What is a jughandle?
A jughandle is a type of intersection design that uses at-grade loop roads to create indirect turning movements. Similar to left-turn-only lanes, indirect turns reduce crashes, improve congestion and add capacity. Jughandles are appropriate for high-traffic intersections that have limited space to expand turn lanes.

How will the jughandle work?
The intersection will have jughandle roads in the southwest and northeast quadrants. The southwest jughandle will utilize existing roads and the northeast jughandle will require new right of way. The jughandles will be used for left turns from WIS 31 and for right turns from WIS 50. Left-turn lanes along WIS 50 and right-turn lanes along WIS 31 will still be accommodated within the main intersection. Roadway signs will be in place to guide drivers through the intersection. See back page for more information.

Will it take longer to get through the intersection?
The jughandles may reduce overall travel times because fewer traffic signal phases will be needed at the main intersection. However, vehicles turning left from WIS 31 to WIS 50 may experience slightly longer travel times when using the jughandles because of the longer distances. Traffic lights will be synchronized so that when vehicles exit the jughandles they will typically receive a green light at the main intersection.

Are jughandles safe?
Jughandles may cause some initial driver confusion, but with a little education, drivers will quickly become accustomed to the new intersection. Overall, the jughandle design is expected to improve safety at the intersection by reducing the number of vehicles turning left at the main intersection, which reduces the chance for collisions.

How will pedestrians be affected?
The pedestrian crossing distance at the main intersection will be shorter than in an expanded conventional intersection because fewer turn lanes are required. The jughandle roads will, however, introduce new conflict points along WIS 50 and WIS 31 of which pedestrians will need to be aware.

WHY WAS A JUGHANDLE CHOSEN?
During the project’s corridor planning phase, WisDOT evaluated expanding the capacity of the WIS 50/WIS 31 intersection with a conventional design. After reviewing multiple alternatives, the jughandle intersection emerged as a solution that would address traffic flow and safety needs on WIS 50 while still providing reasonable access to adjacent businesses. During the design phase, WisDOT revisited several intersection alternatives and reaffirmed that the Jughandle is the preferred alternative.
Driving the jughandle

**WIS 31 SB to WIS 50 EB**
A driver heading southbound along WIS 31 who needs to go eastbound along WIS 50 will need to pass through the main intersection and turn right at the jughandle road in the southwest quadrant. The driver will navigate the jughandle loop to merge with eastbound WIS 50 traffic.

**WIS 31 NB to WIS 50 WB**
A driver heading northbound along WIS 31 who needs to go westbound along WIS 50 will need to pass through the main intersection and turn right at the jughandle road located in the northeast quadrant. The driver will navigate the jughandle loop to merge with westbound WIS 50 traffic.

**WIS 50 WB to WIS 31 NB**
A driver heading westbound along WIS 50 who needs to go northbound along WIS 31 will need to exit WIS 50 before the main intersection and use the jughandle to access WIS 31.

**WIS 50 EB to WIS 31 SB**
A driver heading eastbound along WIS 50 who needs to go southbound along WIS 31 will need to exit WIS 50 before the main intersection and use the jughandle to access WIS 31.

Note: Drivers turning right from WIS 31 and drivers turning left from WIS 50 will not use the jughandle roads. Turns will be made at the main intersection.