




MEMORANDUM

Date: January 21, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator 

Re: **Thornydale Road Widening and Capacity Improvements**

Thornydale Road widening, from Orange Grove Road to Linda Vista Boulevard, was part of the 1997 Highway User Revenue Bond issue with an estimated cost of \$26.5 million (\$3 million of Bond Funding and \$23.5 million of Other Funding).

The project was somewhat controversial since in 1997 the Cactus Ferruginous Pygmy Owl was still listed as an endangered species and significant mitigation measures were required to widen even the first phases of the project from Orange Grove Road to Ina Road and from Ina Road to Cortaro Farms Road, completed in 1999 and 2003 respectively. The total for both phases was \$19.8 million, \$3.0 million for Orange Grove to Ina Road and \$16.8 million for Ina Road to Cortaro Farms Road.

When the 1997 bond program was proposed, the primary complaint in Pima County was that our rural system was overtaxed and needed to be significantly improved by a series of capacity improvements or roadway widening. Again, in 2006, the Regional Transportation Authority (RTA) was primarily designated for roadway capacity improvements in the highway element. Thornydale was not included since we were still in the early stages of implementing the 1997 bond program.

Since both the 1997 bond program and the 2006 RTA, there has been a shift in the focus for transportation improvements from capacity and mobility to maintenance and repair, specifically, pavement preservation. Hence, the decision was made by the Board of Supervisors in April 2018 to amend the scope for Thornydale Road, from Cortaro Farms Road to Linda Vista Boulevard, to pavement repair and shoulder widening.

Transportation agencies in counties, cities and towns, including the State agency, the Arizona Department of Transportation, are under increasing pressure to operate and maintain a transportation system with stagnant revenue sources, rapidly increasing costs, increased roadway utilization due to increased vehicle fuel efficiency and the introduction of electric vehicles that pay no gas taxes. Since 2006, overall fuel efficiency has increased from 22 miles per gallon to nearly 26 miles per gallon, an 18 percent fuel efficiency increase. The

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number of electric car models has increased from less than 50 in 2006 to over 200 models in 2018. The purchasing power of the gas tax has been reduced by half since 1990.

The Highway User Revenue Fund (HURF), the main source of revenue for transportation systems (State, county, city or town) has been steadily eroded over time. The gas tax in 1991, as a percentage of HURF, was 44 percent. In 2019, the gas tax is 35 percent. This lack of revenue has caused stressors in the transportation system. For example, in 2010, the pavement condition of Arizona's interstate highway system was rated at 72 percent Good. In eight years, this rating has fallen to 53 percent Good. The national highway system that contains the balance of other state highways had a pavement condition index of Good at 68 percent in 2010, but decreased to 35 percent in 2018. Finally, the cost of construction, maintenance and repair of highway systems has been rapidly increasing as the economy recovers. The Highway Cost Index as reported by the Arizona Department of Transportation in 2016, was 1.0 and increased to 1.47 by 2019. Therefore, \$1 of highway improvements in 2016, now costs \$1.47 for the same product (47 percent increase).

The actual cost for widening the balance of Thornsdale Road to Linda Vista is approximately \$21 million. There is no schedule for including the widening project in a future capital improvement program since our focus is on roadway repair, maintenance and pavement rehabilitation. This focus is expected to remain for the next 10 years. The best possibility for any future widening of Thornsdale Road will rest with any new initiative of the RTA.

CHH/anc

c: Jan Leshar, Chief Deputy County Administrator
Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Yves Khawam, PhD, Assistant County Administrator for Public Works
Ana Olivares, Director, Transportation Department