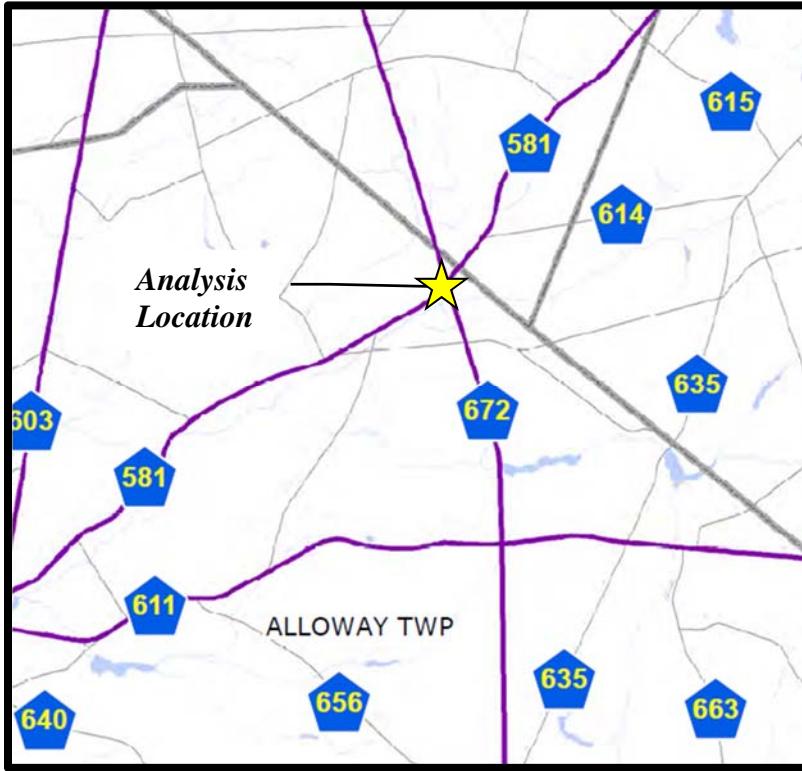


Traffic Intersection Analysis



Watsons Mill Road (C.R. 672) & Commissioners Pike (C.R. 581)
Alloway Township, Salem County, New Jersey

December 8, 2017

Prepared for: County of Salem

Prepared by: Remington & Vernick Engineers
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Cherry Hill, NJ 08002
File #: 1700F001



**REMINGTON
& VERNICK
ENGINEERS**

DISCLAIMER

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I. INTRODUCTION

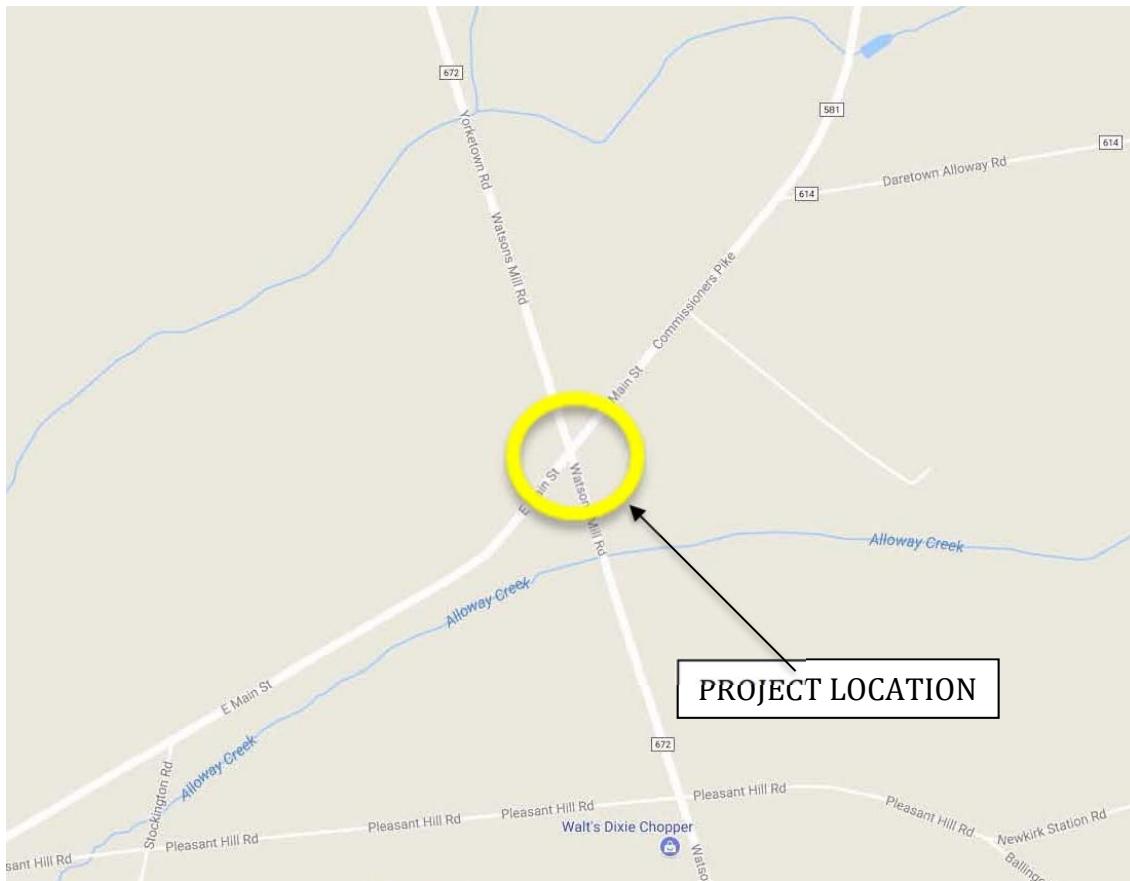
Remington & Vernick Engineers has been retained by Salem County to study, analyze and develop an improvement plan for the intersection of Watsons Mill Road (CR 672) & Commissioner's Pike (CR 581) located in Alloway Township in Salem County, New Jersey. This work is associated with the larger Intersection & Road Analyses for the County of Salem.

The study is intended to evaluate potential improvement alternatives including vertical and horizontal intersection configuration, speed control, signage, striping, and pavement marking upgrades within the intersection's existing right-of-way. Figure 1 shows the location of the study intersection. The main objective of this report is to analyze existing conditions, traffic patterns, and improvement alternatives at the intersection and to provide a recommended course of action. In order to complete this study, the following data was collected and utilized during the course of this corridor study:

- Peak period traffic counts and speed data via radar data collection.
- Existing sight distance limitations.
- Three years of traffic crash reports within the project limits from the New Jersey State Police Department.
- Physical inventory of existing pavement condition, roadway/shoulder widths, signage, striping, and pavement markings.
- NJDOT Straight Line Diagrams and aerial photographs.

Figure 1 – Location Map

Watsons Mill Road (CR 672) & Commissioner's Pike (CR 581)
Alloway Township, Salem County, New Jersey



II. EXISTING CONDITIONS

In order to evaluate the safety and operations of the existing intersection and to develop recommendations for the intersection, RVE conducted a physical inventory of various features that may affect traffic and safety characteristics.

The study intersection is a two-way stop controlled four-legged intersection with stop signs located along the Northbound/Southbound approaches of Commissioner's Pike. Watsons Mill Road is the busier route at this intersection as it carries the higher volume traffic. Both roads are two-lane roads (one lane in each direction), under County jurisdiction, and are classified as Rural Major Collectors.

Approaching the study intersection, Watsons Mill Road typically has two 12-foot wide travel lanes separated by a solid double yellow center line (no passing zone) and 2-foot wide shoulders. Commissioner's Pike typically has two 12-foot wide travel lanes separated by a solid double yellow line (no passing zone) and 6-foot wide shoulders with a posted speed limit of 40

miles-per-hour (MPH). As Watsons Mill Road does not have a posted speed limit within the vicinity of the study intersection, a speed limit of 50 miles per hour (MPH) is enforced based on New Jersey Statute Title 39 – Motor Vehicles and Traffic Regulation, Section 39:4-98 – Rates of speed.

The study intersection is currently stop sign controlled and operates as a two-way stop along the approaches of Commissioner's Pike. The northbound approach has a stop bar approximately 10 feet from the edge of travel way with an accompanying "STOP" pavement marking legend; while the southbound approach has two stop bars installed with one stop sign set adjacent to the stop bar furthest from the intersection. The far stop bar along the southbound approach is set approximately 80 feet from the intersection and provides limited sight distance of vehicles approaching the intersection in the eastbound and westbound directions. There are no lighting or pedestrian accessibility features located at this intersection.

III. EXISTING TRAFFIC CONDITIONS

In order to study and evaluate the intersection of Watsons Mill Road (CR 672) and Commissioner's Pike (CR 581) volume and speed classification counts were conducted by Salem County between September 5 and September 7, 2017, using radar data collection equipment. The radar detection was set up along the four approach legs of Watsons Mill Road and Commissioners Pike to track vehicles approaching the study intersection from all four directions. The traffic count data indicates that the morning system peak hour occurred between 7:00AM and 8:00 AM, and the evening system peak hour occurred between 5:00 PM and 6:00 PM. The existing peak hour traffic volumes are depicted in Table 1 as well as Figure 2. The Average Daily Traffic (ADT) was determined by taking an average of the volumes collected at each radar detection station. The ADT along Watsons Mill Road is approximately 1,575 vehicles/day while the ADT along Commissioners Pike is approximately 1,477 vehicles/day. The raw traffic count data is provided in Appendix B.

Table 1 – Existing Peak Hour Traffic Volumes Entering

Approach	Volume	
	AM	PM
Watsons Mill Road Northbound	100	94
Watsons Mill Road Southbound	67	157
Commissioner's Pike Eastbound	50	62
Commissioner's Pike Westbound	45	66

IV. CRASH HISTORY AND EVALUATIONS

The reasons for analyzing traffic crash data are (1) to identify any crash patterns that may exist, (2) to determine the contributing factors to crashes with respect to drivers, roadway and vehicles, and (3) to develop countermeasures that will reduce the rate and severity of crashes.

A review of crash data was conducted to identify safety concerns that may exist at the intersection. The data was also used to identify intersection crash patterns, from which possible contributing factors of crashes may be identified, leading to the identification of possible remedial actions.

During a three-year period between October 2014 and October 2017, the study intersection experienced eight (8) reported crashes. Table 2 summarizes the reported crashes by type of collision.

Table 2 – Crash Summary

Type	Total # of Crashes	% of Total	# of Personal Injuries
Sideswipe	0	0%	0
Overtake	0	0%	0
Head On	0	0%	0
Left Turn	0	0%	0
Rear End	0	0%	0
Right Angle	8	100%	4
Parked Vehicle	0	0%	0
Bike / Other	0	0%	0
Total Within Scope	8	100%	4

The above-mentioned crash data has been organized and collision diagrams showing each crash have been developed. The collision diagrams are included in Appendix C. A legend is provided to indicate the type of crash and the corresponding number of crashes for that crash type. Overall, the crash data shows a high percentage of right-angle collisions at the study intersection.

The crash data was taken directly from police reports prepared by the New Jersey State Police Department. Since the individual crash reports include personal information, they are not included with this report. The crash reports will remain on file for the duration of the study. However, the personal information related to each report are not included in the analysis.

The data indicates the only crash type in the last three years within the study limits are right angle collisions. A total of 4 personal injuries were recorded during the three-year review period, and there were no fatal crashes during this timeframe. Most of the crashes occurred during the daylight hours, in clear weather and on dry roadway conditions. These crashes can be attributed to poor visibility approaching the intersection due to limited sight distance caused by vegetation adjacent to the intersection, roadside utilities, and the vertical alignment along the northbound Watsons Mill approach.

Since the accident data reveals right-angle crashes as a recurring problem at this intersection, we recommend the installation of overhead flashing yellow and red beacons intended to alert motorists approaching the intersection of the upcoming intersection. This improvement will mitigate the adverse effects of poor visibility at the intersection. Also, since there isn't any existing intersection lighting, this traffic control device will highlight the crossing. Additionally, three of the eight crashes were caused by drivers failing to respond to the stop sign along the minor approaches. The flashing red beacon will enhance safety and further highlight the stop condition.

V. SIGHT DISTANCE ANALYSIS

A sight distance analysis for the study intersection was prepared following the AASHTO publication *A Policy on Geometric Design of Highways and Streets* (the “green book”), which is a standard design manual accepted by NJDOT for roadway analysis. In general, recommended stopping sight distances depend upon the posted speed limit and roadway grades. The stopping sight distance is the sum of the distance traversed during the brake reaction time and the distance required to brake the vehicle to a stop. The existing sight distances at the study intersection were measured in accordance with AASHTO guidelines and compared to AASHTO’s stopping sight distance on level roadways, which can be found in AASHTO – A policy on Geometric Design of Highways and Streets, and seen below in Table 3.

Table 3 – Stopping Sight Distance

Design Speed (MPH)	Brake Reaction Distance (ft)	Braking Distance on Level (ft)	Stopping Sight Distance	
			Calculated (ft)	Design (ft)
15	55.1	21.6	76.7	80
20	73.5	38.4	111.9	115
25	91.9	60	151.9	155
30	110.3	86.4	196.7	200
35	128.6	117.6	246.2	250
40	147	153.6	300.6	305
45	165.4	194.4	359.8	360
50	183.8	240	423.8	425
55	202.1	290.3	492.4	495
60	220.5	345.5	566	570
65	238.9	405.5	644.4	645
70	257.3	470.3	727.6	730
75	275.6	539.9	815.5	820
80	294	614.3	908.3	910

The existing stopping sight distances were obtained by measuring and recording observations at the study intersection using target rods mounted at 3.5 feet to represent the driver’s eye height. The target rod was walked away from the study intersection until the point where it could no longer be seen from the intersecting roadway. The existing distances can be seen in Table 4 and Figure 2.

Table 4 – Existing Sight Distance Conditions

Stopped Approach	Looking Direction	Posted/Statutory Speed (MPH)	85th Percentile Speed (MPH)	Stopping Sight Distance (feet)		
				Recommended per Posted/Statutory Speed	85th Percentile Required	Existing
Eastbound	North	50	65	425	645	807
	South	50	65	425	645	437
Westbound	North	50	65	425	645	785
	South	50	65	425	645	348

As shown in Table 4, the study intersection provides adequate stopping sight distances for three of the four approaches at the posted speed limit. The stopping sight distance provided at the eastbound approach looking in the south direction is 348 feet, while AASHTO recommends a distance of 425 feet at a speed of 50 MPH. The sight distance at this location is limited due to existing vegetation, vertical alignment along the roadway, and roadside utility poles. We recommend the vegetation within the 50 MPH sight triangle be cleared to provide the maximum sight distance possible at this location.



WESTBOUND C.R. 581 APPROACH



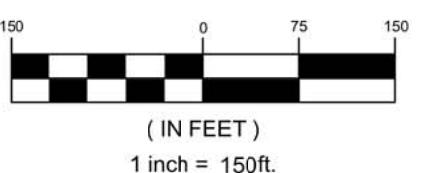
EASTBOUND C.R. 581 APPROACH

SIGHT DISTANCE LEGEND

- A₁ - STOPPED VEHICLE LOCATION, WESTBOUND APPROACH
- A₂ - STOPPED VEHICLE LOCATION, EASTBOUND APPROACH
- B - MEASURED SIGHT DISTANCE
- C - DESIGN SIGHT DISTANCE (VEHICLE SPEED=50 MPH)
- X - DESIGN SIGHT DISTANCE FOR 85TH PERCENTILE SPEED (65 MPH)

FIGURE 2
STOPPING SIGHT DISTANCE
WATSONS MILL ROAD (C.R. 672) & COMMISSIONER'S PIKE (C.R. 581)
ALLOWAY TOWNSHIP, SALEM COUNTY, NEW JERSEY
REMINGTON & VERNICK ENGINEERS
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(856) 795-9555, FAX (856) 795-1882, WEB SITE ADDRESS: WWW.RVE.COM
Certificate of Authorization: 24 GA 28003600
DATE: 9/18/2017 DWG. NO. 1700F001 SHEET 1 of 1

GRAPHIC SCALE



VI. SPEED LIMIT ANALYSIS

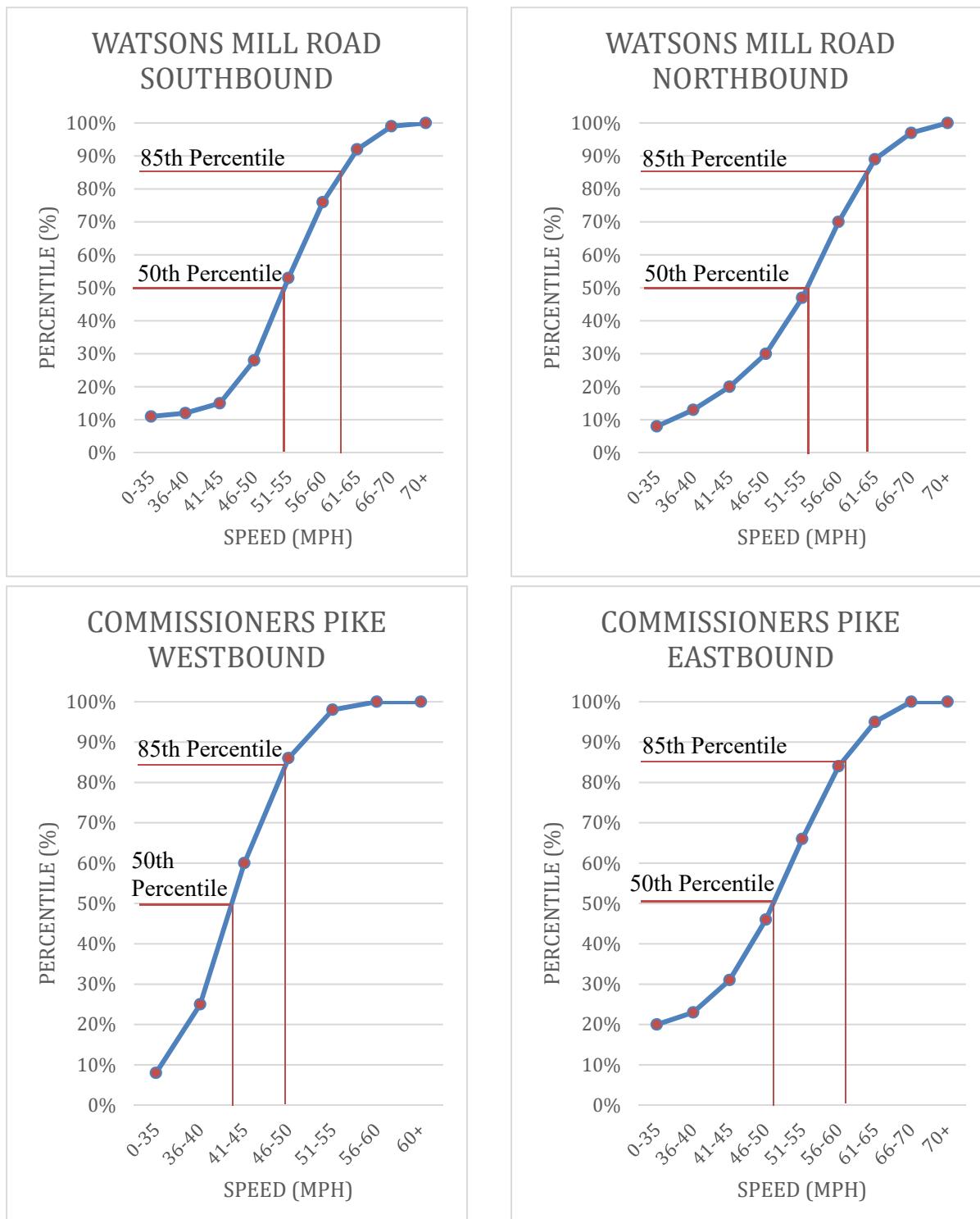
Speed data approaching the study intersection was collected using radar detection equipment between September 5 and 7, 2017. This data was used along with the crash data and the Federal Highway Administration's speed management software USLIMITS2 in order to determine an appropriate speed limit for this area. The raw speed data can be found in Appendix C and is summarized in Table 5 and Figure 3 below.

Table 5 – Existing Speed Data

Approach	Posted/Statutory Speed Limit	50th Percentile Speed	85th Percentile Speed	10 MPH Pace Speed
Watsons Mill Road Northbound	50	55	64	56-65
Watsons Mill Road Southbound	50	54	62	51-60
Commissioner's Pike Eastbound	50	51	60	51-60
Commissioner's Pike Westbound	50	43	49	41-50

As the northbound and southbound approaches along Watsons Mill Road do not have a posted speed limit within the vicinity of the study intersection, a speed limit of 50 miles per hour (MPH) is assumed based on New Jersey Statute Title 39 – Motor Vehicles and Traffic Regulation, Section 39:4-98 – Rates of speed. The speed data collected indicates a 10 MPH pace speed between 51-60 MPH, a 50th percentile speed between 51-55 MPH, and an 85th percentile speed between 61-65 MPH. Based on the collected data, the USLIMITS2 software indicated a speed limit of 60 MPH would be acceptable. However, since the existing sight distance available at the intersection is not sufficient for a design speed of 55 MPH, we do not recommend revising the current speed limit of 50 MPH. The results of the speed limit analysis can be seen in Appendix D.

Figure 3 – Existing Speed Data



VII. TRAFFIC SIGNAL WARRANT ANALYSIS

A traffic signal analysis was completed for the study intersection using the criteria outlined in the 2009 Manual on Uniform Traffic Control Devices (MUTCD). Specifically, the analysis was based on the guidelines listed in Chapter 4C of the MUTCD. Various signal warrants were tested and the results show that none of the nine warrants are met for either location, indicating that a new signal is not technically warranted.

It should also be noted that the intersections do not meet any of the volume based warrants that are considered the more traditional warrant source for traffic signal installations. Additionally, the crash based warrant was also below the threshold required in the MUTCD. A summary of each warrant can be found in Appendix E.

VIII. RECOMMENDATIONS

Based on the existing conditions, a concept plan has been developed in order to mitigate safety concerns at the study intersection. The proposed improvements include relocating stop bars, installing a flashing beacon, upgrading stop signs, installing additional pavement markings, and performing pavement repair. We also recommend installing 50 MPH speed limit signs (R2-1) to reinforce the statutory speed limit on Watsons Mill Road. The purpose of these improvements is to provide an increased sight distance and clear stopping point along the approaches of Commissioner's Pike. The concept plan can be seen in Figure 4.

Due to the amount and type of crashes found to be occurring at the study intersection, the installation of a flashing beacon is designed to increase driver awareness and safety along all four approaches. The beacon will show a flashing yellow signal along the approaches of Watsons Mill Road to inform drivers of the approaching intersection and the potential for cars to enter the roadway. The approaches along Commissioners Pike will show a flashing red signal to supplement the oversized stop signs and provide advanced warning of the approaching intersection.

The improvement plan listed above includes improvements that aim to minimize the need for additional widening or full redesign/construction of the existing intersection. Since the sight distance and noted deficiencies at the study intersection are the primary safety concerns, roadway widening and added signal equipment should not be the primary focus for improvement. Based on the existing conditions, the improvement scenario has been developed out of a need to improve the sight distance and safety at the study intersection.

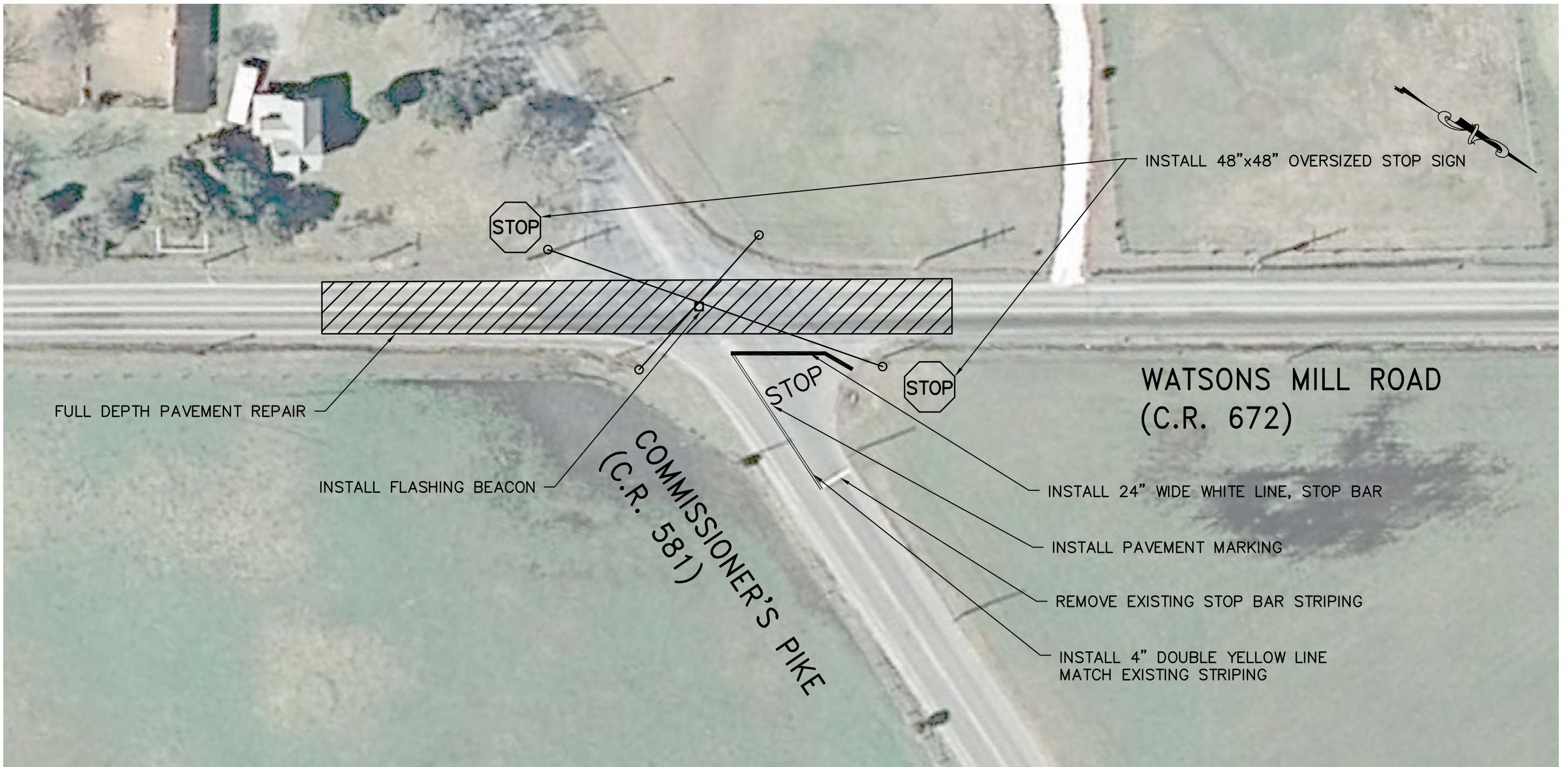


FIGURE 4

CONCEPT PLAN

WATSONS MILL ROAD (C.R. 672) & COMMISSIONER'S PIKE (C.R. 581)

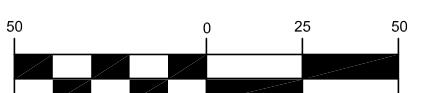
ELMER TOWNSHIP, SALEM COUNTY, NEW JERSEY

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GRAPHIC SCALE



(IN FEET)

1 inch = 50 ft.

Appendix A

PHOTOS



Looking north from Westbound Commissioners Pike



Looking north at Watsons Mill Road



Looking west at the Eastbound Commissioners Pike Approach



Looking east at Commissioners Pike



Looking south at Watsons Mill Road



Looking south from Westbound Watsons Mill Road



Westbound Watsons Mill Road Approach

Appendix B

TRAFFIC COUNT & SPEED

Salem County Engineers Office

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Page 1

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200001

Station ID:

CR 672 Watsons Mill Rd

Between CR 581 and Ballingers Mill Rd

Latitude: 0' 0.0000 Undefined

Southbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace	
	35	40	45	50	55	60	65	70	75	80	85	90	95	999				
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
14:00	8	4	19	23	16	5	0	0	0	0	0	0	0	0	75	41-50	42	
15:00	3	5	26	43	18	6	1	0	0	0	0	0	0	0	0	102	41-50	69
16:00	5	7	30	53	24	1	0	0	0	0	0	0	0	0	0	120	41-50	83
17:00	3	7	31	62	35	14	0	0	0	0	0	0	0	0	0	152	46-55	97
18:00	4	6	17	25	21	8	0	0	0	0	0	0	0	0	0	81	46-55	46
19:00	2	9	23	32	11	7	0	0	0	0	0	0	0	0	0	84	41-50	55
20:00	4	7	20	22	6	3	0	0	0	0	0	0	0	0	0	62	41-50	42
21:00	0	1	12	10	6	0	0	0	0	0	0	0	0	0	0	29	41-50	22
22:00	0	1	7	2	7	0	0	0	0	0	0	0	0	0	0	17	46-55	9
23:00	1	2	2	0	3	1	0	0	0	0	0	0	0	0	0	9	51-60	4
Total	30	49	187	272	147	45	1	0	0	0	0	0	0	0	0	731		
Percent	4.1%	6.7%	25.6%	37.2%	20.1%	6.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

AM Peak Vol.	14:00	19:00	17:00	17:00	17:00	17:00	15:00									17:00	
PM Peak Vol.	8	9	31	62	35	14	1									152	

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	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/06/17 01:00	0	0	2	3	1	0	0	0	0	0	0	0	0	0	6	41-50	5
02:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	5	46-55	4
03:00	0	0	2	5	0	0	0	0	0	0	0	0	0	0	4	45-54	4
04:00	0	2	3	1	1	1	0	0	0	0	0	0	0	0	8	36-45	5
05:00	3	4	3	2	0	1	0	0	0	0	0	0	0	0	13	36-45	7
06:00	0	3	8	6	6	2	0	0	0	0	0	0	0	0	25	41-50	14
07:00	6	1	12	27	13	3	0	0	0	0	0	0	0	0	62	46-55	40
08:00	1	5	18	10	12	3	1	0	0	0	0	0	0	0	50	41-50	28
09:00	3	5	9	10	4	1	2	0	0	0	0	0	0	0	34	41-50	19
10:00	5	3	12	11	5	1	0	0	0	0	0	0	0	0	37	41-50	23
11:00	2	2	7	6	9	4	0	0	0	0	0	0	0	0	30	46-55	15
12 PM	3	5	11	11	10	3	0	0	1	0	0	0	0	0	44	41-50	22
13:00	0	10	19	16	7	3	0	0	2	0	0	0	0	0	57	41-50	35
14:00	8	1	17	16	11	1	0	2	0	0	0	0	0	0	56	41-50	33
15:00	4	6	10	39	21	5	0	0	0	0	0	0	0	0	85	46-55	60
16:00	6	4	24	54	20	4	0	0	1	0	0	0	0	0	113	41-50	78
17:00	6	5	16	41	45	7	2	0	0	0	0	0	0	0	122	46-55	86
18:00	7	4	21	32	14	4	1	0	0	0	0	0	0	0	83	41-50	53
19:00	6	4	23	15	10	2	0	0	0	0	0	0	0	0	60	41-50	38
20:00	8	6	7	16	3	2	0	0	0	0	0	0	0	0	42	41-50	23
21:00	5	5	10	10	5	1	0	0	0	0	0	0	0	0	36	41-50	20
22:00	0	4	7	3	2	0	0	0	0	0	0	0	0	0	16	36-45	11
23:00	2	0	5	7	1	0	0	0	0	0	0	0	0	0	15	41-50	12
Total	75	79	246	346	203	49	6	2	4	0	0	0	0	0	1010		
Percent	7.4%	7.8%	24.4%	34.3%	20.1%	4.9%	0.6%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.	07:00	08:00	08:00	07:00	07:00	11:00	09:00								07:00		
	6	5	18	27	13	4	2								62		
PM Peak Vol.	14:00	13:00	16:00	16:00	17:00	17:00	17:00	14:00	13:00						17:00		
	8	10	24	54	45	7	2	2	2						122		

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	35	40	45	50	55	60	65	70	75	80	85	90	95	999				
09/07/17	0	0	4	1	2	0	0	0	0	0	0	0	0	0	7	39-48	5	
01:00	0	0	1	6	4	0	0	0	0	0	0	0	0	0	11	46-55	10	
02:00	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	40-49	3	
03:00	0	0	3	2	1	0	0	0	0	0	0	0	0	0	6	41-50	5	
04:00	0	1	5	3	2	0	0	0	0	0	0	0	0	0	11	40-49	8	
05:00	1	4	1	1	2	0	0	0	0	0	0	0	0	0	9	36-45	5	
06:00	1	1	2	12	7	3	0	0	0	0	0	0	0	0	26	46-55	19	
07:00	6	5	11	23	19	6	0	0	0	0	0	0	0	0	70	46-55	42	
08:00	0	3	10	21	14	5	0	0	0	0	0	0	0	0	53	46-55	35	
09:00	4	4	20	8	8	0	0	0	0	0	0	0	0	0	44	41-50	28	
10:00	4	6	8	16	6	1	0	0	0	0	0	0	0	0	41	41-50	24	
11:00	1	0	10	15	7	3	0	0	0	0	0	0	0	0	36	41-50	25	
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	17	24	76	110	72	18	0	0	0	0	0	0	0	0	317			
Percent	5.4%	7.6%	24.0%	34.7%	22.7%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	07:00	10:00	09:00	07:00	07:00	07:00										07:00		
PM Peak Vol.	6	6	20	23	19	6											70	

Total	122	152	509	728	422	112	7	2	4	0	0	0	0	0	0	2058	
Percent	5.9%	7.4%	24.7%	35.4%	20.5%	5.4%	0.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		

15th Percentile : 40 MPH

50th Percentile : 46 MPH

85th Percentile : 52 MPH

95th Percentile : 55 MPH

Stats 10 MPH Pace Speed : 41-50 MPH

Number in Pace : 1237

Percent in Pace : 60.1%

Number of Vehicles > 55 MPH : 125

Percent of Vehicles > 55 MPH : 6.1%

Mean Speed(Average) : 46 MPH

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 4

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200001

Station ID:

CR 672 Watsons Mill Rd

Between CR 581 and Ballingers Mill Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	0	1	9	9	21	10	5	3	1	0	0	0	0	59	54-63	31
15:00	6	2	1	9	14	15	28	4	0	0	0	0	0	0	79	56-65	43
16:00	6	6	2	9	15	11	27	6	7	0	0	0	0	0	89	56-65	38
17:00	1	5	3	6	15	30	17	6	7	1	1	0	0	0	92	56-65	47
18:00	1	0	3	11	11	13	13	3	0	0	0	0	0	0	55	56-65	26
19:00	25	4	6	7	11	4	9	2	1	0	0	0	0	0	69	46-55	18
20:00	2	3	3	7	7	5	3	1	0	0	0	0	0	0	31	46-55	14
21:00	0	2	3	6	6	1	2	0	1	0	0	0	0	0	21	46-55	12
22:00	0	0	0	2	0	3	4	0	0	0	0	0	0	0	9	56-65	7
23:00	0	0	3	0	1	1	0	0	1	0	0	0	0	0	6	41-50	3
Total	41	22	25	66	89	104	113	27	20	2	1	0	0	0	510		
Percent	8.0%	4.3%	4.9%	12.9%	17.5%	20.4%	22.2%	5.3%	3.9%	0.4%	0.2%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak Vol.	19:00 25	16:00 6	19:00 6	18:00 11	16:00 15	17:00 30	15:00 28	16:00 6	16:00 7	14:00 1	17:00 1				17:00 92		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 5

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200001

Station ID:

CR 672 Watsons Mill Rd

Between CR 581 and Ballingers Mill Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999		*	*
09/06/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	49-58	1
02:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	39-48	2
03:00	0	0	1	1	3	0	4	0	2	0	0	0	0	0	11	61-70	4
04:00	0	0	0	0	5	4	5	3	1	3	0	0	0	0	21	51-60	9
05:00	27	3	8	4	8	11	9	1	0	0	0	0	0	0	71	54-63	20
06:00	0	4	8	4	12	27	21	13	5	0	2	0	0	0	96	56-65	48
07:00	4	5	2	6	18	30	23	11	0	1	0	0	0	0	100	56-65	53
08:00	7	7	4	8	14	27	18	7	2	0	0	0	0	0	94	56-65	45
09:00	5	6	4	8	11	11	6	0	0	0	0	0	0	0	51	51-60	22
10:00	9	2	2	4	5	14	9	9	2	0	0	0	0	0	56	56-65	23
11:00	2	3	4	4	5	7	7	7	0	0	0	0	0	0	39	55-64	14
12 PM	17	3	8	3	7	10	11	3	2	0	0	0	0	0	64	56-65	21
13:00	1	3	5	3	6	21	4	3	2	0	0	0	0	0	48	51-60	27
14:00	5	1	5	10	9	14	18	8	1	2	0	1	0	0	74	56-65	32
15:00	1	7	4	12	14	11	17	3	1	0	0	0	0	0	70	56-65	28
16:00	5	1	5	8	13	14	13	2	5	1	0	0	0	0	67	56-65	27
17:00	1	6	8	7	19	21	24	5	3	0	0	0	0	0	94	56-65	45
18:00	4	1	8	6	5	7	6	3	0	0	0	0	0	0	40	41-50	14
19:00	2	5	4	4	9	3	5	2	0	0	0	0	0	0	34	46-55	13
20:00	2	1	2	7	7	4	3	1	1	0	0	0	0	0	28	46-55	14
21:00	3	1	1	3	5	4	4	0	0	0	0	0	0	0	21	51-60	9
22:00	0	1	1	2	2	4	2	0	1	0	0	0	0	0	13	56-65	6
23:00	1	1	1	1	2	2	0	0	1	0	0	0	0	0	9	51-60	4
Total	96	61	86	106	179	247	209	81	29	7	2	1	0	0	1104		
Percent	8.7%	5.5%	7.8%	9.6%	16.2%	22.4%	18.9%	7.3%	2.6%	0.6%	0.2%	0.1%	0.0%	0.0%			
AM Peak Vol.	05:00	08:00	05:00	08:00	07:00	07:00	07:00	06:00	06:00	04:00	06:00				07:00		
Vol.	27	7	8	8	18	30	23	13	5	3	2				100		
PM Peak Vol.	12:00	15:00	12:00	15:00	17:00	13:00	17:00	14:00	16:00	14:00	14:00	14:00	14:00	14:00	17:00		
Vol.	17	7	8	12	19	21	24	8	5	2					94		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 6

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200001

Station ID:

CR 672 Watsons Mill Rd

Between CR 581 and Ballingers Mill Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
09/07/17	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	44-53	2
01:00	16	2	1	1	0	0	2	0	0	0	0	0	0	0	22	1-10	5
02:00	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3	60-69	2
03:00	0	0	0	2	1	3	2	1	0	0	0	0	0	0	9	56-65	5
04:00	0	1	1	1	1	4	3	7	2	1	0	0	0	0	21	61-70	10
05:00	0	1	3	4	7	15	10	8	1	0	0	0	0	0	49	56-65	25
06:00	3	0	7	16	25	28	20	7	2	0	0	0	0	0	108	51-60	53
07:00	3	7	12	8	18	35	32	14	5	0	0	0	0	0	134	56-65	67
08:00	3	1	5	12	11	32	13	10	3	0	0	0	0	0	90	55-64	45
09:00	5	3	8	10	13	8	3	4	2	1	0	0	0	0	57	46-55	23
10:00	3	2	0	3	15	13	10	4	2	0	0	0	0	0	52	51-60	28
11:00	2	2	4	1	12	13	17	4	1	0	0	0	0	0	56	56-65	30
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	35	19	41	60	104	152	112	61	18	2	0	0	0	0	604		
Percent	5.8%	3.1%	6.8%	9.9%	17.2%	25.2%	18.5%	10.1%	3.0%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.	01:00	07:00	07:00	06:00	06:00	07:00	07:00	07:00	07:00	04:00					07:00		
PM Peak Vol.																134	
Total	172	102	152	232	372	503	434	169	67	11	3	1	0	0	2218		
Percent	7.8%	4.6%	6.9%	10.5%	16.8%	22.7%	19.6%	7.6%	3.0%	0.5%	0.1%	0.0%	0.0%	0.0%			

15th Percentile : 41 MPH

50th Percentile : 55 MPH

85th Percentile : 64 MPH

95th Percentile : 69 MPH

Stats 10 MPH Pace Speed : 56-65 MPH

Number in Pace : 937

Percent in Pace : 42.2%

Number of Vehicles > 55 MPH : 1188

Percent of Vehicles > 55 MPH : 53.6%

Mean Speed(Average) : 53 MPH

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 1

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200002

Station ID:

CR 672 Yorktown Rd

Between CR 581 and Robbins Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	1	2	7	29	15	8	5	0	1	0	0	0	0	68	51-60	44
15:00	1	0	7	19	23	18	16	2	0	0	0	0	0	0	86	46-55	42
16:00	4	1	3	8	38	21	9	4	1	0	0	0	0	0	89	51-60	59
17:00	2	0	0	9	40	21	25	5	0	1	0	0	0	0	103	51-60	61
18:00	4	0	0	12	21	13	7	1	0	0	0	0	0	0	58	49-58	34
19:00	1	0	2	17	17	5	5	0	0	0	0	0	0	0	47	46-55	34
20:00	0	0	5	12	8	4	0	0	0	0	0	0	0	0	29	46-55	20
21:00	0	0	8	4	5	1	2	0	0	0	0	0	0	0	20	41-50	12
22:00	0	0	1	0	4	3	1	0	0	0	0	0	0	0	9	51-60	7
23:00	0	0	6	0	0	2	0	0	0	0	0	0	0	0	8	36-45	6
Total	12	2	34	88	185	103	73	17	1	2	0	0	0	0	517		
Percent	2.3%	0.4%	6.6%	17.0%	35.8%	19.9%	14.1%	3.3%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak Vol.	16:00	14:00	21:00	15:00	17:00	16:00	17:00	14:00	16:00	14:00					17:00		
	4	1	8	19	40	21	25	5	1	1					103		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 2

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200002

Station ID:

CR 672 Yorktown Rd

Between CR 581 and Robbins Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane	Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999		*	*
09/06/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	49-58	2
	02:00	0	0	1	0	2	1	0	0	0	0	0	0	0	0	4	49-58	3
	03:00	0	0	0	4	5	1	1	0	0	0	0	0	0	0	11	46-55	9
	04:00	0	1	0	3	4	4	5	1	1	0	0	0	0	0	19	54-63	9
	05:00	16	2	8	9	11	8	6	2	0	0	0	0	0	0	62	46-55	20
	06:00	1	0	6	23	26	23	11	0	0	0	0	0	0	0	90	47-56	49
	07:00	6	0	4	15	45	26	7	2	0	0	0	0	0	0	105	51-60	71
	08:00	0	1	4	16	35	31	6	1	0	0	0	0	0	0	94	51-60	66
	09:00	0	0	7	18	22	6	1	0	0	0	0	0	0	0	54	46-55	40
	10:00	4	0	3	14	25	6	5	1	0	0	0	0	0	0	58	46-55	39
	11:00	2	0	2	2	17	5	4	1	0	0	0	0	0	0	33	51-60	22
	12 PM	0	1	0	6	5	1	0	0	0	0	0	0	0	0	13	46-55	11
	13:00	0	0	1	0	2	2	0	0	0	0	0	0	0	0	5	50-59	4
	14:00	0	0	0	1	5	1	2	0	0	0	0	0	0	0	9	49-58	6
	15:00	0	0	0	2	1	4	0	1	0	0	0	0	0	0	8	50-59	5
	16:00	0	0	0	0	2	1	1	0	0	0	0	0	0	0	4	49-58	3
	17:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5	46-55	4
	18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*
	19:00	4	2	0	1	0	0	0	0	0	0	0	0	0	1	8	31-40	3
	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*
	21:00	3	0	0	0	0	0	0	1	0	0	0	0	0	0	4	*	1
	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*
	23:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	29-38	1
	Total	36	8	36	116	211	122	49	10	1	0	0	0	0	1	590		
	Percent	6.1%	1.4%	6.1%	19.7%	35.8%	20.7%	8.3%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%			
AM Peak	05:00	05:00	05:00	06:00	07:00	08:00	06:00	05:00	04:00							07:00		
Vol.	16	2	8	23	45	31	11	2	1							105		
PM Peak	19:00	19:00	13:00	12:00	12:00	15:00	14:00	15:00							19:00	12:00		
Vol.	4	2	1	6	5	4	2	1							1	13		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 3

Telephone (856) 935 - 7510 ext. 8549

Site Code: 67200002

Station ID:

CR 672 Yorktown Rd

Between CR 581 and Robbins Rd

Latitude: 0' 0.0000 Undefined

Northbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/07/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	44-53	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
10:00	0	0	1	0	2	2	0	0	0	0	0	0	0	0	5	50-59	4
11:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	39-48	1
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	0	0	1	2	3	2	0	0	0	0	0	0	0	0	0	8	
Percent	0.0%	0.0%	12.5%	25.0%	37.5%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.			10:00	05:00	10:00	10:00										10:00	
PM Peak Vol.			1	1	2	2										5	
Total	48	10	71	206	399	227	122	27	2	2	0	0	0	0	1	1115	
Percent	4.3%	0.9%	6.4%	18.5%	35.8%	20.4%	10.9%	2.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%		

15th Percentile : 45 MPH

50th Percentile : 52 MPH

85th Percentile : 59 MPH

95th Percentile : 63 MPH

Stats 10 MPH Pace Speed : 51-60 MPH

Number in Pace : 626

Percent in Pace : 56.1%

Number of Vehicles > 55 MPH : 381

Percent of Vehicles > 55 MPH : 34.2%

Mean Speed(Average) : 52 MPH

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Station ID:

CR 672 Yorktown Rd

Between CR 581 and Robbins Rd

Latitude: 0' 0.0000 Undefined

Southbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace	
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999				
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
14:00	0	0	9	9	24	23	17	5	0	0	0	0	0	0	87	51-60	47	
15:00	6	1	5	21	42	36	9	6	2	0	0	0	0	0	128	51-60	78	
16:00	2	2	0	19	43	36	18	5	1	0	1	0	0	0	127	51-60	79	
17:00	2	0	4	10	37	49	35	18	1	1	0	0	0	0	0	157	51-60	86
18:00	2	0	0	5	20	31	21	8	2	0	0	0	0	0	0	89	56-65	52
19:00	20	1	2	15	35	18	11	8	1	0	0	0	0	0	0	111	51-60	53
20:00	8	1	5	10	14	14	4	6	1	0	0	0	1	0	0	64	51-60	28
21:00	0	0	1	2	12	8	5	0	0	0	0	0	0	0	0	28	51-60	20
22:00	0	0	0	5	4	5	5	3	1	0	0	0	0	0	0	23	54-63	10
23:00	0	1	0	2	3	2	1	1	1	0	0	0	0	0	0	11	51-60	5
Total	40	6	26	98	234	222	126	60	10	1	1	1	0	0	825			
Percent	4.8%	0.7%	3.2%	11.9%	28.4%	26.9%	15.3%	7.3%	1.2%	0.1%	0.1%	0.1%	0.0%	0.0%				
AM Peak Vol.																		
PM Peak Vol.	19:00	16:00	14:00	15:00	16:00	17:00	17:00	17:00	15:00	17:00	16:00	20:00			17:00			
	20	2	9	21	43	49	35	18	2	1	1	1				157		

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Southbound Lane

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	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/06/17	0	0	1	0	2	3	0	1	0	0	0	0	0	0	7	51-60	5
01:00	0	0	0	0	3	0	2	0	0	0	0	0	0	0	5	46-55	3
02:00	0	0	0	1	0	0	1	0	1	0	0	0	0	0	3	39-48	1
03:00	0	0	0	1	5	2	1	0	1	0	0	0	0	0	10	51-60	7
04:00	0	4	2	0	1	0	0	1	2	0	1	0	0	0	11	36-45	6
05:00	24	0	0	5	4	1	0	1	0	0	0	0	0	0	35	46-55	9
06:00	1	1	3	4	4	6	8	2	0	0	0	0	0	0	29	56-65	14
07:00	4	1	1	10	11	17	17	6	0	0	0	0	0	0	67	56-65	34
08:00	1	0	3	7	14	15	12	5	1	0	0	0	0	0	58	51-60	29
09:00	0	0	2	11	6	4	5	2	0	0	0	0	0	0	30	46-55	17
10:00	5	3	0	14	19	6	5	2	0	0	0	0	0	0	54	46-55	33
11:00	0	0	2	4	5	4	4	1	0	0	0	0	0	0	20	46-55	9
12 PM	40	0	1	0	2	1	1	0	0	0	0	0	0	0	45	26-35	11
13:00	0	0	0	0	0	0	6	4	2	0	0	0	0	0	12	61-70	10
14:00	0	0	0	3	0	2	4	0	0	0	0	0	0	0	9	56-65	6
15:00	0	1	1	2	0	4	1	2	0	0	0	0	0	0	11	54-63	5
16:00	0	0	0	0	3	2	3	1	0	0	0	0	0	0	9	56-65	5
17:00	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4	54-63	3
18:00	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6	51-60	1
19:00	1	0	0	0	4	2	0	0	0	0	0	0	0	0	7	45-54	6
20:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	*	1
21:00	4	0	0	0	1	1	0	0	0	0	0	0	0	0	7	51-60	2
22:00	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4	*	1
23:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	49-58	1
Total	90	10	16	67	84	70	72	28	7	0	1	0	0	1	446		
Percent	20.2%	2.2%	3.6%	15.0%	18.8%	15.7%	16.1%	6.3%	1.6%	0.0%	0.2%	0.0%	0.0%	0.2%			
AM Peak Vol.	05:00	04:00	06:00	10:00	10:00	07:00	07:00	07:00	04:00	04:00	04:00				07:00		
Vol.	24	4	3	14	19	17	17	6	2		1				67		
PM Peak Vol.	12:00	15:00	12:00	19:00	16:00	15:00	13:00	13:00	13:00						21:00	12:00	
	40	1	1	4	3	4	6	4	2						1	45	

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Between CR 581 and Robbins Rd

Latitude: 0' 0.0000 Undefined

Southbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/07/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	39-48	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	64-73	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	54-63	1
07:00	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3	49-58	2
08:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	49-58	1
09:00	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3	54-63	2
10:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	50-59	2
11:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	44-53	1
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	0	0	0	1	3	4	4	0	1	0	0	0	0	0	13		
Percent	0.0%	0.0%	0.0%	7.7%	23.1%	30.8%	30.8%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak Vol.				01:00	07:00	10:00	09:00		03:00						07:00		
PM Peak Vol.				1	1	2	2		1						3		
Total	130	16	42	166	321	296	202	88	18	1	2	1	0	0	1	1284	
Percent	10.1%	1.2%	3.3%	12.9%	25.0%	23.1%	15.7%	6.9%	1.4%	0.1%	0.2%	0.1%	0.0%	0.1%	0.1%		

15th Percentile : 45 MPH

50th Percentile : 54 MPH

85th Percentile : 62 MPH

95th Percentile : 67 MPH

Stats

10 MPH Pace Speed : 51-60 MPH

Number in Pace : 617

Percent in Pace : 48.1%

Number of Vehicles > 55 MPH : 609

Percent of Vehicles > 55 MPH : 47.4%

Mean Speed(Average) : 52 MPH

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Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100002

Station ID:

CR 581 Commissioners Pike
Between CR 672 and Stockington Rd
Latitude: 0' 0.0000 Undefined

Westbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace	
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999				
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	5	4	6	9	6	2	2	0	0	0	0	0	0	0	34	41-50	15	
14:00	6	4	5	27	1	0	0	0	0	0	0	0	0	0	0	43	41-50	32
15:00	14	3	11	15	10	3	1	0	0	0	0	0	0	0	0	57	41-50	26
16:00	15	2	4	33	14	6	0	0	0	0	0	0	0	0	0	74	46-55	47
17:00	15	2	7	20	23	2	0	0	0	0	0	0	0	0	0	69	46-55	43
18:00	15	1	4	20	13	3	0	0	0	0	0	0	0	0	0	56	46-55	33
19:00	9	5	10	8	5	5	0	0	0	0	0	0	0	0	0	42	41-50	18
20:00	6	1	8	7	3	3	0	0	0	0	0	0	0	0	0	28	41-50	15
21:00	5	1	4	6	5	0	0	0	0	0	0	0	0	0	0	21	46-55	11
22:00	3	4	5	4	1	0	0	0	0	0	0	0	0	0	0	17	36-45	9
23:00	1	0	2	5	2	0	0	0	0	0	0	0	0	0	0	10	46-55	7
Total	94	27	66	154	83	24	3	0	0	0	0	0	0	0	0	451		
Percent	20.8%	6.0%	14.6%	34.1%	18.4%	5.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																		
PM Peak Vol.	16:00	19:00	15:00	16:00	17:00	16:00	13:00									16:00		
	15	5	11	33	23	6	2									74		

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Between CR 672 and Stockington Rd
Latitude: 0' 0.0000 Undefined

Westbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
09/06/17	1	0	4	2	2	0	0	0	0	0	0	0	0	0	9	41-50	6
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	35-44	1
03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	35-44	2
04:00	0	0	2	2	2	5	0	0	0	0	0	0	0	0	11	51-60	7
05:00	2	3	6	11	3	1	1	1	0	0	0	0	0	0	28	41-50	17
06:00	6	7	26	20	5	1	0	0	0	0	0	0	0	0	65	41-50	46
07:00	7	8	9	6	6	6	0	0	0	0	0	0	0	0	42	36-45	17
08:00	5	4	12	5	2	2	0	0	0	0	0	0	0	0	30	41-50	17
09:00	8	4	5	3	1	0	0	0	0	0	0	0	0	0	21	36-45	9
10:00	7	4	10	9	2	0	0	0	0	0	0	0	0	0	32	41-50	19
11:00	11	2	14	7	3	1	0	0	0	0	0	0	0	0	38	41-50	21
12 PM	13	1	5	5	0	2	0	0	0	0	0	0	0	0	26	41-50	10
13:00	6	3	7	13	7	0	0	0	0	0	0	0	0	0	36	41-50	20
14:00	10	5	11	5	2	3	0	0	0	0	0	0	0	0	36	41-50	16
15:00	12	5	10	12	4	0	0	1	0	0	0	0	0	0	44	41-50	22
16:00	12	3	8	18	13	0	0	0	0	0	0	0	0	0	54	46-55	31
17:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	40-49	2
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	101	50	131	120	52	21	1	2	0	0	0	0	0	0	478		
Percent	21.1%	10.5%	27.4%	25.1%	10.9%	4.4%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AM Peak Vol.	11:00	07:00	06:00	06:00	07:00	07:00	05:00	05:00								06:00	
PM Peak Vol.	12:00	14:00	14:00	16:00	16:00	14:00		15:00								16:00	
Total Percent	195	77	197	274	135	45	4	2	0	0	0	0	0	0	0	0	929

15th Percentile : 25 MPH
50th Percentile : 44 MPH
85th Percentile : 51 MPH
95th Percentile : 55 MPH

Stats 10 MPH Pace Speed : 41-50 MPH
Number in Pace : 471
Percent in Pace : 50.7%
Number of Vehicles > 55 MPH : 51
Percent of Vehicles > 55 MPH : 5.5%
Mean Speed(Average) : 41 MPH

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 3

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100002

Station ID:

CR 581 Commissioners Pike
Between CR 672 and Stockington Rd
Latitude: 0' 0.0000 Undefined

Eastbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	8	0	6	12	6	4	3	0	0	0	0	0	0	0	39	46-55	18
14:00	11	1	3	4	13	4	4	3	0	0	0	0	0	0	43	51-60	17
15:00	8	1	1	7	17	19	14	7	0	1	0	0	0	0	75	51-60	36
16:00	12	1	4	9	21	15	10	5	0	0	0	0	0	0	77	51-60	36
17:00	14	1	1	3	16	16	10	1	0	0	0	0	0	0	62	51-60	32
18:00	12	1	1	4	13	12	8	1	1	0	0	0	0	0	53	51-60	25
19:00	13	1	3	3	7	6	3	3	1	1	0	0	0	0	41	51-60	13
20:00	13	1	4	2	4	1	0	0	0	0	0	0	0	0	25	46-55	6
21:00	0	0	1	3	3	3	0	0	0	0	0	0	0	0	10	45-54	6
22:00	1	0	1	4	2	1	0	0	0	0	0	0	0	0	9	46-55	6
23:00	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3	54-63	2
Total	92	7	26	51	102	82	53	20	2	2	0	0	0	0	437		
Percent	21.1%	1.6%	5.9%	11.7%	23.3%	18.8%	12.1%	4.6%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak Vol.	17:00	14:00	13:00	13:00	16:00	15:00	15:00	15:00	18:00	15:00					16:00		
	14	1	6	12	21	19	14	7	1	1					77		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 4

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100002

Station ID:

CR 581 Commissioners Pike
Between CR 672 and Stockington Rd
Latitude: 0' 0.0000 Undefined

Eastbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/06/17	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3	54-63	2
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	59-68	1
02:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3	39-48	2
03:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	44-53	2
04:00	1	0	2	0	0	0	2	0	0	0	0	0	0	0	5	35-44	2
05:00	10	0	1	5	3	1	0	2	0	0	0	0	0	0	22	45-54	8
06:00	4	2	3	9	8	10	4	3	0	0	0	0	0	0	43	51-60	18
07:00	11	2	1	10	10	10	5	1	0	0	0	0	0	0	50	51-60	20
08:00	3	1	1	13	10	8	7	0	0	0	0	0	0	0	43	46-55	23
09:00	9	0	10	6	4	4	2	1	0	0	0	0	0	0	36	41-50	16
10:00	6	3	4	10	9	1	2	0	0	0	0	0	0	0	35	46-55	19
11:00	6	3	3	7	3	4	4	1	0	0	0	0	0	0	31	41-50	10
12 PM	18	2	5	2	6	5	0	1	0	0	0	0	0	0	39	51-60	11
13:00	6	2	6	9	4	2	2	3	0	0	0	0	0	0	34	41-50	15
14:00	16	2	5	5	2	6	3	2	2	0	0	0	0	0	43	41-50	10
15:00	4	0	2	9	19	18	10	7	2	0	0	0	0	0	71	51-60	37
16:00	4	0	2	6	10	18	11	2	0	0	0	0	0	0	53	54-63	29
17:00	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	35-44	2
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Total	98	17	48	93	90	89	55	24	4	0	0	0	0	0	518		
Percent	18.9%	3.3%	9.3%	18.0%	17.4%	17.2%	10.6%	4.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.	07:00	10:00	09:00	08:00	07:00	06:00	08:00	06:00								07:00	
PM Peak Vol.	12:00	12:00	13:00	13:00	15:00	15:00	16:00	15:00	14:00							15:00	
Total Percent	190	24	74	144	192	171	108	44	6	2	0	0	0	0	0	955	

15th Percentile : 26 MPH

50th Percentile : 51 MPH

85th Percentile : 60 MPH

95th Percentile : 65 MPH

Stats 10 MPH Pace Speed : 51-60 MPH

Number in Pace : 363

Percent in Pace : 38.0%

Number of Vehicles > 55 MPH : 331

Percent of Vehicles > 55 MPH : 34.7%

Mean Speed(Average) : 47 MPH

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 1

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike

Between CR 672 and CR 614

Latitude: 0' 0.0000 Undefined

Westbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace	
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999				
09/05/17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	5	6	13	10	6	2	1	0	0	0	0	0	0	0	43	41-50	23	
14:00	6	7	15	4	9	0	0	0	0	0	0	0	0	0	0	41	36-45	22
15:00	2	8	15	20	5	2	0	0	0	0	0	0	0	0	0	52	41-50	35
16:00	1	8	32	24	8	0	0	0	0	0	0	0	0	0	0	73	41-50	56
17:00	2	8	20	18	13	1	0	0	0	0	0	0	0	0	0	62	41-50	38
18:00	4	11	15	17	3	1	0	0	0	0	0	0	0	0	0	51	41-50	32
19:00	5	6	15	5	3	1	0	0	0	0	0	0	0	0	0	35	36-45	21
20:00	2	9	11	7	5	1	0	0	0	0	0	0	0	0	0	35	36-45	20
21:00	0	4	3	6	5	0	0	0	0	0	0	0	0	0	0	18	45-54	11
22:00	1	3	7	1	1	0	0	0	0	0	0	0	0	0	0	13	36-45	10
23:00	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	9	41-50	6
Total	28	72	149	115	59	8	1	0	0	0	0	0	0	0	0	432		
Percent	6.5%	16.7%	34.5%	26.6%	13.7%	1.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																		
PM Peak Vol.	14:00	18:00	16:00	16:00	17:00	13:00	13:00									16:00		
	6	11	32	24	13	2	1									73		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 2

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike

Between CR 672 and CR 614

Latitude: 0' 0.0000 Undefined

Westbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/06/17	0	3	1	2	1	0	0	0	0	0	0	0	0	0	7	36-45	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	44-53	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	4	6	1	0	0	0	0	0	0	0	0	0	11	41-50	10
05:00	6	2	8	6	5	3	0	0	0	0	0	0	0	0	30	41-50	14
06:00	0	11	23	18	9	4	0	0	0	0	0	0	0	0	65	41-50	41
07:00	5	7	12	16	5	0	0	0	0	0	0	0	0	0	45	41-50	28
08:00	1	4	14	7	4	0	0	0	0	0	0	0	0	0	30	41-50	21
09:00	3	5	10	7	0	0	0	0	0	0	0	0	0	0	25	40-49	17
10:00	5	5	9	4	1	1	0	0	0	0	0	0	0	0	25	36-45	14
11:00	6	5	16	8	3	0	0	0	0	0	0	0	0	0	38	41-50	24
12 PM	4	5	10	2	7	0	0	0	0	0	0	0	0	0	28	36-45	15
13:00	5	5	12	10	4	2	1	0	0	0	0	0	0	0	39	41-50	22
14:00	0	5	12	11	3	0	0	0	0	0	0	0	0	0	31	41-50	23
15:00	2	6	11	15	4	0	0	0	0	0	0	0	0	0	38	41-50	26
16:00	2	10	15	20	10	0	0	0	0	0	0	0	0	0	57	41-50	35
17:00	2	8	28	20	6	2	0	0	0	0	0	0	0	0	66	41-50	48
18:00	4	8	18	7	5	1	0	0	0	0	0	0	0	0	43	36-45	26
19:00	3	11	10	5	3	2	0	0	0	0	0	0	0	0	34	36-45	21
20:00	2	8	6	3	0	2	0	0	0	0	0	0	0	0	21	36-45	14
21:00	1	5	7	4	1	0	1	0	0	0	0	0	0	0	19	36-45	12
22:00	1	3	3	2	1	0	0	0	0	0	0	0	0	0	10	36-45	6
23:00	0	2	5	1	0	0	0	0	0	0	0	0	0	0	8	36-45	7
Total	52	118	235	174	75	17	2	0	0	0	0	0	0	0	673		
Percent	7.7%	17.5%	34.9%	25.9%	11.1%	2.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.	05:00 6	06:00 11	06:00 23	06:00 18	06:00 9	06:00 4										06:00 65	
PM Peak Vol.	13:00 5	19:00 11	17:00 28	16:00 20	16:00 10	13:00 2	13:00 1									17:00 66	

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 3

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike

Between CR 672 and CR 614

Latitude: 0' 0.0000 Undefined

Westbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/07/17	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	36-45	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	44-53	1
03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	35-44	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	29-38	1
05:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	39-48	3
06:00	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	40-49	3
07:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4	34-43	2
08:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	45-54	2
09:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	39-48	2
10:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	29-38	1
11:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	34-43	1
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	1	3	11	5	5	0	0	0	0	0	0	0	0	0	0	25	
Percent	4.0%	12.0%	44.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	06:00	04:00	00:00	06:00	08:00											06:00	
PM Peak Vol.	1	1	3	2	2											4	

Total	81	193	395	294	139	25	3	0	0	0	0	0	0	0	0	0	1130
Percent	7.2%	17.1%	35.0%	26.0%	12.3%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

15th Percentile : 37 MPH

50th Percentile : 43 MPH

85th Percentile : 49 MPH

95th Percentile : 53 MPH

Stats	10 MPH Pace Speed :	41-50 MPH
	Number in Pace :	689
	Percent in Pace :	61.0%
	Number of Vehicles > 55 MPH :	28
	Percent of Vehicles > 55 MPH :	2.5%
	Mean Speed(Average) :	43 MPH

Salem County Engineers Office

Page 4

110 Fifth Street, Suite 600
Salem New Jersey 08079

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike
Between CR 672 and CR 614
Latitude: 0' 0.0000 Undefined

Eastbound Lane

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 5

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike

Between CR 672 and CR 614

Latitude: 0' 0.0000 Undefined

Eastbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
09/06/17	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	44-53	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	44-53	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	34-43	1
04:00	0	2	0	0	2	2	1	0	0	0	0	0	0	0	7	51-60	4
05:00	30	2	3	2	1	3	0	0	0	0	0	0	0	0	41	1-10	9
06:00	11	6	13	14	5	4	1	0	0	0	0	0	0	0	54	41-50	27
07:00	3	6	8	10	9	5	3	0	0	0	0	0	0	0	44	44-53	19
08:00	2	9	15	9	9	5	0	0	1	0	0	0	0	0	50	36-45	24
09:00	4	4	9	9	3	2	1	0	0	0	0	0	0	0	32	41-50	18
10:00	32	11	10	5	1	1	3	0	0	0	0	0	0	0	63	36-45	21
11:00	9	1	9	6	2	1	0	0	0	0	0	0	0	0	28	41-50	15
12 PM	49	5	11	4	3	1	0	0	0	0	0	0	0	0	73	36-45	16
13:00	6	6	9	8	5	1	0	0	0	0	0	0	0	0	35	40-49	17
14:00	2	8	10	4	3	2	1	0	0	0	0	0	0	0	30	36-45	18
15:00	5	6	25	18	8	10	1	0	0	0	0	0	0	0	73	41-50	43
16:00	1	8	11	14	15	3	1	0	0	0	0	0	0	0	53	46-55	29
17:00	4	4	15	16	12	6	0	1	0	0	0	0	0	0	58	41-50	31
18:00	25	10	13	9	6	1	1	0	0	0	0	0	0	0	65	36-45	23
19:00	1	4	5	8	4	3	0	0	0	0	0	0	0	0	25	41-50	13
20:00	14	4	3	2	2	1	0	0	0	0	0	0	0	0	26	34-43	7
21:00	28	0	0	2	0	0	1	0	0	0	0	0	0	0	31	26-35	8
22:00	0	2	1	0	1	1	0	0	0	0	0	0	0	0	6	36-45	3
23:00	0	1	1	3	0	0	0	0	0	0	0	0	0	0	5	40-49	4
Total	226	99	172	144	93	53	15	1	1	0	0	0	0	0	804		
Percent	28.1%	12.3%	21.4%	17.9%	11.6%	6.6%	1.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.	10:00	10:00	08:00	06:00	07:00	07:00	07:00			08:00					10:00		
	32	11	15	14	9	5	3			1					63		
PM Peak Vol.	12:00	18:00	15:00	15:00	16:00	15:00	14:00	17:00							12:00		
	49	10	25	18	15	10	1	1							73		

Salem County Engineers Office

110 Fifth Street, Suite 600
Salem New Jersey 08079

Page 6

Telephone (856) 935 - 7510 ext. 8549

Site Code: 58100003

Station ID:

CR 581 Commissioners Pike

Between CR 672 and CR 614

Latitude: 0' 0.0000 Undefined

Eastbound Lane

Start Time	1	36	41	46	51	56	61	66	71	76	81	86	91	96	Total	Pace Speed	Number in Pace
	35	40	45	50	55	60	65	70	75	80	85	90	95	999			
09/07/17	14	0	0	2	0	0	0	0	0	0	0	0	0	0	16	26-35	4
01:00	47	0	0	0	0	0	0	0	0	0	0	0	0	0	47	26-35	13
02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	39-48	1
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	54-63	1
04:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	34-43	1
05:00	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5	40-49	5
06:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	35-44	2
07:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	35-44	2
08:00	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4	36-45	3
09:00	1	1	1	0	2	0	0	0	0	0	0	0	0	0	5	34-43	2
10:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	55-64	2
11:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	54-63	2
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	63	1	12	5	3	2	4	0	0	0	0	0	0	0	90		
Percent	70.0%	1.1%	13.3%	5.6%	3.3%	2.2%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AM Peak Vol.	01:00	09:00	05:00	00:00	09:00	02:00	10:00									01:00	
PM Peak Vol.	47	1	3	2	1	2										47	

Total	378	130	278	262	172	98	29	4	1	0	0	0	0	0	0	1352	
Percent	28.0%	9.6%	20.6%	19.4%	12.7%	7.2%	2.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
15th Percentile :						18 MPH											
50th Percentile :						43 MPH											
85th Percentile :						52 MPH											
95th Percentile :						58 MPH											

Stats	10 MPH Pace Speed :	41-50 MPH
	Number in Pace :	540
	Percent in Pace :	39.9%
	Number of Vehicles > 55 MPH :	132
	Percent of Vehicles > 55 MPH :	9.8%
	Mean Speed(Average) :	39 MPH

Appendix C

COLLISION DIAGRAM

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED: FROM: <u>1/1/2015</u> TO: <u>10/31/2017</u> <u>33</u> MONTHS			# VEHICLES	SEVERITY	LIGHT	ROAD SURFACE	WEATHER	ROUTE NUMBER/STREET NAME: <u>CR 672-CR 581</u> LOCATION: <u>cr 672-cr 581</u> MUNICIPALITY: <u>Alloway</u> COUNTY: <u>Salem</u> REFERENCE MARKERS / NODES: <u>-</u>								CASE No. <u> </u> FILE: <u>CR672581</u> BY: <u>AZ</u> DATE: <u>11/28/2017</u>					
No.	DATE	TIME	ACCIDENT DESCRIPTION												KEY #						
1	1/30/2017	14:59	2	INJ	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
2	1/30/2017	21:44	2	N/R	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
3	6/12/2016	15:04	2	INJ	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
4	10/3/2016	13:21	2	INJ	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
5	4/19/2016	17:16	2	INJ	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
6	12/6/2016	17:01	2	INJ	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
7	2/27/2015	16:49	2	N/R	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2
8	4/1/2015	15:26	2	N/R	1	1	1	1	17	7	4	Rang	Failure to maintain stop at stop sign								2

Accident Codes**CONTRIBUTING FACTORS****TRAFFIC CONTROL**

- 1. None
- 2. Traffic Signal
- 3. Stop Sign
- 4. Flashing Light
- 5. Yield Sign
- 6. Officer/Guard
- 7. No Passing Zone
- 8. RR Crossing Sign
- 9. RR Crossing Flashing Light
- 10. RR Crossing Gates
- 11. Stopped School Bus- Red Lights Flashing

- 11. Stopped School Bus- Red Lights Flashing
- 12. Construction Work Area
- 13. Maintenance Work Area
- 14. Utility Work Area
- 20. Other

ROADWAY CHARACTER

- 1. Straight and Level
- 2. Straight and Grade
- 3. Straight and Hillcrest
- 4. Curve and level
- 5. Curve and Grade
- 6. Curve and Hillcrest

ROADWAY SURFACE CONDITIONS

- 1. Dry
- 2. Wet
- 3. Muddy
- 4. Snow/Ice
- 5. Slush
- 0. Other

LIGHT CONDITIONS

- 1. Daylight
- 2. Dawn
- 3. Dusk
- 4. Dark-Road Lighted
- 5. Dark-Road unlighted
- 0. Unknown

WEATHER

- 1. Clear
- 2. Cloudy
- 3. Rain
- 4. Snow
- 5. Sleet/Hail/Freezing Rain
- 6. Fog/Smog/Smoke
- 0. Other

CONTRIBUTING FACTORS

- | | | |
|----------------------------------|-----------------------------|-------------------------------------------------|
| HUMAN | 40. Other Human | ENVIRONMENTAL |
| 2. Alcohol Involved | 41. Accelerator Defective | 61. Animal's Action |
| 3. Backing Unsafely | 42. Brakes Defective | 62. Glare |
| 4. Driver Inattention | 43. Headlights Defective | 63. Lane Marking Improper/Inadequate |
| 5. Driver Inexperience | 44. Other Lights Defective | 64. Obstruction/Debris |
| 6. Drugs (illegal) | 45. Oversized Vehicle | 65. Pavement Defective |
| 7. Failure to Yield Right-of-Way | 46. Steering Failure | 66. Pavement Slippery |
| 8. Fell Asleep | 47. Tire Failure/Inadequate | 67. Shoulders Defective/Improper |
| 9. Following Too Closely | 48. Tow Hitch Defective | 68. Traffic Control Device Improper/Non-Working |
| 10. Illness | 49. Windshield Inadequate | 69. View Obstructed/Limited |
| | 50. Other Vehicular | 70. Other Environmental |

- 11. Lost Consciousness
- 12. Passenger Distraction
- 13. Passing or Lane Usage Improper
- 14. Pedestrian's/Bicyclist's Error/Confusion
- 15. Physical Disability
- 16. Prescription Medication
- 17. Traffic Control Disregarded
- 18. Turning Improperly
- 19. Unsafe Speed
- 20. Unsafe Lane Changing
- 21. Fatigued/Drowsy

ACCIDENT SUMMARY SHEET

ROUTE: CR 672-CR 581

LOCATION: cr 672-cr 581

MUNICIPALITY: Alloway

COUNTY: Salem

TIME PERIOD COVERED: 1/1/2015 - 10/31/2017 REFERENCE MARKERS / NODES:

REMARKS: All Accidents

DATE: 11/28/2017

TIME OF DAY	# ACC	%	DIRECTION	# ACC	%	DIRECTION	# ACC	
6 AM - 10 AM	0	0.0%	North	4	25.0%	Northeast	0	0.0%
10 AM - 4 PM	4	50.0%	South	4	25.0%	Northwest	0	0.0%
4 PM - 7 PM	3	37.5%	East	5	31.3%	Southeast	0	0.0%
7 PM - 12 AM	1	12.5%	West	3	18.8%	Southwest	0	0.0%
12 AM - 6 AM	0	0.0%				Unspecified	0	0.0%
Unspecified	0	0.0%						
Total	8		Total	16				
WEATHER	# ACC	%	ACCIDENT TYPE	# ACC	%	ACCIDENT TYPE	# ACC	
Clear	8	100.0%	Rear End	0	0.0%	Pedestrian	0	0.0%
Cloudy	0	0.0%	Overtake	0	0.0%	Bicycle	0	0.0%
Rain	0	0.0%	Right Angle	8	100.0%	Parked Vehicle	0	0.0%
Snow	0	0.0%	Left Turn	0	0.0%	Backing	0	0.0%
Sleet/Hail/Freezing Rain	0	0.0%	Right Turn	0	0.0%	Run Off The Road	0	0.0%
Fog/Smog/Smoke	0	0.0%	Fixed Object	0	0.0%	Driveway	0	0.0%
Unspecified	0	0.0%	Head On	0	0.0%	Other	0	0.0%
Total	8		Sideswipe	0	0.0%	Unspecified	0	0.0%
Total	8					Total	8	
SURFACE	# ACC	%	ACCIDENT SEVERITY	# ACC	%			
Dry	8	100.0%	Fatal	0	0.0%			
Wet	0	0.0%	Injury	5	62.5%			
Mud/Slush	0	0.0%	Property Damage	0	0.0%			
Snow/Ice	0	0.0%	Non-Reportable	3	37.5%			
Unspecified	0	0.0%	Total	8				
Total	8							
TIME OF YEAR	# ACC	%	TYPE OF VEHICLE	# ACC	%			
Winter (Dec-Feb)	4	50.0%	Passenger Cars	16	100.0%			
Spring (Mar-May)	2	25.0%	Commercial Vehicles	0	0.0%			
Summer (Jun-Aug)	1	12.5%	Total	16				
Fall (Sep-Nov)	1	12.5%						
Total	8							
DAY OF WEEK	# ACC	%	LIGHT CONDITION	# ACC	%			
Sunday	1	12.5%	Daylight	8	100.0%			
Monday	2	25.0%	Dawn/Dusk	0	0.0%			
Tuesday	1	12.5%	Night	0	0.0%			
Wednesday	1	12.5%	Unspecified	0	0.0%			
Thursday	1	12.5%	Total	8				
Friday	2	25.0%						
Saturday	0	0.0%						
Total	8							

SUMMARY OF ACCIDENT SEVERITY BY YEAR:**2015 2016 2017**

Fatal Accidents	0	0	0
Injury Accidents	0	4	1
Property Damage Accidents	0	0	0
Non-Reportable Accidents	2	0	1
Total Accidents	2	4	2

ACCIDENT RATE CALCULATIONS

Segment
 Intersection

ROUTE: CR 672-CR 581
LOCATION: cr 672-cr 581
REFERENCE MARKERS / NODES: -
TIME PERIOD: 1/1/2015 - 10/31/2017

REMARKS: All Accidents

$$\text{ACCIDENT RATE} = \frac{(8 \text{ total accidents in 2.8 years}) * (1,000,000)}{(365 \text{ days/yr.}) * (2.8 \text{ years}) * (3500 \text{ veh./day})}$$
$$= \underline{\hspace{2cm}}$$

(Statewide average rate = n/a)

COLLISION DIAGRAM

Key Number =

MUNICIPALITY: Alloway

COUNTY: Salem

FILE: CR672581

INTERSECTION: CR 672-CR 581

CASE #:

PERIOD: 2 YEARS 9 MONTHS

FROM 1/1/2015 TO 10/31/2017

BY: AZ DATE: 11/28/2017



SYMBOLS	MANNER OF COLLISION
→ MOVING VEHICLE	→→ REAR END
M MOTORCYCLE	→→ OVERTAKE
↔ BACKING VEHICLE	↔↔ OUT OF CONTROL
→ STOPPED VEHICLE	→→ SKIDDING
TRAFFIC SIGNAL	→○ OVERTURNED
PARKED VEHICLE	↔↔ HEAD ON
P PEDESTRIAN	→↔ LEFT TURN
B BICYCLE	↔→ RIGHT TURN
FIXED OBJECT	→→ RIGHT ANGLE
Fatal	→↔ SIDE SWIPE

1. L O C A T I O N	CASE NO.: <input type="text"/>	HIGHWAY SAFETY INVESTIGATION REPORT			FOR OFFICIAL USE: DIVISION FILE _____ REVIEWED BY _____ SCHEDULED FOR B&A <input type="checkbox"/>
	TOWN <input checked="" type="checkbox"/> CITY OF <u>Alloway</u> <input type="checkbox"/> VILLAGE <input type="checkbox"/>				
	ROUTE NO. OR STREET NAME <u>CR 672-CR 581</u>	STATE HIGHWAY NO.	FROM OR AT REF. MARKER / NODE		
AT INTERSECTION WITH	ROUTE NO. OR STREET NAME <u>cr 672-cr 581</u>	STATE HIGHWAY NO.	TO REFERENCE MARKER / NODE		
2. REASON FOR INVESTIGATION <input type="checkbox"/> (a) IDENTIFIED BY ACCIDENT SURVEILLANCE SYSTEM <input checked="" type="checkbox"/> (b) POLICE HAZARD REPORT <input type="checkbox"/> (c) RESPONSE TO COMPLAINT OR INJURY <input type="checkbox"/> (d) REGIONALLY INITIATED <input type="checkbox"/> (e) OTHER (Explain)			3. RECOMMENDATION <input type="checkbox"/> (a) CAPITAL IMPROVEMENT (Initiate Proj. Devel. Study) <input checked="" type="checkbox"/> (b) TRAFFIC CONTROL IMPROVEMENT <input type="checkbox"/> (c) MAINTENANCE IMPROVEMENT <input checked="" type="checkbox"/> (d) OTHER <input type="checkbox"/> (e) NONE		
4. DISCUSSION (a) PROBLEMS IDENTIFIED <p>Lack of compliance to the traffic control (stop) sign. Inadequate sight distance looking south from stop sign at C.R. 581 Stop sign at the eastbound approach is too far back to provide adequate sight distance. Trees obscuring the sightline. Missing stop ahead warning sign in the southbound direction. No illumination at the intersection.</p>					
(b) PROPOSED SOLUTION <p>See Safety analysis and Recommendations.</p>					
(c) ACTION TAKEN					
5. ACCIDENT EXPERIENCE					6. BENEFIT/COST ANALYSIS
Number of Months	PERIOD BEGINNING		NUMBER OF ACCIDENTS		
	MONTH	YEAR	Fatal Accidents	Injury Accidents	Property Damage+ N/R Accidents
12	1	2015	0	0	0 + 2
12	1	2016	0	4	0 + 0
10	1	2017	0	1	0 + 1
					Check box if Benefit/Cost Calculations are attached <input type="checkbox"/>
PRINCIPAL INVESTIGATOR <u>AZ</u>					TITLE <u>Traffic Engineer</u>
APPROVED BY					DATE: <u>11/28/2017</u>

Appendix D

SPEED LIMIT ANALYSIS

USLIMITS2 Speed Zoning Report

Project Name: Watsons Mill Road & Commissioners Pike

Analyst: SPB

Date: 11-14-2017

Basic Project Information

Project Number: 1700F001
Route Name: Watsons Mill Road
From:
To:
State: New Jersey
County: Salem County
City: Woodstown borough
Route Type: Road Section in Undeveloped Area
Route Status: Existing

Roadway Information

Section Length: 1 mile(s)
Statutory Speed Limit: 50 mph
Adverse Alignment: No
Divided/Undivided: Undivided
Number of Lanes: 2
Roadside Hazard Rating: 2
Transition Zone: No

Crash Data Information

Crash Data Years: 3.00
Crash AADT: 1575 veh/day
Total Number of Crashes: 8
Total Number of Injury Crashes: 4
Section Crash Rate: 464 per 100 MVM
Section Injury Crash Rate: 232 per 100 MVM
Crash Rate Average for Similar Roads: 390
Injury Rate Average for Similar Roads: 58

Traffic Information

85th Percentile Speed: 64 mph
50th Percentile Speed: 55 mph
AADT: 1575 veh/day

Project Description: Analysis at the intersection of Watsons Mill Road (CR 672) and Commissioners Pike (CR 581)

Recommended Speed Limit:



Note: The final recommended speed limit is higher than the statutory speed limit of **50 mph** for this type of road. An engineering study such as the one carried out with USLIMITS is usually required to set a speed limit above the statutory limit.

Note: The injury crash rate for the section of 232 per 100 MVM is more than 30 percent above the average for similar roads (58) but below the critical rate (236). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Note: A section length of 1 miles is too short for speed zoning on public streets and roads for the recommended speed limit. You may consider lengthening the speed zone (if that is possible) or using the speed limits from adjacent sections (if they are appropriate for this section). If the 85th percentile speeds and other data you provided are representative of conditions for this short section, then the speed limit noted above should be considered. If the data were taken in a road section with adverse horizontal and vertical alignment, in a construction zone, or in a area with unique geometric and/or traffic control features, then the above noted speed limit may not be appropriate because this expert system is not designed to recommend speed limits for sharp horizontal curves, within the limits of construction zones, or in other special traffic situations.

Appendix E

TRAFFIC SIGNAL WARRANT ANALYSIS

Warrants Summary													
Information													
Analyst	AZ	Intersection			CR 581 and CR 672								
Agency/Co	Salem County	Jurisdiction			Alloway								
Date Performed	9/29/2017	Units			U.S. Customary								
Project ID	Traffic Signal Warrant	Time Period Analyzed			12 HR								
Study		North/South Street			CR 672								
East/West Street	CR 581	Major Street			North-South								
File Name	CR 672 AND CR 581.xhy												
Project Description <i>Traffic Signal Warrant Study</i>													
General			Roadway Network										
Major Street Speed (mph)	60	<input checked="" type="checkbox"/>	Population < 10,000			Two Major Routes			<input checked="" type="checkbox"/>				
Nearest Signal (ft)	0	<input type="checkbox"/>	Coordinated Signal System			Weekend Count			<input type="checkbox"/>				
Crashes (per year)	5	<input type="checkbox"/>	Adequate Trials of Alternatives			5-yr Growth Factor			1				
Geometry and Traffic		EB			WB			NB			SB		
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N	0	1	0	0	1	0	0	1	0	0	1	0	
Lane usage		T			T			T			T		
Vehicle Volume Averages (vph)	0	48	0	0	38	0	0	70	0	0	38	0	
Peds (ped/h) / Gaps (gaps/h)	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	
Delay (s/veh) / (veh-hr)	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	
Warrant 1: Eight-Hour Vehicular Volume													
<input type="checkbox"/>													
1 A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--													
<input type="checkbox"/>													
1 B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--													
<input type="checkbox"/>													
1 (56%) Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)													
<input type="checkbox"/>													
Warrant 2: Four-Hour Vehicular Volume													
<input type="checkbox"/>													
2 A. Four-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)													
<input type="checkbox"/>													
Warrant 3: Peak Hour													
<input type="checkbox"/>													
3 A. Peak-Hour Conditions (Minor delay --and-- minor volume --and-- total volume) --or--													
<input type="checkbox"/>													
3 B. Peak- Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)													
<input type="checkbox"/>													
Warrant 4: Pedestrian Volume													
<input type="checkbox"/>													
4 A. Four Hour Volumes --or--													
<input type="checkbox"/>													
4 B. One-Hour Volumes													
<input type="checkbox"/>													
Warrant 5: School Crossing													
<input type="checkbox"/>													
5. Student Volumes --and--													
<input type="checkbox"/>													
5. Gaps Same Period													
<input type="checkbox"/>													
Warrant 6: Coordinated Signal System													
<input type="checkbox"/>													
6. Degree of Platooning (Predominant direction or both directions)													
<input type="checkbox"/>													
Warrant 7: Crash Experience													
<input type="checkbox"/>													
7 A. Adequate trials of alternatives, observance and enforcement failed --and--													
<input type="checkbox"/>													
7 B. Reported crashes susceptible to correction by signal (12-month period) --and--													
<input checked="" type="checkbox"/>													

7 C. (56%) Volumes for Warrants 1A, 1B --or-- 4 are satisfied	<input type="checkbox"/>
<i>Warrant 8: Roadway Network</i>	<input type="checkbox"/>
8 A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2 or 3) --or--	<input type="checkbox"/>
8 B. Weekend Volume (Five hours total)	<input type="checkbox"/>
<i>Warrant 9: Grade Crossing</i>	<input type="checkbox"/>
9 A. Grade Crossing within 140 ft --and--	<input type="checkbox"/>
9 B. Peak-Hour Vehicular Volumes	<input type="checkbox"/>

Warrants Volume																
Information																
Analyst AZ Agency/Co Salem County Date Performed 9/29/2017 Project ID Traffic Signal Warrant Study East/West Street CR 581 File Name CR 672 AND CR 581.xhy							Intersection CR 581 and CR 672 Jurisdiction Alloway Units U.S. Customary Time Period Analyzed 12 HR North/South Street CR 672 Major Street North-South									
Project Description <i>Traffic Signal Warrant Study</i>																
Warrant 1																
Condition A—Minimum Vehicular Volume							Condition B—Interruption of Continuous Traffic									
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)			Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)						
Major Street	Minor Street	100%	80%	70%	56%	100%	80%	70%	56%	100%	80%	70%	56%			
1	1	500	400	350	280	150	120	105	84	750	600	525	420			
2 or more	1	600	480	420	336	150	120	105	84	900	720	630	504			
2 or more	2 or more	600	480	420	336	200	160	140	112	900	720	630	504			
1	2 or more	500	400	350	280	200	160	140	112	750	600	525	420			
										100	80	70	56			
Warrant 2																
Warrant 3																
Volume Summary																
Major Street Lanes 1			Minor Street Lanes 1			Speed		60	Population		<10000					
Hours	Major Volume	Minor Volume	Total Volume	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)						
07-08	179	50	274	No	No	No	No	No	No	No	No					
08-09	120	43	193	No	No	No	No	No	No	No	No					
09-10	82	36	143	No	No	No	No	No	No	No	No					
10-11	77	35	137	No	No	No	No	No	No	No	No					
11-12	94	38	163	No	No	No	No	No	No	No	No					
12-13	92	39	159	No	No	No	No	No	No	No	No					
13-14	87	39	165	No	No	No	No	No	No	No	No					
14-15	105	43	179	No	No	No	No	No	No	No	No					
15-16	108	75	221	No	No	No	No	No	No	No	No					
16-17	124	77	258	No	No	No	No	No	No	No	No					
17-18	160	66	288	No	No	No	No	No	No	No	No					
18-19	83	53	179	No	No	No	No	No	No	No	No					
Totals	1311	594	2359	0	0	0	0	0	0	0	0					

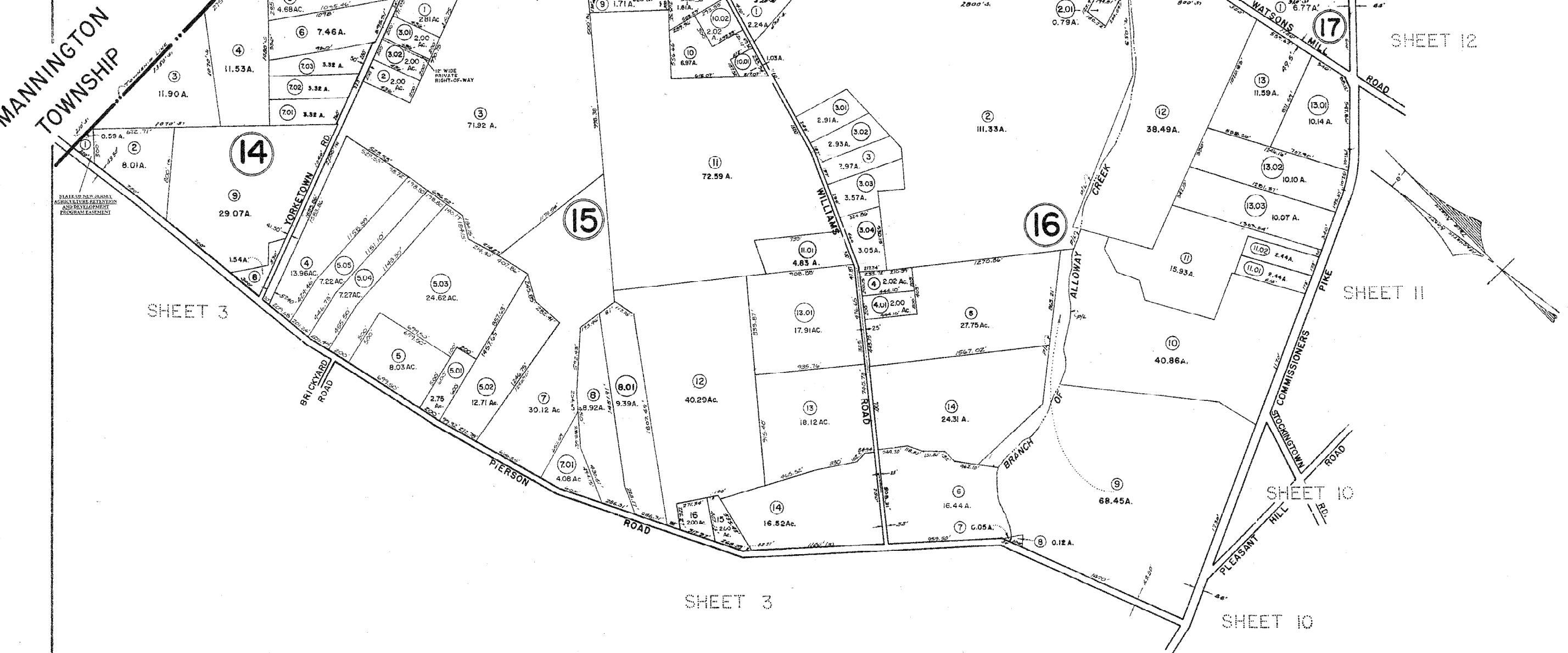
Appendix F

TAX MAP

MANNINGTON
TOWNSHIP

PILESGROVE

TOWNSHIP



NOTE:- LOTS II.01, II.02 BLOCK 16 SUBDIVISION "VERNA MAY PATRICK" FILED SALEM CO. CLERKS OFFICE MAY 3, 1977 MAP #375

NEW JERSEY DEPARTMENT OF THE TREASURER
DIVISION OF TAXATION
ENGINEERING & PLANNING TAX BUREAU
APPROVED AS A TAX MAP PERTAINING TO THE
PROVISIONS OF CHAPTER 175, LAWS OF 1966, N.J.
FOR THE DIRECTOR, DIVISION OF TAXATION
BY *[Signature]*
DATE DEC - 1966
STATE APPROVED
SKINNER & COMPTON, ENGINEERS
DECEMBER 1, 1966
REVISED _____

TAX MAP
ALLOWAY TOWNSHIP

SCALE 1" = 400' SALEM CO., N.J.

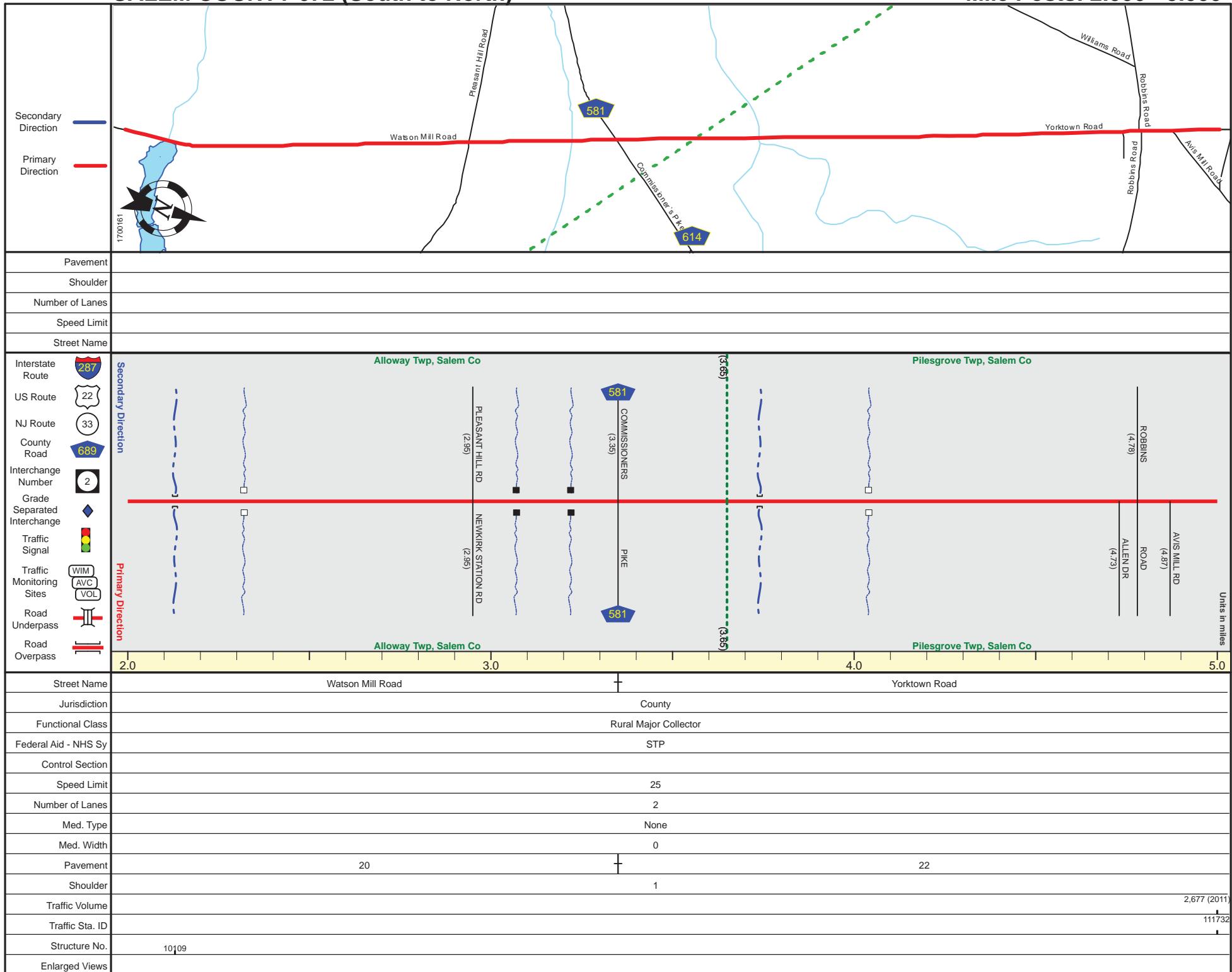
SKINNER & COMPTON, ENGINEERS

Appendix G

NJDOT STRAIGHT LINE DIAGRAM

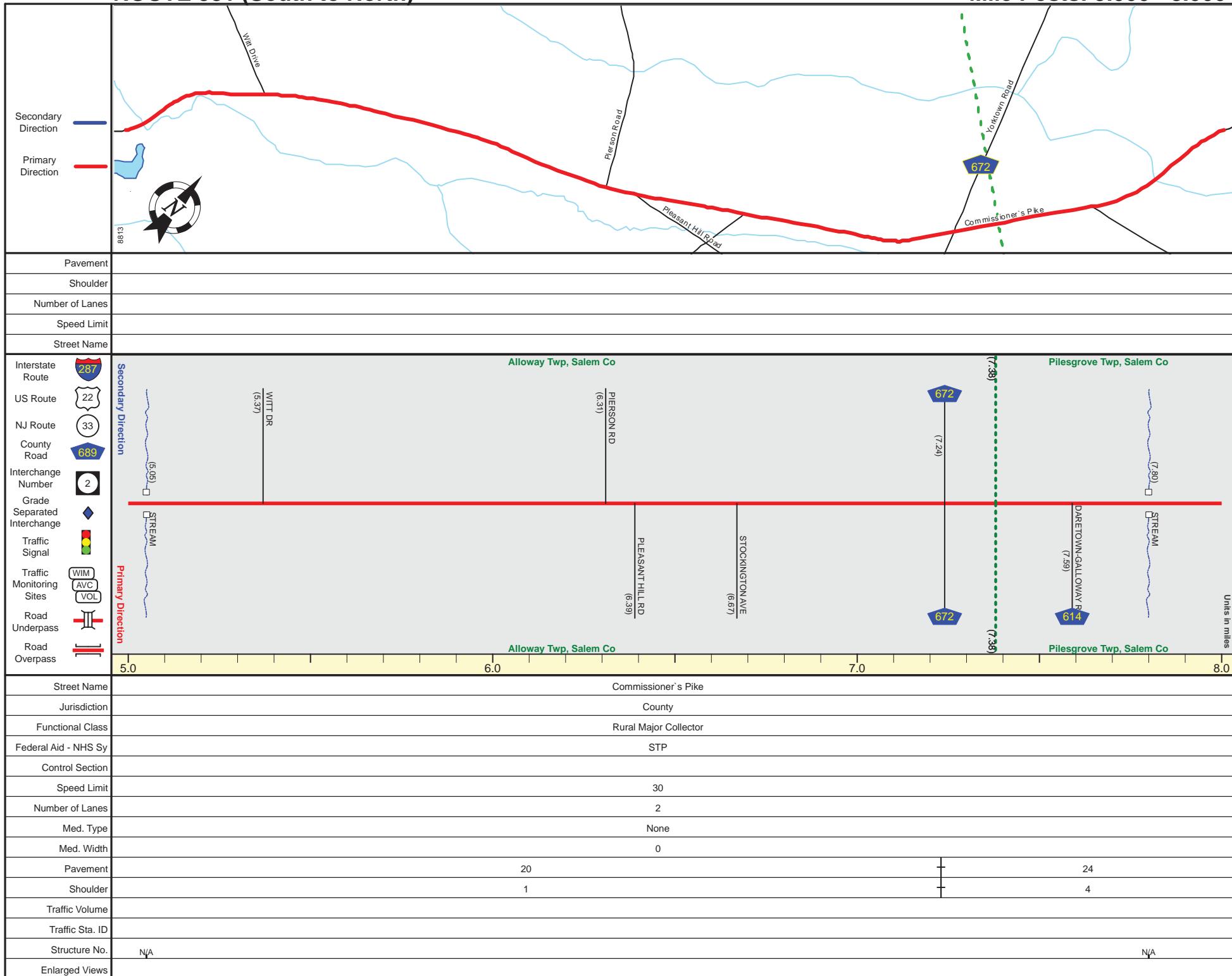
SALEM COUNTY 672 (South to North)

Mile Posts: 2.000 - 5.000



ROUTE 581 (South to North)

Mile Posts: 5.000 - 8.000



SRI = 00000581

Date last inventoried: June 2012