

Projects

April 2025

Prepared by Transportation Planning
Missouri Department of Transportation

Public Opposition to Support

SINGLE-POINT URBAN INTERCHANGE (SPUI)
These interchanges allow two opposing left turns at the same time. This generally lets large volumes of traffic clear out of a limited space, safely and efficiently. While SPUIs take up less space than other interchanges, they can be costly to build since the bridge structure is often very wide. This type of interchange would work with both one-way and two-way outer roads.
(examples: Lindbergh at I-64; Route K at Route 364)

CLOVERLEAF
The loop ramps safely accommodate left-to-right and right-to-left movements from one roadway to another often without contributing to congestion problems. Cloverleaf interchanges result in a weaving movement from people. A full cloverleaf interchange takes up significant space. This type of interchange also works with both one-way and two-way outer roads.
(examples: Route 141 and I-70; Route 20 and I-70)

ROUNDABOUTS
Roundabouts let a lot of traffic through one way at a time. These interchanges often have fewer accidents than signalized intersections. Many drivers are confused about which results in failure to yield. Roundabouts are more cost efficient to build than signalized intersections. A roundabout can be built on one-way and two-way outer roads.
(examples: I-70 and Route Z/Route 141)

DIVERGING DIAMOND INTERCHANGES (DDI)
These interchanges allow a lot of traffic to turn left easily because it allows more space for turning movements. DDIs increase capacity by removing the need for a left turn signal which gives traffic going straight through more green light time. The unfamiliar configuration of a DDI and the movement onto the opposite side of the road can lead to confusion for drivers. In addition, pedestrians have to maneuver through at least four crosswalks. This type of interchange works with both one and two-way outer roads.
(examples: I-70 and Mid Rivers Mall Drive/I-70 at Fifth Street)

TEXAS U-TURN
This intersection allows outer road drivers on one side of the interstate to make an unsignalized turn to get to the outer road on the other side of the interstate. This can improve safety and ease congestion. This type of interchange is not common in Missouri. That, combined with the fact that drivers can feel like they are turning into oncoming traffic, could lead to driver confusion. Texas U-Turns do not work well with two-way outer roads.
(example: Route K and I-70)

Description and Benefit

The I-70 Cave Springs to Fairgrounds Project was planned to improve safety and reduce congestion in a 4-mile section of the I-70 corridor in St. Charles County. Data showed major congestion and almost 3,000 crashes especially in the interchanges during the 5-year analysis period. One option to reduce the congestion and improve safety was to convert the two-way outer roads to one-way outer roads. The residents and business owners were extremely concerned that this change would significantly alter their community and organized in opposition to the project. MoDOT paused the project to take time to listen to the community, resulting in a new goal of the project: improving local connectivity in addition to safety and mobility. By creating the Public Opposition to Support innovation, the result was a solution that is estimated to reduce crashes by 40% and congestion by 22% all while enhancing the connections to local destinations. By pausing the project and practicing radical public involvement, MoDOT was able to complete the project with public support and provide a solution that met both MoDOT's and the community's goals. Without the community's support, this project could have been canceled, leaving the existing congestion indefinitely.

For More Information Contact

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