



Royal Oak

Agenda

Royal Oak Citizens Traffic Committee Meeting

Tuesday, July 23, 2024, 6:30 p.m.

City Hall Commission Chambers Room 121

203 South Troy Street

Royal Oak, MI 48067

Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the city clerk's office at 248-246-3050 at least two (2) business days prior to the meeting.

	Pages
1. Call to Order	
2. Roll Call and Preamble	2
3. Approval of Minutes	3
4. Public Comment for Items not on the Agenda	
5. Unfinished Business	
a. Request for Left Turn Signals on Crooks Road	9
6. New Business	
a. Request to install a No Left Turn sign for the Hazelton Apartments driveway on Williams Street near mid-block pedestrian crossing	13
b. Request for No Parking sign on the east side of Virginia Avenue at E. University Avenue	17
c. Request to remove guardrail adjacent to 3111 N. Main Street	21
d. Request to review traffic concerns on Kayser Avenue at E. Sixth Street intersection by Grant Park	28
e. Request to install guardrail in public right-of-way on northbound Coolidge Highway adjacent to 2804 Coolidge apartment complex	70
7. Information Only Items	
a. Results of Previous Traffic Committee Recommendations	
b. Update on Morse Avenue and Harrison Avenue traffic counts	89
8. Adjournment	

Royal Oak Citizens Traffic Committee Preamble

"The Traffic Committee consists of Royal Oak property owners appointed by the City Commission. We are volunteers and are not paid or elected. What we decide tonight is merely a recommendation to the City Commission. If you do not agree with the findings or decisions of this committee, you may go before the City Commission and petition and/or discuss your issue with them. At this meeting you will be given an opportunity to speak during your item on the agenda. However, at the City Commission meeting, you must be recognized during "public comment" on their agenda, not when the Traffic Committee resolutions are being voted upon. Otherwise, you will not be able to voice your concerns.

It is important to understand that professionals make preliminary recommendations to the Traffic Committee. They consist of civil and traffic engineers, outside consultants and public safety officials. You may have been informed that these professionals have denied your request or petition. This denial does not mean that this committee will vote that way; however, we are committed to discussing the issues at hand in a pragmatic and sensible manner. Our ultimate recommendation to the City Commission will be one that benefits our citizens and community as a whole."



Royal Oak

Minutes

Royal Oak Citizens Traffic Committee Meeting

May 28, 2024, 6:30 p.m.

City Hall Commission Chambers Room 121

203 South Troy Street

Royal Oak, MI 48067

Present: Carl Laubach
Clyde Esbri
Dan Godek
Joe Labataille
Sean Dunlop

Absent: Austin Schneider
Thomas Allen

Staff Present: Holly Donoghue
Jennifer Caudill

1. Call to Order

The meeting was called to order at 6:32 p.m.

2. Roll Call and Preamble

3. Approval of Minutes

Moved by: Carl Laubach

Seconded by: Clyde Esbri

Motion to approve the previous meeting minutes.

Motion Adopted

4. Public Comment for Items not on the Agenda

Chairperson Godek opened the floor for those to speak.

Mr. Alan Ashley, Vice President of Royal Oak Manor spoke. He requested a right turn only sign for vehicles exiting out of parking garage for a new development 222 E Sixth - the Hazelton. He also would like a 4-way stop at the intersection of Sixth and Williams due to increased pedestrian traffic. He asked for something to

be done regarding the street lighting on Williams, as the tree canopy blocks lighting on street.

5. Rescheduled Items and Old Business

5.a Results of Previous Traffic Committee Recommendations

The city engineer informed the committee of the city commission resolutions from the previous traffic committee recommendations.

6. Agenda Items

6.a Request for 4-way stop at intersection of Woodlawn Avenue and Glendale Avenue

The city engineer presented the staff analysis and recommendation for the request. Chairperson Godek opened the floor to those interested in speaking on this issue. No one came forward.

Moved by: Sean Dunlop

Seconded by: Joe Labataille

Motion to accept staff recommendation to replace the north/south yield signs on Glendale Avenue at Woodlawn Avenue with stop signs (R1-1).

Ayes (5): Carl Laubach, Clyde Esbri, Dan Godek, Joe Labataille, and Sean Dunlop

Motion Adopted (5 to 0)

6.b Request for left turn signals on Crooks Road

The city engineer presented the staff analysis and recommendation for the request. Chairperson Godek opened the floor to those interested in speaking on this issue.

Kathleen London of 5132 Thorncroft Court spoke regarding her request. Her son was in an accident when trying to turn east onto Normandy Road from southbound Crooks towards the student parking lot. A vehicle going northbound on Crooks ran the yellow light and hit her son's vehicle when he was making the turn. No one was critically injured but the trauma of that accident still lasts. She stated that more students are using non-motorized transportation, and vehicles are avoiding other north/south roads due to reduced lanes, so there is increased vehicle traffic on Crooks. She thinks these intersections deserve special consideration because they are within a school zone.

No one else came forward and Chairperson Godek closed public comment on this item.

Member Clyde Esbri spoke in favor of adding a left turn phase due to the unique situation around the high school and having young, less experienced drivers.

Members discussed extending southbound green signal time on Crooks for a few seconds, while all other legs are red, or possibly increase the all-red time at the intersection. This could be less costly and only requires a programming change.

The city engineer noted that adding a left turn signal would affect traffic progression through the corridor and could potentially lead to more traffic back-ups. Because the signals were not warranted based on the study results, she did not analyze progression impacts or prepare cost estimates.

Carl spoke in favor of staff recommendation, based on this being a typical intersection and this teaches new drivers typical behavior for an intersection.

Moved by: Clyde Esbri
Seconded by: Carl Laubach

Motion to table this item and have the city engineer gather more information on costs, and alternative programming/timing options for both intersections.

Motion Adopted

6.c Request for No Parking on one side of E. Parent Avenue

The city engineer presented the staff analysis and recommendation for the request. Chairperson Godek opened the floor to those interested in speaking on this issue.

Caitlin Hall of 1222 Longfellow spoke against allowing parking on the north side, and would prefer the parking to be on the south side where the existing ADA parking spaces are already located. She is in favor of a future proposal going to the Park & Recreation Advisory Board to install nose-in parking on the north side of Lawson Park/south side of E. Parent.

Chris Ott of 1305 Anne spoke asking to table this item until the Park & Recreation Advisory Board completes their review of parking around Lawson Park. He is in agreement with Caitlin of protecting the mature trees and not allowing parking on the north side of the roadway.

No one else came forward and Chairperson Godek closed public comment on this item.

Engineer Donoghue gave information regarding the future Park & Recreation Advisory Board meeting.

Members Clyde Esbri and Sean Dunlop spoke about tabling the parking discussion until after parks meeting.

Chairperson Godek asked the petitioner and resident who spoke for their opinion on the proposed nose-in parking. They were both in favor.

Moved by: Carl Laubach
Seconded by: Clyde Esbri

Motion to install 'Dead End' and 'No Parking' signs at the dead end of E. Parent Avenue, east of Longfellow Avenue.

Ayes (4): Carl Laubach, Clyde Esbri, Dan Godek, and Sean Dunlop

Nays (1): Joe Labataille

Motion Adopted (4 to 1)

Moved by: Carl Laubach
Seconded by: Sean Dunlop

Motion to install 'No Parking' signs on the north side of E. Parent Avenue if the Park & Recreation advisory board approves nose-in parking at Lawson park; if nose-in parking is not approved, install 'No Parking' signs on the north side of E. Parent Avenue.

Ayes (2): Carl Laubach, and Sean Dunlop

Nays (3): Clyde Esbri, Dan Godek, and Joe Labataille

Motion Failed (2 to 3)

Moved by: Clyde Esbri
Seconded by: Joe Labataille

Motion to table parking restriction recommendations for E. Parent Avenue until Park & Recreation Advisory Board reviews nose-in parking for Lawson Park.

Motion Adopted

6.d Request for stop sign at alley off Normandy Road

The city engineer presented the staff analysis and recommendation for the request. Chairperson Godek opened the floor to those interested in speaking on this issue.

Patrick McGee of 4524 Elmhurst spoke about site distance issues for cars exiting the alleyway onto Normandy, cannot see pedestrians due to fence and trees. The only crosswalk on Normandy to cross Woodward is on the south side of the roadway, so you have to walk past the alley egress.

No one else came forward and Chairperson Godek closed public comment on this item.

Members discussed if this is more of a code enforcement concern due to the fence adjacent to the alley near the sidewalk causing a site distance issue.

Moved by: Sean Dunlop
Seconded by: Joe Labataille

Motion to accept the staff recommendation to deny the request for a Stop sign within the public alley at the intersection of Normandy Road and the public alley, located east of Woodward Avenue.

Motion Adopted

6.e Review and Amendment to Traffic Committee Bylaws

The city engineer presented the staff review and recommendations for updates to the by-laws. Chairperson Godek opened the floor to those interested in speaking on this issue. No one came forward.

Members discussed if the police traffic safety officer who attends meetings should be included as an ex-officio member to clarify that he is not a voting member of the committee. Members also discussed if there was a need or reason to have an alternate on the committee.

Moved by: Clyde Esbri
Seconded by: Carl Laubach

Motion to accept the staff recommendation to amend the Royal Oak Traffic Committee Bylaws as outlined in the attached document, to add the police traffic safety representative as an ex-officio member, and to cancel the practice of appointing an alternate member to the committee.

Motion Adopted

6.f Reschedule July meeting

Members were agreeable to moving the July 2024 meeting to the following Tuesday, as no other present members had any conflicts with the new proposed date.

Moved by: Clyde Esbri
Seconded by: Carl Laubach

Motion to move the July Citizens Traffic Committee meeting to Tuesday, July 30, 2024.

Motion Adopted

7. Information Only Items

8. Adjournment

The meeting was adjourned at 7:52 p.m.

Moved by: Joe Labataille

Seconded by: Carl Laubach

Motion to adjourn.

Motion Adopted



Royal Oak Traffic Committee

AGENDA ITEM

Title	Request for Left Turn Signals on Crooks Road
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

Requestor Concern:

At the May 28, 2024 traffic meeting, a request was reviewed from Kathleen London of 5132 Thorncroft Court requesting dedicated left turn signals at the intersections of:

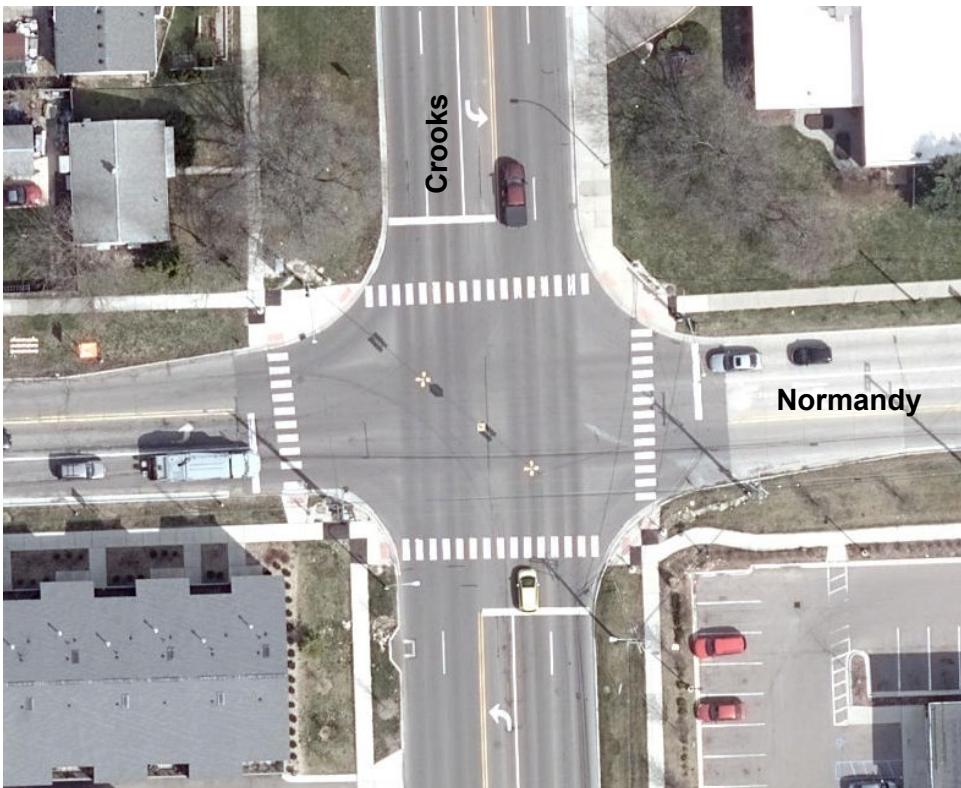
- Crooks Road at Lexington Boulevard
- Crooks Road at Normandy Road

Staff presented a warrant study performed by the Transportation Improvement Association (TIA) which showed that the warrants were not met for a dedicated left turn signal at either intersection. The committee considered installing left turn signals because these intersections are adjacent to Royal Oak High School, which has young drivers accessing the property each school day. The committee voted to table this item so the city engineer could gather information on costs, traffic impacts, and alternative programming/timing options for both intersections.

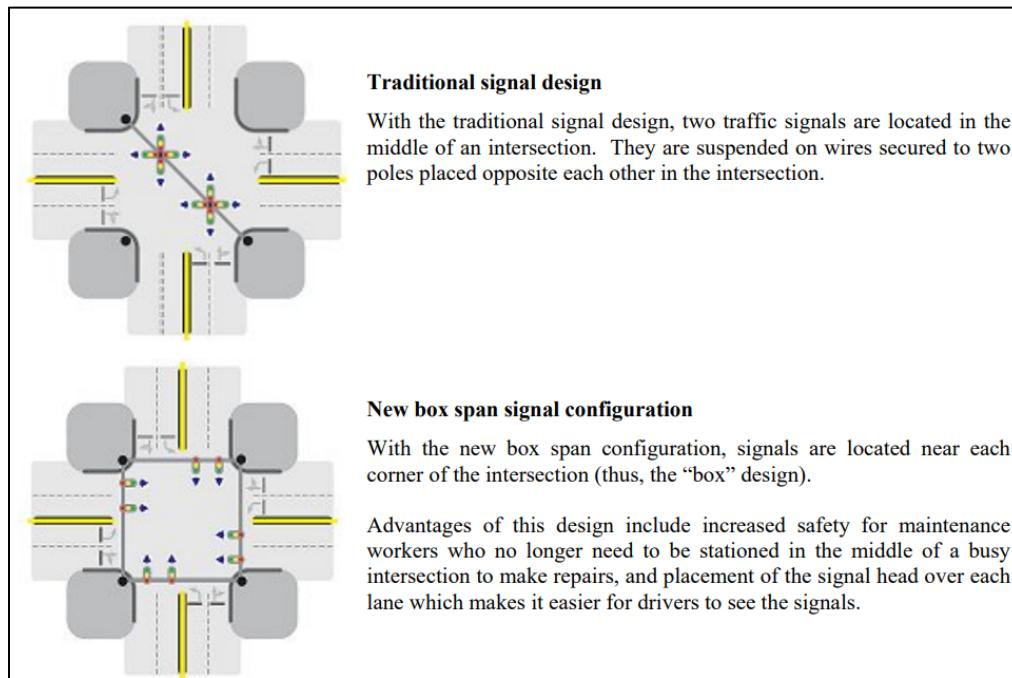
Staff Analysis:

The Staff Traffic Committee has further reviewed this request and determined that:

1. Crooks Road is a 58-foot wide major road consisting of composite pavement with concrete curbing.
2. Lexington Boulevard is major road consisting of concrete pavement with 22-foot wide pavement on each side of the boulevard.
3. Normandy Road is a 37-foot wide major road consisting of composite pavement with concrete curbing west of Crooks, and concrete pavement east of Crooks.
4. Crooks/Lexington is a signalized intersection with no dedicated left turn signals in any direction. There is a dedicated left turn lane for southbound Crooks. Lexington does not have painted lane lines, but there is space for two lanes of traffic (left turns and right turns).
5. Crooks/Normandy is a signalized intersection with no dedicated left turn signals in any direction. There are dedicated left turn lanes in all directions.
6. An aerial view of the two intersections is provided below:



8. The crash history for each intersection is as follows:
 - a. For Crooks/Lexington: Of the 13 reported crashes at the intersection (2021-2023), one was a southbound angle crash that could have potentially been avoided with installation of a left turn phase signal.
 - b. For Crooks/Normandy: Of the 29 reported crashes at the intersection (2021-2023), there were six crashes that were correctable with installation of a left turn phase signal (1 head-on left turn, 2 angle, 2 pedestrian involved, and 1 bike involved):
 - i. Two in the southbound direction
 - ii. Two in the eastbound direction
 - iii. Two in the westbound direction
9. The Transportation Improvement Association (TIA) performed a Left Turn Phase Warrant Study for each intersection using the Michigan Department of Transportation (MDOT) formulas. These reports are included in the attachments, and indicate that a dedicated left-turn signal is not warranted for either intersection in any direction.
10. Staff requested an opinion from its traffic consultant, Fleis and VandenBrink. Their professional opinion is that the dedicated left turn signals should not be installed. However, if the city wishes to move forward with left turn signals, they provided the following comments:
 - a. Both signals have a fair amount of capacity, and they did not think adding left turn time would significantly impact traffic backups.
 - b. Increasing the all-red time would not really help anything. It is typically 2-3 seconds (depends on speed of road), and the Normandy signals already have a 5-second delay.
 - c. Pedestrian and bicycle counts would not really factor into this decision. With left turn signals, there would be a “no walk” interval during a green left turn signal. Pedestrians and bicyclists could be crossing the road during a permissive left (blinking yellow).
 - d. If implemented, we would want to rerun the optimization study for Crooks Road (the city just optimized the timings along the corridor this year). This is estimated to cost \$3,000.
11. Staff presented this information to Carrier and Gable who provides traffic signal equipment and training services throughout Oakland County. Their professional opinion is that the dedicated left turn signals should not be installed. However, if the city wished to move forward with this effort, they provided the following comments:
 - a. The city upgraded these signals with camera detection systems and new cabinets in 2022-23, but signal heads are still on a span wire and are rather old. Note that “span wire intersections” include cables that run diagonally across the intersection. Current best practice is to install “box span intersections.” A snippet from an MDOT traffic signal guide helps explain the difference:



- b. Normandy and Crooks – because of the span wire configuration at Normandy and Crooks, installing the left turn signals is a little more complicated. There must be two signals for the thru-movement in each direction, and they must be located to the right of the left-turn signal. Staff prepared a layout of the traffic signal heads to see if they could be installed on the existing span wire and still meet the required spacing stipulated in the MMUTCD. The signal heads must be spaced a minimum of 8 feet laterally (in perpendicular direction) and must be between 40 feet and 120 feet from each stop bar. Because of the number of signal heads required, it was not possible to achieve both spacing constraints. Therefore, installation of dedicated left turn signals here must be done by replacing the intersection with a box span configuration. A detailed cost was not performed as this requires a more in-depth design with utility and foundation analysis. In general, upgrading a span-wire to a box-span configuration costs roughly \$250,000 to \$350,000.
- c. Lexington and Crooks – This intersection is simpler to upgrade. One additional traffic signal head and one left-turn signal will be required for southbound traffic. Carrier and Gable recommends installing a dual head to achieve this:



Additionally, vehicle detection pucks would need to be installed in the southbound left turn lane to optimize traffic flow. Estimated cost: \$24,000.

- 12. Note that funding is not allocated for this work, and so roadwork may need to be removed from the city’s capital improvement plan in order to fund one or both of these intersections.
- 13. Staff relies on data and best practice to make recommendations. Considering the data presented in the left-turn warrant studies, staff maintains the same recommendation that left-turn signals should not be installed at these two intersections.

Suggested Staff Recommendation: To deny the request for dedicated left-turn traffic signals at the intersections of Crooks/Normandy and Crooks/Lexington.

Estimated cost: \$0



Royal Oak Traffic Committee

AGENDA ITEM

Title	Request to install a no left turn sign for Hazelton Apartment driveway on Williams Street near mid-block pedestrian crossing
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

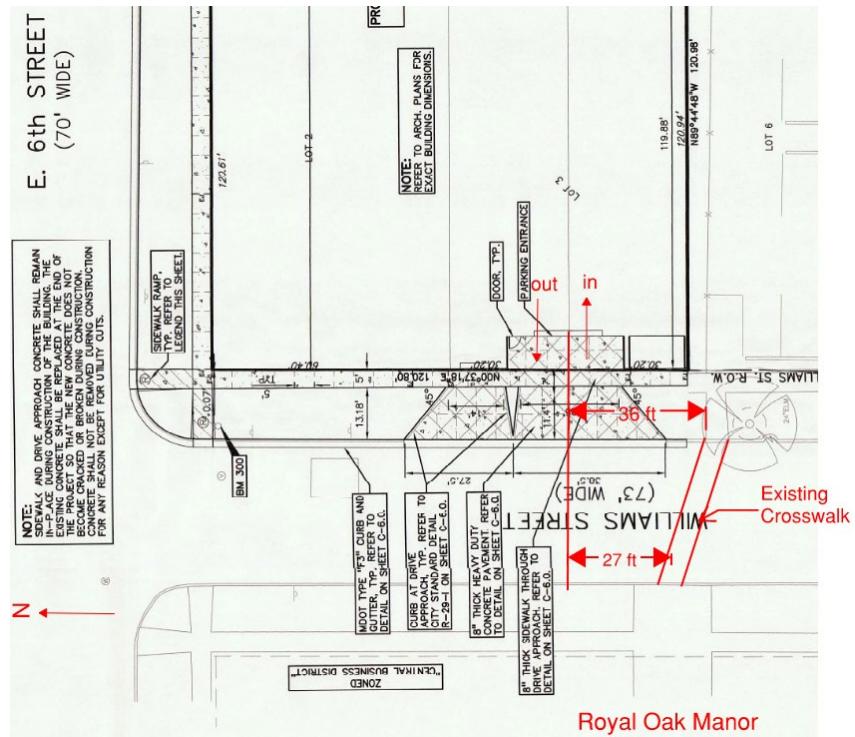
Requestor Concern:

A request was received from Alan Ashley of 606 Williams Street to install a “no left turn” sign at the driveway out of the parking garage for the Hazelton Apartments development located at the corner of Williams Street and E. Sixth Street. He states this would be to protect Royal Oak Manor residents that cross Williams to get to the parking lot.

Staff Analysis:

The Staff Traffic Committee has reviewed this request and determined that:

1. Williams Street is a 37-foot wide major road consisting of composite pavement with concrete curb.
2. There are metered parking lanes on both sides of the road. There is a mid-block pedestrian crossing between Royal Oak Manor and the parking lot on the east side of Williams Street.
3. The three-year (2021-2023) accident report shows one accident at the corner of E. Sixth Street and Williams Street in which a vehicle traveling south on Williams struck a vehicle crossing the intersection going east on Sixth.
4. The Hazelton Apartments project is still under construction. The proposed driveway approach for the Hazelton Apartments parking garage is shown below. The existing pedestrian crosswalk across Williams is skewed, and the distance between exiting vehicles and the northern edge of the crosswalk varies between 27 and 36 feet laterally as shown below:



5. City Code §770-109 requires that all ingress and egress points shall be located no less than 25 feet from any street intersection. While this situation is not a street intersection, part of the reason for this spacing requirement is to ensure vehicles exiting the driveways are not too close to intersection crosswalks. The exiting vehicles in this situation will be slightly more than 25 feet away from the crosswalk.
6. There are many similar instances of mid-block pedestrian crossings near driveways in the city without turn prohibitions. There is no guidance in the MMUTCD regarding adding signage for this situation.
7. Staff inquired with the developer of the Hazelton to see if any pedestrian warning signs were planned within/near the parking garage exit. The developer noted that they are willing to add "Watch for Pedestrians" signage within the parking area.
8. Staff noted that a pedestrian warning sign is missing for southbound traffic on Williams Street. This sign should be installed because this is a mid-block crossing.

Suggested Staff Recommendation: To deny the request for "no left turn" signage at the parking garage exit for 222 E. Sixth Street and add one pedestrian warning sign (W11-2) for southbound William Street traffic, located north of the existing mid-block pedestrian crossing.

Estimated cost: \$300

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Monday, June 17, 2024 6:37:54 PM

Traffic Committee Request

Please complete required fields and submit.

Name	Alan R Ashley
Email Address	arashley1946@yahoo.com
Street Address	606 Williams ST. Apt 602
Phone Number	2489350466
Location of Concern	Williams Street between 6th and 7th streets
Type of Issue	Traffic or pedestrian signal
Detailed Description of Concern	As shown in the picture that I gave Holly, the entrance into and exit from the underground parking for the Hazelton Apartments across from Royal Oak Manor. The crosswalk from Royal Oak Manor and our parking lot on William Street.
Proposed Solution	As I stated in the last traffic committee meeting, I would like a stop sign and no left turn at the Hazelton Apartments at 6th and Williams. Also, a four way stop at 6th and Williams. The four way is because of the future increase in traffic. The no left turn is to protect Royal oak Manor resident that cross to get to their cars in our parking lot.
Media Upload	<i>Field not completed.</i>
Important	I have the reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time, and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the

Traffic Committee.

Name	Carson Kruger
Address	606 S. Williams Street
Email	ck.cplpistol@gmail.com
Name	Michael Huggie
Address	606 S. Williams Street
Email	mheggie45@aol.com

Email not displaying correctly? [View it in your browser.](#)



Royal Oak Traffic Committee

AGENDA ITEM

Title	Request for No Parking Sign on the east side of Virginia Avenue at E. University Avenue
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

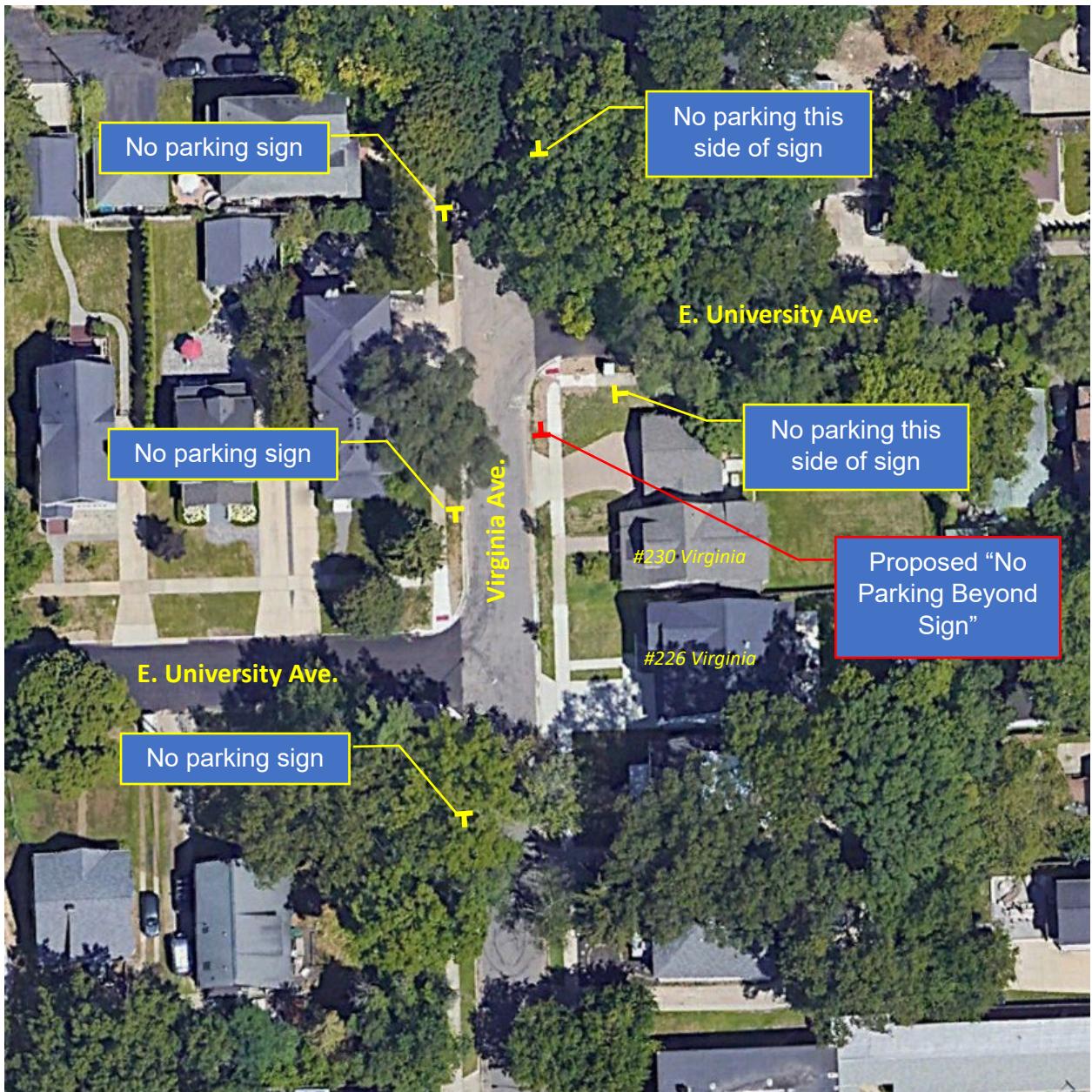
Requestor Concern:

A request was received from Cary Mergele of 230 Virginia Avenue to install a No Parking sign between her driveway and the corner of E. University Avenue. She states vehicles are constantly trying to park in the 25-feet between the edge of her driveway and the intersection, which is illegal and dangerous since it impedes site distance for oncoming traffic.

Staff Analysis:

The Staff Traffic Committee has further reviewed this request and determined that:

1. Virginia Avenue is a 27-foot wide local road consisting of asphalt pavement with concrete curbing.
2. E. University Avenue is a 27-foot wide major road consisting of composite pavement with concrete curbing.
3. The three-year (2021-2023) accident report shows no crashes at the subject location.
4. Permit parking is allowed on the east side of Virginia Avenue north of E. University Avenue and no parking is allowed on the west side. There was previously a "no parking beyond sign" on the east side of the intersection, and it appears it was removed in 2021 and not replaced for unknown reasons. See existing signage below.



5. Per the Michigan Vehicle Code, parking is not allowed within 20 feet of a crosswalk, or if there is not a crosswalk, then within 15 feet of the intersection of property lines at an intersection of highways.
6. With this in mind, "no parking beyond" signage should be installed where shown below to prohibit parking within 15 feet of the intersection of E. University Avenue.

Suggested Staff Recommendation: Install a "No Parking Beyond Sign" sign north of the driveway approach at 230 Virginia Avenue.

Estimated cost: \$300

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Wednesday, May 8, 2024 6:50:08 AM

Traffic Committee Request

Traffic Request Form

Please complete required fields and submit.

Name	Cary Mergele
Email Address	cmergele@mergelelaw.com
Street Address	230 VIRGINIA AVE
Phone Number	5862308413
Location of Concern	East side of Virginia Avenue, south of E. University Avenue
Type of Issue	Parking
Detailed Description of Concern	<p>I live at the SE corner of Virginia and University, and I have two issues:</p> <p>1. Cars are constantly trying to park in the 25 feet between the edge of my driveway and the intersection of Virginia and University. It is dangerous and illegal, as oncoming cars cannot see the traffic when a vehicle is parked at the intersection. There are No Parking signs at other similarly-situated intersections to prevent such parking, and I respectfully request such a No Parking sign.</p> <p>2. Virginia Avenue north of E. University Avenue, on the east side, is already deemed Permit Parking Only, with appropriate signs. All of Virginia Avenue on the west side is deemed No Parking, with appropriate signs. I was informed by the prior homeowner that Virginia Avenue south of E. University Avenue, on the east side, was also deemed Permit Parking Only, but there are no signs. I respectfully request signage. Because our street is so close to downtown, non-residents are constantly parking in this very small stretch, in order to walk to downtown, and avoid parking garages.</p>
Proposed Solution	See above. I respectfully request a No Parking sign, at the SE intersection of Virginia and University. I also respectfully request a Permit Parking Only designation, and signage, on the east side of Virginia Avenue, south of University.
Media Upload	<i>Field not completed.</i>

I have reviewed the Traffic Committee's Frequently Asked

Important

Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time, and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the Traffic Committee.

Name	Whitney Marx
Address	312 E University Ave
Email	whitney.marx@marxmoda.com
Name	Laurie Thelan
Address	302 Virginia Ave
Email	lrotary@hotmail.com

Email not displaying correctly? [View it in your browser.](#)



Royal Oak Traffic Committee

AGENDA ITEM

Title	Request to remove guardrail adjacent to 3111 N. Main Street
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

Requestor Concern:

A request was received from Kan Yob of 3111 N. Main Street to eliminate the guardrail in the public right-of-way adjacent to his driveway approach. He said when driving north it is extremely difficult to turn in the driveway without hitting the guardrail.

Staff Analysis:

The Staff Traffic Committee has further reviewed this request and determined that:

1. N. Main Street is a 40-foot wide minor arterial road consisting of composite pavement with concrete curbing.
2. The city installed a 4-to-3 lane conversation on N. Main Street between 12 Mile and 13 Mile in 2018. There are bike lanes and no parking is allowed on either side of the road. This change has created a larger gap between vehicular traffic and pedestrian traffic along N. Main Street.
3. A three-year accident history (2021-2023) was collected for this area of Main Street, and there were three accidents. None of them resulted in driving off the road.
4. It is not clear why the guardrail was installed at these locations, but it is assumed it was installed to protect obstructions such as trees and utility poles or pedestrians on the sidewalk.
5. According to the AASHTO Roadside Design Guide the following comments are applicable:
 - a. Guardrail should only be considered if the result of a car hitting the guardrail will be less severe than the car hitting the unshielded object.
 - b. A "clear zone" of 14 to 16 feet is ideal for N. Main Street (speed limit is less than 40 mph and average daily traffic > 6,000 vehicles per day) per Table 3-1 in the design guide.
 - c. In urban areas with road curbing, a recommended goal is to achieve at least 4 feet of lateral offset between the face of curb and possible obstructions. However, a minimum clearance of 1.5 feet between the face of curb and obstructions should be provided (Section 10.1.3.1).

- d. There are no objective criteria for determining if guardrail should be used to shield pedestrians and engineering judgement should be used. Crash history should be considered in determining the need for roadside treatment.
- e. Guardrails too close to the traveled way can sometimes cause accidents or driver discomfort.

6. The existing face of the guardrail ranges from 0.8 to 1.3 feet from the face of curb which is less than the recommended minimum 1.5-foot separation. There is 4.5 feet between the face of curb and the existing edge of sidewalk, which equates to 13.5 feet between the vehicle lane and the sidewalk.
7. There are no objects in the ROW the guardrail appears to be shielding.
8. Considering the lack of accident history and items that require shielding, guardrail does not appear to be warranted here and can be removed. The remainder of the guardrail in this area should be studied for potential removal with the N. Main Street resurfacing project slated for 2028. DPS indicated that they can perform the removal work in-house and restore the disturbed area with topsoil and seed.



Suggested Staff Recommendation: Remove approximately 30 feet of guardrail in front of 3111 N. Main Street.

Estimated cost: \$1,500

Main Street Guardrail

#1	Location: N MAIN (3.071) 16 feet Sof E LAWRENCE AVE							Crash ID: 2253547
Date:	04/07/2021	Day:	Wed	Hour:	5am	Weather:	cloudy	Roadway: dry
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 0
CVT:	Royal Oak		Area:	straight		HBD:	N	Drugs: N
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type
1	go straight	other non-fixed obj	none	none	none	unknown	car	ctrfront

 UD10: [2253547](#)

#2	Location: W LAWRENCE (0.073) 74 feet Wof N MAIN ST							Crash ID: 2343275
Date:	08/01/2021	Day:	Sun	Hour:	3pm	Weather:	clear	Roadway: dry
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 1
CVT:	Royal Oak		Area:	straight		HBD:	N	Drugs: N
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type
1	E	backing	veh in transpt	none	none	none	imprp backing	truck/bus
2	W	nodriver parked	veh in transpt	none	none	none	none	car

 UD10: [2343275](#)

#3	Location: N MAIN (3.07) 20 feet Sof E LAWRENCE AVE							Crash ID: 2970817
Date:	08/18/2023	Day:	Fri	Hour:	3pm	Weather:	clear	Roadway: dry
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	1	Injy 0: 1
CVT:	Royal Oak		Area:	straight		HBD:	N	Drugs: N
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type
1	N	slow/stop on rd	veh in transpt	none	none	none	unable to stop	car
2	N	stop on road	veh in transpt	none	none	none	none	car

 UD10: [2970817](#)

Crash Type

Count	Type
0	uncoded
1	single
0	head-on
0	head-on/lt
0	angle
1	rr-end
0	rr-end/lt
0	rr-end/rt
0	ss-same
0	ss-opp
1	back
0	other
0	unknown
Totals	3

Lighting Conditions

Count	Type
0	uncoded
2	day
0	dawn
0	dusk
1	dark/ltd
0	dark/unltd
0	other
0	unknown
Totals	3

Weather Conditions

Count	Type
0	uncoded
2	clear
1	cloudy
0	fog
0	rain
0	snow
0	wind
0	sleet/hail
0	blowing snow
0	blowing sand
0	smoke
0	unknown
Totals	3

Road Condition

Count	Type
0	uncoded
3	dry
0	wet
0	ice
0	snow
0	mud
0	slush
0	debris
0	water
0	sand
0	oily
0	other
0	unknown
Totals	3

Crashes by Month

Count	Type
0	January
0	February
0	March
1	April
0	May
0	June
0	July
2	August
0	September
0	October
0	November
0	December
Totals	3

Hazardous Action

Count	Type
2	none
0	speeding
0	spd too slow
0	failed to yield
0	disrgd traffic cntrl
0	wrong way
0	left of center
0	imprp passing
0	imprp lane use
0	imprp turn
0	imprp/no signal
1	imprp backing
1	unable to stop
0	other
1	unknown
0	reckls driving
0	carels driving
Totals	5

Unit Type

Count	Type
0	Bicyclist
0	Engineer
5	Vehicle
0	Pedestrian
Totals	5

Crashes by Year

Count	Type
2	2021
1	2023
Totals	3

Crash Severity

	Fatal	A	B	C	No Injy	Total
Persons	0	0	0	1	0	1
Crashes	0	0	0	1	2	3

Alcohol in Crashes

	Fatal	A	B	C	PDO	Total
Drinking	0	0	0	0	0	0
Not Drinking	0	0	0	1	2	3
Totals	0	0	0	1	2	3

Crashes per Hour by Day

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
12a-1a	0	0	0	0	0	0	0	0
1a-2a	0	0	0	0	0	0	0	0
2a-3a	0	0	0	0	0	0	0	0
3a-4a	0	0	0	0	0	0	0	0
4a-5a	0	0	0	0	0	0	0	0
5a-6a	0	0	0	1	0	0	0	1
6a-7a	0	0	0	0	0	0	0	0
7a-8a	0	0	0	0	0	0	0	0
8a-9a	0	0	0	0	0	0	0	0
9a-10a	0	0	0	0	0	0	0	0
10a-11a	0	0	0	0	0	0	0	0
11a-12p	0	0	0	0	0	0	0	0
12p-1p	0	0	0	0	0	0	0	0
1p-2p	0	0	0	0	0	0	0	0
2p-3p	0	0	0	0	0	0	0	0
3p-4p	1	0	0	0	0	1	0	2
4p-5p	0	0	0	0	0	0	0	0
5p-6p	0	0	0	0	0	0	0	0
6p-7p	0	0	0	0	0	0	0	0
7p-8p	0	0	0	0	0	0	0	0
8p-9p	0	0	0	0	0	0	0	0
9p-10p	0	0	0	0	0	0	0	0
10p-11p	0	0	0	0	0	0	0	0
11p-12a	0	0	0	0	0	0	0	0
Totals	1	0	0	1	0	1	0	3

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Monday, May 13, 2024 10:15:15 AM

Traffic Committee Request

Please complete required fields and submit.

Name	Kob
Email Address	kob.yan0505@gmail.com
Street Address	3111 N main st
Phone Number	248-506-5484
Location of Concern	Front of my house - Guard Rail
Type of Issue	Other
Detailed Description of Concern	The guardrail keeps hitting my car when I turn into my home coming from the north
Proposed Solution	1. Eliminate guardrail all together
Media Upload	<i>Field not completed.</i>
Important	I have reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time, and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the Traffic Committee.

Name	John Dimmer
Address	3107 N Main st

Email	gus.diemer@gmail.com
Name	Jesse Peterson
Address	3115 N. Main st
Email	jessie13@wowway.com

Email not displaying correctly? [View it in your browser.](#)

Royal Oak Traffic Committee

AGENDA ITEM

Title	Request to review speeding, safety and cut through issues on Kayser Avenue at E. Sixth Street intersection by Grant Park
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

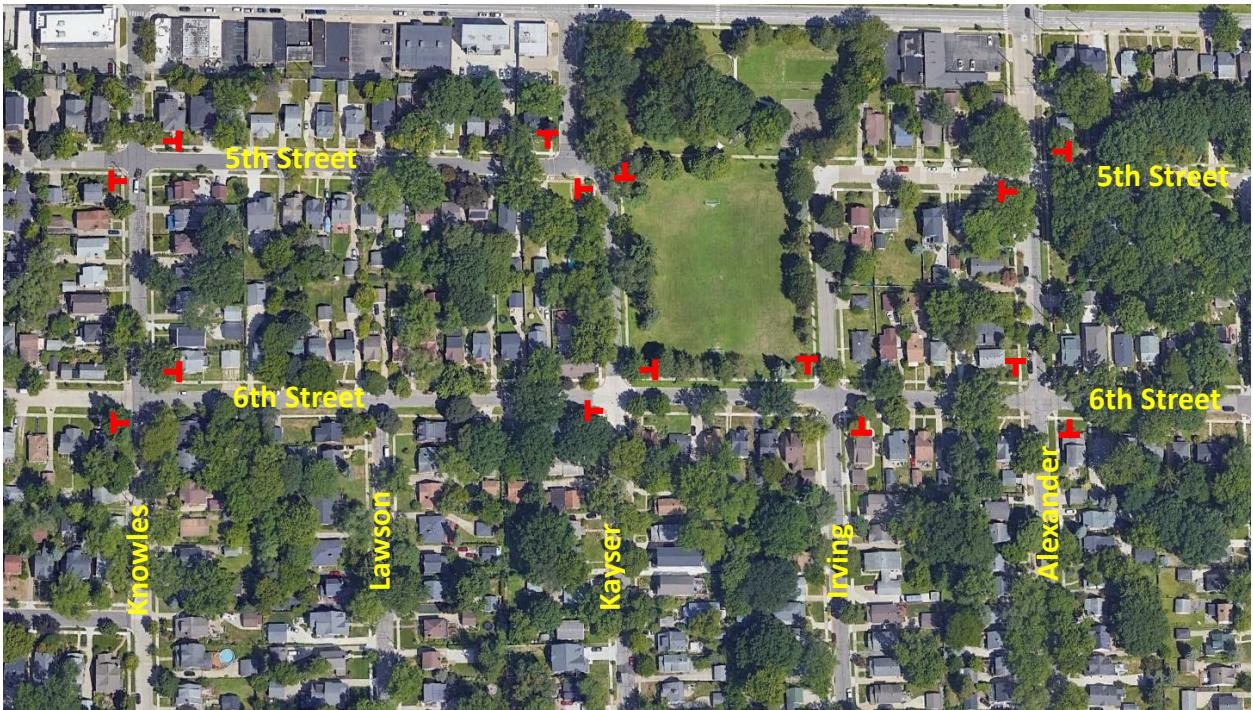
Requestor Concern:

A request was received from Jason Kassab of 712 Kayser, Matt Curtis of 716 Kayser, Edward Reedy of 719 Kayser, and Tammy Rossilli of 706 Kayser to review safety concerns at the intersection of Kayser Avenue and E. Sixth Street near Grant Park due to speeding and cut-thru traffic. They state that vehicles speed up the block and use Kayser as a cut-thru to get to Fourth Street or 11 Mile Road from Lincoln Avenue. When vehicles are parked around the intersection due to events or kids' games at Grant Park, it restricts the sight distance for vehicles travelling through the intersection in all directions. There are currently stop signs for east/west traffic but not for north/south. To reduce the speeding and cut-thru traffic and increase safety for pedestrians using the park and drivers at the intersection they would like to see a 4-way stop installed.

Staff Analysis:

The Staff Traffic Committee has further reviewed this request and determined that:

1. Kayser Avenue and E. Sixth Street are both 27-foot wide local roads consisting of composite pavement with concrete curbing.
2. Grant Park is located in the northeast corner of the intersection, and there is no parking allowed along the park frontage. Parking is not allowed on the south side of E. Sixth Street west of the intersection.
3. The three-year (2021-2023) accident report shows no crashes on Kayser between Fifth and Sixth Street and three crashes between Lincoln and Sixth Street, all related to traffic hitting parked vehicles.
4. The image below shows the study location and existing stop signs in the area.



5. The city requested traffic measurements from the TIA for speed and traffic volume, which were measured from May 20-22, 2024:

Kayser Avenue	85th Percentile Speed (mph)	Vehicles Per Day
Lincoln Ave. to E. Sixth St.	26	390
E. Sixth St. to E. Fifth St.	24	495

6. The data does not indicate a speeding issue on either block. The volume of traffic is in the low range for a residential local street (0 to 600 vehicles per day).

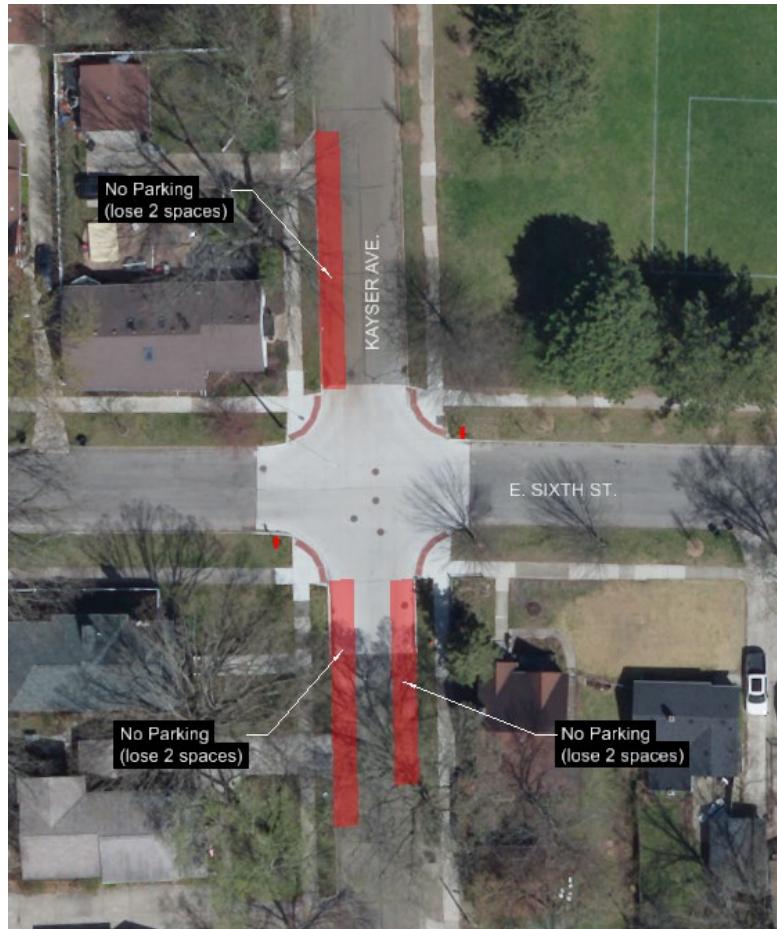
7. The city concurs with the MMUTCD that the purpose of regulatory signs is to promote safe traffic and pedestrian movements and actions. The city also concurs with national studies that indicate inappropriately placed stop signs do not necessarily lessen speeding and have resulted in higher speeds.

8. The following MMUTCD criteria is used to determine if a multi-way stop application is warranted:

- Five or more reported crashes in a 12-month period
- Vehicular volume from the major street averages at least 300 vehicles per hour for any 8 hours
- Vehicular, pedestrian, and bike volume from the minor approach averages 200 units per hour for the same 8 hours
- High pedestrian volumes (exceeding 100 per hour)
- Sight distance issues

9. The warrants for crash history and traffic volumes are not met. However, staff noticed that cars park very close to the intersection during busy times, and so there could be potential sight distance issues for eastbound and westbound cars that are stopped at the existing stop signs.

10. The recommended stopping sight distance required for a 25 mph street is 155 feet (MDOT Sight Distance Guidelines). An analysis of the current conditions indicates that the sight distance is inadequate for eastbound drivers (80 feet to the north and 69 feet to the south) and westbound drivers (79 feet to the south, view to the north is unobstructed).
11. With these findings, there are two options to improve safety at the intersection:
 - a. Install a 4-way stop.
 - b. Prohibit parking away from the intersection such that the available sight distance becomes 155 feet. This results in losing a total of six parking spaces around the intersection as shown below.



12. Considering how popular this park is, eliminating these parking spaces will be a hardship for park users and cause additional congestion in other parts of the surrounding neighborhood. For this reason, staff recommends installing a 4-way stop at this intersection. When studying this location, staff noticed that the nearby intersection of Lawson Street and E. Sixth Street (a T-intersection) does not have a stop sign for northbound Lawson, and recommends installing one.

Suggested Staff Recommendation: To install stop signs at Kayser Avenue and E. Sixth Street to create a 4-way stop intersection, and to install “all-way” plaques on all four stop signs; to install a stop sign for northbound Lawson Street traffic at E. Sixth Street.

Estimated cost: \$700

There are no records to display for the search criteria you have specified.
Please click the "HOME" button and change your search criteria.

[Crash History, Kayser Ave, E 5th St to E 6th St, 3-Year Plus 2021-2024](#)

Crash History, Kayser Ave, E 6th St to Lincoln Ave, 3-Year+ 2021-2024

#1	Location: NB KAYSER (0.009) 48 feet Nof LINCOLN							Crash ID: 2385392	
Date:	09/21/2021	Day:	Tue	Hour:	10a	Weather:	cloudy	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 1	
CVT:	Royal Oak		Area:	straight		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	N	go straight	veh in transpt	none	none	none	imprp passing	car	rtside
2	N	nodriver parked	veh in transpt	none	none	none	none	truck/bus	lftside

UD10: 2385392

#2	Location: KAYSER (0.008) 40 feet Nof E LINCOLN AVE							Crash ID: 2982651	
Date:	08/29/2023	Day:	Tue	Hour:	4pm	Weather:	clear	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 0	
CVT:	Royal Oak		Area:	straight		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	unknown		veh parked	none	none	none	unknown	car	none
2	N	nodriver parked	veh in transpt	none	none	none	none	car	ctrfront

UD10: 2982651

#3	Location: KAYSER (0.068) 360 feet Nof E LINCOLN							Crash ID: 3010259	
Date:	10/02/2023	Day:	Mon	Hour:	4pm	Weather:	unknown	Roadway: unknown	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 0	
CVT:	Royal Oak		Area:	parking		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	unknown		veh in transpt	none	none	none	unknown	car	none
2	E	nodriver parked	veh parked	none	none	none	none	car	lftside

UD10: 3010259

Crash Type

Count	Type
0	uncoded
0	single
0	head-on
0	head-on/lt
0	angle
0	rr-end
0	rr-end/lt
0	rr-end/rt
2	ss-same
0	ss-opp
1	back
0	other
0	unknown
Totals	3

Lighting Conditions

Count	Type
0	uncoded
2	day
0	dawn
0	dusk
0	dark/ltd
0	dark/unltd
0	other
1	unknown
Totals	3

Weather Conditions

Count	Type
0	uncoded
1	clear
1	cloudy
0	fog
0	rain
0	snow
0	wind
0	sleet/hail
0	blowing snow
0	blowing sand
0	smoke
1	unknown
Totals	3

Road Condition

Count	Type
0	uncoded
2	dry
0	wet
0	ice
0	snow
0	mud
0	slush
0	debris
0	water
0	sand
0	oily
0	other
1	unknown
Totals	3

Crashes by Month

Count	Type
0	January
0	February
0	March
0	April
0	May
0	June
0	July
1	August
1	September
1	October
0	November
0	December
Totals	3

Hazardous Action

Count	Type
3	none
0	speeding
0	spd too slow
0	failed to yield
0	disrgd traffic cntrl
0	wrong way
0	left of center
1	imprp passing
0	imprp lane use
0	imprp turn
0	imprp/no signal
0	imprp backing
0	unable to stop
0	other
2	unknown
0	reckls driving
0	carels driving
Totals	6

Unit Type

Count	Type
0	Bicyclist
0	Engineer
6	Vehicle
0	Pedestrian
Totals	6

Crashes by Year

Count	Type
1	2021
2	2023
Totals	3

Crash Severity

	Fatal	A	B	C	No Injy	Total
Persons	0	0	0	0	0	0
Crashes	0	0	0	0	3	3

Alcohol in Crashes

	Fatal	A	B	C	PDO	Total
Drinking	0	0	0	0	0	0
Not Drinking	0	0	0	0	3	3
Totals	0	0	0	0	3	3

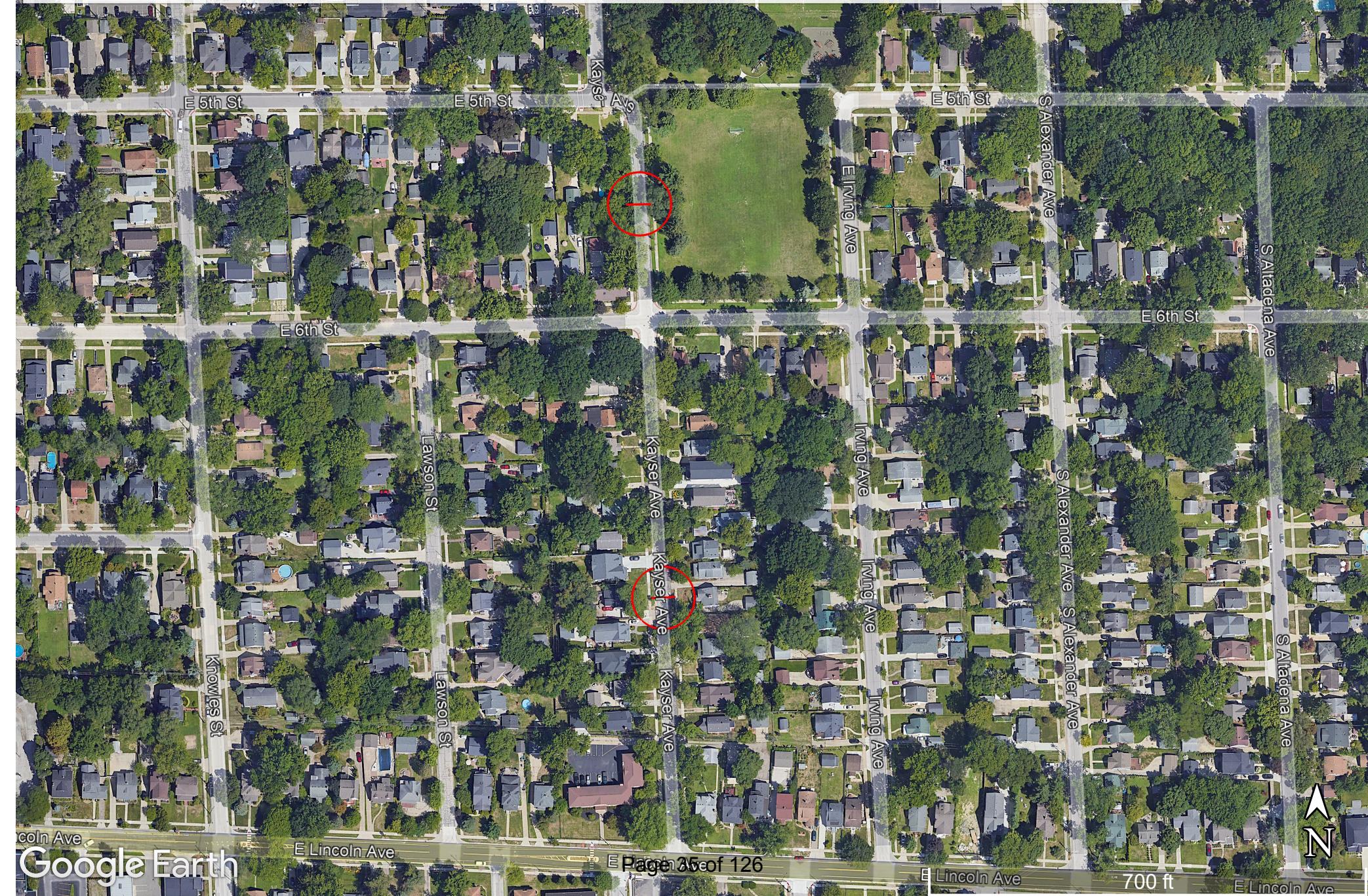
Crashes per Hour by Day

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
12a-1a	0	0	0	0	0	0	0	0
1a-2a	0	0	0	0	0	0	0	0
2a-3a	0	0	0	0	0	0	0	0
3a-4a	0	0	0	0	0	0	0	0
4a-5a	0	0	0	0	0	0	0	0
5a-6a	0	0	0	0	0	0	0	0
6a-7a	0	0	0	0	0	0	0	0
7a-8a	0	0	0	0	0	0	0	0
8a-9a	0	0	0	0	0	0	0	0
9a-10a	0	0	0	0	0	0	0	0
10a-11a	0	0	1	0	0	0	0	1
11a-12p	0	0	0	0	0	0	0	0
12p-1p	0	0	0	0	0	0	0	0
1p-2p	0	0	0	0	0	0	0	0
2p-3p	0	0	0	0	0	0	0	0
3p-4p	0	0	0	0	0	0	0	0
4p-5p	0	1	1	0	0	0	0	2
5p-6p	0	0	0	0	0	0	0	0
6p-7p	0	0	0	0	0	0	0	0
7p-8p	0	0	0	0	0	0	0	0
8p-9p	0	0	0	0	0	0	0	0
9p-10p	0	0	0	0	0	0	0	0
10p-11p	0	0	0	0	0	0	0	0
11p-12a	0	0	0	0	0	0	0	0
Totals	0	1	2	0	0	0	0	3

Royal Oak - Kayser Ave, E Lincoln Ave to E 5th St, Count Locations Map

3-Day (72-Hour) Volume & Speed Counts (2-Locations):

1. Kayser Ave, btwn E 5th St & E 6th St
2. Kayser Ave, btwn E 6th St & E Lincoln Ave



Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
Time															
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
9:00	1	0	0	0	0	0	2	5	2	0	0	0	0	0	10
10:00	0	0	0	0	1	1	4	4	2	0	0	0	0	0	12
11:00	0	0	0	0	0	1	6	3	0	1	0	0	0	0	11
12:00 PM	0	0	0	0	0	0	3	7	6	1	0	0	0	0	17
1:00	0	0	0	0	0	2	2	4	0	0	0	0	0	0	8
2:00	0	0	0	0	1	4	6	2	1	2	0	0	0	0	16
3:00	0	0	0	1	2	1	4	4	0	0	1	0	0	0	13
4:00	0	0	0	1	2	2	3	5	1	1	0	0	0	0	15
5:00	0	0	0	5	2	4	6	4	2	2	0	0	0	0	25
6:00	0	0	1	3	5	4	3	5	0	0	0	0	0	0	21
7:00	0	0	0	0	3	5	2	4	3	0	0	0	0	0	17
8:00	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4
9:00	1	0	0	0	1	1	1	2	0	0	0	0	0	0	6
10:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	1	10	17	25	45	49	20	7	1	0	0	0	177

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	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	1	0	0	0	0	1
3:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	0	1	1	0	2	2	2	0	0	0	0	0	8
7:00	0	0	0	0	0	2	3	6	4	0	0	0	0	0	15
8:00	0	0	0	0	0	7	3	2	2	0	0	0	0	0	14
9:00	0	0	0	0	2	3	7	7	3	0	0	0	0	0	22
10:00	0	0	0	1	0	3	3	0	1	0	0	0	0	0	8
11:00	0	0	0	1	2	2	3	2	0	0	0	0	0	0	10
12:00 PM	0	0	0	1	1	4	6	2	0	0	0	0	0	0	14
1:00	1	0	0	1	1	6	4	3	0	0	0	0	0	0	16
2:00	0	0	0	0	1	4	5	5	2	1	0	0	0	0	18
3:00	0	0	0	1	0	2	8	1	1	0	0	0	0	0	13
4:00	0	0	0	0	3	2	4	5	3	0	0	0	0	0	17
5:00	0	0	0	0	3	5	6	5	5	1	0	0	0	0	25
6:00	0	0	0	0	1	3	7	8	1	0	0	0	0	0	20
7:00	0	0	0	0	0	2	2	2	2	0	0	0	0	0	8
8:00	0	0	0	0	1	2	3	2	2	0	0	0	0	0	10
9:00	0	0	0	1	0	0	1	2	0	0	0	0	0	0	4
10:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
11:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Total	1	0	1	7	16	49	71	56	28	3	0	0	0	0	232

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
1:00	0	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	0
3:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	0	0	1	3	2	1	2	0	0	0	0	0	9
7:00	0	0	0	0	3	4	8	3	3	3	0	0	0	0	24
8:00	0	0	0	0	2	0	4	8	0	0	0	0	0	0	14
9:00	0	1	0	0	3	6	1	4	1	0	0	0	0	0	16
10:00	0	0	0	1	0	2	4	2	1	0	0	0	0	0	10
11:00	0	0	0	0	1	1	4	2	0	0	0	0	0	0	8
12:00 PM	0	0	0	0	1	1	4	2	0	1	0	0	0	0	9
1:00	0	0	0	0	0	3	3	3	2	0	0	0	0	0	11
2:00	0	0	0	0	1	3	8	3	2	1	0	0	0	0	18
3:00	0	0	0	1	0	1	9	4	3	1	1	0	0	0	20
4:00	0	0	0	1	1	3	5	8	3	0	0	0	0	0	21
5:00	0	0	0	2	2	3	9	4	4	0	0	0	0	0	24
6:00	0	0	0	0	2	4	7	9	0	0	0	0	0	0	22
7:00	0	0	0	0	1	5	5	5	0	0	0	0	0	0	16
8:00	0	0	0	1	1	1	1	0	2	1	0	0	0	0	7
9:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
10:00	0	0	0	0	0	0	0	0	3	3	0	0	0	0	6
11:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	1	0	6	19	43	78	63	27	7	1	0	0	0	245

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	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	0
6:00	0	0	0	0	0	1	0	2	2	0	0	0	0	0	5
7:00	0	0	0	0	0	2	4	9	2	2	0	0	0	0	19
8:00	0	0	0	0	2	0	4	2	2	0	1	0	0	0	11
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	0	0	2	3	10	13	6	2	1	0	0	0	37
Grand Total	3	1	2	23	54	120	204	181	81	19	3	0	0	0	691

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	19.9			
	10 MPH Pace Speed	15-24			
	Number in Pace	531			
	Percent in Pace	76.8%			
	Number > 24 MPH	103			
	Percent > 24 MPH	14.9%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	0	0	0	3	2	1	3	5	0	0	0	0	14
10:00	0	0	0	0	0	1	3	4	2	1	0	0	0	0	11
11:00	0	0	0	0	0	1	0	1	5	4	0	0	0	0	11
12:00 PM	0	0	0	0	0	3	1	4	5	1	1	0	0	0	15
1:00	0	0	0	0	0	1	3	2	4	3	1	0	0	0	14
2:00	0	0	0	0	0	1	6	8	3	2	1	0	0	0	21
3:00	0	0	1	0	4	3	8	4	2	1	0	0	0	0	23
4:00	0	0	0	0	2	2	6	8	3	1	0	1	0	0	23
5:00	0	1	1	1	4	5	8	8	1	0	0	0	0	0	29
6:00	0	0	2	2	5	5	8	4	0	0	0	0	0	0	26
7:00	0	0	1	4	4	6	6	2	3	1	0	0	0	0	27
8:00	0	0	0	0	1	2	2	2	2	0	0	0	0	0	9
9:00	0	0	0	0	1	3	1	1	0	1	0	0	0	0	7
10:00	0	0	0	1	1	1	0	1	0	0	0	0	0	0	4
11:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
Total	0	1	5	8	26	43	57	51	30	13	1	1	0	0	236

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	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	0	1
2:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	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	0
6:00	0	0	0	0	0	0	3	0	2	1	0	0	0	0	6
7:00	0	0	0	0	1	1	1	3	1	1	0	0	0	0	8
8:00	0	0	0	0	0	4	0	2	4	1	0	0	0	0	11
9:00	0	0	0	0	0	1	2	4	0	1	0	0	0	0	8
10:00	0	0	0	0	1	1	0	2	3	0	0	0	0	0	7
11:00	0	0	0	0	0	3	1	2	2	1	0	0	0	0	9
12:00 PM	0	0	0	1	1	4	5	3	2	1	0	0	0	0	17
1:00	0	0	0	0	0	1	2	4	1	1	0	0	0	0	9
2:00	0	0	0	0	3	2	3	8	3	1	1	0	0	0	21
3:00	0	0	0	1	1	2	7	7	4	1	0	0	0	0	23
4:00	0	0	0	0	0	3	3	7	5	0	0	0	0	0	18
5:00	0	0	0	3	1	8	7	10	2	2	0	0	0	0	33
6:00	0	0	0	0	0	2	7	12	1	2	0	0	1	0	25
7:00	0	0	0	1	0	4	6	4	3	0	0	0	0	0	18
8:00	0	0	0	1	1	3	3	7	3	1	0	0	0	0	19
9:00	0	0	0	0	1	0	2	5	1	1	0	0	0	0	10
10:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
11:00	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Total	0	0	0	8	10	42	53	82	39	15	1	0	1	0	251

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:00	0	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	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	0	0	0	0	0	1	1	1	0	0	0	0	3
7:00	0	1	1	0	2	0	4	4	1	1	0	0	0	0	14
8:00	0	0	0	0	3	4	6	5	2	0	1	0	0	0	21
9:00	0	0	0	1	1	1	0	3	1	0	0	0	0	0	7
10:00	0	0	0	0	1	1	2	2	0	0	0	0	0	0	6
11:00	0	0	0	0	0	2	3	6	1	0	0	0	0	0	12
12:00 PM	0	0	0	0	1	4	4	7	3	1	0	0	0	0	20
1:00	0	0	0	0	1	2	6	2	3	0	0	0	0	0	14
2:00	0	0	0	0	2	3	5	4	4	0	1	0	0	0	19
3:00	0	0	0	0	2	4	4	6	3	2	1	0	0	0	22
4:00	0	0	0	0	1	4	7	9	2	1	0	0	0	0	24
5:00	0	0	0	0	1	4	10	11	5	0	0	0	0	0	31
6:00	0	0	0	0	2	2	6	9	3	1	0	0	0	0	23
7:00	0	0	1	1	1	5	6	4	1	0	0	1	0	0	20
8:00	0	0	0	1	2	1	6	4	3	3	0	0	0	0	20
9:00	0	0	0	0	0	1	1	4	2	0	0	0	0	0	8
10:00	0	0	0	0	1	0	2	2	2	1	0	0	0	0	8
11:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	0	1	3	3	21	39	72	84	39	12	3	1	0	0	278

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	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	0
2:00	0	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	0
4:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
7:00	0	0	0	0	0	1	2	2	0	0	0	1	0	0	8
8:00	0	0	1	1	0	2	2	5	3	1	1	0	0	0	16
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	1	1	0	3	5	8	5	2	1	1	0	0	27
Grand Total	0	2	9	20	57	127	187	225	113	42	6	3	1	0	792

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	20.6			
	10 MPH Pace Speed	15-24			
	Number in Pace	575			
	Percent in Pace	72.6%			
	Number > 24 MPH	165			
	Percent > 24 MPH	20.8%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024	Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	1	0	0	0	0	3	4	6	5	5	0	0	0	0	0	24
10:00	0	0	0	0	1	2	7	8	4	1	0	0	0	0	0	23
11:00	0	0	0	0	1	1	7	8	4	1	0	0	0	0	0	22
12:00 PM	0	0	0	0	0	3	4	11	11	2	1	0	0	0	0	32
1:00	0	0	0	0	1	5	4	8	3	1	0	0	0	0	0	22
2:00	0	0	0	0	2	10	14	5	3	3	0	0	0	0	0	37
3:00	0	0	1	1	6	4	12	8	2	1	1	0	0	0	0	36
4:00	0	0	0	1	4	4	9	13	4	2	0	1	0	0	0	38
5:00	0	1	1	6	6	9	14	12	3	2	0	0	0	0	0	54
6:00	0	0	3	5	10	9	11	9	0	0	0	0	0	0	0	47
7:00	0	0	1	4	7	11	8	6	6	1	0	0	0	0	0	44
8:00	0	0	0	0	1	2	5	2	3	0	0	0	0	0	0	13
9:00	1	0	0	0	2	4	2	3	0	1	0	0	0	0	0	13
10:00	0	0	0	1	1	1	0	1	2	0	0	0	0	0	0	6
11:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	2	1	6	18	43	68	102	100	50	20	2	1	0	0	0	413

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
3:00	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
4:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	0	1	1	0	5	2	4	1	0	0	0	0	14
7:00	0	0	0	0	1	3	4	9	5	1	0	0	0	0	23
8:00	0	0	0	0	0	11	3	4	6	1	0	0	0	0	25
9:00	0	0	0	0	2	4	9	11	3	1	0	0	0	0	30
10:00	0	0	0	1	1	4	3	2	4	0	0	0	0	0	15
11:00	0	0	0	1	2	5	4	4	2	1	0	0	0	0	19
12:00 PM	0	0	0	2	2	8	11	5	2	1	0	0	0	0	31
1:00	1	0	0	1	1	7	6	7	1	1	0	0	0	0	25
2:00	0	0	0	0	4	6	8	13	5	2	1	0	0	0	39
3:00	0	0	0	2	1	4	15	8	5	1	0	0	0	0	36
4:00	0	0	0	0	3	5	7	12	8	0	0	0	0	0	35
5:00	0	0	0	3	4	13	13	15	7	3	0	0	0	0	58
6:00	0	0	0	0	1	5	14	20	2	2	0	0	1	0	45
7:00	0	0	0	1	0	6	8	6	5	0	0	0	0	0	26
8:00	0	0	0	1	2	5	6	9	5	1	0	0	0	0	29
9:00	0	0	0	1	1	0	3	7	1	1	0	0	0	0	14
10:00	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
11:00	0	0	0	0	0	2	2	0	2	0	0	0	0	0	6
Total	1	0	1	15	26	91	124	138	67	18	1	0	1	0	483

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3
1:00	0	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	0
3:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
6:00	0	0	0	0	1	3	2	2	3	1	0	0	0	0	12
7:00	0	1	1	0	5	4	12	7	4	4	0	0	0	0	38
8:00	0	0	0	0	5	4	10	13	2	0	1	0	0	0	35
9:00	0	1	0	1	4	7	1	7	2	0	0	0	0	0	23
10:00	0	0	0	1	1	3	6	4	1	0	0	0	0	0	16
11:00	0	0	0	0	1	3	7	8	1	0	0	0	0	0	20
12:00 PM	0	0	0	0	2	5	8	9	3	2	0	0	0	0	29
1:00	0	0	0	0	1	5	9	5	5	0	0	0	0	0	25
2:00	0	0	0	0	3	6	13	7	6	1	1	0	0	0	37
3:00	0	0	0	1	2	5	13	10	6	3	2	0	0	0	42
4:00	0	0	0	1	2	7	12	17	5	1	0	0	0	0	45
5:00	0	0	0	2	3	7	19	15	9	0	0	0	0	0	55
6:00	0	0	0	0	4	6	13	18	3	1	0	0	0	0	45
7:00	0	0	1	1	2	10	11	9	1	0	0	1	0	0	36
8:00	0	0	0	2	3	2	7	4	5	4	0	0	0	0	27
9:00	0	0	0	0	0	2	3	4	2	0	0	0	0	0	11
10:00	0	0	0	0	1	0	2	5	5	1	0	0	0	0	14
11:00	0	0	0	0	0	0	0	1	1	1	0	0	0	0	3
Total	0	2	3	9	40	82	150	147	66	19	4	1	0	0	523

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	0	0	1	1	2	2	1	0	0	0	0	7
7:00	0	0	0	0	0	3	6	11	4	2	0	1	0	0	27
8:00	0	0	1	1	2	2	6	7	5	1	2	0	0	0	27
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	1	1	2	6	15	21	11	4	2	1	0	0	64
Grand Total	3	3	11	43	111	247	391	406	194	61	9	3	1	0	1483

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	20.3			
	10 MPH Pace Speed	15-24			
	Number in Pace	1106			
	Percent in Pace	74.6%			
	Number > 24 MPH	268			
	Percent > 24 MPH	18.1%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K2

Station ID:

Location 1: Kayser Ave btwn E 6th St and E 5th St

Location 2: Royal Oak

Location 3:

Location 4:

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024			5/21/2024			5/22/2024			5/23/2024			5/24/2024			Weekday Average		5/25/2024		5/26/2024	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	0	0	2	1	0	0	*	*	1	0	*	*	*	*	*	*	*	
1:00	*	*	1	1	0	1	1	0	*	*	1	1	*	*	*	*	*	*	*	
2:00	*	*	1	1	0	0	1	0	*	*	1	0	*	*	*	*	*	*	*	
3:00	*	*	2	1	2	0	0	0	*	*	1	0	*	*	*	*	*	*	*	
4:00	*	*	2	0	1	1	0	1	*	*	1	1	*	*	*	*	*	*	*	
5:00	*	*	1	0	1	1	0	0	*	*	1	0	*	*	*	*	*	*	*	
6:00	*	*	8	6	9	3	5	2	*	*	7	4	*	*	*	*	*	*	*	
7:00	*	*	15	8	24	14	19	8	*	*	19	10	*	*	*	*	*	*	*	
8:00	*	*	14	11	14	21	11	16	*	*	13	16	*	*	*	*	*	*	*	
9:00	10	14	22	8	16	7	*	*	*	*	16	10	*	*	*	*	*	*	*	
10:00	12	11	8	7	10	6	*	*	*	*	10	8	*	*	*	*	*	*	*	
11:00	11	11	10	9	8	12	*	*	*	*	10	11	*	*	*	*	*	*	*	
12:00 PM	17	15	14	17	9	20	*	*	*	*	13	17	*	*	*	*	*	*	*	
1:00	8	14	16	9	11	14	*	*	*	*	12	12	*	*	*	*	*	*	*	
2:00	16	21	18	21	18	19	*	*	*	*	17	20	*	*	*	*	*	*	*	
3:00	13	23	13	23	20	22	*	*	*	*	15	23	*	*	*	*	*	*	*	
4:00	15	23	17	18	21	24	*	*	*	*	18	22	*	*	*	*	*	*	*	
5:00	25	29	25	33	24	31	*	*	*	*	25	31	*	*	*	*	*	*	*	
6:00	21	26	20	25	22	23	*	*	*	*	21	25	*	*	*	*	*	*	*	
7:00	17	27	8	18	16	20	*	*	*	*	14	22	*	*	*	*	*	*	*	
8:00	4	9	10	19	7	20	*	*	*	*	7	16	*	*	*	*	*	*	*	
9:00	6	7	4	10	3	8	*	*	*	*	4	8	*	*	*	*	*	*	*	
10:00	2	4	1	2	6	8	*	*	*	*	3	5	*	*	*	*	*	*	*	
11:00	0	2	2	4	1	2	*	*	*	*	1	3	*	*	*	*	*	*	*	
Total Day	177	236	232	251	245	278	37	27	0	0	231	265	0	0	0	0	0	0	0	
AM Peak Volume	10:00	9:00	9:00	8:00	7:00	8:00	7:00	8:00			7:00	8:00								
PM Peak Volume	5:00	5:00	5:00	5:00	5:00	5:00					5:00	5:00								
Comb Total ADT	413		483		523		64		0		496		0		0		0		0	
	ADT: 495		AADT: 495																	

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	0	0	0	0	2	1	4	0	0	0	0	0	7
10:00	0	0	1	0	1	3	2	3	2	1	0	0	0	0	13
11:00	0	0	0	0	0	0	1	2	1	0	1	0	0	0	5
12:00 PM	0	0	0	0	1	2	2	3	4	6	0	0	0	0	18
1:00	0	0	1	1	2	2	4	2	0	1	0	1	0	0	14
2:00	0	2	4	2	0	4	2	1	0	0	2	0	0	0	17
3:00	0	0	1	0	2	2	4	2	1	0	0	0	0	0	12
4:00	0	0	0	0	0	2	4	1	4	1	0	0	0	0	12
5:00	0	0	0	2	3	3	3	1	3	2	0	0	0	0	17
6:00	0	0	0	1	4	3	9	5	1	1	1	0	0	0	25
7:00	0	0	0	0	2	1	2	1	2	2	0	0	0	0	10
8:00	0	0	0	0	0	1	2	2	0	1	0	0	0	0	6
9:00	0	0	0	0	1	0	0	1	1	2	0	0	0	0	5
10:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
11:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	2	7	6	16	23	38	25	25	17	4	1	0	0	164

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	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	0	1
2:00	0	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	0	1
4:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	1	1	0	1	3	1	0	0	0	0	0	7
7:00	0	1	0	0	1	1	1	2	3	0	1	0	0	0	10
8:00	0	0	0	0	3	1	0	2	0	2	0	0	0	0	8
9:00	0	0	0	2	2	2	2	2	3	2	2	0	0	0	17
10:00	0	0	1	0	0	1	1	2	1	1	0	0	0	0	7
11:00	0	0	0	0	1	0	3	2	2	0	0	0	0	0	8
12:00 PM	0	0	0	0	0	3	3	1	1	3	0	0	0	0	11
1:00	0	0	0	0	1	2	3	4	2	3	0	0	0	0	15
2:00	1	1	2	0	0	1	2	7	2	3	0	0	0	0	19
3:00	0	0	0	0	1	3	3	3	0	1	0	0	0	0	11
4:00	0	0	0	0	2	3	4	5	1	3	0	0	0	0	18
5:00	0	0	0	2	2	4	1	7	5	1	1	0	0	0	23
6:00	0	0	0	1	0	2	6	4	3	1	0	0	0	0	17
7:00	0	0	1	0	1	3	4	1	0	1	0	0	0	0	11
8:00	0	0	0	1	0	1	3	3	1	0	1	0	0	0	10
9:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
10:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
11:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	1	2	4	9	15	28	39	51	26	22	5	0	0	0	202

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00	0	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	0
3:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	1	0	1	3	1	0	0	0	0	0	0	6
7:00	0	2	0	1	1	1	2	5	2	1	1	1	0	0	17
8:00	0	0	0	1	0	2	2	5	0	0	0	0	0	0	10
9:00	0	1	0	0	0	0	0	2	2	1	0	0	0	0	6
10:00	0	0	0	1	0	0	1	1	2	0	0	0	0	0	5
11:00	0	0	0	0	0	1	0	2	1	0	1	0	0	0	5
12:00 PM	0	0	0	0	0	0	2	2	2	0	1	0	0	0	7
1:00	0	0	1	0	2	0	1	0	2	0	1	1	0	0	8
2:00	0	0	0	1	0	2	3	7	2	3	0	0	0	0	18
3:00	0	2	2	1	0	1	3	5	1	1	3	0	0	0	19
4:00	0	0	0	2	0	2	2	2	4	2	0	0	0	0	14
5:00	0	0	0	1	0	3	5	5	2	3	0	0	0	0	19
6:00	0	0	1	1	1	1	2	4	8	0	0	0	0	0	18
7:00	0	0	1	1	0	5	1	2	2	0	0	0	0	0	12
8:00	0	0	0	3	1	1	2	2	1	0	0	0	0	0	10
9:00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
10:00	0	0	0	0	0	1	0	3	2	1	0	0	0	0	7
11:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Total	0	5	5	14	5	21	34	49	34	12	7	2	0	0	188

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	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	0
4:00	0	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	0
6:00	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
7:00	0	0	0	0	5	2	2	4	3	1	0	0	0	0	17
8:00	0	0	1	0	0	0	1	2	2	0	0	1	0	0	7
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	1	1	5	3	4	6	6	1	0	1	0	0	28
Grand Total	1	9	17	30	41	75	115	131	91	52	16	4	0	0	582

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	20.5			
	10 MPH Pace Speed	17-26			
	Number in Pace	361			
	Percent in Pace	62.0%			
	Number > 24 MPH	163			
	Percent > 24 MPH	28.0%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	0	1	1	0	1	2	4	3	0	0	0	0	12
10:00	0	0	2	1	0	1	2	1	3	0	0	0	0	0	10
11:00	0	0	0	1	1	2	2	3	3	0	0	0	0	0	12
12:00 PM	0	0	0	0	0	1	3	3	2	6	0	0	0	0	15
1:00	0	0	0	2	0	3	1	2	2	0	0	0	0	0	10
2:00	0	0	3	0	0	2	5	2	1	1	0	0	0	0	14
3:00	0	1	1	2	2	2	1	0	2	0	2	0	0	0	13
4:00	0	0	1	1	0	2	5	4	3	0	0	0	0	0	16
5:00	0	0	0	0	1	5	7	6	2	1	0	0	0	0	22
6:00	0	0	0	0	1	0	4	4	1	0	1	0	0	0	11
7:00	0	0	0	0	3	0	4	5	3	2	0	0	0	0	17
8:00	0	0	0	0	1	2	2	1	0	0	0	0	0	0	6
9:00	0	0	0	0	1	2	2	0	0	1	0	0	0	0	6
10:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Total	0	1	7	8	12	23	39	33	27	14	3	0	0	0	167

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	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	1	0	0	0	0	1
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00	0	0	0	0	1	0	0	1	3	0	0	0	0	0	5
7:00	0	0	0	1	0	1	1	2	1	0	0	0	0	0	6
8:00	0	0	1	0	0	0	1	3	2	1	0	0	0	0	8
9:00	0	0	1	1	0	2	1	1	1	1	0	0	0	0	8
10:00	0	0	0	1	0	2	2	1	2	0	0	0	0	0	8
11:00	0	0	0	0	0	2	2	0	1	2	0	0	0	0	7
12:00 PM	0	0	0	2	0	2	3	3	3	1	0	0	0	0	14
1:00	0	0	0	1	1	1	3	3	1	0	0	0	0	0	10
2:00	0	0	2	1	0	2	1	8	4	0	0	0	0	0	18
3:00	0	1	0	2	1	2	3	7	2	0	0	0	0	0	18
4:00	0	0	0	2	1	2	6	1	2	1	0	0	0	0	15
5:00	0	0	0	1	4	4	3	5	4	2	0	0	0	0	23
6:00	0	0	0	0	2	2	7	3	3	1	0	0	0	0	18
7:00	0	0	0	0	4	2	2	3	1	2	0	0	0	0	14
8:00	0	0	1	0	2	0	7	3	3	1	0	0	0	0	17
9:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
10:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
11:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	1	5	12	17	25	45	47	33	14	0	0	0	0	199

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:00	0	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	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
6:00	0	0	0	1	0	0	0	1	2	0	0	0	0	0	4
7:00	0	1	0	0	1	4	3	2	1	1	0	0	0	0	13
8:00	0	0	2	0	2	1	2	2	1	1	0	0	0	0	11
9:00	0	0	0	0	0	2	0	2	2	0	0	0	0	0	6
10:00	0	0	3	1	0	1	2	2	0	0	0	0	0	0	9
11:00	0	0	0	0	0	1	3	4	1	0	0	0	0	0	9
12:00 PM	0	0	0	0	0	0	3	3	2	1	0	0	0	0	9
1:00	0	0	1	1	1	1	4	1	3	0	0	0	0	0	12
2:00	0	0	1	0	0	1	3	3	1	3	0	0	0	0	12
3:00	0	0	0	1	0	0	3	5	4	2	0	0	0	0	15
4:00	0	0	0	1	2	1	3	3	6	1	0	0	0	0	17
5:00	1	0	1	0	2	2	2	8	2	2	0	0	0	0	20
6:00	0	0	0	1	1	0	2	3	5	1	0	0	0	0	13
7:00	0	0	0	0	0	2	5	5	0	0	0	0	1	0	13
8:00	0	0	0	1	2	1	1	4	2	1	0	0	0	0	12
9:00	0	0	0	0	0	1	3	1	2	1	0	0	0	0	8
10:00	0	0	0	0	0	0	1	0	0	2	0	0	0	0	3
11:00	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
Total	1	1	9	7	12	21	40	50	36	15	0	0	1	0	193

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:00	0	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	0
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00	0	0	0	0	0	0	2	1	0	0	0	0	1	0	4
7:00	1	0	1	1	2	1	1	1	2	0	0	1	0	0	11
8:00	0	0	0	0	1	1	2	3	3	0	0	1	0	0	11
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	1	0	1	1	3	2	6	6	6	0	0	3	0	0	29
Grand Total	2	3	22	28	44	71	130	136	102	43	3	3	1	0	588

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	20.3			
	10 MPH Pace Speed	17-26			
	Number in Pace	391			
	Percent in Pace	66.5%			
	Number > 24 MPH	152			
	Percent > 24 MPH	25.9%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024	Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	0	1	1	0	3	3	8	3	0	0	0	0	0	19
10:00	0	0	3	1	1	4	4	4	5	1	0	0	0	0	0	23
11:00	0	0	0	1	1	2	3	5	4	0	1	0	0	0	0	17
12:00 PM	0	0	0	0	1	3	5	6	6	12	0	0	0	0	0	33
1:00	0	0	1	3	2	5	5	4	2	1	0	1	0	0	0	24
2:00	0	2	7	2	0	6	7	3	1	1	2	0	0	0	0	31
3:00	0	1	2	2	4	4	5	2	3	0	2	0	0	0	0	25
4:00	0	0	1	1	0	4	9	5	7	1	0	0	0	0	0	28
5:00	0	0	0	2	4	8	10	7	5	3	0	0	0	0	0	39
6:00	0	0	0	1	5	3	13	9	2	1	2	0	0	0	0	36
7:00	0	0	0	0	5	1	6	6	5	4	0	0	0	0	0	27
8:00	0	0	0	0	1	3	4	3	0	1	0	0	0	0	0	12
9:00	0	0	0	0	2	2	2	1	1	3	0	0	0	0	0	11
10:00	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	3
11:00	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	3
Total	0	3	14	14	28	46	77	58	52	31	7	1	0	0	0	331

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/21/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	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	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3
5:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00	0	0	0	1	2	0	1	4	4	0	0	0	0	0	12
7:00	0	1	0	1	1	2	2	4	4	0	1	0	0	0	16
8:00	0	0	1	0	3	1	1	5	2	3	0	0	0	0	16
9:00	0	0	1	3	2	4	3	3	4	3	2	0	0	0	25
10:00	0	0	1	1	0	3	3	3	3	1	0	0	0	0	15
11:00	0	0	0	0	1	2	5	2	3	2	0	0	0	0	15
12:00 PM	0	0	0	2	0	5	6	4	4	4	0	0	0	0	25
1:00	0	0	0	1	2	3	6	7	3	3	0	0	0	0	25
2:00	1	1	4	1	0	3	3	15	6	3	0	0	0	0	37
3:00	0	1	0	2	2	5	6	10	2	1	0	0	0	0	29
4:00	0	0	0	2	3	5	10	6	3	4	0	0	0	0	33
5:00	0	0	0	3	6	8	4	12	9	3	1	0	0	0	46
6:00	0	0	0	1	2	4	13	7	6	2	0	0	0	0	35
7:00	0	0	1	0	5	5	6	4	1	3	0	0	0	0	25
8:00	0	0	1	1	2	1	10	6	4	1	1	0	0	0	27
9:00	0	0	0	0	0	0	1	2	0	1	0	0	0	0	4
10:00	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
11:00	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
Total	1	3	9	21	32	53	84	98	59	36	5	0	0	0	401

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/22/2024	Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
	12:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
	1:00	0	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	0
	3:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	4:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
	5:00	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
	6:00	0	0	0	2	0	1	3	2	2	0	0	0	0	0	10
	7:00	0	3	0	1	2	5	5	7	3	2	1	1	0	0	30
	8:00	0	0	2	1	2	3	4	7	1	1	0	0	0	0	21
	9:00	0	1	0	0	0	2	0	4	4	1	0	0	0	0	12
	10:00	0	0	3	2	0	1	3	3	2	0	0	0	0	0	14
	11:00	0	0	0	0	0	2	3	6	2	0	1	0	0	0	14
	12:00 PM	0	0	0	0	0	0	5	5	4	1	1	0	0	0	16
	1:00	0	0	2	1	3	1	5	1	5	0	1	1	0	0	20
	2:00	0	0	1	1	0	3	6	10	3	6	0	0	0	0	30
	3:00	0	2	2	2	0	1	6	10	5	3	3	0	0	0	34
	4:00	0	0	0	3	2	3	5	5	10	3	0	0	0	0	31
	5:00	1	0	1	1	2	5	7	13	4	5	0	0	0	0	39
	6:00	0	0	1	2	2	1	4	7	13	1	0	0	0	0	31
	7:00	0	0	1	1	0	7	6	7	2	0	0	0	1	0	25
	8:00	0	0	0	4	3	2	3	6	3	1	0	0	0	0	22
	9:00	0	0	0	0	0	1	6	1	2	1	0	0	0	0	11
	10:00	0	0	0	0	0	0	2	0	3	4	1	0	0	0	10
	11:00	0	0	0	0	0	1	0	1	0	1	0	0	0	0	3
	Total	1	6	14	21	17	42	74	99	70	27	7	2	1	0	381

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/23/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
2:00	0	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	0
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00	0	0	0	1	0	1	2	1	1	0	0	0	1	0	7
7:00	1	0	1	1	7	3	3	5	5	1	0	1	0	0	28
8:00	0	0	1	0	1	1	3	5	5	0	0	2	0	0	18
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	1	0	2	2	8	5	10	12	12	1	0	4	0	0	57
Grand Total	3	12	39	58	85	146	245	267	193	95	19	7	1	0	1170

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	20.4			
	10 MPH Pace Speed	17-26			
	Number in Pace	752			
	Percent in Pace	64.3%			
	Number > 24 MPH	315			
	Percent > 24 MPH	26.9%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: K1

Station ID:

Location 1: Kayser Ave btwn E Lincoln Ave and E 6th St

Location 2: Royal Oak

Location 3:

Location 4:

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

5/20/2024			5/21/2024			5/22/2024			5/23/2024			5/24/2024			Weekday Average		5/25/2024		5/26/2024	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	0	0	1	1	0	0	*	*	0	0	*	*	*	*	*	*	*	
1:00	*	*	1	1	0	0	1	1	*	*	1	1	*	*	*	*	*	*	*	
2:00	*	*	0	1	0	0	0	0	*	*	0	0	*	*	*	*	*	*	*	
3:00	*	*	1	1	1	0	0	0	*	*	1	0	*	*	*	*	*	*	*	
4:00	*	*	2	1	1	1	0	1	*	*	1	1	*	*	*	*	*	*	*	
5:00	*	*	0	2	0	3	0	1	*	*	0	2	*	*	*	*	*	*	*	
6:00	*	*	7	5	6	4	3	4	*	*	5	4	*	*	*	*	*	*	*	
7:00	*	*	10	6	17	13	17	11	*	*	15	10	*	*	*	*	*	*	*	
8:00	*	*	8	8	10	11	7	11	*	*	8	10	*	*	*	*	*	*	*	
9:00	7	12	17	8	6	6	*	*	*	*	10	9	*	*	*	*	*	*	*	
10:00	13	10	7	8	5	9	*	*	*	*	8	9	*	*	*	*	*	*	*	
11:00	5	12	8	7	5	9	*	*	*	*	6	9	*	*	*	*	*	*	*	
12:00 PM	18	15	11	14	7	9	*	*	*	*	12	13	*	*	*	*	*	*	*	
1:00	14	10	15	10	8	12	*	*	*	*	12	11	*	*	*	*	*	*	*	
2:00	17	14	19	18	18	12	*	*	*	*	18	15	*	*	*	*	*	*	*	
3:00	12	13	11	18	19	15	*	*	*	*	14	15	*	*	*	*	*	*	*	
4:00	12	16	18	15	14	17	*	*	*	*	15	16	*	*	*	*	*	*	*	
5:00	17	22	23	23	19	20	*	*	*	*	20	22	*	*	*	*	*	*	*	
6:00	25	11	17	18	18	13	*	*	*	*	20	14	*	*	*	*	*	*	*	
7:00	10	17	11	14	12	13	*	*	*	*	11	15	*	*	*	*	*	*	*	
8:00	6	6	10	17	10	12	*	*	*	*	9	12	*	*	*	*	*	*	*	
9:00	5	6	2	2	3	8	*	*	*	*	3	5	*	*	*	*	*	*	*	
10:00	2	1	2	1	7	3	*	*	*	*	4	2	*	*	*	*	*	*	*	
11:00	1	2	2	1	1	2	*	*	*	*	1	2	*	*	*	*	*	*	*	
Total Day	164	167	202	199	188	193	28	29	0	0	194	197	0	0	0	0	0	0	0	
AM Peak Volume	10:00	9:00	9:00	8:00	7:00	7:00	7:00	7:00			7:00	7:00								
	13	12	17	8	17	13	17	11			15	10								
PM Peak Volume	6:00	5:00	5:00	5:00	3:00	5:00					5:00	5:00								
Comb Total ADT	331		401		381		57		0		391		0		0		0		0	
		ADT: 390			AADT: 390															

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Wednesday, May 15, 2024 7:33:40 PM

Traffic Committee Request

Please complete required fields and submit.

Name	Tammy Rossilli
Email Address	tammyrossilli@gmail.com
Street Address	706 Kayser Ave
Phone Number	2482177834
Location of Concern	Kayser Ave and Fifth St
Type of Issue	Safety
Detailed Description of Concern	The speeding and cut through traffic needs to be reduced for the safety of our kids and the kids at the park as well as the danger I feel not knowing if the cars traveling east and west know that this is not a 4 way stop and the cars headed north and south do not need to stop.
Proposed Solution	A 4 way stop sign at the corner of Kayser and Sixth street.
Media Upload	<i>Field not completed.</i>
Important	I have reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time, and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the Traffic Committee.

Name	Jason Kassab
------	--------------

Address	712 Kayser Ave
Email	kassabjay@gmail.com
Name	Matt Curtis
Address	716 Kayser Ave
Email	mattdcurtis@gmail.com

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Tuesday, May 14, 2024 10:24:15 AM

Traffic Committee Request

Please complete required fields and submit.

Name	Jason Kassab
Email Address	kassabjay@gmail.com
Street Address	712 Kayser Ave
Phone Number	5867093248
Location of Concern	Corner of Sixth and Kayser Ave
Type of Issue	Traffic or pedestrian signal
Detailed Description of Concern	The corner of Kayser and Sixth is a 2 way stop if traveling East and West...it's a dangerous intersection. People use our street so much because it runs almost straight from Lincoln to 11 mile and at the end of our street is a Liquor Store, so they leave there and fly up our street to get to 4th or 11 Mile. There is also a park at the corner of Sixth and Kayser, Grant Park. It's too dangerous to have cars driving like this near that park with no need to stop if traveling North and South. There have been many times that the street has cars parked for games at the park so the cars traveling east and west cannot see the cars going north and south and do not have a stop sign. Our street is used as a cut through and cars speed quite a bit up and down our street and we have young kids who live on our block. The type of issue this causes is a safety concern due to the sight distance when cars are parked on the street when there is a game at the park as well as the speeding concerns while kids are playing outside on our street.
Proposed Solution	To reduce the speeding and safety of the intersection and to slow down the cut through traffic I would like to see this intersection become a 4 way stop instead of a 2 way stop. This will slow cut through drivers speeding down, will protect cars at the intersection and keep our kids living on our street or playing at the park safe from cars that gain speed without having to stop or slow down at this intersection.
Media Upload	<i>Field not completed.</i>
Important	I have reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

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Name	Tammy Rosselli
Address	706 Kayser Ave
Email	tammyrossilli@gmail.com
Name	Matt Curtis
Address	716 Kayser Ave
Email	mattdcurtis@gmail.com

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Wednesday, May 15, 2024 8:53:33 PM

Traffic Committee Request

Please complete required fields and submit.

Name	Edward Reedy
Email Address	reedyt7@gmail.com
Street Address	719 Kayser Ave
Phone Number	248-556-6142
Location of Concern	Corner of Kayser Ave and E. Sixth Street
Type of Issue	Cut-thru traffic
Detailed Description of Concern	Grant Park is located at the Corner of Kayser Ave and E. Sixth Street. There is a lot of cut-thru traffic on Kayser and also a lot of pedestrians and kids that are on this street. In addition Grant Park has soccer games almost every night during soccer season. The cut-thru traffic can be dangerous for kids who are leaving there cars to get to the park as well as the spectators that go to watch the games. Since drivers don't need to stop until they get all the way past Grant park they are speeding all the way through to almost 4th street. Neighbors have put out signs to slow down but this has had little to no affect.
Proposed Solution	A Stop sign at North and South bound Kayser would help make this a street safer for the residents as well as the kids and parents who come to enjoy a soccer game. I have read the Traffic Committee's FAQ about Stop signs. There is a house on this corner that comes almost all the way to the sidewalk causing "Sight distance issues" for drivers coming South on Kayser and there is "Excessive Traffic" on this street due to the ease of cutting through the neighborhood from Lincoln to 11 mile.
Media Upload	<i>Field not completed.</i>
Important	I have the reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

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and we require neighborhood support for a particular issue before beginning review.

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Name	Jason Kassab
Address	712 Kayser Ave
Email	Kassabjay@gmail.com
Name	Melanie Humphrey
Address	720 Kayser Ave
Email	Grnmel@gmail.com

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Tuesday, May 14, 2024 6:39:07 PM

Traffic Committee Request

Please complete required fields and submit.

Name	Matt
Email Address	Curtis
Street Address	716 Kayser Ave
Phone Number	2485094646
Location of Concern	Kayser Avenue and E. 6th Street
Type of Issue	Cut-thru traffic
Detailed Description of Concern	People use Kayser Ave as a cut thru during rush hour, speeding recklessly down the Kayser Ave (I bought a radar gun and regularly clock vehicles at 30-45 mph). Other drivers speed down Kayser Ave the output the day. This is a massive safety risk for children who live and play on Kayser Ave. It's also an extreme safety risk with the children playing at Grant Park and those children and adults who use the Grant Park soccer field. The RO police have placed a speed cameras on Kayser Ave and all it does is slow down traffic while it's in place. Afterward, drivers continue speeding.
Proposed Solution	Add Stop signs for north and south bound traffic or raised intersection at intersection of Kayser Avenue and E. 6th Street to slow down north and south bound traffic. This would slow down traffic, and protect children who live on not only on Kayser Ave, but also children using Grant Park.
Media Upload	<i>Field not completed.</i>
Important	I have reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time, and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the Traffic Committee.

Name	Jason Kassab
Address	712 Kayser Ave
Email	kassabjay@gmail.com
Name	Tammy Roselli
Address	706 Kayser Ave
Email	Tammy roselli@gmail.com

Email not displaying correctly? [View it in your browser.](#)



Royal Oak Traffic Committee

AGENDA ITEM

Title	Request to install guardrail in public right-of-way on northbound Coolidge Highway adjacent to 2804 Coolidge apartment complex
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

Requestor Concern:

A request was received from Ari Zartarian, owner of the apartment building located at 2804 Coolidge Highway, to install a guardrail in the public right-of-way between the road and their building. He states within the last 24 months, three vehicles have crashed into the building that were heading northbound on Coolidge, damaging the building and displacing residents for months. For varying reasons, the drivers are not properly veering left at the curve north of the cemetery and he would like a barrier installed to protect his residents, who are very concerned for their safety after these multiple incidents.

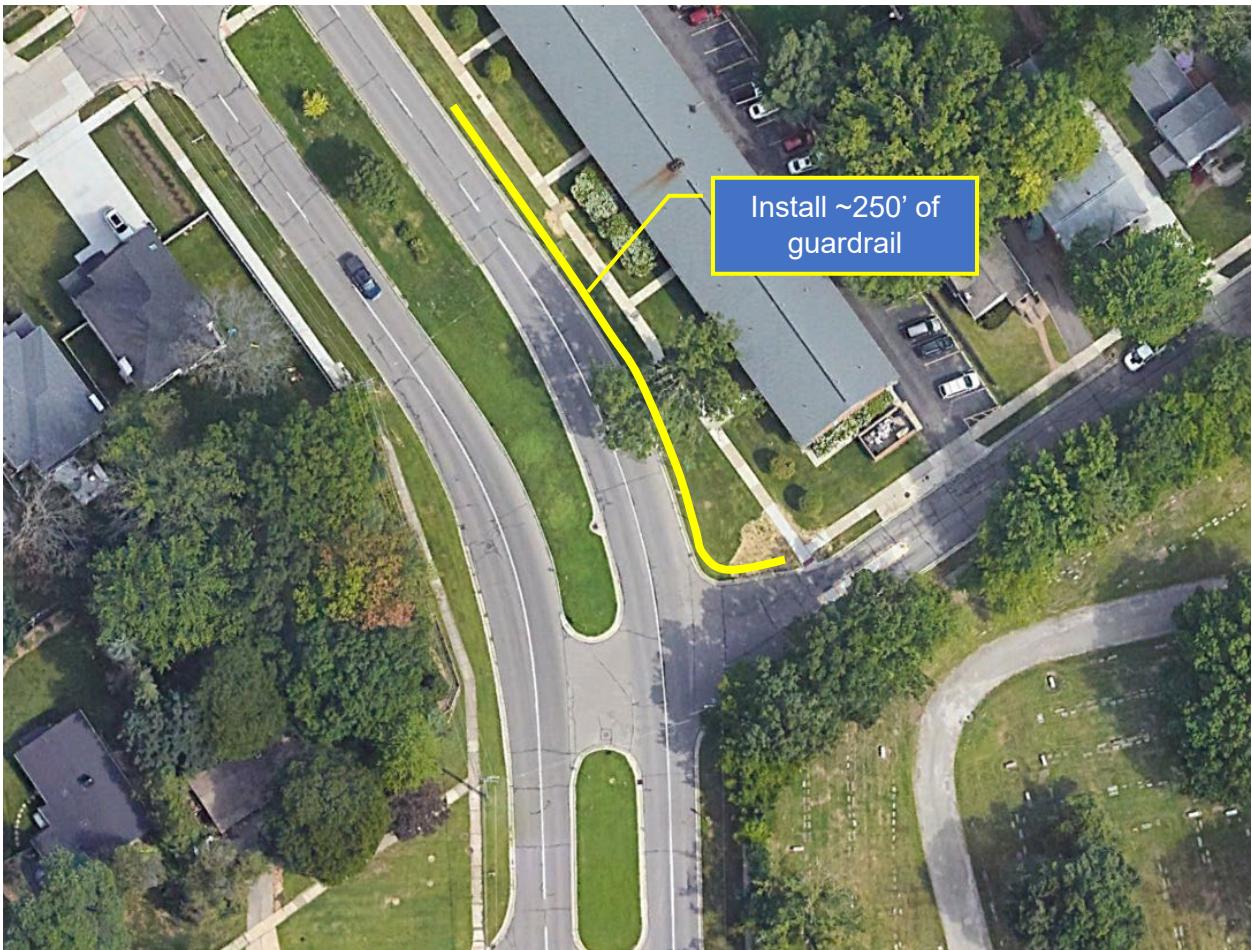
Staff Analysis:

The Staff Traffic Committee has further reviewed this request and determined that:

1. Coolidge Highway between Trafford Road and Warick Road is a major road consisting of composite pavement with concrete curbing. The road is a divided highway with two lanes in each direction, and each road segment has widths ranging from 26 to 32 feet wide.
2. The three-year+ (2021-current date) accident report shows six crashes in the area. Four of them were related to crashes at the Warick intersection north of the curve. One accident involved a driver under the influence not properly turning at the curve and striking the apartment building as described by the requestor (July 2022). An accident from this year showed another instance of a vehicle failing to turn at the curve and striking the building. The report stated the driver did not appear under the influence or distracted. The ten-year accident report showed additional instances of cars not turning properly hitting signs and the utility pole located along the curve.
3. SEMCOG's traffic volume map showed approximately 7,700 vehicles per day driving northbound on Coolidge in September 2023.
4. According to the AASHTO Roadside Design Guide the following comments are applicable:
 - a. Guardrail should only be considered if the result of a car hitting the guardrail will be less severe than the car hitting the unshielded object.
 - b. Table 3-1 in the guidance document notes that a clear zone of 14 to 16 feet is ideal for Coolidge Highway (speed limit is less than 40 mph and average daily traffic > 6,000 vehicles per day).

- c. In urban areas with road curbing, a recommended goal is to achieve at least 6 feet of lateral offset between the face of curb and possible obstructions at horizontal curves. (Section 10.1.3.1).
Guardrails too close to the traveled way can sometimes cause accidents or driver discomfort.
- d. The apartment building is approximately 40 feet away from the road, and an existing tree is approximately 20 feet away from the road. There is also a utility pole that is approximately 5 feet away from the curb.

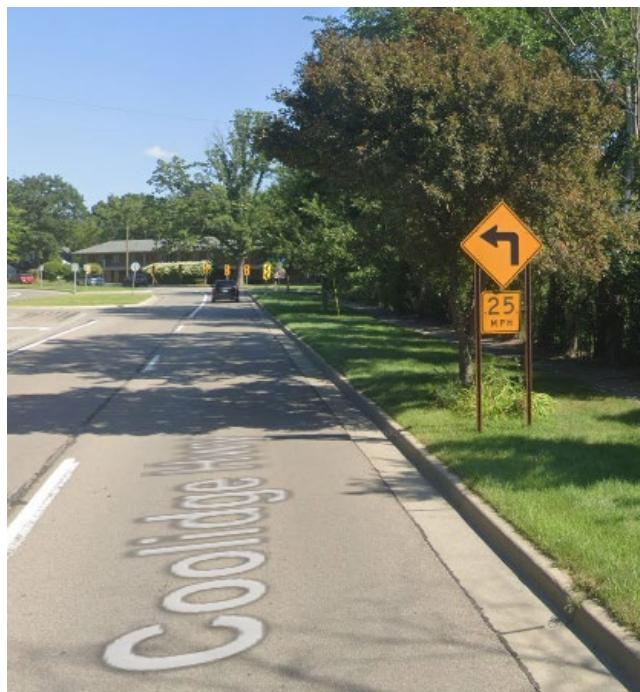
5. Considering crash history, staff recommends installation of guardrail along the curve. One additional set of chevron signage is also recommended as shown below.



6. The cost of this work is estimated to be \$45,000. The city has some unused budget for a 2024 project and will be able to fund this work without a budget amendment. If approved, staff will attempt to have the guardrail installed this construction season.



7. The curve warning sign shown below is approximately 320 feet south of the road curve. According to the Michigan Manual of Uniform Traffic Control Devices, the sign should be located within 100 feet of the start of the curve for this situation.



Suggested Staff Recommendation: To install approximately 250 feet of guardrail a minimum of three feet from the curb along the east side of Coolidge just north of Trafford Road, to relocate the existing W1-1 curve warning signs to be within 100 feet of the start of the curve for both northbound and southbound Coolidge traffic, and to install two additional chevron signs on the east side of Coolidge Highway within the road curvature area.

Estimated cost: \$45,000

Coolidge Highway - Trafford to Warick

#1	Location: WARICK (0.149) 0 feet NEof COOLIDGE HWY							Crash ID: 2331883	
Date:	07/17/2021	Day:	Sat	Hour:	2pm	Weather:	clear	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 3	
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	E	start on rdwy	veh in transpt	none	none	none	failed to yield	car	rtside
2	N	go straight	veh in transpt	none	none	none	none	car	ctrfront

UD10: 2331883

#2	Location: NB COOLIDGE (4.598) 0 feet Xof WARICK RD							Crash ID: 2344054	
Date:	08/03/2021	Day:	Tue	Hour:	5pm	Weather:	cloudy	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 2	
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	E	go straight	veh in transpt	none	none	none	failed to yield	car	rtrear
2	N	go straight	veh in transpt	none	none	none	none	car	ctrfront

UD10: 2344054

#3	Location: COOLIDGE (4.536) 26 feet Nof TRAFFORD RD							Crash ID: 2648881	
Date:	07/24/2022	Day:	Sun	Hour:	3pm	Weather:	clear	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	1	Injy 0: 1	
CVT:	Royal Oak		Area:	curved		HBD:	Y	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	N	none	other pole	none	none	none	other	car	ctrfront

UD10: 2648881

#4	Location: COOLIDGE (0.581) 0 feet Xof WARICK RD							Crash ID: 2757746	
Date:	11/23/2022	Day:	Wed	Hour:	4pm	Weather:	clear	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	1	Injy 0: 1	
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	E	go straight	veh in transpt	none	none	none	failed to yield	car	ctrfront
2	S	go straight	veh in transpt	none	none	none	none	car	ctrfront

UD10: 2757746

#5	Location: NB COOLIDGE (4.598) 0 feet Xof WARICK RD						Crash ID: 2862625		
Date:	03/30/2023	Day:	Thu	Hour:	5pm	Weather:	clear		
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0		
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N		
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	E	start on rdwy	veh in transpt	none	none	none	failed to yield	car	ctrfront
2	N	go straight	veh in transpt	none	none	none	none	car	lftrear

UD10: [2862625](#)

Crash Type

Count	Type
0	uncoded
1	single
0	head-on
0	head-on/lt
4	angle
0	rr-end
0	rr-end/lt
0	rr-end/rt
0	ss-same
0	ss-opp
0	back
0	other
0	unknown
Totals	5

Lighting Conditions

Count	Type
0	uncoded
4	day
1	dawn
0	dusk
0	dark/ltd
0	dark/unltd
0	other
0	unknown
Totals	5

Weather Conditions

Count	Type
0	uncoded
4	clear
1	cloudy
0	fog
0	rain
0	snow
0	wind
0	sleet/hail
0	blowing snow
0	blowing sand
0	smoke
0	unknown
Totals	5

Road Condition

Count	Type
0	uncoded
5	dry
0	wet
0	ice
0	snow
0	mud
0	slush
0	debris
0	water
0	sand
0	oily
0	other
0	unknown
Totals	5

Crashes by Month

Count	Type
0	January
0	February
1	March
0	April
0	May
0	June
2	July
1	August
0	September
0	October
1	November
0	December
Totals	5

Hazardous Action

Count	Type
4	none
0	speeding
0	spd too slow
4	failed to yield
0	disrgd traffic cntrl
0	wrong way
0	left of center
0	imprp passing
0	imprp lane use
0	imprp turn
0	imprp/no signal
0	imprp backing
0	unable to stop
1	other
0	unknown
0	reckls driving
0	carels driving
Totals	9

Unit Type

Count	Type
0	Bicyclist
0	Engineer
9	Vehicle
0	Pedestrian
Totals	9

Crashes by Year

Count	Type
2	2021
2	2022
1	2023
Totals	5

Crash Severity

	Fatal	A	B	C	No Injy	Total
Persons	0	0	0	2	0	2
Crashes	0	0	0	2	3	5

Alcohol in Crashes

	Fatal	A	B	C	PDO	Total
Drinking	0	0	0	1	0	1
Not Drinking	0	0	0	1	3	4
Totals	0	0	0	2	3	5

Crashes per Hour by Day

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
12a-1a	0	0	0	0	0	0	0	0
1a-2a	0	0	0	0	0	0	0	0
2a-3a	0	0	0	0	0	0	0	0
3a-4a	0	0	0	0	0	0	0	0
4a-5a	0	0	0	0	0	0	0	0
5a-6a	0	0	0	0	0	0	0	0
6a-7a	0	0	0	0	0	0	0	0
7a-8a	0	0	0	0	0	0	0	0
8a-9a	0	0	0	0	0	0	0	0
9a-10a	0	0	0	0	0	0	0	0
10a-11a	0	0	0	0	0	0	0	0
11a-12p	0	0	0	0	0	0	0	0
12p-1p	0	0	0	0	0	0	0	0
1p-2p	0	0	0	0	0	0	0	0
2p-3p	0	0	0	0	0	0	1	1
3p-4p	1	0	0	0	0	0	0	1
4p-5p	0	0	0	1	0	0	0	1
5p-6p	0	0	1	0	1	0	0	2
6p-7p	0	0	0	0	0	0	0	0
7p-8p	0	0	0	0	0	0	0	0
8p-9p	0	0	0	0	0	0	0	0
9p-10p	0	0	0	0	0	0	0	0
10p-11p	0	0	0	0	0	0	0	0
11p-12a	0	0	0	0	0	0	0	0
Totals	1	0	1	1	1	0	1	5

STATE OF MICHIGAN TRAFFIC CRASH REPORT

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number		Date of Birth (Age)	License Type	Endorsements	Sex	Race	Total Occupants	Hazardous Action	
	Unit Type	Driver Information					Driver is Owner	Injury	Position			Restraint	
	Driver Condition at Time of Crash 1st 2nd					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital						Ambulance						
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> O PBT <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Alcohol Test Results <input type="checkbox"/> Pending			Test Results:		Interlock Device		
	Drug Suspected	Contributing Factor	Drug Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Drug Test Results <input type="checkbox"/> Pending			Test Results:		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other		
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior				
Sequence of Events (● indicates MOST harmful event)		First	Second	Third	Fourth								
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Carrier Information						USDOT		MC		MPSC		
							Driver's CDL Type	Endorsements <input type="checkbox"/> O <input type="checkbox"/> P <input type="checkbox"/> O T <input type="checkbox"/> N <input type="checkbox"/> O S <input type="checkbox"/> X	CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other				
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.			Vehicle Configuration			Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #		
	OWNERS	Owner Information					Owner Information						
WITNESS	Witness Information ##### ##### #####, # #####-### (##) ####-####					Witness Information ##### ##### #####, # #####-### (##) ####-####							
Investigated at Scene	Yes	Reported Date (Time)	07/24/2022 (15:10)	1st Investigator Name (Badge)	SMITH (459)			2nd Investigator Name (Badge)	Photos			No	
<p>Narrative</p> <p>UNIT 1 WAS TRAVELING N/B ON COOLIDGE WHEN THEY LOST CONTROL OF VEHICLE AND VEERED RIGHT, JUMPED THE CURB EAST OF COOLIDGE, STRUCK A TRAFFIC SIGN WITH AN ARROW INDICATING A CURVE AHEAD. CONTINUED NORTH ACROSS THE LAWN OF THE APARTMENT BUILDING(2830 COOLIDGE). UNIT 1 SCRAPED ALONG SIDE THE FRONT OF THE APARTMENT BUILDING, KNOCKING DOWN SEVERAL POLES HOLDING THE UPSTAIRS BALCONIES IN PLACE. ALSO TORE DOWN PARTS OF THE AWNINGS OF THE GROUND FLOOR APARTMENTS, AND DAMAGED THE WINDOW TO APARTMENT 1. DRIVER OF UNIT 1 WAS ULTIMATELY ARRESTED FOR OWI. SHE APPEARED TO HAVE SOME INJURIES (I.E. BLISTERS/BRUIISING) TO HER WRIST MOST LIKELY FROM AIRBAG DEPLOYMENT. UNIT 1 WAS IMPOUNDED AND TOWED TO A&M.</p>													
<p>Diagram</p> <p>WARICK</p> <p>Not To Scale</p>													

SANITIZED SANITIZED SANITIZED

Authority: 1949 PA 300, Sec.257.622
 Compliance: Required MSP UD-10E
 Penalty: \$100 and/or 90 days (Rev 11/2020)

External # 1287343 Crash ID 2648881

Page 02 of 03
 File Class C3146

Incident # 220026044
 Reviewer DESANO (00408)

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI MI 6371400		Department Name Royal Oak Police Department							
Crash Date 07/24/2022	Crash Time 15:10	No. of Units 01	Crash Type Single Motor Vehicle	Special Circumstances <input checked="" type="radio"/> None <input type="radio"/> Fleeing Police <input type="radio"/> Unknown	O Hit and Run <input type="radio"/> O Unknown	O School Bus <input type="radio"/> O Animal	Special Checks <input type="radio"/> O Fatal <input type="radio"/> O Non-Traffic Area <input type="radio"/> O ORV/Snowmobile		
County 63 - Oakland	Traffic Control None		Relation to Roadway Outside of Shoulder/Curb		Weather Clear		Area NON-FRWY Curved Roadway		
City/Twp 90 - Royal Oak	Contributing Circumstances 1st None			2nd	Light Daylight	Road Surface Condition Dry	Total Lanes 02	Speed Limit 35	Posted Yes
Work Zone (if applicable) Type Workers Present Activity Location									

LOCATION	Prefix COOLIDGE	Road Type HWY		Suffix	Divided Roadway
	Distance / Direction 50 Feet S	Trafficway Divided Hwy wo/Barrier			
	Prefix WARICK	Road Type RD		Suffix	Divided Roadway

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type <input type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex	Race	Total Occupants	Hazardous Action		
	Unit Type	Driver Information				Driver is Owner	Injury	Position			Restraint		
	Driver Condition at Time of Crash 1st					Driver Distracted By		Ejected	Trapped	Airbag Deployed			
	Hospital					Ambulance							
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Field <input type="radio"/> PBT			O Urine <input type="radio"/> Refused <input type="radio"/> Not Offered	Alcohol Test Results <input type="radio"/> Pending	Test Results:		Interlock Device			
	Drug Suspected	Contributing Factor	Drug Test Type <input type="radio"/> Blood <input type="radio"/> Urine <input type="radio"/> Field <input type="radio"/> Refused			O Not Offered	Drug Test Results <input type="radio"/> Pending	Test Results:		Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other			
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle				Automation System Level Engaged at Time of Crash						
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior				
Sequence of Events (● indicates MOST harmful event)		First		Second		Third		Fourth					

PASSENGERS	Passenger Information			Date of Birth (Age)	Sex	Race	Position	Restraint		
				Injury	Ejected	Trapped	Airbag Deployed			
	Hospital			Ambulance						
Passenger Information			Date of Birth (Age)	Sex	Race	Position	Restraint			
			Injury	Ejected	Trapped	Airbag Deployed				
Hospital			Ambulance							

TRUCK/ BUS	Carrier Information			USDOT		MC	MPSC		
				Driver's CDL Type <input type="radio"/> O <input type="radio"/> N <input type="radio"/> O <input type="radio"/> S	Endorsements <input type="radio"/> P <input type="radio"/> O <input type="radio"/> T <input type="radio"/> X	CDL Exempt <input type="radio"/> O Farm <input type="radio"/> O Other			
	GVWR/GCWR <input type="radio"/> O 10,000 lbs. or Less <input type="radio"/> O 10,001 - 26,000 lbs. <input type="radio"/> O Greater than 26,000 lbs.			Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material <input type="radio"/> O Placard <input type="radio"/> O Cargo Spill	ID #

OWNERS	Owner Information			Owner Information					
Damaged Property DAMAGE TO APARTMENT 1 2830 COO			Public No	Owner & Phone ##### ####					

SANITIZED SANITIZED SANITIZED

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number		Date of Birth (Age)	License Type	Endorsements	Sex	Race	Total Occupants	Hazardous Action	
	Unit Type	Driver Information					Driver is Owner	Injury	Position			Restraint	
	Driver Condition at Time of Crash 1st _____ 2nd _____					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital						Ambulance						
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> PBT <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Alcohol Test Results <input type="checkbox"/> Pending			Test Results:		Interlock Device		
	Drug Suspected	Contributing Factor	Drug Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Drug Test Results <input type="checkbox"/> Pending			Test Results:		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other		
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior				
Sequence of Events (● indicates MOST harmful event)		First	Second	Third	Fourth								
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Carrier Information						USDOT		MC	MPSC			
							Driver's CDL Type	Endorsements <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> O <input type="checkbox"/> T <input type="checkbox"/> N <input type="checkbox"/> O <input type="checkbox"/> X	CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other				
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.			Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #			
	OWNERS	Owner Information					Owner Information						
WITNESS	Witness Information					Witness Information							
Investigated at Scene	Reported Date (Time)	1st Investigator Name (Badge)			2nd Investigator Name (Badge)			Photos					
Narrative						Diagram							

SANITIZED SANITIZED SANITIZED

Authority: 1949 PA 300, Sec.257.622
 Compliance: Required MSP UD-10E
 Penalty: \$100 and/or 90 days (Rev 11/2020)

External # 1287343 Crash ID 2648881

Page 03 of 03
 File Class C3146
 Incident # 220026044
 Reviewer DESANO (00408)

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI MI 6371400		Department Name Royal Oak Police Department							
Crash Date 07/24/2022	Crash Time 15:10	No. of Units 01	Crash Type Single Motor Vehicle	Special Circumstances <input checked="" type="radio"/> None <input type="radio"/> Fleeing Police <input type="radio"/> Unknown	O Hit and Run <input type="radio"/> O Unknown	O School Bus <input type="radio"/> O Animal	Special Checks <input type="radio"/> O Fatal <input type="radio"/> O Non-Traffic Area <input type="radio"/> O ORV/Snowmobile		
County 63 - Oakland	Traffic Control None		Relation to Roadway Outside of Shoulder/Curb		Weather Clear		Area NON-FRWY Curved Roadway		
City/Twp 90 - Royal Oak	Contributing Circumstances 1st None			2nd	Light Daylight	Road Surface Condition Dry	Total Lanes 02	Speed Limit 35	Posted Yes
Work Zone (if applicable) Type Workers Present Activity Location									

LOCATION	Prefix COOLIDGE	Primary Road Name COOLIDGE	Road Type HWY	Suffix	Divided Roadway
	Distance / Direction 50 Feet S	Trafficway Divided Hwy wo/Barrier			
	Prefix WARICK	Intersecting Road Name WARICK	Road Type RD	Suffix	Divided Roadway

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type <input type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex	Race	Total Occupants	Hazardous Action		
	Unit Type	Driver Information				Driver is Owner	Injury	Position			Restraint		
	Driver Condition at Time of Crash 1st					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital					Ambulance							
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="radio"/> Breath <input type="radio"/> Field <input type="radio"/> O Blood <input type="radio"/> O PBT	O Urine <input type="radio"/> O Refused <input type="radio"/> O Not Offered	Alcohol Test Results <input type="radio"/> Pending			Test Results:		Interlock Device			
	Drug Suspected	Contributing Factor	Drug Test Type <input type="radio"/> Blood <input type="radio"/> Field <input type="radio"/> O Urine <input type="radio"/> O Refused	O Not Offered	Drug Test Results <input type="radio"/> Pending			Test Results:		Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other			
	Vehicle Registration	State	Vehicle Description	Year	Make	Model				Color			
	VIN		Vehicle Type		Special Vehicles			Private Trailer Type		Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)			Vehicle Direction	Vehicle Use			Action Prior				
Sequence of Events (● indicates MOST harmful event)		First		Second		Third		Fourth					

PASSENGERS	Passenger Information			Date of Birth (Age)	Sex	Race	Position	Restraint		
				Injury	Ejected	Trapped	Airbag Deployed			
	Hospital			Ambulance						
	Passenger Information			Date of Birth (Age)	Sex	Race	Position	Restraint		
			Injury	Ejected	Trapped	Airbag Deployed				
Hospital			Ambulance							

TRUCK/ BUS	Carrier Information				USDOT		MC	MPSC	
					Driver's CDL Type <input type="radio"/> O H <input type="radio"/> O N <input type="radio"/> O P <input type="radio"/> O S <input type="radio"/> O T <input type="radio"/> O X	Endorsements <input type="radio"/> O Farm <input type="radio"/> O Other	CDL Exempt		
	GVWR/GCWR <input type="radio"/> O 10,000 lbs. or Less <input type="radio"/> O 10,001 - 26,000 lbs. <input type="radio"/> O Greater than 26,000 lbs.				Vehicle Configuration	Cargo Body Type	Medical Card	Hazardous Material <input type="radio"/> O Placard <input type="radio"/> O Cargo Spill	ID #

OWNERS	Owner Information				Owner Information					
	Damaged Property APARTMENT BUILDING 2830 COOLID				Public No	Owner & Phone ##### ####				

SANITIZED SANITIZED SANITIZED

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number		Date of Birth (Age)	License Type	Endorsements	Sex	Race	Total Occupants	Hazardous Action	
	Unit Type	Driver Information					Driver is Owner	Injury	Position			Restraint	
	Driver Condition at Time of Crash 1st _____ 2nd _____					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital						Ambulance						
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Field <input type="checkbox"/> PBT <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Alcohol Test Results <input type="checkbox"/> Pending			Test Results:		Interlock Device		
	Drug Suspected	Contributing Factor	Drug Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Drug Test Results <input type="checkbox"/> Pending			Test Results:		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other		
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior				
Sequence of Events (● indicates MOST harmful event)		First	Second	Third	Fourth								
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Carrier Information						USDOT		MC	MPSC			
							Driver's CDL Type	Endorsements <input type="checkbox"/> H <input type="checkbox"/> O <input type="checkbox"/> P <input type="checkbox"/> O T <input type="checkbox"/> N <input type="checkbox"/> O S <input type="checkbox"/> O X	CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other				
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.			Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #			
	OWNERS	Owner Information					Owner Information						
WITNESS	Witness Information					Witness Information							
Investigated at Scene	Reported Date (Time)	1st Investigator Name (Badge)			2nd Investigator Name (Badge)			Photos					
Narrative						Diagram							

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI MI 6371400		Department Name Royal Oak Police Department						Reviewer BUDZYNOWSKI (00316)		
Crash Date 05/20/2024	Crash Time 16:46	No. of Units 01	Crash Type Single Motor Vehicle	Special Circumstances <input checked="" type="radio"/> None <input type="radio"/> Fleeing Police	O Hit and Run <input type="radio"/> Unknown	O School Bus <input type="radio"/> Animal	Special Checks <input type="radio"/> Fatal <input type="radio"/> Non-Traffic Area <input type="radio"/> ORV/Snowmobile			
County 63 - Oakland	Traffic Control None		Relation to Roadway On the Road		Weather Clear		Area NON-FRWY Curved Roadway			
City/Twsp 90 - Royal Oak	Contributing Circumstances 1st None			2nd	Light Daylight	Road Surface Condition Dry		Total Lanes 02	Speed Limit 35	Posted Yes
Work Zone (if applicable)		Type	Workers Present		Activity	Location				

LOCATION	Prefix	Primary Road Name COOLIDGE	Road Type HWY	Suffix	Divided Roadway
	Distance / Direction 50 Feet N	Trafficway Divided Hwy wo/Barrier			
	Prefix	Intersecting Road Name TRAFFORD	Road Type RD	Suffix	Divided Roadway

Unit Number 01	Unit Known Yes	State MI	Driver License Number #####/#/#/#/#/#/#	Date of Birth (Age) ###/##/#### (29)	License Type ● Operator ○ Chauffeur ○ Moped	Endorsements ○ Cycle ○ Farm ○ Recreation	Sex F	Race W	Total Occupants 01	Hazardous Action Other
Unit Type MV	Driver Information #####/#/#/#/#/#/#/#/#/#/#/#/# #####/#/#/#/#/#/#/#/#/#/#/#/# OAK PARK, MI 48237-1895 (##) # #- # ##				Driver is Owner Yes	Injury C	Position Front - Left	Restraint Shoulder and Lap Belt		
Driver Condition at Time of Crash				Driver Distracted By			Ejected	Trapped	Airbag Deployed	

1st Appeared Normal 2nd Not Distracted Not Deployed

ROYAL OAK FIRE DEPARTMENT

No	No	O Breath O Field	O Blood O PBT	O Urine O Refused	● Not Offered	O Pending	Test Results:	No
Drug Suspected No.	Contributing Factor No.	Drug Test Type O Breath O Blood O Urine O Refused	Drug Test Results O Pending O Not Offered O Test Results	Citation Issued O Not Issued				

Vehicle Registration	State	Vehicle Description	Year	Make	Model	Color
EMZ7282	MI		2019	FORD	EDGE	WHITE

VIN 2FMPK4J92KBC46767	Vehicle Type Passenger Car, SUV, Van	Special Vehicles Not Applicable	Private Trailer Type	Vehicle Defect
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Automation System(s) in Vehicle No	Automation System Level in Vehicle No Automation	Automation System Level Engaged at Time of Crash No Automation	
Insurance Company	Insurance Policy #	Towed By	Towed To

AM TOWING 248-398-8309

Sequence of First Second Third Fourth
Events 04 - Ran Off Roadway-Right 28 - Traffic Sign / Post • 41 - Building
● indicates MOST harmful event

Passenger Information	Date of Birth (Age)	Sex	Race	Position	Restraint
-----------------------	---------------------	-----	------	----------	-----------

Passenger **Injury** **Ejected** **Trapped** **Airbag Deployed**

Hospital	Ambulance
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Passenger Information Date of Birth (Age) Sex Race Position Restraint

PASS	Injury	Ejected	Trapped	Airbag Deployed	

Hospital	Ambulance		
911-111-1111	911-222-2222	911-333-3333	911-444-4444

Driver's CDL Type Endorsements CDL Exempt

Owner Information
What information _____

SANITIZED SANITIZED SANITIZED

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type	Endorsements	Sex	Race	Total Occupants	Hazardous Action	
	Unit Type	Driver Information				Driver is Owner	Injury	Position			Restraint	
	Driver Condition at Time of Crash 1st _____ 2nd _____					Driver Distracted By			Ejected	Trapped	Airbag Deployed	
	Hospital					Ambulance						
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Field <input type="checkbox"/> O PBT <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Alcohol Test Results <input type="checkbox"/> Pending			Test Results:		Interlock Device	
	Drug Suspected	Contributing Factor	Drug Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Drug Test Results <input type="checkbox"/> Pending			Test Results:		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other	
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color			
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect		
	Automation System(s) in Vehicle		Automation System Level in Vehicle				Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To		
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior			
Sequence of Events (● indicates MOST harmful event)		First	Second	Third	Fourth							
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint			
					Injury	Ejected	Trapped	Airbag Deployed				
	Hospital					Ambulance						
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint			
					Injury	Ejected	Trapped	Airbag Deployed				
	Hospital					Ambulance						
	Carrier Information					USDOT			MC	MPSC		
						Driver's CDL Type	Endorsements <input type="checkbox"/> H <input type="checkbox"/> O <input type="checkbox"/> P <input type="checkbox"/> O T <input type="checkbox"/> N <input type="checkbox"/> O S <input type="checkbox"/> O X		CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other			
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.			Vehicle Configuration			Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #	
	OWNERS	Owner Information				Owner Information						
Witness Information ##### ##### #####, # #####-### (##) ####-####				Witness Information ##### ##### #####, # #####-### (##) ####-####								
Investigated at Scene Yes	Reported Date (Time) 05/20/2024 (16:46)	1st Investigator Name (Badge) SMITH (459)			2nd Investigator Name (Badge)			Photos No				
<p>Narrative</p> <p>UNIT 1 WAS TRAVELING N/B COOLIDGE NEAR TRAFFORD, WHEN THEY WENT OFF THE ROAD TO THE RIGHT STRIKING A TRAFFIC SIGN AND AN APARTMENT BUILDING. DRIVER OF UNIT 1 APPEARED NORMAL ON SCENE BUT ADVISED SHE WAS UNSURE OF WHAT HAPPENED. WITNESS ADVISED THAT UNIT 1 MADE NO ATTEMPT TO FOLLOW THE CURVE OF COOLIDGE, CONTINUED STRAIGHT, WENT OVER THE CURB, STRUCK A SIGN, AND THEN STRUCK THE BUILDING. NO INJURIES TO THE RESIDENT OF UNIT 5, WHOM WAS HOME AT THE TIME OF THE CRASH. DRIVER OF UNIT 1 WAS TRANSPORTED TO COREWELL TO BE CHECKED OUT.</p>					<p>Diagram</p> <p>Not To Scale</p>							

Authority: 1949 PA 300, Sec.257.622
 Compliance: Required MSP UD-10E
 Penalty: \$100 and/or 90 days (Rev 11/2020)

External # 1469912 Crash ID 3204444

Page 02 of 02
 File Class C3155

Incident # 240017841
 Reviewer BUDZYNOWSKI (00316)

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI MI 6371400			Department Name Royal Oak Police Department										
Crash Date 05/20/2024	Crash Time 16:46	No. of Units 01	Crash Type Single Motor Vehicle	Special Circumstances <input checked="" type="radio"/> None <input type="radio"/> Fleeing Police <input type="radio"/> Unknown	O Hit and Run <input type="radio"/> <input type="radio"/> <input type="radio"/>	O School Bus <input type="radio"/> <input type="radio"/>	Special Checks <input type="radio"/> Fatal <input type="radio"/> Non-Traffic Area <input type="radio"/> ORV/Snowmobile						
County 63 - Oakland	Traffic Control None		Relation to Roadway On the Road		Weather Clear	Area NON-FRWY Curved Roadway							
City/Twp 90 - Royal Oak	Contributing Circumstances 1st None			2nd	Light Daylight	Road Surface Condition Dry	Total Lanes 02	Speed Limit 35	Posted Yes				
Work Zone (if applicable) Type Workers Present Activity Location													
LOCATION	Prefix	Primary Road Name COOLIDGE			Road Type HWY	Suffix	Divided Roadway						
	Distance / Direction 50 Feet N				Trafficway Divided Hwy wo/Barrier								
	Prefix	Intersecting Road Name TRAFFORD			Road Type RD	Suffix	Divided Roadway						
UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type <input type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex	Race	Total Occupants	Hazardous Action		
	Unit Type	Driver Information				Driver is Owner	Injury	Position			Restraint		
	Driver Condition at Time of Crash 1st					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital					Ambulance							
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="radio"/> Breath <input type="radio"/> Field <input type="radio"/> Blood <input type="radio"/> PBT			O Urine <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Alcohol Test Results <input type="radio"/> Pending	Test Results:		Interlock Device			
	Drug Suspected	Contributing Factor	Drug Test Type <input type="radio"/> Blood <input type="radio"/> Field <input type="radio"/> Urine <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>			O Refused <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Drug Test Results <input type="radio"/> Pending	Test Results:		Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other			
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles			Private Trailer Type		Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)			Vehicle Direction	Vehicle Use			Action Prior				
Sequence of Events (● indicates MOST harmful event)		First		Second		Third		Fourth					
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital				Ambulance								
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital				Ambulance								
TRUCK/ BUS	Carrier Information					USDOT			MC	MPSC			
						Driver's CDL Type <input type="radio"/> O <input type="radio"/> N <input type="radio"/> P <input type="radio"/> S <input type="radio"/> O <input type="radio"/> X <input type="radio"/> T	Endorsements <input type="radio"/> O <input type="radio"/> P <input type="radio"/> T <input type="radio"/> F <input type="radio"/> R <input type="radio"/> O <input type="radio"/> C <input type="radio"/> R <input type="radio"/> H <input type="radio"/> O <input type="radio"/> A	CDL Exempt <input type="radio"/> O <input type="radio"/> F <input type="radio"/> R <input type="radio"/> O <input type="radio"/> H <input type="radio"/> C <input type="radio"/> R <input type="radio"/> H <input type="radio"/> O <input type="radio"/> A					
	GVWR/GCWR <input type="radio"/> O 10,000 lbs. or Less <input type="radio"/> O 10,001 - 26,000 lbs. <input type="radio"/> O Greater than 26,000 lbs.					Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material <input type="radio"/> O Placard <input type="radio"/> O Cargo Spill	ID #	Class #	
OWNERS	Owner Information					Owner Information							
	Damaged Property 08-TRAFFIC SIGN/POST					Public Yes	Owner & Phone #####-#####-#####-##### ####-##-####						

SANITIZED SANITIZED SANITIZED

UNIT / DRIVER	Unit Number	Unit Known	State	Driver License Number		Date of Birth (Age)	License Type	Endorsements	Sex	Race	Total Occupants	Hazardous Action	
	Unit Type	Driver Information					Driver is Owner	Injury	Position			Restraint	
	Driver Condition at Time of Crash 1st _____ 2nd _____					Driver Distracted By			Ejected	Trapped	Airbag Deployed		
	Hospital						Ambulance						
	Alcohol Suspected	Contributing Factor	Alcohol Test Type <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> PBT <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Alcohol Test Results <input type="checkbox"/> Pending			Test Results:		Interlock Device		
	Drug Suspected	Contributing Factor	Drug Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Field <input type="checkbox"/> Refused <input type="checkbox"/> Not Offered			Drug Test Results <input type="checkbox"/> Pending			Test Results:		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other		
	Vehicle Registration	State	Vehicle Description	Year	Make	Model			Color				
	VIN		Vehicle Type		Special Vehicles		Private Trailer Type			Vehicle Defect			
	Automation System(s) in Vehicle		Automation System Level in Vehicle					Automation System Level Engaged at Time of Crash					
	Insurance Company			Insurance Policy #			Towed By			Towed To			
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use				Action Prior				
Sequence of Events (● indicates MOST harmful event)		First	Second	Third	Fourth								
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint				
					Injury	Ejected	Trapped	Airbag Deployed					
	Hospital						Ambulance						
	Carrier Information						USDOT		MC	MPSC			
							Driver's CDL Type	Endorsements <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> O <input type="checkbox"/> T <input type="checkbox"/> N <input type="checkbox"/> O <input type="checkbox"/> X	CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other				
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.			Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #			
	OWNERS	Owner Information					Owner Information						
WITNESS	Witness Information					Witness Information							
Investigated at Scene	Reported Date (Time)	1st Investigator Name (Badge)			2nd Investigator Name (Badge)			Photos					
Narrative						Diagram							

From: noreply@civicplus.com
To: [Engineering Division](#)
Subject: Online Form Submittal: Traffic Committee Request
Date: Tuesday, May 21, 2024 1:48:23 PM

Traffic Committee Request

Please complete required fields and submit.

Name	Ari Zartarian
Email Address	ari@thelegacyequities.com
Street Address	2804 Coolidge Highway
Phone Number	248-767-4366
Location of Concern	Coolidge Highway Northbound Between Trafford and Warrick
Type of Issue	Safety
Detailed Description of Concern	I own the apartment building that sits on Coolidge Highway between Trafford and Warrick and as of yesterday three vehicles have crashed into the building over the course of the last 24 months. Each crash has resulted in injuries to the drivers and tenants, extensive damage to my building, the displacement of residents, and a general uneasiness by everyone that lives or works at the property. For varying reasons, drivers are not properly veering to the left at the curve on Coolidge North of the Cemetery, and I'm getting news reporters, neighbors and residents asking me why a barrier or guard rail hasn't been installed on the road. Tenants are asking to vacate from the property for fear of another vehicle striking and maintenance workers are reluctant to do work on the Coolidge facing side of the property.
Proposed Solution	It seems a simple and obvious solution would be to put some sort of guard rail along the East side of Coolidge highway at the turn, that would stop vehicles from jumping that curb and striking the building.
Media Upload	View recent photos.jpeg
Important	I have reviewed the Traffic Committee's Frequently Asked Questions (FAQ) regarding traffic requests and concerns

(Section Break)

Neighborhood Support

Analyzing traffic requests can take a significant amount of staff time,

and we require neighborhood support for a particular issue before beginning review.

Please provide at least two neighbors' contact information, who are in agreement with your concerns or request. **They must be from separate households.** They will be notified if this item is brought to the Traffic Committee.

Name	Richard Dewitt
Address	2804 Coolidge Highway, Apt. 24
Email	jumpsteady1965@yahoo.com
Name	Nick Marrogy
Address	2808 Coolidge Highway, Apt. 26
Email	nickmarrogy@gmail.com

Email not displaying correctly? [View it in your browser.](#)

Royal Oak Traffic Committee INFORMATION ITEM

Title	Update on Morse Avenue and Harrison Avenue Traffic Counts
SUBMITTING DEPARTMENT	Engineering
PRESENTER	Holly Donoghue, P.E.
MEETING DATE	July 23, 2024

Traffic Concern:

At the May 23, 2023 traffic meeting, the committee reviewed speeding concerns on E. Harrison Avenue and Morse Avenue. The committee did not recommend any changes to these streets, but recommended that staff re-study these streets one year later to determine if the data was still representative.

Staff Analysis:

The Staff Traffic Committee has reviewed this request and determined that:

1. An image of the study location is shown below.



2. Staff ordered new traffic counts and the data from 2023 and 2024 are provided for comparison below:

Data Collected	Location	85th Percentile Speed (mph)	Vehicles Per Day
March 6-9, 2023	E Harrison Avenue (between Knowles and Morse)	25	1,642
June 11-13, 2024		25	1,547
March 6-9, 2023	Morse Avenue (south of E. Harrison)	23	1,296
June 11-13, 2024		23	1,446

3. The three-year (2021-2023) accident report shows two accidents:
 - a. Failure to yield to Harrison driver when turning left out of Diamond Court driveway.
 - b. Vehicle on Harrison backed into a driver exiting Diamond Court.
4. The speed and volume results were very similar between the two studies, and the crash report did not indicate a significant issue on either corridor. No further analysis is recommended.

E. Harrison (Knowles to Morse)andMorse (Harrison to Parent)

#1	Location: E HARRISON (0.279) 148 feet E of KNOWLES							Crash ID: 2881002	
Date:	04/25/2023	Day:	Tue	Hour:	7am	Weather:	cloudy	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 2	
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	N	left turn	veh in transpt	none	none	none	failed to yield	car	rtfront
2	E	go straight	veh in transpt	none	none	none	none	car	rtside

UD10: 2881002

#2	Location: E HARRISON (0.286) 180 feet W of MORSE							Crash ID: 3040916	
Date:	10/30/2023	Day:	Mon	Hour:	1pm	Weather:	cloudy	Roadway: dry	
Injy K:	0	Injy A:	0	Injy B:	0	Injy C:	0	Injy 0: 2	
CVT:	Royal Oak		Area:	w/i intersection		HBD:	N	Drugs: N	
Unit#	Veh Dir	Action Prior	Event 1	Event 2	Event 3	Event 4	Haz Action	Veh Type	Damage
1	N	stop on road	veh in transpt	none	none	none	unknown	car	rtfront
2	E	backing	veh in transpt	none	none	none	none	truck/bus	none

UD10: 3040916

Crash Type

Count	Type
0	uncoded
0	single
0	head-on
0	head-on/lt
1	angle
0	rr-end
0	rr-end/lt
0	rr-end/rt
0	ss-same
0	ss-opp
1	back
0	other
0	unknown
Totals	2

Lighting Conditions

Count	Type
0	uncoded
2	day
0	dawn
0	dusk
0	dark/ltd
0	dark/unltd
0	other
0	unknown
Totals	2

Weather Conditions

Count	Type
0	uncoded
0	clear
2	cloudy
0	fog
0	rain
0	snow
0	wind
0	sleet/hail
0	blowing snow
0	blowing sand
0	smoke
0	unknown
Totals	2

Road Condition

Count	Type
0	uncoded
2	dry
0	wet
0	ice
0	snow
0	mud
0	slush
0	debris
0	water
0	sand
0	oily
0	other
0	unknown
Totals	2

Crashes by Month

Count	Type
0	January
0	February
0	March
1	April
0	May
0	June
0	July
0	August
0	September
1	October
0	November
0	December
Totals	2

Hazardous Action

Count	Type
2	none
0	speeding
0	spd too slow
1	failed to yield
0	disrgd traffic cntrl
0	wrong way
0	left of center
0	imprp passing
0	imprp lane use
0	imprp turn
0	imprp/no signal
0	imprp backing
0	unable to stop
0	other
1	unknown
0	reckls driving
0	carels driving
Totals	4

Unit Type

Count	Type
0	Bicyclist
0	Engineer
4	Vehicle
0	Pedestrian
Totals	4

Crashes by Year

Count	Type
2	2023
Totals	2

Crash Severity

	Fatal	A	B	C	No Injy	Total
Persons	0	0	0	0	0	0
Crashes	0	0	0	0	2	2

Alcohol in Crashes

	Fatal	A	B	C	PDO	Total
Drinking	0	0	0	0	0	0
Not Drinking	0	0	0	0	2	2
Totals	0	0	0	0	2	2

Crashes per Hour by Day

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
12a-1a	0	0	0	0	0	0	0	0
1a-2a	0	0	0	0	0	0	0	0
2a-3a	0	0	0	0	0	0	0	0
3a-4a	0	0	0	0	0	0	0	0
4a-5a	0	0	0	0	0	0	0	0
5a-6a	0	0	0	0	0	0	0	0
6a-7a	0	0	0	0	0	0	0	0
7a-8a	0	0	1	0	0	0	0	1
8a-9a	0	0	0	0	0	0	0	0
9a-10a	0	0	0	0	0	0	0	0
10a-11a	0	0	0	0	0	0	0	0
11a-12p	0	0	0	0	0	0	0	0
12p-1p	0	0	0	0	0	0	0	0
1p-2p	0	1	0	0	0	0	0	1
2p-3p	0	0	0	0	0	0	0	0
3p-4p	0	0	0	0	0	0	0	0
4p-5p	0	0	0	0	0	0	0	0
5p-6p	0	0	0	0	0	0	0	0
6p-7p	0	0	0	0	0	0	0	0
7p-8p	0	0	0	0	0	0	0	0
8p-9p	0	0	0	0	0	0	0	0
9p-10p	0	0	0	0	0	0	0	0
10p-11p	0	0	0	0	0	0	0	0
11p-12a	0	0	0	0	0	0	0	0
Totals	0	1	1	0	0	0	0	2

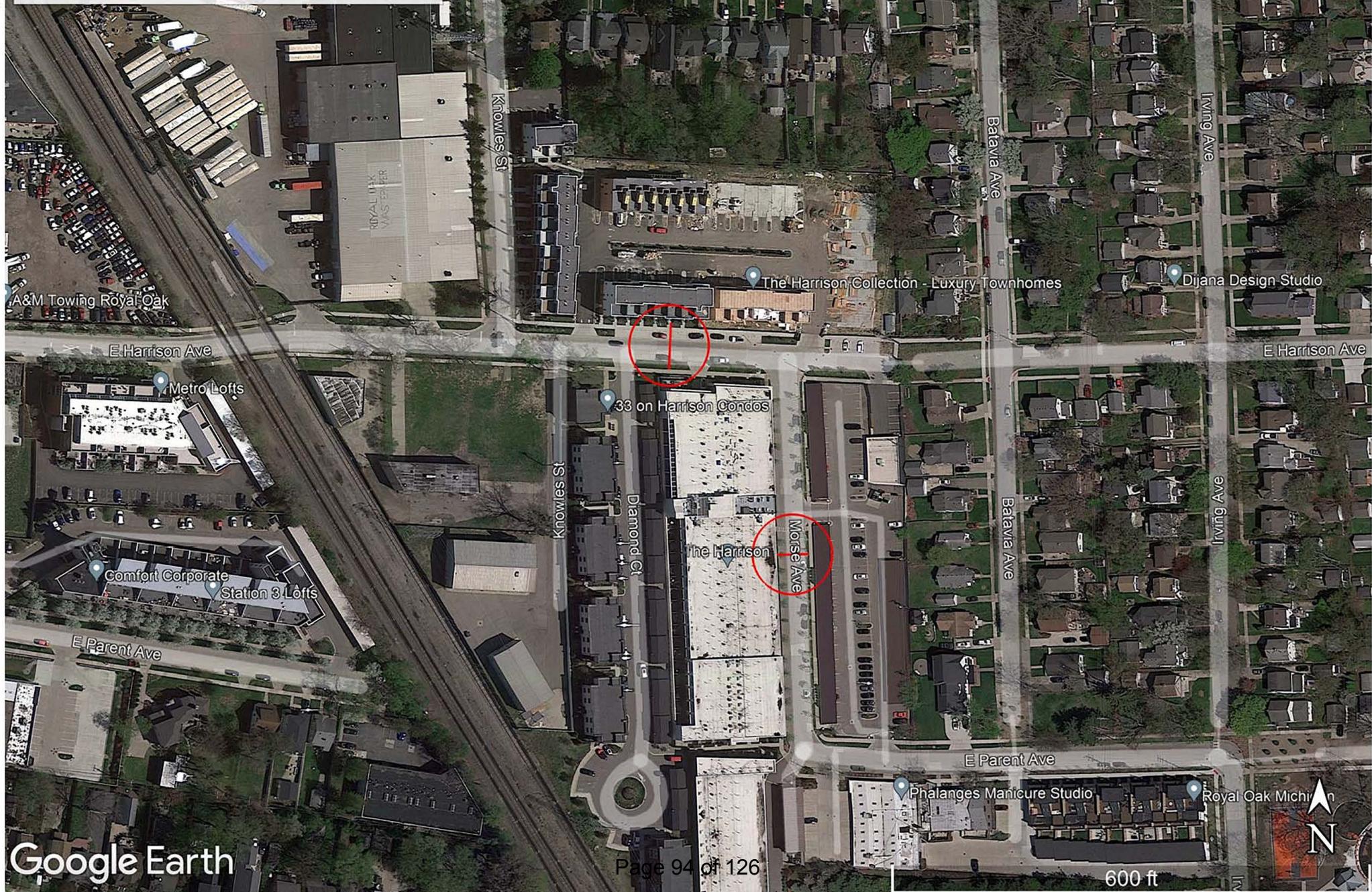
City of Royal Oak

Legend

72-Hour Volume & Speed Counts:

1. E Harrison Ave, Knowles St to Morse Ave
2. Morse Ave, E Parent Ave to E Harrison Ave

Green For Life



Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: EB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	3	0	1	0	7	7	3	6	1	0	0	0	0	28
10:00	0	1	0	1	3	5	9	4	3	2	0	0	0	0	28
11:00	0	0	1	1	2	10	15	8	6	2	0	0	0	0	45
12:00 PM	0	2	3	5	7	10	9	2	5	1	1	1	0	0	46
1:00	0	1	2	4	5	10	14	13	1	5	0	0	0	0	55
2:00	0	0	1	2	3	12	10	12	6	1	0	0	0	0	47
3:00	0	1	3	2	2	14	15	19	4	1	1	0	1	0	63
4:00	0	0	2	5	13	21	22	11	6	4	0	0	0	0	84
5:00	0	1	5	5	4	25	20	15	12	2	0	0	0	0	89
6:00	0	0	1	5	6	23	13	14	8	2	0	0	0	0	72
7:00	0	0	2	5	11	15	14	2	0	1	0	0	0	0	50
8:00	0	1	1	1	6	19	5	8	3	2	1	0	0	0	47
9:00	0	0	2	3	3	5	12	8	2	0	0	0	0	0	35
10:00	1	1	0	1	3	0	2	6	5	2	0	0	0	0	21
11:00	0	0	0	0	0	2	1	1	3	0	0	0	0	0	7
Total	1	11	23	41	68	178	168	126	70	26	3	1	1	0	717

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: EB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	0	0	2	0	1	1	0	0	0	0	6
1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	1	4	1	0	0	0	0	0	7
6:00	0	1	0	1	0	2	3	1	1	2	0	0	0	0	11
7:00	1	1	0	0	2	5	9	3	0	0	0	0	0	0	21
8:00	0	2	1	1	3	7	6	5	0	1	0	0	0	0	26
9:00	0	0	0	1	1	7	6	1	1	3	0	0	0	0	20
10:00	1	0	1	0	4	10	7	6	2	1	1	0	0	0	33
11:00	0	0	1	3	3	8	11	4	2	0	0	0	0	0	32
12:00 PM	0	1	2	2	10	10	8	10	2	0	0	0	0	0	45
1:00	3	2	2	1	7	17	7	9	5	0	0	0	0	0	53
2:00	3	1	4	7	9	14	13	5	5	0	0	0	0	0	61
3:00	0	0	2	2	4	16	18	4	0	0	0	0	0	0	46
4:00	0	0	0	9	18	23	35	13	1	1	0	0	0	0	100
5:00	2	1	6	7	17	28	31	13	0	0	0	0	0	0	105
6:00	1	1	2	6	8	22	18	5	2	0	0	0	0	0	65
7:00	0	1	6	10	10	22	11	4	0	0	0	0	0	0	64
8:00	0	0	2	6	12	9	9	5	0	0	0	0	0	0	43
9:00	1	0	2	3	5	19	8	4	0	0	0	0	0	0	42
10:00	0	0	0	1	3	3	4	4	1	0	0	0	0	0	16
11:00	0	0	1	0	1	2	1	1	0	0	0	0	0	0	6
Total	12	11	32	62	117	225	208	103	24	9	1	0	0	0	804

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: EB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	1	1	1	0	0	0	0	0	4
1:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
3:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	1	0	0	0	1	2	1	1	0	0	0	0	0	6
6:00	1	2	0	3	3	3	4	3	1	1	0	0	0	0	21
7:00	1	1	0	0	5	3	4	0	0	0	0	0	0	0	14
8:00	1	2	1	3	7	6	7	3	1	0	0	0	0	0	31
9:00	0	0	0	0	5	10	7	4	4	0	0	0	0	0	30
10:00	1	3	2	1	4	11	9	0	0	0	0	0	0	0	31
11:00	0	0	4	4	8	9	3	2	0	0	0	0	0	0	30
12:00 PM	0	4	2	3	5	17	9	9	1	0	0	0	0	0	50
1:00	0	0	0	3	11	6	6	5	0	0	0	0	0	0	31
2:00	0	1	2	4	10	18	15	5	1	0	0	0	0	0	56
3:00	0	1	3	5	6	20	13	8	2	0	0	0	0	0	58
4:00	0	1	3	4	10	19	14	12	1	0	0	0	0	0	64
5:00	0	0	2	9	10	26	26	10	5	0	0	0	0	0	88
6:00	1	1	3	7	12	11	19	13	2	1	0	0	0	0	70
7:00	1	2	1	5	8	12	8	2	0	0	0	0	0	0	39
8:00	0	0	0	6	9	13	4	2	0	0	0	0	0	0	34
9:00	1	0	2	5	11	7	5	4	1	0	1	0	0	0	37
10:00	0	0	1	1	1	3	2	1	0	0	0	0	0	0	9
11:00	0	0	0	1	2	5	0	0	0	0	0	0	0	0	8
Total	7	19	26	66	127	202	159	86	21	2	1	0	0	0	716

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: EB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	1	3	2	5	3	2	0	0	0	0	0	16
1:00	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3
2:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
3:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3
6:00	1	0	0	2	2	1	1	4	1	0	0	0	0	0	12
7:00	0	4	0	1	3	8	3	2	0	0	0	0	0	0	21
8:00	0	1	0	0	4	13	6	4	0	0	0	0	0	0	28
9:00	0	1	1	3	8	12	4	3	1	0	0	0	0	0	33
10:00	0	2	1	3	8	8	5	1	0	1	1	0	0	0	30
11:00	3	0	2	0	5	15	3	4	2	0	0	0	0	0	34
12:00 PM	0	1	0	4	6	9	3	2	3	0	0	0	0	1	29
1:00	1	0	2	2	3	13	7	5	3	0	0	0	0	0	36
2:00	0	0	2	3	6	14	11	3	0	1	0	0	0	0	40
3:00	0	1	1	8	10	11	13	6	1	0	0	0	0	0	51
4:00	1	1	1	7	15	23	17	7	2	0	0	0	0	0	74
5:00	0	1	4	11	18	16	18	9	5	1	0	0	0	0	83
6:00	1	0	3	7	6	22	12	7	0	0	0	0	0	0	58
7:00	1	0	5	6	12	22	8	1	0	0	0	0	0	0	55
8:00	0	0	2	1	7	12	6	3	0	0	0	0	0	0	31
9:00	1	1	4	3	12	14	7	3	0	0	0	0	0	0	45
10:00	0	0	2	2	5	5	0	1	0	0	0	0	0	0	15
11:00	0	0	1	1	2	9	2	0	0	0	0	0	0	0	15
Total	9	13	31	66	137	232	133	68	21	4	1	0	0	1	716

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: EB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	2	3	3	0	0	0	0	0	0	0	8
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
3:00	0	0	0	0	1	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	0
5:00	0	1	1	0	1	2	0	0	0	0	0	0	0	0	5
6:00	1	1	0	0	3	3	2	3	0	0	0	0	0	0	13
7:00	0	1	2	2	1	8	0	2	1	0	0	0	0	0	17
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	1	3	3	2	8	17	7	5	1	0	0	0	0	0	47
Grand Total	30	57	115	237	457	854	675	388	137	41	6	1	1	1	3000

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	17.0			
	10 MPH Pace Speed	12-21			
	Number in Pace	2110			
	Percent in Pace	70.3%			
	Number > 24 MPH	187			
	Percent > 24 MPH	6.2%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: WB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	4	3	6	8	20	6	8	1	1	1	0	0	58
10:00	0	0	3	3	1	6	8	6	7	3	3	1	0	1	42
11:00	2	0	1	0	5	10	14	8	4	2	1	0	0	0	47
12:00 PM	0	0	3	1	4	7	9	6	4	2	2	0	0	0	38
1:00	0	0	0	1	2	3	9	10	8	4	1	0	0	0	38
2:00	0	0	0	1	2	7	13	8	7	2	2	1	0	0	43
3:00	0	0	0	0	1	8	15	14	9	2	0	0	0	0	49
4:00	0	0	1	4	3	13	23	11	3	4	0	0	0	0	62
5:00	0	0	1	2	3	12	22	15	3	3	0	0	0	0	61
6:00	1	0	4	1	3	15	16	10	1	4	2	0	1	0	58
7:00	1	0	0	2	3	9	12	12	7	4	0	0	0	0	50
8:00	0	0	1	1	4	5	4	5	3	1	1	0	0	0	25
9:00	0	0	0	1	1	5	2	5	1	0	0	0	0	0	15
10:00	0	0	0	0	2	1	0	1	0	0	0	0	0	0	4
11:00	0	0	1	0	0	1	1	1	0	0	0	0	0	0	5
Total	4	0	19	20	40	110	168	118	66	32	13	3	1	1	595

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: WB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	1	1	0	0	0	1	0	0	0	0	3
1:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00	0	0	0	1	0	0	4	3	2	0	2	0	0	0	12
6:00	0	1	0	1	3	2	7	3	9	4	3	0	0	0	33
7:00	0	0	0	0	5	3	18	17	9	8	5	1	0	0	66
8:00	0	1	5	2	5	9	12	16	9	11	4	2	1	1	78
9:00	0	0	1	1	3	2	8	8	6	2	2	2	1	0	36
10:00	0	0	0	0	0	3	9	6	5	4	3	4	0	0	34
11:00	0	0	0	1	4	3	7	10	5	1	3	1	0	0	35
12:00 PM	0	0	1	0	3	11	16	14	5	1	0	0	2	0	53
1:00	0	0	1	0	4	4	10	7	8	4	2	1	0	0	41
2:00	1	0	3	2	4	6	22	14	3	2	0	0	1	0	58
3:00	0	0	1	2	4	5	12	11	7	4	1	0	0	0	47
4:00	0	0	4	2	3	7	15	15	12	5	1	1	1	1	67
5:00	1	0	0	0	4	13	20	20	15	11	0	0	0	0	84
6:00	0	0	2	1	4	11	25	17	14	4	1	1	0	0	80
7:00	0	0	0	2	3	11	16	9	4	4	0	1	0	0	50
8:00	0	0	1	1	4	6	7	5	6	1	0	0	0	0	31
9:00	0	0	0	0	3	11	6	3	0	2	0	0	0	0	25
10:00	0	0	0	1	0	1	2	5	3	3	1	0	0	0	16
11:00	0	0	0	0	0	0	1	1	2	0	0	0	1	0	5
Total	2	2	19	17	57	110	217	185	124	72	29	14	7	2	857

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: WB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3
2:00	0	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	0
4:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00	0	0	0	0	0	1	3	3	1	4	1	0	0	0	13
6:00	0	0	0	2	1	1	3	9	5	2	3	1	0	0	27
7:00	0	0	0	1	1	7	9	16	8	8	3	2	0	1	56
8:00	0	2	1	2	6	3	10	11	12	8	6	3	0	0	64
9:00	0	0	1	2	1	5	9	5	6	3	2	0	0	1	35
10:00	0	0	0	2	1	4	12	10	6	3	1	0	0	0	40
11:00	0	0	0	1	2	7	11	15	5	6	3	2	0	0	52
12:00 PM	0	0	0	2	4	9	22	16	9	4	5	0	0	0	71
1:00	0	0	0	2	5	7	9	11	5	2	2	0	0	0	43
2:00	0	0	1	2	6	9	13	12	7	5	2	1	1	0	59
3:00	0	0	0	2	6	6	11	15	8	6	2	2	0	0	58
4:00	0	0	0	1	1	13	17	11	12	7	3	1	0	0	66
5:00	0	0	2	2	3	11	14	17	11	9	1	0	0	0	70
6:00	1	0	1	2	6	11	13	11	9	6	0	1	2	0	63
7:00	0	0	1	1	3	6	5	4	4	0	0	0	0	0	24
8:00	0	0	0	2	4	7	15	7	2	2	2	0	0	0	41
9:00	0	0	1	0	6	4	3	4	3	1	0	0	0	0	22
10:00	0	0	1	0	0	1	2	1	1	0	0	1	0	0	7
11:00	0	0	0	0	0	2	1	2	0	1	1	1	0	0	8
Total	1	2	9	26	56	115	183	180	114	79	37	15	4	3	824

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: WB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	1	0	0	4	2	1	2	0	0	0	0	10
1:00	0	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	0
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	2	1	1	0	2	0	0	0	7
6:00	0	0	0	1	0	2	5	4	6	1	3	3	0	0	25
7:00	0	0	0	3	1	4	12	11	11	5	2	0	0	0	49
8:00	0	0	2	2	4	9	9	15	12	4	3	1	1	1	63
9:00	0	0	0	2	4	5	12	5	3	3	1	1	2	0	38
10:00	0	0	0	0	6	4	8	6	1	4	0	1	0	0	30
11:00	0	0	1	1	0	4	8	12	5	3	0	0	1	0	35
12:00 PM	0	0	1	1	2	4	9	7	8	4	1	1	0	0	38
1:00	0	0	0	0	1	5	8	11	7	5	0	4	0	0	41
2:00	0	0	0	4	3	5	5	5	3	1	2	1	1	0	30
3:00	0	0	0	1	1	7	13	8	6	6	3	1	0	0	46
4:00	1	0	1	1	2	12	10	13	5	6	1	1	0	0	53
5:00	0	0	3	2	3	15	17	17	10	9	4	0	0	0	80
6:00	0	0	1	0	5	14	16	24	17	12	3	0	0	0	92
7:00	0	0	1	1	4	5	8	11	10	2	0	0	0	1	43
8:00	0	0	0	2	1	7	11	3	4	5	0	0	0	0	33
9:00	0	0	0	2	1	6	6	3	2	0	2	0	0	0	22
10:00	0	0	0	0	0	1	3	1	0	0	0	0	0	0	5
11:00	0	0	0	3	0	2	1	0	0	0	0	0	0	0	6
Total	1	0	10	27	38	112	167	160	112	72	27	14	5	2	747

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: WB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
4:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
5:00	0	0	0	0	1	0	1	1	1	0	0	0	0	0	4
6:00	0	0	0	0	0	1	5	4	5	2	0	2	0	0	19
7:00	0	0	0	0	2	7	8	9	4	5	3	0	0	1	39
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	0	1	3	9	16	16	11	8	3	3	0	1	71
Grand Total	8	4	57	91	194	456	751	659	427	263	109	49	17	9	3094

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	21.5			
	10 MPH Pace Speed	15-24			
	Number in Pace	2001			
	Percent in Pace	64.7%			
	Number > 24 MPH	874			
	Percent > 24 MPH	28.2%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	3	4	4	6	15	27	9	14	2	1	1	0	0	86
10:00	0	1	3	4	4	11	17	10	10	5	3	1	0	1	70
11:00	2	0	2	1	7	20	29	16	10	4	1	0	0	0	92
12:00 PM	0	2	6	6	11	17	18	8	9	3	3	1	0	0	84
1:00	0	1	2	5	7	13	23	23	9	9	1	0	0	0	93
2:00	0	0	1	3	5	19	23	20	13	3	2	1	0	0	90
3:00	0	1	3	2	3	22	30	33	13	3	1	0	1	0	112
4:00	0	0	3	9	16	34	45	22	9	8	0	0	0	0	146
5:00	0	1	6	7	7	37	42	30	15	5	0	0	0	0	150
6:00	1	0	5	6	9	38	29	24	9	6	2	0	1	0	130
7:00	1	0	2	7	14	24	26	14	7	5	0	0	0	0	100
8:00	0	1	2	2	10	24	9	13	6	3	2	0	0	0	72
9:00	0	0	2	4	4	10	14	13	3	0	0	0	0	0	50
10:00	1	1	0	1	5	1	2	7	5	2	0	0	0	0	25
11:00	0	0	1	0	0	3	2	2	4	0	0	0	0	0	12
Total	5	11	42	61	108	288	336	244	136	58	16	4	2	1	1312

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	1	1	2	0	1	2	0	0	0	0	9
1:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00	0	0	0	1	0	1	5	7	3	0	2	0	0	0	19
6:00	0	2	0	2	3	4	10	4	10	6	3	0	0	0	44
7:00	1	1	0	0	7	8	27	20	9	8	5	1	0	0	87
8:00	0	3	6	3	8	16	18	21	9	12	4	2	1	1	104
9:00	0	0	1	2	4	9	14	9	7	5	2	2	1	0	56
10:00	1	0	1	0	4	13	16	12	7	5	4	4	0	0	67
11:00	0	0	1	4	7	11	18	14	7	1	3	1	0	0	67
12:00 PM	0	1	3	2	13	21	24	24	7	1	0	0	2	0	98
1:00	3	2	3	1	11	21	17	16	13	4	2	1	0	0	94
2:00	4	1	7	9	13	20	35	19	8	2	0	0	1	0	119
3:00	0	0	3	4	8	21	30	15	7	4	1	0	0	0	93
4:00	0	0	4	11	21	30	50	28	13	6	1	1	1	1	167
5:00	3	1	6	7	21	41	51	33	15	11	0	0	0	0	189
6:00	1	1	4	7	12	33	43	22	16	4	1	1	0	0	145
7:00	0	1	6	12	13	33	27	13	4	4	0	1	0	0	114
8:00	0	0	3	7	16	15	16	10	6	1	0	0	0	0	74
9:00	1	0	2	3	8	30	14	7	0	2	0	0	0	0	67
10:00	0	0	0	2	3	4	6	9	4	3	1	0	0	0	32
11:00	0	0	1	0	1	2	2	2	2	0	0	0	1	0	11
Total	14	13	51	79	174	335	425	288	148	81	30	14	7	2	1661

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	1	1	1	0	0	0	1	0	5
1:00	0	0	0	1	0	1	1	0	0	1	0	0	0	0	4
2:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
3:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00	0	1	0	0	0	2	5	4	2	4	1	0	0	0	19
6:00	1	2	0	5	4	4	7	12	6	3	3	1	0	0	48
7:00	1	1	0	1	6	10	13	16	8	8	3	2	0	1	70
8:00	1	4	2	5	13	9	17	14	13	8	6	3	0	0	95
9:00	0	0	1	2	6	15	16	9	10	3	2	0	0	1	65
10:00	1	3	2	3	5	15	21	10	6	3	1	0	0	0	71
11:00	0	0	4	5	10	16	14	17	5	6	3	2	0	0	82
12:00 PM	0	4	2	5	9	26	31	25	10	4	5	0	0	0	121
1:00	0	0	0	5	16	13	15	16	5	2	2	0	0	0	74
2:00	0	1	3	6	16	27	28	17	8	5	2	1	1	0	115
3:00	0	1	3	7	12	26	24	23	10	6	2	2	0	0	116
4:00	0	1	3	5	11	32	31	23	13	7	3	1	0	0	130
5:00	0	0	4	11	13	37	40	27	16	9	1	0	0	0	158
6:00	2	1	4	9	18	22	32	24	11	7	0	1	2	0	133
7:00	1	2	2	6	11	18	13	6	4	0	0	0	0	0	63
8:00	0	0	0	8	13	20	19	9	2	2	2	0	0	0	75
9:00	1	0	3	5	17	11	8	8	4	1	1	0	0	0	59
10:00	0	0	2	1	1	4	4	2	1	0	0	1	0	0	16
11:00	0	0	0	1	2	7	1	2	0	1	1	1	0	0	16
Total	8	21	35	92	183	317	342	266	135	81	38	15	4	3	1540

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	3	2	9	5	3	2	0	0	0	0	26
1:00	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3
2:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
3:00	0	0	0	0	1	1	0	1	0	0	0	0	0	0	3
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	2	3	1	1	1	2	0	0	0	10
6:00	1	0	0	3	2	3	6	8	7	1	3	3	0	0	37
7:00	0	4	0	4	4	12	15	13	11	5	2	0	0	0	70
8:00	0	1	2	2	8	22	15	19	12	4	3	1	1	1	91
9:00	0	1	1	5	12	17	16	8	4	3	1	1	2	0	71
10:00	0	2	1	3	14	12	13	7	1	5	1	1	0	0	60
11:00	3	0	3	1	5	19	11	16	7	3	0	0	1	0	69
12:00 PM	0	1	1	5	8	13	12	9	11	4	1	1	0	1	67
1:00	1	0	2	2	4	18	15	16	10	5	0	4	0	0	77
2:00	0	0	2	7	9	19	16	8	3	2	2	1	1	0	70
3:00	0	1	1	9	11	18	26	14	7	6	3	1	0	0	97
4:00	2	1	2	8	17	35	27	20	7	6	1	1	0	0	127
5:00	0	1	7	13	21	31	35	26	15	10	4	0	0	0	163
6:00	1	0	4	7	11	36	28	31	17	12	3	0	0	0	150
7:00	1	0	6	7	16	27	16	12	10	2	0	0	0	1	98
8:00	0	0	2	3	8	19	17	6	4	5	0	0	0	0	64
9:00	1	1	4	5	13	20	13	6	2	0	2	0	0	0	67
10:00	0	0	2	2	5	6	3	2	0	0	0	0	0	0	20
11:00	0	0	1	4	2	11	3	0	0	0	0	0	0	0	21
Total	10	13	41	93	175	344	300	228	133	76	28	14	5	3	1463

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	2	4	4	0	0	0	0	0	0	0	10
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	1	2	1	0	0	0	0	0	0	5
3:00	0	0	0	0	1	0	0	0	1	1	0	1	0	0	4
4:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
5:00	0	1	1	0	2	2	1	1	1	0	0	0	0	0	9
6:00	1	1	0	0	3	4	7	7	5	2	0	2	0	0	32
7:00	0	1	2	2	3	15	8	11	5	5	3	0	0	1	56
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	1	3	3	3	11	26	23	21	12	8	3	3	0	1	118
Grand Total	38	61	172	328	651	1310	1426	1047	564	304	115	50	18	10	6094

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	19.3			
	10 MPH Pace Speed	14-23			
	Number in Pace	3987			
	Percent in Pace	65.4%			
	Number > 24 MPH	1061			
	Percent > 24 MPH	17.4%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: HARRISON btwn KNOWLE

Station ID:

Location 1: E Harrison Ave btwn Knowles St and Morse Ave

Location 2: Royal Oak

Location 3:

Location 4:

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024		6/10/2024		6/11/2024		6/12/2024		6/13/2024		6/14/2024		Weekday Average		6/15/2024		6/16/2024		
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	6	3	4	1	16	10	8	2	8	4	*	*	*	*	*	*
1:00	*	*	1	1	1	3	3	0	0	0	1	1	*	*	*	*	*	*
2:00	*	*	0	1	2	0	2	0	3	2	2	1	*	*	*	*	*	*
3:00	*	*	1	0	2	0	2	1	1	3	2	1	*	*	*	*	*	*
4:00	*	*	0	1	0	1	0	0	0	2	0	1	*	*	*	*	*	*
5:00	*	*	7	12	6	13	3	7	5	4	5	9	*	*	*	*	*	*
6:00	*	*	11	33	21	27	12	25	13	19	14	26	*	*	*	*	*	*
7:00	*	*	21	66	14	56	21	49	17	39	18	52	*	*	*	*	*	*
8:00	*	*	26	78	31	64	28	63	*	*	28	68	*	*	*	*	*	*
9:00	28	58	20	36	30	35	33	38	*	*	28	42	*	*	*	*	*	*
10:00	28	42	33	34	31	40	30	30	*	*	30	36	*	*	*	*	*	*
11:00	45	47	32	35	30	52	34	35	*	*	35	42	*	*	*	*	*	*
12:00 PM	46	38	45	53	50	71	29	38	*	*	42	50	*	*	*	*	*	*
1:00	55	38	53	41	31	43	36	41	*	*	44	41	*	*	*	*	*	*
2:00	47	43	61	58	56	59	40	30	*	*	51	48	*	*	*	*	*	*
3:00	63	49	46	47	58	58	51	46	*	*	54	50	*	*	*	*	*	*
4:00	84	62	100	67	64	66	74	53	*	*	80	62	*	*	*	*	*	*
5:00	89	61	105	84	88	70	83	80	*	*	91	74	*	*	*	*	*	*
6:00	72	58	65	80	70	63	58	92	*	*	66	73	*	*	*	*	*	*
7:00	50	50	64	50	39	24	55	43	*	*	52	42	*	*	*	*	*	*
8:00	47	25	43	31	34	41	31	33	*	*	39	32	*	*	*	*	*	*
9:00	35	15	42	25	37	22	45	22	*	*	40	21	*	*	*	*	*	*
10:00	21	4	16	16	9	7	15	5	*	*	15	8	*	*	*	*	*	*
11:00	7	5	6	5	8	8	15	6	*	*	9	6	*	*	*	*	*	*
Total Day	717	595	804	857	716	824	716	747	47	71	754	790	0	0	0	0	0	0
AM Peak Volume	11:00	9:00	10:00	8:00	8:00	8:00	11:00	8:00	7:00	7:00	11:00	8:00						
PM Peak Volume	5:00	4:00	5:00	5:00	5:00	12:00 PM	5:00	6:00			5:00	5:00						
Comb Total ADT	1312		1661		1540		1463		118		1544		0		0		0	
	ADT: 1,547		AADT: 1,547															

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	4	3	3	2	15	20	6	1	0	0	0	0	0	54
10:00	0	0	0	1	0	3	10	11	8	1	0	0	0	0	34
11:00	1	0	0	2	9	6	8	4	5	0	0	0	0	0	35
12:00 PM	0	0	0	0	3	9	8	7	4	1	1	0	0	0	33
1:00	0	0	0	3	2	7	14	9	2	1	0	0	0	0	38
2:00	0	0	0	1	3	8	9	18	1	1	0	0	0	0	41
3:00	0	2	0	1	3	8	15	12	7	1	0	0	0	0	49
4:00	0	0	1	0	1	7	18	15	5	2	0	0	0	0	49
5:00	0	1	2	1	5	13	21	9	5	0	0	0	0	0	57
6:00	0	0	0	4	7	11	16	6	7	1	0	0	0	0	52
7:00	0	1	1	0	6	13	10	11	2	0	0	0	0	0	44
8:00	0	0	2	2	3	7	7	3	0	0	0	0	0	0	24
9:00	0	1	1	1	3	4	4	3	0	0	2	0	0	0	19
10:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
11:00	0	0	0	1	0	3	1	2	0	0	0	0	0	0	7
Total	1	10	11	21	47	114	161	116	47	8	3	0	0	0	539

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	1	1	0	1	0	0	0	0	0	0	3
1:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
2:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	2	2	3	2	1	0	0	0	0	10
6:00	0	0	1	0	3	2	2	6	3	2	0	0	0	0	19
7:00	0	0	0	0	2	6	12	18	10	2	1	0	0	0	51
8:00	0	0	6	2	1	5	23	18	9	2	1	0	0	0	67
9:00	0	0	2	1	3	0	5	7	12	4	1	0	0	0	35
10:00	0	0	0	0	1	1	5	9	7	3	1	0	0	0	27
11:00	0	0	1	1	4	12	8	5	5	1	0	0	0	0	37
12:00 PM	2	1	0	2	6	14	9	7	1	1	0	0	0	0	43
1:00	0	1	0	2	7	9	15	4	5	0	0	0	0	0	43
2:00	0	1	0	2	6	10	7	15	8	0	1	0	0	0	50
3:00	0	0	0	1	1	7	17	5	3	3	0	0	0	0	37
4:00	0	0	0	1	12	13	15	17	9	1	0	0	0	0	68
5:00	0	0	0	0	16	17	24	14	4	4	0	0	0	0	79
6:00	0	0	1	0	7	17	29	12	6	1	0	0	0	0	73
7:00	0	0	1	5	7	10	12	11	3	1	0	0	0	0	50
8:00	0	0	2	1	2	9	3	6	1	1	0	0	0	0	25
9:00	0	0	1	1	5	8	6	3	2	0	0	0	0	0	26
10:00	0	0	0	3	0	5	5	3	2	0	0	0	0	0	18
11:00	0	0	1	0	0	1	1	2	1	0	1	0	0	0	7
Total	2	3	16	22	84	150	202	166	94	27	6	0	0	0	772

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
1:00	0	0	0	0	0	2	1	1	0	1	0	0	0	0	5
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00	0	0	0	0	0	1	2	3	3	0	0	0	0	0	9
6:00	0	0	0	1	0	1	9	4	5	2	0	1	0	0	23
7:00	0	0	0	0	0	3	11	12	11	0	1	0	0	0	38
8:00	0	0	0	0	2	11	16	24	8	1	0	0	0	0	62
9:00	0	0	1	0	3	6	6	8	2	2	0	0	0	0	28
10:00	0	0	0	0	4	7	10	12	2	0	1	0	0	0	36
11:00	0	0	1	1	2	4	8	18	11	2	0	0	0	0	47
12:00 PM	0	0	0	0	5	9	25	13	12	0	0	0	0	0	64
1:00	0	0	2	0	6	11	12	13	6	2	0	0	0	0	52
2:00	1	1	0	5	4	10	17	16	4	2	0	0	0	0	60
3:00	0	0	0	2	3	14	12	19	7	3	0	0	0	0	60
4:00	0	0	0	2	3	7	18	19	7	0	0	0	0	0	56
5:00	0	1	2	2	4	20	21	19	4	0	0	0	0	0	73
6:00	0	0	0	3	11	12	21	8	4	0	0	0	0	0	59
7:00	0	0	2	0	9	7	7	4	2	2	0	0	0	0	33
8:00	0	1	0	0	9	16	9	5	1	0	0	0	0	0	41
9:00	0	0	0	1	6	8	4	4	0	0	0	0	0	0	23
10:00	0	0	0	0	0	3	4	1	2	0	0	0	0	0	10
11:00	0	0	1	0	1	3	2	5	0	0	0	0	0	0	12
Total	1	3	9	17	73	155	216	211	91	18	2	2	0	0	798

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	2	1	2	2	1	0	0	0	0	0	10
1:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
2:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
3:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	1	3	1	0	0	0	0	0	6
6:00	0	1	2	0	1	3	6	3	5	2	0	0	0	0	23
7:00	0	0	0	0	1	4	15	12	3	4	1	0	0	0	40
8:00	0	2	0	1	7	9	24	10	5	1	0	0	0	0	59
9:00	0	0	1	1	2	13	10	3	2	1	0	0	0	0	33
10:00	0	0	1	2	3	3	8	7	3	1	0	0	0	0	28
11:00	0	1	1	2	4	11	11	4	3	0	0	0	0	0	37
12:00 PM	0	1	1	1	3	4	18	9	6	1	0	0	0	0	44
1:00	0	0	0	1	3	8	12	11	2	0	1	0	0	0	38
2:00	0	0	1	0	2	8	13	6	7	2	0	0	0	0	39
3:00	0	0	0	1	6	11	16	17	5	0	0	0	0	0	56
4:00	0	1	0	2	4	12	14	8	6	0	0	0	0	0	47
5:00	0	1	0	2	14	27	22	11	3	0	0	0	0	1	81
6:00	0	1	0	3	14	20	22	22	4	0	0	0	0	0	86
7:00	0	0	0	0	2	9	13	10	4	0	0	0	0	0	38
8:00	0	0	1	3	4	9	13	6	1	0	0	0	0	0	37
9:00	0	1	0	1	6	6	6	4	0	0	0	0	0	0	24
10:00	0	0	0	0	0	1	3	5	1	0	0	0	0	0	10
11:00	0	0	0	0	1	2	0	2	0	0	1	0	0	0	6
Total	0	9	8	22	79	162	232	155	64	12	3	0	0	1	747

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: NB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	1	0	0	2	1	0	0	0	0	0	0	4
1:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
2:00	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
4:00	0	0	0	0	2	2	0	2	0	0	0	0	0	0	6
5:00	0	0	0	0	0	0	1	2	1	2	0	0	0	0	6
6:00	0	0	0	0	0	4	5	5	5	1	1	1	0	0	22
7:00	0	0	0	1	2	8	10	6	5	2	0	0	0	0	34
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	1	0	2	4	15	20	18	13	5	1	1	0	0	80
Grand Total	4	26	44	84	287	596	831	666	309	70	15	3	0	1	2936

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	19.4			
	10 MPH Pace Speed	15-24			
	Number in Pace	2195			
	Percent in Pace	74.8%			
	Number > 24 MPH	398			
	Percent > 24 MPH	13.6%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	0	0	1	2	3	15	6	1	0	0	0	0	0	28
10:00	0	0	0	2	2	11	9	2	1	1	0	0	0	0	28
11:00	0	0	1	2	6	9	17	2	0	0	0	0	0	0	37
12:00 PM	0	0	1	1	8	14	10	6	1	0	0	0	1	0	42
1:00	0	0	2	2	7	15	18	5	1	0	0	0	0	0	50
2:00	0	0	0	3	3	10	16	7	2	0	0	0	0	0	41
3:00	0	0	0	0	3	19	19	12	0	0	0	0	0	0	53
4:00	0	1	0	0	2	12	25	16	3	1	0	0	0	0	60
5:00	0	0	0	1	6	23	33	20	3	0	0	0	0	0	86
6:00	0	0	0	1	4	10	23	10	2	0	0	0	0	0	50
7:00	0	0	1	3	4	11	13	2	0	0	0	0	0	0	34
8:00	1	0	0	1	6	12	11	3	1	0	0	0	0	0	35
9:00	0	1	1	1	3	7	4	6	0	0	0	0	0	0	23
10:00	0	0	0	0	0	3	5	4	0	0	0	0	1	0	13
11:00	0	0	0	1	0	5	3	0	0	0	0	0	0	0	9
Total	1	2	6	19	56	164	221	101	15	2	0	2	0	0	589

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	1	1	2	1	0	0	0	0	0	0	5
1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00	0	0	0	1	0	0	4	3	0	0	0	0	0	0	8
6:00	0	0	0	0	0	3	6	3	0	0	0	0	0	0	12
7:00	0	0	0	1	0	3	12	7	2	0	0	0	0	0	25
8:00	0	0	0	2	2	4	9	7	1	0	0	0	0	0	25
9:00	0	0	0	1	0	0	14	6	2	0	0	0	0	0	23
10:00	0	1	1	1	0	5	14	9	2	0	0	0	0	0	33
11:00	0	1	0	2	4	8	5	6	4	0	0	0	0	0	30
12:00 PM	0	1	3	5	10	18	5	3	0	0	0	0	0	0	45
1:00	0	1	0	1	8	8	13	5	3	0	0	0	0	0	39
2:00	0	0	0	2	4	14	20	9	2	0	0	0	0	0	51
3:00	1	0	1	1	3	11	18	9	2	0	0	0	0	0	46
4:00	0	0	0	1	7	34	34	13	1	0	0	0	0	0	90
5:00	0	0	1	1	7	30	36	14	2	1	0	0	0	0	92
6:00	0	0	1	1	9	19	15	8	2	0	0	0	0	0	55
7:00	0	1	0	5	8	18	14	3	0	0	0	0	0	0	49
8:00	0	0	1	4	6	7	10	3	1	0	0	0	0	0	32
9:00	0	0	0	1	6	13	7	3	0	0	0	0	0	0	30
10:00	0	0	1	0	1	6	4	1	0	0	0	0	0	0	13
11:00	0	0	0	0	0	1	2	1	0	0	0	0	0	0	4
Total	1	5	9	30	76	204	245	115	25	1	0	0	0	0	711

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	1	2	0	1	0	0	0	0	4
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	3	1	0	1	0	0	0	0	0	5
3:00	0	0	0	0	0	1	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	0
5:00	0	0	0	0	0	1	1	2	0	0	0	0	0	0	4
6:00	0	0	0	1	1	7	5	3	2	0	0	0	0	0	19
7:00	0	0	0	0	2	2	9	7	0	0	0	0	0	0	20
8:00	0	0	0	1	5	5	15	8	0	0	0	0	0	0	34
9:00	0	0	0	0	2	5	17	6	1	0	0	0	0	0	31
10:00	0	0	0	0	3	6	10	5	0	0	0	0	0	0	24
11:00	0	0	1	1	3	6	13	10	0	0	0	0	0	0	34
12:00 PM	0	0	0	0	1	10	21	12	2	0	0	0	0	0	46
1:00	0	1	0	3	2	7	14	7	2	0	0	0	0	0	36
2:00	0	1	0	2	6	7	20	12	2	0	0	0	0	0	50
3:00	0	1	0	3	7	7	27	12	2	1	0	0	0	0	60
4:00	0	0	0	2	5	17	28	15	2	0	0	0	0	0	69
5:00	0	0	0	2	8	18	34	14	2	1	0	0	0	0	79
6:00	0	0	2	5	5	12	33	7	0	0	0	0	0	0	64
7:00	0	0	0	2	6	9	10	4	1	0	0	0	0	0	32
8:00	0	0	0	5	5	13	9	1	0	0	0	0	0	0	33
9:00	0	1	2	3	7	7	6	5	1	0	0	0	0	0	32
10:00	0	0	0	0	2	2	5	5	0	0	0	0	0	0	14
11:00	0	0	1	0	1	5	4	2	0	0	0	0	0	0	13
Total	0	4	6	30	71	150	283	139	18	3	0	0	0	0	704

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	1	3	6	1	0	1	0	0	0	0	12
1:00	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3
2:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	1	1	0	0	1	0	0	0	0	0	0	3
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	3	1	1	0	0	0	0	0	5
6:00	0	0	0	2	1	3	5	8	0	0	0	0	0	0	19
7:00	0	0	1	0	1	7	7	5	3	0	0	0	0	0	24
8:00	0	0	0	0	4	8	6	8	0	0	0	0	0	0	26
9:00	0	0	1	0	3	10	12	5	0	0	0	0	0	0	31
10:00	1	1	4	3	4	8	4	5	0	0	0	0	0	0	30
11:00	0	0	1	2	6	9	11	4	2	0	0	0	0	0	35
12:00 PM	0	0	0	1	2	3	11	10	4	1	0	0	0	0	32
1:00	0	0	0	2	4	10	13	11	1	0	0	0	0	0	41
2:00	0	0	0	2	3	10	11	9	1	0	0	0	0	0	36
3:00	0	1	0	1	3	6	18	6	2	1	0	0	0	0	38
4:00	2	1	3	6	9	17	30	15	2	0	0	0	0	0	85
5:00	0	0	0	2	9	24	25	14	2	1	0	0	0	0	77
6:00	0	1	0	5	4	19	21	7	1	0	0	0	0	0	58
7:00	0	0	0	1	5	19	19	2	0	0	0	0	0	0	46
8:00	0	1	0	0	6	14	7	7	0	1	0	0	0	0	36
9:00	0	0	1	2	2	8	9	1	0	0	0	0	0	0	23
10:00	0	0	0	0	1	6	7	3	1	0	0	0	0	0	18
11:00	0	1	0	0	3	0	4	4	0	1	0	0	0	0	13
Total	3	6	11	30	72	185	230	129	20	6	0	0	0	0	692

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: SB

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	1	2	2	2	2	0	0	0	0	0	0	9
1:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
2:00	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3
3:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	2	2	1	0	0	0	0	0	0	5
6:00	0	0	0	1	2	3	1	7	1	0	0	0	0	0	15
7:00	0	0	0	1	2	3	10	6	1	0	0	0	0	0	23
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	0	0	3	8	11	17	17	4	0	0	0	0	0	60
Grand Total	5	17	32	112	283	714	996	501	82	12	0	2	0	0	2756

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	18.3			
	10 MPH Pace Speed	14-23			
	Number in Pace	2298			
	Percent in Pace	83.4%			
	Number > 24 MPH	96			
	Percent > 24 MPH	3.5%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 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
9:00	0	4	3	4	4	18	35	12	2	0	0	0	0	0	82
10:00	0	0	0	3	2	14	19	13	9	2	0	0	0	0	62
11:00	1	0	1	4	15	15	25	6	5	0	0	0	0	0	72
12:00 PM	0	0	1	1	11	23	18	13	5	1	1	1	0	0	75
1:00	0	0	2	5	9	22	32	14	3	1	0	0	0	0	88
2:00	0	0	0	4	6	18	25	25	3	1	0	0	0	0	82
3:00	0	2	0	1	6	27	34	24	7	1	0	0	0	0	102
4:00	0	1	1	0	3	19	43	31	8	3	0	0	0	0	109
5:00	0	1	2	2	11	36	54	29	8	0	0	0	0	0	143
6:00	0	0	0	5	11	21	39	16	9	1	0	0	0	0	102
7:00	0	1	2	3	10	24	23	13	2	0	0	0	0	0	78
8:00	1	0	2	3	9	19	18	6	1	0	0	0	0	0	59
9:00	0	2	2	2	6	11	8	9	0	0	2	0	0	0	42
10:00	0	1	1	1	0	3	5	4	0	0	0	1	0	0	16
11:00	0	0	0	2	0	8	4	2	0	0	0	0	0	0	16
Total	2	12	17	40	103	278	382	217	62	10	3	2	0	0	1128

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/11/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	2	2	2	2	0	0	0	0	0	0	8
1:00	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3
2:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
5:00	0	0	0	1	0	2	6	6	2	1	0	0	0	0	18
6:00	0	0	1	0	3	5	8	9	3	2	0	0	0	0	31
7:00	0	0	0	1	2	9	24	25	12	2	1	0	0	0	76
8:00	0	0	6	4	3	9	32	25	10	2	1	0	0	0	92
9:00	0	0	2	2	3	0	19	13	14	4	1	0	0	0	58
10:00	0	1	1	1	1	6	19	18	9	3	1	0	0	0	60
11:00	0	1	1	3	8	20	13	11	9	1	0	0	0	0	67
12:00 PM	2	2	3	7	16	32	14	10	1	1	0	0	0	0	88
1:00	0	2	0	3	15	17	28	9	8	0	0	0	0	0	82
2:00	0	1	0	4	10	24	27	24	10	0	1	0	0	0	101
3:00	1	0	1	2	4	18	35	14	5	3	0	0	0	0	83
4:00	0	0	0	2	19	47	49	30	10	1	0	0	0	0	158
5:00	0	0	1	1	23	47	60	28	6	5	0	0	0	0	171
6:00	0	0	2	1	16	36	44	20	8	1	0	0	0	0	128
7:00	0	1	1	10	15	28	26	14	3	1	0	0	0	0	99
8:00	0	0	3	5	8	16	13	9	2	1	0	0	0	0	57
9:00	0	0	1	2	11	21	13	6	2	0	0	0	0	0	56
10:00	0	0	1	3	1	11	9	4	2	0	0	0	0	0	31
11:00	0	0	1	0	0	2	3	3	1	0	1	0	0	0	11
Total	3	8	25	52	160	354	447	281	119	28	6	0	0	0	1483

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/12/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	2	3	0	2	0	0	0	0	7
1:00	0	0	0	0	0	2	1	1	0	1	0	0	0	0	5
2:00	0	0	0	0	1	3	1	0	1	0	0	0	0	0	6
3:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00	0	0	0	0	0	2	3	5	3	0	0	0	0	0	13
6:00	0	0	0	2	1	8	14	7	7	2	0	1	0	0	42
7:00	0	0	0	0	2	5	20	19	11	0	1	0	0	0	58
8:00	0	0	0	1	7	16	31	32	8	1	0	0	0	0	96
9:00	0	0	1	0	5	11	23	14	3	2	0	0	0	0	59
10:00	0	0	0	0	7	13	20	17	2	0	1	0	0	0	60
11:00	0	0	2	2	5	10	21	28	11	2	0	0	0	0	81
12:00 PM	0	0	0	0	6	19	46	25	14	0	0	0	0	0	110
1:00	0	1	2	3	8	18	26	20	8	2	0	0	0	0	88
2:00	1	2	0	7	10	17	37	28	6	2	0	0	0	0	110
3:00	0	1	0	5	10	21	39	31	9	4	0	0	0	0	120
4:00	0	0	0	4	8	24	46	34	9	0	0	0	0	0	125
5:00	0	1	2	4	12	38	55	33	6	1	0	0	0	0	152
6:00	0	0	2	8	16	24	54	15	4	0	0	0	0	0	123
7:00	0	0	2	2	15	16	17	8	3	2	0	0	0	0	65
8:00	0	1	0	5	14	29	18	6	1	0	0	0	0	0	74
9:00	0	1	2	4	13	15	10	9	1	0	0	0	0	0	55
10:00	0	0	0	0	2	5	9	6	2	0	0	0	0	0	24
11:00	0	0	2	0	2	8	6	7	0	0	0	0	0	0	25
Total	1	7	15	47	144	305	499	350	109	21	2	2	0	0	1502

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/13/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	3	4	8	3	1	1	0	0	0	0	22
1:00	0	0	0	0	0	0	1	2	2	0	0	0	0	0	5
2:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
3:00	0	0	0	1	1	0	1	1	0	0	0	0	0	0	4
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	4	4	2	0	0	0	0	0	11
6:00	0	1	2	2	2	6	11	11	5	2	0	0	0	0	42
7:00	0	0	1	0	2	11	22	17	6	4	1	0	0	0	64
8:00	0	2	0	1	11	17	30	18	5	1	0	0	0	0	85
9:00	0	0	2	1	5	23	22	8	2	1	0	0	0	0	64
10:00	1	1	5	5	7	11	12	12	3	1	0	0	0	0	58
11:00	0	1	2	4	10	20	22	8	5	0	0	0	0	0	72
12:00 PM	0	1	1	2	5	7	29	19	10	2	0	0	0	0	76
1:00	0	0	0	3	7	18	25	22	3	0	1	0	0	0	79
2:00	0	0	1	2	5	18	24	15	8	2	0	0	0	0	75
3:00	0	1	0	2	9	17	34	23	7	1	0	0	0	0	94
4:00	2	2	3	8	13	29	44	23	8	0	0	0	0	0	132
5:00	0	1	0	4	23	51	47	25	5	1	0	0	0	1	158
6:00	0	2	0	8	18	39	43	29	5	0	0	0	0	0	144
7:00	0	0	0	1	7	28	32	12	4	0	0	0	0	0	84
8:00	0	1	1	3	10	23	20	13	1	1	0	0	0	0	73
9:00	0	1	1	3	8	14	15	5	0	0	0	0	0	0	47
10:00	0	0	0	0	1	7	10	8	2	0	0	0	0	0	28
11:00	0	1	0	0	4	2	4	6	0	1	1	0	0	0	19
Total	3	15	19	52	151	347	462	284	84	18	3	0	0	1	1439

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Direction: Combined

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/14/2024 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	2	2	2	4	3	0	0	0	0	0	0	13
1:00	0	0	0	0	0	1	2	0	2	0	0	0	0	0	5
2:00	0	1	0	0	0	1	0	1	1	0	0	0	0	0	5
3:00	0	0	0	0	0	1	1	0	2	1	0	0	0	0	5
4:00	0	0	0	0	0	2	2	1	2	0	0	0	0	0	7
5:00	0	0	0	0	0	2	3	3	1	2	0	0	0	0	11
6:00	0	0	0	1	2	7	6	12	6	1	1	1	0	0	37
7:00	0	0	0	2	4	11	20	12	6	2	0	0	0	0	57
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
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	0	1	0	5	12	26	37	35	17	5	1	1	0	0	140
Grand Total	9	43	76	196	570	1310	1827	1167	391	82	15	5	0	1	5692

Stats	Percentile Speed	15th	50th	85th	95th
	Mean Speed (Average)	18.9			
	10 MPH Pace Speed	14-23			
	Number in Pace	4474			
	Percent in Pace	78.6%			
	Number > 24 MPH	494			
	Percent > 24 MPH	8.7%			

Transportation Improvement Association

100 E. Big Beaver Road, Suite 910

Troy, Michigan 48083

Site Code: MORSE btwn HARRISON

Station ID:

Location 1: Morse Ave btwn E Parent Ave and E Harrison Ave

Location 2: Royal Oak

Location 3:

Location 4:

Comment 1:

Comment 2:

Comment 3:

Comment 4:

Latitude: 0.000000

Longitude: 0.000000

6/10/2024			6/10/2024			6/11/2024			6/12/2024			6/13/2024			6/14/2024			Weekday Average			6/15/2024			6/16/2024		
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	3	5	3	4	10	12	4	9	5	8	*	*	*	*	*	*	*	*	*	*	*	*	*	
1:00	*	*	2	1	5	0	2	3	3	2	3	2	*	*	*	*	*	*	*	*	*	*	*	*	*	
2:00	*	*	1	0	1	5	2	1	2	3	2	2	*	*	*	*	*	*	*	*	*	*	*	*	*	
3:00	*	*	0	2	1	1	1	3	3	2	1	2	*	*	*	*	*	*	*	*	*	*	*	*	*	
4:00	*	*	1	1	2	0	0	0	6	1	2	0	*	*	*	*	*	*	*	*	*	*	*	*	*	
5:00	*	*	10	8	9	4	6	5	6	5	8	6	*	*	*	*	*	*	*	*	*	*	*	*	*	
6:00	*	*	19	12	23	19	23	19	22	15	22	16	*	*	*	*	*	*	*	*	*	*	*	*	*	
7:00	*	*	51	25	38	20	40	24	34	23	41	23	*	*	*	*	*	*	*	*	*	*	*	*	*	
8:00	*	*	67	25	62	34	59	26	*	*	63	28	*	*	*	*	*	*	*	*	*	*	*	*	*	
9:00	54	28	35	23	28	31	33	31	*	*	38	28	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	34	28	27	33	36	24	28	30	*	*	31	29	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	35	37	37	30	47	34	37	35	*	*	39	34	*	*	*	*	*	*	*	*	*	*	*	*	*	
12:00 PM	33	42	43	45	64	46	44	32	*	*	46	41	*	*	*	*	*	*	*	*	*	*	*	*	*	
1:00	38	50	43	39	52	36	38	41	*	*	43	42	*	*	*	*	*	*	*	*	*	*	*	*	*	
2:00	41	41	50	51	60	50	39	36	*	*	48	44	*	*	*	*	*	*	*	*	*	*	*	*	*	
3:00	49	53	37	46	60	60	56	38	*	*	50	49	*	*	*	*	*	*	*	*	*	*	*	*	*	
4:00	49	60	68	90	56	69	47	85	*	*	55	76	*	*	*	*	*	*	*	*	*	*	*	*	*	
5:00	57	86	79	92	73	79	81	77	*	*	72	84	*	*	*	*	*	*	*	*	*	*	*	*	*	
6:00	52	50	73	55	59	64	86	58	*	*	68	57	*	*	*	*	*	*	*	*	*	*	*	*	*	
7:00	44	34	50	49	33	32	38	46	*	*	41	40	*	*	*	*	*	*	*	*	*	*	*	*	*	
8:00	24	35	25	32	41	33	37	36	*	*	32	34	*	*	*	*	*	*	*	*	*	*	*	*	*	
9:00	19	23	26	30	23	32	24	23	*	*	23	27	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	3	13	18	13	10	14	10	18	*	*	10	14	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	7	9	7	4	12	13	6	13	*	*	8	10	*	*	*	*	*	*	*	*	*	*	*	*	*	
Total Day	539	589	772	711	798	704	747	692	80	60	751	696	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Volume	9:00	11:00	8:00	10:00	8:00	8:00	8:00	11:00	7:00	7:00	8:00	11:00														
PM Peak Volume	5:00	5:00	5:00	5:00	5:00	5:00	6:00	4:00			5:00	5:00	72	84												
Comb Total ADT	1128		1483		1502		1439		140		1447		0		0		0		0		0		0		0	
	ADT: 1,446		AADT: 1,446																							