

## Fenton Road – Grand Blanc Road to Hill Road (Grand Blanc Twp)

24 Hour ADT: 13,494 collected on 10/1/2025

Peak Hour: 3:45 – 4:45 PM

Peak Hour Volume: 1,227

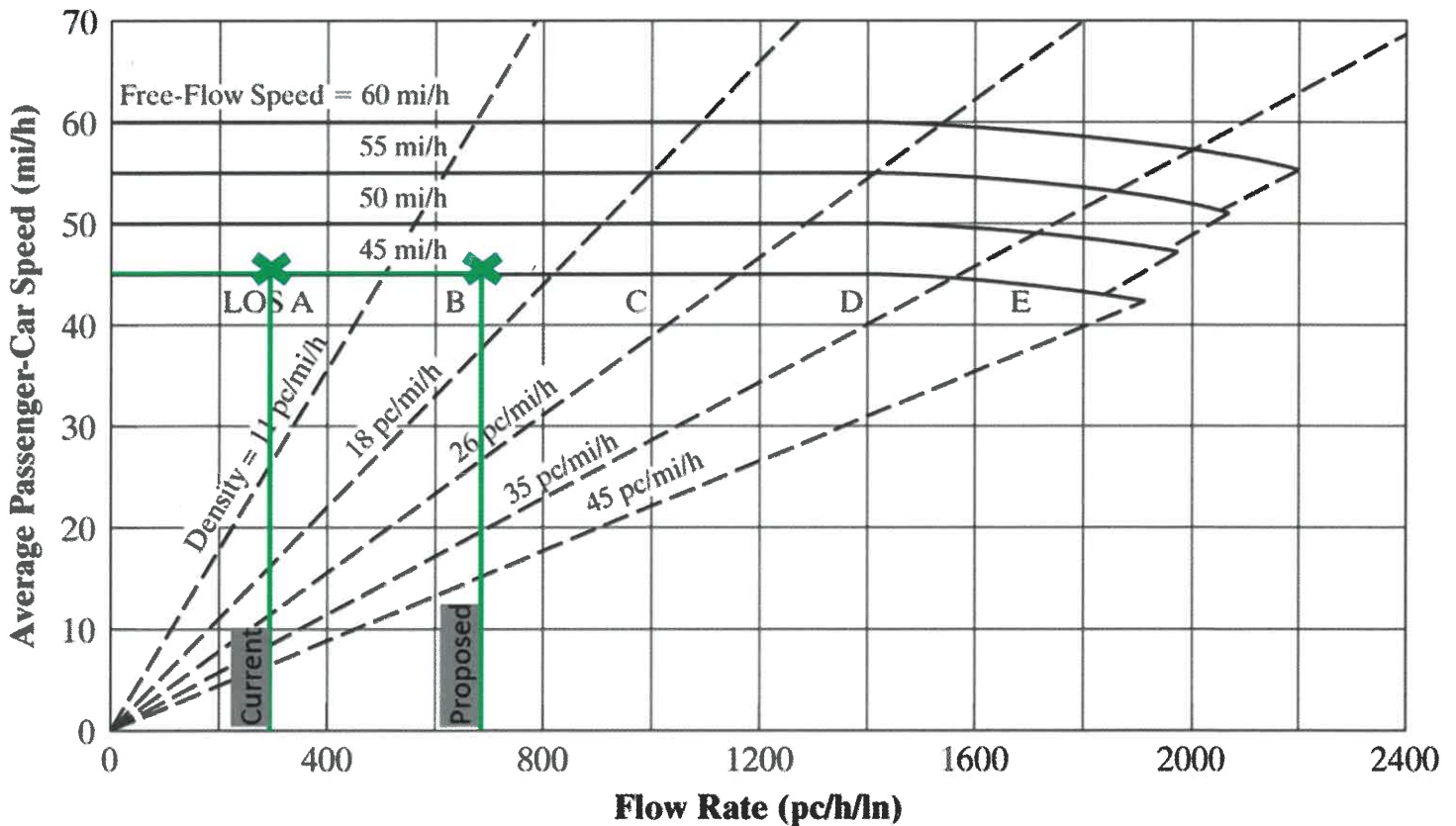
- 3:45 – 4:00 PM = 299
- 4:00 – 4:15 PM = 315
- 4:15 – 4:30 PM = 312
- 4:30 – 4:45 PM = 301

$$F_{HV} = \frac{1}{1 + P_T(E_T - 1)} = \frac{1}{1 + 0.05(1.5 - 1)} = 0.976$$

$$PHF = \frac{\text{Peak Hour Volume}}{4 * \text{Peak 15 Minute Volume}} = \frac{1227}{4 * 315} = 0.974$$

$$V_{P,Existing} = \frac{ADT_{Peak Hour} * (0.5)}{PHF * \# \text{ of Lanes} * F_{HV}} = \frac{1227 * 0.5}{0.974 * 2 * 0.976} = 322.68 \text{ pc/h/ln} = \text{LOS A}$$

$$V_{P,Proposed} = \frac{ADT_{Peak Hour} * (0.5)}{PHF * \# \text{ of Lanes} * F_{HV}} = \frac{1227 * 0.5}{0.974 * 1 * 0.976} = 645.37 \text{ pc/h/ln} = \text{LOS B}$$



Fenton :  
 Reid :  
 Grnad Blanc :

Site: GRC0271  
 10/01/2025  
 Wednesday







24 Hour Volume, per Channel (Volume factor 0.500)

Channel 1			
Interval Start		Interval Start	
6:15 AM	70	6:15 PM	247
6:30 AM	76	6:30 PM	261
6:45 AM	137	6:45 PM	222
7:00 AM	158	7:00 PM	190
7:15 AM	139	7:15 PM	199
7:30 AM	207	7:30 PM	194
7:45 AM	220	7:45 PM	149
8:00 AM	262	8:00 PM	152
8:15 AM	194	8:15 PM	126
8:30 AM	211	8:30 PM	162
8:45 AM	206	8:45 PM	120
9:00 AM	184	9:00 PM	126
9:15 AM	156	9:15 PM	98
9:30 AM	145	9:30 PM	108
9:45 AM	170	9:45 PM	74
10:00 AM	162	10:00 PM	63
10:15 AM	172	10:15 PM	50
10:30 AM	138	10:30 PM	56
10:45 AM	184	10:45 PM	59
11:00 AM	152	11:00 PM	43
11:15 AM	160	11:15 PM	58
11:30 AM	181	11:30 PM	45
11:45 AM	220	11:45 PM	30
12:00 PM	216	10/02/2025 12:00 AM	24
12:15 PM	174	12:15 AM	36
12:30 PM	202	12:30 AM	22
12:45 PM	198	12:45 AM	11
1:00 PM	178	1:00 AM	10
1:15 PM	226	1:15 AM	11
1:30 PM	205	1:30 AM	6
1:45 PM	216	1:45 AM	7
2:00 PM	262	2:00 AM	4
2:15 PM	227	2:15 AM	6
2:30 PM	243	2:30 AM	11
2:45 PM	272	2:45 AM	4
3:00 PM	217	3:00 AM	4
3:15 PM	275	3:15 AM	10
3:30 PM	291	3:30 AM	6
3:45 PM	299	3:45 AM	2
4:00 PM	315	4:00 AM	12
4:15 PM	312	4:15 AM	10
4:30 PM	301	4:30 AM	16
4:45 PM	247	4:45 AM	24
5:00 PM	260	5:00 AM	18
5:15 PM	300	5:15 AM	20
5:30 PM	326	5:30 AM	31
5:45 PM	315	5:45 AM	76
6:00 PM	260	6:00 AM	40

24 Hour Total 13494

**12:00 AM - 12:00 PM**  
 12 Hour Count 4325  
 Peak Hour 7:45 AM  
 Peak Volume 887  
 Factor 0.85

**12:00 PM - 12:00 AM**  
 12 Hour Count 9169  
 Peak Hour 3:45 PM  
 Peak Volume 1227  
 Factor 0.97

Level of Service	Flow Conditions	Technical Descriptions
<p>Best</p> <p><b>A</b></p>		<p>Highest level of service. Traffic flows freely with little or no restrictions on maneuverability.</p> <p><b>No Delays</b></p>
<p><b>B</b></p>		<p>Traffic flows freely, but drivers have slightly less freedom to maneuver.</p> <p><b>No Delays</b></p>
<p><b>C</b></p>		<p>Density becomes noticeable with ability to maneuver limited by other vehicles.</p> <p><b>Minimal Delays</b></p>
<p><b>D</b></p>		<p>Speed and ability to maneuver is severely restricted by increasing density of vehicles.</p> <p><b>Minimal Delays</b></p>
<p><b>E</b></p>		<p>Unstable traffic flow. Speeds vary greatly and are unpredictable.</p> <p><b>Moderate Delays</b></p>
<p>Worst</p> <p><b>F</b></p>		<p>Traffic flow is unstable, with brief periods of movement followed by forced stops.</p> <p><b>Significant Delays</b></p>

Source: 2000 HCM, Exhibit 21-3, Speed-Flow Curves with LOS Criteria for Multi-Lane Highways.