



MEMORANDUM

Department of Transportation



DATE: October 31, 2008

TO: RTA Wildlife Connectivity Committee

FROM: Pima County

SUBJECT: **Sunrise Road Wildlife Permeability Study**

Background:

The overall purpose of this project is to identify locations that represent a high value to wildlife connectivity and develop opportunities to improve permeability across various roadways within a specific three by five mile region in northeast Tucson, within Pima County. This region includes Rillito River north 5 miles to the US Forest Service Boundary and Craycroft Road east 3 miles to Sabino Canyon Road. Four road projects are in the planning stages and four additional roadways may require retrofitting.

Discussion Points:

Most of Arizona's roads were not originally designed to accommodate wildlife movement. Current road improvement projects can dramatically restore permeability and reduce the threat of wildlife-vehicle collisions if wildlife movement is incorporated into roadway design. Addressing potential barriers one road at-a-time is expensive and inefficient. In each existing corridor, we must address all potential barriers concurrently to successfully maintain or restore linkages between habitats and conserve the wildlife and natural ecosystems that Arizona's residents and visitors rely on and benefit from.

This proposal is the first of its kind locally, approaching wildlife connectivity by evaluating road crossing permeability throughout an identified geographic region rather than across one road. Pima County believes this approach will become quite useful in the following years as local municipalities begin evaluating wildlife connectivity areas identified on the proposed Regional Map. The Regional Map is anticipated to recognize geographic blocks in which wildlife corridors are important within Pima County. Multiple geographic blocks can be initially evaluated at very low overall costs. Planned projects, construction dates, roadkill information, etc. can be overlaid into these identified blocks, and areas of priority established throughout the region. These prioritized geographic areas can then be further evaluated in the most overall efficient manner, but in a manner that allows individual road crossing improvements to be carried out as funding and timing allows, but within the recommendations established for the study area. In the long run, this approach will be cost effective to identify current projects where there is wildlife movement and future needs.

Ramification of No Action:

There is a need for maintaining and improving upon wildlife linkages across roadways for use in the design and placement of applicable wildlife crossings in transportation and regional planning efforts. We anticipate that information gained by this study will be incorporated into various roadway projects as well as possible retrofits. If this specific region is not analyzed, roadway engineers may

inadvertently design roads that continue to seriously impact wildlife moving back and forth between the Catalina Mountains and the Rillito River. Our lack of understanding of where existing wildlife linkages are located may continually lead to further fragmentation of wildlife connectivity and habitat throughout Pima County. We may also lose opportunities to incorporate linkages into the initial stages of the road design process.

Recommendation:

Pima County recommends the proposal for funding of the Sunrise Road Permeability Study, in the amount of \$28,290.00, submitted to the RTA Wildlife Connectivity Committee be approved and forwarded to the Transportation Improvement Program (TIP) RTA Subcommittee.