

## Cary, North Carolina Citation Counts for Red Light Camera Approaches

The Town of Cary North Carolina operated red light cameras from February 2004 to August 2012. The graphs were generated using Excel. The Town of Cary furnished the raw data from 2004 through 2010. Data from 2011 through 2012 came from Redflex. In both cases Redflex supplies the Town of Cary with the data in the form of an Excel spread sheet containing citation counts per month by intersection.

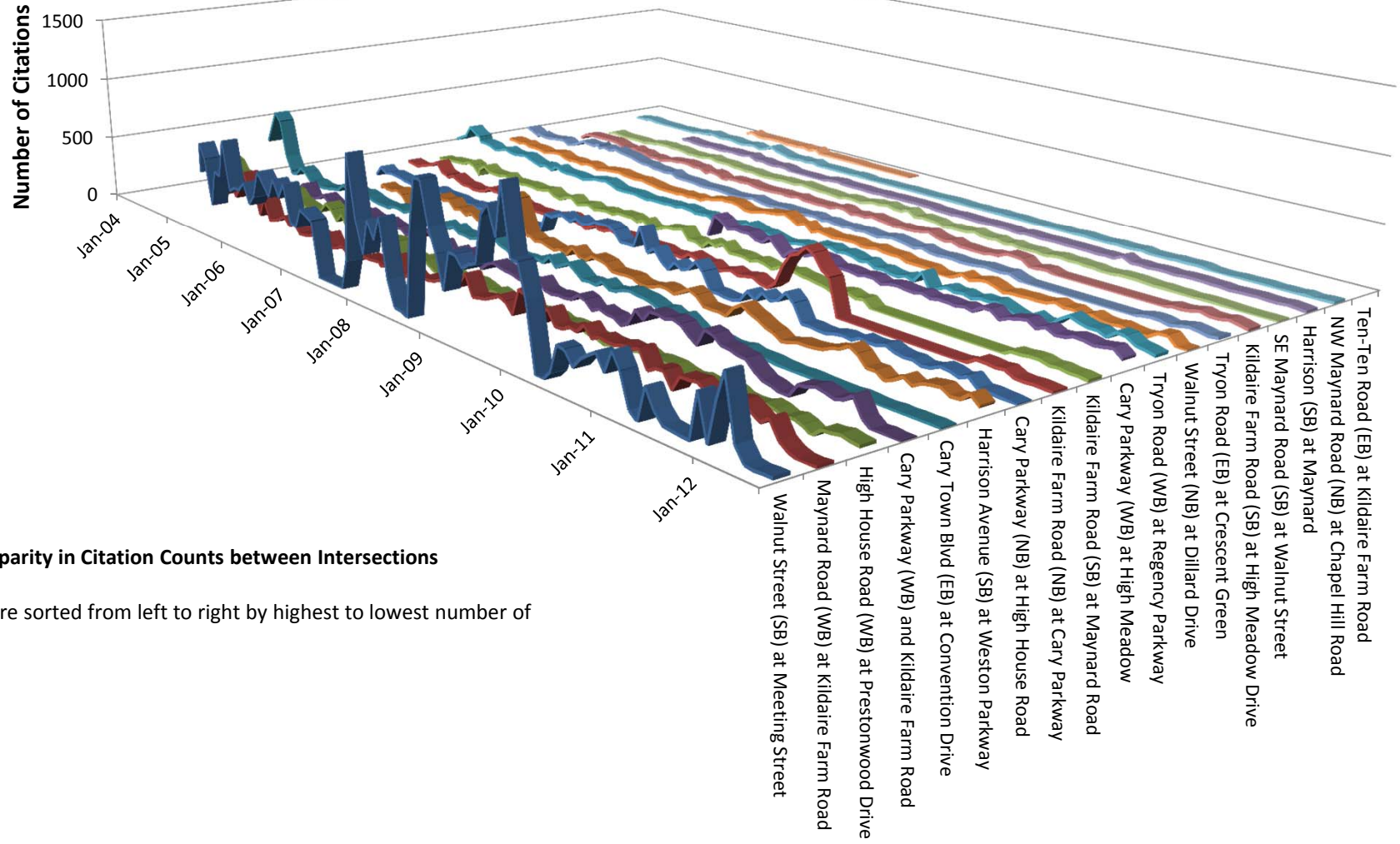
The Town of Cary made many changes in its intersections during the red light camera operation period. The graphs contain labels stating the left turn and straight-through yellow durations, the plan date and the engineer for a given traffic signal plan.

The traffic signal plan data is not complete. The Town of Cary did not disclose all the signal plans for all the intersections for the time period and did not furnish us with a log book when Cary implemented the changes on the ground. So you will see delays between the signal plan dates and how those signal plans affected the level of citations. There are also surges and dips in citation counts for months at a time where we do not know the nature of the engineering cause. Cary also shut off its cameras for periods of time for reasons unknown. We do know that for a period of time during 2011 Cary shut down some of its cameras because Cary was issuing citations for drivers running flashing yellow lights.

The population of the Town of Cary according to the 2010 US Census was 135,234.

The total number of red light camera citations Town of Cary issued was 136,957.

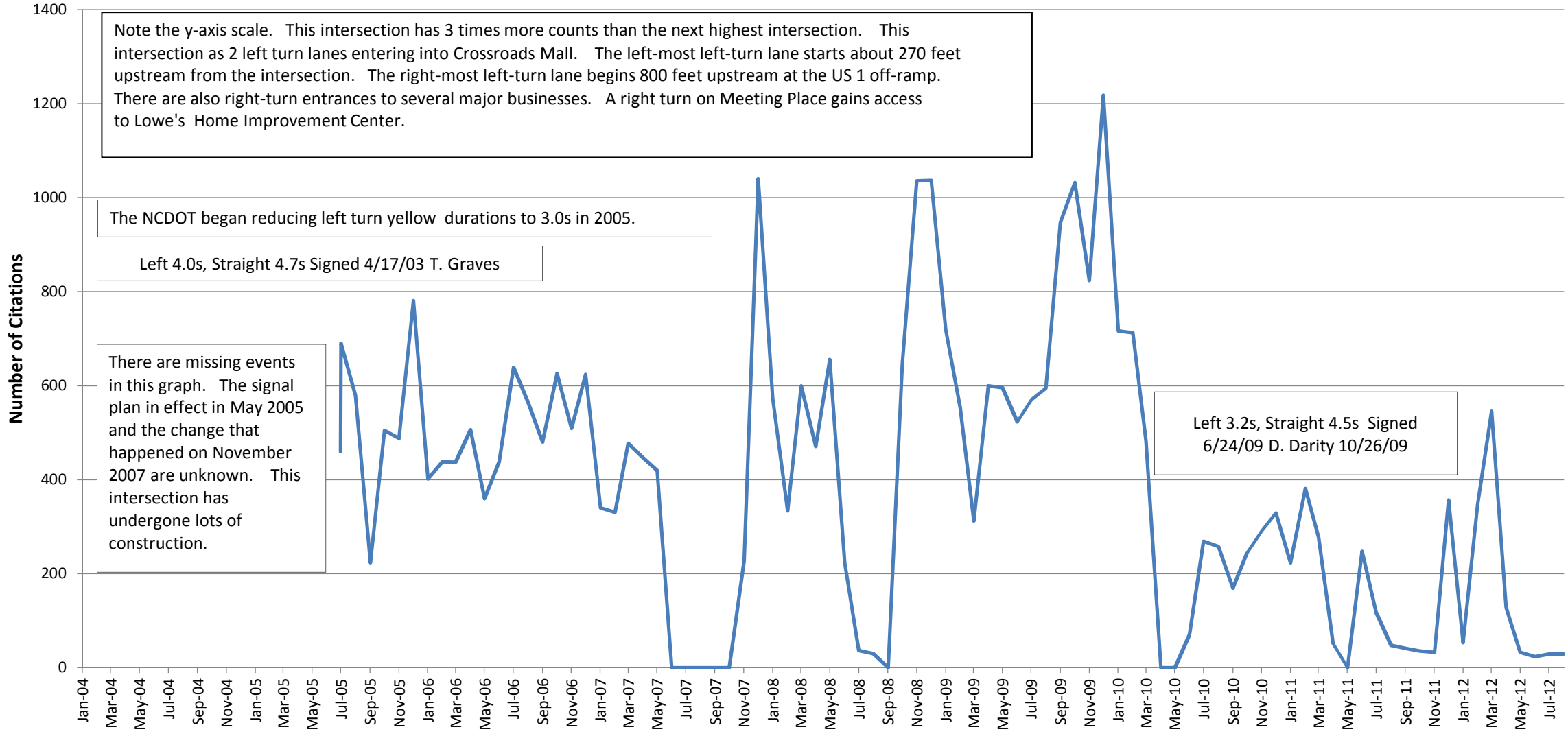
Page	Intersection	Number of Citations
2	All Intersections	136957
3	Walnut Street (SB) at Meeting Street	33686
4	Maynard Road (WB) at Kildaire Farm Road	17428
5	High House Road (WB) at Prestonwood Drive	10984
6	Cary Parkway (WB) and Kildaire Farm Road	9832
7	Cary Town Blvd (EB) at Convention Drive	8904
8	Harrison Avenue (SB) at Weston Parkway	8604
9	Cary Parkway (NB) at High House Road	8450
10	Kildaire Farm Road (NB) at Cary Parkway	6850
11	Kildaire Farm Road (SB) at Maynard Road	5855
12	Cary Parkway (WB) at High Meadow	5554
13	Tryon Road (WB) at Regency Parkway	4957
14	Walnut Street (NB) at Dillard Drive	3863
15	Tryon Road (EB) at Crescent Green	3610
16	Kildaire Farm Road (SB) at High Meadow Drive	2699
17	SE Maynard Road (SB) at Walnut Street	2173
18	Harrison (SB) at Maynard	1804
19	NW Maynard Road (NB) at Chapel Hill Road	1310
20	Ten-Ten Road (EB) at Kildaire Farm Road	394
21 - End	Raw data	



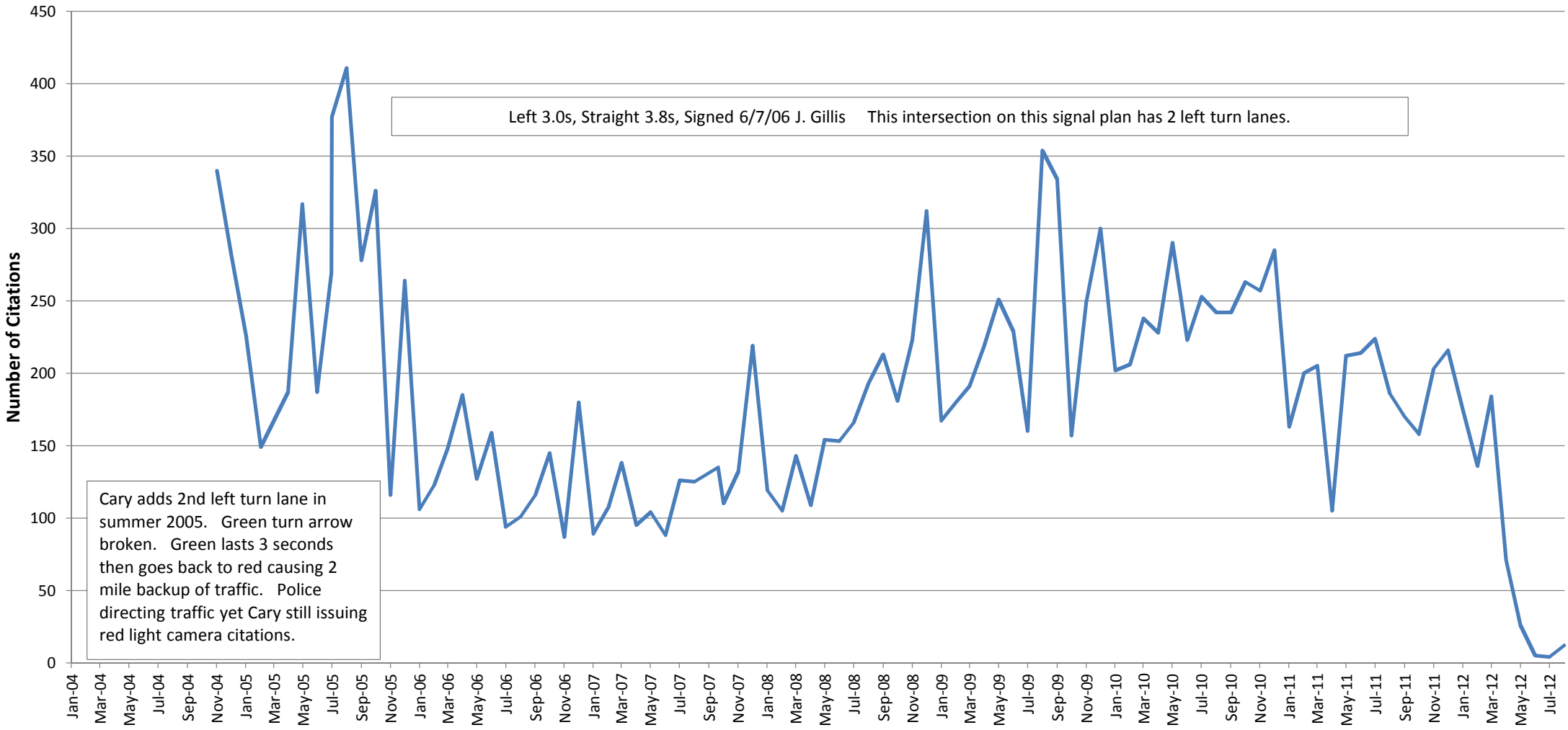
**Disparity in Citation Counts between Intersections**

The intersections are sorted from left to right by highest to lowest number of citation counts.

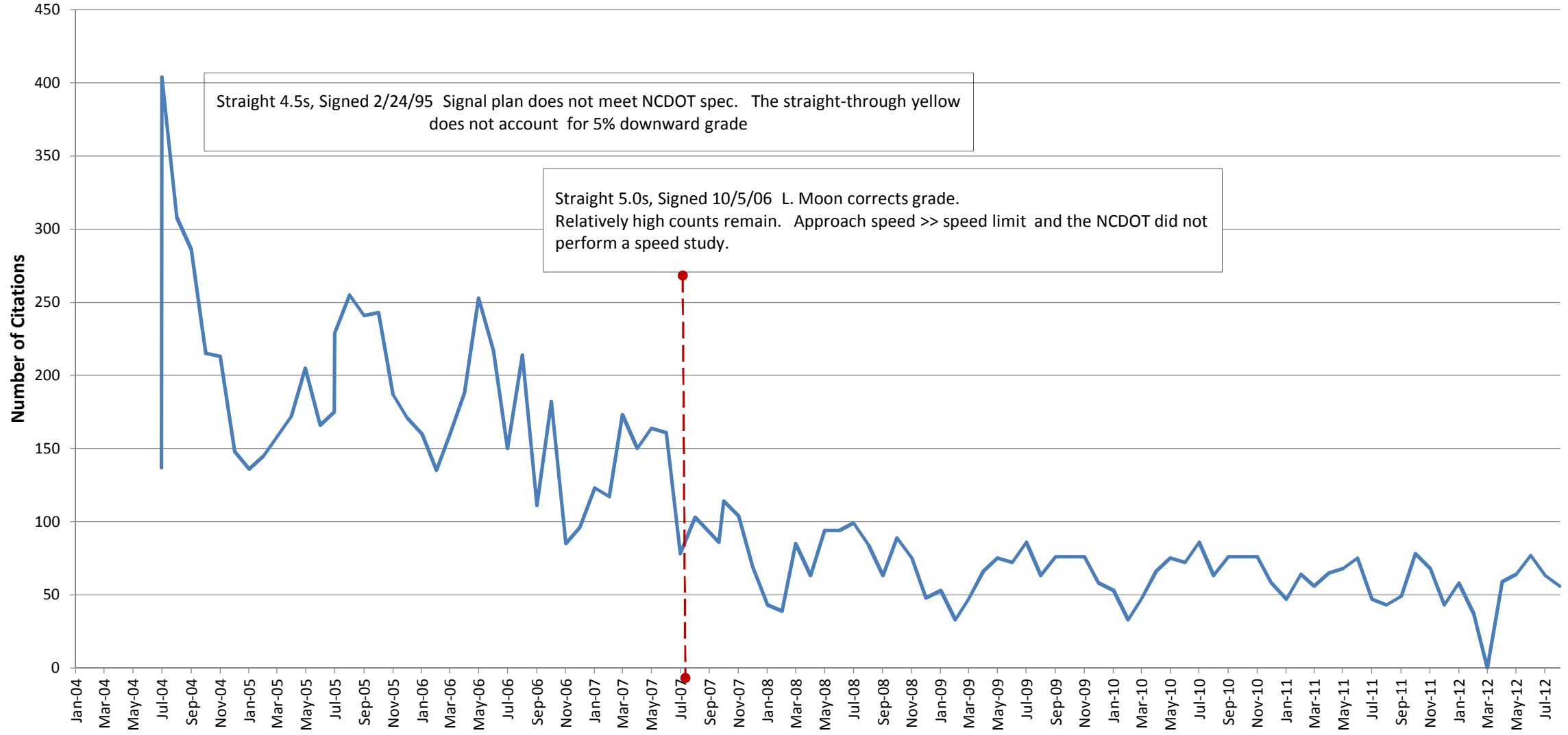
# Walnut Street (SB) at Meeting Place



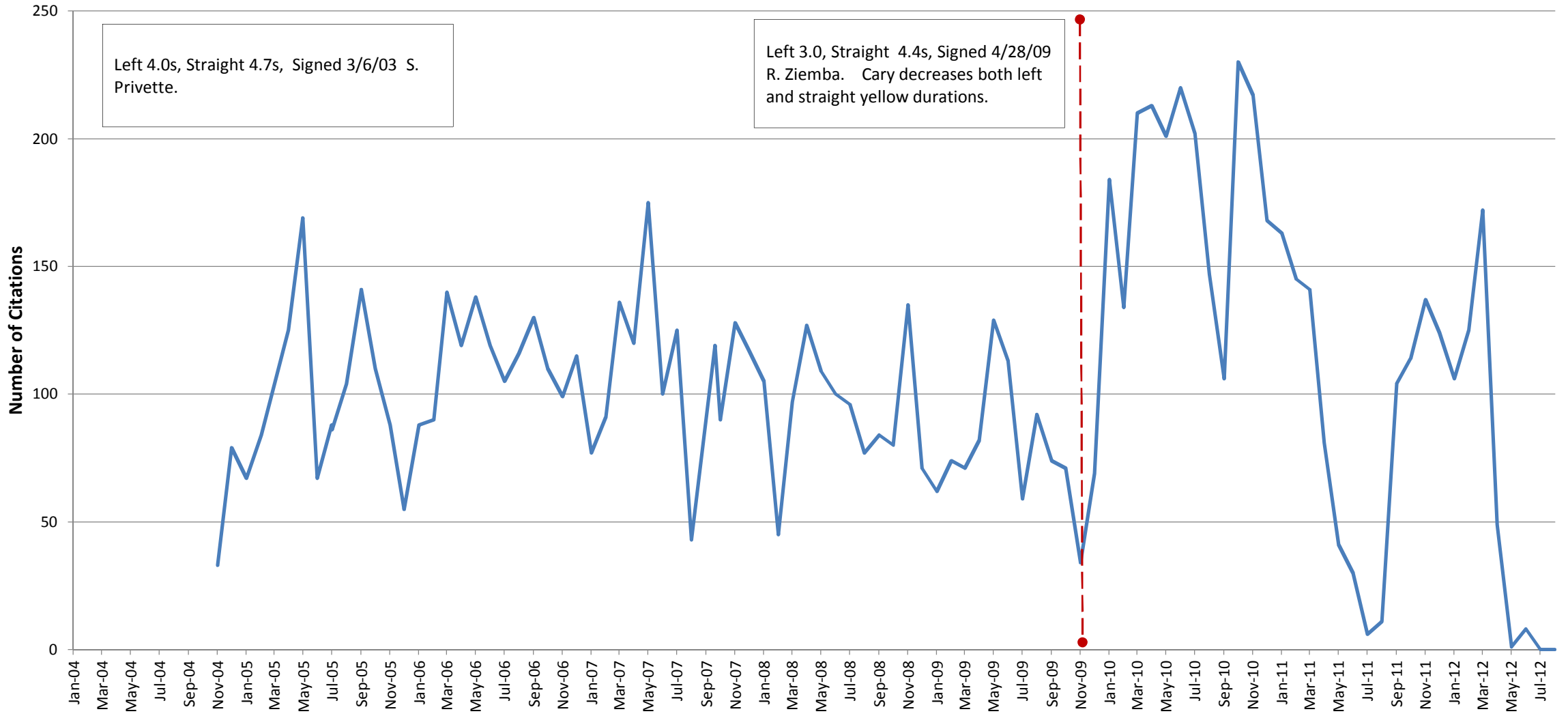
# Maynard Road (WB) at Kildaire Farm Road



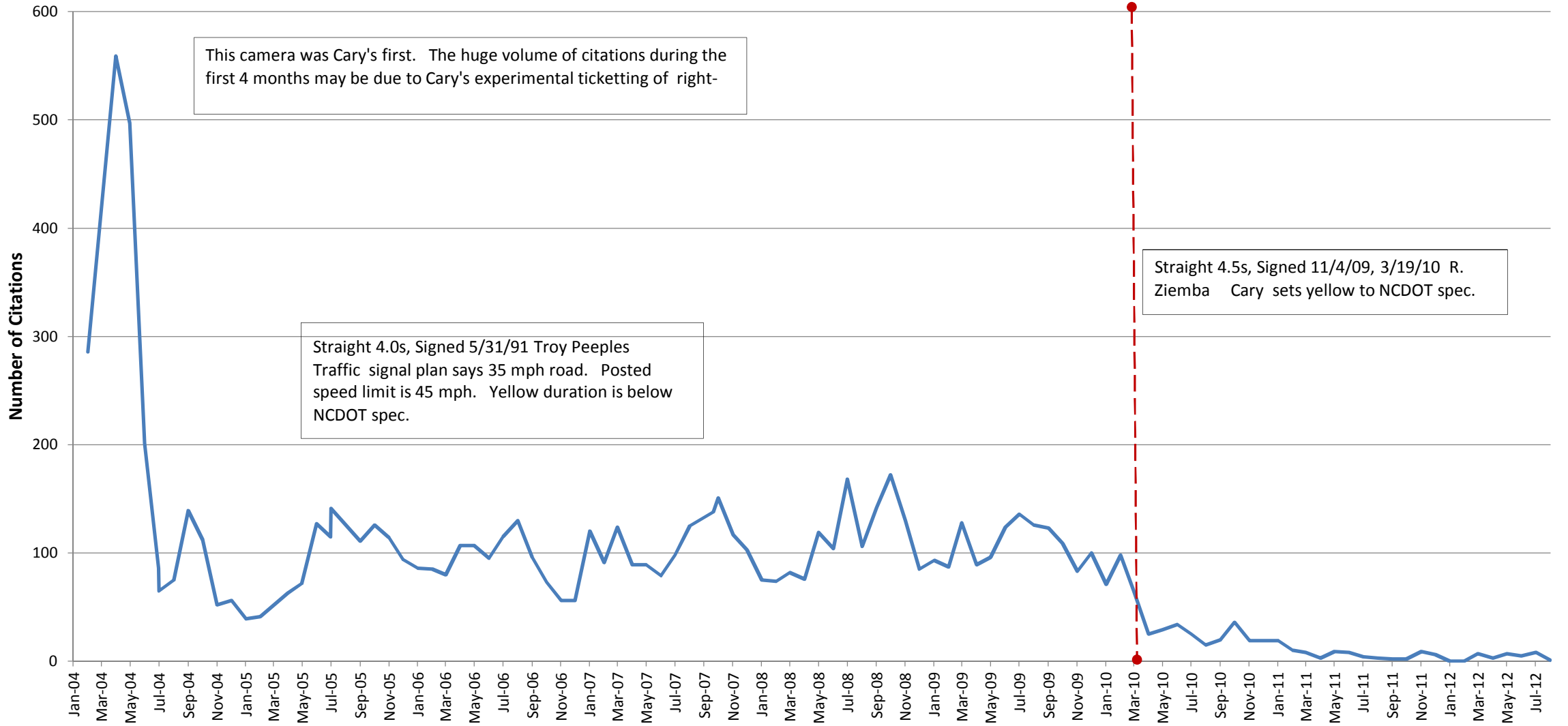
# High House Road (WB) at Prestonwood Drive



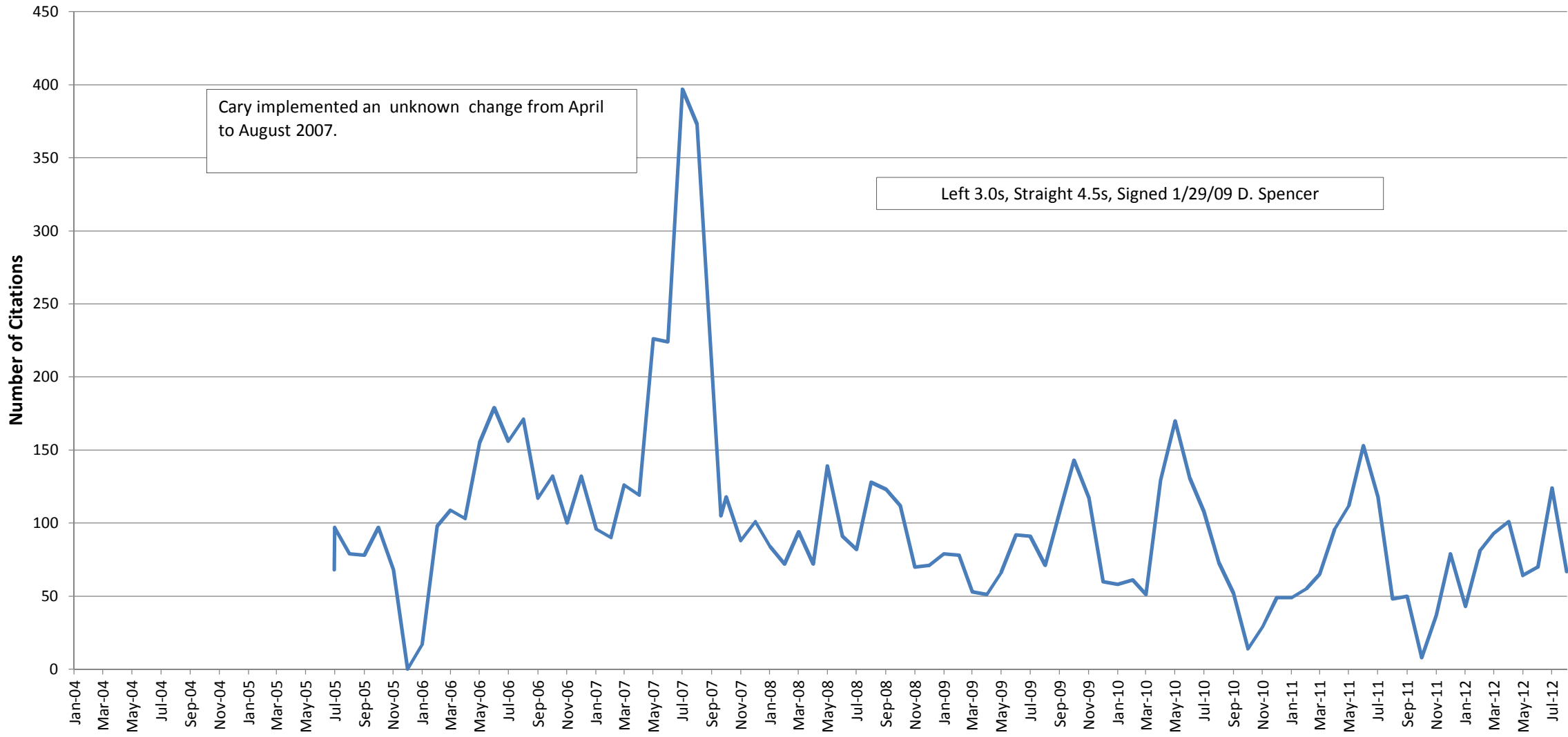
# Cary Parkway (WB) and Kildaire Farm Road



# Cary Town Blvd (EB) at Convention Drive

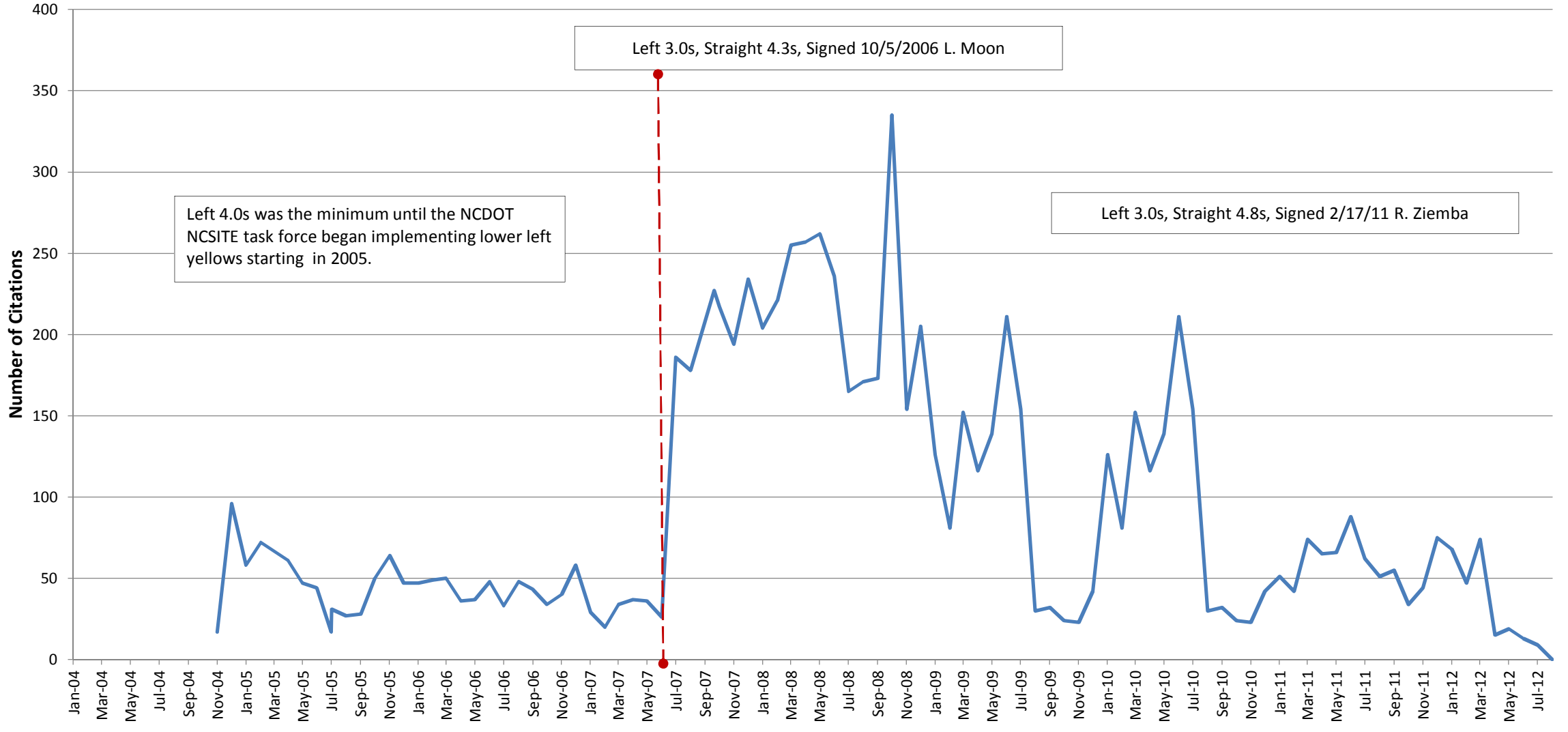


# Harrison Avenue (SB) at Weston Parkway

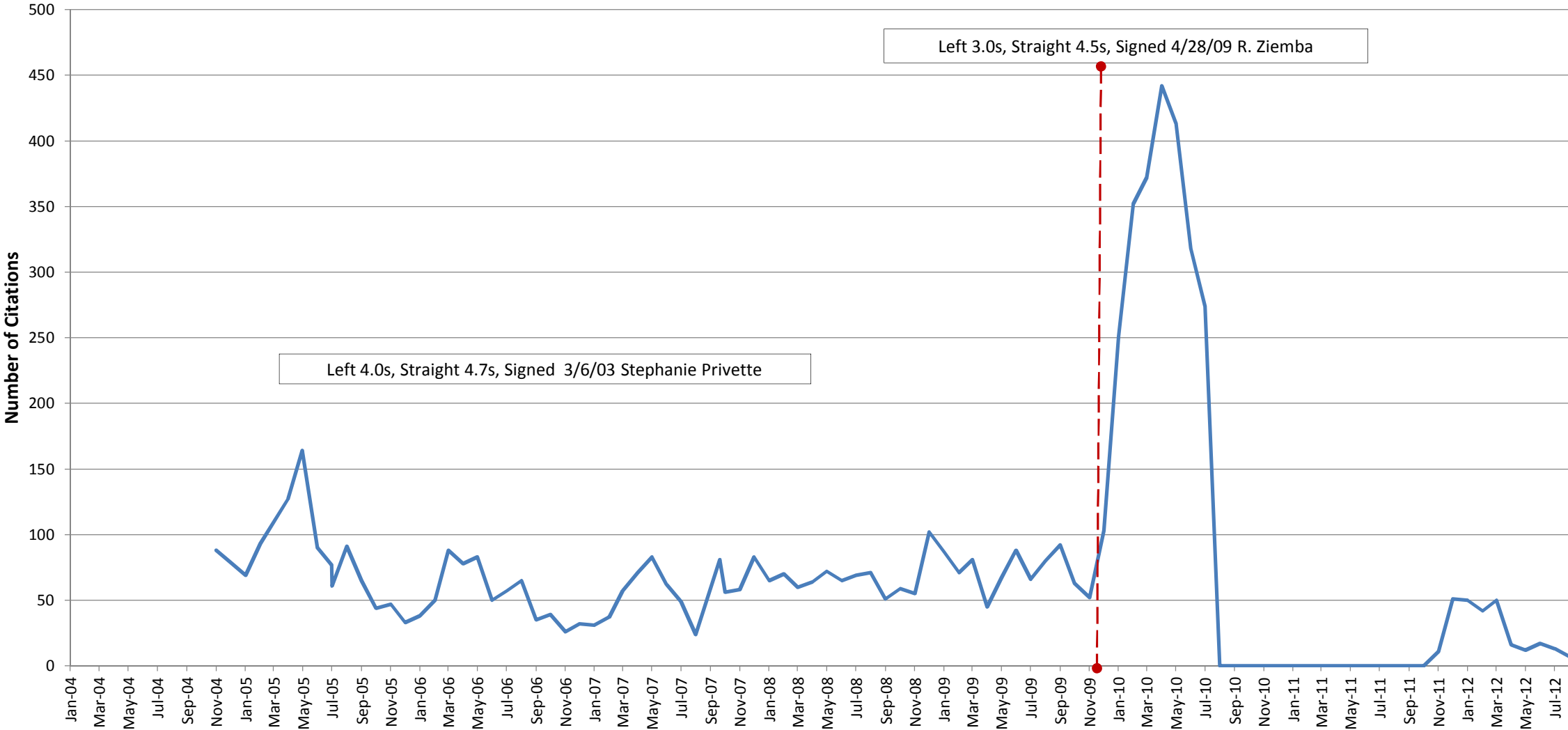




# Cary Parkway (NB) at High House Road

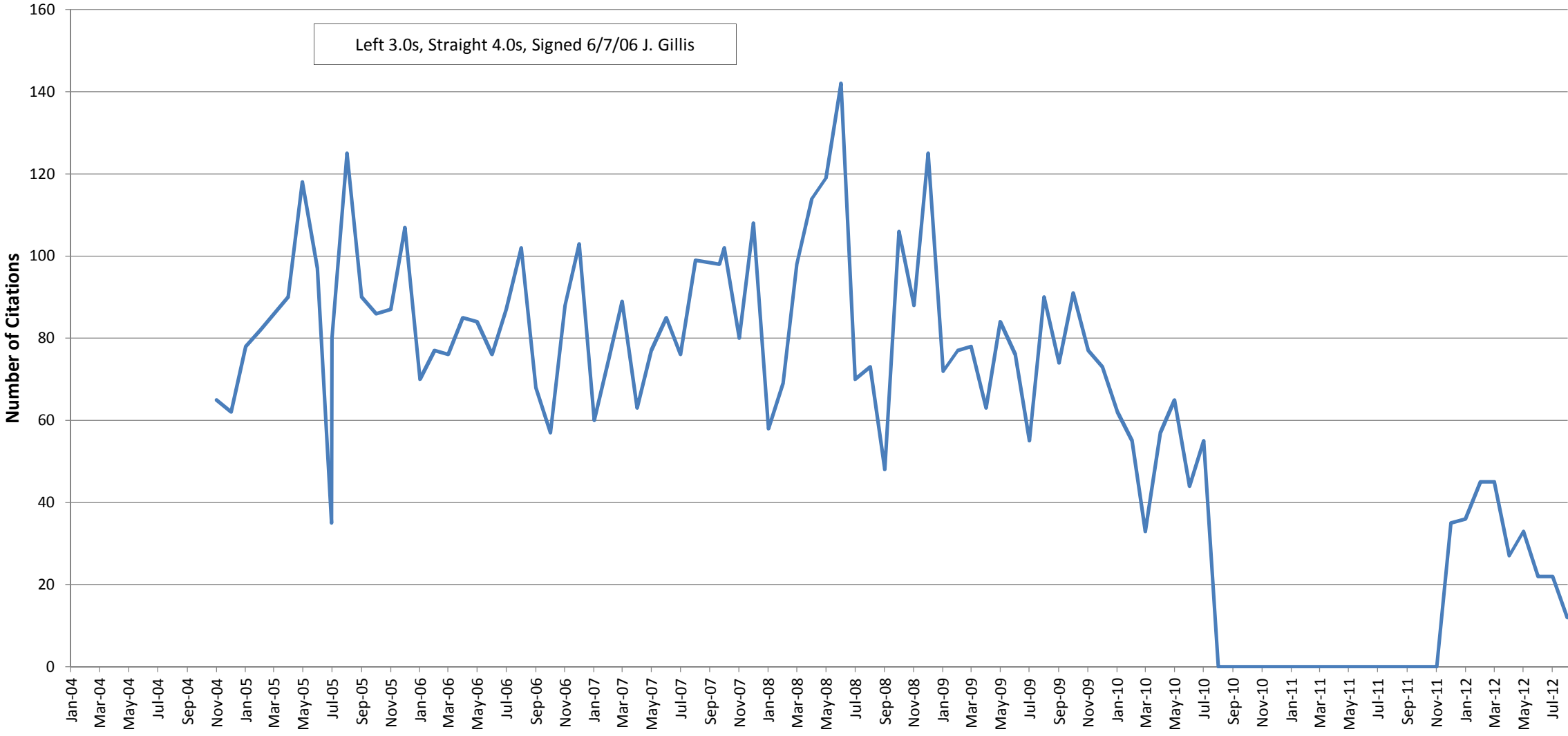


# Kildaire Farm Road (NB) at Cary Parkway

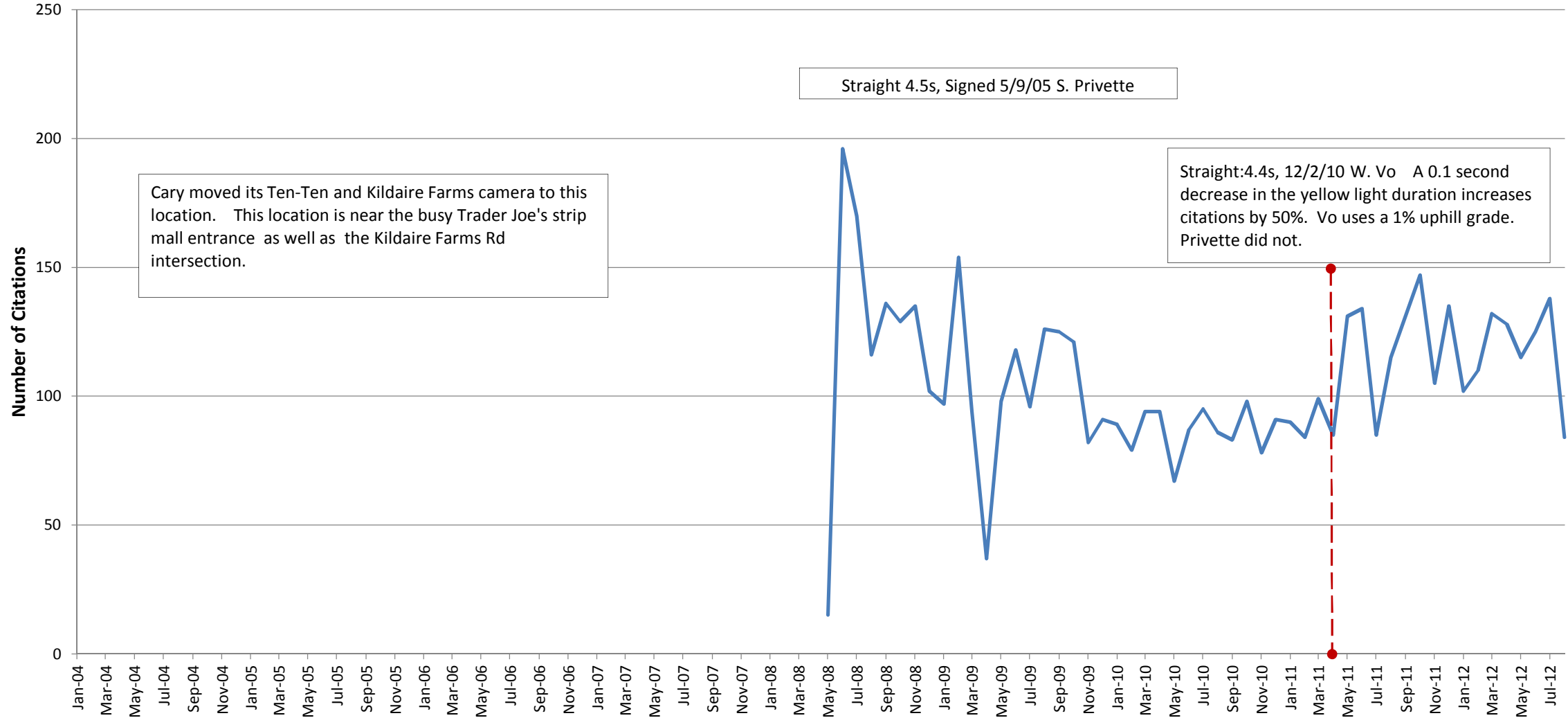


# Kildaire Farm Road (SB) at Maynard Road

Left 3.0s, Straight 4.0s, Signed 6/7/06 J. Gillis



# Cary Parkway (WB) at High Meadow



Cary moved its Ten-Ten and Kildaire Farms camera to this location. This location is near the busy Trader Joe's strip mall entrance as well as the Kildaire Farms Rd intersection.

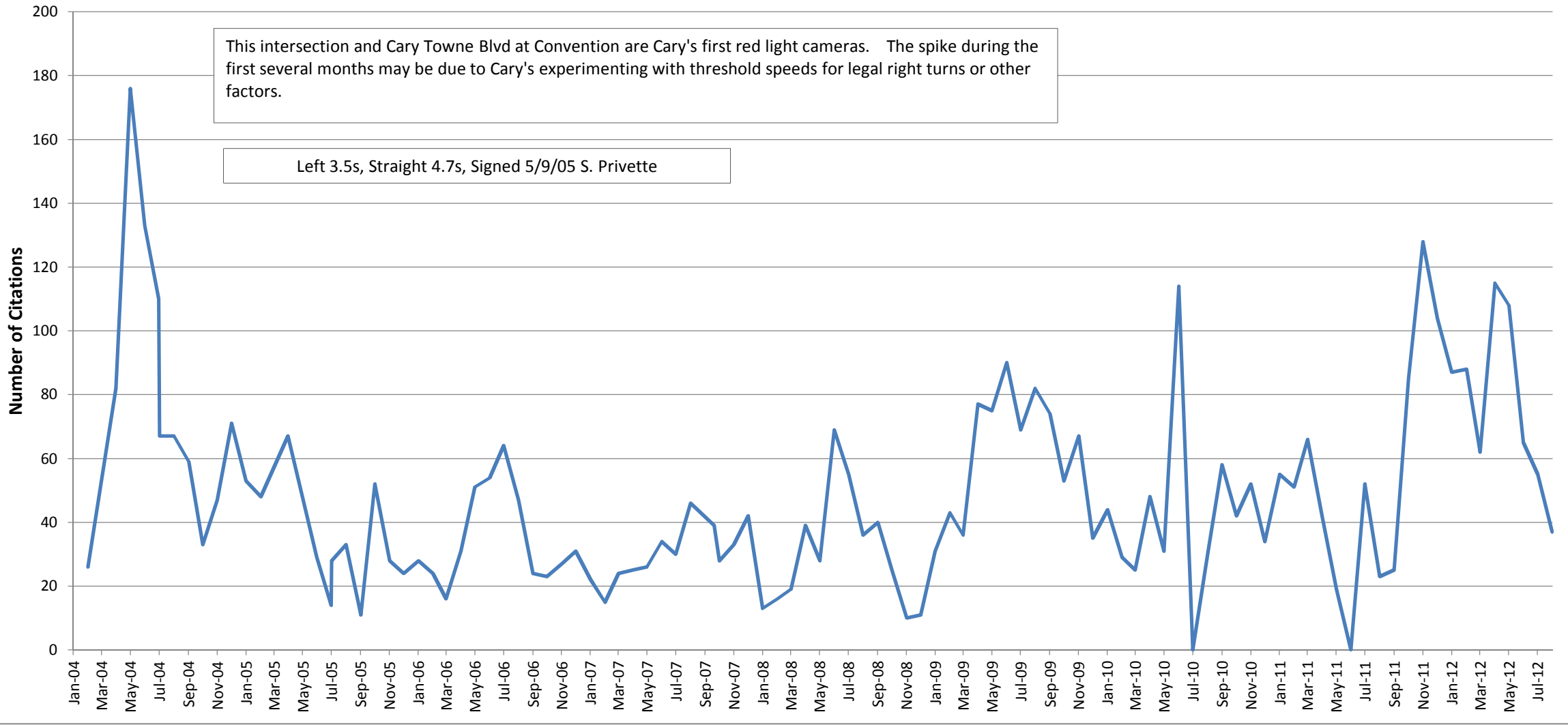
Straight 4.5s, Signed 5/9/05 S. Privette

Straight:4.4s, 12/2/10 W. Vo A 0.1 second decrease in the yellow light duration increases citations by 50%. Vo uses a 1% uphill grade. Privette did not.

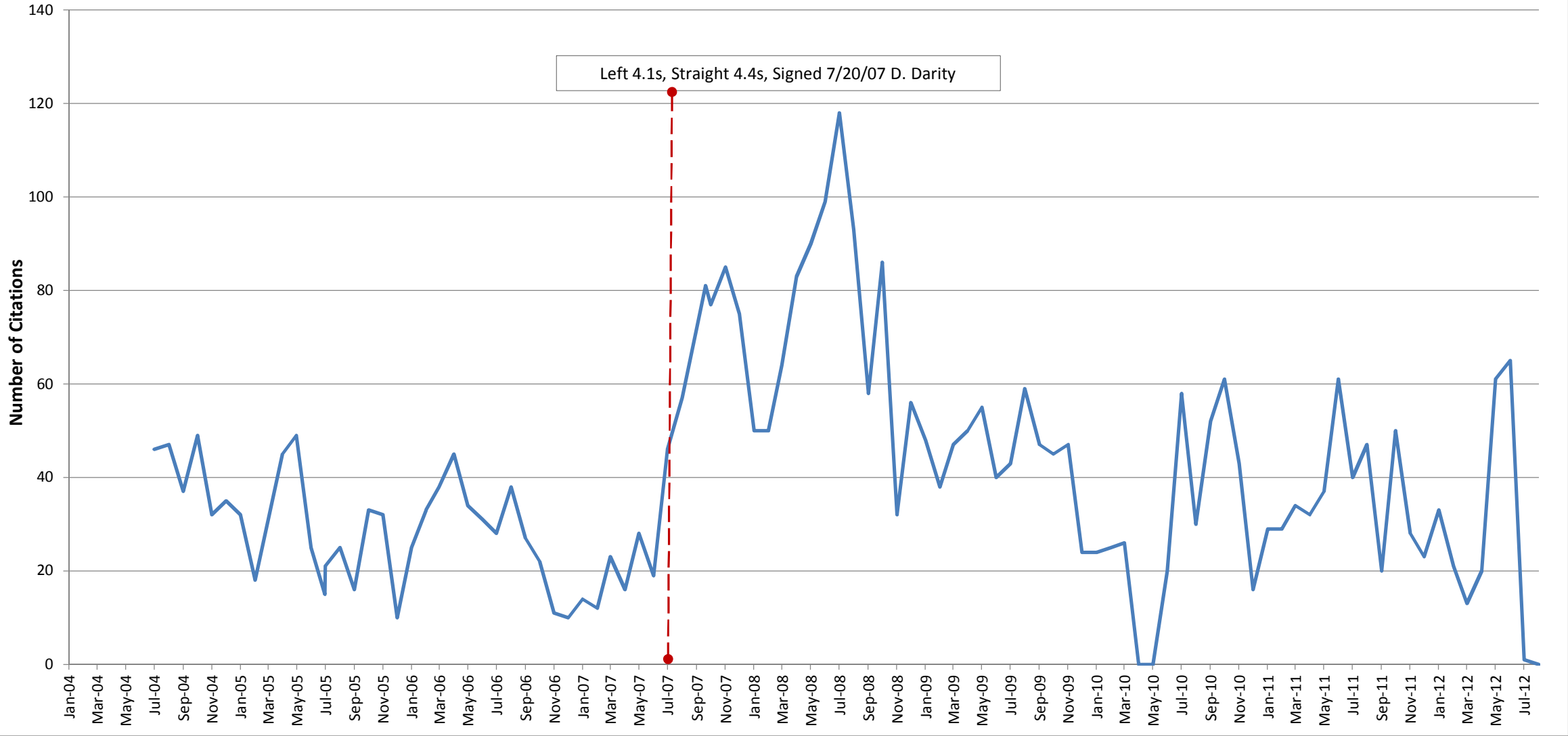
# Tryon Road (WB) at Regency Parkway

This intersection and Cary Towne Blvd at Convention are Cary's first red light cameras. The spike during the first several months may be due to Cary's experimenting with threshold speeds for legal right turns or other factors.

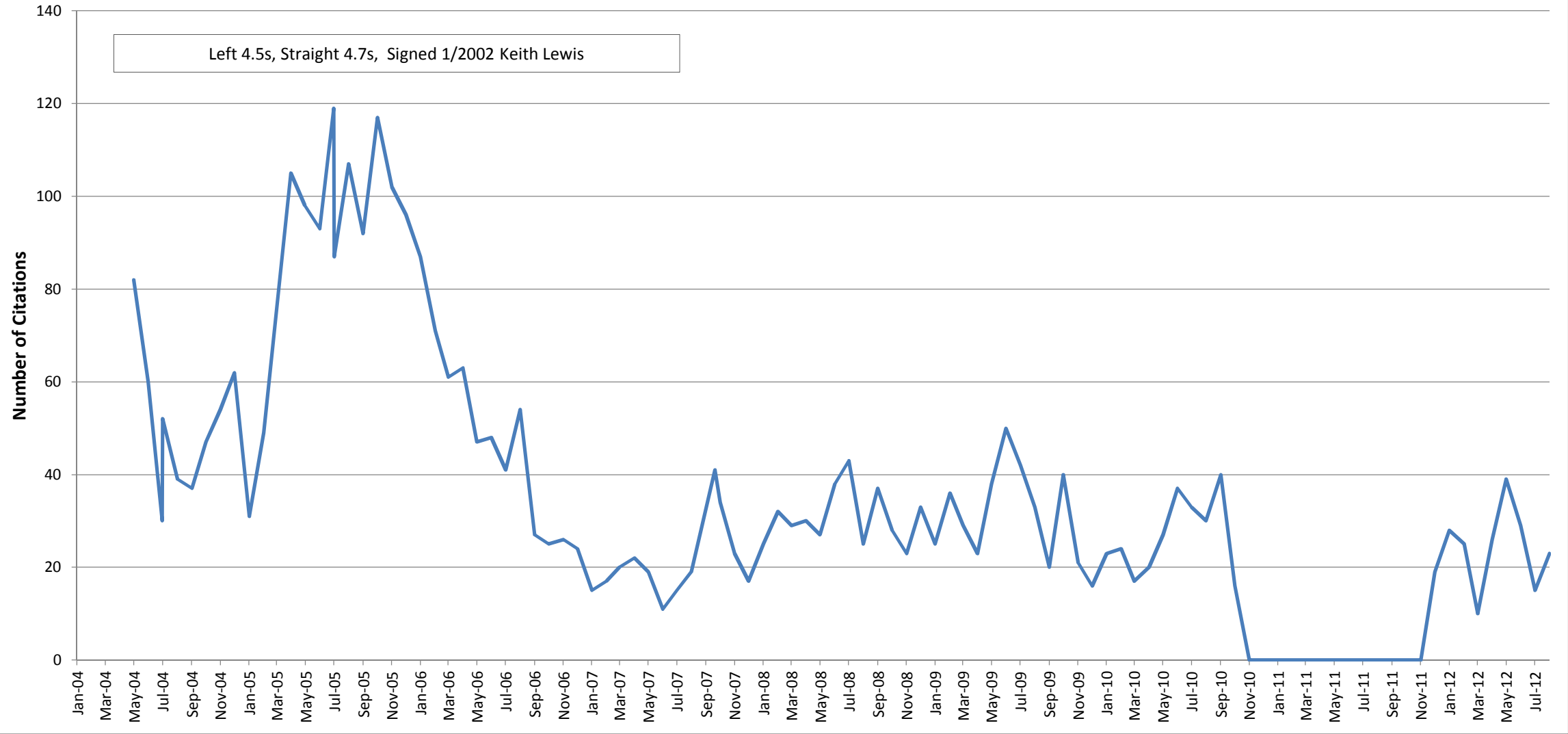
Left 3.5s, Straight 4.7s, Signed 5/9/05 S. Privette



# Walnut Street (NB) at Dillard Drive

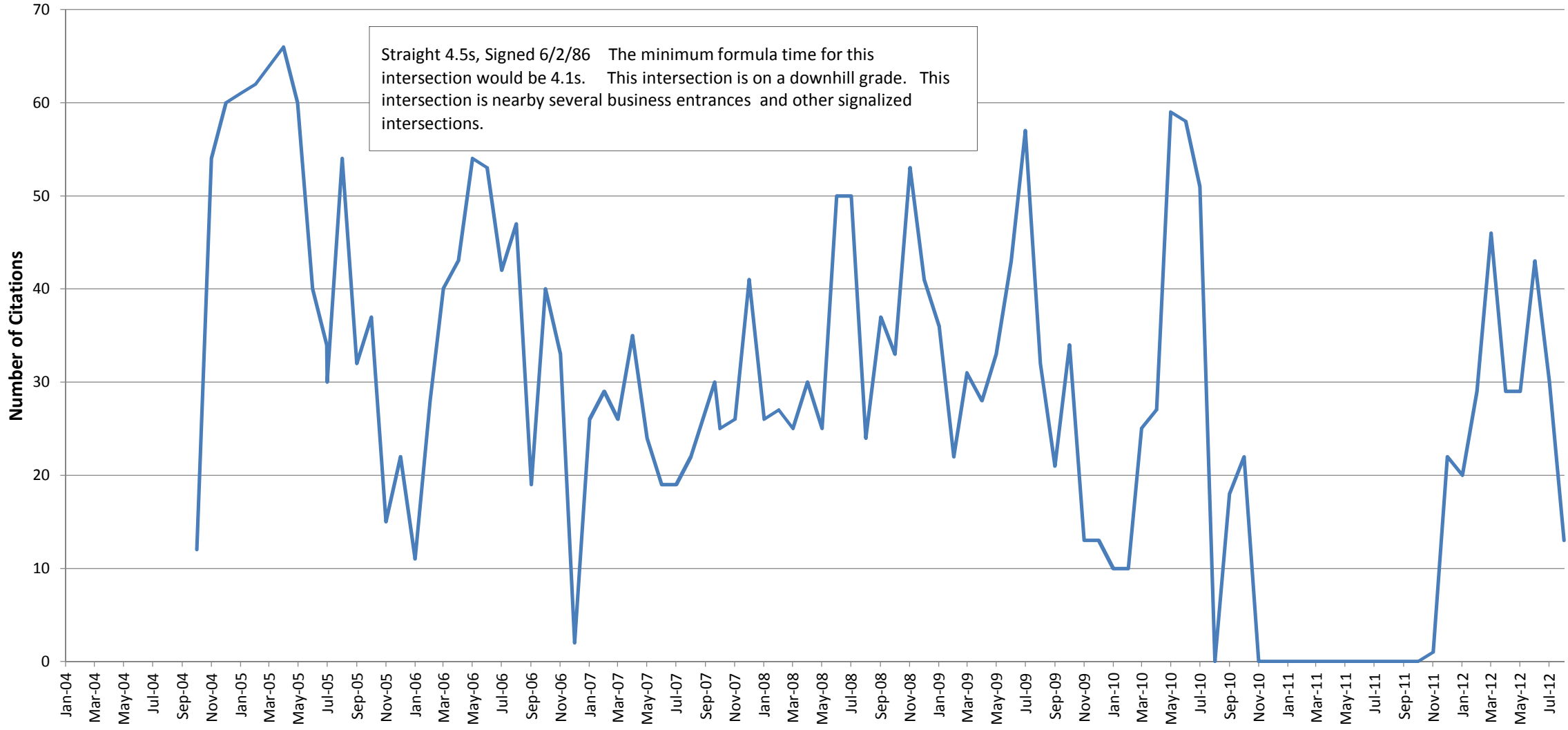


# Tryon Road (EB) at Crescent Green



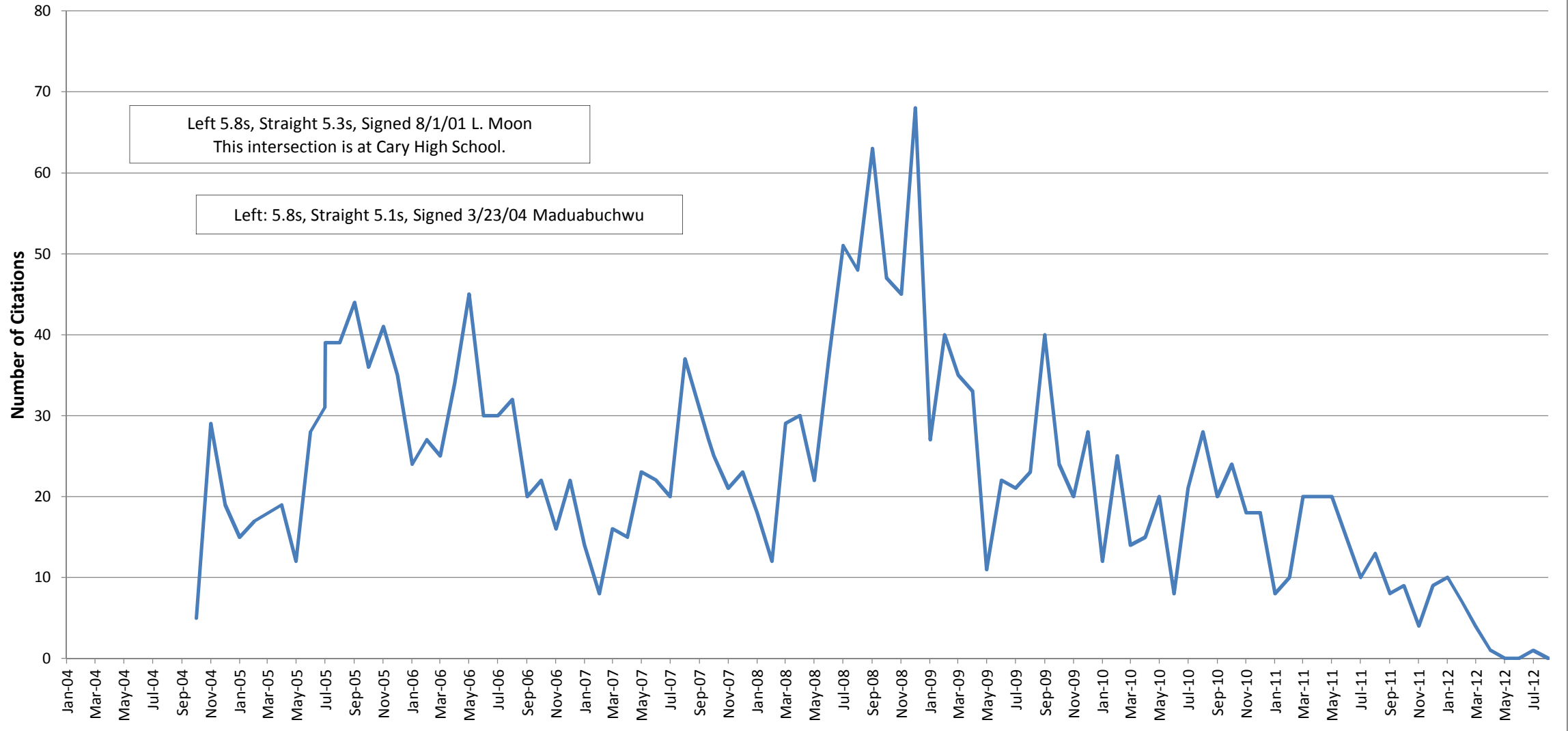
# Kildaire Farm Road (SB) at High Meadow Drive

Straight 4.5s, Signed 6/2/86 The minimum formula time for this intersection would be 4.1s. This intersection is on a downhill grade. This intersection is nearby several business entrances and other signalized intersections.

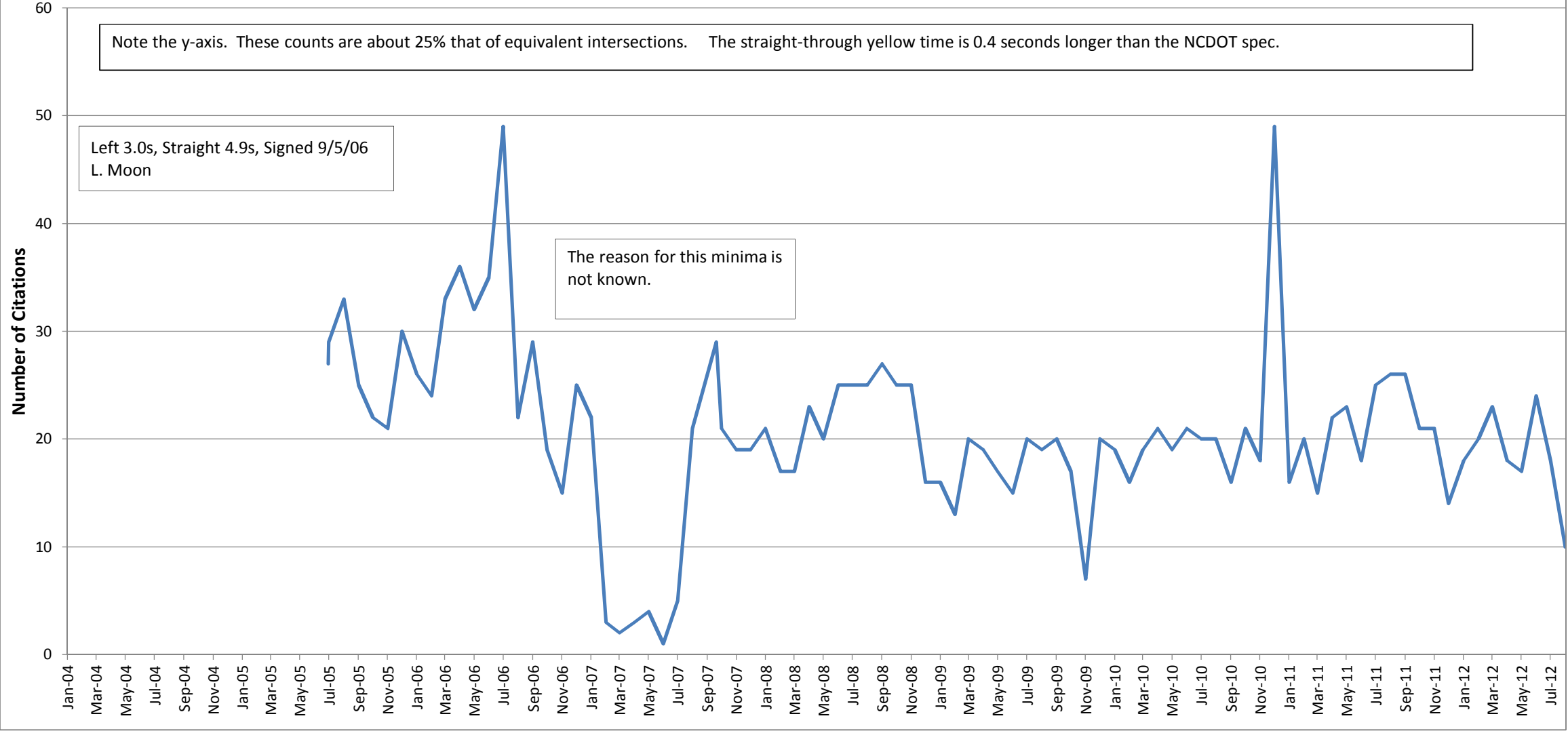




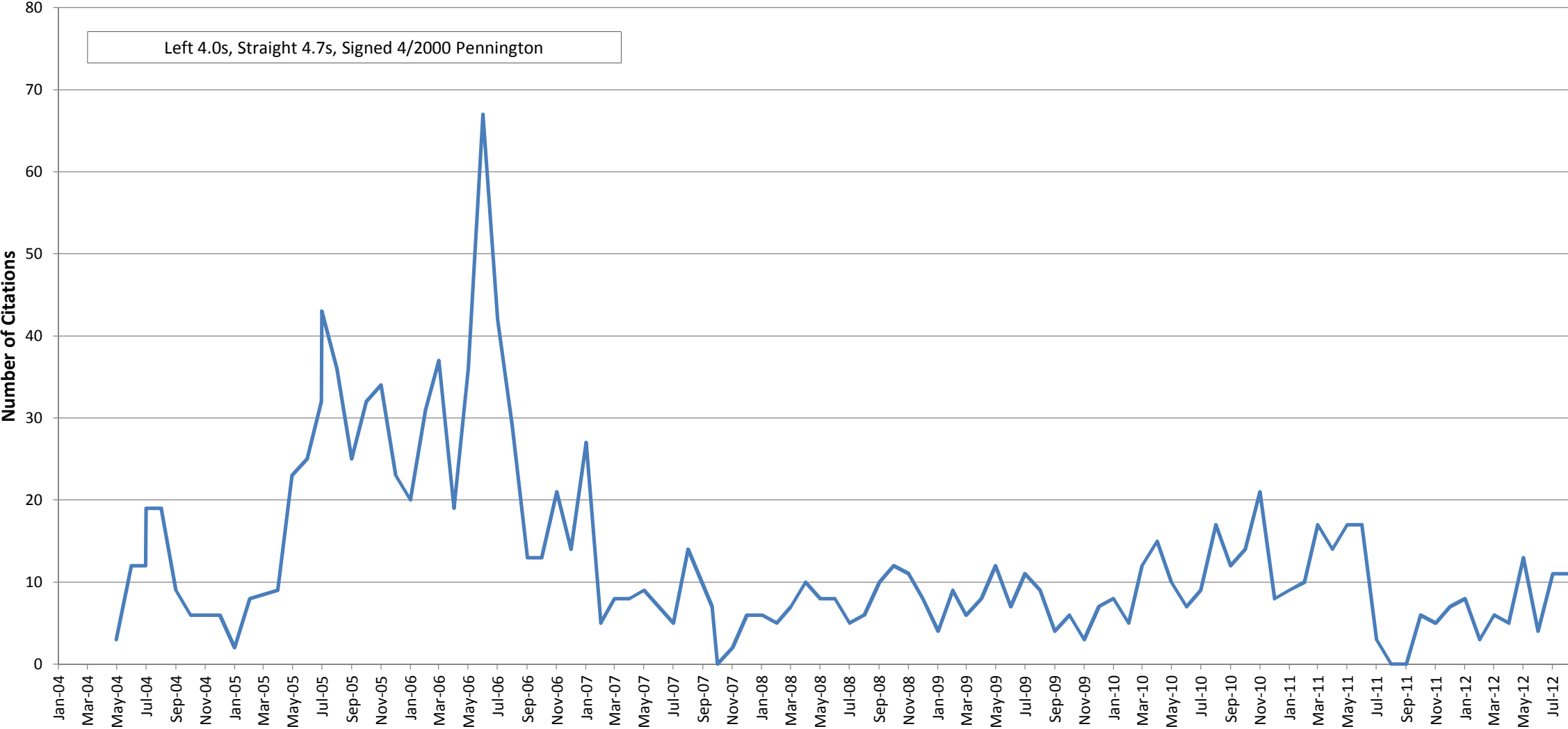
# SE Maynard Road (SB) at Walnut Street



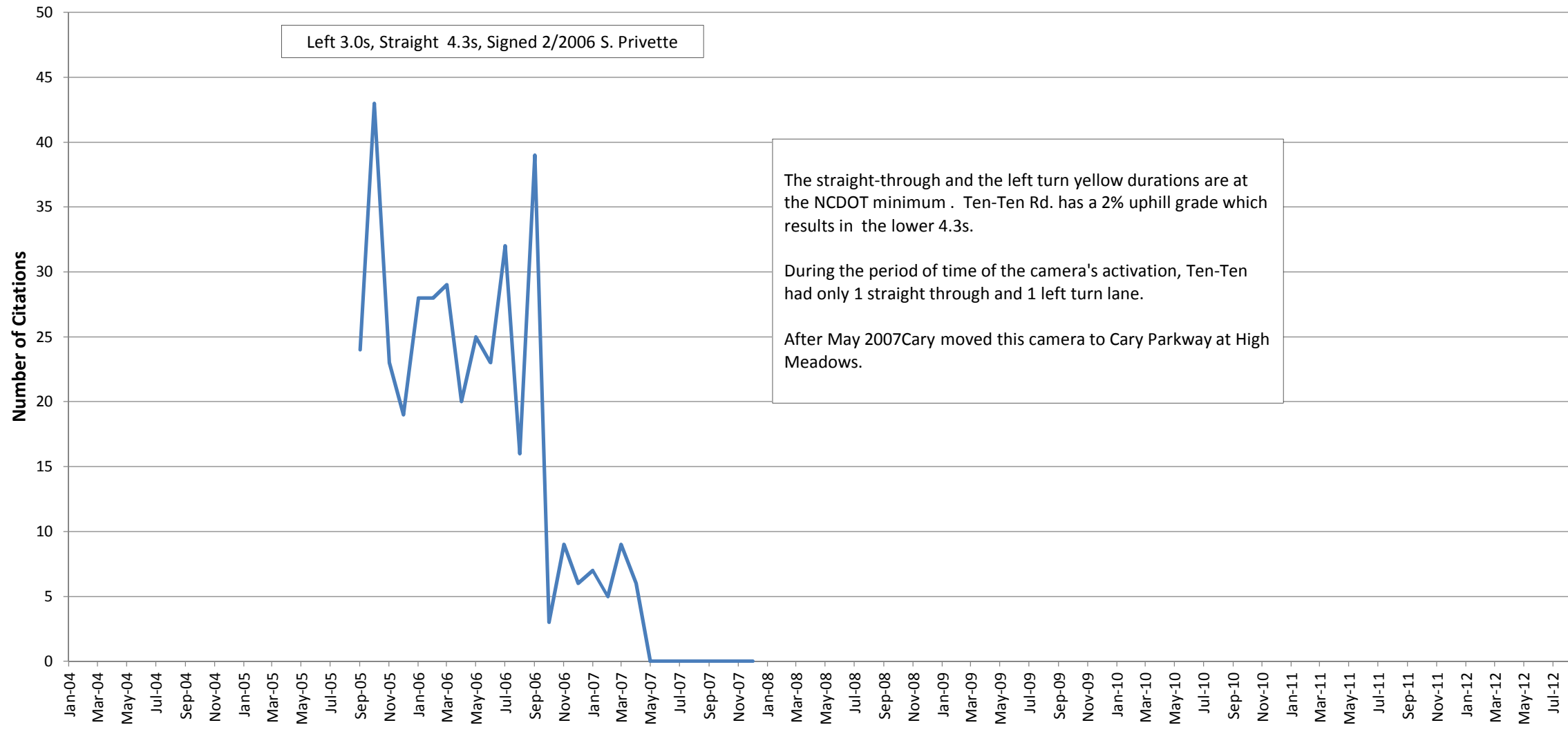
# Harrison (SB) at Maynard



# NW Maynard Road (NB) at Chapel Hill Road



# Ten-Ten Road (EB) at Kildaire Farm Road



	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05
Walnut Street (SB) at Meeting Street															
Maynard Road (WB) at Kildaire Farm Road											340	282	226	149	187
High House Road (WB) at Prestonwood Drive						137	404	308	286	215	213	148	136	145	172
Cary Parkway (WB) and Kildaire Farm Road											33	79	67	84	125
Cary Town Blvd (EB) at Convention Drive		286	559	497	201	86	65	75	139	112	52	56	39	41	63
Harrison Avenue (SB) at Weston Parkway															
Cary Parkway (NB) at High House Road											17	96	58	72	61
Kildaire Farm Road (NB) at Cary Parkway											88	79	69	93	127
Kildaire Farm Road (SB) at Maynard Road											65	62	78	82	90
Cary Parkway (WB) at High Meadow															
Tryon Road (WB) at Regency Parkway		26	82	176	133	110	67	67	59	33	47	71	53	48	67
Walnut Street (NB) at Dillard Drive							46	47	37	49	32	35	32	18	45
Tryon Road (EB) at Crescent Green				82	60	30	52	39	37	47	54	62	31	49	105
Kildaire Farm Road (SB) at High Meadow Drive										12	54	60	61	62	66
SE Maynard Road (SB) at Walnut Street										5	29	19	15	17	19
Harrison (SB) at Maynard															
NW Maynard Road (NB) at Chapel Hill Road				3	12	12	19	19	9	6	6	6	2	8	9
Ten-Ten Road (EB) at Kildaire Farm Road															

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Total 136957

Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
		459	690	579	223	504	487	781	401	438	437	506	359	437	639	564	480	626	509	624
317	187	269	377	411	278	326	116	264	106	123	148	185	127	159	94	101	116	145	87	180
205	166	175	229	255	241	243	187	171	160	135	160	188	253	217	150	214	111	182	85	96
169	67	88	86	104	141	110	88	55	88	90	140	119	138	119	105	116	130	110	99	115
72	127	115	141	126	111	126	114	94	86	85	80	107	107	95	115	130	96	73	56	56
		68	97	79	78	97	68	0	17	98	109	103	155	179	156	171	117	132	100	132
47	44	17	31	27	28	50	64	47	47	49	50	36	37	48	33	48	43	34	40	58
164	90	77	61	91	65	44	47	33	38	50	88	78	83	50	57	65	35	39	26	32
118	97	35	80	125	90	86	87	107	70	77	76	85	84	76	87	102	68	57	88	103
48	29	14	28	33	11	52	28	24	28	24	16	31	51	54	64	47	24	23	27	31
49	25	15	21	25	16	33	32	10	25	33	38	45	34	31	28	38	27	22	11	10
98	93	119	87	107	92	117	102	96	87	71	61	63	47	48	41	54	27	25	26	24
60	40	34	30	54	32	37	15	22	11	28	40	43	54	53	42	47	19	40	33	2
12	28	31	39	39	44	36	41	35	24	27	25	34	45	30	30	32	20	22	16	22
		27	29	33	25	22	21	30	26	24	33	36	32	35	49	22	29	19	15	25
23	25	32	43	36	25	32	34	23	20	31	37	19	36	67	42	29	13	13	21	14
					24	43	23	19	28	28	29	20	25	23	32	16	39	3	9	6









Apr-12	May-12	Jun-12	Jul-12	Aug-12
128	32	23	29	29
71	26	5	4	12
59	64	77	63	56
49	1	8	0	0
3	7	5	8	1
101	64	70	124	67
15	19	13	9	0
16	12	17	13	7
27	33	22	22	12
128	115	125	138	84
115	108	65	55	37
20	61	65	1	0
26	39	29	15	23
29	29	43	30	13
1	0	0	1	0
18	17	24	18	10
5	13	4	11	11