

The following section provides a summary of transit needs within the Eastern Framework study area. Data was gathered from available transportation plans and studies, as well as comments from stakeholder and community outreach efforts.

Arizona Rural Transit Needs Study

The State of Arizona conducted the *Rural Transit Needs Study* to prepare for the future of public transportation in the rural communities of the state. This strategic plan was developed in cooperation with the Arizona's Department of Transportation, regional planning organizations and Councils of Governments (COGs). The following are the primary tasks of the Study, which focused on a 10-year planning horizon:

- Collection and analysis of relevant data, including population, employment, income levels, automobile ownership, and travel patterns;
- Identification of national trends in addressing rural transit needs;
- Obtaining key stakeholder input on current gaps in transit service;
- Developing projections for future transit demand;
- Identification and quantification of potential solutions; and
- Development of a plan for future new services and service improvements.²

First, the report provided a thorough trend analysis of various population characteristics that are likely to contribute to the future demand for rural public transportation. Based on population data provided by the Arizona Department of Economic Security (DES) (2005) and the 2000 U.S. Census, the study team forecasted the demographic trends for rural Arizona up to the year 2015. The key findings of the future trend analysis affect areas within the Eastern Arizona study area. The findings include:

- It is anticipated that the rural communities of Lake Havasu City-Kingman and Sierra Vista-Douglas will be designated new urbanized areas following the next census in 2010. As a result, the percentage those living in the rural areas will decline from 24.8 percent to 20.2 percent between 2005 and 2015.
- Cochise County is projected to grow at a rapid rate of 36.6 percent with a population of 180,000 by 2015.
- The percentage of elderly persons in rural Arizona is predicted to increase from 23.2 percent in 2005 to 27.7 percent in 2015.
- The report identified Cochise County as being one of the top counties with the highest projected level of rural transit demand in 2016 with a figure of almost one million (0.9 million).
- If Arizona's population continues to grow at a rapid rate, it is likely that by 2016 the current rural transit services will only meet 13 percent of the rural transit needs if no additional transit services are implemented.

After an extensive outreach process, stakeholder feedback and the findings from four previous interim reports – which detailed the methodology, findings and recommendations of the Study – identified the top locations for new or expanded transit program services under FTA Section 5311: Rural Public Transportation Program. Eight cities/town and two tribal communities within the study area were identified as top candidates for new services:

² Cambridge Systematics, Arizona Rural Transit Needs Study, 2008

- Santa Cruz County (Nogales);
- Gila County (Payson);
- Graham County (Safford/Thatcher);
- Navajo County (Winslow, Holbrook);
- Apache County (Eagar/Springerville);
- Cochise County (Willcox, Benson);
- Fort Apache Reservation (in Apache, Gila, and Navajo Counties); and
- the San Carlos Reservation (in Gila, Graham, and Pinal Counties).

The following are programs that were identified as eligible recipients of FTA Section 5311 funds for service expansion:

- Catholic Community Services in Douglas (Cochise County);
- City of Sierra Vista Public Transit System (Cochise County); and
- City of Show Low/Pinetop (Navajo County).

The Study also identified the top potential intercity connectors for FTA Section 5311 funding for new services within the Eastern Arizona study area:

- Navajo County (Fort Apache Reservation-Show Low-Snowflake/Taylor-Holbrook);
- Gila-Maricopa Counties (Payson-East Mesa); and
- Graham-Greenlee Counties (Safford/Thatcher-Clifton/Morenci).

Responses to Executive Order 2007-02; Arizona Public Transportation Program

The Arizona Department of Transportation released the *Arizona Public Transportation Program* in response to the Governor's Executive Order 2007-02: Expanding Arizona's Transportation Options. The purpose of the document is to identify the new strategies and investments necessary to improve the mobility through mass transit, commuter rail, and light rail programs.

To meet the intent of the Executive Order, the response was divided into four primary areas, which were then further sub-divided into broad program categories:

- Mass transit –bus and bus related programs
 - Connecting Communities
 - Enhancing Rural Transportation Programs
 - Serving Elderly/Disabled and Tribal populations in Rural Areas
 - Enhancing Urban Regional Mobility
 - Increasing Capacity in Dense Urban Environments
 - Sharing rides and Vanpooling
 - Building State Infrastructure
 - Planning, Marketing, and Other Programs
- Commuter rail –high-speed rail programs
 - Capacity relief in Urban Corridors
 - High-Speed Urban-Urban Connections
- Light rail – Valley Metro's Light Rail program
 - Light Rail/Fixed Guideway People Mover
- Acceleration – programs that are currently included in local, regional, or State public transportation plans

Projects within the Eastern Arizona Framework Study are likely to fall within the Mass Transit Program. The Connecting Communities program category has identified a need for more than 20 connectors statewide that would provide links between rural and urban communities statewide. The preliminary costs for this program is approximately \$4.8 million. The Enhancing Rural Transportation Programs would increase the level of service for existing rural transit services, as well as implement new rural transit services through FTA Section 5311 funding. The program identified Benson and the San Carlos Indian Reservation as potential recipients for funding for new transit services. Consistent with the Rural Transit Needs Study, the program noted the great need for increased transportation options for elderly and disabled populations within the rural areas of the state through the Serving Elderly and Disabled Populations program. FTA Section 5310 would be the primary sponsor for the program, which has preliminary costs of an estimated \$5 million. Additionally, projects within the study area could fall under the broader program categories of Sharing Rides and Vanpooling, Building State Infrastructure, and Planning, Marketing and Other Programs.

Recent SATS and Local or Regional Transit Studies

Several studies conducted within the focus area have addressed the transit needs within the community – from recommending improvements to the current transit services to transit feasibility studies.

Within the Mogollon Rim focus area, two planning documents identified the need for future transit services. The City of St. Johns published their most recent General Plan in 2003. The City recognized that it is essential to the future of their community to develop a long-range plan for coordinated public transportation. The Town of Pinetop-Lakeside – together with Navajo County – produced a regional transportation plan which recommended the entities within the study area increased funding for the transit program. Furthermore, the Navajo County Comprehensive Plan focused on improving transit services for the unincorporated areas of the county. Examples of strategies include supporting tribal efforts to establish and maintain intercity transit and coordinating with public and private agencies to establish transportation services for transit dependent persons.

Graham County and the City of Safford addressed the transit needs of communities within the Copper Country focus area. The Safford General Plan expressed interest in studying the feasibility of establishing a transit service to link the major trip generators within the area (i.e., Eastern Arizona College, Mt. Graham Community Hospital). Additionally, this document addressed the need to improve the condition of the railroad crossings throughout the city. To further address Graham County's lack of public transit services, the Graham County Transit Feasibility Review Final Report was released. The study concluded it would be most efficient to, "build on the information provided in the SEAGO Human Services Transportation Coordination Plan issued March 2007 to support coordination of current transit services."³ The study also recommended monitoring any potential dedicated funding sources for the establishment of a new rural transit service for the community (i.e., LTAF II, FTA Section 5311).

³ Ostrander Consulting, Inc., RAE Consultants, Inc., Graham County Transit Feasibility Review Final Report, May 2007

Two local plans in the Cochise-Santa Cruz Focus Area referenced transit services within their community. The Bisbee General Plan stated the city should “continue to encourage affordable transit as provided in the Three Year Transit Plan for the Bisbee Bus⁴.” The City of Nogales prepared a Transit Feasibility Review and Implementation Plan to determine the practicality of implementing a public transit service within the city. The study identified the community’s unmet transportation needs and included a proposed implementation plan.

ADOT Investment Strategy

Under the *Strategic Rail and Transit and Programs* category, projects are subcategorized into:

- Connection Communities Bus Transit Program
- Enhancing Public Transportation Programs
- Transit Serving Elderly, Persons with Disabilities and Tribal Populations in Rural Areas
- Statewide Vanpool and Rideshare Programs
- Transit/Rail Planning, Marketing and Other Related Programs

Mogollon Rim Focus Area

Of the three primary counties within this focus area, Navajo County was allotted the largest amount of funds for its rail and transit projects with a budget of approximately \$41 million. Apache County and Gila County were awarded approximately \$30 and \$24 million, respectively. In all counties, a set amount of \$10 million was dedicated to *Connecting Communities Bus Transit Program*. The majority of funding for Navajo and Apache counties has been apportioned through *Enhancing Public Transportation Programs* with approximately \$18 and \$11 million, respectively. *Transit/Rail Planning, Marketing and Other Related Programs* received the least amount of dedicated funding across all counties; Gila County has allocated only \$270,937 to the program.

As described in Working Paper #2, the only public transit system operating within the focus area is Four Seasons Connection. The service, which provides trips between the city of Show Low and the town of Pinetop-Lakeside, is managed by the City of Show Low. In 2005, the City cited the total operating and administrative budget for the service was \$392,280⁵. It is assumed that a significant portion of the approximately \$18 million would be utilized to enhance this public transit service and expand service into potential new connectors between the northern towns of Taylor, Snowflake, the city of Holbrook and the City of St. Johns to the east.

Other potential, transit enhancements identified within the remainder of the focus area include the establishment of additional public service providers in the following communities:

- City of St. Johns
- Town of Eagar

⁴ The Planning Center, City of Bisbee General Plan Update, January 2005

⁵ RAE Consultants, Inc., Northern Arizona Regional Transportation Coordination Plan, April 2007

- Town of Snowflake
- Town of Springerville
- Town of Taylor

Copper Country Focus Area

The portion of Gila County within the focus area does not include any populated areas that would meet the demands for public transportation services. Therefore, the majority of the approximately \$24.5 million will be allocated for services within areas in the Mogollon Rim Focus Area or the Central Arizona study area. The remaining counties – Graham and Greenlee Counties – which are entirely incorporated into the Copper Country Focus Area were allocated more than \$30 million for the counties' public transit projects and programs.

Through the *Connecting Communities Bus Transit Program* over \$20 million will be dedicated to funding new transit services within the only focus area without any form of public transportation available. Graham and Greenlee Counties each have been allocated \$10 million. The report identifies potential for service providers in the community of Bylas and the city of Safford within Graham County.

The Investment Strategy identified a potential new connection between Miami/Globe in Gila County and the populated areas of Graham County via US 70. The proposed connection will travel through the towns of Pima and Thatcher, as well as the city of Safford where it would traverse through US 190 into Cochise County. An additional \$6.6 million, over 30 years, would go to the *Enhancing Public Transportation Programs* for Graham and Greenlee counties.

A bulk of the remaining funds (\$2.1 million) is dedicated to *Statewide Vanpool and Rideshare Programs* in Graham County. Approximately \$800,000 will be distributed between the *Statewide Vanpool and Rideshare Programs* in Greenlee County and the *Transit/Rail Planning, Marketing and Other Related Programs* for the two counties.

Cochise-Santa Cruz Focus Area

With the projected growth in southern Arizona, over \$50 million has been apportioned to public transit projects and programs in Cochise County. An additional \$22 million was allocated for similar projects in Santa Cruz County. The following communities, within the focus area, were identified as potential providers of new transit services:

- City of Tombstone
- City Willcox
- Town of Elfrida
- City of Nogales

Three potential new connectors were identified. It was proposed that a transit connection travel through US 191 from the Graham-Cochise County Line to the international boarder. A connector was proposed to link the cities of Benson and Bisbee via SR 80. The last proposed potential connector would link the city of Nogales in Santa Cruz County to Pima County via I-19. These proposed projects would be categorized under *Connecting Communities Bus Transit Program* which was dedicated \$25 million for both counties.

Transit Propensity Analysis

Transit propensity is a measure of potential demand for transit service based on key socioeconomic variables. The recently completed Arizona Rural Transit Needs Study used the Arkansas Public Transportation Needs Assessment method to represent the demand for transit service. The ADOT project team used a similar approach, employing methodology from the national Transit Cooperative Research Program (TCRP).

One purpose of transit propensity analysis is to identify needs for local transit service. At the framework planning level, it can be used as a guide to establish corridors linking areas with high transit needs.

The ADOT project team prepared year 2030 and 2050 transit propensity analyses for each State Transportation Analysis Zone using the population projections developed previously. The TCRP transit propensity analysis method uses nine variables:

- 1) Population density;
- 2) Percent of population with mobility limitations;
- 3) Percent of population with employment disability;
- 4) Percent of population that is not "White, Non-Hispanic";
- 5) Percent of population that is female;
- 6) Percent of households with income under \$20,000;
- 7) Percent of occupied housing units without an auto available;
- 8) Percent of workforce age 30 or younger; and
- 9) Percent of workforce age 65 or older.

These variables represent attributes that national studies identify as having a relationship to transit patronage. Research that supports the methodology includes:

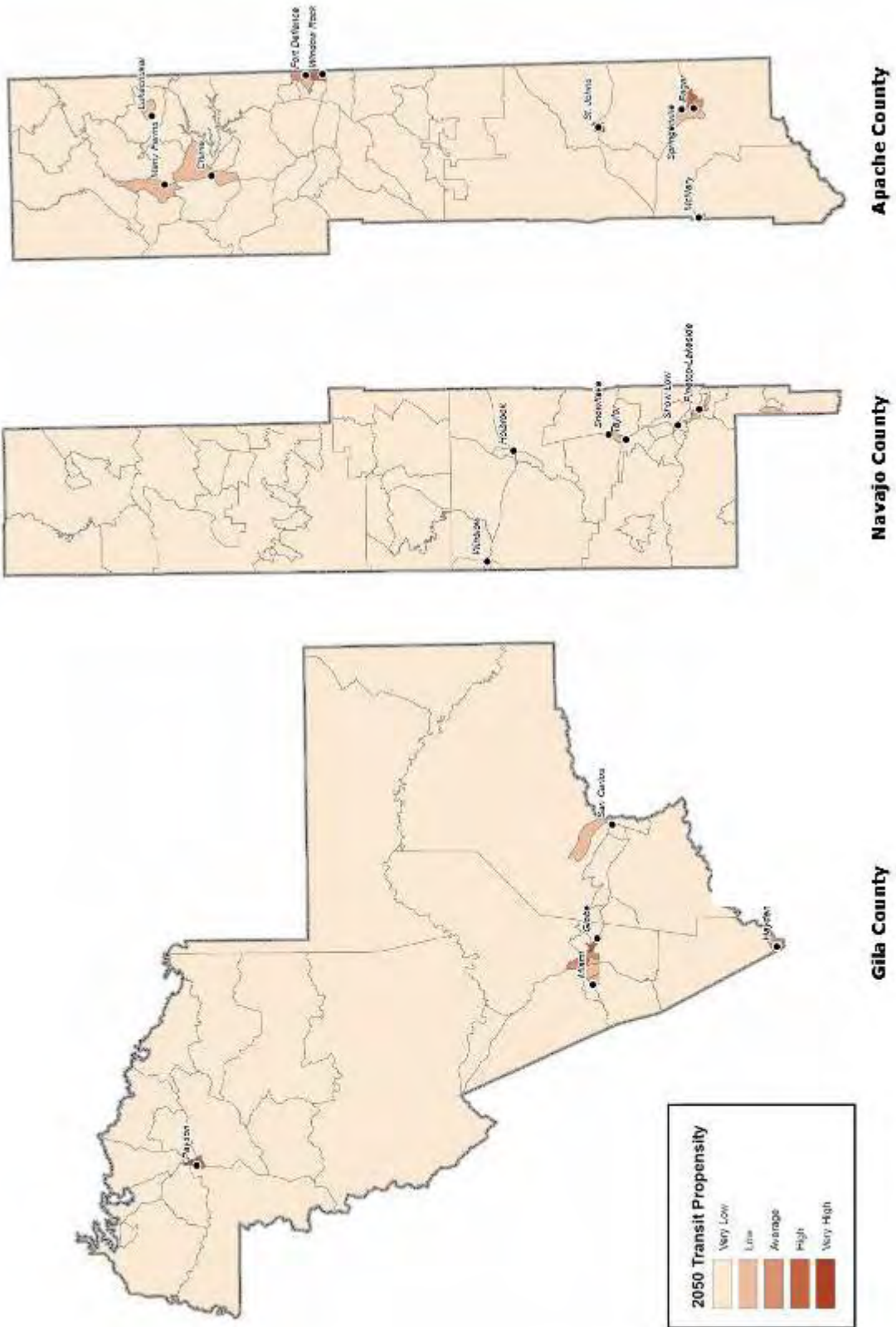
- TCRP Report 28: Transit Markets of the Future
- TCRP Report 3: Workbook for Estimating Demand for Rural Passenger Transportation
- TCRP Report 27: Building Transit Ridership

The project team obtained data for these nine variables by block group for each county in the central, eastern, northern and western regions of the state. These variables were expanded based on the 2030 and 2050 population projections. The project team assigned a weight to each variable, based primarily on findings in TCRP Report 28.

Propensity is calculated as an index that shows the relative propensity of one block group to the county as a whole. Ridership estimates can be considered as the "demand" for transit services. Variables used to estimate ridership are the same as the variables used for propensity.

Figure 3-6 to Figure 3-7 illustrate year 2050 transit propensity estimates by county in the region.

**Figure 3-6 Transit Propensity Maps
(Gila County, Navajo County, Apache County)**



**Figure 3-7 Transit Propensity Maps
(Cochise County, Santa Cruz County, Graham County, Greenlee County)**



Input from Stakeholders and Community Workshops

The following section summarizes the feedback gathered from the various workshops held throughout the Eastern Arizona study area from February 2008 through April 2009.

Mogollon Rim Focus Area

During the Stakeholder workshop, there seemed to be differing opinions on whether or not transit would be beneficial for the Mogollon Rim; however, most other workshop participants agreed it is necessary to improve transit connections within the study area. Community members expressed the need for transit connectors between Springerville and the cities of St. Johns and Show Low. Additionally, the community noted they would like to see the following transit needs addressed:

- Payson transit expanded beyond the casino,
- More medical transportation options for the elderly, and
- Seasonal transit system to the ski resort for people who want to go skiing.

Copper Country Focus Area

Community and Focus Group participants believe it is essential to provide commuter transit, specifically between Safford and Phoenix for purposes of employment and medical care. Community members added it would be beneficial to provide other commuter transit services to Morenci, Duncan, and throughout the focus area.

Participants of the Focus Area's Regional Technical Advisory Team thoroughly discussed the future of public transportation based on FTA funding sources. A representative from Southeastern Arizona Governments Organization (SEAGO) clarified that Douglas and Sierra Vista both operate public transit services with funding assistance from FTA 5311 Rural Public Transportation Program. The City of Nogales currently has FTA 5310 Elderly and Disabled Specialized Transit Program funds and can transition ambulatory passengers to FTA 5311 sponsored transit services. Currently, the towns, cities, etc. within the focus area are not in the position to apply for 5311 transit funding for rural transportation. The area does not have 5310 funding for elderly and persons with disabilities. As a step in the direction of public transit, SEAGO hopes to soon appoint a Mobility Manager. It was then suggested that when the opportunity approaches to implement transit services, Safford, Thatcher and Pima should consider contracting out the services.

The project team also looked at the relationship between land use and transit within their communities. For example, consider placing community centers and schools within a close proximity of each other to avoid having to drive all over town. A participant noted there are existing private transportation options for the minors from Safford; however, operations for the services will likely cutback or cease depending on the success of the copper industry.

Santa Cruz – Cochise Focus Area

Rail safety in Nogales was a common concern between the participants of the Community and Stakeholder workshops. Specific concerns included:

- Liability for hazmat / emergency vehicles,
- Disruption for business, and
- Backlog of traffic due to rail crossing.

Participants across the board requested commuter transportation options to Tucson from Nogales and Sierra Vista. There were also various requests for transportation options for medical care due to the increase in elderly population within the Focus Area.

Unlike the other Focus Areas, many of those who participated in the workshops within the Cochise-Santa Cruz Focus Area, mentioned the need for passenger rail. The community would like to see passenger rail to Hermosillo, while Stakeholders believe light rail would be beneficial for Nogales. Members of the Transportation Focus Group, however, do not believe there is demand for passenger rail in Cochise County.

Summary

Most participants agreed there is an obvious need to take action and plan for future transit services within the focus areas. The top areas selected for new transit services – to be sponsored through FTA Section 5311 funds – by relevant planning documents and participant feedback are Safford, Thatcher and Nogales. The Town of Payson and the City of Sierra Vista will likely apply for FTA 5311 funding for service expansion. The northern region of the study area (i.e., Snowflake, Taylor) is in need of additional services for seniors and persons with disabilities. The participants at the Cochise-Santa Cruz workshops requested for passenger rail services from Nogales into Tucson and Hermosillo.

Table 3.4 Transit and Passenger Rail Needs

Location	Summary of Need or Deficiency	When Needed	Source
<i>Benson, Willcox, Pima and Nogales (fixed route demand response service)</i>	New Local and Tribal Section 5311 program services (new local services)	N/A	<i>Rural Transit Needs Study</i>
<i>Catholic Community Services in Douglas, Pima County Rural Transit and the City of Sierra Vista Public Transit System</i>	Expanded Section 5311 program services	N/A	<i>Rural Transit Needs Study</i>
<i>Catholic Community Services in Douglas, Sierra Vista Public Transit System</i>	Expanded Local and Tribal Section 5311 program services (expanded local services): increased service frequency of Catholic Community Services in Douglas, Sierra Vista Public Transit System by implement restructuring, longer span of service in Sierra Vista	N/A	<i>Rural Transit Needs Study</i>
<i>City of Bisbee</i>	Continue to encourage affordable transit as provided in the Three Year Transit Plan for the Bisbee Bus	N/A	<i>City of Bisbee General Plan Update</i>
<i>City of Nogales</i>	Need to look at some sort of reliable public transportation	N/A	<i>Cochise – Santa Cruz Stakeholders Meeting – Bisbee, 29 February 2008 OR Cochise – Santa Cruz Stakeholders Meeting</i>
	Large commuter travel from Tucson – likely use for light rail. – Bus service in Nogales is privately owned. – Light rail would be beneficial.		
	Nogales community is getting older – need affordable public transportation to take care of their needs (doctor appointments, etc.)		
<i>City of Nogales</i>	Establish fixed route transit service that operate on an established schedule, route, and fare structure		<i>Nogales Transit Feasibility Review and Implementation Plan</i>
<i>City of Safford</i>	Study feasibility of establishing regular transit service linking downtown Safford Eastern Arizona College, Mt. Graham Community Hospital and Mountain View Terrace	N/A	<i>Safford General Plan</i>
	Systematically improve the condition of railroad crossings throughout the city		

Location	Summary of Need or Deficiency	When Needed	Source
City of Show Low/Pinetop	Expanded Section 5311 program services	N/A	Rural Transit Needs Study
	Expanded Local and Tribal Section 5311 program services (expanded local services); Expand geographic coverage for integration with new service in Fort Apache Reservation		
City of St. Johns	Begin long-range planning for future transit system through coordination of school, charity, and City vehicles	N/A	St. John's General Plan 2003
Graham County	Build on the information provided in the SEAGO Human Services Transportation Coordination Plan issued March 2007 to support coordination of current transit services	N/A	Graham County Transit Feasibility Review Final Report
	Monitor statewide legislative efforts to secure a dedicated source of funding for rural transit through the LTAF II or a similar program		
Navajo County	Improve transit service opportunities in unincorporated portions of Navajo County	N/A	Navajo County Comprehensive Plan
Nogales, Wilcox and Benson.	New Section 5311 program services	N/A	Rural Transit Needs Study
Payson and Fort-Apache Reservation	New Local and Tribal Section 5311 program services (local, fixed-route service)	N/A	Rural Transit Needs Study
Payson and the Fort Apache Reservation	New Section 5311 program services	N/A	Rural Transit Needs Study
Pinetop-Lakeside & Navajo County	Continue and increase funding for the Transit Program	N/A	Pinetop-Lakeside & Navajo County Regional Plan
Rio Rico NE, Rio Rico NW, and Rio Rico SW	New Section 5310 program services	N/A	Rural Transit Needs Study
Safford District	Bus Canopies	2012	ADOT Critical Needs Report
	New Transit Buses	2011	ADOT Critical Needs Report
Safford, Thatcher and San Carlos Reservation	New Section 5311 program services	N/A	Rural Transit Needs Study
	New Local and Tribal Section 5311 program services (new local services)		
Santa Cruz-Cochise Focus Area	Rail, specifically related to rail located in very congested areas and rail interacting with traffic (i.e., Nogales) both City and County issue also	N/A	Cochise – Santa Cruz Stakeholders Meeting – Bisbee, 29 February 2008 OR Cochise – Santa Cruz Stakeholders Meeting

Location	Summary of Need or Deficiency	When Needed	Source
	<ul style="list-style-type: none"> - Hazmat/emergency vehicles – liability - Disruption for business - Backlog of traffic due to rail passing 		
<i>Town of Snowflake</i>	New Section 5310 program services	N/A	<i>Rural Transit Needs Study</i>
<i>Town of Taylor</i>	New Section 5310 program services	N/A	<i>Rural Transit Needs Study</i>
<i>Town of Thatcher</i>	New Section 5310 program services	N/A	<i>Rural Transit Needs Study</i>

Sources: Rural Transit Needs Study, 2008; City of Bisbee General Plan Update, 2004; Cochise-Santa Cruz Stakeholders Meeting, 2008; Nogales Transit Feasibility Review and Implementation Plan, 2006; Safford General Plan, 2004; Graham County Transit Feasibility Review, 2007; St. Johns General Plan, 2003; Navajo County Comprehensive Plan, 2004; Pinetop-Lakeside & Navajo County Regional Plan; ADOT Critical Needs Report, 2008.