



**Projects First-Round Winner**  
Innovations Challenge

**April 2018**

Prepared by Transportation Planning  
Missouri Department of Transportation

## BDB Toolbar



### Description

Bentley is currently contracted by MoDOT to build a new automated application to issue permits for oversize overweight (OSOW) vehicles. As part of this contract, MoDOT has provided a 'routeable' transportation network. This network includes an inventory of restricted turns in order to not route OSOW vehicles through certain turns. The network also has two different fields on an intersection to intersection basis to assist with issuing permits. The first is a 'routeable' field that indicates whether we are able to route OSOW vehicles on sections of roadway. The other is an 'auto issue' field that indicates if permits can be automatically issued on sections of roadways. This innovation is an efficient and easy to use tool to manage these flags and the restricted turn inventory.

### Benefit

This tool is a custom tool inside of ArcMap, a mapping software that can be used to view geospatial data. A user will open up a map in ArcMap to begin using the tool. This map will contain useful information such as the current routing network that shows what sections of route are currently routeable, the restricted turn inventory, and aerial photos. The user can use this information to find the sections of roadways they want to update. They would then use the tool to select those sections by using point and click logic. This makes the tool extremely quick and easy to use. A user can add or delete a restricted turn or update a field on the routing network in five minutes or less. Pop up boxes are used along the way to gain basic information from the user. The tool gets the rest of the information it needs to update the routing network from the map. The process of updating the routing network and adding or deleting turn restrictions would be a much longer process without this program. A user would have to find the details about what portion of a route they want to update. They would then need to send that information to a computer programmer. That programmer would then have to write a specific code for that one update. This alternate process could take 2-4 hours per update. A similar product would have been a very expensive enhancement had it also been contracted out instead of developed in house. It could have cost MoDOT upwards of \$20,000 had the work been contracted instead.

## **Materials and Labor**

30 hours of staff time with no materials costs.

## **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>