



Traffic Engineering Division

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SUMMARY OF STAFF RECOMMENDATIONS To TRANSPORTATION COMMISSION

February 22, 2022

- AMERICAN PARKWAY & HOEPKER ROAD & RATTMAN ROAD (#2 on the All-Way Stop Intersection List): recommend maintaining existing all way stop control intersection.
- CROSS COUNTRY ROAD & MAPLE GROVE ROAD & NESBIT ROAD (#3 on All-Way Stop Intersection List): recommend maintaining existing all way stop control intersection.
- MILWAUKEE STREET & SPRECHER ROAD (#11 on All-Way Stop Intersection List): recommend maintaining existing all way stop control intersection.
- PACKERS AVENUE & SCHLIMGEN AVENUE (#30 on list Not Meeting Warrant): recommend maintaining existing stop control with Rectangular Rapid Flashing Beacon and update study upon completion of new development nearby.
- MONONA DRIVE & WINNEQUAH ROAD (#40 on list Not Meeting Warrant): recommend maintaining existing stop control and consider Rectangular Rapid Flashing Beacon installation for south crosswalk.
- SIGGELKOW ROAD & FREEDOM RING ROAD & VALLEY DRIVE (#52 on list Not Meeting Warrant): recommend maintaining existing stop control.
- HOEPKER ROAD & MANUFACTURERS DRIVE (#61 on list Not Meeting Warrant): recommend maintaining existing stop control.
- NORTH FRANKLIN & EAST JOHNSON STREET (#67 on list Not Meeting Warrant): recommend maintaining existing stop control, and consider traffic calming measures.
- NORTHPORT DRIVE & WARNER PARK DRIVEWAY (#75 on list Not Meeting Warrant): recommend maintaining existing stop control, and upgrade 12" flashing amber ball indicators with Rectangular Rapid Flashing Beacon.

2022 TRAFFIC SIGNAL PRIORITY LIST SPECIAL STUDIES FOR TRANSPORTATION COMMISSION SELECT INTERSECTIONS

Actions completed to date

- **AMERICAN PARKWAY & HOEPKER ROAD & RATTMAN ROAD**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect turning movement counts.
Collect vehicle delay observations.
Evaluate stop control, signal, and roundabout operation using Synchro modeling software.

- **CROSS COUNTRY ROAD & MAPLE GROVE ROAD & NESBIT ROAD**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect automated 24 hour speed data.
Collect turning movement counts.
Evaluate stop control, signal, and roundabout operation using Synchro modeling software.

- **MILWAUKEE STREET & SPRECHER ROAD**
Review of crash history.
Collect turning movement counts.

- **PACKERS AVENUE & SCHLIMGEN AVENUE**
Review of Crash History.

- **MONONA DRIVE & WINNEQUAH ROAD**
Review of crash history.
Collect automated 24 hour traffic counts.

- **SIGGELKOW ROAD & FREEDOM RING ROAD & VALLEY VIEW DRIVE**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect turning movement counts.
Collect Vehicle delay observations.
Evaluate stop control, signal, and roundabout operation using Synchro modeling software.

- **HOEPKER DRIVE & MANUFACTURERS DRIVE**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect automated 24 hour speed data.

- **NORTH FRANKLIN STREET & EAST JOHNSON STREET**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect automated 24 hour speed data.

- **NORTHPORT DRIVE & WARNER PARK DRIVEWAY**
Review of crash history.
Collect automated 24 hour traffic counts.
Collect automated 24 hour speed data.

TRAFFIC SIGNAL PRIORITY LIST COMMENTARY

AMERICAN PARKWAY & HOEPKER ROAD & RATTMAN ROAD (#1 on the All-Way Stop Intersection List)

The American Parkway & Hoepker Road & Rattman Road intersection is an all-way stop controlled intersection. This intersection is located approximately 3,500 feet west of the signalized intersection at Hoepker Road & Prairie Lakes Drive & Triumph Drive in Sun Prairie; and approximately 4,700 feet north of the signalized intersection of American Parkway & American Family Drive.

Crash History

- During the five-year period 2017-2022 there have been a reported twelve (12) crashes; of which five (5) are of type considered to be correctable by traffic signal control.
- During the five-year period 2017-2021, there have been three (3) crashes resulting in injuries.
- One (1) of the three (3) crashes resulting in injuries was a result of a crash of type typically considered correctable by traffic signal operation; and another one (1) injury crash of the three (3), was a result of a potentially correctable crash.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 17 percent above meeting the adopted minimum numerical volume.
- Manual delay counts indicate the intersection is 73 percent below meeting the minimum numerical delay warrant.

Staff Recommendation

Staff recommends maintaining the all-way stop control operation.

CROSS COUNTRY ROAD & MAPLE GROVE ROAD & NESBIT ROAD (#2 on All-Way Stop Intersection List)

The Cross Country Road & Maple Grove Road & Nesbit Road intersection is an all-way stop controlled intersection. This intersection is located approximately 2,100 feet south of the two way stop controlled intersection at Maple Grove Road & Manchester Road; and approximately 4,600 feet east of the Cross Country Road & Ice Age Trail crossing.

Crash History

- During the five-year period 2017-2022 there have been a reported nine (9) crashes; of which, three (3) are of type considered to be correctable by traffic signal control.
- During the five-year period 2017-2022, there have been no reported injuries.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 21 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining existing stop control configuration, and consider roundabout for future design.

MILWAUKEE STREET & SPRECHER ROAD (#10 on All-Way Stop Intersection List)

The Milwaukee Street & Sprecher Road intersection is an all-way stop controlled intersection. This intersection is located approximately 2,630 feet south of the signalized intersection at CTH T and Sprecher Road; and approximately 925 feet east of the two way stop intersection at Milwaukee Street & Rustic.

This intersection is currently equipped with flashing 12-inch red LED indicators to draw attention to the stop signs for the Sprecher Road approaches.

Crash History

- During the five-year period 2017-2022 there have been a reported fourteen (14) crashes; of which, five (5) are of type considered to be correctable by traffic signal control.
- During the five-year period 2017-2022, there have been three (3) crashes resulting in injuries, of which, all three (3) were a result of crashes of types considered to be correctable with traffic signal operations.
- Two (2) of these three (3) Injury crashes were angle crashes as a result of drivers not stopping at the stop sign while approaching on the Sprecher Road approach, prior to the red LED flashing light installation.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 58 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining all way stop configuration.

PACKERS AVENUE & SCHLIMGEN AVENUE (#30 on List)

The Packers Avenue & Schlimgen Avenue intersection is a 1-way stop controlled "T" intersection located approximately 1,060 feet south of the signalized intersection at Packers Avenue & International Lane; and approximately 1,825 feet north of the SB Packers Avenue ramp at Aberg Avenue.

The Schlimgen Avenue approach is stop controlled, and the pedestrian crosswalk along the north side is equipped with a Rectangular Rapid Flashing Beacon.

Crash History

- During the five-year period 2017-2022 there have been a reported sixteen (16) crashes; of which, three (3) are of type considered to be correctable by traffic signal control.
- As a result of these sixteen (16) crashes, there were a total of six (6) injuries, of which, two (2) were a result of crashes considered correctable by a traffic signal.
- Four (4) of the total sixteen (16) crashes were rear end crashes while a pedestrian was in the crosswalk. These crash types are not typically considered correctable by a traffic signal.

Application of Traffic Signal Criteria

- This intersection was last studied in 2018 and was 53 percent below meeting minimum numerical warrant.

Staff Recommendation

Staff recommends performing an update to this study upon completion and occupation of a few nearby planned developments.

MONONA DRIVE & WINNEQUAH DRIVE (#40 on List)

The intersection of Monona Drive & Winnequeah Drive is located approximately 1,600 feet south of the signalized intersection of Buckeye Road & Monona Drive; and 2,400 feet north of the signalized intersection of Monona Drive & Dean Avenue.

The intersection is currently a 2-way stop controlled intersection with the Winnequah Drive approach being the stop controlled approaches.

Crash History

- During the five-year period 2017-2022 there have been a reported four (4) crashes; of which, two (2) are of type considered to be correctable by traffic signal control.
- Of these four (4) crashes, three (3) resulted in injury.
- Of the three (3) injury crashes, two (2) were crash types considered correctable.
- There has been one (1) bike and one (1) pedestrian reported crash. Both resulted in injury to the pedestrian and bicyclist. The bike involved crash is a type considered correctable by traffic signal control.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 59 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining existing stop control configuration and adding this intersection to the Safe Streets Madison list for consideration of a Rectangular Rapid Flashing Beacon installation, or other suitable treatments. Coordination with City of Monona on any improvements at this intersection will be required.

SIGGELKOW ROAD & FREEDOM RING ROAD & VALLEY VIEW DRIVE (#52 on List)

The Siggelkow Road & Freedom Ring Road & Valley View Drive intersection is a 2-way stop controlled intersection located approximately 1,390 feet east of the un-signalized intersection at the Siggelkow Road & US 51 Ramp; and approximately 940 feet west of the un-signalized intersection at Siggelkow Road & Freese Lane & Autumn Lane.

The intersection is currently controlled by stop signs on the Freedom Ring Road and Valley Drive approaches. The west pedestrian crossing of East Washington Avenue is equipped with a RRFB and continental crosswalk pavement markings.

Crash History

- During the five-year period 2017-2022 there have been a reported four (4) crashes; none of which are of type typically considered to be correctable by traffic signal control.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 64 percent below meeting the adopted minimum numerical volume for traffic signals.
- Manual delay counts indicate this intersection is 91 percent below meeting minimum numerical warrant for user delay.

Staff Recommendation

Staff recommends maintaining the existing stop control configuration and Rectangular Rapid Flashing Beacon operation.

HOEPKER ROAD & MANUFACTURERS DRIVE (#61 on List)

The intersection of Hoepker Road & Manufacturers Drive is located approximately 2,140 feet east of the signalized intersection at Stoughton Road (US 51) and Hoepker Road; and 3,090 feet west of the all way stop intersection at Hoepker Road & Portage Road.

The intersection is currently a 2-way stop controlled intersection with the Manufacturers approaches being the stop controlled approaches.

Crash History

- During the five-year period 2017-2022 there have been a reported three (3) crashes; of which, one (1) is of type considered to be correctable by traffic signal control.
- There were no reported injuries in this time period reported.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 69 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining stop control configuration.

NORTH FRANKLIN STREET & EAST JOHNSON STREET (#67 on List)

The intersection of North Franklin Street & East Johnson Street is approximately 600 feet east of the signalized intersection of East Johnson St. & Blair St. & Hamilton St.; and 330 feet west of the signalized intersection of East Johnson St. & Blair St.

The intersection is currently a 1-way stop controlled intersection of two one way streets with the NB Franklin Street being the stop controlled approaches.

Crash History

- During the five-year period 2017-2022 there have been a reported twelve (12) crashes; of which, two (2) are of type considered to be correctable by traffic signal control.
- During this time period, three (3) crashes involved people on bike and one (1) crash involved a person walking.
 - Two (2) crashes are of type considered to be correctable by traffic signal control, both angle crashes involving a NB driver and EB bike.
 - One (1) crash involved a person riding a bike WB on the south sidewalk and NBRT driver.
 - One (1) crash involved a WB pedestrian on the south sidewalk and NBRT driver.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 73 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining existing stop sign control configuration and adding this intersection to the Safe Streets Madison list to evaluate for traffic calming measures.

NORTHPORT DRIVE & WARNER PARK DRIVEWAY (#75 on List)

The intersection of Northport Drive & Warner Park Driveway is located approximately 1,070 feet east of the signalized intersection of Troy Drive & Northport Drive; and 1,225 feet west of the signalized intersection of Northport Drive & Sherman Avenue.

The intersection is currently a 1-way stop controlled “T” intersection with the Warner Park driveway approach being the stop controlled approach. The west crosswalk is currently equipped with a pedestrian activated 12” amber flashing beacon.

Crash History

- During the five-year period 2017-2022 there have been a reported six (6) crashes; of which, one (1) is of type considered to be correctable by traffic signal control.
- Two (2) crashes were of severity type B, neither crash being of type typically considered to be correctable by a traffic signal control operation.

Application of Traffic Signal Criteria

- Automatic hose counts show that this intersection is 79 percent below meeting the adopted minimum numerical volume for traffic signals.

Staff Recommendation

Staff recommends maintaining existing stop control and updating flashing beacon to Rectangular Rapid Flashing Beacons and update signs and pavement markings.

END