



Selection of Preferred Alternative

County Highway O • Moorland Rd

US Highway 18 • Bluemound Rd to I-94

Project Update: **6/11/2020**

Waukesha County Department of Public Works has selected a preferred alternative for the rehabilitation / pavement replacement of 0.8-mile of Moorland Road (County O) to bring it up to current standards. Improvements will include: replacing the existing concrete pavement, reconfiguring intersections to improve safety, replacing older traffic signals, minor grading, sidewalk installation, and storm water improvements.

Alternative #1 has been recommended as the preferred improvement. Alternative #1 was determined to best address the existing deficiencies, accommodate future traffic conditions and fit within the scope of the project.

The recommended Alternative #1 improvements will enhance safety and operations along the corridor but are not expected to address all documented deficiencies. Elements of the recommended proposed improvement include:

- Northbound County O through traffic will no longer need to change lanes to continue northbound by eliminating the northbound lane drop at Brookfield Square Drive.
- The I-94 Westbound Off-ramp to Brookfield Square Drive weave movement will remain and the number of lane changes required to complete the weave movement will increase from two lanes to three lanes as a result of providing three continuous northbound through travel lanes.
- Proposed signal timings at the Brookfield Square Drive intersection will introduce a red phase for northbound County O traffic (to accommodate an eastbound-to-northbound left-turn movement).
- The Mall Center Driveway median opening is proposed to be closed and restrict the driveway to allow right-in/right-out movements only.
- The Westmoor Driveway median opening is proposed to be restricted so the driveway operates with left-in/right-in/right-out movements only.
- Optimize corridor signal timings and provided a single coordinated system along Moorland Road.
- New sidewalk on the west side of Moorland Road will be constructed between the I-94 ramp terminal and Bluemound Road (US 18).

Alternatives screened from further consideration:

Alternative 2

Alternative 2 maintains a single-lane, free flow off-ramp with northbound lane add and constructs a raised median preventing I-94 Westbound Off-ramp traffic from accessing the northbound left-turn lanes at Brookfield Square Drive.

While this alternative meets the purpose and need for the project by replacing the deteriorated pavement, providing bicycle and pedestrian accommodations, and addressing identified safety and operational issues, it did not receive support from local officials who cited it would create undesirable traffic diversion and impacts to the nearly completed Brookfield Conference Center. Based on lack of local support, this alternative was eliminated from further consideration and is not the preferred alternative.

Alternative 3

Alternative 3 would eliminate the I-94 Westbound Off-ramp to Brookfield Square Drive weave movement by separating the two traffic streams at the proposed signalized off-ramp intersection, the new signal would introduce several operational and design issues including:

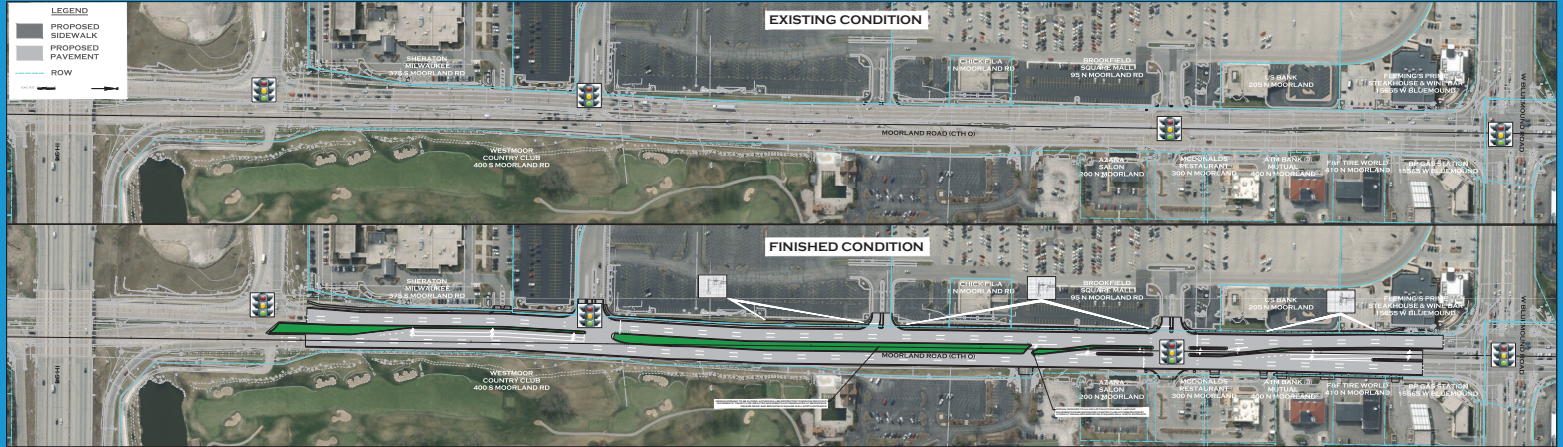
- The proposed triple right-turn lane intersection would be located within the taper area of the northbound dual left-turn lanes at the I-94 Westbound On/Off-Ramp intersection. The northbound stop bar for the new intersection would need to be located under the I-94 structures or the northbound dual left-turn lanes would need to be shortened to separate the taper from the new intersection. Shortening the northbound dual left-turn lanes at the I-94 Westbound On/Off-Ramp intersection would introduce additional operational issues at this intersection.
- Signal head visibility for northbound traffic would be problematic due to the close proximity of the proposed intersection to the I-94 bridge structures.

Alternative 3 results in higher costs as compared to Alternative 1 as it requires significant reconstruction and expansion of the I-94 Westbound Off-ramp, new signal equipment, and additional property acquisition. While this alternative does remove safety and operational issues resulting from the traffic weave between the I-94 Westbound Off-ramp and Brookfield Square Drive, it introduces new safety and operational issues within the functional area of the interchange. Addressing the safety and operational issues at the south end of the corridor would entail partial reconstruction of the I-94 interchange, which is beyond the scope of the current County project and not within the County's jurisdiction.

Alternative 3 meets the purpose and need for the project, but it is not the preferred alternative due to the additional construction costs and that construction is required in an area outside of the County's jurisdiction and outside of the project scope.

MOORLAND ROAD (CTH O) I-94 TO BLUEMOUND ROAD (US 18)

CITY OF BROOKFIELD, WAUKESHA COUNTY



PREFERRED ALTERNATIVE
JUNE 10, 2020



















MOORLAND RD
BLUEMOUND RD TO I-94 STATE
PROJECT ID: 2722-07-01
WAUKESHA COUNTY, WISCONSIN



Layer: 1556 Date Saved: 12/20/2019 1:00:46 PM Path: X:\BL\2019\20190706Design\GIS\Map\Figure 1 - Site Location.mxd Proj. Number: 2722-07-01 Source: Waukesha County

MOORLAND ROAD (COUNTY O) I-94 TO BLUEMOUND ROAD (US 18)

CITY OF BROOKFIELD, WAUKESHA COUNTY

	2019	2020				2021				2022			
													
Project Kick-Off													
Public Involvement Meeting #1 - Present Alternatives													
Property Owner Meetings and/or Small Group Focus Meetings													
Public Involvement Meeting #2 - Present Preferred Alternatives													
Right-of-Way Acquisition, as needed													
Public Involvement Meeting #3 - Pre-Construction Meeting													
Construction													

CONTACTS:

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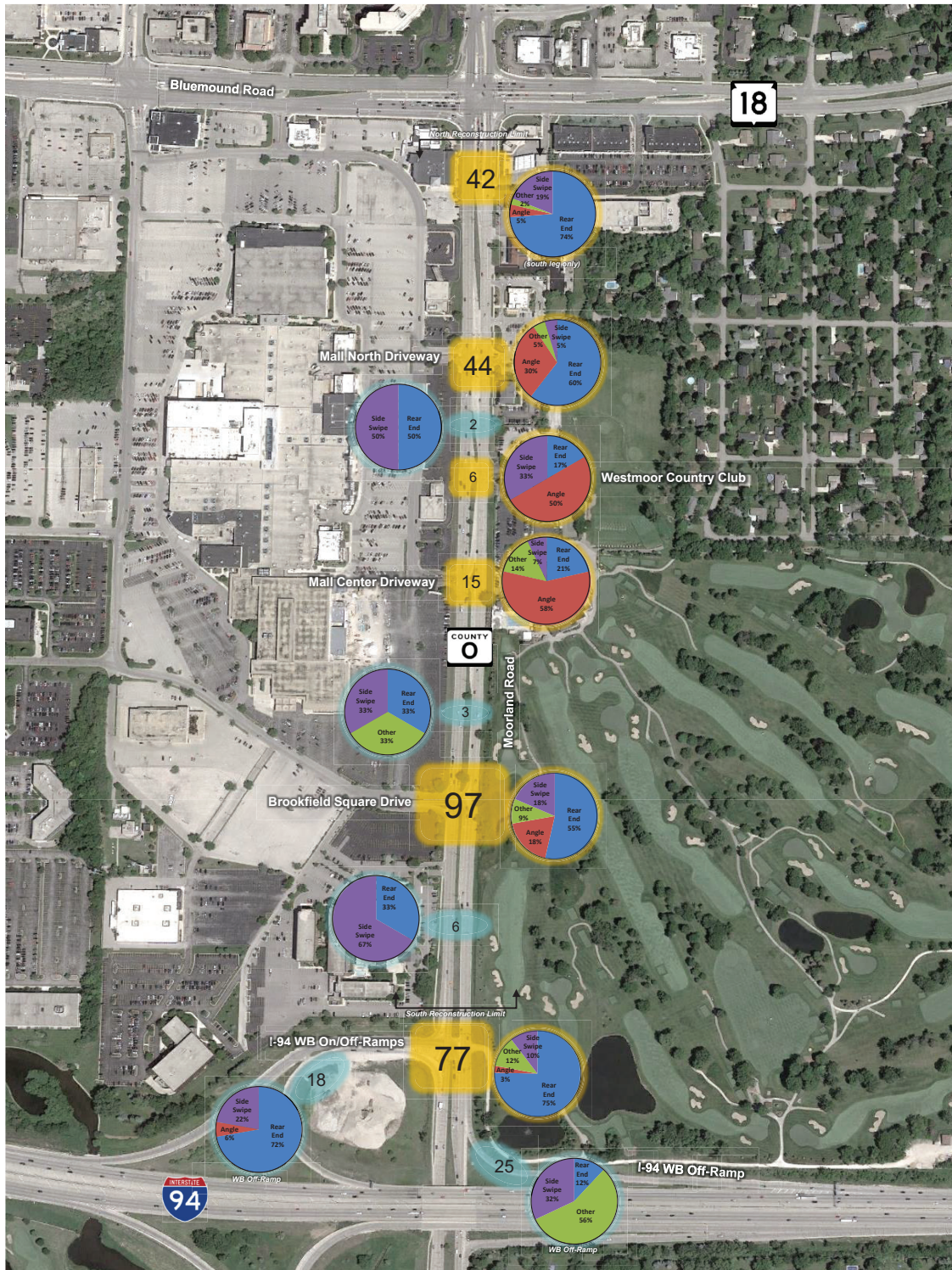
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PUBLIC INVOLVEMENT MEETING
FEBRUARY 26, 2020

MOORLAND ROAD (CTH O) I-94 TO BLUEMOUND ROAD (US 18)

CITY OF BROOKFIELD, WAUKESHA COUNTY



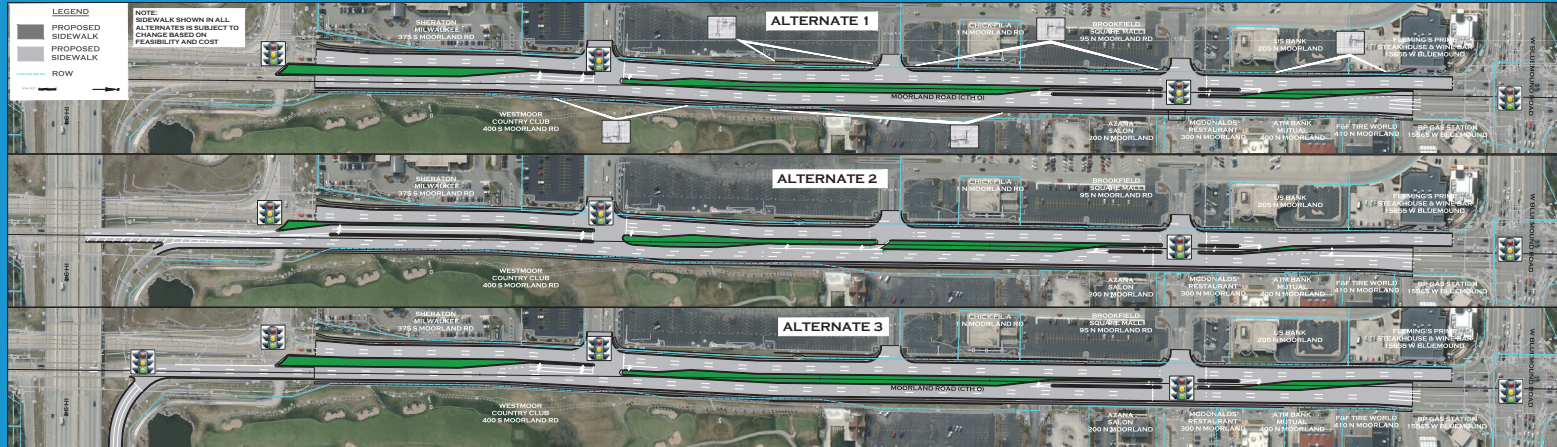
5-year Corridor Crashes (2015 - 2019)

= Percent Breakdown by Crash Type = Intersection Crashes = Non-Intersection Crashes

**PUBLIC INVOLVEMENT MEETING
FEBRUARY 26, 2020**

MOORLAND ROAD (CTH O)
I-94 TO BLUEMOUND ROAD (US 18)

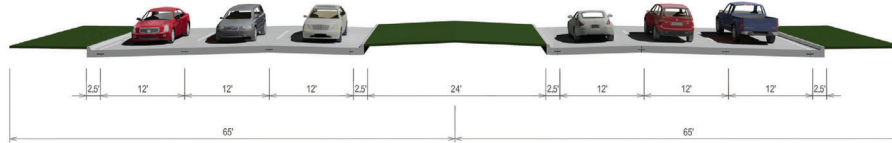
CITY OF BROOKFIELD, WAUKESHA COUNTY



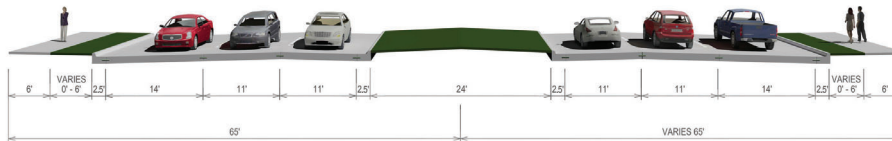
PUBLIC INVOLVEMENT MEETING
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I-94 TO BLUEMOUND ROAD (US 18)

CITY OF BROOKFIELD, WAUKESHA COUNTY



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

NOTE: SIDEWALK IS SUBJECT TO CHANGE BASED ON FEASIBILITY AND COST



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