

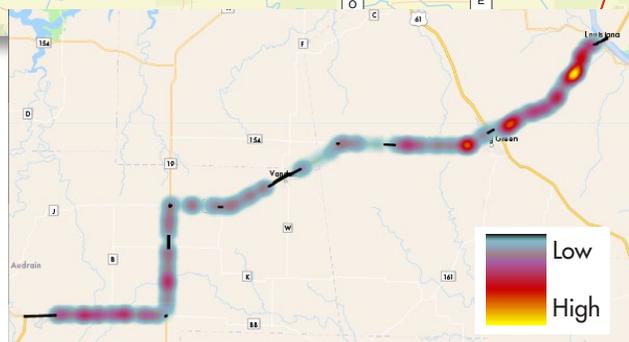


PROJECT UPDATE: Route 54 Mexico to Louisiana, MO Shared Four-Lane Design



ABOUT THE PROJECT

Although this project is not currently funded, the Missouri Department of Transportation (**MoDOT**) invites area residents now to learn more about the potential improvements of U.S. Route 54 from Mexico, Missouri, to Louisiana, Missouri. Working with the engineering consulting firm Bartlett & West, MoDOT's core team has determined that the best option to improve safety and efficiency of travel along Route 54 is to incorporate a **Shared Four-Lane Design**. This type of design has become popular on other Missouri roadways with similar traffic patterns to Route 54 because they have been proven to improve safety, provide efficient travel for drivers, and have the benefit of reduced maintenance and materials costs.



Above: The route under consideration. At right: a heat map displaying crashes along Route 54 from 2017-2021. * The map features data from 267 traffic incidents.

*Data does not include crashes in towns or major intersections.

DESIGN BENEFITS

EFFICIENCY

The traffic flow is very efficient and has resulted in a travel time savings for Missouri travelers.

COST

The Shared Four-Lane carries nearly the same amount of traffic but cost 60% less than a four-lane divided highway.

QUALITY

The opposing lanes of traffic are separated by a four-foot median that is marked by a series of 6-inch stripes, two of which are rumble stripes to alert a driver when they may be straying into the opposing lane. The highway also includes a series of new signs informing the driver of what to expect ahead.

ORGANIZATIONAL IMPACT

This innovative approach is fitting with MoDOT's philosophy and its use of practical design. In addition, the Shared Four-Lane Highway is an attractive alternative between two or four lane roads.

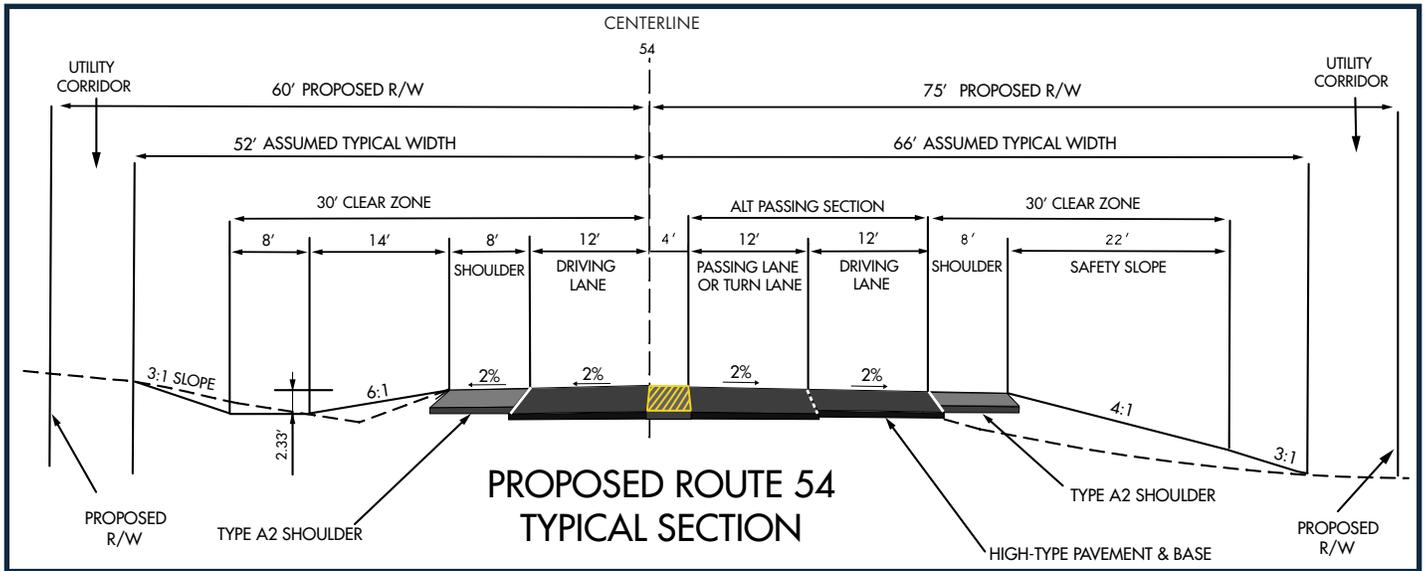
SAFETY

This innovative design has proven to reduce incidences of crashes on similar roadways in Missouri.

ENVIRONMENTAL

The design utilizes fewer materials and takes less time to build as the footprint is smaller than that of a four-lane divided highway.

TYPICAL SECTION



BACKGROUND

Expansion of the US 54 corridor in Northeast Missouri has been discussed since the early 1990s when a new four-lane alignment was contemplated. Preliminary planning and environmental work was completed for this idea with the development and approval of an Environmental Impact Statement (EIS) in 1996. Unfortunately, the project was not constructed due to a lack of funds.

In 2009, a MoDOT Value Engineering study team analyzed the Route 54 corridor to implement practical design and cost saving ideas, collect input from stakeholders and develop updated cost estimates. It was concluded then that the addition of an alternating passing lane, or "shared 4-lane", facility would provide an improved level of service and safety at half the cost of a four-lane divided highway. These findings were then presented to the stakeholders, local officials and the Highway 54 Coalition.

A recent unfunded needs study conducted by MoDOT has brought the project back into focus and advanced it to the concept study phase of project development. The results of this study are being presented to the public at open house meetings. The project still remains unfunded and is not a part of MoDOT's five-year STIP construction program.

ESTIMATED PROJECT COSTS

CORRIDOR SECTION		LENGTH (MILES)	2023 CONST. COST
FROM	TO		
Mexico	Scott's Corner	8.4	\$19,070,000
Scott's Corner	Basinger's Corner	8.2	\$15,415,000
Basinger's Corner	Jenning's Corner	13.7	\$17,824,000
Jenning's Corner	Bowling Green	10.2	\$16,772,000
Bowling Green	Louisiana	12.1	\$17,763,000
PASSING LANES TOTAL		52.6	\$86,844,000
Complete 4 Lanes around Mexico		6	\$33,955,000
Intersection Improvements at Jennings's Corner		NA	\$4,188,000
TOTAL CORRIDOR IMPROVEMENTS		58.6	\$124,987,000

25%

The reduction rate in crashes of all types and all severities on routes using Shared Four-Lane Concepts.

American Association of State and Highway Transportation Officials (AASHTO) Highway Safety Manual, 2010, with 2014 Supplement, Section 16.6.2 - Passing and Climbing Lane Treatments with CMFs

CONTACT INFORMATION

For further information about the project, please visit the project website using the QR code. You may also contact:

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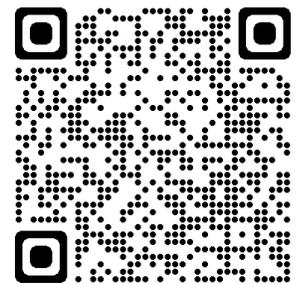
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Bartlett & West