

DOWNTOWN ALTERNATIVES COMPARISON SUMMARY MATRIX
Alternatives No Longer Being Considered

Project ID : 4085-32-00		Main Avenue, City of De Pere		3 rd Street – 8 th Street, WIS 32		Brown County	
Alternative	Volume Patterns	Traffic Operations	Safety	Pedestrian and Bicycles	Parking	Access	Practical Feasibility
ALT 2 – TWO-WAY CONVERSION	<p>With full traffic movements allowed at all intersections, there is a distinct shift in traffic to Main Avenue for east-west traffic and 3rd Street for north-south traffic.</p> <p>Traffic generally migrates away from Reid Street and 4th Street.</p>	<p>Due to changes in travel patterns, there are significant capacity needs on Main Avenue and on 3rd Street. The number of lanes necessary to accommodate traffic on Main Avenue leaves virtually no room for sidewalk, as the roadway width nearly stretches from building face to building face.</p> <p>Reid Street sees a decrease in traffic and lane requirements, so a 2-lane roadway is acceptable nearly throughout. All intersections within the downtown core are shown as signalized to meet operational requirements.</p>	<p>The loss of existing sidewalk raises significant pedestrian safety concerns on Main Avenue. Additionally, the conversion to two-way traffic creates a significant increase in vehicle conflict points in the study area.</p> <p>Conversely, lower traffic on Reid Street and a smaller roadway width should improve safety.</p>	<p>Signalization of all intersections would improve pedestrian crossings by creating a more familiar intersection for all users.</p> <p>The bidirectional traffic increases potential pedestrian conflicts and the possible loss of sidewalk is particularly concerning. It also creates a conflict between maintaining historical resources and conforming to the City's multimodal goals.</p> <p>Traffic on 3rd Street also impacts pedestrians from St. Norbert College, as the campus continues to expand west of 3rd Street.</p>	<p>This alternative includes 107 on-street parking stalls, a loss of 95.</p> <p>The biggest loss is the central business district of Main Avenue from 3rd Street to 4th Street. Also, the south side of Main Avenue from 4th Street to 5th Street due to the expanded roadway width.</p>	<p>With the conversion to two-way traffic, visibility of businesses is improved at the expense of parking in the downtown core.</p> <p>Businesses on Reid Street would see a significant drop in the number of vehicles driving by their business.</p> <p>The improved visibility opposed to the loss in parking would need to be weighed by the business community.</p>	<p>Due to the wider roadway and difficulty in balancing parking, pedestrian, historical and business needs this is not seen as a practical alternative.</p> <p>Further discussion of this option is not recommended.</p>
ALT 2B – TWO-WAY CONVERSION ON REID STREET	<p>With full traffic movements allowed at all intersections, there is no way to prevent traffic from using Main Avenue vs Reid Street for east-west travel.</p>	<p>Due to changes in travel patterns, there are significant capacity needs on Reid Street and on 3rd Street. The number of lanes necessary to accommodate traffic on Reid Street leaves virtually no room for sidewalk, as the roadway width nearly stretches from building face to building face.</p> <p>Main Street will likely see some decrease in traffic; however, the preference will be to traverse east-west on Main Avenue since that is the most direct route. Intersections will be over capacity and won't meet operational requirements.</p>	<p>The loss of existing sidewalk raises significant pedestrian safety concerns on Reid Street. Additionally, the conversion to two-way traffic creates a significant increase in vehicle conflict points in the study area.</p> <p>Truck traffic and maneuvers on 3rd Street at both Main Avenue and Reid Street require wider than standard lanes. Over tracking is still a concern even with the wider lanes.</p>	<p>Signalization of all intersections would improve pedestrian crossings by creating a more familiar intersection for all users.</p> <p>The bidirectional traffic increases potential pedestrian conflicts and the possible loss of sidewalk is particularly concerning. It also creates a conflict between maintaining historical resources and conforming to the City's multimodal goals.</p> <p>Traffic on 3rd Street also impacts to pedestrians from St. Norbert College, as the campus continues to expand west of 3rd Street.</p>	<p>This alternative includes 96 on-street parking stalls, a loss of 106. Additionally 52 off street parking stalls are lost due to right of way needs.</p>	<p>With the conversion to two-way traffic, visibility of businesses is improved at the expense of parking on Reid Street, overall traffic operations in the downtown, and real estate acquisition.</p> <p>The improved visibility would need to be weighed by the business community.</p>	<p>Due to the wider roadway and difficulty in balancing parking, pedestrian, historical and business needs this is not seen as a practical alternative.</p> <p>Further discussion of this option is not recommended.</p>

Notes: (1) All alternatives were compared using future (2038) volumes and patterns specific to each alternative.
(2) Only AM and PM Peak hours were reviewed.

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<p>ALT 4 – REVERSE FLOW CIRCULATING LANE</p> <p><i>(City of De Pere Master Plan)</i></p>	<p>It is anticipated that usage of the counter flow lane will be relatively low. Only those with specific destinations are expected to use the new route.</p> <p>Changes at 3rd Street & Reid Street have a big impact on traffic from St. Norbert College, which forces traffic to 4th Street for entering and exiting the downtown corridor and/or St Norbert College.</p> <p>The inability to use 3rd Street for northbound left turns to Main Avenue further worsens existing problems at Main Avenue and 4th Street.</p>	<p>Due to the changes in volume patterns, there is considerably more pressure placed on 4th Street. Even with the additional capacity shown at Main Avenue and 4th Street, operations are marginally acceptable at best. A large amount of northbound right turn traffic creates the need for 2 right turn lanes on 4th Street at Reid Street.</p>	<p>The counter flow lane creates a number of potential safety concerns. Not only does it increase the conflict points of all intersections, the usage of the lane is expected to be significantly less than the regional flow of traffic. This may cause roadway users to fail to recognize the change in traffic patterns and increased conflicts that will exist due to the addition of the counter flow traffic.</p>	<p>Counter flow traffic raises concerns that pedestrians will not recognize traffic exists in both directions. With a majority of traffic traveling in one direction, pedestrians’ focus will be shifted to one direction, and may create crossing issues because conflicts with opposing traffic will exist.</p> <p>The improvements to pedestrian crossings along 3rd Street help separate pedestrian and vehicle movements, but create some concern as to the appropriate place to access the northwest corner of Reid Street and 3rd Street.</p>	<p>This alternative includes 30 on-street parking stalls, a loss of 172.</p> <p>The only parking that remains is primarily on the north side of Main Avenue and along 4th Street.</p>	<p>While visibility of businesses is significantly improved with this option, it eliminates most on-street parking. Combined with the fact that any turning vehicles (particularly left turns) in the counter flow lane will block the through traffic flow until the turn is completed.</p> <p>It is unclear if a significant advantage is provided by this alternative.</p>	<p>While the alternative appears to be feasible from a design perspective, the overall benefits versus safety, parking, and access concerns make this option less desirable.</p>
<p>ALT 5 – MODIFIED REVERSE FLOW CIRCULATING LANE</p> <p><i>(Modified City of De Pere Master Plan)</i></p>	<p>Combines Alt 1 and Alt 4. Reverse flow lane between 6th Street and 4th Street, while segments east of 4th Street would remain as existing one-way streets.</p> <p>Ending the reverse flow lane at 4th Street & Main Avenue creates a unique intersection with head-on conflicts. Additional movements at this intersection also increase existing delay issues.</p> <p>Eastbound traffic on Main Avenue would need additional signage to direct WIS 32 through traffic that wants to access bridge to continue south on 4th Street and eastbound on Reid Street.</p>	<p>With the addition of the circulating lane, the 4th Street and Main Avenue intersection will have more movements that conflict with the primary traffic flow. This causes increased delay to the heavy westbound left turn movement. Overall operations are worse as there is more traffic than there is roadway capacity on the east and south approaches.</p> <p>Additional operational concerns exist at Reid Street & 3rd Street for traffic exiting St. Norbert.</p>	<p>The intersection of Main Avenue & 4th Street poses a unique, but not unprecedented safety concern. With the addition of the eastbound reverse flow lane up to and ending at 4th Street, the westbound left turn and eastbound right turn would be head-on at this intersection. This creates confusion in terms of which movement has the right-of-way, and could create additional safety concerns if not designed properly to warn potential wrong way drivers.</p>	<p>Multi-modal concerns for this alternative are similar to the concerns identified in ALT 4. The counter flow lane creates additional sporadic conflicts that could go unrecognized by pedestrians and bicyclists.</p> <p>By maintaining the existing configuration on 3rd Street, both the positive and negative aspects of the existing configuration are maintained. One-way traffic allows pedestrians to focus their attention in one direction, but the high volume, short segments, and unique intersection layouts still create challenges for pedestrians in the downtown area.</p>	<p>This alternative includes 79 on-street parking stalls, a loss of 123.</p> <p>The largest loss of parking is on Reid Street due to the construction of the reverse flow lane. Additional spots are lost on Main Avenue for similar reasons.</p>	<p>By reducing the reverse flow lane one block from 3rd Street back to 4th Street there is little anticipated benefit to the reverse flow lane on Reid Street. All westbound traffic from the bridge must use Main Avenue for the first block, which limits those who might be interested in the reverse flow lane as most access points and parking lots west of 4th Street are easily accessible from Main Avenue. In addition the heaviest business section of Main Avenue east of 4th Street does not see the additional benefits of the reverse flow lane in this alternative.</p>	<p>Similar to Alt 4, there are no specific items that make this alternative impractical or unfeasible. However, the unique configurations that create safety and operational concerns, combined with the loss of parking may also make this option less desirable than others that have been presented.</p>

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