



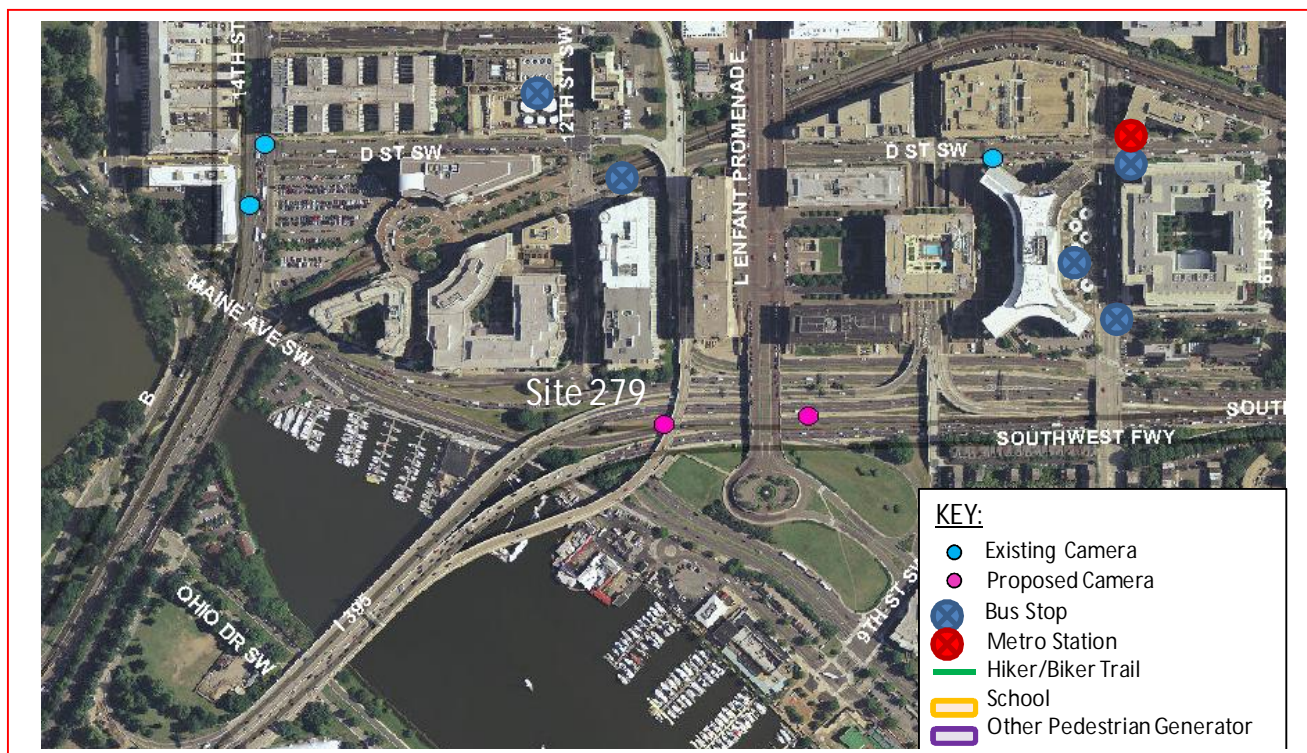
District Department of Transportation

Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia

I-395 SW after Exit 4 E/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	701	8	8A	Proposed	I-395 Southwest after Exit 4, Eastbound



The *proposed* speed camera is located in Ward 8 on I-395 Southwest after Exit 4 in the eastbound direction. I-395 runs between US 50 / New York Avenue NW to the north and I-95 to the south. The posted speed limit is 40 MPH.

W8 - 100





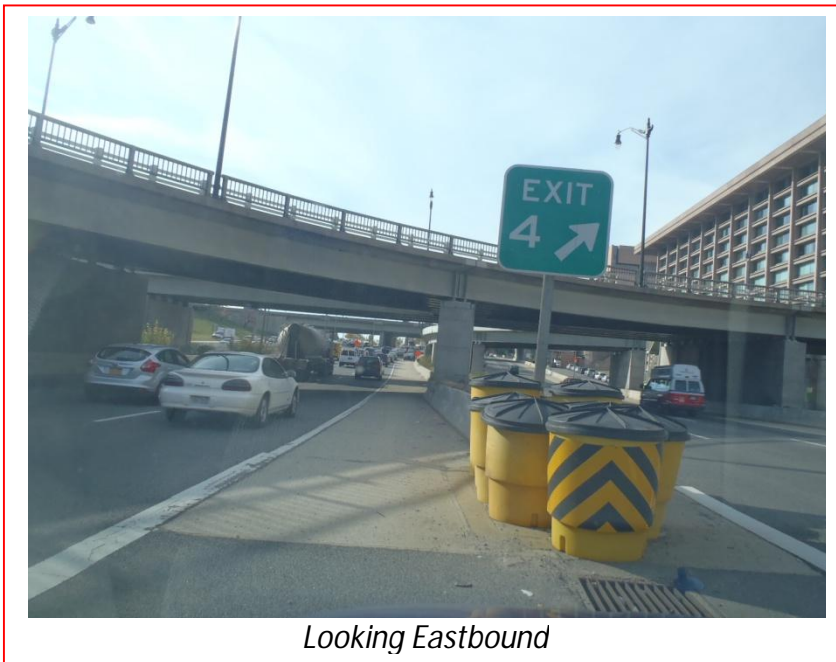
District Department of Transportation

I-395 SW after Exit 4 E/B

Field Assessment Summary

I-395 is assumed to run in an east-west direction, and is classified as an interstate. I-395 has seven travel lanes eastbound and five travel lanes westbound. This site has the following characteristics:

- There are several bus stops in the surrounding area.
- The L'Enfant Plaza Metro Station is located nearby.
- Several tourist attractions including the Thomas Jefferson Memorial are in the area and generate pedestrian activity.
- There are two concrete barriers present at this location. One separates eastbound and westbound traffic. The other separates the five lanes eastbound into three lanes eastbound and three lanes exiting at Exit 4 - Maine Avenue.
- The pavement is in good condition and there is curb and gutter with drainage inlets.



Looking Eastbound



District Department of Transportation

I-395 SW after Exit 4 E/B

Speed Data Analysis

Posted Speed Limit (MPH)	40
Mean Speed (MPH)	40
85th Percentile Speed (MPH)	56
10 MPH Pace Speed	44-53
ADT	39,427

The mean speed is equal to the posted speed limit and the 85th percentile speed is 16 MPH higher than the posted speed at this location.

Crash Data Analysis

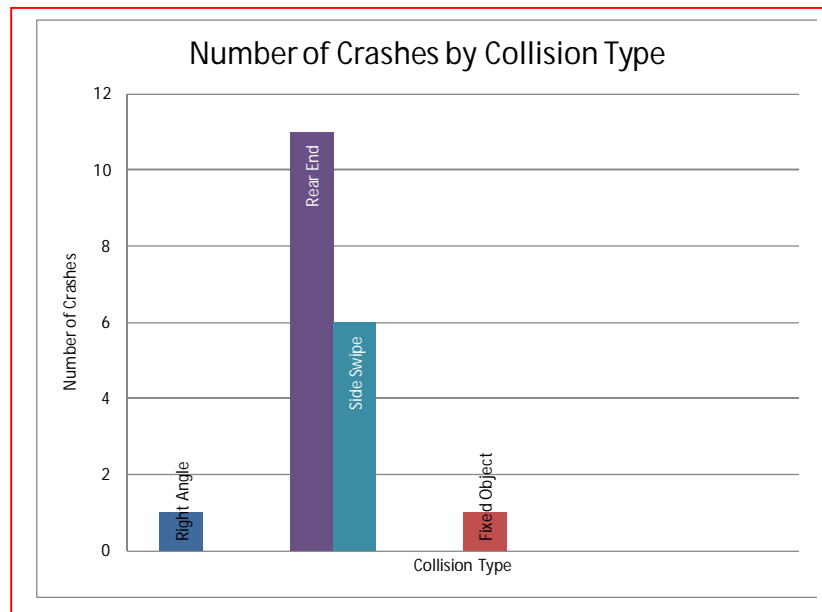
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 19 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Rear (11 crashes) and Side Swiped (6 crashes). The other collision types had 1 crash or less each. Furthermore, the site experienced six injury-related crashes.

Severity			Weather			Surface Condition			Light Condition		
Total	19										
Fatal	0	0.0%	Clear	17	89.5%	Dry	16	84.2%	Day	14	73.7%
Injury	6	31.6%	Rain	1	5.3%	Wet	2	10.5%	Night	4	21.1%
Bus	1	5.3%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	2	10.5%									



District Department of Transportation

I-395 SW after Exit 4 E/B



Safety Nexus

This site presents the following safety considerations which may establish a safety nexus between the speed camera and safety.

1. Speed Data – The 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – There was six injury-related crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. There are two concrete barriers present at this location. One separates eastbound and westbound traffic. The other separates the five lanes eastbound into three lanes eastbound and three lanes exiting at Exit 4 - Maine Avenue. Slower travel speeds are needed to facilitate safer weaving and merging operations in this section of I-395.

Due to elevated 85th percentile speeds through the corridor and the desire for slower speeds due to weaving and merging operations on this segment, there is a nexus between traffic safety and the speed camera at this location.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

I-395 SW after Exit 4 EB Speed

EB

Start 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	Total
12/04/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	5	0	0	0	0	6	28	44	48	25	8	3	0	0	167
04:00	33	0	0	0	3	22	90	162	182	107	66	44	32	138	879
05:00	375	1	0	1	10	106	286	321	236	244	226	213	204	480	2703
06:00	625	1	3	14	57	250	366	337	312	262	221	197	105	130	2880
07:00	415	17	22	23	11	10	12	15	6	0	1	0	0	0	532
08:00	466	15	26	30	119	272	459	403	173	50	12	2	0	0	2027
09:00	429	14	19	4	21	27	54	28	8	4	0	0	0	0	608
10:00	264	7	4	4	6	107	471	570	485	328	147	51	15	4	2463
11:00	221	5	3	2	4	84	340	465	402	305	160	65	10	7	2073
12 PM	257	0	0	2	21	174	498	609	568	363	164	55	19	9	2739
13:00	284	2	1	1	40	156	495	575	517	394	165	69	24	8	2731
14:00	331	2	8	6	13	151	540	634	583	388	168	49	16	3	2892
15:00	350	25	10	7	3	0	1	0	0	0	0	0	0	0	396
16:00	386	2	5	15	54	221	575	571	429	159	58	8	2	0	2485
17:00	382	8	10	9	55	228	359	410	158	55	12	0	0	0	1686
18:00	321	14	17	9	0	0	0	0	0	0	0	0	0	0	361
19:00	295	0	0	11	26	182	628	680	538	262	91	20	13	0	2746
20:00	167	0	0	0	11	81	416	538	521	344	138	55	20	6	2297
21:00	143	0	0	0	8	76	351	590	547	370	146	51	16	8	2306
22:00	89	0	1	0	8	69	269	399	449	351	156	51	14	8	1864
23:00	51	0	0	0	0	33	160	294	289	215	137	43	20	11	1253
Total	5889	113	129	138	470	2255	6398	7645	6451	4226	2076	976	510	812	38088

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

I-395 SW after Exit 4 EB Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/05/13	12	0	0	0	1	10	72	144	167	117	63	29	6	9	630
01:00	3	0	0	0	2	15	56	78	93	79	48	12	6	1	393
02:00	23	0	0	1	2	4	11	39	50	43	18	10	1	1	203
03:00	1	0	0	0	0	0	12	18	30	27	19	5	1	0	113
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	39	0	0	1	5	29	151	279	340	266	148	56	14	11	1339
Grand Total	5928	113	129	139	475	2284	6549	7924	6791	4492	2224	1032	524	823	39427

15th Percentile : 9 MPH
 50th Percentile : 45 MPH
 85th Percentile : 56 MPH
 95th Percentile : 63 MPH

Stats
 Mean Speed(Average) : 40 MPH
 10 MPH Pace Speed : 44-53 MPH
 Number in Pace : 13065
 Percent in Pace : 33.8%
 Number of Vehicles > 40 MPH : 25753
 Percent of Vehicles > 40 MPH : 66.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

I-395 SW after Exit 4 EB Volume

Start Time	Wed 04-Dec-13		Thu 05-Dec-13		Fri 06-Dec-13		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	666	194	*	*	*	194	666
12:15	*	739	161	*	*	*	161	739
12:30	*	663	161	*	*	*	161	663
12:45	*	671	114	*	*	*	114	671
01:00	*	658	116	*	*	*	116	658
01:15	*	712	114	*	*	*	114	712
01:30	*	715	81	*	*	*	81	715
01:45	*	646	82	*	*	*	82	646
02:00	*	699	51	*	*	*	51	699
02:15	*	754	41	*	*	*	41	754
02:30	*	785	64	*	*	*	64	785
02:45	*	654	47	*	*	*	47	654
03:00	*	95	59	*	*	*	59	95
03:15	*	110	54	*	*	*	54	110
03:30	76	93	*	*	*	*	76	93
03:45	91	98	*	*	*	*	91	98
04:00	118	205	*	*	*	*	118	205
04:15	175	810	*	*	*	*	175	810
04:30	256	815	*	*	*	*	256	815
04:45	330	655	*	*	*	*	330	655
05:00	444	822	*	*	*	*	444	822
05:15	629	659	*	*	*	*	629	659
05:30	800	111	*	*	*	*	800	111
05:45	830	94	*	*	*	*	830	94
06:00	782	85	*	*	*	*	782	85
06:15	782	91	*	*	*	*	782	91
06:30	647	102	*	*	*	*	647	102
06:45	669	83	*	*	*	*	669	83
07:00	169	601	*	*	*	*	169	601
07:15	147	742	*	*	*	*	147	742
07:30	99	728	*	*	*	*	99	728
07:45	117	675	*	*	*	*	117	675
08:00	554	611	*	*	*	*	554	611
08:15	515	613	*	*	*	*	515	613
08:30	289	577	*	*	*	*	289	577
08:45	669	496	*	*	*	*	669	496
09:00	314	574	*	*	*	*	314	574
09:15	113	610	*	*	*	*	113	610
09:30	88	581	*	*	*	*	88	581
09:45	93	541	*	*	*	*	93	541
10:00	250	540	*	*	*	*	250	540
10:15	749	505	*	*	*	*	749	505
10:30	748	448	*	*	*	*	748	448
10:45	716	371	*	*	*	*	716	371
11:00	286	378	*	*	*	*	286	378
11:15	450	359	*	*	*	*	450	359
11:30	665	285	*	*	*	*	665	285
11:45	672	231	*	*	*	*	672	231
Total	14332	23756	1339	0	0	0	15671	23756
Combined Total	38088		1339		0		39427	
Peak	05:30	04:15	12:00				05:30	04:15
Vol.	3194	3102	630				3194	3102
P.H.F.	0.962	0.943	0.812				0.962	0.943
ADT	ADT 39,427		AADT 39,427					

Accident Summary Report (R-8)

Corridor: INTERSTATE 395,BN From INTERSTATE 695 INTERSTATE,BN TO 12TH ST EXPWY,SW

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** admin TARAS **Prepared Date:** 1/2/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	19	Right Angle:	1	5.3%	Fixed Object:	1	5.3%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	8	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	11	57.9%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	1	Side Swiped:	6	31.6%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	4	21.1%	Sunday:	2	10.5%
09:30 ~ 11:30:	4	21.1%	Monday:	1	5.3%
11:30 ~ 13:30:	0	0.0%	Tuesday:	3	15.8%
13:30 ~ 16:00:	4	21.1%	Wednesday:	4	21.1%
16:00 ~ 18:30:	2	10.5%	Thursday:	3	15.8%
18:30 ~ 07:30:	5	26.3%	Friday:	3	15.8%
Unspecified:	0	0.0%	Saturday:	3	15.8%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	17	89.5%	Dry:	16	84.2%
Rain:	1	5.3%	Wet:	2	10.5%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	1	5.3%	Unspecified:	1	5.3%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	33	80.5%	Fatal Collision:	0	0.0%
Bus:	1	2.4%	Injury Collision:	6	31.6%
Truck:	2	4.9%	PDO Collision:	13	68.4%
Taxi:	1	2.4%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	14	73.7%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	1	5.3%
Bicycle:	0	0.0%	Dark(Lighted):	4	21.1%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	4	9.8%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	7	17.1%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	1	2.4%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	33	80.5%	Unspecified:	0	0.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2010	17	0	6	1	0	0	0
2011	1	0	0	0	0	0	0
2012	1	0	2	0	0	0	0