

# Apache Junction Comprehensive Transportation Study

## *Executive Summary*

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Prepared for the:  
**Arizona Department  
of Transportation**



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## EXECUTIVE SUMMARY

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### PURPOSE OF THE STUDY

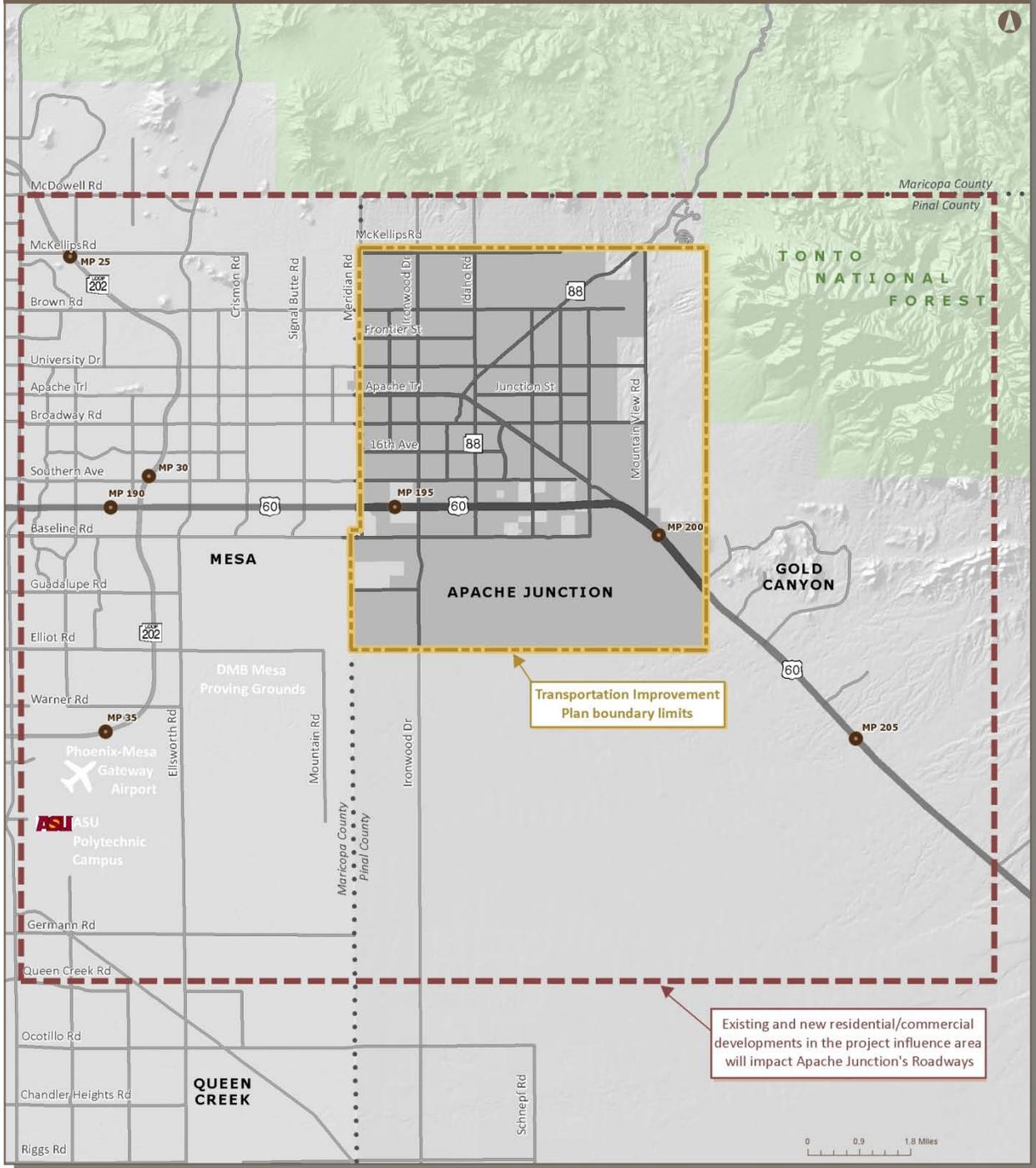
The Apache Junction Comprehensive Transportation Study was a joint effort by the City of Apache Junction and the Arizona Department of Transportation (ADOT) to develop a long-range multimodal transportation plan to address the City's most critical current and future transportation needs. The study was funded by Federal Highway Administration's (FHWA) State Planning and Research Program and administered through ADOT's Multimodal Planning Division. Significant growth anticipated in the Portalis area located in the southern portion of the City, could result in population growth, economic development, and increased traffic volumes. The principal focus of the transportation plan was to address the growing demands placed on the City's local roads and streets by developments in study area, the Portalis area, and within the region. In addition, the plan examined public transportation, bicycle and pedestrian needs, and additional multimodal opportunities necessary to accommodate growth and development.

The City of Apache Junction is located on the eastern edge of the Phoenix Metropolitan area. The City is situated in the northwest portion of Pinal County and a small portion is located in eastern section of Maricopa County. Due to the City's location, the Maricopa Association of Governments (MAG) and Central Arizona Association of Governments (CAAG) coordinate planning activities for Apache Junction. The study area is comprised of approximately 44 square miles and is bounded by Meridian Drive to the west, McKellips Road to the north, Elliot Road alignment to the south, and the Tonto National Forest on the east.

Figure 1 shows the study area boundary along with the project influence area. The study area represents the Transportation Improvements Plan boundary limits while the project influence area represents a geographic area beyond the study boundary that directly affects the study area. The project influence area is needed to identify and accurately quantify the impact of traffic generated outside the study area within the City's transportation system.



**FIGURE 1: STUDY AREA AND PROJECT INFLUENCE AREA**



**LEGEND**

-  Study Area
-  Influence Area
-  City Limits
-  Study Roadways
-  Other Major Roadways
-  County Line

Data Sources: City of Apache Junction, ALRIS, ADOT



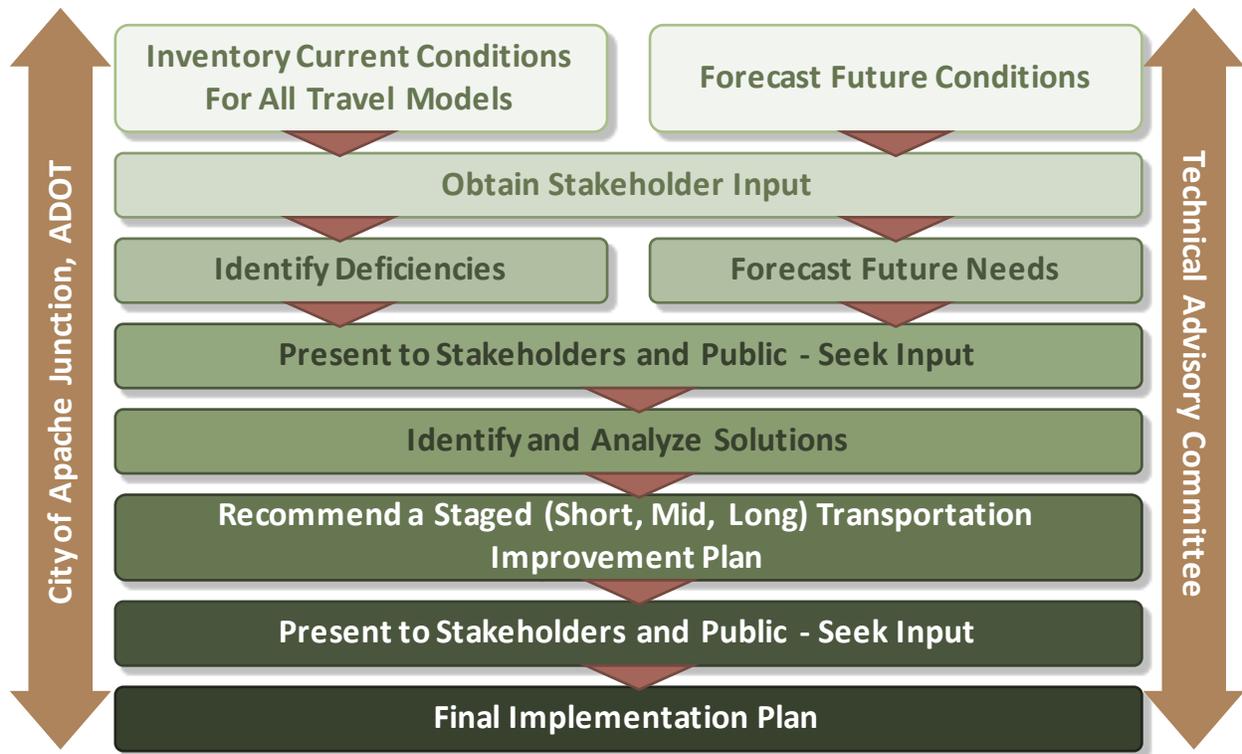
## STUDY PROCESS

The study was guided by a Technical Advisory Committee (TAC) that included representatives from:

- ◆ City of Apache Junction
- ◆ ADOT
- ◆ Pinal County
- ◆ CAAG
- ◆ City of Mesa
- ◆ Arizona State Land Department (ASLD)
- ◆ Maricopa County Department of Transportation (MCDOT)
- ◆ Bureau of Land Management (BLM)
- ◆ Town of Queen Creek
- ◆ Maricopa County Flood Control District (MCFCD)

The role of the TAC was to provide guidance, support, advice, suggestions, and recommendations, and to perform document reviews throughout the study process. The First Public Open House was conducted in March 2011 to present existing and projected transportation conditions and issues. The second round of public input involved extensive outreach through online social media and a presentation was given to the City Council of recommended transportation improvements. The study process is illustrated in Figure 2

**FIGURE 2: STUDY PROCESS**



## TRANSPORTATION ISSUES

Based on an inventory and analysis of existing conditions, transportation system deficiencies and issues were identified. These issues and deficiencies formed the basis for the next phase of the study which is the development of the long range transportation plan. Figure 3 displays the current major transportation issues in the study area.

## MULTIMODAL TRANSPORTATION PLAN

### Short-Term (Population Level 1 – 60K) Transportation Recommendations

Short-term phase projects are recommended to be completed as the study area reaches *Population Level 1 (60K)*. Table 1 lists the transportation recommendations for this phase, as well as the project number\*, location, description, and estimated costs for each project. Figure 4 is a graphical representation of the short-term transportation recommendations.

### Mid-Term (Population Level 2 – 75K) Transportation Recommendations

Mid-term phase projects are recommended to be completed as the study area reaches *Population Level 2 (75K)*. Table 2 lists the transportation recommendations for this phase, as well as the project number\*, location, description, and estimated costs for each project. Figure 5 is a graphical representation of the mid-term transportation recommendations.

### Long-Term (Population Level 3 – 130K) Transportation Recommendations

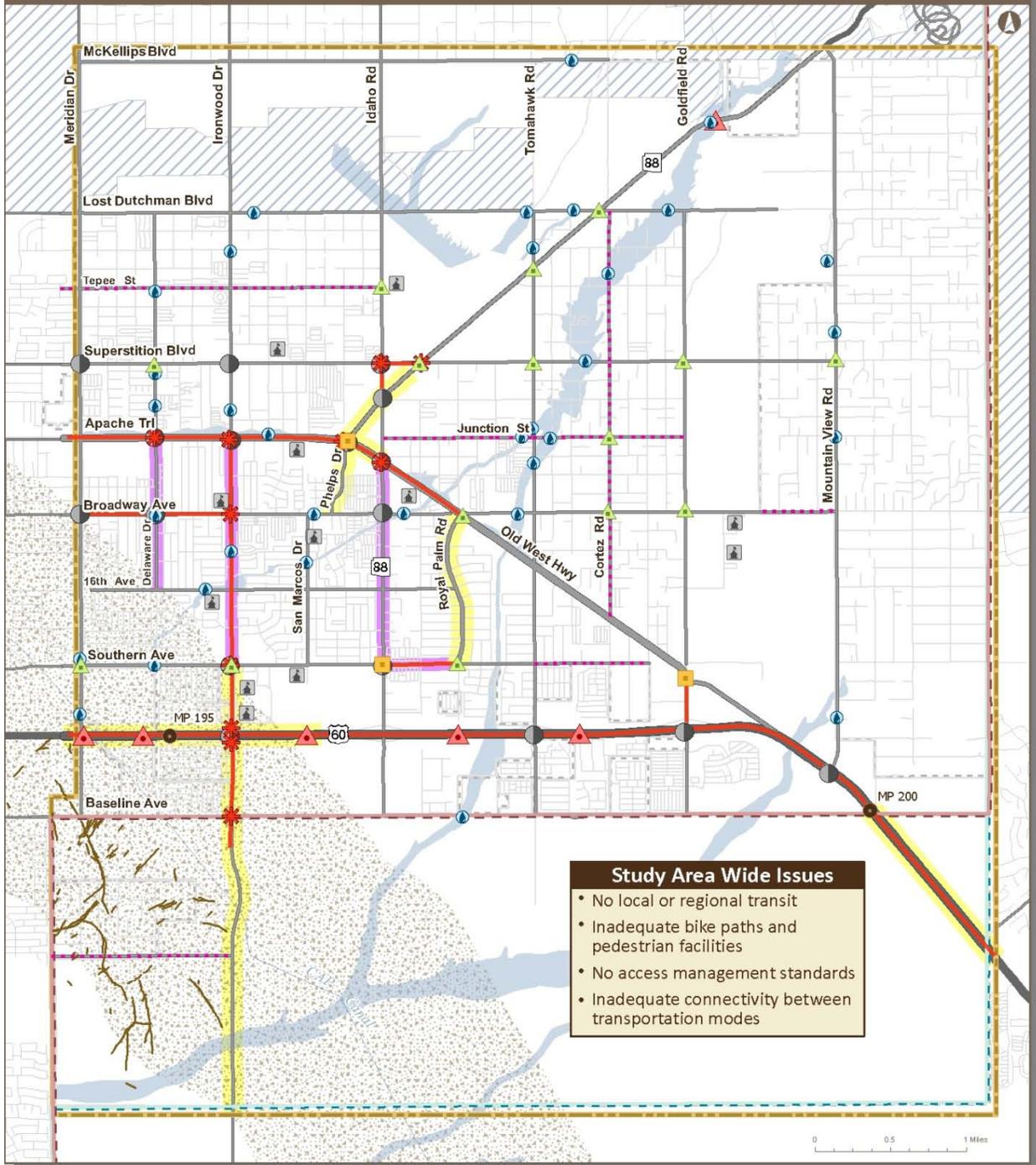
Long-term phase projects are recommended to be completed as the study area reaches *Population Level 3 (130K)*. Table 3 lists the transportation recommendations for this phase, as well as the project number\*, location, description, and estimated costs for each project. Figure 6 is a graphical representation of the long-term transportation recommendations.

Estimated costs for each project are expressed in 2011 dollars and are general estimates. Actual costs for projects could vary at the time of implementation; therefore, a detailed analysis should be performed on a case-by-case basis to determine actual costs.

*\* The Project Identification Number (eg: ST -1) does NOT represent the priority of the project; rather it is an identification number to track project progress in the future.*



**FIGURE 3: TRANSPORTATION ISSUES**



**Study Area Wide Issues**

- No local or regional transit
- Inadequate bike paths and pedestrian facilities
- No access management standards
- Inadequate connectivity between transportation modes

**LEGEND**  
Safety and Congestion Issues

- Intersection Congestion
- Intersection Configuration Issues
- ▲ Intersection Sight Distance and Approach Angle Issues
- ★ High Crash Rate Intersections
- High Crash Rate Corridor

- ▲ Bridge Eligible for Rehabilitation
- Earth Fissure
- Study Roadways
- ◆ Not Federally Classified
- Heavy Traffic Congestion
- Access Management Issues

Environmental Issues

- Potential Roadway Flooding
- PM10 Nonattainment Area
- 8-hour Ozone Nonattainment Area
- Flood Hazard Areas
- Wildlife Linkage Zone
- Habitat Block

- School
- Study Area
- Freeway
- Study Roadway
- Local Roadway

Data Sources: City of Apache Junction, ALRIS, ADOT, ADEQ, ATIS, AZGS, ALISS



**TABLE 1: SHORT-TERM (POPULATION LEVEL 1 – 60K) IMPROVEMENTS**

ID	Project Location	Project Type	Issue Addressed	Project Description	Cost	Agency	Comment
ST-1	Apache Trail: 1/4 mile west of Mountain View Road	Bridge	Safety	Bridge rehabilitation	\$3,200,000	ADOT	
ST-2	US 60/Meridian Drive	Bridge	Safety	Bridge rehabilitation	\$2,500,000	ADOT	
ST-3	US 60: 1/2 mile east of Idaho Road	Bridge	Safety	Bridge rehabilitation	\$2,500,000	ADOT	
ST-4	US 60: 1/2 mile east of Ironwood Drive	Bridge	Safety	Bridge rehabilitation	\$2,500,000	ADOT	
ST-5	US 60: 1/2 mile east of Meridian Drive	Bridge	Safety	Bridge rehabilitation	\$2,500,000	ADOT	
ST-6	US 60: 1/4 mile east of Tomahawk Road	Bridge	Safety	Bridge rehabilitation	\$2,500,000	ADOT	
ST-7	Baseline Avenue: Meridian Drive to Ironwood Drive	Capacity Improvement	Traffic congestion	Widen to six lane roadway for 1 mile	\$2,500,000	MAG/Apache Junction	Included in MAG TIP for 4 lane widening
ST-8	Meridian Drive/Southern Avenue	Capacity Improvement	Traffic congestion	New traffic signal design	\$1,510,000	Apache Junction	Included in Apache Junction TIP
ST-9	Meridian Drive/Southern Avenue	Capacity Improvement	Traffic congestion	New traffic signal construction	\$1,200,000	Apache Junction	
ST-10	Meridian Drive: Broadway Avenue to Southern Avenue	Capacity Improvement	Traffic congestion	Widen to four lane roadway for 1 mile	\$2,800,000	MAG/Apache Junction	Included in MAG TIP
ST-11	Meridian Drive: Southern Avenue to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen to four lane roadway for 1 mile	\$2,800,000	MAG/Apache Junction	Included in MAG TIP
ST-12	US 60/Meridian Drive	Capacity Improvement	Traffic congestion	Construct half diamond interchange	\$12,500,000	ADOT	Included in ADOT STIP
ST-13	Winchester Road/Old West Highway	Capacity Improvement	Traffic congestion and Central Arizona College expansion	New traffic signal at intersection	\$1,200,000	Apache Junction	Included in Apache Junction TIP
ST-14	Broadway Avenue: 1/4 mile east of Idaho Road	Flooding / Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
ST-15	Apache Trail/Delaware Drive	Safety	Safety: High crash location	Review and enhance signage, lighting, and intersection striping	\$45,000	Apache Junction	
ST-16	Apache Trail/Idaho Road	Safety	Safety: High crash location	Review and enhance signage, striping, lighting, and signal timing	\$45,000	Apache Junction	
ST-17	Apache Trail/Ironwood Drive	Safety	Safety: High crash location	Review and enhance signage, lighting, and intersection striping	\$45,000	Apache Junction	
ST-18	Apache Trail/Phelps Drive	Safety	Safety: High crash location	Review and enhance signage, lighting, and intersection striping	\$45,000	Apache Junction	
ST-19	Apache Trail: Old West Highway to Lost Dutchman Boulevard	Safety	Safety: Sight distance issues, high crash locations	Conduct a corridor study for 2.5 miles of roadway to: 1) assess the need for a roundabout, traffic signal, or intersection reconstruction to offset sight distance issues at each intersection 2) identify proper signage type and location to direct tourist traffic accessing the historic Apache Trail	\$350,000	ADOT	

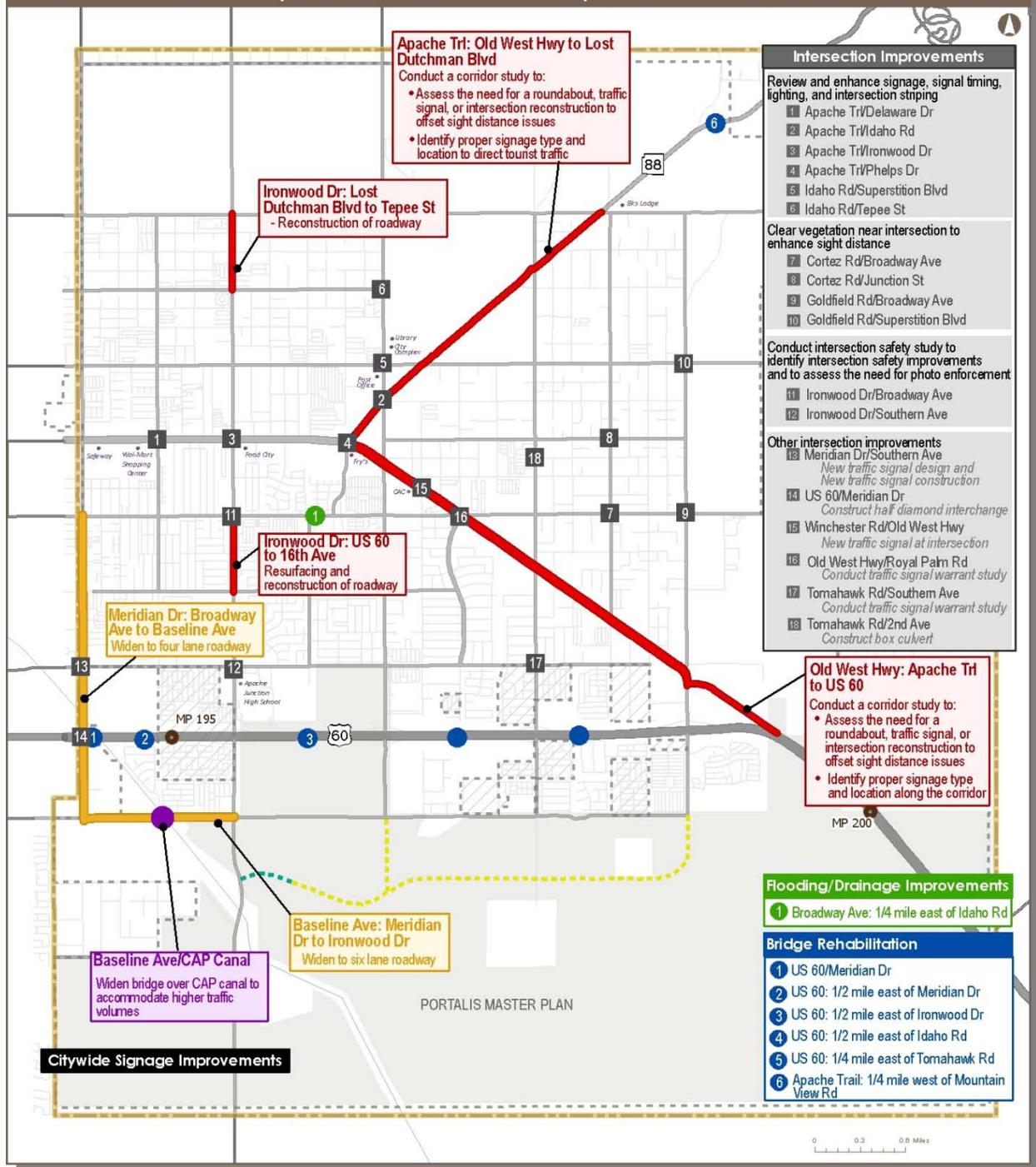


**TABLE 1: SHORT-TERM (POPULATION LEVEL 1 – 60K) IMPROVEMENTS (CONTINUED)**

ID	Project Location	Project Type	Issue Addressed	Project Description	Cost	Agency	Comment
ST-20	Citywide Signage Improvements	Safety	Safety	Signage improvement	\$285,390	CAAG/Apache Junction	Included in CAAG TIP
ST-21	Cortez Road/Broadway Avenue	Safety	Safety: Sight distance issues	Clear brush and other debris in the vicinity of the intersection to enhance sight distance	\$25,000	Apache Junction	
ST-22	Cortez Road/Junction Street	Safety	Safety: Sight distance issues	Clear brush in the vicinity of the intersection to enhance sight distance	\$25,000	Apache Junction	
ST-23	Goldfield Road/Broadway Avenue	Safety	Safety: Sight distance issues	Clear brush and other debris in the vicinity of the intersection to enhance sight distance	\$25,000	Apache Junction	
ST-24	Goldfield Road/Superstition Boulevard	Safety	Safety: Sight distance issues	Clear brush in the vicinity of the intersection to enhance sight distance	\$25,000	Apache Junction	
ST-25	Idaho Road/Superstition Boulevard	Safety	Safety: High crash location	Review and enhance signage, lighting, and intersection striping	\$45,000	Apache Junction	
ST-26	Idaho Road/Tepee Street	Safety	Safety: Lack of designated turn lanes	Review and enhance signage and intersection striping	\$45,000	Apache Junction	
ST-27	Ironwood Drive/Broadway Avenue	Safety	Safety: High crash location. School zone	Conduct intersection safety study to: 1) identify safety improvements in the vicinity of the intersection 2) assess the need for photo enforcement	\$55,000	Apache Junction	
ST-28	Ironwood Drive/Southern Avenue	Safety	Safety: High crash location. School zone	Conduct intersection safety study to: 1) identify safety improvements in the vicinity of the intersection 2) assess the need for photo enforcement	\$55,000	Apache Junction	
ST-29	Old West Highway/Royal Palm Road	Safety	Safety	Conduct traffic signal warrant study to assess the need for a traffic signal	\$55,000	Apache Junction	
ST-30	Tomahawk Road/Southern Avenue	Safety	Safety	Conduct traffic signal warrant study to assess the need for a traffic signal	\$55,000	Apache Junction	
ST-31	Tomahawk Road/2nd Avenue	Safety	Safety	Construct box culvert	\$350,000	Apache Junction	
ST-32	Ironwood Drive: 16th Avenue to Broadway Avenue	Safety	Safety	Resurfacing and reconstruction of roadway for 0.5 miles of roadway	\$1,486,790	CAAG/Apache Junction	Included in CAAG & AJ TIP
ST-33	Ironwood Drive: Lost Dutchman Boulevard to Tepee Street	Safety	Safety	Reconstruction of roadway	\$374,220	Apache Junction	Included in Apache Junction TIP
ST-34	Old West Highway: Apache Trail to US 60	Safety	Safety: Sight distance issues, high crash locations	Conduct a corridor study for 3 miles of roadway to: 1) assess the need for a traffic signal or other intersection control type for each intersection to offset sight distance issues 2) identify proper signage type and location along the corridor	\$350,000	Apache Junction	
ST-36	Baseline Avenue/CAP Canal	Bridge	Functionally obsolete	Widen bridge over CAP canal to accommodate higher traffic volumes	\$2,500,000	ADOT	



**FIGURE 4: SHORT-TERM (POPULATION LEVEL 1 - 60K) IMPROVEMENTS**

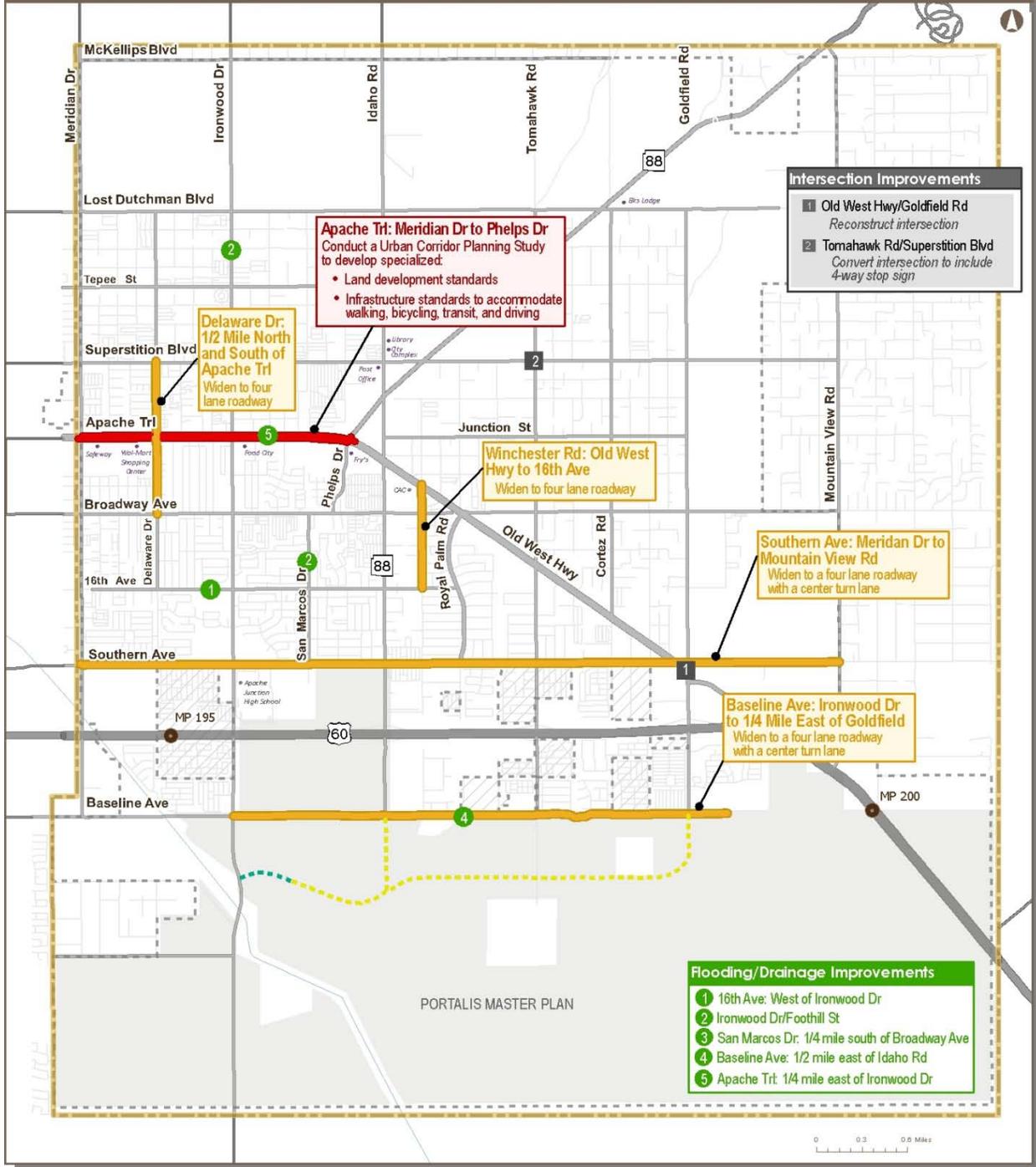


**TABLE 2: MID-TERM (POPULATION LEVEL 2 – 75K) IMPROVEMENTS**

ID	Project Location	Project Type	Issue Addressed	Project Description	Cost	Agency	Comment
MT-1	Baseline Avenue: Ironwood Drive to 1/4 Mile East of Goldfield Road	Capacity Improvement	Traffic congestion and future economic development	Widen to a four lane roadway with a center turn lane for 3.25 miles	\$9,250,000	Apache Junction	
MT-2	Delaware Drive: 1/2 Mile North of Apache Trail	Capacity Improvement	Traffic congestion	Widen from two lanes to a four lane roadway for 0.5 miles	\$1,600,000	Apache Junction	
MT-3	Delaware Drive: 1/2 Mile South of Apache Trail	Capacity Improvement	Traffic congestion	Widen from two lanes to a four lane roadway for 0.5 miles	\$1,600,000	Apache Junction	
MT-4	Southern Avenue: Meridian Drive to Mountain View Road	Capacity Improvement	Traffic congestion and alternative emergency route to US 60	Widen from two lanes to four lane roadway with a center turn lane for 3.25 miles	\$9,750,000	Apache Junction	
MT-5	Winchester Road: Old West Highway to 16th Avenue	Capacity Improvement	Traffic congestion	Widen from two lanes to four lane roadway for 0.75 miles	\$2,250,000	Apache Junction	
MT-6	16th Avenue: West of Ironwood Drive	Flooding/Drainage	Flooding	Flood warning system	\$350,000		
MT-7	Apache Trail: 1/4 mile east of Ironwood Drive	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
MT-8	Baseline Avenue: 1/2 mile east of Idaho Road	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
MT-9	Ironwood Drive/Foothill Street	Flooding/Drainage	Flooding	Culvert	\$350,000	Apache Junction	
MT-10	San Marcos Drive: 1/4 mile south of Broadway Avenue	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
MT-11	Old West Highway/Goldfield Road	Safety	Safety: Sight distance issues and complex intersection design lead to driver confusion	Reconstruct intersection	\$950,000	Apache Junction	
MT-12	Tomahawk Road/Superstition Boulevard	Safety	Safety: Sight distance issues	Convert intersection to 4-way stop sign controlled intersection	\$15,000	Apache Junction	
MT-13	Apache Trail: Meridian Drive to Phelps Drive	Safety and economic development	Safety and economic development: High crash corridor. Divided Highway causes signal timing coordination issues, excessive business access driveways	Conduct an Urban Corridor Planning Study for 2 miles of roadway to develop specialized" 1) land development standards 2) infrastructure standards to accommodate walking, bicycling, transit, and driving. The study will identify specific improvements to enhance safety, promote economic development, and improve access to activity centers	\$190,000	Apache Junction	



**FIGURE 5: MID-TERM (POPULATION LEVEL 2 - 75K) IMPROVEMENTS**



**LEGEND**

Capacity Improvement	New 2 lane roadway	Freeway	City Boundary
Safety and Economic	New 4 lane roadway	Study Roadway	County Island
Development Improvements		Local Roadway	Study Area

Data Sources: City of Apache Junction, ALRIS, ADOT

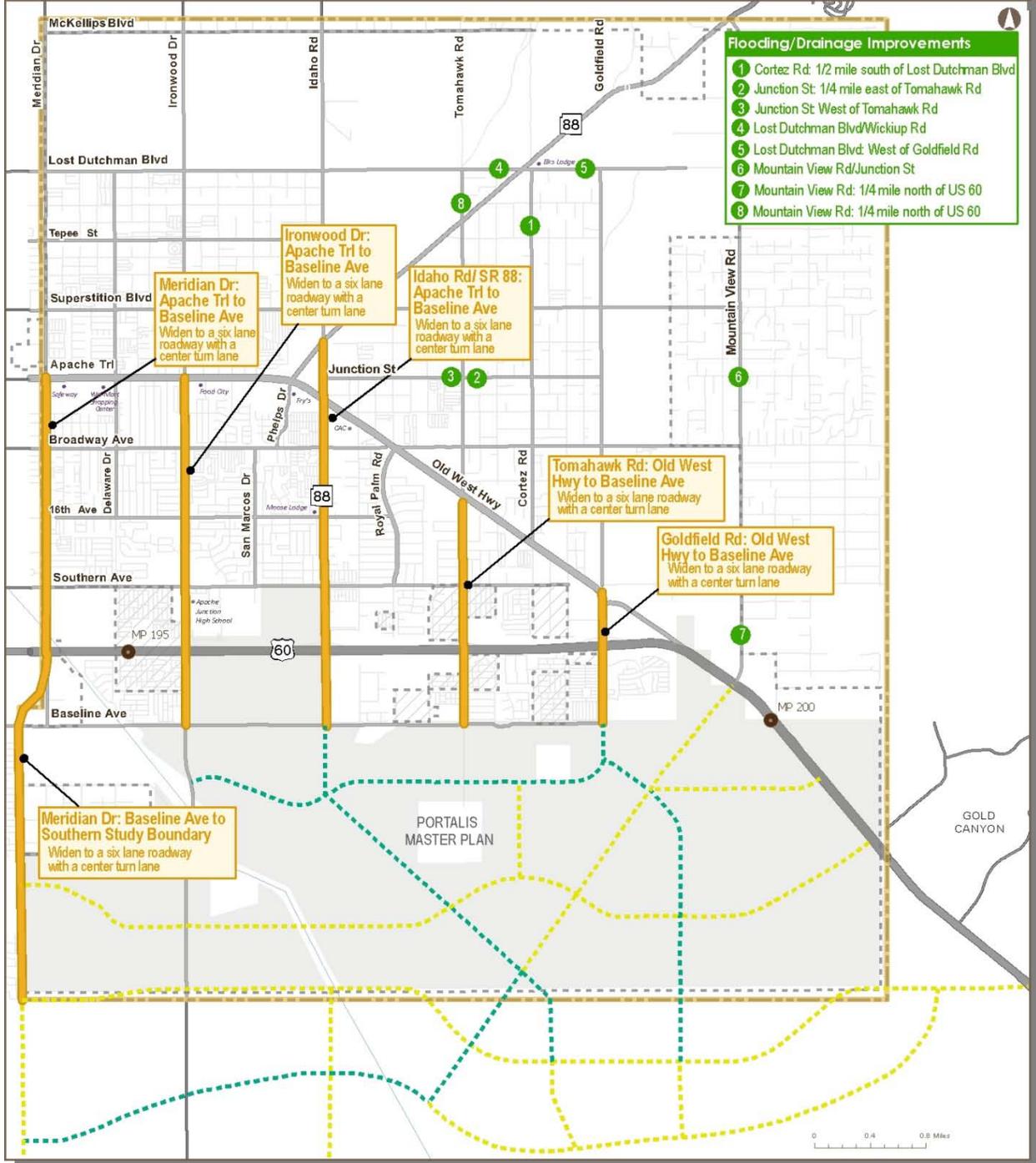


**TABLE 3: LONG-TERM (POPULATION LEVEL 3 – 130K) IMPROVEMENTS**

ID	Project Location	Project Type	Issue	Project Description	Cost	Agency	Comment
LT-1	Goldfield Road: Old West Highway to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen from two lanes to a six lane roadway with a center turn lane for 0.75 miles	\$1,900,000	Apache Junction	
LT-2	Idaho Road/ SR 88: Apache Trail to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen from four lanes to a six lane roadway with a center turn lane for 1.25 miles	\$5,600,000	Apache Junction	
LT-3	Ironwood Drive: Apache Trail to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen from four lanes to a six lane roadway with a center turn lane for 2.5 miles	\$6,250,000	Apache Junction	
LT-4	Meridian Drive: Apache Trail to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen from four lanes to a six lane roadway with a center turn lane for 2.5 miles	\$6250,000	Apache Junction	
LT-5	Tomahawk Road: Old West Highway to Baseline Avenue	Capacity Improvement	Traffic congestion	Widen from two lanes to a six lane roadway with a center turn lane for 1.5 miles	\$4,500,000	Apache Junction	
LT-6	Cortez Road: 1/2 mile south of Lost Dutchman Boulevard	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000		
LT-7	Junction Street: 1/4 mile east of Tomahawk Road	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
LT-8	Junction Street: West of Tomahawk Road	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
LT-9	Lost Dutchman Boulevard/Wickiup Road	Flooding/Drainage	Flooding	Culvert	\$350,000	Apache Junction	
LT-10	Lost Dutchman Boulevard: West of Goldfield Road	Flooding/Drainage	Flooding	Bridge/Culvert	\$350,000	Apache Junction	
LT-11	Mountain View Road/Junction Street	Flooding/Drainage	Flooding	Culvert	\$350,000	Apache Junction	
LT-12	Mountain View Road: 1/4 mile north of US 60	Flooding/Drainage	Flooding	Culvert	\$350,000	Apache Junction	
LT-13	Tomahawk Road: 1/4 mile south of Lost Dutchman Boulevard	Flooding/Drainage	Flooding	Culvert	\$350,000	Apache Junction	



**FIGURE 6: LONG-TERM (POPULATION LEVEL 3 - 130K) IMPROVEMENTS**



**LEGEND**

Capacity Improvement	New 2 lane roadway	Freeway	City Boundary
Safety and Economic Development Improvements	New 4 lane roadway	Study Roadway	County Island
		Local Roadway	Study Area

Data Sources: City of Apache Junction, ALRIS, ADOT



### Regional Roadway Improvements

The transportation improvements recommended above are based on the implementation of additional regional improvements as outlined in Table 4.

**TABLE 4: REGIONAL IMPROVEMENTS**

Regional Improvements		
Project Location	Project Description	Phase
Meridian Drive: Southern Study Boundary Limits to SR 24 Alignment	Widen to a four lane roadway	Mid
Idaho Road: Elliott Avenue to Warner Road	New 0.75 mile, four lane roadway	Long
Goldfield Road: Elliott Avenue to Warner Road	New 1 mile, four lane roadway	Long
Meridian Drive: Southern Study Boundary Limits to SR 24 Alignment	Widen to a six lane roadway	Long
Warner Road: Meridian Drive to Elliott Avenue	New four lane roadway	Long

### Portalis Area Roadway Improvements

As the Portalis area is developed in the future, several new roadways are needed to meet the traffic demand. The new roadways required in the Portalis area for the short, mid, and long term phases are illustrated in Figures 4, 5, and 6.



## Transit Recommendations

The *Apache Junction Transit Feasibility Study Update*, conducted in conjunction with this study, outlines specific transit recommendations for the study area.

### Short-Term (Population Level 1 – 60K) Transit Recommendations

- ◆ Implement a local circulator serving the areas of the City that have the highest combined residential and employment density, together with regional commuter services connecting the Study Area with Valley Metro and, hence, with the remainder of the Phoenix metropolitan area.
- ◆ Establish a Core Area Circulator that would both serve the “core” area of the City having the highest existing residential and employment density and would also serve as the “core” of the local transit system.

Figure 7 presents an overview of the service concept including alternate routes for the regional service, including park-and-ride lots, color-coded to the routing of the regional service that would make use of them. Figure 8 illustrates the potential Core Area Circulator route.

### Mid-Term (Population Level 2 – 75K) Transit Recommendations

- ◆ Add three additional routes to the local circulator and establish a transit hub near the Chamber of Commerce. Figure 9 presents an overview of the recommended transit system for the mid-term phase as the study area reaches *Population Level 2 (75K)*. The three additional routes include:
  - Route 2 - Idaho Road/Baseline Avenue Route
  - Route 3 – Ironwood Drive:
  - Route 4 – Meridian Drive:

### Long-Term (Population Level 3 – 130K) Transit Recommendations

- ◆ Add additional connection to the East Valley Connector
- ◆ Restructuring Route 4- Meridian Drive to include service to Baseline Avenue
- ◆ Add two additional routes to the local transit system
  - Route 5 – Idaho Road/Southern Avenue:
  - Route 6 – Tomahawk Road:

Figure 10 presents an overview of the recommended transit system for the long-term phase as the study area reaches *Population Level 3 (130K)*.



### *Regional Options*

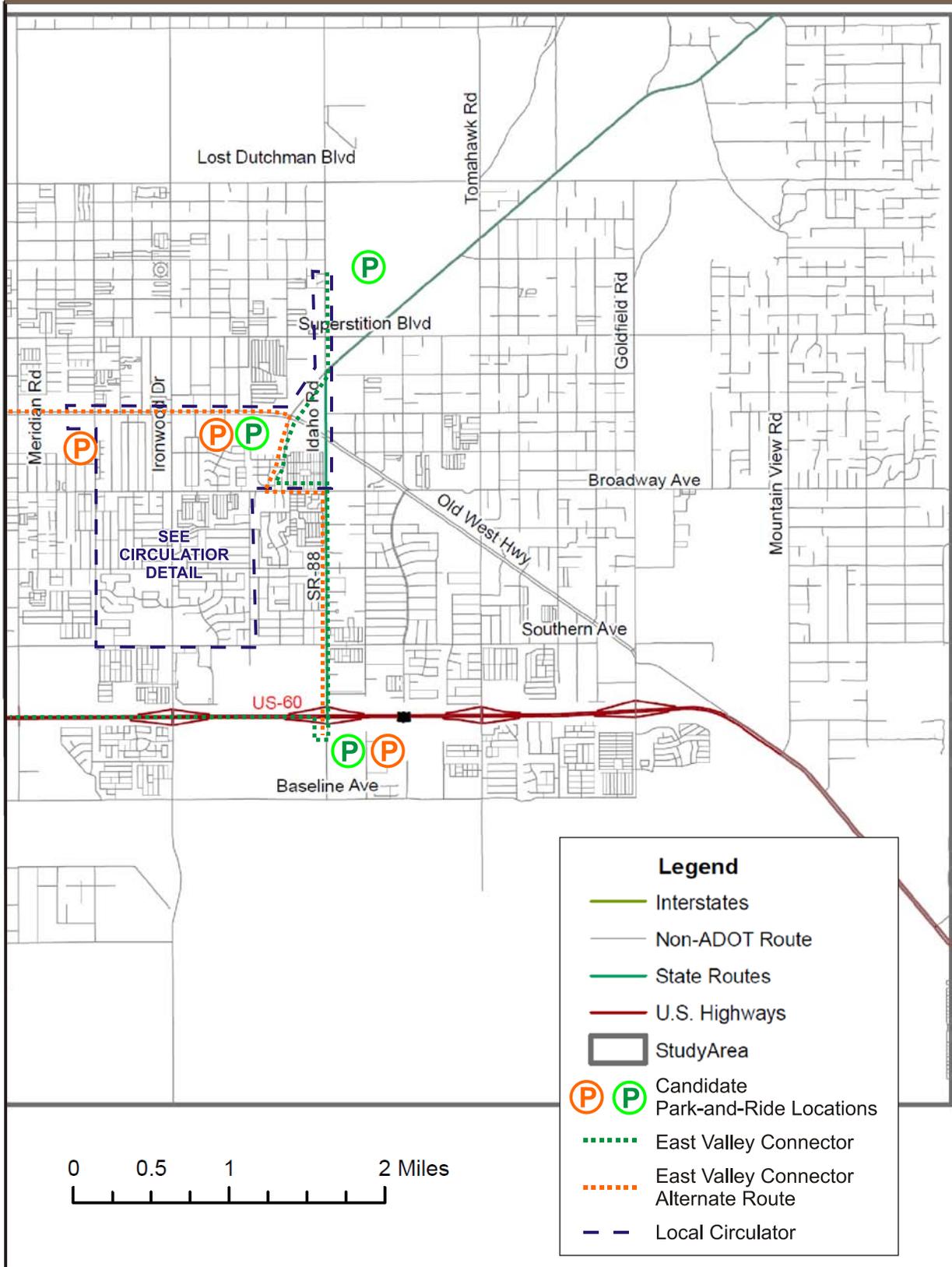
- ◆ Extending service to newer areas, including but not limited to:
  - Deviated fixed route service or dial-a-ride service can be extended east on US 60 toward Gold Canyon
  - Peak period only “commuter bus” service can be extended to outlying areas while the core of the city receives service throughout the day
  - Park-and-ride lots at the extents of fixed-route or high-capacity lines, can be complemented by dial-a-ride service into the newer neighborhoods to bring mobility-limited persons within reach of the other services
- ◆ Provide rural transit services from the downtown Transit Hub to communities east of Apache Junction, communities in eastern Pinal County, and new developments in the Superstition Vistas area.
- ◆ Market park and ride facilities located either downtown or on Idaho Road to motorists and carpools to utilize public transit to Mesa, Tempe, or Phoenix.

### **Pedestrian, Bicycle, and Trails Facilities**

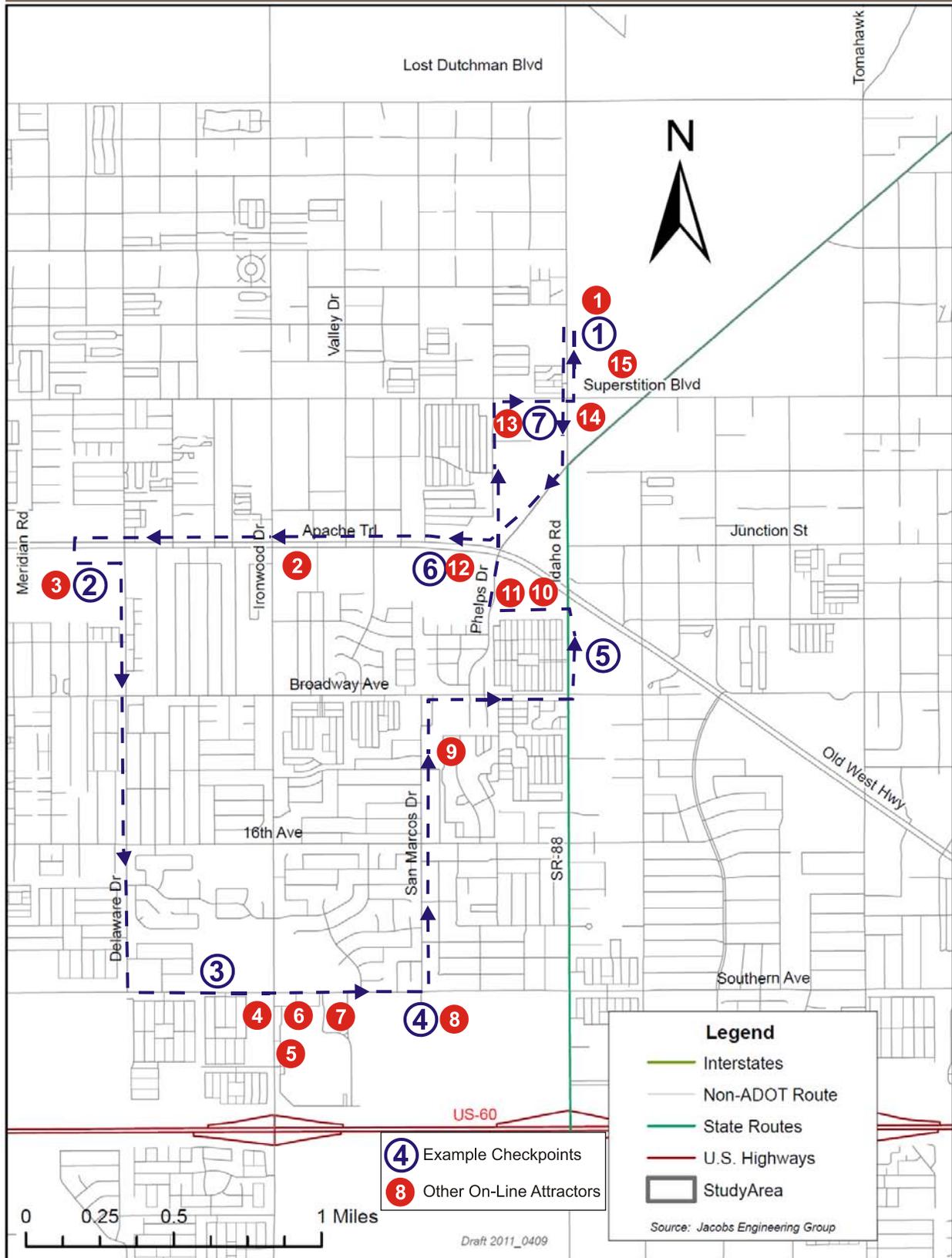
The City of Apache Junction has already prepared preliminary plans to expand the pedestrian, bicycle, and trails (including equestrian) facilities throughout the study area and are illustrated in Figure 11 through 14.



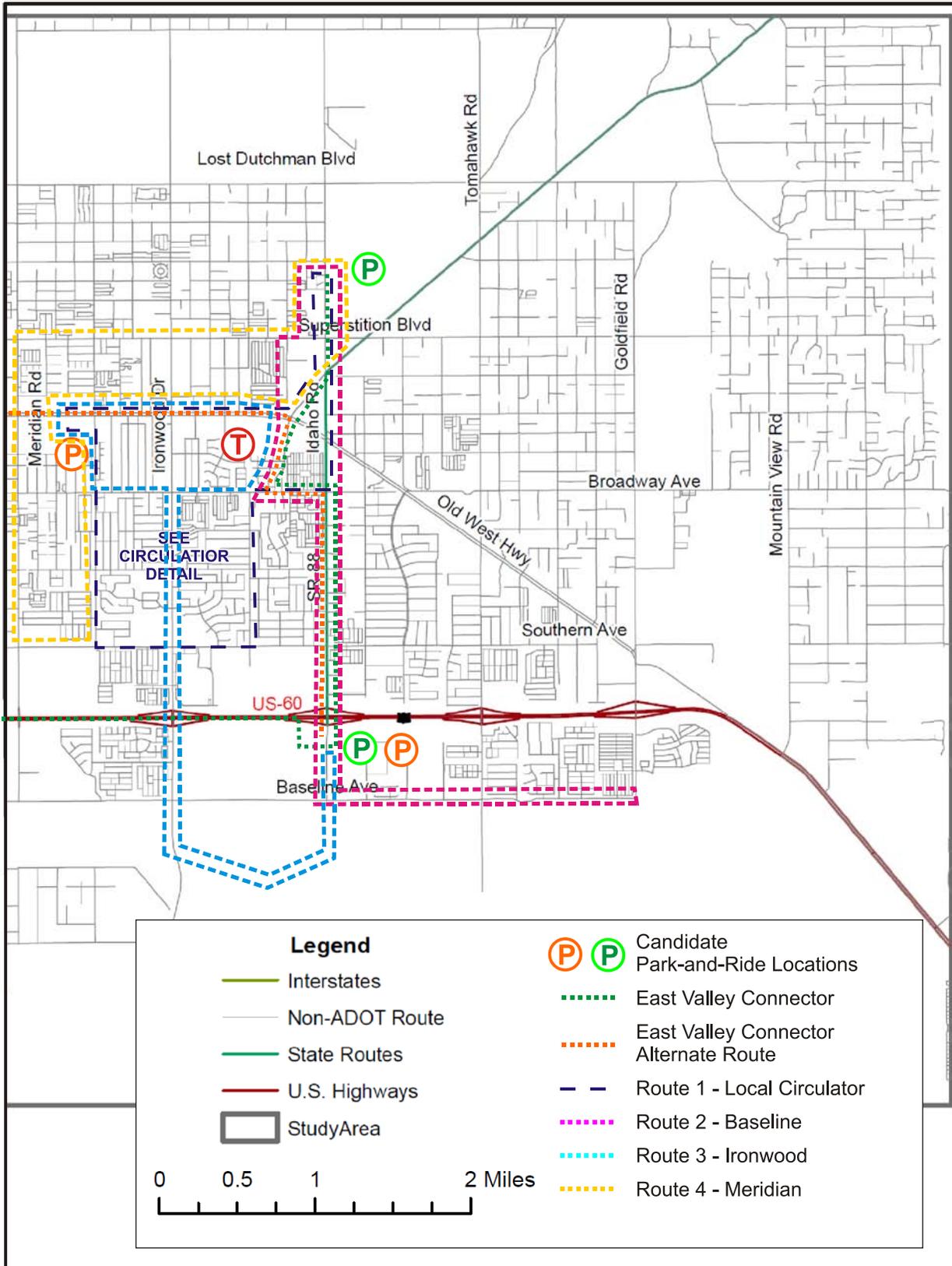
**FIGURE 7: SERVICE CONCEPT FOR SHORT-TERM (POPULATION LEVEL 1 – 60K)**



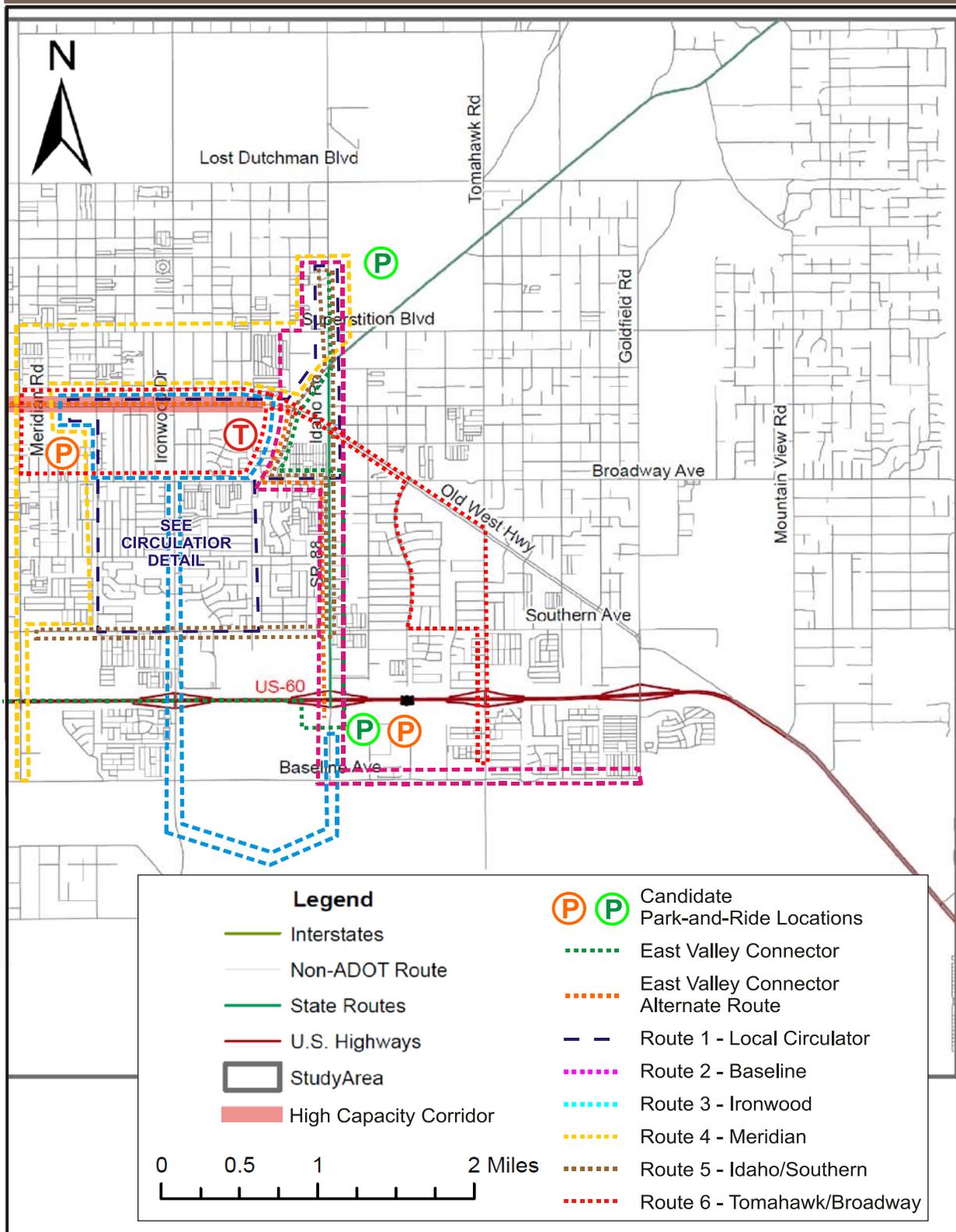
**FIGURE 8: CORE AREA CIRCULATOR DETAIL FOR SHORT-TERM (POPULATION LEVEL 1 - 60K)**



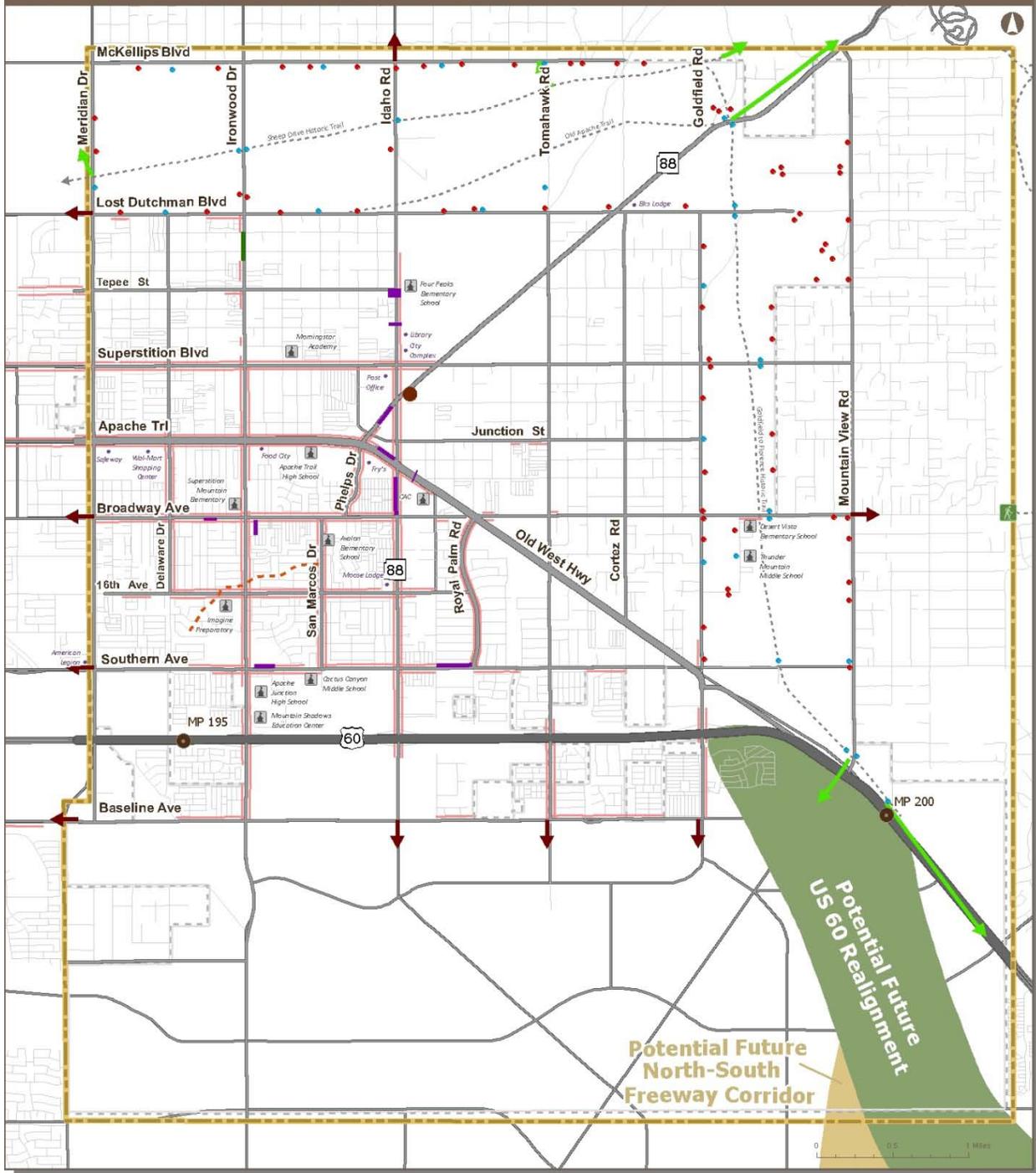
**FIGURE 9: SERVICE CONCEPT FOR MID-TERM (POPULATION LEVEL 2 – 75K)**



**FIGURE 10: SERVICE CONCEPT FOR LONG-TERM (POPULATION LEVEL 3 – 130K)**



**FIGURE 11: PROPOSED PEDESTRIAN FACILITIES**



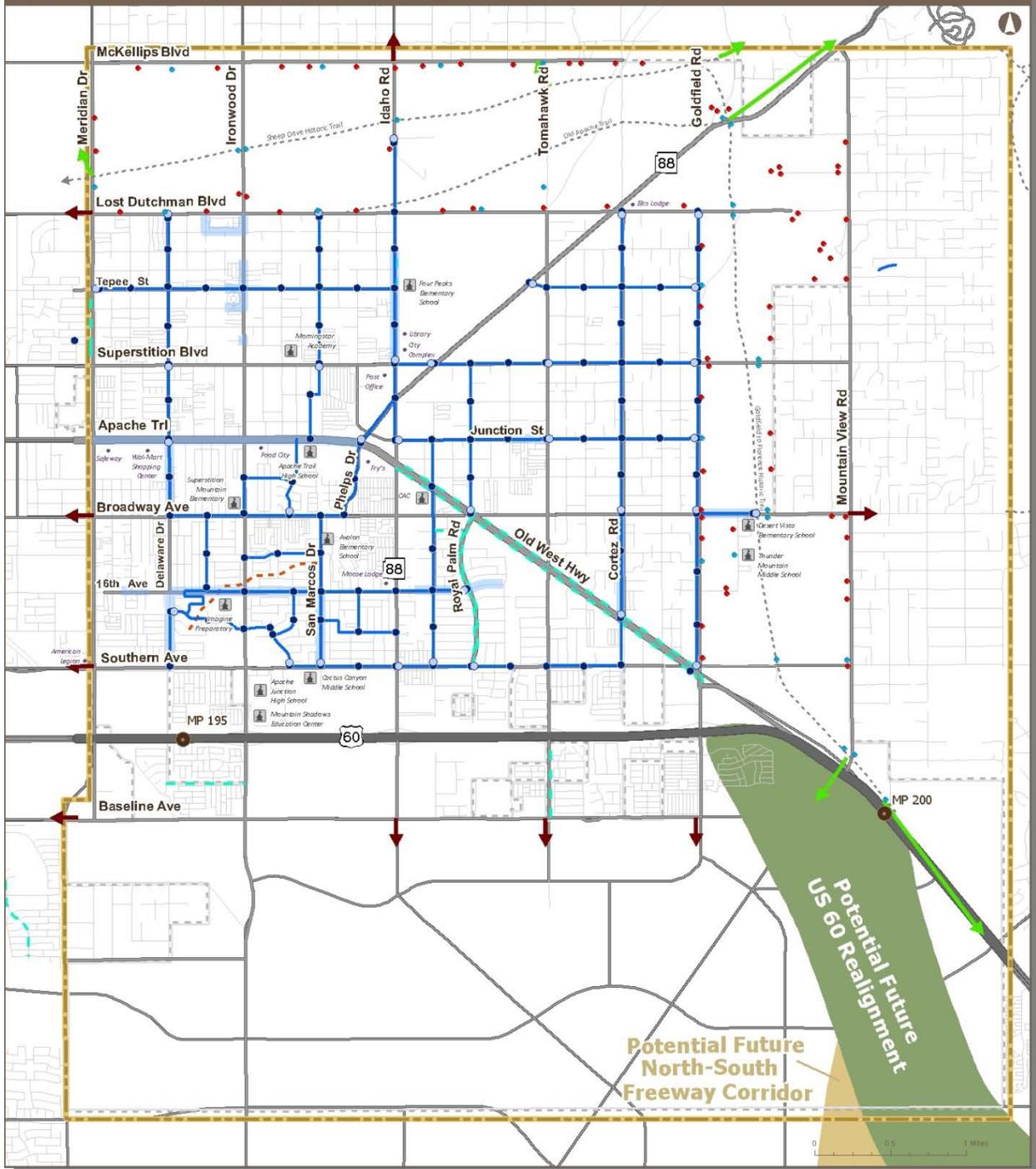
**LEGEND**

- |                                                                        |                                         |                         |
|------------------------------------------------------------------------|-----------------------------------------|-------------------------|
| ● Trail Head                                                           | Existing Trailhead                      | Existing Multi-Use Path |
| Proposed Sidewalk (City Funded)                                        | School                                  | Multi-Use Trail         |
| Proposed Sidewalk (Roadway Project)                                    | Combination Vehicle/<br>Equestrian Gate | Existing Sidewalk       |
| Proposed Regional Bike Lane or<br>Multi-use Trail Connection (Roadway) | Hiking/Equestrian Gate                  |                         |
| Potential Regional Trail Connection<br>(No Adjacent Roadway)           |                                         |                         |

Data Sources: City of Apache Junction, ALRIS, ADOT, USFS, City of Mesa



**FIGURE 12: PROPOSED BICYCLE FACILITIES**

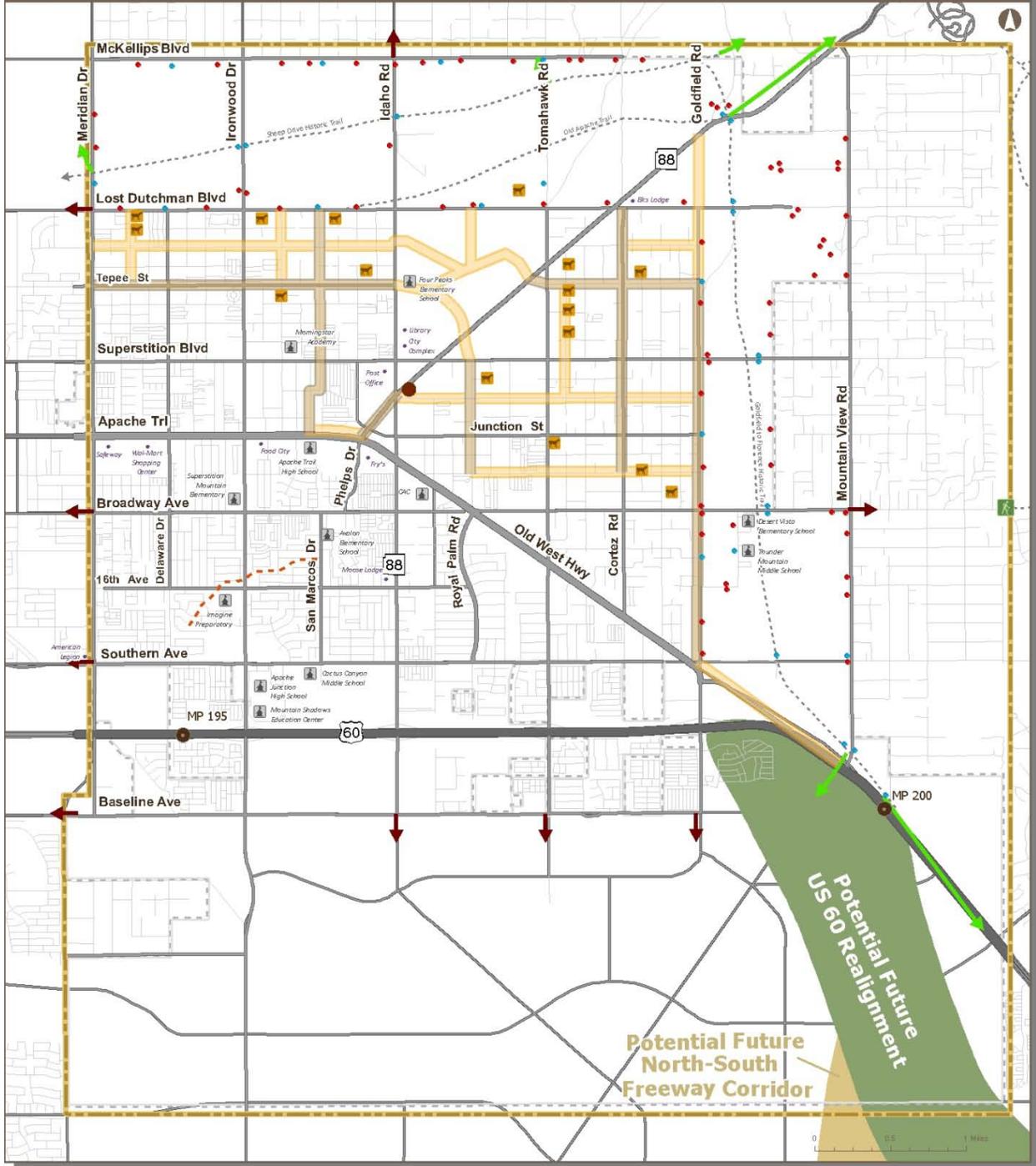


**LEGEND**

- Bike Route - Share the Road
  - Bike Route
  - Bike Routes
  - Proposed Bike Lanes
  - Proposed Regional Bike Lane or Multi-use Trail Connection (Roadway)
  - Potential Regional Trail Connection (No Adjacent Roadway)
  - School
  - Combination Vehicle/Equestrian Gate
  - Hiking/Equestrian Gate
  - Existing Multi-Use Path
  - Multi-Use Trail
  - Existing Bike Lane
- Data Sources: City of Apache Junction, ALRIS, ADOT, USFS, City of Mesa
- 



**FIGURE 13: PROPOSED EQUESTRIAN FACILITIES**



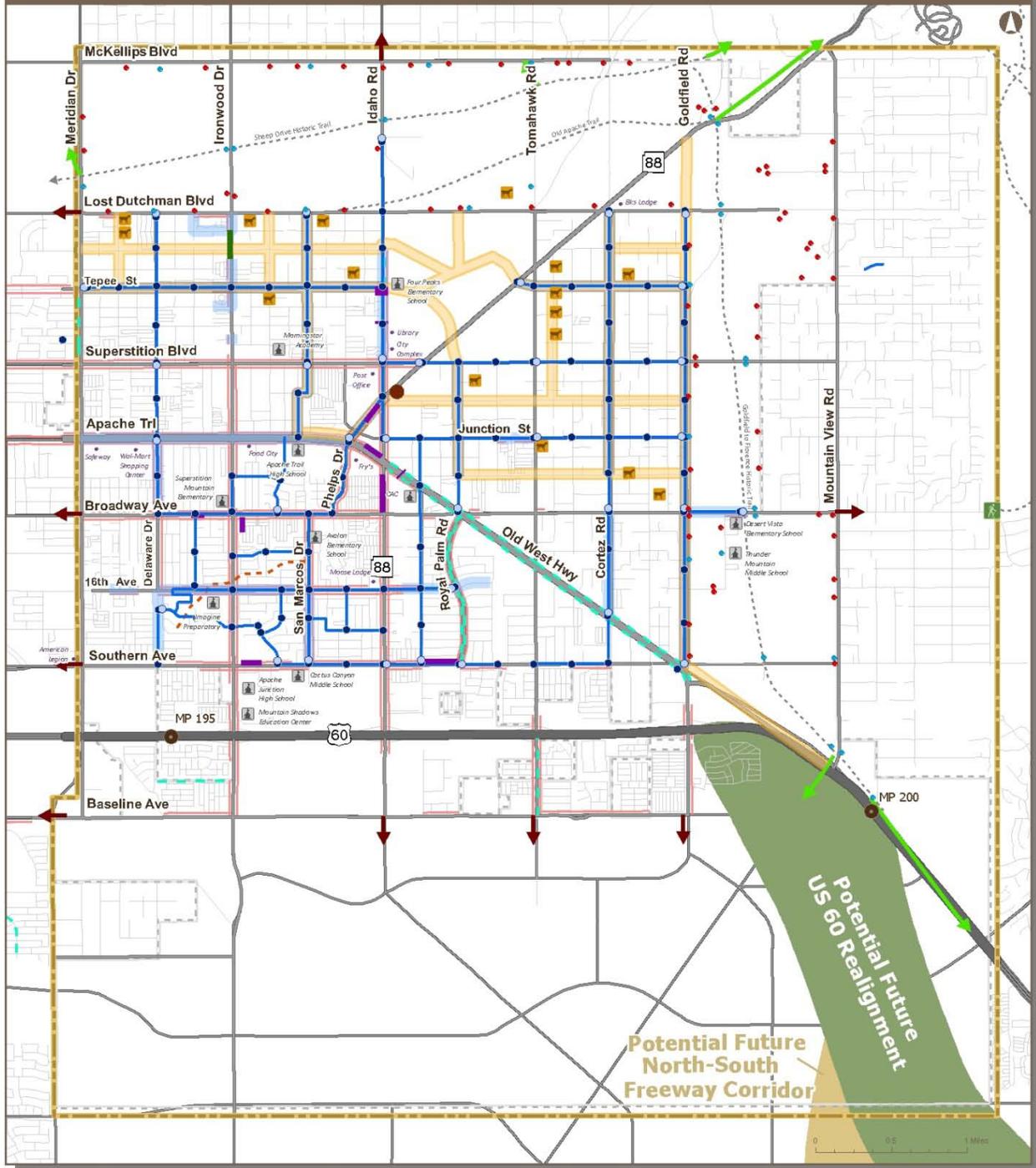
**LEGEND**

- |                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li> Approximate Location of Licensed Horse Boarding Facility</li> <li> Trail Head</li> <li> Concept Multi-Use Right of Way</li> <li> Concept Equestrian Route</li> </ul> | <ul style="list-style-type: none"> <li> Proposed Regional Bike Lane or Multi-use Trail Connection (Roadway)</li> <li> Potential Regional Trail Connection (No Adjacent Roadway)</li> <li> Existing Trailhead</li> <li> Combination Vehicle/Equestrian Gate</li> <li> Hiking/Equestrian Gate</li> </ul> | <ul style="list-style-type: none"> <li> School</li> <li> Existing Multi-Use Path</li> <li> Multi-Use Trail</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|

Data Sources: City of Apache Junction, ALRIS, ADOT, USFS, City of Mesa



**FIGURE 14: PROPOSED MULTIMODAL FACILITIES**



**LEGEND**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li><span style="color: blue;">●</span> Bike Route - Share the Road</li> <li><span style="color: blue;">●</span> Bike Route</li> <li><span style="color: orange;">■</span> Approximate Location of Licensed Horse Boarding Facility</li> <li><span style="color: brown;">●</span> Trail Head</li> <li><span style="color: blue;">—</span> Bike Routes</li> <li><span style="color: lightblue;">—</span> Proposed Bike Lanes</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: purple;">—</span> Proposed Sidewalk (City Funded)</li> <li><span style="color: green;">—</span> Proposed Sidewalk (Roadway Project)</li> <li><span style="color: yellow;">—</span> Concept Multi-Use Right of Way</li> <li><span style="color: orange;">—</span> Concept Equestrian Route</li> <li><span style="color: red;">—</span> Proposed Regional Bike Lane or Multi-use Trail Connection (Roadway)</li> <li><span style="color: green;">—</span> Potential Regional Trail Connection (No Adjacent Roadway)</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: green;">■</span> Existing Trailhead</li> <li><span style="color: grey;">■</span> School</li> <li><span style="color: blue;">●</span> Combination Vehicle/Equestrian Gate</li> <li><span style="color: red;">●</span> Hiking/Equestrian Gate</li> <li><span style="color: orange;">—</span> Existing Multi-Use Path</li> <li><span style="color: grey;">—</span> Multi-Use Trail</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: red;">—</span> Existing Sidewalk</li> <li><span style="color: cyan;">—</span> Existing Bike Lane</li> </ul> <p><small>Data Sources: City of Apache Junction, ALRIS, ADOT USFS, City of Mesa</small></p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



### **Functional Classification**

Figure 15 illustrates the recommended functional classification of the roadways in the study area. The City of Apache Junction should first coordinate with CAAG to prepare the appropriate applications to reclassify the roadways. Applications must be submitted to ADOT through CAAG. Final roadway classification will be forwarded to the FHWA for final approval.

### **Build-Out Roadway Network Recommendations**

The Countywide TransCAD travel demand model was used to forecast traffic volumes for the build-out population scenario to subsequently develop the build-out roadway network. Figure 16 illustrates the proposed build-out roadway network for the study area.

### **Funding Sources**

The successful implementation of the Apache Junction Comprehensive Transportation Plan is contingent upon the availability of funding for design and construction of the improvement projects. Primary funding sources for the Town include federal programs, ADOT, and other regional government agencies such as CAAG. Table 5 is a comprehensive funding matrix of funding sources that the City of Apache Junction can apply for funding of transportation projects identified in this study.

### **Implementation Actions**

The following action items are recommended for the City of Apache Junction to successfully implement the Multimodal Transportation Plan.

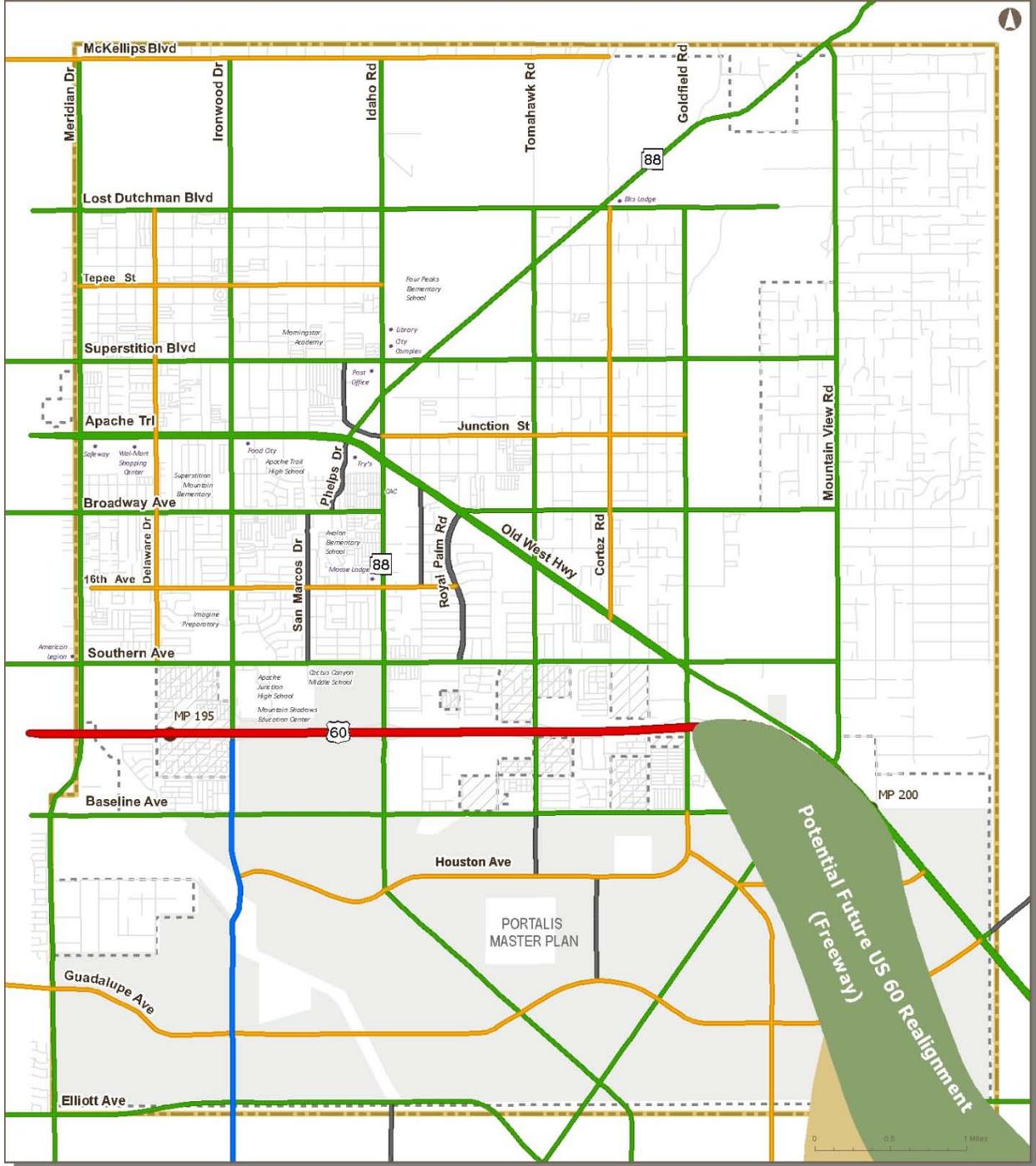
- ◆ Present the Transportation Plan to the City Council for approval and adoption.
- ◆ Coordinate with CAAG and ADOT to request change in functional classification of roadways identified in Figure 15
- ◆ Apply for funding sources for each project in the transportation plan.
- ◆ Include high-priority projects in the City's Transportation Improvement Program (TIP).
- ◆ Establish a transit department.
- ◆ Coordinate with ADOT to initiate a Transit Implementation Plan.
- ◆ Develop policies and procedures to promote alternative modes of transportation. Review and update street design standards, develop comprehensive access management standards, and detailed traffic impact guidelines procedures.
- ◆ Promote alternative modes of transportation through improved developer collaboration.
- ◆ Create aesthetically appealing gateways into the City at key roadway entry points.



- ◆ Increase communication, cooperation, and collaboration with ADOT, CAAG, the City Council, neighboring jurisdictions including the City of Mesa, MAG, Town of Queen Creek, and Pinal County. Work in partnership with each agency to address transportation needs and implement the plan.
- ◆ Offer opportunities for public involvement throughout the plan implementation process.
- ◆ Promote Public-Private partnerships between the City and the private sector.
- ◆ Monitor progress on the transportation plan on a quarterly basis.
- ◆ Update the transportation plan on a five year cycle.



**FIGURE 15: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION**



**LEGEND**

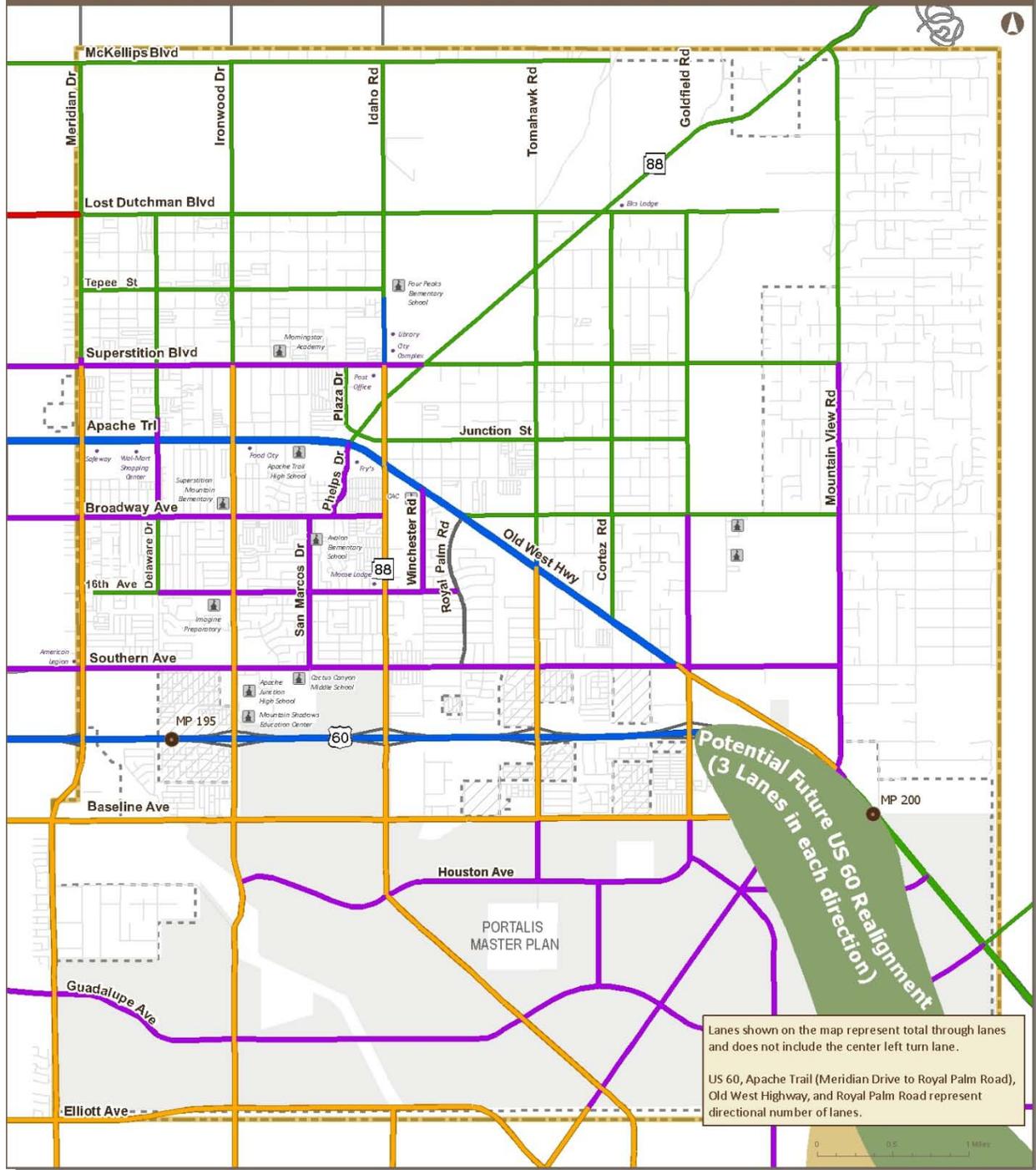
Freeway	Minor Arterial	Study Area	Potential Future US 60 Re-alignment Corridor
Expressway	Collector	City Boundary	Potential Future North-South Freeway Corridor
Principal Arterial	Local Roadway	County Island	

(Buffer is a mere graphical representation, does not represent a fix alignment)

Data Sources: City of Apache Junction, ADOT



**FIGURE 16: RECOMMENDED ROADWAY NETWORK FOR BUILD-OUT POPULATION LEVELS**



**TABLE 5: FUNDING SOURCES**

Program	Description	Requirements	Eligible Uses	Source	Application
<b>Surface Transportation Program (STP)</b>	Federal funds, managed by FHWA and ADOT	<ul style="list-style-type: none"> <li>- Located on Federal-aid highway</li> <li>- Bridge project on any public road</li> <li>- Transit capital products</li> <li>- Intracity/intercity bus terminals and facilities.</li> </ul>	General transportation, environmental, and transit projects	Federal	Programmed by ADOT and local MPO or COG
<b>Highway Safety Improvement Program (HSIP)</b>	Federal funds, managed by FHWA and ADOT	Project must be used on safety improvement projects to reduce number and/or severity of highway related crashes	Safety improvement projects	Federal	The Strategic Highway Safety Plan (SHSP) analyzes highway safety data
<b>Transportation Enhancement</b>	Funds provide funding for bicycle, pedestrian, historic and beautification projects.	Must be surface transportation- related	<ul style="list-style-type: none"> <li>- Bicycle projects</li> <li>- Pedestrian projects</li> <li>- Historic &amp; beautification projects.</li> </ul>	Federal	Applications considered yearly through MPO and COG
<b>Transportation and Community and System Preservation Pilot Program (TCSP)</b>	Funds projects that address the link between land use, community quality of life, and transportation.	Favors projects that partner with private sector interests	<ul style="list-style-type: none"> <li>-Improve the efficiency of the transportation system</li> <li>- Reduce environmental impacts of transportation</li> <li>- Reduce the need for costly future public infrastructure investments</li> <li>- Ensure efficient access to jobs, services and centers of trade</li> <li>- Examine development patterns and identify strategies to encourage compatible private sector development patterns.</li> </ul>	Federal	Jurisdictions are eligible recipients of these grant funds, and there is no maximum on the dollar amount of the award.
<b>Transit Funds – Section 5310, 5311, 5313</b>	Provides funding for local transit.		<ul style="list-style-type: none"> <li>- 5310 program funds transit programs for elderly and disabled</li> <li>- 5311 program funds local transit systems in non-urbanized areas</li> <li>- 5313 program funds state planning and research programs</li> </ul>	Federal	Applications for funds are generally made available in January through ADOT
<b>Job Access and Reverse Commute (Section 5316) Grants (JARC)</b>	Provides financing for projects that providing access to jobs, promoting use of transit and transit vouchers for welfare recipients and eligible low income individuals, and promoting use of employer provided transportation.		Capital planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects.	Federal	- Applications for funds are generally made available through MPO and ADOT, depending upon the size of the urban population.
<b>New Freedom Program (Section 5317) Grants</b>	Grants provide competitive grants for improved public transportation services and alternatives for people with disabilities beyond those required by the Americans with Disabilities Act (ADA) of 1990		Capital and operating expenses for new public transportation services and new public transportation alternatives beyond those required by the American with Disabilities Act of 1990 (ADA), that are designed to assist individuals with disabilities.	Federal	Applications for funds are generally made available through MPO and ADOT, depending upon the size of the urban population.
<b>Safe Routes to School</b>	Focused on enabling and encouraging children to safely walk and bicycle to school	State must use between 10-30 percent of the funds for non-infrastructure related activities	<ul style="list-style-type: none"> <li>- Projects can include sidewalk, traffic</li> <li>- Calming and speed reduction</li> <li>- Improvements, pedestrian and bicycle</li> <li>- Crossing improvements, traffic diversion improvements near schools.</li> </ul>	Federal	Programmed through ADOT



**TABLE 5: FUNDING SOURCES (CONTINUED)**

Program	Description	Requirements	Eligible Uses	Source	Application
<b>Highway Bridge Replacement and Rehabilitation</b>	Funding for States to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance	Preventative maintenance on Federal-aid and non-Federal-aid highway systems	Preventative maintenance on Federal-aid and non-Federal-aid highway systems	Federal	Applications available year-round
<b>Governor's Office of Highway Safety</b>	Finances State and local government highway safety projects.	Cannot be used for the construction, design, or maintenance of highways or for highway construction research projects.	Inventories, need studies, engineering studies, systems development, program implementation, or for purchasing equipment	State	
<b>State and Community Highway Safety Grants</b>	Funds to assist jurisdictions in the development and implementation of highway safety programs designed to reduce traffic crashes, deaths, injuries and property damage.		<ul style="list-style-type: none"> <li>- Alcohol countermeasures</li> <li>- Occupant protection</li> <li>- Police traffic services (e.g. enforcement)</li> <li>- Emergency medical services</li> <li>- Traffic records</li> <li>- Motorcycle safety</li> <li>- Pedestrian and bicycle safety (jointly administered by FHWA and NHTSA)</li> <li>- Non-construction aspects of roadway safety (administered by FHWA)</li> <li>- Speed control (jointly administered by NHTSA and FHWA)</li> </ul>	Federal	Formula based funds are distributed to States
<b>Community Development Block Grants (CDBG)</b>	Managed by Federal Office of Housing and Urban Development	Located in a census tract or block group with at least 51% of population in low to the moderate income group	Sidewalk improvements and possible roadway projects	Federal	
<b>National Highway System</b>	Funding for construction, reconstruction, resurfacing, restoration, rehabilitation, and safety improvements on the National Highway System	Must be located on the National Highway System	A wide variety of transportation improvement projects	Federal	
<b>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</b>	Funds transportation projects that reduce emissions in nonattainment and maintenance areas.	Located in nonattainment or maintenance areas	A wide range of transportation and transit programs	Federal	
<b>Recreational Trails Program (RTP)</b>	Provide funds to develop and maintain recreation trails		A wide range of recreational improvement projects	Federal	Available annually through Arizona State Parks
<b>Highway User Revenue Fund (HURF)</b>	Funds derived from fuel taxes, vehicle license tax, registration fees and other fees.	Project must be on highway	Highway construction, improvements, and other related expenses	State	Distributed directly to jurisdictions based on population
<b>Vehicle License Tax (VLT)</b>	Arizona tax paid by vehicle owners			State	
<b>Arizona Game and Fish Department Heritage Funds</b>	Funds derived from lottery proceeds to preserve natural and cultural resources		<ul style="list-style-type: none"> <li>Public Access</li> <li>Environmental Education</li> <li>Schoolyard Habitat</li> <li>Urban Wildlife and Urban Wildlife Habitat</li> <li>IIAPM</li> </ul>	State	Available annually in November through Arizona State Parks



**TABLE 5: FUNDING SOURCES (CONTINUED)**

Program	Description	Requirements	Eligible Uses	Source	Application
<b>Development Impact Fees</b>	Impact fees or development requirements for targeted projects or areas.	Amount of the assessment needs to be in direct proportion to the magnitude of the need created by the project		Local	
<b>Development Stipulations</b>	Developers dedicate appropriate ROW and build adjacent streets			Local	
<b>Hotel Bed Tax</b>	Tax added to hotel room charge that is paid to the state during tax returns and refunded to the local jurisdiction by the state of Arizona.			Local	
<b>Sales Tax</b>	Funds from a portion of a municipality's sales tax		Motorized and non-motorized improvements	Local	
<b>Developer Exactions</b>	Require developers to construct off-site facilities necessary to serve their development.			Local	
<b>Equity Bonus</b>	Funding to States based on equity considerations				Applications available year-round
<b>Community Facilities District (CFD)</b>	Special District created for the purpose of financing the acquisition, construction, operation and maintenance of public infrastructure improvements.		<ul style="list-style-type: none"> <li>- Water and sewer projects</li> <li>- Police and fire facilities (and sites)</li> <li>- Public buildings (and sites)</li> <li>- Flood control and drainage projects</li> <li>- Roadways</li> <li>- Public parking structures</li> <li>- Landscaping and lakes</li> <li>- Lighting and traffic control</li> <li>- Parks and recreational facilities</li> <li>- Schools and school sites</li> <li>- Pedestrian malls</li> <li>- Enhanced public services</li> </ul>	Local	Applications available year-round

