



Northeastern Indiana Regional Coordinating Council
200 East Berry St, Suite 230

Location: 41.10183, -
85.204026

Fort Wayne, Indiana, United States 46802
260.449.7309

Count Name: Butler Rd /
Leesburg Rd
Site Code:
Start Date: 10/16/2024
Page No: 1

Turning Movement Data

Start Time	Leesburg Rd Westbound					Leesburg Rd Eastbound					Butler Rd Southbound					Haeman Rd Northbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:00 AM	0	19	0	0	19	1	21	0	0	22	0	1	2	0	3	5	8	2	0	15	59
6:15 AM	1	28	0	0	29	2	16	1	0	19	2	3	0	0	5	4	4	8	0	16	69
6:30 AM	5	42	5	0	52	2	54	3	0	59	2	2	2	0	6	4	11	7	0	22	139
6:45 AM	0	43	6	0	49	6	43	1	0	50	1	5	6	0	12	5	17	3	0	25	136
Hourly Total	6	132	11	0	149	11	134	5	0	150	5	11	10	0	26	18	40	20	0	78	403
7:00 AM	3	56	6	0	65	5	40	0	0	45	0	4	4	0	8	1	18	3	0	22	140
7:15 AM	3	60	5	0	68	4	37	0	0	41	0	6	5	0	11	8	21	14	0	43	163
7:30 AM	3	71	8	0	82	5	50	3	0	58	0	9	2	0	11	13	17	7	0	37	188
7:45 AM	2	55	4	0	61	12	48	3	0	63	0	8	4	0	12	5	18	4	0	27	163
Hourly Total	11	242	23	0	276	26	175	6	0	207	0	27	15	0	42	27	74	28	0	129	654
8:00 AM	1	38	7	0	46	7	18	5	0	30	1	8	7	0	16	3	14	2	0	19	111
8:15 AM	5	40	6	0	51	2	34	7	0	43	2	8	5	0	15	1	16	1	0	18	127
8:30 AM	0	65	4	0	69	7	32	1	0	40	3	4	6	0	13	5	16	3	0	24	146
8:45 AM	5	66	1	0	72	6	20	3	0	29	3	9	4	0	16	2	15	3	0	20	137
Hourly Total	11	209	18	0	238	22	104	16	0	142	9	29	22	0	60	11	61	9	0	81	521
9:00 AM	0	32	2	0	34	0	22	3	0	25	3	2	1	0	6	3	9	0	0	12	77
9:15 AM	2	28	1	0	31	5	28	3	0	36	1	2	0	0	3	1	7	0	0	8	78
9:30 AM	2	29	1	0	32	2	16	2	0	20	1	4	3	0	8	4	10	6	0	20	80
9:45 AM	0	23	2	0	25	2	27	1	0	30	3	4	1	0	8	4	8	4	0	16	79
Hourly Total	4	112	6	0	122	9	93	9	0	111	8	12	5	0	25	12	34	10	0	56	314
10:00 AM	6	15	6	0	27	2	17	1	0	20	1	5	3	0	9	1	8	7	0	16	72
10:15 AM	2	19	1	0	22	3	19	1	0	23	5	5	2	0	12	5	4	3	0	12	69
10:30 AM	3	19	3	0	25	4	21	2	0	27	1	5	5	0	11	6	12	2	0	20	83
10:45 AM	1	27	2	0	30	2	24	1	0	27	5	11	4	0	20	1	11	5	0	17	94
Hourly Total	12	80	12	0	104	11	81	5	0	97	12	26	14	0	52	13	35	17	0	65	318
11:00 AM	3	17	1	0	21	4	15	2	0	21	1	4	4	0	9	5	5	0	0	10	61
11:15 AM	5	27	1	0	33	4	40	0	0	44	1	11	4	0	16	1	8	3	0	12	105
11:30 AM	1	24	10	0	35	2	31	0	0	33	2	6	2	0	10	1	8	1	0	10	88
11:45 AM	0	26	3	0	29	3	23	2	0	28	1	3	5	0	9	0	8	2	0	10	76
Hourly Total	9	94	15	0	118	13	109	4	0	126	5	24	15	0	44	7	29	6	0	42	330
12:00 PM	5	27	2	0	34	1	29	1	0	31	4	15	5	0	24	3	7	0	0	10	99
12:15 PM	2	30	4	0	36	0	32	1	0	33	3	8	2	0	13	1	4	3	0	8	90
12:30 PM	4	31	5	0	40	5	33	3	0	41	1	10	4	0	15	2	8	2	0	12	108
12:45 PM	3	33	5	0	41	2	25	1	0	28	3	12	4	0	19	2	15	3	0	20	108
Hourly Total	14	121	16	0	151	8	119	6	0	133	11	45	15	0	71	8	34	8	0	50	405
1:00 PM	4	34	4	0	42	4	30	6	0	40	3	7	1	0	11	1	10	3	0	14	107
1:15 PM	3	32	5	0	40	4	23	0	0	27	2	9	3	0	14	3	9	1	0	13	94
1:30 PM	5	30	3	0	38	0	28	3	0	31	3	10	4	0	17	3	8	8	0	19	105
1:45 PM	1	31	4	0	36	3	31	4	0	38	1	10	1	0	12	2	7	0	0	9	95
Hourly Total	13	127	16	0	156	11	112	13	0	136	9	36	9	0	54	9	34	12	0	55	401
2:00 PM	3	29	4	0	36	7	23	3	0	33	5	9	2	0	16	3	10	6	0	19	104
2:15 PM	1	41	3	0	45	4	42	4	0	50	2	11	5	0	18	2	7	4	0	13	126
2:30 PM	4	25	6	0	35	6	43	3	0	52	4	14	1	0	19	6	9	5	0	20	126
2:45 PM	5	32	7	0	44	2	52	4	0	58	5	14	5	0	24	2	6	5	0	13	139
Hourly Total	13	127	20	0	160	19	160	14	0	193	16	48	13	0	77	13	32	20	0	65	495
3:00 PM	6	34	9	0	49	1	39	2	0	42	4	19	3	0	26	1	12	6	0	19	136
3:15 PM	6	40	4	0	50	4	35	4	0	43	1	13	9	0	23	4	3	4	0	11	127
3:30 PM	5	48	5	0	58	8	45	9	0	62	10	14	12	0	36	5	13	5	0	23	179
3:45 PM	12	48	3	0	63	3	34	6	0	43	9	17	7	0	33	2	14	2	0	18	157
Hourly Total	29	170	21	0	220	16	153	21	0	190	24	63	31	0	118	12	42	17	0	71	599
4:00 PM	3	41	4	0	48	6	49	4	0	59	5	13	9	0	27	5	22	6	0	33	167
4:15 PM	6	50	10	0	66	4	52	8	0	64	4	17	8	0	29	0	15	5	0	20	179
4:30 PM	8	45	6	0	59	2	53	7	0	62	9	20	7	0	36	7	9	6	0	22	179
4:45 PM	5	53	6	0	64	2	60	13	0	75	4	24	7	0	35	2	8	7	0	17	191
Hourly Total	22	189	26	0	237	14	214	32	0	260	22	74	31	0	127	14	54	24	0	92	716
5:00 PM	7	47	3	0	57	7	59	5	0	71	7	22	10	0	39	6	11	7	0	24	191
5:15 PM	3	45	3	0	51	2	70	11	0	83	1	21	7	0	29	7	11	5	0	23	186
5:30 PM	8	39	3	0	50	3	53	5	0	61	4	19	2	0	25	3	14	2	0	19	155
5:45 PM	4	48	5	0	57	2	46	13	0	61	3	26	5	0	34	1	12	2	0	15	167
Hourly Total	22	179	14	0	215	14	228	34	0	276	15	88	24	0	127	17	48	16	0	81	699

6:00 PM	4	47	6	0	57	3	129	8	0	140	2	18	2	0	22	1	9	4	0	14	233
6:15 PM	4	43	4	0	51	3	72	5	0	80	2	13	1	0	16	3	12	3	0	18	165
6:30 PM	5	30	2	0	37	0	39	5	0	44	2	14	2	0	18	2	3	5	0	10	109
6:45 PM	5	29	4	0	38	3	33	4	0	40	4	15	2	0	21	0	7	3	0	10	109
Hourly Total	18	149	16	0	183	9	273	22	0	304	10	60	7	0	77	6	31	15	0	52	616
Grand Total	184	1931	214	0	2329	183	1955	187	0	2325	146	543	211	0	900	167	548	202	0	917	6471
Approach %	7.9	82.9	9.2	0.0	-	7.9	84.1	8.0	0.0	-	16.2	60.3	23.4	0.0	-	18.2	59.8	22.0	0.0	-	-
Total %	2.8	29.8	3.3	0.0	36.0	2.8	30.2	2.9	0.0	35.9	2.3	8.4	3.3	0.0	13.9	2.6	8.5	3.1	0.0	14.2	-
Lights	179	1901	208	0	2288	178	1916	185	0	2279	144	530	206	0	880	160	534	197	0	891	6338
% Lights	97.3	98.4	97.2	-	98.2	97.3	98.0	98.9	-	98.0	98.6	97.6	97.6	-	97.8	95.8	97.4	97.5	-	97.2	97.9
Buses	2	3	4	0	9	1	2	0	0	3	1	6	1	0	8	5	3	2	0	10	30
% Buses	1.1	0.2	1.9	-	0.4	0.5	0.1	0.0	-	0.1	0.7	1.1	0.5	-	0.9	3.0	0.5	1.0	-	1.1	0.5
Trucks	3	27	2	0	32	4	37	2	0	43	1	7	4	0	12	2	11	3	0	16	103
% Trucks	1.6	1.4	0.9	-	1.4	2.2	1.9	1.1	-	1.8	0.7	1.3	1.9	-	1.3	1.2	2.0	1.5	-	1.7	1.6

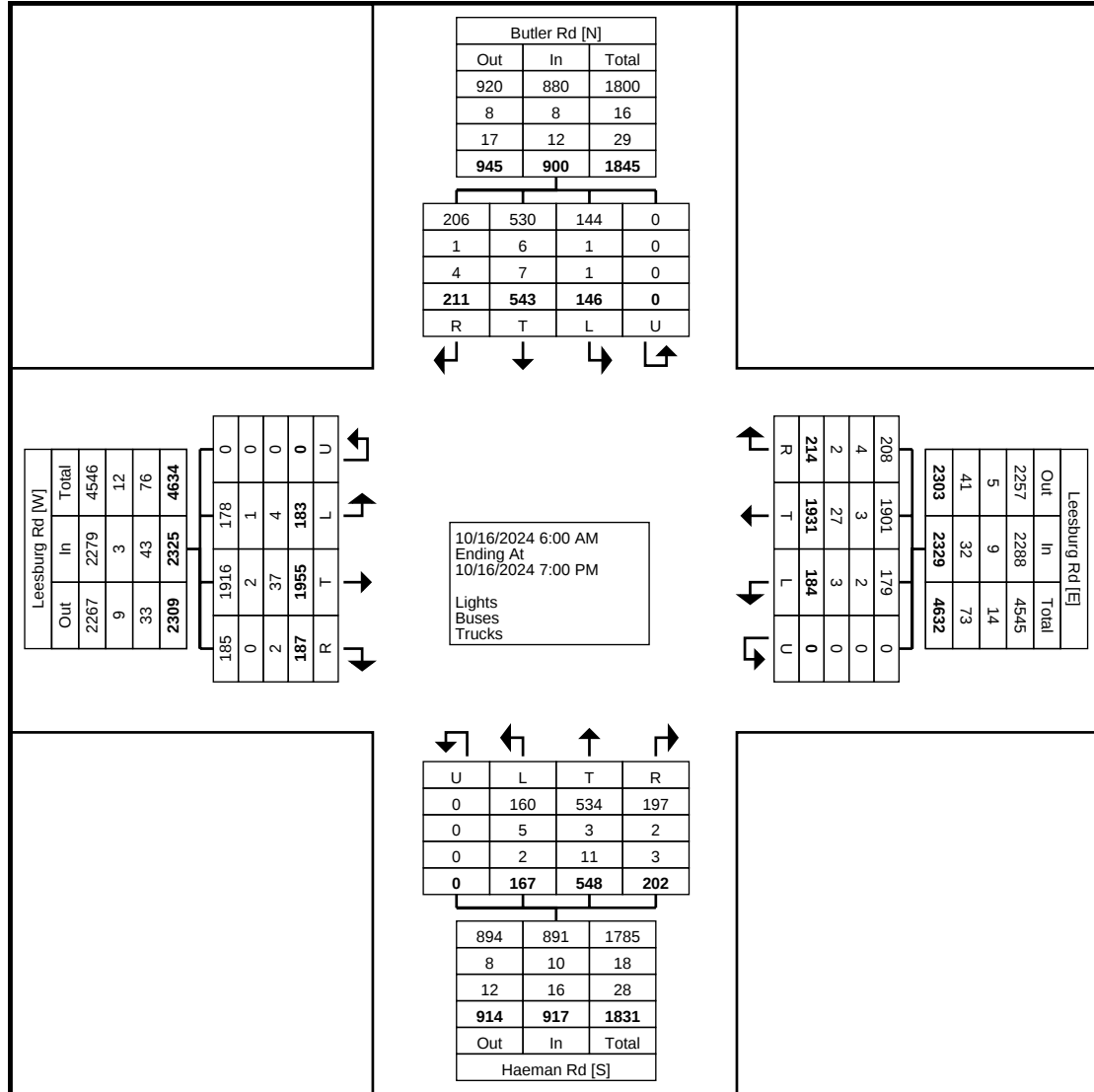


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Turning Movement Data Plot



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Count Name: Butler Rd /
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Turning Movement Peak Hour Data (7:00 AM)

Start Time	Leesburg Rd Westbound					Leesburg Rd Eastbound					Butler Rd Southbound					Haeman Rd Northbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	3	56	6	0	65	5	40	0	0	45	0	4	4	0	8	1	18	3	0	22	140
7:15 AM	3	60	5	0	68	4	37	0	0	41	0	6	5	0	11	8	21	14	0	43	163
7:30 AM	3	71	8	0	82	5	50	3	0	58	0	9	2	0	11	13	17	7	0	37	188
7:45 AM	2	55	4	0	61	12	48	3	0	63	0	8	4	0	12	5	18	4	0	27	163
Total	11	242	23	0	276	26	175	6	0	207	0	27	15	0	42	27	74	28	0	129	654
Approach %	4.0	87.7	8.3	0.0	-	12.6	84.5	2.9	0.0	-	0.0	64.3	35.7	0.0	-	20.9	57.4	21.7	0.0	-	-
Total %	1.7	37.0	3.5	0.0	42.2	4.0	26.8	0.9	0.0	31.7	0.0	4.1	2.3	0.0	6.4	4.1	11.3	4.3	0.0	19.7	-
PHF	0.917	0.852	0.719	0.000	0.841	0.542	0.875	0.500	0.000	0.821	0.000	0.750	0.750	0.000	0.875	0.519	0.881	0.500	0.000	0.750	0.870
Lights	11	235	23	0	269	26	174	6	0	206	0	25	15	0	40	26	73	28	0	127	642
% Lights	100.0	97.1	100.0	-	97.5	100.0	99.4	100.0	-	99.5	-	92.6	100.0	-	95.2	96.3	98.6	100.0	-	98.4	98.2
Buses	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	1	0	0	2	5
% Buses	0.0	0.4	0.0	-	0.4	0.0	0.0	0.0	-	0.0	-	7.4	0.0	-	4.8	3.7	1.4	0.0	-	1.6	0.8
Trucks	0	6	0	0	6	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	7
% Trucks	0.0	2.5	0.0	-	2.2	0.0	0.6	0.0	-	0.5	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	1.1

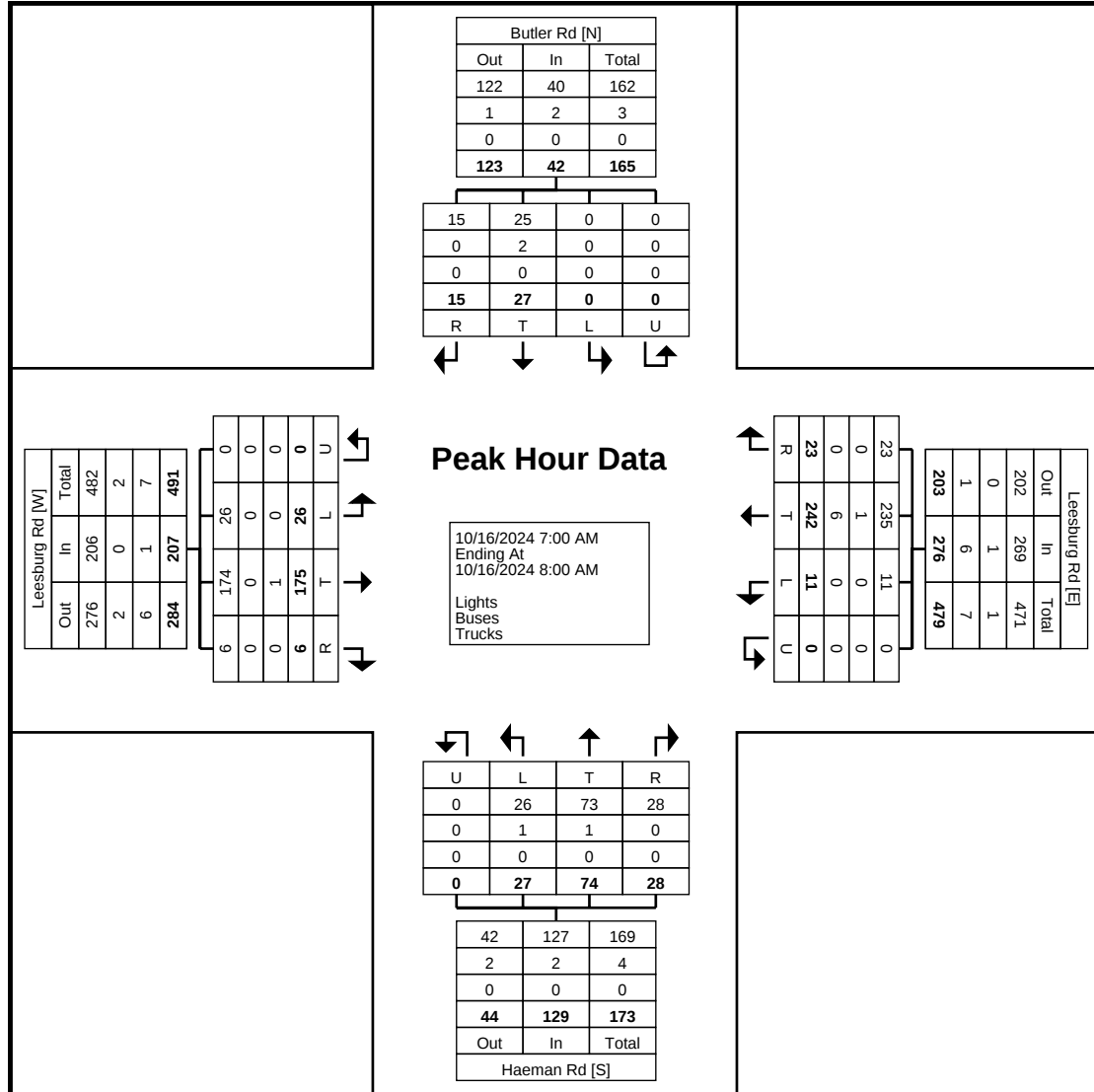


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Turning Movement Peak Hour Data Plot (7:00 AM)



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Page No: 6

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Leesburg Rd Westbound					Leesburg Rd Eastbound					Butler Rd Southbound					Haeman Rd Northbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:30 PM	8	45	6	0	59	2	53	7	0	62	9	20	7	0	36	7	9	6	0	22	179
4:45 PM	5	53	6	0	64	2	60	13	0	75	4	24	7	0	35	2	8	7	0	17	191
5:00 PM	7	47	3	0	57	7	59	5	0	71	7	22	10	0	39	6	11	7	0	24	191
5:15 PM	3	45	3	0	51	2	70	11	0	83	1	21	7	0	29	7	11	5	0	23	186
Total	23	190	18	0	231	13	242	36	0	291	21	87	31	0	139	22	39	25	0	86	747
Approach %	10.0	82.3	7.8	0.0	-	4.5	83.2	12.4	0.0	-	15.1	62.6	22.3	0.0	-	25.6	45.3	29.1	0.0	-	-
Total %	3.1	25.4	2.4	0.0	30.9	1.7	32.4	4.8	0.0	39.0	2.8	11.6	4.1	0.0	18.6	2.9	5.2	3.3	0.0	11.5	-
PHF	0.719	0.896	0.750	0.000	0.902	0.464	0.864	0.692	0.000	0.877	0.583	0.906	0.775	0.000	0.891	0.786	0.886	0.893	0.000	0.896	0.978
Lights	23	189	17	0	229	13	235	36	0	284	20	85	31	0	136	21	39	25	0	85	734
% Lights	100.0	99.5	94.4	-	99.1	100.0	97.1	100.0	-	97.6	95.2	97.7	100.0	-	97.8	95.5	100.0	100.0	-	98.8	98.3
Buses	0	0	1	0	1	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	4
% Buses	0.0	0.0	5.6	-	0.4	0.0	0.4	0.0	-	0.3	4.8	1.1	0.0	-	1.4	0.0	0.0	0.0	-	0.0	0.5
Trucks	0	1	0	0	1	0	6	0	0	6	0	1	0	0	1	1	0	0	0	1	9
% Trucks	0.0	0.5	0.0	-	0.4	0.0	2.5	0.0	-	2.1	0.0	1.1	0.0	-	0.7	4.5	0.0	0.0	-	1.2	1.2

HCM 7th TWSC
3: Haeman Rd/Butler Rd & Leesburg Rd

10/24/2024

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	175	6	11	242	23	27	74	28	0	27	15
Future Vol, veh/h	26	175	6	11	242	23	27	74	28	0	27	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	54	88	50	92	85	72	52	88	50	92	75	75
Heavy Vehicles, %	0	1	0	0	3	0	4	1	0	0	7	0
Mvmt Flow	48	199	12	12	285	32	52	84	56	0	36	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	317	0	0	211	0	0	628	642	205	662	632	301
Stage 1	-	-	-	-	-	-	301	301	-	325	325	-
Stage 2	-	-	-	-	-	-	327	341	-	337	307	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.14	6.51	6.2	7.1	6.57	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.51	-	6.1	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.51	-	6.1	5.57	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.536	4.009	3.3	3.5	4.063	3.3
Pot Cap-1 Maneuver	1255	-	-	1372	-	-	393	394	841	378	391	744
Stage 1	-	-	-	-	-	-	704	667	-	692	640	-
Stage 2	-	-	-	-	-	-	682	641	-	681	652	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1372	-	-	328	373	841	262	370	744
Mov Cap-2 Maneuver	-	-	-	-	-	-	328	373	-	262	370	-
Stage 1	-	-	-	-	-	-	673	638	-	685	634	-
Stage 2	-	-	-	-	-	-	619	634	-	528	624	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.48			0.28			20.19			14.11		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	426	331	-	-	64	-	-	451				
HCM Lane V/C Ratio	0.45	0.038	-	-	0.009	-	-	0.124				
HCM Control Delay (s/veh)	20.2	8	0	-	7.6	0	-	14.1				
HCM Lane LOS	C	A	A	-	A	A	-	B				
HCM 95th %tile O(veh)	2.3	0.1	-	-	0	-	-	0.4				

Intersection

Int Delay, s/veh 6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	242	36	23	190	18	22	39	25	21	87	31
Future Vol, veh/h	13	242	36	23	190	18	22	39	25	21	87	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	46	86	69	72	90	75	79	89	89	58	91	78
Heavy Vehicles, %	0	3	0	0	1	6	5	0	0	5	2	0
Mvmt Flow	28	281	52	32	211	24	28	44	28	36	96	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	235	0	0	334	0	0	687	663	307	647	677	223
Stage 1	-	-	-	-	-	-	364	364	-	287	287	-
Stage 2	-	-	-	-	-	-	323	299	-	360	390	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.15	6.5	6.2	7.15	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.5	-	6.15	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.5	-	6.15	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.545	4	3.3	3.545	4.018	3.3
Pot Cap-1 Maneuver	1344	-	-	1237	-	-	357	384	737	380	375	821
Stage 1	-	-	-	-	-	-	649	627	-	714	674	-
Stage 2	-	-	-	-	-	-	683	670	-	652	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1344	-	-	1237	-	-	238	363	737	306	354	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	363	-	306	354	-
Stage 1	-	-	-	-	-	-	632	611	-	693	654	-
Stage 2	-	-	-	-	-	-	538	650	-	567	592	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.6			0.96			18.7			21.09		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	362	136	-	-	211	-	-	393
HCM Lane V/C Ratio	0.276	0.021	-	-	0.026	-	-	0.437
HCM Control Delay (s/veh)	18.7	7.7	0	-	8	0	-	21.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.1	-	-	2.2

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgAllWar

Study Date : 10/24/2024

Multiway Stop Warrants - Summary

Major Street Approaches

Eastbound: Leesburg Rd

Number of Lanes : 1

Total Approach Volume: 2,378

Westbound: Leesburg Rd

Number of Lanes :1

Total Approach Volume: 2,329

Minor Street Approaches

Northbound: Haeman RD

Number of Lanes :1

Total Approach Volume: 917

Southbound: Butler Rd

Number of Lanes :1

Total Approach Volume: 899

Warrant Summary (Urban Values Apply)

Criteria A - Interim Measure..... **Not Evaluated**
If traffic signals are justified, stop signs can be installed as an interim measure.

Criteria B - Crash Experience..... **Satisfied**
Number of crashes (9) meet or exceed minimum required (5).

Criteria C - Minimum Volumes and Delays..... **Not Satisfied**
Average Delay Per Vehicle (20.0) is less than minimum required (30).
Average of 8 highest hours is less than volume criteria.

Criteria D - 80% of Volumes, Delays, and Crashes..... **Not Satisfied**
Average Delay Per Vehicle (20.0) is less than minimum required (24).
Number of crashes (9) meets or exceeds minimum required (4).
Average of 8 highest hours meets or exceeds volume criteria.

Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
16:30 - 17:30	522	429.6	225	164.4	300	200	No
17:30 - 18:30	557		163				
07:00 - 08:00	536		171				
15:30 - 16:30	463		219				
14:30 - 15:30	373		155				
08:00 - 09:00	380		141				
13:30 - 14:30	307		123				
12:30 - 13:30	299		118				
06:00 - 07:00	299		104				
11:15 - 12:15	267		101				
10:00 - 11:00	201		117				
09:00 - 10:00	233		81				

Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
16:30 - 17:30	522	429.6	225	164.4	240	160	Yes
17:30 - 18:30	557		163				
07:00 - 08:00	536		171				
15:30 - 16:30	463		219				
14:30 - 15:30	373		155				
08:00 - 09:00	380		141				
13:30 - 14:30	307		123				
12:30 - 13:30	299		118				
06:00 - 07:00	299		104				
11:15 - 12:15	267		101				
10:00 - 11:00	201		117				
09:00 - 10:00	233		81				

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Signal Warrants - Summary

Major Street Approaches

Eastbound: Leesburg Rd

Number of Lanes : 1

Total Approach Volume: 2,325

Westbound: Leesburg Rd

Number of Lanes :1

Total Approach Volume: 2,329

Minor Street Approaches

Northbound: Haeman Rd

Number of Lanes :1

Total Approach Volume: 917

Southbound: Butler Rd

Number of Lanes :1

Total Approach Volume: 900

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Not Satisfied

Required 1A volumes reached for 3 hours, 8 are needed

Required 1B volumes reached for 0 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Not Satisfied

Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour.....Not Evaluated

Warrant 3A - Peak Hour Delay.....Not Evaluated

Warrant 3B - Peak Hour Volumes.....Not Evaluated

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Satisfied

Number of accidents (9) meet minimum (5) but volumes do not.

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Major Road Leesburg Rd						Minor Road Haeman Rd		Met?
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
17:15 - 18:15	345	+	215	=	560	71	110	No
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
16:30 - 17:30	291	+	231	=	522	86	139	No
16:15 - 17:15	272	+	246	=	518	83	139	No
16:45 - 17:45	290	+	222	=	512	83	128	No
16:00 - 17:00	260	+	237	=	497	92	127	No
17:00 - 18:00	276	+	215	=	491	81	127	No
18:00 - 19:00	304	+	183	=	487	52	77	No
07:00 - 08:00	207	+	276	=	483	129	42	No
15:45 - 16:45	228	+	236	=	464	93	125	No
15:30 - 16:30	228	+	235	=	463	94	125	No
06:45 - 07:45	194	+	264	=	458	127	39	No
07:15 - 08:15	192	+	257	=	449	126	50	No
07:30 - 08:30	194	+	240	=	434	101	54	No
06:30 - 07:30	195	+	234	=	429	112	37	No
15:15 - 16:15	207	+	219	=	426	85	119	No
15:00 - 16:00	190	+	220	=	410	71	118	No
14:45 - 15:45	205	+	201	=	406	66	109	No
07:45 - 08:45	176	+	227	=	403	88	56	No
08:00 - 09:00	142	+	238	=	380	81	60	No
14:15 - 15:15	202	+	173	=	375	65	87	No
14:30 - 15:30	195	+	178	=	373	61	92	No
06:15 - 07:15	173	+	195	=	368	85	31	No
08:15 - 09:15	137		226		363	74	50	No

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Major Road Leesburg Rd						Minor Road Haeman Rd		Met?
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
17:15 - 18:15	345	+	215	=	560	71	110	No
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
16:30 - 17:30	291	+	231	=	522	86	139	No
16:15 - 17:15	272	+	246	=	518	83	139	No
16:45 - 17:45	290	+	222	=	512	83	128	No
16:00 - 17:00	260	+	237	=	497	92	127	No
17:00 - 18:00	276	+	215	=	491	81	127	No
18:00 - 19:00	304	+	183	=	487	52	77	No
07:00 - 08:00	207	+	276	=	483	129	42	No
15:45 - 16:45	228	+	236	=	464	93	125	No
15:30 - 16:30	228	+	235	=	463	94	125	No
06:45 - 07:45	194	+	264	=	458	127	39	No
07:15 - 08:15	192	+	257	=	449	126	50	No
07:30 - 08:30	194	+	240	=	434	101	54	No
06:30 - 07:30	195	+	234	=	429	112	37	No
15:15 - 16:15	207	+	219	=	426	85	119	No
15:00 - 16:00	190	+	220	=	410	71	118	No
14:45 - 15:45	205	+	201	=	406	66	109	No
07:45 - 08:45	176	+	227	=	403	88	56	No
08:00 - 09:00	142	+	238	=	380	81	60	No
14:15 - 15:15	202	+	173	=	375	65	87	No
14:30 - 15:30	195	+	178	=	373	61	92	No
06:15 - 07:15	173	+	195	=	368	85	31	No
08:15 - 09:15	137		226		363	74	50	No

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 3 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road Leesburg Rd						Minor Road Haeman Rd		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:30 - 17:30	291	+	231	=	522	86	139	Yes
15:30 - 16:30	228	+	235	=	463	94	125	Yes
06:45 - 07:45	194	+	264	=	458	127	39	Yes
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
18:00 - 19:00	304	+	183	=	487	52	77	No
06:30 - 07:30	195	+	234	=	429	112	37	No
15:15 - 16:15	207	+	219	=	426	85	119	No
15:00 - 16:00	190	+	220	=	410	71	118	No
14:45 - 15:45	205	+	201	=	406	66	109	No
07:45 - 08:45	176	+	227	=	403	88	56	No
08:00 - 09:00	142		238		380	81	60	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
17:15 - 18:15	345	+	215	=	560	71	110	No
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
16:30 - 17:30	291	+	231	=	522	86	139	No
16:15 - 17:15	272	+	246	=	518	83	139	No
16:45 - 17:45	290	+	222	=	512	83	128	No
16:00 - 17:00	260	+	237	=	497	92	127	No
17:00 - 18:00	276	+	215	=	491	81	127	No
18:00 - 19:00	304	+	183	=	487	52	77	No
07:00 - 08:00	207	+	276	=	483	129	42	No
15:45 - 16:45	228	+	236	=	464	93	125	No
15:30 - 16:30	228		235		463	94	125	No

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

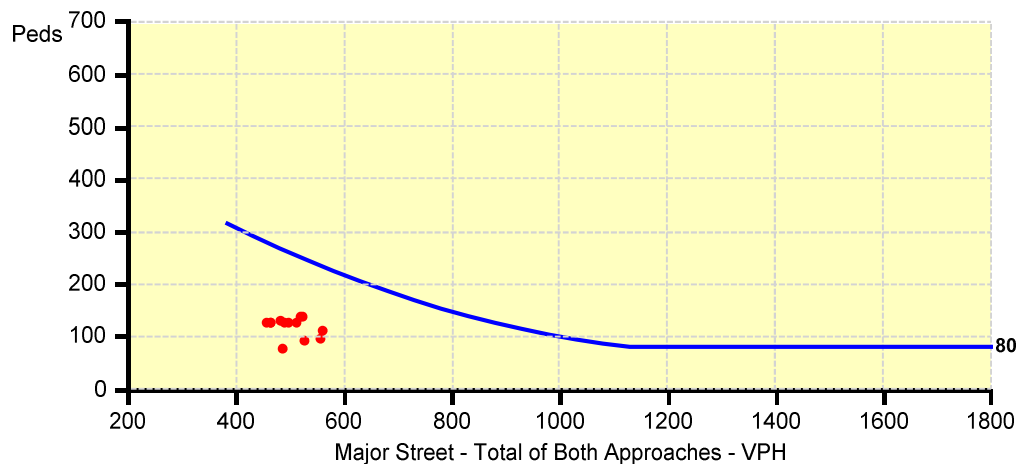
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Major Road Leesburg Rd						Minor Road Haeman Rd		Met?
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
17:15 - 18:15	345	+	215	=	560	71	110	No
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
16:30 - 17:30	291	+	231	=	522	86	139	No
16:15 - 17:15	272	+	246	=	518	83	139	No
16:45 - 17:45	290	+	222	=	512	83	128	No
16:00 - 17:00	260	+	237	=	497	92	127	No
17:00 - 18:00	276	+	215	=	491	81	127	No
18:00 - 19:00	304	+	183	=	487	52	77	No
07:00 - 08:00	207	+	276	=	483	129	42	No
15:45 - 16:45	228	+	236	=	464	93	125	No
							125	No



Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

Warrant 7 - Crash Experience

Description

Intended for sites where the frequency of correctible crashes in the past 12 months is the primary motivation for installing a traffic signal.

Summary

Number of crashes meet minimum.
Pedestrian volumes do not meet the 80% criteria.
War 1A or 1B volumes do not meet the 80% criteria.
Warrant is NOT met.

Site Data Required

Number of crashes in last 12 months = 9

Rural Settings Apply = False

Number of Major Lanes = 1

Number of Minor Lanes = 1

Crash and Volume Requirements

Minimum number of crashes = 5

Veh/Hr Major: War 1A = 400 War 1B = 600

Veh/Hr Minor: War 1A = 120 War 1B = 60

Volume and Pedestrian Data

Hours data meets 80% requirements of Warrant 1A (8 needed) 3 Met? No

Hours data meets 80% requirements of Warrant 1B (8 needed) 0 Met? No

Hours data meets 80% requirements of Warrant 4 (4,1 needed) 0 0 Met? No

Major Road

Leesburg Rd

Minor Road

Haeman Rd

Warrant 1A Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:30 - 17:30	291	+	231	=	522	86	139	Yes
15:30 - 16:30	228	+	235	=	463	94	125	Yes
06:45 - 07:45	194	+	264	=	458	127	39	Yes
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
18:00 - 19:00	304	+	183	=	487	52	77	No
06:30 - 07:30	195	+	234	=	429	112	37	No
15:15 - 16:15	207	+	219	=	426	85	119	No
15:00 - 16:00	190	+	220	=	410	71	118	No
14:45 - 15:45	205	+	201	=	406	66	109	No
07:45 - 08:45	176	+	227	=	403	88	56	No
08:00 - 09:00	142	+	238	=	380	81	60	No

Warrant 1B Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
17:15 - 18:15	345	+	215	=	560	71	110	No
17:30 - 18:30	342	+	215	=	557	66	97	No
17:45 - 18:45	325	+	202	=	527	57	90	No
16:30 - 17:30	291	+	231	=	522	86	139	No
16:15 - 17:15	272	+	246	=	518	83	139	No
16:45 - 17:45	290	+	222	=	512	83	128	No
16:00 - 17:00	260	+	237	=	497	92	127	No
17:00 - 18:00	276	+	215	=	491	81	127	No
18:00 - 19:00	304	+	183	=	487	52	77	No
07:00 - 08:00	207	+	276	=	483	129	42	No
15:45 - 16:45	228	+	236	=	464	93	125	No
15:30 - 16:30	228	+	235	=	463	94	125	No

Northeastern Indiana Regional Coordinating Council

200 E Berry St, Suite 230

Fort Wayne, IN 46802

Study Name: ButlerLeesburgWar

Study Date : 10/24/2024

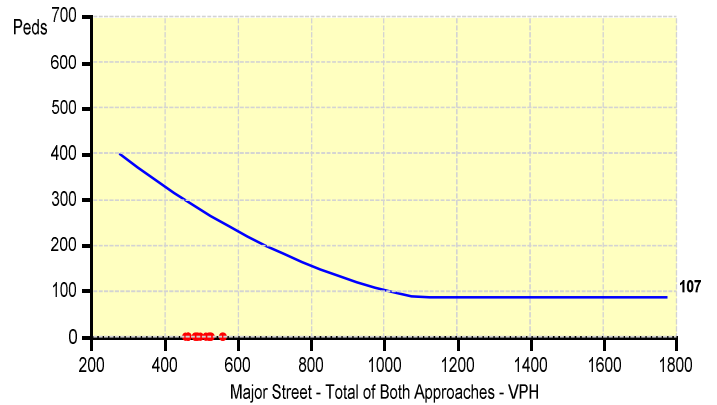
Warrant 7 - Crash Experience

Major Road

Leesburg Rd

80% of Warrant 4 - 4 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
17:15 - 18:15	345	+	215	=	560	0	+	0	=	0	No
17:30 - 18:30	342	+	215	=	557	0	+	0	=	0	No
17:45 - 18:45	325	+	202	=	527	0	+	0	=	0	No
16:30 - 17:30	291	+	231	=	522	0	+	0	=	0	No
16:15 - 17:15	272	+	246	=	518	0	+	0	=	0	No
16:45 - 17:45	290	+	222	=	512	0	+	0	=	0	No
16:00 - 17:00	260	+	237	=	497	0	+	0	=	0	No
17:00 - 18:00	276	+	215	=	491	0	+	0	=	0	No
18:00 - 19:00	304	+	183	=	487	0	+	0	=	0	No
07:00 - 08:00	207	+	276	=	483	0	+	0	=	0	No
15:45 - 16:45	228	+	236	=	464	0	+	0	=	0	No
15:30 - 16:30	228	+	235	=	463	0	+	0	=	0	No



80% of Warrant 4 - 1 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
17:15 - 18:15	345	+	215	=	560	0	+	0	=	0	No
17:30 - 18:30	342	+	215	=	557	0	+	0	=	0	No
17:45 - 18:45	325	+	202	=	527	0	+	0	=	0	No
16:30 - 17:30	291	+	231	=	522	0	+	0	=	0	No
16:15 - 17:15	272	+	246	=	518	0	+	0	=	0	No
16:45 - 17:45	290	+	222	=	512	0	+	0	=	0	No
16:00 - 17:00	260	+	237	=	497	0	+	0	=	0	No
17:00 - 18:00	276	+	215	=	491	0	+	0	=	0	No
18:00 - 19:00	304	+	183	=	487	0	+	0	=	0	No
07:00 - 08:00	207	+	276	=	483	0	+	0	=	0	No
15:45 - 16:45	228	+	236	=	464	0	+	0	=	0	No
15:30 - 16:30	228	+	235	=	463	0	+	0	=	0	No

