



U.S. Department  
of Transportation

**Federal Highway  
Administration**

**ARIZONA DIVISION**

February 18, 2009

4000 North Central Avenue,  
Suite 1500  
Phoenix, Arizona 85012-1906  
602-379-3646

In Reply Refer To:  
HPM-AZ

804.3  
SR89A, MP 371 to MP 372.99 Lighting Study  
revised approval from Aug 26, 2006

Mr. Reed Henry, P.E.  
Highway Enhancements for Safety Section Manager  
Arizona Department of Transportation (065R)  
Phoenix, Arizona 85007

Dear Mr. Henry:

We have reviewed the revised estimate and request for Highway Enhancements for Safety (HES) funds for continuous highway lighting on SR 89A between milepost 371 and 372.99 and a traffic signal at the Andante Drive intersection in the City of Sedona. Based on the pedestrian activity and the occurrence of nighttime pedestrian crashes the lighting and signal will enhance the safety for pedestrians in this area. Therefore, this proposed safety improvement, with a revised estimated cost of up to \$2,000,000, is approved and safety funds may be used for this project.

If you have any further questions or concerns I would be happy to discuss them with you. Please feel free to call me at (602) 382-8961

Sincerely yours,

Jennifer Brown, P.E.  
Safety Programs Manager

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**AMERICAN**  
**ECONOMY**



# Arizona Department of Transportation

## Intermodal Transportation Division

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano  
Governor

Victor M. Mendez  
Director

Floyd Roehrich Jr.  
State Engineer

January 20, 2009

Jennifer H. Brown, P.E.  
FHWA Arizona Division  
4000 N. Central Ave, Suite 1500  
Phoenix, AZ 85012-1906

### Re: SR 89A, MP 371 to MP 372.99 Pedestrian Safety Evaluation

Dear Ms. Brown:

Please refer to the FHWA memo dated August 30, 2006 regarding the HSIP fund approval for SR 89A, MP 371 to MP 372.99 continuous highway lighting. Due to several comments from Sedona citizens, the scope of work was revised to include the construction of a traffic signal system with exclusive right turn lane at Andante Dr. in addition to original continuous highway lighting from SR 89A, MP 371 to MP 372.99.

The safety evaluation reviewed the pedestrian-motor vehicle crashes occurring on SR 89A, MP 371 to MP 373 from January 2004 to December 2006 to determine suitability for funding for streetlight installations. In addition, pedestrian volume data were analyzed to identify pedestrian crossing issues along SR 89A corridor. A traffic signal has been warranted at SR 89A and Andante Dr. intersection which is currently STOP sign controlled. The signal needs study was completed in September 2007 and met 3 of the 8 MUTCD signal warrants. Warrant Number 1, Eight-Hour Vehicular Volume; Warrant 2, Four-Hour Vehicular Volume; and Warrant 3, Peak Hour Vehicular Volume. Although Warrant 4, Pedestrian Volume was not met - it is recognized that the individual signal warrant for pedestrian volume criteria is exceedingly high. During the study, 60 pedestrian crossings of SR 89A in the vicinity of the Andante Dr intersection were observed between 6:00AM and 9:00PM. There was one fatal crash at Andante Dr. intersection and another one within approximately 700 ft from the same intersection. The Access Management Guidelines being developed for this section of roadway (U2 - Urban Mixed) requires the construction of a right-turn lane when the peak hour volume exceeds 15 turning vehicles. Installation of the signal will provide safe crossing facility to the pedestrians.

A revised pedestrian crash analysis, signal warrant study, and benefit/cost analysis are attached. We are requesting additional funding in the amount of \$600,000 with a revised total amount of \$2,000,000. Please contact me at (602) 712-7374 if you have any questions.

Sincerely,

D. Reed Henry, P.E.  
State Safety Engineer