## ABETTER54.COM



FROM MEXICO, MO TO LOUISIANA, MO OUR RESIDENTS AND THE TRAVELING PUBLIC NEED A BETTER 54.

## OUR MISSION

Northeast Missouri needs to complete its extension of the US 54 corridor by upgrading it to a shared four lane highway to support economic development, provide safer travel and provide more efficiency. A shared four–lane highway is being proposed by a concerned group of citizens to help this happen.



## OUR COMMUNITIES

Communities along the Highway 54 Corridor:

- Mexico, MO
- Laddonia, MO
- Farber, MO
- Vandalia, MO
- Curryville, MO
- Bowling Green, MO
- Louisiana, MO

## OUR MEMBERS

Feel free to contact any of the following coalition representatives:

- Bill Allen, 573-470-6565, ballen@pikecounty-mo.gov
- Emily Edgar, 573-248-8688, emily.edgar@modot.mo.gov
- Amy O'Brien, 573-581-2100, aobrien@mexicomissouri.org
- Bruce Slagle, 573-581-2100, blagle@mexicomissouri.org
- Alan Winders, 573-473-5822, awinders@audraincounty.org
- Carolyn Wisecarver, 573-324-2077, pcda@nemonet.com

# MOST RECENT OPENINGS ON HWY 54



SCOTT'S CORNER

CONSTRUCTION BEGAN MAY 2019 COMPLETED AUGUST 2019

# MOST RECENT OPENINGS ON HWY 54 CONT'D



BASSINGER CORNER

CONSTRUCTION BEGAN JUNE 2022 COMPLETED SEPTEMBER 2022

# BARTLETT & WEST 4-LANE STUDY

Shared 4 Lanes are proven to be not only faster and cheaper, but much safer to the public than two-lane highways. A four-lane allows for more consistent traffic flow, 75% less than two-lane roads, and reduce severe injury crashes by 55%.



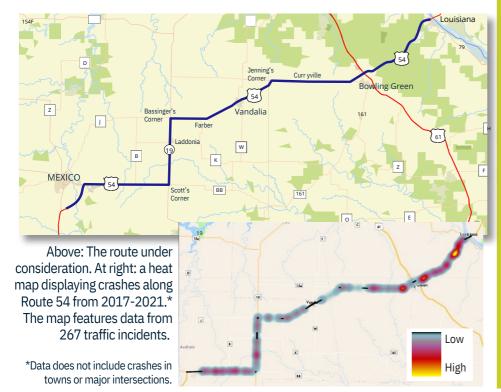
# PROJECT UPDATE: Route 54 Mexico to Louisiana, MO

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.



### **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.

#### **OUALITY**

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.

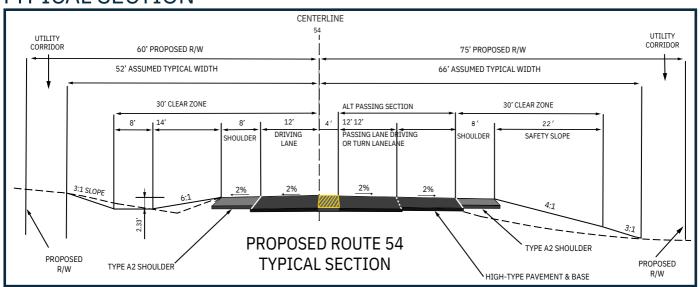
#### SAFETY

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 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 fourlane 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 fiveyear STIP construction program.

#### **ESTIMATED PROJECT COSTS**

CORRIDOR SECTION		LENGTH	2023 CONST.
FROM	то	(MILES)	COST
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
PA	SSING LANES TOTAL	52.6	\$86,844,000
Complete 4 Lanes around Mexico		6	\$33,955,000
Intersection Imrovements at Jenning's Corner		NA	\$4,188,000
TOTAL CORRIDO	R IMPROVEMENTS	58.6	\$124,987,000

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

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







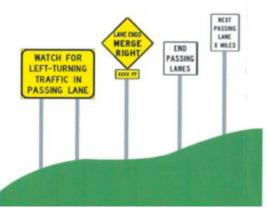
#### Guiding the Way

Highway markings warn and inform drivers.

- A series of four, six-inch painted stripes in combination with two rumble stripes mark the four-foot separation between opposing traffic directions.
- A six-inch edgeline rumble stripe warns motorists when they are leaving the travel lane on the right.
- Painted arrows inform the driver to change lanes when coming to the end of a passing lane.

#### New traffic signs:

- Alert drivers of an upcoming passing lane.
- Mark the beginning and length of each passing lane.
- Alert drivers when the passing lane is ending.
- Alert drivers to watch for left-turning traffic in the passing lane, when applicable.



For more information on

## Shared Four-Lanes

contact MoDOT at

## 888-ASK-MODOT

(275-6636)



Shared Four-Lane

Missouri Department of Transportation



Misssouri Department of Transportation PO Box 270 Jefferson City, MO 65102



## **Moving Across Missouri**

More than 60 percent of Missouri's rural roads are twolane highways. While these routes are adequate to handle the volume of traffic they serve both now and in the future, drivers often become frustrated with delays caused by the inability to pass a slower moving vehicle. In this situation, a driver must either contend with a travel delay or risk a potentially dangerous passing maneuver. Clearly, there is a real need to improve the safety and functionality of many two-lane routes.

Through innovation, MoDOT has designed an alternative roadway, called a "Shared Four-Lane" highway. This unique design provides a cost-effective solution to ease traffic flow, improve safety and reduce driver frustration.

### Defining "Shared Four-Lane"

A shared four-lane highway consists of passing lanes along a conventional two-lane highway to better accommodate traffic volumes and improve safety. The passing lane alternates between both sides of the highway to give drivers periodic opportunities to pass.

Although MoDOT has used similar applications in limited fashion before, the first of these projects is scheduled for Route 5 between Camdenton and Lebanon. Its continuous nature will make it one of the first projects of its type in the U.S. These facilities are very common, and have been very successful, in Europe.

#### Faster

A shared four-lane helps maintain a consistent traffic flow. It increases passing opportunities over long stretches of highway, reducing the time drivers spend behind a slower-moving vehicle.

#### Safer

The addition of a passing lane improves safety because it eliminates the need for a driver to cross into the opposing lane of traffic to pass another vehicle. Rumble stripes between opposing lanes encourage drivers to remain safely in their lanes. In Europe fatal and severe injury crashes have been reduced by as much as 55 percent.

MEDIAN

### Cheaper

A shared four-lane provides an effective design alternative for higher-volume, two-lane roads, but at a much lower cost than a typical four-lane highway - as much as 75 percent less. While it can be built on a new alignment, it can also be applied to existing highways, making use of the existing roadbed to minimize the need for new right of way and extensive construction.

#### Wider

In most locations, MoDOT will design shared four-lane highways with:

- 12-foot lane widths, separated by a four-foot buffer
- Variable shoulder widths
- Left-turn lanes at major intersections
- A flexible design to fit the location

