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October 29, 2024

Mayor Marc D. Citrin Village of Tuxedo Park 80 Lorillard Road Tuxedo Park, NY 10987

Speed Study Reduction
Village of Tuxedo Park, Orange County, New York
Colliers Engineering & Design Project No. 24007638A

Dear Mayor Citrin:

Colliers Engineering & Design (CED) has completed our evaluation of the appropriateness of a Village-wide posted speed limit reduction from 30 MPH to 25 MPH.

Data Collection

As part of this evaluation, representatives of CED placed Automatic Traffic Recorder (ATR) machines at four (4) locations within the Village to collect information with respect to traffic volume and travel speeds. This data collection was completed for a 24-hour period on Wednesday, September 18, 2024. The locations at which the information was collected are shown on the attached Figure No. 1 and include:

- Tuxedo Road between Clubhouse Road and Fox Hill Road
- Tower Hall Road E between Clubhouse Road and Tower Hill Loop
- West Lake Road between Patterson Brook Road and Brook Farm Road
- East Lake Road between Acoma Road and Cliff Road

These locations were chosen based on geographic location within the Village, roadway geometrics (horizontal/vertical alignment) and density of development adjacent thereto. Additionally, crash experience and incident reports were collected from Village staff and reviewed to determine whether any pattern or commonality exist.

Traffic Volumes

Identified on Tables No. V-1 through V-4 are the results of the volume/speed data collected by direction. As shown Table No. V-1, the Tuxedo Road location supports 1,978 vehicles per day equally balanced by direction. East Lake Road data shown on Table No. V-2 supports 396 vehicles per day balanced by direction. Tower Hill Road identified on Table No. V-3 supports only 101 vehicles per day with most of the traffic headed in the northbound direction. Shown on Table No. V-4, West Lake Road supports some 229 vehicles per day nearly balanced by direction. East Lake Road, Tower Hill

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Road, and West Lake Road daily volumes are such that they could be considered as "Very Low Volume Local Roads" where their Average Daily Traffic (ADT) is less than 400 vehicles.

Speed

Collected concurrently with the traffic volumes were travel speeds, by direction, on each of these same facilities. Identified on Tables No. S-1, S-1a through S-4 and S-4a are the recorded speeds given in 4 MPH increments during each of the 24 hours observed.

Identified on Tables S-1 and S-1a are the speeds recorded on Tuxedo Road where the average speed was recorded at 28 MPH eastbound and 30 MPH westbound. The 85% speed, the speed at which 85% of those observed traveled at or below, was recorded at 30 MPH eastbound and 33 MPH westbound.

Tables No. S-2 and S-2a identify those speeds recorded at East Lake Road where the average speed was found to be 28 MPH northbound and 29 MPH southbound. The 85% speeds were recorded at 32 MPH and 33 MPH northbound/southbound, respectively.

On Tower Hill Road, identified on Tables No. S-3 and S-3a, the average speed was found to be 28 MPH with an 85% speed of 33 MPH in each of the northbound and southbound directions.

The West Lake Road results, identified on Tables No. S-4 and S-4a, indicate an average speed of 26 MPH and an 85% speed of 29 MPH in the northbound direction and an average speed of 28 MPH and an 85% speed of 31 MPH in the southbound direction.

It should be noted, the 85% speed is generally recognized as the value used to set posted speed limits. Drivers that travel above the 85% speed are considered to be exceeding the safe speed for the prevailing road conditions. Often, the posted speed limit is set at 5 MPH below the 85% speed to allow for an increased safety margin.

Accidents

As mentioned earlier, CED collected crash records for an approximate 3-year period that occurred on Village roadways. A summary of these data are provided on the attached Table No. A. Crash incidents have been identified as to location, date, time, traffic control measure, accident class, number of vehicles involved and injuries, lighting condition, road condition and weather, all elements that could influence crashes. The number of collisions and apparent contributing factors are also provided.

As review of the table indicates, 18 crashes were reported over the review period, nearly 85% involved only a single vehicle, 83% occurred during daylight periods, for 61% the pavement surface was dry and weather clear. Nine (9) of the crashes were listed as "off road" with contributing factors as "slippery pavement" and "driver inattention".

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Identified on Table No. B is a summary of Village Incident Reports. The list contains 22 incidents of which 4 correlated with the accident summary provided above. The remaining 18 incidents reflect mostly property damage caused by inattentive drivers hitting walls, pillars, or mailboxes. A few incidents were recorded as vehicles damaged by falling trees.

Conclusions

Based on the above volume, speed, and crash data and considering the geometrics of the roads throughout the Village having numerous changes in vertical and horizontal alignment, the narrowness of the roads, the fact that a significant portion of the recorded accidents are of the single vehicle type and that all but one of the 85% speeds were found to be around the 30 MPH value, it is our recommendation that the posted speed limit be set at 25 MPH. This value will provide a speed limit more in line with the character of these local roads, particularly considering the geometrics mentioned above and the proximity of roadside vegetation that limits available sight distance.

Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

A. Peter Russillo, P.E., PTOE Senior Project Manager

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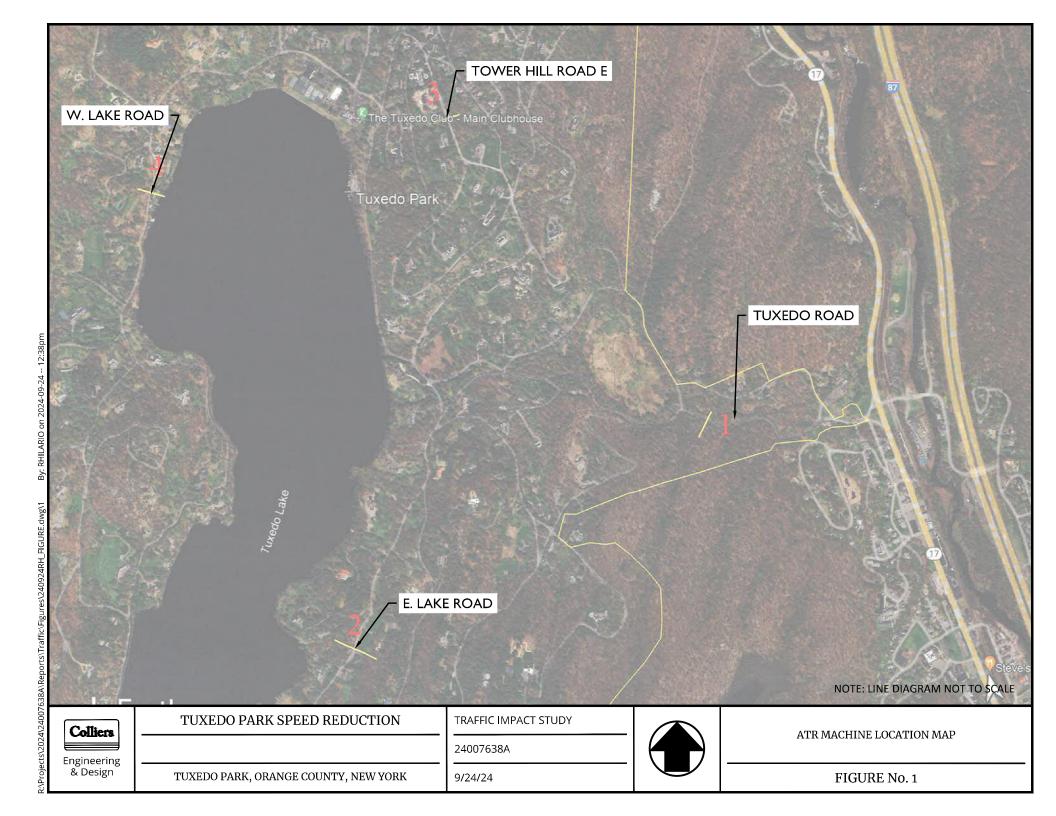




		Table V1			
		Tuxedo RD, Tuxedo	Park NY		
16 6 24	T	\\\	Theresales	Full day.	\\/ -

	16-Se	p-24	Tues	day	Wedne	esday	Thur	sday	Fri	day	Weekday	Average
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	-	-	-	-	2	4	-		-	-	2	4
01:00 AM	-	-	-	-	1	3	-	-	-	-	1	3
02:00 AM	-	-	-	-	1	1	-	-	-	-	1	1
03:00 AM	-	-	-	-	1	0	-	-	-	-	1	0
04:00 AM	-	-	-	-	5	4	-	-	-	-	5	4
05:00 AM	-	-	-	-	8	4	-	-	-	-	8	4
06:00 AM	-	-	-	-	30	18	-	-	-	-	30	18
07:00 AM	-	-	-	-	39	80	-	-	-	-	39	80
08:00 AM	-	-	-	-	87	139	-	-	-	-	87	139
09:00 AM	-	-	-	-	71	72	-	-	-	-	71	72
10:00 AM	-	-	-	-	62	55	-	-	-	-	62	55
11:00 AM	-	-	-	-	77	52	-	-	-	-	77	52
12:00 PM	-	-	-	-	74	61	-	-	-	-	74	61
01:00 PM	-	-	-	-	63	60	-	-	-	-	63	60
02:00 PM	-	-	-	-	69	75	-	-	-	-	69	75
03:00 PM	-	-	-	-	79	80	-	-	-	-	79	80
04:00 PM	-	-	-	-	140	56	-	-	-	-	140	56
05:00 PM	-	-	-	-	51	49	-	-	-	-	51	49
06:00 PM	-	-	-	-	55	62	-	-	-	-	55	62
07:00 PM	-	-	-	-	29	44	-	-	-	-	29	44
08:00 PM	-	-	-	-	17	32	-	-	-	-	17	32
09:00 PM	-	-	-	-	18	23	-	-	-	-	18	23
10:00 PM	-	-	-	-	6	10	-	-	-	-	6	10
11:00 PM	-	-	-	-	4	5	-	-	-	-	4	5
Total Day	0	0	0	0	989	989	0	0	0	0	989	989
	0		0		197	'8	C)	(0	197	78
Am Peak	-	-	-	-	8:00	8:00	-	-	-	-	0.00	8:00
Volume	<u>-</u>	-	-	-	87	139	<u>-</u>	-	-	-		139
Pm Peak	-	-	-	-	16:00	15:00	-	-	-	-	. 0.00	15:00
Volume	-	-	-	-	140	80	-	-	-	-	140	80



						Table V2	5 1 107					
	46.6	2.4		. L.	East Lake I			1 .	F : 1	ı.	\\\\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\	<u> </u>
T:	16-Sep		Tues		Wedne		Thur	_	Frid		Weekday	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	-	-	-	-	2	1	-	-	-	-	2	0
01:00 AM	-	-	-	-	1	0	-	-	-	-	1	0
02:00 AM 03:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
03.00 AM	-	-		-	0 2	2	-	-	-	-	0 2	2
05:00 AM	-	-	-	-	2	0	-	-	-	-	2	0
06:00 AM	-	-	-	-	7	3	-	-	-	-	7	3
06.00 AM	-	-	-	-	9	3 7	-	-	-	-	9	5 7
07:00 AM	-	-	-	-	16	26	-	-	-	-	16	26
08:00 AM	-	-	-	-	14	18	-	-	-	-	14	18
10:00 AM	_		_		11	11					11	11
11:00 AM					20	18			_		20	18
12:00 PM	_	_	_	_	13	16	_	_	_	_	13	16
01:00 PM	_	_	_	_	13	13	-	_	_	_	13	13
02:00 PM	_	-	_	-	17	11	_	-	_	-	17	11
03:00 PM	-	-	_	_	18	18	-	-	_	_	18	18
04:00 PM	-	-	_	-	21	14	-	-	_	-	21	14
05:00 PM	-	-	_	_	9	9	-	_	-	_	9	9
06:00 PM	-	-	-	-	10	9	-	-	-	-	10	9
07:00 PM	-	-	-	-	5	11	-	-	-	-	5	11
08:00 PM	-	-	-	-	3	3	-	-	-	-	3	3
09:00 PM	-	-	-	-	1	7	-	-	-	-	1	7
10:00 PM	-	-	-	-	3	1	-	-	-	-	3	1
11:00 PM	-	-	-	-	0	1	-	-	-	-	0	1
Total Day	0	0	0	0	197	199	0	0	0	0	197	199
Total Day	0		0		396	5	C)	0)	39	6
Am Peak	-	-	-	-	11:00	8:00	-	-	-	-	11:00	8:00
Volume	-	-	-	-	20	26	-	-	-	-	20	26
Pm Peak	-	-	-	-	16:00	15:00	-	-	-	-	16:00	15:00
Volume	-	-	-	-	21	18	-	-	-	-	21	18



		Table V3			
		Tower Hill RD, Tuxedo	o Park NY		
16-Sep-24	Tuesday	Wednesday	Thursday	Friday	Weekday Average

	16-Se	p-24	Tues	day	Wedne	sday	Thur	sday	Fri	day	Weekday <i>i</i>	Average
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
01:00 AM	-	-	-	-	1	0	-	-	-	-	1	0
02:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
03:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
04:00 AM	-	-	-	-	2	1	-	-	-	-	2	1
05:00 AM	-	-	ì	-	0	2	-	-	-	-	0	2
06:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
07:00 AM	-	-	-	-	2	1	-	-	-	-	2	1
08:00 AM	-	-	-	-	7	7	-	-	-	-	7	7
09:00 AM	-	-	-	-	1	10	-	-	-	-	1	10
10:00 AM	-	-	-	-	1	7	-	-	-	-	1	7
11:00 AM	-	-	-	-	1	2	-	-	-	-	1	2
12:00 PM	-	-	-	-	1	6	-	-	-	-	1	6
01:00 PM	-	-	-	-	3	4	-	-	-	-	3	4
02:00 PM	-	-	-	-	2	3	-	-	-	-	2	3
03:00 PM	-	-	-	-	2	8	-	-	-	-	2	8
04:00 PM	-	-	-	-	4	10	-	-	-	-	4	10
05:00 PM	-	-	-	-	1	4	-	-	-	-	1	4
06:00 PM	-	-	-	-	1	2	-	-	-	-	1	2
07:00 PM	-	-	-	-	0	1	-	-	-	-	0	1
08:00 PM	-	-	-	-	1	2	-	-	-	-	1	2
09:00 PM	-	-	-	-	0	1	-	-	-	-	0	1
10:00 PM	-	-	-	-	0	0	-	-	-	-	0	0
11:00 PM	-	-	-	-	0	0	-	-	-	-	0	0
Total Day	0	0	0	0	30	71	0	0	0	0		71
	0		0		101		C)	(0	101	
Am Peak	-	-	-	-	8:00	9:00	-	-	-	-	0.00	9:00
Volume	-	-	-	-	7	10	-	-	-	-		10
Pm Peak	-	-	-	-	16:00	16:00	-	-	-	-	16:00	16:00
Volume	-	-	-	-	4	10	-	-	-	-	4	10



						Table V4						
					West Lake							
	16-Sep-		Tueso		Wedne		Thur		Frid	-	Weekday	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	-	-	-	-	0	1	-	-	-	-	0	1
01:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
02:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
03:00 AM	-	-	•	-	0	0	-	-	-	-	0	0
04:00 AM	-	-	-	-	0	0	-	-	-	-	0	0
05:00 AM	-	-	-	-	1	0	-	-	-	-	1	0
06:00 AM	-	-	-	-	2	2	-	-	-	-	2	2
07:00 AM	-	-	-	-	3	6	-	-	-	-	3	6
08:00 AM	-	-	-	-	11	10	-	-	-	-	11	10
09:00 AM	-	-	-	-	7	12	-	-	-	-	7	12
10:00 AM	-	-	-	-	11	11	-	-	-	-	11	11
11:00 AM	-	-	-	-	11	8	-	-	-	-	11	8
12:00 PM	-	-	-	-	9	8	-	-	-	-	9	8
01:00 PM	-	-	-	-	6	10	-	-	-	-	6	10
02:00 PM	-	-	-	-	15	8	-	-	-	-	15	8
03:00 PM	-	-	-	-	2	9	-	-	-	-	2	9
04:00 PM	-	-	-	-	9	18	-	-	-	-	9	18
05:00 PM	-	-	-	-	7	1	-	-	-	-	7	1
06:00 PM	-	-	-	-	10	10	-	-	-	-	10	10
07:00 PM	-	-	-	-	0	4	-	-	-	-	0	4
08:00 PM	-	-	-	-	2	1	-	-	-	-	2	1
09:00 PM	-	-	-	-	0	2	-	-	-	-	0	2
10:00 PM	-	-	-	-	0	1	-	-	-	-	0	1
11:00 PM	-	-	-	-	0	1	-	-	-	-	0	1
Total Day	0	0	0	0	106	123	0	0	0	0	106	123
Total Day	0		0		229)	0)	0		22	9
Am Peak	-	-	-	-	8:00	9:00	-	-	-	-	8:00	9:00
Volume	-	-	-	-	11	12	-	-	-	-	11	12
Pm Peak	-	-	-	-	14:00	16:00	-	-	-	-	14:00	16:00
Volume	-	-	-	-	15	18	-	-	-	-	15	18



							Table S-1							
						Tuxedo F	RD, Tuxedo	Park NY						
							E.B. S							
Time	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	76-999
12:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	2	4	2	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	2	22	5	1	0	0	0	0	0	0	0	0
07:00 AM	0	0	3	23	13	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	10	62	15	0	0	0	0	0	0	0	0	0
09:00 AM	1	1	4	48	17	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	10	43	9	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	10	59	8	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	6	60	8	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	6	47	9	1	0	0	0	0	0	0	0	0
02:00 PM	0	0	4	53	12	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	8	59	11	1	0	0	0	0	0	0	0	0
04:00 PM	0	0	15	110	15	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	4	37	10	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	2	41	12	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	4	17	8	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	0	11	5	1	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	8	10	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	2	2	1	0	1	0	0	0	0	0	0	0
11:00 PM	0	0	0	3	1	0	0	0	0	0	0	0	0	0
		85th Percentile: 30 MP												
		10 MPH Pace Speed: 26-35 MPH												
		Number in Pace: 890												
		Percent in Pace: 9												
Į	N	Mean Speed	d(Average):		28 MPH									



							Table S-1a							
							RD, Tuxedo	Park NY						
						TaxeaoT	W.B. S							
Time	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	76-999
12:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	3	0	1	0	0	0	0	0	0	0
05:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	4	9	4	1	0	0	0	0	0	0	0	0
07:00 AM	0	0	7	38	34	1	0	0	0	0	0	0	0	0
08:00 AM	0	0	2	80	52	5	0	0	0	0	0	0	0	0
09:00 AM	0	0	3	49	18	1	1	0	0	0	0	0	0	0
10:00 AM	0	1	3	29	21	1	0	0	0	0	0	0	0	0
11:00 AM	0	0	4	25	22	1	0	0	0	0	0	0	0	0
12:00 PM	0	0	5	35	18	3	0	0	0	0	0	0	0	0
01:00 PM	0	0	4	29	26	1	0	0	0	0	0	0	0	0
02:00 PM	0	0	1	40	33	1	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	39	38	3	1	0	0	0	0	0	0	0
04:00 PM	0	0	2	28	25	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	1	22	22	4	0	0	0	0	0	0	0	0
06:00 PM	0	0	3	37	19	3	0	0	0	0	0	0	0	0
07:00 PM	0	0	5	26	13	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	2	13	16	1	0	0	0	0	0	0	0	0
09:00 PM	0	0	2	14	7	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	2	1	7	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	4	1	0	0	0	0	0	0	0	0	0
•		85th Percentile: 33 MP												
,		10 MPH Pace Speed: 26-35 MPI												
,		Number in Pace: 90												
,		Percent in Pace: 92												
	N	Mean Speed	l(Average):		30 MPH									



							Table S-2							
						E Lake R	D, Tuxedo I	Park NY						
		_					N.B. S		_	_		_		
Time	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	76-999
12:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0
05:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	2	3	2	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	2	4	3	0	0	0	0	0	0	0	0	0
08:00 AM	1	1	6	6	2	0	0	0	0	0	0	0	0	0
09:00 AM	0	1	1	7	4	1	0	0	0	0	0	0	0	0
10:00 AM	0	0	1	5	5	0	0	0	0	0	0	0	0	0
11:00 AM	0	2	2	12	4	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	0	9	3	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	2	7	3	1	0	0	0	0	0	0	0	0
02:00 PM	0	0	5	9	3	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	3	9	6	0	0	0	0	0	0	0	0	0
04:00 PM	0	1	5	12	2	0	1	0	0	0	0	0	0	0
05:00 PM	0	0	3	4	2	0	0	0	0	0	0	0	0	0
06:00 PM	0	1	3	5	1	0	0	0	0	0	0	0	0	0
07:00 PM	0	1	0	3	1	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ŀ		85th Percentile: 32 MF												
		10 MPH Pace Speed: 26-35 MPH												
ŀ		Number in Pace: 14 Percent in Pace: 759												
ŀ	N.													
	IN.	neari speed	i(Average):		28 MPH									



							Table S-2a							
						E Lake R	D, Tuxedo I							
							S.B. S							
Time	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	76-999
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	2	3	2	0	0	0	0	0	0	0	0	0
08:00 AM	1	2	3	12	8	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	2	10	5	1	0	0	0	0	0	0	0	0
10:00 AM	0	0	2	5	4	0	0	0	0	0	0	0	0	0
11:00 AM	0	1	2	7	8	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	2	11	2	1	0	0	0	0	0	0	0	0
01:00 PM	0	0	4	5	4	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	6	4	1	0	0	0	0	0	0	0	0
03:00 PM	0	0	1	13	4	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	1	6	7	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	1	6	1	1	0	0	0	0	0	0	0	0
06:00 PM	0	1	1	4	3	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	1	6	4	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	0	2	1	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	1	1	5	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		85th Percentile: 33 MP												
ŀ		10 MPH Pace Speed: 26-35 MP												
		Number in Pace: 16 Percent in Pace: 83												
					83%									
Į	N	/lean Speed	(Average):		29 MPH									



							Table S-3							
						Tower Hill	RD, Tuxed	o Park NY						
							N.B. S	Speed						
Time	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	76-999
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	1	2	3	1	0	0	0	0	0	0	0	0
09:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	1	2	1	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		85th	Percentile:		33 MPH						<u></u>			
		10 MPH Pa	•	2	26-35 MPH									
			er in Pace:		19									
			nt in Pace:		63%									
	N	lean Speed	l(Average):		28 MPH									



							Table S-3a							
						Tower Hill	RD, Tuxedo							
							S.B. S							
Time	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	76-999
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0
08:00 AM	0	0	1	2	4	0	0	0	0	0	0	0	0	0
09:00 AM	0	0	4	5	1	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	3	3	1	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	3	1	1	1	0	0	0	0	0	0	0	0
01:00 PM	0	0	2	1	1	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	1	5	0	1	1	0	0	0	0	0	0	0	0
04:00 PM	1	1	1	4	2	1	0	0	0	0	0	0	0	0
05:00 PM	0	0	1	2	1	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		85th F	Percentile:		33 MPH									
		10 MPH Pa	ce Speed:	2	21-30 MPH									
		Numbe	er in Pace:		47									
		Percer	nt in Pace:		66%									
	N	lean Speed	(Average):		28 MPH									



Table S-4														
	W Lake RD, Tuxedo Park NY													
	N.B. Speed													
Time	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	76-999
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0
08:00 AM	0	1	2	8	0	0	0	0	0	0	0	0	0	0
09:00 AM	0	1	1	5	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	6	5	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	1	5	4	0	1	0	0	0	0	0	0	0	0
12:00 PM	0	1	4	4	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	2	3	1	0	0	0	0	0	0	0	0	0
02:00 PM	0	1	6	5	3	0	0	0	0	0	0	0	0	0
03:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	4	4	1	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	4	3	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	1	8	1	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85th Percentile:				29 MPH									
Ī	10 MPH Pace Speed:			21-30 MPH										
Ī	Number in Pace:				90									
Ī	Percent in Pace:				85%									
	Mean Speed(Average):				26 MPH									



Table S-4a														
	W Lake RD, Tuxedo Park NY													
							S.B. S							
Time	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	76-999
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	4	2	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	7	2	1	0	0	0	0	0	0	0	0
09:00 AM	0	1	2	6	3	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	2	8	1	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	4	4		0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	5	2	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	3	3	4	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	2	3	3	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	1	5	3	0	0	0	0	0	0	0	0	0
04:00 PM	0	1	2	13	2	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	3	4	3	0	0	0	0	0	0	0	0	0
07:00 PM	0	0	1	2	1	0	0	0	0	0	0	0	0	0
08:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
09:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	85th Percentile:				31 MPH									
	10 MPH Pace Speed:			26-35 MPH										
ſ	Number in Pace:				47									
ſ		Percent in Pace: 6			66%									
Į	Mean Speed(Average): 28 Mean Speed				28 MPH									

TABLE A

ACCIDENT SUMMARY - VILLAGE ACCIDENT DATA
TUXEDO PARK, ROCKLAND COUNTY

NODE/LINK	LOCATION	DATE	TIME	TRAFFIC CONTROL	ACCIDENT CLASS ³	# OF VEHICLES - INJURIES	LIGHT CONDITION	ROAD CONDITION	WEATHER	MANNER OF COLLISION	APPARENT CONTRIBUTING FACTORS
West Lake Road	100 feet North of Summit Road	12/24/21	9:35 AM	None	PDO	1-0	Daylight	Wet	Cloudy	Off Road	Pavement Slippery
Tuxedo Park	30 feet East of 57 West Lake Road	05/27/22	8:30 AM	None	PDO & I	1-1	Daylight	Wet	Cloudy	Off Road	Pavement Slippery
Wee Wah Road	Wee Wah Road Parking Lot	06/25/22	8:03 PM	None	PDO	2-0	Daylight	Dry	Clear	Right Angle	View Obsturcted/Limited, Outside Car Distraction
West Lake Road	100 feet East of West Lake Road	07/25/22	1:01 PM	No Passing Zone	PDO	1-0	Daylight	Dry	Cloudy	Off Road	Reaction to Uninvolved Vehicle, Passing or Lane Usage Improper
Town Hill Road	700 feet west of Tuxedo Road	09/24/22	11:34 AM	None	PDO	1-0	Daylight	Dry	Clear	Animal	Animal's Action
Tuxedo Road/Fox Hill Road	Fox Hill Road	10/01/22	2:38 PM	None	PDO	1-0	Daylight	Wet	Cloudy	Off Road	Driver Inattention/Distraction
Pepperidge Road	0.1 miles West of Tuxedo Road	12/11/22	4:33 PM	None	PDO	1-0	Dark-Road Unlighted	Snow/Ice	Snow	Off Road	Pavement Slippery
Tuxedo Road	300 feet South of Intersection of West Lake/Tuxedo	06/18/23	1:31 AM	None	PDO	1-0	Dark-Road Unlighted	Dry	Clear	Off Road	Driver Inattention/Distraction
West Lake Road	100 Feet West of Lorrilard Road	07/25/23	3:20 PM	None	PDO	1-0	Daylight	Wet	Rain	Object	Obstruction/Debris
Tuxedo Road	300 feet Southwest of Fox Hill Road	09/26/23	1:17 PM	No Passing Zone	PDO	1-0	Daylight	Wet	Clear	Off Road	Failure to Keep Right, Pavement Slippery
East Lake Road	Intersection of East Lake Road & Cliff Road	10/31/23	7:07 PM	No Passing Zone	PDO	1-0	Dark-Road Unlighted	Dry	Clear	Off Road	Reaction to Uninvolved Vehicle
Tuxedo Road	Intersection of Tuxedo Road & Pine Road	11/14/23	3:34 PM	None	PDO	1-0	Daylight	Dry	Clear	Animal	Animal's Action
South Gate Road	250 feet Southwest of South Lake Place	11/16/23	8:17 AM	Other	PDO	1-0	Daylight	Dry	Clear	Building	Traffic Control Disregarded
South Gate Road	250 feet South of South Lake Place	11/29/23	2:54 PM	Other	PDO	1-0	Daylight	Dry	Clear	Building	Traffic Control Disregarded, Driver Inattention/Disctraction
Tuxedo Road	300 feet South of West Lake Road	01/15/24	3:00 PM	None	PDO & I	1-1	Daylight	Dry	Clear	Off Road	Driver Inattention/Distraction
West Lake Road	200 feet Southwest of Summit Road	05/08/24	8:27 AM	No Passing Zone	PDO	2-0	Daylight	Wet	Cloudy	Sideswipe(opposite direction)	Failure to Keep Right
East Lake Road	100 feet South of 225 East Lake Road	06/07/24	3:15 PM	None	PDO & I	2-1	Daylight	Dry	Clear	Pedestrian	Passing or Lane Usage Improper, Unsafe Speed
South Gate Road	1000 feet West of South Lake Place	09/21/24	10:18 AM	Other	PDO	1-0	Daylight	Dry	Clear	Building	Traffic Control Disregarded

NOTES:

10/23/2024 JOB NO. 2400738A

¹⁾ ACCIDENT OBTAINED FROM THE VILLAGE OF TUXEDO PARK FOR THE TIME PERIOD BETWEEN DECEMBER, 24 2021 THROUGH SEPTEMBER, 21 2024.

²⁾ ACCIDENT CLASS: PDO = PROPERTY DAMAGE ONLY, I = INJURY, F = FATALITY, UNKOWN = NON-REPORTABLE

TABLE B

INCIDENT SUMMARY - VILLAGE INCIDENT DATA
TUXEDO PARK, ROCKLAND COUNTY

Date	Time	Location	Cross Street	Description		
01/06/21	2:58 PM	1 Circuit Road	Clubhouse Road	Vehicle caused property damage		
01/19/21	6:13 PM	16 Summit Road	West Lake Road	Vehicle struck wall		
05/18/21	8:12 AM	67 Pine Road	Tuxedo Road	Vehicle struck pillar		
06/15/21	4:15 PM	DPW Garage	West Lake Stable Road	rear end collision		
06/18/21	12:29 PM	East Lake Road	Acoma Road	Sideswipe		
10/30/21	1:10 AM	Tuxedo Park School	Mountain Farm Road	Hit and Run MVA		
12/24/21	9:30 AM	West Lake Road	Mountain Farm Road	Vehicle caused property damage		
04/02/22	1:05 PM	Tuxedo Police Department	Park Avenue	Tree fell on vehicle		
05/09/22	9:20 PM	Wee Wah Beach	West Lake Stable Road	Vehicle hit object		
09/07/22	12:27 PM	1 Tuxedo Road	NA	Vehicle hit by gate		
12/24/22	5:46 PM	South Gate	West Lake Drive	South gate struck Vehicle		
06/18/23	12:31 AM	Tuxedo Club	Lorillard Road	Vehicle struck wall		
07/14/23	12:28 PM	84 East Lake Road	Cliff Road	Vehicle caused property damage		
10/10/23	3:23 PM	Tuxedo Police Department	Park Avenue	Vehicle hit object		
10/31/23	7:38 PM	East Lake Road	Cliff Road	Vehicle Drove into a ditch		
11/14/23	3:33 PM	Tuxedo Road	Pine Road	Animal		
01/22/24	4:51 PM	18 Acomca Road	East Lake Road	Vehicle hit mailbox		
05/08/24	8:28 AM	West Lake Road	Summit Road	Sideswipe (Opposite Directions)		
05/23/24	7:55 AM	11 Lorillard Road	Wee Wah Road	Tree fell on vehicle		
06/07/24	3:15 PM	225 East Lake Road	Crowsnest Road	vehicle hit pedestrian		
07/17/24	3:35 PM	Tuxedo Club	Lorillard Road	Tree fell on vehicle		
08/12/24	9:05 PM	55 Mountain Farm Road	West Lake Road	MVA		