

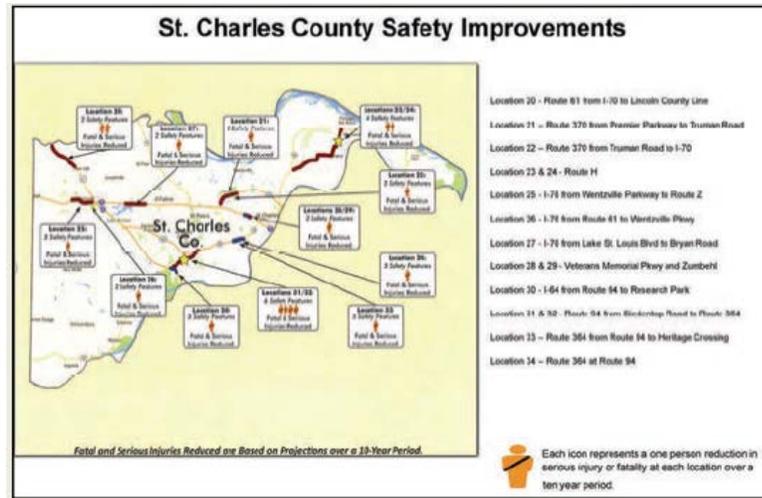


**Projects First-Round Winner**  
Innovations Challenge

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Prepared by Transportation Planning  
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## Safety Improvements Design-Build Projects



### Description

MoDOT delivers safety improvements every year, but the St. Louis District Safety Design-Build project takes things a step further. It allows MoDOT to tap into public and private industries for innovative strategies to reduce crashes and save lives. The goal is to reduce crashes using engineering solutions in line with the state’s strategic highway safety plan, “Missouri’s Blueprint: A Partnership toward Zero Deaths.” Using a data driven process, MoDOT analyzed the number and types of crashes over a three year period to determine the nearly three dozen improvement locations. Using the innovative project delivery method known as Design-Build, industry partners from nationally renowned engineering and contracting firms worked to find new and different ways to save the most lives with the limited amount of funding available. These experts also brought ideas from other state agencies that have been successful at reducing crashes. This approach allows MoDOT to implement safety solutions quickly, efficiently and cost effectively. The result is a project that will make safety improvements at 31 locations in St. Charles and Franklin Counties. The improvements will help motorists better avoid runoff the road, intersection and other types of crashes by adding pavement markers, intersection signage, rumble strips and high-friction surface treatments. The improvements also include right turn angle changes, intersection warning systems and guardable. For more information on the St. Louis District Safety Design-Build project, go to:

[http://www.modot.org/stlouis/major\\_projects/SLSafetyDBProject/index.html](http://www.modot.org/stlouis/major_projects/SLSafetyDBProject/index.html)

### Benefit

This first-of-a-kind project used dedicated safety funds and a sophisticated data driven process to identify 31 locations that have experienced severe crashes over the last three years in St. Charles and Franklin Counties. After targeting these locations, the Design-Build Competition was setup for the DB Teams to utilize the Highway Safety Manual and “Missouri’s Blueprint: A partnership toward Zero Deaths” to assemble their proposals and propose the most safety improvements that save the most lives as calculated within the available \$24 Million. The competition also included a schedule component that allowed the improvements to be installed as quickly as practical. The improvements will help motorists better avoid runoff the road, intersection and other types of crashes by adding pavement markers, intersection signage, rumble strips, high-friction surface treatments, right turn angle changes, intersection warning systems and guardable. Over a 10 year period, the improvements are expected to reduce the number of fatal and serious injury crashes by more than 70 people.

## **Materials and Labor**

MoDOT had a conceptual project equating to roughly \$31 Million in improvements on the 31 different project locations. The Design-Build competition was focused on Safety, Cost, Schedule, and Service Life to deliver the best value project. Compared to the conceptual alternative that MoDOT would have delivered traditionally, the Design-Build project will:

1. Reduce more fatal and serious crashes
2. Deliver more cost effective solutions
3. Complete the project 1 year ahead of the anticipated schedule
4. Provide at least 5 years of service life on all improvements

## **For More Information Contact:**

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Additional information, photos or videos can be seen by accessing the Innovations Challenge SharePoint page at:

<http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>