



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.



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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

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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	
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PLEASE INDICATE WHO WILL SERVE AS PROJECT DIRECTOR: Dale Buskirk	
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<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

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