



TRAFFIC COMMITTEE AGENDA

July 16, 2025 – 7:30 P.M.

Lower Level Conference Room – Troy City Hall – 500 West Big Beaver

1. Roll Call
2. Approval of Minutes – March 19, 2025, Traffic Committee

PUBLIC HEARINGS

3. No Public Hearings

REGULAR BUSINESS

4. Request for Traffic Control – Williams Drive at Castleton Drive
5. Request for Traffic Control – Wendover Road at Oakhill Drive
6. Public Comment
7. Other Business
8. Adjourn

Copy to:

Traffic Committee Members: Sgt. Brian Warzecha, Police Department; Deputy Fire Chief, Michael Koehler, Fire Department;

TRAFFIC COMMITTEE

MESSAGE TO VISITORS, DELEGATIONS, AND CITIZENS

The Traffic Committee comprises seven Troy citizens who have volunteered their time to the City to address traffic and safety concerns. The stated role of this Committee is:

- a. To give first hearing to citizens' requests and obtain their input.
- b. To make recommendations to the City Council based on technical considerations, traffic surveys, established standards, and evaluation of citizen input.
- c. To identify hazardous locations and recommend improvements to reduce the potential for traffic crashes.

The Committee will make final decisions on sidewalk waivers.

The recommendations and conclusions arrived at on regular items this evening will be forwarded to the City Council for their final action. Any citizen can discuss these recommendations before the City Council. The City Manager will place the items addressed in the Traffic Committee meeting on the City Council Agenda. The earliest date the City Council might consider these items would typically be 10 to 14 days after the Traffic Committee meeting. If you are interested, you may contact the City Manager's Office to determine when a particular item is on the Agenda.

Persons wishing to speak before this Committee should attempt to hold their remarks to no more than 5 minutes. Please try to keep your comments relevant to the subject at hand. Please speak only when recognized by the Chair. These comments are made to keep this meeting moving along. Anyone wishing to be heard will be heard; we are here to listen to your concerns.

2. Approval of Minutes – March 19, 2025, Traffic Committee

PUBLIC HEARING

3. No Public Hearing

REGULAR BUSINESS

4. Request for Traffic Control – Williams Drive at Castleton Drive

Jeffrey Novak of 2721 Williams Drive requests that the intersection of Williams Drive and Castleton Drive be reviewed for traffic control purposes at the intersection. He states, I currently live on the Corner of Williams Drive and Castleton. I am reaching out to request that a 3-way Stop sign be placed at this intersection. The traffic flies through here on both streets with no one stopping or slowing down. Several times, cars and school buses have had to slam on their brakes to avoid collisions. No one slows down when on Williams Dr (School buses driving from Landford to Castleton take the corner without slowing down, pretty much on two wheels), approaching the race track of Castleton. There is no slowdown on Castleton for almost a ½ mile until you reach Susick Elementary School. The parents racing their kids to school in the morning is ridiculous. A 3-way stop at the intersection of Williams Dr and Castleton would slow traffic and avoid all types of problems. I don't want to see anyone getting injured or worse at this intersection since it is a busy street for parents taking their children to school.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that the Williams Drive Approach at Castleton Drive be modified from UNCONTROLLED to YIELD CONTROLLED.
- b. RESOLVED, that **NO CHANGE** be made to the current traffic control at the intersections.

5. Request for Traffic Control – Wendover Road at Oakhill Drive

Eric Calvird of 3235 Myddleton requested that several intersections be reviewed to update the traffic control at the intersections. Eric provided the following comments: The first location is on the southwest corner of Myddleton and Wendover. This yield sign receives a significant amount of traffic from people traveling 16 miles and entering the sub from either Oakhill or Henhawk. There are currently no stop or yield signs on Oakhill and Wendover, so cars are typically traveling at higher speeds since they do not have to come to a stop when entering Wendover heading towards Myddleton. This intersection comes to a dead end, and drivers are forced to either turn right or left onto Myddleton. Almost every car does not come to a stop when making this turn, which is another reason why I feel a stop sign is required. Some cars will make a sharp right-hand turn at the Northeast corner of Myddleton and Wendover to head further east into the suburb. The subdivision lacks sidewalks, forcing pedestrians to travel in the street. The Second location is on the northeast corner of Myddleton & Wendover. I feel a stop sign is required for the same reasons above.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that the Wendover Approach at Oakhill Drive be modified from YIELD CONTROLLED to STOP CONTROLLED.
- b. RESOLVED, that **NO CHANGE** be made to the current traffic control at the intersections.

6. Public Comment

7. Other Business

8. Adjourn

A regular meeting of the Troy Traffic Committee was held Wednesday, March 19, 2025 in the Lower Level Conference Room at Troy City Hall. Pete Ziegenfelder called the meeting to order at 7:30 p.m.

1. Roll Call

Present: Timothy Battle
Dale Christiansen
Swathi Jeeda, Student Representative
Shama Kenkre
Justin Rose
Pete Ziegenfelder

Absent: Al Petrulis
Abi Swaminathan
Deputy Fire Chief, Michael Koehler

Also present: G. Scott Finlay, City Engineer
Sgt. Brian Warzecha, Police Department
Merissa Clark, Administrative Assistant

2. Minutes – February 19, 2025 Traffic Committee

Resolution # 2025-03-07

Moved by Rose

Seconded by Battle

To approve the February 19, 2025 minutes as printed.

Yes: Battle, Christiansen, Rose, Ziegenfelder

No: None

Absent: Petrulis, Swaminathan

MOTION CARRIED**PUBLIC HEARINGS****3. No Public Hearings****REGULAR BUSINESS****4. Request for Traffic Control – Eden Gardens Site Condominium**

Eden Gardens Site Condominiums has been completed. The Kohli Drive and Rochester Road intersections are STOP-controlled on the Kohli Drive approaches to Rochester Road with no Traffic Control Order. During the preliminary site plan review, a No-Left-Turn Sign was recommended to be installed on Rochester Road south of the north Kohli Drive. The installation

of a No-Left-Turn sign requires a Traffic Control Order.

Three residents came in to represent Eden Gardens subdivisions, they voiced their concerns about the speeding of drivers along Rochester Rd when they are coming off of I-75, and stated that people are constantly trying to use Kohli as a cut thru, and speeding while doing so. Multiple people park along Kohli for long periods of time, and they do not live in the subdivision.

Scott Finlay let the residents know that the Police Department can be contacted for speeding, and that P.D. will drop off the Radar Sign in that area for a period of time, all you would need to do is call the non-emergency line.

Justin Rose added that the speeding on the street is most likely neighbors.

Dale Christiansen asked when the subdivision was built.

The representatives for Eden Gardens stated it was completed in 2023. They also asked if it was possible, when installing the No Left Turn sign, if we could also add a center lane on Rochester Rd in that area.

Justin Rose explained that the site distance when making that left turn would make for the turn lane to be very unsafe since it does not have the proper site distance.

A resident from Eden Gardens asked if a Stop Sign on Rochester Rd was an option.

Justin Rose & Scott Finlay explained that the warrants would not be met, and that the city does not put stop signs on major roads.

A resident from Eden Gardens asked again, about the center lane being added.

Scott Finlay stated that the other issue with the center lane is that you would have competing left hand turns, NB traffic making a left into that north drive is also going to be competing with the existing traffic that is coming south on Rochester and turning into Larchwood. So those competing & conflicting left turns cannot be permitted otherwise, and since Larchwood was there first, they get to continue and that would make the new subdivision restricted. That's why this no left turn was part of the preliminary site plan approval. It was also in the previous City Engineer's notes that he wanted these posted before the subdivision was even occupied, but were a little behind. This was a planned sign installation when this was subdivision was purposed.

Sgt. Warzecha asked for clarification on which direction the speeding is mostly taking place, North to South, or both.

The resident from Eden Gardens explained that it's the people coming off of I-75, and mentioned that cars will come and park in the subdivision for long periods of time as well.

Sgt. Warzecha asked for specific times, and explained that with the speeding taking place all the time it is very hard to patrol.

Tim Battle asked if it was always the same car(s), parking in the subdivision.

The residents stated that it is not the same car(s) and that the times vary, for speeding and parking.

Sgt. Warzecha let the residents know that they do not need to call for the radar trailer he will have one dropped off in the area soon. He mentioned that we do not receive data from the radar, and that sometimes the radar helps with speeding, and sometimes it can make it worse because cars want to see how fast they can go.

The resident stated that the Police were out a few weeks ago and they were very glad to see them in the area and that they were hoping the speeders would finally get caught.

Sgt. Warzecha explained that, that area is not typically a road they think they would have speeders on, so not typically somewhere we sit for that. But if you are saying it is becoming an issue, we can definitely get someone out there on patrol. He also explained that overtime, the cutting thru happening on the street will eventually stop because they will realize that it does not go anywhere.

Resolution # 2025-03-08

Moved by Rose

Seconded by Battle

BE IT RESOLVED, that the Kohli Drive and Rochester Road intersections be STOP CONTROLLED on the Kohli Drive approach to Rochester Road.

BE IT RESOLVED, that a NO LEFT TURN sign be installed on Rochester Road at the north Kohli Drive and Rochester Road intersection.

Yes: Battle, Christiansen, Rose, Ziegenfelder

No: None

Absent: Petrulis, Swaminathan

MOTION CARRIED

5. Request for Traffic Control – Adler Cove Site Condominium

The Adler Cove Site Condominiums has been completed. The intersection of Adler Court and Long Lake Road is STOP-controlled on the Adler Court approach to Long Lake Road, and there is no Traffic Control Order.

Scott Finlay explained that the subdivision is occupied, and that in order for these stop signs to be enforced we have to have a Traffic Control Order done.

Resolution # 2025-03-09

Moved by Rose

Seconded by Christiansen

BE IT RESOLVED, that the Adler Court and Long Lake Road intersection be STOP CONTROLLED on the Adler Court approach to Long Lake Road

Yes: Battle, Christiansen, Rose, Ziegenfelder

No: None

Absent: Petrulis, Swaminathan

MOTION CARRIED

6. Public Comment

No public comment.

7. Other Business

The Big Beaver and I-75 project was discussed regarding completion dates, Scott stated they are hoping to have it done mid, to end June.

The Traffic Committee asked a few questions about the Rochester Road expansion project, Scott stated that we are hoping to have it go out for Bid in August, and hopefully have a contractor selected sometime in October. Lane closures should be starting sometime in the winter. Projected to be finished in Spring of 2027.

8. Adjourn

The meeting adjourned at 7:55 PM.

Pete Ziegenfelder -Chairperson

G. Scott Finlay, City Engineer/Traffic Engineer



TRAFFIC COMMITTEE REPORT

July 16, 2025

TO: Traffic Committee

FROM: G. Scott Finlay, City Engineer/Traffic Engineer

SUBJECT: Request for Traffic Control – Williams Drive at Castleton Drive

Background:

Jeffrey Novak of 2721 Williams Drive requests that the intersection of Williams Drive and Castleton Drive be reviewed for traffic control purposes at the intersection. He states: I currently live on the Corner of Williams Drive and Castleton. I am reaching out to request that a 3-way Stop sign be placed at this intersection. The traffic flies through here on both streets with no one stopping or slowing. Several times cars, school buses have to hit the brakes to avoid collisions. No one slows down when on Williams Dr (School buses driving from Landford to Castleton take the corner without slowing down pretty much on 2 wheels) approaching the race track of Castleton. There is no slowdown on Castleton for almost a ½ mile until you reach Susick Elementary School. The parents racing their kids to school in the morning is ridiculous. A 3-way stop at the intersection of Williams Dr and Castleton would definitely slow traffic and avoid all types of problems. I don't want to see anyone getting injured or worse at this intersection since it is a busy street for parents taking their children to school.

The posted speed limit on both streets is 25 miles per hour.

This 3-way intersection is currently uncontrolled.

Both Williams Drive and Castleton Drive are considered local roads.

There were no crashes recorded in the past five (5) full years within a 250' radius of the intersection.

The significant potential sight distance obstruction at the intersection is for a motorist traveling eastbound on Williams Drive. The safe approach speed for eastbound vehicles on Williams Drive is 13.8 mph due to the sight distance obstruction from the house corner on the northwest and southwest quadrants.

OHM recommends implementing a YIELD control on the Williams Drive approach.

The city requested that OHM review the intersection and provide their findings and recommendations (copy attached).

June 4, 2025

Mr. Scott G Finlay, PE
City Engineer
City of Troy
500 W. Big Beaver Rd
Troy, MI 48084

RE: Traffic Control Recommendation for
Castleton Drive at Williams Drive

Dear Mr. Finlay:

As requested, we have reviewed the intersection of Castleton Drive at Williams Drive to determine the proper traffic control. Castleton Drive at Williams Drive is a 3-legged intersection located in the City of Troy. The speed limit on both streets under investigation is 25 mph. The intersection does not have any stop-controlled approaches. Attached are aerial and intersection photos.

Types of Roadways

Both Castleton Drive and Williams Drive are considered local streets. Castleton Drive runs north to south providing direct access to the neighborhood from E Maple Road. Williams Drive runs east to west offering access to the neighborhood.

The surrounding land use is entirely single-family residential. On-street parking is permitted on the west side of Castleton Drive and on the south side of Williams Drive. There is no clear major versus minor street. However, for the purpose of analysis Castleton Drive is presumed to be the major road, while Williams Drive is considered the minor road. Both Castleton Drive and Williams Drive serve as key routes throughout the neighborhood.

Traffic Control Analyses

Traffic control analyses described herein adheres to the requirements presented in the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) that are considered mandates of state law. A reference document explaining the background behind the analyses is attached to this memo.

Crash Analysis

Based on information obtained through the Traffic Improvement Association of Michigan, there were no crashes recorded in the past full five (5) years within a 250' radius of the intersection. The crash history does not constitute a compelling case for modifying the existing controls.



Traffic Volumes

Traffic volumes in residential areas are predominantly driven by the number of single-family residential homes in the neighborhood. Traffic counts were collected on Castleton Drive approximately 450 feet north of Williams Drive from May 8 to May 15, 2025. Castleton Drive does not meet the 300 vehicles per hour threshold for a minimum of 8 hours.

While counts were not taken on Williams Drive, it is highly unlikely that Williams Drive reaches and sustains a combined vehicular, pedestrian, and bicycle volumes of at least 200 units per hour for 8 hours.

Reductions in the minimum traffic volume criteria for an all-way STOP are not permissible at this location. The 85th percentile speed was found to be 30.4 mph for northbound traffic and 29.2 mph for southbound traffic. Based on this data, the 85th percentile approach speed does not exceed 40 mph on Castleton Drive nor likely on Williams Drive; thus, the minimum vehicular warrants cannot be discounted to 70 percent of the values described previously. Additionally, the study intersection is likely to fall significantly shy even of the reduced 80 percent volumes, based on traffic count data collected.

Therefore, the minimum volume criteria for an all-way STOP has not been met. The minimum volume warrants for an all-way STOP can be found in the attached Reference Guide.

Approach Speed Limits

The approach speed limit on all study streets is 25 mph. Speed limits alone cannot be used in this case to determine which direction of traffic should be assigned the right-of-way.

Sight Distance

The major potential sight distance obstruction at the intersection of Castleton Drive at Williams Drive for a motorist traveling eastbound on Williams Drive would be the house corners on the northwest and southwest quadrants of the intersection. These obstructions impact the calculated safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle seen on the cross street.

When the safe approach speed is found to be 10 mph or less, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. In this case, the safe approach speed for eastbound vehicles on Williams Drive is 13.8 mph due to the permanent sight distance obstruction from the house corner on the northwest and southwest quadrants. Thus, based on the safe approach speed calculations, YIELD-control is the computed right-of-way control for Williams Drive approach. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Recommendation

The preceding analysis did not determine that any criteria were met for all-way STOP-control. The safe approach speed calculations suggested YIELD-control would be appropriate for the minor street (Williams Drive) approach.

OHM recommends implementing a YIELD sign on the Williams Drive approach. The intersection should be reevaluated if traffic volumes increase or crashes begin to occur.



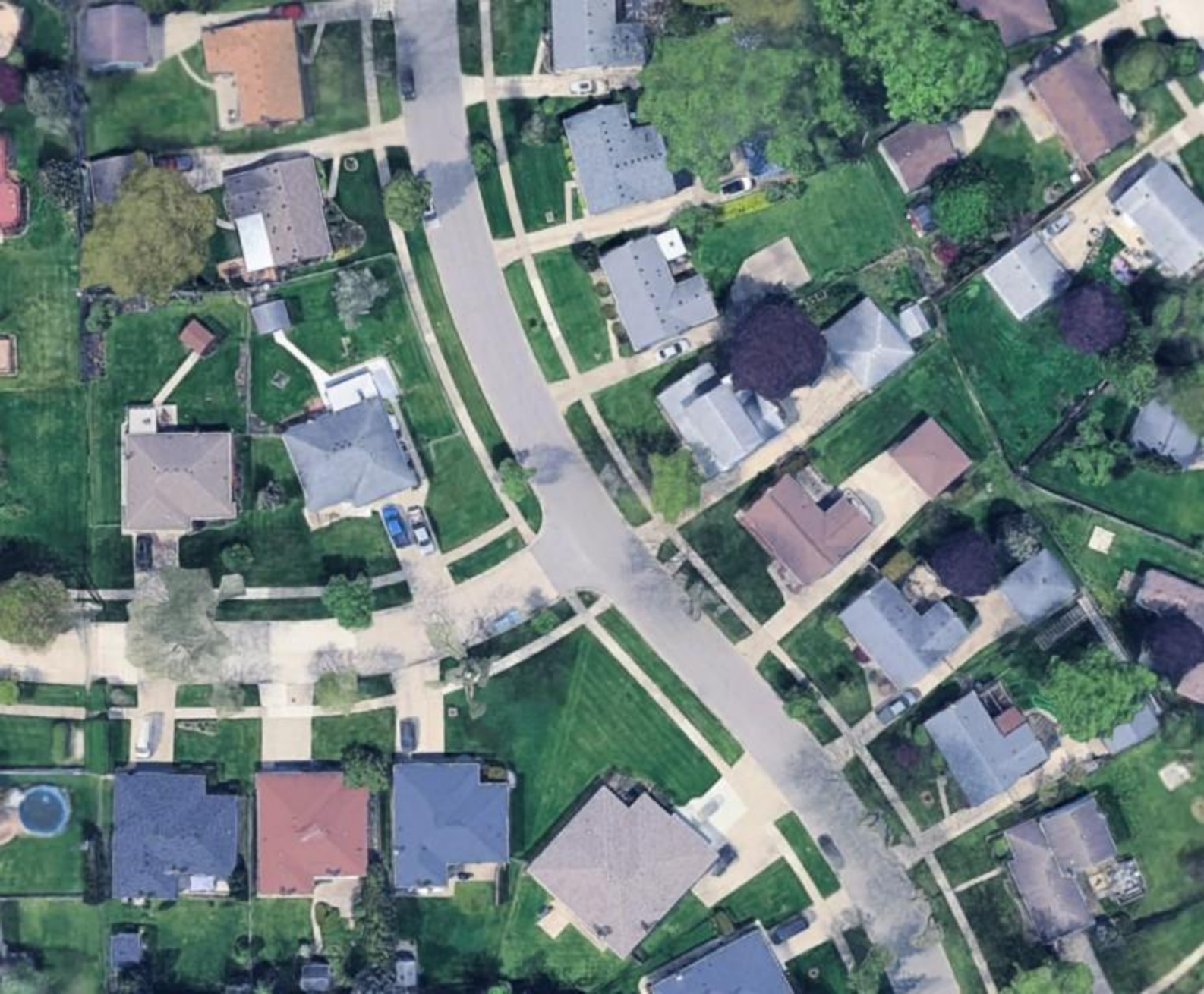
Sincerely,

OHM Advisors

Lauren Hull, PE, RSP₁
Traffic Engineer

Attachments:

- Aerial Photo
- Safe Approach Speed Calculation Spreadsheet
- Intersection Photos
- Traffic Control Determination Reference Guide
- Castleton Drive Traffic Speed & Volume Data



Safe Approach Speed Calculation

Castleton Dr and Williams Dr
City of Troy

Measured:

Width of Roads
Road 1 = 26 (ft)
Road 2 = 26 (ft)
Distance to Obstruction
a = 57.5 (ft)
b = 27 (ft)
c = 45.5 (ft)
d = 35 (ft)

Angle of Intersection
Delta = 90 (degrees, measure counterclockwise)
Road 1 Posted
Speed Limit = 25 (mph)

Assumed:

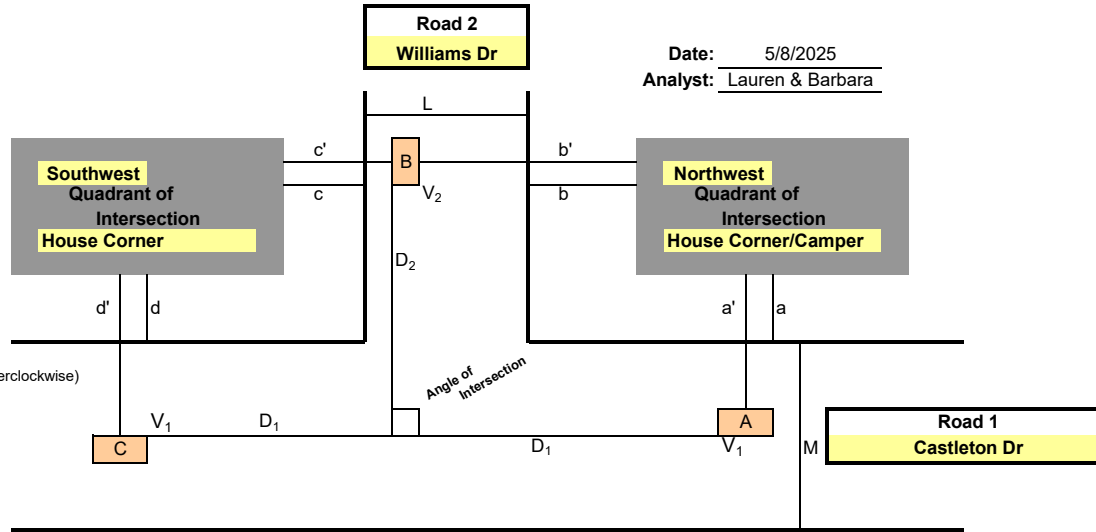
Speed of Vehicle A = Speed of Vehicle C
= Posted Speed Limit on Road 1

+ 5 (mph)
 $V_1 = 30$ (mph)
Perception / Reaction Time (AASHTO)
 $t = 2.5$ (sec)
Deceleration rate (AASHTO)
 $A = 11.20$
Clearance distance in excess of safe stopping distance (AAA)
 $EC = 0$ (ft)

Calculated Safe Approach Speed for Vehicle B

Approaching on Road 2
 $V_2 = 15.6$ (mph) [Based on Veh. A]
or $V_2 = 13.8$ (mph) [Based on Veh. C]

Threshold of Safe Approach Speed (AAA, FHWA & NSC)
to Recommend STOP Control 10.0 (mph)
to Recommend YIELD Control 25.0 (mph)
Otherwise Recommends NO CONTROL.



Intermediate Calculations:

$D_1 = 196$
 $D_{2A} = 80.3$
 $D_{2C} = 68.6$
 $a' = 63.5$
 $b' = 41$
 $c' = 51.5$
 $d' = 49$

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$
 $D_{2A} = \frac{a' * D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' * D_1}{(D_1 - d')}$

Notes: Enter field measurements in yellow highlighted area.
Blue fields are std. default values; change only for cause.
Calculated by spreadsheet

Recommended ROW control for Road 2
based on safe approach speed : **YIELD SIGN**



Photograph No. 1: Castleton Dr – Heading North Looking Left
Date: 05/08/2025 **Photographer:** Lauren Hull



Photograph No. 2: Castleton Dr – Heading North
Date: 05/08/2025 **Photographer:** Lauren Hull



Photograph No. 3: Williams Dr – Heading East Looking Left
Date: 05/08/2025 **Photographer:** Lauren Hull



Photograph No. 4: Williams Dr – Heading East
Date: 05/08/2025 **Photographer:** Lauren Hull



Photograph No. 5: Williams Dr – Heading East Looking Right
Date: 05/08/2025 Photographer: Lauren Hull



Photograph No. 6: Castleton Dr – Heading South
Date: 05/08/2025 Photographer: Lauren Hull



Photograph No. 7: Castleton Dr – Heading South Looking Right
Date: 05/08/2025 **Photographer:** Lauren Hull

Reference Guide on Traffic Control Determination in the State of Michigan

Background

This document is intended to be used as a reference guide for performing intersection traffic control studies of intersections on public roadways in Michigan. The document explains the procedure and requirements necessary to implement traffic control at an intersection as stipulated by the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Act 300 of Public Acts of 1949 (as amended) requires the adoption of this Manual, and further requires conformance to the manual for all state highways, county roads and local streets open to public travel.

Generally, the starting premise is an uncontrolled intersection. The first step would then be to verify if the intersection should remain uncontrolled or if YIELD or STOP controls on the minor street approach(es) should be provided. For locations with higher traffic volumes and /or crash issues, then an evaluation of the location for all-way STOP warrants would be performed. The appropriate analysis for each level of control described below.

YIELD Traffic Control Guidance

The use of a YIELD sign is intended to assign the right-of-way at intersections where it is not usually necessary to stop before proceeding into the intersection. Conversely, the STOP sign is intended for use where it is usually necessary to stop before proceeding into the intersection.

The following conditions should be fully evaluated to determine how the right-of-way should be assigned:

- Traffic Volumes: Normally, the heavier volume of traffic should be given the right-of-way.
- Approach Speeds: The higher speed traffic should normally be given the right-of-way.
- Types of Highways: When a minor highway intersects a major highway, it is usually desirable to control the minor highway.
- Sight Distance: Sight distance across the corners of the intersection is the most important factor and is critical in determining safe approach speeds.

STOP Traffic Control Guidance

Based on the MMUTCD there are four conditions where STOP signs may be warranted:

- At the intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
- On a street entering a through highway or street.
- At an unsignalized intersection in a signalized area.
- At other intersections where a combination of high speed, restricted view, or crash records indicate a need for control by the STOP sign.

In many cases STOP signs are installed where they may not be warranted. Traffic experts agree that unnecessary STOP signs:

- Cause accidents they are designed to prevent.
- Breed contempt for other necessary STOP signs.
- Waste millions of gallons of gasoline annually.
- Create added noise and air pollution.
- Increase, rather than decrease, speeds between intersections.

There is also an explicit restriction in the MMUTCD that STOP signs are not to be used for speed control, in Section 2B.04.

Evaluation of All-Way STOP Traffic Control

Based on the MMUTCD there are four conditions where **all-way** STOP signs may be warranted:

- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- B. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- C. *Minimum volumes:*
 - 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - 2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 - 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
- D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/5/2025	5/5/2025		5/6/2025		5/7/2025		5/8/2025		5/9/2025		Weekday Average		5/10/2025		5/11/2025	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	2	1	2	1	3	0	3	2
1:00	*	*	*	*	*	*	*	*	0	1	0	1	5	0	1	2
2:00	*	*	*	*	*	*	*	*	1	0	1	0	0	1	1	0
3:00	*	*	*	*	*	*	*	*	1	2	1	2	3	2	1	0
4:00	*	*	*	*	*	*	*	*	1	8	1	8	0	3	0	2
5:00	*	*	*	*	*	*	*	*	3	15	3	15	4	6	0	2
6:00	*	*	*	*	*	*	*	*	17	36	17	36	2	9	3	5
7:00	*	*	*	*	*	*	*	*	76	78	76	78	10	20	6	20
8:00	*	*	*	*	*	*	7	10	31	54	19	32	14	29	14	26
9:00	*	*	*	*	*	*	13	22	22	17	18	20	15	22	20	28
10:00	*	*	*	*	*	*	36	33	18	32	27	32	25	29	25	25
11:00	*	*	*	*	*	*	37	32	28	26	32	29	24	36	26	29
12:00 PM	*	*	*	*	*	*	22	31	33	29	28	30	26	36	30	31
1:00	*	*	*	*	*	*	27	33	23	24	25	28	24	21	32	32
2:00	*	*	*	*	*	*	86	37	67	30	76	34	25	26	29	27
3:00	*	*	*	*	*	*	51	77	47	80	49	78	27	28	18	21
4:00	*	*	*	*	*	*	51	29	35	23	43	26	29	24	33	22
5:00	*	*	*	*	*	*	37	30	29	22	33	26	27	31	20	23
6:00	*	*	*	*	*	*	32	21	22	28	27	24	18	25	22	14
7:00	*	*	*	*	*	*	23	15	23	21	23	18	12	18	15	25
8:00	*	*	*	*	*	*	13	11	25	9	19	10	11	8	9	16
9:00	*	*	*	*	*	*	12	6	19	5	16	6	13	7	8	10
10:00	*	*	*	*	*	*	3	3	14	7	8	5	8	7	3	6
11:00	*	*	*	*	*	*	4	0	5	1	4	0	3	4	3	1
Total	0	0	0	0	0	0	454	390	542	549	548	539	328	392	322	369
Day	0		0		0		844		1091		1087		720		691	
AM Peak							11:00	10:00	7:00	7:00	7:00	7:00	12:00 PM	11:00	12:00 PM	12:00 PM
Volume	0	0	0	0	0	0	37	33	76	78	76	78	26	36	30	31
PM Peak							2:00	3:00	2:00	3:00	2:00	3:00	4:00	12:00 PM	4:00	1:00
Volume	0	0	0	0	0	0	86	77	67	80	76	78	29	36	33	32

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/12/2025	5/12/2025		5/13/2025		5/14/2025		5/15/2025		5/16/2025		Weekday Average		5/17/2025		5/18/2025	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	1	2	1	0	1	0	0	1	*	*	1	1	*	*	*	*
1:00	0	0	0	0	0	0	1	2	*	*	0	0	*	*	*	*
2:00	0	0	1	0	1	1	0	0	*	*	0	0	*	*	*	*
3:00	1	4	1	5	2	4	2	4	*	*	2	4	*	*	*	*
4:00	4	7	2	8	2	4	9	11	*	*	4	8	*	*	*	*
5:00	7	13	4	18	4	13	8	15	*	*	6	15	*	*	*	*
6:00	16	34	23	41	20	43	15	39	*	*	18	39	*	*	*	*
7:00	79	68	71	53	93	68	84	65	*	*	82	64	*	*	*	*
8:00	34	62	40	69	35	63	46	74	*	*	39	67	*	*	*	*
9:00	20	18	18	26	18	26	7	25	*	*	16	24	*	*	*	*
10:00	40	39	36	31	36	33	*	*	*	*	37	34	*	*	*	*
11:00	47	35	27	32	38	42	*	*	*	*	37	36	*	*	*	*
12:00 PM	25	20	21	21	27	25	*	*	*	*	24	22	*	*	*	*
1:00	34	36	66	31	31	25	*	*	*	*	44	31	*	*	*	*
2:00	73	40	45	58	63	31	*	*	*	*	60	43	*	*	*	*
3:00	61	70	30	23	46	77	*	*	*	*	46	57	*	*	*	*
4:00	44	30	45	36	45	30	*	*	*	*	45	32	*	*	*	*
5:00	32	24	42	28	33	27	*	*	*	*	36	26	*	*	*	*
6:00	30	19	23	19	35	15	*	*	*	*	29	18	*	*	*	*
7:00	22	16	15	10	19	16	*	*	*	*	19	14	*	*	*	*
8:00	16	6	15	20	21	16	*	*	*	*	17	14	*	*	*	*
9:00	11	5	7	6	12	3	*	*	*	*	10	5	*	*	*	*
10:00	6	3	5	1	5	2	*	*	*	*	5	2	*	*	*	*
11:00	2	1	4	1	3	6	*	*	*	*	3	3	*	*	*	*
Total	605	552	542	537	590	570	172	236	0	0	580	559	0	0	0	0
Day	1157		1079		1160		408		0		1139		0		0	
AM Peak	7:00	7:00	7:00	8:00	7:00	7:00	7:00	8:00			7:00	8:00				
Volume	79	68	71	69	93	68	84	74	0	0	82	67	0	0	0	0
PM Peak	2:00	3:00	1:00	2:00	2:00	3:00					2:00	3:00				
Volume	73	70	66	58	63	77	0	0	0	0	60	57	0	0	0	0
Comb Total	1157		1079		1160		1252		1091		2226		720		691	
ADT	ADT: 978		AADT: 978													

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/8/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	0	2	1	4	0	0	0	0	0	0	0	0	0	7
9:00	4	1	2	5	1	0	0	0	0	0	0	0	0	13
10:00	2	3	18	11	2	0	0	0	0	0	0	0	0	36
11:00	3	2	18	10	4	0	0	0	0	0	0	0	0	37
12:00 PM	2	1	8	9	2	0	0	0	0	0	0	0	0	22
1:00	1	1	8	17	0	0	0	0	0	0	0	0	0	27
2:00	2	1	31	38	14	0	0	0	0	0	0	0	0	86
3:00	2	5	11	29	2	2	0	0	0	0	0	0	0	51
4:00	2	3	16	16	14	0	0	0	0	0	0	0	0	51
5:00	0	1	7	24	3	0	2	0	0	0	0	0	0	37
6:00	2	2	7	15	5	1	0	0	0	0	0	0	0	32
7:00	2	4	5	11	1	0	0	0	0	0	0	0	0	23
8:00	0	0	5	5	3	0	0	0	0	0	0	0	0	13
9:00	1	2	2	6	1	0	0	0	0	0	0	0	0	12
10:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
11:00	0	1	1	1	1	0	0	0	0	0	0	0	0	4
Total	23	29	141	203	53	3	2	0	0	0	0	0	0	454

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/9/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
6:00	0	2	4	7	4	0	0	0	0	0	0	0	0	17
7:00	1	2	17	34	20	2	0	0	0	0	0	0	0	76
8:00	0	3	11	10	6	1	0	0	0	0	0	0	0	31
9:00	1	1	3	12	5	0	0	0	0	0	0	0	0	22
10:00	0	4	2	7	4	1	0	0	0	0	0	0	0	18
11:00	1	0	9	14	4	0	0	0	0	0	0	0	0	28
12:00 PM	0	2	8	12	10	1	0	0	0	0	0	0	0	33
1:00	0	1	5	12	4	1	0	0	0	0	0	0	0	23
2:00	1	1	22	30	12	1	0	0	0	0	0	0	0	67
3:00	3	3	11	20	9	1	0	0	0	0	0	0	0	47
4:00	0	1	9	16	8	1	0	0	0	0	0	0	0	35
5:00	0	3	7	12	6	1	0	0	0	0	0	0	0	29
6:00	0	1	5	8	6	1	0	1	0	0	0	0	0	22
7:00	0	3	7	12	1	0	0	0	0	0	0	0	0	23
8:00	0	4	6	13	2	0	0	0	0	0	0	0	0	25
9:00	0	0	6	11	2	0	0	0	0	0	0	0	0	19
10:00	0	2	4	6	1	1	0	0	0	0	0	0	0	14
11:00	0	1	1	3	0	0	0	0	0	0	0	0	0	5
Total	7	35	139	244	104	12	0	1	0	0	0	0	0	542

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/10/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	3
1:00	0	0	0	3	0	1	1	0	0	0	0	0	0	5
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	1	1	1	1	0	0	0	0	0	0	0	0	4
6:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:00	2	2	5	1	0	0	0	0	0	0	0	0	0	10
8:00	2	2	3	3	3	0	1	0	0	0	0	0	0	14
9:00	0	3	1	8	3	0	0	0	0	0	0	0	0	15
10:00	2	0	10	9	4	0	0	0	0	0	0	0	0	25
11:00	2	0	6	11	3	1	0	1	0	0	0	0	0	24
12:00 PM	1	0	6	15	4	0	0	0	0	0	0	0	0	26
1:00	1	1	5	13	3	1	0	0	0	0	0	0	0	24
2:00	1	2	3	13	6	0	0	0	0	0	0	0	0	25
3:00	0	1	5	11	8	2	0	0	0	0	0	0	0	27
4:00	0	1	8	11	6	2	0	1	0	0	0	0	0	29
5:00	1	1	10	11	3	1	0	0	0	0	0	0	0	27
6:00	0	2	6	8	2	0	0	0	0	0	0	0	0	18
7:00	0	0	5	5	2	0	0	0	0	0	0	0	0	12
8:00	0	0	4	3	4	0	0	0	0	0	0	0	0	11
9:00	0	2	7	4	0	0	0	0	0	0	0	0	0	13
10:00	0	0	5	2	1	0	0	0	0	0	0	0	0	8
11:00	0	0	2	1	0	0	0	0	0	0	0	0	0	3
Total	12	18	97	135	54	8	2	2	0	0	0	0	0	328

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/11/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	3
1:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
7:00	1	0	3	2	0	0	0	0	0	0	0	0	0	6
8:00	0	1	2	10	1	0	0	0	0	0	0	0	0	14
9:00	0	1	7	10	2	0	0	0	0	0	0	0	0	20
10:00	2	2	7	9	4	1	0	0	0	0	0	0	0	25
11:00	2	1	5	13	5	0	0	0	0	0	0	0	0	26
12:00 PM	0	0	8	14	8	0	0	0	0	0	0	0	0	30
1:00	2	2	9	15	3	1	0	0	0	0	0	0	0	32
2:00	0	3	4	16	6	0	0	0	0	0	0	0	0	29
3:00	0	0	7	7	4	0	0	0	0	0	0	0	0	18
4:00	4	1	6	14	7	1	0	0	0	0	0	0	0	33
5:00	0	0	5	14	1	0	0	0	0	0	0	0	0	20
6:00	1	1	7	9	3	1	0	0	0	0	0	0	0	22
7:00	1	2	5	6	1	0	0	0	0	0	0	0	0	15
8:00	0	0	6	3	0	0	0	0	0	0	0	0	0	9
9:00	0	1	1	5	1	0	0	0	0	0	0	0	0	8
10:00	0	1	0	2	0	0	0	0	0	0	0	0	0	3
11:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
Total	13	17	86	156	46	4	0	0	0	0	0	0	0	322

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/12/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
5:00	0	3	2	2	0	0	0	0	0	0	0	0	0	7
6:00	1	1	2	7	4	1	0	0	0	0	0	0	0	16
7:00	1	1	17	44	14	2	0	0	0	0	0	0	0	79
8:00	2	0	8	8	13	3	0	0	0	0	0	0	0	34
9:00	0	0	5	13	2	0	0	0	0	0	0	0	0	20
10:00	0	5	5	25	5	0	0	0	0	0	0	0	0	40
11:00	4	1	15	20	6	1	0	0	0	0	0	0	0	47
12:00 PM	0	0	9	9	5	2	0	0	0	0	0	0	0	25
1:00	0	3	10	14	3	4	0	0	0	0	0	0	0	34
2:00	1	0	25	27	18	2	0	0	0	0	0	0	0	73
3:00	2	4	20	24	8	3	0	0	0	0	0	0	0	61
4:00	0	4	15	20	5	0	0	0	0	0	0	0	0	44
5:00	0	1	11	11	9	0	0	0	0	0	0	0	0	32
6:00	1	5	10	11	3	0	0	0	0	0	0	0	0	30
7:00	1	1	13	6	1	0	0	0	0	0	0	0	0	22
8:00	1	1	5	6	3	0	0	0	0	0	0	0	0	16
9:00	0	1	4	2	4	0	0	0	0	0	0	0	0	11
10:00	0	0	3	2	1	0	0	0	0	0	0	0	0	6
11:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	14	31	182	255	105	18	0	0	0	0	0	0	0	605

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/13/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00	0	1	0	1	2	0	0	0	0	0	0	0	0	4
6:00	1	2	5	10	5	0	0	0	0	0	0	0	0	23
7:00	0	2	11	39	18	1	0	0	0	0	0	0	0	71
8:00	0	5	8	15	9	3	0	0	0	0	0	0	0	40
9:00	0	2	6	7	2	1	0	0	0	0	0	0	0	18
10:00	1	5	12	17	0	1	0	0	0	0	0	0	0	36
11:00	3	3	7	9	4	1	0	0	0	0	0	0	0	27
12:00 PM	1	2	3	10	5	0	0	0	0	0	0	0	0	21
1:00	2	6	19	27	12	0	0	0	0	0	0	0	0	66
2:00	3	3	14	13	8	4	0	0	0	0	0	0	0	45
3:00	0	3	12	9	4	2	0	0	0	0	0	0	0	30
4:00	3	3	15	18	5	1	0	0	0	0	0	0	0	45
5:00	0	4	13	18	6	1	0	0	0	0	0	0	0	42
6:00	2	3	8	9	1	0	0	0	0	0	0	0	0	23
7:00	0	3	4	7	0	1	0	0	0	0	0	0	0	15
8:00	0	1	8	5	1	0	0	0	0	0	0	0	0	15
9:00	0	2	1	2	2	0	0	0	0	0	0	0	0	7
10:00	0	0	1	2	2	0	0	0	0	0	0	0	0	5
11:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
Total	16	50	150	222	87	17	0	0	0	0	0	0	0	542

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/14/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
5:00	0	1	0	0	2	0	1	0	0	0	0	0	0	4
6:00	1	0	5	7	6	1	0	0	0	0	0	0	0	20
7:00	0	5	14	54	19	1	0	0	0	0	0	0	0	93
8:00	0	3	12	14	4	2	0	0	0	0	0	0	0	35
9:00	1	0	6	9	2	0	0	0	0	0	0	0	0	18
10:00	1	2	18	11	4	0	0	0	0	0	0	0	0	36
11:00	2	2	12	18	4	0	0	0	0	0	0	0	0	38
12:00 PM	2	0	10	10	4	1	0	0	0	0	0	0	0	27
1:00	2	2	14	9	4	0	0	0	0	0	0	0	0	31
2:00	0	3	16	35	7	2	0	0	0	0	0	0	0	63
3:00	0	1	21	20	4	0	0	0	0	0	0	0	0	46
4:00	1	5	9	22	8	0	0	0	0	0	0	0	0	45
5:00	1	2	10	13	6	0	1	0	0	0	0	0	0	33
6:00	2	3	7	12	10	1	0	0	0	0	0	0	0	35
7:00	1	4	8	4	2	0	0	0	0	0	0	0	0	19
8:00	0	1	10	8	2	0	0	0	0	0	0	0	0	21
9:00	0	2	5	4	1	0	0	0	0	0	0	0	0	12
10:00	0	1	2	2	0	0	0	0	0	0	0	0	0	5
11:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
Total	14	38	184	255	89	8	2	0	0	0	0	0	0	590

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: NB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/15/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	1	0	0	1	0	0	0	0	0	0	0	0	0	2
4:00	6	1	2	0	0	0	0	0	0	0	0	0	0	9
5:00	2	1	0	3	2	0	0	0	0	0	0	0	0	8
6:00	1	0	3	8	1	2	0	0	0	0	0	0	0	15
7:00	0	0	22	43	17	2	0	0	0	0	0	0	0	84
8:00	4	7	15	11	9	0	0	0	0	0	0	0	0	46
9:00	1	1	0	5	0	0	0	0	0	0	0	0	0	7
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
Total	15	10	42	72	29	4	0	0	0	0	0	0	0	172
Grand Total	114	228	1021	1542	567	74	6	3	0	0	0	0	0	3555
Stats														
	Percentile			15th	50th	85th	95th							
	Speed			21.7	26.1	30.4	33.1							
	Mean Speed (Average)			26.5										
	10 MPH Pace Speed			20-29										
	Number in Pace			2537										
	Percent in Pace			74.0%										
	Number > 25 MPH			2192										
	Percent > 25 MPH			63.7%										

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/8/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	1	3	3	1	1	0	1	0	0	0	0	0	0	10
9:00	1	3	9	8	1	0	0	0	0	0	0	0	0	22
10:00	3	4	16	8	2	0	0	0	0	0	0	0	0	33
11:00	0	1	16	12	3	0	0	0	0	0	0	0	0	32
12:00 PM	0	5	15	9	1	0	1	0	0	0	0	0	0	31
1:00	6	3	13	10	1	0	0	0	0	0	0	0	0	33
2:00	0	6	14	13	4	0	0	0	0	0	0	0	0	37
3:00	3	12	30	25	7	0	0	0	0	0	0	0	0	77
4:00	1	2	9	17	0	0	0	0	0	0	0	0	0	29
5:00	0	1	11	13	4	1	0	0	0	0	0	0	0	30
6:00	0	2	14	5	0	0	0	0	0	0	0	0	0	21
7:00	0	5	5	5	0	0	0	0	0	0	0	0	0	15
8:00	1	1	3	4	2	0	0	0	0	0	0	0	0	11
9:00	0	1	4	1	0	0	0	0	0	0	0	0	0	6
10:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	49	163	133	26	1	2	0	0	0	0	0	0	390

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/9/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
4:00	0	2	0	5	1	0	0	0	0	0	0	0	0	8
5:00	1	1	9	2	2	0	0	0	0	0	0	0	0	15
6:00	0	1	8	18	8	1	0	0	0	0	0	0	0	36
7:00	1	6	19	41	11	0	0	0	0	0	0	0	0	78
8:00	0	5	16	26	7	0	0	0	0	0	0	0	0	54
9:00	0	1	6	7	2	1	0	0	0	0	0	0	0	17
10:00	6	1	8	11	5	1	0	0	0	0	0	0	0	32
11:00	1	2	9	12	2	0	0	0	0	0	0	0	0	26
12:00 PM	0	2	11	15	0	1	0	0	0	0	0	0	0	29
1:00	1	0	10	9	4	0	0	0	0	0	0	0	0	24
2:00	0	2	7	12	9	0	0	0	0	0	0	0	0	30
3:00	3	6	29	32	9	1	0	0	0	0	0	0	0	80
4:00	0	0	11	10	1	1	0	0	0	0	0	0	0	23
5:00	0	2	10	7	3	0	0	0	0	0	0	0	0	22
6:00	1	2	9	12	3	1	0	0	0	0	0	0	0	28
7:00	3	1	10	7	0	0	0	0	0	0	0	0	0	21
8:00	0	1	4	3	1	0	0	0	0	0	0	0	0	9
9:00	0	0	3	2	0	0	0	0	0	0	0	0	0	5
10:00	0	0	2	3	1	1	0	0	0	0	0	0	0	7
11:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	17	36	181	236	70	9	0	0	0	0	0	0	0	549

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/10/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:00	2	0	0	0	1	0	0	0	0	0	0	0	0	3
5:00	0	1	1	3	1	0	0	0	0	0	0	0	0	6
6:00	1	0	4	4	0	0	0	0	0	0	0	0	0	9
7:00	2	1	7	8	2	0	0	0	0	0	0	0	0	20
8:00	0	2	8	13	5	1	0	0	0	0	0	0	0	29
9:00	0	0	5	10	6	1	0	0	0	0	0	0	0	22
10:00	0	0	9	16	4	0	0	0	0	0	0	0	0	29
11:00	2	1	14	14	4	1	0	0	0	0	0	0	0	36
12:00 PM	2	5	21	5	3	0	0	0	0	0	0	0	0	36
1:00	1	3	9	4	4	0	0	0	0	0	0	0	0	21
2:00	0	0	11	11	4	0	0	0	0	0	0	0	0	26
3:00	4	2	8	10	4	0	0	0	0	0	0	0	0	28
4:00	1	2	8	10	3	0	0	0	0	0	0	0	0	24
5:00	2	4	12	11	2	0	0	0	0	0	0	0	0	31
6:00	0	2	14	9	0	0	0	0	0	0	0	0	0	25
7:00	3	2	6	6	1	0	0	0	0	0	0	0	0	18
8:00	1	1	3	2	1	0	0	0	0	0	0	0	0	8
9:00	0	1	2	2	1	1	0	0	0	0	0	0	0	7
10:00	0	2	2	2	1	0	0	0	0	0	0	0	0	7
11:00	0	1	1	2	0	0	0	0	0	0	0	0	0	4
Total	21	31	146	143	47	4	0	0	0	0	0	0	0	392

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/11/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	2
1:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
5:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
6:00	0	0	2	2	1	0	0	0	0	0	0	0	0	5
7:00	0	1	5	11	3	0	0	0	0	0	0	0	0	20
8:00	0	0	13	10	3	0	0	0	0	0	0	0	0	26
9:00	2	1	14	8	3	0	0	0	0	0	0	0	0	28
10:00	1	3	8	9	4	0	0	0	0	0	0	0	0	25
11:00	2	0	10	13	4	0	0	0	0	0	0	0	0	29
12:00 PM	1	4	12	10	4	0	0	0	0	0	0	0	0	31
1:00	0	0	13	17	2	0	0	0	0	0	0	0	0	32
2:00	3	3	6	13	2	0	0	0	0	0	0	0	0	27
3:00	0	1	7	12	1	0	0	0	0	0	0	0	0	21
4:00	0	1	7	11	3	0	0	0	0	0	0	0	0	22
5:00	0	2	11	9	1	0	0	0	0	0	0	0	0	23
6:00	2	2	3	5	2	0	0	0	0	0	0	0	0	14
7:00	2	2	11	5	3	1	1	0	0	0	0	0	0	25
8:00	1	4	5	5	1	0	0	0	0	0	0	0	0	16
9:00	0	2	4	4	0	0	0	0	0	0	0	0	0	10
10:00	0	2	2	2	0	0	0	0	0	0	0	0	0	6
11:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	14	29	135	151	38	1	1	0	0	0	0	0	0	369

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/12/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	1	1	2	0	0	0	0	0	0	0	0	4
4:00	0	1	1	5	0	0	0	0	0	0	0	0	0	7
5:00	1	3	7	2	0	0	0	0	0	0	0	0	0	13
6:00	0	1	7	16	8	2	0	0	0	0	0	0	0	34
7:00	1	7	26	25	8	1	0	0	0	0	0	0	0	68
8:00	1	3	18	30	9	1	0	0	0	0	0	0	0	62
9:00	0	0	6	8	3	1	0	0	0	0	0	0	0	18
10:00	1	4	11	18	5	0	0	0	0	0	0	0	0	39
11:00	3	1	11	16	4	0	0	0	0	0	0	0	0	35
12:00 PM	0	1	7	10	2	0	0	0	0	0	0	0	0	20
1:00	2	2	16	8	7	1	0	0	0	0	0	0	0	36
2:00	3	4	10	15	6	2	0	0	0	0	0	0	0	40
3:00	2	7	29	24	7	1	0	0	0	0	0	0	0	70
4:00	1	4	3	18	4	0	0	0	0	0	0	0	0	30
5:00	2	4	7	11	0	0	0	0	0	0	0	0	0	24
6:00	2	3	10	4	0	0	0	0	0	0	0	0	0	19
7:00	2	4	4	4	1	1	0	0	0	0	0	0	0	16
8:00	0	1	4	1	0	0	0	0	0	0	0	0	0	6
9:00	0	1	3	0	1	0	0	0	0	0	0	0	0	5
10:00	0	0	2	1	0	0	0	0	0	0	0	0	0	3
11:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	21	52	183	219	67	10	0	0	0	0	0	0	0	552

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/13/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	1	1	2	1	0	0	0	0	0	0	0	0	5
4:00	1	0	1	5	1	0	0	0	0	0	0	0	0	8
5:00	1	1	4	8	3	1	0	0	0	0	0	0	0	18
6:00	0	3	11	25	2	0	0	0	0	0	0	0	0	41
7:00	1	6	21	19	6	0	0	0	0	0	0	0	0	53
8:00	1	11	24	28	5	0	0	0	0	0	0	0	0	69
9:00	0	1	12	10	3	0	0	0	0	0	0	0	0	26
10:00	2	4	11	13	1	0	0	0	0	0	0	0	0	31
11:00	3	4	10	11	4	0	0	0	0	0	0	0	0	32
12:00 PM	1	5	6	7	2	0	0	0	0	0	0	0	0	21
1:00	0	4	16	11	0	0	0	0	0	0	0	0	0	31
2:00	1	4	23	20	9	1	0	0	0	0	0	0	0	58
3:00	0	1	9	10	3	0	0	0	0	0	0	0	0	23
4:00	0	4	15	16	1	0	0	0	0	0	0	0	0	36
5:00	1	5	12	6	3	1	0	0	0	0	0	0	0	28
6:00	0	4	7	7	0	1	0	0	0	0	0	0	0	19
7:00	1	0	7	2	0	0	0	0	0	0	0	0	0	10
8:00	0	3	4	9	2	2	0	0	0	0	0	0	0	20
9:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
10:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	13	64	198	209	47	6	0	0	0	0	0	0	0	537

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/14/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	2	1	1	0	0	0	0	0	0	0	4
4:00	0	1	1	2	0	0	0	0	0	0	0	0	0	4
5:00	1	3	5	1	2	0	1	0	0	0	0	0	0	13
6:00	0	2	10	24	7	0	0	0	0	0	0	0	0	43
7:00	1	6	32	23	5	1	0	0	0	0	0	0	0	68
8:00	1	4	29	24	5	0	0	0	0	0	0	0	0	63
9:00	1	2	8	12	3	0	0	0	0	0	0	0	0	26
10:00	1	3	16	10	3	0	0	0	0	0	0	0	0	33
11:00	1	8	20	12	1	0	0	0	0	0	0	0	0	42
12:00 PM	3	3	11	7	1	0	0	0	0	0	0	0	0	25
1:00	0	4	12	7	2	0	0	0	0	0	0	0	0	25
2:00	1	2	15	13	0	0	0	0	0	0	0	0	0	31
3:00	2	8	36	22	8	1	0	0	0	0	0	0	0	77
4:00	1	3	6	15	4	0	1	0	0	0	0	0	0	30
5:00	3	0	10	7	6	1	0	0	0	0	0	0	0	27
6:00	0	3	8	4	0	0	0	0	0	0	0	0	0	15
7:00	0	1	8	6	1	0	0	0	0	0	0	0	0	16
8:00	1	3	8	3	1	0	0	0	0	0	0	0	0	16
9:00	1	0	1	1	0	0	0	0	0	0	0	0	0	3
10:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
11:00	2	1	2	1	0	0	0	0	0	0	0	0	0	6
Total	20	57	239	197	51	4	2	0	0	0	0	0	0	570

OHM Advisors

34000 Plymouth Road
Livonia, MI 48150

Advancing Communities

Site Code: 050801
Start Date: 5/8/2025
End Date: 5/15/2025
Direction: SB

Location 1: Castleton Dr
Location 2: 450' N of Williams Dr

5/15/2025	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
4:00	5	2	2	2	0	0	0	0	0	0	0	0	0	11
5:00	1	0	7	2	5	0	0	0	0	0	0	0	0	15
6:00	0	2	13	16	8	0	0	0	0	0	0	0	0	39
7:00	0	3	27	28	7	0	0	0	0	0	0	0	0	65
8:00	9	11	21	25	6	2	0	0	0	0	0	0	0	74
9:00	3	3	12	5	2	0	0	0	0	0	0	0	0	25
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
Total	18	21	86	81	28	2	0	0	0	0	0	0	0	236
Grand Total	140	339	1331	1369	374	37	5	0	0	0	0	0	0	3595
Stats														
	Percentile			15th	50th	85th	95th							
	Speed			20.3	24.9	29.2	31.9							
	Mean Speed (Average)			25.3										
	10 MPH Pace Speed			20-29										
	Number in Pace			2679										
	Percent in Pace			78.0%										
	Number > 25 MPH			1785										
	Percent > 25 MPH			51.7%										



TRAFFIC COMMITTEE REPORT

July 16, 2025

TO: Traffic Committee

FROM: G. Scott Finlay, City Engineer/Traffic Engineer

SUBJECT: Request for Traffic Control – Wendover Road at Oakhill Drive

Background:

Eric Calvird of 3235 Myddleton requested that several intersections be reviewed for the purpose of updating the traffic control at the intersections. Eric provided the following comments: The first location is on the southwest corner of Myddleton and Wendover. This yield sign receives a significant amount of traffic from people traveling 16 miles and entering the sub from either Oakhill or Henhawk. There are currently no stop/yield signs on Oakhill & Wendover, so cars are typically traveling at higher speeds since they do not have to come to a stop when entering Wendover heading towards Myddleton. This intersection comes to a dead end, and drivers are forced to either turn right or left onto Myddleton. Almost every car does not come to a stop when making this turn, which is another reason why I feel a stop sign is required. Some cars will make a sharp right-hand turn at the Northeast corner of Myddleton and Wendover to head further east into the suburb. The subdivision lacks sidewalks, forcing pedestrians to travel in the street. The Second location is on the northeast corner of Myddleton & Wendover. I feel a stop sign is required for the same reasons above.

The posted speed limit on all streets is 25 miles per hour.

The intersection of Oakhill Drive at Wendover Road and both intersections of Myddleton Drive at Wendover Road have the Wendover Road approaches under yield control, while the Oakhill Drive and Myddleton Drive approaches remain uncontrolled.

All roads are considered local roads.

There were no crashes recorded in the past five (5) full years within a 250' radius of the intersections.

The significant potential sight distance obstruction at the intersection of Oakhill and Wendover is for a motorist traveling westbound on Wendover. The safe approach speed for westbound vehicles on Wendover is 7.1 mph due to the sight distance obstruction caused by vegetation in the southeast quadrant.

OHM recommends implementing a STOP sign on the Wendover Road approach at the Oakhill Drive intersection and retaining the yield signs at the Myddleton Drive intersections with Wendover Road, north and south.

The city requested that OHM review the intersection and provide their findings and recommendations (copy attached).

June 3, 2025

Mr. Scott G Finlay, PE
City Engineer
City of Troy
500 W. Big Beaver Rd
Troy, MI 48084

RE: Traffic Control Recommendation for
Oakhill Drive at Wendover Road,
Myddleton Drive at Wendover Road (North Intersection), and
Myddleton Drive at Wendover Road (South Intersection)

Dear Mr. Finlay:

As requested, we have reviewed the intersections of Oakhill Drive at Wendover Road, Myddleton Drive at Wendover Road (North Intersection), and Myddleton Drive at Wendover Road (South Intersection) to determine the proper traffic control. These three intersections are 3-legged intersections located in the City of Troy. The speed limit on all of the streets under investigation is 25 mph. The intersection of Oakhill Drive at Wendover Road and both intersections of Myddleton Drive at Wendover Road have the Wendover Road approaches under yield control, while the Oakhill Drive and Myddleton Drive approaches remain uncontrolled. Attached are aerial and intersection photos.

Types of Roadways

Oakhill Drive, Wendover Road, and Myddleton Drive are considered local streets. Oakhill Drive and Myddleton Drive run north to south. Oakhill Drive provides direct access to the neighborhood from W Big Beaver Road. Wendover Road runs east to west offering access to the neighborhood.

The surrounding land use is entirely single-family residential. On-street parking is permitted on the south side of Wendover Road east of Myddleton Drive, on the east side of Myddleton Drive north of Wendover Road, and on the east side of Oakhill Drive. For the purpose of this analysis, Oakhill Drive and Myddleton Drive are considered the major roads, while Wendover Road is considered the minor road.

Traffic Control Analyses

Traffic control analyses described herein adheres to the requirements presented in the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) that are considered mandates of state law. A reference document explaining the background behind the analyses is attached to this memo.

Crash Analysis

Based on information obtained through the Traffic Improvement Association of Michigan, there were no crashes recorded in the past full five (5) years within a 250' radius of any of these three intersections. The crash history does not constitute a compelling case for modifying the existing controls.



Traffic Volumes

Traffic counts were not collected in the vicinity of the intersection. Traffic volumes in residential areas are predominantly driven by the number of single-family residential homes in the neighborhood. Based on the residential nature and the number of homes in the surrounding area it is highly improbable that this location would satisfy any of the minimum volume warrants for an all-way STOP (see attached Reference Guide).

It is therefore extremely unlikely that Oakhill Drive or Myddleton Drive meets and sustains the 300 vehicles per hour threshold for a minimum of 8 hours. The combined vehicular, pedestrian, and bicycle volumes entering from Wendover Road is similarly unlikely to average at least 200 units for any 8 hours. Additionally, since the posted speed limit is only 25 mph, it is reasonable to assume that the 85th percentile approach speed does not exceed 40 mph on either road; thus, the minimum vehicular volume warrants cannot be discounted to 70 percent of the values described previously. Finally, the study intersection is likely to fall significantly shy even of the reduced 80 percent volumes, based on expected trip generation for this neighborhood. Therefore, the minimum volume criteria for an all-way STOP has not likely been met.

Approach Speed Limits

The approach speed limit on all study streets is 25 mph. Speed limits alone cannot be used in this case to determine which direction of traffic should be assigned the right-of-way.

Oakhill at Wendover Sight Distance

The major potential sight distance obstruction at the intersection of Oakhill Drive at Wendover Road for a motorist traveling westbound on Wendover Road would be planted vegetation in the southeast quadrant and the house on the northeast quadrant of the intersection. These obstructions impact the calculated safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle seen on the cross street.

When the safe approach speed is found to be 10 mph or less, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. In this case, the safe approach speed for westbound vehicles on Wendover Drive is 7.1 mph due to the sight distance obstruction from the vegetation in the southeast quadrant. Thus, based on the safe approach speed calculations, STOP-control is the computed right-of-way control for the Wendover Road approach. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Myddleton at Wendover (North Intersection) Sight Distance

The major potential sight distance obstruction at the intersection of Myddleton Drive at Wendover Road for a motorist traveling westbound on Wendover Road would be the house corners on the northeast and southeast quadrants of the intersection. These obstructions impact the calculated safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle seen on the cross street.

When the safe approach speed is found to be 10 mph or less, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. In this case, the safe approach speed for westbound vehicles on Wendover Road is 17.2 mph due to the permanent sight distance obstruction from the house corner on the northeast and southeast quadrants. Thus, based on the safe approach speed calculations, YIELD-control is the computed right-of-way control for Wendover



Road approach. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Myddleton at Wendover (South Intersection) Sight Distance

The major potential sight distance obstruction at the intersection of Myddleton Drive at Wendover Road for a motorist traveling eastbound on Wendover Road would be the house corners on the northwest and southwest quadrants of the intersection. These obstructions impact the calculated safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle seen on the cross street.

When the safe approach speed is found to be 10 mph or less, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. In this case, the safe approach speed for eastbound vehicles on Wendover Road is 12.3 mph due to the permanent sight distance obstruction from the house corner on the northwest and southwest quadrants. Thus, based on the safe approach speed calculations, YIELD-control is the computed right-of-way control for the Wendover Road approach. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Recommendation

The preceding analysis did not determine that any criteria were met for all-way STOP-control. The safe approach speed calculations suggested STOP-control would be appropriate only for the minor street (Wendover Road) approach at the intersection with Oakhill Drive. The safe approach speed calculations suggested YIELD-control would be appropriate for both North and South minor street (Wendover Road) approaches at the Myddleton Drive intersections.

OHM recommends implementing a STOP sign on the Wendover Road approach at the Oakhill Drive intersections and retaining the yield signs at the Myddleton Drive at Wendover Road north and south intersections. The intersections should be reevaluated if traffic volumes increase or crashes begin to occur.

Sincerely,

OHM Advisors

Lauren Hull, PE, RSP₁
Traffic Engineer

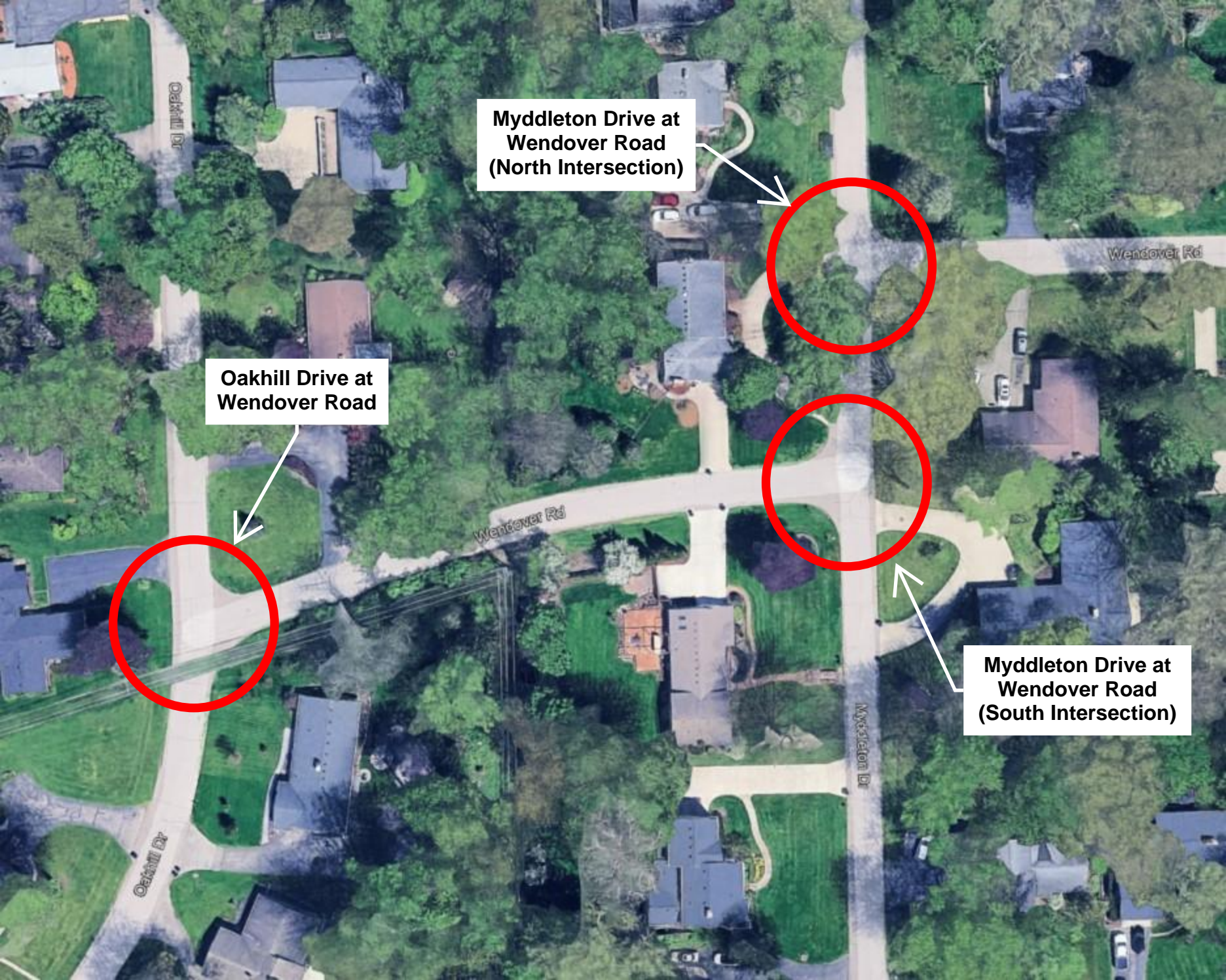
Attachments:

- Aerial Photo
- Safe Approach Speed Calculation Spreadsheet
- Intersection Photos
- Traffic Control Determination Reference Guide

**Myddleton Drive at
Wendover Road
(North Intersection)**

**Oakhill Drive at
Wendover Road**

**Myddleton Drive at
Wendover Road
(South Intersection)**



Safe Approach Speed Calculation

Oakhill Dr and Wendover Rd
City of Troy

Measured:

Width of Roads
Road 1 = 21 (ft)
Road 2 = 20 (ft)
Distance to Obstruction
a = 21 (ft)
b = 11 (ft)
c = 37 (ft)
d = 49 (ft)
Angle of Intersection
Delta = 75 (degrees, measure counterclockwise)
Road 1 Posted
Speed Limit = 25 (mph)

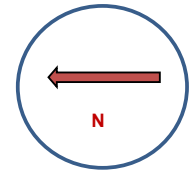
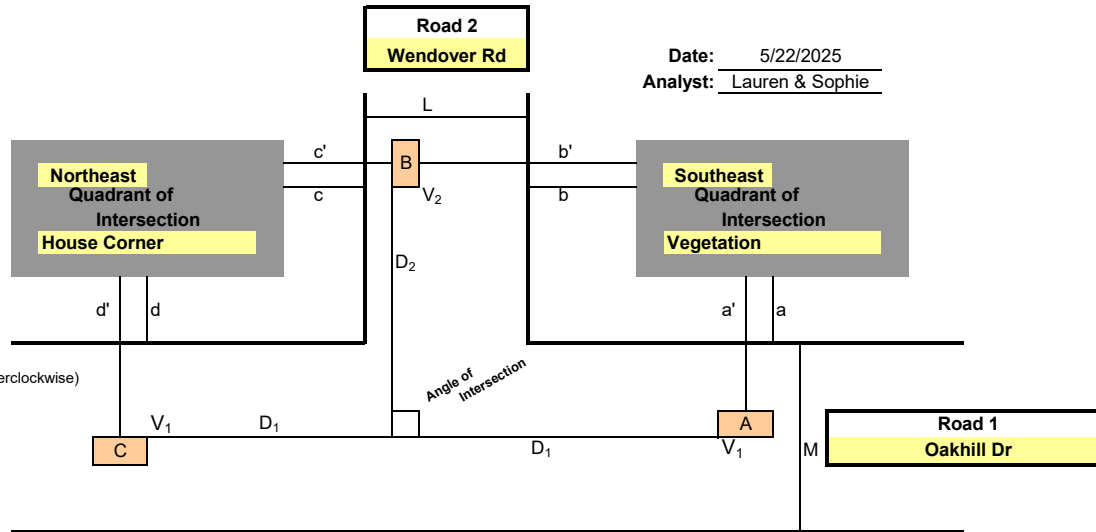
Assumed:

Speed of Vehicle A = Speed of Vehicle C
= Posted Speed Limit on Road 1
+ 5 (mph)
 $V_1 = 30$ (mph)
Perception / Reaction Time (AASHTO)
 $t = 2.5$ (sec)
Deceleration rate (AASHTO)
 $A = 11.20$
Clearance distance in excess of safe stopping distance (AAA)
 $EC = 0$ (ft)

Calculated Safe Approach Speed for Vehicle B
Approaching on Road 2

or $V_2 = 7.1$ (mph) [Based on Veh. A]
or $V_2 = 13.0$ (mph) [Based on Veh. C]

Threshold of Safe Approach Speed (AAA, FHWA & NSC)
to Recommend STOP Control 10.0 (mph)
to Recommend YIELD Control 25.0 (mph)
Otherwise Recommends NO CONTROL.



Intermediate Calculations:

$D_1 = 196$
 $D_{2A} = 31.1$
 $D_{2C} = 64.1$

$a' = 27$
 $b' = 19$
 $c' = 43$
 $d' = 58$

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$

$D_{2A} = \frac{a' * D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' * D_1}{(D_1 - d')}$

Notes: Enter field measurements in yellow highlighted area.

Blue fields are std. default values; change only for cause.

Calculated by spreadsheet

Recommended ROW control for Road 2
based on safe approach speed :

STOP Sign

Safe Approach Speed Calculation

Myddleton Dr and Wendover Rd
City of Troy

Date: 5/22/2025
Analyst: Lauren & Sophie

Measured:

Width of Roads
Road 1 = 20 (ft)
Road 2 = 20 (ft)
Distance to Obstruction
a = 59.5 (ft)
b = 48 (ft)
c = 56.5 (ft)
d = 74 (ft)
Angle of Intersection
Delta = 90 (degrees, measure counterclockwise)
Road 1 Posted
Speed Limit = 25 (mph)

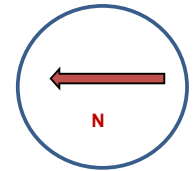
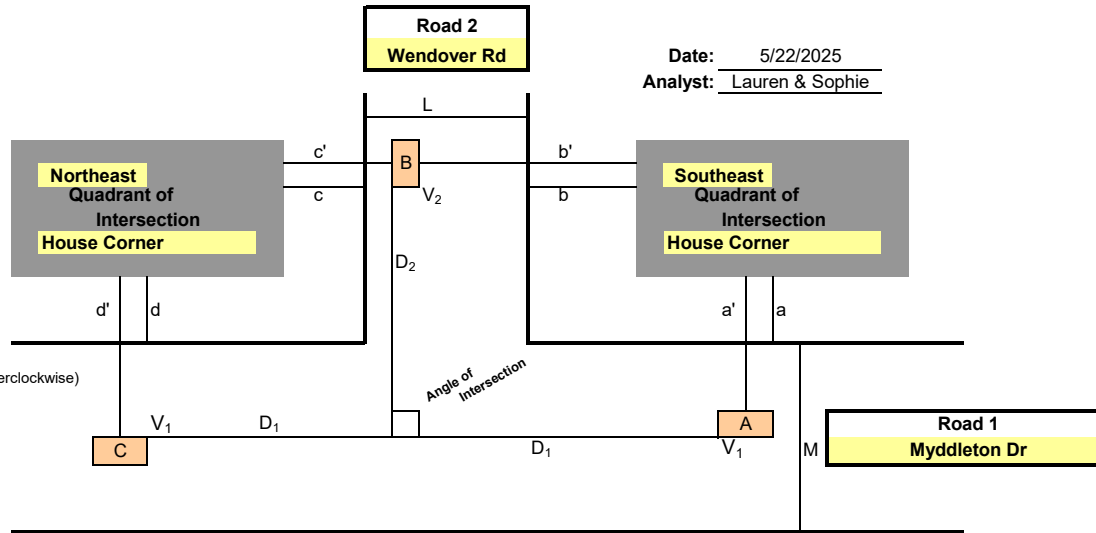
Assumed:

Speed of Vehicle A = Speed of Vehicle C
= Posted Speed Limit on Road 1
+ 5 (mph)
V₁ = 30 (mph)
Perception / Reaction Time (AASHTO)
t = 2.5 (sec)
Deceleration rate (AASHTO)
A = 11.20
Clearance distance in excess of safe stopping distance (AAA)
EC = 0 (ft)

Calculated Safe Approach Speed for Vehicle B
Approaching on Road 2

17.2 (mph) [Based on Veh. A]
or V₂ = 19.4 (mph) [Based on Veh. C]

Threshold of Safe Approach Speed (AAA, FHWA & NSC)
to Recommend STOP Control 10.0 (mph)
to Recommend YIELD Control 25.0 (mph)
Otherwise Recommends NO CONTROL.



Intermediate Calculations:

D₁ = 196
D_{2A} = 91.6
D_{2C} = 107.3

a' = 65.5
b' = 56
c' = 62.5
d' = 82

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$

$D_{2A} = \frac{a' * D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' * D_1}{(D_1 - d')}$

Notes: Enter field measurements in yellow highlighted area.

Blue fields are std. default values; change only for cause.

Calculated by spreadsheet

Recommended ROW control for Road 2
based on safe approach speed :

YIELD SIGN

Safe Approach Speed Calculation

Myddleton Dr and Wendover Rd
City of Troy

Date: 5/22/2025
Analyst: Lauren & Sophie

Measured:

Width of Roads
Road 1 = 20 (ft)
Road 2 = 20 (ft)
Distance to Obstruction
a = 61 (ft)
b = 44.5 (ft)
c = 32.5 (ft)
d = 61 (ft)
Angle of Intersection
Delta = 90 (degrees, measure counterclockwise)
Road 1 Posted
Speed Limit = 25 (mph)

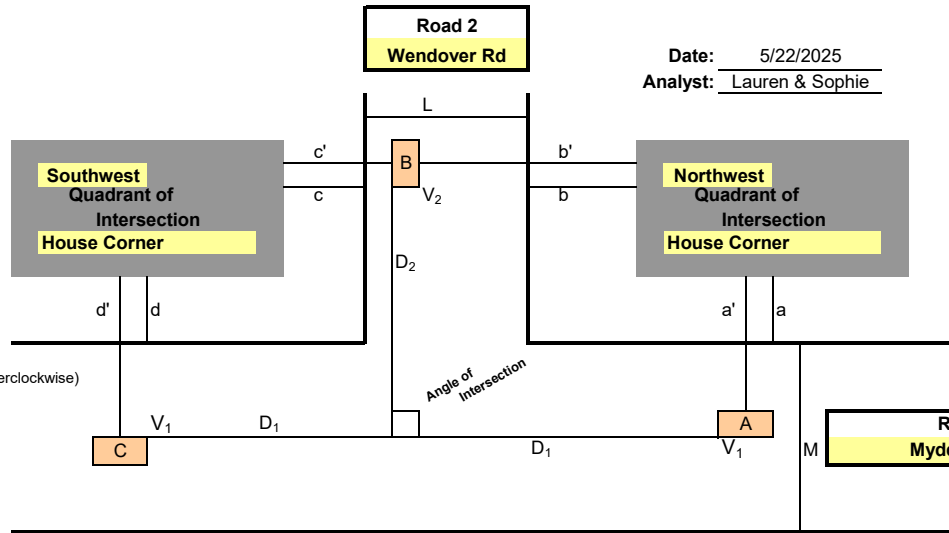
Assumed:

Speed of Vehicle A = Speed of Vehicle C
= Posted Speed Limit on Road 1
+ 5 (mph)
V₁ = 30 (mph)
Perception / Reaction Time (AASHTO)
t = 2.5 (sec)
Deceleration rate (AASHTO)
A = 11.20
Clearance distance in excess of safe stopping distance (AAA)
EC = 0 (ft)

Calculated Safe Approach Speed for Vehicle B
Approaching on Road 2

17.2 (mph) [Based on Veh. A]
or V₂ = 12.3 (mph) [Based on Veh. C]

Threshold of Safe Approach Speed (AAA, FHWA & NSC)
to Recommend STOP Control 10.0 (mph)
to Recommend YIELD Control 25.0 (mph)
Otherwise Recommends NO CONTROL.



Intermediate Calculations:

D₁ = 196
D_{2A} = 91.4
D_{2C} = 59.4
a' = 67
b' = 52.5
c' = 38.5
d' = 69

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$
 $D_{2A} = \frac{a' * D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' * D_1}{(D_1 - d')}$

Notes: Enter field measurements in yellow highlighted area.
Blue fields are std. default values; change only for cause.
Calculated by spreadsheet

Recommended ROW control for Road 2
based on safe approach speed : YIELD SIGN



Photograph No. 1: Oakhill Dr - Heading North Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 2: Oakhill Dr - Heading North
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 3: Wendover Rd - Heading West Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 4: Wendover Rd - Heading West
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 5: Wendover Rd – Heading West Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 6: Oakhill Dr – Heading South
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 7: Oakhill Dr – Heading South Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 1: Myddleton Dr - Heading North Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 2: Myddleton Dr - Heading North
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 3: Wendover Rd - Heading West Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 4: Wendover Rd - Heading West
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 5: Wendover Rd – Heading West Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 6: Myddleton Dr – Heading South
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 7: Myddleton Dr – Heading South Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 1: Myddleton Dr - Heading North Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 2: Myddleton Dr - Heading North
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 3: Wendover Rd - Heading East Looking Left
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 4: Wendover Rd - Heading East
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 5: Wendover Rd – Heading East Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 6: Myddleton Dr – Heading South
Date: 05/22/2025 **Photographer:** Lauren Hull



Photograph No. 7: Myddleton Dr – Heading South Looking Right
Date: 05/22/2025 **Photographer:** Lauren Hull

Reference Guide on Traffic Control Determination in the State of Michigan

Background

This document is intended to be used as a reference guide for performing intersection traffic control studies of intersections on public roadways in Michigan. The document explains the procedure and requirements necessary to implement traffic control at an intersection as stipulated by the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Act 300 of Public Acts of 1949 (as amended) requires the adoption of this Manual, and further requires conformance to the manual for all state highways, county roads and local streets open to public travel.

Generally, the starting premise is an uncontrolled intersection. The first step would then be to verify if the intersection should remain uncontrolled or if YIELD or STOP controls on the minor street approach(es) should be provided. For locations with higher traffic volumes and /or crash issues, then an evaluation of the location for all-way STOP warrants would be performed. The appropriate analysis for each level of control described below.

YIELD Traffic Control Guidance

The use of a YIELD sign is intended to assign the right-of-way at intersections where it is not usually necessary to stop before proceeding into the intersection. Conversely, the STOP sign is intended for use where it is usually necessary to stop before proceeding into the intersection.

The following conditions should be fully evaluated to determine how the right-of-way should be assigned:

- Traffic Volumes: Normally, the heavier volume of traffic should be given the right-of-way.
- Approach Speeds: The higher speed traffic should normally be given the right-of-way.
- Types of Highways: When a minor highway intersects a major highway, it is usually desirable to control the minor highway.
- Sight Distance: Sight distance across the corners of the intersection is the most important factor and is critical in determining safe approach speeds.

STOP Traffic Control Guidance

Based on the MMUTCD there are four conditions where STOP signs may be warranted:

- At the intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
- On a street entering a through highway or street.
- At an unsignalized intersection in a signalized area.
- At other intersections where a combination of high speed, restricted view, or crash records indicate a need for control by the STOP sign.

In many cases STOP signs are installed where they may not be warranted. Traffic experts agree that unnecessary STOP signs:

- Cause accidents they are designed to prevent.
- Breed contempt for other necessary STOP signs.
- Waste millions of gallons of gasoline annually.
- Create added noise and air pollution.
- Increase, rather than decrease, speeds between intersections.

There is also an explicit restriction in the MMUTCD that STOP signs are not to be used for speed control, in Section 2B.04.

Evaluation of All-Way STOP Traffic Control

Based on the MMUTCD there are four conditions where **all-way** STOP signs may be warranted:

- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- B. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- C. *Minimum volumes:*
 - 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - 2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 - 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
- D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*