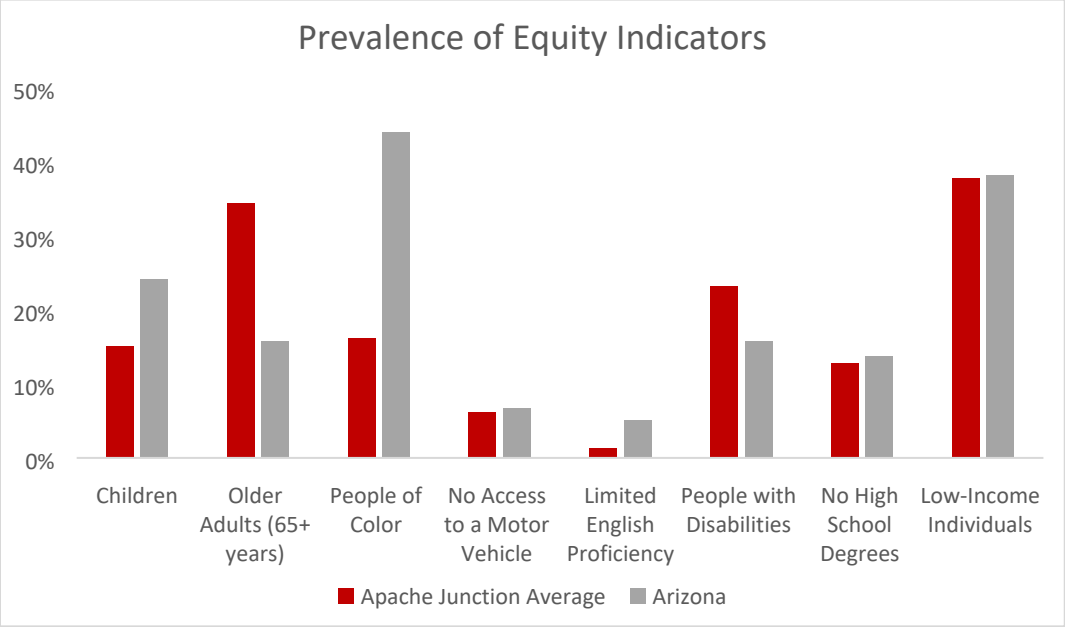


Figure 8: Prevalence of Equity Indicators

Section 3: Recommendations

The Recommendation Section builds on the framework of data and other information collected through the existing conditions phase (Section 1). The section outlines the plan recommendations to guide development and implementation of a connective, comprehensive active transportation network in Apache Junction. These include both policy-focused recommendations as well as facility-specific recommendations.

Application of the 6E's Guiding Principles to each policy reinforces the underpinnings of the community's philosophy and commitment to active transportation See Figure 9.

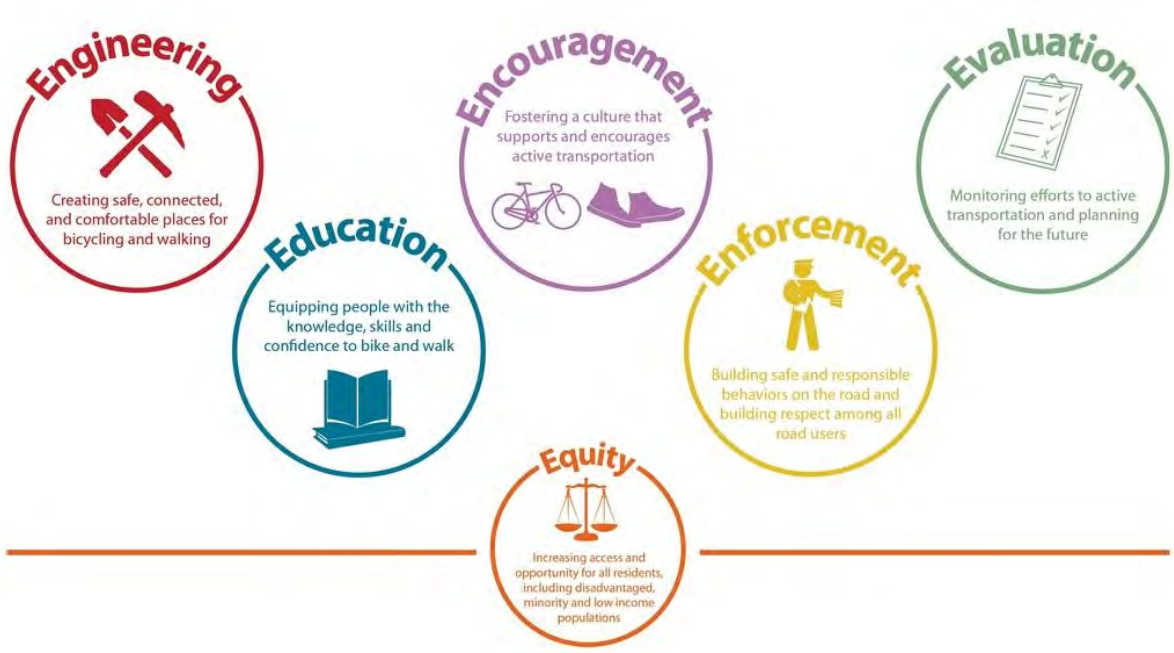


Figure 9 the 6 E's

A. Policies

1. Active Transportation System
2. Safe Non-Motorized System
3. Wayfinding
4. Operations and maintenance

1. Active Transportation System

To provide a unique high-quality active transportation system throughout the City to meet the needs of residents, employees, and visitors.

- Safe and Convenient Access to Destinations. The City shall implement an active transportation system for a range of purposes, including but not limited to, bicyclists, pedestrians, and equestrians. This network shall provide safe, convenient, and enjoyable access to destinations that are open to the public along designated routes identified in this Plan. Facilities providing this access may be one or more of the facility types identified in this Plan.

- Linkage. The City shall plan for and provide the development of non-motorized system linkages to neighborhood community non-motorized networks.

- Right-of-Way (R.O.W). The City shall design existing and future roadway R.O.W. to provide safety for all non-motorized modes of transportation.

- Conflicts. The City shall develop safe and convenient non-motorized facilities that reduce potential conflicts between non-motorized and motorized vehicles. Design of the non-motorized system shall consider ways to avoid such conflicts along routes with particular attention at roadway intersections.

- Capacity. The City shall provide an appropriate level of service to all type of non-motorized transportation in order to manage the future potential use and influx of people as the City continues to grow.

- Transfer Points. The City shall plan for and provide the development of a non-motorized system that allows for persons to transfer easily between such places as transit stops.

- Connection to Schools and Community Facilities. The City shall ensure that its network of bicycle and pedestrian facilities include safe access and convenient connections to schools and other community facilities/destinations.

2. Safe Non-Motorized System

To provide a safe, comprehensive, and integrated Non-Motorized System throughout the City that is accessible and compatible with traffic patterns, land uses, and neighborhoods.

- Safe Circulation. The City shall design, build, and maintain non-motorized transportation system through the City in accordance with this Plan and national standards to ensure public safety

- Safe Facilities. The City shall develop safe and convenient facilities that connect and are compatible with other regional facilities.

- Friendly Streetscapes. The City shall ensure that streets include the appropriate amount of R.O.W. to accommodate non-motorized transportation facilities.

- Crossing. Where non-motorized routes encounter motorized traffic, the City should explore modifications that would make crossing intersections safer.

3. Wayfinding

To develop and implement a comprehensive wayfinding system that helps to improve safety along non-motorized routes, is respectful of residents, reflects community character, is sparingly used while aesthetically appealing, and incorporates technology.

- Safe Facilities. The City shall create safer non-motorized facilities through the use of signage and wayfinding that provides accessibility to a wide range of users and educates about the rules of the network.

- Community Character. The City should design and implement a wayfinding and signage system that incorporates current and future City branding and signage standards.

- Minimize Quantities. The City shall locate signs primarily at intersections, junctions/entry points, and destinations. Exact placement should be outlined in a Wayfinding and Signage Plan.

- Maintenance. The City shall establish a maintenance and replacement schedule to replace damaged and faded signs in a timely manner.

- Technology. The City shall incorporate the latest wayfinding technologies to complement physical wayfinding to be accessible with Global Positioning System [GPS] and coordinate with existing online map tools and digital applications for hiking and biking.

4. Operations and Maintenance

To provide a comprehensive management and operations program for the Non-Motorized Circulation System, from project inception to budget development and on-going maintenance, education, promotion and rule enforcement.

- Maintenance. The City shall maintain non-motorized transportation facilities and its corresponding signage/wayfinding.

- Funding & Implementation. The City shall continue its long-range program for planning and constructing non-motorized circulation facilities and seek ways through transfer, gift, grants, easement, or Capital Improvement Program funds to complete the system and to fund studies, programs and policies.

- Regional Coordination. The City shall participate in regional bicycle and pedestrian planning efforts in order to coordinate facility development, ensure that regional bikeway system designations are maintained, and be kept aware of potential funding sources.

- Education. The City shall use a variety of means to educate persons regarding laws and safe use practices of non-motorized and shared facilities that may include public outreach events, classes, and pamphlets.

- Enforcement. The City shall enforce existing and consider new state and local statutes related to Non-motorized transportation.

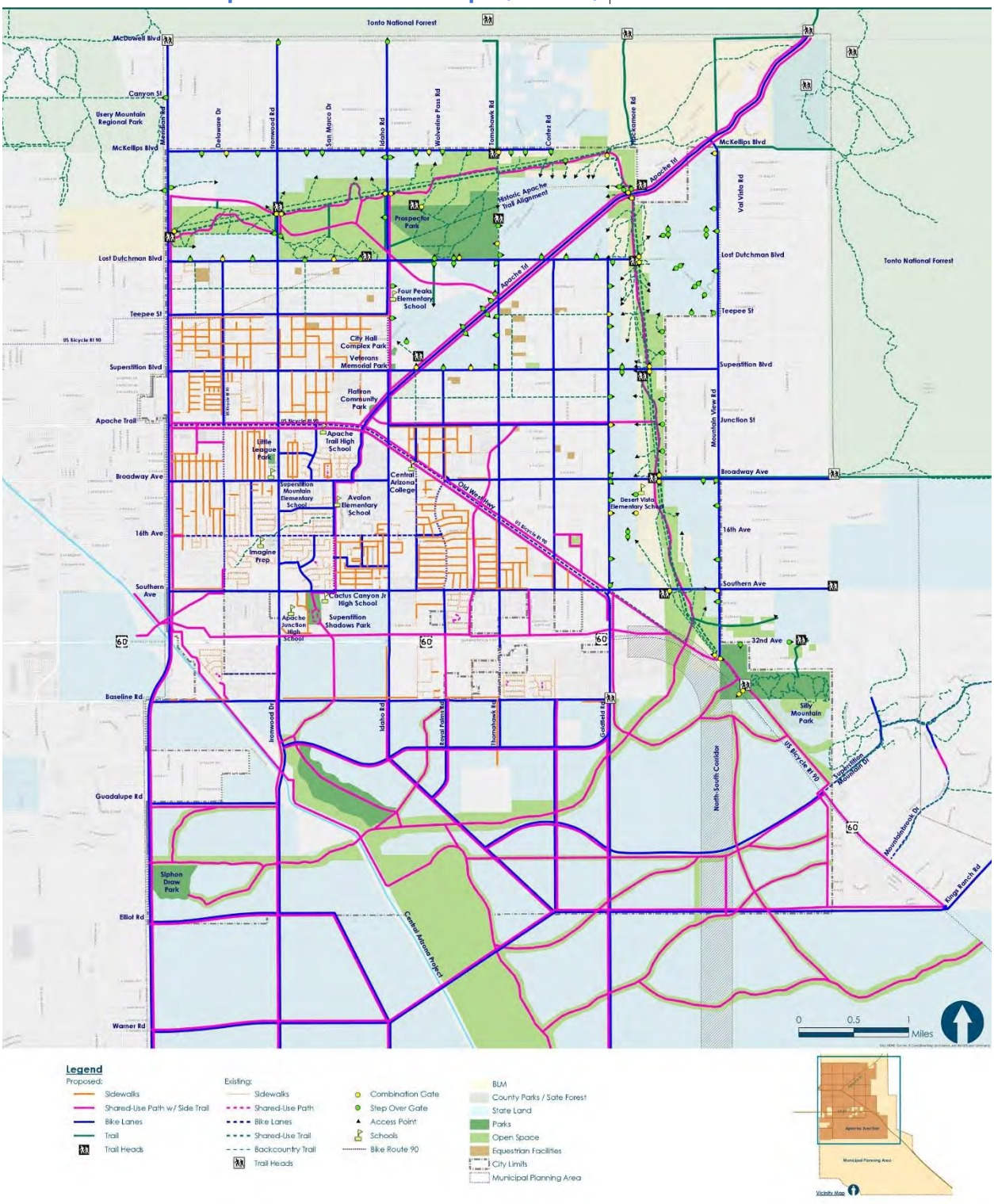
- Internal Planning Process. The City shall implement internal policies that ensure proper communication and coordination among the various City departments working to improve non-motorized facilities.

B. Proposed Facilities (Sidewalks, Bicycle and Trails)

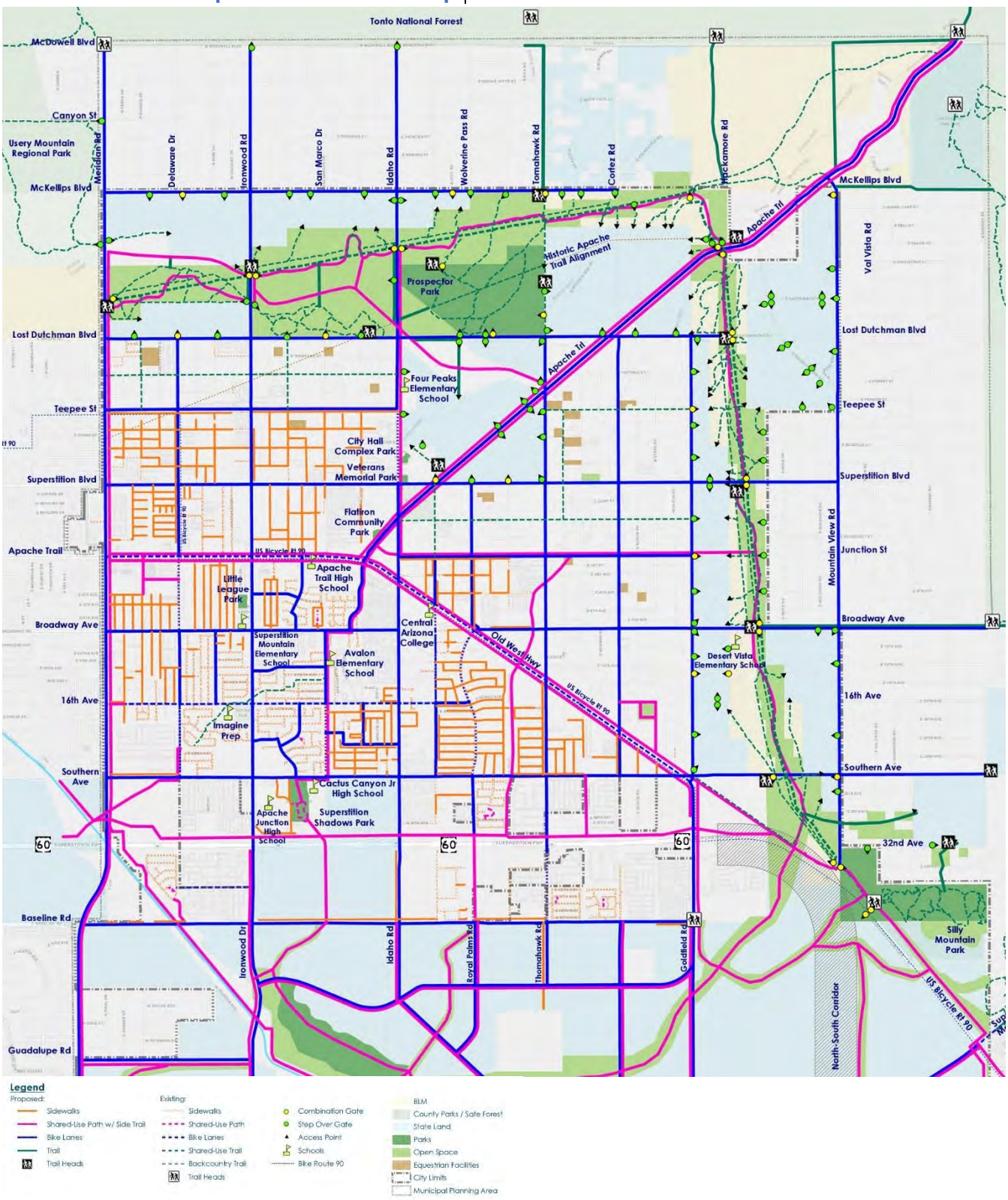
The following series of maps depict the proposed network for the City of Apache Junction. The maps show facilities grouped by mode, recognizing that trails and multi-use pathways serve a variety of modes and users.

When completed, these network additions would add 52 miles of sidewalk retro fit, 143 miles of bike lanes, 11 miles of multi-use and backcountry trails (unpaved), 14 trailheads and 160 miles of multi-use paved pathways. See Figures 10, 11, 12,13, 14,15.

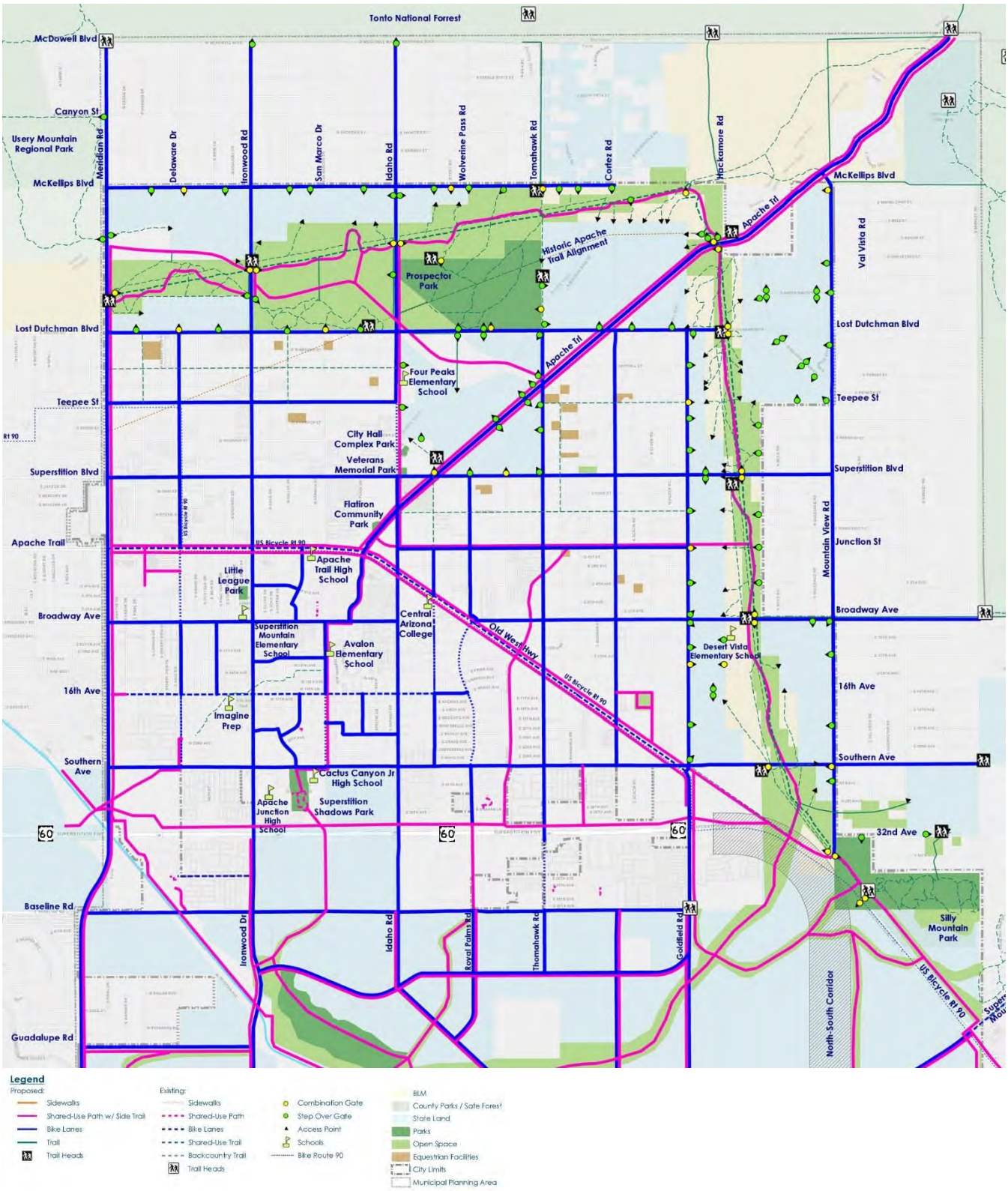
Active Transportation Map (overall) *(Figure 10)*



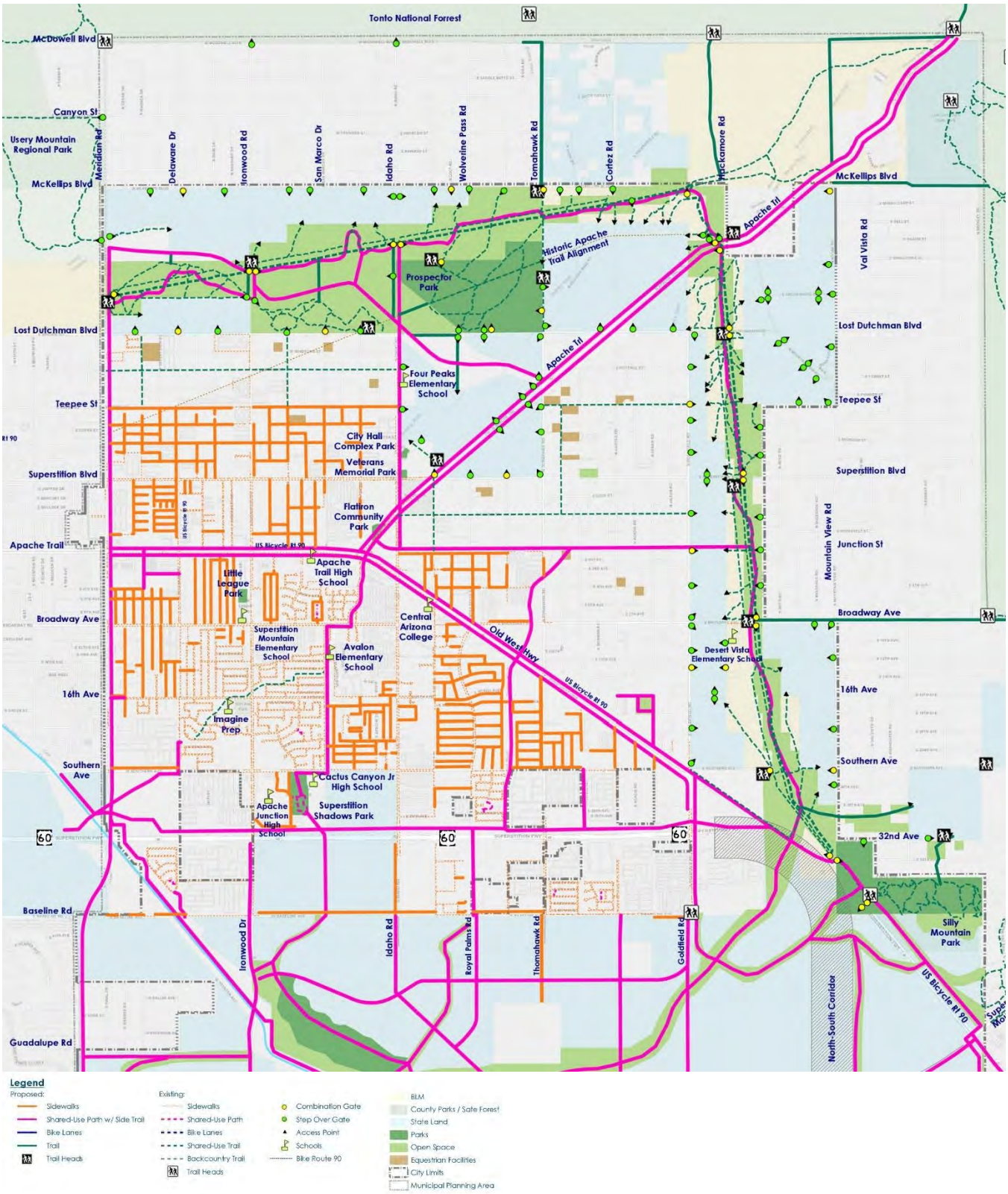
Active Transportation Map *(Figure 11)*



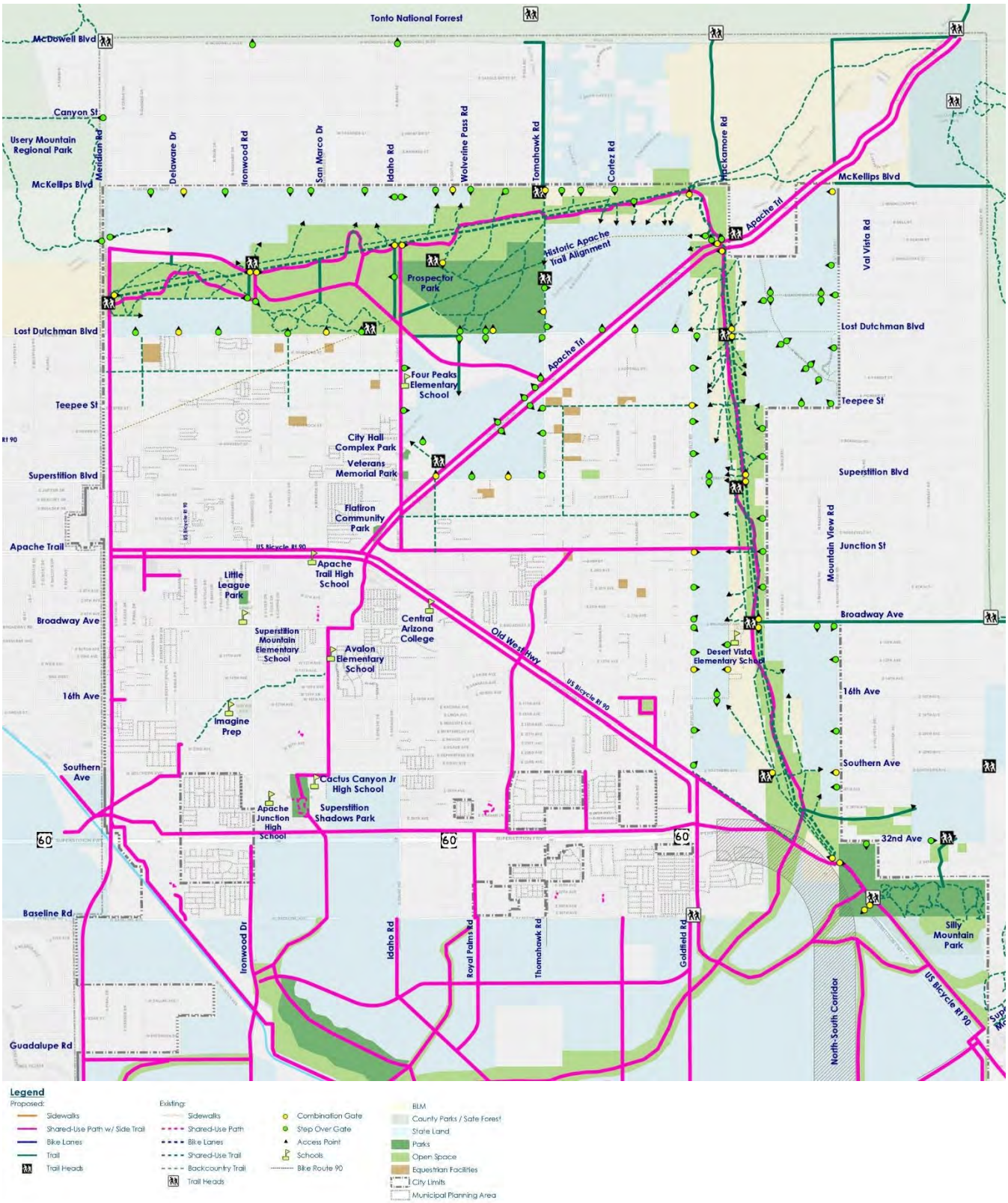
Bicycle Map *(Figure 12)*



Pedestrian Map *(Figure 13)*



Trails Map *(Figure 14)*



C. Facilities & Standards

For existing and future facilities to achieve Active Transportation principals, the existing roadway and trail standards will need to be modified. The following page graphically depict the new facility standards and approaches for both the physical facility and the right-of-way (R.O.W.)/Easements. The standards shall be implemented per the route maps included in this plan.

Off-Street Facilities: Trails and some multi-use paths are located in open spaces and parks, adjacent to streets, on city owned properties, leases, R.O.W.'s or easements. Standards include:

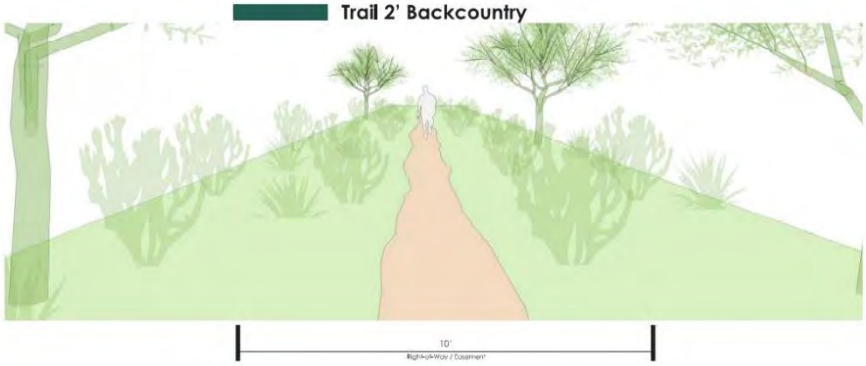
- Trails (unpaved):
  - Backcountry trail (unpaved)
  - Shared Use Trail (unpaved)
  - Shared Use Path with Side Trail (paved and unpaved)

On Street Facilities: Bike lanes, sidewalks and some multi-use paths are located adjacent to streets within city-owned R.O.W. Street classifications are determined by geographic character areas within the city and by roadway function type/capacity. The city has four character areas 1. Downtown, 2. Rural, 3. Standard, 4 Lost Dutchman Heights *(Figure 17)*. The roadway function/capacity is based on the recommended lanes/streets classifications *(Figure 16).* Standards include *(Figures 19, 20, 21, 22):*

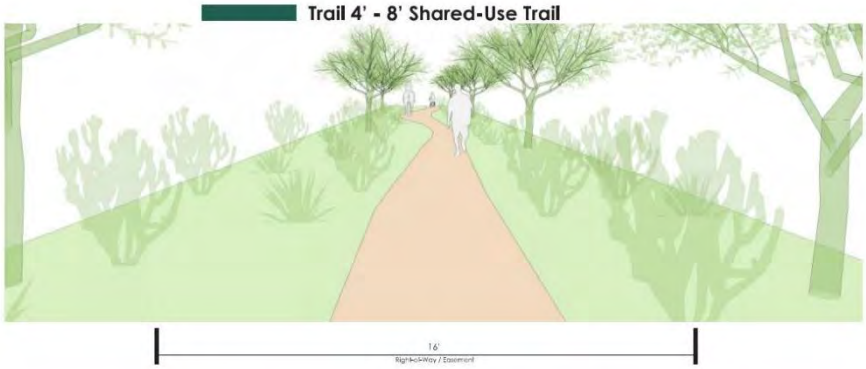
- Downtown:
  - Multilane Boulevard
  - Apache Trail/Old West Highway 60' Median
  - Apache Trail/Old West Highway 80' Median
  - Downtown Street
- Rural:
  - Local Street
  - Commercial/Industrial
  - Collector
  - Principal Arterial
- Standard:
  - Local Street
  - Commercial/Industrial
  - Collector
  - Principal Arterial
- Lost Dutchmen Heights:
  - Local Street
  - Commercial/Industrial
  - Collector (with and without parking)
  - Principal Arterial
  - Parkway

Trail Sections *(Figure15)*

Trail 2' Backcountry



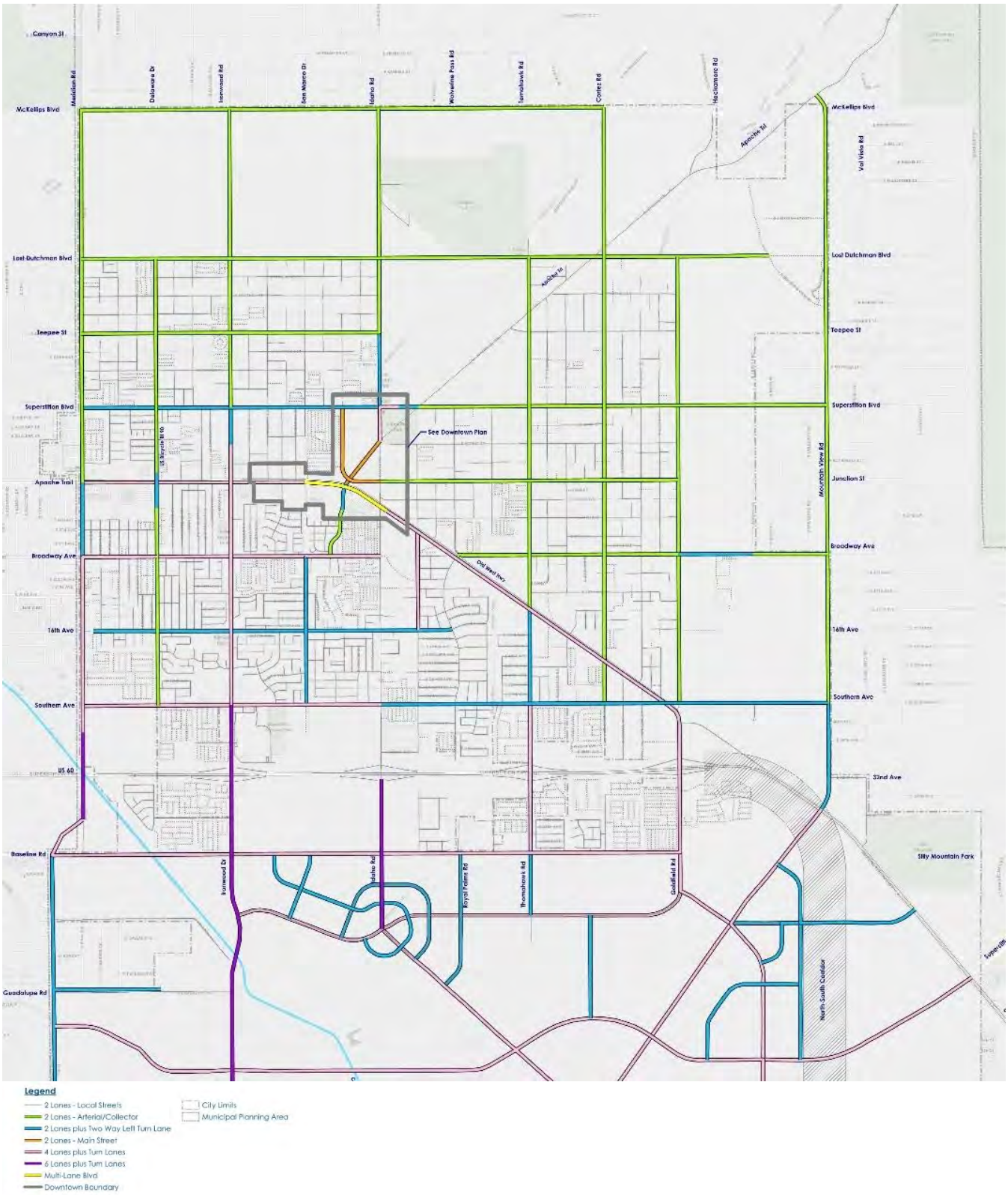
Trail 4' - 8' Shared-Use Trail



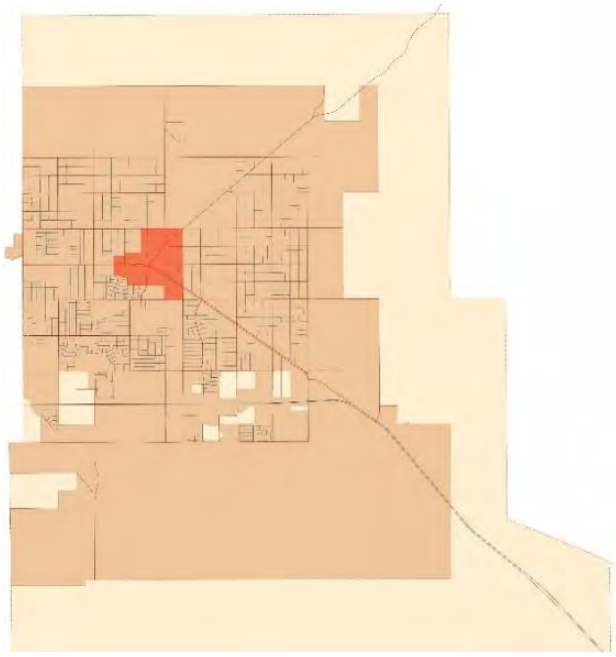
Urban 10' Shared-Use Path with 4' Side Trail

Rural/Off Street 10' Shared-Use Path with 4' Side Trail & 4'-8' Shared Trail

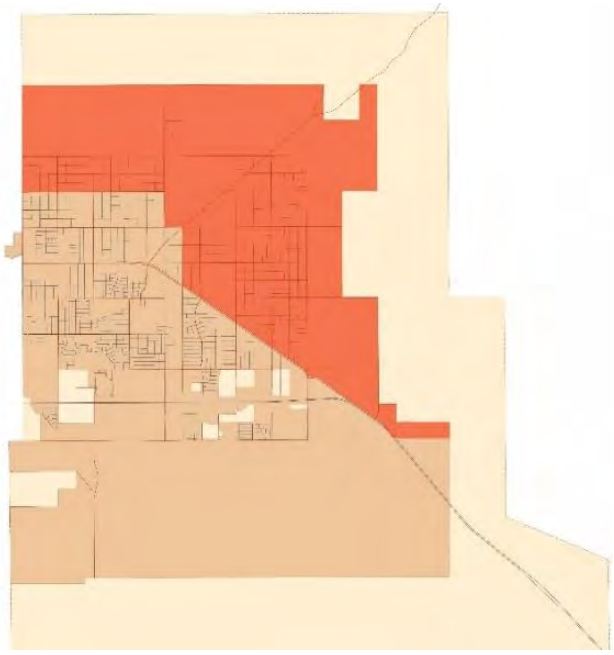
Recommended Lanes/Street Classifications *(Figure16)*



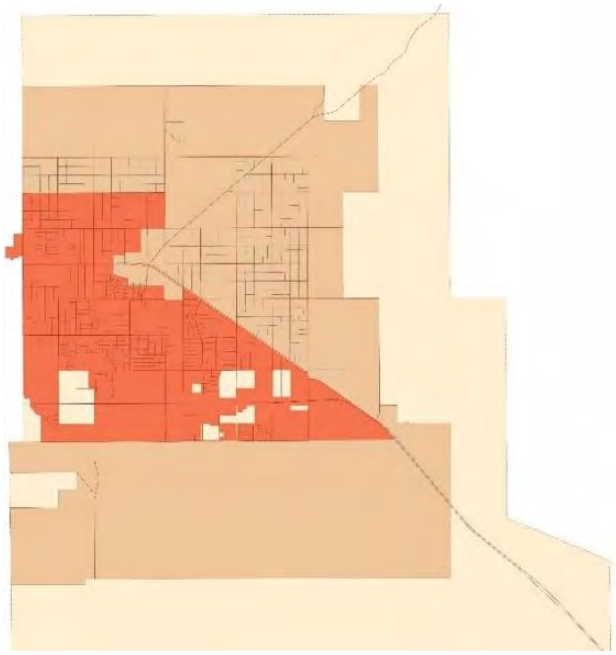
Character Areas *(Figure 17)*



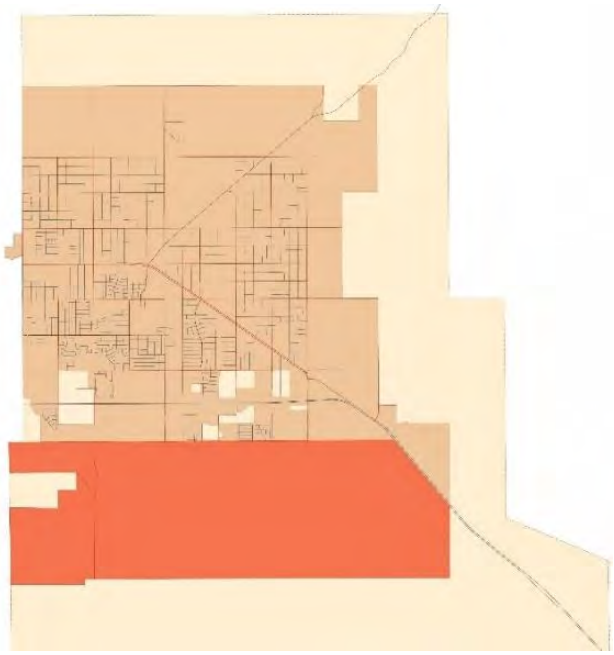
Downtown



Rural

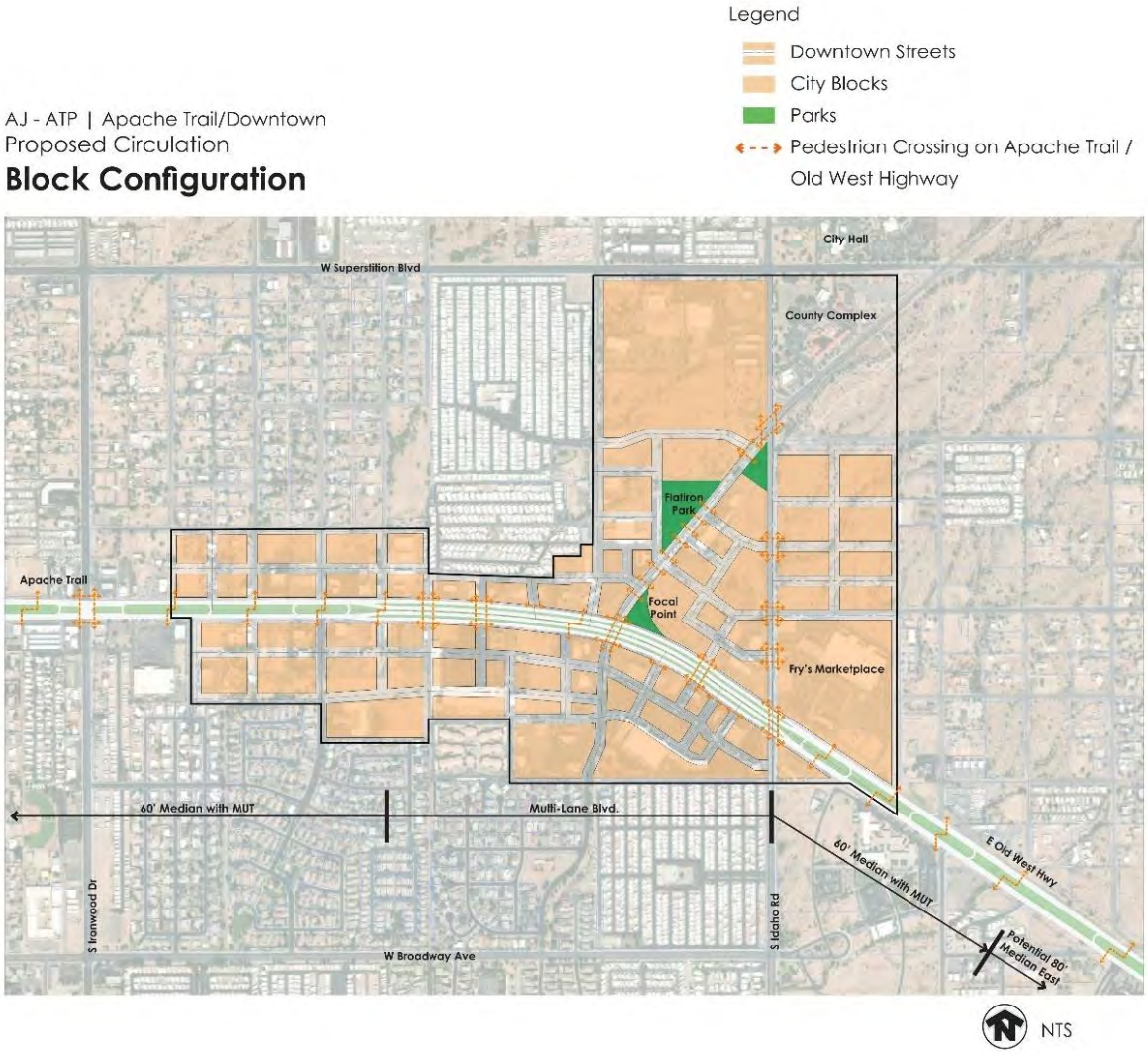


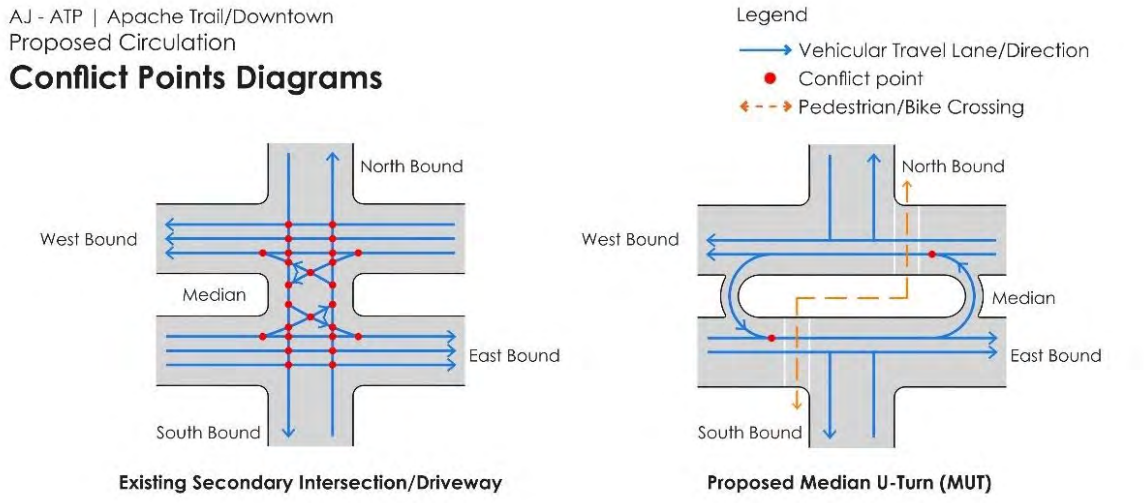
Standard



Lost Dutchman Heights

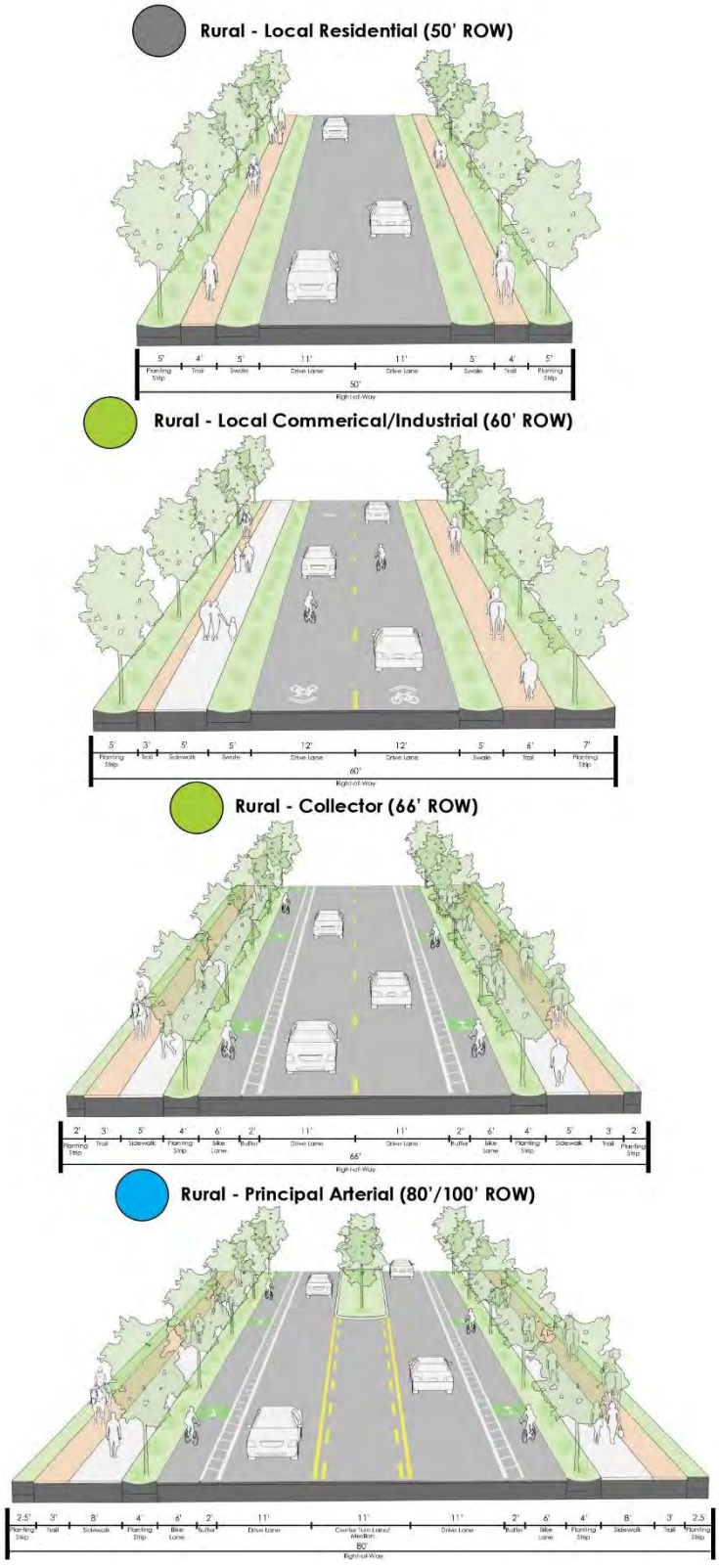
Downtown: Apache Trail - Old West Highway Plan *(Figure 18)*



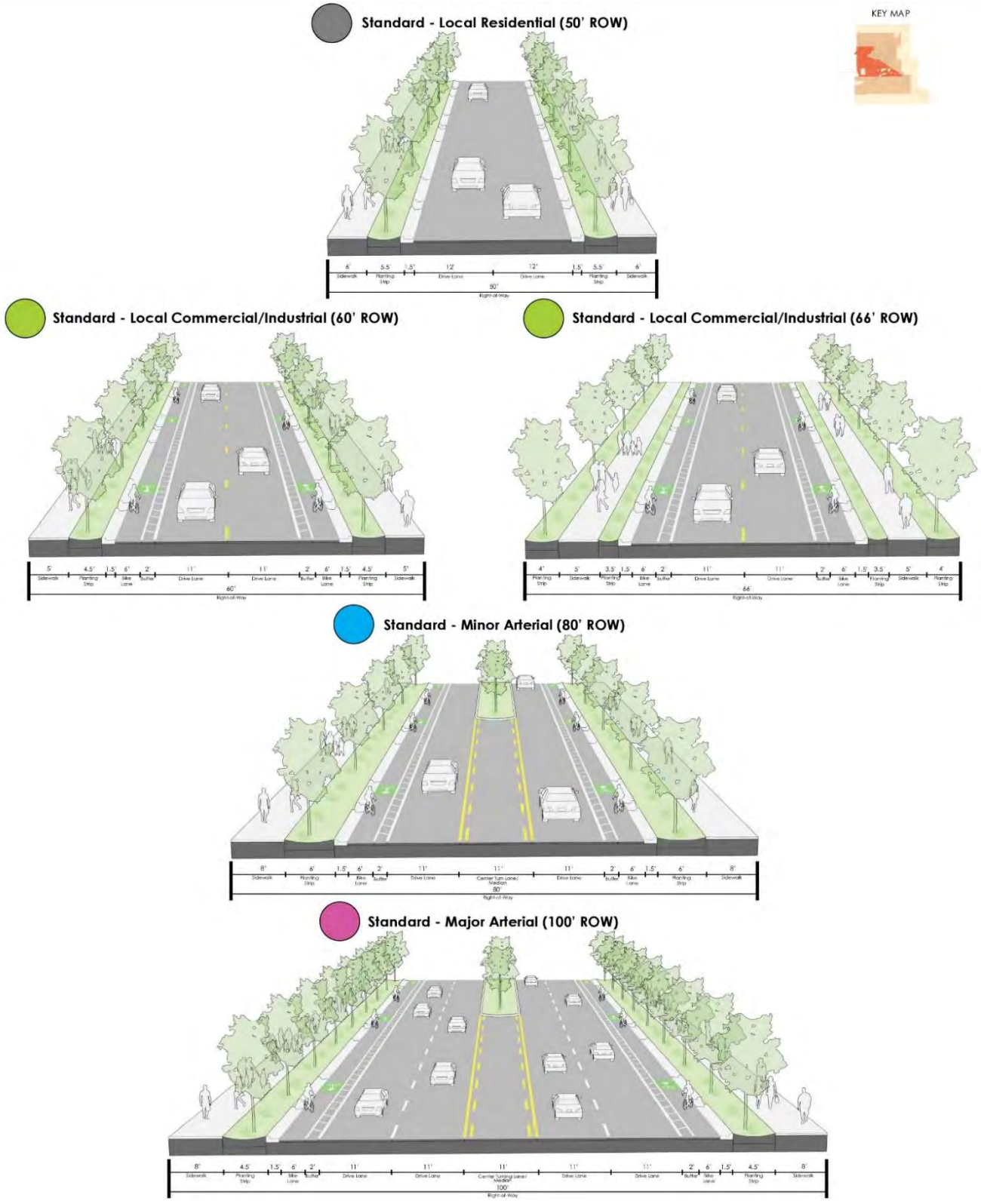


Downtown Streets *(Figure 19)*

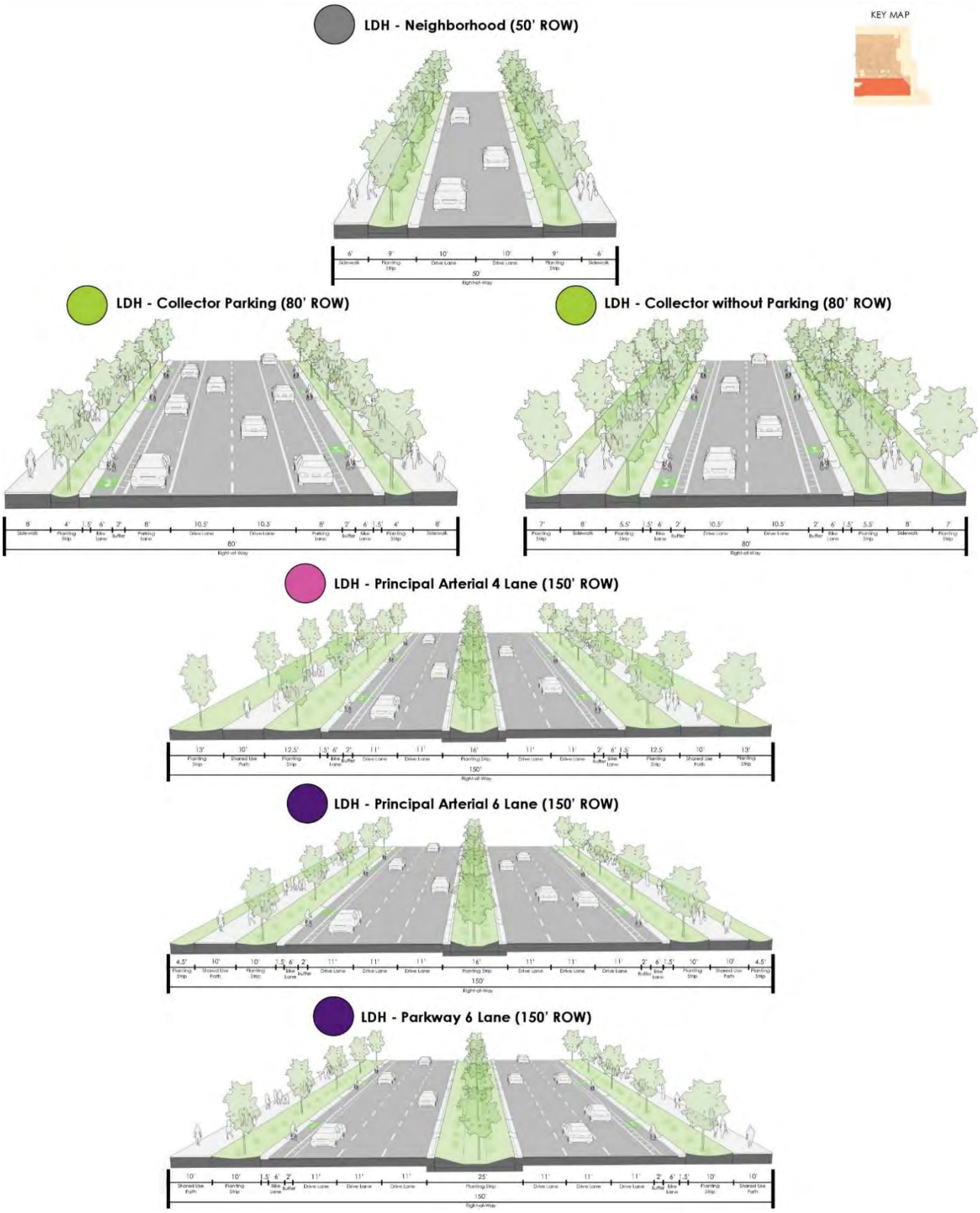
Rural Roads *(Figure 20)*



Standard Streets *(Figure 21)*



Lost Dutchmen Heights Streets (LDH) *(Figure 22)*



Section 4: Implementation

A. Priority Projects

This section identifies opportunities to incorporate Active Transportation Plan components with other capital improvements. Including active transportation facilities when resurfacing a roadway is recognized by Federal Highway Administration (FHWA) to provide multiple benefits, including:

- Create Connected Networks
- Cost Efficiencies
- Create Safer and More Comfortable Roadways
- High Quality Markings
- Improvements to provide Americans with Disabilities Act (ADA) compliant facilities

Additional guidance for achieving these benefits can be found in the U.S. Department of Transportation/FHWA *Incorporating On-Road Bicycle Networks into Resurfacing Projects* workbook at:

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/resurfacing_workbook.pdf

In some instances, recommended active transportation facilities within these projects have been tailored to fit the scope of a specific area. This strategy results in a higher likelihood for inclusion of active transportation facilities within projects identified. These adjustments provide for interim facilities with inclusion of active transportation facilities, while the recommended sections provided in the plans remain the desired ultimate configuration.

Projects included in the following summary (table XX) are included in the City of Apache Junction FY17 – FY21 Capital Improvement Plan and/or are being considered for inclusion per coordination with the Public Works and Engineering Departments.

Near Term 0- 5 Year Implementation: (Based on current COAJ CIP) *(Figure 23)*

2019

Southern Avenue: Project Type: Streets - Improvements Major, Project #: TI0034

Existing Configuration: Two and three lane

Project Description:

Winchester - three lanes with bike lanes, curbs, and sidewalks on both sides.
Southern Ave. sidewalks - between Winchester and Royal Palm - construction

Recommended Active Transportation Facilities: Connectivity, ADA Improvements

2020

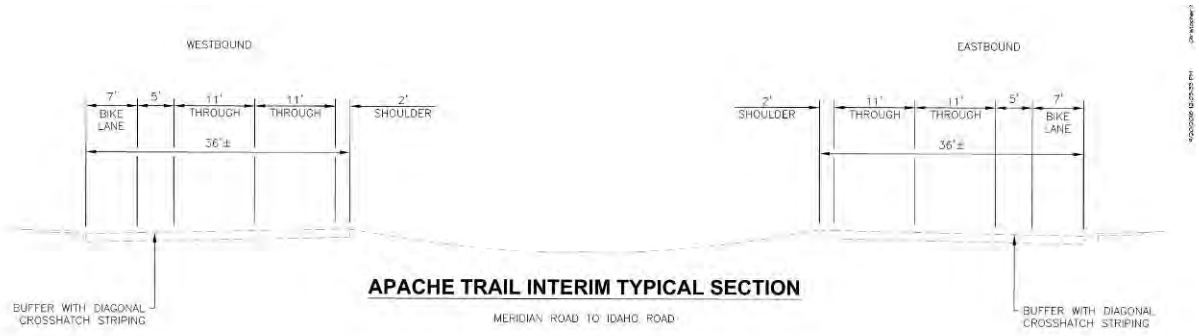
Apache Trail: Project Type: Streets – Rehabilitation, Project #: PW*

Existing Configuration: 6-lane roadway Bike Lanes Depressed Median

Project Description: Apache Trail - (Meridian to Idaho) – Just completed slurry seal and stripe.

Recommended Active Transportation Facilities: Incorporate Apache Trail Interim Typical Section, Install median refuge & 2-stage crossing at Meridian, and ADA Improvements.

Comments: Restriping provides Interim configuration appropriate for traffic volumes and provide greater user comfort to increase ridership. WB Old West Highway requires restriping east of Idaho to be compatible with project limits. Interim Typical Section included as part of this plan.



(Figure 24)

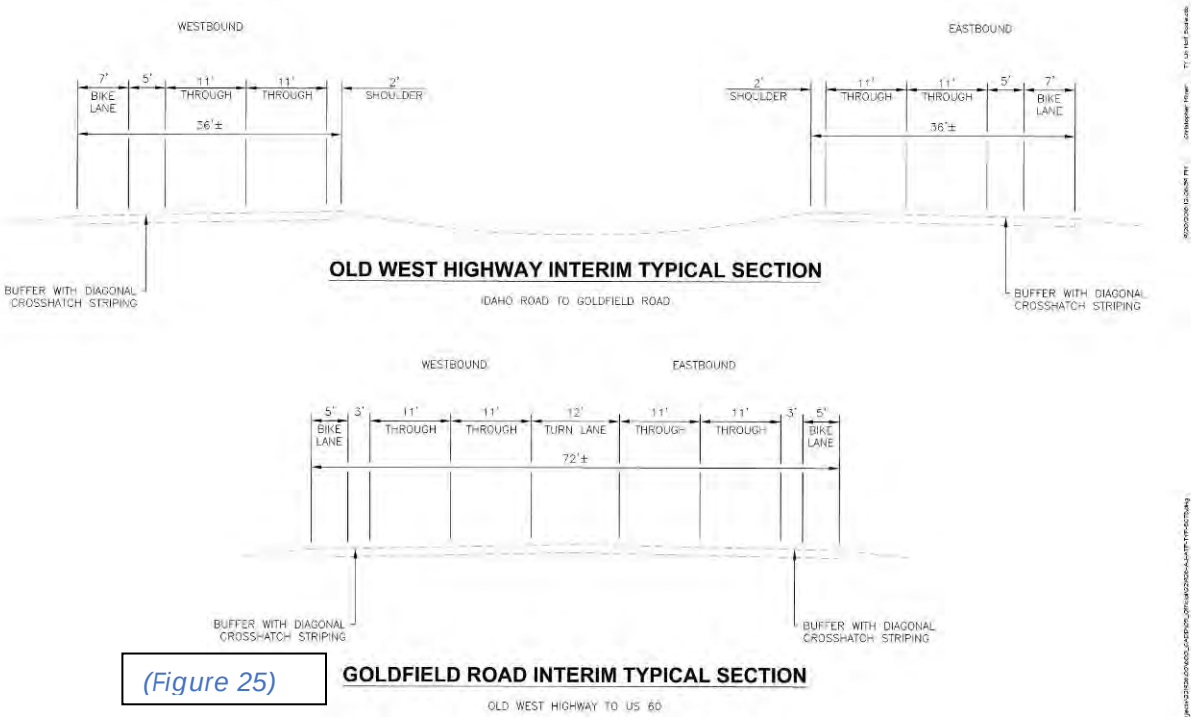
Old West Highway: Project Type: Streets – Rehabilitation, Project #: PW*

Existing Configuration: 4-lane roadway Bike Lanes Depressed Median

Project Description: Old West Highway (Idaho to US60) – Construction begins Winter/Spring 2019: Slurry seal, stripe

Recommended Active Transportation Facilities: Incorporate Interim Old West Highway and Goldfield Typical Sections as well as ADA Improvements.

Comments: Restriping provides opportunity to provide bike lane buffer and median U-turns. Recommend adding bicycle striping enhancements at Old West Highway and Goldfield Road.



(Figure 25)

(Figure 26)

Southern Avenue: Project Type: Streets – Reconstruction, Project #: TI0117

Existing Configuration: Varies between 2-lane uncurbed and 5-lane curbed

Project Description:
Southern Ave. - Delaware to Ironwood - reconstruction and widening - construction

Recommended Active Transportation Facilities: Incorporate Major Arterial Standard Street Section where curb and gutter are not present. Widen sidewalk where present to form interim typical section without extensive removal/reconstruction of curbing. Include lighting and ADA improvements.

Comments: Lane diet required to incorporate bicycle facilities within existing curb widths.

Tomahawk Road: Project Type: Streets – Rehabilitation, Project #: TI0124

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Tomahawk Rd - OWH to Southern - overlay/reconstruction

Recommended Active Transportation Facilities: Grade and compact 4-ft wide earthen trail and water harvesting ditch between road and trail. Include seeding for area outside roadside trail limits. Add edge line striping at scalloped roadway sections.

Comments: Existing roadway width only sufficient for 2-lanes with unpaved shoulders

FY20

Tomahawk Road: Project Type: Streets – Reconstruction, Project #: TI0024

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description:
Tomahawk - Superstition to Broadway - reconstruction - ROW, utilities

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section, extend culverts, and ADA Improvements.

Tomahawk Road: Project Type: Streets – Reconstruction, Project #: TI0027

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Tomahawk - Southern to US60 - reconstruction - construction

Recommended Active Transportation Facilities: Incorporate Major Arterial Standard Street Section and ADA Improvements.

FY21

Haven Hollow: Project Type: Streets – Reconstruction, Project #: TI0083

Existing Configuration: 2-lane neighborhood

Project Description: Reconstruction of the Haven Hollow subdivision streets.

Recommended Active Transportation Facilities: Incorporate Standard Local Residential Street Section and ADA Improvements.

Hilton Road: Project Type: Streets – Reconstruction, Project #: TI0123

Existing Configuration: 2-lane neighborhood

Project Description: Hilton Rd - Superstition Blvd to Broadway - reconstruction

Recommended Active Transportation Facilities: Incorporate Standard Local Residential Street Section and ADA Improvements.

Ironwood Drive: Project Type: Streets - Improvements Major, Project #: TI0018

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description:
Ironwood - Superstition to Tepee - reconstruction - construction (ROW, utilities, widening)

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section and ADA Improvements.

Ironwood Drive: Project Type: Streets – Rehabilitation, Project #: T0126

Existing Configuration: 5-lane curbed

Project Description:
Ironwood Dr - Apache Trail to Superstition Blvd - overlay/reconstruction

Recommended Active Transportation Facilities: Incorporate Interim Street Section (2-4-ft bike lanes, 4-10-ft through lanes, and 12-ft center turn lane) and ADA Improvements.

Comments: Lane diet would be required to provide bike lanes. Dimensions from lip of gutter.

Junction Street: Project Type: Streets – Reconstruction, Project #: T0125

Existing Configuration: 2-lane unpaved shoulders

Project Description: Junction St - Wickiup to Goldfield - reconstruction

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section, extend culverts, and ADA Improvements.

Lost Dutchman Blvd: Project Type: Streets – Reconstruction, Project #: TI0022

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Lost Dutchman - Meridian to Idaho - reconstruction - construction

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section, extend culverts, and ADA Improvements.

Old West Highway: Project Type: Streets – Reconstruction, Project #: PW*

Existing Configuration: 4-lane roadway Bike Lanes Depressed Median

Project Description: Old West Highway (Idaho to US60): Curb gutter sidewalk

Recommended Active Transportation Facilities: Incorporate Old West Highway Recommended Street Section, Median U turns, and ADA Improvements.

Southern Avenue: Project Type: Streets – Reconstruction, Project #: TI0088

Existing Configuration: Varies between 2-lane uncurbed and 5-lane curbed

Project Description: Southern Ave. - Ironwood to Apache - reconstruction

Recommended Active Transportation Facilities: Incorporate Recommended Street Sections as feasible. Incorporate interim typical sections as necessary to provide bicycle facilities. ADA Improvements

Comments: Some sections may require lane diet to incorporate bicycle facilities within existing curb widths.

Southern Avenue: Project Type: Streets – Rehabilitation, Project #: T0127

Existing Configuration: Varies between 2-lane uncurbed and 5-lane curbed

Project Description:
Southern Ave - Meridian Dr to Ironwood Dr - overlay or reconstruction

Recommended Active Transportation Facilities: Incorporate Recommended Street Sections, ADA Improvements

Comments: Pending completion of TI0117 will affect need for facilities.

FY20-22

Idaho Road: Project Type: Streets – Reconstruction, Project #: PW*

Existing Configuration: Varies between 2-lane uncurbed and 5-lane curbed

Project Description: Idaho Rd (Superstition to McKellips) Various work: Bike lanes entire length

Recommended Active Transportation Facilities: Incorporate Recommended Street Sections (rural principal arterial and collector) and ADA Improvements

Future Priorities

16th Avenue: Project Type: Streets - New Construction, Project #: TI0038

Existing Configuration: Unpaved connection to City of Mesa

Project Description:
16th Ave. - Meridian to Cedar - new construction - construction (relocate trailers, ROW, utilities)

Recommended Active Transportation Facilities: Incorporate Standard Minor Arterial Section and ADA Improvements.

2nd Avenue: Project Type: Streets - Improvements Neighborhood, Project #: TI0042

Existing Configuration: Unpaved neighborhood connection

Project Description:
2nd Ave. dirt road from Wickiup to Starr - new construction to address drainage, ROW, a nd grade issues - construction

Recommended Active Transportation Facilities: Incorporate Rural Local Residential Street Section, ADA Improvements. Install sufficient culvert length to allow for roadside active transportation facilities.

Baseline Avenue: Project Type: Streets - Improvements Major, Project #: TI0080

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Baseline Ave. - Meridian to Ironwood - reconstruction

Recommended Active Transportation Facilities: Incorporate Standard Street Major Arterial Section and ADA Improvements. Provide connections to CAP.

Broadway Avenue: Project Type: Streets – Reconstruction, Project #: TI0020

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Broadway Ave. – Tomahawk to Goldfield – reconstruction – (add Storm Water improvement #16) CMP/CRP culvert crossings between Winchester and Idaho; west of Raindance, west of Chaparral, east of Acacia, west of Vaquero

Recommended Active Transportation Facilities: Incorporate Rural Collection Section and ADA Improvements. Install sufficient culvert length to allow for roadside active transportation facilities.

Downtown District: Project Type: Asphalt/Concrete, Project #: RD0001

Existing Configuration: Undeveloped Land

Project Description: Develop a downtown Park & Ride lot and infrastructure

Recommended Active Transportation Facilities: Active transportation connections to Park & Ride

Downtown District: Project Type: Streets, Project #: RD0004/RD0005

Existing Configuration: 2-3 lane roadway
No edge line and/or on-street parking delineation

Project Description:
Design phase - reconstruct and widen Plaza Drive to support economic development

Recommended Active Transportation Facilities: Use "Main Street" Standard Detail AJ-20.11/12. Consider inclusion of sharrows.

Downtown District: Project Type: Streets, Project #: RD0006

Existing Configuration: 6-lane roadway Bike Lanes Depressed Median

Project Description:
Construct median improvements from Phelps to Rennick on Apache Trail

Recommended Active Transportation Facilities: Incorporate Apache Trail recommended typical section

Downtown District: Project Type: Streets, Project #: RD0007

Existing Configuration: 6-lane roadway Bike Lanes Depressed Median

Project Description:
Construct median improvements from Rennick to Thunderbird on Apache Trail

Recommended Active Transportation Facilities: Incorporate Apache Trail recommended typical section

Downtown District: Project #: Project Type: Land Acquisition, Project #: RD0011

Existing Configuration: Undeveloped Land

Project Description:
Future land acquisition for downtown improvements to support economic development

Recommended Active Transportation Facilities: Incorporate recommended downtown street network circulation

Downtown District: Project Type: Streets, Project #: RD0013

Existing Configuration: Existing

Project Description: Signage and landscape enhancements

Recommended Active Transportation Facilities: Incorporate wayfinding

Goldfield Road: Project Type: Streets – Reconstruction, Project #: TI0051

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Goldfield Rd. - Lost Dutchman to OWH - reconstruction

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section and ADA Improvements. Install sufficient culvert length to allow for roadside active transportation facilities.

Lost Dutchman Blvd: Project Type: Streets - Improvements Major, Project #: TI0052

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description: Lost Dutchman Blvd. - Goldfield to Idaho - new 4 lane arterial

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section and ADA Improvements.

Comments: Average Daily Traffic Volumes for Long-Term Phase do not warrant a 4-lane section.

Meridian Road: Project Type: Streets – Reconstruction, Project #: TI0004

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description:
Meridian Road - Baseline Ave. to McKellips - design and construction

Recommended Active Transportation Facilities: Incorporate Recommended Street Sections (Standard Major Arterial, Standard Minor Arterial, and Rural Principal Arterial) and ADA Improvements.

Miscellaneous: Project Type: Streets - Storm Water Improvements,
Project #: SW0001/SW0002/SW0003/SW0008/SW0009/SW0010

Existing Configuration: Overtopping roadway in storm event

Project Description: Install roadway culvert crossing

Recommended Active Transportation Facilities: Install sufficient culvert length to allow for roadside active transportation facilities.

Pueblo Del Sol: Project Type: Streets – Reconstruction, Project #: TI0005

Existing Configuration: 2-lane

Project Description: Roadway construction

Recommended Active Transportation Facilities: Incorporate ADA improvements

Southern Avenue: Project #: Project Type: Streets – Reconstruction, Project #: TI0050

Existing Configuration: Varies between 2-lane uncurbed and 5-lane curbed

Project Description:
Southern Ave. - Meridian to Tomahawk - reconstruction and widening, ROW, utilities - co nstruction (3 miles)

Recommended Active Transportation Facilities: Incorporate Recommended Street Sections, ADA Improvements

Comments: Some sections may require lane diet to incorporate bicycle facilities within existing curb widths.

Superstition Blvd: Project Type: Streets – Reconstruction, Project #: TI0053

Existing Configuration: Primarily 2-lane with unpaved shoulders

Project Description:
Superstition Blvd. - Idaho to Arroyo - reconstruction - CMP/RCP culvert crossing

Recommended Active Transportation Facilities: Incorporate Rural Collector Street Section and ADA Improvements. Install sufficient culvert length to allow for roadside active transportation facilities.

Various Intersections: Project Type: Traffic Signals, Project #: TI0090 - TI0099

Existing Configuration: Stop Control

Project Description: Various Locations

Recommended Active Transportation Facilities: ADA Improvements and bicycle detection

Winchester Drive: Project Type: Streets – Reconstruction, Project #: TI0014

Existing Configuration: Primarily 2-lane with unpaved shoulders

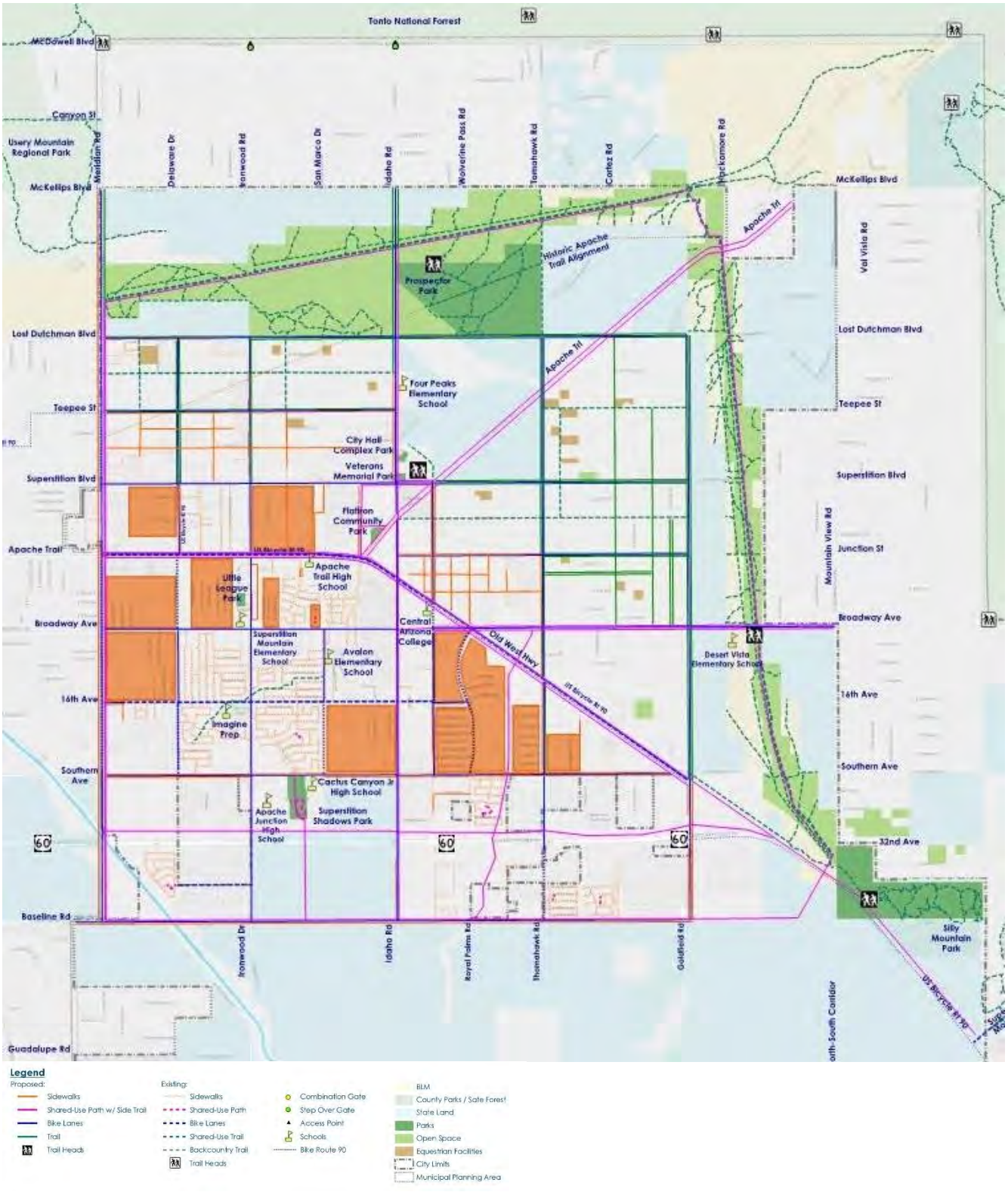
Project Description: Winchester - 4th Ave. to Scenic - reconstruction - construction

Recommended Active Transportation Facilities: Incorporate Local Commercial/Industrial Section, ADA Improvements

* Per Public Works Director

Mid - Term 5 - 10 Year Implementation: (Priorities) *(Figure 27)*

Long - Term 10 + Year Implementation: (Priorities) *(Figure 28)*



B. Prioritization Criteria

This Plan strives to create a safe and cohesive network of active transportation facilities. Much of the corridors are in place, yet many other corridors need to be completed and/or improved. All potential projects, however, do not have the same level of importance in completing the system. The following criteria, derived from public outreach, staff input, and working with regional agencies, will help to evaluate potential projects and determine the implementation sequence. Since not all criteria hold the same level of importance, our input groups were asked at public meetings and through an on-line survey to give broad range input on importance of each. The responses created the weight.

Cost was not used as an evaluation criterion based upon the idea that a project should first be evaluated on its merits. It will ultimately be a Council decision to decide if the project expenditure is worth the benefits it will provide. For instance, the Council could decide to fund one more expensive project rather than two less expensive projects because of the overall benefits to the City.

How to Use

To score a project, multiply the weight by the category improvement score (0-2) to find the value. Once each category has been assigned a value, combine all category values to find the total score for the individual project.

(ex: sample below; 3 {weight} x 2 {category improvement score} = 6 {value})

Weight ×	Improvement Categories & Criteria	Range =	Value
(3) ×	Improve safety 0. Project involves no existing or potential safety problem. 1. Project prevents a potential problem. (2) Project corrects an existing problem.	(0-6) =	(6)

(Figure 29)

Project Prioritization Worksheet

Weight	×	Improvement Categories & Criteria	Range	=	Value
3	×	Improve safety 0. Project involves no existing or potential safety problem. 1. Project prevents a potential problem. 2. Project corrects an existing problem.	(0-6)	=	
3	×	"Piggy-Back" With Other Already Planned Projects (roadway repair, traffic congestion, drainage, utilities and other public infrastructure improvements) 0. No nearby planned projects could be included. 1. At least one nearby planned private project could be included. 2. At least one nearby public project could be included.	(0-6)	=	
2	×	Address Traffic Conflicts 0. Project does not attempt to address conflicts between Pedestrians, bicyclists, Equestrians or drivers. 1. Project attempts to to address conflicts between pedestrians or bicyclists or Equestrians and drivers. 2. Project attempts to address conflicts between 2 or more(Pedestrians, bicyclists, Equestrians or drivers).	(0-4)	=	
2	×	Close a Gap in the System 0. Project does not close a gap. 1. Project closes a gap providing up to 1 mile of usable and continuous bike or pedestrian corridor. 2. Project closes a gap providing greater than 1 mile of usable and continuous bike o n corridor.	(0-4)	=	
2	×	Link to Destinations 0. Project provides little to no improved access to destinations 1. Project somewhat or indirectly improves access to at least one destination. 2. Project provides direct access to one or more destinations.	(0-4)	=	
1	×	Focus on Heavy Use Corridors 0. Project along a corridor with low existing or potential use. 1. Project is along a corridor with moderate existing or potential use. 2. Project is along a corridor with heavy existing or potential use.	(0-2)	=	
1	×	Address Multiple Modes 0. Project improves one mode: bicycle or pedestrian or equestrian facility. 1. Project improves two modes: bicycle or pedestrian or equestrian facility with vehicular or transit. 2. Project improves 3 modes: bicycle and pedestrian and equestrian facility with vehicular or transit.	(0-2)	=	
			Total Score		

(Figure 30)

C. Typical Costs

Active Transportation element costs listed below are based upon the proposed changes in the city's existing standard roadway or public works improvement standards. The additional costs are typically for the addition (or in some cases reduction) of pavement, striping or signage. In other cases such as the Apache Trail Multi-Lane Boulevard, Apache Trail/Old West Hwy. Reconstruction, these costs are for the full improvement.

Cost Per Mile:

Downtown/ Apache Trail/Old West Highway:	
Apache Trail Multi-Lane Blvd (200' ROW)	$14,000,000+/-
Apache Trail/Old West Highway 60' Median (200' ROW)	$10,000,000+/-
Apache Trail/Old West Highway 80' Median (200' ROW)	$10,000,000+/-
Downtown Main Street (80' ROW)	No additional cost
Rural:	
Local Residential (50' ROW)	$ 5,000 +/-
Local Commercial/Industrial (60' ROW)	$ 150,000 +/-
Collector (66' ROW)	$ 150,000 +/-
Principal Arterial (80' ROW)	$ 200,000 +/-
Standard:	
Local Residential (50' ROW)	$ 50,000 +/-
Local Commercial/Industrial (60' ROW)	$ 150,000 +/-
Local Commercial/Industrial (66' ROW)	$ 150,000 +/-
Minor Arterial (80' ROW)	$ (170,000)+/-
Major Arterial (100' ROW)	$ 75,000 +/-
Lost Dutchman Heights (LDH)	
Local Residential (50' ROW)	No additional cost
Local Commercial/Industrial (60' ROW)	No additional cost
Local Commercial/Industrial (66' ROW)	No additional cost
Minor Arterial (80' ROW)	$ 175,000 +/-
Major Arterial (100' ROW)	$ 175,000 +/-
Parkway 6 Lane (150' ROW)	$ 175,000 +/-

Typical Project costs are based upon current 2018 construction costs.

D. Implementation Strategies/Measures

The Corresponding elements within the implementation measures will be filled in upon solidification of Goals and policies, the discussion of responsible parties with city staff, and the selection of year vs annual vs ongoing for each measure.

Education

1. Develop education programs, activities, and/or web based and print materials related to aiding education, enforcement, and guidance to the public about the City's transportation network (e.g. maps, special education events and activities, school visits, walk and bike days, wayfinding, etc.).

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

2. Implement internal policies that ensure proper communication and coordination among the various departments and sections working to improve all forms of active transportation within the City.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

Enforcement

1. Review City codes, standards, policies and procedures to ensure they include guidelines for providing a continuous route between public non-motorized facilities and main entrances of public or semi-public buildings.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

Encouragement

1. Use asset management techniques to implement the construction and maintenance of the City's non-motorized circulation facilities for the benefit of the residents.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

2. Complete high priority projects that best meet the project prioritization criteria of this Plan.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

3. Install appropriate Non-motorized signage as identified in this plan and future signage and wayfinding plan.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

4. Coordinate with Chamber of Commerce to develop a desired map for non-motorized facilities within the City and its connections to regional destinations.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

Engineering

1. Develop and maintain a high-quality design of the roadway, bicycle, pedestrian and equestrian network that reduces negative environmental impacts including noise and minimizes adverse impacts to the neighborhood through the use of roadway cross sections, control techniques, intersection enhancements, traffic counts, and high-quality hardscaping and landscaping.

    a. Implements which policies – TBD
    b. Primary Responsible Party – TBD
    c. Other Responsible/involved parties- TBD

2. Preserve existing right-of-way, except when necessary to implement the facilities and standards adopted by the City, or when necessary to allow for innovative alignments, abandonments, or shared-use by different travel modes as appropriate.

    a. Implements which policies – TBD
    b. Primary Responsible Party – TBD
    c. Other Responsible/involved parties- TBD

3. Designate a City staff person to represent the Apache Junction on the Maricopa Association of Governments [MAG] Active Transportation Committee to coordinate facility development, ensure that regional bikeway system designations are consistent with the City's Active Transportation Plan, and to be kept aware of potential funding sources.

    a. Primary Responsible Party – TBD
    b. Other Responsible/involved parties- TBD

4. Institute a pavement reduction plan on local streets where appropriate to lessen long term maintenance costs and to provide Non-motorized facilities within the public right of way.

    a. Implements which policies – TBD
    b. Primary Responsible Party – TBD
    c. Other Responsible/involved parties- TBD

Equity

1. Maintain and update an inventory and map of the City's non-motorized transportation network.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

2. Coordinate with adjacent municipalities and governing agencies on mutually beneficial projects, potential project cost sharing, mapping, shared parking, and transit routes/stops to ensure safe and efficient linkages.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

3. Promote Active Transportation and local and regional transit services for the City and ensure that facilities within the city are functional and attractive. Cooperate with transit agencies, neighboring jurisdictions, and local communities to improve transit and ride share pick up points. Produce route maps that are shared with residents, visitors, adjacent communities, and MAG.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

4. Develop capital improvement, operations and management budgets to properly develop, maintain and improve the Active Transportation network and the related wayfinding system in the City.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

Evaluation

1. Evaluate the ability, application, and cost sharing for the institution of Mutli-use facilities for both motorized and non-motorized facilities. This should include an assessment of various techniques, design guidelines, cost sharing, and administrative process for potential installation.

   a. Implements which policies – TBD
   b. Primary Responsible Party – TBD
   c. Other Responsible/involved parties- TBD

E. Evaluation

Within 5 years from acceptance of this plan the City of Apache Junction should evaluate the status of the plan implementation based on the master plan policies and strategies. Utilize the following score cards:

Policies Score Card	Score		
1. Active Transportation System	Implemented	Progress	No Progress
Safe and Convenient Access to Destinations. The City shall implement an active transportation system for a range of purposes, including but not limited to, bicyclists, pedestrians, and equestrians. This network shall provide safe, convenient, and enjoyable access to destinations that are open to the public along designated routes identified in this Plan. Facilities providing this access may be one or more of the facility types identified in this Plan.			
Linkage. The City shall plan for and provide the development of non-motorized system linkages to neighborhood community non-motorized networks.			
Right-of-Way (R.O.W). The City shall design existing and future roadway R.O.W. to provide safety for all non-motorized modes of transportation.			
Conflicts. The City shall develop safe and convenient non-motorized facilities that reduce potential conflicts between non-motorized and motorized vehicles. Design of the non-motorized system shall consider ways to avoid such conflicts along routes with particular attention at roadway intersections.			
Capacity. The City shall provide an appropriate level of service to all type of non-motorized transportation in order to manage the future potential use and influx of people as the City continues to grow.			
Transfer Points. The City shall plan for and provide the development of a non-motorized system that allows for persons to transfer easily between such places as transit stops.			
Connection to Schools and Community Facilities. The City shall ensure that its network of bicycle and pedestrian facilities include safe access and convenient connections to schools and other community facilities/destinations.			
2. Safe Non-Motorized System			
Safe Circulation. The City shall design, build, and maintain a non-motorized transportation system through the City in accordance with this Plan and national standards to ensure public safety			
Safe Facilities. The City shall develop safe and convenient facilities that connect and are compatible with other regional facilities.			
Friendly Streetscapes. The City shall ensure that streets include the appropriate amount of R.O.W. to accommodate non-motorized transportation facilities.			
Crossing. Where non-motorized routes encounter motorized traffic, the City should explore modifications that would make crossing intersections safer.			
3. Wayfinding			
Safe Facilities. The City shall create safer non-motorized facilities through the use of signage and wayfinding that provides accessibility to a wide range of users and educates about the rules of the network.			
Community Character. The City should design and implement a wayfinding and signage system that incorporates current and future City branding and signage standards.			
Minimize Quantities. The City shall locate signs primarily at intersections, junctions/entry points, and destinations. Exact placement should be outlined in a Wayfinding and Signage Plan.			
Maintenance. The City shall establish a maintenance and replacement schedule to replace damaged and faded signs in a timely manner.			
Technology. The City shall incorporate the latest wayfinding technologies to complement physical wayfinding to be accessible with Global Positioning System [GPS] and coordinate with existing online map tools and digital applications for hiking and biking.			
4. Operations and Maintenance			
Maintenance. The City shall maintain non-motorized transportation facilities and its corresponding signage/wayfinding.			
Funding & Implementation. The City shall continue its long-range program for planning and constructing non-motorized circulation facilities and seek ways through transfer, gift, grants, easement, or Capital Improvement Program funds to complete the system and to fund studies, programs and policies.			
Regional Coordination. The City shall participate in regional bicycle and pedestrian planning efforts in order to coordinate facility development, ensure that regional bikeway system designations are maintained, and be kept aware of potential funding sources.			
Education. The City shall use a variety of means to educate persons regarding laws and safe use practices of non-motorized and shared facilities that may include public outreach events, classes, and pamphlets.			
Enforcement. The City shall enforce existing and consider new state and local statutes related to Non-motorized transportation.			
Internal Planning Process. The City shall implement internal policies that ensure proper communication and coordination among the various City departments working to improve non-motorized facilities.			

Strategies Score Card	Score		
Education	Implemented	Progress	No Progress
1. Develop education programs, activities, and/or web based and print materials related to aiding education, enforcement, and guidance to the public about the City's transportation network (e.g. maps, special education events and activities, school visits, walk and bike days, wayfinding, etc.).			
2. Implement internal policies that ensure proper communication and coordination among the various departments and sections working to improve all forms of active transportation within the City.			
Enforcement			
1. Review City codes, standards, policies and procedures to ensure they include guidelines for providing a continuous route between public non-motorized facilities and main entrances of public or semi-public buildings.			
Encouragement			
1. Use asset management techniques to implement the construction and maintenance of the City's non-motorized circulation facilities for the benefit of the residents.			
2. Complete high priority projects that best meet the project prioritization criteria of this Plan.			
3. Install appropriate Non-motorized signage as identified in this plan and future signage and wayfinding plan.			
4. Coordinate with Chamber of Commerce to develop a desired map for non-motorized facilities within the City and its connections to regional destinations.			
Engineering			
1. Develop and maintain a high-quality design of the roadway, bicycle, pedestrian and equestrian network that reduces negative environmental impacts including noise and minimizes adverse impacts to the neighborhood through the use of roadway cross sections, control techniques, intersection enhancements, traffic counts, and high-quality hardscaping and landscaping.			
2. Preserve existing right-of-way, except when necessary to implement the facilities and standards adopted by the City, or when necessary to allow for innovative alignments, abandonments, or shared-use by different travel modes as appropriate.			
3. Designate a City staff person to represent the Apache Junction on the Maricopa Association of Governments [MAG] Active Transportation Committee to coordinate facility development, ensure that regional bikeway system designations are consistent with the City's Active Transportation Plan, and to be kept aware of potential funding sources.			
4. Institute a pavement reduction plan on local streets where appropriate to lessen long term maintenance costs and to provide Non-motorized facilities within the public right of way.			
Equity			
1. Maintain and update an inventory and map of the City's non-motorized transportation network.			
2. Coordinate with adjacent municipalities and governing agencies on mutually beneficial projects, potential project cost sharing, mapping, shared parking, and transit routes/stops to ensure safe and efficient linkages.			
3. Promote Active Transportation and local and regional transit services for the City and ensure that facilities within the city are functional and attractive. Cooperate with transit agencies, neighboring jurisdictions, and local communities to improve transit and ride share pick up points. Produce route maps that are shared with residents, visitors, adjacent communities, and MAG.			
4. Develop capital improvement, operations and management budgets to properly develop, maintain and improve the Active Transportation network and the related wayfinding system in the City.			
Evaluation			
1. Evaluate the ability, application, and cost sharing for the institution of Mutli-use facilities for both motorized and non-motorized facilities. This should include an assessment of various techniques, design guidelines, cost sharing, and administrative process for potential installation.			

Appendices

A. Plan Maps and Standard Sections (11 x 17)

B. Public Outreach

C. Existing Plan & Studies

D. Existing System & Needs Analysis

E. Detailed Costs

F. Funding Sources

G. NHTSA Pedestrian & Bicycle Safety Assessment Pilot

H. League of American Bicyclists Bicycle Friendly Community Application

I. Walk Friendly Communities Walk Friendly Designation Application

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