



Arizona Statewide Bicycle and Pedestrian Program

Summary of Phase III Activities

Task Assignment TPD 03-06

Prepared by:



Kimley-Horn
and Associates, Inc.

January 30, 2007
091374015

Copyright © 2007, Kimley-Horn and Associates, Inc.



TABLE OF CONTENTS
DRAFT – PHASE III ACTIVITIES

1. INTRODUCTION..... 1

2. EDUCATIONAL PROGRAM (TASK 2)..... 1

3. WEBSITE ENHANCEMENTS (TASK 3)..... 5

4. HIGHWAY SAFETY PROGRAM GRANT (TASK 4)..... 5

5. STATEWIDE BICYCLE AND PEDESTRIAN STEERING COMMITTEE (TASK 5)..... 6

6. STATEWIDE BICYCLE AND PEDESTRIAN POLICY (TASK 6)..... 6

7. TRANSPORTATION IMPROVEMENT PLAN MAP (TASK 7) 7

APPENDIX 8

A.1 Funding Proposal to Governor’s Office of Highway Safety for Law Enforcement Training 1

A.2 Funding Proposal Governor’s Office of Highway Safety Application for Public Education Campaign..... 2

A.3 Funding Proposal to Governor’s Office of Highway Safety for Bicycle and Pedestrian Facility Training Course 3

A.4 Proposed ADOT Bicycle Policy Revisions 4

 Proposed modifications to ADOT Bicycle Policy are shown in bold. 4

A.5 Bicycle and Pedestrian related projects in the Statewide Transportation Improvement Program..... 8



1. INTRODUCTION

This document provides a summary of activities completed in support of Phase III of the Arizona Statewide Bicycle and Pedestrian Program. The purpose of Phase III was to implement recommendations from the Arizona Statewide Bicycle and Pedestrian Plan Phase I and Phase II. Specifically, Phase III included the following tasks:

- § Task 1 – Project Management
- § Task 2 – Educational Program
- § Task 3 – Website Enhancements
- § Task 4 – Highway Safety Program Grant
- § Task 5 – Bicycle and Pedestrian Steering Committee
- § Task 6 – Statewide Bicycle and Pedestrian Policy
- § Task 7 – Transportation Improvement Plan (TIP) Map

Activities completed on Tasks 2 through 7 are described below.

2. EDUCATIONAL PROGRAM (TASK 2)

Kimley-Horn continued development and implementation of the bicycle and pedestrian education program that was initially proposed in Phase II of the Arizona Statewide Bicycle and Pedestrian Plan. Education plan components included:

- § Bicycle and Pedestrian Facility Design Training Course
- § Education Documents and Bicycle User Map

Bicycle and Pedestrian Facility Design Training Course

In support of implementation of the Bicycle and Pedestrian training program, Kimley-Horn identified several existing educational training course programs that are focused on bicycle and pedestrian facility design. The identified curriculums are targeted at engineers, planners, and bicycle/pedestrian coordinators. Each curriculum is focused on bicycle and pedestrian facility design. The identified courses are listed in **Table 1** on the next page.

Kimley-Horn prepared a grant application (refer to Section 4) that was submitted to the Arizona Governor's Office of Highway Safety to provide funding to conduct a set of one of the bicycle and pedestrian facility design training course workshops listed in **Table 1**. The funding application was selected for partial funding by the GOHS. The specific training course that will be conducted will be selected in consultation with the GOHS and the National Highway Traffic Safety Administration (NHTSA). The training course will be implemented as part of ADOT Bicycle and Pedestrian Program Phase IV activities.



Table 1 – Available Bicycle and Pedestrian Facility Education Training Courses

Course Title	Length	Cost	Description
		Contact Information	
Northwestern University Bicycle Planning and Facilities Workshop	3 days	\$650.00 per participant	3-day Bicycle and Facilities Workshop is directed to traffic and transportation engineers, technicians, and planners to help them better understand the comprehensive nature of bicycle facility planning and design.
		1-800-323-4011	
Pedestrian and Bicycle Information Center, Walkable Communities	1 or 2 day courses	\$2,000 per day	Course presentation illustrates dozens of successful towns and cities of all sizes as they changed their town planning, roadway design and funding decisions from reactive to proactive.
		1-866-347-2734 DBurden@aol.com kowens@glatting.com	
National Highway Institute, Pedestrian Facility Design Course	1 ½ days	\$310 per participant	Target audience are engineers with planning, design, construction, or maintenance responsibilities; pedestrian and bicycle specialists; planners; disability and orientation specialists, transportation planners, architects, landscape architects, as well as decision makers at the project planning level. http://www.nhi.fhwa.dot.gov/coursedesc.asp?coursenum=1066
		NHI Training Team: nhitraining@fhwa.dot.gov (703) 235-0534 NHI Training Program Manager: Mila Plosky (703) 235-0527 mila.plosky@fhwa.dot.gov Technical Information: John Fegan (202) 366-5007 john.fegan@fhwa.dot.gov	
National Highway Institute, Bicycle Facility Design Course	1 ½ days	\$260 per participant	Target audience are Federal, State, or local engineers with planning, design, construction, or maintenance responsibilities; bicycle specialists; transportation planners; landscape architects, as well as decision makers at the project planning level. http://www.nhi.fhwa.dot.gov/coursedesc.asp?coursenum=1066
		NHI Training Team: nhitraining@fhwa.dot.gov (703) 235-0534 NHI Training Program Manager: Mila Plosky (703) 235-0527 mila.plosky@fhwa.dot.gov Technical Information: John Fegan (202) 366-5007 john.fegan@fhwa.dot.gov	
Designing streets for Safe Bicycle Accommodation	1 day	Fee varies	Workshop gives transportation planners and traffic engineers the framework they need to design bicycle travel space on any type of street. The seminar covers options for new construction, resurfacing, and widenings, and discusses state-of-the-art bicycle options such as Bicycle Boulevards.
		info@bicyclesolutions.com John Ciccarelli (650) 494-9140 650-714-1274	



Table 1 – Available Bicycle and Pedestrian Facility Education Training Courses (continued)

Course Title	Length	Cost	Description
		Contact Information	
Designing Streets for Pedestrians	2- and 3-day combined bike and pedestrian courses; 1 or 2-day bike or pedestrian courses also available.	\$1,500 per day, plus direct expenses, \$750.00 for an additional local focus.	www.michaelronkin.com Focus is on street designs that better accommodate bicycles and pedestrians. Courses provide enough detail so engineers and planners can substantially improve their understanding and skills. The courses can be customized to fit local needs. Course content includes: <ul style="list-style-type: none"> - Introduction - Basics of sidewalk design - Other sidewalk design issues: - ADA- "Universal Design": - Street crossings (mostly midblock) - Intersection design part 1 and part 2
		michaelronkin@comcast.net	
Designing Streets for Bicyclists	1 day	\$1,500 per day, plus direct expenses, \$750.00 for an additional local focus.	www.michaelronkin.com Course content includes: <ul style="list-style-type: none"> - The principles of bicycling: - On-road bikeways: - Surface design details: - Restriping roads with bike lanes - Intersection design: - Signing and marking - Shared use paths: - Bicycle parking - Advanced bikeway designs
		michaelronkin@comcast.net	

Education Documents and Bicycle User Map

A second element of Task 2 was to update and order additional copies of the Arizona Bicycle Street Smarts and the Statewide Bicycle User Map.

Minor changes to the Statewide Bicycle User Map were made, and 5,000 copies were ordered. Minor changes included:

- Update shoulder widths for the following:
 - Miracle Mile between I-10 and Oracle Road. Shoulder width should be greater than 4 ft.

3. WEBSITE ENHANCEMENTS (TASK 3)

Kimley-Horn and Associates provided enhancements to the Arizona Bicycle and Pedestrian Program website (azbikeped.org) reflect current ADOT website standards. Enhancements included:

- Website was updated to reflect ADOT standards. The azbikeped.org left-side navigation was removed and replaced with left side navigation from the Transportation Planning Division at ADOT. In addition, the ADOT header was added to each webpage as illustrated.
- Inclusion of maintenance resource contact list for local city and county agencies throughout Arizona. When a maintenance need is identified, an individual can use the website to obtain the contact information for reporting the maintenance need.
- All links on the website were verified and missing/dead links were updated or removed.
- Kimley-Horn created a map utilizing existing ADOT GIS data that shows regional bicycle improvements that will be completed along with ADOT projects within the Transportation Improvement Plan that will improve conditions for cyclists and pedestrians, such as shoulder widths to be widened. The map was added to the website.



4. HIGHWAY SAFETY PROGRAM GRANT (TASK 4)

Kimley-Horn developed three funding applications that were submitted to the Arizona Governor's Office of Highway Safety. Copies of the submitted proposals are included in the Appendices. The proposals submitted are:

- *Bicycle and Pedestrian Engineering Design*: Proposal is to conduct a series of bicycle and pedestrian facility design workshops throughout the state for local, county, tribal land and state engineers and planners so that they are better able to design safe facilities. The proper design of such facilities will improve the safety of the bicyclist and the pedestrian.
- *Bicycle and Pedestrian Public Safety Education*: Proposal is to develop a public education campaign to increase the safety awareness of motorists, pedestrians, and bicyclists on Arizona roadways. The awareness campaign will be targeted toward the general public throughout all of Arizona including in metropolitan areas, rural areas, and on tribal lands.
- *Bicycle, Pedestrian, and Motorist Enforcement*: Proposal is to develop training materials and curriculum to increase awareness among police officers of bicycle and pedestrian safety laws, regulations, and practices so that they are better able to enforce them. The training materials will be prepared in coordination with the Arizona Peace Officers Standards and Training Board (AZ POST). Alternatives include incorporating materials into the existing AZ POST training curriculum or providing the materials as continuing education curriculum. The



benefits of the project will be to increase officers' knowledge of pedestrian and bicycle safe practices, laws, and enforcement opportunities.

5. STATEWIDE BICYCLE AND PEDESTRIAN STEERING COMMITTEE (TASK 5)

The Arizona Statewide Bicycle and Pedestrian Plan identifies the need to continue regular stakeholder interaction to discuss statewide bicycle and pedestrian issues. Several options for maintaining regular interactions among stakeholders are available. Among the alternatives are:

- Establish an informal committee, similar to the Project Steering Committee established during the Bicycle and Pedestrian Plan Phase I, II and III;
- Establish a formal Arizona Bicycle and Pedestrian Steering Committee. This committee would be similar to the now defunct Governor's Bicycle Task Force.

Each of these alternatives was discussed at the Phase III stakeholder committee meetings. The consensus of the stakeholder committee was that a formalized Statewide Bicycle and Pedestrian Steering Committee should be established. The Statewide Bicycle and Pedestrian Steering Committee should:

- Be a formalized committee established by action of the Governor;
- Have a defined set of goals and objectives;
- Have a requirement for an annual report;
- Have regularly scheduled bi-monthly or quarterly meetings;
- Address both bicycle and pedestrian topics within the same committee;
- Be sponsored by either ADOT or the Governor's Office of Highway Safety; and,
- Be multi-disciplined and include representatives from agencies such as Motor Vehicle Division (MVD), the Arizona Office of Tourism and the business community.

Michael Sanders, the ADOT Bicycle and Pedestrian Coordinator is leading the task of determining how best to formalize the committee.

6. STATEWIDE BICYCLE AND PEDESTRIAN POLICY (TASK 6)

The ADOT Bicycle and Pedestrian coordinator hosted a meeting to review the existing ADOT bicycle and pedestrian policies. ADOT staff will continue to instigate the appropriate procedures within ADOT for a formal review of the existing Bicycle Policy and for the establishment of a Pedestrian Policy.

ADOT Bicycle Policy: Proposed revisions to the existing bicycle policy are included in the **Appendix**.

ADOT Pedestrian Policy: Current ADOT pedestrian policy is to only provide right-of-way for sidewalks in which the local jurisdictions can construct the sidewalks with local funding. The ADOT Bicycle/Pedestrian Steering Committee has expressed a desire that a pedestrian policy facility inclusion of sidewalks in roadway design projects.



7. TRANSPORTATION IMPROVEMENT PLAN MAP (TASK 7)

Kimley-Horn reviewed the ADOT Five-Year Transportation Improvement Program to identify upcoming projects that will improve the accommodation of bicycles and pedestrians on state highways. In addition to bicycle/pedestrian-specific projects, roadway improvement projects that will improve bicycle accommodation, such as shoulder widening, were identified. The identified projects were included in a map and accompanying table. The map is based on the Five-Year Transportation Improvement Program GIS map that is updated annually by staff in the ADOT Transportation Planning Division. The map and accompanying project listing table were incorporated into the ADOT website and are available in the Appendix.



APPENDIX



A.1 Funding Proposal to Governor's Office of Highway Safety for Law Enforcement Training



Arizona Department of Transportation

Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano
Governor

Victor M. Mendez
Director

David P. Jankofsky
Deputy Director

March 29, 2006

Ms. Patricia Arteaga
Governor's Office of Highway Safety
Transmitted via email to: parteaga@azgohs.gov

Re: Governor's Office of Highway Safety, FY 2007 Highway Safety Funding Proposal

Dear Ms. Arteaga:

The Arizona Department of Transportation (ADOT) Bicycle and Pedestrian Program has been working diligently since 2002 on the development and implementation of the Statewide Bicycle and Pedestrian Plan. Information on the ADOT Bicycle and Pedestrian Plan and Program can be viewed at www.azbikeped.org. Phase I and Phase II are complete. ADOT is currently working on the third phase of the Plan, which includes an Education component that focuses on the 3 E's: Engineering, Education, and Enforcement.

In continued support of the ADOT Bicycle and Pedestrian Program and Plan, ADOT is pleased to submit three funding proposals to the Governor's Office of Highway Safety for a Fiscal Year 2007 Reimbursable Grant. The three proposals are:

- Bicycle & Pedestrian Engineering Design: Conduct a series of Bicycle and Pedestrian Facility Design Workshops throughout the state for local, county, tribal land and state engineers and planners so that they are better able to design safe facilities.
- Bicycle & Pedestrian Public Safety Education: Develop a public education campaign to increase the safety awareness of motorists, pedestrians, and bicyclists on Arizona roadways.
- Bicycle, Pedestrian, & Motorist Enforcement: Develop training materials and curriculum to increase awareness among police officers of bicycle and pedestrian safety laws, regulations, and practices so that they are better able to enforce them.



2001 Award Recipient

Ms. Arteaga
March 29, 2006
Page Two

As you are aware, cyclists have the very same rights, *and responsibilities*, as motorists. The use of Education, Enforcement and Engineering to provide an increased understanding by cyclists, pedestrians, motorists and public safety of these rights and responsibilities will result in improved safety of all users of Arizona's highways including those in local jurisdictions, on state highways, and on Tribal Lands.

We appreciate your consideration of these proposals.

Sincerely,



Victor M. Mendez

VM\ms

B. AGENCY COVER LETTER

(A transmittal letter from Mr. Victor Mendez, Director, ADOT, is transmitted separately.)

C. PROJECT PROPOSAL OUTLINE NARRATIVE

1. BACKGROUND / PROBLEM

a) **General Characteristics:** The applicant agency, the Arizona Department of Transportation, Transportation Planning Division, supports and manages the Arizona Bicycle and Pedestrian Program. The purpose of the Arizona Bicycle and Pedestrian program is to plan, develop, and support implementation of facilities and programs that serve the mobility needs and improve the accessibility and safety of bicyclists and pedestrians on Arizona roadways.

b) **Streets and Highways:** ADOT is responsible for the maintenance and operation of over 6,800 miles of state highway throughout Arizona. However, influence of the ADOT Bicycle and Pedestrian Program expands beyond the state-owned highways. Programs implemented by the ADOT Bicycle and Pedestrian Program serve cyclists on all Arizona roadways, including local city and county owned roads. In total, there are more than 60,000 miles of roadways in Arizona.

c) **Problem or Deficiency:** The awareness of behavior that improves the safety of bicyclists and pedestrians needs to be better understood by bicyclists, pedestrians, motorists and police officers. Many cyclists and pedestrians are unfamiliar with the "rules of the road" and often place themselves in dangerous situations. Examples include cyclists who ride on the wrong side of the road, or who run stop signs and red lights. Enforcement of existing bicycle and pedestrian laws and regulations is important to reducing the number of cyclists and pedestrians fatalities and injuries on Arizona roadways. Continued education and training of public safety officers is critical, so in turn they can enforce existing laws and regulations. Areas to target enforcement at bicyclists include:

- Driving at night without lights or required reflectors.
- Riding the wrong way in a traffic lane or on the wrong side of the road.
- Running a stop sign or yield sign.

Equally important, it is typical to see motorists driving on Arizona roadways in a manner that is especially unsafe to bicyclists and pedestrians. Areas to focus enforcement at the motorist include:

- Failing to yield the right of way to a pedestrian or cyclist when turning at intersections or driveways, entering a roadway, changing lanes, or to pedestrians in or entering cross walks.
- Overtaking bicycles in areas where it cannot be done safely (not giving bicyclists the required three-foot separation).

Arizona Facts

Climate - The topography of the State of Arizona ranges from low-lying deserts in the south to high-elevation mountain peaks in the north. The weather and climate are as varied, with temperatures exceeding 100 degrees during the summer time in the desert valleys, and falling into the single digits and below in the high-altitude deserts and mountains of the north.

Population - The estimated population of Arizona in July 2005 was 6,044,985. The population increased nearly 40% between 1990 and 2000.

Demographics - The people of Arizona are as diverse as the topography and climate. Over ¼ of the population is of Hispanic origin. Nearly 13% of the population is age 65 or over, higher than the national average of 12.4%.

Training and education of public safety and enforcement officers is needed to raise their awareness of cyclist and pedestrian laws and regulations. Officers who complete the curriculum will be better prepared to informally educate cyclists and pedestrians as part of their routine patrol and enforcement activities. Public safety officers assigned to bike patrol are particularly suited to enforce laws and regulations that pertain to bicyclists and pedestrians. The safety awareness materials could include specific suggestions and guidelines for bike patrol officers.

Is the Proposal Enforcement Related: No, although this proposal, which is focused on training and education, is anticipated to increase enforcement awareness of bicycle and pedestrian laws statewide.

2. ATTEMPTS TO SOLVE PROBLEM

There have been no specific efforts to focus attention on this type of training. A study of all traffic-related Arizona Revised Statutes is included in law enforcement training. The current class roster of the Arizona Peace Officers Standards and Training Board does not include specific training on this subject.

3. PROJECT OBJECTIVES

Historically, the emphasis of bicycle and pedestrian programs has been on providing facilities. As communities, agencies, and programs gained experience, they began to realize that they couldn't solve all bicycle and pedestrian issues simply by constructing facilities. For example, some safety problems are more easily solved through multi-faceted programs than through facilities. As a result, the concept of the "3-E" program emerged, combining the elements of *Engineering, Education, and Enforcement*. The objective of the Public Safety/Law Enforcement Bicycle and Pedestrian Safety Awareness Training Curriculum is to Educate the public through Enforcement. The approach will be to:

- Work with the Arizona Peace Officers Standards and Training Board (AZ POST) to develop training materials and determine the format for the materials (e.g. DVD to mail, PowerPoint slide presentation, handout booklet).
- Develop Bicycle and Pedestrian safety awareness training materials within an eight-month time period.
- Review these materials with the AZ Post and determine how they can be incorporated into on-going or new training programs within a six-month period, including as a course to satisfy continuing education requirements.

4. METHOD OF PROCEDURE

The methods used to solve the problem and meet the project objectives include:

- a. Meet with Arizona Peace Officers Standards and Training Board to discuss how the development of training materials would be incorporated into the existing AZ POST training curriculum; the format of the courses; and whether the course would be a stand-alone course or incorporated as a module of a longer class.
- b. Consultant will prepare a detailed outline of course elements and description of examples to be used in the training materials. This will be reviewed by the ADOT Project Manager, and refined.
- c. Review the detailed outline with the Arizona Peace Officers Standards and Training Board with representatives of the Pima Association of Government and the Maricopa Association of Government and revise the outline, if necessary.
- d. Prepare draft training course materials, using the detailed outline as a basis for the training materials.

- e. Review the draft training course materials with ADOT, the AZ Post, and possibly MPO representatives.
- f. Revise the draft course materials as necessary.
- g. Submit the final course materials. It is anticipated both hard copy and an electronic version of the course materials will be prepared.

The total time required to complete the project is estimated to be eight months. This estimate is based on:

- Two months to initially coordinate and prepare an initial and final detailed outline of the material.
- Six months to prepare the draft training materials, receive comments on the draft, and prepare a revised final submittal.

5. BUDGET

Agency: Arizona Department of Transportation, Transportation Planning Division

BUDGET

I.	Personnel Services		\$0.00
II.	Employee Related Expenses		\$0.00
III.	Professional and Outside Services	27,000	27,000
IV.	Travel In-State		500
	Mileage expense	500	
V.	Travel Out-of-State		\$0.00
VI.	Materials and Supplies		2,000
	Miscellaneous Educational Materials	2,000	
VII.	Other Expenses		\$0.00
VIII.	Capital Outlay		\$0.00
TOTAL ESTIMATED COSTS			\$29,500

6. PROFESSIONAL AND TECHNICAL PERSONNEL

Project Director:

Dale Buskirk
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602-712-8143
Fax: 602-256-7659
dbuskirk@azdot.gov

Project Administrator:

Michael Sanders
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602-712-8141
Fax: 602-712-3046
msanders@azdot.gov



A.2 Funding Proposal Governor's Office of Highway Safety Application for Public Education Campaign



Arizona Department of Transportation

Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano
Governor

Victor M. Mendez
Director

David P. Jankofsky
Deputy Director

March 29, 2006

Ms. Patricia Arteaga
Governor's Office of Highway Safety
Transmitted via email to: parteaga@azgohs.gov

Re: Governor's Office of Highway Safety, FY 2007 Highway Safety Funding Proposal

Dear Ms. Arteaga:

The Arizona Department of Transportation (ADOT) Bicycle and Pedestrian Program has been working diligently since 2002 on the development and implementation of the Statewide Bicycle and Pedestrian Plan. Information on the ADOT Bicycle and Pedestrian Plan and Program can be viewed at www.azbikeped.org. Phase I and Phase II are complete. ADOT is currently working on the third phase of the Plan, which includes an Education component that focuses on the 3 E's: Engineering, Education, and Enforcement.

In continued support of the ADOT Bicycle and Pedestrian Program and Plan, ADOT is pleased to submit three funding proposals to the Governor's Office of Highway Safety for a Fiscal Year 2007 Reimbursable Grant. The three proposals are:

- Bicycle & Pedestrian Engineering Design: Conduct a series of Bicycle and Pedestrian Facility Design Workshops throughout the state for local, county, tribal land and state engineers and planners so that they are better able to design safe facilities.
- Bicycle & Pedestrian Public Safety Education: Develop a public education campaign to increase the safety awareness of motorists, pedestrians, and bicyclists on Arizona roadways.
- Bicycle, Pedestrian, & Motorist Enforcement: Develop training materials and curriculum to increase awareness among police officers of bicycle and pedestrian safety laws, regulations, and practices so that they are better able to enforce them.



Ms. Arteaga
March 29, 2006
Page Two

As you are aware, cyclists have the very same rights, *and responsibilities*, as motorists. The use of Education, Enforcement and Engineering to provide an increased understanding by cyclists, pedestrians, motorists and public safety of these rights and responsibilities will result in improved safety of all users of Arizona's highways including those in local jurisdictions, on state highways, and on Tribal Lands.

We appreciate your consideration of these proposals.

Sincerely,



Victor M. Mendez

VM\ms

PROPOSAL SUMMARY SHEET

<u>FOR GOHS USE ONLY</u>	<u>PROPOSAL NUMBER 2007 - _____</u>
AGENCY: Arizona Department of Transportation	
AGENCY CEO: Victor Mendez	
MAILING ADDRESS: 206 S. 17th Avenue, Mail Drop 310B	
CITY: Phoenix	COUNTY: Maricopa ZIP: 85007
AGENCY TELEPHONE NUMBER: (602) 712-7227	FAX: 602-712-256-6941
PLEASE INDICATE WHO WILL SERVE AS PROJECT DIRECTOR: Dale Buskirk	
E-MAIL: DBuskirk@azdot.gov	PHONE: (602) 712-8143
PLEASE INDICATE WHO WILL SERVE AS PROJECT ADMINISTRATOR: Michael Sanders	
E-MAIL: MSanders@azdot.gov	PHONE: (602) 712-8141

<i>SYNOPSIS OF PROPOSAL:</i>
This proposal is to develop a public education campaign to increase the safety awareness of motorists, pedestrians, and bicyclists on Arizona roadways. The awareness campaign will be targeted toward the general public throughout all of Arizona including in metropolitan areas, rural areas, and on tribal lands.

TOTAL AMOUNT OF REQUEST: \$ 125,000.00

<i>GOHS USE ONLY:</i>

AGENCY COVER LETTER

(A transmittal letter from Mr. Victor Mendez, Director, ADOT, is transmitted separately.)

PROJECT PROPOSAL OUTLINE NARRATIVE

1. BACKGROUND / PROBLEM

a) General Characteristics: The applicant agency, the Arizona Department of Transportation, Transportation Planning Division, supports and manages the Arizona Bicycle and Pedestrian Program. The purpose of the Arizona Bicycle and Pedestrian program is to plan, develop, and support implementation of facilities and programs that serve the mobility needs and improve the accessibility and safety of bicyclists and pedestrians on Arizona roadways.

b) Streets and Highways: ADOT is responsible for the maintenance and operation of over 6,800 miles of state highway throughout Arizona. However, influence of the ADOT Bicycle and Pedestrian Program expands beyond the state-owned highways. Programs implemented by the ADOT Bicycle and Pedestrian Program serve cyclists on all Arizona roadways, including local city and county owned roads. In total, there are more than 60,000 miles of roadways in Arizona.

c) Problem or Deficiency: The education of bicyclists, pedestrians, and motorists is a key component to reduce vehicle and bicycle/pedestrian conflicts. For bicyclists to safely travel with motorists, bicyclists need to practice safe cycling habits that exhibit knowledge of the "rules of the road." Like drivers, bicyclists must understand and obey the rules and laws that apply. Likewise, pedestrians must also understand and obey rules and laws if they are to coexist safely with vehicles. Drivers also can be made to be more aware and careful around bicyclists and pedestrians through safety and education campaigns and through spot enforcement programs.

Educating the public can provide the bicyclist, pedestrian and motorist the knowledge and skills necessary for each to more safely coexist.

2. ATTEMPTS TO SOLVE PROBLEM

ADOT has devoted significant efforts over the past several years through the development of the Statewide Bicycle and Pedestrian Plan to improve bicycle and pedestrian safety. However, ADOT recognizes that there is significant work yet to be completed. To guide ADOT's efforts in educating cyclists, motorists, and pedestrians, an Education Plan was developed that identifies five focus areas for improving bicycling and pedestrian safety. These are:

- Safety Education Training;
- Safe Routes to School;
- Bicycle and Pedestrian Facility Design Training;

Arizona Facts

Climate - The topography of the State of Arizona ranges from low-lying deserts in the south to high-elevation mountain peaks in the north. The weather and climate are as varied, with temperatures exceeding 100 degrees in the summer time in the desert valleys, and falling into the single digits and below in the high-altitude deserts and mountains of the north.

Population - The estimated population of Arizona in July 2005 was 6,044,985. The population increased nearly 40% between 1990 and 2000.

Demographics - The people of Arizona are as diverse as the topography and climate. Over ¼ of the population is of Hispanic origin. Nearly 13% of the population is age 65 or over, higher than the national average of 12.4%.

- Safety Awareness Campaign; and
- Archived Data.

As part of the Safety Education Training focus area, the Arizona Bicycle and Pedestrian Program developed and distributed the following educational materials:

- Bicycle Share the Road Guide
- Sharing the Road with Pedestrians Guide
- Arizona Bicycling Street Smarts

As funding becomes available, additional elements of the Education Plan are being developed and implemented.

3. PROJECT OBJECTIVES

The objective of the Statewide Safety Awareness Campaign will further the implementation of the Education Plan of the ADOT Bicycle and Pedestrian Program. Specifically, the purpose of the Statewide Safety Awareness Campaign will be to:

- Increase Arizona bicyclists and pedestrians' knowledge of safe practices, laws, and regulations.
- Increase Arizona motorists' knowledge of bicycle and pedestrian laws, regulations, and safe practices.

The Statewide Safety Awareness Campaign will improve bicyclist and pedestrian safety by educating the general public of the "rules of the road" for bicyclists and pedestrians. Specific strategies that could be employed include:

- Develop an attractive poster displaying, for example; "rules of the road", "give a bicyclist five (5) feet", facts on bike helmet use, and dangers of riding a bike against traffic. These can be widely distributed in schools, libraries, community centers and other public places, such as malls.
- Placing messages on transit buses and at bus stops, on light rail and at light rail stations.
- Using billboards.
- Distributing educational booklets/pamphlets that were developed by the ADOT Bicycle and Pedestrian Program statewide.
- Developing articles for print media, and radio and TV public service announcements (PSA). For example, a PSA can inform motorists how to "share the road" with bicyclists. Sharing the road is something many motorists are uncomfortable with because motorists were never really taught how to safely deal with bicyclist when learning to drive. Nor do many motorists understand that the cyclist has a legitimate right to be on the road and that riding in the gutter or on the sidewalk is, in most instances, less safe. These and other messages should reach a larger audience than can be reached through a classroom setting.
- Remake/update driver education videos on bicycle/vehicle safety for the Defensive Driving School Program. Incorporate this video into the Defensive Driving School Program. Currently, the 12-minute video describes bicyclists as a "hazard." Such terminology does not foster mutual respect between cyclists and vehicles. Thousands of individuals each year, essentially a captive audience, take the Defensive Driving Course instead of getting points on their license.

4. METHOD OF PROCEDURE

The public education media campaign will be targeted towards the general public, will be bilingual (English and Spanish), and will also be implemented on tribal lands. The following activities will be followed to develop and implement the Statewide Safety Awareness Campaign:

- ADOT will coordinate the media campaign with the Governor's Office of Highway Safety. All media material will be approved by the GOHS.
- Distribute the Arizona Pedestrian and Bicyclist Share the Road Documents.
- Identify bicyclist and bicycle/motor vehicle safety issues and statewide problem locations. Collect bicycle and bicycle/motor vehicle crash data, citation data, and survey law enforcement agencies and medical facilities on the types of crashes occurring.
- Develop a Safety Awareness Campaign and present it to the Statewide Bicycle/Pedestrian Steering Committee and to the Governor's Office of Highway Safety.
- Obtain the required professional services to design required poster program and Public Service Announcements.

5. BUDGET

Until the details of the Safety Awareness Campaign are developed, it is difficult to determine a precise budget amount. Consultant services will be required to develop the graphics for posters, and to develop the video presentation. Final costs will be determined in conjunction with GOHS. The proposed program budget is outlined in the following table.

Agency: Arizona Department of Transportation, Transportation Planning Division

BUDGET

I.	Personnel Services		\$ 0.00
II.	Employee Related Expenses		\$ 0.00
III.	Professional and Outside Services		\$75,000
	Advertising/Public Relations Consultant Services (develop posters, video, PSA's, etc.)	\$75,000	
IV.	Travel In-State		\$0.00
V.	Travel Out-of-State		\$0.00
VI.	Materials and Supplies		\$50,000
	Posters, brochures, etc.	\$50,000	
VII.	Other Expenses		\$ 0.00
VIII.	Capital Outlay		\$ 0.00
TOTAL ESTIMATED COSTS			\$125,000

6. PROFESSIONAL AND TECHNICAL PERSONNEL

Project Director:

Dale Buskirk
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602- 712-7431
Fax: 602-256-7659
dbuskirk@azdot.gov

Project Administrator:

Michael Sanders
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602-712-8141
Fax: 602-712-3046
MSanders@azdot.gov



A.3 Funding Proposal to Governor's Office of Highway Safety for Bicycle and Pedestrian Facility Training Course



Arizona Department of Transportation

Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano
Governor

Victor M. Mendez
Director

David P. Jankofsky
Deputy Director

March 29, 2006

Ms. Patricia Arteaga
Governor's Office of Highway Safety
Transmitted via email to: parteaga@azgohs.gov

Re: Governor's Office of Highway Safety, FY 2007 Highway Safety Funding Proposal

Dear Ms. Arteaga:

The Arizona Department of Transportation (ADOT) Bicycle and Pedestrian Program has been working diligently since 2002 on the development and implementation of the Statewide Bicycle and Pedestrian Plan. Information on the ADOT Bicycle and Pedestrian Plan and Program can be viewed at www.azbikeped.org. Phase I and Phase II are complete. ADOT is currently working on the third phase of the Plan, which includes an Education component that focuses on the 3 E's: Engineering, Education, and Enforcement.

In continued support of the ADOT Bicycle and Pedestrian Program and Plan, ADOT is pleased to submit three funding proposals to the Governor's Office of Highway Safety for a Fiscal Year 2007 Reimbursable Grant. The three proposals are:

- Bicycle & Pedestrian Engineering Design: Conduct a series of Bicycle and Pedestrian Facility Design Workshops throughout the state for local, county, tribal land and state engineers and planners so that they are better able to design safe facilities.
- Bicycle & Pedestrian Public Safety Education: Develop a public education campaign to increase the safety awareness of motorists, pedestrians, and bicyclists on Arizona roadways.
- Bicycle, Pedestrian, & Motorist Enforcement: Develop training materials and curriculum to increase awareness among police officers of bicycle and pedestrian safety laws, regulations, and practices so that they are better able to enforce them.



Ms. Arteaga
March 29, 2006
Page Two

As you are aware, cyclists have the very same rights, *and responsibilities*, as motorists. The use of Education, Enforcement and Engineering to provide an increased understanding by cyclists, pedestrians, motorists and public safety of these rights and responsibilities will result in improved safety of all users of Arizona's highways including those in local jurisdictions, on state highways, and on Tribal Lands.

We appreciate your consideration of these proposals.

Sincerely,



Victor M. Mendez

VM\ms

A. PROPOSAL SUMMARY SHEET

<u>FOR GOHS USE ONLY</u>	<u>PROPOSAL NUMBER 2007 - _____</u>
AGENCY: Arizona Department of Transportation	
AGENCY CEO: Victor Mendez	
MAILING ADDRESS: 206 S. 17th Avenue, Mail Drop 310B	
CITY: Phoenix	COUNTY: Maricopa
	ZIP: 85007
AGENCY TELEPHONE NUMBER: (602) 712-7227	FAX: 602-712-6941
PLEASE INDICATE WHO WILL SERVE AS PROJECT DIRECTOR: Dale Buskirk	
E-MAIL: DBuskirk@azdot.gov	PHONE: (602) 712-8143
PLEASE INDICATE WHO WILL SERVE AS PROJECT ADMINISTRATOR: Michael Sanders	
E-MAIL: MSanders@azdot.gov	PHONE: (602) 712-8141

<p><i>SYNOPSIS OF PROPOSAL:</i> This proposal is to provide funding to conduct a series of Bicycle and Pedestrian Facility Design workshops throughout the State of Arizona that will increase the knowledge and design skills of engineers and planners for bicycle and pedestrian facilities. The proper design of such facilities will improve the safety of the bicyclist and the pedestrian.</p>

TOTAL AMOUNT OF REQUEST: \$ 62,780.00

<i>GOHS USE ONLY:</i>

B. AGENCY COVER LETTER

(A transmittal letter from Mr. Victor Mendez, Director, ADOT, is transmitted separately.)

C. PROJECT PROPOSAL OUTLINE NARRATIVE

1. BACKGROUND / PROBLEM

a) General Characteristics: The applicant agency, the Arizona Department of Transportation, Transportation Planning Division, supports and manages the Arizona Bicycle and Pedestrian Program. The purpose of the Arizona Bicycle and Pedestrian program is to plan, develop, and support implementation of facilities and programs that serve the mobility needs and improve the accessibility and safety of bicyclists and pedestrians on Arizona roadways.

b) Streets and Highways: ADOT is responsible for the maintenance and operation of over 6,800 miles of state highway throughout Arizona. However, influence of the ADOT Bicycle and Pedestrian Program expands beyond the state-owned highways. Programs implemented by the ADOT Bicycle and Pedestrian Program serve cyclists on all Arizona roadways, including local city and county-owned roads. In total, there are more than 60,000 miles of roadways in Arizona.

c) Problem or Deficiency: Approximately 20 percent of U.S. citizens, or nearly 41 million people, ride bicycles at least one or more times per month. Bicycling and walking are basic, fundamental modes of transportation that in today's motorized world of travel are viable and necessary options to help manage our circulation and congestion issues. In recent years, the availability of federal, state, and local transportation funding for bicycle and pedestrian facilities has resulted in a significant increase in the number of facilities being planned, designed, and constructed. However, there are no federal design standards for bicycle and pedestrian facilities, though a number of design resources exist including the AASHTO Guide for the Development of Bicycle Facilities and the Manual on Uniform Traffic Control Devices. Proper application of these resources for the design and construction of bicycle and pedestrian facilities requires significant engineering judgment. Education of engineers and planners throughout Arizona, including state, city, county, and tribal staff, is needed to help them learn how to properly apply these guidelines to design and construct safe bicycle and pedestrian facilities.

Arizona Facts

Climate - The topography of the State of Arizona ranges from low-lying deserts in the south to high-elevation mountain peaks in the north. The weather and climate are as varied, with temperatures exceeding 100 degrees during the summer in the desert valleys and falling into the single digits and below in the high-altitude deserts and mountains of the north.

Population - The estimated population of Arizona in July 2005 was 6,044,985. The population increased nearly 40% between 1990 and 2000.

Demographics - The people of Arizona are as diverse as the topography and climate. Over ¼ of the population is of Hispanic origin. Nearly 13% of the population is age 65 or over, higher than the national average of 12.4%.

2. ATTEMPTS TO SOLVE PROBLEM

The Arizona Bicycle and Pedestrian Plan was developed in two phases. Phase I, which began in April 2002, provided a review of existing conditions and development of a Statewide Bicycle Network, identified design guidelines for the design of safer bicycle and pedestrian facilities, and provided recommendations for bicycle and pedestrian programs that, when implemented, will improve the accommodation and safety of bicycles and pedestrians on Arizona Highways. Development and implementation of several of the most critical Phase I recommendations began in Phase II. Phase II included the production of a Statewide Bicycle User Map, Bicycle Share the Road Guide, Sharing the Road with Pedestrians Guide, Arizona

Bicycling Street Smarts Brochure, website enhancements, a Grant and Funding Plan, an Education Plan, and a Pedestrian Action Plan. The need to educate engineers and planners of bicycle and pedestrian design guidelines and standards was identified in Phase II.

3. PROJECT OBJECTIVES

The objective of the Bicycle and Pedestrian Facility Design Workshop is to further the implementation of the ADOT Bicycle and Pedestrian Program, and specifically to improve bicyclist and pedestrian safety by educating engineers and planners of bicycle and pedestrian facility design considerations.

4. METHOD OF PROCEDURE

A NHSTA/FHWA approved course curriculum will be selected in consultation with the Governor’s Office of Highway Safety. A list of existing courses is identified in Table 1. The course may be modified, in consultation with GOHS, to meet local Arizona agencies’ needs. Two course curriculums may be selected- one specifically for bicycle facilities and one specifically for pedestrian facilities.

Attendance at the workshop will be targeted toward public agency staff from all agencies throughout Arizona including ADOT staff, local cities and counties, and tribal entities. The workshops will be held in multiple locations throughout the state including in major metropolitan areas (Phoenix, Tucson), smaller cities (Yuma, Flagstaff, Kingman), and on tribal lands.

It is anticipated that the workshops could be completed within a reasonable timeframe, as workshop content is based on existing curriculum and courses.

Table 1 - Bicycle and Pedestrian Facility Design Courses			
Course Title	Length	Course Cost	Course Description
National Highway Institute, Pedestrian Facility Design Course	1 ½ days	\$310 per participant	Target audience are engineers with planning, design, construction, or maintenance responsibilities; pedestrian and bicycle specialists; planners; disability and orientation specialists, transportation planners, architects, landscape architects, as well as decision-makers at the project planning level. This course broadens the design user to include persons with disabilities, offers class design exercises, and demonstrates how designing facilities for pedestrians can be done while also meeting the needs of other facility users such as motorists and bicyclists.

Table 1 - Bicycle and Pedestrian Facility Design Courses (continued)

Course Title	Length	Course Cost	Course Description
National Highway Institute, Bicycle Facility Design Course	1 ½ days	\$260 per participant	<p>Target audience is federal, state, or local engineers with planning, design, construction, or maintenance responsibilities; bicycle specialists; transportation planners; landscape architects, as well as decision-makers at the project planning level.</p> <p>This course employs the <i>AASHTO Guide for the Development of Bicycle Facilities (1999 edition)</i> as the source document.</p>
Designing Streets for Pedestrians (Michael Ronkin)	<p><u>Option # 1</u> 2- and 3-day combined bike and pedestrian courses;</p> <p><u>Option #2</u> 1- or 2-day separate bicycle or pedestrian facility design courses also available.</p>	<p>Standard fee is \$1,500 per workshop, plus direct expenses, \$750 for modification of curriculum to include in-depth local focus.</p> <p>Assume 30 participants at each workshop, cost is \$75 each, plus approximately \$50 per participant for facility/room rental and miscellaneous costs.</p>	<p>Focus is on street designs that better accommodate bicycles and pedestrians. The courses can be customized to fit local needs. Course content includes:</p> <ul style="list-style-type: none"> - Introduction - Basics of sidewalk design - Other sidewalk design issues - ADA "Universal Design" - Street crossings (mostly midblock) - Intersection design Part 1 and Part 2
Designing Streets for Bicyclists (Michael Ronkin)			<p>Course content includes:</p> <ul style="list-style-type: none"> - The principles of bicycling - On-road bikeways - Surface design details - Restriping roads with bike lanes - Intersection design - Signing and marking - Shared use paths - Bicycle parking - Advanced bikeway designs

5. BUDGET

As illustrated in Table 1 - Bicycle and Pedestrian Facility Design Courses, there is a considerable range in program costs dependent upon the number of workshops that are held and the number of attendees at each workshop. The final decision as to the number of workshops held and the number of attendees at each workshop would be made in consultation with GOHS and dependent upon the funding provided.

All workshops will be held in Arizona. No out-of-state travel would be required. It is anticipated that approximately 30 participants would attend each workshop. Workshops would be held, at a minimum in Flagstaff, Phoenix, Tucson, and Yuma. Particular outreach would be extended to tribal entities to encourage their participation and could also be held on tribal lands and in other rural locations throughout the state. Alternatively, funding could be provided for travel and lodging accommodations for participants from outlying areas and tribal entities to attend workshops in the metropolitan areas. The proposed program budget is outlined in the following table.

Agency: Arizona Department of Transportation, Transportation Planning Division

BUDGET

I.	Personnel Services		\$ 0.00
II.	Employee Related Expenses		\$ 0.00
III.	Professional and Outside Services		\$46,500
	Course registration fee for National Highway Institute, Pedestrian Facility Design Course (150 participants at \$310.00/participant)*	\$46,500	
IV.	Travel In-State		\$14,280
	Ground Transportation**	\$6,000	
	Per Diem (30 people, 2 days)**	\$2,280	
	Lodging**	\$6,000	
V.	Travel Out-of-State		\$0.00
VI.	Materials and Supplies		\$2,000
	Miscellaneous course materials, advertising costs, postage, etc.	\$2,000	
VII.	Other Expenses		\$ 0.00
VIII.	Capital Outlay		\$ 0.00
TOTAL ESTIMATED COSTS			\$62,780
* Final registration costs to be identified upon selection of course curriculum			
** Assume 30 people travel 250 miles from rural areas and tribal lands, 2 nights lodging, 2 nights per diem. Final number of individuals to be accommodated to be determined in consultation with GOHS.			

6. PROFESSIONAL AND TECHNICAL PERSONNEL

Project Director:

Dale Buskirk
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602- 712-7431
Fax: 602-256-7659
dbuskirk@azdot.gov

Project Administrator:

Michael Sanders
Arizona Department of Transportation
206 S. 17th Avenue
Mail Drop 310B
Phoenix, AZ 85007
Phone: 602-712-8141
Fax: 602-712-3046
MSanders@azdot.gov



A.4 Proposed ADOT Bicycle Policy Revisions

Proposed modifications to ADOT Bicycle Policy are shown in bold.



MGT 02-1 BICYCLE POLICY

Purpose

To establish uniform guidelines for accommodating bicycle travel on the State Highway System.

Authority

Arizona Revised Statute 28-812 Traffic laws apply to persons riding bicycles grants bicycle riders all the rights and subjects them to all the duties applicable to the driver of a vehicle except where special regulations apply.

Arizona Revised Statute 28-641 Traffic Control Device Manual and Specifications requires ADOT to adopt a manual for a uniform system of traffic control devices that correlates with the most recent edition of the national manual on uniform traffic control devices for streets and highways.

Arizona Revised Statute 28-733 Restrictions on use of Controlled Access Highway authorizes ADOT to prohibit the use of any part of a controlled access highway by bicyclists. Requires ADOT to regulate prohibitions on controlled access highways through official signs. (Note: See reference 3.a. below)

References

1. AASHTO Guide for the Development of Bicycle Facilities.
2. Manual on Uniform Traffic Control Devices, Part 9 – “Traffic Controls for Bicycle Facilities”
3. ADOT Traffic Engineering Policies, Guidelines and Procedures
 - a. PGP # 1030 “Controlled Access Highways as Bikeways”
 - b. PGP # 480 “Continuous Longitudinal Rumble Strips”
 - c. PGP # 1031 “**Signing and Marking of Shared-Use Paths**”

Definitions

“*Shared Roadway*” (AASHTO) a roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved shoulders.

“*Bicycle Lane*” (AASHTO) a portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

“*Shared Use Path*” (AASHTO) a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent **right-of-way**. Shared use paths may be used by pedestrians, skaters, wheelchair users, joggers and other nonmotorized users.

“*Bikeway*” (AASHTO and MUTCD) a generic term for any road, street, path, or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

“*Designated Bicycle Route*” (MUTCD) a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational route markers, with or without specific bicycle route numbers. Bicycle routes, which might be a combination of various types of bikeways, should establish a continuous routing.



Policy

1. It is ADOT's **goal** to develop a transportation infrastructure that provides safe and convenient bicycle access. ADOT further advocates that bicyclists have the right to operate in a legal manner on all roadways open to public travel, with the exception of fully controlled-access highways. Bicyclists may use fully controlled-access highways in Arizona except where specifically excluded by regulation and where posted signs give notice of a prohibition. In support of, and in accord with the foregoing, it is ADOT's policy to:
 - a. Include provisions for bicycle travel in all new major construction and major reconstruction projects on the state highway system. New bridge and roadway widening projects are normally considered as being within the scope of major construction or major reconstruction. Pavement preservation, minor and spot improvement projects are not included; existing widths for bicycles will be maintained. The scoping documents for new construction and reconstruction will define the parameters for inclusion of bicycle travel.
 - b. Utilize the AASHTO Guide for the Development of Bicycle Facilities as the design guide for roadway features to accommodate bicycles.
 - c. Utilize the Manual on Uniform Traffic Control Devices, Part 9 as adopted in accordance with ARS 28-641 for design of traffic controls for bicycle facilities.
 - d. Provide shared roadway cross-section templates as a minimum condition with new major construction and major reconstruction projects, regardless of the presence of a shared use path.
 - e. Consider, as a part of major new construction and major reconstruction in urban areas, wide curb lanes up to 15' in width (exclusive of gutter pan) and placement of a stripe at the vehicle lane edge where appropriate. This decision will be made on a project basis weighing such factors as location, vehicular traffic, grades, anticipated bicycle usage, and right of way availability.
 - f. Consider bicycle lanes for inclusion with major new construction or major reconstruction when:
 - 1) **incremental costs** for construction and maintenance **are funded** by a local agency AND 2) the bicycle lane is included as a part of **an adopted bicycle facilities plan**.
 - g. As a part of major new construction and major reconstruction, ADOT will fund and construct at-grade or grade separated (**including bridges**) **street or roadway** crossings of state highway system roadways to meet cross section templates **accommodating bicyclists that have been adopted** as standard by the local agency. **The limits of construction are determined on a project by project basis, are normally within the ADOT right of way, and may include appropriate transitions to existing roadways outside of ADOT right of way.**
 - h. Accommodate shared use paths within the ADOT right of way when the facilities are: 1) designed and located in accordance with accepted criteria for a proper and safe facility AND 2) funded and properly maintained by the local agency.
 - i. Utilize the ADOT Traffic Engineering PGP # 1030 to designate route sections where bicycle traffic is prohibited on fully access-controlled State Highways.

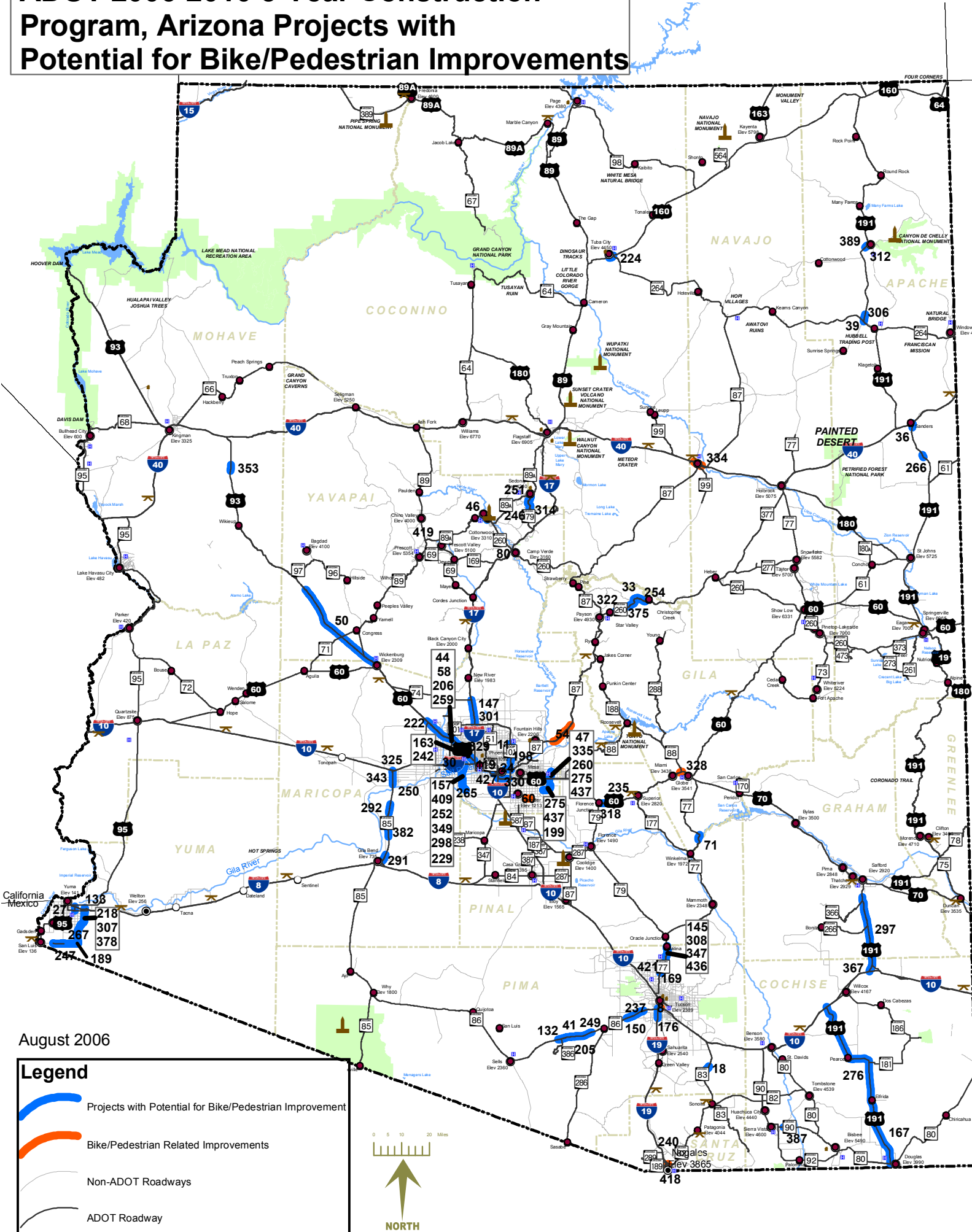


-
- j. Utilize the ADOT Traffic Engineering PGP # 480 for placement of longitudinal rumble strips on State Highways.
 - k. Use pavement surfacing materials that provide reasonably smooth surfaces on travel lanes and shoulders in conjunction with paving projects.
 - l. Evaluate and consider the impacts of bicyclists when restriping roadways in conjunction with new construction, reconstruction, pavement preservation and minor spot improvement projects.
 - m. Utilize Intergovernmental Agreements to define funding and maintenance responsibilities with local governments for bicycle facilities within **State highway** right-of-way.
2. It is ADOT's Policy not to:
- a. Reduce existing travel lane widths to accommodate bicycle traffic unless supported by a traffic study. Concurrence by the State Traffic Engineer and the Assistant Engineer, Roadway Engineering Group are required.
 - b. Sign or designate bikeways on any roadways on the State Highway System or roads on State-owned right of way **without concurrence of the District Engineer and State Bicycle Coordinator.**
 - c. Sign or designate sidewalks as bicycle routes or bikeways.
 - d. Use transportation enhancement funds for maintenance of bicycle facilities.
 - e. **Mark or sign sidewalks or shared-use paths on State right-of -way parallel and adjacent to roadways for the preferential or exclusive use of bicyclists per ADOT Traffic Engineering PGP # 1031**
3. It is ADOT's policy to require written approval from the State Traffic Engineer and the Assistant State Engineer, Roadway Engineering Group **in consultation with the State Bicycle Coordinator** for any **variations** or exceptions to this policy.







A.5 Bicycle and Pedestrian related projects in the Statewide Transportation Improvement Program

ADOT 2006-2010 5-Year Construction Program, Arizona Projects with Potential for Bike/Pedestrian Improvements




August 2006

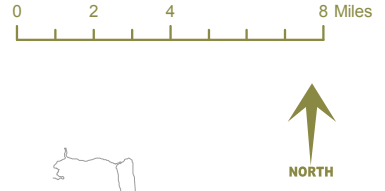
Legend

-  Projects with Potential for Bike/Pedestrian Improvement
-  Bike/Pedestrian Related Improvements
-  Non-ADOT Roadways
-  ADOT Roadway

0 5 10 20 Miles

 NORTH

ADOT 2006-2010 5-Year Construction Program, Tucson Area Projects with Potential for Bike/Pedestrian Improvements



145
308
347
436

421
169

150
237

176

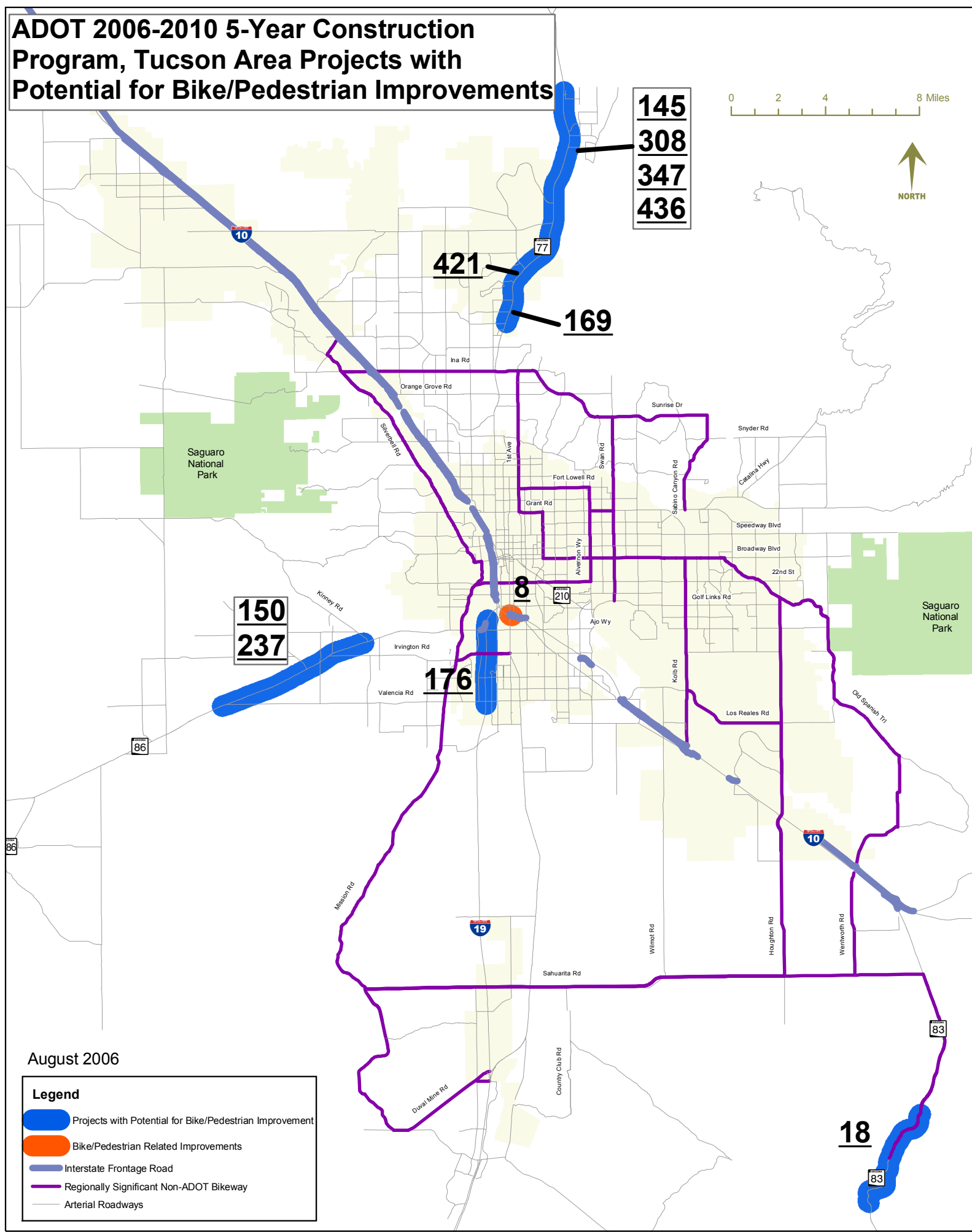
8

18

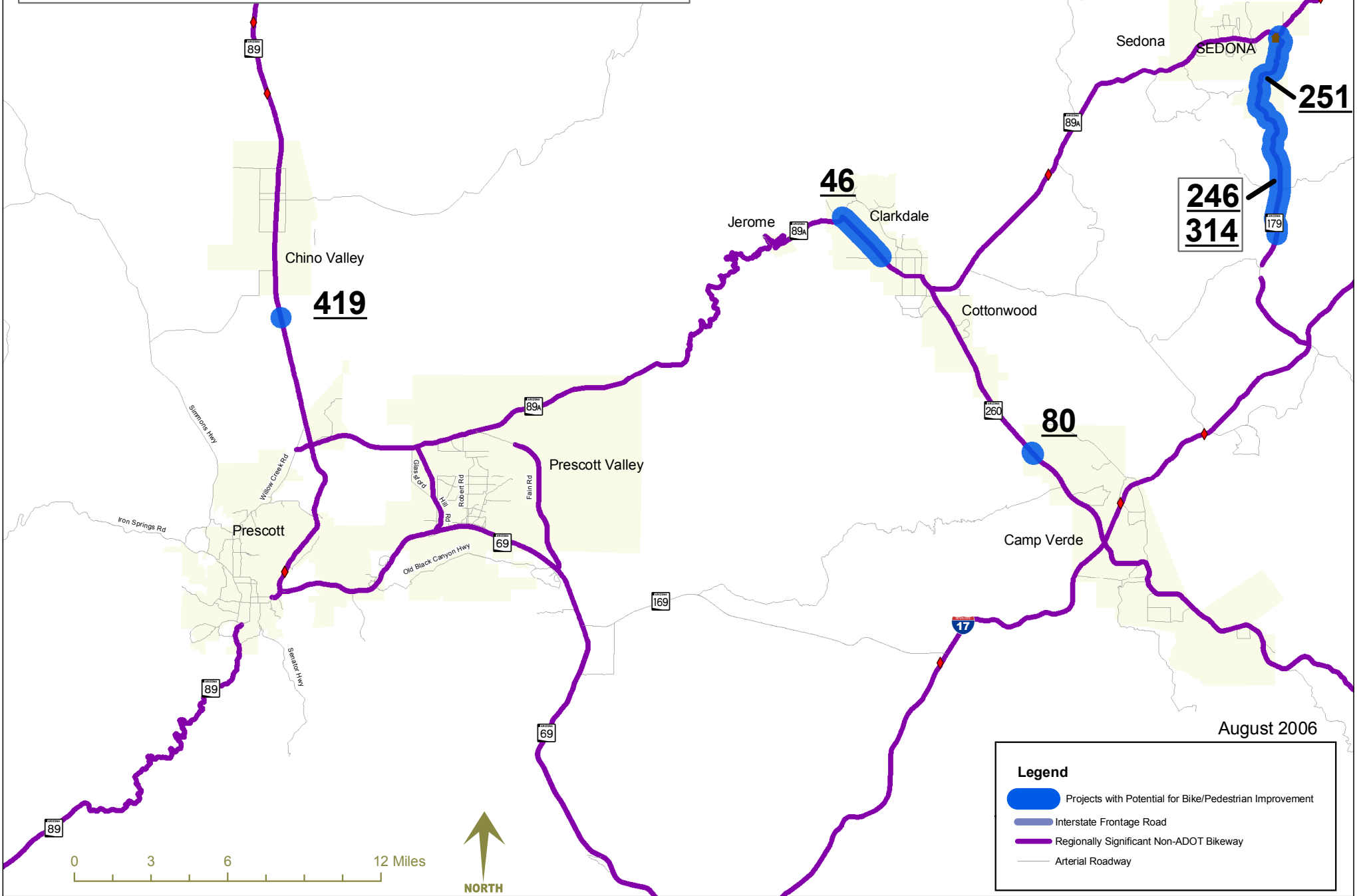
August 2006

Legend

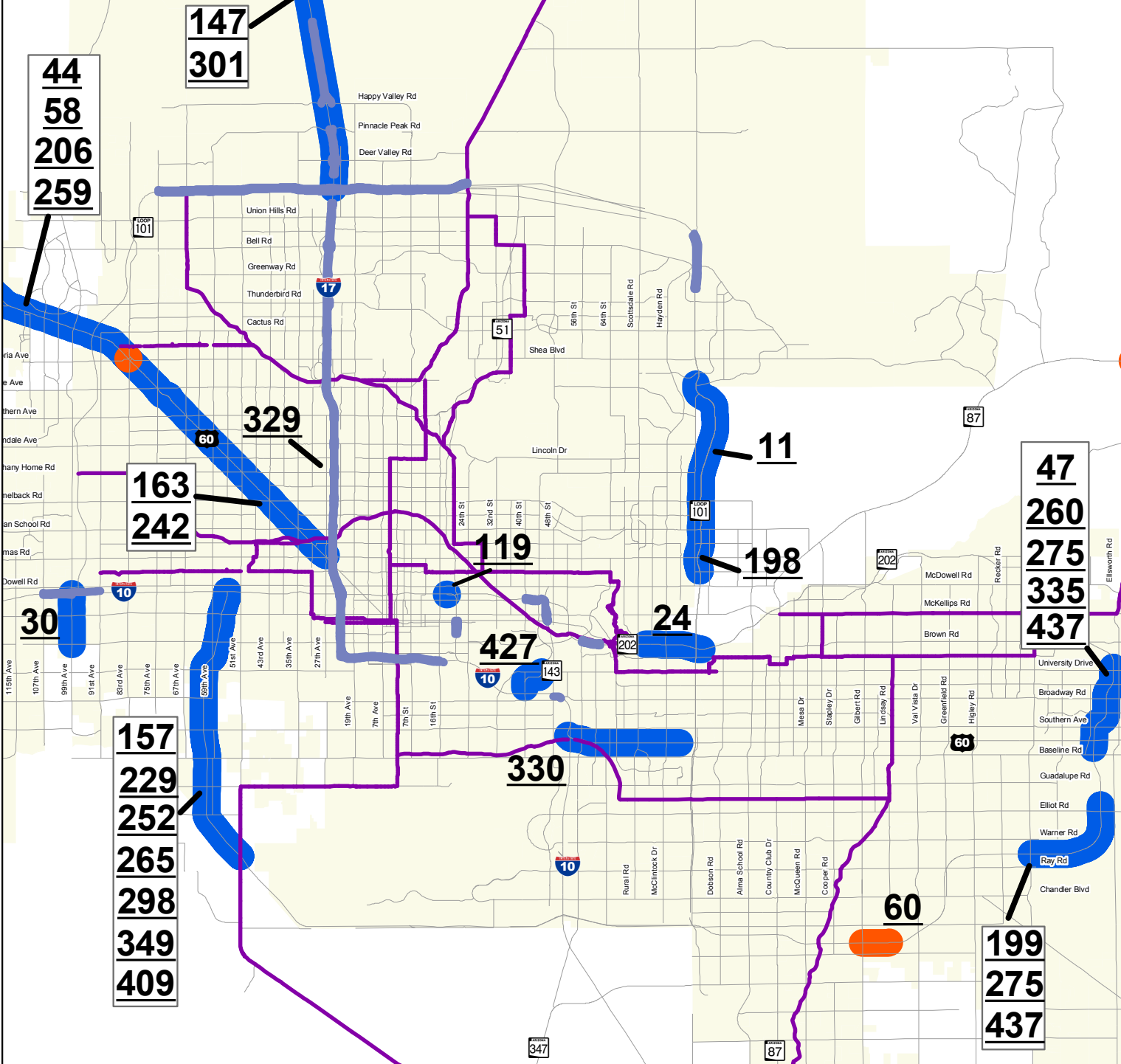
- Projects with Potential for Bike/Pedestrian Improvement
- Bike/Pedestrian Related Improvements
- Interstate Frontage Road
- Regionally Significant Non-ADOT Bikeway
- Arterial Roadways



ADOT 2006-2010 5-Year Construction Program, Prescott Area Projects with Potential for Bike/Pedestrian Improvements



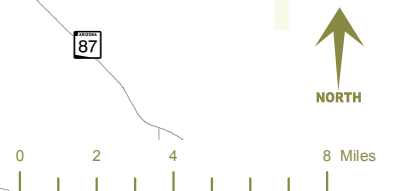
ADOT 2006-2010 5-Year Construction Program, Phoenix Area Projects with Potential for Bike/Pedestrian Improvements



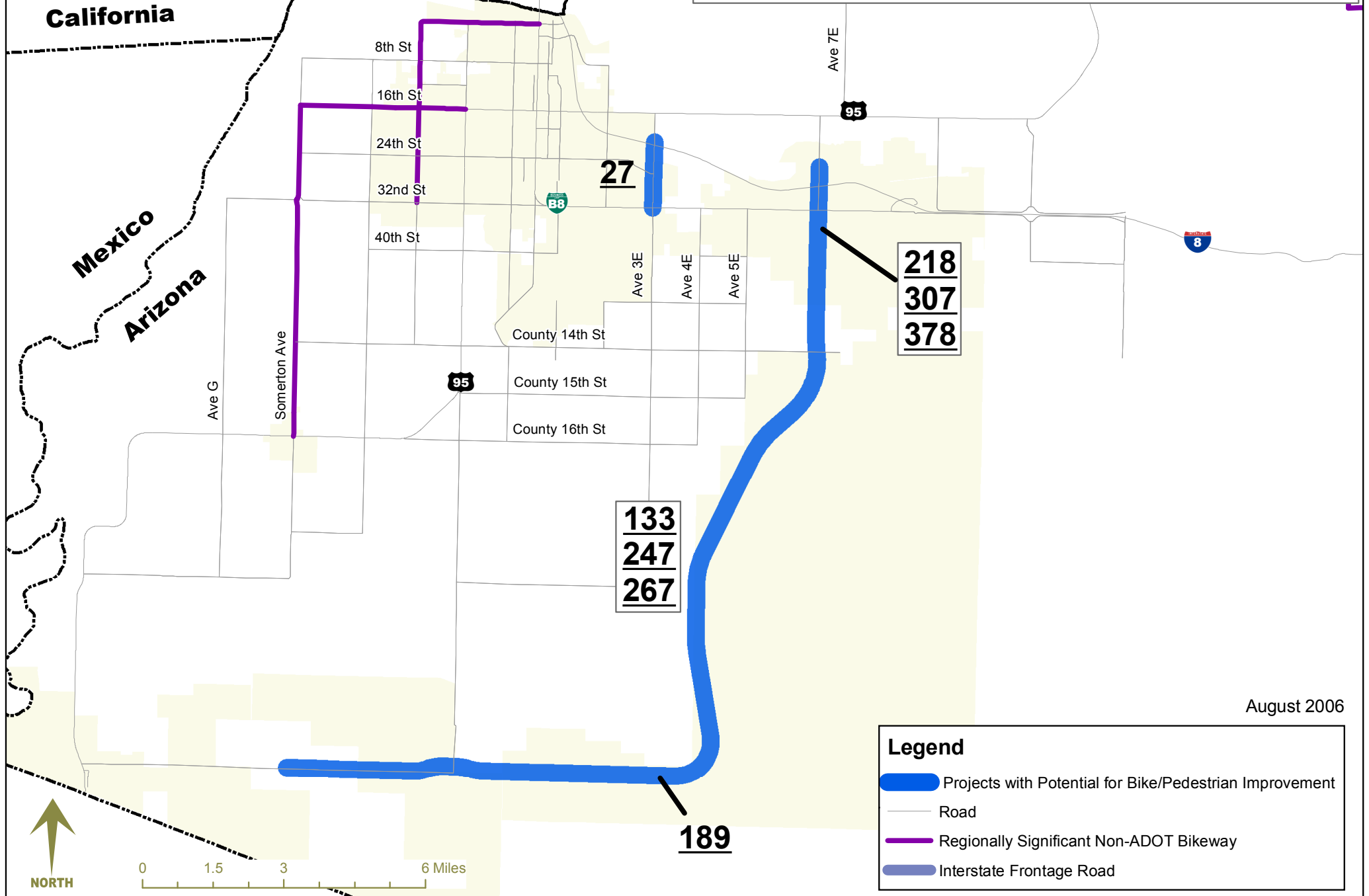
August 2006

Legend





- Projects with Potential for Bike/Pedestrian Improvement
- Bike/Pedestrian Related Improvements
- Interstate Frontage Roads
- Regionally Significant Non-ADOT Bikeway
- Arterial Roadways



ADOT 2006-2010 5-Year Construction Program, Yuma Area Projects with Potential for Bike/Pedestrian Improvements



Legend

-  Projects with Potential for Bike/Pedestrian Improvement
-  Road
-  Regionally Significant Non-ADOT Bikeway
-  Interstate Frontage Road

August 2006



MAP ID	Road	Location	Beginning Mile Post	Ending Mile Post	CFY	Type of Work	ADOT District	County Name	Type of Improvement
30	07 99TH AVE	I-10 TO MC 85 (99TH AVE)	0.00	0.01	2008	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
8	I 010	6TH AVE TI	260.99	260.99	2006	Sidewalks and artistic fencing	T	Pima	Bike/Pedestrian Improvement
147	I 017	SR 101L TO CAREFREE HIGHWAY (SR 74)	215.00	224.00	2007	Reconstruct & widen	E	Maricopa	Potential Bike/Pedestrian Improvement
301	I 017	SR 101L TO CAREFREE HIGHWAY (SR 74)	215.00	224.00	2007	Reconstruct & widen	E	Maricopa	Potential Bike/Pedestrian Improvement
329	I 017	BETHANY HOME RD TO NORTHERN AVE	204.90	204.91	2010	Design / Construct pedestrian walkway along the frontage roads	E	Maricopa	Bike/Pedestrian Improvement
176	I 019	VALENCIA RD TO AJO WAY (JCT SR 86)	58.70	62.30	2007	Widen Roadway	T	Pima	Potential Bike/Pedestrian Improvement
240	I 019	DOE ST TO BAFFERT DR, NOGALES	1.72	3.08	2006	Sidewalks, landscaping & scour retrofit	T	Santa Cruz	Bike/Pedestrian Improvement
71	S 077	MP 145 - MP 147	145.00	147.00	2007	Roadway Construction	G	Gila	Potential Bike/Pedestrian Improvement
145	S 077	TANGERINE RD - PINAL COUNTY LINE, PHASE I	82.00	87.82	2008	Construct roadway widening to 6 lanes	T	Pima	Potential Bike/Pedestrian Improvement
169	S 077	CALLE CONCORDIA - TANGERINE RD	77.50	77.51	2006	Widen to 6 lanes	T	Pima	Potential Bike/Pedestrian Improvement
308	S 077	TANGERINE RD - PINAL COUNTY LINE, PHASE I	82.00	87.82	2006	Design (roadway widening to 6 lanes)	T	Pima	Potential Bike/Pedestrian Improvement
347	S 077	TANGERINE RD - PINAL COUNTY LINE, PHASE I	82.00	87.82	2008	Construct roadway widening to 6 lanes	T	Pima	Potential Bike/Pedestrian Improvement
421	S 077	CALLE CONCORDIA - TANGERINE RD	77.00	82.00	2006	Widen to 6 Lanes	T	Pima	Potential Bike/Pedestrian Improvement
436	S 077	TANGERINE RD - PINAL COUNTY LINE, PHASE II	82.00	87.82	2009	Construct roadway widening to 6 lanes	T	Pima	Potential Bike/Pedestrian Improvement
18	S 083	HILTON RANCH RD TO 5 MILES SOUTH	44.00	49.00	2010	Design & construct roadway widening	T	Pima	Potential Bike/Pedestrian Improvement
250	S 085	2 MC 85 TO SOUTHERN AVE	150.40	152.50	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
291	S 085	2 MP 120.54 - MP 122.99	120.54	122.99	2009	Construct roadway	Y	Maricopa	Potential Bike/Pedestrian Improvement
292	S 085	2 MP 139.01 - MP 141.71	139.01	141.71	2006	Construct roadway	Y	Maricopa	Potential Bike/Pedestrian Improvement
325	S 085	2 SOUTHERN AVE TO I-10	152.00	154.52	2006	Construct roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
343	S 085	2 MP 149.40 - MP 152.01	149.40	152.01	2009	Reconstruct & widen	E	Maricopa	Potential Bike/Pedestrian Improvement
382	S 085	2 MP 130.71 - MP 137.00	130.71	137.00	2007	Roadway Reconstruction (utilities included)	Y	Maricopa	Potential Bike/Pedestrian Improvement
41	S 086	EAST OF KITT PEAK (SR 386 - MP 140.8)	133.30	140.80	2008	Construct roadway widening	T	Pima	Potential Bike/Pedestrian Improvement
132	S 086	EAST OF KITT PEAK (SR 386 - MP 140.8)	133.30	140.80	2007	Design roadway widening	T	Pima	Potential Bike/Pedestrian Improvement
150	S 086	VALENCIA RD - KINNEY RD	169.50	166.10	2008	Construct roadway widening to 4 lanes	T	Pima	Potential Bike/Pedestrian Improvement
205	S 086	MP 137.1 TO SR 386 (KITT PEAK)	137.10	141.40	2009	Widen roadway to 40'	T	Pima	Potential Bike/Pedestrian Improvement
237	S 086	VALENCIA RD - KINNEY RD	169.50	166.10	2006	Design (roadway widening to 4 lanes)	T	Pima	Potential Bike/Pedestrian Improvement
249	S 086	WEST OF KITT PEAK, PHASE III	141.40	145.70	2010	Design (roadway widening)	T	Pima	Potential Bike/Pedestrian Improvement
54	S 087	FOREST BOUNDARY TO NEW FOUR PEAKS	194.00	203.00	2007	Shoulder widening/median crossovers	E	Maricopa	Bike/Pedestrian Improvement
419	S 089	MP 324.3 TO CENTER STREET	324.30	324.31	2007	Construct 5 lane urban roadway	P	Yavapai	Potential Bike/Pedestrian Improvement
387	S 090	CENTRAL AVE TO MOSON RD, E OF SIERRA VISTA	323.50	325.50	2010	Widen to 5 lanes	S	Cochise	Potential Bike/Pedestrian Improvement
11	S 101	PIMA RD, MCDOWELL RD - VIA LINDA, JPA	42.00	49.00	2006	Roadway Widening	E	Maricopa	Potential Bike/Pedestrian Improvement
198	S 101	PIMA RD EXTENSION, JPA	48.00	49.00	2007	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
274	S 101	PIMA RD EXTENSION, JPA	48.00	48.00	2006	Design Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
427	S 153UNBUILT	SUPERIOR AVE - UNIVERSITY DR	0.00	0.00	2007	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
246	S 179	VILLAGE OF OAK CREEK TO NORTH FOREST BOUNDARY	304.50	310.00	2006	Construct roadway	F	Yavapai	Potential Bike/Pedestrian Improvement
251	S 179	NORTH FOREST BOUNDARY TO SEDONA	310.10	313.40	2007	Construct roadway	F	Yavapai	Potential Bike/Pedestrian Improvement
314	S 179	VILLAGE OF OAK CREEK TO NORTH FOREST BOUNDARY	304.50	310.00	2006	Construct roadway	F	Yavapai	Potential Bike/Pedestrian Improvement
133	S 195UNBUILT	YUMA AREA SERVICE HWY	0.00	26.00	2009	Construct New Roadway	Y	Yuma	Potential Bike/Pedestrian Improvement
189	S 195UNBUILT	AVE E 1/2 - AVE B	5.50	9.08	2006	Construct 4 lane divided highway	Y	Yuma	Potential Bike/Pedestrian Improvement
218	S 195UNBUILT	40TH STREET TO I-8	25.96	27.40	2006	Construct roadway widening	Y	Yuma	Potential Bike/Pedestrian Improvement
247	S 195UNBUILT	YUMA AREA SERVICE HWY	0.00	26.00	2008	Construct New Roadway	Y	Yuma	Potential Bike/Pedestrian Improvement
267	S 195UNBUILT	YUMA AREA SERVICE HWY	0.00	26.00	2010	Construct new roadway	Y	Yuma	Potential Bike/Pedestrian Improvement
307	S 195UNBUILT	40TH STREET TO I-8	25.96	27.40	2006	Construct roadway widening	Y	Yuma	Potential Bike/Pedestrian Improvement
378	S 195UNBUILT	40TH STREET TO I-8	25.96	27.40	2006	Construct roadway widening	Y	Yuma	Potential Bike/Pedestrian Improvement
24	S 202	RURAL RD TO SR 101L, WB	8.00	10.00	2009	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
119	S 202	51ST AVE TO I-10 EAST/SANTAN TI	0.00	0.01	2008	Design roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
47	S 202UNBUILT	UNIVERSITY DR - SOUTHERN AVE	27.80	27.81	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
60	S 202UNBUILT	LINDSEY RD TO GILBERT RD	0.00	0.01	2008	Design & construct multi-use path	E	Maricopa	Bike/Pedestrian Improvement
157	S 202UNBUILT	I-10 WEST TO 51ST AVE	0.00	0.01	2010	Construct roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
199	S 202UNBUILT	POWER RD - UNIVERSITY DR	23.30	27.80	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
229	S 202UNBUILT	I-10 / SR 51 TI TO SR 101L, EB	0.00	10.00	2009	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
252	S 202UNBUILT	I-10 WEST TO 51ST AVE	0.00	0.01	2008	Construct roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
260	S 202UNBUILT	UNIVERSITY DR - SOUTHERN AVE	27.80	27.81	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
265	S 202UNBUILT	I-10 WEST TO 51ST AVE	0.00	0.01	2010	Construct roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
275	S 202UNBUILT	POWER RD - UNIVERSITY DR	23.30	27.80	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
298	S 202UNBUILT	I-10 / SR 51 TI TO SR 101L, EB	0.00	10.00	2009	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
335	S 202UNBUILT	UNIVERSITY DR - SOUTHERN AVE	27.80	27.81	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
349	S 202UNBUILT	I-10 WEST TO 51ST AVE	0.00	0.01	2008	Construct roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
409	S 202UNBUILT	I-10 / SR 51 TI TO SR 101L, EB	0.00	10.00	2008	Design roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
437	S 202UNBUILT	POWER RD - UNIVERSITY DR	23.30	27.80	2006	Construct Roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
33	S 260	LITTLE GREEN VALLEY	263.10	270.00	2008	Reconstruct Roadway	P	Gila	Potential Bike/Pedestrian Improvement
80	S 260	COTTONWOOD TO CAMP VERDE	214.00	214.01	2010	Reconstruct roadway (IGA Repayment)	P	Yavapai	Potential Bike/Pedestrian Improvement
254	S 260	DOUBTFUL CANYON SECTION	269.00	272.50	2009	Reconstruct Roadway	P	Gila	Potential Bike/Pedestrian Improvement
322	S 260	LION SPRINGS SECTION	258.00	260.00	2009	Design (Roadway)	P	Gila	Potential Bike/Pedestrian Improvement
375	S 260	DOUBTFUL CANYON SECTION	269.00	269.00	2006	Design (Roadway)	P	Gila	Potential Bike/Pedestrian Improvement
27	S 280	I-8 TO B-8, SR 280 (AVE 3E)	0.00	1.30	2006	Reconstruct Roadway	Y	Yuma	Potential Bike/Pedestrian Improvement
46	SA089	CEMENT PLANT ROAD - BLACK HILLS DRIVE	349.00	351.20	2007	Reconstruct roadway & scour retrofit	P	Yavapai	Potential Bike/Pedestrian Improvement
418	SB019	1 DOE ST TO BAFFERT DR, NOGALES	1.72	3.08	2006	Sidewalks, landscaping & scour retrofit	T	Santa Cruz	Bike/Pedestrian Improvement
334	SB040	6 WINSLOW STREETS (TURNBACK)	251.90	257.50	2006	Reconstruct streets, curbs & sidewalks	H	Navajo	Bike/Pedestrian Improvement
44	U 060	303L (ESTRELLA) TO SR 101L (AGUA FRIA)	138.00	149.00	2009	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
58	U 060	99TH AVE - 83RD AVE (INCLUDING NEW RIVER BRIDGE)	148.90	150.50	2007	Widen roadway and bridge	E	Maricopa	Potential Bike/Pedestrian Improvement
163	U 060	SR 101L (AGUA FRIA) TO MCDOWELL RD	148.90	161.90	2009	Design roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
206	U 060	99TH AVE - 83RD AVE (INCLUDING NEW RIVER BRIDGE)	148.00	148.01	2006	Design widening	E	Maricopa	Potential Bike/Pedestrian Improvement
222	U 060	303L (ESTRELLA) TO SR 101L (AGUA FRIA)	138.00	149.00	2007	Design roadway	E	Maricopa	Potential Bike/Pedestrian Improvement
235	U 060	BOYCE THOMPSON STATE PARK	220.00	220.01	2007	Construct road	G	Gila	Potential Bike/Pedestrian Improvement
242	U 060	SR 101L (AGUA FRIA) TO MCDOWELL RD	148.90	161.90	2010	Widen roadway	E	Maricopa	Potential Bike/Pedestrian Improvement

259	U 060	83RD AVE & PEORIA	150.50	150.51	2006	Design & construct at-grade pedestrian crossing	E	Maricopa	Bike/Pedestrian Improvement
318	U 060	FLORENCE JCT- QUEEN CREEK	213.00	218.00	2006	Reconstruct roadway (widening)	G	Pinal	Potential Bike/Pedestrian Improvement
328	U 060	RUSSELL RD - RAGUS RD	246.77	247.60	2006	New sidewalk & highway lighting	G	Gila	Bike/Pedestrian Improvement
330	U 060	I-10 TO SR 101L (PRICE)	172.00	176.00	2008	Design general purpose lane	E	Maricopa	Potential Bike/Pedestrian Improvement
50	U 093	SANTA MARIA RIVER - WICKENBURG	161.00	198.70	2006	Design (Roadway)	K	Yavapai	Potential Bike/Pedestrian Improvement
353	U 093	ANTELOPE WASH	101.80	104.10	2008	Design new roadway	K	Mohave	Potential Bike/Pedestrian Improvement
224	U 160	VAN'S TRADING POST TO EAST OF SR 264	320.00	321.90	2006	Widening and drainage	F	Coconino	Potential Bike/Pedestrian Improvement
36	U 191	NAHATA' DZIIL RD - SANDERS TI	367.00	368.80	2007	Reconstruct 3 bridges and roadway	H	Apache	Potential Bike/Pedestrian Improvement
39	U 191	BURNSIDE JUNCTION - NORTH, PH I	417.50	420.00	2006	Design (widening)	H	Apache	Potential Bike/Pedestrian Improvement
167	U 191	ELFRIDA	24.00	25.50	2006	Construct pathway	S	Cochise	Bike/Pedestrian Improvement
266	U 191	US 191, MP 355 - 356 (HARDSCRABBLE RD)	355.00	356.00	2006	Reconstruct roadway & drainage	H	Apache	Potential Bike/Pedestrian Improvement
276	U 191	ROPER LAKE STATE PARK	115.00	0.10	2008	Construct Road, PH II	S	Graham	Potential Bike/Pedestrian Improvement
297	U 191	TEN RANCH TO OWL CANYON (SEG III)	94.34	98.00	2008	Construct parallel roadway	S	Graham	Potential Bike/Pedestrian Improvement
306	U 191	BURNSIDE JUNCTION - NORTH	417.50	420.00	2008	Roadway Widening	H	Apache	Potential Bike/Pedestrian Improvement
312	U 191	CHINLE SOUTH	446.00	447.00	2010	Roadway widening	H	Apache	Potential Bike/Pedestrian Improvement
367	U 191	MP 91.6 - MP 95.4 (SEGMENT II)	91.60	95.40	2010	Construct parallel roadway	S	Graham	Potential Bike/Pedestrian Improvement
389	U 191	CHINLE SOUTH	446.00	447.00	2009	Design roadway widening	H	Apache	Potential Bike/Pedestrian Improvement