

REGIONALLY SIGNIFICANT ROUTES FOR SAFETY AND MOBILITY

REGIONALLY SIGNIFICANT ROUTES



PARTNERING FOR SAFETY
& MOBILITY

FINAL REPORT

DECEMBER 2008

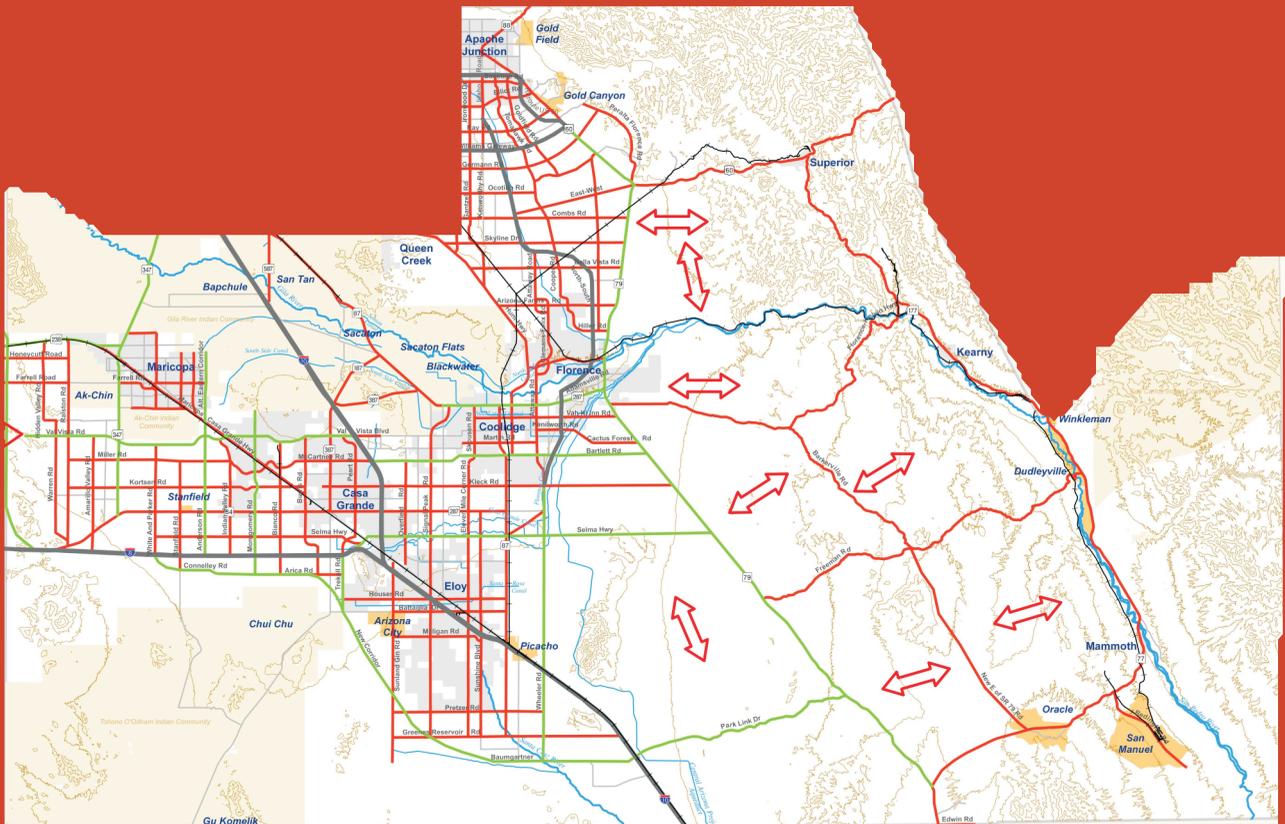


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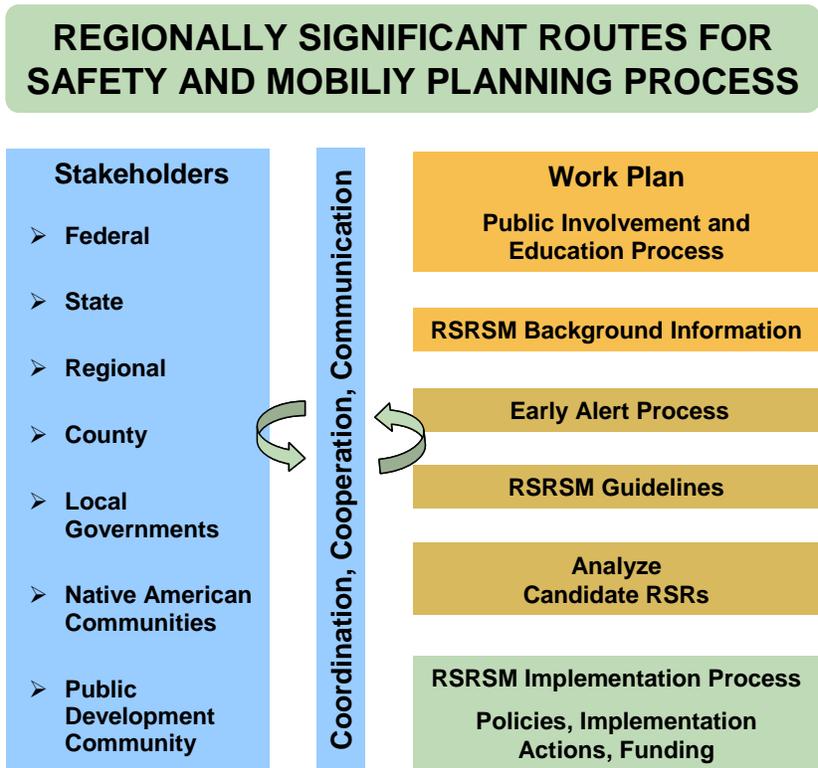
1. INTRODUCTION

This report describes the planning process for Regionally Significant Routes (RSRs) for Safety and Mobility (RSRSM) in Pinal County and documents the study results. The study developed a RSRSM plan to ensure mobility and safety through a partnering approach with federal, state, county, local, Native American Communities, and private stakeholders. The purpose of the plan is to provide a guide for the County and other stakeholders to implement and fund RSRs. The plan is also a guide to preserve right-of-way for RSRs.

STUDY PROCESS

The RSRSM study process was carried out within an extensive coordination, cooperation, and communication process among federal, state, regional, county, local, Native American, and private stakeholders. The following tasks were conducted:

- Conduct of Public Involvement and Education Processes.
- Review of RSRSM Background Information.
- Development of RSRSM Guidelines.
- Identification and Analysis of Candidate RSRSM Corridors.
- Development of RSRSM Plan.
- Development of RSRSM Implementation Process.
- Preparation of RSRSM Access Management Manual.



Major products of the study included:

- Corridor Preservation Map
- Priority Map
- Implementation Procedures
- Access Management Manual
- Early Alert Process

ORGANIZATION OF REPORT

The second chapter of the final report describes the coordination, cooperation, and communication activities carried out to develop the RSRSM plan. Next, Chapter 3 presents the identification and analysis of candidate regionally significant corridors. Chapter 4 presents the RSRM plan including vision, guidelines, corridor preservation map, and a RSRSM priority map. The final chapter presents recommended steps to implement the RSRSM plan. The following additional documentation of the study was prepared during the study:

- *Technical Memorandum 1*, March 2007. Discusses legal issues and regulatory procedures, regionally significant route practices, and access management practices.
- *Technical Memorandum 2: Early Alert Coordination Process*, March 2007. Presents the early process for implementing RSRs by the County, local governments, and Native American Communities.
- *Regionally Significant Routes for Safety and Mobility Plan*, July 2007. Documents the plan for the Pinal County Transportation Summit.
- *Memorandum: Regionally Significant Routes for Safety and Mobility, Feasibility Analysis*, September 4, 2007.
- *Definition of Roadway Facility Types for Pinal County Regionally Significant Routes for Safety and Mobility*, August 15, 2007. Discusses the definitions of freeways, parkways, and principal arterials.
- *Access Management Manual*, October, 2008. Presents information on the need for access management, access decision-making process, classification and access criteria, access management plans and traffic studies, and access management toolkit.

2. COORDINATION, COOPERATION, AND COMMUNICATION

OVERVIEW

The Regionally Significant Routes Plan for Safety and Mobility has been prepared through an extensive open process of coordination, cooperation, and communication among the County, local municipalities, Native American Communities, private developers, and the Arizona Department of Transportation. The coordination, cooperation, and communication process has built upon the activities carried out for the *2006 Small Area Transportation Study* that identified potential Regionally Significant Routes. Table 1 lists the various coordination and advisory meetings held during the planning process.

TABLE 1. COORDINATION, COOPERATION, AND COMMUNICATION ACTIVITIES

Coordination, Cooperation & Communication:	Number to Date
Technical Advisory Committee Meetings	5
Stakeholder Meeting/Workshop	3
City/Town/Tribal Study Sessions	20
CAAG Mgmt. Comm. & Regional Council	2
Developer Individual/Group Meetings	27/14
Public Open Forums	16
Pinal County Internal Meetings	6
Pinal Regional Transportation Summit 2007	1
Transportation Planning by Others	Continuous



EDUCATIONAL AND OUTREACH MATERIAL



Educational and outreach materials were prepared to provide study information to the stakeholders. As a means of convenient accessibility, the study materials were posted on the Pinal County Public Works Web Site throughout the study. Informational material included the following:



- Study Brochure describing the study process and benefits of access management
- Power Point slide presentations
 - Overview of Study Process
 - Benefits of Access Management
 - Presentation for the public
 - Presentation for Public Official
- Display Boards for stakeholder and public meetings
- Acceptance of continuous open comment sheet

TECHNICAL ADVISORY COMMITTEE

A Technical Advisory Committee (TAC) provided guidance to the development of RSRSM plan throughout the study. The committee provided information to the study team, reviewed documents and draft plans, and commented on potential RSR corridor locations and policies and procedures. The committee was comprised of representatives of the entities listed in Table 2.

TABLE 2. TECHNICAL ADVISORY COMMITTEE

• Ak-chin Indian Community	• City of Tucson
• Arizona Department of Transportation Engineering (ADOT) District & Planning Division	• Gila River Indian Community
• Arizona State Land Department	• Maricopa County Department of Transportation
• Central Arizona Association of Governments	• Pinal County
• City of Apache Junction	• Pinal County Public Works
• City of Casa Grande	• Tohono O'odham Nation
• City of Coolidge	• Town of Florence
• City of Eloy	• Town of Kearney
• City of Marana	• Town of Mammoth
• City of Maricopa	• Town of Oro Valley
	• Town of Queen Creek
	• Town of Superior

STAKEHOLDER WORKSHOPS

Three workshops, including the Summit 2007, were held with state, regional, county, local, and Native American stakeholders during the study. The focus of the first workshop was to identify policies and legal authority issues. A presentation was made on policy and legal issues related to regionally significant routes. Break groups brainstormed potential policies and discussed legal issues and legal mechanisms.

The purpose of the second workshop was to identify potential regionally significant route corridors and review potential constraints to the corridors. The attendees of the workshop were divided into groups for a hands-on analysis of potential corridors. Each group focused on each of the planning areas in Pinal County. The findings of each group were presented to all the attendees. The study team then compiled the findings of each group and distilled the findings into a draft map of potential corridors. This map was used to analyze the potential corridors.

The third workshop, Pinal Regional Summit, is a signature gathering of stakeholders to coordinate the improvement of transportation in Pinal County. As part of the summit, the RSRSM Plan including study purpose, process, coordination activities, and products of the

Plan was shared with over 150 elected officials; senior management; federal, state, and local governments; Native American communities; and private business representatives **to ensure compatibility with other Regional Plans**. The following information was presented to the summit attendees:

- Corridor Preservation Map
- Priority Map
- Access Management Concepts

A portable drive containing all the information presented at the Summit was given to each participant and summit information was posted on the Pinal County Public Works Web Site.

COORDINATION WITH DEVELOPER COMMUNITY

Meetings were held to provide information to the development community and obtain feedback on the RSRSM plan on January 19, May 3, November 13, and December 11, 2007. In addition, special meetings throughout 2008 were held with the Transportation Committee of the Pinal Partnership to discuss the access management concepts for the RSRSM plan and to continue work with development.

OPEN HOUSES

Two phases of open houses were conducted during the study. The Open Houses were announced widely in the newspaper, radio, and television media. Key stakeholders and the development community were notified about the meetings and an announcement of the meetings was posted on the Pinal County Public Works Web Site. The locations of the open houses for each phase are listed below. The format of the open houses included a brief presentation, a question and answer period, and display boards. Comment sheets were available at each open house.

First Phase		Second Phase	
Maricopa High School	5/8/07	Casa Grande	9/25/07
Walker Butte Elementary School	5/9/07	Florence Town Hall	9/25/07
SaddleBrooke	5/10/07	SaddleBrooke	9/27/07
Toltec Middle School	5/10/07	Gold Canyon	9/27/07

The first open houses presented the existing conditions, discussed issues, and identified potential regionally significant route corridors. The second phase of open houses presented the revised regionally significant route corridors and obtained input from the public on the corridors. A summary of the comments received is summarized in Table 3.

TABLE 3. OPEN HOUSE COMMENTS

First Phase						
Characteristics	Not Important	Somewhat Important	Highly Important			
Provide continuous routes through the County	1	3	6			
Provide a consistent roadway cross-section on routes. (e.g., number of lanes, sidewalks, shoulders, etc.)	0	4	7			
Provide high capacity routes.	1	4	5			
Consider other transportation modes such as transit, pedestrian, and bicyclists.	1	6	4			
Provide grade separated interchanges.	2	4	5			
Control access to adjacent property along a route.	0	4	7			
Second Phase						
Do you agree that the following characteristics are important for a Regionally Significant Routes Plan for Safety and Mobility?	Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly	No Opinion	
Provide uninterrupted routes through the County.	10	1	0	0	1	
Provide a consistent roadway cross-section on routes. (e.g., number of lanes, sidewalks, shoulders, etc.)	7	5	0	0	0	
Provide routes that can accommodate high traffic levels.	11	1	0	0	0	
Consider other transportation modes such as transit, pedestrian, and bicyclists.	11	1	0	0	1	
Provide interchanges over or under side streets.	7	5	0	0	0	
Limit the number of driveways to adjacent property along a route.	10	0	1	0	1	

The following were individual written comments made by participants:

First Phase

- This type of planning is needed to improve the road network in this part of the county.
- Obviously, we want all the above characteristics – but will be limited by available/expanded funds. Unless higher buildings, rather than expanded areas are used to contain the coming population, higher capacity controlled access will take precedence over safety/ease. What steps will be/are being taken to force higher rise residential housing?
- Improve Park Link Drive as soon as possible (several comments were made)
- I think one of the most important routes to consider for those in the South S/E part of the county would be SR 77 (Oracle Road) from the junction of SR 79 – SR 77 to North Pima County into Tucson. Lots of construction near the junction on the paving of Park Link Drive is also important.

- As our population grows older, we need greater sources of public transit.
- Proceed with plans to develop Salem Hwy, Kleck Rd, Bartlett Rd, and Cactus Forest Rd.
- Pave currently unpaved routes that cut across the county.

Second Phase

- McCartney Rd. should go straight into Mile Corner Rd. The plan as is cuts the water from the farm and of irrigation wells and CAP canal.
- We need the safety of the added roads and access management.
- From what I can understand, the plan looks pretty good. We need the 60 re-route NOW!
- Planned strategy for effective and efficient travel is important. I would like to see further interaction with the development community as the plan poses highly detrimental challenges to future retail development within Pinal County. Further refine and discuss the Access Management component of the plan.
- I like the plan because it is before major development begins! Planning is important!
- Good first concept.
- Great job to get communities involved.
- I like the plan because it's working with Pima & Maricopa counties. Include transit and other modes of transportation. Include paving Park Link Road. Better communication of additional meetings. Some of the characteristics listed above might not be achievable over the whole length of the route.
- I would like to hear more specific timing.
- Southeastern part of county rather neglected.
- Good start. More routes in the SE part of Pinal County. Obtain R/W well in advance of construction. Develop a bond program for number. Consider a statewide or county-only tax program
- Nice, informative presentation.
- Strongly consider transit.

RESOLUTIONS OF SUPPORT

As a step in the Coordination, Cooperation, and Communication Process, Pinal County presented the RSRSM plan to local governments, Native American Communities, Central Arizona Association of Governments (CAAG), and other agencies. Every City and Town in Pinal County has passed a resolution of support for the RSRSM plan. In addition, resolutions of support have been passed by the Gila River Indian Community, CAAG, Maricopa County Department of Transportation (MCDOT), and the Arizona Department of Transportation (ADOT).

FUTURE COORDINATION, COOPERATION, AND COMMUNICATION

The Coordination, Cooperation, and Communication will continue throughout the implementation of the RSRs under the guidance of a Regional Implementation Committee. The purpose of this committee is described further in Chapter 5. Continuing Coordination, Cooperation, and Communication is critical to ensure coordinated design and construction and leveraging of funding. Many studies are currently in progress or have been recently complete that will impact transportation in Pinal County including:

- Pinal County Comprehensive Plan
- I-8/Hidden Valley Roadway Framework Study
- I-10/Pinal County Regional Transportation Profile Study
- City of Maricopa Regional Transportation Study
- Coolidge-Florence Regional Transportation Study
- City of Eloy Small Area Transportation Study
- Casa Grande Small Area Transportation Study (Completed)
- Queen Creek Small Area Transportation Study (Completed)
- Phoenix-Tucson High Speed Passenger Rail Strategic Plan
- Commuter Rail Strategic Plan
- I-10 Bypass Study
- Union Pacific Railroad Double Tracking
- Build Quality Arizona
- Gila Indian River Community Transportation Study (Upcoming)

Effective partnering among all the stakeholders is critical to ensure a well coordinated transportation system of freeways, RSRs, and one-mile arterials. The rapid ongoing and impending development makes partnering even more critical to preserve right-of-way. The preservation of right-of-way is a high priority for the following proposed facilities:

- Extension of SR 303 from Maricopa County southeast to Pinal County
- North-South Freeway Corridor
- Maricopa Casa Grande highway
- Val Vista Parkway
- I-10 Bypass
- Potential transportation corridors identified by the I-10/Pinal county Regional Transportation Corridors

3. ANALYSIS OF CANDIDATE CORRIDORS

This chapter summarizes the process that was carried out to identify and analyze candidate RSR corridors and the results of the corridor analysis.

NEED FOR REGIONALLY SIGNIFICANT ROUTES

The need for regionally significant routes in Pinal County has been demonstrated by the following factors:

- Unprecedented growth that is expected to continue
- A significant increase in congestion throughout Pinal County
- Impact on safety as congestion levels increase
- An existing roadway system with limited capacity and that lacks continuity and connectivity between activity centers, cities/towns/Native American communities and State highway system

Unprecedented Growth

Over the past several years, Pinal County has experienced unprecedented growth. According to the Arizona Department of Economic Security (DES), the County grew from 179,727 residents in 2000 to an estimated 299,875 residents in July 2006. The City of Maricopa is a prime example of the explosive growth trend throughout the County. Between 2000, when it was an unincorporated Census Designated Place, and 2006, after it had become an incorporated city, Maricopa's population increased from 1,040 to 25,830. Areas such as Johnson Ranch and Anthem Ranch in Florence have experienced similarly rapid growth rates. This high rate of growth is expected to continue, as hundreds of thousands of housing units have been entitled by the local governments and in unincorporated portions of Pinal County. The *2006 Pinal County Small Area Transportation Study* projected that the County population would ultimately grow to nearly two million residents.

Rapid Increase in Congestion

The *2006 Pinal County Small Area Transportation Study* identified the need for regionally significant routes based on 2025 traffic forecasts on a two-mile arterial grid system. Figure 1 illustrates the 2025 daily traffic volumes and level of service for the recommended 2025 road system.

Traffic congestion is evident today in parts of the County. A continuous stream of traffic along SR 347 is a common sight during peak hours. A similar sight is the continuous line of traffic on Hunt Highway entering and leaving the Johnson Ranch and Florence areas. Interstate 10 commonly experiences delays due to high automobile and truck traffic.

Impact on Safety

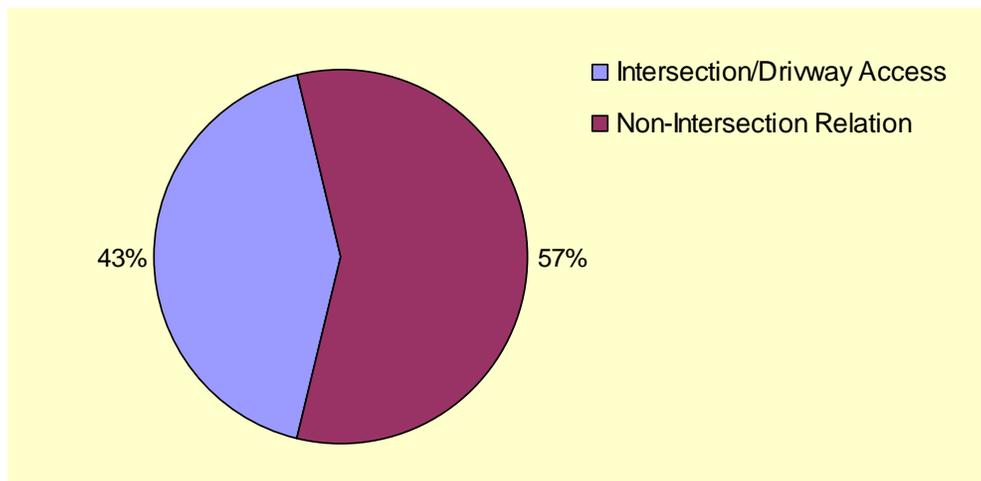
Figure 3 (following page) illustrates the 5-Year crash history on the current roadway system in Pinal County. Approximately 17,309 crashes occurred in Pinal County during the five-year period from July 2001 to July 2006. Table 4 shows the distribution of the types of crashes. As shown in Figure 2, approximately 43 percent of the crashes are driveway and intersection related crashes. Traffic incidents have significant impacts on traffic operations. For example, SR 347 in the City of Maricopa is frequently closed down by a traffic incident resulting in traffic backups of a mile or more. The lack of alternative routes to SR 347 further aggravates traffic congestion.

TABLE 4. CRASH TYPE

Collision Manner	Accidents	Percentage
Single Vehicle	6,929	40.0%
Angle	2,768	16.0%
Backing	472	2.7%
Head-On	191	1.1%
Left Turn	801	4.6%
Other	616	3.6%
Rear-End	3,742	21.6%
Sideswipe (Same Direction)	1,618	9.3%
U-Turn	172	1.0%
Total	17,309	100.0%

Source: Accident System Identification Surveillance System (ALISS) Database for ADOT. (July 2001-June 2006)

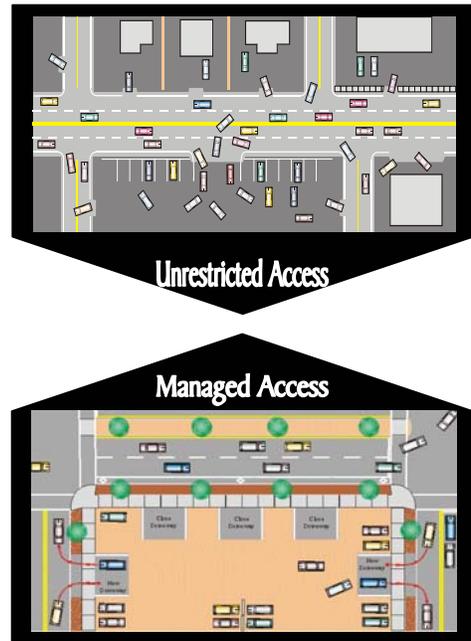
**FIGURE 2. PINAL COUNTY INTERSECTION/DRIVEWAY RELATED CRASHES
JUNE 2001 – JULY 2006**



Source: Accident System Identification Surveillance System (ALISS) Database

Need For Access Management

The purpose of major transportation corridors such as the Pinal County Regionally Significant Routes is to provide for the safe and efficient movement of people and goods at a high level of service. If access to these corridors is limited, then safety and mobility will be maintained along the corridors. However, if access to adjacent property is not limited and adjacent property develops, the addition of traffic signals and curb cuts often has an adverse effect on mobility and safety. As land is developed along transportation corridors, vehicle access to property adjacent to the corridor is often achieved directly to and from the transportation corridor. As a result, more trips are forced onto the corridor due to insufficient internal access systems serving these land use activities. As traffic congestion increases, the level of service provided by the major transportation corridor decreases. In addition, crashes along such a corridor generally increase due to the large number of turning and other conflicts along the corridor.



What is Access Management?

One way to minimize the adverse impact of increased access to adjacent property is to apply access management techniques along transportation corridors. According to the Federal Highway Administration (FHWA) access management is:

the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding system in terms of safety, capacity, and speed

In practical terms this process requires the regulation of vehicular access to public highways from adjoining property in order to limit the number of access points to a roadway, and, therefore; to reduce the number of potential conflict points among the users of the roadway.

- Access management deals with the traffic problems caused by unmanaged development before they occur.
- Access management addresses how land is accessed along arterials.
- Access management focuses on mitigating traffic problems arising from development and increased traffic volume traveling to the new activity centers.
- Access management calls upon local planning and zoning to address overall patterns of growth and the aesthetic issues arising from development.

Access management is use of techniques by state and local governments to improve the access to highways and local roads. The purpose of these techniques is to improve travel time and improve safety:

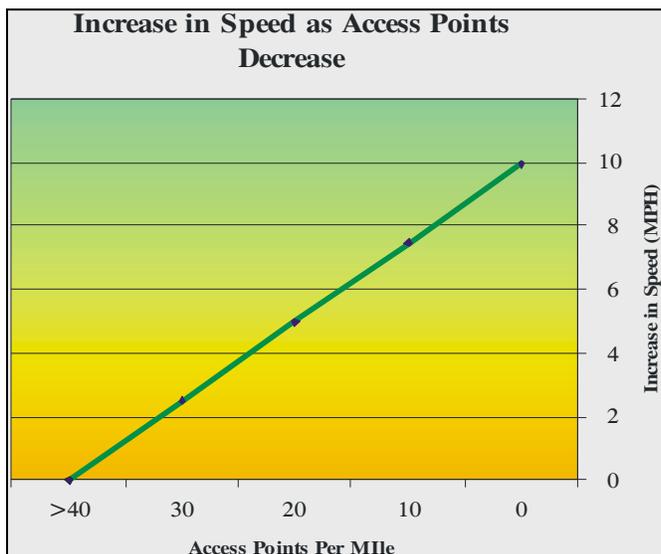
- Increase spacing of intersections and interchanges to improve movement and traffic flow.
- Reduce the number of driveways to avoid conflict points and reduce accidents.
- Use left- and right-turn lanes to separate traffic movements, improving both traffic flow and safety.
- Apply median treatments including two-way left-turn lanes and raised medians that allow drivers to safely turn off of the highway.
- Use frontage and backage roads that provide for safer and easier access to businesses and local roadways.
- Implement land use policies that regulate types of land use conducive to the highway environment.

What are the Benefits of Access Management?

The primary benefits of access management are:

- overall reduced travel time
- reduced vehicle crashes

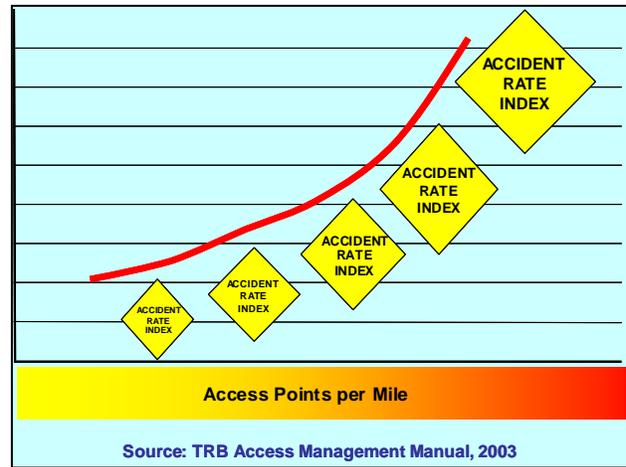
The benefits of access management are well documented in the professional literature including the *TRB Access Management Manual*, *NCHRP Report 420, Impacts of Access Management Techniques* and other reports.



Some of the most important access management techniques relate to the frequency of driveways and intersections and the uniformity of traffic signal spacing. Travel time has been shown to decrease significantly as speed increases with the reduction in the number of driveway and intersection access points. The uniform and increased spacing of traffic signals will also increase travel speeds.

Many studies have shown that crash rates increase with greater frequency of driveways and intersections. More driveways and intersections mean more conflicts between vehicles and also between vehicles and pedestrian. Crashes can be reduced significantly with fewer driveways and intersections.

One of the complaints about access management comes from businesses concerned about restricting access to their enterprises. However, studies have shown that the application of access management techniques reduce the travel time from residential areas to commercial areas.

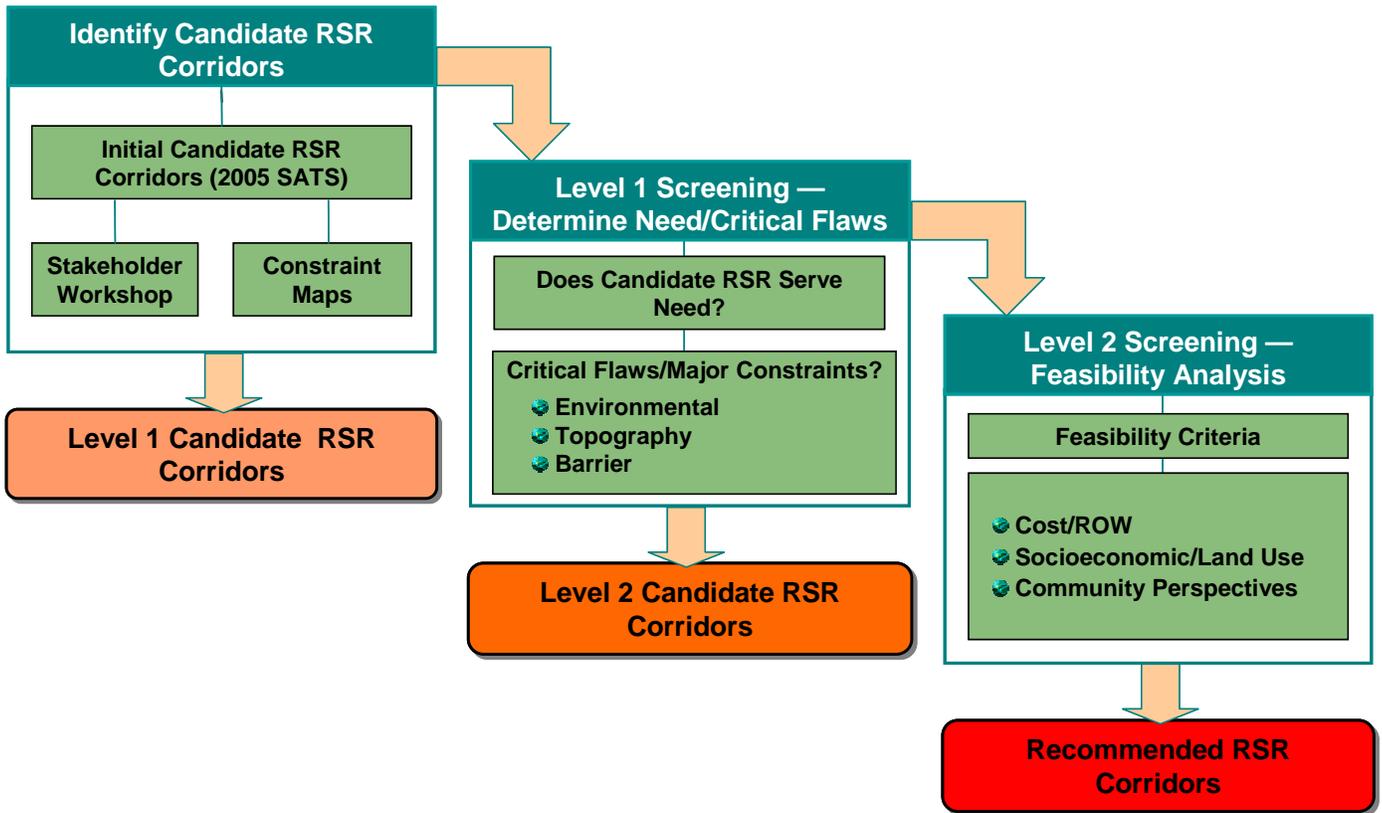


IDENTIFICATION OF CANDIDATE CORRIDORS

The overall process to identify candidate corridors and screen candidates is illustrated in Figure 4. Initial candidate RSR corridors were identified by the *2006 Pinal County Small Area Transportation Study* as components of the overall Pinal County functional classification. Potential RSR corridors defined in the study are illustrated in Figure 5.

Participants of the second stakeholder workshops described in Chapter 2 refined the initial set of candidate corridors. Workshop breakout groups focused on the candidate corridors in each planning area in the County and refined, deleted, or added segments to the candidate corridors. Each breakout group reported the results of their group to all the participants of the workshop. The study team then synthesized the results of the workshop into Level 1 Candidate Corridors shown in Figure 6 to advance to the screening analysis.

FIGURE 4. SCREENING AND PRIORITY ANALYSIS PROCESS



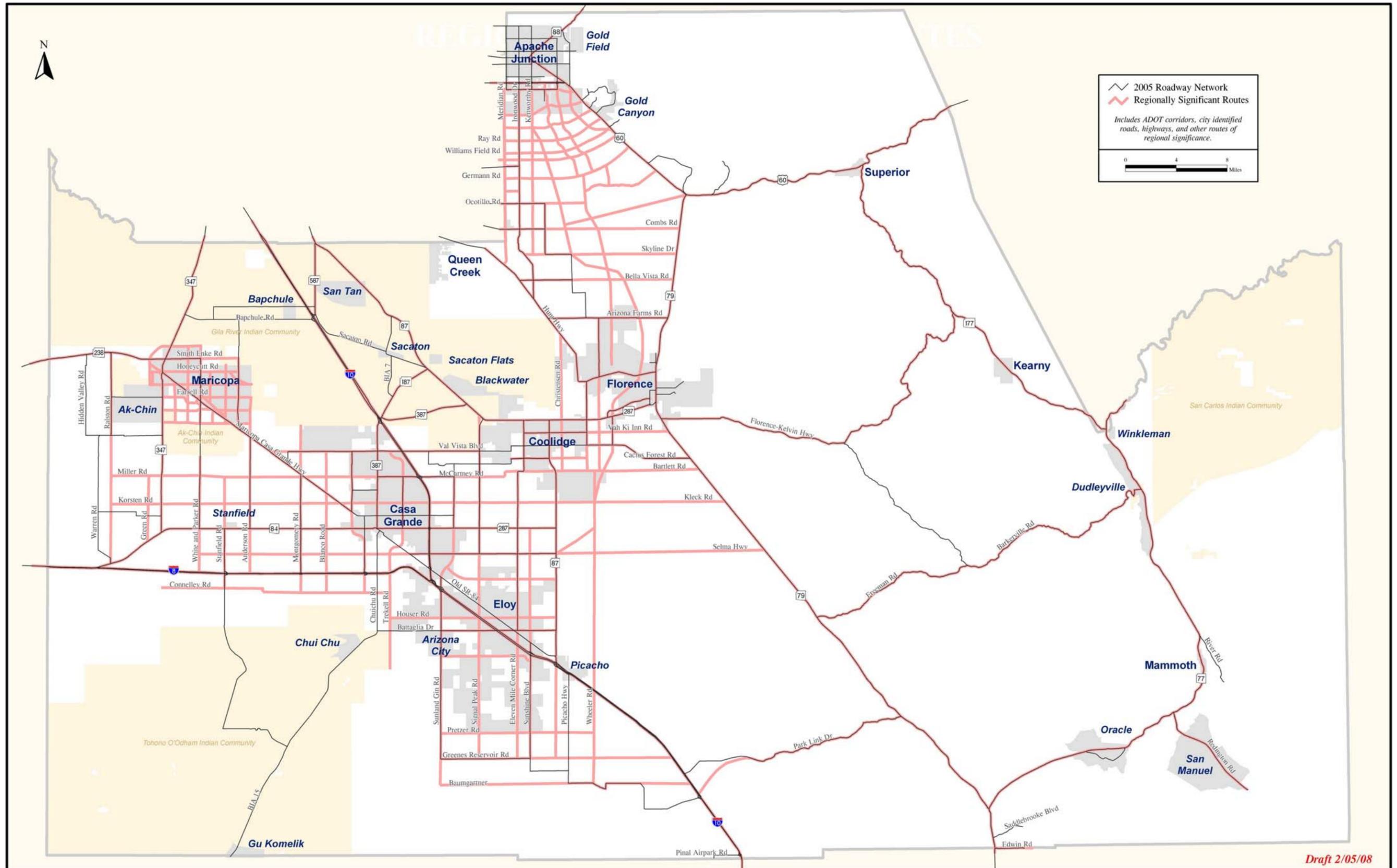
SCREENING ANALYSIS

Figure 4 illustrates the process used to screen candidate corridors and identify priorities for RSRs. The purpose of the screening analysis was to identify constraints and fatal flaws for the RSRs. The analysis identified issues and constraints at a very high planning level that will need to be addressed in future development activities for the regionally significant routes. The process followed to conduct the screening analysis is first discussed. The results of the screening analysis are presented in the form of a map and accompanying table.

Screening Analysis Data Sources

The primary basis for the screening analysis was a comprehensive Geographical Information System (GIS) database and county-wide aerial photography. Table 5 identifies the available GIS data and information sources that were used to review the screening of each Level 1 RSR candidate.

FIGURE 5. INITIAL REGIONALLY SIGNIFICANT ROUTE CORRIDORS



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FIGURE 6. CANDIDATE REGIONALLY SIGNIFICANT ROUTE CORRIDORS

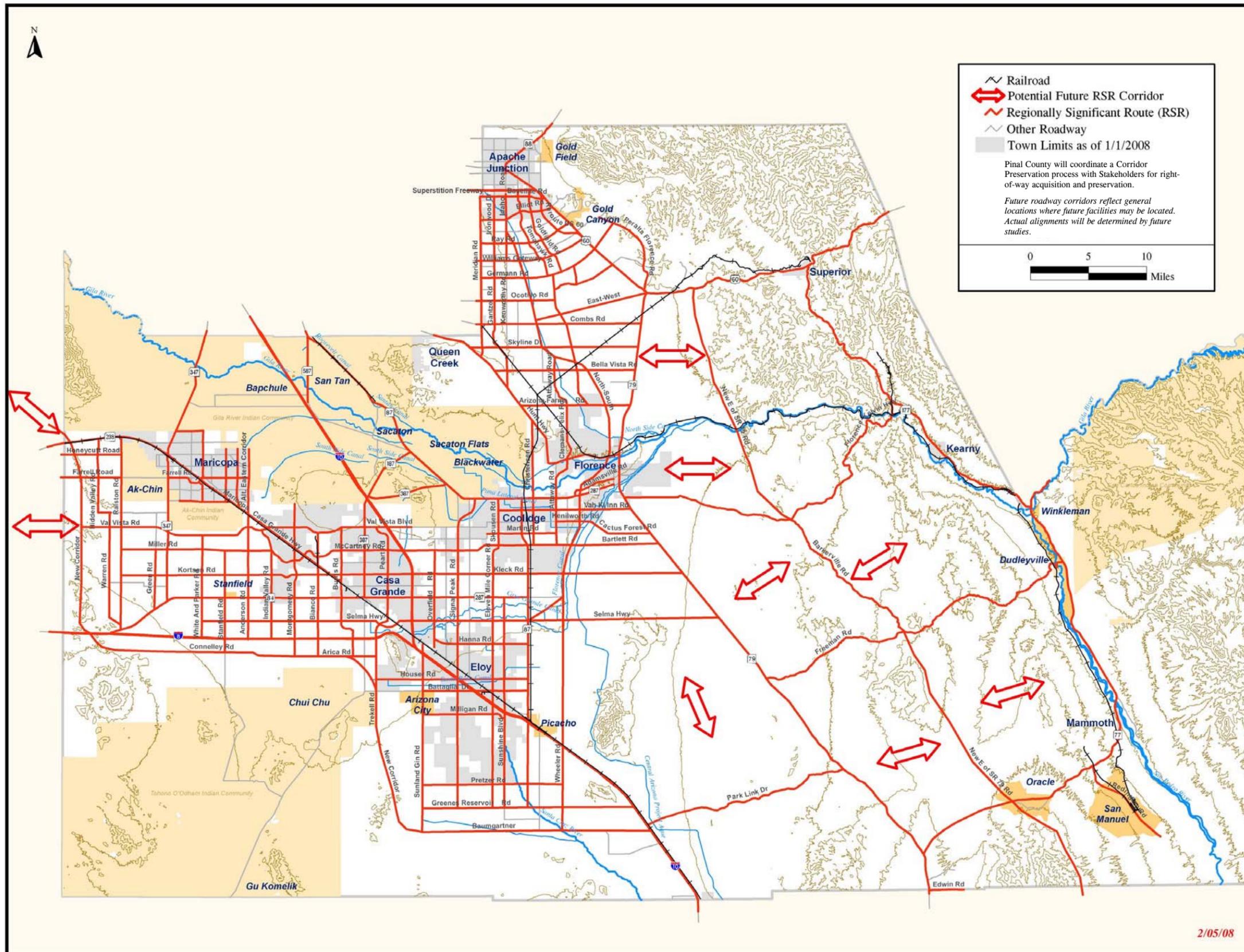


TABLE 5. SCREENING ANALYSIS DATA SOURCES

Data	Source
CIP Projects/Pinal/SATS	Pinal County
Planned Area Developments, April 2007	Central Arizona Association of Governments
At-grade railroad crossing locations	Lima and Associates, Inc.
Topography, Rivers & Stream	Arizona Land Resource Information System (ALRIS)
Public lands	Arizona Land Resource Information System (ALRIS)
Aerial Photography	Central Arizona Association of Governments, December 2006
ADOT I-10 DCR Interchange Locations	I-10 Design Concept Report, Tangerine Road to I-8 Lima and Associates, Inc.

Level 1 Screening

Screening Analysis Methodology

Applying the analysis tools and data sources as described above, potential constraints and critical flaws were identified. The identification of constraints does not necessarily constitute a fatal flaw. Additional engineering studies are required to identify and evaluate alternative alignments. Constraints were categorized as:

Topography Constraints: Corridors were identified that are currently shown (in the GIS) to pass through areas of steep grade, hills, etc. Alternative alignments may need to be developed and evaluated.

Alignment Constraints: Corridors were identified that are currently shown (in GIS) to pass through areas of existing development, industrial operations, mining operations, or natural resources or features. Such a designation does not mean that the route is unfeasible, only that alternative alignments need to be identified and evaluated.

Connectivity Considerations: Routes were identified that are shown to intersect with other major regional routes (such as I-10), but for which current plans and studies (e.g. I-10 Design Concept Report) do not currently show an interchange planned at the RSR/I-10 intersection. If the RSR route is developed, studies will be needed to determine the need for and location of interchanges.

Development Constraints: Corridors were identified where expansion/upgrade to a higher-level facility (e.g. current 2-lane or 4-lane facility) would be difficult or very costly due to existing development and right-of-way constraints. Detailed right-of-way information was not available for the analysis. As such, the analysis was based on a visual inspection only of aerial photography.

Public Lands. Routes were identified that impact public lands including lands owned and managed by the Bureau of Land Management and National Forest Service.

Level 2 Screening

The second level screening consisted of the following steps:

- Estimation of probable cost of an RSR.
- Review of available right-of-way.
- Comments from County, local governments, and Native American stakeholders and the general public about the need for and location of RSR corridors.
- Consideration of socioeconomic/land use impacts.
- Consideration of community perspectives based on input from County, local governments, and Native American stakeholders and input received from the public.

A final set of candidate RSR corridors was then defined and is presented in Chapter 4. Regionally Significant Routes for Safety And Mobility Plan.

Results of Screening Analysis

The results of the screening analysis are illustrated in Figure 7 and a summary is documented in Table 6. The following critical flaws were identified by the analysis:

- The Western Corridor crosses the Sonoran Desert National Monument and the Ironwood Forest National Monument.
- The New North-South RSR corridor between SR 79 and SR 177 crosses BLM lands between US 60 and Kelvin-Florence Highway.
- The New North-South RSR corridor between SR 79 and SR 177 impacts National Forest lands south of SR 77.

TABLE 6. SUMMARY OF SCREENING ANALYSIS

Feasibility ID Number	Road Name	Total Lanes	Pinal Functional Classification	Length (miles)	2025 Volume	Flaw / Constraint Type	Flaw / Constraint Description	Priority
1240	-	-	-	0.00	-	Topography Constraints	Potential topography constraints	Under Evaluation
1249						Public Lands Constraints	Impacts Sonoran Desert National Monument	Under Evaluation
607	Barkerville Rd	6 Lanes	Major Arter	18.25	141,798	Topography Constraints	Potential topography constraints	Medium Priority
77		4 Lanes	Major Arter	0.43	53,468	Development Considerations		Low Priority
1051	Baseline Rd	4 Lanes	Major Arter	0.57	73,052	Development Considerations		Low Priority
1052		4 Lanes	Major Arter	0.47	81,597	Development Considerations		Low Priority
778	Battaglia Dr	6 Lanes	Major Arter	0.98	128,409	Development Considerations		Medium Priority
223		6 Lanes	Major Arter	0.68	179,175	Development Considerations		Medium Priority
348	Bella Vista Rd	6 Lanes	Major Arter	1.83	204,840	Development Considerations		Medium Priority
351		6 Lanes	Major Arter	0.39	205,445	Development Considerations		Medium Priority
60		6 Lanes	Major Arter	1.04	174,099	Alignment Constraints	Alignment crosses Asarco Sacaton	Medium Priority
940	Bianco Road	6 Lanes	Major Arter	1.27	186,285	Alignment Constraints	Alignment crosses Asarco Sacaton	Medium Priority
1212		6 Lanes	Major Arter	0.96	190,592	Alignment Constraints	Alignment crosses Asarco Sacaton	Medium Priority
639		6 Lanes	Major Arter	3.31	296,483	Alignment Constraints	Alignment crosses traverses mining oper	High Priority
958	Christensen Rd	6 Lanes	Major Arter	3.39	237,350	Alignment Constraints	Proposed Road Alignment crosses over mining operations	High Priority
1254		6 Lanes	Major Arter	3.39	237,350	Development Considerations		High Priority
775	Eleven Mile Corner Rd	6 Lanes	Major Arter	0.21	168,043	Development Considerations		Medium Priority
127		6 Lanes	Major Arter	0.57	186,420	Development Considerations		High Priority
128	Gantzel Rd	6 Lanes	Major Arter	1.01	173,397	Development Considerations		Medium Priority
380		6 Lanes	Major Arter	1.00	163,531	Development Considerations		Medium Priority
951		6 Lanes	Major Arter	0.80	111,297	Alignment Constraints	Alignment runs perpendicular to Vineyard Dam	Low Priority
952	Germann Rd	6 Lanes	Major Arter	1.18	97,076	Alignment Constraints	Alignment runs perpendicular to Vineyard Dam	Low Priority
1047		4 Lanes	Major Arter	0.26	96,053	Development Considerations		Medium Priority
1055	Goldfield Rd	4 Lanes	Major Arter	0.25	123,407	Development Considerations		Medium Priority
851	Greenes Reservoir Rd	6 Lanes	Major Arter	6.10	181,772	Alignment Constraints	Alignment abuts Picacho Peak State Park	Medium Priority
10		6 Lanes	Major Arter	0.67	210,178	Development Considerations		High Priority
37		6 Lanes	Major Arter	0.92	279,153	Development Considerations		High Priority
324		6 Lanes	Major Arter	1.20	216,266	Development Considerations		High Priority
353	Hunt Hwy	6 Lanes	Major Arter	0.50	315,429	Development Considerations		High Priority
355		6 Lanes	Major Arter	0.85	322,509	Development Considerations		High Priority
385		6 Lanes	Major Arter	0.77	217,436	Development Considerations		High Priority
1021	Maricopa Casa Grande	6 Lanes	Major Arter	0.31	157,257	Development Considerations		High Priority
1025		6 Lanes	Major Arter	0.69	157,257	Development Considerations		High Priority
17	McCartney Rd	6 Lanes	Major Arter	2.00	267,185	Alignment Constraints	Asarco Sacaton Unit - Mine Pit	High Priority
166		6 Lanes	Major Arter	0.51	126,137	Development Considerations		Medium Priority
167	Meridian Rd	6 Lanes	Major Arter	0.46	145,897	Development Considerations		Medium Priority

TABLE 6. SUMMARY OF SCREENING ANALYSIS (CONTINUED)

Feasibility ID Number	Road Name	Total Lanes	Pinal Functional Classification	Length (miles)	2025 Volume	Flaw / Constraint Type	Flaw / Constraint Description	Priority
180		6 Lanes	Major Arter	0.50	118,091	Development Considerations		Medium Priority
181		6 Lanes	Major Arter	0.52	145,686	Development Considerations		Medium Priority
395		6 Lanes	Major Arter	1.00	217,361	Development Considerations		High Priority
483		6 Lanes	Major Arter	0.99	183,951	Alignment Constraints	Test track btw Stanfield and White and	High Priority
1019	Miller Rd	6 Lanes	Major Arter	1.93	164,429	Alignment Constraints	Test track btw Stanfield and White and Parker Road	High Priority
1111		6 Lanes	Major Arter	2.00	156,408	Alignment Constraints	Test track btw Stanfield and White and Parker Road	High Priority
1246	New Corridor	-	-	0.00	-	Topography Constraints	Potential topography constraints	Under Evaluation
		-	-	0.00	-	Topography Constraints	Potential topography constraints	Under Evaluation
		-	-	0.00	-	Public Lands Constraints	Impacts Ironwood Forest National Monument	Under Evaluation
1245	New E of SR 79 Rd	-	-	0.00	-	Topography Constraints	Potential topography constraints	Under Evaluation
378		6 Lanes	Major Arter	0.51	117,408	Development Considerations		Medium Priority
399		6 Lanes	Major Arter	0.58	134,911	Development Considerations		Medium Priority
717		6 Lanes	Major Arter	0.51	142,001	Development Considerations		Medium Priority
718	Ocotillo Rd	6 Lanes	Major Arter	0.54	117,408	Development Considerations		Medium Priority
1005		6 Lanes	Major Arter	1.11	109,132	Alignment Constraints	Alignment runs perpendicular to Vineyard Dam	Medium Priority
1008		6 Lanes	Major Arter	0.61	143,469	Development Considerations		Medium Priority
1009		6 Lanes	Major Arter	0.91	122,069	Alignment Constraints	Alignment runs perpendicular to Vineyard Dam	Medium Priority
675		4 Lanes	Major Arter	0.51	195,241	Development Considerations		Medium Priority
678	Peart Rd	4 Lanes	Major Arter	0.50	214,871	Development Considerations		Medium Priority
679		4 Lanes	Major Arter	0.69	198,272	Development Considerations		Medium Priority
687		4 Lanes	Major Arter	0.99	140,122	Development Considerations		Medium Priority
182	Ray Rd	6 Lanes	Major Arter	0.53	98,140	Alignment Constraints	Crosses perpendicular to Vineyard Dam	Low Priority
183		6 Lanes	Major Arter	0.80	95,484	Alignment Constraints	Crosses perpendicular to Vineyard Dam	Low Priority
402		6 Lanes	Major Arter	1.73	190,750	Alignment Constraints	Alignment through Picacho Reservoir	Medium Priority
720	Selma Hwy	6 Lanes	Major Arter	1.28	186,828	Alignment Constraints	Alignment through Picacho Reservoir	Medium Priority
722		6 Lanes	Major Arter	7.48	142,688	Development Considerations	Potential topography constraints	Medium Priority
11		4 Lanes	Collector	1.06	199,292	Development Considerations		Medium Priority
34	Skyline Dr	6 Lanes	Major Arter	0.39	303,027	Development Considerations		Medium Priority
35		6 Lanes	Major Arter	0.54	176,379	Development Considerations		Medium Priority
345		6 Lanes	Major Arter	1.07	184,360	Development Considerations		Medium Priority
677		4 Lanes	Major Arter	0.69	122,892	Development Considerations		Medium Priority
1195	SR-287	4 Lanes	Major Arter	1.00	109,494	Development Considerations		Medium Priority
1196		4 Lanes	Major Arter	1.00	118,594	Development Considerations		Medium Priority
210		6 Lanes	Major Arter	0.62	103,332	Development Considerations		High Priority
214	SR-347	6 Lanes	Major Arter	3.83	133,077	Development Considerations		High Priority
1022		6 Lanes	Major Arter	1.30	162,153	Development Considerations		High Priority
1024		6 Lanes	Major Arter	0.06	215,487	Development Considerations		High Priority

TABLE 6. SUMMARY OF SCREENING ANALYSIS (CONTINUED)

Feasibility ID Number	Road Name	Total Lanes	Pinal Functional Classification	Length (miles)	2025 Volume	Flaw / Constraint Type	Flaw / Constraint Description	Priority
1028		6 Lanes	Major Arter	0.68	135,824	Development Considerations		High Priority
1034		6 Lanes	Major Arter	0.42	123,782	Development Considerations		High Priority
672	SR-387	6 Lanes	Major Arter	0.59	164,355	Development Considerations		Medium Priority
744		6 Lanes	Major Arter	0.41	163,752	Development Considerations		Medium Priority
745		6 Lanes	Major Arter	1.00	130,035	Development Considerations		Medium Priority
746		6 Lanes	Major Arter	0.55	132,476	Development Considerations		Medium Priority
321	SR-79	6 Lanes	Major Arter	0.79	191,453	Development Considerations		High Priority
337		6 Lanes	Major Arter	0.70	200,538	Development Considerations		High Priority
847		6 Lanes	Major Arter	0.17	195,937	Development Considerations		High Priority
979		6 Lanes	Major Arter	0.36	136,728	Development Considerations		High Priority
983		6 Lanes	Major Arter	0.32	136,075	Development Considerations		High Priority
985		6 Lanes	Major Arter	0.24	144,322	Development Considerations		High Priority
646	SR-87	4 Lanes	Major Arter	0.55	81,659	Development Considerations		Medium Priority
647		4 Lanes	Major Arter	0.50	90,043	Development Considerations		Medium Priority
649		4 Lanes	Major Arter	0.50	90,043	Development Considerations		Medium Priority
1154		4 Lanes	Major Arter	1.00	94,257	Development Considerations		Medium Priority
329	Sunland Gin Rd	6 Lanes	Major Arter	2.02	238,688	Development Considerations		Medium Priority
791	Sunshine Blvd	6 Lanes	Major Arter	0.43	157,210	Development Considerations		High Priority
793		6 Lanes	Major Arter	0.51	143,394	Development Considerations		High Priority
1061	Tomahawk Rd	4 Lanes	Major Arter	0.24	115,491	Development Considerations		Medium Priority
1062		4 Lanes	Major Arter	0.24	93,378	Development Considerations		Medium Priority
133	US-60	4 Lanes	Major Arter	0.44	80,921	Development Considerations		Medium Priority
149		4 Lanes	Major Arter	0.22	80,540	Development Considerations		Medium Priority
157		4 Lanes	Major Arter	0.46	102,322	Development Considerations		Medium Priority
64	Vah Ki Inn Rd	6 Lanes	Major Arter	0.55	157,721	Development Considerations		Medium Priority
65		6 Lanes	Major Arter	0.49	156,112	Development Considerations		Medium Priority
50	Val Vista Rd	6 Lanes	Major Arter	1.08	265,450	Alignment Constraints	Alignment passes near Asarco Sacaton	High Priority
51		6 Lanes	Major Arter	0.96	283,559	Alignment Constraints	Alignment passes near Asarco Sacaton	High Priority
1198		6 Lanes	Major Arter	0.94	265,450	Alignment Constraints	Alignment passess near Asarco Sacaton	High Priority
1223		6 Lanes	Major Arter	0.00	-	Alignment Constraints	Alignment issues - Traverses proving ground	Low Priority
461	Wheeler Rd	6 Lanes	Major Arter	0.10	166,905	Connectivity Considerations	No service interchange currently planned	High Priority
463		6 Lanes	Major Arter	0.03	166,964	Connectivity Considerations	No service interchange currently planned	High Priority
472		6 Lanes	Major Arter	3.24	166,905	Connectivity Considerations	No service interchange currently planned	Medium Priority
738		6 Lanes	Major Arter	2.96	180,313	Connectivity Considerations	No service interchange currently planned	Medium Priority
220	-	4 Lanes	Major Arter	1.24	77,278	Development Considerations		High Priority
222	-			0.00	0	Development Considerations		Medium Priority
354	-	6 Lanes	Major Arter	0.84	179,237	Development Considerations		High Priority

4. REGIONALLY SIGNIFICANT ROUTES FOR SAFETY AND MOBILITY PLAN

VISION FOR REGIONALLY SIGNIFICANT ROUTES

The following vision statement articulates key elements identified by stakeholders for the planning and implementation of Regionally Significant Routes:

A partnership among Pinal County, local governments, stakeholders, and residents will develop and implement Regionally Significant Routes for Safety and Mobility. Regionally Significant Routes will provide continuity across the county and through urban areas and connect to adjacent counties and state highways. A high level of safety will be provided for automobile, transit, and pedestrian trips and the routes will provide a high level of service through corridor management and access control. The routes will be planned, programmed, designed, and constructed in consideration of community and environmental values.

POLICIES

The following are recommended policies for Regionally Significant Routes in Pinal County:

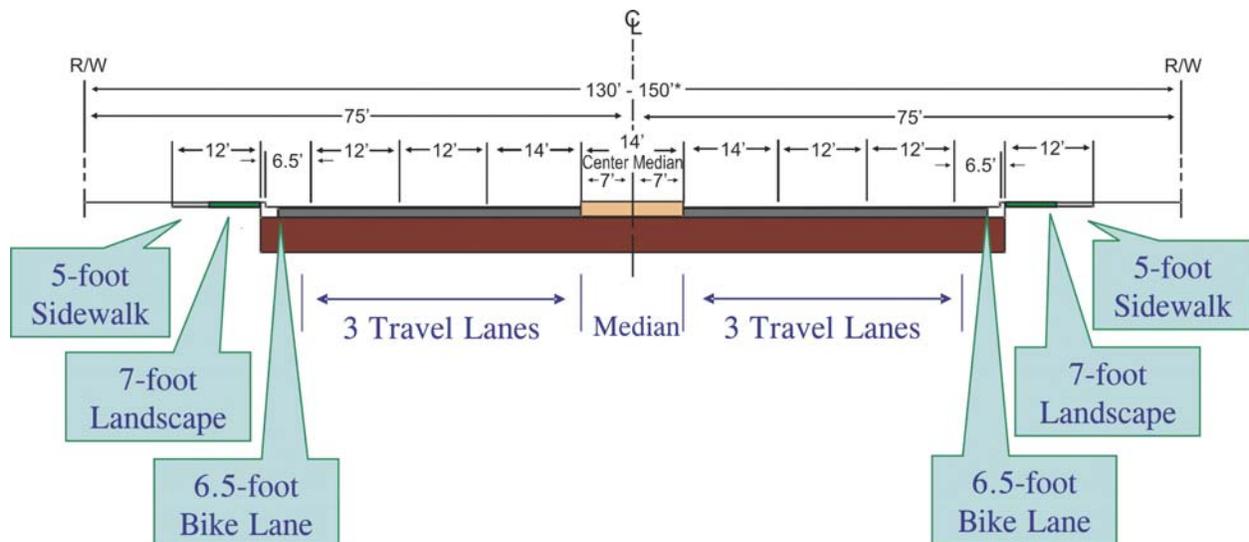
- Provide a safe, efficient, multimodal Regionally Significant Route system serving the mobility needs of people, services, and goods throughout the region.
- Carry out an ongoing consultation process with local governments, Native American stakeholders and the general public in the planning, programming, design, and construction of Regionally Significant Routes.
- Work closely with local governments and Native Americans to encourage early mutual notification of agencies regarding zoning and other land use decisions that will impact Regionally Significant Routes.
- Plan, program, design, and construct Regionally Significant Routes in consideration of the interrelationship of land use and transportation facilities.
- Implement a regionally significant route system that promotes economic development.
- Preserve right-of-way for Regionally Significant Routes through purchase of access rights, corridor management, access management, and system management.
- Plan, program and design Regionally Significant Route system in consideration of the impacts on the environment.
- Implement innovative management strategies and advanced technology to improve the efficiency on Regionally Significant Routes.
- Pursue funding for Regionally Significant Routes through public/private partnerships.

- Place priorities on Regionally Significant Routes that:
 - Connect County regions and population centers through an efficient route network to carry travelers and commerce throughout the County.
 - Connect the County regions and population centers with adjacent counties.
- Consider opportunities for inclusion of multimodal facilities within or proximate to Regionally Significant Route. Multimodal facilities may include exclusive or prioritized bus, vanpool and other high-occupancy-vehicle lanes, ramps and other access-ways, related signalization, stops, storage facilities, park & ride facilities, pedestrian/bicycle facilities, air facilities, rail facilities, other high capacity transit facilities and Intelligent Transportation Systems (ITS).
- All proposed development plans on designated future transportation corridors shall be consistent with identified right-of-way needs as a condition of development approval.

REGIONALLY SIGNIFICANT ROUTE CLASSIFICATION AND ACCESS MANAGEMENT GUIDELINES

Two classifications of regionally significant routes were defined: 1) RSR Parkway; and 2) RSR Principal Arterial. Figure 8 illustrates the typical cross section of an RSR Principal Arterial. Table 7 presents the classification criteria for the two types of RSRs. Criteria are presented in the following categories: 1) laneage and planning capacity; 2) design standards; 3) access management guidelines; and 4) alternative travel modes. Current Pinal County design standards will be revised to conform to the access management criteria recommend by the RSRS Plan.

FIGURE 8. TYPICAL SECTION, REGIONALLY SIGNIFICANT ROUTE PRINCIPAL ARTERIAL



1. Additional right-of-way may be required at intersections to provide additional turning lanes and pedestrian refuge space in the median.
 2. Sidewalk and landscape widths will transition to local jurisdiction standards.
- * Right-of-way widths of 130' to 150' will accommodate a modified divided six-lane cross section.

TABLE 7. REGIONALLY SIGNIFICANT ROUTES CLASSIFICATION AND ACCESS CRITERIA

Item	RSR Parkway	RSR Principal Arterial
Laneage and Planning Capacity		
Number of Lanes	Six lanes	Six lanes
Planning Capacity	88,000 vehicles per day	50,000 vehicles per day
Design Standards		
Posted Speed	50-65 mph	35-50 mph
Right-of-Way	200 feet	130-150 feet
Medians	To be determined by Pinal County in reference to the Final Arizona Parkway Guidelines	Divided with full or directional median openings at ¼ mile spacing
Lane Width		Lane widths as in Typical Section
Left Turn Lanes		At all locations where left turns are permitted
Right Turn Lanes		At all locations where right turns are permitted and volumes warrant
Access Management Guidelines		
Publicly Dedicated Roadways	To be determined by Pinal County in reference to the Final Arizona Parkway Guidelines	¼ mile to ½ mile spacing
Traffic Signal Spacing		¼ mile and ½ mile locations Fully coordinated and progressed where warranted
Typical Traffic Control		Signalized, two-way stop
*Private Access/Driveways:		
Full Access Driveway from Signal		660 feet
Partial Access Driveway from Signal		330 feet See Note 5
Driveway Spacing		330 feet
Grade Separated Interchanges Spacing		One mile locations where warranted
Grade Separated Interchanges Type		May include SPUI or tight diamond if warranted and feasible
Frontage Roads		Possible
On-Street Parking	Prohibited	
Alternate Travel Modes		
Transit	Provide for pull-outs and queue jumper lanes where warranted	Provide for pull-outs and queue jumper lanes where warranted
Bicycle and Pedestrian Facilities	Provide roadway width for bicycles and sidewalks for pedestrians Grade-separated pedestrian/ bicycle crossings where warranted.	Provide roadway width for bicycles and sidewalks for pedestrians Grade-separated pedestrian/ bicycle crossings where warranted.

*Driveway examples; commercial, institutional, schools, private driveways that are not dedicated to the public.

Notes: 1. Additional right-of way may be required at intersections to provide additional turning lanes and pedestrian refuge space in the median.

2. Sidewalk and landscape widths will transition to local government standards.

3. U-turn movements will be permitted at the median openings of RSR Principal Arterials if conditions warrant.

4. All standards are subject to the approval of the Pinal County Engineer.

5. For parcels with short frontage, proposed driveways with less than 330 feet spacing will be considered case by case.

RSR Parkway

This facility type has been identified as the “Arizona Parkway.” Pinal County will review and adopt the RSR Parkways at a future date. These guidelines will include the interim RSR Parkway criteria.

RSR Principal Arterial

RSR Principal Arterials are major roadways that emphasize a high level of traffic mobility and a low level of access to land; generally roadways of regional importance, intended to serve moderate to high volumes of traffic traveling relatively long distances and at higher speeds.

Access limitations on RSR Principal Arterials are intended to increase capacity and safety, and improve travel time. Access management strategies that might be implemented to accomplish this include: continuous median barriers, prohibition of left-out movements from driveways and minor side streets, and driveway consolidation. Access to individual businesses and residences will be well managed, and where provided may be right-in/right-out. Four (4) to six (6) lanes, two to three in each direction, will be considered the minimum number of lanes for these roadways and typical right-of-way requirements will be 130 feet to 150 feet.

Desired Access to Adjacent Properties

Pinal County desires that for properties adjacent to RSRs access be provided on the minor side streets. Special consideration will be made for properties located at the corner of two RSRs of those immediately adjacent to residential properties. In cases where properties are land locked, special access considerations, or access has been entitled to a property, the property owner can request an access exception or the “grandfathering” of the access.

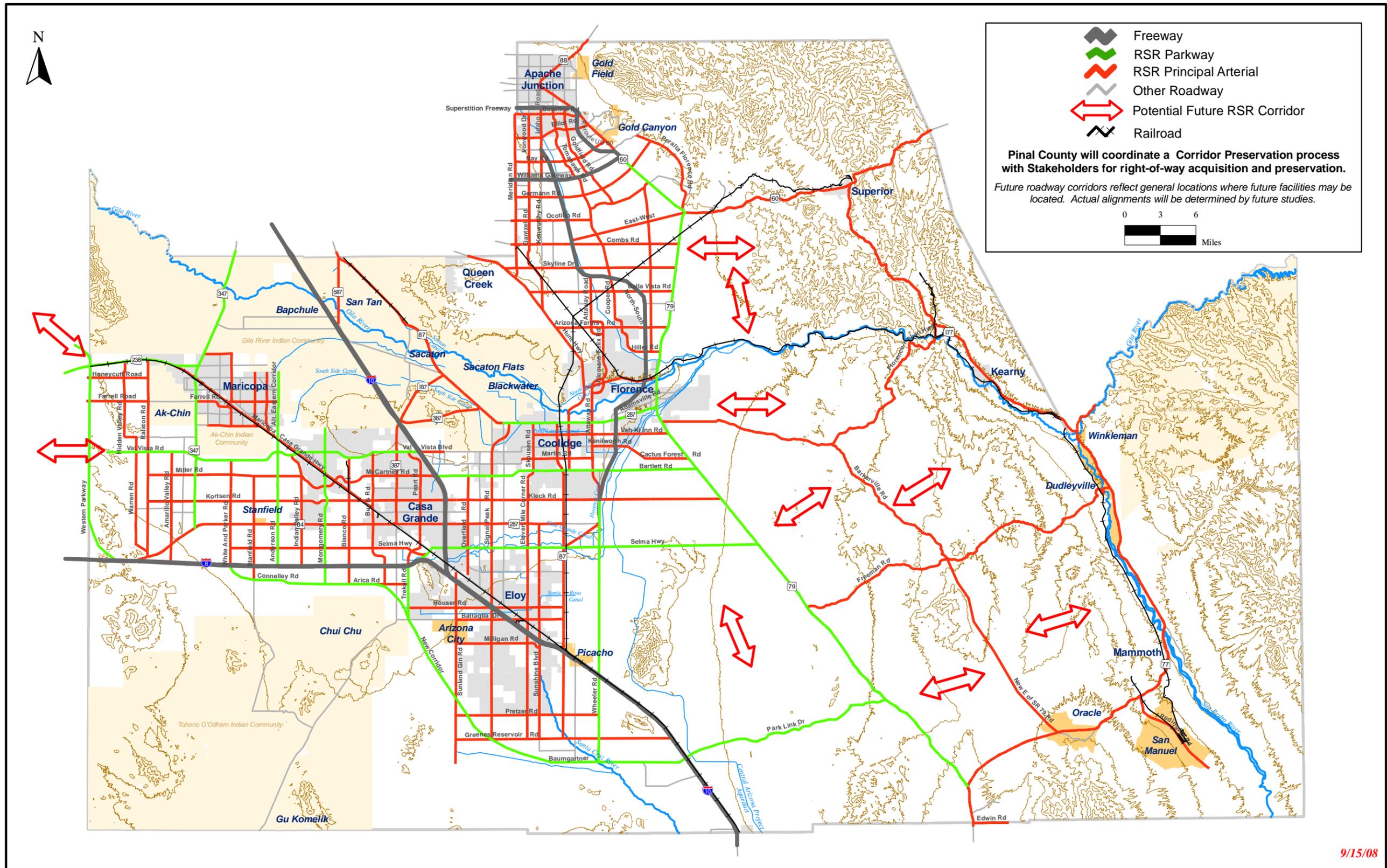
ACCESS MANAGEMENT MANUAL

The RSRSM Access Management Manual provides guidance to implement access control and access management for regionally significant routes to the County, local governments, and Native American Communities. The manual includes chapters on the need for access management, authority, classifications and standards, overview of access decision-making, access management plans for regionally significant routes, and an access management toolkit.

CORRIDOR PRESERVATION MAP

Based on the screening analysis and comments from the stakeholders, a final corridor preservation map was prepared as shown in Figure 9. The Corridor Preservation Map will be the official map adopted by Pinal County, local governments, and Native American Communities for preserving right-of-way, implementing design and construction, and implementing access management.

FIGURE 9. REGIONALLY SIGNIFICANT ROUTES FOR SAFETY AND MOBILITY CORRIDOR PRESERVATION MAP

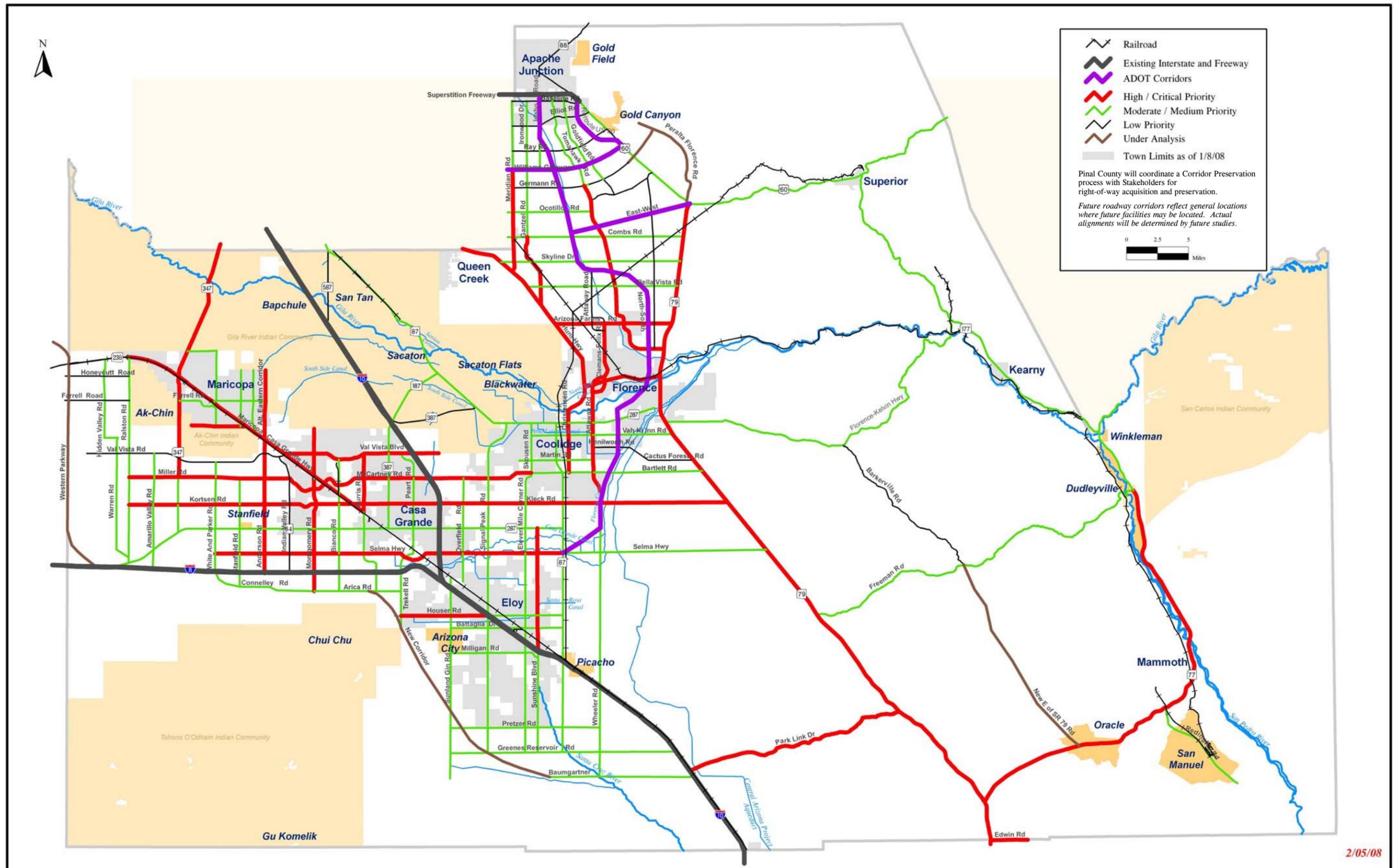


PRIORITY ANALYSIS

A priority analysis was conducted on preliminary RSR corridors. The RSRSM prioritization methodology used eight indicators to determine the priority of implementing Pinal County RSRs. Figure 10 illustrates the priority categories assigned to the candidate RSRs. A summary of the indicators is described below:

1. Potential Continuous Route/Connectivity to Activity Centers – Candidate corridors were evaluated based on their potential to serve as a primary route establishing connectivity between major activity centers. These routes were assigned a value of “1.”
2. Potential To Relieve Current Congestion– This is a measure of the current congestion levels on existing local routes. This measure was calculated as the volume-to-capacity ratio of the candidate RSR (2006 traffic volume divided by the capacity of the candidate RSR). The V/C ratio was correlated into a Level of Service. Candidate RSRs were assigned a value of “1” to “3” where:
 - 3 = LOS F
 - 2 = LOS E
 - 1 = LOS D
 - (0 = LOS A, B, or C)
3. Potential to Relieve Future Congestion– This measure was based on the 2025 Pinal County Travel Demand Model. Candidate RSRs were assigned a value of “1” to “5” where:
 - 5 = Candidate RSRs with projected ADTs greater than 200,000 vehicles per day.
 - 4 = RSRs with projected ADTs of 150,000 to 200,000 vehicles per day
 - 3 = RSRs with projected ADTs of 100,000 to 150,000 vehicles per day
 - 2 = RSRs with projected ADTs of 75,000 to 100,000 vehicles per day
 - 1 = RSRs with projected ADTs of 50,000 to 75,000 vehicles per day
4. Potential to Serve Current Development Or Impending Growth – This measure used a GIS analysis and visual inspection to determine routes that serve current development or impending growth in Pinal County, based on Planned Area Development information provided by the Central Arizona Association of Governments. Routes located within one-half mile of existing/future Planned Area Developments (PADs) were assigned a value of “1”.
5. Available Right-of-Way – This measure used a GIS analysis of data provided by Pinal County to determine the availability of existing right-of-way (ROW) for proposed routes in Pinal County. Candidate RSRs that intersect with existing right-of-way were assigned a value of “1” to “3” where:
 - 3 = Candidate RSRs where existing right-of-way exceeds 150 feet
 - 2 = Candidate RSRs where existing right-of-way is between 100 feet and 150 feet
 - 1 = Candidate RSRs where existing right-of-way is between 50 feet and 100 feet
 - (0 = Candidate RSRs where existing right-of-way is less than 50 feet)

FIGURE 10. REGIONALLY SIGNIFICANT ROUTES FOR SAFETY AND MOBILITY PRIORITY MAP



6. Potential to Improve Rail Crossing Safety – This measure used a GIS analysis and visual inspection to determine route segments that have the potential to improve at-grade rail crossing safety. Routes located within a 500-foot distance of at-grade rail crossing locations were selected and assigned a value of “1”.
7. Proximity to Future Interchanges – Routes that are proposed to be located within one-quarter mile of a future proposed interchange location were selected and assigned a value of “1”.
8. Included in TIP / CIP - This measure provides emphasis to routes that are already included in an adopted TIP or CIP of a local jurisdiction or municipality. A value of “1” was assigned to these routes.

Points were assigned to each indicator for segments of individual RSRs. The point values were then weighted as follows in Table 8:

TABLE 8. PRIORITY ANALYSIS: WEIGHTING OF MEASURES

Indicator	Weight
Potential Continuous Route/Connectivity to Activity Centers	2
Potential to Relieve Current Congestion	2
Potential to Relieve Future Congestion	4
Potential to Serve Current Development or Impending Growth	1
Available Right-Of-Way	1
Potential to Improve Rail Crossing Safety	1
Proximity to Future Interchanges	1
Included in TIP / CIP	1

Finally, the weighted values were summed and each candidate RSR segment was placed in one of the following priority categories as shown in Table 9:

TABLE 9. PRIORITY ANALYSIS: ASSIGNMENT OF RSR PRIORITIES

Priority Category	Number of Points
Low	0 – 10
Medium/Moderate	11- 20
High/Critical	21 - 30

ESTIMATE OF PROBABLE COST

An estimate of probable cost for implementation of RSR was developed based on a unit cost of \$5,800,000 per mile for a 6-lane roadway, multiplied by the length of the RSR routes.

Based upon the GIS analysis, there are approximately 1,657 miles of RSR routes in the RSR plan. Total cost to implement the RSRs is estimated at nearly \$10 billion, and summarized in Table 10. A derivation of unit cost is provided in Table 11.

TABLE 10. ESTIMATE OF PROBABLE COST BY RSR PRIORITY

Priority Level	Centerline Length (miles)	Estimate of probable cost (in millions) 6-lane RSR
Low Priority	172	\$1,010
Medium Priority	964	\$5,661
High Priority	417	\$2,449
Under Evaluation	104	\$ 610
Total	1,657	\$9,731

The unit estimate of probable cost assumes that new roadways include a minimum level of landscaping limited to gravel/decomposed granite and a minimum number of plants. Costs for installation of an irrigation system are not included.

The unit estimate of probable cost does not include costs for right-of-way acquisition. Inclusion of right-of-way unit costs would require detailed right-of-way investigation that is beyond the scope of this study.

TABLE 11. DERIVATION OF UNIT COST

Item Description	Unit	Quantity	Unit Cost	Total
NPDES (Original)	L.S.	1	\$500.00	\$500.00
NPDES (Modifications)	F.A.	500	\$1.00	\$500.00
Clearing and Grubbing	L.S.	1	\$500.00	\$500.00
Removal of Structures and Obstructions	L.S.	1	\$1,000.00	\$1,000.00
Borrow (Pit)	CY	3700	\$12.00	\$44,400.00
Grading Roadway For Pavement	S.Y.	11222	\$6.00	\$67,332.00
Aggregate Base Course	CY	2680	\$25.00	\$67,000.00
Bituminous Tack Coat	TON	3.3	\$200.00	\$660.00
Asphaltic Concrete	TON	3222	\$65.00	\$209,430.00
Storm Drain Pipe	L.S.	1	\$50,000.00	\$50,000.00
Drainage Structures	L.S.	1	\$10,000.00	\$10,000.00
Miscellaneous Utility Relocations	F.A.	1000	\$1.00	\$1,000.00
Traffic Signals (signalized intersection every half mile)	L.S.	1	\$113,600.00	\$113,600.00
Roadway Lighting	L.S.	1	\$58,400.00	\$58,400.00
Landscaping	L.S.	1	\$30,000.00	\$30,000.00
Mobilization	L.S.	1	\$57,680.15	\$57,680.15
Concrete Sidewalk	SF	16000	\$3.50	\$56,000.00
Concrete Curb and Gutter	L.F.	4000	\$14.00	\$56,000.00
SUBTOTAL				\$824,002.15
Design (10%)				\$82,400.22
Incidental Utility Work (5%)				\$41,200.11
Traffic Control During Construction (10%)				\$82,400.22
Construction Administration (10%)				\$82,400.22
Total Estimated Cost Per 1,000 Feet of Roadway				\$1,112,402.90
Total Cost Per Mile of Roadway				\$5,873,487.33

5. IMPLEMENTATION

The following are the recommended steps to implement the regionally significant routes plan.

- Adopt the Corridor Preservation Map by Pinal County Board of Supervisors
- Establish a Regional Implementation Committee to coordinate the implementation of the RSRs.
- Implement Early Alert Process by Pinal County by incorporating the process into the Development Review Procedures and Capital Improvement Planning Processes.
- Coordinate land use development and preserve right-of-way for RSRs.
- Adopt the *RSRSM Access Management Manual*.
- Conduct training and outreach sessions on the benefits and implementation of access management.
- Continuously monitor and update the RSRSM plan.

REGIONAL IMPLEMENTATION COMMITTEE

A standing implementation committee will be established composed of representatives from the ADOT, State Land Department, Bureau of Land Management, Pinal County, CAAG, local jurisdictions, and Native American Communities. The Committee will be charged to coordinate the following activities:

- Adoption by the County, jurisdiction, and Native American Communities of the Corridor Preservation Map and Priority Maps.
- Continuous update of the Corridor Preservation Map and Priority Maps.
- Implementation of the Early Alert Process to preserve right-of-way.
- Implementation of a region-wide permit process.
- Identification of RSRs for Design Concept Studies (DCRs).
- Monitoring the design and construction of Regionally Significant Routes.
- Identification of funding sources and assisting agencies to obtain funding for planning and implementing RSRs.

EARLY ALERT PROCESS

Overview of RSR Early Alert Process

The RSRSM plan includes a set of RSR guidelines for access management and roadway cross-sections. The guidelines represent the information on the RSR system, including mapping of the routes themselves and guidelines with respect to right-of-way, cross-section, signal spacing, median control, and median opening spacing. Local governments and Native American Communities should adopt and incorporate the guidelines into their planning activities including general and comprehensive plans and zoning ordinances.

A key component of the RSRS Plan is the *Early Alert Process*. The Early Alert Process consists of a set of Early Alert Resources and an Early Alert procedure.

Figure 11 illustrates how these steps will integrate with development and capital improvement planning processes of local governments and Native American Communities. Later chapters describe more specifically how the Early Alert Process can be incorporated into development plan reviews, rezoning, road improvement plans, and into the framework for making planning decisions.

Early Alert Resources

As local governments, Native American Communities, and ADOT become aware of proposed projects and developments, the early alert resources help those entities to determine whether the proposed project or improvement will potentially affect a Regionally Significant Route. The Early Alert Resources will include a GIS database of:

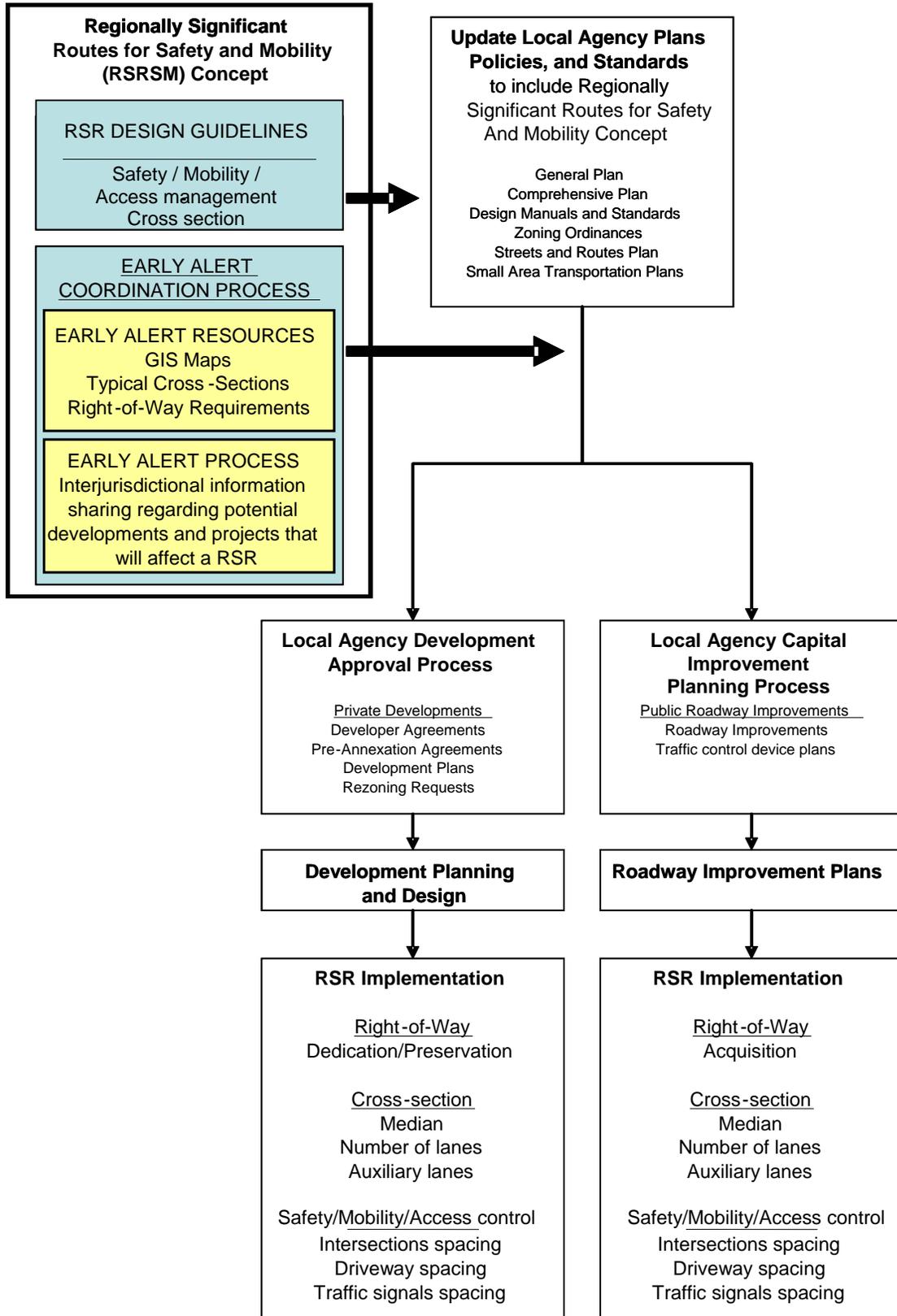
- Regionally Significant Routes and their right-of-way requirements
- Planned/in-progress developments
- Jurisdictional boundaries
- RSR Early Alert Process

The proposed RSR Early Alert Process is patterned after the existing ADOT Red-Letter notification process. ADOT uses their Red Letter Notification Process to help limit future escalation of right-of-way costs by requesting that local governments and Native American Communities notify ADOT of potential development plans within or near right-of-way corridors.

Local municipalities provide notice to the ADOT Right-of-Way Project Management Office of proposed zoning changes, building permit applications, or planned development projects that are within a half mile of state highway corridors. ADOT reviews the notices and makes a determination if the proposed development or project is located within an existing or future freeway corridor and if there would be a financial benefit to the State by acquiring the property under the early acquisition program. If the property is not located in a corridor, or is not anticipated to impact the state highway system, a form letter is sent back. If ADOT determines that the project or development may potentially affect the state highway system, the municipality or developer is notified and advance acquisition is explored further.

The proposed RSR Early Alert Process would operate in a similar manner. The objective of the RSR Early Alert Process would be to make all involved parties aware of development or roadway plans on, adjacent to, or nearby a RSR. The Early Alert Process would facilitate coordination between county and local jurisdiction staff, better enabling them to cooperatively preserve access on Regionally Significant Routes by incorporating access management considerations into their development review and capital improvement planning processes. With advance early notification, county and local agency staff can consider and apply RSR guidelines with respect to access, traffic control, and median openings.

FIGURE 11. INTEGRATION OF RSRSM INTO THE LOCAL PLANNING PROCESS



The Early Alert Process will provide a brief background of the proposed project and an initial understanding of the potential impacts to the RSR. The Early Alert should answer the following questions:

- Is the proposed improvement/development adjacent to an existing or future Regionally Significant Route right-of-way?
- Do the proposed facilities encroach onto existing or future RSR right-of-way?
- Will the proposed improvement potentially generate traffic volumes significant enough to warrant new traffic control devices (e.g. traffic signal) on a nearby RSR?

Local Jurisdiction/Pinal County Responsibilities

When Pinal County or local governments, Native American Communities, or ADOT are ready to implement they would utilize the Early Alert Resources (GIS maps, right-of-way information, etc.) to make a preliminary determination if the proposed project/development might impact an existing or future RSR. Examples of activities that might warrant a review with respect to RSRs are:

- A developer/property owner performs due diligence activities for property located adjacent to a RSR.
- A rezoning application is submitted for a parcel(s) located adjacent to a RSR
- Development plans for parcels located adjacent to a RSR are submitted for approval
- Arizona State Land Department coordinates planning activities for parcels located adjacent to a RSR with a local jurisdiction
- State Land parcels located adjacent to a RSR are considered for auction

If it were determined that the proposed project/improvement might potentially affect an existing or future RSR, the affected local government, Native American Community, or ADOT would send a “Early Alert” to other entities on the RSR route that includes a brief summary of the proposed project. Local governments, Native American Communities, or ADOT receiving the Early Alert Process would respond back to confirm they are aware of the project. This would serve to make all affected entities and developers aware that if a project is planned on a RSR, it has an associated access control plan.

Ideally, the Early Alert notifications are sent well in advance of when formal development plans and zoning or rezoning requests are submitted to the local jurisdiction for review. Early coordination and communication would better enable jurisdictions to cooperatively preserve access and right-of-way for the future RSR.

Additional Pinal County Responsibilities

Pinal County serves as a library and clearinghouse of RSR information, access management plans and GIS mapping for RSR routes. The county would maintain the RSR maps and design standards and would be responsible for sending any updated maps and/or design standards to each jurisdiction.

INCORPORATION OF EARLY ALERT PROCESS INTO DEVELOPMENT REVIEW PROCEDURES

This section describes the steps to incorporate the *Early Alert Process* into local development review processes. Table 12 summarizes how the *Early Alert Process* can be incorporated into the development review processes. The Pinal County processes are used as the example. An effective RSRSM plan can only be accomplished with the full cooperation, coordination, and communication among all of the jurisdictions in the Early Alert Process. For each step described below for Pinal County, there would be an equivalent step for each municipality to incorporate the process into its own procedures. The Pinal County Planning & Development Department has the lead role in coordinating the Early Alert Process supported by the Public Works Department.

Incorporation into Pinal County Comprehensive Plan

In order for RSRs to be considered in the planning process, the RSRs should be incorporated into the Comprehensive Plan. An Arizona county comprehensive plan according to the Growing Smarter legislation (ARS 11-801 to 11-833) is effective for one of the following: up to ten years, until the plan is readopted, or until a new plan is adopted. The Pinal County Comprehensive Plan was adopted in 2001, but spurred by the rapid development of the County, officials decided to undertake a Comprehensive Plan Update in 2007, for adoption in 2008. Additional elements that are typically done only for the larger counties in the state are to be a part of the Pinal County plan for the first time. The steps to incorporate RSRs into the Comprehensive plan might occur as a 2007 major amendment (see below), and would then be carried into the overall update, with any advisable modifications, in 2008. Two of the new Plan elements in 2008, the Growth Areas and Cost of Development elements, will include some of the material to incorporate RSRs into the Plan.

The Comprehensive Plan Major Amendment process is an opportunity for landowners to apply for changes to the Comprehensive Plan for their properties, and for the County to update the Comprehensive Plan to have it match new County Policies or Ordinances. The State of Arizona mandates that the major Comprehensive Plan Amendments occur once a year, and must be completed in the year they were started. Minor amendments to the plan can occur through the year.

TABLE 12. SUMMARY OF DEVELOPMENT REVIEW PROCESSES

Development Phase	Agency Activities	How RSR is Incorporated in this process	Agency Actions Items
Pre-Development Process			
Due-diligence by developer Information exchange on upcoming plans	Preliminary staff coordination	Provide general RSR information to the public (e.g., overview maps) Provide RSR information to developer: <ul style="list-style-type: none"> ▪ RSR policies ▪ RSR design standards and design criteria ▪ RSR maps and reference 	Send a <i>Early Alert Process</i> regarding plan of development submittal to neighboring jurisdictions and to Pinal County
Development Process – No Rezoning, Commercial or Industrial Property			
Initial Meeting	Agency staff provides the developer with site plan requirements.	Provide general RSR information to the public (e.g., overview maps) Provide RSR information to developer: <ul style="list-style-type: none"> ▪ RSR Policies ▪ RSR design standards and design criteria ▪ RSR maps and reference Determine right-of-way requirements (does ROW need to be dedicated?)	Designate appropriate review staff to be the lead on RSR requirements. Send an <i>Early Alert Process</i> regarding plan of development submittal to neighboring jurisdictions and to Pinal County. Are there requirements from neighboring communities that should be addressed?
Plan of development Submittal	Reviewed by staff – if it meets criteria, it is approved.	Include RSR requirements into plan of development checklist. If the development is within 3 miles of neighboring jurisdictions, send plan of development to neighboring jurisdictions.	Amend plan of development checklist to include RSR review. Send plan of development to neighboring jurisdictions if appropriate.
Improvement plan submittal	Reviewed by staff – if it meets approval then construction can commence.	RSR requirements part of review process.	Amend review process to include RSR review.

TABLE 12. SUMMARY OF DEVELOPMENT REVIEW PROCESSES (Continued)

Development Phase	Agency Activities	How RSR is Incorporated in this process	Agency Actions Items
Development Process – No Rezoning, Residential Subdivision			
Initial Meeting – Tentative Plat Pre-Application Review	Agency staff (Planning Department and the Public Works Department) meets with developer to review the initial design concept and provides the developer with site plan requirements and relevant plans.	<p>Provide general RSR information to the public (e.g., overview maps)</p> <p>Make information available to developer:</p> <ul style="list-style-type: none"> ▪ RSR Policies ▪ RSR design standards and design criteria ▪ RSR maps and reference <p>Determine right-of-way requirements (does ROW need to be dedicated?)</p>	<p>Designate appropriate review staff to be the lead on RSR requirements.</p> <p>Assure that the Subdivision Coordinating Committee members are aware of RSR that the project will impact.</p> <p>Send <i>Early Alert Process</i> regarding tentative plat submittal to neighboring jurisdictions and to Pinal County.</p> <p>Are there requirements from neighboring communities that should be addressed?</p>
Tentative Plat Submittal / Revisions	Application submittal and plat are reviewed by staff and if completeness criteria are met, plat is forwarded to the Subdivision Coordinating Committee. When the Planning Director has considered all required reviews, the plat is declared ready to be forwarded to the Planning & Zoning (P&Z) Commission and is scheduled for P&Z review. The P&Z can continue the matter, conditionally approve the tentative plat, or deny the tentative plat.	<p>Incorporate RSR requirements into the specifications for Tentative Plats (e.g. enhance Comprehensive and Area Plan data submittal).</p> <p>If the development is within 3 miles of neighboring jurisdictions, send tentative plat submittal to neighboring jurisdictions</p>	<p>Amend the specifications for tentative plats (Article 4 of Regulations) to include RSR review.</p> <p>Send tentative plat to neighboring jurisdictions if appropriate (the Pinal County Subdivision regulations state that any City, county, or incorporated town within a 3-mile radius, or if subdivision is within an established municipal planning area). ADOT is also a reviewer if the project is adjacent to a state highway.</p>
Final Plat	Application submittal and final plat are reviewed by the Planning Department, and the other county departments and agencies. After any revisions the Planning Director may deem the final plat ready for Board review and action. Board action is to approve and record the final plat with the County Recorder, or to disapprove.	RSR requirements part of review process. (e.g. enhance improvement plans section).	<p>Amend the specifications for final plats (Article 4 of Regulations) to include RSR review.</p> <p>Send tentative plat to neighboring jurisdictions if appropriate.</p>
Improvement plan submittal	Reviewed by staff – if it meets approval then construction can commence.	RSR requirements part of review process.	Amend improvement plan review to include RSR check.

TABLE 12. SUMMARY OF DEVELOPMENT REVIEW PROCESSES (Continued)

Development Phase	Agency Activities	How RSR is Incorporated in this process	Agency Actions Items
Development Process – Rezoning Required (PAD Example)			
Preliminary Staff Coordination		Provide map of RSR to public and development community. Make RSR information available to developer: <ul style="list-style-type: none"> ▪ RSR Policies ▪ RSR design standards and design criteria ▪ RSR maps and reference Right-of-way requirements (does ROW need to be dedicated)? 	Develop information packet of RSR requirements and distribute. Send <i>Early Alert Process</i> to surrounding jurisdictions and to Pinal County.
Zoning Application and documents and, if for a PAD, Preliminary Plan of development submitted	Preliminary Staff review – Revise and Resubmit as required	Incorporate RSR requirements into staff review process.	Designate appropriate review staff to be the lead on RSR requirements.
If for a PAD: Determine if the plan of development is in conformance with Comprehensive Plan, any area plan, and Zoning Ordinance	In conformance – plan to P&Z Commission Public Hearing Not in conformance – plan goes to P&Z Preliminary Hearing	Review plan of development for compliance to RSR guidelines.	Incorporate RSR guidelines into zoning plans, area plans. Designate appropriate review staff to be the lead on RSR requirements.
Planning & Zoning Commission Preliminary Hearing	Either: Approved: goes to P&Z Public Hearing, or Denied: developer can submit a consent petition, which if successful, project will go to the P&Z public hearing. If unsuccessful, rezoning case will be closed.	Comments on RSR compliance can be part of input to P&Z Commission	Provide input on RSR to P&Z Commission Preliminary Hearing.
Planning & Zoning Commission Public Hearing	Either: Recommend approval or denial to Board of Supervisors or Mayor and Council.	Comments on RSR compliance can be part of input to P&Z Commission	Provide input on RSR to P&Z Commission.
Board of Supervisors or Mayor and Council Public Hearing	Either: Conditional approval with time limits and rezoning requirements, or Denial (rezoning case closed)	Comments on RSR compliance can be part of input to Public Hearing	Provide input on RSR to Public Hearing and to elected officials.

Key steps to incorporate RSRs and the Early Alert Process into the annual Comprehensive Plan program involve:

- Planning and Development Services can recommend amendment of specific elements of the Comprehensive Plan. This would likely include Transportation Element of the Comprehensive Plan, the Transportation Map, and possibly the Special Policies that are listed for the Oracle Area, the San Tan area, and the Arizona City area.
- Draft changes to the Comprehensive Plan.
- Present changes to the public, obtain public comments, revise the document if required, and make available to the public. Public comments must be received two weeks prior to the Planning and Zoning Commission (the “Commission”) Study session.
- Commission reviews in study session.
- Public Hearing of the Commission to make recommendations to the Board of Supervisors.
- A final draft of the plan changes to be approved by the Planning and Zoning Commission, at least 15 days prior to the Commission hearing. 15 days notice of the meeting should be given. The recommendation of the plan should be by resolution and requires a majority vote of the members present.
- Public Hearing by the Board of Supervisors and decision to amend the Comprehensive Plan. The notice of the meeting must be given 15 days in advance.

For the municipalities, the equivalent step necessary for full effectiveness of RSRs, would be to incorporate RSRs into their General Plans, whether during an overall update or during a major amendment.

Incorporation into Pinal County Zoning Ordinance

In order for RSRs to be considered in the re-zoning process, the RSRs should be incorporated into the Pinal County Zoning Ordinance. The Pinal County Zoning Code contains application requirements for Planned Area Developments, as well as Design Review Overlay Zones. The Planned Area Development District permits alternatives to some zoning requirements in Pinal County’s Zoning Ordinance. Design Review Overlay Zones are areas subject to review of additional architectural and environmental impact standards as outlined in the associated design review plan. Guidelines may include design criteria related to driveways, pedestrian walks, off-street parking areas, including entrances and exits, and other aspects of the development.

The Pinal County Zoning Ordinance could be amended with respect to application requirements for Planned Area Developments and Design Review Overlay Zones on Regionally Significant Routes.

Other sections of the zoning ordinance should be modified to deal with amending the zoning classification of a property adjacent to an RSR, in the absence of a Planned Area Development or Design Review Overlay Zone. Examples would be a rezoning to a commercial or industrial use.

For the municipalities the equivalent step, necessary for full effectiveness of RSRs, would be to incorporate RSRs into their Zoning Ordinances. The seven larger municipalities each has a form of planned development overlay district (Technical Memorandum 1, Chapter 2, pg 18).

Incorporation into Other Review Procedures

Revisions to other review procedures can be summarized as follows:

- Provide information resources to Pinal County and affected jurisdictions regarding the Early Alert Process and how it would be used to trigger certain reviews of access using RSR guidelines.
- Require that traffic impact study requirements include a statement whether the project is on a Regionally Significant Route, and how that would affect access requirements.

Incorporation into Development Review Procedures

The Early Alert Process can be incorporated into development projects that require a rezoning approval as well as into development projects that do not require a rezoning. The general requirements and procedures for submission of tentative and final plats for subdivisions are contained in the Pinal County Subdivision Regulations. Table 12 describes how the RSR and Early Alert Process can be incorporated into development projects during:

- The pre-development process
- The development process where no rezoning is required for commercial and for residential projects
- The development process when rezoning is required
- Certain procedures (such as repeat review) that would apply in the same way to the Early Alert Process as to other aspects of the existing development review process are not listed in detail

In the case where a rezoning would be required, Table 12 presents the example of the addition of a PAD overlay. The incorporation of the Early Alert Process into a rezoning process that does not include an overlay district would be very similar except that there would be only “underlying” zoning, so there would be no conformance check.

While the County’s authority to regulate is more limited for Minor Land Divisions than for subdivisions, adjustments in Minor Land Division processes to support RSRSM should be considered.

Incorporation of RSR Process into Capital Improvement Plan Process

RSR design guidelines and standards should be considered during all phases of capital/roadway improvement projects. Activities that may warrant a review of RSR considerations include:

- The county or local jurisdiction begins planning and design activities for a RSR road widening/improvement project.
- Planning/design activities begin for a traffic signal installation or intersection improvements on a RSR or on a route that intersects a RSR within one-half mile of the RSR.
- Corridor studies and design concept reports commence for a RSR or a corridor within one-half mile of a RSR.

Incorporation of the RSR considerations into a road improvement plan review process could be accomplished for the following types of projects:

- **Request for traffic signal installation or other traffic control devices** – On RSR routes, plan review should include a check as to whether the traffic signal will maintain the traffic signal spacing specified in the access management plan to achieve safety and mobility on the route.
- **Intersection Improvements** – Intersection improvements should be developed using the criteria for signal spacing and median control developed for the routes.
- **Corridor Plans** – Corridor plans on RSR should be developed using the access management plans developed to achieve safety and mobility on the specific route. The corridor plan review process should verify that this has been done.
- **Design Concept Reports** – Design concept reports should identify the route as an RSR route. Design criteria should include access management criteria, including safety and mobility standards.
- **Design Plans and Traffic Control Plans during Construction** – Plan review check should note that the plans were developed in accordance with the access management plan for the road.

A general overview of how the Early Alert Process and RSR process can be incorporated into design plans is summarized in Table 13.

TABLE 13. SUMMARY OF DESIGN PLAN REVIEW PROCESS

Project Phase	Agency Action	How RSR is Incorporated in this process	Actions
Pre – Design and Pre- Design Planning studies (e.g. corridor studies, Design Concept Reports)	Staff coordination	Provide RSR information to design team: <ul style="list-style-type: none"> ▪ RSR Policies ▪ RSR design standards and design criteria ▪ Right-of-way requirements (is ROW needed?) ▪ RSR maps and reference 	Develop information packet of RSR requirements and distribute. Send <i>Early Alert Process</i> to surrounding jurisdictions and to Pinal County
Preliminary Plans, Specifications, and cost estimates	Staff review and approval	RSR requirements part of review process.	Amend construction plan review process to include RSR check.
Interim Plans, Specifications, and cost estimates	Staff review and approval	RSR requirements part of review process.	Amend construction plan review process to include RSR check.
Final Plans, Specifications, and cost estimates	Staff review and approval	RSR requirements part of review process.	Amend construction plan review process to include RSR check.

IMPLEMENTATION OF EARLY ALERT PROCESS

A key step in the implementation process for both Regionally Significant Routes and the Early Alert Process is to incorporate the RSR into planning documents and procedures, such as the Comprehensive Plan and Zoning Ordinance, in order that consideration of RSR can become an integral part of the planning and design process. A list of steps to establish an *Early Alert Process* is summarized in Table 14.

TABLE 14. EARLY ALERT IMPLEMENTATION STEPS

No.	Action Item	Lead Agency	Supporting Agency
Steps to Initially Incorporate RSR guidelines into review process			
1	Amend Pinal County Comprehensive Plan to include Regionally Significant Routes Early Alert Process Equivalent processes to follow for each jurisdiction.	Pinal County	Jurisdictions within Pinal County
2	Amend Pinal County Zoning Ordinance regarding application requirements for Planned Area Development and any other changes needed in the zoning code regarding the approval process. Equivalent processes to follow for each jurisdiction.	Pinal County	Jurisdictions within Pinal County/Adjacent Counties and Jurisdictions
3	Jurisdictions agree to participate in the Early Alert Process. This may be formalized through a Memorandum of Understanding/Resolution of support.	Pinal County and Jurisdictions within Pinal County	
4	Regional Implementation Committee meet to coordinate joint review requirements.	Pinal County and Jurisdictions within Pinal County	
5	Regional Implementation Committee develop format of letter and distribution list for Early Alert Process.	Pinal County and Jurisdictions within Pinal County	
6	Incorporate RSR into checklists for plans of development subdivision plats, and rezoning requests.	Pinal County and Jurisdictions within Pinal County	
7	Amend TIA requirements to include Early Alert Process.	Pinal County and Jurisdictions within Pinal County	
8	Establish web page and links for information on Early Alert Process.	Pinal County	Jurisdictions within Pinal County
9	Conduct a workshop for developers on the process.	Pinal County and Jurisdictions within Pinal County	

FUNDING AND LAND ACQUISITION

The competition for limited funds makes it imperative for the County to partner with federal, state, local, and Native American stakeholders to identify funding sources and define strategies to obtain and leverage funds. This section discusses potential funding sources and strategies to obtain funds to implement RSRs.

Funding Sources

Potential key federal, state, regional, and local funding sources for RSRs are presented in Table 15. The following discusses the Pinal County Excise Tax and Impact fees in more detail.

Pinal County Excise Tax

Pinal County voters authorized the 2007 Pinal County transportation Excise Tax replacing a previous tax expiring on December 31, 2006. The revenues raised from the tax shall be used for the following transportation purposes:

1. Highway and street purposes including roadway construction, reconstruction, maintenance, repair and roadside construction of county, city or town roads, streets, and bridges.
2. Payment of principal and interest on highway and street bonds.
3. Multimodal transportation systems including single and multi-use trails, sidewalks and curbs, and pedestrian pathways.
4. Regional transportation studies.
5. Cooperative transportation projects and studies between the federal government and its agencies, the State government and its agencies, and the incorporated cities and towns within the County.

The anticipated revenue from the excise tax is approximately \$952 million over 20 years. The tax currently generates approximately \$10 million per year and is distributed according to a population based formula:

1. Distribution to incorporated cities and towns is calculated by multiplying the total revenue by the factor of incorporated population/total population
2. Distribution to unincorporated areas is calculated by multiplying the total revenue by the factor of unincorporated population/total population
3. Distribution to individual city or town: distribution to incorporated cities and towns multiplied by the factor of individual city/total incorporated population
4. Distribution to Supervisory district is calculated by multiplying the distribution to unincorporated areas by the factor of supervisory district population/total rural population

TABLE 15. MATRIX OF KEY FUNDING SOURCES

Fund Name	Description	Eligible Uses	Application Process
Federal			
STP	Federal funds, administered by FHWA and ADOT	Variety of capital projects including highways, bridges, transit and enhancement projects	Programmed and distributed through CAAG and ADOT District
Bridge Replacement and Rehabilitation	Federal funds, administered by FHWA and ADOT	Used for bridge replacement for rehabilitation for eligible bridges located on public roads	Programmed through ADOT
Safe Routes to School Program	Federal funds, administered by FHWA and ADOT	sidewalk, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, traffic diversion improvements near schools	Programmed through ADOT
State			
HURF	State funds, derived from fuel tax and VLT, administered by ADOT	Nearly any capital project related to roadway improvements	Funds allocated to jurisdiction as proportion of population
Regional/Local			
Pinal County Transportation Excise Tax	½ cent sales tax dedicated to road improvements within Pinal County	1. Highway and street purposes for county, city or town roads, streets, and bridges. 2. Principal and interest on highway and street bonds. 3. Multi-modal transportation systems. 4. Regional transportation studies. 5. Cooperative transportation projects and studies between the federal government and its agencies, the State government and its agencies, and the incorporated cities and towns within the County.	Funds allocated to jurisdiction as proportion of population
Impact Fees	Fee imposed by local jurisdiction on development on per unit basis	Used to fund a variety of infrastructure needs including transportation	Locally administered
Development Stipulations	Requirements that developers dedicate appropriate ROW and build streets adjacent to project	Benefits are derived by offsetting cost of acquiring ROW and building infrastructure	Locally administered
Private			
Public Private Partnerships	Partnerships between public agencies and private enterprise to plan, finance, build and operate the County's transportation infrastructure.	Broad array of possible infrastructure needs.	Regionally and local partnerships.

Pinal County Development Impact Fees

Pinal County adopted an impact fee ordinance in October 2006 with an effective date of January 18, 2007. The County was divided into seven impact fee regions that will collect monies to develop, construct, or purchase projects that are needed as the result of new growth. The fees may not be used on already existing infrastructure. Impact fees were authorized for the purposes of parks, public safety, and streets.

The streets component may include arterial streets, support facilities, and support vehicles and equipment. There is a fee schedule, which will be reviewed and may be adjusted bi-annually, for each of the seven regions, and there is an appeals process for developers if they feel they have any disputes with the fees.

The impact fee ordinance states that the impact fee areas are those identified as sub-regions designated in the CIP for New Growth and Development Fee Study, dated May 24, 2006 as may be amended or updated (Pinal County Ordinance 101806-DF). The Streets CIP includes the geographic distribution of the impact fee areas and the fee schedule. The Streets CIP also includes the list of arterial streets (from the SATS) envisioned by the County to be constructed over the next 5 years. Finally, the Streets CIP includes the calculations of the demand for streets, street support facilities, and support vehicles and equipment, and the rationale for allocating the impact fees to development in each of the seven regions.

Pinal County had been collecting stipulated impact fees on zoning cases as a part of some development agreements since the state legislature approved such a measure in 2000 (Pinal County, October 18, 2006). Before that time, counties were unable to collect money from development to provide services that were needed because of new growth. Since the year 2000, stipulated impact fees have provided money to specific districts such as the Superstition Valley Transportation District, the Maricopa Sub-regional Transportation District and the Southern Pinal Transportation District.

Local Development Impact Fees

Table 16 presents a summary of general plan elements and impact fee status for cities and towns in Pinal County. Apache Junction, Casa Grande, Florence, Maricopa, and Queen Creek each have at least some of their impact fees allocated for transportation. The impact fees are assessed to new development at the time a building permit is issued and are expressed as a rate per residential unit or per 1,000 square feet of nonresidential structure. Among the various services of municipal government, retail land uses are relatively demanding of transportation services, and the allocation of the impact fees that they pay reflects this. The proportion of impact fees allocated for various uses varies widely from place to place.

**TABLE 16. GENERAL PLAN ELEMENTS AND IMPACT FEE STATUS
(CITIES AND TOWNS IN PINAL COUNTY)**

City/Town	Adopted ² by 2003	General Plan							Development Impact Fees ¹	
		Elements Required (according to city or town population)							Any Impact Fees	Impact Fees used for Roads
		Land Use	Circulation	Open Space	Growth Areas	Environmental Planning	Cost of Development	Water Resources		
Apache Junction ³	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Casa Grande	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coolidge	Yes	Yes	Yes						No	
Eloy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Florence	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kearny	Yes	Yes	Yes						No	
Mammoth	N/A	Yes	Yes						No	
Maricopa City	2006	Yes	Yes	Yes					Yes	Yes
Queen Creek	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Superior	Yes	Yes	Yes						No	
Winkelman ⁴	N/A	Yes	Yes						No	

¹ Source: 2006 National Impact Fee Survey, Duncan Associates, August, 2006.

² Adopted and ratified, in Casa Grande, Florence, Maricopa, and Queen Creek. Voter ratification not necessary in the smaller communities. Mammoth and Winkelman (under 2,500 population), were not subject to 2003 deadline and had adopted the elements indicated previously.

³ Incremental adoption of Growing Smarter Elements, Chapter 2 of the General Plan, as of 2007, has the Growing Smarter Elements.

⁴ Winkelman received a Growing Smarter planning grant for a General Plan for FY 2007.

Funding and Land Acquisition Strategies

The successful funding for the implementation of the RSRs depends on effective coordination of stakeholders in seeking and leveraging of available funds. The Regional Implementation Committee will be responsible for identifying funding sources, coordinating the acquisition of funding, and implementing funding strategies. The following are recommended funding strategies.

Strategy 1. Rank order the high priority RSRs corridors into tiers. Pool funds and target for the planning, design, right-of-way acquisition, and construction of to tier priority corridors. Possible funds that could be pooled include Pinal County transportation ½ cent funds, impact fees, state, and federal funds.

Strategy 2. Partner with stakeholders to leverage transportation funds to advance planning, design, and construction. An example of a successful partnership with is the partnering between ADOT and MCDOT to plan, design, and construct SR303L. Another example is the partnering of Yavapai County with ADOT to convert existing SR 89A to a limited access highway.

- Strategy 3.** Coordinate with developers to obtain right-of-way and infrastructure contributions.
- Strategy 4.** Identify corridor improvement overlay districts and implement improvement tax/fees.
- Strategy 5.** Designate controlled-access corridors, preserve right-of-way, and purchase access rights where possible.
- Strategy 6.** Continuously update funding sources and refine funding strategies.