#### MH Corbin Traffic Analyzer Study Computer Generated Summary Report City: City of Thorold Street: Niagara Falls Rd - EB Location: 1

A study of vehicle traffic was conducted with the device having serial number 405279. The study was done in the EB lane at Niagara Falls Rd - EB in City of Thorold, ON in btwn Ontario St & Davis St county. The study began on 2024-06-19 at 12:00 AM and concluded on 2024-06-20 at 12:00 AM, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 1,819 vehicles passed through the location with a peak volume of 55 on 2024-06-19 at [08:15 AM-08:30 AM] and a minimum volume of 0 on 2024-06-19 at [12:15 AM-12:30 AM]. The AADT count for this study was 1,819.

#### <u>SPEED</u>

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 50 - 60 KM/H range or lower. The average speed for all classifed vehicles was 51 KM/H with 55.94% vehicles exceeding the posted speed of 50 KM/H. 0.33% percent of the total vehicles were traveling in excess of 89 KM/H. The mode speed for this traffic study was 50KM/H and the 85th percentile was 58.83 KM/H.

<	10	20	30	40	50	60	70	80	90	100	110	120	130	140
to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
9	19	29	39	49	59	69	79	89	99	109	119	129	139	>
2	10	25	80	684	843	150	18	4	2	0	0	0	0	0

#### CHART 1

#### **CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 1745 which represents 96 percent of the total classified vehicles. The number of Small Trucks in the study was 9 which represents 0 percent of the total classified vehicles. The number of Trucks/Buses in the study was 46 which represents 3 percent of the total classified vehicles. The number of Tractor Trailers in the study was 18 which represents 1 percent of the total classified vehicles.

< to 4.9	5.0 to 7.9	8.0 to 9.9	10.0 to 12.9	13.0 to 15.9	16.0 to 18.9	19.0 to 21.9	22.0 to >				
1096	649	9	46	10	3	4	1				

CHART 2

#### **HEADWAY**

During the peak traffic period, on 2024-06-19 at [08:15 AM-08:30 AM] the average headway between vehicles was 16.071 seconds. During the slowest traffic period, on 2024-06-19 at [12:15 AM-12:30 AM] the average headway between vehicles was 900 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 28.00 and 50.00 degrees C.

#### MH Corbin Traffic Analyzer Study Computer Generated Summary Report City: City of Thorold Street: Niagara Falls Rd - WB Location: 1

A study of vehicle traffic was conducted with the device having serial number 400181. The study was done in the WB lane at Niagara Falls Rd - WB in City of Thorold, ON in btwn Ontario St & Davis St county. The study began on 2024-06-19 at 12:00 AM and concluded on 2024-06-20 at 12:00 AM, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 1,854 vehicles passed through the location with a peak volume of 60 on 2024-06-19 at [04:45 PM-05:00 PM] and a minimum volume of 0 on 2024-06-19 at [01:00 AM-01:15 AM]. The AADT count for this study was 1,854.

#### <u>SPEED</u>

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 50 - 60 KM/H range or lower. The average speed for all classifed vehicles was 55 KM/H with 73.35% vehicles exceeding the posted speed of 50 KM/H. 0.86% percent of the total vehicles were traveling in excess of 89 KM/H. The mode speed for this traffic study was 50KM/H and the 85th percentile was 63.50 KM/H.

9 $19$ $29$ $39$ $49$ $59$ $89$ $79$ $89$ $99$ $109$ $119$ $129$ $139$ >	<	10	20	30	40	50	60	70	80	90	100	110	120	130	140
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
	9	19	29 16	39 35	49 441	59 964	69 334	79 46	89 14	99 2	0	0	129	0	>

#### CHART 1

#### **CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 1759 which represents 95 percent of the total classified vehicles. The number of Small Trucks in the study was 25 which represents 1 percent of the total classified vehicles. The number of Trucks/Buses in the study was 49 which represents 3 percent of the total classified vehicles. The number of Tractor Trailers in the study was 21 which represents 1 percent of the total classified vehicles.

< to 4.9	5.0 to 7.9	8.0 to 9.9	10.0 to 12.9	13.0 to 15.9	16.0 to 18.9	19.0 to 21.9	22.0 to >				
917	842	25	49	8	5	5	3				

CHART 2

#### **HEADWAY**

During the peak traffic period, on 2024-06-19 at [04:45 PM-05:00 PM] the average headway between vehicles was 14.754 seconds. During the slowest traffic period, on 2024-06-19 at [01:00 AM-01:15 AM] the average headway between vehicles was 900 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 27.00 and 48.00 degrees C.

#### MH Corbin Traffic Analyzer Study Computer Generated Summary Report City: City of Thorold Street: Niagara Falls Rd - EB Location: 2

A study of vehicle traffic was conducted with the device having serial number 406306. The study was done in the EB lane at Niagara Falls Rd - EB in City of Thorold, ON in east of Bartlett St county. The study began on 2024-06-19 at 12:00 AM and concluded on 2024-06-20 at 12:00 AM, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 2,053 vehicles passed through the location with a peak volume of 64 on 2024-06-19 at [08:15 AM-08:30 AM] and a minimum volume of 0 on 2024-06-19 at [01:00 AM-01:15 AM]. The AADT count for this study was 2,053.

#### <u>SPEED</u>

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 50 - 60 KM/H range or lower. The average speed for all classifed vehicles was 55 KM/H with 73.54% vehicles exceeding the posted speed of 50 KM/H. 0.78% percent of the total vehicles were traveling in excess of 89 KM/H. The mode speed for this traffic study was 50KM/H and the 85th percentile was 65.98 KM/H.

<	10	20	30	40	50	60	70	80	90	100	110	120	130	140
to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
9	19	29	39	49	59	69	79	89	99	109	119	129	139	>
1	3	34	113	392	915	478	100	10	6	0	0	0	0	0

#### CHART 1

#### **CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 1958 which represents 95 percent of the total classified vehicles. The number of Small Trucks in the study was 23 which represents 1 percent of the total classified vehicles. The number of Trucks/Buses in the study was 47 which represents 2 percent of the total classified vehicles. The number of Tractor Trailers in the study was 24 which represents 1 percent of the total classified vehicles.

< to 4.9	5.0 to 7.9	8.0 to 9.9	10.0 to 12.9	13.0 to 15.9	16.0 to 18.9	19.0 to 21.9	22.0 to >				
926	1032	23	47	10	5	6	3				

CHART 2

#### **HEADWAY**

During the peak traffic period, on 2024-06-19 at [08:15 AM-08:30 AM] the average headway between vehicles was 13.846 seconds. During the slowest traffic period, on 2024-06-19 at [01:00 AM-01:15 AM] the average headway between vehicles was 900 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 26.00 and 53.00 degrees C.

#### MH Corbin Traffic Analyzer Study Computer Generated Summary Report City: City of Thorold Street: Niagara Falls Rd - WB Location: 2

A study of vehicle traffic was conducted with the device having serial number 405261. The study was done in the WB lane at Niagara Falls Rd - WB in City of Thorold, ON in east of Bartlett St county. The study began on 2024-06-19 at 12:00 AM and concluded on 2024-06-20 at 12:00 AM, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 2,099 vehicles passed through the location with a peak volume of 63 on 2024-06-19 at [04:45 PM-05:00 PM] and a minimum volume of 0 on 2024-06-19 at [02:30 AM-02:45 AM]. The AADT count for this study was 2,099.

#### <u>SPEED</u>

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 50 - 60 KM/H range or lower. The average speed for all classifed vehicles was 52 KM/H with 62.19% vehicles exceeding the posted speed of 50 KM/H. 0.24% percent of the total vehicles were traveling in excess of 89 KM/H. The mode speed for this traffic study was 50KM/H and the 85th percentile was 61.17 KM/H.

< to	10 to	20 to	30 to	40 to	50 to	60 to	70 to	80 to	90 to	100 to	110 to	120 to	130 to	140 to
9	19	29	39	49	59	69	79	89	99	109	119	129	139	>
2	14	42	117	616	953	290	53	5	0	0	0	0	0	0

#### CHART 1

#### **CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 1989 which represents 95 percent of the total classified vehicles. The number of Small Trucks in the study was 39 which represents 2 percent of the total classified vehicles. The number of Trucks/Buses in the study was 40 which represents 2 percent of the total classified vehicles. The number of Tractor Trailers in the study was 24 which represents 1 percent of the total classified vehicles.

< to 4.9	5.0 to 7.9	8.0 to 9.9	10.0 to 12.9	13.0 to 15.9	16.0 to 18.9	19.0 to 21.9	22.0 to >				
1209	780	39	40	9	6	9	0				

CHART 2

#### **HEADWAY**

During the peak traffic period, on 2024-06-19 at [04:45 PM-05:00 PM] the average headway between vehicles was 14.063 seconds. During the slowest traffic period, on 2024-06-19 at [02:30 AM-02:45 AM] the average headway between vehicles was 900 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 26.00 and 53.00 degrees C.

# All-Way Stop Warrants - Rural Arterial/ Collector

Municipality:	Thorold
Intersection:	Niagara Falls Rd @ Davis St
Major Road:	Niagara Falls Rd
Direction:	East/West
Minor Road:	Davis St

Count Date: Jun 13, 2024

Cross or "T": T

# 1. Total Vehicle Volume

	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Approaching: all legs	222	297	190	248	226	311	345	252	2091
Total Volume > 200 ?	YES	YES	NO	YES	YES	YES	YES	YES	

# Major Road East/ West Traffic

# 2. Minor Street Volume

	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Total Minor Street Volume	9	10	4	5	8	6	13	6	61
Minor Street Volume > 75?	NO	NO	NO	NO	NO	NO	NO	NO	

# 3. Vehicle Volume Split

·	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Approaching: Major	215	294	189	243	220	310	340	249	2060
% Total Approach on major	97%	99%	99%	98%	97%	100%	99%	99%	
% split on Major < 75 ? (T)	NO	NO	NO	NO	NO	NO	NO	NO	

An All-Way Stop condition would NOT be recommended for this location under local road warrants.