# TECHNICAL APPENDIX FOR REPORT ON RED-LIGHT TRAFFIC CONTROL SIGNAL MONITORING SYSTEMS Third Annual Report

Prepared by the New Jersey Department of Transportation





# DETERMINING YELLOW CHANGE INTERVALS

In New Jersey, yellow change intervals are determined by nationally accepted standards. The Department's guiding principle in determining the yellow change interval at traffic signals is the 2009 edition of the <u>Manual on Uniform Traffic Control Devices for</u> <u>Streets and Highways</u> (<u>MUTCD</u>), as amended and supplemented. Section 4D.26 of the MUTCD states: *The duration of the yellow change interval shall be determined using engineering practices*. The <u>MUTCD</u> is adopted in New Jersey through existing motor vehicle law, specifically Title 39 of the Revised Statutes.

The accepted engineering practice to determine yellow change intervals is from the Institute of Transportation Engineers (ITE) 1994 report titled "Determining Vehicle Signal Change and Clearance Intervals". The formula is: y = t + (v / 2a + 2Gg) where y is the length of the yellow interval, t is driver perception-reaction time (recommended as 1 second), v is the speed limit (feet per second), a is the deceleration rate (10 feet per second squared), g is gravitational acceleration (32 feet per second squared), and G is the approach grade, usually 0%. Using this formula, a speed limit of 45 MPH will result in 4.3 seconds of required yellow change interval time.

The Department utilizes a generally conservative form of the ITE formula:  $\mathbf{y} = \mathbf{v}$  (miles per hour) **divided by 10**. This formula demands a yellow change interval of 4.5 seconds for 45 MPH, but since tenths of seconds are not recognized by the Department, the time is increased, meaning 45 MPH results in 5 seconds of yellow change interval time.

Section 4D.26 of the <u>MUTCD</u> states further: The duration of a yellow change interval may be different in different signal timing plans for the same controller unit and a yellow change interval should have a minimum duration of 3 seconds and a maximum duration of 6 seconds; the longer intervals should be reserved for use on approaches with higher speeds. As such, it should be noted that the yellow change interval for a protected left turn movement (a left turn that moves on an arrow indication), is usually lower than the yellow time for the through movement on the same approach. This is because left turns are never made safely at roadway speeds, and in most cases, the maneuvers are completed at speeds less than 25 MPH. Therefore, following the Department's engineering practice and the provisions of the <u>MUTCD</u>, yellow change intervals are usually set at the suggested minimum duration of 3 seconds.

Finally, Section 4D.26 of the <u>MUTCD</u> states that the exclusive function of the yellow change interval shall be to warn traffic of an impending change in the right-of-way assignment. Neither ITE nor the <u>MUTCD</u> has any expectation of the yellow time being long enough for the vehicle to completely clear the intersection prior to green for the conflicting movement. That clearance time is determined by the ITE formula

TC = t + v / 2a + (w + L) / v where TC is the <u>total</u> clearance (yellow change <u>plus</u> all-red clearance) time, w is total intersection crossing width, L is vehicle length (assumed to be 20 feet), and the other variables are as per the aforementioned yellow interval formula. Yellow change time is simply subtracted from the total clearance time.

# RLR GROUPS GROUP PARTICIPANTS CRASH DATA SEVERITY DATA COST/BENEFIT ANALYSIS CITATION GRAPHS



# Municipal Participants By Group

# <u>Group 1</u>

Newark City, Essex County: Broad Street and Market Street Broad Street and Raymond Boulevard

#### Group 2

Brick Township, Ocean County:	Rt. 70 and Chambers Bridge Road Brick Boulevard and Chambers Bridge Road
Deptford Township, Gloucester County:	Rt. 41 and Deptford Center Road
Glassboro Borough, Gloucester County:	Rt. 47 and Dalton Drive
Gloucester Township, Camden County:	Blackwood-Clementon Road and Cherrywood Drive Blackwood-Clementon Road and Erial/Blenheim/New Brooklyn Road Blackwood-Clementon Road and Little Gloucester Road Blackwood-Clementon Road and Millbridge Road
Linden City, Union County:	Rt. 1&9 and South Park Avenue Rt. 1&9 and South Stiles Street Rt. 27 and North Stiles Street
New Brunswick City, Middlesex County:	Easton Avenue and Park Boulevard
<u>Newark City, Essex County:</u>	Broad Street and Murray Street McCarter Highway and Edison Place McCarter Highway and Lafayette Street McCarter Highway and Market Street McCarter Highway and South Street Mulberry Street and Market Street Raymond Boulevard and Raymond Plaza West Raymond Boulevard, Market Street and Prospect Street
Stratford Borough, Camden County:	Rt. 30 W/B Jughandle and White Horse Road and Berlin Road
Woodbridge Township, Middlesex County:	Rt. 1&9 and Avenel Street

# Group 3

Cherry Hill Township, Camden County:	Rt. 70 and Springdale Road
East Brunswick Township, Middlesex County:	Rt. 18 and Tices Lane
Edison Township, Middlesex County:	Rt. 1 and Plainfield Avenue Rt. 1 and Prince Street Rt. 1 and Wooding Avenue
Jersey City, Hudson County:	JF Kennedy Boulevard and Communipaw Avenue Jersey Avenue and 18 <sup>th</sup> Street Merseles Avenue and Montgomery Boulevard
Lawrence Township, Mercer County:	Rt. 1 and Baker's Basin Road/Franklin Corner Road
Monroe Township, Gloucester County:	Rt. 42 and Rt. 322/CR 536 Spur
Newark City, Essex County:	Doremus Avenue and Wilson Avenue Market Street and University Avenue Market Street and Washington Street Stockton Street and Delancy Street
Palisades Park Borough, Bergen County:	Rt. 63 (Bergen Blvd) and Edsall Boulevard
Piscataway Township, Middlesex County:	Centennial Avenue and Old New Brunswick Road South Randolphville Road and Centennial Avenue
Pohatcong Township, Warren County:	Rt. 22 and CR 519
Rahway City, Union County:	Rt. 1&9 and East Milton Road/Paterson Street Rt. 27 and Maple Avenue
Roselle Park Borough, Union County:	Rt. 28 and Locust Street
Wayne Township, Passaic County:	Paterson-Hamburg Turnpike and Black Oak Ridge Road
Woodbridge Township, Middlesex County:	Rt. 1 and Green Street

# Yearly Crash Data

#### Group 1 - RLR Intersections (Crash Data)

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	7	12	28	47
Year 1	3	6	17	26
Year 2	1	7	12	20
Year 3	1	5	7	13

#### **Group 1 - Reference Intersections (Crash Data)**

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	0	3	8	11
Year 1	1	4	2	7
Year 2	0	0	0	0
Year 3	0	1	8	9

#### Group 2 - RLR Intersections (Crash Data)

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	53	274	4 203 5	
Year 1	48	330	165	543
Year 2	21	256	108	385

# Group 2 - Reference Intersections (Crash Data)

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	23	79	47 14	
Year 1	21	83	31	135
Year 2	6	54	21	81

# Group 3 - RLR Intersections (Crash Data)

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	41	326	166	533
Year 1	35	315	157	507

#### Group 3 - Reference Intersections (Crash Data)

Crashes	<b>Right Angle</b>	Same Direction	Other	<u>Total</u>
Pre-Camera	25	192	96	313
Year 1	22	208	78	308

# Yearly Severity Data

	Creak				6	000	Tabal
Year	Crash	К	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	0	0	2	5	7
	Same Direction	0	0	0	5	7	12
Year 1	Right Angle	0	0	0	2	1	3
	Same Direction	0	0	0	3	3	6
Year 2	Right Angle	0	0	0	0	1	1
	Same Direction	0	0	0	2	5	7
Year 3	Right Angle	0	0	0	1	0	1
	Same Direction	0	0	0	2	3	5

Group 1 - RLR Intersections Severity Data

Group 1 - Reference Intersections Severity Data

Year	Crash	К	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	0	0	0	0	0
	Same Direction	0	0	0	0	3	3
Year 1	Right Angle	0	0	0	0	1	1
	Same Direction	0	0	0	2	2	4
Year 2	Right Angle	0	0	0	0	0	0
	Same Direction	0	0	0	0	0	0
Year 3	Right Angle	0	0	0	0	0	0
	Same Direction	0	0	0	0	1	1

dioup 2 - NER intersections sevency Data							
Year	Crash	к	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	0	1	18	34	53
	Same Direction	0	1	1	67	205	274
Year 1	Right Angle	0	0	5	24	19	48
	Same Direction	0	0	4	73	253	330
Year 2	Right Angle	0	0	1	7	13	21
	Same Direction	0	0	3	70	183	256

**Group 2 - RLR Intersections Severity Data** 

#### Group 2 - Reference Intersections Severity Data

Year	Crash	К	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	0	3	3	17	23
	Same Direction	0	0	0	11	68	79
Year 1	Right Angle	0	0	0	3	18	21
	Same Direction	0	0	2	20	61	83
Year 2	Right Angle	0	0	0	2	4	6
	Same Direction	0	0	2	13	39	54

Group 3 - RLR Intersections Severity Data

Year	Crash Type	к	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	1	9	10	21	41
	Same Direction	0	1	13	102	210	326
Year 1	Right Angle	0	0	1	11	23	35
	Same Direction	0	0	5	88	222	315

Group 3 - Reference Intersections Severity Data

Year	Crash Type	К	Α	В	С	PDO	<u>Total</u>
Pre-Year	Right Angle	0	0	6	6	13	25
	Same Direction	0	0	5	47	140	192
Year 1	Right Angle	1	0	2	11	8	22
	Same Direction	0	0	6	54	148	208

# Yearly Cost/Benefit Analysis

#### Group 1 - RLR Intersections - Benefit/(Loss)

		<b>RLR Intersections</b>		Reference Intersections					
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>			
Pre-Yr to Yr 1	\$29,600.00	\$119,400.00	\$149,000.00	(\$7,400.00)	(\$82,400.00)	(\$89,800.00)			
Yr 1 to Yr 2	\$89 <i>,</i> 800.00	\$30,100.00	\$119,900.00	\$7,400.00	\$104,600.00	\$112,000.00			
Yr 2 to Yr 3	(\$37,500.00)	\$14,800.00	(\$22,700.00)	\$0.00	(\$7,400.00)	(\$7,400.00)			

# Group 1 - RLR Intersections - Benefit/(Loss) to Base Year

		<b>RLR Intersections</b>		Reference Intersections					
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>			
Pre-Yr to Yr 1	\$29,600.00	\$119,400.00	\$149,000.00	(\$7,400.00)	(\$82,400.00)	(\$89,800.00)			
Pre-Yr to Yr 2	\$119,400.00	\$149,500.00	\$268,900.00	\$0.00	\$22,200.00	\$22,200.00			
Pre-Yr to Yr 3	\$81,900.00	\$164,300.00	\$246,200.00	\$0.00	\$14,800.00	\$14,800.00			

#### Group 2 - RLR Intersections - Benefit/(Loss)

		<b>RLR Intersections</b>	5	Reference Intersections						
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>				
Pre-Yr to Yr 1	(\$474,400.00)	(\$847,400.00)	(\$1,321,800.00)	\$105,700.00	(\$420,500.00)	(\$314,800.00)				
Yr 1 to Yr 2	\$1,123,700.00	\$985,300.00	\$2,109,000.00	\$272,400.00	\$551,600.00	\$824,000.00				

#### Group 2 - RLR Intersections - Benefit/(Loss) to Base Year

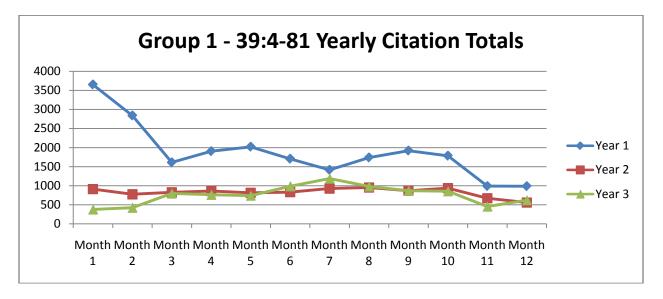
		<b>RLR Intersections</b>	5	Reference Intersections						
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>				
Pre-Yr to Yr 1	(\$474,400.00)	(\$847,400.00)	(\$1,321,800.00)	\$105,700.00	(\$420,500.00)	(\$314,800.00)				
Pre-Yr to Yr 2	\$649,300.00	\$137,900.00	\$787,200.00	\$378,100.00	\$131,100.00	\$509,200.00				

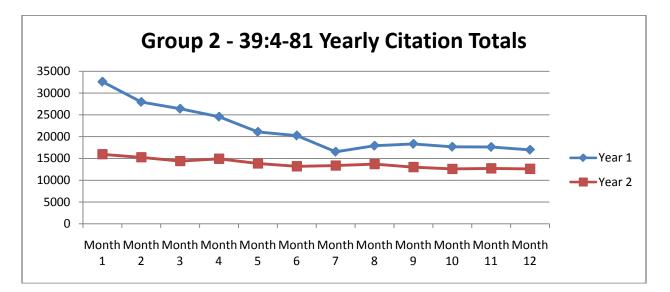
#### Group 3 - RLR Intersections - Benefit/(Loss)

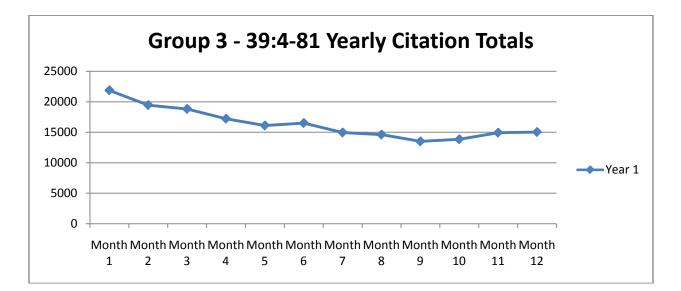
		<b>RLR Intersections</b>	5	Reference Intersections					
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>			
Pre-Yr to Yr 1	\$788,300.00	\$1,387,800.00	\$2,176,100.00	(\$3,880,400.00)	(\$452,500.00)	(\$4,332,900.00)			

# Group 3 - RLR Intersections - Benefit/(Loss) to Base Year

		<b>RLR Intersections</b>	5	Reference Intersections					
	<b>Right Angle</b>	Same Direction	<u>Total</u>	<b>Right Angle</b>	Same Direction	<u>Total</u>			
Pre-Yr to Yr 1	\$788,300.00	\$1,387,800.00	\$2,176,100.00	(\$3,880,400.00)	(\$452,500.00)	(\$4,332,900.00)			







# YEAR 1 – MUNICIPAL DATA CRASH DATA AND COST/BENEFIT ANALYSIS CITATION DATA AND GRAPHS (for locations with one year of operation)



#### Crash Data and Cost/Benefit Analysis: Cherry Hill Township - Year 1

			Right Angle Crashes						Same Direction Crashes					
MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)		
Cherry Hill	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
		А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
		В	0	\$0	0	\$0	\$0	1	\$79,000	0	\$0	\$79,000		
		с	0	\$0	0	\$0	\$0	14	\$628,600	5	\$224,500	\$404,100		
		PDO	1	\$7,400	1	\$7,400	\$0	21	\$155,400	21	\$155,400	\$0		
			Total Cost/Benefit \$				\$0			Total Co	ost/Benefit	\$483,100		
			Cherry Hill Camden K A B C	MUNICIPALITY COUNTY SEVERITY Camera   Cherry Hill Camden K 0   A 0   B 0   Cherry Hill Camden C	MUNICIPALITYCOUNTYSEVERITYCameraCostCherry HillCamdenK0\$0A0\$0B\$0\$0B0\$0C\$0\$0C0\$0C\$0\$0	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1       Cherry Hill     Camden     K     0     \$0     0       A     0     \$0     0     0     0       B     0     \$0     0     0     0       C     0     \$0     0     1     0     1	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost       Cherry Hill     Camden     K     0     \$0     \$0     \$0       Cherry Hill     Camden     K     0     \$0     \$0     \$0       B     0     \$0     \$0     \$0     \$0     \$0     \$0       C     0     \$0     \$0     \$0     \$0     \$0     \$0       PDO     1     \$7,400     1     \$7,400     \$0     \$0     \$0	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)       Cherry Hill     Camden     K     0     \$0     0     \$0     \$0     \$0       Cherry Hill     Camden     K     0     \$0     0     \$0     \$0     \$0       B     0     \$0     0     \$0     \$0     \$0     \$0       C     0     \$0     \$0     \$0     \$0     \$0     \$0       PDO     1     \$7,400     1     \$7,400     \$0     \$0	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera       Cherry Hill     Camden     K     0     \$0     0     \$0     \$0     \$0     0       A     0     \$0     0     \$0     \$0     \$0     \$0     0       B     0     \$0     0     \$0     \$0     \$0     \$0     1       C     0     \$0     \$0     \$0     \$0     \$0     \$0     1       PDO     1     \$7,400     1     \$7,400     \$0     \$0     21	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     O       Cherry Hill     Camden     K     0     \$0     0     \$0 </td <td>MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1       Cherry Hill     Camden     K     O     \$0     O     \$0     <th< td=""><td>MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1     Cost       Cherry Hill     Camden     K     0     \$0     0     \$0     &lt;</td></th<></td>	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1       Cherry Hill     Camden     K     O     \$0     O     \$0 <th< td=""><td>MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1     Cost       Cherry Hill     Camden     K     0     \$0     0     \$0     &lt;</td></th<>	MUNICIPALITY     COUNTY     SEVERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1     Cost       Cherry Hill     Camden     K     0     \$0     0     \$0     <		

Total Benefit (Loss) \$483,100

				Right Angle Crashes					Same Direction Crashes				
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Route 38 and Chapel Avenue	Cherry Hill	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	1	\$79,000	(\$79,000)
			С	0	\$0	1	\$44,900	(\$44,900)	7	\$314,300	8	\$359,200	(\$44,900)
			PDO	0	\$0	0	\$0	\$0	15	\$111,000	20	\$148,000	(\$37,000)
	-					Total Co	ost/Benefit	(\$44,900)	Total Cost/Benefit			(\$160,900)	

Total Benefit (Loss) (\$205,800)

# Crash Data and Cost/Benefit Analysis: East Brunswick Township – Year 1

				Right Angle Crashes						Same Direction Crashes					
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)		
Route 18 and Tices Lane	East Brunswick	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
			С	1	\$44,900	1	\$44,900	\$0	10	\$449,000	6	\$269,400	\$179,600		
			PDO	0	\$0	0	\$0	\$0	20	\$148,000	23	\$170,200	(\$22,200)		
						ost/Benefit	\$0			Total Co	ost/Benefit	\$157,400			

Total Benefit (Loss) \$157,400

				Right Angle Crashes						Same Direction Crashes				
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	
Route 18 and Edgeboro Road	East Brunswick	Middlesex	К	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			В	0	\$0	0	\$0	\$0	1	\$79,000	0	\$0	\$79,000	
			с	1	\$44,900	1	\$44,900	\$0	7	\$314,300	6	\$269,400	\$44,900	
			PDO	1	\$7,400	1	\$7,400	\$0	24	\$177,600	13	\$96,200	\$81,400	
		•		Total Cost/Benefit \$0						Total C	ost/Benefit	\$205,300		

Total Benefit (Loss) \$205,300

# Crash Data and Cost/Benefit Analysis: Edison Township - Year 1

						Right Ang	le Crashes			Si	ame Direc	tion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Plainfield Ave	Edison	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	1	\$216,000	0	\$0	\$216,000	1	\$216,000	0	\$0	\$216,000
			В	2	\$158,000	0	\$0	\$158,000	6	\$474,000	1	\$79,000	\$395,000
			с	1	\$44,900	2	\$89,800	(\$44,900)	22	\$987,800	15	\$673,500	\$314,300
			PDO	2	\$14,800	1	\$7,400	\$7,400	25	\$185,000	29	\$214,600	(\$29,600)
		_				Total Ber	nefit/(Loss)	\$336,500			Total Be	nefit/(Loss)	\$895,700

Total Benefit (Loss) \$1,232,200

						Right Angle	Crashes			S	ame Dire	ction Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Prince St	Edison	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	4	\$316,000	0	\$0	\$316,000	3	\$237,000	2	\$158,000	\$79,000
			с	1	\$44,900	0	\$0	\$44,900	5	\$224,500	4	\$179,600	\$44,900
			PDO	0	\$0	0	\$0	\$0	25	\$185,000	25	\$185,000	\$0
						Total Bene	fit/(Loss)	\$360,900			Total Be	nefit/(Loss)	\$123,900

Total Benefit (Loss) \$484,800

						Right Ang	le Crashes			s	ame Dire	tion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Wooding Ave	Edison	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	1	\$79,000	0	\$0	\$79,000
			С	1	\$44,900	0	\$0	\$44,900	4	\$179,600	1	\$44,900	\$134,700
			PDO	1	\$7,400	1	\$7,400	\$0	18	\$133,200	14	\$103,600	\$29,600
				1 \$7,400 1 \$7,40 Total Benefit/(Los			efit/(Loss)	\$123,900			Total Be	nefit/(Loss)	\$243,300

Total Benefit (Loss) \$367,200

# Crash Data and Cost/Benefit Analysis: Edison Township – Year 1 (Continued)

					Right	Angle Crashe	s			Same I	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Forest Haven Blvd	Edison	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	1	\$79,000	0	\$0	\$79,000
			С	1	\$44,900	0	\$0	\$44,900	4	\$179,600	8	\$359,200	(\$179,600)
			PDO	3	\$22,200	0	\$0	\$22,200	11	\$81,400	17	\$125,800	(\$44,400)
		_				Total Benef	it/(Loss)	\$67,100			Total Be	enefit/(Loss)	(\$145,000)

Total Benefit (Loss) (\$77,900)

# Crash Data and Cost/Benefit Analysis: <u>Glassboro Borough</u> – Year 1 (Revised)

						Right Angle	Crashes			Sa	ame Direct	ion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Route 47 and William Dalton Drive	Glassboro	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	2	\$89,800	0	\$0	\$89,800	1	\$44,900	1	\$44,900	\$0
			PDO	0	\$0	0	\$0	\$0	3	\$22,200	3	\$22,200	\$0
				0 \$0 0 \$0				\$168,800			Total Bei	nefit/(Loss)	\$0

Total Benefit (Loss)

\$168,800

# Crash Data and Cost/Benefit Analysis: <u>Jersey City</u> – Year 1

						Right Angl	e Crashes			Sa	me Directio	n Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
JF Kennedy Blvd and Communipaw Ave	Jersey City	Hudson	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	1	\$44,900	1	\$44,900	\$0	0	\$0	0	\$0	\$0
			PDO	1	\$7,400	1	\$7,400	\$0	4	\$29,600	0	\$0	\$29,600
				0 1 \$7,400 1 \$7,400 Total Benefit/(Loss)				\$0			Total Bene	fit/(Loss)	\$29,600

Total Benefit (Loss)

\$29,600

						Right Angl	e Crashes				Same Dire	ction Crashe	S
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
18th St and Jersey Ave	Jersey City	Hudson	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	1	\$44,900	0	\$0	\$44,900	0	\$0	0	\$0	\$0
			PDO	0	\$0	0	\$0	\$0	2	\$14,800	3	\$22,200	(\$7,400)
		_						\$44,900			Total Ber	nefit/(Loss)	(\$7,400)

\$37,500 Total Benefit (Loss)

					Righ	nt Angle Cra	ashes			Same D	Direction Cr	ashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Merseles Ave and Montgomery Blvd	Jersey City	Hudson	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	1	\$44,900	0	\$0	\$44,900
			PDO	0	\$0	1	\$7,400	(\$7,400)	3	\$22,200	1	\$7,400	\$14,800
		_		Total Benefit/(Loss) (\$7,400)							Total Ber	nefit/(Loss)	\$59,700

\$52,300 Total Benefit (Loss)

#### Crash Data and Cost/Benefit Analysis: <u>Jersey City</u> – Year 1 (Continued)

						Right An	gle Crashe	25			Same Dire	ction Cras	hes
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
NJ Rt 440 and Danforth St	Jersey City	Hudson	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			PDO	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
						Total Bene	fit/(Loss)	\$0			Total Bene	fit/(Loss)	\$0

Total Benefit (Loss) \$0

#### Crash Data and Cost/Benefit Analysis: Lawrence Township – Year 1

						Right A	Angle Crashe	25		g	Same Dire	ction Crashes	i
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt. 1 and Bakers Basin Rd	Lawrence Twp.	Mercer	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	9	\$404,100	10	\$449,000	(\$44,900)
			PDO	0	\$0	2	\$14,800	(\$14,800)	21	\$155,400	29	\$214,600	(\$59,200)
						Total Co	ost/Benefit	(\$14,800)			Total C	ost/Benefit	(\$104,100)

Total Benefit (Loss) (\$118,900)

						Right A	ngle Crashe	S		s	ame Dire	ction Crashe	S
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt. 206 and Franklin Corner Rd	Lawrence Twp.	Mercer	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Location)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	1	\$44,900	(\$44,900)	2	\$89,800	2	\$89,800	\$0
			PDO	0	\$0	0	\$0	\$0	8	\$59,200	11	\$81,400	(\$22,200)
		_				Total Co	ost/Benefit	(\$44,900)			Total Co	ost/Benefit	(\$22,200)

Total Benefit (Loss) (\$67,100)

# Crash Data and Cost/Benefit Analysis: Monroe Township - Year 1

				VERITY     Pre- Camera     Cost     Year 1     Cost     Difference Benefit (Loss)     Pre- Camera     Cost     Year 1     Cost       K     0     \$0     0     \$0									
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	-	Cost	Year 1	Cost		-	Cost	Year 1	Cost	Difference Benefit (Loss)
Rt. 42 and Rt. 322 / CR 536 Spur	Monroe Twp.	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	1	\$44,900	3	\$134,700	(\$89,800)	1	\$44,900	5	\$224,500	(\$179,600)
			PDO	3	\$22,200	4	\$29,600	(\$7,400)	10	\$74,000	17	\$125,800	(\$51,800)
			-	Total Cost/Benefit     (\$18,200)				(\$18,200)		•	Total Co	ost/Benefit	(\$231,400)

Total Benefit (Loss) (\$249,600)

					R	ight Angle	Crashes			Sar	ne Directi	on Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Blackhorse Pike and New Brooklyn Rd	Monroe Twp.	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Location)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	3	\$237,000	0	\$0	\$237,000	0	\$0	0	\$0	\$0
			с	0	\$0	1	\$44,900	(\$44,900)	4	\$179,600	3	\$134,700	\$44,900
			PDO	0	\$0	0	\$0	\$0	6	\$44,400	3	\$22,200	\$22,200
				Total Cost/Benefit			\$192,100			Total C	ost/Benefit	\$67,100	

Total Benefit (Loss) \$259,200

# Crash Data and Cost/Benefit Analysis: Newark City - Year 1

						Right A	ngle Crash	nes			Same D	irection Cra	shes
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Year	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Year	Cost	Year 1	Cost	Difference Benefit (Loss)
Doremus Ave. & Wilson Ave.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0 \$0		\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			PDO	0	\$0	0	\$0	\$0	0	\$0	1	\$7,400	(\$7,400)
		-		-	Total Benet	fit/(Loss)	\$0			Total Ben	efit/(Loss)	(\$7,400)	

Total Benefit (Loss) (\$7,400)

						Right An	gle Crashes			9	ame Direc	tion Crashes	5
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Market St and University Ave	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	1	\$44,900	(\$44,900)	1	\$44,900	0	\$0	\$44,900
			PDO	1	\$7,400	1	\$7,400	\$0	1	\$7,400	1	\$7,400	\$0
				Total Benefit/(Loss) (\$44,900)					Total Ben	efit/(Loss)	\$44,900		

Total Benefit (Loss)

\$0

						Right Angl	e Crashes			ç	Same Direo	ction Crashes	i
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Market St and Washington St	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	1	\$44,900	0	\$0	\$44,900
			PDO	1	\$7,400	0	\$0	\$7,400	0	\$0	2	\$14,800	(\$14,800)
						Total Bene	fit/(Loss)	\$7,400			Total Be	nefit/(Loss)	\$30,100
	40												

Total Benefit (Loss) \$37,500

# Crash Data and Cost/Benefit Analysis: <u>Newark City</u> – Year 1 (Continued)

						Right An	gle Crashe	25			Same Di	rection Cras	hes
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Stockton St. & Delancy St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0 \$0		0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	0	\$0	0	\$0	\$0	0	\$0	3	\$22,200	(\$22,200)
		_			Total Bene	fit/(Loss)	\$0			Total Bei	nefit/(Loss)	(\$67,100)	

Total Benefit (Loss) (\$67,100)

						Right Angle	e Crashes			Sam	ne Directio	n Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera (2009)	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera (2009)	Cost	Year 1	Cost	Difference Benefit (Loss)
Broad St. & E. / W. Kinney St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	2	\$89,800	(\$89,800)
			PDO	0	\$0	1	\$7,400	(\$7,400)	3	\$22,200	2	\$14,800	\$7,400
						Total Ben	efit/(Loss)	(\$7,400)			Total Bei	nefit/(Loss)	(\$82,400)

Total Benefit (Loss) (\$89,800)

						Right Angle	Crashes			Sa	ame Direct	tion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera (2009)	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera (2009)	Cost	Year 1	Cost	Difference Benefit (Loss)
Ferry St. & Van Buren St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
					Total Bene	fit/(Loss)	\$0			Total Be	nefit/(Loss)	(\$44,900)	

Total Benefit (Loss) (\$44,900)

#### Crash Data and Cost/Benefit Analysis: Palisades Park Borough - Year 1

PDO

2

\$14,800

					Rig	ht Angle C	rashes			Same	Direction	Crashes	
LOCATION	MUNICIPALIT	Y COUNT	( SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Rt 63 (Bergen Blvd) and Edsall Blvc	d Palisades Par	k Bergen	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	1	\$79,000	(\$79,000)	2	\$158,000	1	\$79,000	\$79,000
			с	1	\$44,900	2	\$89,800	(\$44,900)	4	\$179,600	3	\$134,700	\$44,900
			PDO	3	\$22,200	2	\$14,800	\$7,400	4	\$29,600	1	\$7,400	\$22,200
						Total E	Benefit/(Loss)	(\$116,500)			Total B	enefit/(Loss)	\$146,100
Total Benefit (Loss)	\$29,600												
			Γ		Right	Angle Cras	shes			Same D	irection (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Grand Ave and Central Blvd	Palisades Park	Bergen	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	1	\$44,900	1	\$44,900	\$0	2	\$89,800	3	\$134,700	(\$44,900)

\$14,800

Total Benefit/(Loss)

2

\$0

\$79,000

4

\$29,600

\$7,400

Total Benefit/(Loss)

\$22,200 (\$22,700)

1

Total Benefit (Loss)	\$56,300

# Crash Data and Cost/Benefit Analysis: Piscataway Township - Year 1

						Right Angl	e Crashes			Sa	me Direct	ion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Old New Brunswick Rd and Centennial Ave	Piscataway	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	1	\$44,900	(\$44,900)	2	\$89,800	1	\$44,900	\$44,900
			PDO	1	\$7,400	1	\$7,400	\$0	12	\$88,800	15	\$111,000	(\$22,200)
		_		Total Benefit/(Loss) (\$44,900)							Total Be	enefit/(Loss)	\$22,700

Total Benefit (Loss) (\$22,200)

						Right Angl	e Crashes			Sa	me Direct	ion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
So Randolphville Rd and Centennial Ave	Piscataway	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	2	\$89,800	0	\$0	\$89,800
			PDO	0	\$0	0	\$0	\$0	3	\$22,200	2	\$14,800	\$7,400
				Total Benefit/(Loss)			\$0			Total Ber	nefit/(Loss)	\$97,200	

Total Benefit (Loss)

\$97,200

						Right An	gle Crashes			Sai	me Directi	ion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
So. Washington Ave and Centennial Ave	Piscataway	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	1	\$79,000	(\$79,000)	2	\$158,000	0	\$0	\$158,000
			С	0	\$0	2	\$89,800	(\$89,800)	5	\$224,500	3	\$134,700	\$89,800
			PDO	0	\$0	1	\$7,400	(\$7,400)	19	\$140,600	12	\$88,800	\$51,800
		_		Total Benefit/(Loss) (\$176,200)							Total Be	nefit/(Loss)	\$299,600
	4												

Total Benefit (Loss) \$

#### Crash Data and Cost/Benefit Analysis: Pohatcong Township - Year 1

						Right An	gle Crashes	i		s	ame Dire	ction Crashe	25
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 22 and CR 519	Pohatcong	Warren	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	6	\$269,400	2	\$89,800	\$179,600
			PDO	2	\$14,800	1	\$7,400	\$7,400	10	\$74,000	9	\$66,600	\$7,400
				2 \$14,800 1 \$7,400 Total Cost/Benefit				\$7,400			Total Co	st/Benefit	\$187,000

Total Benefit (Loss) \$194,400

						Right A	ngle Crashes			Si	ame Direc	tion Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 22 and CR 638	Pohatcong	Warren	к	0	\$0	1	\$4,008,900	(\$4,008,900)	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	1	\$79,000	(\$79,000)	1	\$79,000	2	\$158,000	(\$79,000)
			С	1	\$44,900	0	\$0	\$44,900	5	\$224,500	3	\$134,700	\$89,800
			PDO	1	\$7,400	0	\$0	\$7,400	10	\$74,000	21	\$155,400	(\$81,400)
						Total 0	Cost/Benefit	(\$4,035,600)			Total Co	ost/Benefit	(\$70,600)

Total Benefit (Loss) (\$4,106,200)

# Crash Data and Cost/Benefit Analysis: Rahway City - Year 1

						Right An	gle Crashes			ç	Same Dire	ection Crashe	s
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Rt 1 and East Milton	Rahway	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	1	\$79,000	(\$79,000)
			с	1	\$44,900	0	\$0	\$44,900	8	\$359,200	14	\$628,600	(\$269,400)
			PDO	0	\$0	1	\$7,400	(\$7,400)	21	\$155,400	22	\$162,800	(\$7,400)
						Total Cos	st/Benefit	\$116,500			Total C	ost/Benefit	(\$355,800)

Total Benefit (Loss) (\$239,300)

					-	Right An	gle Crashes			-	Same Dire	ction Crash	es
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Rt 27 and Maple Ave	Rahway	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	1	\$44,900	0	\$0	\$44,900	1	\$44,900	1	\$44,900	\$0
			PDO	1	\$7,400	1	\$7,400	\$0	0	\$0	6	\$44,400	(\$44,400)
						Total Co	st/Benefit	\$44,900			Total Co	ost/Benefit	(\$44,400)

Total Benefit (Loss) \$500

						Right Angle	e Crashes			s	ame Dire	ction Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and E Grand	Rahway	Union	К	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	1	\$79,000	(\$79,000)
			с	1	\$44,900	0	\$0	\$44,900	5	\$224,500	6	\$269,400	(\$44,900)
			PDO	4	\$29,600	0	\$0	\$29,600	11	\$81,400	18	\$133,200	(\$51,800)
						Total Bene	fit/(Loss)	\$153,500			Total Be	nefit/(Loss)	(\$175,700)

Total Benefit (Loss) (\$22,200)

#### Crash Data and Cost/Benefit Analysis: <u>Rahway City</u> – Year 1 (Continued)

						Right /	Angle Crashe	S			Same Dire	ection Crashe	95
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
NJ Rt 27 and W Milton	Rahway	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	2	\$89,800	(\$89,800)	0	\$0	1	\$44,900	(\$44,900)
			PDO	0	\$0	1	\$7,400	(\$7,400)	5	\$37,000	3	\$22,200	\$14,800
				0 \$0 1 \$7,400 Total Benefit/(Loss)				(\$97,200)			Total Bei	nefit/(Loss)	(\$30,100)

Total Benefit (Loss) (\$127,300)

# Crash Data and Cost/Benefit Analysis: Roselle Park Borough - Year 1

		-	-		-	Right Ar	gle Crashes				Same Dire	ction Crashes	5
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
NJ Rt 28 and Locust St	Roselle Park	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	4	\$179,600	7	\$314,300	(\$134,700)
			PDO	3	\$22,200	4	\$29,600	(\$7,400)	0	\$0	9	\$66,600	(\$66,600)
		_				Total Be	nefit/(Loss)	(\$7,400)			Total Be	nefit/(Loss)	(\$201,300)

Total Benefit (Loss) (\$208,700)

						Right An	gle Crashe	25			Same Di	rection Cras	hes
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
NJ Rt 28 and Chestnut St	Roselle Park	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	0	\$0	0	\$0	\$0	0	\$0	3	\$22,200	(\$22,200)
						Total Bene	fit/(Loss)	\$0			Total Be	nefit/(Loss)	(\$67,100)

Total Benefit (Loss) (\$67,100)

# Crash Data and Cost/Benefit Analysis: Wayne Township - Year 1

						Right Ang	e Crashes				Same Dire	ction Crashes	i
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Paterson-Hamburg Tpk and	Wayne	Passaic	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
Black Oak Ridge Rd			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	1	\$7,400	0	\$0	\$7,400	7	\$51,800	3	\$22,200	\$29,600
		_				Total Bene	fit/(Loss)	\$7,400			Total Bei	nefit/(Loss)	(\$15,300)

Total Benefit (Loss) (\$7,900)

						Right Angle (	Crashes			Sa	me Directio	n Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre- Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Paterson-Hamburg Tpk and Colfax Ave	Wayne	Passaic	К	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	1	\$44,900	0	\$0	\$44,900	0	\$0	0	\$0	\$0
			PDO	0	\$0	0	\$0	\$0	4	\$29,600	0	\$0	\$29,600
					Total Bene	fit/(Loss)	\$44,900			Total Bene	fit/(Loss)	\$29,600	

Total Benefit (Loss) \$74,500

#### Crash Data and Cost/Benefit Analysis: Woodbridge Township - Year 1

						Right An	gle Crashe	95			Same Dire	ection Crashe	95
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Avenel St	Woodbridge	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	1	\$44,900	4	\$179,600	(\$134,700)
			PDO	0	\$0	0	\$0	\$0	8	\$59,200	6	\$44,400	\$14,800
				0 \$0 0 \$0 Total Benefit/(Loss)				\$0			Total Be	enefit/(Loss)	(\$119,900)

Total Benefit (Loss) (\$119,900)

						Right A	ngle Crashe	es		ç	Same Dire	ction Crashe	s
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Green St	Woodbridge	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	7	\$314,300	2	\$89,800	\$224,500
			PDO	0	\$0	1	\$7,400	(\$7,400)	3	\$22,200	6	\$44,400	(\$22,200)
				0 \$0 1 \$7,400 Total Benefit/(Loss)				(\$7,400)			Total Bei	nefit/(Loss)	\$202,300

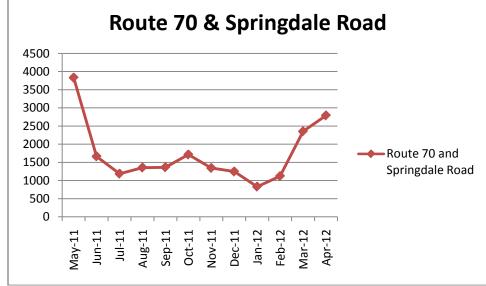
Total Benefit (Loss) \$194,900

						Right Angle	e Crashes		Same Direction Crashes						
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre- Camera						Cost	Year 1	Cost	Difference Benefit (Loss)		
US Rt 1 and Smith St	Woodbridge	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0		
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0		
			с	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)		
			PDO	2	\$14,800	0	\$0	\$14,800	4	\$29,600	2	\$14,800	\$14,800		
					Tot			\$93,800				nefit/(Loss)	(\$30,100)		

Total Benefit (Loss) \$63,700

#### Citation Data Analysis: <u>Cherry Hill Township</u> – Year 1

Citations (39:4-81)	Municipality	County	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Total for Year 1
Route 70 and Springdale Road	Cherry Hill	Camden	3833	1664	1188	1356	1365	1715	1345	1247	831	1121	2352	2791	20808

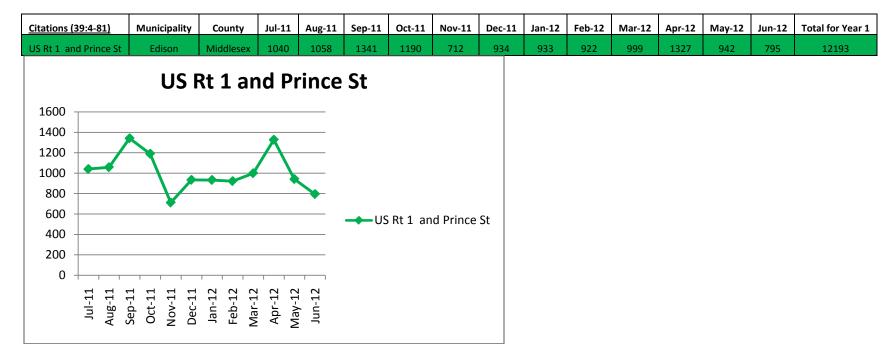


#### Citation Data Analysis: East Brunswick Township – Year 1

Citations (39:4-81)	Municipality	County	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Total for Year 1
Route 18 and Tices Lane	East Brunswick	Middlesex	1356	1490	1628	1397	1427	1372	963	942	802	713	867	899	13856
	Route	18 & 1	ices	Lane	2										
1800 1600 1400 1200 1000 800 600 400 200 0 11-hpr 11-npr	Aug-11 Sep-11 Oct-11	Dec-11	Feb-12 Mar-12	Apr-12 ]	← Rou Lane	te 18 and e	d Tices								

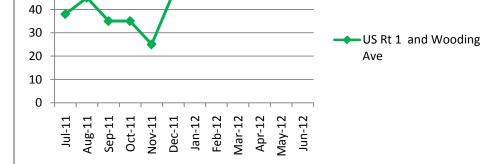
#### Citation Data Analysis: Edison Township - Year 1

<u>Citations (39:4-81)</u>	Municipality	County	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 1
US Rt 1 and Plainfield Ave	Edison	Middlesex	639	328	1257	1100	917	618	612	858	953	898	786	739	9705
U 1400 1200 1000 800 400 200 0 1000 400 400 400 400 1000	Dec-11 Dec-11 Jan-12	Apr-12 Apr-12 Apr-12	· · · ·	- - - - -		L and Pla	ainfield								



#### Citation Data Analysis: Edison Township – Year 1 (Continued)

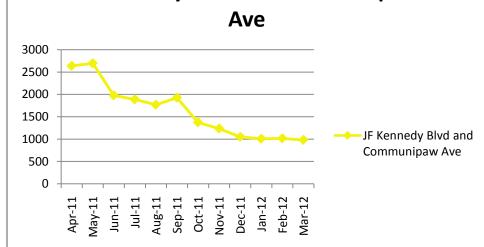
<u>Citations (39:4-81)</u>	Municipality	County	Jul-11	Aug-11	Sep-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 1	
US Rt 1 and Wooding Ave	Edison	Middlesex	38	45	47	61	47	50	63	62	51	559			
ι	JS Rt 1	and W	'ood	ing A											
70 60 50		_													



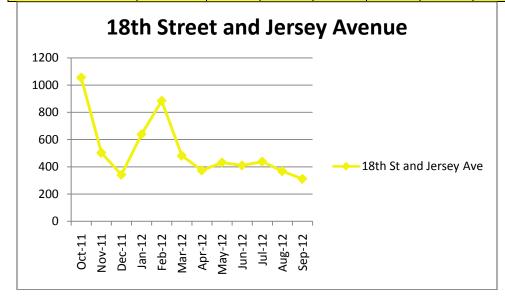
Citation Data Analysis: Jersey City – Year 1

<u>Citations (39:4-81)</u>	Municipality	County	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total for Year 1
JF Kennedy Blvd and Communipaw Ave	Jersey City	Hudson	2638	2696	1977	1886	1768	1925	1373	1235	1049	1005	1014	981	19547



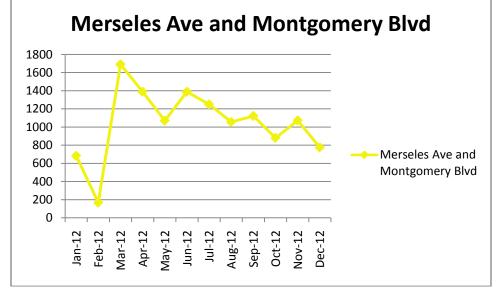


Citations (39:4-81)	Municipality	County	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Total for Year 1
18th St and Jersey Ave	Jersey City	Hudson	1055	503	341	638	884	481	373	431	410	438	367	311	6232



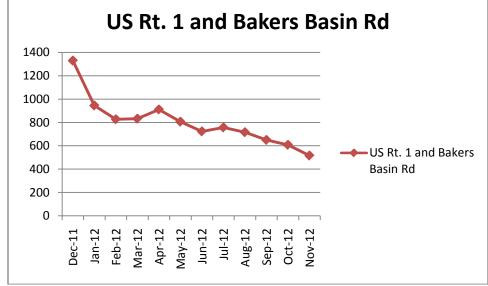
Citation Data Analysis: <u>Jersey City</u> – Year 1 (Continued)

Citations (39:4-81)	Municipality	County	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total for Year 1
Merseles Ave and Montgomery Blvd	Jersey City	Hudson	683	167	1690	1388	1069	1388	1249	1055	1121	880	1072	774	12536

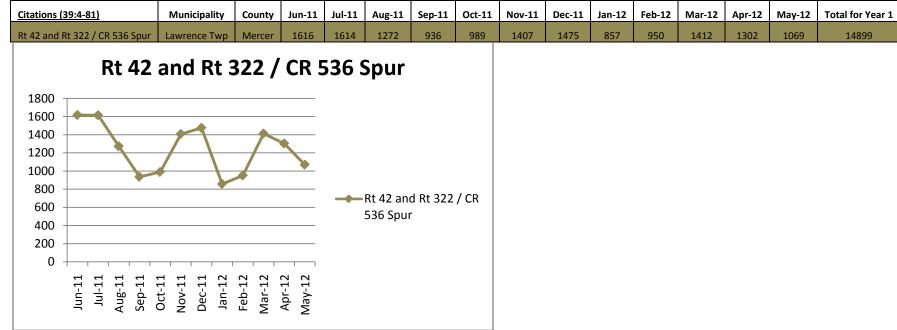


#### Citation Data Analysis: Lawrence Township – Year 1

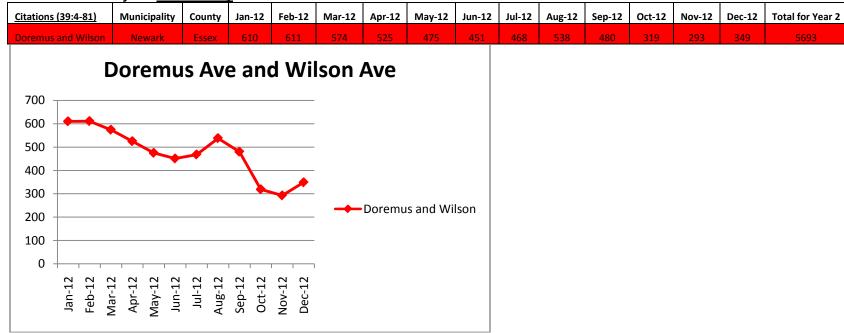
Citations (39:4-81)	Municipality	County	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Total for Year 1
US Rt. 1 and Bakers Basin Rd	Lawrence Twp	Mercer	1330	945	827	832	911	806	723	757	716	650	608	516	9621

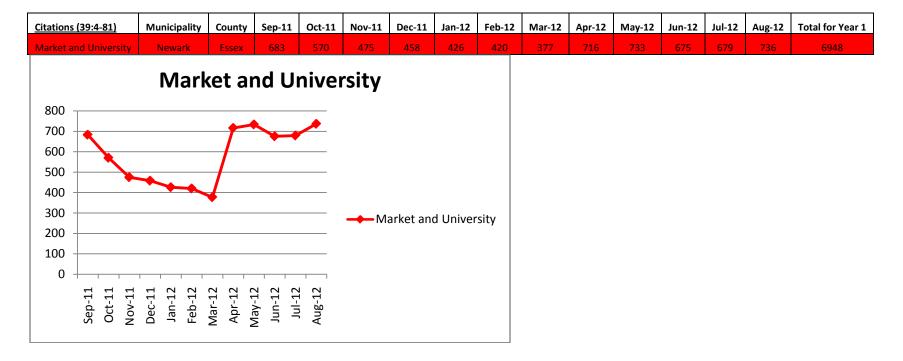


#### Citation Data Analysis: Monroe Township - Year 1

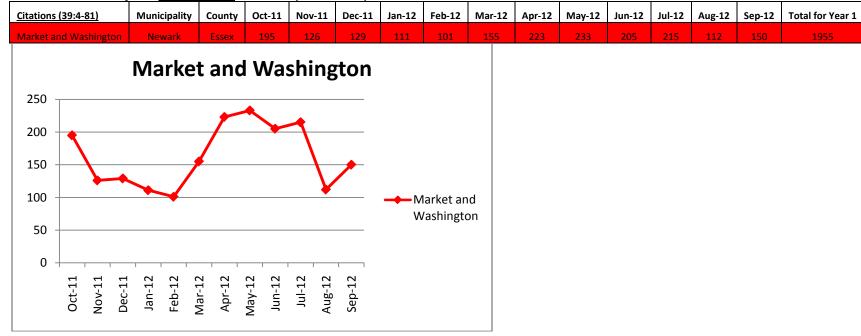


Citation Data Analysis: Newark City – Year 1





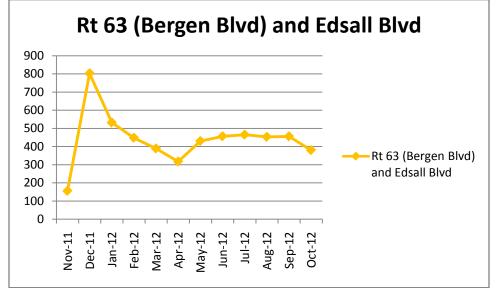
Citation Data Analysis: <u>Newark City</u> – Year 1 (Continued)



<u> Citations (39:4-81)</u>	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 1
Stockton St. & Delancy St.	Newark	Essex	1346	611	845	659	671	535	420	585	553	503	543	531	7802
St	ockton	St a	nd D	elan	cy St										
1600 1400 1200															
1000 800 600 400		<b>/</b>	•		Stock	ton St. 8	Delancy	,							
Aug-11 0 Sep-11 0 Oct-11 0	NOV-11 Dec-11 Jan-12 Feb-12	Mar-12 Apr-12	May-12 Jun-12	 											

#### Citation Data Analysis: Palisades Park Borough – Year 1

<u>Citations (39:4-81)</u>	Municipality	County	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Total for Year 1
Rt 63 (Bergen Blvd) and Edsall Blvd	Palisades park	Bergen	155	803	532	448	389	317	430	456	465	453	456	380	5284



#### Citation Data Analysis: Piscataway Township - Year 1

May-12 Jun-12

Jul-12 Aug-12 Oct-12

Sep-12

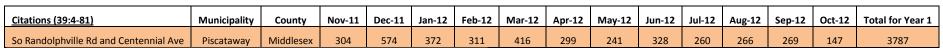
200 0

Jan-12

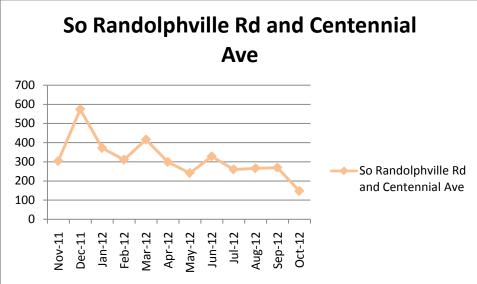
Feb-12

Nov-11 Dec-11 Mar-12 Apr-12

entation Bata / inalycion riceata															
<u>Citations (39:4-81)</u>	Municipality	County	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Total for Year 1
Old New Brunswick Rd and Centennial Ave	Piscataway	Middlesex	251	1051	526	518	659	596	604	482	337	316	350	294	5984
Old New Cer	Brunsw ntennia		d and	l											
1200 1000 800 600 400			← Old N	lew Brur	nswick R	d									



and Centennial Ave



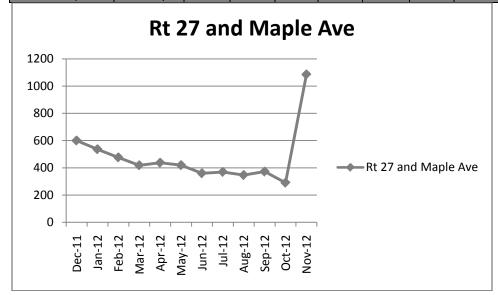
#### Citation Data Analysis: Pohatcong Township – Year 1

<u>Citations (39:4-81)</u>	Municipality	County	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total for Year 1
US Rt 22 and CR 519	Pohatcong Twp	Warren	760	625	864	865	635	975	1005	919	674	568	847	647	9384
	US F	Rt 22	and	CR 5	19										
1200															
1000		-													
800				<b>A</b>											
600															
400					<b>→</b> L	IS Rt 22 a	and CR 5	19							
200															
Jan-12 Feb-12	Mar-12 Apr-12 May-12 Jun-12	Jul-12 Aug-12	Sep-12 Oct-12	Nov-12 Dec-12											

#### Citation Data Analysis: Rahway City - Year 1

<u> Citations (39:4-81)</u>	Municipality	County	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Total for Year 1
Rt 1 and East Milton	Rahway	Union	1173	826	970	897	667	598	751	825	876	806	859	779	10027
1400 1200 1000	Rt	1 and	d Eas	t Mi	ton										
800					- - -	–Rt 1 an	d East N	Ailton							
0	Nov-11 Dec-11 Jan-12	Heb-12 Mar-12 Anr-12	May-12 Jun-12	Jul-12 Aug-12	л ,										

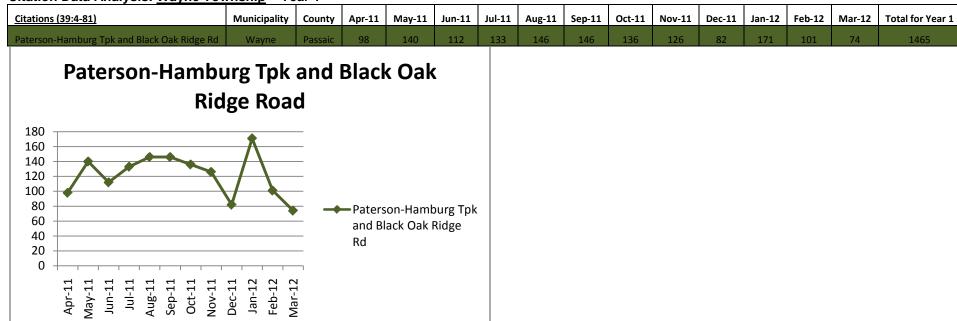
<u>Citations (39:4-81)</u>	Municipality	County	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Total for Year 1
Rt 27 and Maple Ave	Rahway	Union	600	536	476	418	437	419	359	369	346	372	290	1086	5708



#### Citation Data Analysis: <u>Roselle Park Borough</u> – Year 1

<u>Citations (39:4-81)</u>	Municipality	County	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Total for Year 1
NJ Rt 28 and Locust St	Roselle Park	Union	1372	1244	1183	947	821	653	555	497	478	593	596	732	9671
	NJ Rt	t 28 a	and L	ocus	t St										
1600															
1400															
1200															
1000															
800															
600			_			Rt 28 ai	nd Locus	t St							
400															
200															
0 +		1 1	1 1												
May-11 Jun-11 Jul-11	Aug-11 Sep-11 Oct-11	Nov-11 Dec-11	Jan-12 Feb-12 Mar-12	Apr-12											

#### Citation Data Analysis: <u>Wayne Township</u> – Year 1



#### Citation Data Analysis: <u>Woodbridge Township</u> – Year 1

<u>Citations (39:4-81)</u>	Municipality	County	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Total for Year 1
US Rt 1 and Green St	Woodbridge	Middlesex	80	1211	189	158	188	242	267	183	124	74	153	197	3066
	US I	Rt 1 ar	nd Gr	een	St										
1400															
1200															
1000															
800															
600					US	Dt 1 and	d Green S	-+							
400					03	RLI din	u Green .								
200															
Nov-11 Dec-11	Jan-12 Feb-12 Mar-12 Apr-12	May-12 Jun-12	Jul 12 Aug-12 Sep-12	Oct-12											
N Q	Ϋ́́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́	Σ Γ	, At Se	0											

# YEAR 2 – MUNICIPAL DATA CRASH DATA AND COST/BENEFIT ANALYSIS CITATION DATA AND GRAPHS (for locations with two years of operation)



# Crash Data and Cost/Benefit Analysis: Brick Township – Year 2

					Righ	t Angle Crash	es			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Route 70 and Chambers Bridge Rd.	Brick Twp.	Ocean	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	2	\$89,800	0	\$0	\$89,800	4	\$179,600	5	\$224,500	(\$44,900)
			PDO	1	\$7 <i>,</i> 400	0	\$0	\$7,400	16	\$118,400	19	\$140,600	(\$22,200)
						Total Benef	it/(Loss)	\$97,200			Total Be	enefit/(Loss)	(\$67,100)

Total Benefit (Loss) \$30,100

					Rigi	nt Angle Cr	ashes			Same	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Brick Blvd. and Chambers Bridge Rd.	Brick Twp.	Ocean	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			с	2	\$89,800	0	\$0	\$89,800	2	\$89,800	2	\$89,800	\$0
			PDO	3	\$22,200	3	\$22,200	\$0	11	\$81,400	12	\$88,800	(\$7,400)
		1				Total Be	nefit/(Loss)	\$168,800			Total Be	nefit/(Loss)	(\$7,400)

Total Benefit (Loss)

\$161,400

					Righ	t Angle Cra	ashes			Same	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Brick Blvd. and Cedar Bridge Rd.	Brick Twp.	Ocean	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	1	\$44,900	2	\$89,800	(\$44,900)	2	\$89,800	1	\$44,900	\$44,900
			PDO	3	\$22,200	0	\$0	\$22,200	9	\$66,600	5	\$37,000	\$29,600
						Total Be	nefit/(Loss)	(\$22,700)			Total Be	nefit/(Loss)	\$74,500
	6F4 000	1						•					

Total Benefit (Loss) \$51,800

#### Crash Data and Cost/Benefit Analysis: <u>Deptford Township</u> – Year 2

					Right	t Angle Cra	ashes			Same I	Direction C	rashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Rt 41 and Deptford Center Dr.	Deptford Twp.	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	1	\$79,000	(\$79,000)
			С	1	\$44,900	1	\$44,900	\$0	3	\$134,700	2	\$89,800	\$44,900
			PDO	0	\$0	1	\$7,400	(\$7,400)	11	\$81,400	7	\$51,800	\$29,600
						Total Be	nefit/(Loss)	(\$7,400)			Total Be	nefit/(Loss)	(\$4,500)

Total Benefit (Loss) (\$11,900)

					Rigł	nt Angle Cra	shes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Almonesson and Deptford Center Dr.	Deptford Twp.	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	1	\$44,900	2	\$89,800	(\$44,900)
			PDO	1	\$7,400	1	\$7,400	\$0	11	\$81,400	6	\$44,400	\$37,000
		-				Total Ber	efit/(Loss)	\$0			Total Be	nefit/(Loss)	(\$7,900)

Total Benefit (Loss) (\$7,900)

### Crash Data and Cost/Benefit Analysis: <u>Glassboro Borough</u> – Year 2

					Rig	ht Angle Cras	hes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Rt. 47 and William Dalton Drive	Glassboro	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	1	\$44,900	2	\$89,800	(\$44,900)
			PDO	0	\$0	0	\$0	\$0	3	\$22,200	3	\$22,200	\$0
		•				Total Benef	it/(Loss)	\$0			Total Be	nefit/(Loss)	(\$44,900)

Total Benefit (Loss) (\$44,900)

					Rig	ht Angle Crasł	nes			Same	Direction Cra	shes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Greentree Rd and William Dalton Dr	Glassboro	Gloucester	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	1	\$44,900	0	\$0	\$44,900
			PDO	1	\$7,400	0	\$0	\$7,400	3	\$22,200	0	\$0	\$22,200
						Total Benef	it/(Loss)	\$7,400			Total Benef	fit/(Loss)	\$67,100
			•										

Total Benefit (Loss) \$74,500

# Crash Data and Cost/Benefit Analysis: <u>Gloucester Township</u> – Year 2

					Righ	nt Angle Cr	ashes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Blackwood-Clementon Rd and Cherrywood Dr	Gloucester Twp.	Camden	к	0	\$0	0	\$0	\$0	0	\$0		\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0		\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0		\$0	\$0
			с	3	\$134,700	1	\$44,900	\$89,800	15	\$673,500	2	\$89,800	\$583,700
			PDO	0	\$0	1	\$7,400	(\$7,400)	0	\$0	13	\$96,200	(\$96,200)
						Total Be	nefit/(Loss)	\$82,400			Total Be	nefit/(Loss)	\$487,500

Total Benefit (Loss)

\$569,900

					Rig	ght Angle Cras	hes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Blackwood-Clementon Rd and Erial Road	Gloucester Twp.	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	2	\$89,800	0	\$0	\$89,800	7	\$314,300	0	\$0	\$314,300
			PDO	0	\$0	0	\$0	\$0	17	\$125,800	7	\$51,800	\$74,000
		_				Total Benet	fit/(Loss)	\$89,800			Total Be	nefit/(Loss)	\$388,300
Total Benefit (Loss)	\$478,100												

					Rig	ght Angle	Crashes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Blackwood-Clementon Rd and Little Gloucester Road	Gloucester Twp.	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	1	\$44,900	4	\$179,600	(\$134,700)	1	\$44,900	2	\$89,800	(\$44,900)
			PDO	4	\$29,600	0	\$0	\$29,600	21	\$155,400	13	\$96,200	\$59,200
						Total Be	enefit/(Loss)	(\$26,100)			Total Be	nefit/(Loss)	\$14,300
Total Benefit (Loss)	(\$11,800)												

# Crash Data and Cost/Benefit Analysis: <u>Gloucester Township</u> – Year 2 (Continued)

					Rig	ht Angle C	rashes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Blackwood-Clementon Rd and Millbridge Road	Gloucester Twp.	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	1	\$79,000	0	\$0	\$79,000
			С	0	\$0	0	\$0	\$0	3	\$134,700	0	\$0	\$134,700
			PDO	3	\$22,200	2	\$14,800	\$7,400	13	\$96,200	8	\$59,200	\$37,000
						Total Be	nefit/(Loss)	\$7,400			Total Be	nefit/(Loss)	\$250,700

Total Benefit (Loss) \$258,100

					Righ	t Angle Cr	ashes			Same	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Little Gloucester Road and Erial Road	Gloucester Twp.	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	4	\$179,600	1	\$44,900	\$134,700
			PDO	5	\$37,000	3	\$22,200	\$14,800	5	\$37,000	4	\$29,600	\$7,400
		•				Total Be	nefit/(Loss)	\$14,800			Total Be	nefit/(Loss)	\$142,100

Total Benefit (Loss) \$156,900

# Crash Data and Cost/Benefit Analysis: Linden City – Year 2

					Righ	t Angle Cra	ishes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
US Rt 1 and South Park Ave	Linden	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	3	\$237,000	1	\$79,000	\$158,000
			с	1	\$44,900	1	\$44,900	\$0	9	\$404,100	14	\$628,600	(\$224,500)
			PDO	2	\$14,800	2	\$14,800	\$0	31	\$229,400	24	\$177,600	\$51,800
						Total Be	nefit/(Loss)	\$0			Total Be	enefit/(Loss)	(\$14,700)

(\$14,700) Total Benefit (Loss)

					Right	t Angle Crash	es			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
US Rt 1 and South Stiles Ave	Linden	Union	к	0	\$0	0	\$0	\$0	0	\$0		\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0		\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	1	\$79,000	(\$79,000)
			с	2	\$89,800	0	\$0	\$89,800	6	\$269,400	22	\$987,800	(\$718,400)
			PDO	1	\$7,400	0	\$0	\$7,400	67	\$495,800	32	\$236,800	\$259,000
		_				Total Benef	it/(Loss)	\$97,200			Total Be	enefit/(Loss)	(\$538,400)

(\$441,200) Total Benefit (Loss)

					Rig	ht Angle Cras	hes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
NJ Rt 27 and North Stiles Ave	Linden	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	3	\$134,700	6	\$269,400	(\$134,700)
			PDO	0	\$0	0	\$0	\$0	13	\$96,200	4	\$29,600	\$66,600
						Total Benef	it/(Loss)	\$0			Total Be	enefit/(Loss)	(\$68,100)
		1											

(\$68,100) Total Benefit (Loss)

# Crash Data and Cost/Benefit Analysis: Linden City – Year 2 (Continued)

					Right	Angle Crashe	es			Same I	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
US Rt 1 and Pleasant Ave	Linden	Union	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	2	\$158,000	2	\$158,000	\$0
			с	2	\$89,800	0	\$0	\$89,800	6	\$269,400	3	\$134,700	\$134,700
			PDO	2	\$14,800	0	\$0	\$14,800	16	\$118,400	8	\$59,200	\$59,200
						Total Benef	it/(Loss)	\$104,600			Total Be	enefit/(Loss)	\$193,900

Total Benefit (Loss) \$298,500

#### Crash Data and Cost/Benefit Analysis: New Brunswick City – Year 2

					Righ	t Angle Cra	shes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Easton Avenue and Park Boulevard	New Brunswick	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	1	\$44,900	0	\$0	\$44,900	0	\$0	0	\$0	\$0
			PDO	1	\$7,400	1	\$7,400	\$0	1	\$7,400	12	\$88,800	(\$81,400)
		_				Total Ben	efit/(Loss)	\$123,900			Total Be	nefit/(Loss)	(\$81,400)

\$42,500 Total Benefit (Loss)

					Rigl	ht Angle Crasł	nes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Easton Ave and Albany St	New Brunswick	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			PDO	3	\$22,200	0	\$0	\$22,200	8	\$59,200	5	\$37,000	\$22,200
						Total Benef	it/(Loss)	\$22,200			Total Be	nefit/(Loss)	\$22,200
Total Benefit (Loss)	\$44,400												

# Crash Data and Cost/Benefit Analysis: Newark City – Year 2

					F	Right Angle Ci	rashes			San	ne Directio	on Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Broad Street and Murray Street	Newark City	Essex	К	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	1	\$44,900	1	\$44,900	\$0
			PDO	0	\$0	0	\$0	\$0	0	\$0	3	\$22,200	(\$22,200)
						Total Benef	it/(Loss)	\$0			Total Be	nefit/(Loss)	(\$22,200)

Total Benefit (Loss) (\$22,200)

					Rig	ht Angle Cras	hes			Same	Direction Cras	shes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
McCarter Hwy and Edison Pl	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			с	0	\$0	0	\$0	\$0	2	\$89,800	0	\$0	\$89,800
			PDO	0	\$0	0	\$0	\$0	1	\$7,400	0	\$0	\$7,400
		1				Total Benef	it/(Loss)	\$0			Total Benef	it/(Loss)	\$97,200

Total Benefit (Loss) \$97,200

					Rig	ht Angle Crasi	ies			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Cost	Difference Benefit (Loss)	
McCarter Highway and Lafayette St	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	2	\$14,800	0	\$0	\$14,800	4	\$29,600	2	\$14,800	\$14,800
						Total Benef	it/(Loss)	\$14,800			Total Be	nefit/(Loss)	(\$30,100)

Total Benefit (Loss) (\$15,300)

# Crash Data and Cost/Benefit Analysis: <u>Newark City</u> – Year 2 (Continued)

					Right	Angle Cra	shes			Same I	Direction C	rashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
McCarter Highway. & Market St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	1	\$79,000	\$0	0	\$0	0	\$0	\$0
			С	3	\$134,700	0	\$0	\$134,700	3	\$134,700	1	\$44,900	\$89,800
			PDO	0	\$0	1	\$7,400	(\$7,400)	8	\$59,200	4	\$29,600	\$29,600
			-			Total Be	nefit/(Loss)	\$127,300			Total Be	nefit/(Loss)	\$119,400

Total Benefit (Loss) \$246,700

					Right	Angle Cras	hes			Same	Direction	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
McCarter Highway. & South St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	4	\$179,600	0	\$0	\$179,600	4	\$179,600	3	\$134,700	\$44,900
			PDO	0	\$0	1	\$7,400	(\$7,400)	13	\$96,200	6	\$44,400	\$51,800
						Total Ben	efit/(Loss)	\$172,200			Total Be	enefit/(Loss)	\$96,700

Total Benefit (Loss) \$268,900

					Righ	nt Angle Crash	nes			Same	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Mulberry St. & Market St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	2	\$89,800	(\$89,800)
			PDO	0	\$0	0	\$0	\$0	4	\$29,600	3	\$22,200	\$7,400
						Total Benef	it/(Loss)	\$0			Total Be	nefit/(Loss)	(\$82,400)

Total Benefit (Loss) (\$82,400)

# Crash Data and Cost/Benefit Analysis: <u>Newark City</u> – Year 2 (Continued)

					Ri	ght Angle Cra	shes			Sar	ne Directio	on Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Raymond Blvd and Raymond Pl West	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	1	\$44,900	0	\$0	\$44,900	1	\$44,900	1	\$44,900	\$0
			PDO	0	\$0	0	\$0	\$0	3	\$22,200	2	\$14,800	\$7,400
						Total Benef	it/(Loss)	\$123,900			Total Be	nefit/(Loss)	\$7,400

Total Benefit (Loss) \$131,300

					Rigi	ht Angle Cra	ashes			Same	Direction (	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Raymond Blvd, Market St and	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
Prospect St			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	1	\$44,900	2	\$89,800	(\$44,900)
			PDO	0	\$0	1	\$7,400	(\$7,400)	5	\$37,000	3	\$22,200	\$14,800
		-				Total Ber	nefit/(Loss)	(\$7,400)			Total Be	nefit/(Loss)	(\$30,100)

Total Benefit (Loss) (\$37,500)

					Rigi	ht Angle Crasl	nes			Same I	Direction Cras	shes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
Broad St. & E. / W. Kinney St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	2	\$89,800	0	\$0	\$89,800
			PDO	1	\$7,400	0	\$0	\$7,400	2	\$14,800	0	\$0	\$14,800
		_				Total Benef	it/(Loss)	\$7,400			Total Benef	fit/(Loss)	\$104,600
	4440.000												

# Crash Data and Cost/Benefit Analysis: <u>Stratford Borough</u> – Year 2

					Right	Angle Cras	shes			Same I	Direction C	rashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
US Rt 30 and White Horse Road	Stratford	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	2	\$89,800	0	\$0	\$89,800	3	\$134,700	2	\$89,800	\$44,900
			PDO	2	\$14,800	1	\$7,400	\$7,400	5	\$37,000	0	\$0	\$37,000
		•				Total Ben	efit/(Loss)	\$97,200			Total Be	nefit/(Loss)	\$81,900

Total Benefit (Loss) \$179,100

					Right	Angle Cra	shes			Same [	Direction C	Crashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
Laurel Road and Atlantic Avenue	Stratford	Camden	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	1	\$44,900	0	\$0	\$44,900	1	\$44,900	3	\$134,700	(\$89,800)
			PDO	2	\$14,800	2	\$14,800	\$0	9	\$66,600	9	\$66,600	\$0
		_			\$14,800     2     \$14,800     \$0     9     \$66,600     9     \$66,600       Total Benefit/(Loss)     \$44,900     Total Benefit/(Loss)							enefit/(Loss)	(\$89,800)

Total Benefit (Loss) (\$44,900)

# Crash Data and Cost/Benefit Analysis: <u>Woodbridge Township</u> – Year 2

					Righ	nt Angle Crasl	nes			Same I	Direction C	rashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)	Year 1	Cost	Year 2	Cost	Difference Benefit (Loss)
US Rt 1 and Avenel St	Woodbridge	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	4	\$179,600	0	\$0	\$179,600
			PDO	0	\$0	0	\$0	\$0	6	\$44,400	7	\$51,800	(\$7,400)
		_				Total Benef	it/(Loss)	\$0			Total Be	nefit/(Loss)	\$172,200

Total Benefit (Loss) \$172,200

					Right	Angle Crashe	s			Same D	irection C	rashes	
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)	Pre-Camera	Cost	Year 1	Cost	Difference Benefit (Loss)
US Rt 1 and Smith St	Woodbridge	Middlesex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0
			В	1	\$79,000	0	\$0	\$79,000	0	\$0	0	\$0	\$0
			С	0	\$0	0	\$0	\$0	0	\$0	1	\$44,900	(\$44,900)
			PDO	2	\$14,800	0	\$0	\$14,800	4	\$29,600	2	\$14,800	\$14,800
		-				Total Benef	it/(Loss)	\$93,800			Total Be	nefit/(Loss)	(\$30,100)

Total Benefit (Loss) \$63,700

Citation Data Analysis: <u>Brick Township</u> – Year 2

Citations (39:4-81)	Municipality	County	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Total for Year 2
Route 70 and Chambers Bridge	Brick	Ocean	294	767	116	298	455	632	767	784	684	720	559	641	6717





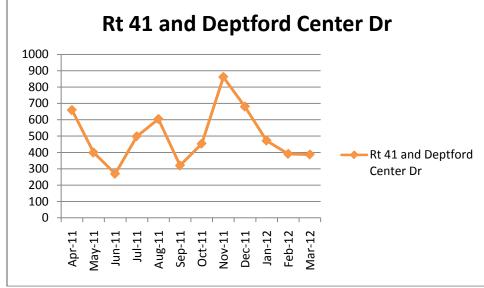
ſ	Citations (39:4-81)	Municipality	County	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Total for Year 2
	Brick and Chambers Bridge	Brick	Ocean	387	386	458	901	755	739	881	991	871	737	660	348	8114





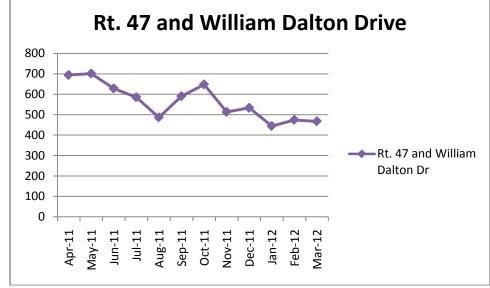
Citation Data Analysis: <u>Deptford Township</u> – Year 2

Citations (39:4-81)	Municipality	County	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total for 2011
Rt. 41 and Deptford Center Dr.	Deptford	Gloucester	659	399	269	498	604	320	453	861	680	472	391	387	5993



#### Citation Data Analysis: <u>Glassboro Borough</u> – Year 2

Citations (39:4-81)	Municipality	County	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total for Year 2
Rt. 47 and William Dalton	Glassboro	Gloucester	694	701	628	585	486	590	648	513	533	444	474	467	6763

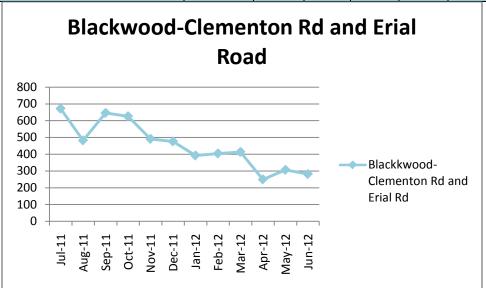


Citation Data Analysis: <u>Gloucester Township</u> – Year 2

Citations (39:4-81)	Municipality	County	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 2
Blackwood-Clementon Rd and Cherrywood Dr	Gloucester	Camden	472	363	304	292	193	208	184	183	303	254	311	360	3427

#### **Blackwood-Clementon Rd and Cherrywood Dr** 500 400 300 200 Blackwood-Clementon Rd and Cherrywood Dr 100 0 Aug-11 Sep-11 May-12 Jun-12 Jul-11 Jan-12 Mar-12 Apr-12 Oct-11 Nov-11 Dec-11 Feb-12

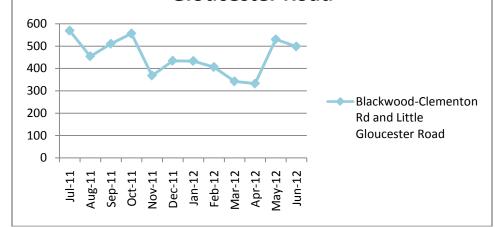
<u>Citations (39:4-81)</u>	Municipality	County	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 2
Blackwood-Clementon Rd and Erial Road	Gloucester	Camden	672	482	646	626	491	476	392	404	413	249	306	281	5438

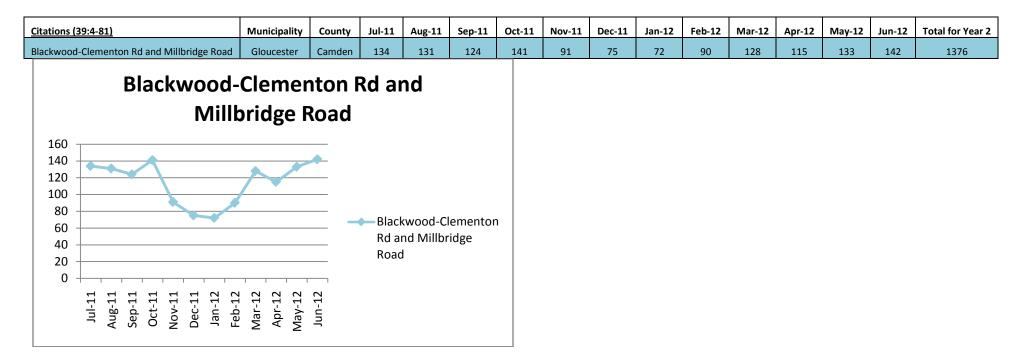


#### Citation Data Analysis: <u>Gloucester Township</u> – Year 2 (Continued)

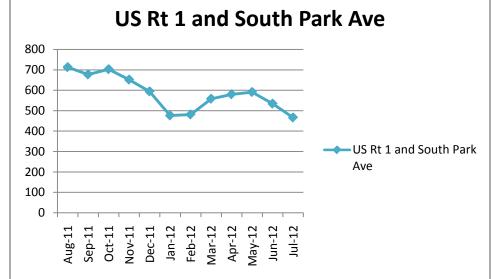
<u>Citations (39:4-81)</u>	Municipality	County	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 2
Blackwood-Clementon Rd and Little															
Gloucester Road	Gloucester	Camden	569	454	510	556	368	434	433	406	342	332	530	498	5432

# Blackwood-Clementon Rd and Little Gloucester Road

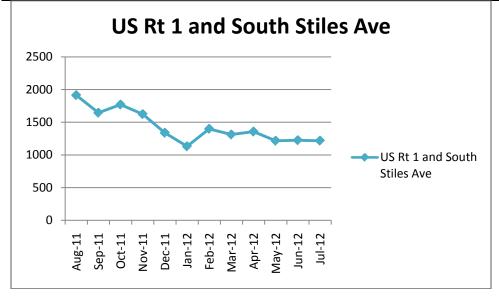




Citations (39:4-81)	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 2
US Rt 1 and South Park Ave	Linden	Union	713	677	703	652	594	476	481	558	580	591	534	466	7025

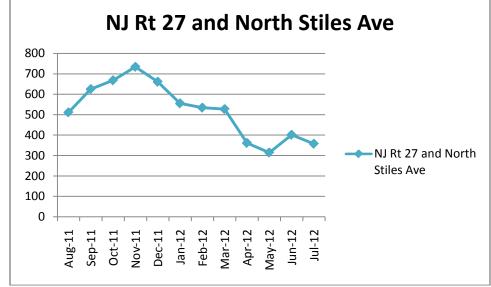


Citations (39:4-81)	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 2
US Rt 1 and South Stiles Ave	Linden	Union	1913	1644	1769	1623	1338	1131	1398	1311	1356	1216	1224	1217	17140



#### Citation Data Analysis: Linden City – Year 2 (Continued)

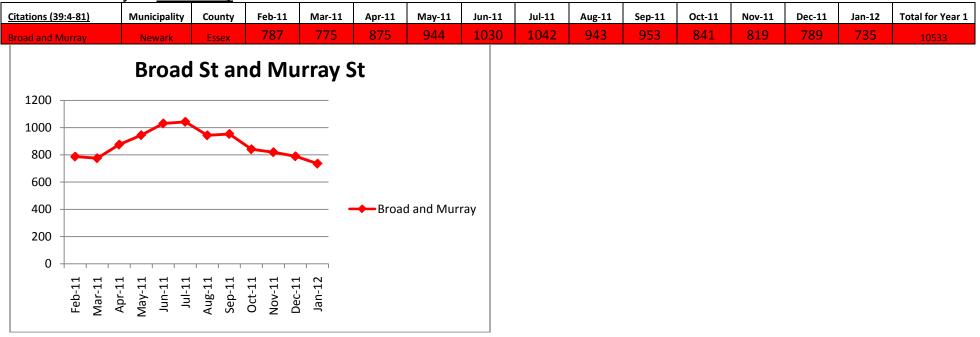
Citations (39:4-81)	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 2
NJ Rt 27 and North Stiles Ave	Linden	Union	511	625	668	734	661	555	534	527	361	314	401	357	6248



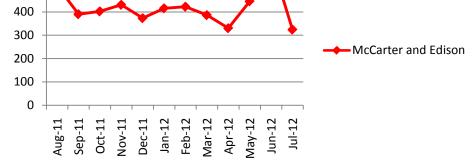
#### Citation Data Analysis: <u>New Brunswick City</u> – Year 2

itations (39:4-81)	Municipality	County	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Total for Year
aston Ave and Park Blvd	New Brunswick City	Middlesex	1349	1335	1214	1071	992	977	1102	1140	1053	1038	1040	1078	13389
	Easton Ave	and P	ark E	Blvd											
1600															
1400															
1200															
1000															
800				- Fa	ston Ave a	and Dark									
400				Blv											
200															
0															
11 11 11	11 12 12 12 12	12	12												
Sep-11 Oct-11 Nov-11	Dec-11 Jan-12 Feb-12 Mar-12 Apr-12	May-12 Jun-12	Aug-12												
•, - ∠	2 `	2	4												

Citation Data Analysis: Newark City – Year 2

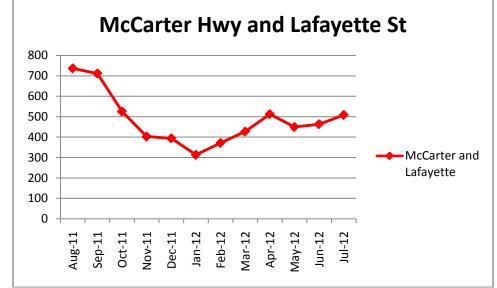


<u>Citations (39:4-81)</u>	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 1
McCarter and Edison	Newark	Essex	512	390	402	430	373	415	422	386	330	445	622	324	5051
1	McCarte	er Hw	y and	Ediso	n Pl										
700															
600															
500 400															
300	•			<b>&gt;</b>											

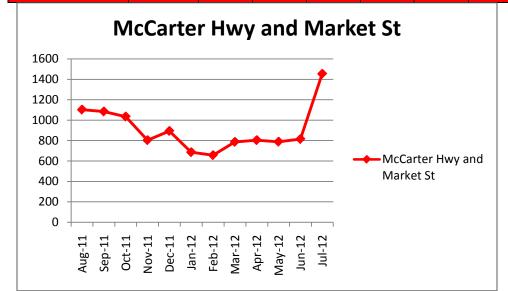


Citation Data Analysis: <u>Newark City</u> – Year 2 (Continued)

Citations (39:4-81)	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 1
McCarter and Lafayette	Newark	Essex	736	711	525	402	394	313	371	427	512	449	463	508	5811



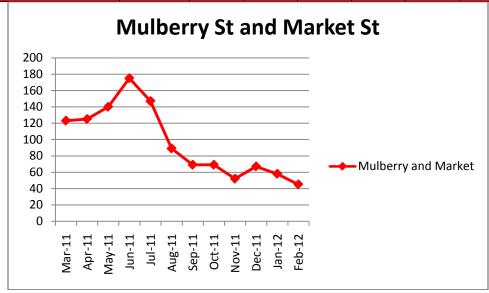
Citations (39:4-81)	Municipality	County	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Total for Year 2
McCarter and Market	Newark	Essex	1103	1085	1035	804	894	686	657	787	804	789	815	1454	10913



Citation Data Analysis: <u>Newark City</u> – Year 2 (Continued)

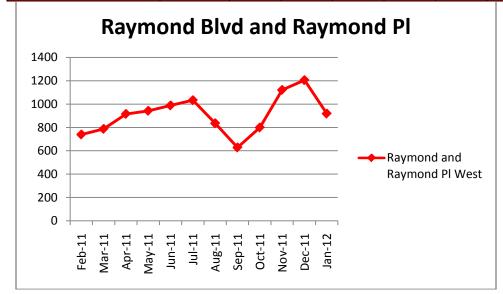
Citation Data Ana		rk City –	10012	Continue	ч)		1	1			1	1	1	1	1
<u>Citations (39:4-81)</u>	Municipality	County	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total for Year 2
McCarter and South	Newark	Essex	1880	1528	1105	1089	1027	1383	1059	1014	977	1018	932	1059	14071
2000     1800     1600     1400     1200     1000     800     600     400     200     0     11000	Dec-11		Apr-12 Apr-12 May-12		<b>h St</b> ► McCart	er and Soi	uth								

<u>Citations (39:4-81)</u>	Municipality	County	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Total for Year 2
Mulberry and Market	Newark	Essex	123	125	140	175	147	89	69	69	52	67	58	45	1159



Citation Data Analysis: <u>Newark City</u> – Year 2 (Continued)

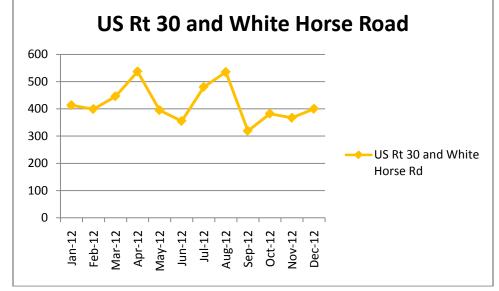
Citations (39:4-81)	Municipality	County	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Total for Year 2
Raymond and Raymond Pl West	Newark	Essex	739	787	915	942	988	1033	835	628	799	1121	1205	918	10910



itations (39:4-81)	Municipality	County	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Total for Year 2
aymond, Market and Prospect	Newark	Essex	888	1101	1150	1109	1071	903	913	803	729	643	555	656	10521
1400 1200 1000 800 600 400 200 0	Uond Bl Aug-11 Sep-11 Oct-11				n <b>d</b> mond, Ma spect	arket and									

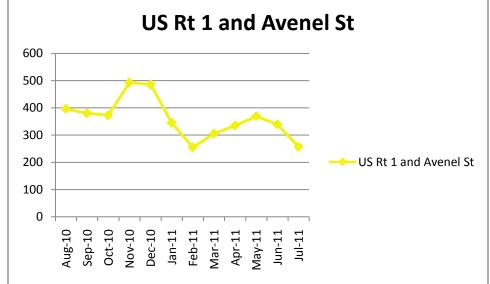
#### Citation Data Analysis: <u>Stratford Borough</u> – Year 2

<u>Citations (39:4-81)</u>	Municipality	County	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total for Year 2
US Rt 30 and White Horse Rd	Stratford	Camden	413	399	446	537	395	355	480	535	319	382	367	400	5028



#### Citation Data Analysis: Woodbridge Township – Year 2

<u>Citations (39:4-81)</u>	Municipality	County	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Total for Year 2
US Rt 1 and Avenel St	Woodbridge	Middlesex	396	380	373	493	486	345	255	305	335	369	339	257	4333



# YEAR 3 – MUNICIPAL DATA CRASH DATA AND COST/BENEFIT ANALYSIS CITATION DATA AND GRAPHS (for locations with three years of operation)



# Crash Data and Cost/Benefit Analysis: Newark City – Year 3

					Righ	t Angle Crash	es		Same Direction Crashes					
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	
Broad St. & Market St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			С	0	\$0	0	\$0	\$0	1	\$44,900	2	\$89,800	(\$44,900)	
			PDO	1	\$7,400	0	\$0	\$7,400	4	\$29,600	2	\$14,800	\$14,800	
						Total Benefit/(Loss)		\$7,400			Total Be	nefit/(Loss)	(\$30,100)	

(\$22,700) Total Benefit (Loss)

					Rigi	nt Angle C	rashes		Same Direction Crashes					
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	
Broad St and Raymond Blvd	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			с	0	\$0	1	\$44,900	(\$44,900)	1	\$44,900	0	\$0	\$44,900	
			PDO	0	\$0	0	\$0	\$0	3	\$22,200	1	\$7,400	\$14,800	
						Total Benefit/(Loss) (\$44,900)					Total Ber	efit/(Loss)	\$59,700	

Total Benefit (Loss)

\$14,800

					Rig	ht Angle Cras	hes		Same Direction Crashes					
LOCATION	MUNICIPALITY	COUNTY	SEVERITY	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	Year 2	Cost	Year 3	Cost	Difference Benefit (Loss)	
Broad St. & E. / W. Kinney St.	Newark City	Essex	к	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
(Reference Intersection)			А	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			В	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			С	0	\$0	0	\$0	\$0	0	\$0	0	\$0	\$0	
			PDO	0	\$0	0	\$0	\$0	0	\$0	1	\$7,400	(\$7,400)	
				Total Benefit/(Loss) \$0			\$0			Total Ber	efit/(Loss)	(\$7,400)		
		1		-										

Total Benefit (Loss)

(\$7,400)

Citation Data Analysis: Newark City – Year 3

<u>Citations (39:4-81)</u>	Municipality	County	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total for Year 3
Broad and Market	Newark	Essex	13	27	12	12	14	9	13	11	7	13	12	9	152
	Broad	St ar	nd Ma	rket S	St										
30				_											
25				_											
15			•	_											
10					Broad St a	and Marke	t St								
5		•		_											
	0 0 0 0	<b>7</b> 7	12 12 12												
Jan-12 Feb-12 Mar-12	Apr-12 May-12 Jun-12 Jul-12	Aug-12 Sep-12	Oct-12 Nov-12 Dec-12												
	_														

<u>Citations (39:4-81)</u>	Municipality	County	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total for Year 3
Broad and Raymond	Newark	Essex	363	394	782	749	725	976	1173	969	859	841	440	610	8881
E	Broad St	and	Raym	ond E	Blvd										
1400 1200 1000 800 400 200 0 0 0 0 0 0 0 0 0 0 0 0		Aug-12 Sep-12	Oct-12 Nov-12 Dec-12	-	Broad St a Blvd	and Raymo	ond								