



**HAJEC ASSOCIATES**

Transportation Engineering  
and Planning

**ATTACHMENT 1**

**AUTOMATIC TRAFFIC RECORDER COUNT AND SPEED SURVEY**

**\* BAYBERRY ROAD (Just South of Project Driveway)**

■  
Hajec Associates, Inc.

**375 Common Street  
Lawrence, MA 01840  
Tel. (978) 557-5887  
Fax. (978) 557-1185**

①

Accurate Counts  
978-664-2565

Location : Bayberry Road @ #20  
Location :  
City/State: Pepperell, MA  
Counter : 2488

060300v1  
Site Code: 06030001

Start Time	10-Apr-06	SB		Hour Totals		NB		Hour Totals		Combined Totals		
		Mon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00			0	1			0	1				
12:15			0	0			0	2				
12:30			0	0			0	0				
12:45			0	0	0	1	0	0	0	3	0	4
01:00			0	0			0	0				
01:15			0	1			0	0				
01:30			0	1			0	0				
01:45			0	0	0	2	0	1	0	1	0	3
02:00			0	1			0	0				
02:15			0	1			0	1				
02:30			0	3			0	1				
02:45			0	4	0	9	0	4	0	6	0	15
03:00			0	1			0	2				
03:15			0	2			0	0				
03:30			0	0			0	4				
03:45			0	0	0	3	0	3	0	9	0	12
04:00			1	1			2	3				
04:15			0	3			0	2				
04:30			0	3			0	2				
04:45			0	1	1	8	0	2	2	9	3	17
05:00			0	1			0	3				
05:15			1	1			0	2				
05:30			2	2			0	6				
05:45			0	2	3	6	0	2	0	13	3	19
06:00			0	2			0	2				
06:15			0	2			0	4				
06:30			2	1			0	1				
06:45			2	1	4	6	3	2	3	9	7	15
07:00			1	2			0	1				
07:15			2	2			0	3				
07:30			1	0			3	0				
07:45			1	0	5	4	0	1	3	5	8	9
08:00			3	0			1	0				
08:15			1	5			0	1				
08:30			2	0			0	0				
08:45			1	1	7	6	0	2	1	3	8	9
09:00			1	0			1	1				
09:15			0	0			0	0				
09:30			2	0			1	0				
09:45			0	0	3	0	1	0	3	1	6	1
10:00			2	0			1	0				
10:15			2	0			2	2				
10:30			1	0			0	1				
10:45			1	0	6	0	0	1	3	4	9	4
11:00			0	0			0	0				
11:15			0	0			1	0				
11:30			0	0			0	0				
11:45			1	0	1	0	2	0	3	0	4	0
Total			30	45			18	63			48	108
Percent			40.0%	60.0%			22.2%	77.8%			30.8%	69.2%
Grand Total			30	45			18	63			48	108
Percent			40.0%	60.0%			22.2%	77.8%			30.8%	69.2%

ADT Not Calculated

Accurate Counts  
978-664-2565

Location : Bayberry Road @ #20  
Location :  
City/State: Pepperell, MA  
Counter : 2488

060300v1  
Site Code: 06030001

Start Time	10-Apr-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0
01:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0
02:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0
03:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0
04:00	1	2	*	*	*	*	*	*	*	*	*	*	*	*	1	2
05:00	3	0	*	*	*	*	*	*	*	*	*	*	*	*	3	0
06:00	4	3	*	*	*	*	*	*	*	*	*	*	*	*	4	3
07:00	5	3	*	*	*	*	*	*	*	*	*	*	*	*	5	3
08:00	7	1	*	*	*	*	*	*	*	*	*	*	*	*	7	1
09:00	3	3	*	*	*	*	*	*	*	*	*	*	*	*	3	3
10:00	6	3	*	*	*	*	*	*	*	*	*	*	*	*	6	3
11:00	1	3	*	*	*	*	*	*	*	*	*	*	*	*	1	3
12:00 PM	1	3	*	*	*	*	*	*	*	*	*	*	*	*	1	3
01:00	2	1	*	*	*	*	*	*	*	*	*	*	*	*	2	1
02:00	9	6	*	*	*	*	*	*	*	*	*	*	*	*	9	6
03:00	3	9	*	*	*	*	*	*	*	*	*	*	*	*	3	9
04:00	8	9	*	*	*	*	*	*	*	*	*	*	*	*	8	9
05:00	6	13	*	*	*	*	*	*	*	*	*	*	*	*	6	13
06:00	6	9	*	*	*	*	*	*	*	*	*	*	*	*	6	9
07:00	4	5	*	*	*	*	*	*	*	*	*	*	*	*	4	5
08:00	6	3	*	*	*	*	*	*	*	*	*	*	*	*	6	3
09:00	0	1	*	*	*	*	*	*	*	*	*	*	*	*	0	1
10:00	0	4	*	*	*	*	*	*	*	*	*	*	*	*	0	4
11:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0
Lane	75	81	0	0	0	0	0	0	0	0	0	0	0	75	81	
Day	156		0		0		0		0		0		0	156		
AM Peak	08:00	06:00												08:00	06:00	
Vol.	7	3												7	3	
PM Peak	14:00	17:00												14:00	17:00	
Vol.	9	13												9	13	
Comb. Total	156		0		0		0		0		0		0	156		
ADT	Not Calculated															

(3)

Location : Bayberry Road @ #20  
Location :  
City State: Pepperell, MA  
Counter : 2488  
Southbound

Accurate Counts  
978-664-2565

06030us1  
Site Code: 06030001

Time	15	20	25	30	35	40	45	46	51	58	61	68	71	73	Total	85th Percent	95th Percent
04:10:06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	21	21
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	41	41
05:00	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	32	33
06:00	0	0	0	2	3	0	0	0	0	0	0	0	0	0	5	32	33
07:00	0	0	1	1	5	0	0	0	0	0	0	0	0	0	7	34	35
08:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	32	32
09:00	0	1	1	1	2	1	0	0	0	0	0	0	0	0	6	32	36
10:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	31	31
11:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
12 PM	1	1	0	0	1	0	0	0	0	0	0	0	0	0	3	31	31
13:00	4	2	0	4	1	0	0	0	0	0	0	0	0	0	11	28	29
14:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	35	36
15:00	4	0	1	1	2	1	0	0	0	0	0	0	0	0	9	32	36
16:00	1	1	0	0	3	2	0	0	0	0	0	0	0	0	7	35	37
17:00	0	0	0	2	0	4	0	0	0	0	0	0	0	0	6	38	39
18:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4	32	33
19:00	1	0	0	1	3	2	0	0	0	0	0	0	0	0	7	36	37
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
Total	14	5	4	15	31	12	1	0	0	0	0	0	0	0	62		
Percent	17.1%	6.1%	4.9%	18.3%	37.8%	14.6%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	09:00	03:00	08:00	07:00	04:00	04:00								07:00		
Vol.	2	1	1	2	5	1	1								7		
PM Peak	13:00	13:00	15:00	13:00	16:00	17:00									13:00		
Vol.	4	2	1	4	3	4									11		
Grand Total	14	5	4	15	31	12	1	0	0	0	0	0	0	0	62		
Percent	17.1%	6.1%	4.9%	18.3%	37.8%	14.6%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
15th Percentile :					12 MPH												
50th Percentile :					31 MPH												
85th Percentile :					36 MPH												
95th Percentile :					39 MPH												

Statistic  
 10 MPH Pace Speed : 26-35 MPH  
 Number in Pace : 46  
 Percent in Pace : 55.1%  
 Number of Vehicles > 30 MPH : 44  
 Percent of Vehicles > 30 MPH : 53.7%  
 Mean Speed(Average) : 27 MPH

Jun 12 06 02:06P

ACCURATE COUNTS

978 664 7883



Location : Bayberry Road @ #20  
Location :  
City State: Pepperell, MA  
Counter : 2488  
Northbound

Accurate Counts  
978-664-2565

06030

Site Code: 06030

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	959	Total	85th Percent	9th Perc
04:10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	41	
04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:00	1	0	1	3	0	1	0	0	0	0	0	0	0	0	0	4	3	
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	36	
08:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	16	
09:00	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	32	
10:00	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	4	16	
11:00	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	31	
12 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	27	
13:00	1	0	2	2	1	0	0	0	0	0	0	0	0	0	0	2	16	
14:00	4	1	0	2	2	1	0	0	0	0	0	0	0	0	0	6	27	
15:00	3	0	0	1	3	2	1	0	0	0	0	0	0	0	0	10	31	
16:00	0	1	1	2	3	6	0	0	0	0	0	0	0	0	0	10	36	
17:00	1	1	0	1	4	3	0	0	0	0	0	0	0	0	0	13	38	
18:00	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	10	36	
19:00	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5	32	
20:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	37	
21:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	1	31	
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	37	
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	18	10	4	13	21	18	4	0	0	0	0	0	0	0	0	1	41	
Percent	20.5%	11.4%	4.5%	14.8%	23.9%	20.5%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88		
AM Peak	05:00	05:00	06:00	11:00	08:00	08:00	03:00										05:00	
Vol.	3	1	1	2	2	1	1										4	
PM Peak	14:00	12:00	13:00	13:00	17:00	16:00	15:00										16:00	
Vol.	4	1	2	2	4	6	1										13	
Grand Total	19	10	4	13	21	18	4	0	0	0	0	0	0	0	0	56		
Percent	20.5%	11.4%	4.5%	14.8%	23.9%	20.5%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 10 MPH  
50th Percentile : 30 MPH  
85th Percentile : 38 MPH  
95th Percentile : 40 MPH

Statistic s  
10 MPH Pace Speed : 29-38 MPH  
Number in Pace : 39  
Percent in Pace : 44.3%  
Number of Vehicles > 30 MPH : 43  
Percent of Vehicles > 30 MPH : 49.9%  
Mean Speed(Average) : 26 MPH

Jun 12 06 02:06p

ACCURATE COUNTS

978 664 7883

p.3

5

Location : Bayberry Road @ =20  
 Location :  
 City State: Pepperell, MA  
 Counter : 2-88

Accurate Counts  
 978-664-2565

06930

Southbound, Northbound

Site Code: 06030

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Percent	Percent
04:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
03:00	1	0	1	0	0	0	1	0	0	0	0	0	0	0	3	41	
04:00	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3	41	
05:00	5	1	0	0	3	0	0	0	0	0	0	0	0	0	9	32	
06:00	1	0	1	2	3	1	0	0	0	0	0	0	0	0	8	33	
07:00	0	1	1	1	5	0	0	0	0	0	0	0	0	0	8	34	
08:00	0	0	0	2	4	0	0	0	0	0	0	0	0	0	6	33	
09:00	2	2	1	1	3	1	0	0	0	0	0	0	0	0	10	32	
10:00	0	1	0	1	2	0	0	0	0	0	0	0	0	0	4	31	
11:00	1	1	0	2	0	0	0	0	0	0	0	0	0	0	4	31	
12 PM	2	2	0	0	1	0	0	0	0	0	0	0	0	0	4	26	
13:00	5	2	2	6	2	0	0	0	0	0	0	0	0	0	5	17	
14:00	4	1	0	3	3	2	0	0	0	0	0	0	0	0	17	29	
15:00	7	0	1	2	5	3	1	0	0	0	0	0	0	0	13	33	
16:00	1	2	1	2	6	8	0	0	0	0	0	0	0	0	19	36	
17:00	1	1	0	3	4	7	0	0	0	0	0	0	0	0	20	38	
18:00	0	1	0	2	5	1	0	0	0	0	0	0	0	0	18	38	
19:00	2	0	0	1	3	4	0	0	0	0	0	0	0	0	9	35	
20:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	10	37	
21:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	1	31	
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	37	
23:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	41	
Total	32	15	8	28	52	30	5	0	0	0	0	0	0	0	170		
Percent	18.8%	8.8%	4.7%	16.5%	30.6%	17.6%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	09:00	03:00	06:00	07:00	04:00	03:00								09:00		
Vol.	5	2	1	2	5	1	1								10		
PM Peak	15:00	12:00	13:00	13:00	16:00	16:00	15:00								16:00		
Vol.	7	2	2	6	6	8	1								20		
Grand Total	32	15	8	28	52	30	5	0	0	0	0	0	0	0	170		
Percent	18.8%	8.8%	4.7%	16.5%	30.6%	17.6%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 12 MPH  
 50th Percentile : 31 MPH  
 85th Percentile : 37 MPH  
 95th Percentile : 40 MPH

Statistics

10 MPH Pace Speed : 28-37 MPH  
 Number in Pace : 82  
 Percent in Pace : 48.2%  
 Number of Vehicles > 30 MPH : 87  
 Percent of Vehicles > 30 MPH : 51.2%  
 Mean Speed(Average) : 27 MPH

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