

DOWNTOWN ALTERNATIVES COMPARISON SUMMARY MATRIX
Alternatives Still Under Consideration

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
NO BUILD ALTERNATIVE	<p>Along with the split of traffic eastbound on Reid Street and westbound on Main Avenue, there is a fairly prevalent split of traffic on 3rd Street (northbound) and 4th Street (southbound) due to the one-way section of 3rd Street.</p> <p>The high number of left turns from Main Avenue southbound on 4th Street, coupled with a high volume of northbound traffic on 4th Street creates backups along Main Avenue.</p> <p>The unsignalized intersections of 5th Street & 6th Street with Main Avenue have high enough traffic volumes to degrade operations but not enough volume to need signals.</p>	<p>Significant concerns include the Main Avenue intersections with 3rd Street and 4th Street, where the east approaches are over capacity, and the south approach volumes continue to see increased delays.</p> <p>At the intersection of Reid Street & 3rd Street all movements reach capacity and/or experience undesirable delay.</p> <p>The two stop controlled intersections of Main Avenue with 5th Street and 6th Street create additional concerns for backups.</p>	<p>Currently, the signalized intersections along Reid Street, as well as the Main Avenue intersections with 3rd Street and 6th Street are experiencing the most crashes.</p> <p>Crashes are expected to continue at similar rates and patterns with no significant changes.</p>	<p>Most pedestrian cross at intersections, many of which are signalized, in the downtown.</p> <p>Currently, at 3rd Street pedestrians cross Main Avenue west of the intersection. Northbound traffic on 3rd St is looking to the east for gaps in traffic due to the one-way nature of Main Avenue. This could lead vehicles to turn into a gap in traffic while a pedestrian is in the crosswalk. Additionally, the shadows from the buildings can hide pedestrians.</p> <p>At 6th Street, vulnerability is created by combining the uncertainty which vehicle has the right of way and the lack of a marked crossing for the east leg of the intersection.</p>	<p>There are currently 202 on-street parking stalls within the study area.</p>	<p>Most access locations are at intersections in the downtown.</p> <p>While turning vehicles slow through traffic, there is limited conflicting traffic due to the one-way roadways in the downtown.</p> <p>The ability to provide two lanes of traffic also minimizes impacts to through vehicles, mostly during off-peak times.</p> <p>The one-way nature of the downtown network does have limitations in terms of visibility and business exposure.</p>	<p>Due to poor operations, it is unlikely the status quo will be an acceptable alternative. This option is provided as a baseline for comparing the potential alternatives.</p>
ALT 1 – IMPROVE EXISTING CONDITIONS	<p>Volume patterns are similar to the No-Build Alternative. No significant change in traffic patterns is expected with this alternative.</p>	<p>Additional turn lanes are required at the intersections of Main Avenue & 4th Street and Reid Street & 3rd Street to improve operations.</p> <p>Additional lanes at the intersections of Main Avenue & 5th Street and Main Avenue & 6th Street also improve operations but movements still operate below standards. The installation of traffic signals at these intersections would improve operations to acceptable levels, but it is doubtful traffic volume would be high enough to warrant installation.</p>	<p>Roadway improvements necessary to provide sufficient operations would be designed with the intent of providing sufficient storage, sight distance, and other appropriate design criteria to improve safety throughout the downtown.</p>	<p>Signalization of the intersection of Main Avenue & 6th Street would improve the existing pedestrian crosswalks by establishing clearer ROW for vehicles and pedestrians. It would also create a more familiar intersection for all users.</p> <p>At Main Avenue and 3rd Street, it is recommended that the Main Avenue pedestrian crossing be moved east, before the northbound left turn lane of 3rd Street to improve visibility of the pedestrians and place them in clear sight for vehicles on all approaches.</p>	<p>This alternative includes 151 on-street parking stalls, a loss of 51.</p> <p>The biggest loss is on the south side of Main Avenue from 3rd Street to 4th Street, due to the operational need for a westbound left turn lane.</p>	<p>Access is generally unchanged from the no-build alternative.</p>	<p>Despite losses to parking, generally the proposed layout is feasible.</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 3 – 3rd & 4th STREET ONE-WAY PAIR</p>	<p>Southbound traffic is directed away from 3rd Street and shifts to 4th Street. All northbound traffic shifts from 4th Street to 3rd Street.</p> <p>Existing traffic conditions on 3rd Street and 4th Street resemble a one-way pattern today however restrictions would force traffic to drive the one-way system.</p> <p>There are no significant shifts in traffic outside the four-intersection one-way square in the study area.</p>	<p>With conversion of 3rd Street & 4th Street to one-way streets, operations improve for westbound traffic along Main Avenue. The signal at 4th Street would likely not be installed until volume is high enough.</p> <p>Signals are a possibility at 3rd Street and Main Avenue as 3rd Street traffic traveling northbound and westbound raise concerns about intersection capacity.</p> <p>Reid Street and 3rd Street see significant improvements. Additional lanes are needed for the south and east approaches to the intersection, despite the east approach being right turn only.</p>	<p>The conversion of 3rd Street and 4th Street to one-way streets further decreases the number of conflict points in the downtown.</p> <p>A disadvantage is that certain origin-destination patterns become slightly more circuitous and add distance and traffic to intersections because of the one-way restrictions.</p>	<p>The one-way street system simplifies conflicts for pedestrian crossings. This has potential benefits for St. Norbert’s campus in that 3rd Street would be one-way northbound.</p> <p>The crossing at Main Avenue and 3rd Street is again relocated to improve visibility.</p>	<p>This alternative includes 178 on-street parking stalls, a loss of 24.</p> <p>Main Avenue from 3rd Street to 4th Street again sees the biggest impact, but additional parking could be provided in this section by phasing in the left turn at 4th Street based on operational needs.</p>	<p>Converting 3rd Street & 4th Street to one-way traffic will impact traffic within AND beyond the study area. Residences south of the study area could also be impacted by the restrictions, depending on how far the one-way pair extends. Much of this area is owned or used by individuals affiliated with the college, which could reduce the disruption to vehicle traffic that might be seen otherwise.</p> <p>Access to the large off-street parking areas would need to be repainted based on the travel direction of the roadway it faces.</p>	<p>The preliminary review does not raise any design or other barriers to the feasibility of this alternative.</p> <p>Based on the wider impacts this alternative could create, discussion with City and St. Norbert’s officials will be important in determining the feasibility of this alternative going forward.</p>

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