

COUNTY OF MILWAUKEE
INTEROFFICE COMMUNICATION

DATE: May 21, 2021

TO: Supervisor Marcelia Nicholson, Chair, County Board of Supervisors

FROM: Donna Brown-Martin, Director, Milwaukee County Department of Transportation
Theodore Chisholm, Chief of Staff, Office of the Sheriff
Martin Ewert, Deputy Sheriff, Law Enforcement Analytics Division

SUBJECT: From the Director, Department of Transportation providing an informational report on Highway Speeds; and From the Office of the Sheriff, Data and Preliminary Analysis Regarding Crashes and Citations in Three Locations Identified by the Board of Supervisors.

REQUEST

This report is for informational purposes, there is no request at this time.

REPORT

Highway Speeds

The interstate system in Milwaukee County and Southeastern Wisconsin has been progressively rehabilitated and repaired in segments across the region in the last twenty years. In Milwaukee County, the Wisconsin Department of Transportation (WisDOT) has completed reconstruction on the Marquette Interchange, Mitchell Interchange, Zoo Interchange and the North-South I-94 Interstate to the state line. Although these are significant transportation initiatives that have added lanes and capacity to the southeastern interstate infrastructure, there remain gaps impacting key segments of the freeway network in the County and throughout the region. These gaps present safety and crash concerns because of dropped lanes, left-hand exits and outdated geometric design elements that negatively influence safety and prevent the state from raising travel speeds within Milwaukee County.

By Wisconsin State Statute, WisDOT is responsible for establishing posted speeds on state freeways, interstates and roadways. The 55 and 50 mile per hour (mph) posted speeds were set below current statutory 65 mph freeway speed limits many years ago for a number of reasons including but not limited to close interchange spacing, shoulder widths, and horizontal and vertical distances. These conditions still exist today due to gaps in the reconstruction of large segments of the Southeastern Wisconsin freeway system. WisDOT has stated that periodically reviewing the transition zone speed limits on Milwaukee County freeways is sound engineering practice and that they will develop a draft scope and schedule for reviewing the posted speeds within Milwaukee County.

WisDOT states that it is important to accurately reflect typical freeway operating conditions. Employment and workplace variations over the past year did not result in anything resembling

typical traffic. WisDOT's monthly freeway traffic volume data continues to depict a gap between current year and prior year traffic volumes. Therefore, WisDOT will not entertain initiating the review until a reasonable duration after all temporary COVID-19 workplace alterations (such as full-time telework) have been lifted.

As soon as WisDOT initiates the study and provides the analysis schedule later this fall, MCDOT will provide an update and information on Milwaukee County's role in this analysis. For further information on highway speeds on Wisconsin Highways, Brian Roper, WisDOT Southeast Region Systems Operation Chief will be our contact and liaison for further traffic analysis input.

Data and Preliminary Analysis Regarding Crashes and Citations in Three Locations Identified by the Board of Supervisors

The Milwaukee County Sheriff's Office (MCSO) is statutorily responsible for providing law enforcement services on Milwaukee County's expressways. MCSO personnel enforce state laws governing the safe and responsible operation of motor vehicles and serve as first responders assisting the victims of motor vehicle crashes. MCSO's Law Enforcement Analytics Division (LEAD) administers data related to expressway patrol operations. In partnership with the Milwaukee County Board of Supervisors and the Milwaukee County Department of Transportation, LEAD conducted research, analysis, and incident concentration mapping regarding crashes and citations in three locations:

- Interstate 41 north of W. Silver Spring Dr. to the county line (**see Table A**)
- The Zoo Interchange, including portions of Interstates 94, 41, and 894 (**see Table B**)
- The Hale Interchange, including portions of Interstates 43 and 894 (**see Table C**)

LEAD examined a two-year time period beginning on January 1, 2019 and concluding on January 1, 2021. LEAD's analysis centered on the number of crashes to which MCSO responded in each location, which under agency protocols are classified either as personal-injury (PI) crashes or property-damage-only (PDO) crashes. LEAD also compiled the number of crash-related citations issued by MCSO in each location, and conducted a general overview of crashes on I-41 north of the Zoo Interchange, given the centrality of this expressway to the present discussion. Additionally, in response to concerns regarding excessive speed in each location, LEAD conducted further analysis of crash-related citations to determine the number in each location that involved a speeding citation under Wis. Stat. § 346.57(4)(a).

LEAD's analysis is depicted in the following:

Table A: Interstate 41 north of W. Silver Spring Dr. to the county line and map of primary crash-and-citation concentration points.

US 41 North of Silver Spring Dr Crashes			
	2019	2020	Total
Personal Injury	29	31	60
Personal Injury w/citation	23	23	46
Personal Injury w/speed citation	13	15	28
Property Damage Only	134	56	190
Property Damage Only w/citation	100	37	137

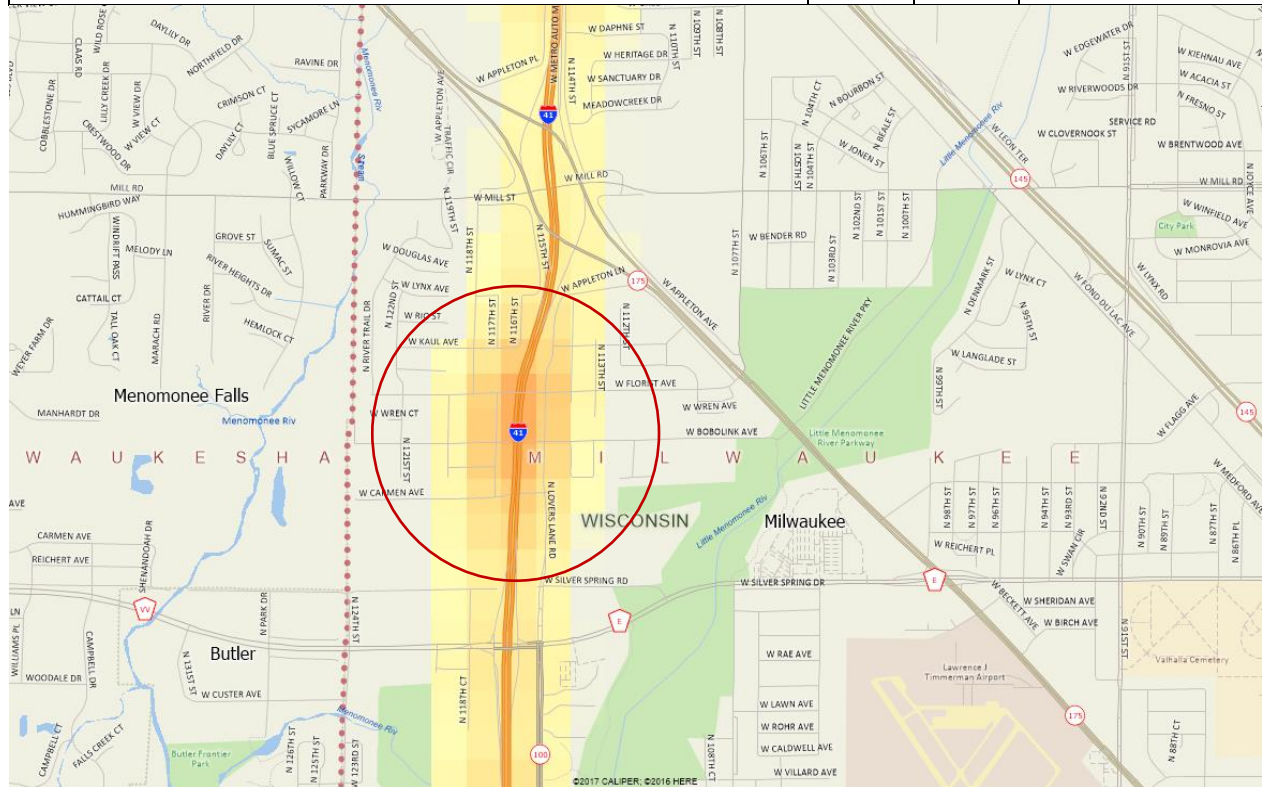


Table B: Zoo Interchange and map of associated crash-and-citation concentration points.

Zoo Interchange Crashes			
	2019	2020	Total
Personal Injury	20	31	51
Personal Injury w/citation	15	23	38
Property Damage Only	135	73	208
Property Damage Only w/citation	85	46	131

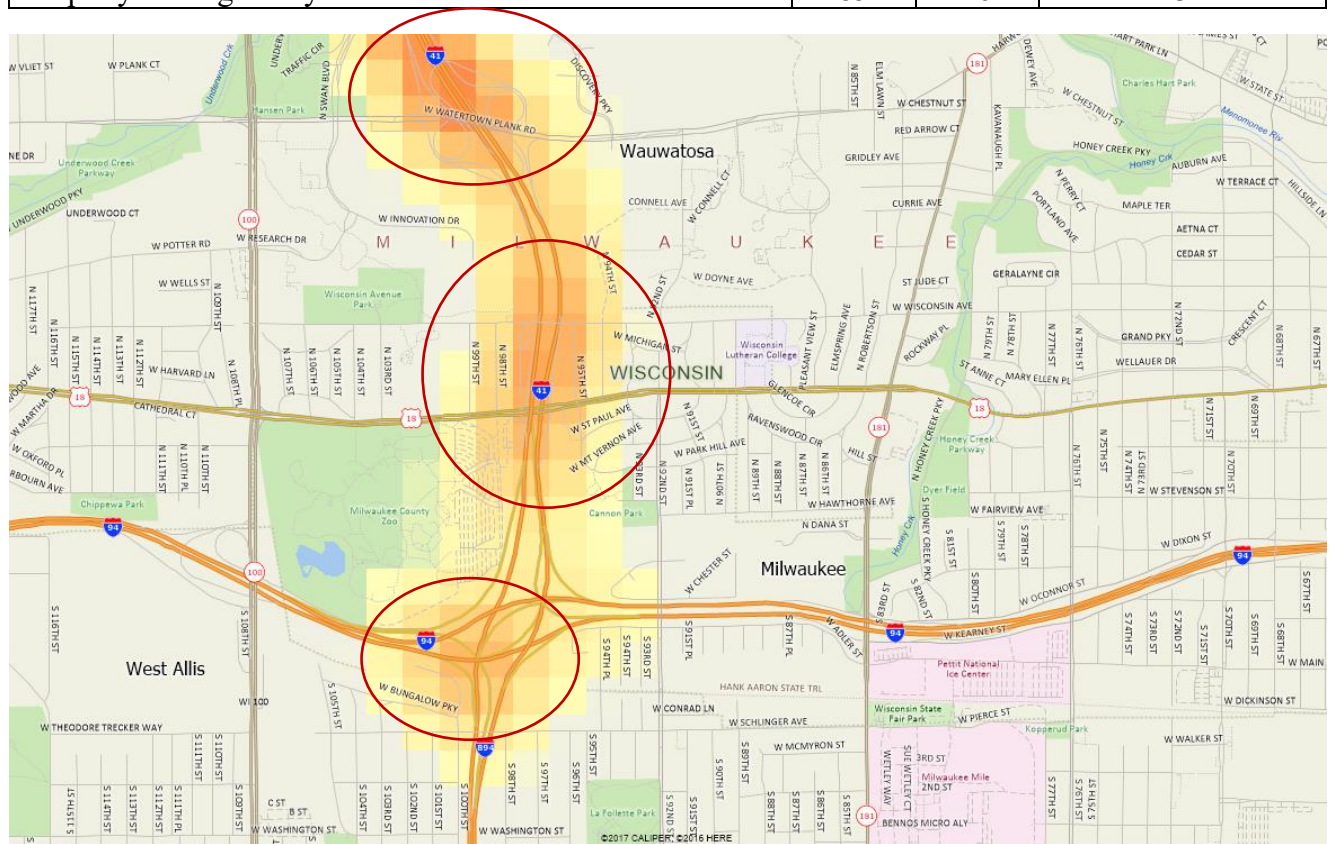


Table C: Hale Interchange.

Hale Interchange			
	2019	2020	Total
Personal Injury	14	5	19
Property Damage Only	37	19	56
Grand Total	51	24	75

Hale Interchange East to S 76th St			
	2019	2020	Total
Personal Injury	27	13	40
Property Damage Only	97	53	150
Grand Total	124	66	190

Hale Interchange West to S 124th St (County Line)			
	2019	2020	Total
Personal Injury	28	15	43
Property Damage Only	89	43	132
Grand Total	117	58	175

Analysis and Conclusion

Given the significant number of crashes occurring annually in each of the examined locations, the Milwaukee County Sheriff's Office has, for many years, prioritized each location within its patrol operations. The Zoo Interchange in particular – and even more so prior to its recent redesign – has long been well-known as a focal point for rush-hour crashes. The data generated by LEAD in its review of crashes in 2019 and 2020 serves to support this ongoing prioritization strategy, which entails rigorous patrols and infraction enforcement by marked MCSO squad cars and uniformed MCSO deputies. Other findings of note include:

- Property-damage-only crashes decreased across the board at all examined locations from 2019 to 2020. Reduced vehicular traffic due to COVID-19-related closures may have been a factor in this decrease.
- Personal-injury crashes in both examined locations associated with Interstate 41, the Zoo Interchange and the expressway north of W. Silver Spring Dr., increased from 2019 to 2020, although only marginally on Interstate 41 north of W. Silver Spring Dr.
- Personal-injury crashes in the Zoo Interchange increased by 55% (11 additional crashes reaching a new total of 31) in 2020 over the 2019 total of 20 crashes, suggesting an increase in crash severity at this location.

Numerous independent variables could account for these year-to-year discrepancies, including differences in weather patterns year-to-year, resulting in fewer ice-and-snow-related property-damage-only crashes. As stated above, reduced vehicular traffic due to the COVID-19 pandemic likely played a significant role. It would be challenging and unreliable to offer further generalizations on this subject without conducting a detailed examination of each crash occurring in each examined location, and then comparing these factors with those underlying the prior year's crashes in the same location.

Concrete measures can be undertaken to further examine and then resolve the challenges illustrated by this study, including the increase in personal-injury crashes in the Zoo Interchange. Law enforcement mitigation measures are already in progress and will remain a high priority. MCSO has, throughout the COVID-19 pandemic, reallocated available internal resources to conduct high-visibility saturation patrols of expressway sectors experiencing increases in crashes. A more detailed study of these patrols, particularly those that have been conducted in and around the examined areas, could be provided in future Board cycles for further review.

Furthermore, with additional guidance from the Board, MCSO could conduct further analysis of crash and citation data associated with each of the examined locations. Although this level of analysis will require additional time for research and a more intensive commitment of staff and resources, areas that could be explored include:

- Times of day and weather conditions associated with representative samples of personal-injury crashes in the Zoo Interchange and on Interstate 41 north of W. Silver Spring Dr., so as to determine whether rush-hour traffic patterns or weather conditions are a primary causal factor in personal-injury crash increases.
- Comparative analysis between representative samples of personal-injury and property-damage-only crashes occurring within the same examined location, so as to determine whether traffic patterns, weather conditions, or other unspecified factors are playing a role in mitigating or exacerbating crash severity.
- Comparative analysis with municipal police department crash data to determine consistency or inconsistency with broader local trends.

MCSO will continue its assertive efforts to decrease reckless driving and speeding throughout our expressway system, and is available to support the Board in whichever course of action is deemed most appropriate in relation to further examining these three locations.

RECOMMENDATION:

Ongoing study and analysis through 2021 and 2022.

Approved by:

Julie Esch, Deputy Director

Donna Brown-Martin
Director, Department of Transportation

Theodore J. Chisholm

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