

LEE COUNTY HIGHWAY DEPARTMENT

ENGINEERING AND INVESTIGATION REPORT
FOR ESTABLISHMENT OF SPEED ZONES

ZONE NO. 1

ROUTE Lowell Park Road FROM Penrose Road
TO Pilgrim Road A DISTANCE OF 1 MILES
IN Dixon TOWNSHIP, Lee COUNTY

I. SPOT SPEED STUDIES (ATTACHED)

CHECK NO.	85th %	10 MPH PACE UPPER LIMIT
1	59	59
2		
3		
4		

V. DRIVEWAY CONFLICTS

RESIDENTIAL DRIVES	<u>11</u> X <u>1.0</u> =	<u>11</u>
MINOR SIDE ROADS	<u>6</u> X <u>5.0</u> =	<u>30</u>
LARGE BUSINESS DRIVES	<u>0</u> X <u>10.0</u> =	<u>0</u>
DRIVEWAY CONFLICT NUMBER TOTAL		<u>41</u>
<u>41</u> (D.C.N.)	=	<u>41</u>
<u>1</u> MILES		CONFLICT NO./MILE

II. TEST RUNS ---NONE - N/A

RUN NO.	AVERAGE SPEED MPH	
	NB OR WB	SB OR EB
1	N/A	N/A
2		
3		
4		
5		

VI. MISCELLANEOUS FACTORS

PEDESTRIAN VOLUME	<u>0</u>
ACCIDENT RATE RATIO:	
STATEWIDE AVG. ROUTE	= <u>NO RECORDS</u>
PARKING PERMITTED	<u>YES</u> <u>X</u> <u>NO</u>

III. PREVAILING SPEED

85th PERCENTILE AVG.	<u>59</u>
UPPER LIMIT AVG.	<u>53</u>
TEST RUN AVERAGE	<u>N/A</u>
PREVAILING SPEED	<u>56</u>

VII. PREVAILING SPEED ADJUSTMENT

DRIVEWAY ADJUSTMENT	<u>5</u> %
PEDESTRIAN ADJUSTMENT	<u>0</u> %
ACCIDENT ADJUSTMENT	<u>0</u> %
PARKING ADJUSTMENT	<u>5</u> %
TOTAL (MAX 20%)	<u>5</u> %
<u>56</u> X <u>5</u> %	<u>2.8</u>
PREVAILING SPEED	ADJUST (Max. 9)
ADJUSTED PREVAILING SPEED:	<u>53.2</u> MPH

IV. EXISTING SPEED LIMITS

ZONE BEING STUDIED	<u>45</u> MPH
VIOLATION RATE	<u>88.00</u> %
ADJACENT ZONES N or W	
LENGTH <u>N/A</u> MILES	
S or E	
LENGTH <u>N/A</u> MILES	

VIII. REVISED SPEED LIMIT

RECOMMENDED SPEED LIMIT	<u>55</u> MPH*
ANTICIPATED VIOLATION RATE	<u>22</u> %
RECOMMENDED BY	<u>DAVID ANDERSON</u>
ORGANIZATION	<u>LEE COUNTY HIGHWAY DEPARTMENT</u>
DATE	<u>11/10/2022</u>
APPROVED BY	_____
DATE	<u>11/10/2022</u>

Speed Study Location



Legend

📍 Study Location

Google Earth

1000 ft



Study Name Lowell Park Road North 2022
 Study ID 2592194547
 Device Serial Number FC:F2:3F:D5:CO:0A
 Location (Google Map <http://maps.google.com/maps?z=12&t=m&q=loc:41.8981445+-89.494887>)
 Dwell setting 77 milliseconds
 Tube spacing 36 inch
 Total axle events in ra 9809 axles
 Algorithm version 2.22
 Time Zone America/Chicago - Central Daylight Time

 Daily Summary

 NorthBound Volume 7/13/2022 7/14/2022
 SouthBound Volume 816 191
 Total Volume 850 373
 NorthBound Average Speed 1666 564
 SouthBound Average Speed 52 53
 Total Average Speed 53 54
 NorthBound 85th Percentile Spi 57 54
 SouthBound 85th Percentile Spi 60 62
 Total 85th Percentile Spi 58 Average 85th percentile speed= 59 MPH
 NorthBound Percent Trucks 3% 5%
 SouthBound Percent Trucks 6% 8%
 Total Percent Trucks 5% 7%

Study Volume	Date	Timeslot	NorthBound	SouthBound	Total
	7/13/2022	10:00-10:14	4	9	13
	7/13/2022	10:15-10:29	16	15	31
	7/13/2022	10:30-10:44	15	20	35
	7/13/2022	10:45-10:59	17	20	37
	7/13/2022	11:00-11:14	15	19	34
	7/13/2022	11:15-11:29	22	30	52
	7/13/2022	11:30-11:44	27	19	46
	7/13/2022	11:45-11:59	20	15	35
	7/13/2022	12:00-12:14	18	15	33
	7/13/2022	12:15-12:29	13	16	29
	7/13/2022	12:30-12:44	17	30	47
	7/13/2022	12:45-12:59	19	23	42
	7/13/2022	13:00-13:14	21	15	36
	7/13/2022	13:15-13:29	27	14	41
	7/13/2022	13:30-13:44	15	23	38
	7/13/2022	13:45-13:59	15	22	37
	7/13/2022	14:00-14:14	19	20	39
	7/13/2022	14:15-14:29	32	30	62
	7/13/2022	14:30-14:44	22	26	48
	7/13/2022	14:45-14:59	20	16	36
	7/13/2022	15:00-15:14	28	23	51
	7/13/2022	15:15-15:29	21	18	39
	7/13/2022	15:30-15:44	24	20	44
	7/13/2022	15:45-15:59	37	30	67

7/13/2022 16:00-16:14	26	32	58
7/13/2022 16:15-16:29	23	18	41
7/13/2022 16:30-16:44	22	39	61
7/13/2022 16:45-16:59	17	30	47
7/13/2022 17:00-17:14	21	17	38
7/13/2022 17:15-17:29	14	22	36
7/13/2022 17:30-17:44	14	21	35
7/13/2022 17:45-17:59	16	10	26
7/13/2022 18:00-18:14	16	18	34
7/13/2022 18:15-18:29	11	15	26
7/13/2022 18:30-18:44	12	9	21
7/13/2022 18:45-18:59	14	10	24
7/13/2022 19:00-19:14	13	10	23
7/13/2022 19:15-19:29	9	10	19
7/13/2022 19:30-19:44	8	13	21
7/13/2022 19:45-19:59	11	13	24
7/13/2022 20:00-20:14	11	8	19
7/13/2022 20:15-20:29	12	7	19
7/13/2022 20:30-20:44	13	9	22
7/13/2022 20:45-20:59	8	9	17
7/13/2022 21:00-21:14	4	3	7
7/13/2022 21:15-21:29	8	8	16
7/13/2022 21:30-21:44	3	6	9
7/13/2022 21:45-21:59	5	5	10
7/13/2022 22:00-22:14	5	1	6
7/13/2022 22:15-22:29	1	5	6
7/13/2022 22:30-22:44	1	5	6
7/13/2022 22:45-22:59	5	1	6
7/13/2022 23:00-23:14	3	2	5
7/13/2022 23:15-23:29	4	4	8
7/13/2022 23:30-23:44	1	0	1
7/13/2022 23:45-23:59	1	2	3
7/14/2022 00:00-00:14	2	0	2
7/14/2022 00:15-00:29	0	1	1
7/14/2022 00:30-00:44	1	3	4
7/14/2022 00:45-00:59	3	0	3
7/14/2022 01:00-01:14	1	1	2
7/14/2022 01:15-01:29	2	0	2
7/14/2022 01:30-01:44	0	0	0
7/14/2022 01:45-01:59	1	0	1
7/14/2022 02:00-02:14	0	0	0
7/14/2022 02:15-02:29	0	0	0
7/14/2022 02:30-02:44	2	1	3
7/14/2022 02:45-02:59	1	0	1
7/14/2022 03:00-03:14	2	2	4
7/14/2022 03:15-03:29	0	0	2
7/14/2022 03:30-03:44	0	1	1
7/14/2022 03:45-03:59	2	3	5
7/14/2022 04:00-04:14	0	4	4
7/14/2022 04:15-04:29	4	4	8
7/14/2022 04:30-04:44	2	5	7
7/14/2022 04:45-04:59	2	7	9
7/14/2022 05:00-05:14	5	6	11

7/14/2022 05:30-05:44	4	12	16
7/14/2022 05:45-05:59	6	14	20
7/14/2022 06:00-06:14	9	4	13
7/14/2022 06:15-06:29	12	17	29
7/14/2022 06:30-06:44	9	22	31
7/14/2022 06:45-06:59	4	23	27
7/14/2022 07:00-07:14	5	13	18
7/14/2022 07:15-07:29	5	15	20
7/14/2022 07:30-07:44	8	32	40
7/14/2022 07:45-07:59	15	20	35
7/14/2022 08:00-08:14	9	22	31
7/14/2022 08:15-08:29	9	21	30
7/14/2022 08:30-08:44	11	20	31
7/14/2022 08:45-08:59	7	21	28
7/14/2022 09:00-09:14	6	20	26
7/14/2022 09:15-09:29	14	7	21
7/14/2022 09:30-09:44	13	17	30
7/14/2022 09:45-09:59	5	17	22
7/14/2022 10:00-10:14	6	11	17
7/14/2022 10:15-10:29	0	0	0
7/14/2022 10:30-10:44	0	0	0
7/14/2022 10:45-10:59	0	0	0

ADT = 2230

Southbound		Speed Ranges (MPH)													Total		
Date	Hour	1-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76+	MPH	Total
7/13/2022	10:00-10:14	0	0	0	0	0	0	4	3	2	0	0	0	0	0	0	9
7/13/2022	10:15-10:29	0	0	0	0	1	0	2	1	5	1	2	3	0	0	0	15
7/13/2022	10:30-10:44	0	0	0	0	0	0	6	4	6	1	3	0	0	0	0	20
7/13/2022	10:45-10:59	0	0	0	0	0	1	0	6	8	4	4	0	0	0	0	20
7/13/2022	11:00-11:14	0	0	0	0	0	1	1	5	6	4	2	0	0	0	0	19
7/13/2022	11:15-11:29	0	0	0	0	0	0	7	4	13	2	4	0	0	0	0	30
7/13/2022	11:30-11:44	0	0	0	0	0	0	2	3	10	2	2	1	0	0	0	19
7/13/2022	11:45-11:59	0	0	0	1	0	0	1	0	4	8	1	0	0	0	0	15
7/13/2022	12:00-12:14	0	0	0	0	0	0	4	4	6	0	1	0	0	0	0	15
7/13/2022	12:15-12:29	0	0	0	0	0	0	2	2	7	2	1	1	0	0	0	16
7/13/2022	12:30-12:44	0	0	1	0	0	0	5	9	7	6	2	1	1	0	0	30
7/13/2022	12:45-12:59	0	0	0	0	0	0	3	9	4	3	6	2	0	0	0	23
7/13/2022	13:00-13:14	0	0	0	0	0	0	3	2	2	5	3	0	0	0	0	15
7/13/2022	13:15-13:29	0	0	0	0	0	0	0	7	3	2	2	0	0	0	0	14
7/13/2022	13:30-13:44	0	0	0	0	0	0	0	5	5	6	1	0	0	0	0	23
7/13/2022	13:45-13:59	0	0	0	0	1	0	2	7	13	3	2	0	0	0	0	22
7/13/2022	14:00-14:14	0	0	0	0	0	0	2	4	5	8	1	0	0	0	0	20
7/13/2022	14:15-14:29	0	0	0	0	0	0	2	2	4	3	1	0	0	0	0	20
7/13/2022	14:30-14:44	0	0	0	0	0	1	2	1	11	7	2	0	0	0	0	26
7/13/2022	14:45-14:59	0	0	0	0	0	0	2	4	5	3	3	0	0	0	0	16
7/13/2022	15:00-15:14	0	0	0	0	1	0	2	8	8	4	4	1	0	0	0	23
7/13/2022	15:15-15:29	0	0	0	0	0	0	1	3	3	5	5	2	1	0	0	18
7/13/2022	15:30-15:44	0	0	0	0	0	0	4	6	6	9	5	2	0	0	0	20
7/13/2022	15:45-15:59	0	0	0	0	0	0	2	7	8	7	9	1	1	0	0	30
7/13/2022	16:00-16:14	0	0	0	0	0	1	5	13	6	7	0	0	0	0	0	32
7/13/2022	16:15-16:29	0	0	0	0	0	0	2	2	8	4	4	0	0	0	0	18
7/13/2022	16:30-16:44	0	0	0	0	0	1	6	9	11	6	6	1	0	0	1	39
7/13/2022	16:45-16:59	0	0	0	0	0	1	4	5	6	13	1	1	0	0	0	30
7/13/2022	17:00-17:14	0	0	0	0	0	0	2	6	2	5	5	1	0	0	0	17
7/13/2022	17:15-17:29	0	0	0	0	0	0	0	2	3	2	10	1	0	0	0	22
7/13/2022	17:30-17:44	0	0	0	0	0	0	0	3	11	3	5	0	0	0	0	21
7/13/2022	17:45-17:59	0	0	0	0	0	0	0	4	4	0	2	1	0	0	0	10
7/13/2022	18:00-18:14	0	0	0	0	1	0	2	4	5	3	3	0	0	0	0	18
7/13/2022	18:15-18:29	0	0	0	0	0	0	4	3	4	3	3	0	1	0	0	15
7/13/2022	18:30-18:44	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	9
7/13/2022	18:45-18:59	0	0	0	0	0	1	0	1	1	3	3	1	2	0	0	10
7/13/2022	19:00-19:14	0	0	0	0	0	0	0	3	3	2	2	1	0	0	0	10
7/13/2022	19:15-19:29	0	0	0	0	0	0	1	2	4	2	4	1	0	0	0	10
7/13/2022	19:30-19:44	0	0	0	0	0	0	1	2	8	2	0	1	0	0	0	13
7/13/2022	19:45-19:59	0	0	0	0	0	1	2	1	3	5	2	0	0	0	0	13
7/13/2022	20:00-20:14	0	0	0	0	0	0	1	2	2	2	1	1	0	0	0	8
7/13/2022	20:15-20:29	0	0	0	0	0	0	0	4	1	0	2	0	0	0	0	7
7/13/2022	20:30-20:44	0	0	0	0	0	1	5	2	0	1	0	0	0	0	0	9
7/13/2022	20:45-20:59	0	0	0	0	0	0	2	1	1	3	3	1	0	0	0	9
7/13/2022	21:00-21:14	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	3
7/13/2022	21:15-21:29	0	0	0	0	0	0	3	1	1	3	3	0	0	0	0	8
7/13/2022	21:30-21:44	0	0	0	0	0	0	1	0	1	4	0	0	0	0	0	6

Total Date	Hour	1-15 MPH	16-20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	46-50 MPH	51-55 MPH	56-60 MPH	61-65 MPH	66-70 MPH	71-75 MPH	76+ MPH	Total
7/13/2022	10:00-10:14	0	0	0	0	0	0	4	6	3	0	0	0	0	0	13
7/13/2022	10:15-10:29	0	0	0	0	1	0	6	4	10	5	2	3	0	0	31
7/13/2022	10:30-10:44	0	0	0	0	0	0	8	9	10	4	4	0	0	0	35
7/13/2022	10:45-10:59	0	0	0	0	0	1	1	12	15	7	1	0	0	0	37
7/13/2022	11:00-11:14	0	0	0	0	0	1	4	13	9	5	2	0	0	0	34
7/13/2022	11:15-11:29	0	1	0	0	0	0	7	11	24	5	4	1	0	0	52
7/13/2022	11:30-11:44	0	0	0	1	0	1	4	10	20	7	1	1	0	0	46
7/13/2022	11:45-11:59	0	0	0	1	0	0	3	5	12	12	2	0	0	0	35
7/13/2022	12:00-12:14	0	0	0	0	0	0	4	8	15	4	1	1	0	0	33
7/13/2022	12:15-12:29	0	0	0	0	0	0	3	5	13	5	1	1	1	0	29
7/13/2022	12:30-12:44	0	0	1	1	0	1	6	11	15	10	2	0	0	0	47
7/13/2022	12:45-12:59	0	0	0	0	0	0	4	17	7	7	3	4	0	0	42
7/13/2022	13:00-13:14	0	0	0	0	0	0	4	8	12	7	5	0	0	0	36
7/13/2022	13:15-13:29	0	0	0	0	0	0	6	8	9	16	2	0	0	0	41
7/13/2022	13:30-13:44	0	0	0	0	1	2	1	9	11	12	2	0	0	0	38
7/13/2022	13:45-13:59	0	0	0	0	1	0	3	7	19	6	1	0	0	0	37
7/13/2022	14:00-14:14	0	0	0	0	0	0	4	10	12	12	1	0	0	0	39
7/13/2022	14:15-14:29	0	0	0	0	0	3	4	14	28	12	1	0	0	0	62
7/13/2022	14:30-14:44	0	0	0	0	0	2	4	7	19	10	4	2	0	0	48
7/13/2022	14:45-14:59	0	0	0	0	0	0	3	9	13	8	3	0	0	0	36
7/13/2022	15:00-15:14	0	0	0	0	1	1	5	16	16	9	3	1	0	0	51
7/13/2022	15:15-15:29	0	0	0	0	0	0	4	6	11	12	4	1	0	0	39
7/13/2022	15:30-15:44	0	0	0	0	0	1	7	12	11	7	4	2	0	0	44
7/13/2022	15:45-15:59	0	0	0	0	0	0	3	17	26	21	4	1	0	0	67
7/13/2022	16:00-16:14	0	0	0	1	0	1	5	17	19	13	2	0	0	0	58
7/13/2022	16:15-16:29	0	0	0	0	0	0	3	6	22	8	1	0	0	0	41
7/13/2022	16:30-16:44	0	0	0	0	0	3	8	14	22	7	5	1	0	1	61
7/13/2022	16:45-16:59	0	0	0	0	0	1	7	11	14	18	2	0	0	0	47
7/13/2022	17:00-17:14	0	0	0	0	0	0	2	10	10	12	3	1	0	0	38
7/13/2022	17:15-17:29	0	0	0	0	0	1	0	2	9	14	7	1	0	0	36
7/13/2022	17:30-17:44	0	0	0	0	0	0	2	6	11	6	2	0	0	0	35
7/13/2022	17:45-17:59	0	0	0	0	0	0	1	9	19	3	1	1	0	0	26
7/13/2022	18:00-18:14	0	0	0	0	1	0	2	8	12	7	3	0	0	0	34
7/13/2022	18:15-18:29	0	0	0	0	1	0	6	5	6	7	3	0	1	0	26
7/13/2022	18:30-18:44	0	0	0	0	0	0	0	3	9	5	3	1	0	0	24
7/13/2022	18:45-18:59	0	0	0	0	0	1	0	5	8	3	2	3	1	0	21
7/13/2022	19:00-19:14	0	0	0	0	0	0	0	5	9	6	2	1	0	0	23
7/13/2022	19:15-19:29	0	0	0	1	0	0	1	3	8	4	0	1	0	0	21
7/13/2022	19:30-19:44	0	0	0	0	0	1	1	2	12	3	0	0	0	0	19
7/13/2022	19:45-19:59	0	0	0	0	0	1	2	6	7	5	2	1	0	0	24
7/13/2022	20:00-20:14	0	0	0	0	0	0	2	4	6	4	3	0	0	0	19
7/13/2022	20:15-20:29	0	0	0	0	0	0	2	10	6	0	0	1	0	0	19
7/13/2022	20:30-20:44	0	0	0	0	0	1	6	7	4	4	0	0	0	0	22
7/13/2022	20:45-20:59	0	0	0	0	0	0	2	6	3	4	1	1	0	0	17
7/13/2022	21:00-21:14	0	0	0	0	0	0	1	2	2	3	0	0	0	0	17
7/13/2022	21:15-21:29	0	0	0	0	0	1	7	2	2	2	1	0	0	0	16
7/13/2022	21:30-21:44	0	0	0	0	0	0	2	0	2	4	0	0	0	0	9
7/13/2022	21:45-21:59	0	0	0	0	0	0	2	2	3	0	1	0	0	0	10

