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5-3-2014

# The Silhavy Corridor Improvement Project

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## Recommended Citation

Berning, Matthew; Coeur, Douglas; and Sherrick, Jon, "The Silhavy Corridor Improvement Project" (2014). *Symposium on Undergraduate Research and Creative Expression (SOURCE)*. 313.  
<https://scholar.valpo.edu/cus/313>

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## **The Silhavy Corridor Improvement Project**

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The City of Valparaiso, Indiana is considering various alternatives to improve safety and efficiency at the existing signalized intersection at Silhavy Road and LaPorte Avenue. One of these alternatives is to construct a multi-lane roundabout. However, a large amount of space is required for the construction of a multi-lane roundabout. In an already heavily developed area, space is a major constraint. The city is also proposing improvements along Silhavy Road north and south of the intersection to enhance traffic flow in the area. The first goal of this research project was to determine if an appropriately sized roundabout would fit into the available space. The second objective was to study improvements in traffic conditions in the area due to the proposed roundabout at Silhavy Road and LaPorte Avenue and capacity enhancement measures along the Silhavy Road corridor. A two-lane roundabout that will fit into the available space and handle the traffic demand was designed. Using traffic simulation software, the delay was measured for both the current signalized intersection and for the proposed two-lane roundabout. The results showed a significant reduction in delay at the intersection due to the roundabout. This benefit is in addition to the safer conditions of a roundabout over a signalized intersection.

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Matt Berning, Doug Coeur, and Jon Sherrick are all civil engineering seniors in the College of Engineering.

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