## State of Good Repair

The Bella Vista Bypass consists of constructing a new, four-lane, fully-controlled access (Interstate-type) facility from the Highway 71/Highway 71 Business interchange south of Bella Vista, Arkansas to Highway 71 south of Pineville, Missouri. The new location project will consist of two travel lanes in each direction separated by a 60-foot depressed median. Paved four-foot inside and 10-foot outside shoulders will be provided on each side of the traveled way. The length of the Bella Vista Bypass in Arkansas is 14.1 miles, measured from the Highway 71/Highway 71 Business interchange to the Arkansas-Missouri State Line. The length of the Bypass in Missouri is 4.8 miles, measured from the Arkansas-Missouri State Line to Highway 71 south of Pineville, Missouri. The proposed Bypass will route through traffic away from the existing section of Highway 71 thereby alleviating congestion in the Bella Vista community.

The Bella Vista Bypass is designed for a twenty-year life span and is to be constructed to the highest interstate standards for new construction.

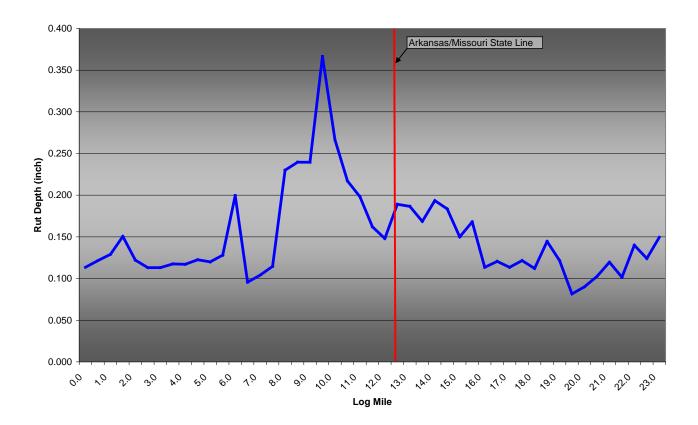
The existing section of Highway 71 that extends from just south of Bella Vista, Arkansas to Pineville, Missouri is a four-lane facility with two travel lanes in each direction. From the mile-maker 0.00 to 5.027, the facility is built as a four-lane, fully-controlled access (Interstate-type) facility. For the next 0.903 miles the roadway is separated by eight-foot left shoulder widths with a dividing concrete parapet wall. From 5.93 mile-maker to mile-maker 12.63, the roadway has four-foot left shoulder widths and a concrete median. The roadway was constructed with a hot-mix asphalt pavement. The pavement has performed well structurally with in-situ mechanistic pavement analysis indicating that it will be structurally adequate for another 20 years. The following table shows results of this analysis.

**In-Situ Mechanistic Pavement Analysis** 

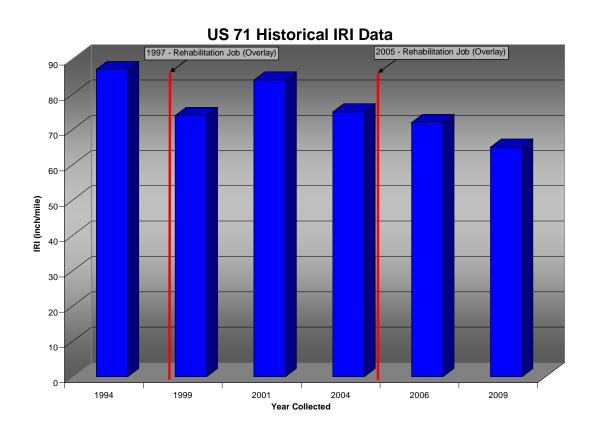
				Resilient Modulus				
							Design	Remaining
	Begin Log End Log						Subgrade	Life of
Section	Descripton	Mile	Mile	ACHM	Base	Subgrade	Value(1)	Pavement
				(ksi)	(ksi)	(ksi)	(ksi)	(years)
1	US 71 Section 19 Main Lanes	5.64	12.63	366	47	38	13	20.0

(1) Reference AASHTO Guide for Design of Pavement Structures, Section L3.2

The average rut depths in several locations and low-to-moderate longitudinal, transverse, and fatigue cracking throughout its length at its forecasted rate of deterioration show the need for a maintenance overlay in the year 2018. The rut depths on existing US 71 is shown in the following chart.

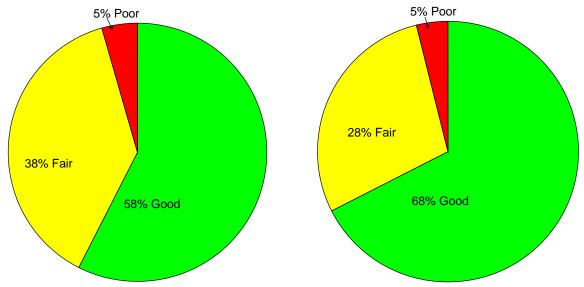


Currently US 71 has an overall International Roughness Index (IRI) of 65 inches per mile (indicating a smooth pavement). The following chart shows the Arkansas portion of the roadway's historical IRI performance over the last 15 years.



The opening of the Bella Vista Bypass is anticipated to cause a significant decrease in the volume of large and medium size trucks utilizing the existing route. Since these vehicles are generally reported to negatively impact rutting and cracking pavements, the structural integrity of this route may allow the pavement to remain at a high level of service far in excess of its projected twenty-year life span.

Until the tolls are removed from the Bella Vista Bypass (approximately 2048), the existing route will maintain its identity on the National Highway System (NHS). The route will be maintained at a performance level consistent with routes on the NHS. The percent of good NHS routes in Arkansas is 58% and for Missouri 68%. The following pie charts show the performance breakdown of Arkansas' and Missouri's NHS.



Arkansas NHS Pavement Performance Missouri NHS Pavement Performance

The following link shows the right-of-way imagery for existing US 71, <a href="https://www.arkansashighways.com/bellavista/movies.aspx">www.arkansashighways.com/bellavista/movies.aspx</a>. This will demonstrate a simulated driving experience of the current US 71 roadway surface.