Traffic Engineering Consultant Services

EVALUATION OF INTERSECTION IMPROVEMENTS

Salem County, New Jersey

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Executive Summary

Four (4) intersections, two (2) intersection specific approaches and one (1) roadway corridor in Salem County, New Jersey were studied as part of an intersection/roadway improvement analysis. The evaluation of the intersections and roadway corridors included a field investigation, traffic data collection, crash evaluation, road condition analysis, signal warrant evaluation and development of conceptual improvements to assist Salem County in developing projects that will qualify for federal funding.

The following intersections, intersection approaches and roadway corridor were studied:

- Intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) – Upper Pittsgrove Township
- Intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive
- The approaches of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) – Elsinboro Township
- Intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643) – Oldmans Township
- Intersection of South Main Street (CR 672) and Green Street/Dickinson Street – Borough of Woodstown
- Roadway corridor of North Railroad Avenue (CR 602) from West Mill Street (CR 642) to US Route 130 – Oldmans Township

Automatic Traffic Recorder (ATR) counts, including speed data, were conducted at the following locations:

- Elmer-Shirley Road (CR 611) between State Street and Burlington Road (CR 677) from May 24th, 2021, through May 28th, 2021
- Elmer-Shirley Road (CR 611) between Eft Road and Burlington Road (CR 677) from May 24th, 2021, through May 28th, 2021
- Burlington Road (CR 677) between Sandy Bridge Road and Elmer-Shirley Road (CR 611) from May 24th, 2021, through May 28th, 2021
- Burlington Road (CR 677) between Garrison Road and Elmer-Shirley Road (CR 611) from May 24th, 2021, through May 28th, 2021
- Sinnickson Landing Road (CR 643) between Friendship Road and South Tilbury Road (CR 627) from May 11th, 2021, through May 14th, 2021.
- South Tilbury Road (CR 627) between Hackett Road and Tilbury Road (CR 661) from May 17th, 2021, through May 24th, 2021
- Tilbury Road (CR 661) between Stuart Drive and South Tilbury Road (CR 627) from May 11th, 2021, through May 30th, 2021
- Perkintown Road (CR 644) between I-295 and Straughns Mill Road (CR 643) from April 26th, 2021, through April 30th, 2021
- Perkintown Road (CR 644) between Tighe Road and Straughns Mill Road (CR 643) from April 20th, 2021, through April 23rd, 2021
- Straughns Mill Road (CR 643) between RT 295 and Perkintown Road (CR 644) from April 19th, 2021, through April 23rd, 2021
- Straughns Mill Road (CR 643) between Tighe Road and Perkintown Road (CR 644) from April 19th, 2021, through April 23rd, 2021
- South Main Street (CR 672) between Green Street and Church Street from April 26th, 2021, through April 30th, 2021
- North Railroad Avenue (CR 602) between Route 130 and railroad tracks from April 26th, 2021, through April 30th, 2021
- North Railroad Avenue (CR 602) between Mill Street and railroad tracks from April 26th, 2021, through April 30th, 2021

Crash data for the study locations for the five-year period from 2015 to 2019 was obtained through the NJDOT website. Crashes are broken down by date, time of day, location, type, roadway surface conditions and severity.

The intersection of Burlington Road (CR 661) and Elmer-Shirley Road (CR 611) is a four-leg intersection in Pittsgrove Township. At Burlington Road (CR 661) and Elmer-Shirley Road (CR 611) Pennoni is recommending the following improvement options for the County's consideration:

- Intersection be changed from a two-way stop to a 4-way stop controlled intersection
- Stop signs with reflectors on supports and "All Stop" signs be added to the northeast and southwest corners of the intersection
- "All Stop" signs to be added to the existing stop signs on Burlington Road (CR 677)
- Advanced warning "Stop Ahead" signs to be added on Elmer-Shirley Road (CR 611)
- Existing stop sign on the southeast corner of the intersection should be replaced
- Rumble Strips on Burlington Road (CR 677) should be refreshed
- Stop lines and rumble strips are to be added to Elmer-Shirley Road (CR 611)
- Missing u-post reflector on northbound approach of Burlington Road (CR 677) be replaced
- It is recommended the county trim the vegetation within the right-of-way on the south side of Elmer -Shirley Road (CR 611)

The intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive is a four-leg intersection in Elsinboro Township. At Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive, and at its approaches, Pennoni is recommending the following improvement options for the County's consideration:

- The County can consider installation of radar speed sign
- Convert the intersection to a traditional 2-way stop controlled intersection
- Provide stop sign and stop line on Tilbury Road (CR 661) at the study intersection
- Advanced warning "Stop Ahead" sign to be added on Tilbury Road (CR 661)
- Remove existing yield sign, existing yield ahead pavement markings, and existing yield ahead sign
- Rumble strips to be added on Tilbury Road (CR 661)
- Milling and resurfacing the intersection
- Restriping intersection to reflect proposed operating condition

The intersection of Straughns Mill Road (CR 643) and Perkintown Road (CR 644) is a four-leg intersection in Oldmans Township. At Straughns Mill Road (CR 643) and Perkintown Road (CR 644) Pennoni is recommending the following improvement options for the County's consideration:

- Intersection be changed from a two-way stop to a 4-way stop controlled intersection
- Stop signs with reflectors on supports and "All Stop" signs be added to the northeast and southwest corners of the intersection
- "All Stop" signs are to be added to the existing stop signs on Straughns Mill Road
- Advanced warning "Stop Ahead" signs are to be added on and Perkintown Road (CR 644)
- Stop lines are to be added on Perkintown Road (CR 644)
- Rumble strips are to be added to Straughns Mill Road (643) and Perkintown Road (CR 644)

The intersection of South Main Street (CR 672) and Green Street/Dickinson Street is a four-leg intersection in the Borough of Woodstown. At South Main Street (CR 672) and Green Street/Dickinson Street Pennoni is recommending the following improvement options for the County's consideration:

- Install Rapid Rectangular Flashing Beacons
- Refresh crosswalk pavement markings on Green Street and Dickinson Street
- Install "PED XING AHEAD" pavement markings in advance of center crosswalk
- Installation of handicap ramp on east side of South Main Street (CR 672) perpendicular to the handicap ramp located on the northeast corner of the study intersection on Green Street
- Reconstruct handicap ramp on northeast corner of study intersection on Green Street

The intersection of North Railroad Avenue (CR 602) and US Route 130 is a three-leg intersection in Oldmans Township with stop control on North Railroad Avenue (CR 602). The intersection of North Railroad Avenue (CR 602) and West Mill Street is a four-leg intersection in Oldmans Township with stop control on all approaches. The study area corridor lies between US Route 130 and West Mill Street on North Railroad Avenue (CR 602). Pennoni is recommending the following improvement options for the County's consideration:

- Guiderail on north side of North Railroad Avenue (CR 602), north of Lerro Road to be replaced to conform with the latest MASH requirements.

Introduction

Four (4) intersections, the two (2) approaches to an intersection, and one (1) roadway corridor in Salem County, New Jersey were studied as part of an intersection and roadway improvement analysis. The evaluation of the intersections, approaches, and roadway corridors included a field investigation, traffic data collection, crash evaluation, road condition analysis, and signal warrant evaluation along with the development of conceptual improvements to assist Salem County in developing projects that will qualify for federal funding.

The following locations were evaluated:

- Intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) – Upper Pittsgrove Township
- Intersection of Sinnickson Landing Road (CR 661)/ Tilbury Road (CR 661) and South Tilbury Road (CR 627)
- The approaches of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) – Elsinboro Township
- Intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643) – Oldmans Township
- Intersection of South Main Street (CR 672) and Green Street/Dickinson Street – Borough of Woodstown
- Corridor of North Railroad Avenue (CR 602) from West Mill Street (CR 642) to US Route 130 – Oldmans Township

FIGURE 1 shows the overall study area. **FIGURES 2, 3, 4, 5 and 6** are 2021 aerials of the individual locations obtained from *Nearmap* software.

Methodology

The study locations selected by the County were evaluated based on the crash history, the roadway condition, and traffic. Based on the evaluations, recommendations regarding possible roadway improvements were developed. Specific elements of the evaluation include:

- An inventory of the roadway facilities in the vicinity of this project, including the existing physical and traffic operating characteristics
- ATR counts recording volume and speed at study locations
- Crash analysis for the study area roadways
- Multi-way stop/Signal warrant evaluation of the study intersections
- Identification of improvement options

Elmer-Shirley Road (CR 611) and Burlington Road (CR 677)

The intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) is a four-leg intersection in Pittsgrove Township with stop control on Burlington Road (CR 677). Each approach contains one left/thru/right lane and one receiving lane.

The following roadways make up the intersection:

- **Elmer-Shirley Road (CR 611)** is an east west rural major collector. Within the study area, Elmer-Shirley Road (CR 611) is 22' wide and designated two-way with one travel lane in each direction. Passing is allowed for the eastbound

direction, east of the intersection. Passing is allowed for the westbound direction, west of the intersection. A 6' wide shoulder is provided in each direction. The speed limit is not posted on Elmer-Shirley Road and New Jersey law sets speed limits as 50 mph on roadways unless otherwise posted or in school zones, business, or residential districts.

- **Burlington Road (CR 677)** is a north-south oriented rural local roadway. Within the study area, Burlington Road (CR 677) is 20' wide and designated two-way with one travel lane in each direction. A 1' wide shoulder is provided in each direction. The speed limit is not posted on Burlington Road and New Jersey law sets speed limits as 50 mph on roadways unless otherwise posted or in school zones, business, or residential districts. Burlington Road (CR 677) is stop controlled at Elmer-Shirley Road (CR 611).

Photo 1: Burlington Road (CR 677) looking north from the intersection.

Photo 2: Burlington Road (CR 677) looking north from the south leg of the intersection.

Photo 3: Elmer-Shirley Road (CR 611) looking east from intersection.

Photo 4: Elmer-Shirley Road (CR 611) looking west from intersection.

Existing Conditions

At the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677), the pavement on both Elmer-Shirley Road and Burlington Road is in good condition. Curbing is present at each corner of the intersection and the curb is in good condition. Elmer-Shirley Road appears to have been resurfaced and the pavement markings are in good condition. Burlington Road has 4 sets of painted rumble strips on each leg approaching the stop line. The pavement markings on Burlington Road, aside from those immediately at the intersection, are functional but do show significant wear. The pavement and pavement marking condition are shown in Photos 5 and 6.

There is a single, large stop sign (R1-1) with reflectors on the u-post supports located at the stop line of each Burlington Road approaches. The stop sign located at the southeast corner of the intersection is functional but shows some damage and is missing a reflector (see Photo 7). There are also "Stop Ahead" signs (W3-1) provided on each approach of Burlington Road approximately 700' prior to the intersection.

There are no pedestrian accommodations provided at the intersection (sidewalks, ADA ramps or crosswalks) and there are no signs indicating heavy pedestrian use (worn paths in the grass). No streetlights are provided at this intersection or along either approaches of Elmer-Shirley Road or Burlington Road.

The site distance evaluation of the existing condition showed that the available intersection site distance for the eastbound approach of Elmer-Shirley Road (CR 611) (right or left turn from northbound) is 285 ft due to vegetation outside of ROW, which is lower than the required site distance of 530 ft in accordance with AASHTO Green Book, 2018, 7th edition. No site distance issues were observed for other turning movements. The ASSHTO design intersection site distance tables are shown in **APPENDIX A.**

Photo 5: Elmer-Shirley Road (CR 611) looking West from intersection

Photos 6: Rumble Strips on the southern leg of the intersection

Photo 7: Stop Sign at the southeast corner of the intersection.

Existing Traffic Volumes

Automatic Traffic Recorder (ATR) counts were conducted from Monday, May 24, 2021, thru Friday, May 28, 2021, at the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) and included volume and speed data. Elmer-Shirley Road (CR 611) is a rural major collector with bi-directional traffic volume of approximately 1,132 vehicles per day east of Burlington Road, and approximately 1,548 vehicles per day west of Burlington Road, based on the ATR. Burlington Road (CR 677) is a rural local roadway with bidirectional daily traffic of approximately 16 vehicles per day north of Elmer-Shirley Road, and approximately 45 vehicles per day south of Elmer-Shirley Road, based on the ATR.

The hourly traffic volumes are summarized in **TABLE 1** and the count data is provided in **APPENDIX B.**

TABLE 1
ATR VOLUME SUMMARY
ELMER-SHIRLEY ROAD (CR 611) AND BURLINGTON ROAD (677)

Time	Elmer-Shirley Road (East Approach)		Elmer-Shirley Road (West Approach)		Burlington Road (North Approach)		Burlington Road (South Approach)	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00-7:00 AM	6	55	21	67	3	3	5	0
7:00-8:00 AM	2	65	14	83	1	1	2	1
8:00-9:00 AM	16	87	31	134	0	0	7	1
9:00-10:00 AM	6	79	16	83	0	0	0	2
10:00-11:00 AM	16	69	29	83	0	0	5	0
11:00 AM -12:00 PM	12	70	32	71	4	4	3	0
12:00 – 1:00 PM	12	49	25	69	1	1	1	0
1:00 – 2:00 PM	19	76	30	87	0	0	2	1
2:00 – 3:00 PM	7	94	20	106	0	0	5	0
3:00 – 4:00 PM	11	100	39	116	1	1	1	1
4:00 – 5:00 PM	9	96	26	142	1	1	2	2
5:00 – 6:00 PM	14	77	21	86	2	2	5	1
6:00 – 7:00 PM	2	53	10	60	0	0	5	0
7:00 – 8:00 PM	4	28	12	39	0	0	1	0

Crash Analysis

Crash data for the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) for the five-year period from 2015 to 2019 was obtained through New Jersey Department of Transportation. Crashes are broken down by type, location, time of day, month and year, roadway conditions and severity.

Between 2015 and 2019, there were 15 crashes at or near the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677). Of the 15 crashes, 2 occurred in 2015, 2 crashes occurred in 2016, 1 crash occurred in 2017, 4 crashes occurred in 2018 and 6 crashes occurred in 2019. Of the 15 crashes, 10 (67%) were right angle crashes, 2 (13%) were fixed object crashes, and the remaining 3 (17%) crashes were rear-end, left turn, and same direction sideswipe crashes. There were 10 (67%) crashes that resulted in injuries and 1 crash in 2019 resulted in a fatality. All but 4 of the crashes occurred with dry roadway conditions and 10 of the crashes occurred during daylight hours.

A Summary of the crashes provided in the attached **TABLE 2**.

TABLE 2
CRASH SUMMARY
ELMER-SHIRLEY ROAD (CR 611) AND BURLINGTON ROAD (677)

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
4/18/2015	6:51 PM	Right Angle	Daylight	Dry	Injury
7/31/2015	9:02 PM	Right Angle	Dark	Dry	Property Damage
2/15/2016	6:24 PM	Head On	Dark	Icy	Property Damage
4/1/2016	4:03 PM	Rear-End	Daylight	Dry	Injury
7/1/2017	5:53 AM	Fixed Object	Dawn	Dry	Injury
4/18/2018	7:29 AM	Right Angle	Daylight	Dry	Property Damage
4/28/2018	6:04 PM	Right Angle	Daylight	Dry	Injury
5/23/2018	6:36 AM	Right Angle	Daylight	Wet	Injury
11/11/2018	4:10 PM	Left Turn	Daylight	Dry	Property Damage
3/1/2019	11:47 AM	Right Angle	Daylight	Wet	Injury
3/15/2019	6:12 AM	Fixed Object	Dark	Wet	Injury
6/11/2019	4:56 PM	Right Angle	Daylight	Dry	Injury
7/3/2019	4:07 PM	Right Angle	Daylight	Dry	Injury
11/19/2019	10:36 AM	Right Angle	Daylight	Dry	Injury
12/3/2019	5:27 PM	Right Angle	Dark	Dry	Fatality

The full summary of all the crash data and a crash diagram for Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) are found in **APPENDIX C.**

To analyze the crash data at the intersection, the crash rate for each condition and crash type was compared to the most recent crash rates for unsignalized intersections on County roadway systems provided by the NJDOT (2019). There were certain crash types at the intersection that were significantly higher than the NJDOT crash rates. See the comparisons below in **TABLE 3**. As discussed earlier, the site distance for the eastbound approach of Elmer-Shirley Road (CR 611) is substandard, which is the main contributor to 80% (8 out of 10) of the right-angle crashes at this intersection.

TABLE 3
CRASH SUMMARY COMPARISONS
ELMER-SHIRLEY ROAD (CR 611) AND BURLINGTON ROAD (CR 677)

Description	NJDOT Crash Rate	Intersection Crash Rate	Difference in Crash Rates
Right Angle	40.2 %	66.7 %	+26.4 %
Crashes with Injury	28.0 %	66.7 %	+38.6 %
Crashes with Fatality	0.17 %	6.7 %	+6.53 %

Multi-way Stop Warrant Analysis

The intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) has the minor road stop controlled. The intersection was evaluated for multi-way stop control.

Chapter 2B of the MUTCD identifies the following criteria for the consideration of a multi-way stop control:

- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation.
- The vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the highest hour.
- Where the previous two criteria are not satisfied but where the crash and volume criteria are both satisfied to 80 % of the minimum volumes.
- Need to control left-turn conflicts.
- Need to control vehicle/pedestrian conflicts.
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless cross traffic is also required to stop.

Multi-way Stop Warrant Analysis (MUTCD – Warrant 2B.07 – Multi-way Stop Evaluation)

Condition A: Where traffic signal control is justified, the multi-way stop is an interim measure to quickly control traffic while arrangements are being made.

Result: **Not Applicable**

Condition B: 5 or more reported crash in a 12-month period that is susceptible to correction by a multi-way stop installation.

In 2019 there were 6 crashes, 5 of which were angle crashes, a type that is susceptible to correction by a multi-way stop (right turn, left turn, and angle). All the crashes in 2019 resulted in injury and 1 resulting in a fatality.

Result: There were 5 crashes susceptible to correction reported in a 12-month period. Therefore, **Condition B is satisfied.**

Condition C: Minimum Volumes & Delay

In order to meet minimum volume criteria for a multi-way stop vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the highest hour. Where the 85th percentile approach speed of the major street exceeds 40 mph, the minimum volume warrants are reduced by 30%. The posted speed on the major street Elmer-Shirley Road (CR 611) is 50 mph and the measured 85th percentile speed approximately 57 mph thus meeting the requirement for reduced minimum volumes. A summary of the volume evaluation is shown in **TABLE 4.**

Count Date: 5/25/2021
Qualifiers:
40 mph speed exceeded criteria applicable: Yes
85th Percentile speed on Major Street above 40 mph: Yes
(Posted Speed Limit: 50, 85th Percentile Speed: 57 mph)

TABLE 4
MULTI-WAY STOP EVALUATION
MINIMUM VOLUME REQUIREMENTS
ELMER-SHIRLEY ROAD (CR 611) AND BURLINGTON ROAD (CR 677)

	Required Hourly Volume	Average 8 Hour Volume	# Hours That Meet Required Volume
Elmer-Shirley Road (CR 611)	210*	112*	0
Burlington Road (CR 677)	140**	6**	0

*Average vehicular volume entering the intersection from the major street (total of both approaches)

**Average combined vehicular, pedestrian & bicycle volume entering the intersection from the minor street (total of both approaches)

Requirement: Volumes for common Eight (8) hours above minimums.

Result: **Condition C is not met** for the either the major or minor street approaches.

Optional Criteria:
A multi-way stop control can be installed at a two-way stop-controlled intersection where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection reasonably safely, unless the conflicting cross street is required to stop.

A sight distance evaluation was conducted at the study intersection in accordance with the guidelines contained in the NJDOT Roadway Design Manual and A Policy on Geometric Design of Highways and Streets, 7th Edition. **TABLE 5** details the findings of the sight distance evaluation.

TABLE 5
MULTI-WAY STOP EVALUATION
SIGHT DISTANCE
ELMER-SHIRLEY ROAD (CR 611) AND BURLINGTON ROAD (CR 677)

Approach	Speed Limit (mph)	Sight Distance (ft.)					
		Required Stopping Sight Distance	Recommended			Actual	
			P	SU	WB	To Left	To Right
Burlington Road (CR 677) northbound	50*	425’	555’/480’	700’/625'	845’/775'	285’	900’+
Burlington Road (CR 677) southbound			555’/480’	700’/625'	845’/775'	860’	865’’

##/## = Left-Turn/Right-Turn or Cross
*Speed limit on Elmer-Shirley Road (CR 611) used to calculate minimum sight distance.

Result: As shown on **TABLE 5** the sight distance from the northbound approach of Burlington Road (CR 677) to the left does not meet the recommended sight distance for any of the vehicle classes die to vegetation outside of the ROW and does not provide the required stopping distance for a roadway with a 50 MPH speed limit.

It should be noted that there are farm fields on the northeast and southeast corners of the intersection. The sight distance measurements were conducted in April when there were no crops in the field. In the summer months if tall crops, such as corn, are planted there is the potential for reduced sight distances to the east.

Intersection Improvements

Upon evaluation of the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) the following intersection improvement items were identified for the County's consideration:

Traffic Control

It is recommended that the intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) be changed from a two-way stop controlled to a 4-way stop controlled intersection. Stop signs (R1-1) with reflectors on the supports and "All Stop" signs (R1-3P) and are to be added at the northeast and southwest corners of the intersection. In addition, "All Stop" signs (R1-3P) are to be added to the existing stop signs on Burlington Road. Advanced warning "Stop Ahead" signs (W3-1) are to be added approximately 700' from intersection on Elmer-Shirley Road (CR 611).

The existing stop sign located at the southeast corner of the intersection is in poor condition and should be replaced. The existing stop sign located at the northwest corner of the intersection is in good condition and does not need replacing.

Pavement Markings

The pavement markings on Elmer-Shirley Road (CR 611) and the stop lines on Burlington Road (CR 677) are relatively new and in good shape. The pavement markings on Burlington Road (CR 677) are in fair condition and functionable, but it is recommended as part of the intersection improvements that the rumble strips on Burlington Road be refreshed. As part to the recommended conversion from a two-way stop to a 4-way stop, stop lines, and rumble strips are to be added to Elmer-Shirley Road (CR 611).

Signing

As previously mentioned, stop signs, "all stop" signs, and "stop ahead" signs are to be added to the intersection. In addition, it is recommended that the existing damaged stop sign and the missing u-post reflector on northbound approach of Burlington Road (CR 677) be replaced.

Maintenance

It is recommended that the County trim the vegetation within the right-of way on the south side of the eastern Elmer-Shirley Road (CR 611) to improve sight distance.

The above improvements will mitigate the right-angle crashes at the intersection. In addition, they will improve the sight distance at the stop controlled westbound approach. The recommended improvements are illustrated on **FIGURE D1** in **Appendix D**.

The estimated cost of the improvements for County consideration is approximately $15,520. The engineers estimate is included in **APPENDIX E**.

Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive

The intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive is an un-signalized intersection on Sinnickson Landing Road (CR 661) and Tilbury Road (CR 661). The northbound approach along South Tilbury Road (CR 627) is yield controlled and the eastbound approach on Garden Drive is stop controlled. Each approach contains one shared left/thru/right lane and one receiving lane. The intersection is in Elsinboro Township.

Photo 8: South Tilbury Road (CR 627) looking Northeast.

Photo 9: Sinnickson Landing Road (CR 661) looking north.

Photo 10: Tilbury Road (CR 661) looking east.

Photo 11: Tilbury Road (CR 661) looking northwest.

The following County roadways make up the intersection:

- **Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661)** is an east-west oriented road. Sinnickson Landing Road (CR 661) / Tilbury Road is classified as an urban local collector. Within the study area Sinnickson Landing Road (CR 661) north of Garden Drive/South Tilbury Road is 22’ wide and designated two-way with one travel lane and a 1’ shoulder in each direction. East of South Tilbury Road (CR 627), Tilbury Road (CR 661) is 34’ wide and is designated two-way with one travel lane with no shoulder in either direction. The posted speed limit is 35 mph within the study area.

- **South Tilbury Road (CR 627)** is a north-south oriented road. South Tilbury Road (CR 627) is classified as an urban local collector. Within the study area South Tilbury Road (CR 627) is 22’ wide and designated two-way with one travel lane and a 1’ shoulder in each direction. The posted speed limit is 35 mph within the study area.

- **Garden Drive** is an east-west oriented road. Garden Drive is classified as a local roadway. Within the study area Garden Drive is approximately 22' wide and designated two-way with one travel lane in each direction. Garden Drive is a dead-end street with no outlet. The posted speed limit is 25 mph within the study area.

Existing Conditions

At the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive is in poor condition with potholes and evidence of previous pothole repair. The pavement located at the remaining legs of the intersection are in fair condition. The pavement markings at the intersection are in fair condition. The pavement and pavement markings are illustrated in Photos 12 and 13.

Photo 12: Roadway and Pavement Markings – Southern Leg of Intersection

Photo 13: Roadway and Pavement Markings – East Leg of Intersection

Curbing is present at all four corners of the intersection. There are no pedestrian accommodations provided at the intersection (sidewalks, crosswalks, ADA Ramps) and there are no signs indicating heavy pedestrian use (worn paths in the grass). There is a combined "Caution Children at Play" and "Slow Down" sign assembly located on the on the northeast corner. One (1) streetlight is provided at the northeast corner of the intersection and no other streetlights are provided at the intersection.

The intersection has unconventional traffic control layout in place, with 1 of the three approaches controlled by a stop sign and another having a yield sign. The dead-end street of Garden Drive is stop controlled with a painted stop line and the northbound approach of S. Tilbury Road is yield controlled, but no yield line is present. The yield and stop signs are paired with advanced warning signs ("Stop Ahead" and "Yield Ahead") and the northbound approach of S. Tilbury Road has "Yield Ahead" pavement markings. There are also several sets of double yellow lines within the intersections and there is no control for the conflicting moves from the westbound and southbound approaches.

Existing Traffic Volumes

Automatic Traffic Recorder (ATR) counts were conducted from on Sinnickson Road, Tilbury Road and South Tilbury Road between May 11th and May 21st, 2021 and included volume and speed data. South Tilbury Road (CR 627) is classified as an urban local collector with average bi-directional traffic volume of approximately 190 vehicles per day and an 85th percentile speed of 47 mph. Sinnickson Landing Road (CR 661) is classified as an urban local collector with average bi-directional traffic volume of approximately 205 vehicles per day and an 85th percentile speed of 30 mph. Tilbury Road (CR 661) is an urban local collector with average bi-directional traffic volume of approximately 468 vehicles per day and an 85th percentile speed of 40 mph.

The hourly traffic volumes are summarized in **TABLE 6** and the count data is provided in **APPENDIX B.**

TABLE 6
ATR VOLUME SUMMARY
SINNICKSON LANDING ROAD (CR 661)/TILBURY ROAD (CR 661)
AND SOUTH TILBURY ROAD (CR 627) AND GARDEN DRIVE

Time	Tilbury Road (East Approach)		Sinnickson Landing Road (North Approach)		S. Tilbury Road (South Approach)	
	EB	WB	NB	SB	NB	SB
6:00-7:00 AM	4	19	0	3	2	8
7:00-8:00 AM	16	21	3	4	5	5
8:00-9:00 AM	6	23	8	2	4	4
9:00-10:00 AM	7	17	10	3	5	1
10:00-11:00 AM	14	18	12	7	6	4
11:00 AM -12:00 PM	16	18	18	6	11	5
12:00 – 1:00 PM	20	28	11	2	10	4
1:00 – 2:00 PM	21	30	19	6	13	7
2:00 – 3:00 PM	27	28	15	3	14	8
3:00 – 4:00 PM	17	18	17	6	15	6
4:00 – 5:00 PM	22	23	23	5	18	10
5:00 – 6:00 PM	17	23	14	1	16	12
6:00 – 7:00 PM	14	13	15	3	14	11
7:00 – 8:00 PM	13	8	12	5	14	6

Crash Analysis

Crash data for the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive for the five-year period from 2015 to 2019 was obtained through New Jersey Department of Transportation. Crashes are broken down by type, location, time of day, month and year, roadway conditions and severity.

Between 2015 and 2019, there was 1 crash at or near the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive. The single crash occurred in 2017 and was a fixed object crash that involved an impaired driver.

A crash summary is provided in the attached **TABLE 7.**

TABLE 7
CRASH SUMMARY
SINNICKSON LANDING ROAD (CR 661)/TILBURY ROAD (CR 661)
AND SOUTH TILBURY ROAD (CR 627) AND GARDEN DRIVE

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
9/16/2017	5:00 AM	Fixed Object*	Dark	Dry	Property Damage

*Involved Drugs or Alcohol

The summary of all the crash data and a crash diagram Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive are found in **APPENDIX C.**

Multi-way Stop Warrant Analysis

The intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive has Garden Drive under stop controlled with a painted stop line and the northbound approach of S. Tilbury Road under yield control. The intersection was evaluated for multi-way stop control.

Multi-way Stop Warrant Analysis (MUTCD – Warrant 2B.07 – Multi-way Stop Evaluation)

Condition A: Where traffic signal control is justified, the multi-way stop is an interim measure to quickly control traffic while arrangements are being made.

Result: **Not Applicable**

Condition B: 5 or more reported crash in a 12-month period that is susceptible to correction by a multi-way stop installation.

As stated above, there was only a single crash at the intersection between 2015 and 2019 and that was a fixed object crash that involved an impaired driver.

Result: There were no 12-month periods between 2015 and 2019 where there were five crashes reported that were susceptible to correction. Therefore, **Condition B is not met**.

Condition C: Minimum Volumes & Delay

In order to meet minimum volume criteria for a multi-way stop vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the highest hour. Where the 85th percentile approach speed of the major street exceeds 40 mph, the minimum volume warrants are reduced by 30%. The speed on the major street Sinnickson Landing Road (CR 661)/South Tilbury Road (CR 661) is 35 mph and the measured 85th percentile speed is 30 mph thus not meeting the requirement for reduced minimum volumes. A summary of the volume evaluation is shown in **TABLE 8.**

Count Date: 5/12/2021
Qualifiers:
85th Percentile speed on Major Street above 40 mph: Y (within the study area)
40 mph speed exceeded criteria applicable: yes
(Posted Speed Limit: 35 mph, 85th Percentile Speeds: 39/47 mph mph)

TABLE 8
MULTI-WAY STOP EVALUATION
MINIMUM VOLUME REQUIREMENTS
SINNICKSON LANDING ROAD (CR 661)/TILBURY ROAD (CR 661) AND SOUTH TILBURY ROAD (CR 627) AND GARDEN DRIVE

	Required Hourly Volume	Average 8 Hour Volume	# Hours That Meet Required Volume
Sinnickson Landing Road (CR 661) /South Tilbury Road (CR 627)	17*	112*	0
Tilbury Road (CR 661)	24**	6**	0

*Average vehicular volume entering the intersection from the major street (total of both approaches)

**Average combined vehicular, pedestrian & bicycle volume entering the intersection from the minor street (total of both approaches)

Requirement: Average volumes for common Eight (8) hours above minimums.

Result: **Condition C is not met** for either approach.

Optional Criteria:

A multi-way stop control can be installed at a two-way stop-controlled intersection where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection reasonably safely unless the conflicting cross street is required to stop.

A sight distance evaluation was conducted at the study intersection in accordance with the guidelines contained in the NJDOT Roadway Design Manual. **TABLE 9** details the findings of the evaluation.

TABLE 9
MULTI-WAY STOP EVALUATION
SIGHT DISTANCE
SINNICKSON LANDING ROAD (CR 661)/TILBURY ROAD (CR 661) AND SOUTH TILBURY ROAD (CR 627) AND GARDEN DRIVE

Approach	Speed Limit (mph)	Sight Distance (ft.)					
		Required Stopping Distance	Recommended			Actual	
			P	SU	WB	To Left	To Right
Garden Drive EB	35*	250’	390’/335’	490’/440'	595’/540'	560’	570’
Tilbury Road (CR 661)			390’/335’	490’/440'	595’/540'	220’	300’’

##/## = Left-Turn/Right-Turn or Cross
*Speed Limit on street Sinnickson Landing Road (CR 661)/South Tilbury Road (within the study area) used to calculate minimum sight distance.

Result: As shown on **TABLE 9**, the sight distance from the Garden Drive approach does not meet the recommended sight distance for a roadway, due to vegetation outside of the ROW, with a 35 MPH on both approaches.

Intersection Improvements

Upon evaluation of the unsignalized intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and Tilbury Road (CR 627) and Garden Drive, the following intersection improvement items were identified for the County's consideration:

Traffic Control

It is recommended that the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive be changed from its current configuration to a more traditional 2-way stop controlled intersection to a 4-way stop controlled intersection. A new stop sign and stop line should be placed on Tilbury Road (CR 661) with reflectors on the supports. In addition, an advanced "Stop Ahead" sign (W3-1) to be added approximately 700' from intersection on Tilton Road (CR 661).

The existing yield sign located at the southeast corner of the intersection, the "yield ahead" pavement markings, and yield ahead sign (W3-2) on South Tilbury Road is to be removed.

Pavement Markings

The pavement markings on Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive be changed to reflect the proposed traffic control revision. As part to the recommended conversion to a two-way stop rumble strips are to be added to the Tilbury Road approach (CR 611).

Signing

As previously mentioned, stop signs, "stop ahead" signs are to be added to the intersection and the existing yield sign is to be removed.

Pavement Repair

The existing pavement Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive is in poor condition. Potholes and evidence of previous pothole repair is evident throughout the intersection. Considering the amount of striping removal necessary and new striping that is to be added as part of the traffic control recommendation, it is recommended that that the County consider milling and resurfacing the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive.

The recommended improvements are illustrated on **FIGURE D2** in **Appendix D**.

The estimated cost of the improvements for County consideration is approximately $8,762. The engineers estimate is included in **APPENDIX E**.

Approaches of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627)

Existing Roadway Geometry

Approaching the intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive drivers must negotiate horizontal curves on each approach. Sinnickson Landing Road (CR 661), Tilbury Road (CR 661), South Tilbury Road (CR 627) are classified as local urban roadways and Garden Drive is a local street. AASHTO recommends the design speeds ranging from 20 to mph 30 mph for local urban streets. In addition, AASHTO recommends the posted speeds should be compatible with the horizontal alignment of the roadway.

Crash Analysis

Crash data for the approaches to the intersection of Sinnickson Landing Road (CR 661), Tilbury Road (CR 661), South Tilbury Road (CR 627) and Garden Drive for the five-year period from 2015 to 2019 was obtained through New Jersey Department of Transportation. Crashes are broken down by type, location, time of day, month and year, roadway conditions and severity.

Between 2015 and 2019, there were 3 crashes along the approaches of Sinnickson Landing Road (CR 661), Tilbury Road (CR 661), South Tilbury Road (CR 627) and Garden Drive in the vicinity of their intersection. All 3 of the crashes occurred on Tilbury Road in 2015 and all 3 crashes involved a vehicle hitting a fixed object.

A crash summary is provided in the attached **TABLE 10.**

TABLE 10
CRASH SUMMARY
APPROACHES OF SINNICKSON LANDING ROAD (CR 661)/TILBURY ROAD (CR 661)
AND SOUTH TILBURY ROAD (CR 627) AND GARDEN DRIVE

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
2/10/2015	11:37AM	Fixed Object	Daylight	Icy	Property Damage
8/4/2015	9:10AM	Fixed Object	Daylight	Dry	Property Damage
11/22/2015	11:37AM	Fixed Object	Daylight	Dry	Injury

The summary of all the crash data and a crash diagram for the approaches of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661), Tilbury Road (CR 661), and Garden Drive are found in **APPENDIX C.**

Speed Limit Evaluation

The speed limit for all three roadways is 35 mph and the design speed each of the roads is 40 mph. The minimum radius for the design speed of 40 mph is 533 ft according to table 3.7 of AAHSTO Green book, 2018 7th edition.

FIGURE 7 illustrates the horizontal alignment of the Sinnickson Landing Road (CR 661) on the north side of the intersection. It is worth noting that the horizontal alignment was constructed based on aerial maps and all measurements are approximate. As shown the existing minimum horizontal curve radius is higher than the required value. The 85th percentile speed of the Sinnickson Landing Road (CR 661) is 30 mph, which is lower than the posted speed limit of 35 mph. There is an advisory speed limit sign of 25 mph on the horizontal curve at the intersection of the Sinnickson Landing Road (CR 661) and Friendship Drive.

FIGURE 8 illustrates the approximate horizontal alignment of the South Tilbury Road (CR 627). As shown, two consecutive horizontal curves on the south side of the intersection with the radius of 100 ft are considered as substandard. The maximum allowable speed for these curves is 20 mph. The advisory speed signs of 25 mph were installed in the vicinity of these curves. In addition, the 85th percentile speed for the South Tilbury Road (CR 627) is 37 mph which is close to the posted speed limit.

Although the maximum allowable speed for the horizontal curves is 20 mph, the crash analysis indicates no significant accidents occurred in the vicinity of or can be attributed to vehicular speed through these curves. This can be correlated with the familiarity of drivers with the geometry of the road. It is worth noting that the main users of the South Tilbury Road (CR 627) are local drivers.

The Tilbury Road (CR 661) is classified as local urban road and its posted speed is 35 mph. The speed data analysis does indicate that the 85th percentile speed of vehicles on Tilbury Road is 40 mph and 47% of drivers violated the posted the speed limit with the highest speed recorded being 57 mph.

Intersection Improvements

Upon evaluation of the approaches to the intersection of Sinnickson Landing Road (CR 661), Tilbury Road (CR 661), South Tilbury Road (CR 627), and Garden Drive at their intersection, the improvement items were identified for the County's consideration:

Speed Limit Signing

As previously mentioned, the speed limit posted on Tilbury Road is 35 mph. The 85th percentile speed recorded by the ATR on Tilbury Road was 40 mph with approximately 317 vehicles (17%) exceeding 40 mph and 78 vehicles (4%) exceeding 45 mph. The 85th percentile speed is a typically a dominant factor in establishing posted speeds. The manual on Uniform Traffic Control Devices (MUTCD) indicates that posted speeds "should be within 5 mph of the 85th-percentile speed of free-flowing traffic."

Based on the crash history, there is no indication that the speed limit on Tilbury Road is a factor in the any crashes and there is no indication that there is a need to alter the speed limit on Tilbury Road (CR 661). However, the County can consider the installation of radar speed sign, the purpose which is to reduce vehicular speeds by making drivers aware when they are driving above the posted speed limit. Studies have found that radar speed signs effective in slowing traffic and been found to reduce in 85th percentile speed up to 8 mph can result in a dramatic reduction in the speed of those vehicles that were traveling more than the limit, while not interfering with the progress of most of the traffic that is already traveling at or below the speed limit.

The estimated cost of the improvements for County consideration is approximately $7,500. The engineers estimate is included in **APPENDIX E**.

Perkintown Road (CR 644) and Straughns Mill Road (CR 643)

The intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643) is a four-leg intersection in Oldmans Township with stop control on Straughns Mill Road (CR 643). Each approach contains one left/thru/right lane and one receiving lane.

The following roadways make up the intersection:

- **Perkintown Road (CR 644)** is a north-south rural major collector. Within the study area, Perkintown Road is 20' wide and designated two-way with one travel lane in each direction. Passing is allowed for the eastbound direction east of the Straughns Mill Road (CR 643). A 1' wide shoulder is provided in each direction. The speed limit on Perkintown Road (CR 644) is not posted on west of Straughns Mill Road. The speed limit of 45 mph is posted eastbound on Perkintown Road east of Straughns Mill Road. New Jersey law sets speed limits as 50 mph on roadways unless otherwise posted or in school zones, business, or residential districts.

- **Straughns Mill Road (CR 643)** is an east-west oriented rural roadway. It is designated as a rural minor collector south of Perkintown Road and a rural major collector north of Perkintown Road. Within the study area, Straughns Mill Road (CR 643) is 20' wide and designated two-way with one travel lane in each direction. A 1' wide shoulder is provided in each direction. Passing is allowed for the northbound direction north of Perkintown Road (CR 644). Straughns Mill Road (CR 643) is stop controlled for both the northbound and southbound approaches. The speed limit is not posted on Straughns Mill Road (CR 643) and New Jersey law sets speed limits as 50 mph on roadways unless otherwise posted or in school zones, business, or residential districts.

Photo 14: Looking north on Straughns Mill Road (CR 643) toward the intersection

Photo 15: Looking east on Perkintown Road (CR 644) from the intersection

Photo 16: Looking west on Perkintown Road (CR 644) from the intersection

Photo 17: Looking south on Straughns Mill Road (CR 643) from the intersection

Existing Conditions

The pavement on Straughns Mill Road (CR 643) is in fair condition with some areas of cracking, potholes, and evidence of pothole repair. The pavement along Perkintown Road (CR 644) is in good condition. It should be noted that the patchwork and cracking is present at the northwest and southwest corners of the intersection (See Phots 18 and 19). The southwest corner of the intersection is heavily worn. The pavement markings on Straughns Mill Road (CR 643) and Perkintown Road (CR 644) are cracked and faded.

There are no pedestrian accommodations (sidewalk, crosswalks, etc..) provided at along Straughns Mill Road (CR 643), along Perkintown Road (CR 644), or at the intersection. There are no signs of heavy pedestrian use (worn paths in the grass) that would indicate a need for pedestrian accommodations. There is no curbing is provided at the intersection.

Two (2) type E inlets are located on the southwest corner, and one (1) Type E Inlet is located on the southeast corner of the intersection. It is possible that pavement condition located at the southwest corner near the eastbound approach of Perkintown Road may be due to a combination of flooding and heavy vehicle traffic over the same location (see Photo 16).

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Photo 18: Stop Bar at the northbound approach –cracking and faded pavement markings.

Photo 19 Northwest corner of the intersection – pothole repair and cracking.

Existing Traffic Volumes

Automatic Traffic Recorder (ATR) counts were conducted on each of the intersection approaches from Monday, April 19, 2021, thru Friday, April 23, 2021, and on Monday, April 26, 2021, thru Friday, April 30, 2021, and included volume and speed data. Perkintown Road (CR 644) is a rural major collector road with bi-directional traffic volume of approximately 180 vehicles per day and an 85th percentile speed of 49 mph. Straughns Mill Road between Rt. 295 and Perkintown Road and included volume and speed data. Straughns Mill Road (CR 643) is a rural major collector road with bi-directional traffic volume of approximately 376 vehicles per day and an 85th percentile speed of 52 mph.

Daily traffic volumes are summarized in **TABLE 11** and is provided in **APPENDIX B.**

TABLE 11
ATR VOLUME SUMMARY
PERKINTOWN ROAD (CR 644) AND STRAUGHNS MILL ROAD (CR 643)

Time	Perkintown Road (East Approach)		Perkintown Road (West Approach)		Straughns Mill Road (North Approach)		Straughns Mill Road (South Approach)	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00-7:00 AM	4	2	2	0	37	4	11	2
7:00-8:00 AM	14	8	0	0	51	4	12	5
8:00-9:00 AM	11	11	0	1	52	3	23	8
9:00-10:00 AM	3	5	0	1	15	4	7	4
10:00-11:00 AM	7	6	1	0	23	6	14	5
11:00 AM -12:00 PM	7	5	0	0	22	5	13	6
12:00 – 1:00 PM	8	4	5	1	31	8	20	5
1:00 – 2:00 PM	4	6	0	0	15	2	13	4
2:00 – 3:00 PM	7	15	3	2	27	7	17	6
3:00 – 4:00 PM	3	16	2	3	30	2	11	6
4:00 – 5:00 PM	5	8	0	4	29	10	14	5
5:00 – 6:00 PM	9	15	0	0	22	3	11	9
6:00 – 7:00 PM	5	8	1	0	21	4	12	1
7:00 – 8:00 PM	4	8	0	0	11	1	9	3

Crash Analysis

Crash data for the intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643) for the five-year period from 2015 to 2019 was obtained through New Jersey Department of Transportation. Crashes are broken down by type, location, time of day, month and year, roadway conditions and severity.

Between 2015 and 2019, there were 9 crashes at or near the intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643). Of the 9 crashes, 2 occurred in 2016, 1 crash occurred in 2017, 3 crashes occurred in 2018 and 3 crashes occurred in 2019. Of the 9 crashes, 7 (78%) were right angle crashes, 1 (11%) was a fixed object crash, and the remaining crash (11%) was a same direction rear-end crash. There were 4 (44%) crashes that resulted in injuries and 5 (56%) crashes that resulted in property damage only. All but 2 of the crashes occurred with dry roadway conditions and 7 of the 9 crashes occurred during daylight hours.

A Summary of the crashes provided in the attached **TABLE 12**.

TABLE 12
CRASH SUMMARY
PERKINTOWN ROAD (CR 644) AND STRAUGHNS MILL ROAD (CR 643)

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
11/15/2016	5:24 PM	Angle	Dark	Dry	Injury
11/26/2016	-	Angle	Dark	Dry	Property Damage
7/13/2017	10:03 AM	Angle	Daylight	Dry	Injury
8/17/2018	10:57 AM	Angle	Daylight	Dry	Injury
9/22/2018	1:03 PM	Angle	Daylight	Dry	Property Damage
10/23/2018	4:25 PM	Rear-End	Daylight	Dry	Property Damage
2/19/2019	12:37 PM	Angle	Daylight	Dry	Injury
3/1/2019	8:07 AM	Fixed Object	Daylight	Slush	Property Damage
10/27/2019	12:47 PM	Angle	Daylight	Wet	Property Damage

The full summary of all the crash data and a crash diagram for Perkintown Road (CR 644) and Straughns Mill Road (CR 643) are found in **APPENDIX C.**

To analyze the crash data at the intersection, the crash rate for each condition and crash type was compared to the most recent crash rates for unsignalized intersections on County roadway systems provided by the NJDOT (2019). There were certain crash types at the intersection that were significantly higher than the NJDOT crash rates. See the comparisons below in **TABLE 13**.

TABLE 13
CRASH SUMMARY COMPARISONS
PERKINTOWN ROAD (CR 644) AND STRAUGHNS MILL ROAD (CR 643)

Description	NJDOT Crash Rate	Intersection Crash Rate	Difference in Crash Rates
Right Angle	40.2 %	77.8 %	+37.8 %
Crashes with Injury	28.0 %	44.4 %	+16.4 %

Multi-way Stop Warrant Analysis

The intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643) has Straughns Mill Road stop controlled. The intersection was evaluated for multi-way stop control.

Chapter 2B of the MUTCD identifies the following criteria for the consideration of a multi-way stop control:

- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation.
- The vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the highest hour.
- Where the previous two criteria are not satisfied but where the crash and volume criteria are both satisfied to 80 % of the minimum volumes.
- Need to control left-turn conflicts.
- Need to control vehicle/pedestrian conflicts.
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless cross traffic is also required to stop.

Multi-way Stop Warrant Analysis (MUTCD – Warrant 2B.07 – Multi-way Stop Evaluation)

Condition A: Where traffic signal control is justified, the multi-way stop is an interim measure to quickly control traffic while arrangements are being made.

Result: **Not Applicable**

Condition B: 5 or more reported crash in a 12-month period that is susceptible to correction by a multi-way stop installation.

During the 5-year period analyzed there were 7 angle crashes, a type that is susceptible to correction by a multi-way stop (right turn, left turn, and angle). However, there was no 12-month period in which 5 correctable crashes occurred.

Result: There were no instance of 5 correctable crashes reported in a 12-month period. Therefore, **Condition B is not satisfied.**

Condition C: Minimum Volumes & Delay

In order to meet minimum volume criteria for a multi-way stop vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the highest hour. Where the 85th percentile approach speed of the major street exceeds 40 mph, the minimum volume warrants are reduced by 30%. The posted speed on the major street Perkintown Road (CR 644) is 45/50 mph and the measured 85th percentile speed is 49 mph thus meeting the requirement for reduced minimum volumes. A summary of the volume evaluation is shown in **TABLE 14.**

Count Date: 4/20/2021

Qualifiers:

40 mph speed exceeded criteria applicable: Yes

85th Percentile speed on Major Street above 40 mph: Yes

(Posted Speed Limit: 45/50, 85th Percentile Speed: 49 mph)

TABLE 14
MULTI-WAY STOP EVALUATION
MINIMUM VOLUME REQUIREMENTS
PERKINTOWN ROAD (CR 644) AND STRAUGHNS MILL ROAD (CR 643)

	Required Hourly Volume	Average 8 Hour Volume	# Hours That Meet Required Volume
Perkintown Road (CR 644)	210*	13*	0
Straughns Mill Road (CR 643)	140**	21**	0

*Average vehicular volume entering the intersection from the major street (total of both approaches)

**Average combined vehicular, pedestrian & bicycle volume entering the intersection from the minor street (total of both approaches)

Requirement: Volumes for common Eight (8) hours above minimums.

Result: **Condition C is not met** for the major or minor street approaches.

Optional Criteria:
A multi-way stop control can be installed at a two-way stop-controlled intersection where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection reasonably safely, unless the conflicting cross street is required to stop.

A sight distance evaluation was conducted at the study intersection in accordance with the guidelines contained in the NJDOT Roadway Design Manual. **TABLE 15** details the findings of the sight distance evaluation.

TABLE 15
MULTI-WAY STOP EVALUATION
SIGHT DISTANCE
PERKINTOWN ROAD (CR 644) AND STRAUGHNS MILL ROAD (CR 643)

Approach	Speed Limit (mph)	Sight Distance (ft.)					
		Required Stopping Sight Distance	Recommended			Actual	
			P	SU	WB	To Left	To Right
Straughns Mill Road (CR 643) northbound	50*	425’	555’/480’	700’/625'	845’/775'	900’+	350’
Straughns Mill Road (CR 643) southbound			555’/480’	700’/625'	845’/775'	900’+	480’

##/## = Left-Turn/Right-Turn or Cross
*Speed limit on Perkintown Road (CR 611) used to calculate minimum sight distance.

Result: As shown on **TABLE 16** the sight distance from the northbound approach of Straughns Mill Road (CR 643) to the right does not meet the recommended sight distance for any of the vehicle classes due to vegetation located outside of the ROW and does not provide the required stopping distance for a roadway with a 50 MPH speed limit.

It should be noted that there are farm fields on the northeast and southwest corners of the intersection. The sight distance measurements were conducted in April when there were no crops in the field. In the summer months if tall crops, such as corn, are planted there is the potential for reduced sight distances.

Intersection Improvements

Upon evaluation of the stop-controlled intersection of Straughns Mill Road (CR 643) and Perkintown Road (CR 644) the following intersection improvement items were identified for the County's consideration:

Traffic Control

It is recommended that the intersection of Straughns Mill Road (CR 643) and Perkintown Road (CR 644) be changed from a two-way stop controlled to a 4-way stop controlled intersection. Stop signs (R1-1) with reflectors on the supports and "All Stop" signs (R1-3P) and are to be added at the northeast and southwest corners of the intersection. In addition, "All Stop" signs (R1-3P) are to be added to the existing right side stop signs on Perkintown Road. Advanced warning "Stop Ahead" signs (W3-1) are to be added approximately 700' from intersection on Perkintown Road (CR 644).

Pavement Markings

It is recommended as part of the intersection improvements that the existing stop lines on Straughns Mill Road (CR 643) be refreshed. As part to the recommended conversion from a two-way stop to a 4-way stop, stop lines, and rumble strips are to be added to Elmer-Shirley Road (CR 611). It is also recommended that rumble strips be added to the Straughns Mill Road (CR 643) approaches.

Signing

As previously mentioned, stop signs, "all stop" signs, and "stop ahead" signs are to be added to the intersection.

The above improvements will mitigate the right-angle crashes at the intersection and address the sight distance issues at the intersection. The recommended improvements are illustrated on **FIGURE D3** in **Appendix D**.

The estimated cost of the identified improvements for the County's consideration are approximately $15,880. The engineers estimate is for the improvements is included in **APPENDIX E**.

Intersection of South Main Street (CR 672) and Green Street/Dickinson Street

The intersection of South Main Street (CR 672) and Green/Dickinson Street is an offset un-signalized intersection on Main Street (CR 672) with two local street stop-controlled streets oriented in the east/west direction. Each approach contains one shared left/thru/right lane and one receiving lane. The intersection is in the Borough of Woodstown.

The following roadways make up the intersection:

- **South Main Street (CR 72)** is a north-south road designated as an urban major collector. At the study intersection South Main Street is 40' wide and designated two-way with one travel lane in each direction and on-street parking. The speed limit on South Main Street is 25 mph.

- **Green Street** is an east-west road designated as a local roadway. At the study intersection Green Street is 30' wide and designated two-way with one travel lane in each direction and on-street parking. The speed limit on South Main Street is 25 mph.

- **Dickinson Street** is an east-west road designated as a local roadway. At the study intersection Green Street is 30' wide and designated two-way with one travel lane in each direction and on-street parking. The speed limit on South Main Street is 25 mph.

Photo 20: Looking south on South Main Street (CR 672) from north of the intersection.

Photo 21 Looking north on South Main Street (CR 672) from south of the intersection.

Photo 22: Looking west on Dickinson Street

Photo 23: Looking east on Green Street

Existing Condition

The pavement and pavement markings at the intersection of South Main Street (CR 672) and Green/Dickinson Street are in good condition. There is sidewalk present on all intersection approaches. There are handicap ramps located on the intersection corners for crossing Green and Dickinson Streets. The crossing for South Main Street, which is located between Green and Dickinson Streets, does not include dedicated handicap ramps. There is fairly frequent use of the South Main Street crossing, with next closest marked crossing located approximately 700' to the north at West Avenue and the Woodstown High School located approximately 1,500 feet to the east on Green Street. Curbing is provided at the intersection.

There are no inlets present at the intersections of Green Street and South Main Street and Dickinson Street and South Main Street.

Photo 24: Southeast corner, receiving end of crosswalk at Dickinson Street.

Photo 25: Northwest corner, receiving end of crosswalk at Green Street.

Existing Traffic Volumes

Automatic Traffic Recorder (ATR) counts were conducted from 2:00 PM Wednesday, April 26th, 2021, thru 12:00 PM Sunday, April 30th, 2021, on South Main Street (CR 672) between Green St and the counts included volume and speed data.

South Main Street is an urban major collector with recorded bi-directional traffic volume of approximately 280 vehicles per weekday and an 85th percentile speed of 30 mph.

The weekday daily traffic volumes are summarized in **TABLES 16 & 17.**

TABLE 16
ATR VOLUME SUMMARY
SOUTH MAIN STREET (CR 672) FROM MAPLE STREET TO CHURCH STREET

Time	South Main Street (North/South Approach)		
	Northbound	Southbound	Total
Thurs April 27th, 2021	107	207	314
Fri April 28th, 2021	104	164	268
Sat April 29th, 2021	90	166	256
AVERAGE TOTAL			280

The daily traffic volumes and speed data are provided in **APPENDIX B.**

Crash Analysis

Between 2015 and 2019, there were eight crashes on South Main Street (CR 672) between Maple Court and Church Street. Crash types identified were one backing, one side swipe, one rear-end, one fixed object, and four right angle crashes.

Summaries of the crashes provided in the attached **TABLE 17.**

TABLE 17
CRASH SUMMARY
SOUTH MAIN STREET (CR 672) FROM MAPLE STREET TO CHURCH STREET

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
6/9/2016	11:15 AM	Side Swipe	Daylight	Dry	Property Damage
7/4/2016	3:53 PM	Angle	Daylight	Dry	Injury
3/10/2017*	9:03 PM	Fixed Object	Dark	Dry	Property Damage
4/3/2017	2:57 PM	Angle	Daylight	Dry	Property damage
6/17/2017	1:09 PM	Backing	Daylight	Dry	Property damage
11/14/2018	2:49 PM	Angle	Daylight	Dry	Property damage
6/7/2019	1:02 PM	Rear-End	Daylight	Dry	Property damage
11/1/2019	8:06 AM	Angle	Daylight	Dry	Property damage

*Indicates Drugs or Alcohol

The summary of all the crash data and a crash diagram for South Main Street (CR 672) are found in **APPENDIX C.**

Speed Limit Evaluation

South Main Street (CR 672) is urban major collector. The posted speed on the northbound and southbound approach on South Main Street (CR 672) is 25 mph. The 25 mph posted speed increases to 30 mph after the intersection of South Main Street (CR 672) and West Avenue, located approximately a quarter mile north of Maple Street.

The speed data analysis showed that the 85th percentile speed on South Main Street (CR 672) between Green Street and Church Street is 30 mph, which is comparable with posted speed limit.

Photo 26: Posted Speed Limit on southbound approach, approximately 100 feet north of study intersection

The 85th percentile speed is a typically a dominant factor in establishing posted speeds. The manual on Uniform Traffic Control Devices (MUTCD) indicates that posted speeds "should be within 5 mph of the 85th-percentile speed of free-flowing traffic." The recorded 85th percentile speeds on South Main Street (CR 672) are consistent with the expected 85th percentile speed of free-flowing traffic as noted by the MUTCD.

The speed data collected between April 26th and April 30th recorded 127 (11%) vehicles exceeding the posted limit of 25 mph by more than 5 mph.

Based on the speed data collected and the crash evaluation, our office recommends flashing beacons and additional pedestrian pavement markings, which will be discussed further under the Improvements section below.

Improvements

Upon evaluation of the stop-controlled intersection of South Main Street (CR 672) and Green Street/Dickinson Street the following intersection improvement items were identified for the County's consideration:

Flashing Beacon

Rectangular Rapid Flash Beacons (RRFB)s are typically used to increase driver yielding behavior at crosswalks, aids in the effectiveness of other advance yield markings signs with "STOP HERE FOR PEDESTRIANS" signs. Studies have shown the positive impacts of beacons on pedestrian safety by increasing the number of cars yielding from 18 percent to 81 percent. When two additional beacons were added, the percent of cars yielding increased to 88 percent.

RRFBs can be automated (i.e., video or infrared), and/or can be manually activated via manual-push buttons. It should be noted that RRFBs typically receive power through solar panel units, however, for an installation at South Main Street (CR 672) and Green Street/Dickinson Street it is recommended that can be supplied through traditional means due to close proximity of existing utility lines. See photos 27 and 28 for examples of RRFBs.

Photo 27: Rectangular Rapid Flashing Beacons at a trail crossing

Photo 28: Rectangular Rapid Flashing Beacons at an intersection

Pavement Markings

It is recommended as part of the intersection improvements that the existing stop lines on Dickinson Street and Green Street be refreshed. It is also recommended that that the County consider using a "ladder" style crosswalk to increase visibility, specifically for the crosswalk crossing South Main Street (CR 672). Photo 29 illustrates an example of a "ladder" style crosswalk. In addition, it is recommended that the County should consider the use of "PED XING" pavement markings approaching the crosswalks. Photo 30 illustrates an example of a "Ped XING" pavement markings.

Photo 29: "Ladder" style crosswalk.

Photo 30: Ped Crossing pavement markings

Signing

It is recommended as part of the intersection improvements that "pedestrian crossing ahead" signs be added to the northbound and southbound approaches of the study intersection.

The above improvements will mitigate the right-angle crashes at the intersection. The recommended improvements are illustrated on **FIGURE D4** in **Appendix D**.

The estimated cost of the identified improvements for the County's consideration are approximately $33,275. The engineers estimate is for the improvements is included in **APPENDIX E**.

North Railroad Avenue (CR 602) Corridor from West Mill Street (CR 642) to US Route 130

The North Railroad Avenue (CR 602) corridor from West Mill Street (CR 642) to US Route 130 includes three main intersections:

- North Railroad Avenue (CR 602) and US Route 130 – is a 3-way northbound stop-controlled intersection. The eastbound approach contains one thru/right lane and one receiving lane. The westbound approach contains one left/thru lane and one receiving lane. The northbound approach contains one left/right lane and one receiving lane.
- North Railroad Avenue (CR 602) and Lerro Road – is a 3-way eastbound stop-controlled intersection. The northbound approach contains one left/thru lane and one receiving lane. The southbound approach contains one thru/right lane and one receiving lane. The eastbound approach contains one left/right lane and one receiving lane.
- North Railroad Avenue (CR 602) and West Mill Street (CR 642) – is a signalized intersection. Each approach contains one left/thru/right lane and one receiving lane.

The following roadway makes up the 1.3-mile corridor:

- **North Railroad Avenue (CR 602)** is a north south road designated as an urban local road south of Lerro Road and as a rural local road north of Lerro Road. Within the study area, North Railroad Avenue (CR 602) south of Lerro Road is 26' wide and designated two-way with one travel lane in each direction. Passing is not allowed, and no shoulder is provided. Within the study area, North Railroad Avenue (CR 602) north of Lerro Road is 22' wide and designated two-way with one travel lane in each direction. Passing is not allowed and a 1' shoulder is provided in each direction.

The speed limit on North Railroad Avenue (CR 602) according to the NJDOT Straight Line Diagram is 35 mph south of Lerro Road and 50 mph north of Lerro Road and those speed limits are posted within the study area.

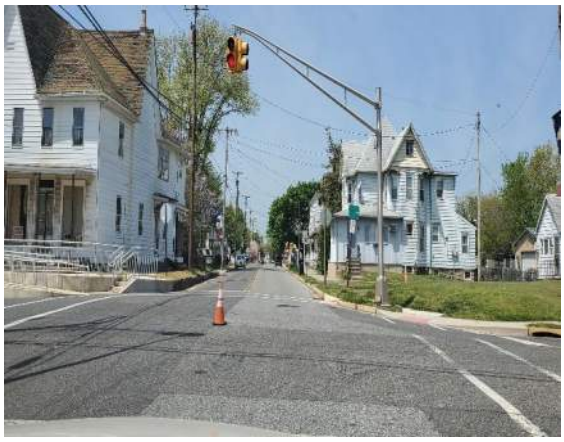


Photo 31: Looking north on North Railroad Avenue (CR 502) from the West Mill Street (CR 642) intersection.

Photo 32: Looking north on North Railroad Avenue Road (CR 602) south of Lerro Road.

Photo 33: Looking north on North Railroad Avenue (CR 602), north of Lerro Road.

Photo 34: Looking north on North Railroad Avenue (CR 602), approximately 500 feet south of US Route 130

Roadway Condition

Within the corridor, North Railroad Avenue exhibits two differing qualities. Between West Mill Street (CR 642) and Lerro Road the roadway is residential in nature with single family homes lining the roadway. From Lerro Road to US Route 130 the roadway takes on more of a rural feel, with the tree lined roadway and only two residences set back from the roadway.

The pavement along North Railroad Avenue (CR 602) is in good condition with minimal cracking (See Photo 34) located along the northbound approach at the intersection of US Route 130 and North Railroad Avenue (CR 602). Stop bars at the intersections of US Route 130 and North Railroad Avenue (CR 602) and Lerro Road and North Railroad Avenue (CR 602) are in fair condition. The stop bars and pavement markings located on North Railroad Avenue (CR 602) and West Mill Street (CR 642) are in poor condition (See Photos 35 and 36). The pavement and pavement markings along West Mill Street (CR 642), both east and west of North Railroad Avenue (CR 602), are in good condition. The pavement and pavement markings along US Route 130, both east and west of North Railroad Avenue (CR 602), are in fair condition.

There is sidewalk located intermittently on N. Railroad Avenue between West Mill Street (CR 642) and Lerro Road. There are no pedestrian accommodations provided north of Lerro Road along North Railroad Avenue (CR 602).

Photo 35: Southbound approach at the intersection of US Route 130 and North Railroad Avenue (CR 602) – fatigue cracking, fair pavement markings

Photo 36: Westbound approach of West Mill Street (CR 642) intersecting North Railroad Avenue (CR 602) - Stop Bar / cracking / poor pavement markings.

Photo 37: Eastbound approach of West Mill Street (CR 642) of the intersection – pavement and pavement markings in good condition

Photo 38: Northbound approach of North Railroad Avenue (CR 602) – pavement in good condition, pavement markings in fair condition

The guiderail (Photo 39) on the northbound side of the North Railroad Avenue (CR 602), north or Lerro Road is not standard. The approach end of the guiderail is not crashworthy, and the current guiderail is not compatible with the latest MASH (Manual for Assessing Safety Hardware) requirements.

Photo 39: Guiderail on the northbound side of the North Railroad Avenue

Existing Traffic Volumes

Automatic Traffic Recorder (ATR) counts were conducted from 12:00 AM Wednesday, April 26th, 2021, thru 12:00 AM Sunday, April 30th, 2021, on North Railroad Avenue (CR 642) between US Route 130 and the Lerro Road and between Lerro Road and West Mill Street (CR 602) and the counts included volume and speed data.

North Railroad Avenue (CR 642) is an urban local roadway with recorded bi-directional traffic volume of approximately 106 vehicles per weekday and an 85th percentile speed of 43 mph north of the Lerro Road and a bi-directional traffic volume of approximately 582 vehicles per weekday and an 85th percentile speed of 36 mph south of the Lerro Road.

The weekday daily traffic volumes are summarized in **TABLES 18 & 19.**

TABLE 18
ATR VOLUME SUMMARY
NORTH RAILROAD AVENUE (CR 642)
NORTH OF LERRO ROAD

Time	North Railroad Avenue North of Lerro Road (North/South Approach)		
	Northbound	Southbound	Total
Thurs April 27th, 2021	75	30	105
Fri April 28th, 2021	71	35	106
AVERAGE TOTAL			106

TABLE 19
ATR VOLUME SUMMARY
NORTH RAILROAD AVENUE (CR 642)
SOUTH OF LERRO ROAD

Time	North Railroad Avenue South of Lerro Road (North/South Approach)		
	Northbound	Southbound	Total
Thurs April 27th, 2021	351	226	577
Fri April 28th, 2021	340	247	587
AVERAGE TOTAL			582

The daily traffic volumes and speed data are provided in **APPENDIX B.**

Crash Analysis

Between 2015 and 2019, there were four crashes on North Railroad Avenue (CR 602) between East Mill Street and US Route 130. Crash types identified were backing, side swipe, animal hit and one right angle crash occurred at the intersection of North Railroad Avenue and Mill Street in 2018.

Summaries of the crashes provided in the attached **TABLE 20.**

TABLE 20
CRASH SUMMARY
NORTH RAILROAD (CR 602) FROM MILL STREET TO ROUTE 130

Date	Crash Time	Crash Type	Light Condition	Roadway Condition	Severity
1/24/2015	10:30 PM	Backing	Dark	Dry	Property Damage
2/1/2018	3:31 PM	Angle	Daylight	Dry	Property Damage
8/19/2019	9:41 PM	Side swipe	Dark	Dry	Property Damage
11/18/2019	4:56 PM	Animal	Dark	Dry	Property damage

The summary of all the crash data and a crash diagram for North Railroad (CR 602) corridor from Mill Street (CR 642) to US Route 130 are found in **APPENDIX C.**

Speed Limit Evaluation

North Railroad Avenue (CR 602) is urban local street. The posted speed on the northbound approach, South Railroad Avenue, before the West Mill Street is 25 mph. The 25 mph posted speed increases to 35 mph after intersection to 35 mph and it subsequently increases to 50 mph after Lerro road. The minimum horizontal curve radius for the 40 mph and 55 mph design speeds are 533 ft and 1190 ft, respectively. As shown in **FIGURE 9** the existing horizontal curves along the North Railroad Avenue (CR 602) satisfy the minimum radius requirements by AASHTO Green Book, 2018, 7th edition. It should be noted that the horizontal alignment measurements are approximate.

The speed data analysis showed that the 85th percentile speed between Lerro Road and Mill Street is 35 mph, which is comparable with posted speed limit. In addition, the speed data analysis between the railroad tracks and Rt 130 showed that the 85th percentile speed is 43 mph for this section of the North Railroad, which is lower than the posted speed limit. It is worth noting that the radar speed sign is present on the southbound North Railroad Avenue (Photo 31) that contributes to the compatibility of 85th percentile speed and posted speed limit.

Photo 40: Radar speed sign on the southbound of North Railroad Avenue

The 85th percentile speed is a typically a dominant factor in establishing posted speeds. The manual on Uniform Traffic Control Devices (MUTCD) indicates that posted speeds "should be within 5 mph of the 85th-percentile speed of free-flowing traffic." The recorded 85th percentile speeds on both portions of North Railroad Avenue are consistent with the expected 85th percentile speed of free-flowing traffic as noted by the MUTCD.

In the southern section of the corridor between Lerro Road and Mill Street, only 93 (4%) vehicles were recorded exceeding the posted speed limit of 35 mph by more than 5 mph and in the northern section of the corridor between Lerro Road and US 130 only a single vehicle was recorded exceeding the speed limit by more than 5 mph.
Based on the speed data collected and the crash evaluation, there is no justification for a change in the existing speed limits on North Railroad Avenue (CR 602) between West Mill Street (CR 642) to US Route 130.

Corridor Improvements

Upon evaluation of the North Railroad Avenue (CR 602) corridor from West Mill Street (CR 642) to US Route 130, the following improvement items were identified for the County's consideration:

Guiderail Replacement

It is recommended that the guiderail on the north side of North Railroad Avenue (CR 602), north of Lerro Road be replaced to conform with the latest MASH (Manual for Assessing Safety Hardware) requirements.

The estimated cost of the identified improvements for the County's consideration are approximately $7,683. The engineers estimate is for the improvements is included in **APPENDIX E**.

Conclusions

Four (4) intersections, two (2) intersection specific approaches, one (1) roadway corridor in Salem County, New Jersey were studied as part of an intersection/roadway improvement analysis. After analysis of the existing conditions at each of the intersections and at study corridor, the following recommendations were developed for the county's consideration:

Elmer-Shirley Road (CR 611) and Burlington Road (CR 677)

- Intersection be changed from a two-way stop to a 4-way stop controlled intersection
- Stop signs with reflectors on supports and "All Stop" signs be added to the northeast and southwest corners of the intersection
- "All Stop" signs are to be added to the existing stop signs on Burlington Road (CR 677)
- Advanced warning "Stop Ahead" signs are to be added on Elmer-Shirley Road (CR 611)
- Existing stop sign on the southeast corner of the intersection should be replaced
- Rumble Strips on Burlington Road (CR 677) should be refreshed
- Stop lines and rumble strips are to be added to Elmer-Shirley Road (CR 611)
- Missing u-post reflector on northbound approach of Burlington Road (CR 677) be replaced
- It is recommended the county trim the vegetation within the right-of-way on the south side of Elmer -Shirley Road (CR 611)

Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627) and Garden Drive

- The county can consider installation of radar speed sign
- Convert the intersection to a traditional 2-way stop controlled intersection
- Provide stop sign and stop line on Tilbury Road (CR 661) at the study intersection
- Advanced warning "Stop Ahead" sign to be added on Tilbury Road (CR 661)
- Remove existing yield sign, existing yield ahead pavement markings, and existing yield ahead sign
- Rumble strips to be added on Tilbury Road (CR 661)
- Milling and resurfacing the intersection
- Restriping intersection to reflect proposed operating condition

Straughns Mill Road (CR 643) and Perkintown Road (CR 644)

- Intersection be changed from a two-way stop to a 4-way stop controlled intersection
- Stop signs with reflectors on supports and "All Stop" signs be added to the northeast and southwest corners of the intersection
- "All Stop" signs are to be added to the existing stop signs on Straughns Mill Road
- Advanced warning "Stop Ahead" signs are to be added on Perkintown Road (CR 644)
- Stop lines are to be added on Perkintown Road (CR 644)
- Rumble strips are to be added to Straughns Mill Road (643) and Perkintown Road (CR 644)

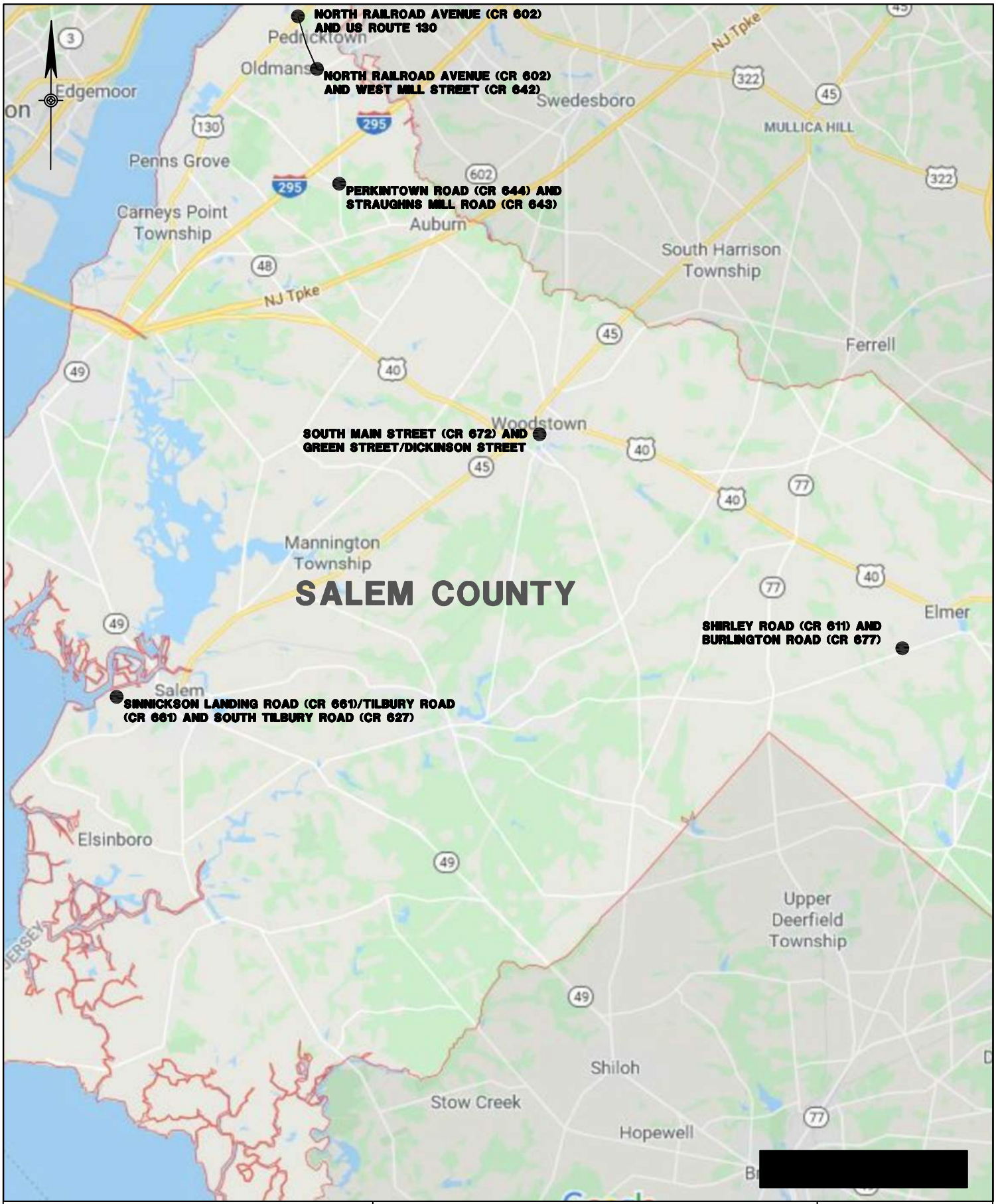
South Main Street (CR 672) and Green Street/Dickinson Street

- Install Rapid Rectangular Flashing Beacons
- Refresh crosswalk pavement markings on Green Street and Dickinson Street
- Install "PED XING AHEAD" pavement markings in advance of center crosswalk
- Installation of handicap ramp on east side of South Main Street (CR 672) perpendicular to the handicap ramp located on the northeast corner of the study intersection on Green Street
- Reconstruct handicap ramp on northeast corner of study intersection on Green Street

North Railroad Avenue (CR 602) corridor from West Mill Street (CR 642) to US Route 130

- Guiderail on north side of North Railroad Avenue (CR 602), north of Lerro Road to be replaced to conform with the last MASH requirements

Although these recommendations have been developed, it is ultimately up to the County to weigh the costs and benefits and determine whether to implement any or all the proposed improvement options.



PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY

Salem County, New Jersey

FIGURE 1

Project Area

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE 2
2021 Aerial Orthography – Elmer–Shirley Road (CR 611) & Burlington Road (CR 677)

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE 3
2021 Aerial Orthography – Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) & South Tilbury Road (CR 627) & Garden Drive

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CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE 4
2021 Aerial Orthography – Perkintown Road (CR 644) & Straughns Mill Road (CR 643)

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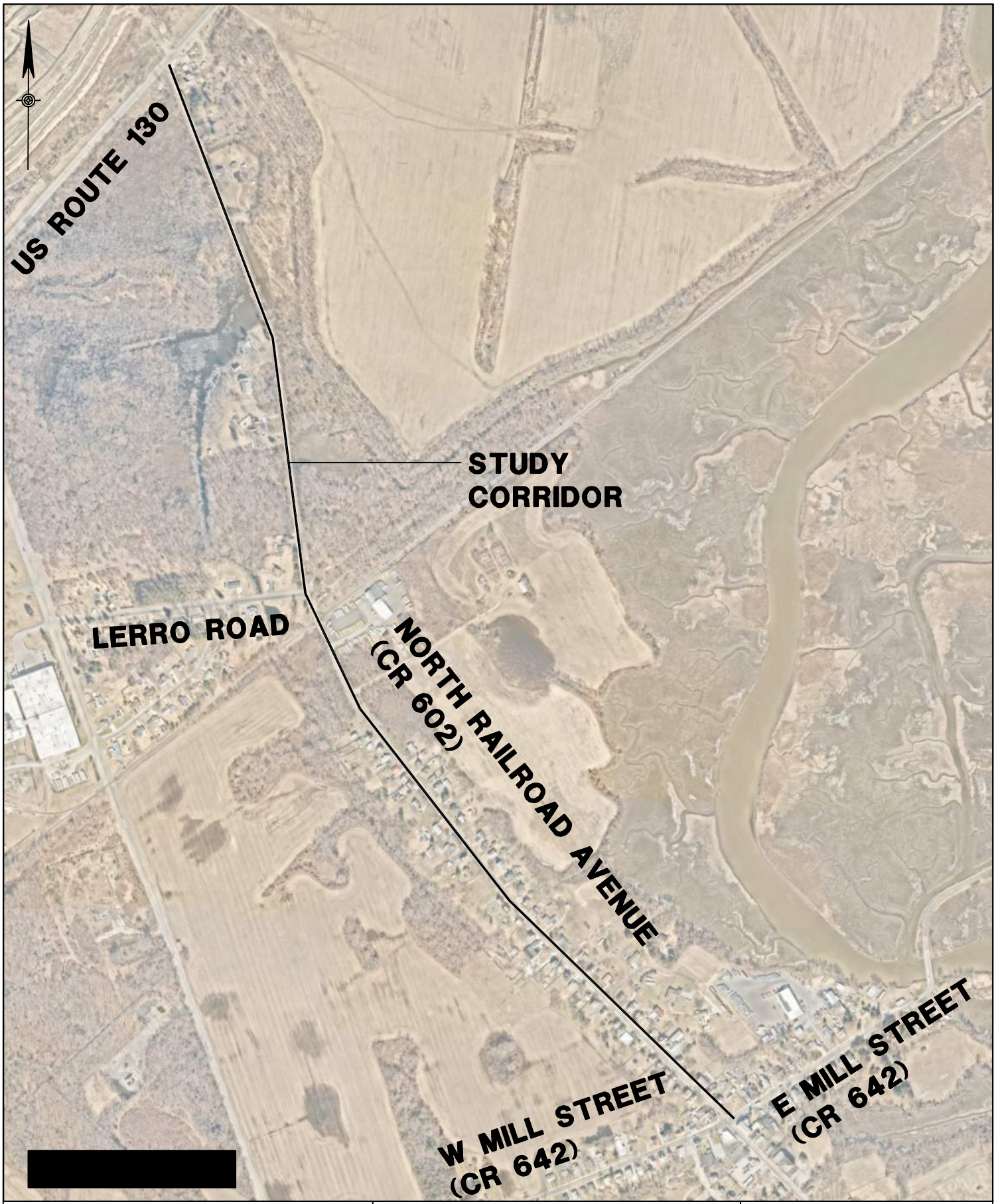
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE 5
2021 Aerial Orthography – South Main Street (CR 672) & Green Street / Dickinson Street



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515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE 6
2021 Aerial Orthography – North Railroad Avenue (CR 602) Corridor From West Mill Street (CR 642) to US Route 130

Pennoni
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

HORIZONTAL ALIGNMENT

Salem County, New Jersey

FIGURE 7

Sinnickson Landing Road
(CR 661)

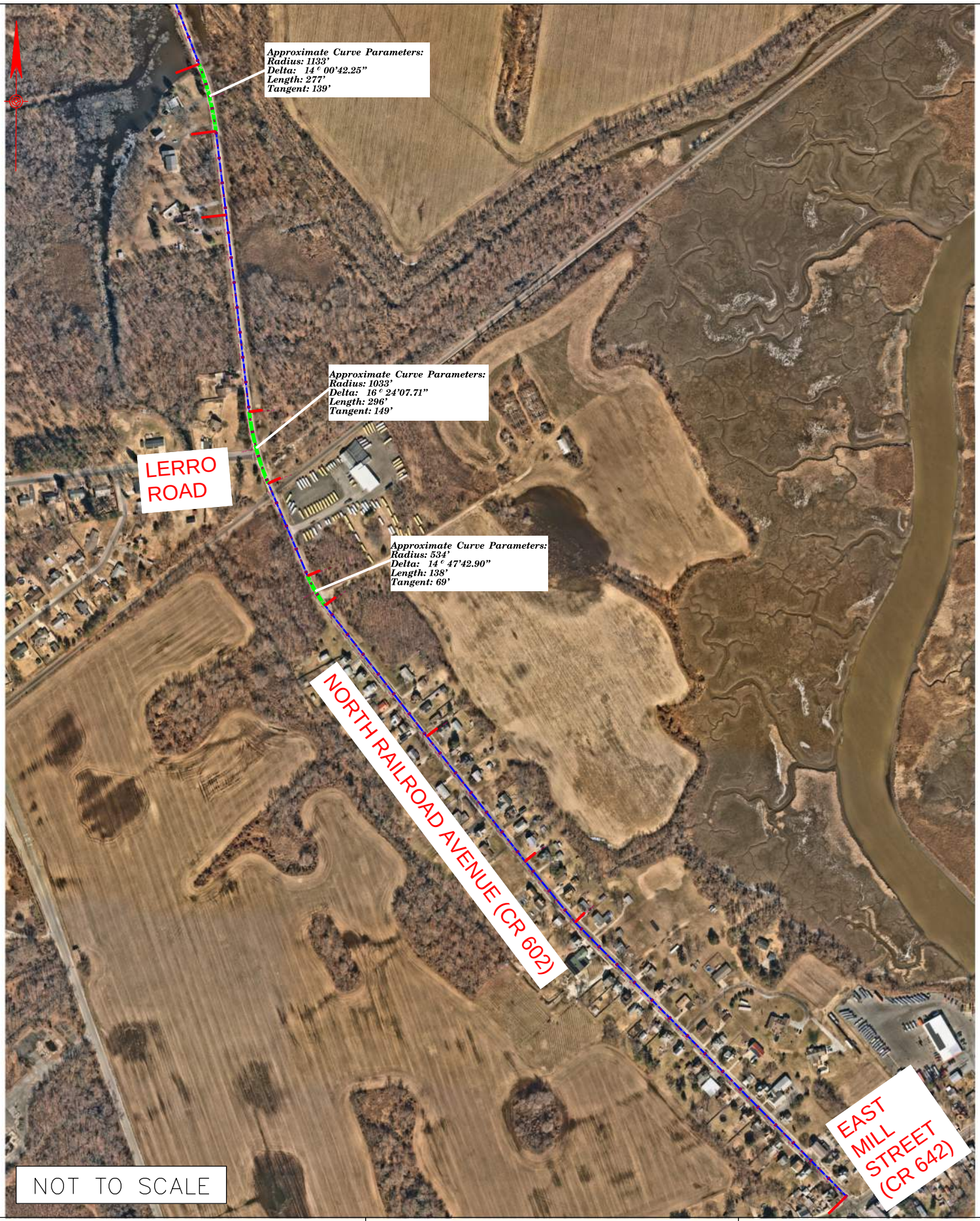
Pennoni
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

HORIZONTAL ALIGNMENT

Salem County, New Jersey

FIGURE 8

South Tilbury Road
(CR 627)



PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

HORIZONTAL ALIGNMENT

Salem County, New Jersey

FIGURE 9

North Railroad Avenue (CR 602) Corridor From West Mill Street (CR 642) to US Route 130

SALEM COUNTY
INTERSECTION IMPROVEMENTS

APPENDIX A

AASHTO SITE DISTANCE CALCULATION

AASHTO Site Distance Calculation

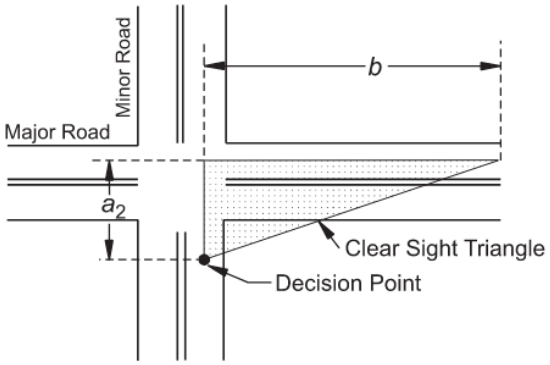
Intersection of Elmer-Shirley Road (CR 611) and Burlington Road (CR 677) :

Elmer-Shirley Road (CR 611)-Major

Design Speed :55

Left Turn from Burlington Road (CR 677) to WB Elmer-Shirley Road (CR 611):

1.Vehicle approaching from the WB (CR 611)



Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Right

Table 9-7. Design Intersection Sight Distance—Case B1, Left Turn from Stop

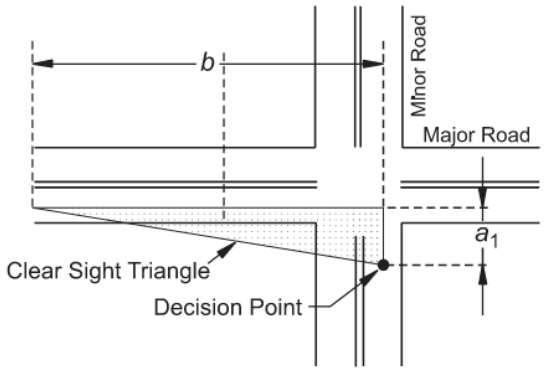
U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	165.4	170
20	115	220.5	225
25	155	275.6	280
30	200	330.8	335
35	250	385.9	390
40	305	441.0	445
45	360	496.1	500
50	425	551.3	555
55	495	606.4	610
60	570	661.5	665
65	645	716.6	720
70	730	771.8	775
75	820	826.9	830
80	910	882.0	885

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	41.7	45
30	35	62.6	65
40	50	83.4	85
50	65	104.3	105
60	85	125.1	130
70	105	146.0	150
80	130	166.8	170
90	160	187.7	190
100	185	208.5	210
110	220	229.4	230
120	250	250.2	255
130	285	271.1	275

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

No obstruction was evident for the site distance of WB approach.

2. Vehicle approaching from the EB (CR 611)



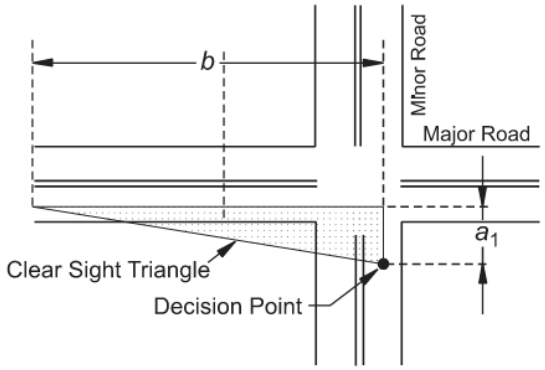
Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Left

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	143.3	145	20	20	36.1	40
20	115	191.1	195	30	35	54.2	55
25	155	238.9	240	40	50	72.3	75
30	200	286.7	290	50	65	90.4	95
35	250	334.4	335	60	85	108.4	110
40	305	382.2	385	70	105	126.5	130
45	360	430.0	430	80	130	144.6	145
50	425	477.8	480	90	160	162.6	165
55	495	525.5	530	100	185	180.7	185
60	570	573.3	575	110	220	198.8	200
65	645	621.1	625	120	250	216.8	220
70	730	668.9	670	130	285	234.9	235
75	820	716.6	720				
80	910	764.4	765				

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Right turn from Burlington Road (CR 677) to WB Elmer-Shirley Road (CR 611) :



Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Left

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	143.3	145
20	115	191.1	195
25	155	238.9	240
30	200	286.7	290
35	250	334.4	335
40	305	382.2	385
45	360	430.0	430
50	425	477.8	480
55	495	525.5	530
60	570	573.3	575
65	645	621.1	625
70	730	668.9	670
75	820	716.6	720
80	910	764.4	765

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	36.1	40
30	35	54.2	55
40	50	72.3	75
50	65	90.4	95
60	85	108.4	110
70	105	126.5	130
80	130	144.6	145
90	160	162.6	165
100	185	180.7	185
110	220	198.8	200
120	250	216.8	220
130	285	234.9	235

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

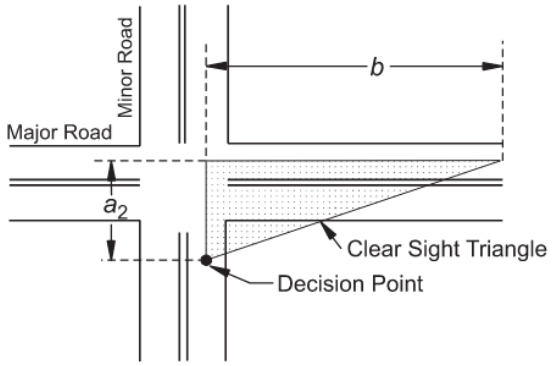
Intersection of Perkintown Road (CR 644) and Straughns Mill Road (CR 643):

Perkintown Road (CR 644)-Major

Design Speed :50 mph

Left Turn from NB approach, Straughns Mill Road (CR 643) to WB departure Perkintown Road (CR 644):

1.Vehicle approaching from the WB (CR 644)



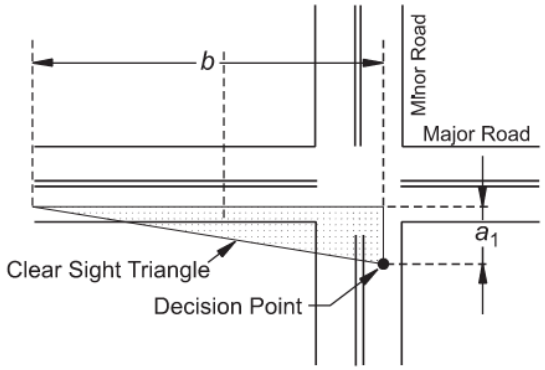
Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Right

Table 9-7. Design Intersection Sight Distance—Case B1, Left Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	165.4	170	20	20	41.7	45
20	115	220.5	225	30	35	62.6	65
25	155	275.6	280	40	50	83.4	85
30	200	330.8	335	50	65	104.3	105
35	250	385.9	390	60	85	125.1	130
40	305	441.0	445	70	105	146.0	150
45	360	496.1	500	80	130	166.8	170
50	425	551.3	555	90	160	187.7	190
55	495	606.4	610	100	185	208.5	210
60	570	661.5	665	110	220	229.4	230
65	645	716.6	720	120	250	250.2	255
70	730	771.8	775	130	285	271.1	275
75	820	826.9	830				
80	910	882.0	885				

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

2. Vehicle approaching from the EB (CR 644)



Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Left

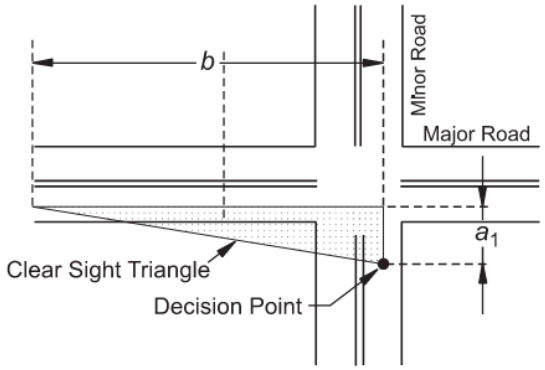
Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	143.3	145
20	115	191.1	195
25	155	238.9	240
30	200	286.7	290
35	250	334.4	335
40	305	382.2	385
45	360	430.0	430
50	425	477.8	480
55	495	525.5	530
60	570	573.3	575
65	645	621.1	625
70	730	668.9	670
75	820	716.6	720
80	910	764.4	765

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	36.1	40
30	35	54.2	55
40	50	72.3	75
50	65	90.4	95
60	85	108.4	110
70	105	126.5	130
80	130	144.6	145
90	160	162.6	165
100	185	180.7	185
110	220	198.8	200
120	250	216.8	220
130	285	234.9	235

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Right turn from Burlington Road (CR 677) to WB Elmer-Shirley Road (CR 611) :



Departure Sight Triangle for Viewing Traffic
Approaching the Minor Road from the Left

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	143.3	145
20	115	191.1	195
25	155	238.9	240
30	200	286.7	290
35	250	334.4	335
40	305	382.2	385
45	360	430.0	430
50	425	477.8	480
55	495	525.5	530
60	570	573.3	575
65	645	621.1	625
70	730	668.9	670
75	820	716.6	720
80	910	764.4	765

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	36.1	40
30	35	54.2	55
40	50	72.3	75
50	65	90.4	95
60	85	108.4	110
70	105	126.5	130
80	130	144.6	145
90	160	162.6	165
100	185	180.7	185
110	220	198.8	200
120	250	216.8	220
130	285	234.9	235

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Intersection of Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) and South Tilbury Road (CR 627)

Horizontal Curve requirement:

Table 3-7. Minimum Radius Using Limiting Values of *e* and *f*

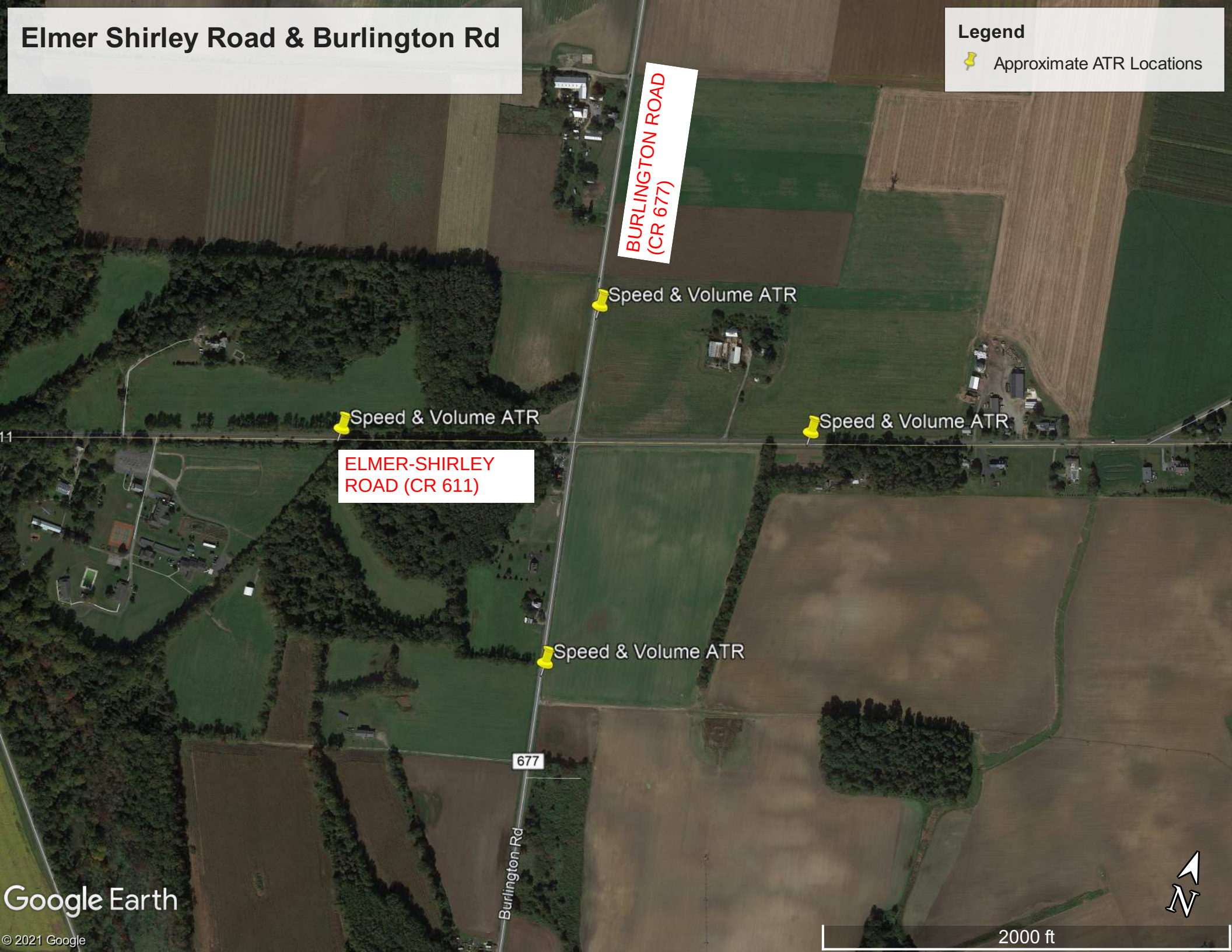
U.S. Customary					
Design Speed (mph)	Maximum *e* (%)	Maximum *f*	Total (*e*/100 + *f*)	Calculated Radius (ft)	Rounded Radius (ft)
10	4.0	0.38	0.42	15.9	16
15	4.0	0.32	0.36	41.7	42
20	4.0	0.27	0.31	86.0	86
25	4.0	0.23	0.27	154.3	154
30	4.0	0.20	0.24	250.0	250
35	4.0	0.18	0.22	371.2	371
40	4.0	0.16	0.20	533.3	533
45	4.0	0.15	0.19	710.5	711
50	4.0	0.14	0.18	925.9	926
55	4.0	0.13	0.17	1186.3	1190
60	4.0	0.12	0.16	1500.0	1500

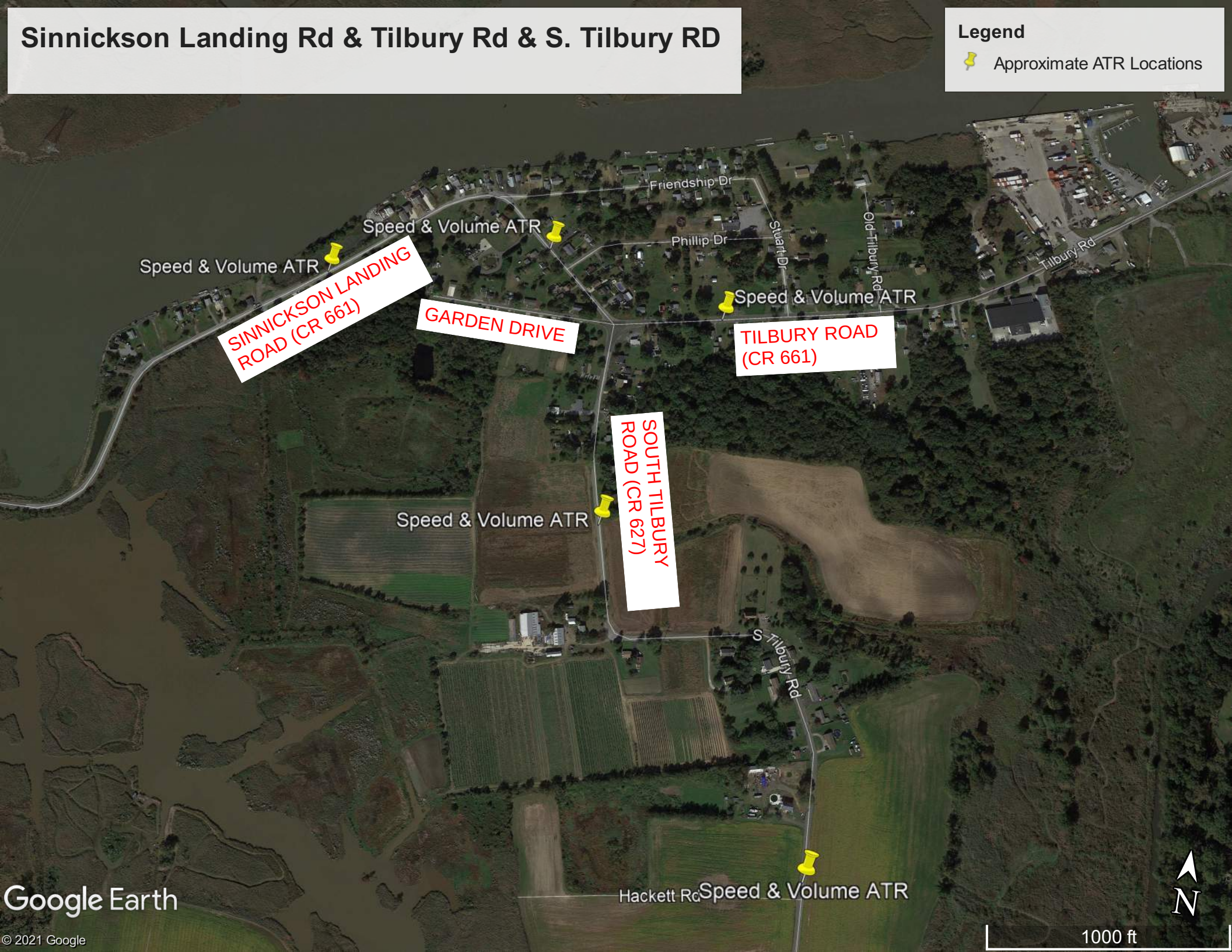
Metric					
Design Speed (km/h)	Maximum *e* (%)	Maximum *f*	Total (*e*/100 + *f*)	Calculated Radius (m)	Rounded Radius (m)
15	4.0	0.40	0.44	4.0	4
20	4.0	0.35	0.39	8.1	8
30	4.0	0.28	0.32	22.1	22
40	4.0	0.23	0.27	46.7	47
50	4.0	0.19	0.23	85.6	86
60	4.0	0.17	0.21	135.0	135
70	4.0	0.15	0.19	203.1	203
80	4.0	0.14	0.18	280.0	280
90	4.0	0.13	0.17	375.2	375
100	4.0	0.12	0.16	492.1	492

SALEM COUNTY INTERSECTION IMPROVEMENTS

APPENDIX B

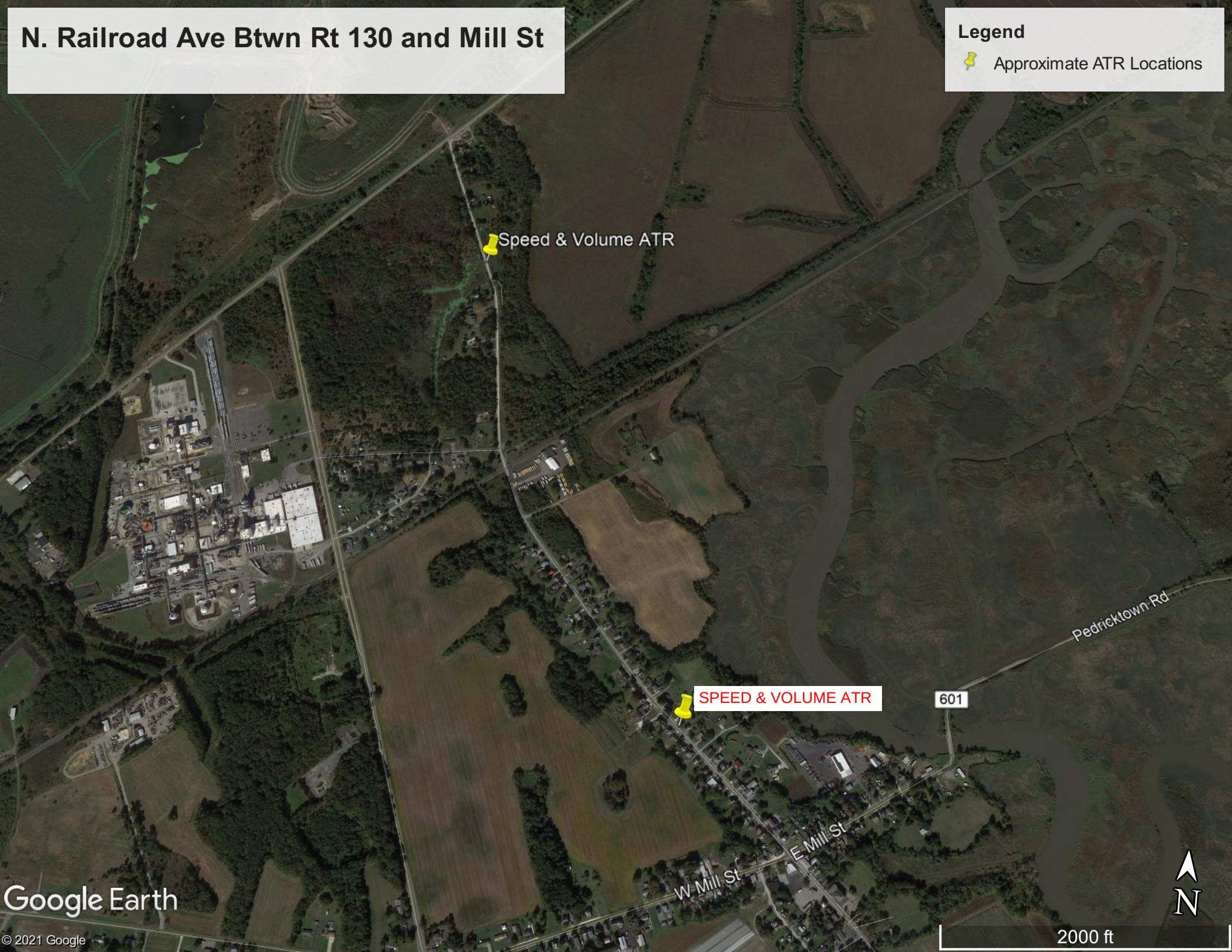
TRAFFIC COUNT DATA


Elmer Shirley Road & Burlington Rd
Legend
Approximate ATR Locations
BURLINGTON ROAD (CR 677)
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
ELMER-SHIRLEY ROAD (CR 611)
677
Burlington Rd
Google Earth
© 2021 Google
N
2000 ft


Sinnickson Landing Rd & Tilbury Rd & S. Tilbury RD
Legend
Approximate ATR Locations
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
SINNICKSON LANDING ROAD (CR 661)
GARDEN DRIVE
TILBURY ROAD (CR 661)
SOUTH TILBURY ROAD (CR 627)
Friendship Dr
Phillip Dr
Stuart Dr
Old Tilbury Rd
Tilbury Rd
S Tilbury Rd
Hackett Rd
Google Earth
© 2021 Google
N
1000 ft


Perkintown Rd & Straughs Mill Rd
Legend
Approximate ATR Locations
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
Speed & Volume ATR
STRAUGHNS MILL ROAD (CR 643)
PERKINTOWN ROAD (CR 644)
Perkintown Rd
Google Earth
© 2021 Google
N
644
1000 ft

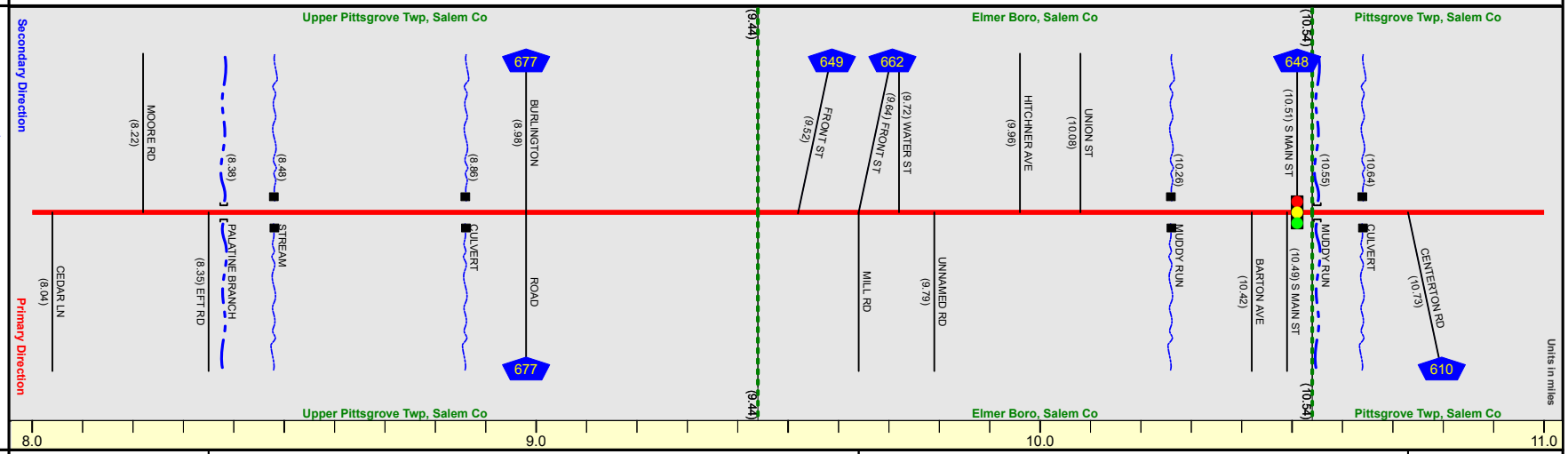

S. Main Street in Woodstown St
Legend
Approximate ATR Locations
SOUTH MAIN STREET (CR 672)
Parks Gardens Rd
Green St
GARDEN STREET
672
Dickinson St
Spring Garden St
Speed and Volume ATR
S Main St
Church St
Church Ln
N
300 ft
Google Earth
© 2021 Google


N. Railroad Ave Btwn Rt 130 and Mill St
Legend
Approximate ATR Locations
Speed & Volume ATR
SPEED & VOLUME ATR
Pedricktown Rd
601
E Mill St
W Mill St
Google Earth
© 2021 Google
N
2000 ft

SALEM COUNTY 611 (West to East)

Mile Posts: 8.000 - 11.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Aldine-Shirley Road	Shirley Road	Salem Street / Dutch Row Road
Jurisdiction	County		
Functional Class	Rural Major Collector	Urban Major Collector	Urban Minor Collector
Federal Aid - NHS Sy	STP		
Control Section			
Speed Limit	50	25	
Number of Lanes	2		
Med. Type	None		
Med. Width			
Pavement	22	28	24 / 22
Shoulder	6	1 / 4	1
Traffic Volume			
Traffic Sta. ID			
Structure No.			
Enlarged Views			

SRI = 17000611__

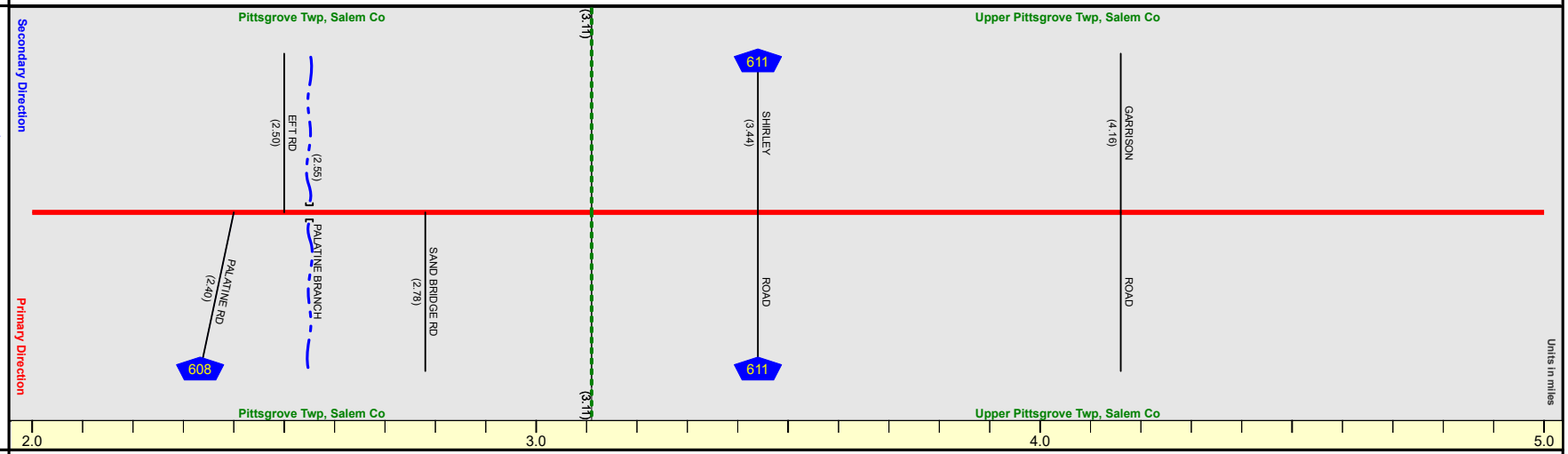
Date last inventoried: June 2011

Page Created: June, 2020

SALEM COUNTY 677 (South to North)

Mile Posts: 2.000 - 5.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Burlington Road
Jurisdiction	County
Functional Class	Rural Local
Federal Aid - NHS Sy	Non-Federal Aid
Control Section	
Speed Limit	25
Number of Lanes	2
Med. Type	None
Med. Width	
Pavement	20 | 22
Shoulder	1
Traffic Volume	
Traffic Sta. ID	
Structure No.	1701221
Enlarged Views	

SRI = 17000677__

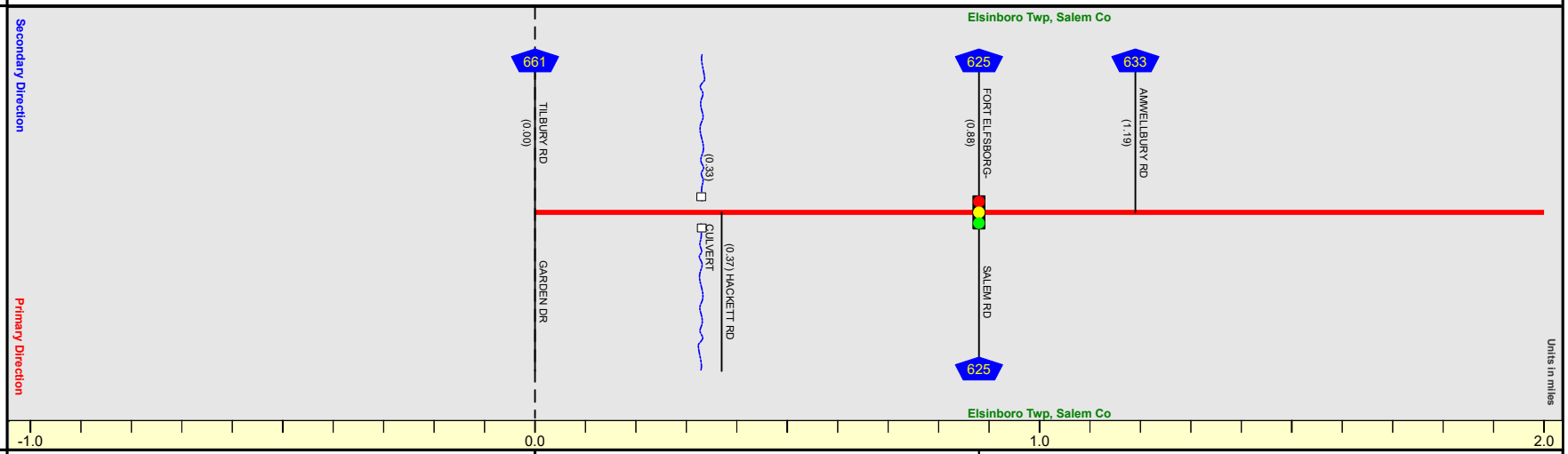
Date last inventoried: May 2011

Page Created: June, 2020

SALEM COUNTY 627 (North to South)

Mile Posts: 0.000 - 2.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Tilbury Road	Amwellbury Road
Jurisdiction	County	
Functional Class	Urban Local	Rural Local
Federal Aid - NHS Sy	Non-Federal Aid	
Control Section		
Speed Limit	25	
Number of Lanes	2	
Med. Type	None	
Med. Width		
Pavement	22	
Shoulder	1	
Traffic Volume		
Traffic Sta. ID		
Structure No.		
Enlarged Views		

Begin Salem County 627 MP=0.00

SRI = 17000627__

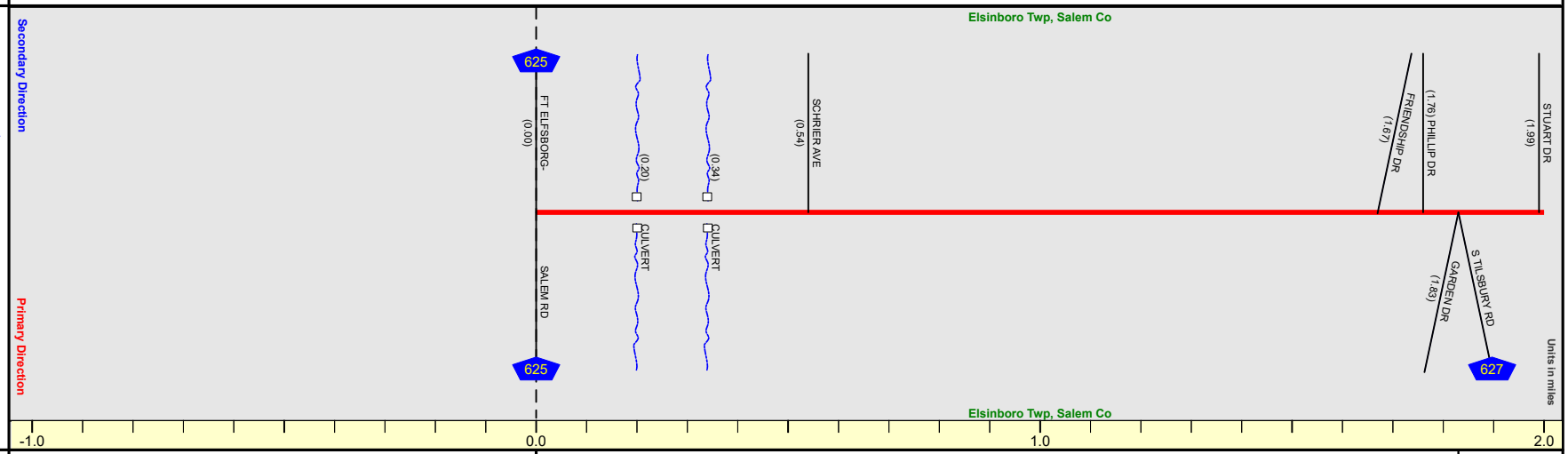
Date last inventoried: June 2011

Page Created: June, 2020

SALEM COUNTY 661 (West to East)

Mile Posts: 0.000 - 2.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Sinnickson Landing Road	Tilbury Road
Jurisdiction	County	
Functional Class	Urban Local	
Federal Aid - NHS Sy	Non-Federal Aid	
Control Section		
Speed Limit	35	
Number of Lanes	2	
Med. Type	None	
Med. Width		
Pavement	20	34
Shoulder	1	
Traffic Volume		
Traffic Sta. ID		
Structure No.		
Enlarged Views		

Begin Salem County 661 MP=0.00

SRI = 17000661__

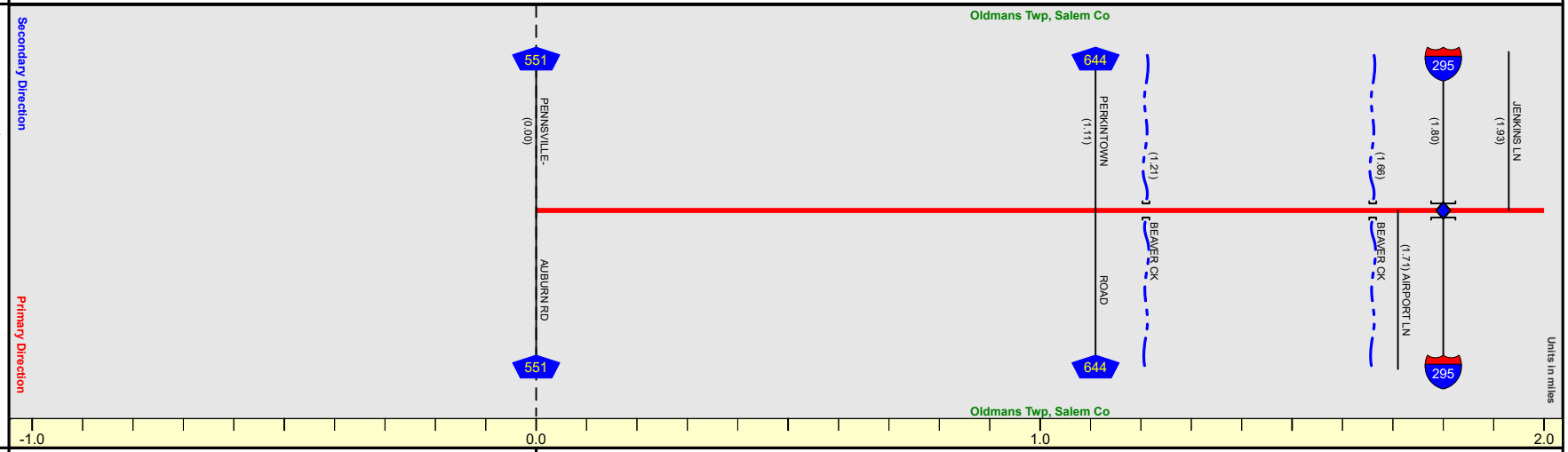
Date last inventoried: June 2011

Page Created: June, 2020

SALEM COUNTY 643 (South to North)

Mile Posts: 0.000 - 2.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Straughns Mill Road	
Jurisdiction	County	
Functional Class	Rural Minor Collector	Rural Major Collector
Federal Aid - NHS Sy	Non-Federal Aid	STP
Control Section		
Speed Limit	25	
Number of Lanes	2	4
Med. Type	None	
Med. Width		
Pavement	20	48 / 28 / 48
Shoulder	1	
Traffic Volume	1,766 (2017)	
Traffic Sta. ID	7-6-340	
Structure No.	1712160	
Enlarged Views		

Begin Salem County 643 MP=0.00

Page Created: June, 2020

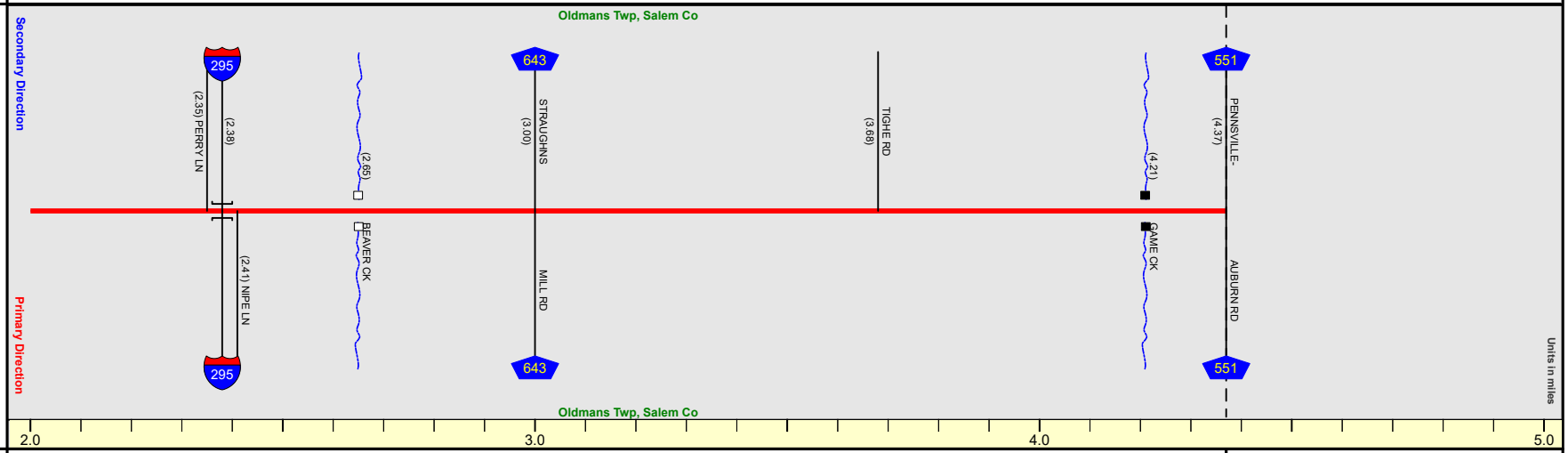
SRI = 17000643__

Date last inventoried: June 2011

SALEM COUNTY 644 (West to East)

Mile Posts: 2.000 - 4.370

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Perkintown Road
Jurisdiction	County
Functional Class	Rural Major Collector
Federal Aid - NHS Sy	STP
Control Section	
Speed Limit	40 | 45
Number of Lanes	2
Med. Type	None
Med. Width	
Pavement	20
Shoulder	1 | 6 | 1
Traffic Volume	1,135 (2019)
Traffic Sta. ID	161711
Structure No.	1712157
Enlarged Views	

End Salem County 644 MP=4.37

SRI = 17000644__

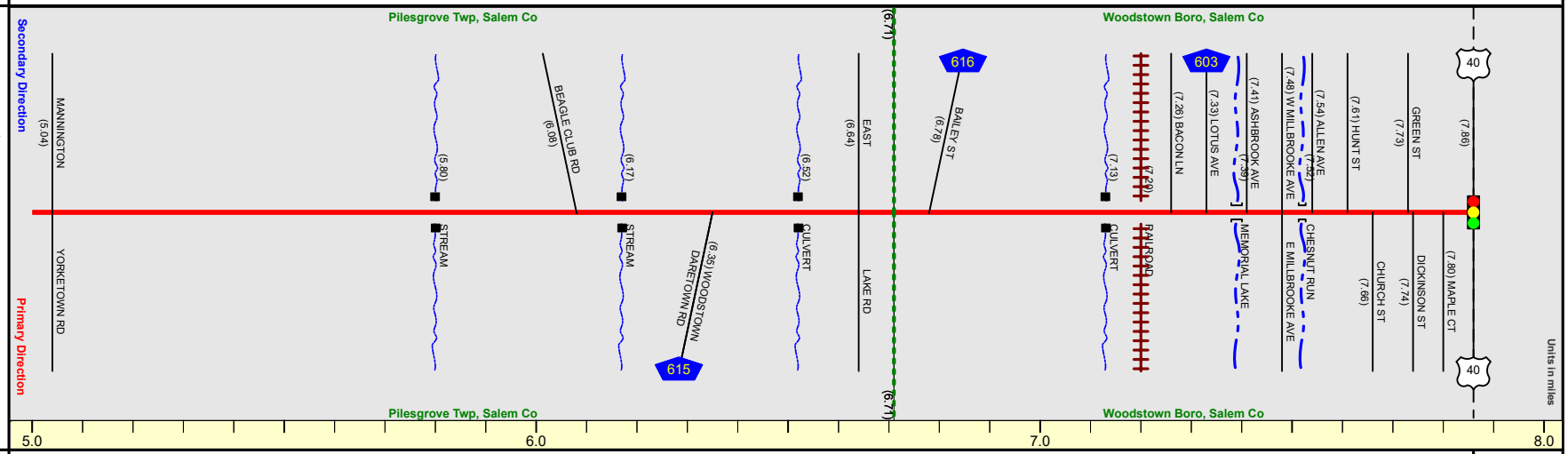
Date last inventoried: June 2011

Page Created: June, 2020

SALEM COUNTY 672 (South to North)

Mile Posts: 5.000 - 7.860

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Yorktown Road
Jurisdiction	County
Functional Class	Rural Major Collector | Urban Major Collector
Federal Aid - NHS Sy	STP
Control Section	
Speed Limit	25
Number of Lanes	2
Med. Type	None
Med. Width	
Pavement	22 | 26 | 28 | 40
Shoulder	1 | 2
Traffic Volume	
Traffic Sta. ID	
Structure No.	1700448 450
Enlarged Views	

End Salem County 672 MP=7.86

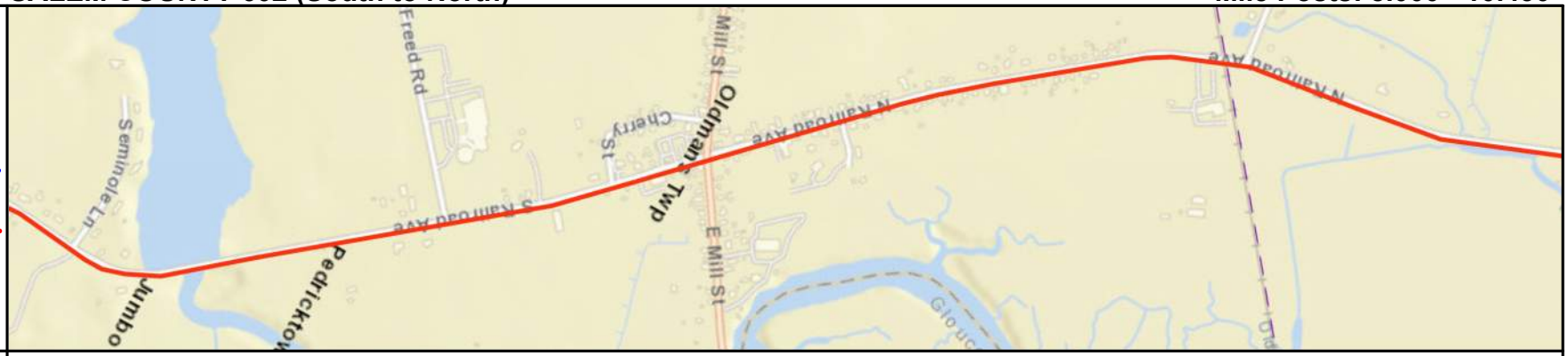
Page Created: June, 2020

SRI = 17000672__

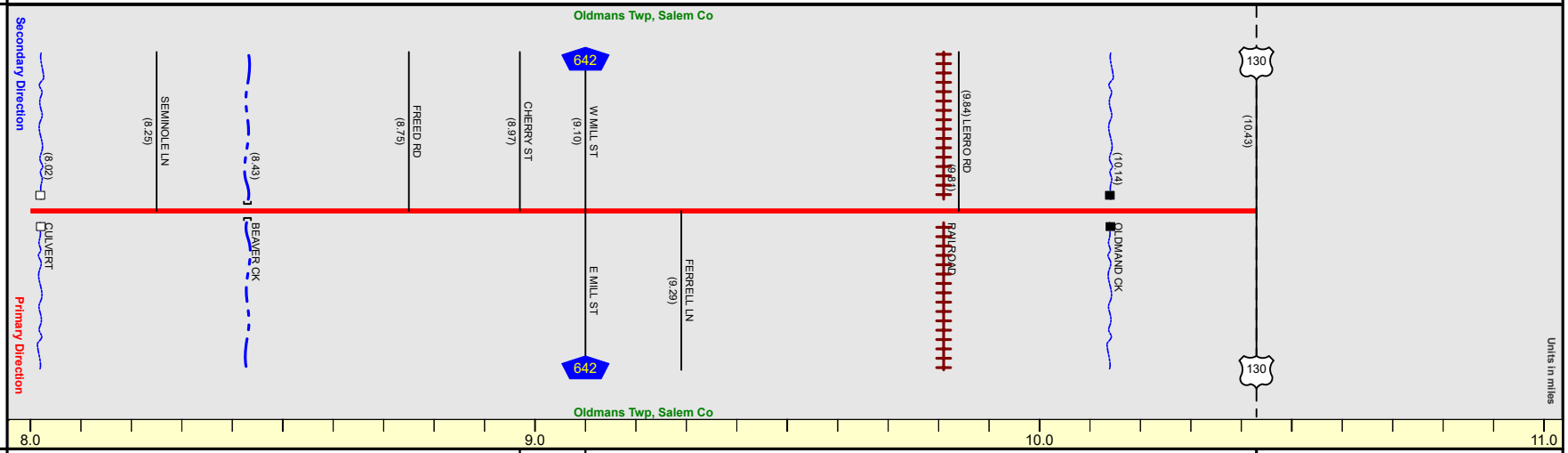
Date last inventoried: June 2011

SALEM COUNTY 602 (South to North)

Mile Posts: 8.000 - 10.430



Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Pedricktown-Woodstown Road	South Railroad Avenue	North Railroad Avenue
Jurisdiction	County		
Functional Class	Rural Local	Urban Local	Rural Local
Federal Aid - NHS Sy	Non-Federal Aid		
Control Section			
Speed Limit	50	35	50
Number of Lanes	2		
Med. Type	None		
Med. Width			
Pavement	22	26	22
Shoulder	1	2	1
Traffic Volume			
Traffic Sta. ID			
Structure No.			
Enlarged Views			

End Salem County 602 MP=10.43

SRI = 17000602__

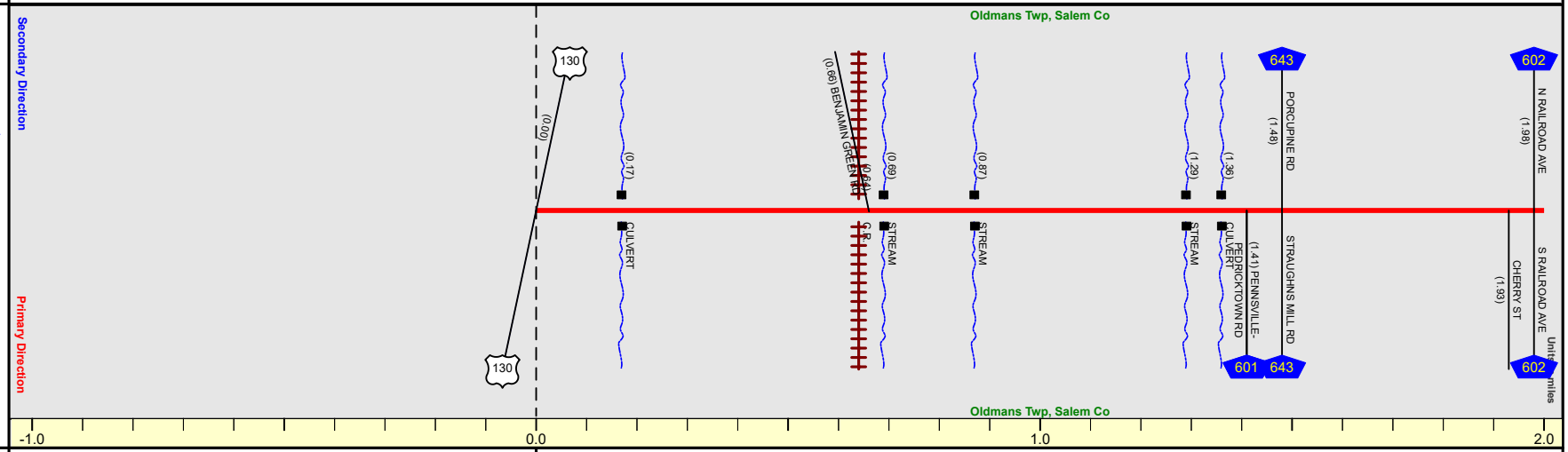
Date last inventoried: June 2011

Page Created: June, 2020

SALEM COUNTY 642 (West to East)

Mile Posts: 0.000 - 2.000

Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Pennsgrove Pedricktown Road
Jurisdiction	County
Functional Class	Rural Minor Collector | Urban Minor Collector
Federal Aid - NHS Sy	Non-Federal Aid | STP
Control Section	
Speed Limit	25 | 50 | 40 | 30
Number of Lanes	2
Med. Type	None
Med. Width	
Pavement	20 | 30 | 34
Shoulder	1 | 10 | 1
Traffic Volume	
Traffic Sta. ID	
Structure No.	
Enlarged Views	

Begin Salem County 642 MP=0.00

SRI = 17000642__

Date last inventoried: June 2011

Page Created: June, 2020

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	2	1	1	1	5	12	3	1	1	0	0	27
Tuesday	0	0	0	1	0	3	15	13	7	4	4	0	1	48
Wednesday	0	0	0	2	1	7	13	12	7	9	3	0	0	54
Thursday	0	0	0	1	1	4	5	16	4	3	0	0	0	34
Friday	0	0	0	0	0	2	1	7	1	1	2	0	0	14
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	5	3	17	39	60	22	18	10	0	1	177

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/24/2021	No Volume					14:39	7	14:39	4	0.44
5/25/2021	06:15	5	06:22	2	0.63	17:16	9	17:41	4	0.56
5/26/2021	07:28	9	08:12	5	0.45	17:19	8	17:19	3	0.67
5/27/2021	07:51	5	08:20	3	0.42	17:42	6	17:42	3	0.50
5/28/2021	06:43	6	06:56	2	0.75	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
41 - 50	99	55%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	179
Total Greater Than 50.0	59
Percent Greater Than 50.0	33.0%

Mean, Median, and Mode Averages

Mean:	47.1
Median (50th %):	47.1
Mode:	47.2

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Burlington Rd 1
Station ID: CR 677
Location 1: Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2: Utlity Pole #B10964
Latitude: 0.000000
Longitude: 0.000000

File Name: Burlington Rd 1
Date Printed: 5/28/2021
Start Date: 5/24/2021
End Date: 5/28/2021
GPS Accuracy: 0ft
Location Verified: No

179	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/24/2021	South, Lane 1	20		1.00		1.00		20		1.00		20
5/24/2021	South, Lane 2	7		1.00		1.00		7		1.00		7
5/24/2021	Day Total	27						27				27
5/25/2021	South, Lane 1	43		1.00		1.00		43		1.00		43
5/25/2021	South, Lane 2	5		1.00		1.00		5		1.00		5
5/25/2021	Day Total	48						48				48
5/26/2021	South, Lane 1	45		1.00		1.00		45		1.00		45
5/26/2021	South, Lane 2	9		1.00		1.00		9		1.00		9
5/26/2021	Day Total	54						54				54
5/27/2021	South, Lane 1	27		1.00		1.00		27		1.00		27
5/27/2021	South, Lane 2	9		1.00		1.00		9		1.00		9
5/27/2021	Day Total	36						36				36
5/28/2021	South, Lane 1	12		1.00		1.00		12		1.00		12
5/28/2021	South, Lane 2	2		1.00		1.00		2		1.00		2
5/28/2021	Day Total	14						14				14
Total		179						179				179
Average		35						35				35

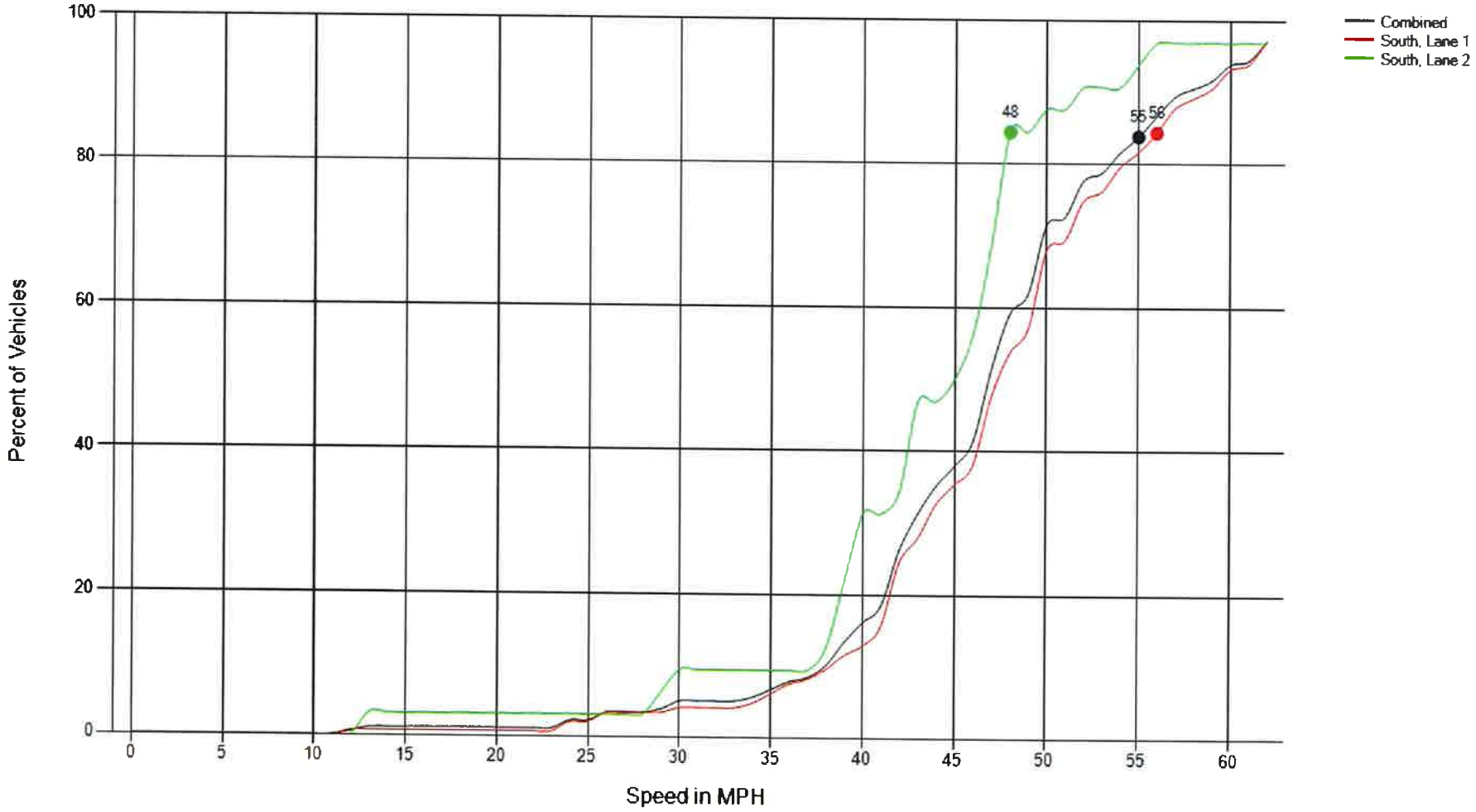
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

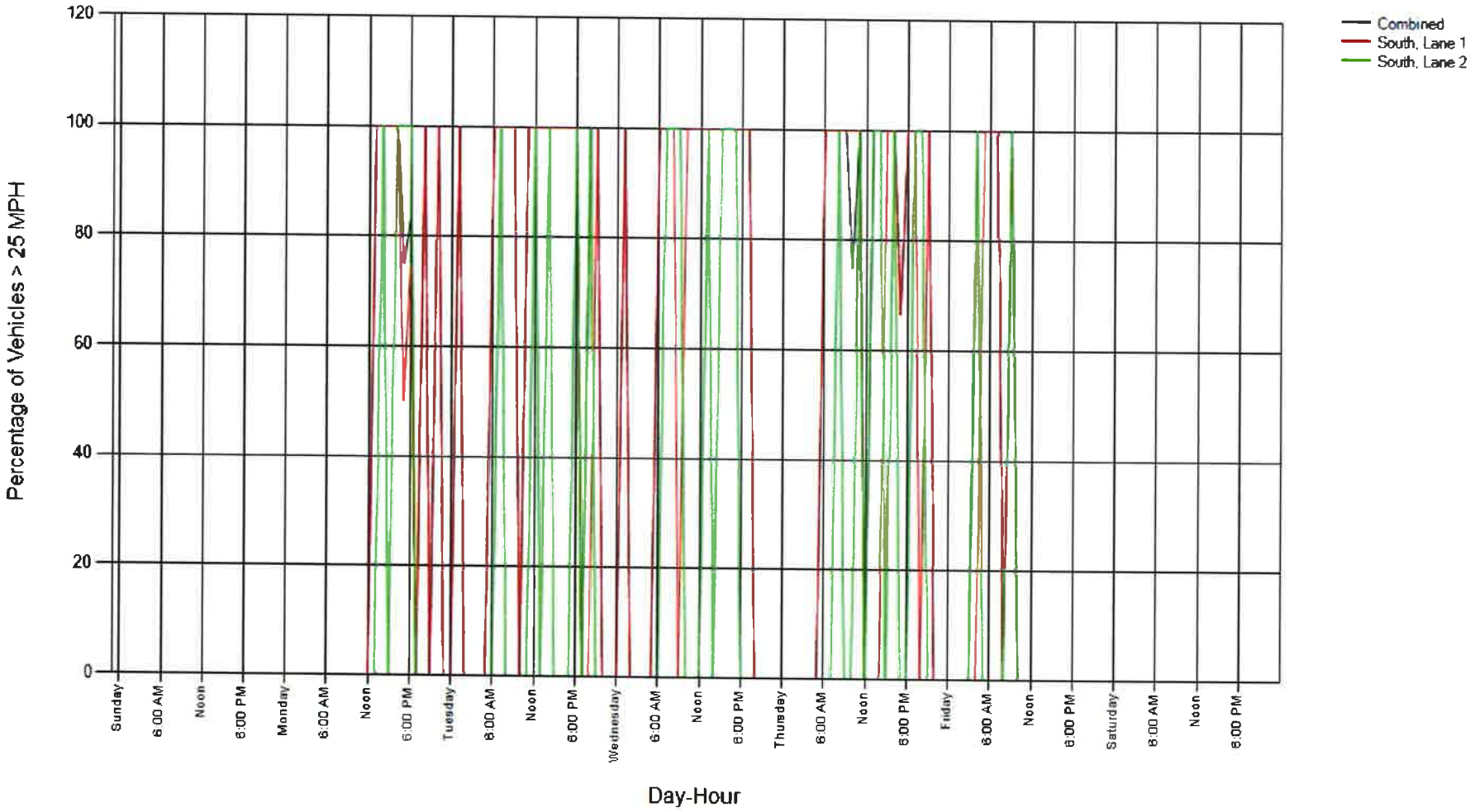


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 25 MPH

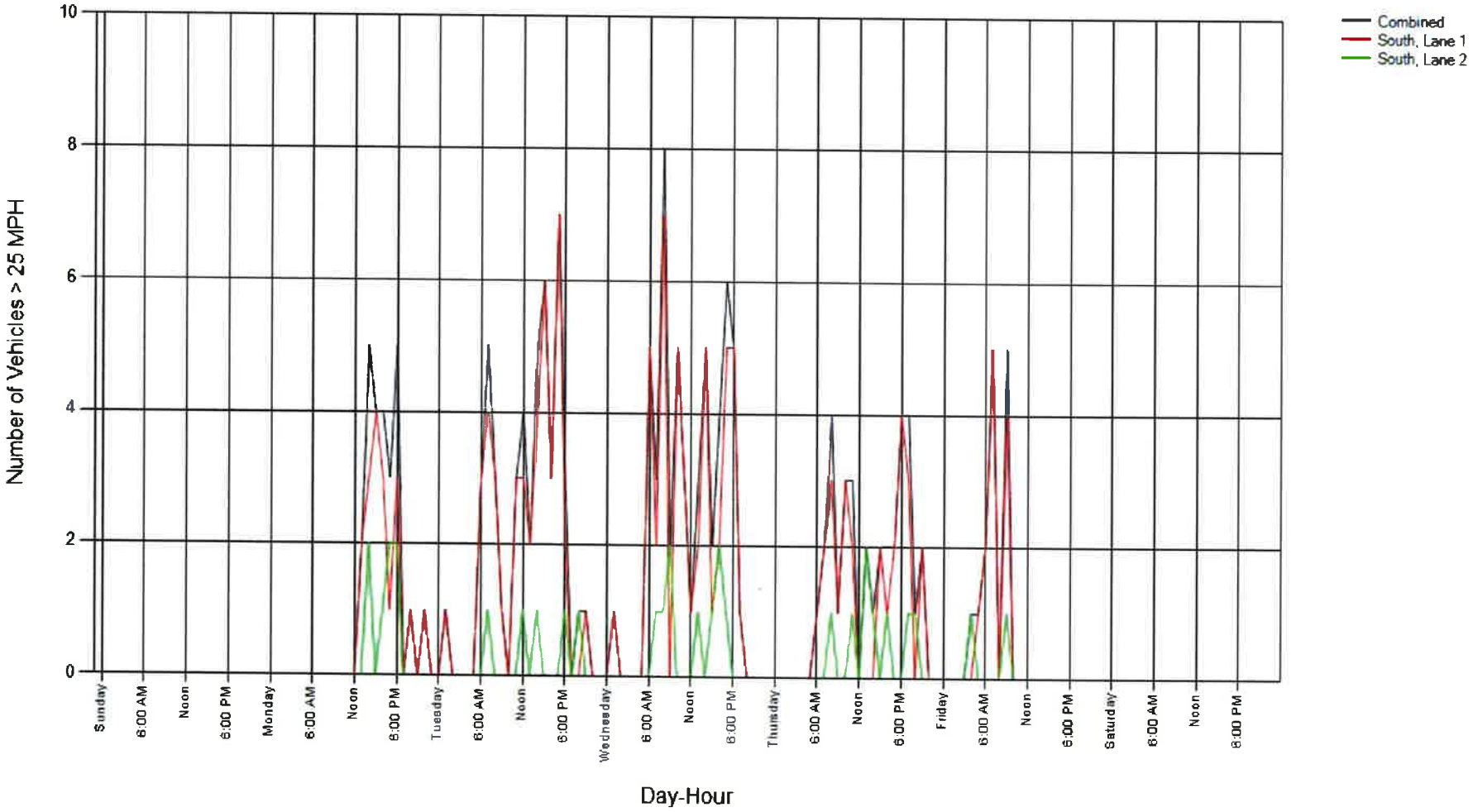


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 25 MPH

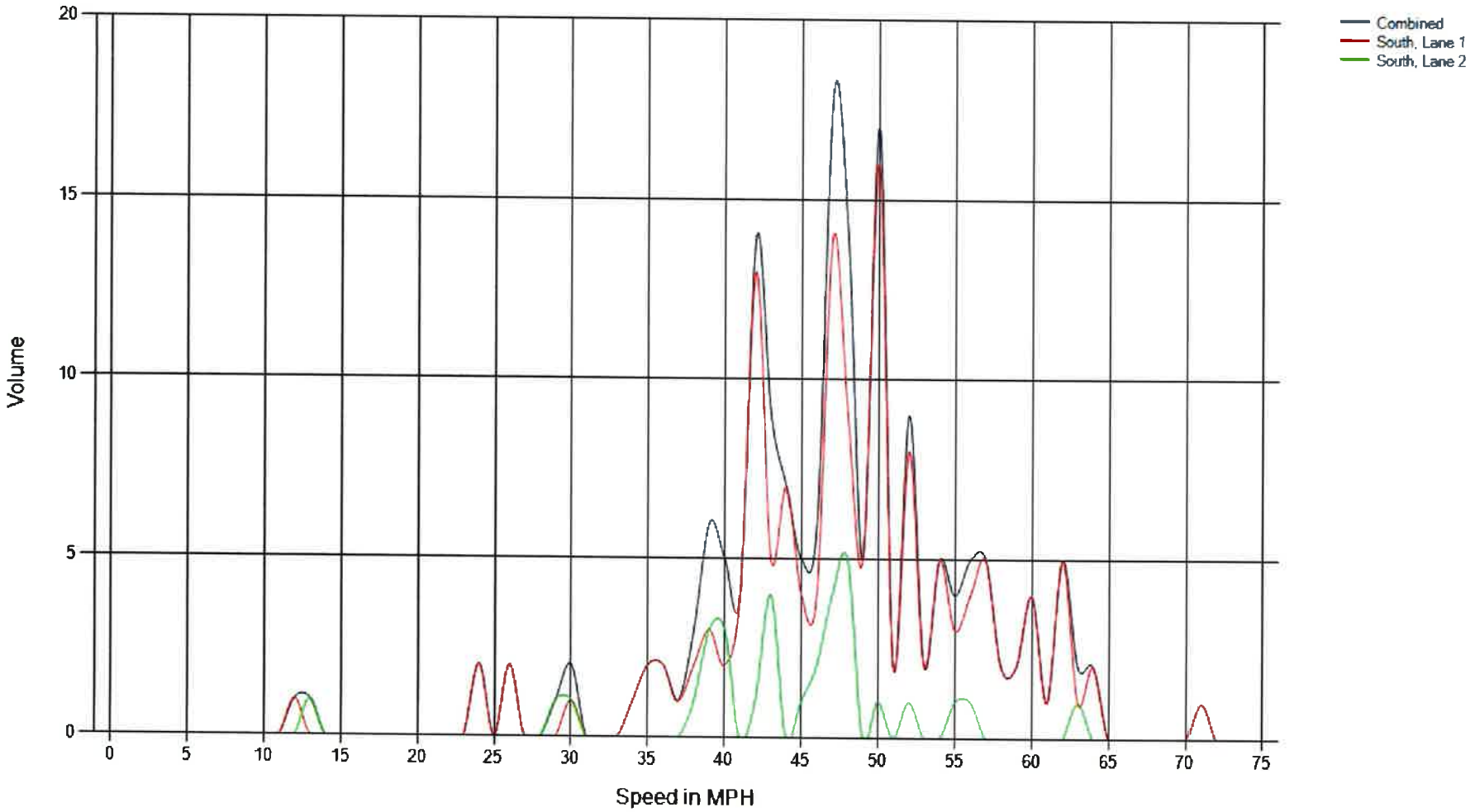


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 1
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Sand Bridge Rd
Location 2:	Utlity Pole #B10964
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	1	2	2	5	4	0	1	0	0	0	15
Tuesday	0	1	0	1	3	3	7	4	3	0	0	0	0	22
Wednesday	0	0	1	1	1	1	2	2	2	1	0	0	0	11
Thursday	0	0	0	0	1	2	5	2	0	0	1	0	0	11
Friday	0	0	0	1	2	5	1	2	0	0	0	0	0	11
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	4	9	13	20	14	5	2	1	0	0	70

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/24/2021	No Volume					16:59	6	16:59	2	0.75
5/25/2021	10:55	6	10:55	2	0.75	15:10	3	15:25	1	0.75
5/26/2021	05:37	2	05:42	1	0.50	15:45	4	15:45	1	1.00
5/27/2021	08:26	4	08:32	2	0.50	14:48	2	15:14	1	0.50
5/28/2021	07:44	4	08:20	2	0.50	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
34 - 43	37	51%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	73
Total Greater Than 50.0	10
Percent Greater Than 50.0	13.7%

Mean, Median, and Mode Averages

Mean:	40.4
Median (50th %):	40.9
Mode:	41.0

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Burlington Rd 2
Station ID: CR 677
Location 1: Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2: Utility Pole #B9510
Latitude: 0.000000
Longitude: 0.000000

File Name: Burlington Rd 2
Date Printed: 5/28/2021
Start Date: 5/24/2021
End Date: 5/28/2021
GPS Accuracy: 0ft
Location Verified: No

73	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/24/2021	South, Lane 1	10		1.00		1.00		10		1.00		10
5/24/2021	North, Lane 2	5		1.00		1.00		5		1.00		5
5/24/2021	Day Total	15						15				15
5/25/2021	South, Lane 1	8		1.00		1.00		8		1.00		8
5/25/2021	North, Lane 2	14		1.00		1.00		14		1.00		14
5/25/2021	Day Total	22						22				22
5/26/2021	South, Lane 1	3		1.00		1.00		3		1.00		3
5/26/2021	North, Lane 2	10		1.00		1.00		10		1.00		10
5/26/2021	Day Total	13						13				13
5/27/2021	South, Lane 1	3		1.00		1.00		3		1.00		3
5/27/2021	North, Lane 2	9		1.00		1.00		9		1.00		9
5/27/2021	Day Total	12						12				12
5/28/2021	South, Lane 1	3		1.00		1.00		3		1.00		3
5/28/2021	North, Lane 2	8		1.00		1.00		8		1.00		8
5/28/2021	Day Total	11						11				11
Total		73						73				73
Average		14						14				14

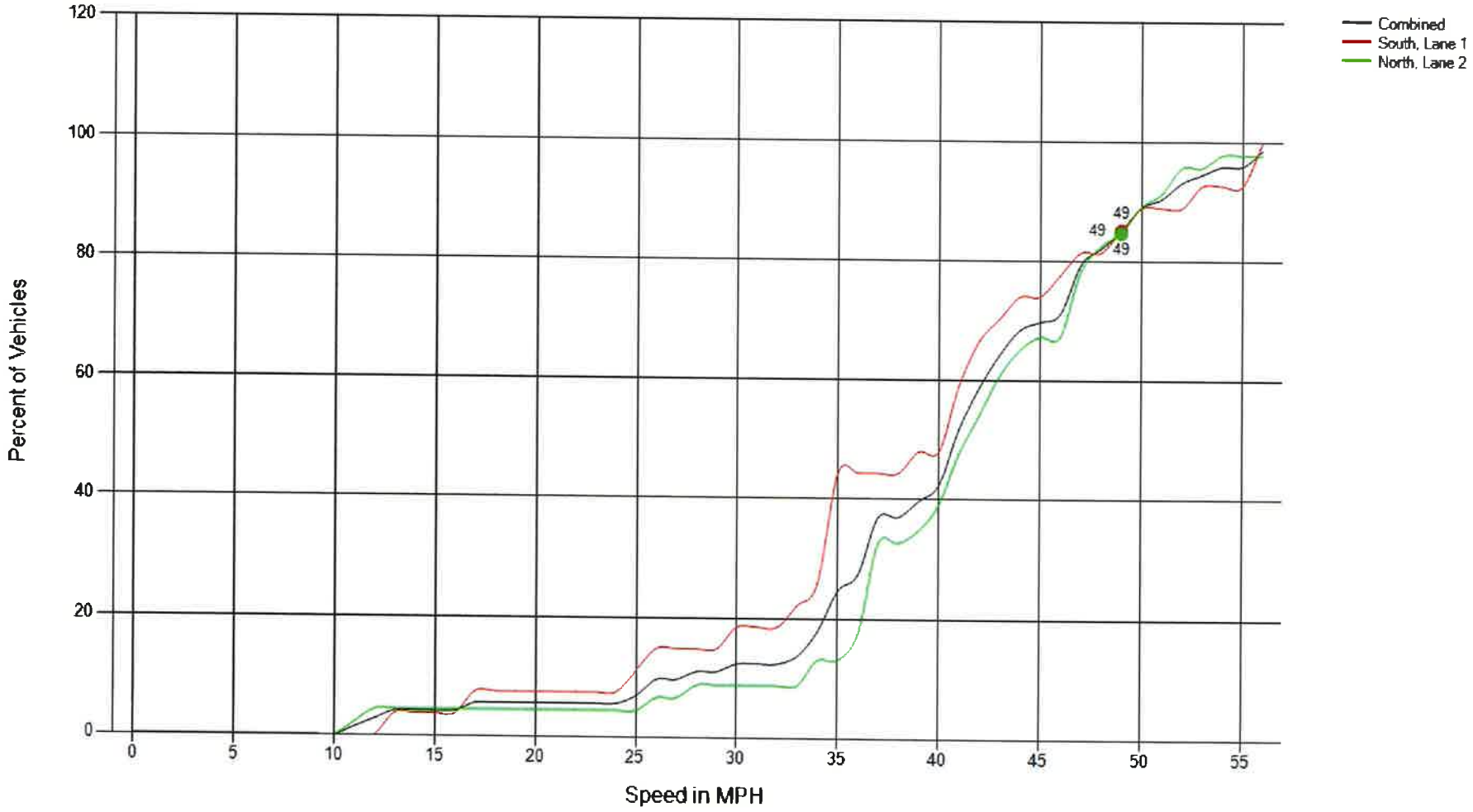
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

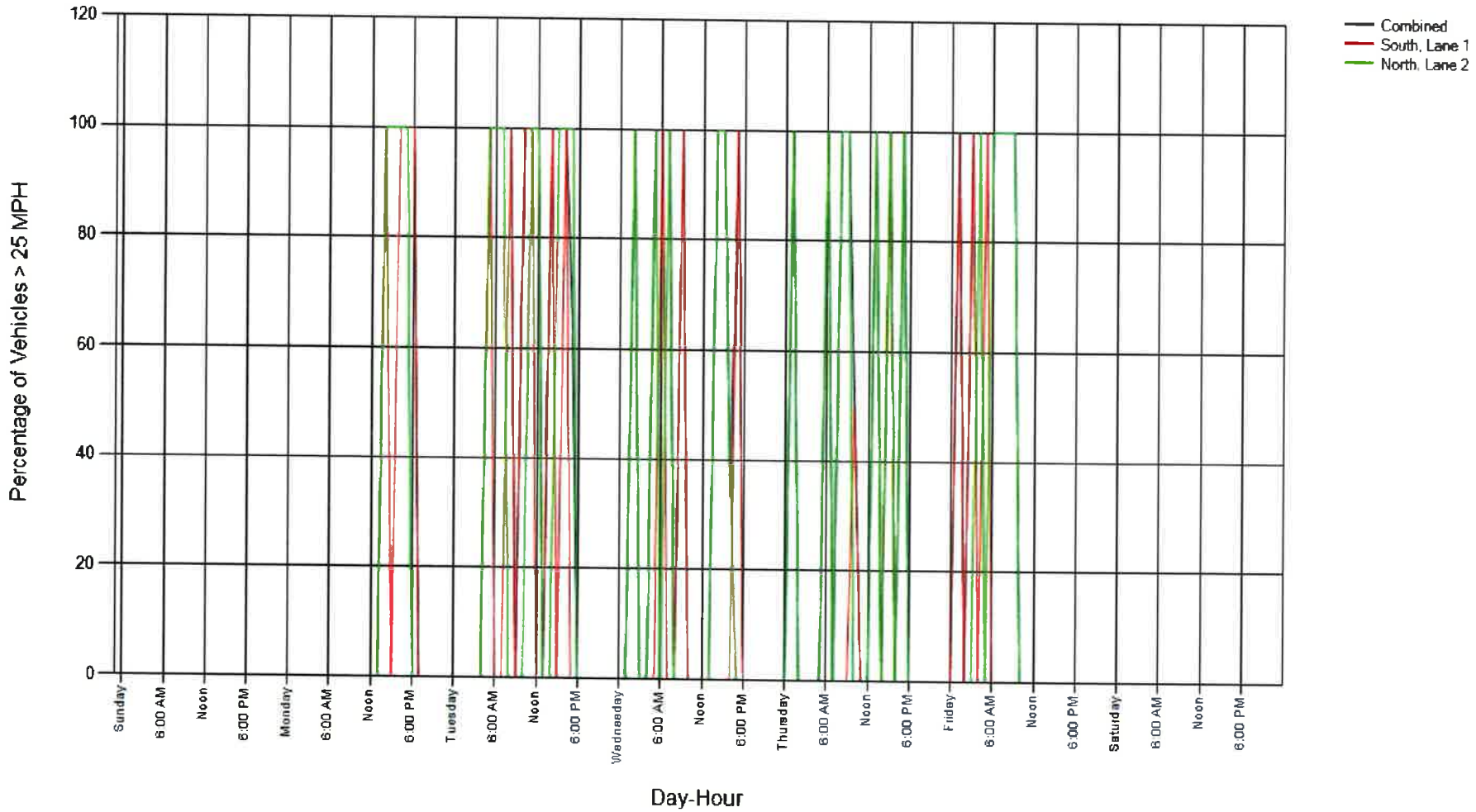


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 25 MPH

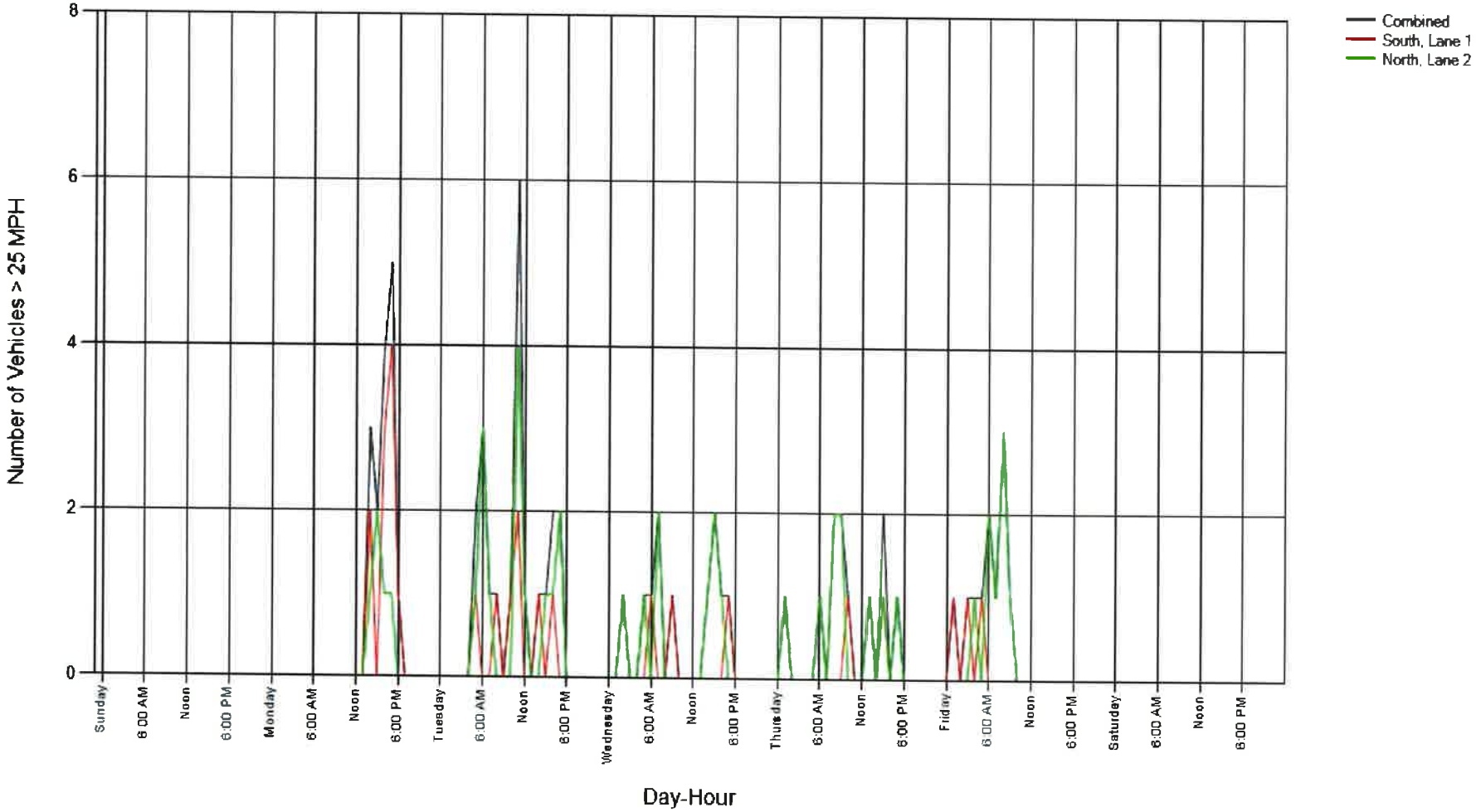


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 25 MPH

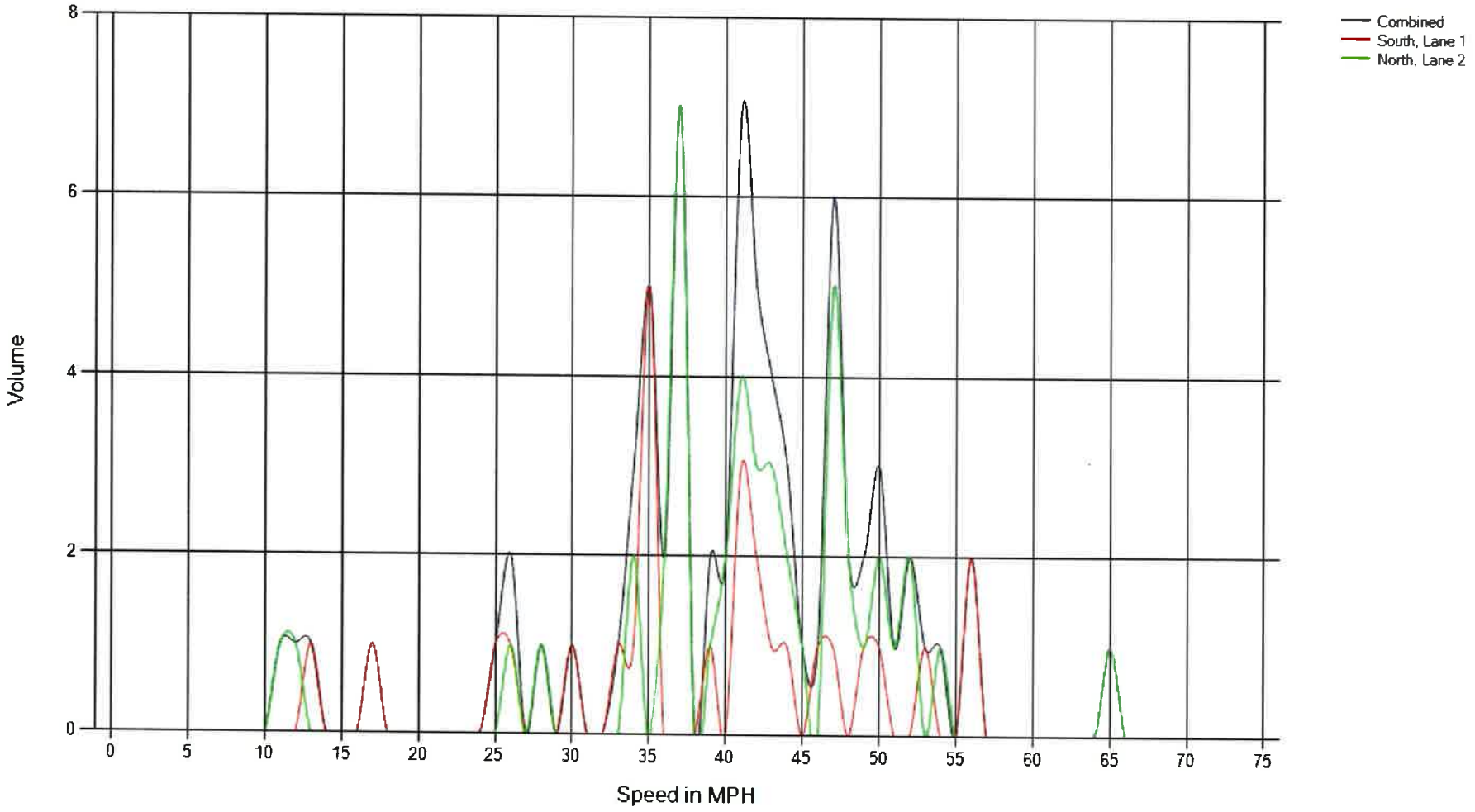


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Burlington Rd 2
Station ID:	CR 677
Location 1:	Between CR 611 Elmer - Shirley Rd and Garrison RD
Location 2:	Utility Pole #B9510
Latitude:	0.000000
Longitude:	0.000000

File Name:	Burlington Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	2	3	26	78	188	169	80	27	3	4	580
Tuesday	0	0	0	5	12	48	198	397	347	171	50	8	3	1,239
Wednesday	0	0	0	1	4	36	125	323	367	175	48	14	4	1,097
Thursday	0	0	0	0	5	34	132	318	340	164	45	14	3	1,055
Friday	0	0	0	0	0	13	49	91	94	36	16	5	1	305
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	8	24	157	582	1,317	1,317	626	186	44	15	4,276

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 2
Station ID:	CR 611
Location 1:	Between Eft Rd and CR 677 Burlington Rd
Location 2:	Utility Pole #56
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer-Shirley Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/24/2021	No Volume					15:39	166	15:56	65	0.64
5/25/2021	08:13	168	08:16	61	0.69	15:12	183	15:56	67	0.68
5/26/2021	07:37	153	08:17	51	0.75	15:40	172	15:57	68	0.63
5/27/2021	07:40	169	08:18	67	0.63	15:54	161	15:54	59	0.68
5/28/2021	07:52	164	08:15	63	0.65	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
49 - 58	3,227	55%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	5,835
Total Greater Than 50.0	3,884
Percent Greater Than 50.0	66.6%

Mean, Median, and Mode Averages

Mean:	52.6
Median (50th %):	52.7
Mode:	52.8

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Elmer - Shirley Rd 2
Station ID: CR 611
Location 1: Between Eft Rd and CR 677 Burlington Rd
Location 2: Utility Pole #56
Latitude: 0.000000
Longitude: 0.000000

File Name: Elmer-Shirley Rd 2
Date Printed: 5/28/2021
Start Date: 5/24/2021
End Date: 5/28/2021
GPS Accuracy: 0ft
Location Verified: No

5835	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/24/2021	West, Lane 1	176		1.00		1.00		176		1.00		176
5/24/2021	East, Lane 2	594		1.00		1.00		594		1.00		594
5/24/2021	Day Total	770						770				770
5/25/2021	West, Lane 1	360		1.00		1.00		360		1.00		360
5/25/2021	East, Lane 2	1,341		1.00		1.00		1,341		1.00		1,341
5/25/2021	Day Total	1,701						1,701				1,701
5/26/2021	West, Lane 1	269		1.00		1.00		269		1.00		269
5/26/2021	East, Lane 2	1,201		1.00		1.00		1,201		1.00		1,201
5/26/2021	Day Total	1,470						1,470				1,470
5/27/2021	West, Lane 1	247		1.00		1.00		247		1.00		247
5/27/2021	East, Lane 2	1,226		1.00		1.00		1,226		1.00		1,226
5/27/2021	Day Total	1,473						1,473				1,473
5/28/2021	West, Lane 1	79		1.00		1.00		79		1.00		79
5/28/2021	East, Lane 2	342		1.00		1.00		342		1.00		342
5/28/2021	Day Total	421						421				421
Total		5835						5835				5835
Average		1167						1167				1167

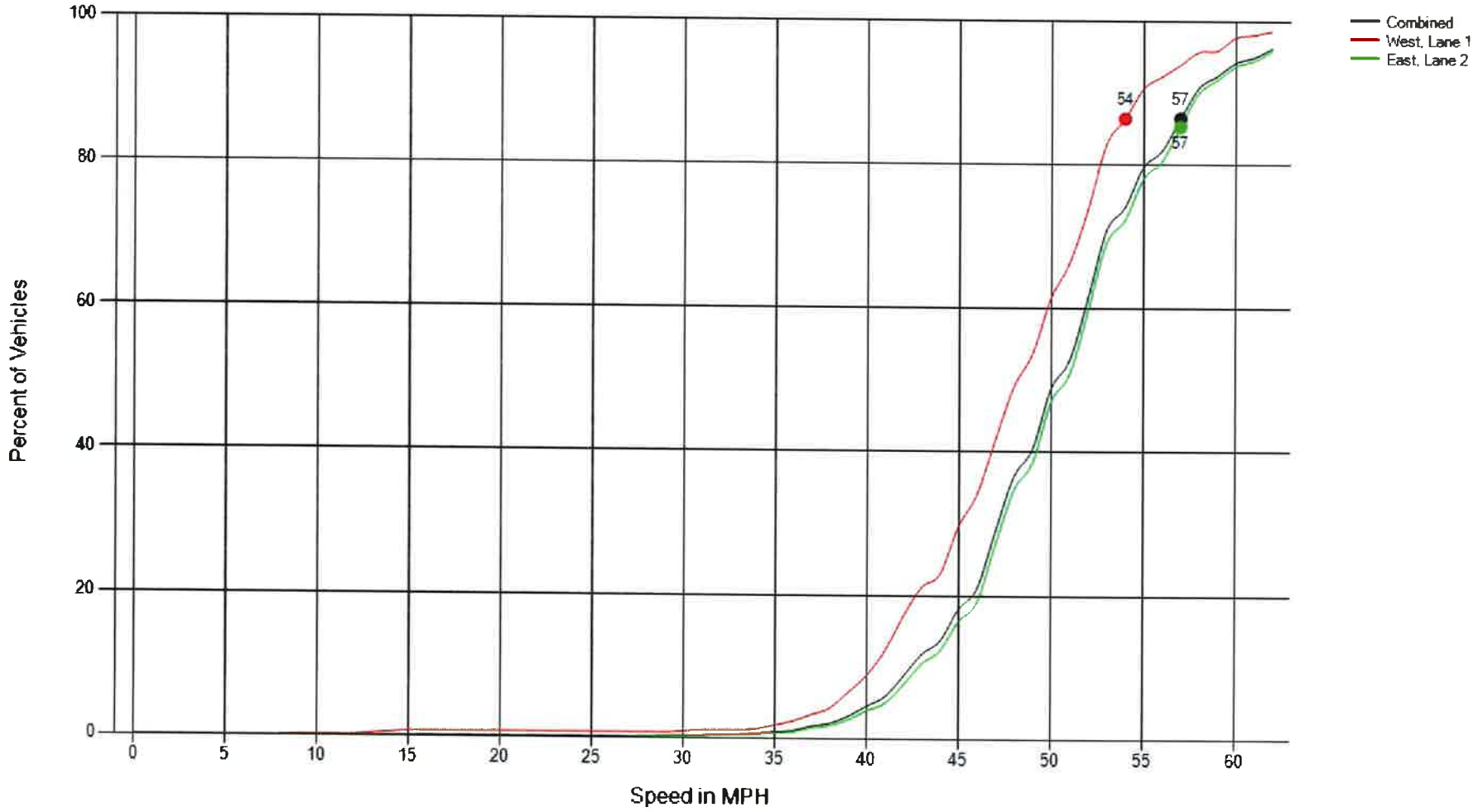
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

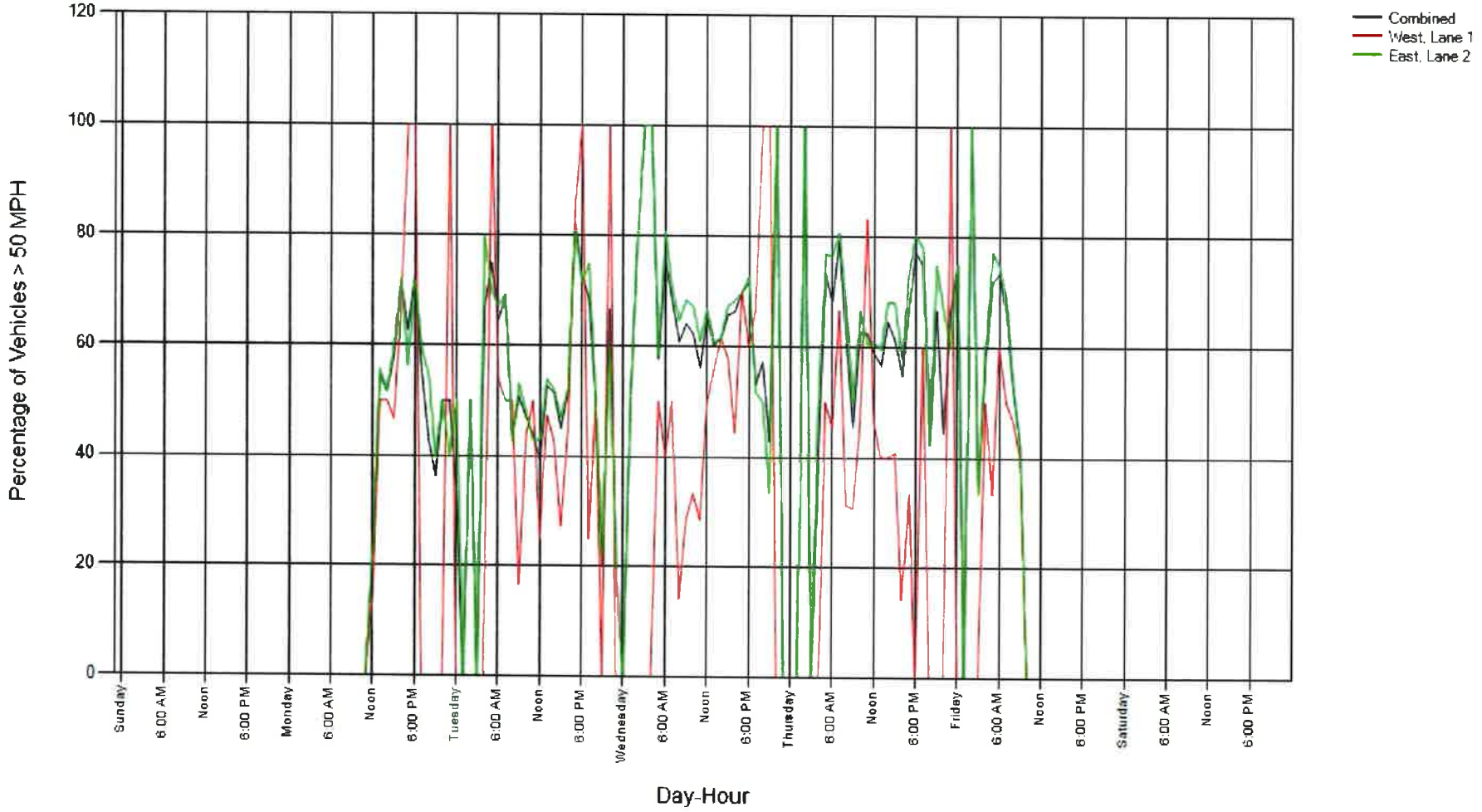


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 50 MPH

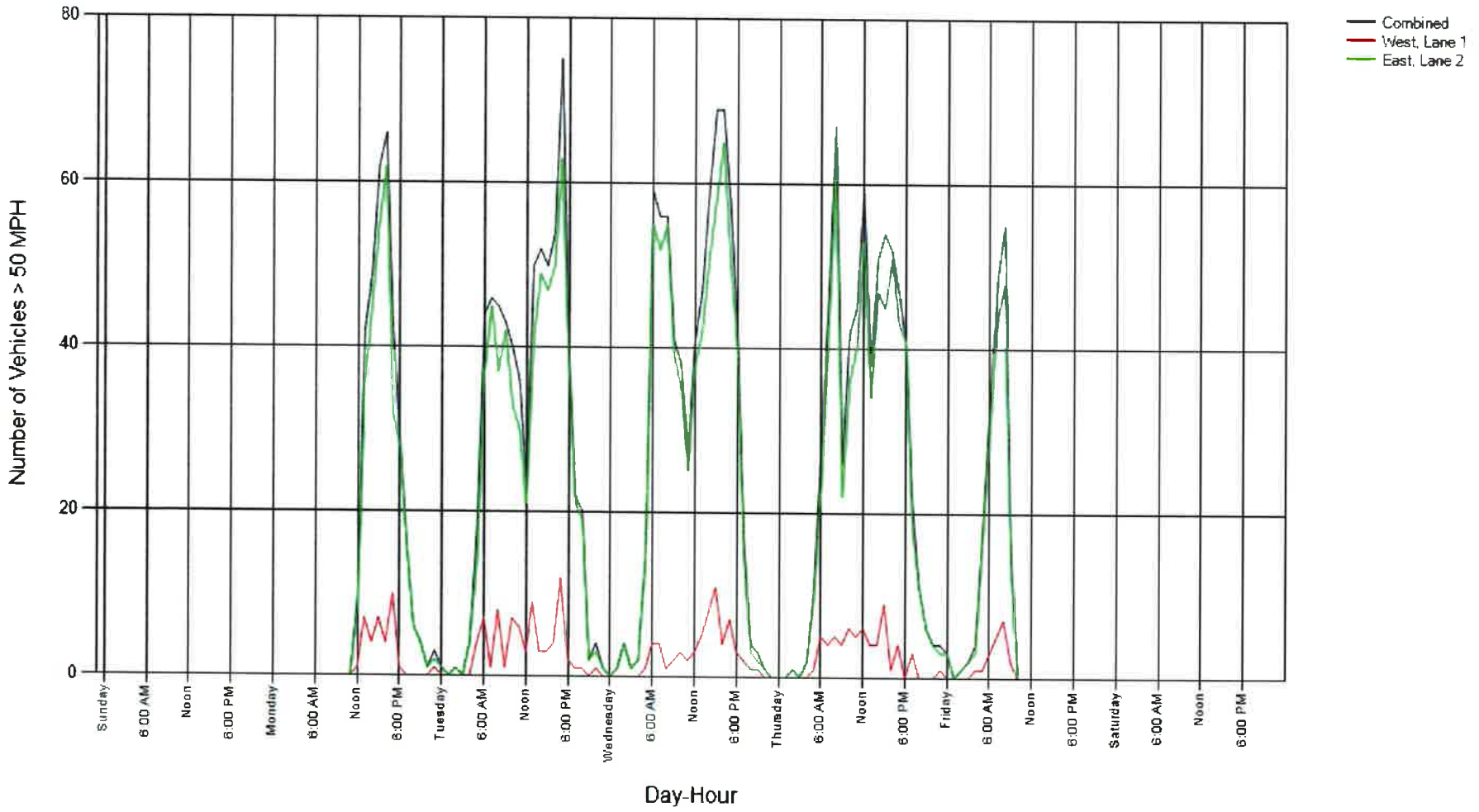


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 50 MPH

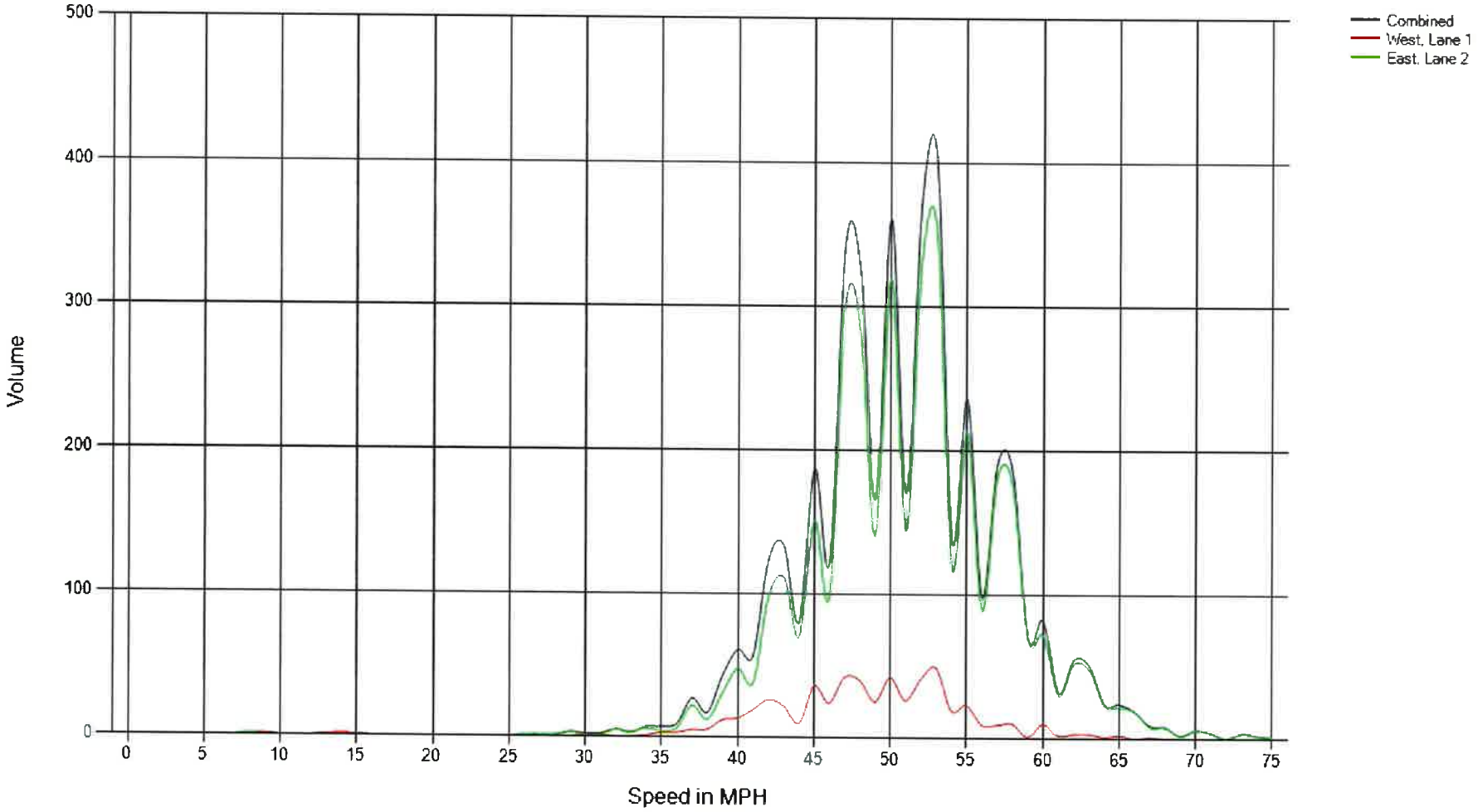


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Elmer - Shirley Rd 2
Station ID: CR 611
Location 1: Between Eft Rd and CR 677 Burlington Rd
Location 2: Utility Pole #56
Latitude: 0.000000
Longitude: 0.000000

File Name: Elmer-Shirley Rd 2
Date Printed: 5/28/2021
Start Date: 5/24/2021
End Date: 5/28/2021
GPS Accuracy: 0ft
Location Verified: No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	2	6	29	85	161	229	161	70	20	7	770
Tuesday	0	2	4	8	19	48	178	402	531	342	121	32	14	1,701
Wednesday	0	1	2	9	12	44	129	292	459	340	128	34	14	1,464
Thursday	0	0	0	1	7	40	147	334	465	300	139	30	7	1,470
Friday	0	1	0	2	3	14	47	98	119	77	37	15	8	421
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	6	22	47	175	586	1,287	1,803	1,220	495	131	50	5,826

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 1
Station ID:	CR 611
Location 1:	Between State St and CR 677 Burlington Rd
Location 2:	Utility pole next to utility pole #B43496
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer - Shirley Rd 1
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/24/2021	No Volume					14:41	110	14:59	39	0.71
5/25/2021	07:42	110	08:16	37	0.74	14:35	135	14:52	48	0.70
5/26/2021	07:38	110	08:18	35	0.79	15:13	128	15:57	42	0.76
5/27/2021	07:43	116	08:18	42	0.69	12:02	103	12:33	34	0.76
5/28/2021	08:05	111	08:14	37	0.75	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
46 - 55	2,634	62%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	4,281
Total Greater Than 50.0	2,382
Percent Greater Than 50.0	55.6%

Mean, Median, and Mode Averages

Mean:	50.8
Median (50th %):	50.9
Mode:	52.8

Classification Statistics

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Elmer - Shirley Rd 1
Station ID: CR 611
Location 1: Between State St and CR 677 Burlington Rd
Location 2: Utility pole next to utility pole #B43496
Latitude: 0.000000
Longitude: 0.000000

File Name: Elmer - Shirley Rd 1
Date Printed: 5/28/2021
Start Date: 5/24/2021
End Date: 5/28/2021
GPS Accuracy: 0ft
Location Verified: No

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
4281	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/24/2021	West, Lane 1	68		1.00		1.00		68		1.00		68
5/24/2021	East, Lane 2	513		1.00		1.00		513		1.00		513
5/24/2021	Day Total	581						581				581
5/25/2021	West, Lane 1	153		1.00		1.00		153		1.00		153
5/25/2021	East, Lane 2	1,087		1.00		1.00		1,087		1.00		1,087
5/25/2021	Day Total	1,240						1,240				1,240
5/26/2021	West, Lane 1	127		1.00		1.00		127		1.00		127
5/26/2021	East, Lane 2	972		1.00		1.00		972		1.00		972
5/26/2021	Day Total	1,099						1,099				1,099
5/27/2021	West, Lane 1	155		1.00		1.00		155		1.00		155
5/27/2021	East, Lane 2	901		1.00		1.00		901		1.00		901
5/27/2021	Day Total	1,056						1,056				1,056
5/28/2021	West, Lane 1	40		1.00		1.00		40		1.00		40
5/28/2021	East, Lane 2	265		1.00		1.00		265		1.00		265
5/28/2021	Day Total	305						305				305
Total		4281						4281				4281
Average		857						857				857

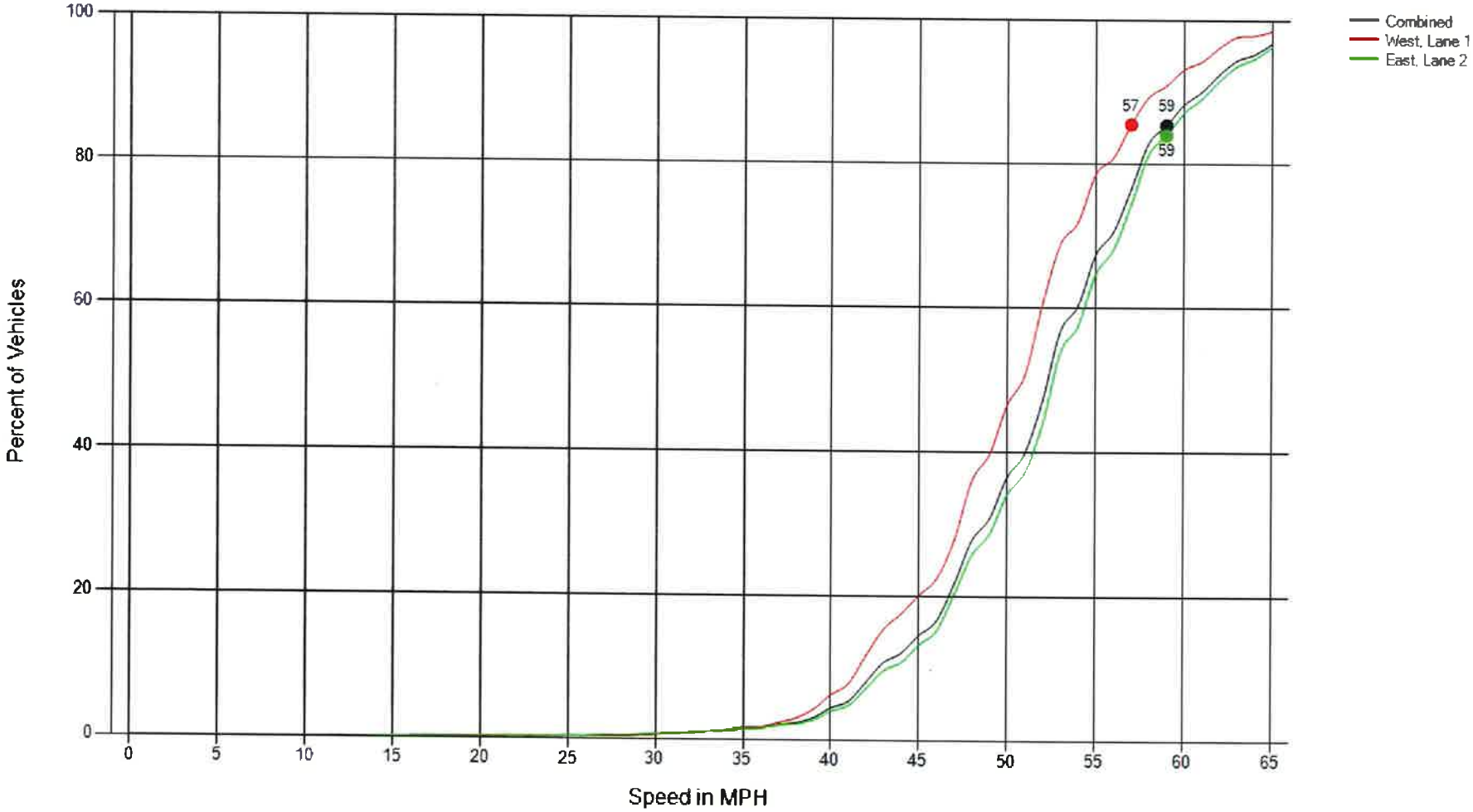
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 2
Station ID:	CR 611
Location 1:	Between Eft Rd and CR 677 Burlington Rd
Location 2:	Utility Pole #56
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer-Shirley Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

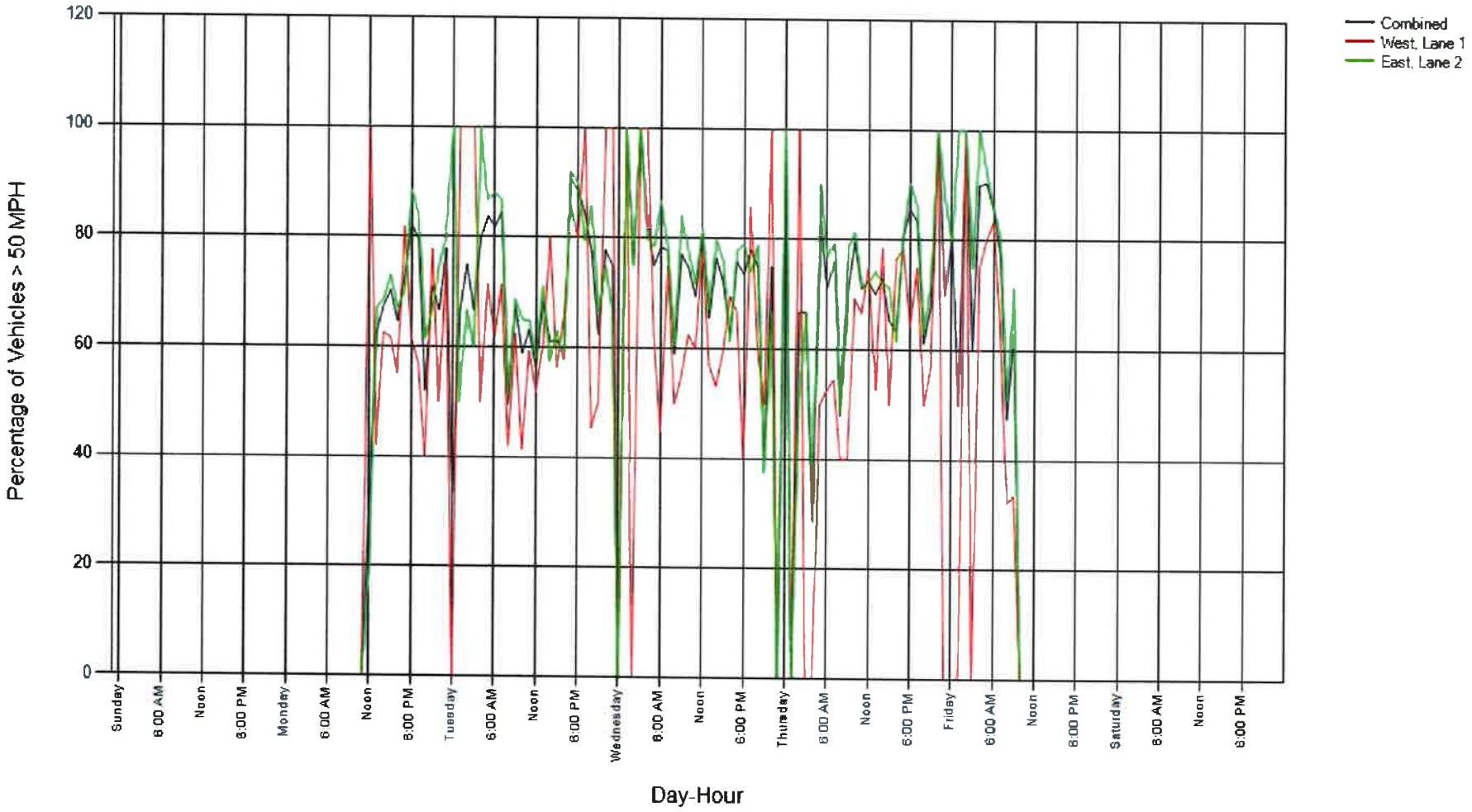


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 2
Station ID:	CR 611
Location 1:	Between Eft Rd and CR 677 Burlington Rd
Location 2:	Utility Pole #56
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer-Shirley Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 50 MPH

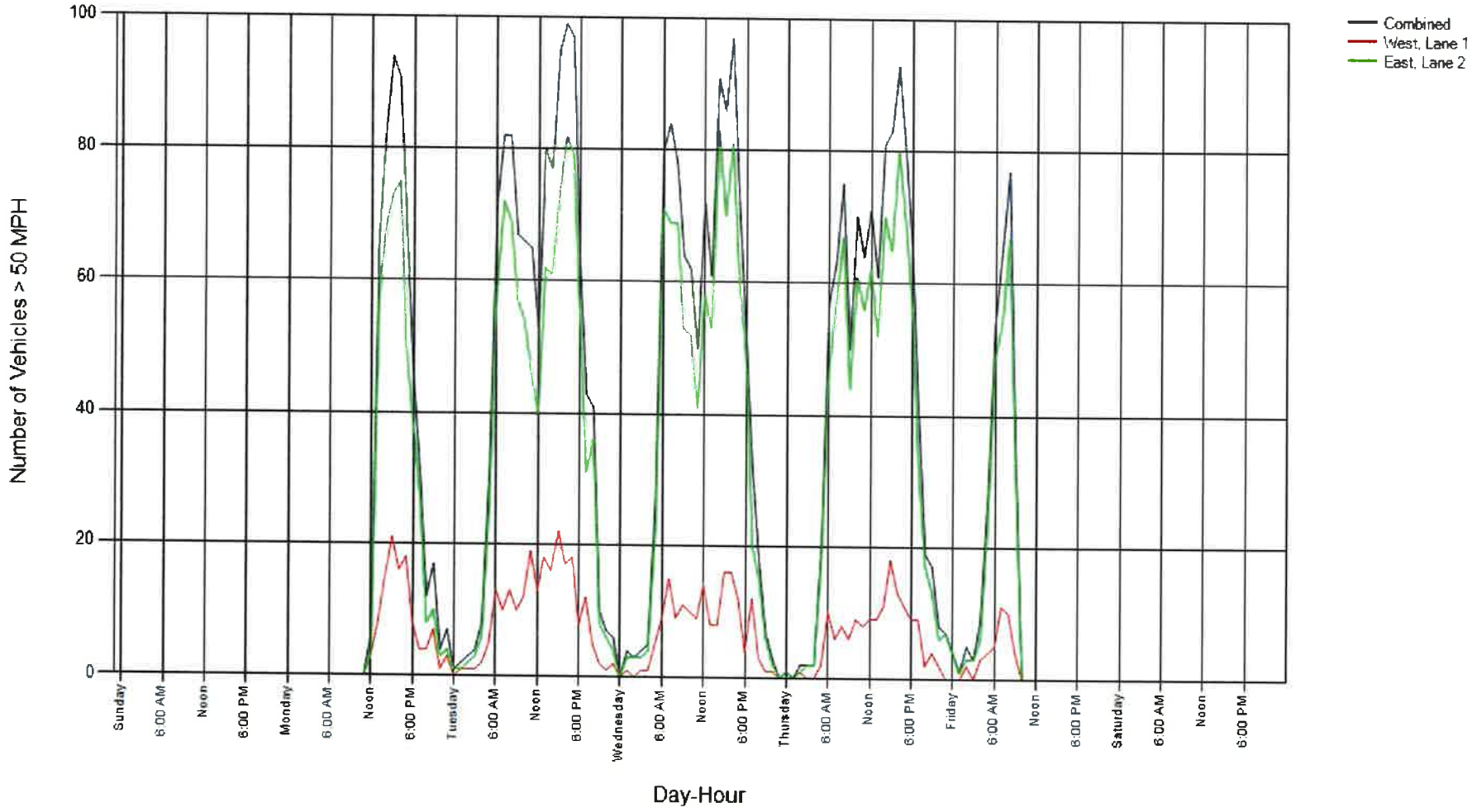


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 2
Station ID:	CR 611
Location 1:	Between Eft Rd and CR 677 Burlington Rd
Location 2:	Utility Pole #56
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer-Shirley Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 50 MPH

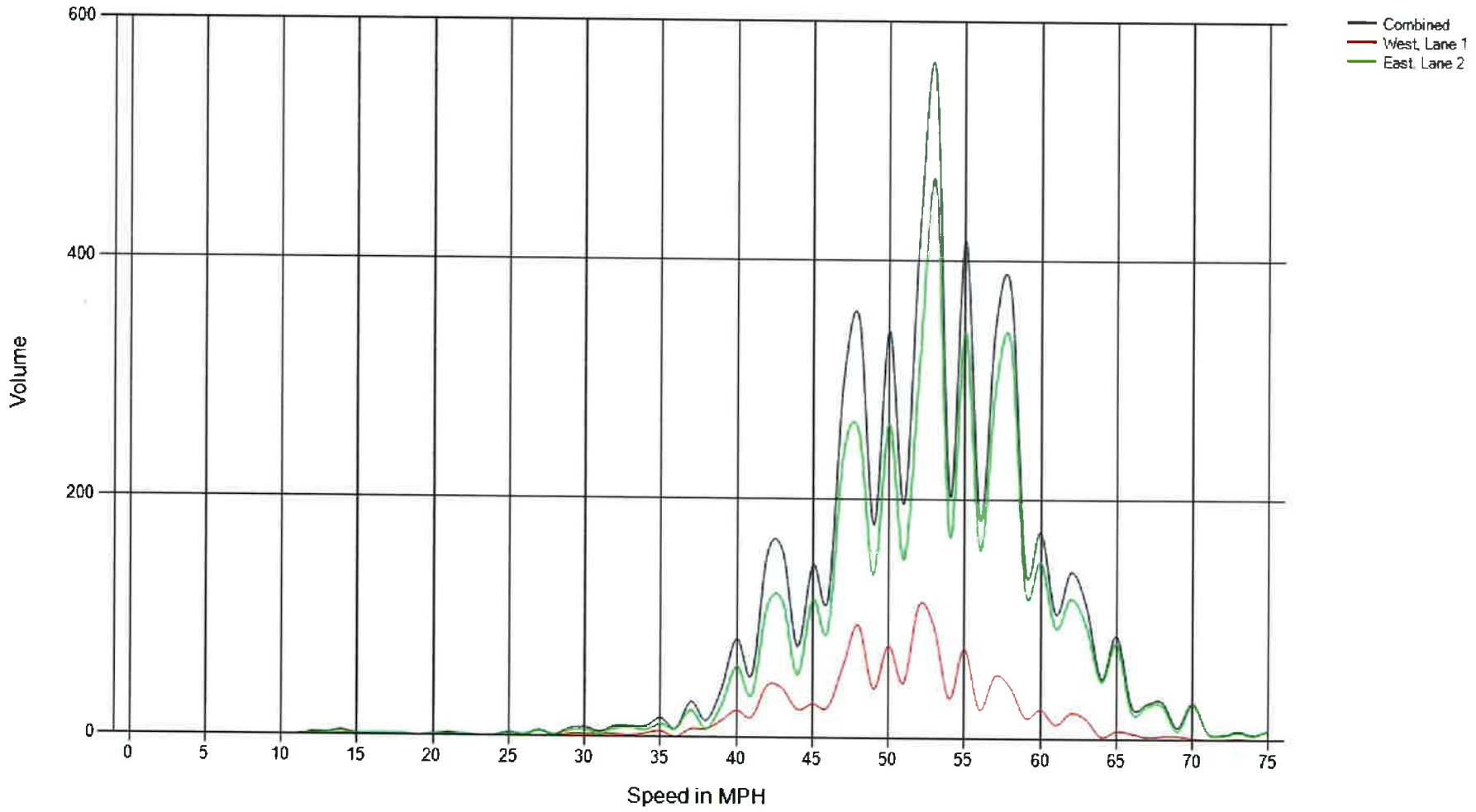


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Elmer - Shirley Rd 2
Station ID:	CR 611
Location 1:	Between Eft Rd and CR 677 Burlington Rd
Location 2:	Utility Pole #56
Latitude:	0.000000
Longitude:	0.000000

File Name:	Elmer-Shirley Rd 2
Date Printed:	5/28/2021
Start Date:	5/24/2021
End Date:	5/28/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 661 Sinnickson Landing Rd
Station ID:
Location 1: Between CR 627 South Tilbury Rd and Friendship Dr
Location 2: Pole #S37876
Latitude: 0.000000
Longitude: 0.000000

File Name: Sinnickson Landing 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	13	67	64	28	3	0	0	0	0	0	0	0	175
Wednesday	0	16	83	101	34	4	0	0	0	0	0	0	0	238
Thursday	0	22	95	102	34	2	0	0	0	0	0	0	0	255
Friday	0	12	45	53	16	1	0	0	0	0	0	0	0	127
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	63	290	320	112	10	0	0	0	0	0	0	0	795

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd
Station ID:	
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr
Location 2:	Pole #S37876
Latitude:	0.000000
Longitude:	0.000000

File Name:	Sinnickson Landing 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/11/2021	10:57	8	11:41	6	0.33	12:02	31	12:23	14	0.55
5/12/2021	10:51	20	11:06	7	0.71	17:41	28	18:25	11	0.64
5/13/2021	10:22	27	11:02	11	0.61	12:50	30	12:50	8	0.94
5/14/2021	10:06	23	10:46	10	0.58	13:22	24	13:38	8	0.75

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
21 - 30	610	74%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume 819
Total Greater Than 50.0
Percent Greater Than 50.00.0%

Mean, Median, and Mode Averages

Mean:	25.9
Median (50th %):	26.0
Mode:	26.7

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd	File Name:	Sinnickson Landing 1
Station ID:		Date Printed:	5/17/2021
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr	Start Date:	5/11/2021
Location 2:	Pole #S37876	End Date:	5/14/2021
Latitude:	0.000000	GPS Accuracy:	0ft
Longitude:	0.000000	Location Verified:	No

819	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/11/2021	East, Lane 1	41		1.00		1.00		41		1.00		41
5/11/2021	West, Lane 2	142		1.00		1.00		142		1.00		142
5/11/2021	Day Total	183						183				183
5/12/2021	East, Lane 1	70		1.00		1.00		70		1.00		70
5/12/2021	West, Lane 2	170		1.00		1.00		170		1.00		170
5/12/2021	Day Total	240						240				240
5/13/2021	East, Lane 1	66		1.00		1.00		66		1.00		66
5/13/2021	West, Lane 2	198		1.00		1.00		198		1.00		198
5/13/2021	Day Total	264						264				264
5/14/2021	East, Lane 1	47		1.00		1.00		47		1.00		47
5/14/2021	West, Lane 2	85		1.00		1.00		85		1.00		85
5/14/2021	Day Total	132						132				132
Total		819						819				819
Average		205						205				205

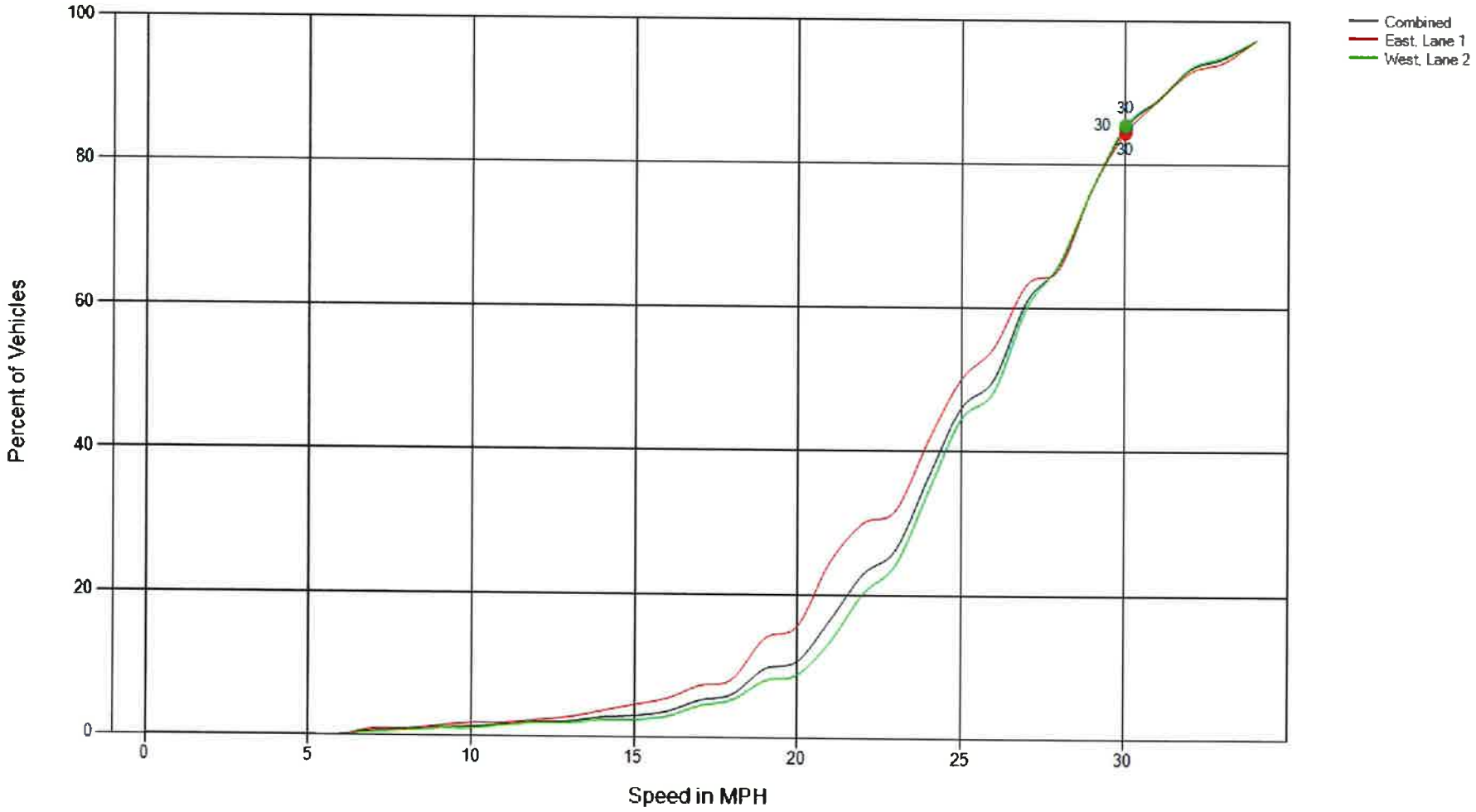
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd
Station ID:	
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr
Location 2:	Pole #S37876
Latitude:	0.000000
Longitude:	0.000000

File Name:	Sinnickson Landing 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

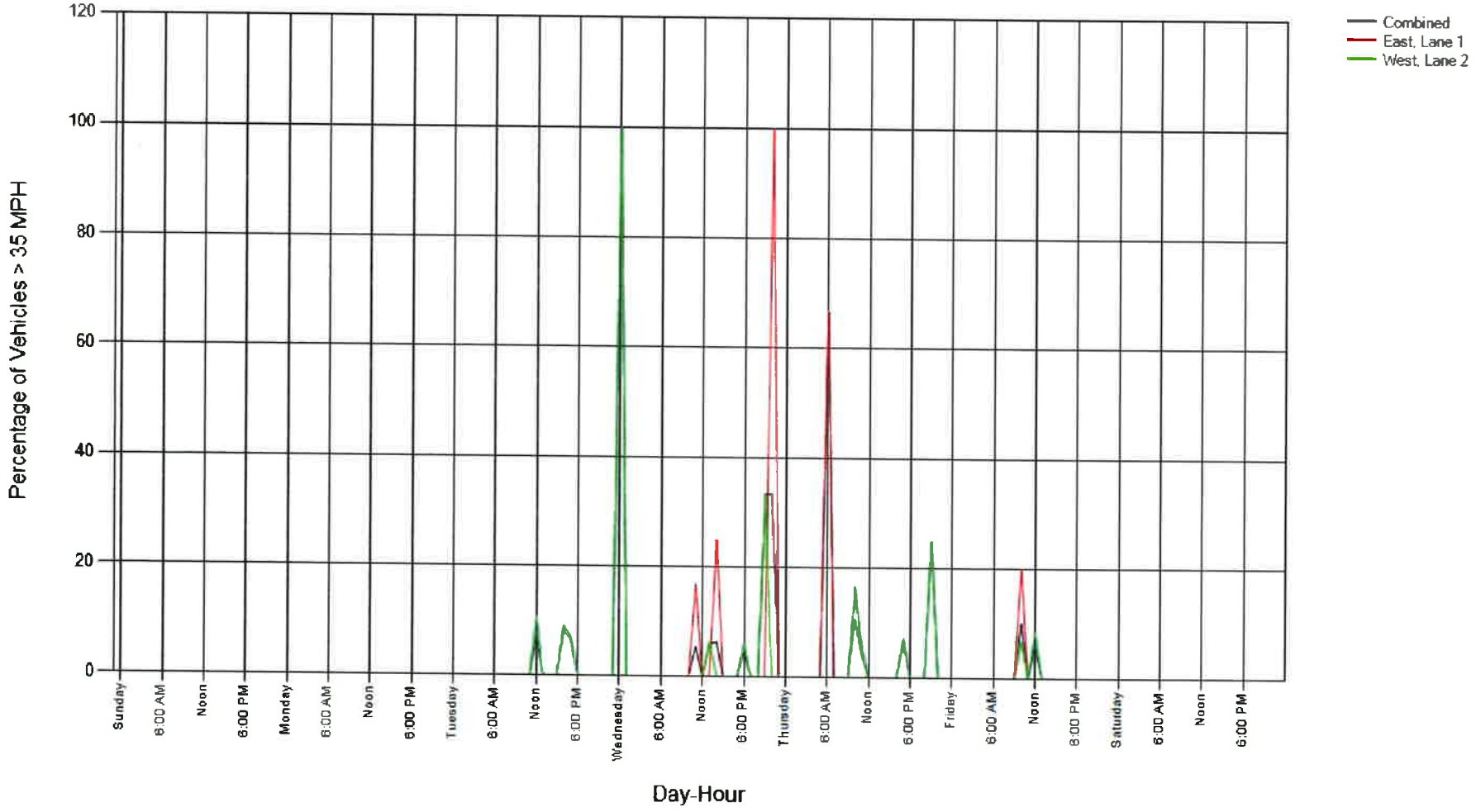


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd
Station ID:	
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr
Location 2:	Pole #S37876
Latitude:	0.000000
Longitude:	0.000000

File Name:	Sinnickson Landing 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 35 MPH

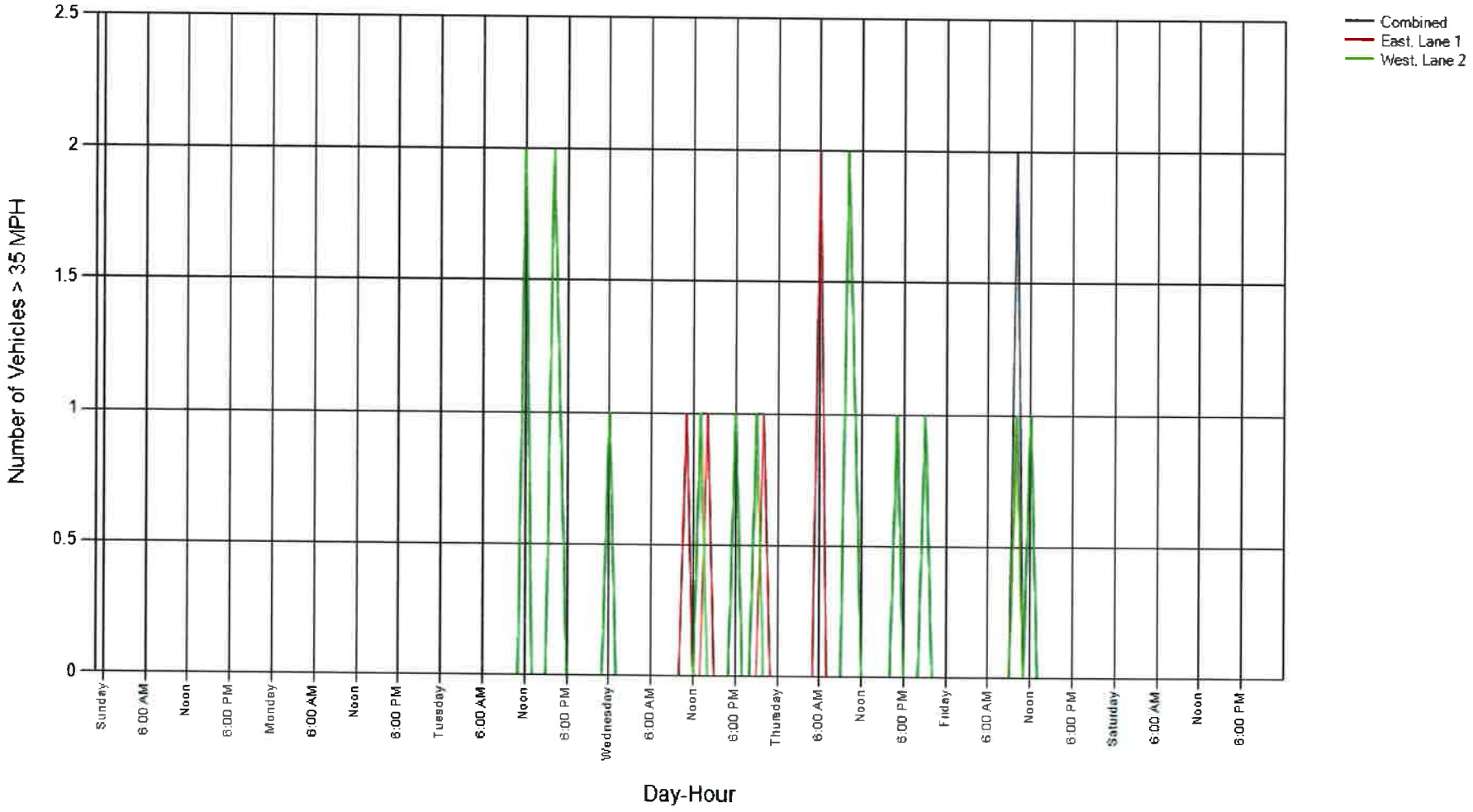


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd
Station ID:	
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr
Location 2:	Pole #S37876
Latitude:	0.000000
Longitude:	0.000000

File Name:	Sinnickson Landing 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 35 MPH

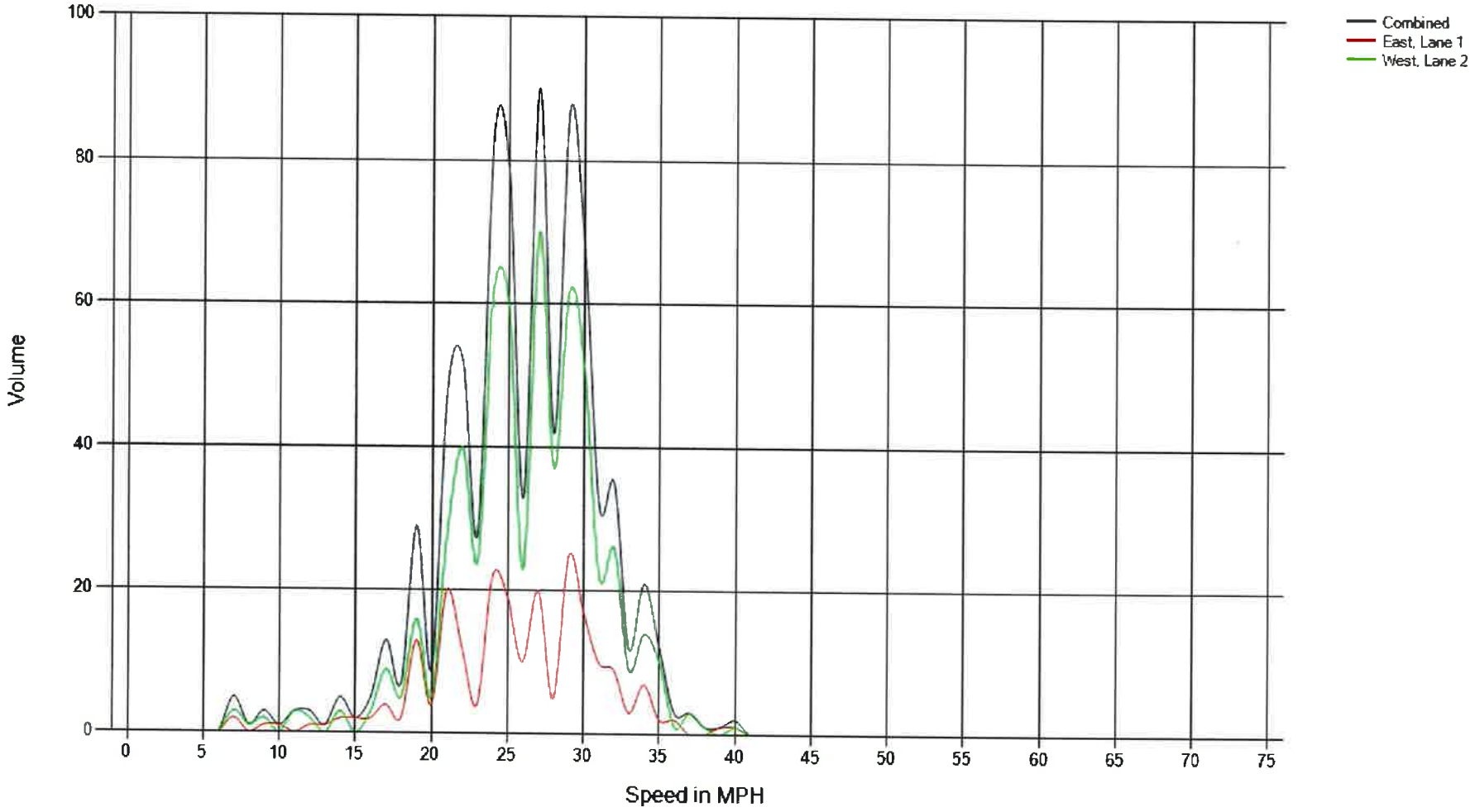


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Sinnickson Landing Rd
Station ID:	
Location 1:	Between CR 627 South Tilbury Rd and Friendship Dr
Location 2:	Pole #S37876
Latitude:	0.000000
Longitude:	0.000000

File Name:	Sinnickson Landing 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 661 Tilbury Rd
Station ID:
Location 1: Between Stuart Dr and CR 627 South Tilbury Rd
Location 2: Pole #26
Latitude: 0.000000
Longitude: 0.000000

File Name: Tilbury Rd 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	6	18	70	134	117	35	9	2	1	0	0	0	392
Wednesday	0	11	28	102	183	160	68	12	4	0	0	0	0	568
Thursday	0	16	27	103	198	169	79	16	3	1	0	0	0	612
Friday	0	6	19	47	78	77	35	8	4	0	0	0	0	274
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	39	92	322	593	523	217	45	13	2	0	0	0	1,846

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 661 Tilbury Rd
Station ID:
Location 1: Between Stuart Dr and CR 627 South Tilbury Rd
Location 2: Pole #26
Latitude: 0.000000
Longitude: 0.000000

File Name: Tilbury Rd 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/11/2021	11:00	23	11:42	14	0.41	14:53	67	15:17	26	0.64
5/12/2021	07:04	44	07:47	16	0.69	12:23	58	12:56	18	0.81
5/13/2021	10:54	47	11:38	15	0.78	12:51	81	12:58	27	0.75
5/14/2021	10:55	43	10:55	13	0.83	13:11	47	13:39	16	0.73

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
30 - 39	1,174	63%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume 1,874
Total Greater Than 50.0 18
Percent Greater Than 50.0 1.0%

Mean, Median, and Mode Averages

Mean: 34.3
Median (50th %): 34.7
Mode: 36.0

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
1874	0	0	0	0	0	0	0	0	0	0

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 661 Tilbury Rd
Station ID:
Location 1: Between Stuart Dr and CR 627 South Tilbury Rd
Location 2: Pole #26
Latitude: 0.000000
Longitude: 0.000000

File Name: Tilbury Rd 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/11/2021	West, Lane 1	203		1.00		1.00		203		1.00		203
5/11/2021	East, Lane 2	197		1.00		1.00		197		1.00		197
5/11/2021	Day Total	400						400				400
5/12/2021	West, Lane 1	244		1.00		1.00		244		1.00		244
5/12/2021	East, Lane 2	327		1.00		1.00		327		1.00		327
5/12/2021	Day Total	571						571				571
5/13/2021	West, Lane 1	290		1.00		1.00		290		1.00		290
5/13/2021	East, Lane 2	330		1.00		1.00		330		1.00		330
5/13/2021	Day Total	620						620				620
5/14/2021	West, Lane 1	111		1.00		1.00		111		1.00		111
5/14/2021	East, Lane 2	172		1.00		1.00		172		1.00		172
5/14/2021	Day Total	283						283				283
Total		1874						1874				1874
Average		468						468				468

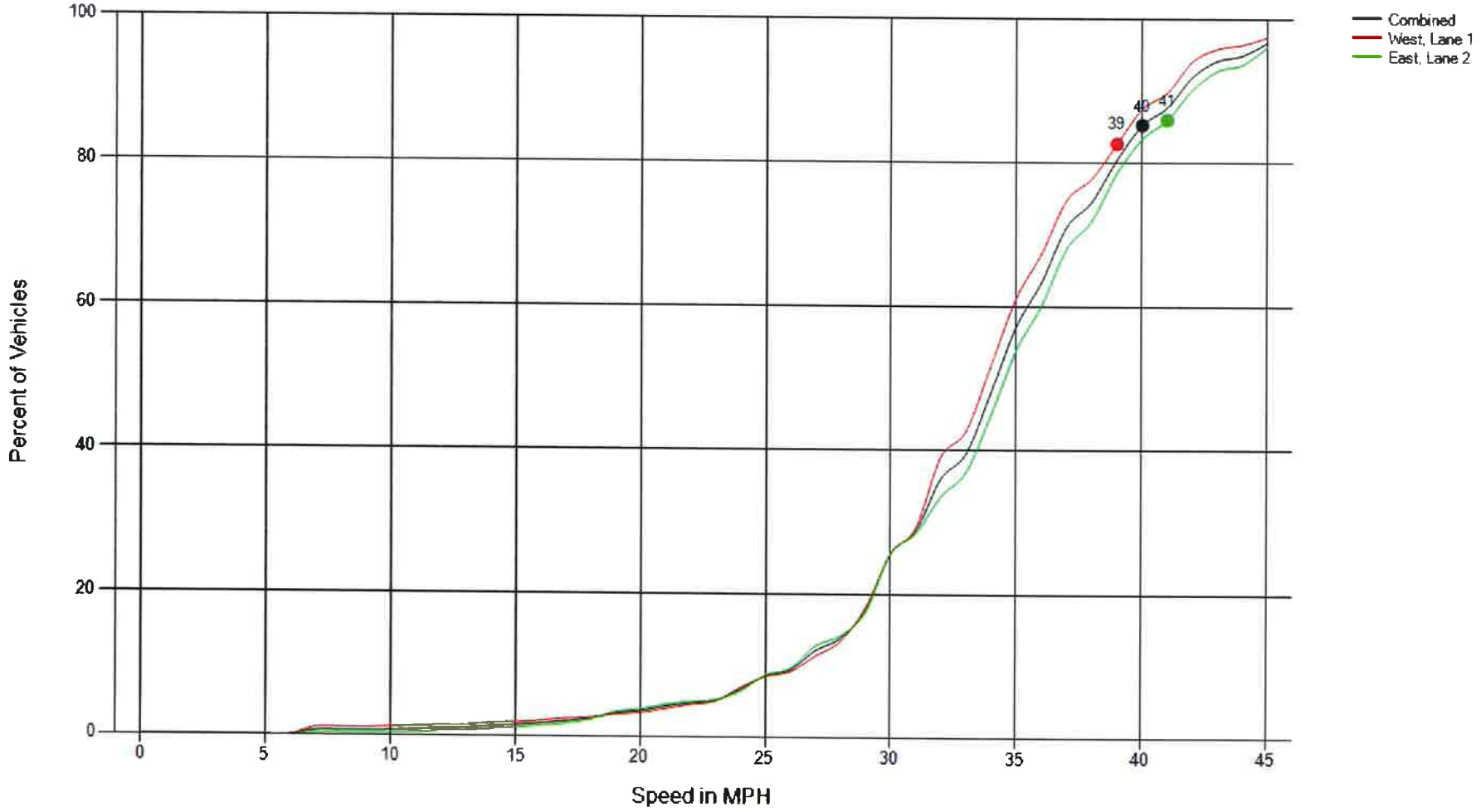
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Tilbury Rd
Station ID:	
Location 1:	Between Stuart Dr and CR 627 South Tilbury Rd
Location 2:	Pole #26
Latitude:	0.000000
Longitude:	0.000000

File Name:	Tilbury Rd 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

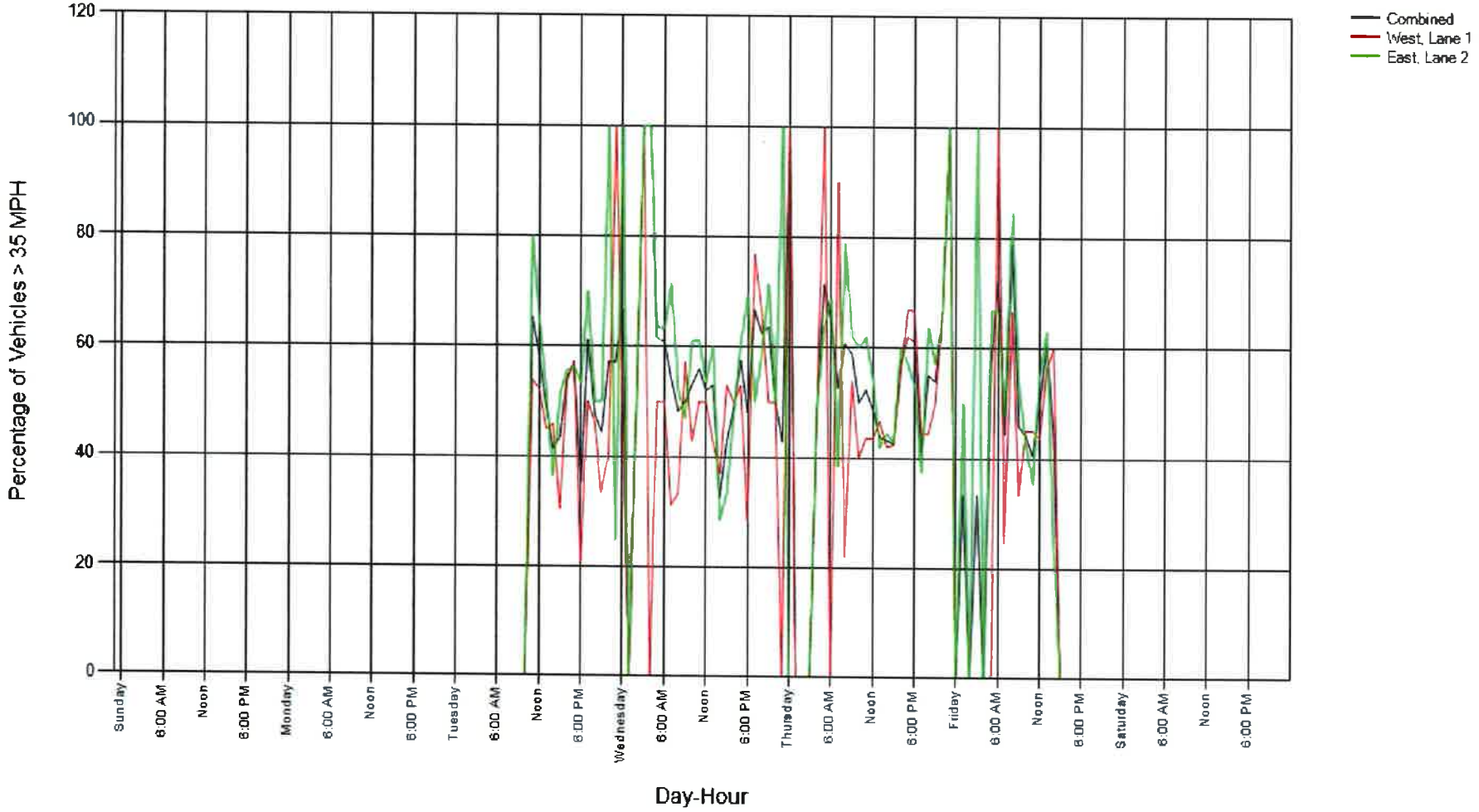


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Tilbury Rd
Station ID:	
Location 1:	Between Stuart Dr and CR 627 South Tilbury Rd
Location 2:	Pole #26
Latitude:	0.000000
Longitude:	0.000000

File Name:	Tilbury Rd 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 35 MPH

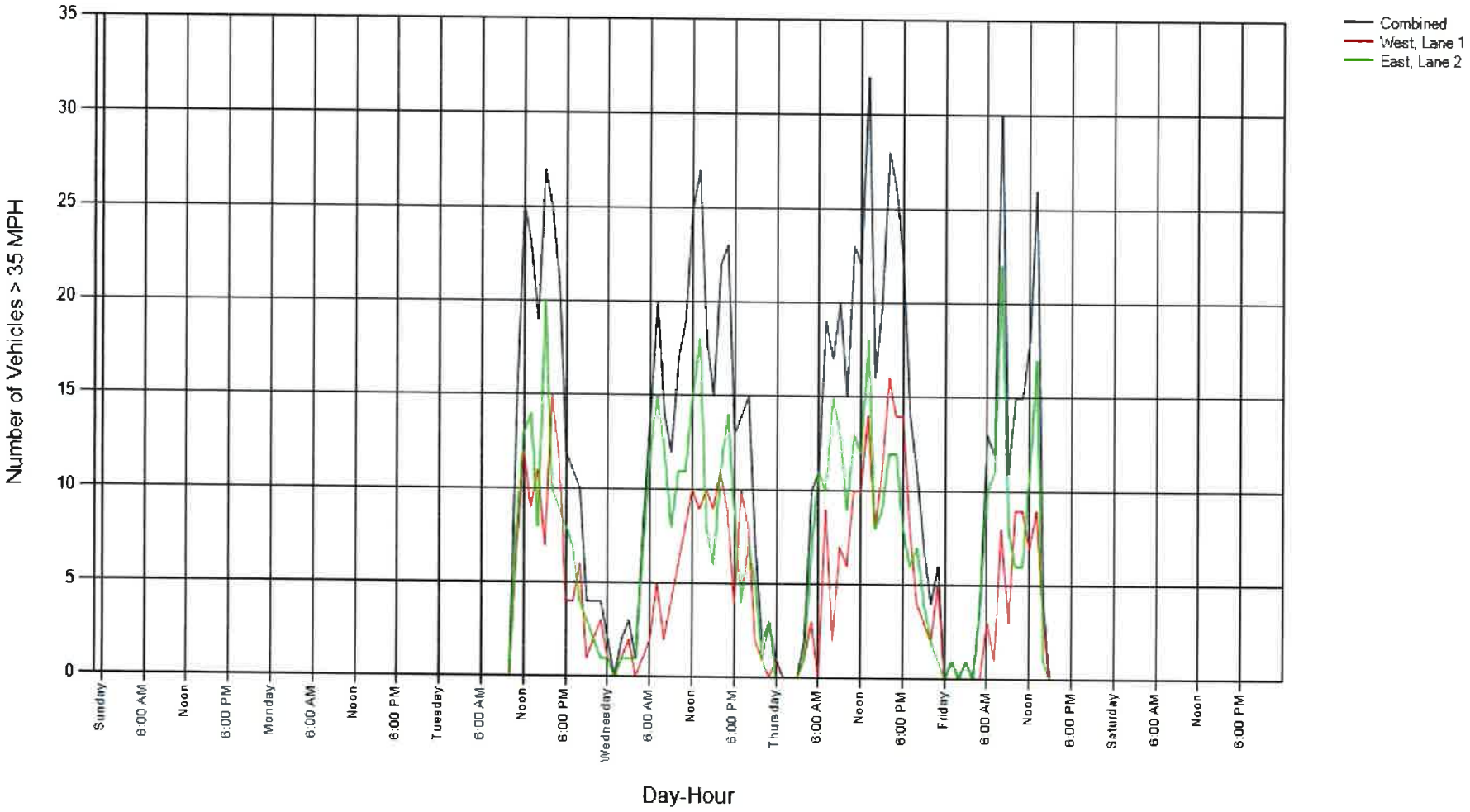


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Tilbury Rd
Station ID:	
Location 1:	Between Stuart Dr and CR 627 South Tilbury Rd
Location 2:	Pole #26
Latitude:	0.000000
Longitude:	0.000000

File Name:	Tilbury Rd 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 35 MPH

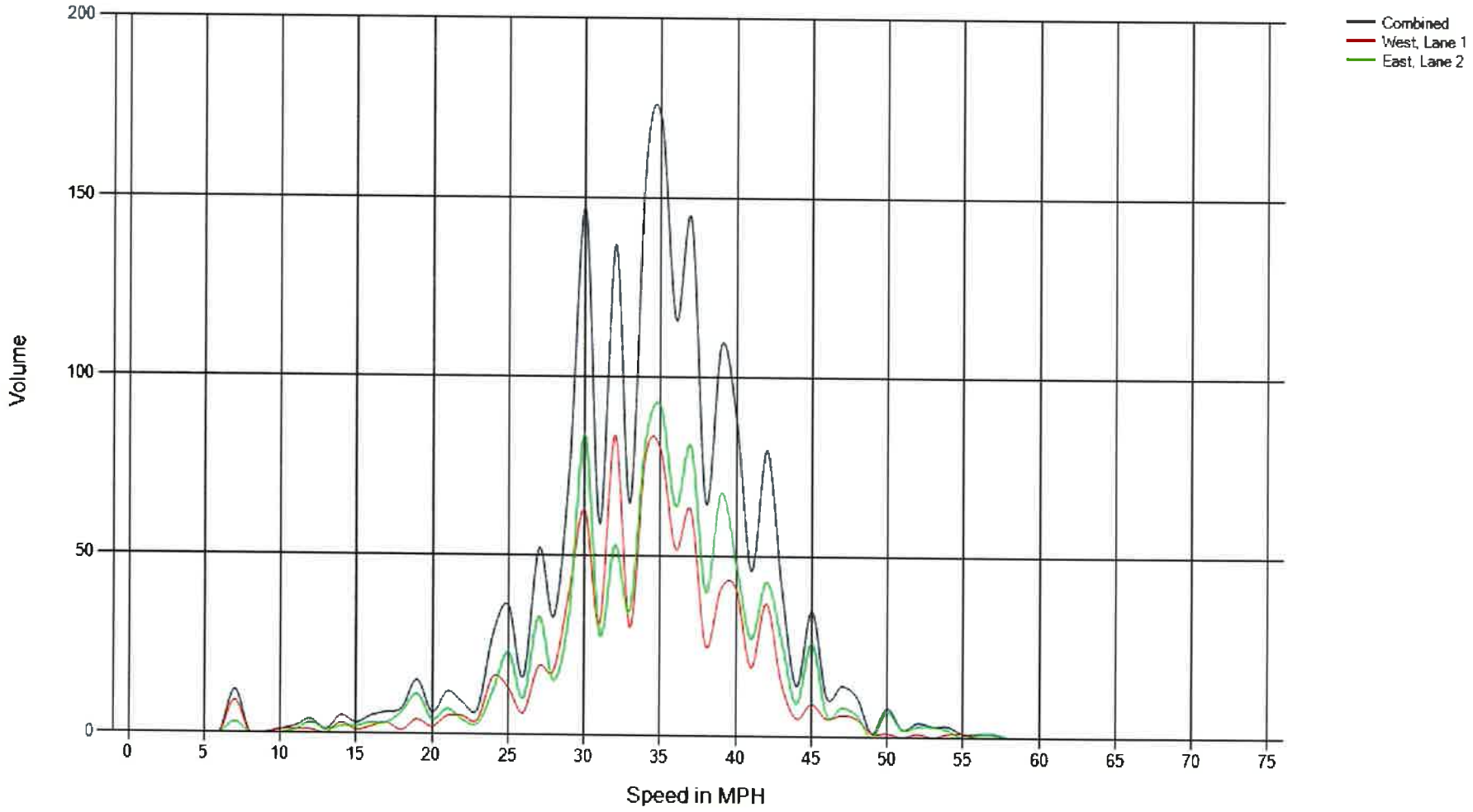


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 661 Tilbury Rd
Station ID:	
Location 1:	Between Stuart Dr and CR 627 South Tilbury Rd
Location 2:	Pole #26
Latitude:	0.000000
Longitude:	0.000000

File Name:	Tilbury Rd 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 627 South Tilbury Rd
Station ID:
Location 1: Between CR 661 Tilbury Rd and Hackett Rd
Location 2: Pole #VZ 27
Latitude: 0.000000
Longitude: 0.000000

File Name: South Tilbury 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	1	1	2	3	4	0	0	0	0	0	0	0	11
Wednesday	0	0	1	3	1	4	0	0	0	0	0	0	0	9
Thursday	0	0	1	6	3	3	1	0	0	0	0	0	0	14
Friday	0	0	1	5	3	0	0	0	0	0	0	0	0	9
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	4	16	10	11	1	0	0	0	0	0	0	43

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd	File Name:	South Tilbury 1
Station ID:		Date Printed:	5/17/2021
Location 1:	Between CR 661 Tilbury Rd and Hackett Rd	Start Date:	5/11/2021
Location 2:	Pole #VZ 27	End Date:	5/14/2021
Latitude:	0.000000	GPS Accuracy:	0ft
Longitude:	0.000000	Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/11/2021	No Volume					14:10	4	14:35	2	0.50
5/12/2021	10:19	2	10:33	1	0.50	15:38	3	15:54	2	0.38
5/13/2021	No Volume					16:13	4	16:30	2	0.50
5/14/2021	06:03	2	06:44	1	0.50	13:01	2	13:39	1	0.50

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
28 - 37	28	64%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume 44
Total Greater Than 50.0
Percent Greater Than 50.00.0%

Mean, Median, and Mode Averages

Mean: 31.0
Median (50th %): 32.2
Mode: 37.3

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 627 South Tilbury Rd
Station ID:
Location 1: Between CR 661 Tilbury Rd and Hackett Rd
Location 2: Pole #VZ 27
Latitude: 0.000000
Longitude: 0.000000

File Name: South Tilbury 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

44	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/11/2021	South, Lane 1	9		1.00		1.00		9		1.00		9
5/11/2021	North, Lane 2	3		1.00		1.00		3		1.00		3
5/11/2021	Day Total	12						12				12
5/12/2021	South, Lane 1	6		1.00		1.00		6		1.00		6
5/12/2021	North, Lane 2	3		1.00		1.00		3		1.00		3
5/12/2021	Day Total	9						9				9
5/13/2021	South, Lane 1	10		1.00		1.00		10		1.00		10
5/13/2021	North, Lane 2	4		1.00		1.00		4		1.00		4
5/13/2021	Day Total	14						14				14
5/14/2021	South, Lane 1	7		1.00		1.00		7		1.00		7
5/14/2021	North, Lane 2	2		1.00		1.00		2		1.00		2
5/14/2021	Day Total	9						9				9
Total		44						44				44
Average		11						11				11

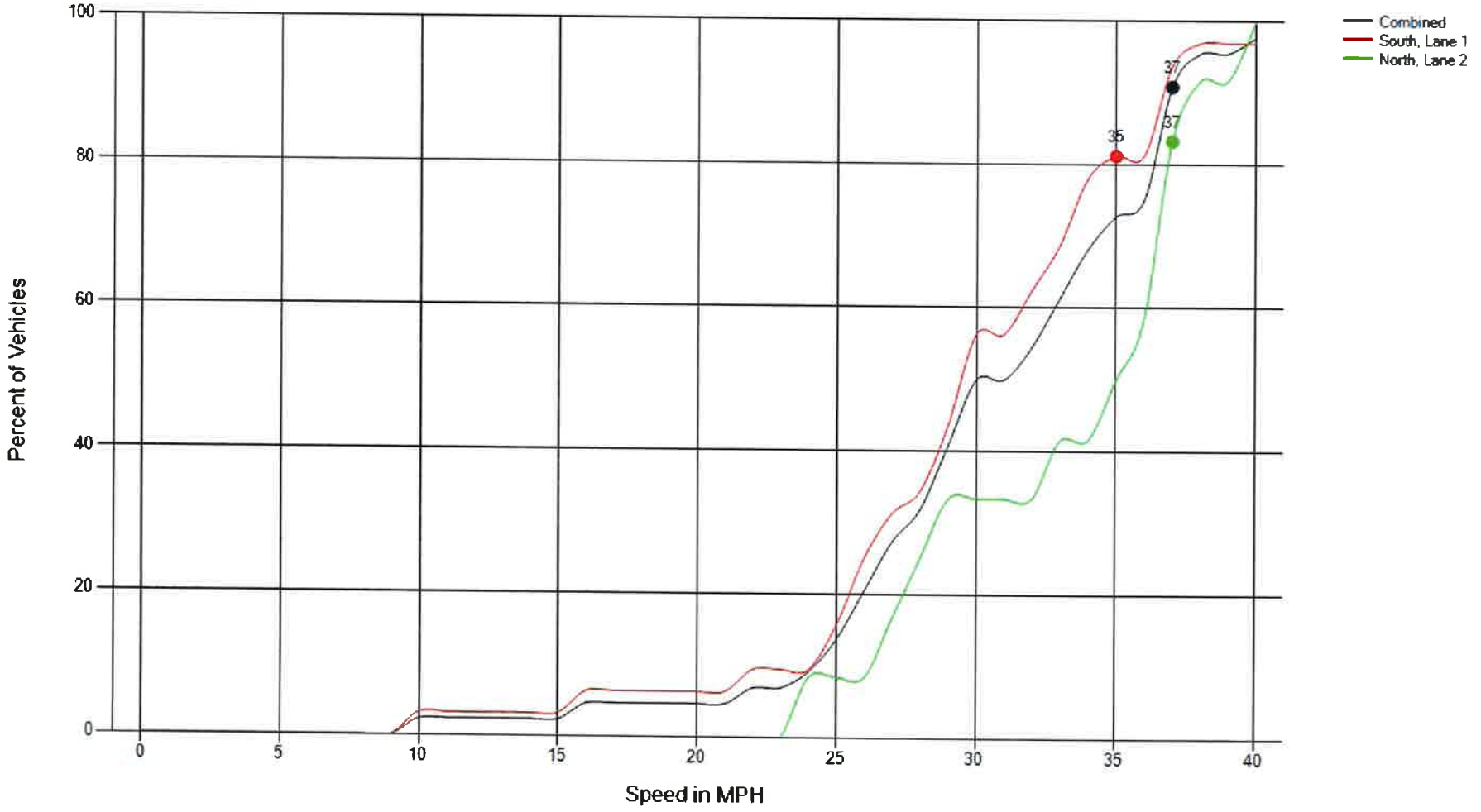
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between CR 661 Tilbury Rd and Hackett Rd
Location 2:	Pole #VZ 27
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

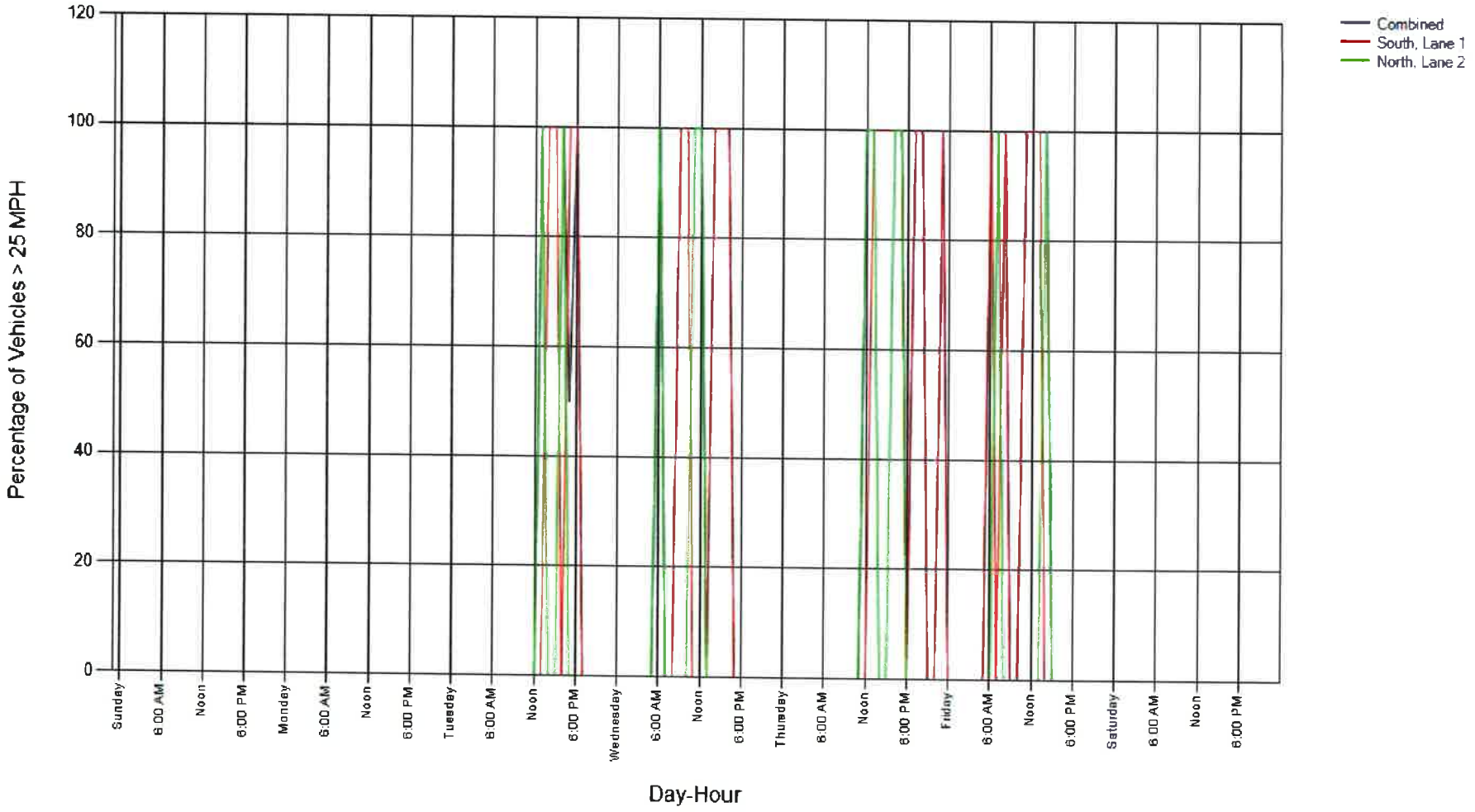


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 627 South Tilbury Rd
Station ID:
Location 1: Between CR 661 Tilbury Rd and Hackett Rd
Location 2: Pole #VZ 27
Latitude: 0.000000
Longitude: 0.000000

File Name: South Tilbury 1
Date Printed: 5/17/2021
Start Date: 5/11/2021
End Date: 5/14/2021
GPS Accuracy: 0ft
Location Verified: No

Percentage of Vehicles Traveling Greater Than 25 MPH

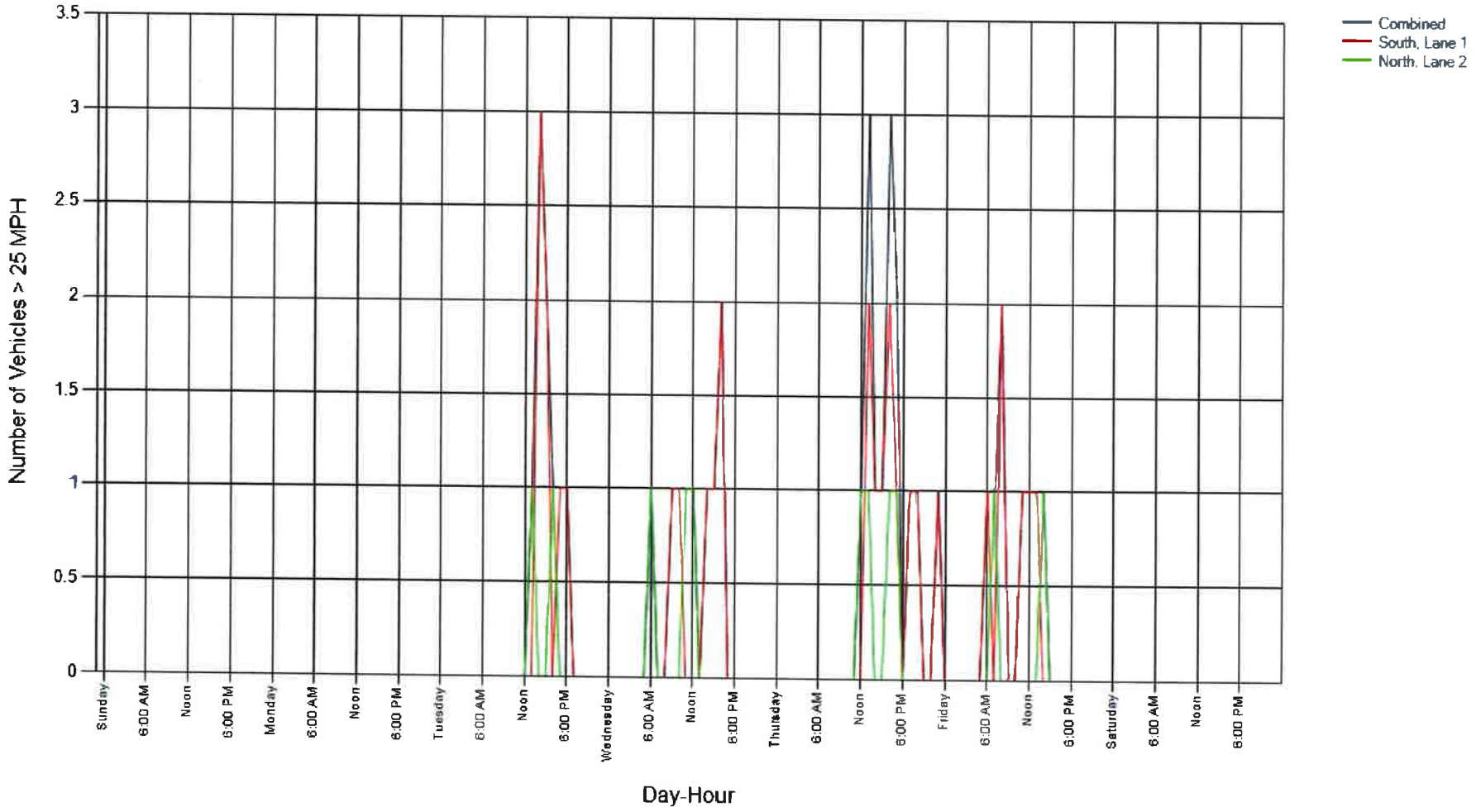


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between CR 661 Tilbury Rd and Hackett Rd
Location 2:	Pole #VZ 27
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 25 MPH

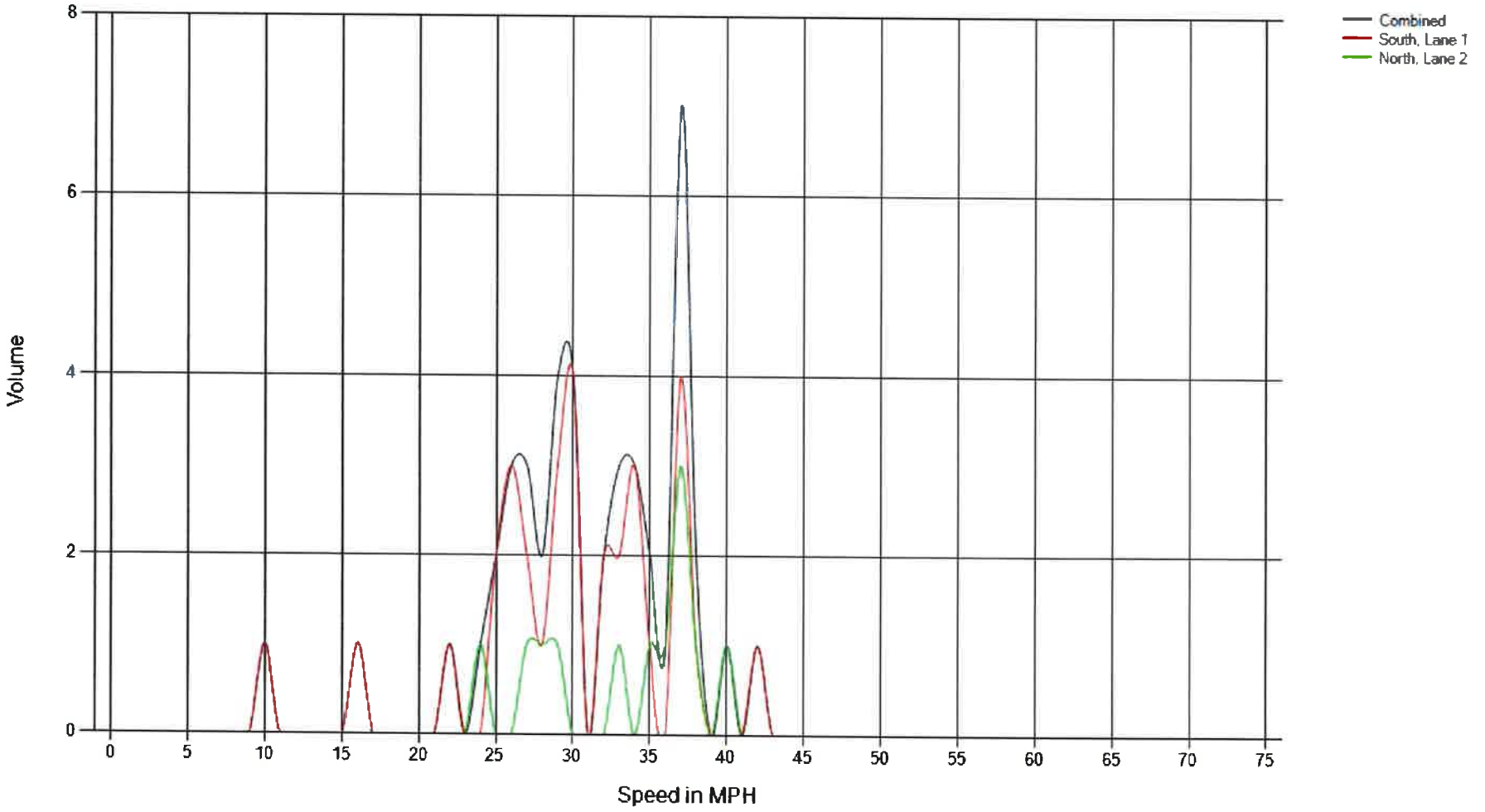


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between CR 661 Tilbury Rd and Hackett Rd
Location 2:	Pole #VZ 27
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 1
Date Printed:	5/17/2021
Start Date:	5/11/2021
End Date:	5/14/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd	File Name:	South Tilbury 2
Station ID:		Date Printed:	5/21/2021
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd	Start Date:	5/17/2021
Location 2:	Pole #S10220	End Date:	5/21/2021
Latitude:	0.000000	GPS Accuracy:	0ft
Longitude:	0.000000	Location Verified:	No

Averaged Totals

Combined

<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
19	6	2	33	130	249	240	185	45	17	3	1	0	930

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd	File Name:	South Tilbury 2
Station ID:		Date Printed:	5/21/2021
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd	Start Date:	5/17/2021
Location 2:	Pole #S10220	End Date:	5/21/2021
Latitude:	0.000000	GPS Accuracy:	0ft
Longitude:	0.000000	Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
5/17/2021	No Volume					14:36	27	14:45	9	0.75
5/18/2021	10:44	19	10:44	6	0.79	15:03	25	15:03	11	0.57
5/19/2021	10:29	17	10:51	5	0.85	16:22	36	16:37	12	0.75
5/20/2021	06:42	17	06:48	7	0.61	15:09	27	15:33	11	0.61
5/21/2021	09:22	17	10:00	6	0.71	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
34 - 43	514	55%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	930
Total Greater Than 50.0	60
Percent Greater Than 50.0	6.5%

Mean, Median, and Mode Averages

Mean:	39.7
Median (50th %):	39.7
Mode:	41.6

Classification Statistics

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: CR 627 South Tilbury Rd
Station ID:
Location 1: Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd
Location 2: Pole #S10220
Latitude: 0.000000
Longitude: 0.000000

File Name: South Tilbury 2
Date Printed: 5/21/2021
Start Date: 5/17/2021
End Date: 5/21/2021
GPS Accuracy: 0ft
Location Verified: No

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
930	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
5/17/2021	South, Lane 1	48		1.00		1.00		48		1.00		48
5/17/2021	North, Lane 2	96		1.00		1.00		96		1.00		96
5/17/2021	Day Total	144						144				144
5/18/2021	South, Lane 1	97		1.00		1.00		97		1.00		97
5/18/2021	North, Lane 2	133		1.00		1.00		133		1.00		133
5/18/2021	Day Total	230						230				230
5/19/2021	South, Lane 1	110		1.00		1.00		110		1.00		110
5/19/2021	North, Lane 2	171		1.00		1.00		171		1.00		171
5/19/2021	Day Total	281						281				281
5/20/2021	South, Lane 1	90		1.00		1.00		90		1.00		90
5/20/2021	North, Lane 2	129		1.00		1.00		129		1.00		129
5/20/2021	Day Total	219						219				219
5/21/2021	South, Lane 1	32		1.00		1.00		32		1.00		32
5/21/2021	North, Lane 2	24		1.00		1.00		24		1.00		24
5/21/2021	Day Total	56						56				56
Total		930						930				930
Average		186						186				186

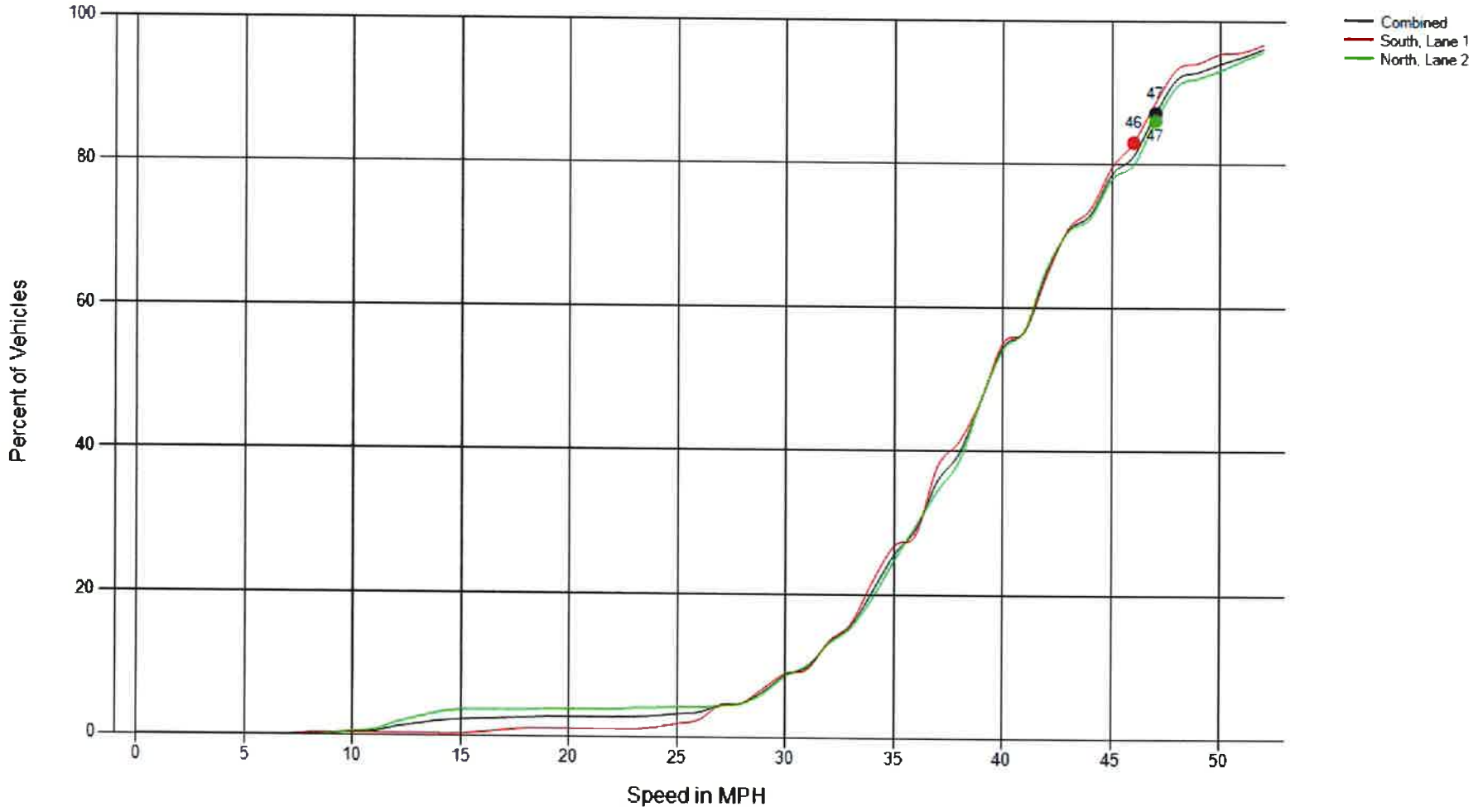
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd
Location 2:	Pole #S10220
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 2
Date Printed:	5/21/2021
Start Date:	5/17/2021
End Date:	5/21/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

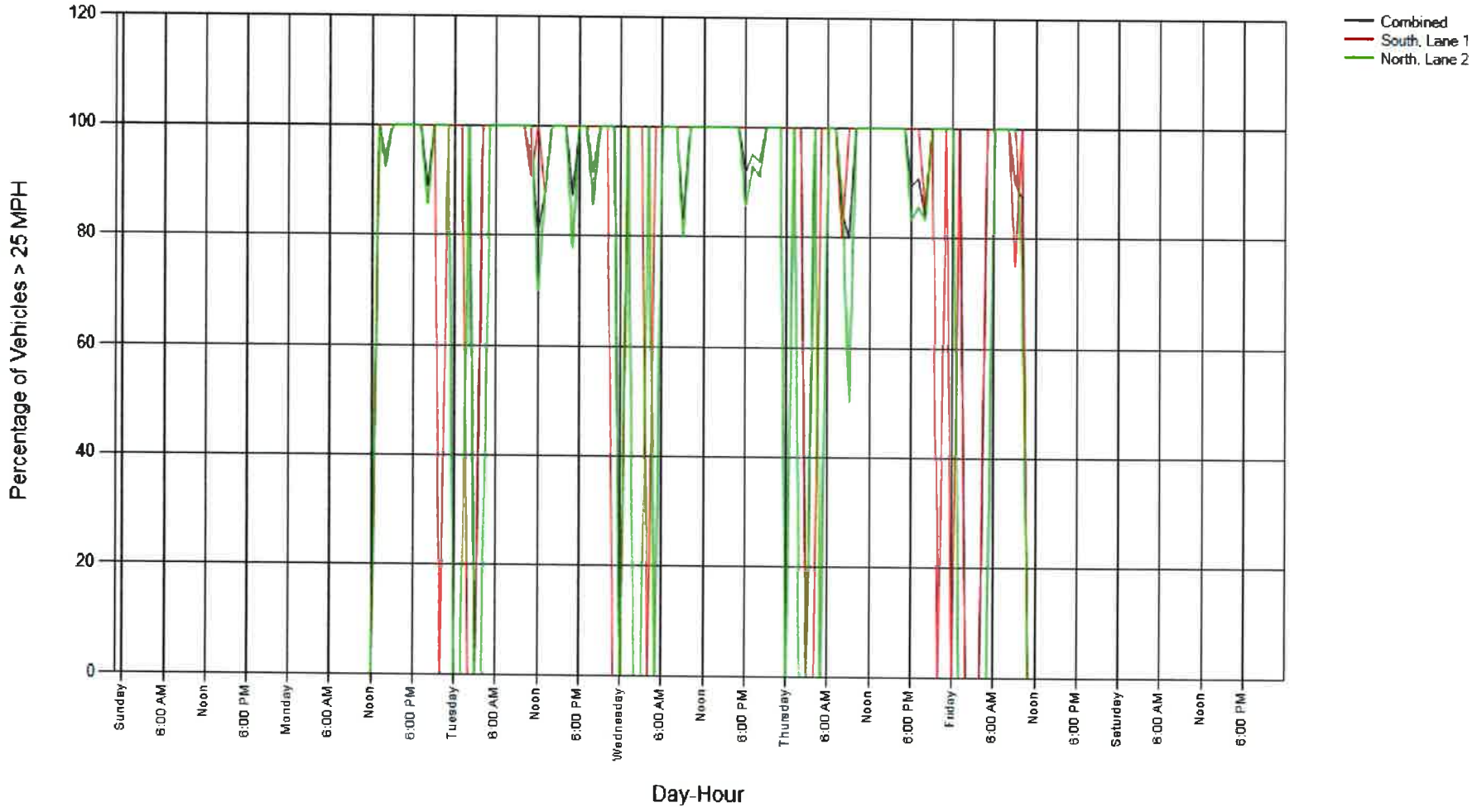


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd
Location 2:	Pole #S10220
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 2
Date Printed:	5/21/2021
Start Date:	5/17/2021
End Date:	5/21/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 25 MPH

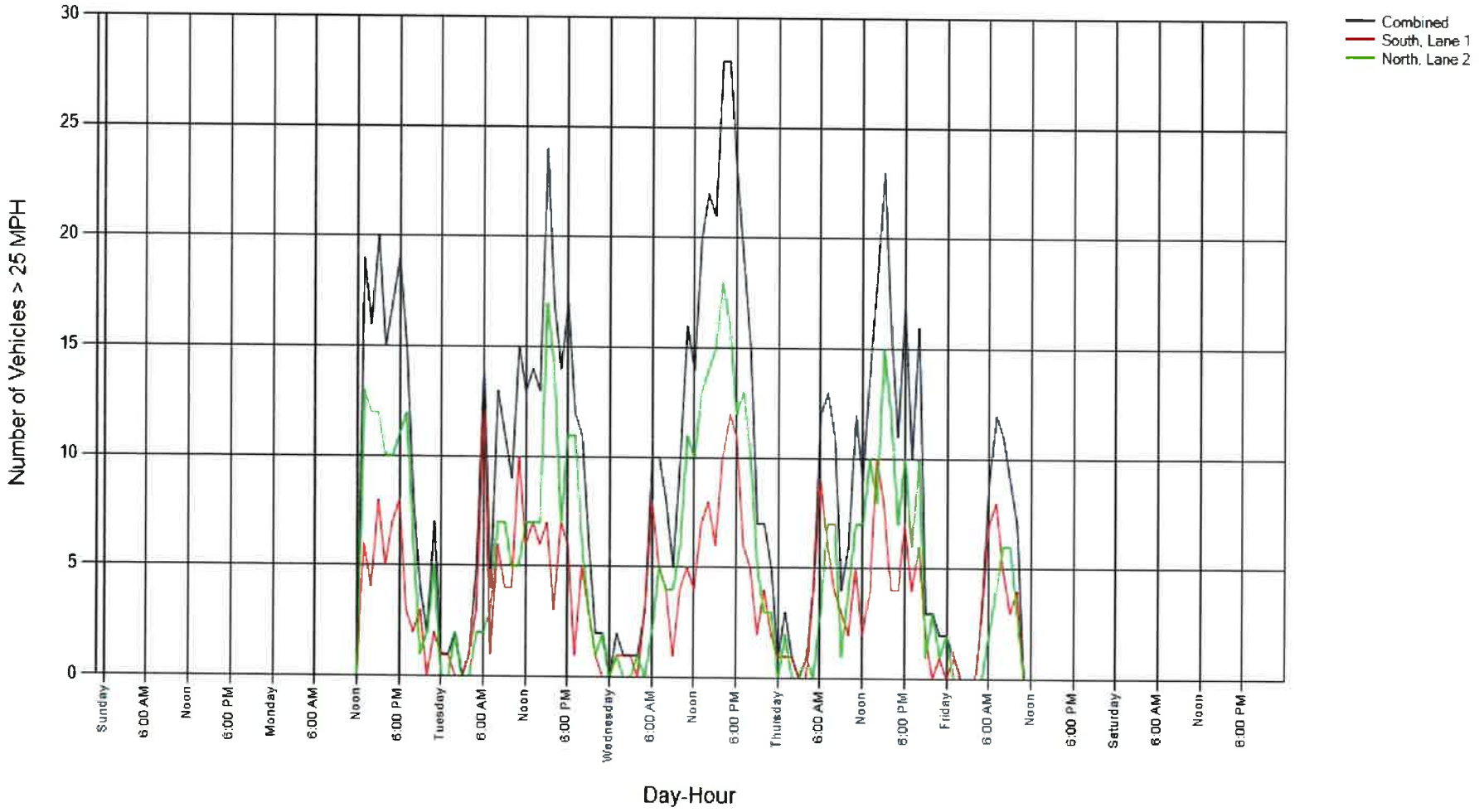


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd
Location 2:	Pole #S10220
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 2
Date Printed:	5/21/2021
Start Date:	5/17/2021
End Date:	5/21/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 25 MPH

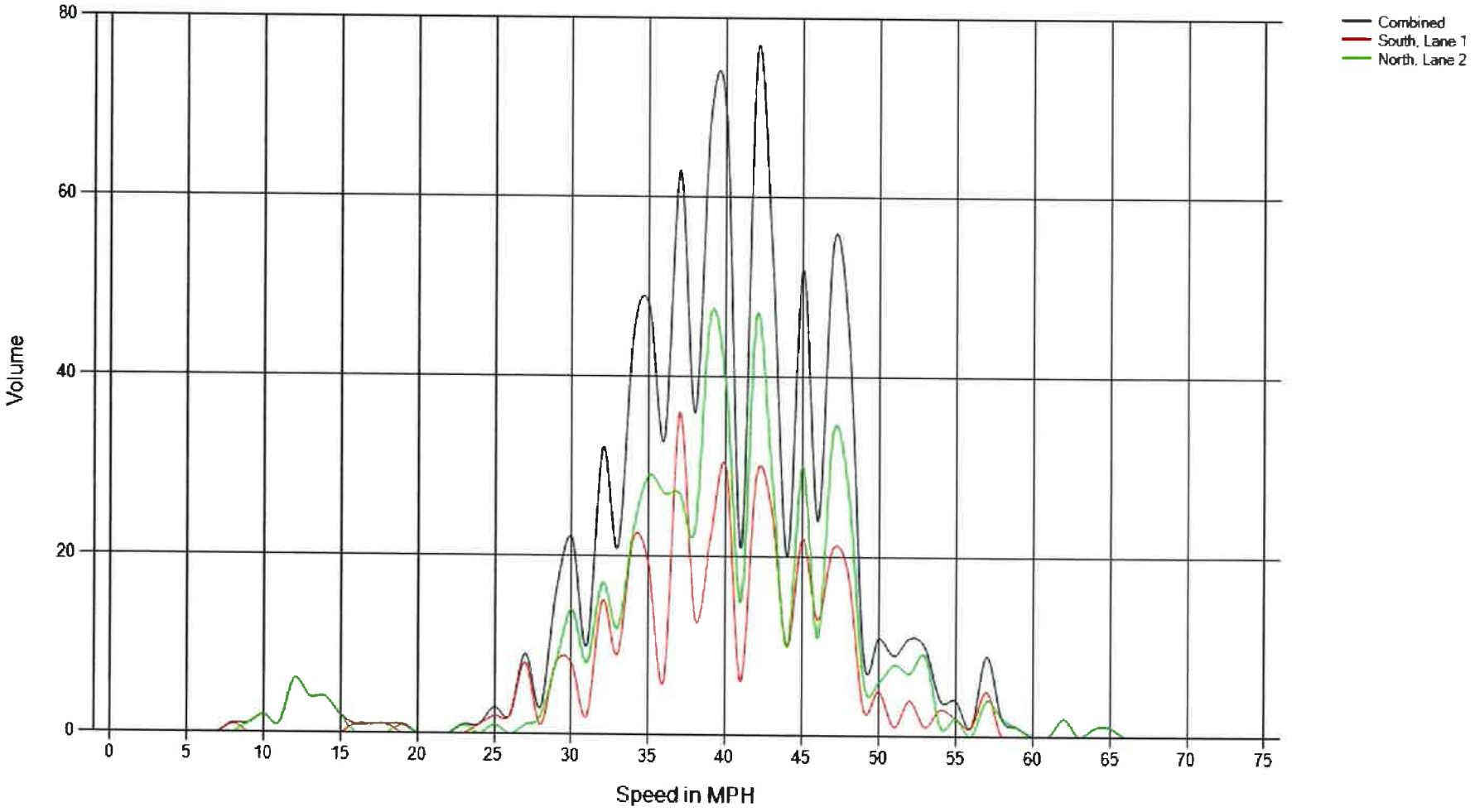


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	CR 627 South Tilbury Rd
Station ID:	
Location 1:	Between Hackett Rd and CR 625 Ft Elfsborg - Salem Rd
Location 2:	Pole #S10220
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Tilbury 2
Date Printed:	5/21/2021
Start Date:	5/17/2021
End Date:	5/21/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	1	1	2	2	0	3	2	0	0	0	0	0	11
Tuesday	0	0	5	1	2	4	2	0	0	0	0	0	0	14
Wednesday	0	1	3	2	7	6	7	2	4	0	0	0	0	32
Thursday	0	0	1	2	3	4	3	1	1	0	0	0	0	15
Friday	0	0	0	6	2	3	1	2	0	0	0	0	0	14
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	10	13	16	17	16	7	5	0	0	0	0	86

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/26/2021	No Volume					14:12	4	14:39	2	0.50
4/27/2021	No Volume					12:56	4	13:34	2	0.50
4/28/2021	No Volume					12:00	6	12:00	3	0.50
4/29/2021	04:58	3	05:23	2	0.38	12:00	3	12:14	2	0.38
4/30/2021	07:11	8	07:31	5	0.40	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
33 - 42	37	42%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	88
Total Greater Than 50.0	6
Percent Greater Than 50.0	6.8%

Mean, Median, and Mode Averages

Mean:	35.7
Median (50th %):	36.6
Mode:	24.2

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Perkintown Rd 1
Station ID: CR 644
Location 1: Between CR 643 and Route 295
Location 2: Pole #S6426 Eastbound Lane
Latitude: 0.000000
Longitude: 0.000000

File Name: Perkintown 1
Date Printed: 5/4/2021
Start Date: 4/26/2021
End Date: 4/30/2021
GPS Accuracy: 0ft
Location Verified: No

88	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/26/2021	East, Lane 1	5		1.00		1.00		5		1.00		5
4/26/2021	West, Lane 2	6		1.00		1.00		6		1.00		6
4/26/2021	Day Total	11						11				11
4/27/2021	East, Lane 1	9		1.00		1.00		9		1.00		9
4/27/2021	West, Lane 2	5		1.00		1.00		5		1.00		5
4/27/2021	Day Total	14						14				14
4/28/2021	East, Lane 1	15		1.00		1.00		15		1.00		15
4/28/2021	West, Lane 2	17		1.00		1.00		17		1.00		17
4/28/2021	Day Total	32						32				32
4/29/2021	East, Lane 1	8		1.00		1.00		8		1.00		8
4/29/2021	West, Lane 2	9		1.00		1.00		9		1.00		9
4/29/2021	Day Total	17						17				17
4/30/2021	East, Lane 1	4		1.00		1.00		4		1.00		4
4/30/2021	West, Lane 2	10		1.00		1.00		10		1.00		10
4/30/2021	Day Total	14						14				14
Total		88						88				88
Average		17						17				17

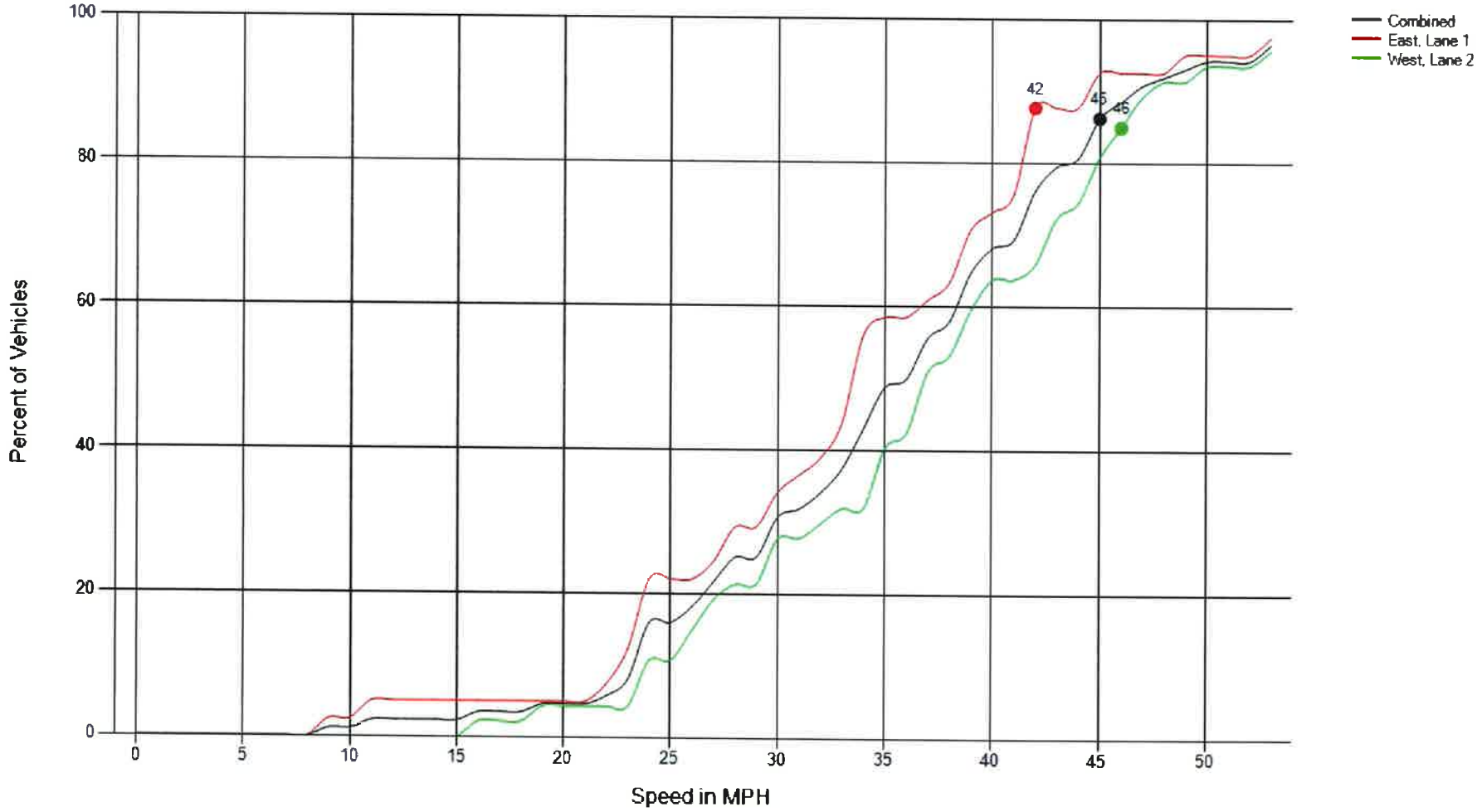
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

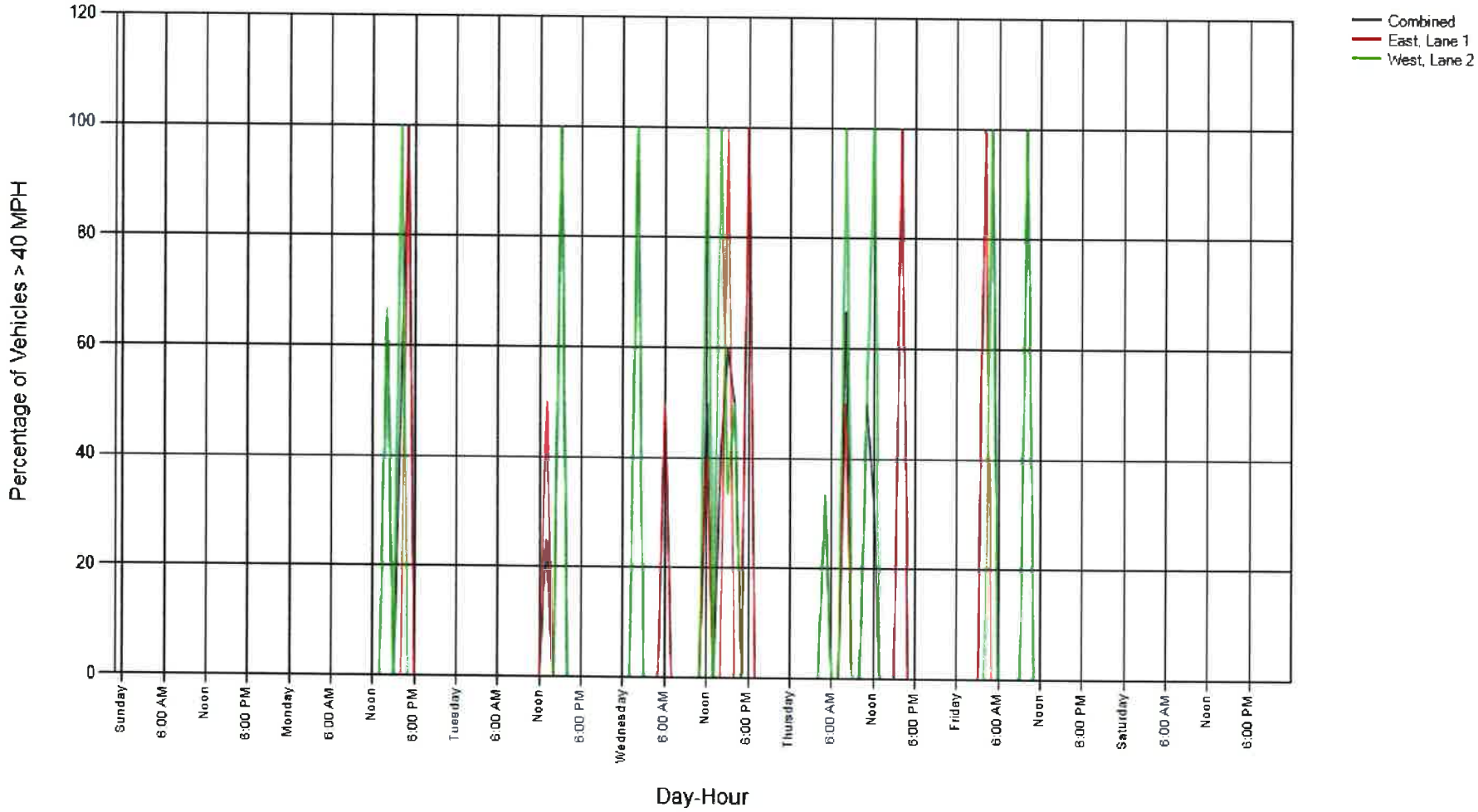


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 40 MPH

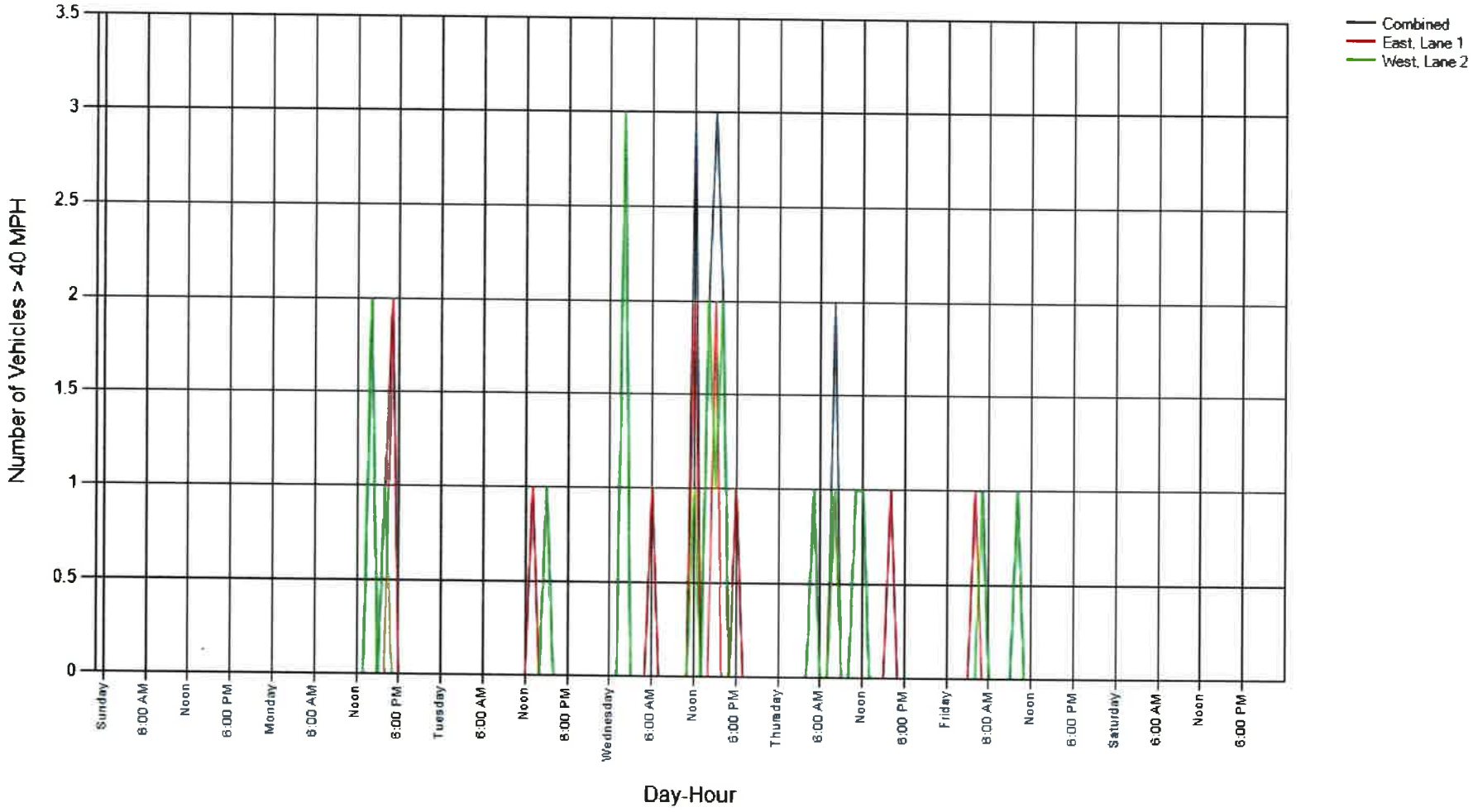


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 40 MPH

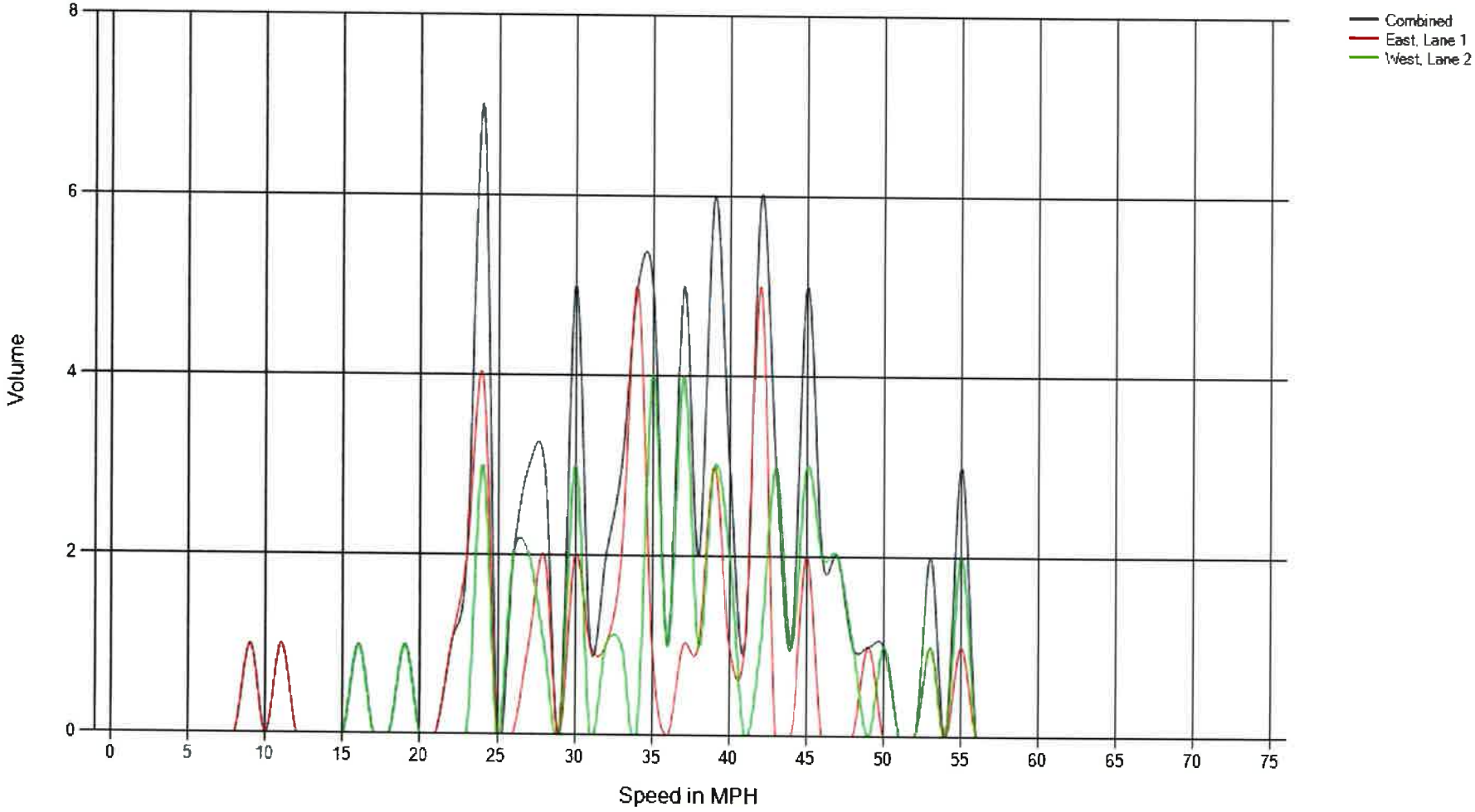


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 1
Station ID:	CR 644
Location 1:	Between CR 643 and Route 295
Location 2:	Pole #S6426 Eastbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	2	9	13	29	53	80	56	22	4	0	1	0	269
Wednesday	0	3	2	4	25	37	45	33	15	7	3	1	1	176
Thursday	0	4	1	13	24	39	61	47	22	6	1	0	0	218
Friday	0	0	2	5	3	1	13	8	9	3	0	0	0	44
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	9	14	35	81	130	199	144	68	20	4	2	1	707

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/20/2021	10:59	19	11:27	9	0.53	12:15	50	12:30	24	0.52
4/21/2021	05:44	18	05:51	6	0.75	16:30	24	17:00	13	0.46
4/22/2021	07:38	30	08:12	12	0.63	13:55	24	14:11	12	0.50
4/23/2021	07:49	18	08:32	8	0.56	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
39 - 48	373	52%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	718
Total Greater Than 50.0	103
Percent Greater Than 50.0	14.3%

Mean, Median, and Mode Averages

Mean:	41.8
Median (50th %):	42.8
Mode:	41.6

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
718	0	0	0	0	0	0	0	0	0	0

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2	File Name:	Perkintown 2
Station ID:	CR 644	Date Printed:	4/27/2021
Location 1:	Between CR 643 and Tighe Rd	Start Date:	4/20/2021
Location 2:	Pole #S-36972 Westbound Lane	End Date:	4/23/2021
Latitude:	0.000000	GPS Accuracy:	0ft
Longitude:	0.000000	Location Verified:	No

100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/20/2021	West, Lane 1	143		1.00		1.00		143		1.00		143
4/20/2021	East, Lane 2	130		1.00		1.00		130		1.00		130
4/20/2021	Day Total	273						273				273
4/21/2021	West, Lane 1	92		1.00		1.00		92		1.00		92
4/21/2021	East, Lane 2	85		1.00		1.00		85		1.00		85
4/21/2021	Day Total	177						177				177
4/22/2021	West, Lane 1	124		1.00		1.00		124		1.00		124
4/22/2021	East, Lane 2	99		1.00		1.00		99		1.00		99
4/22/2021	Day Total	223						223				223
4/23/2021	West, Lane 1	20		1.00		1.00		20		1.00		20
4/23/2021	East, Lane 2	25		1.00		1.00		25		1.00		25
4/23/2021	Day Total	45						45				45
Total		718						718				718
Average		180						180				180

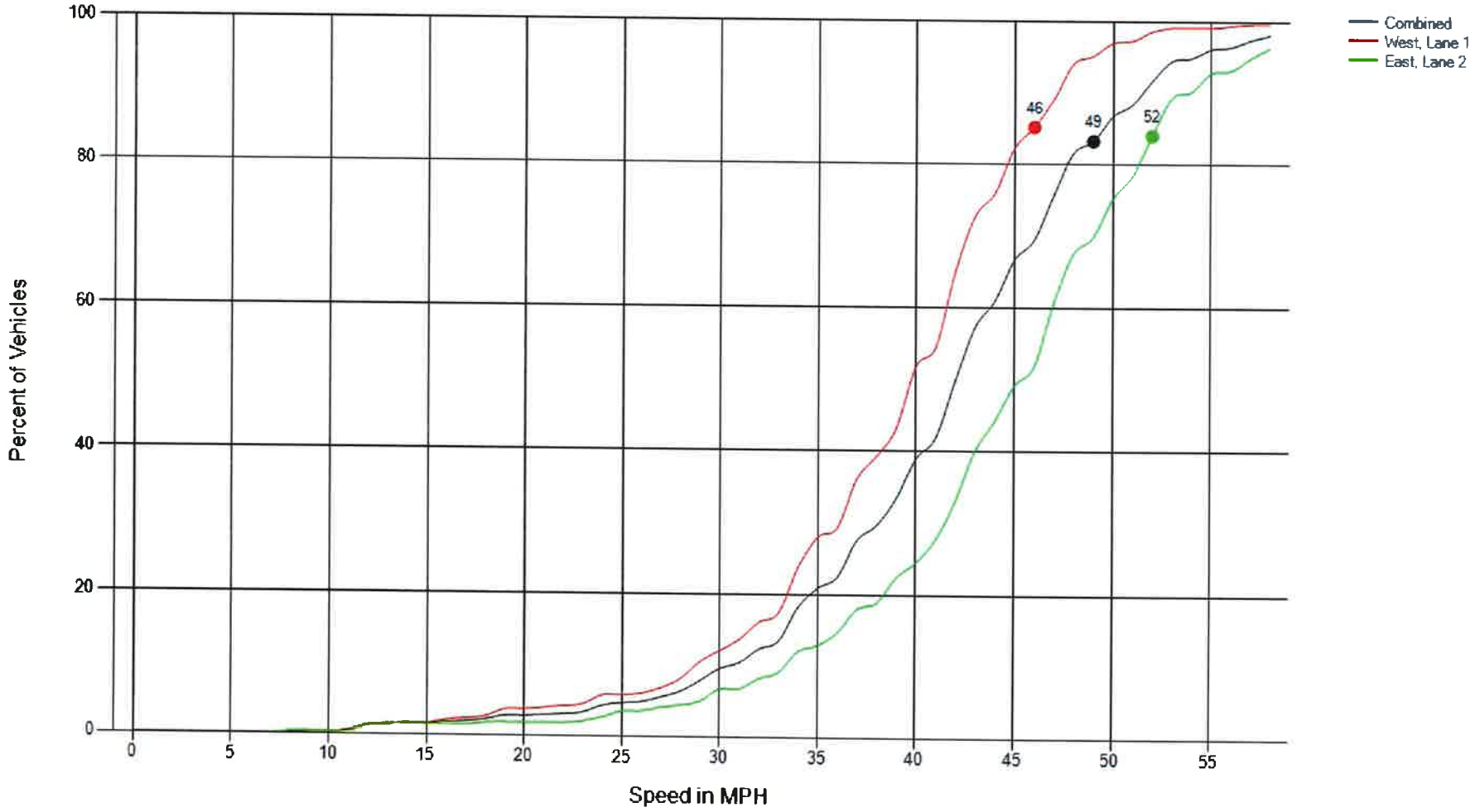
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

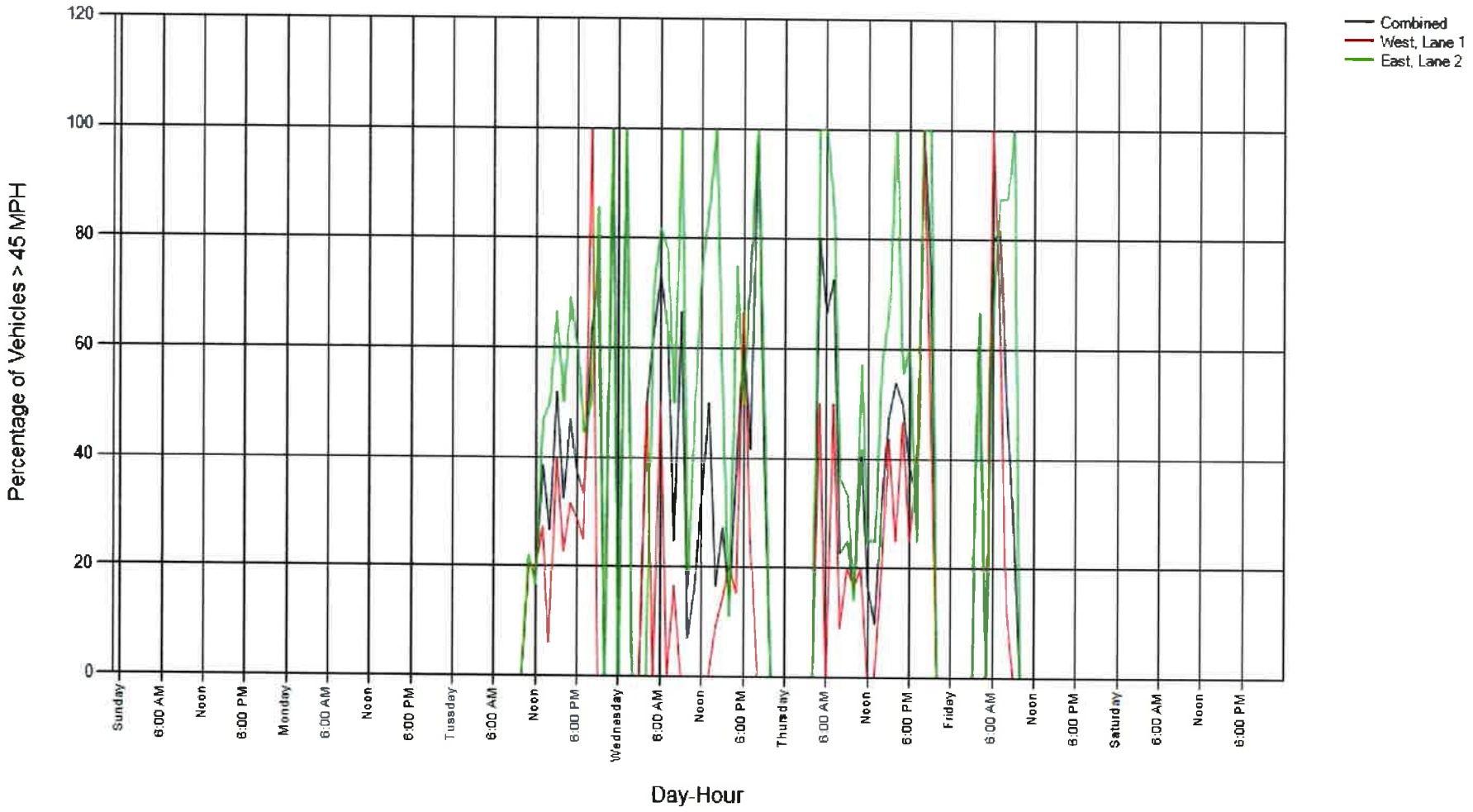


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 45 MPH

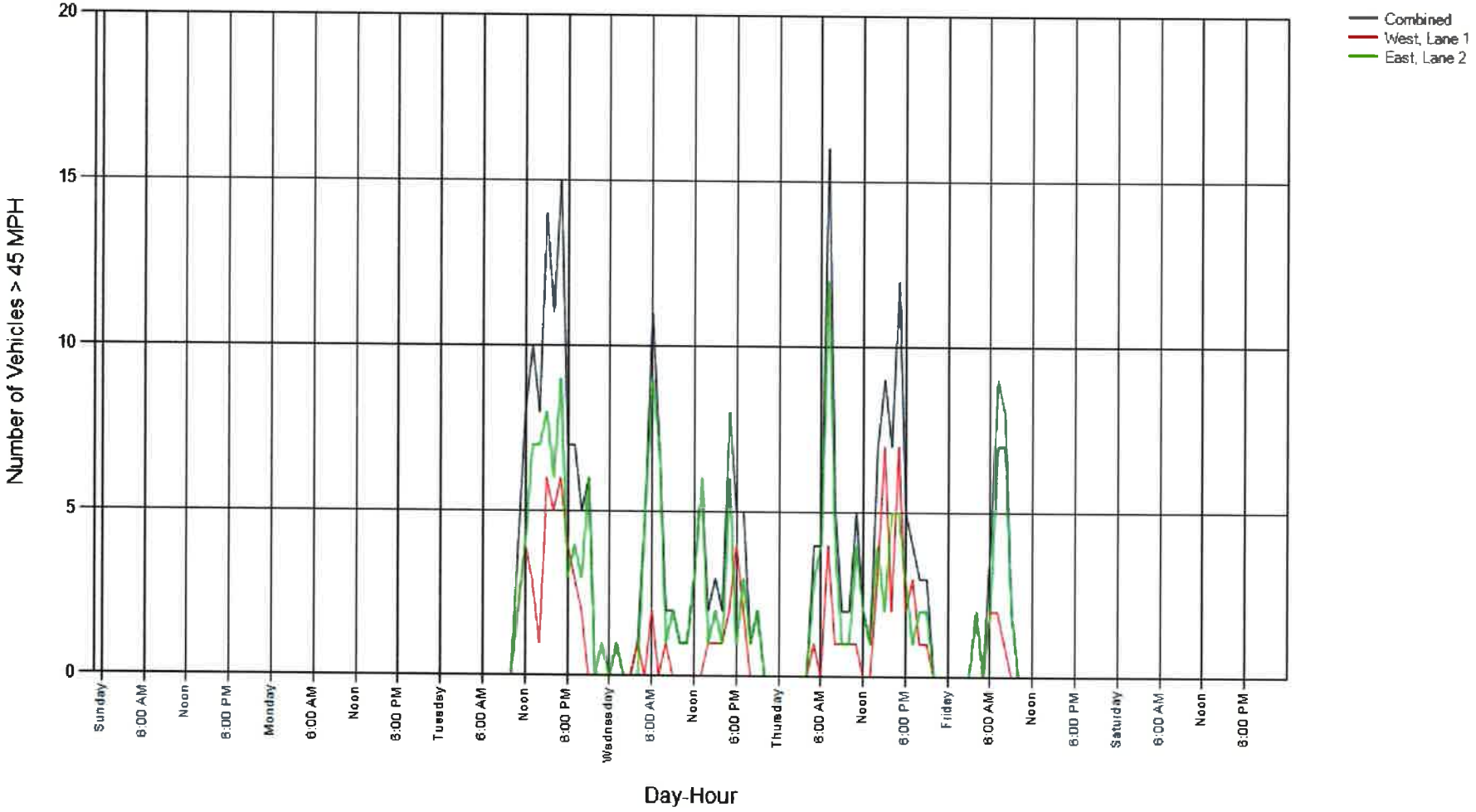


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 45 MPH

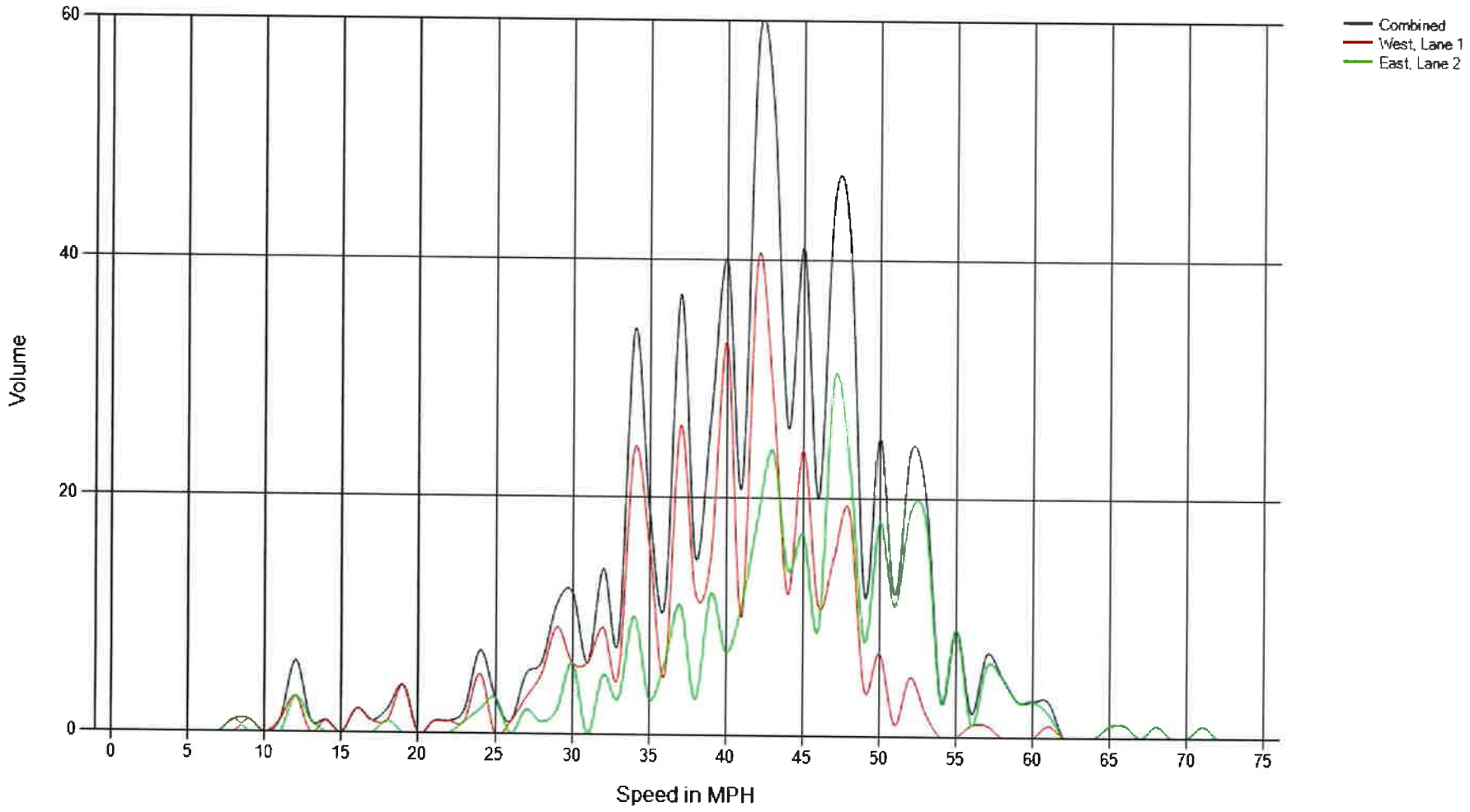


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Perkintown Rd 2
Station ID:	CR 644
Location 1:	Between CR 643 and Tighe Rd
Location 2:	Pole #S-36972 Westbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Perkintown 2
Date Printed:	4/27/2021
Start Date:	4/20/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	3	2	3	9	27	51	58	42	6	2	0	0	203
Tuesday	0	0	2	7	26	83	118	152	97	21	3	2	0	511
Wednesday	0	0	7	8	21	49	118	149	67	23	7	2	3	454
Thursday	0	0	1	4	29	71	136	155	97	18	4	0	0	515
Friday	0	0	0	2	13	13	37	77	34	15	1	0	1	193
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	12	24	98	243	460	591	337	83	17	4	4	1,876

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Straughns Mill Rd 1
Station ID:
Location 1: Between RT 295 and CR 644
Location 2: Pole #S30338 Southbound Lane
Latitude: 0.000000
Longitude: 0.000000

File Name: Straughns Mill 1
Date Printed: 4/27/2021
Start Date: 4/19/2021
End Date: 4/23/2021
GPS Accuracy: 0ft
Location Verified: No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/19/2021	No Volume					14:34	40	14:56	17	0.59
4/20/2021	07:22	66	08:06	23	0.72	14:13	41	14:37	14	0.73
4/21/2021	06:31	63	06:35	19	0.83	14:58	43	15:18	17	0.63
4/22/2021	06:20	67	06:51	26	0.64	13:38	43	13:58	17	0.63
4/23/2021	06:28	61	06:48	25	0.61	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
39 - 48	373	52%

Percentile Speeds

Percentile	5th	10th	15th	20th	25th	30th	35th	40th	45th	50th	55th	60th	65th	70th	75th	80th	85th	90th	95th	100th
Speed - MPH	33.5	37.2	39	40.3	41.5	42.2	43.4	44.6	45.9	46.5	47.1	47.7	48.4	49	50.2	51.5	52.7	54	55.8	76.3

Vehicles Traveling Greater Than 50.0 MPH

Total Volume 1,880
Total Greater Than 50.0 499
Percent Greater Than 50.0 26.5%

Mean, Median, and Mode Averages

Mean: 45.8
Median (50th %): 46.5

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000
Mode:	47.2

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
1880	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/19/2021	South, Lane 1	37		1.00		1.00		37		1.00		37
4/19/2021	North, Lane 2	166		1.00		1.00		166		1.00		166
4/19/2021	Day Total	203						203				203
4/20/2021	South, Lane 1	65		1.00		1.00		65		1.00		65
4/20/2021	North, Lane 2	449		1.00		1.00		449		1.00		449
4/20/2021	Day Total	514						514				514
4/21/2021	South, Lane 1	46		1.00		1.00		46		1.00		46
4/21/2021	North, Lane 2	408		1.00		1.00		408		1.00		408
4/21/2021	Day Total	454						454				454
4/22/2021	South, Lane 1	69		1.00		1.00		69		1.00		69
4/22/2021	North, Lane 2	446		1.00		1.00		446		1.00		446
4/22/2021	Day Total	515						515				515
4/23/2021	South, Lane 1	15		1.00		1.00		15		1.00		15
4/23/2021	North, Lane 2	179		1.00		1.00		179		1.00		179
4/23/2021	Day Total	194						194				194
Total		1880						1880				1880
Average		376						376				376

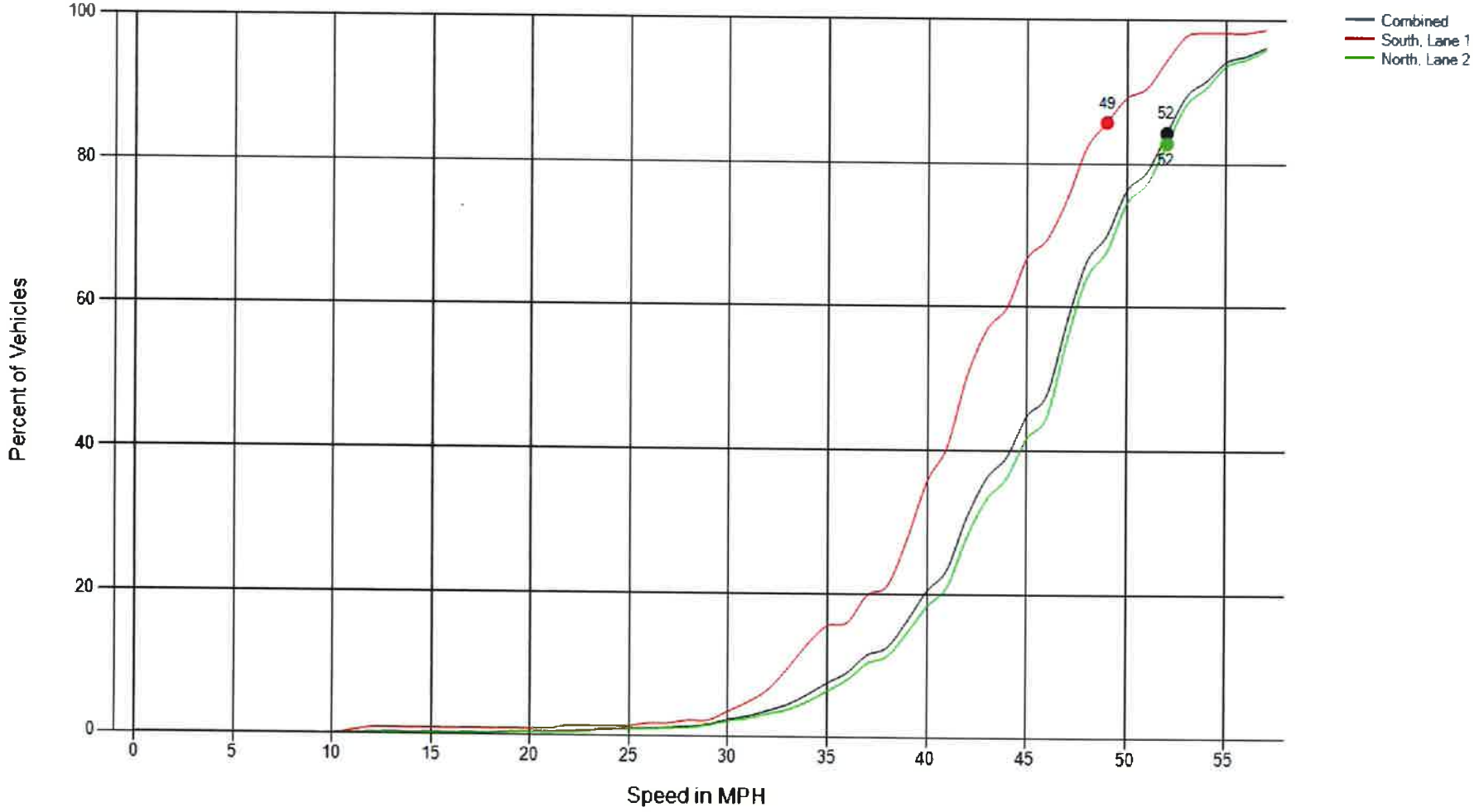
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

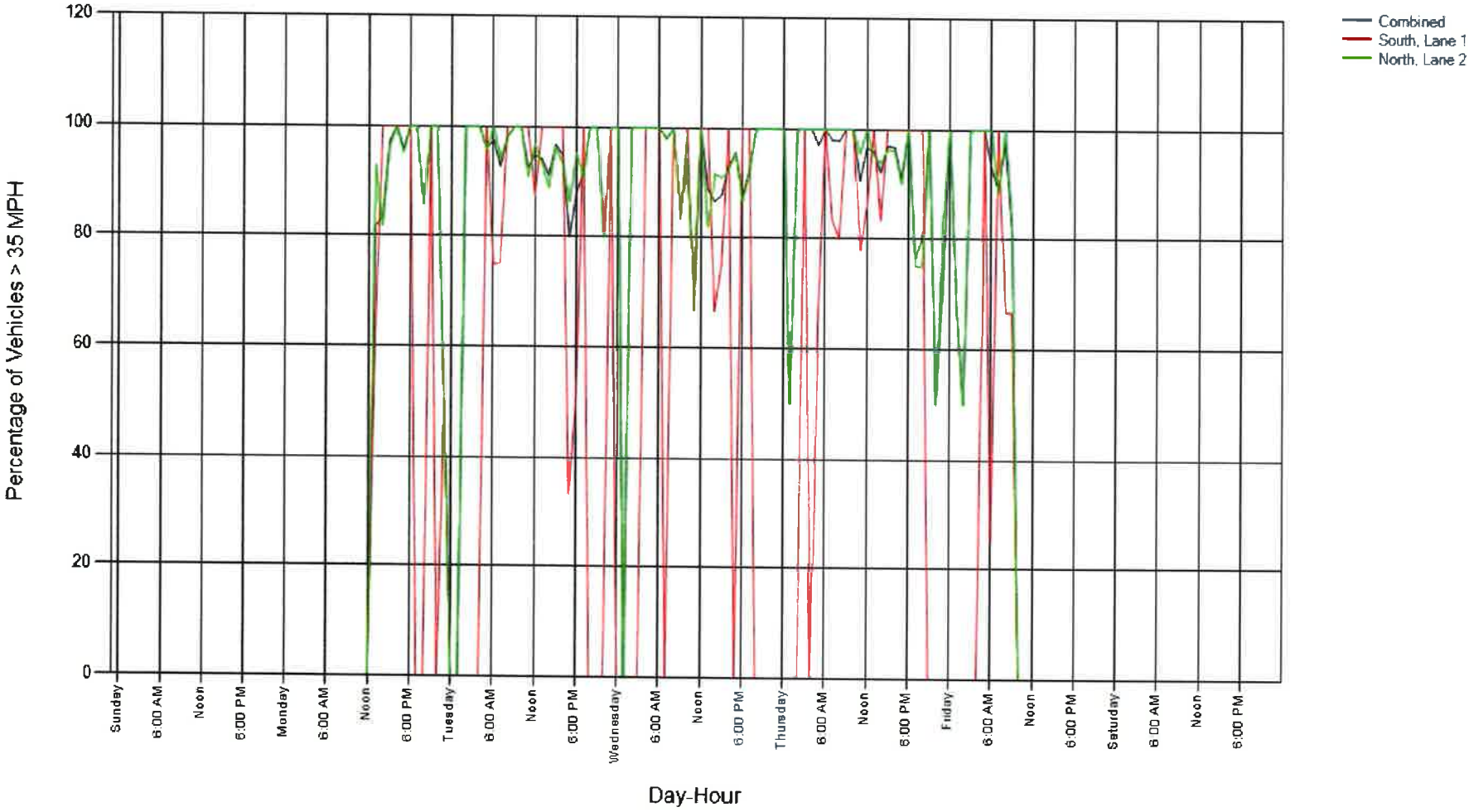


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 35 MPH

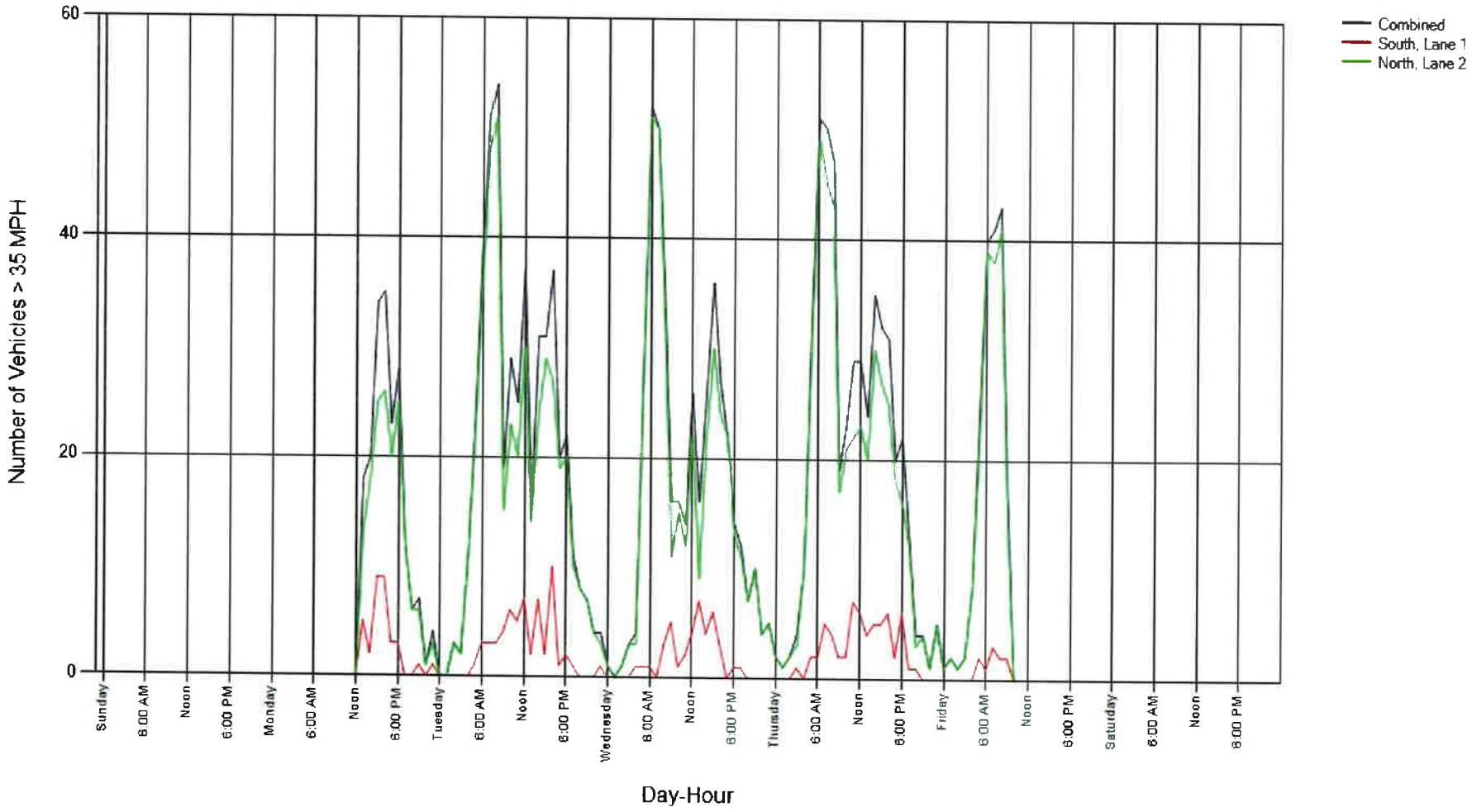


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 35 MPH

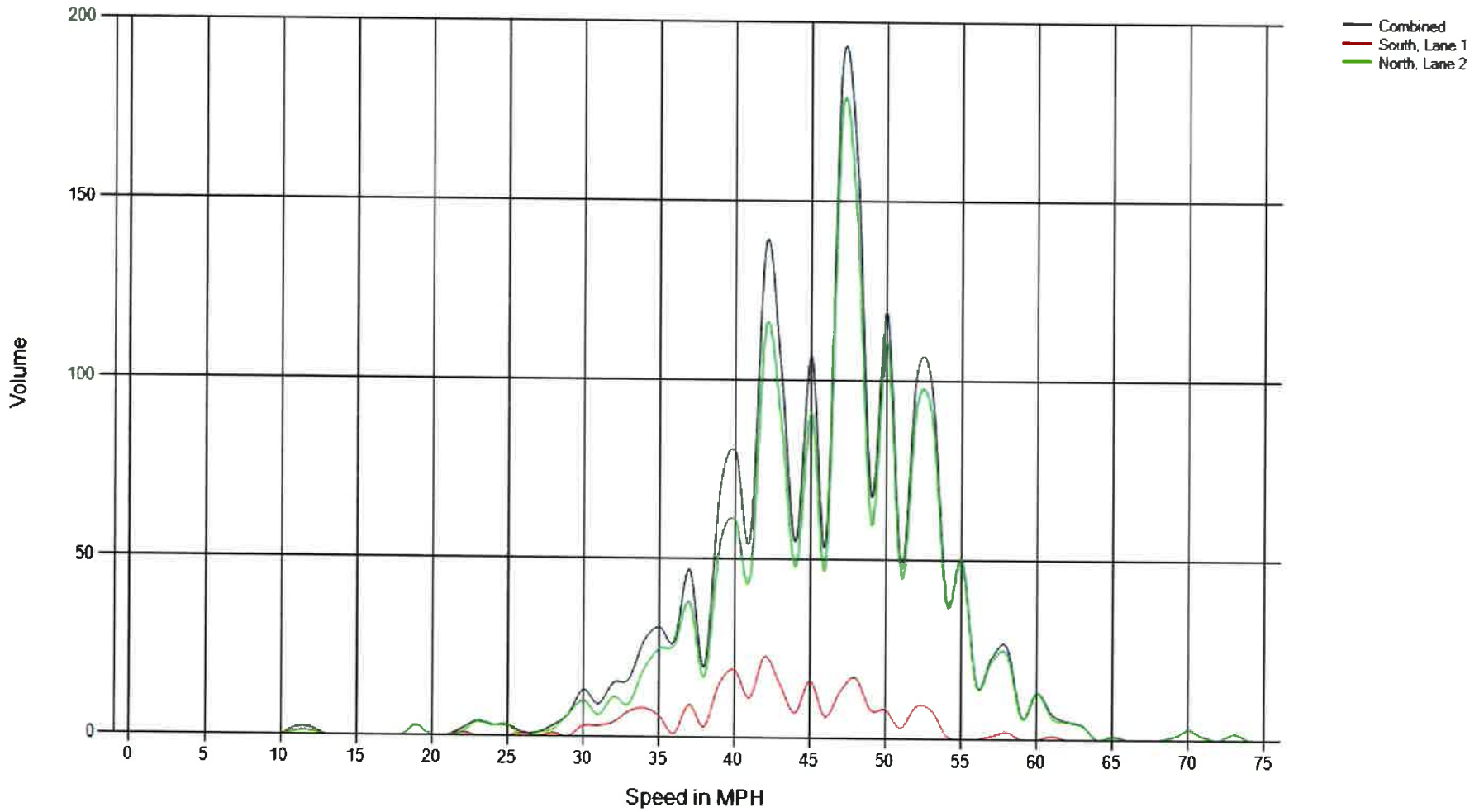


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Mill Rd 1
Station ID:	
Location 1:	Between RT 295 and CR 644
Location 2:	Pole #S30338 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns Mill 1
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Milll Rd 2
Station ID:	CR 643
Location 1:	Between CR 644 and Tighe Rd
Location 2:	Pole #52628 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns mill rd 2
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/19/2021	No Volume					14:28	22	14:33	8	0.69
4/20/2021	08:01	31	08:09	10	0.78	12:11	27	12:13	13	0.52
4/21/2021	07:58	25	08:13	10	0.63	16:09	25	16:20	9	0.69
4/22/2021	07:46	32	08:08	11	0.73	17:31	27	17:37	10	0.68
4/23/2021	07:45	27	08:05	10	0.68	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
39 - 48	373	52%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	1,015
Total Greater Than 50.0	171
Percent Greater Than 50.0	16.8%

Mean, Median, and Mode Averages

Mean:	43.1
Median (50th %):	43.4
Mode:	41.6

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: Straughns Milll Rd 2
Station ID: CR 643
Location 1: Between CR 644 and Tighe Rd
Location 2: Pole #52628 Southbound Lane
Latitude: 0.000000
Longitude: 0.000000

File Name: Straughns mill rd 2
Date Printed: 4/27/2021
Start Date: 4/19/2021
End Date: 4/23/2021
GPS Accuracy: 0ft
Location Verified: No

1015	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/19/2021	South, Lane 1	37		1.00		1.00		37		1.00		37
4/19/2021	North, Lane 2	84		1.00		1.00		84		1.00		84
4/19/2021	Day Total	121						121				121
4/20/2021	South, Lane 1	79		1.00		1.00		79		1.00		79
4/20/2021	North, Lane 2	212		1.00		1.00		212		1.00		212
4/20/2021	Day Total	291						291				291
4/21/2021	South, Lane 1	79		1.00		1.00		79		1.00		79
4/21/2021	North, Lane 2	178		1.00		1.00		178		1.00		178
4/21/2021	Day Total	257						257				257
4/22/2021	South, Lane 1	94		1.00		1.00		94		1.00		94
4/22/2021	North, Lane 2	178		1.00		1.00		178		1.00		178
4/22/2021	Day Total	272						272				272
4/23/2021	South, Lane 1	12		1.00		1.00		12		1.00		12
4/23/2021	North, Lane 2	62		1.00		1.00		62		1.00		62
4/23/2021	Day Total	74						74				74
Total		1015						1015				1015
Average		203						203				203

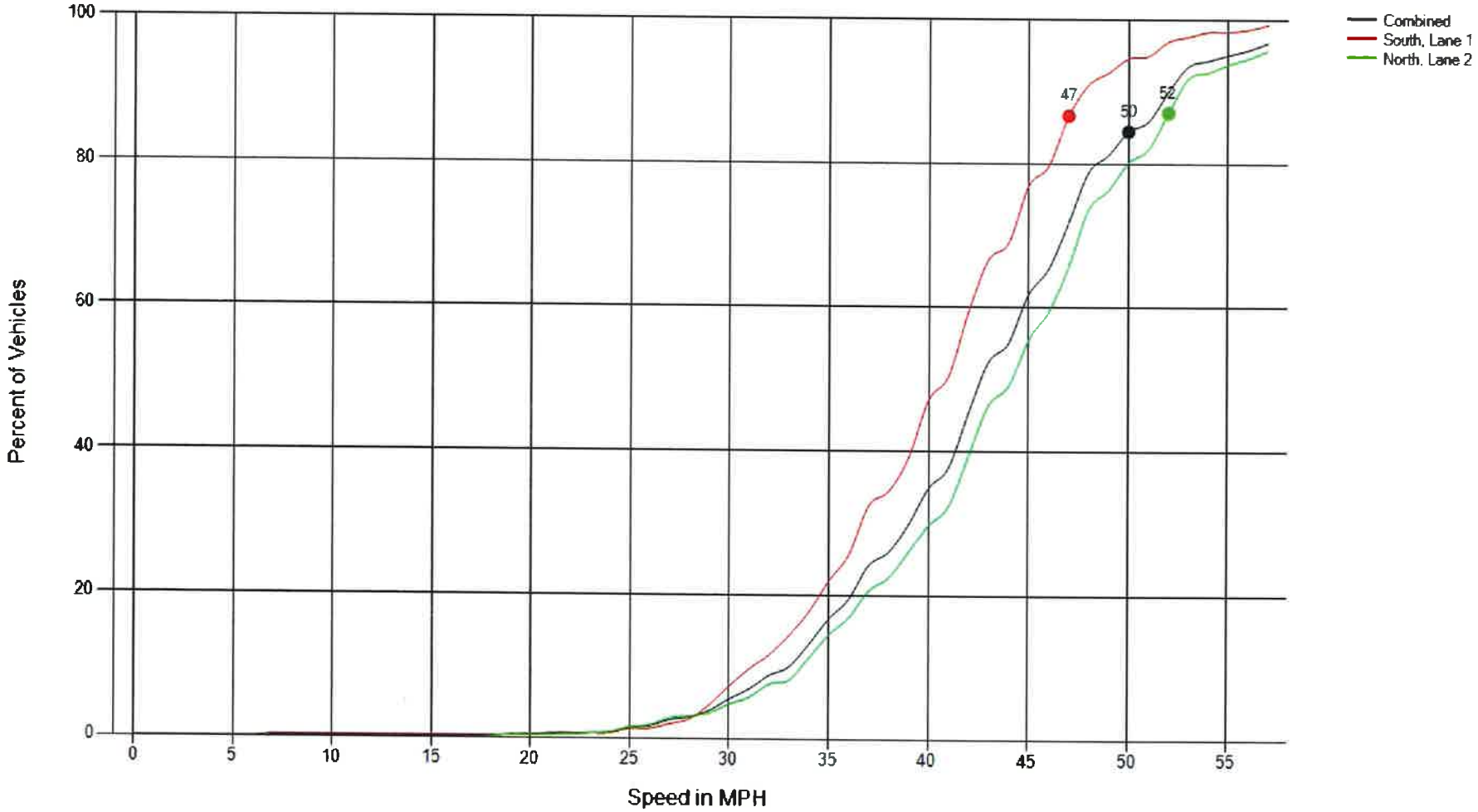
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Milll Rd 2
Station ID:	CR 643
Location 1:	Between CR 644 and Tighe Rd
Location 2:	Pole #52628 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns mill rd 2
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

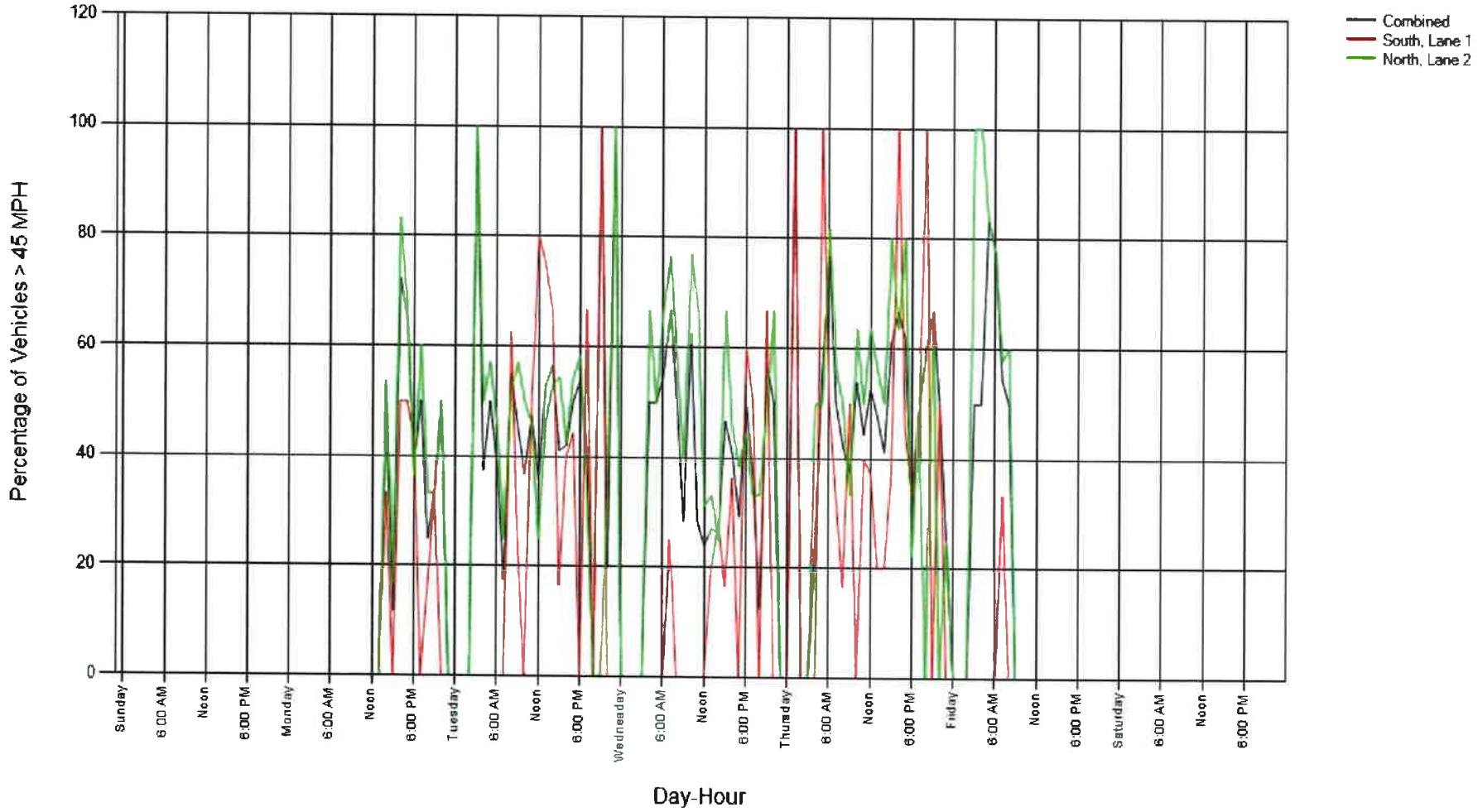


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Milll Rd 2
Station ID:	CR 643
Location 1:	Between CR 644 and Tighe Rd
Location 2:	Pole #52628 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns mill rd 2
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 45 MPH

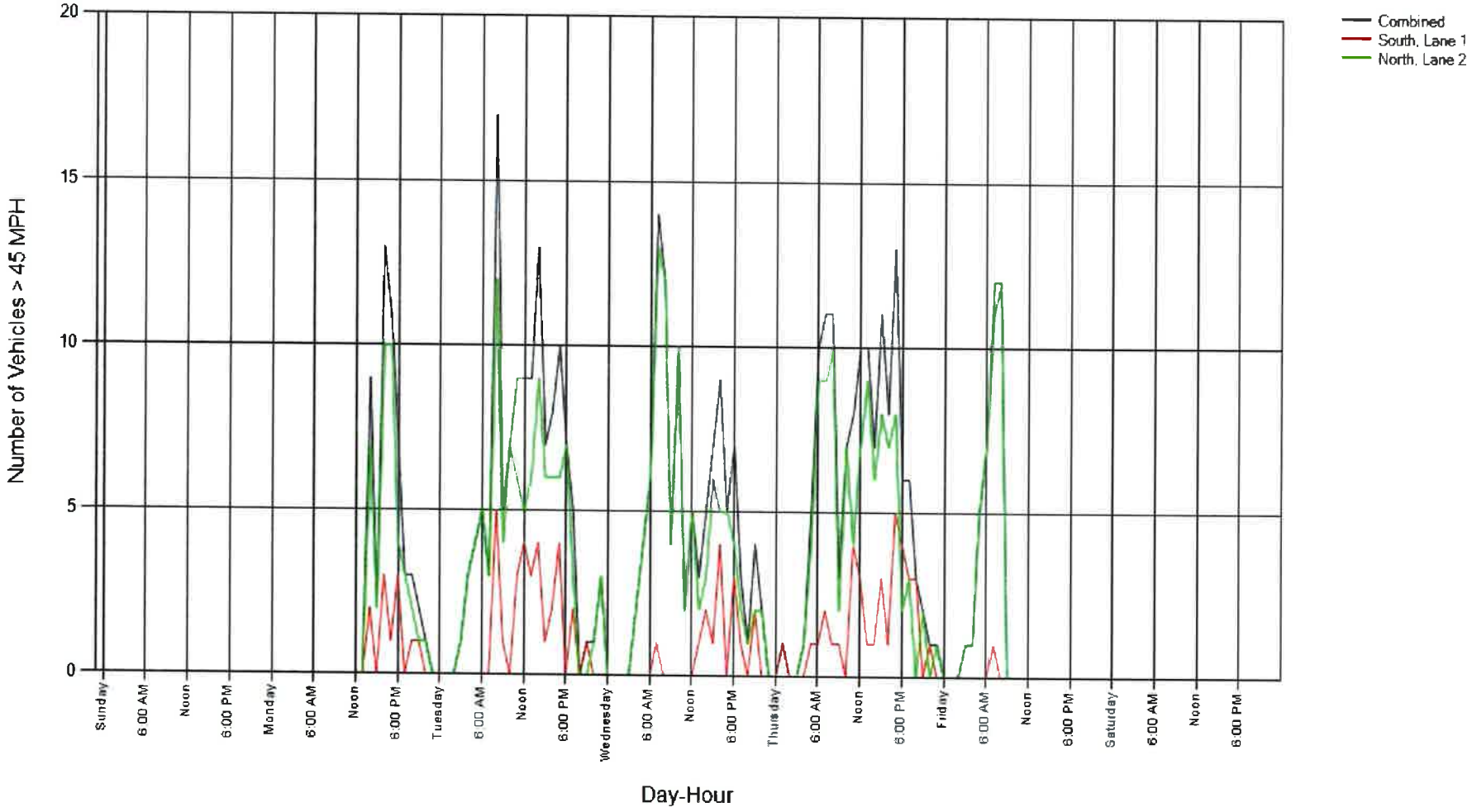


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Milll Rd 2
Station ID:	CR 643
Location 1:	Between CR 644 and Tighe Rd
Location 2:	Pole #52628 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns mill rd 2
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 45 MPH

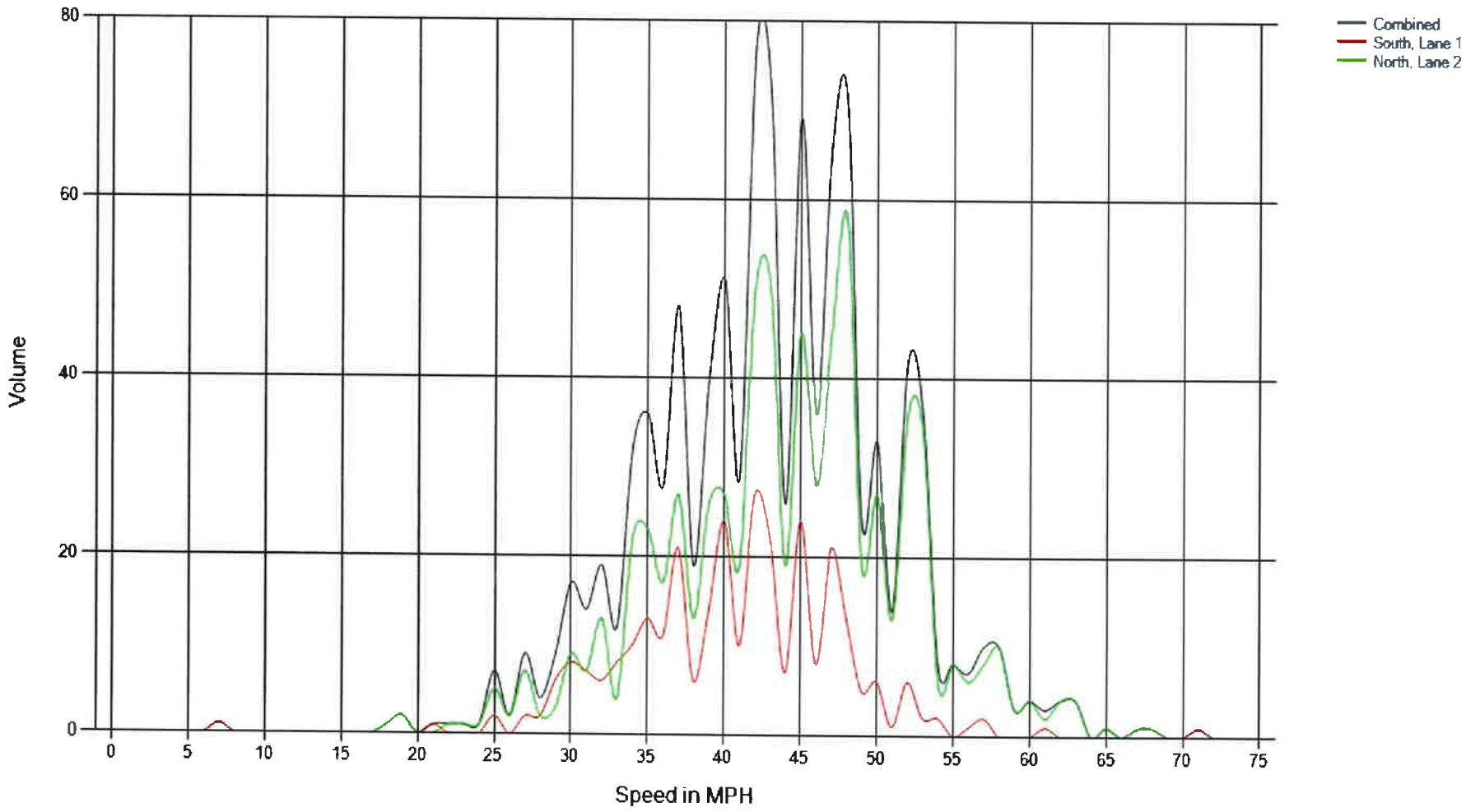


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	Straughns Milll Rd 2
Station ID:	CR 643
Location 1:	Between CR 644 and Tighe Rd
Location 2:	Pole #52628 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	Straughns mill rd 2
Date Printed:	4/27/2021
Start Date:	4/19/2021
End Date:	4/23/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Averaged Daily Totals

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	15	59	60	17	4	0	0	0	0	0	0	0	155
Tuesday	0	20	104	141	37	6	0	0	0	0	0	0	0	308
Wednesday	0	18	100	100	32	8	1	0	1	0	0	0	0	260
Thursday	0	21	95	104	22	4	1	0	0	0	0	0	0	247
Friday	0	46	54	41	19	2	0	0	0	0	0	0	0	162
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	120	412	446	127	24	2	0	1	0	0	0	0	1,132

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/26/2021	No Volume					16:39	44	16:48	18	0.61
4/27/2021	07:16	24	07:32	9	0.67	15:18	53	16:02	18	0.74
4/28/2021	10:57	23	11:17	8	0.72	16:25	37	16:37	16	0.58
4/29/2021	06:57	35	07:10	16	0.55	12:14	34	12:14	15	0.57
4/30/2021	09:32	47	10:16	18	0.65	12:00	42	12:12	20	0.53

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
21 - 30	858	70%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	1,220
Total Greater Than 50.0	1
Percent Greater Than 50.0	0.1%

Mean, Median, and Mode Averages

Mean:	25.0
Median (50th %):	25.4
Mode:	24.9

Classification Statistics

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: South Main St
Station ID: CR 672
Location 1: Between Green St and Church St
Location 2: Pole #S21255 Southbound Lane
Latitude: 0.000000
Longitude: 0.000000

File Name: South Main St
Date Printed: 5/4/2021
Start Date: 4/26/2021
End Date: 4/30/2021
GPS Accuracy: 0ft
Location Verified: No

1220	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/26/2021	South, Lane 1	103		1.00		1.00		103		1.00		103
4/26/2021	North, Lane 2	53		1.00		1.00		53		1.00		53
4/26/2021	Day Total	156						156				156
4/27/2021	South, Lane 1	207		1.00		1.00		207		1.00		207
4/27/2021	North, Lane 2	107		1.00		1.00		107		1.00		107
4/27/2021	Day Total	314						314				314
4/28/2021	South, Lane 1	164		1.00		1.00		164		1.00		164
4/28/2021	North, Lane 2	104		1.00		1.00		104		1.00		104
4/28/2021	Day Total	268						268				268
4/29/2021	South, Lane 1	166		1.00		1.00		166		1.00		166
4/29/2021	North, Lane 2	90		1.00		1.00		90		1.00		90
4/29/2021	Day Total	256						256				256
4/30/2021	South, Lane 1	143		1.00		1.00		143		1.00		143
4/30/2021	North, Lane 2	83		1.00		1.00		83		1.00		83
4/30/2021	Day Total	226						226				226
Total		1220						1220				1220
Average		244						244				244

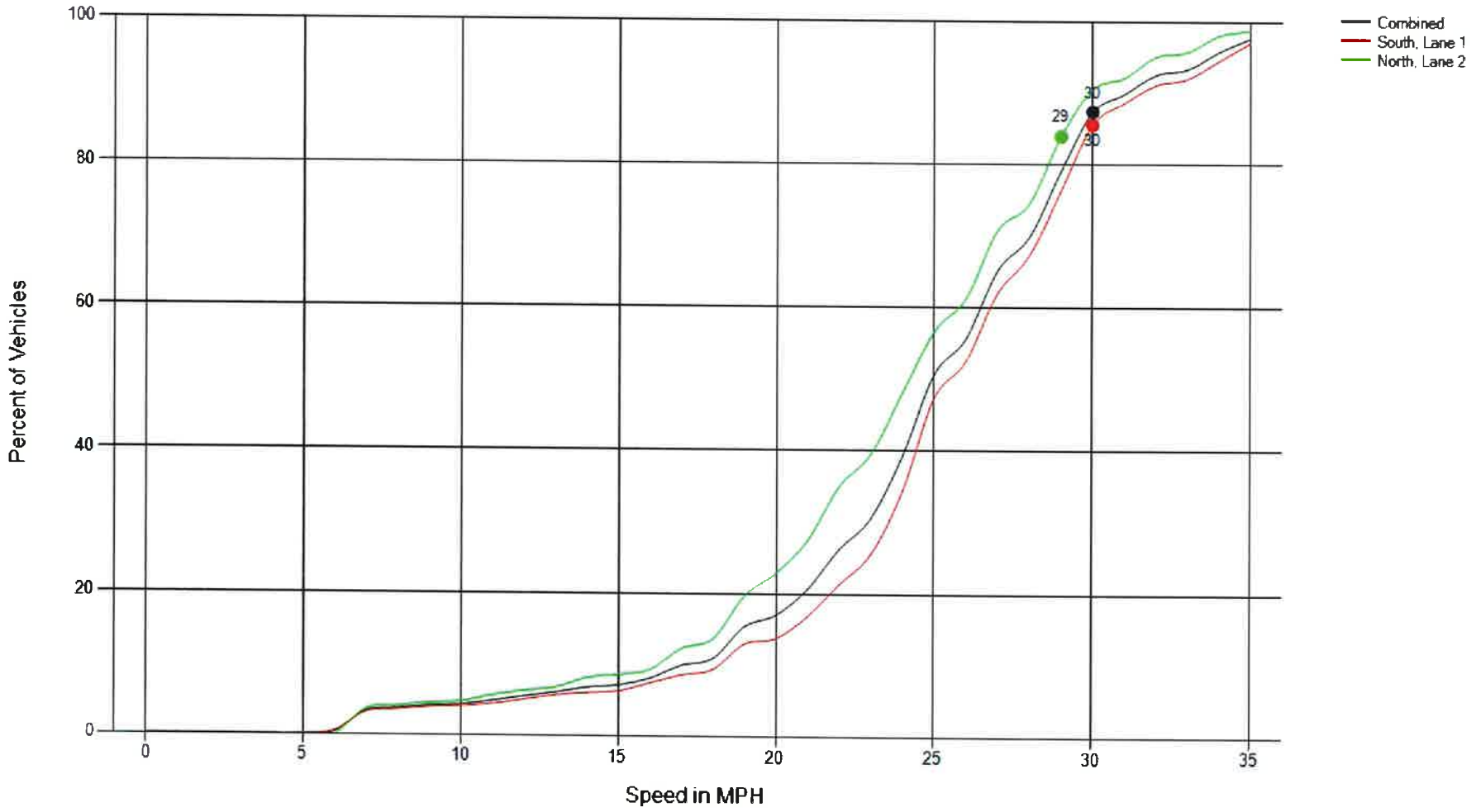
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

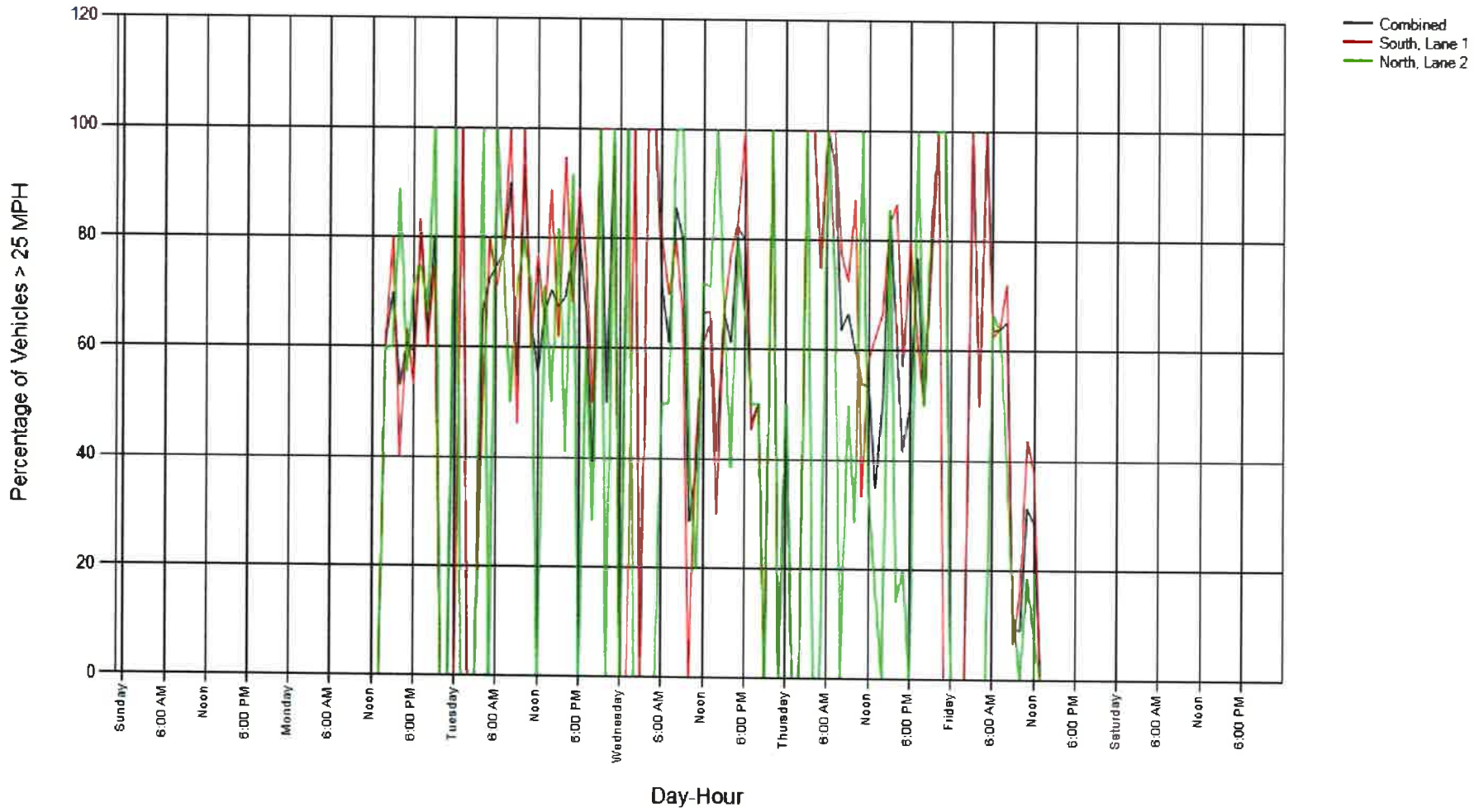


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 25 MPH

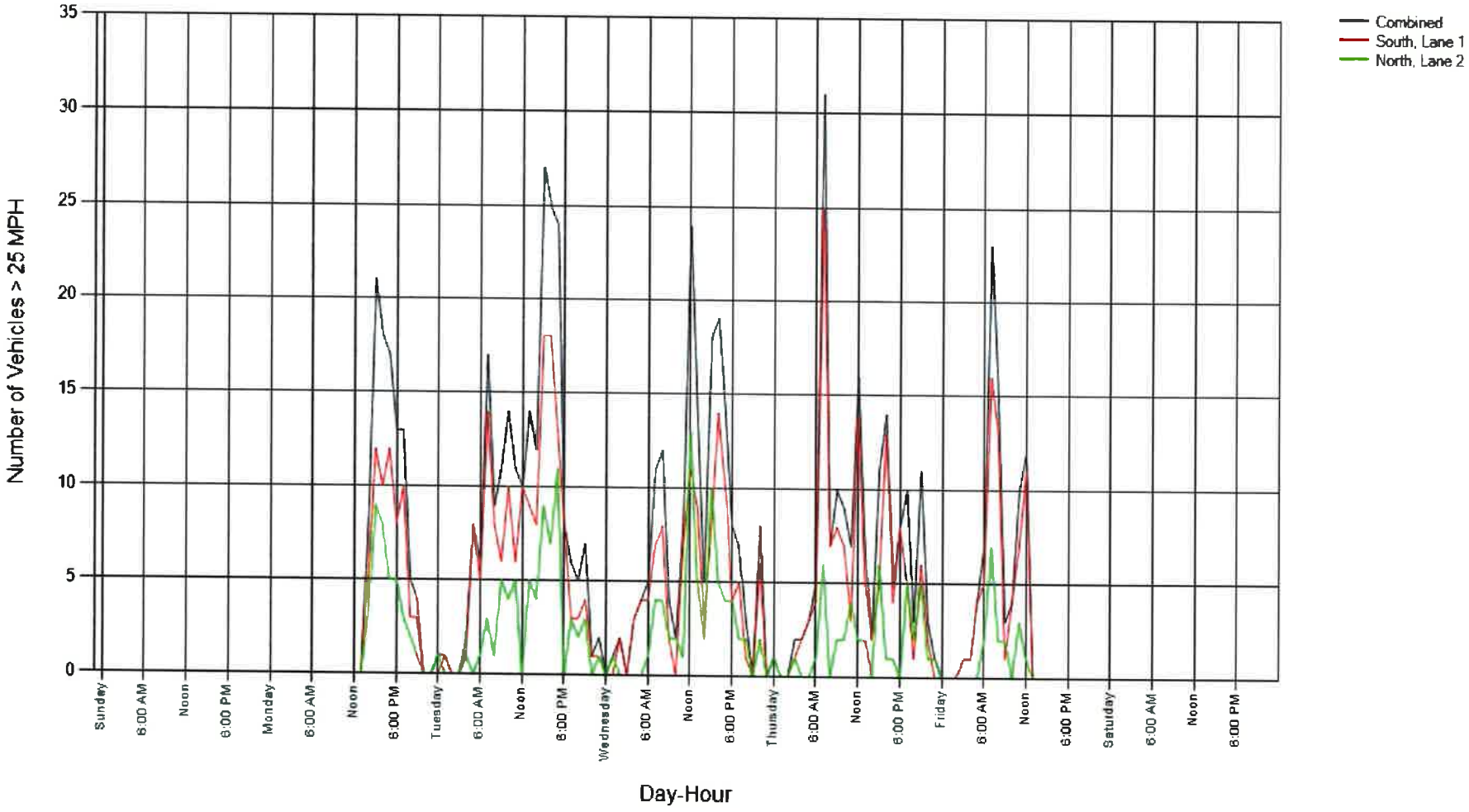


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 25 MPH

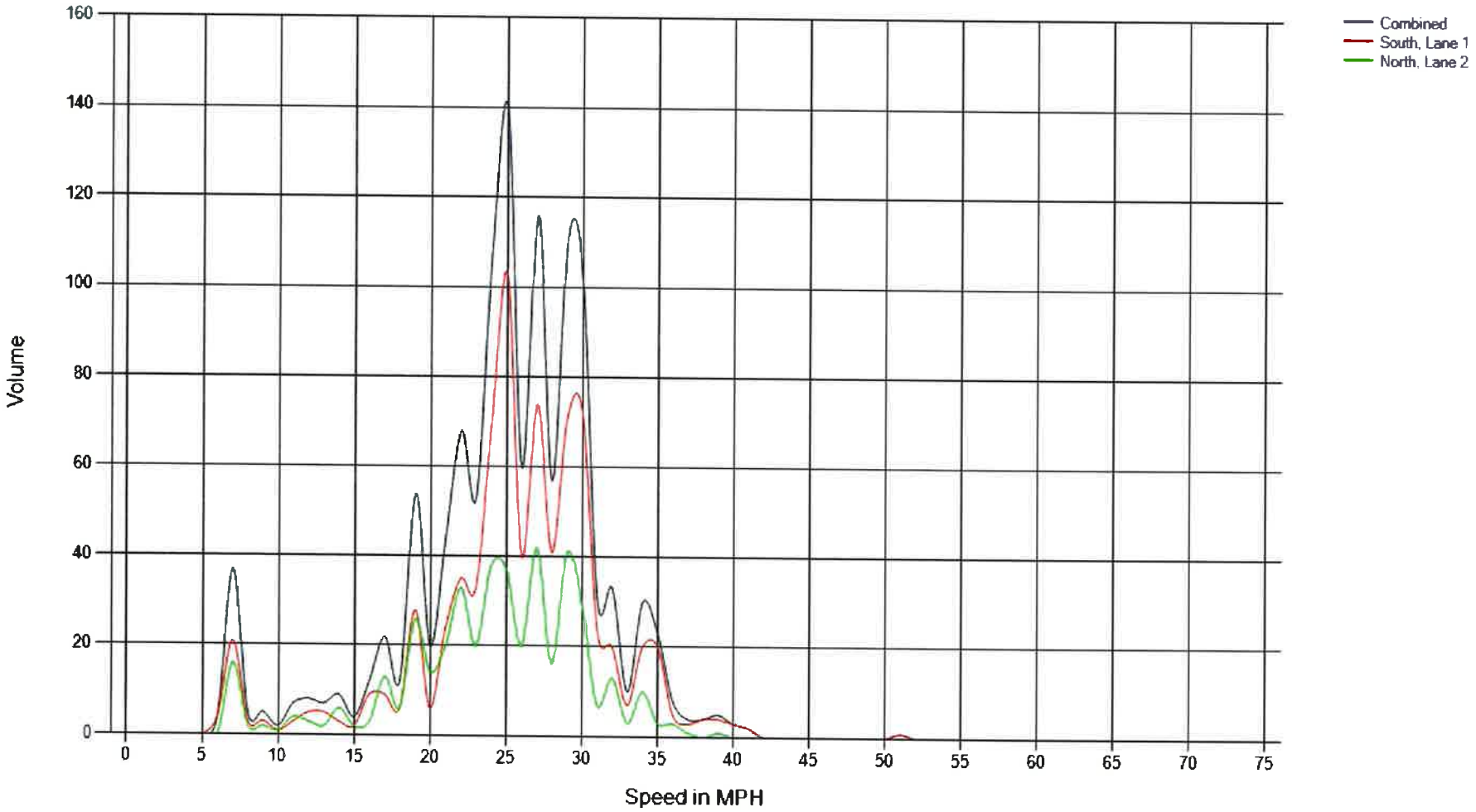


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	South Main St
Station ID:	CR 672
Location 1:	Between Green St and Church St
Location 2:	Pole #S21255 Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	South Main St
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	1	5	2	12	10	7	2	0	0	0	0	0	39
Tuesday	0	0	5	8	27	36	19	7	2	1	0	0	0	105
Wednesday	0	2	0	13	26	32	25	4	3	0	0	0	0	105
Thursday	0	2	4	7	16	32	18	5	2	0	0	0	0	86
Friday	0	0	2	2	10	22	17	5	1	0	0	0	0	59
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	16	32	91	132	86	23	8	1	0	0	0	394

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/26/2021	No Volume					15:20	12	15:24	4	0.75
4/27/2021	09:32	31	09:53	24	0.32	14:35	11	15:18	5	0.55
4/28/2021	09:49	26	09:49	20	0.33	12:01	14	12:32	5	0.70
4/29/2021	09:54	23	09:56	20	0.29	16:01	10	16:01	3	0.83
4/30/2021	09:44	26	09:54	18	0.36	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
34 - 43	244	62%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	395
Total Greater Than 50.0	9
Percent Greater Than 50.0	2.3%

Mean, Median, and Mode Averages

Mean:	37.3
Median (50th %):	37.8
Mode:	40.4

Classification Statistics

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: North Railroad Ave 1
Station ID: CR 602
Location 1: Between Route 130 and Railroad tracks
Location 2: Pole #BT 60L Southbound Lane
Latitude: 0.000000
Longitude: 0.000000

File Name: North Railroad Ave 1
Date Printed: 5/4/2021
Start Date: 4/26/2021
End Date: 4/30/2021
GPS Accuracy: 0ft
Location Verified: No

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
395	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/26/2021	South, Lane 1	15		1.00		1.00		15		1.00		15
4/26/2021	North, Lane 2	24		1.00		1.00		24		1.00		24
4/26/2021	Day Total	39						39				39
4/27/2021	South, Lane 1	30		1.00		1.00		30		1.00		30
4/27/2021	North, Lane 2	75		1.00		1.00		75		1.00		75
4/27/2021	Day Total	105						105				105
4/28/2021	South, Lane 1	35		1.00		1.00		35		1.00		35
4/28/2021	North, Lane 2	71		1.00		1.00		71		1.00		71
4/28/2021	Day Total	106						106				106
4/29/2021	South, Lane 1	27		1.00		1.00		27		1.00		27
4/29/2021	North, Lane 2	59		1.00		1.00		59		1.00		59
4/29/2021	Day Total	86						86				86
4/30/2021	South, Lane 1	12		1.00		1.00		12		1.00		12
4/30/2021	North, Lane 2	47		1.00		1.00		47		1.00		47
4/30/2021	Day Total	59						59				59
Total		395						395				395
Average		79						79				79

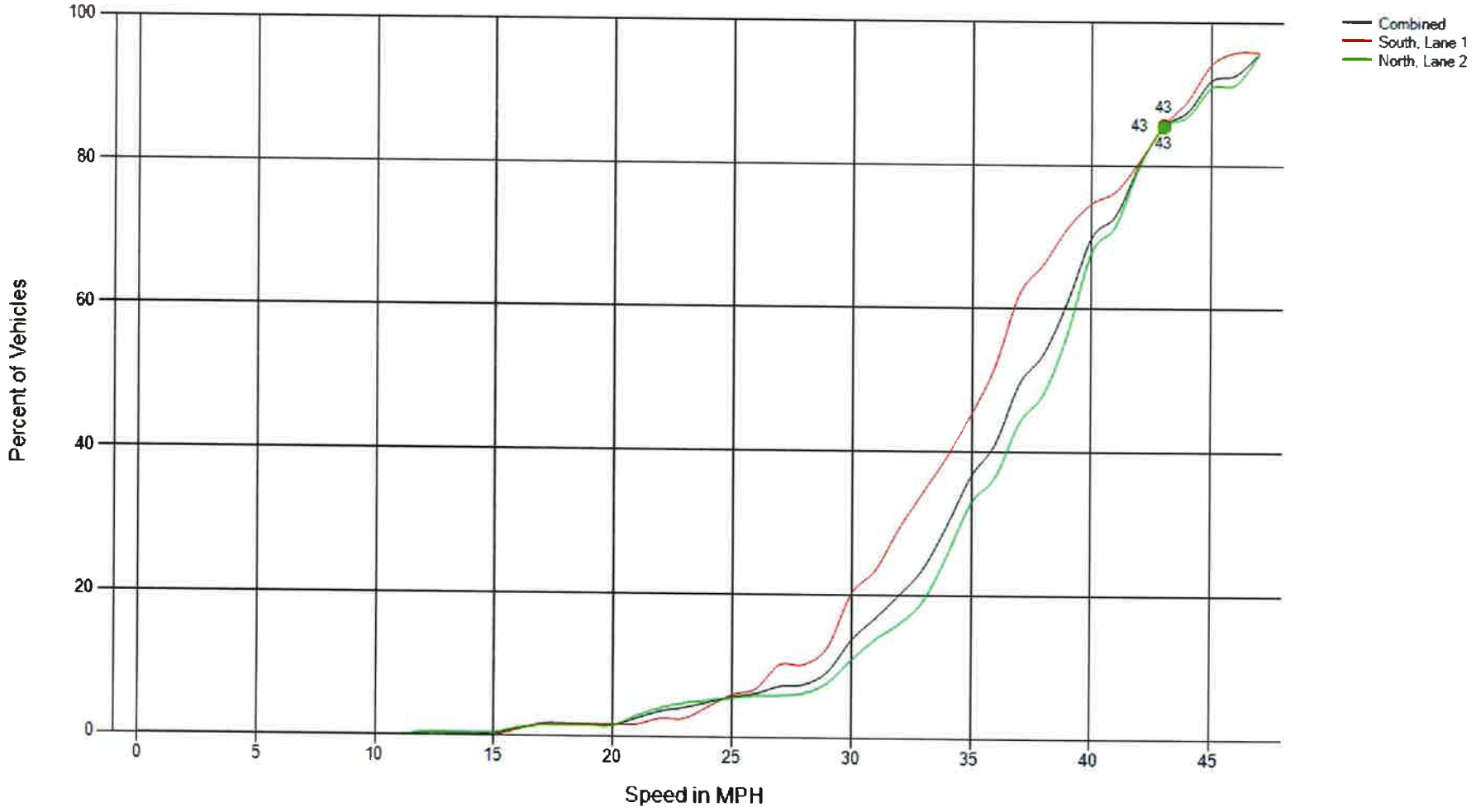
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

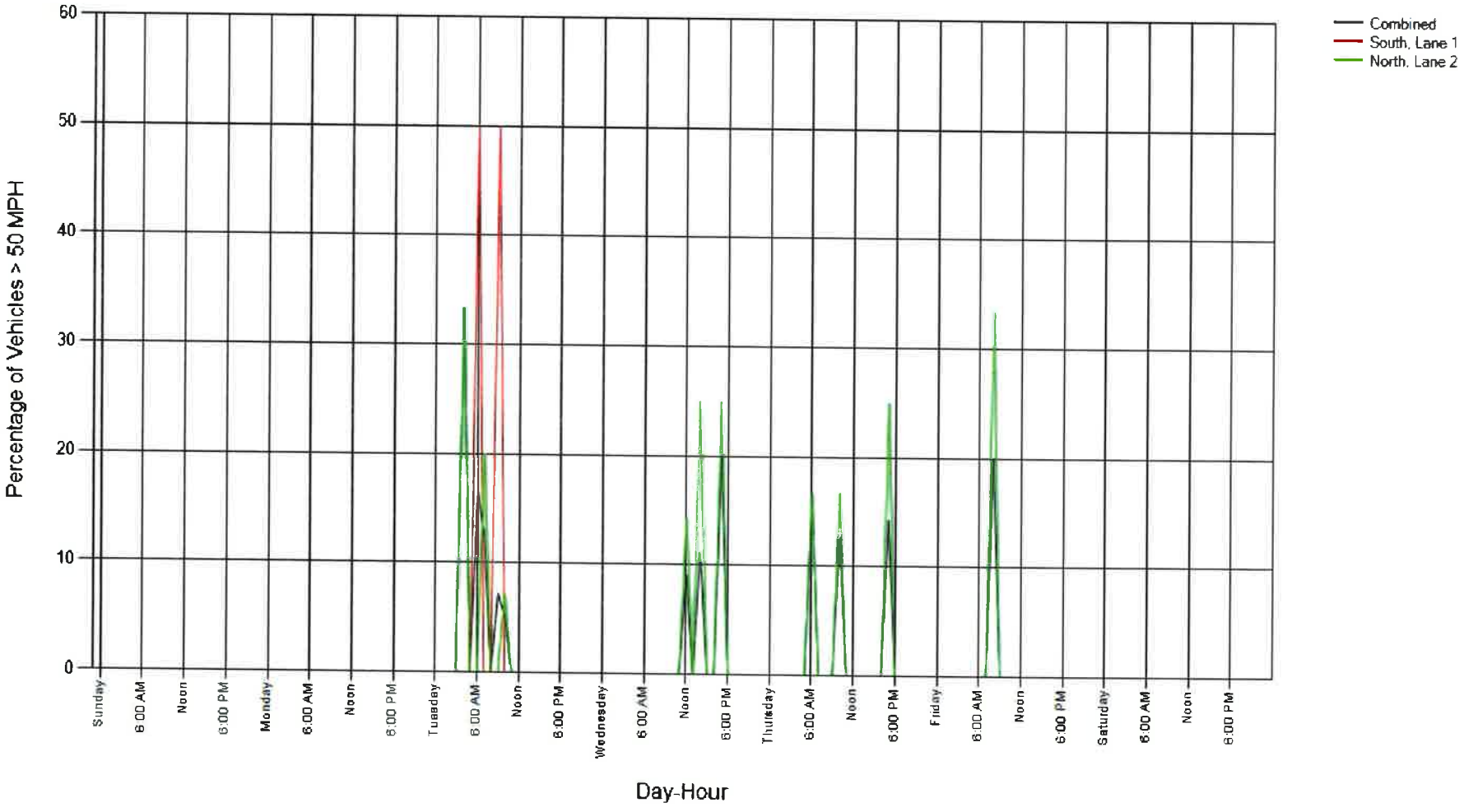


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 50 MPH

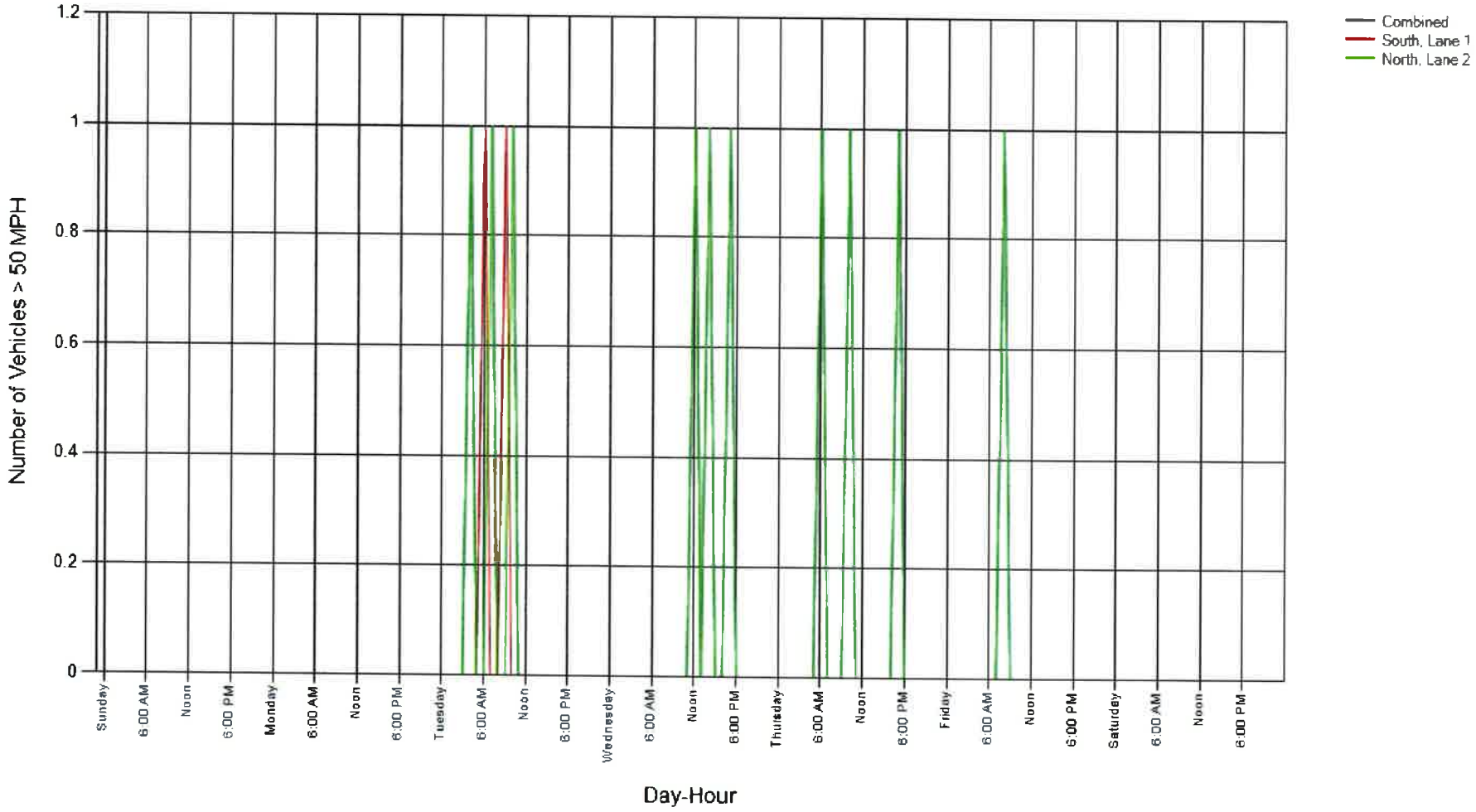


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 50 MPH

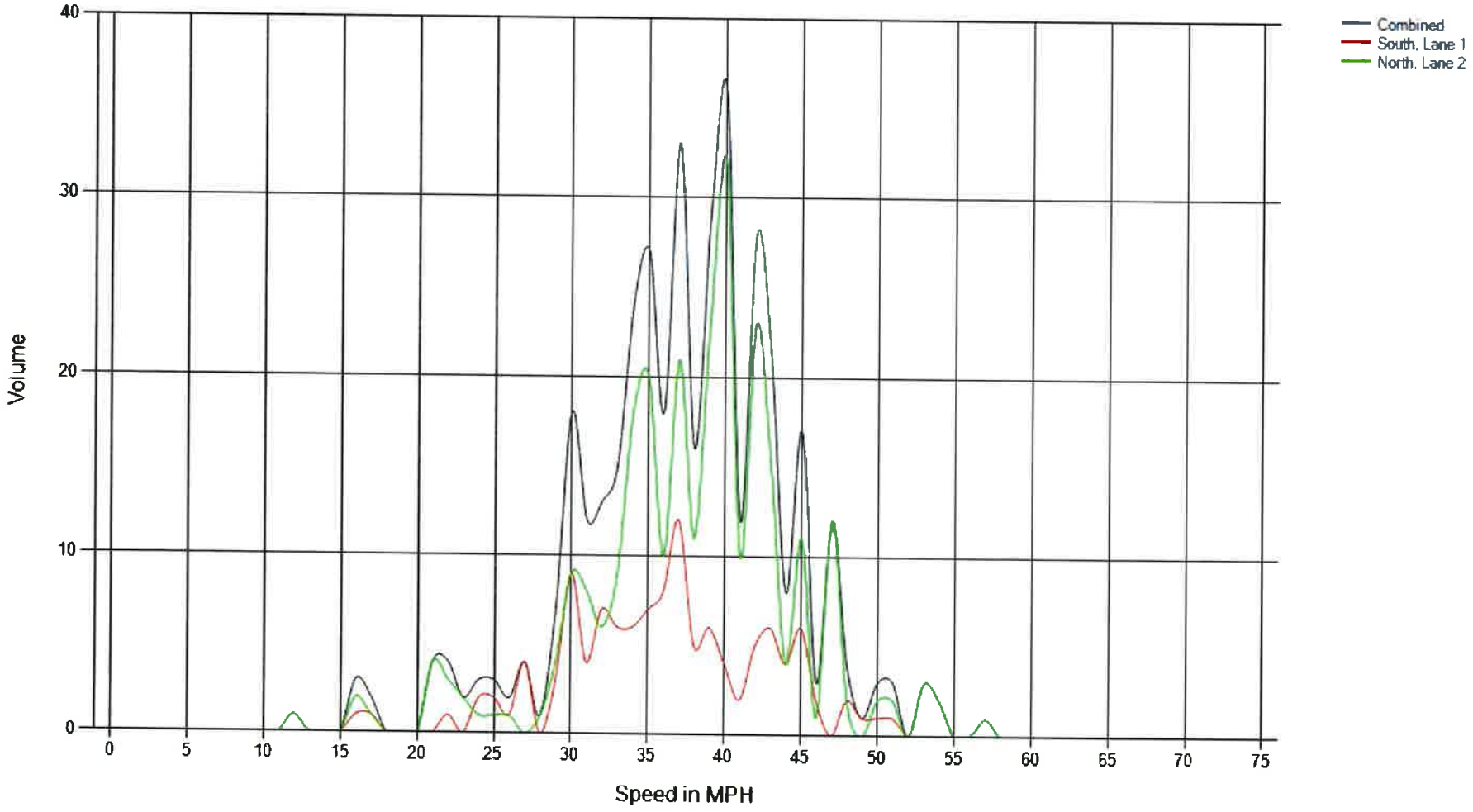


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 1
Station ID:	CR 602
Location 1:	Between Route 130 and Railroad tracks
Location 2:	Pole #BT 60L Southbound Lane
Latitude:	0.000000
Longitude:	0.000000

File Name:	North Railroad Ave 1
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total



Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

Averaged Daily Totals

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined

	<= 15	>15 to 20	>20 to 25	>25 to 30	>30 to 35	>35 to 40	>40 to 45	>45 to 50	>50 to 55	>55 to 60	>60 to 65	>65 to 70	> 70	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	11	40	89	86	38	4	3	1	0	0	0	0	272
Tuesday	0	28	83	186	180	76	17	0	0	0	0	0	0	570
Wednesday	0	40	100	195	151	67	16	4	0	1	0	0	0	574
Thursday	0	29	109	180	164	61	14	2	0	0	0	0	1	560
Friday	0	17	40	95	55	26	7	5	1	0	0	0	0	246
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	125	372	745	636	268	58	14	2	1	0	0	1	2,222

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Combined Lanes

Peak Analysis

Classes Excluded From Peaks: None

Date	AM Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor	Pm Peak	Hour Volume	Highest Interval Time	Highest Interval Volume	Peak Hour Factor
4/26/2021	No Volume					16:29	56	16:29	19	0.74
4/27/2021	09:04	58	09:45	28	0.52	15:44	61	16:10	20	0.76
4/28/2021	09:39	53	09:49	32	0.41	15:23	58	15:31	21	0.69
4/29/2021	09:00	48	09:44	22	0.55	15:14	61	15:31	19	0.80
4/30/2021	09:45	60	09:56	30	0.50	No Volume				

Pace Speed - MPH

Classes Excluded From Pace: None

Speed	Number	Percent
25 - 34	1,387	61%

Vehicles Traveling Greater Than 50.0 MPH

Total Volume	2,267
Total Greater Than 50.0	4
Percent Greater Than 50.0	0.2%

Mean, Median, and Mode Averages

Mean:	29.7
Median (50th %):	29.7
Mode:	30.4

Classification Statistics

1 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code: North Railroad Ave 2
Station ID: CR602
Location 1: Between Railroad Tracks and Mill St
Location 2: Pole #S5013 Southbound
Latitude: 0.000000
Longitude: 0.000000

File Name: ve 2
Date Printed: 5/4/2021
Start Date: 4/26/2021
End Date: 4/30/2021
GPS Accuracy: 0ft
Location Verified: No

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10
2267	0	0	0	0	0	0	0	0	0	0
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AADT

Date	Lane	Volume	x	User	x	Daily	=	ADT	x	Season	=	AADT
4/26/2021	South, Lane 1	136		1.00		1.00		136		1.00		136
4/26/2021	North, Lane 2	142		1.00		1.00		142		1.00		142
4/26/2021	Day Total	278						278				278
4/27/2021	South, Lane 1	226		1.00		1.00		226		1.00		226
4/27/2021	North, Lane 2	351		1.00		1.00		351		1.00		351
4/27/2021	Day Total	577						577				577
4/28/2021	South, Lane 1	247		1.00		1.00		247		1.00		247
4/28/2021	North, Lane 2	340		1.00		1.00		340		1.00		340
4/28/2021	Day Total	587						587				587
4/29/2021	South, Lane 1	225		1.00		1.00		225		1.00		225
4/29/2021	North, Lane 2	351		1.00		1.00		351		1.00		351
4/29/2021	Day Total	576						576				576
4/30/2021	South, Lane 1	77		1.00		1.00		77		1.00		77
4/30/2021	North, Lane 2	172		1.00		1.00		172		1.00		172
4/30/2021	Day Total	249						249				249
Total		2267						2267				2267
Average		453						453				453

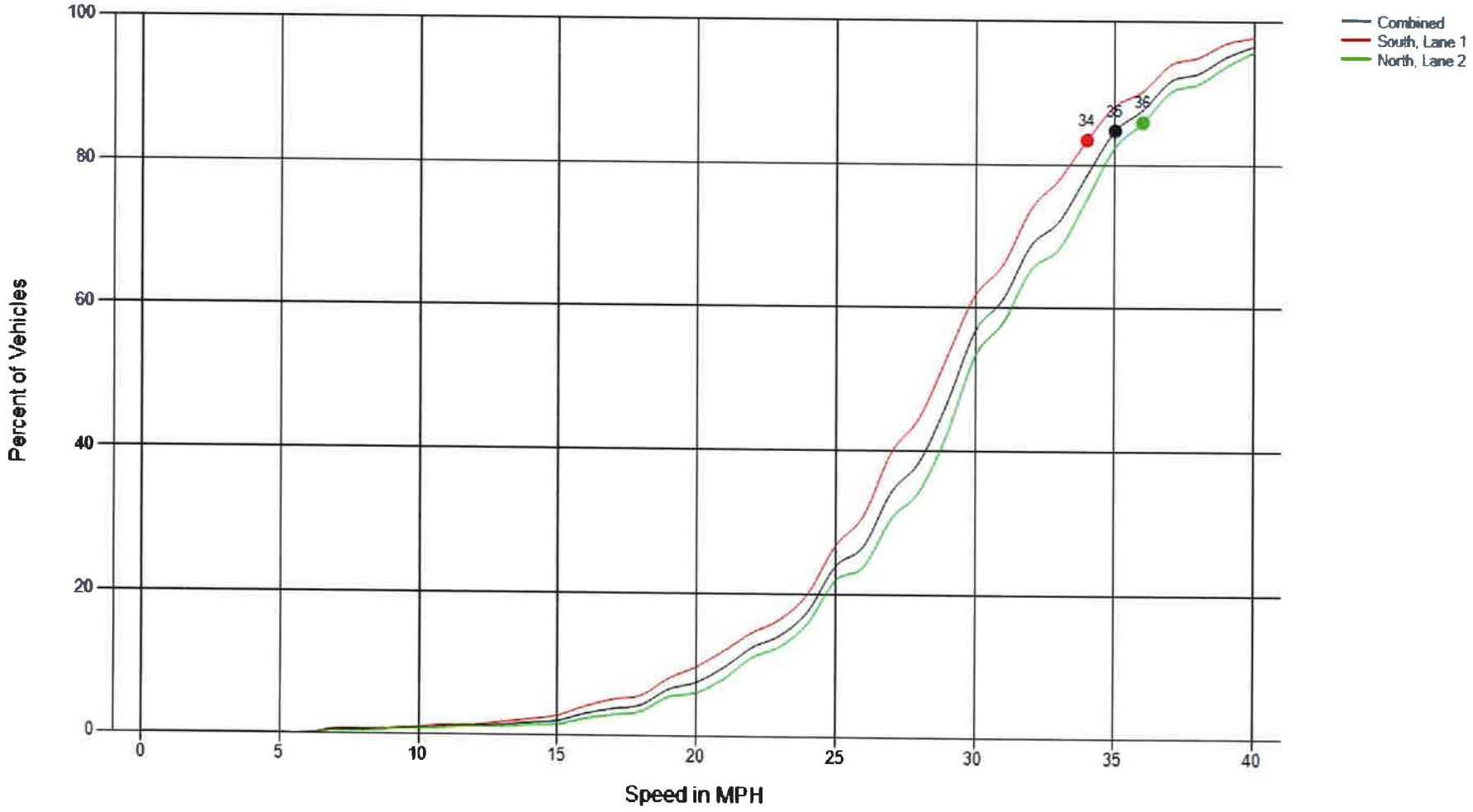
2 of 2

Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Cumulative Speed (in MPH)

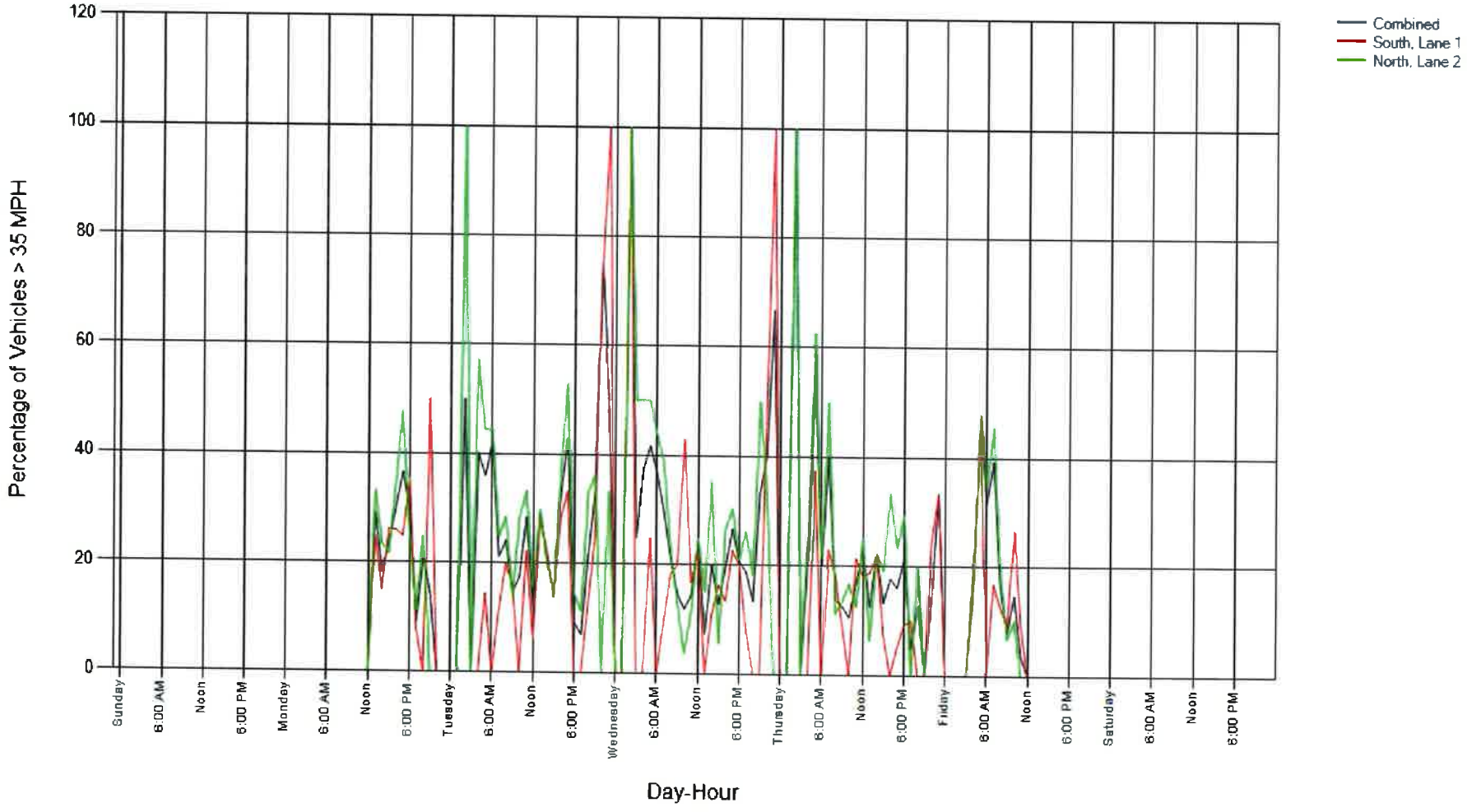


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Percentage of Vehicles Traveling Greater Than 35 MPH

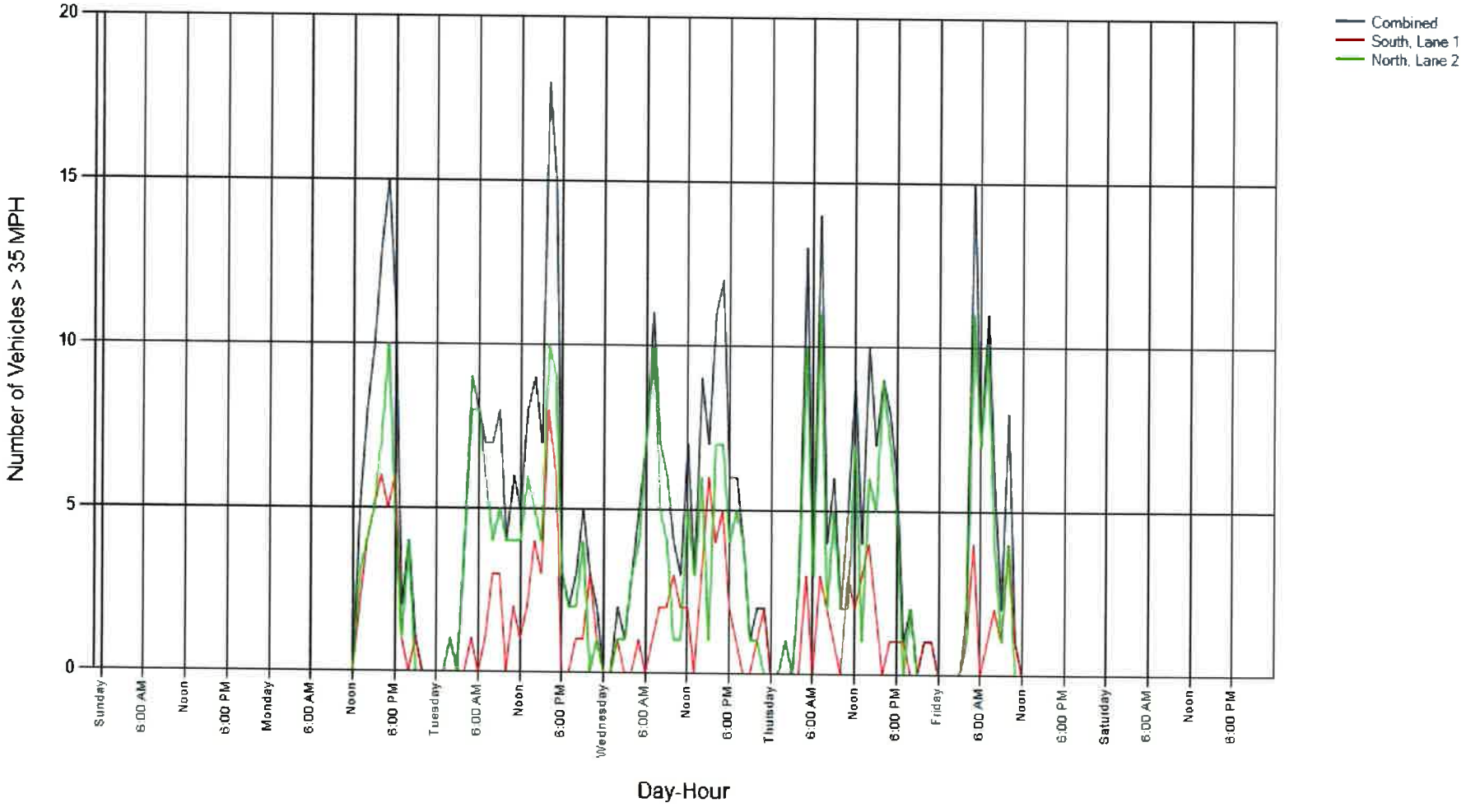


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling Greater Than 35 MPH

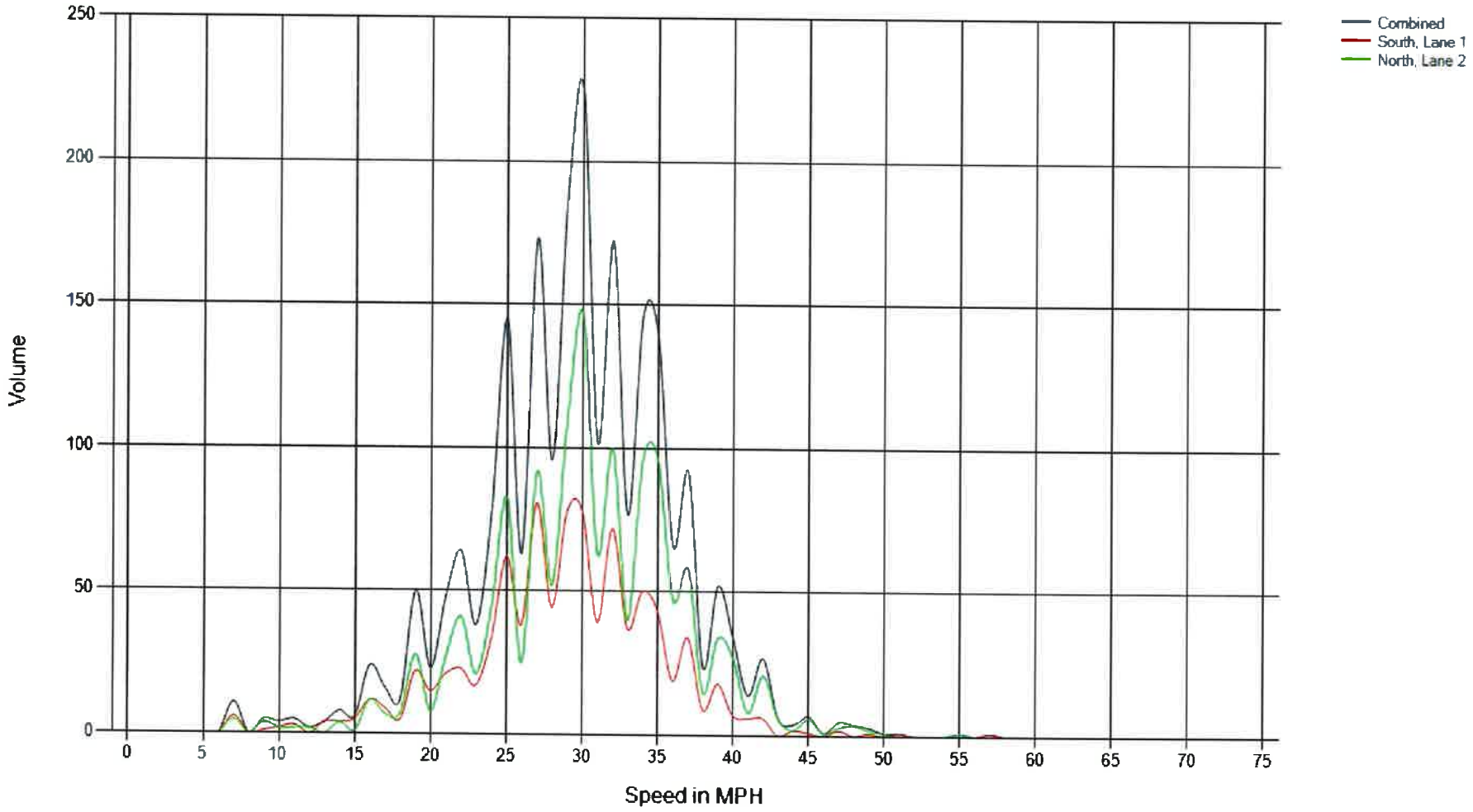


Salem County Engineers Office
110 5 th street Suite 600 Salem N.J. 08079

Site Code:	North Railroad Ave 2
Station ID:	CR602
Location 1:	Between Railroad Tracks and Mill St
Location 2:	Pole #S5013 Southbound
Latitude:	0.000000
Longitude:	0.000000

File Name:	ve 2
Date Printed:	5/4/2021
Start Date:	4/26/2021
End Date:	4/30/2021
GPS Accuracy:	0ft
Location Verified:	No

Number of Vehicles Traveling At A Given Speed - Total

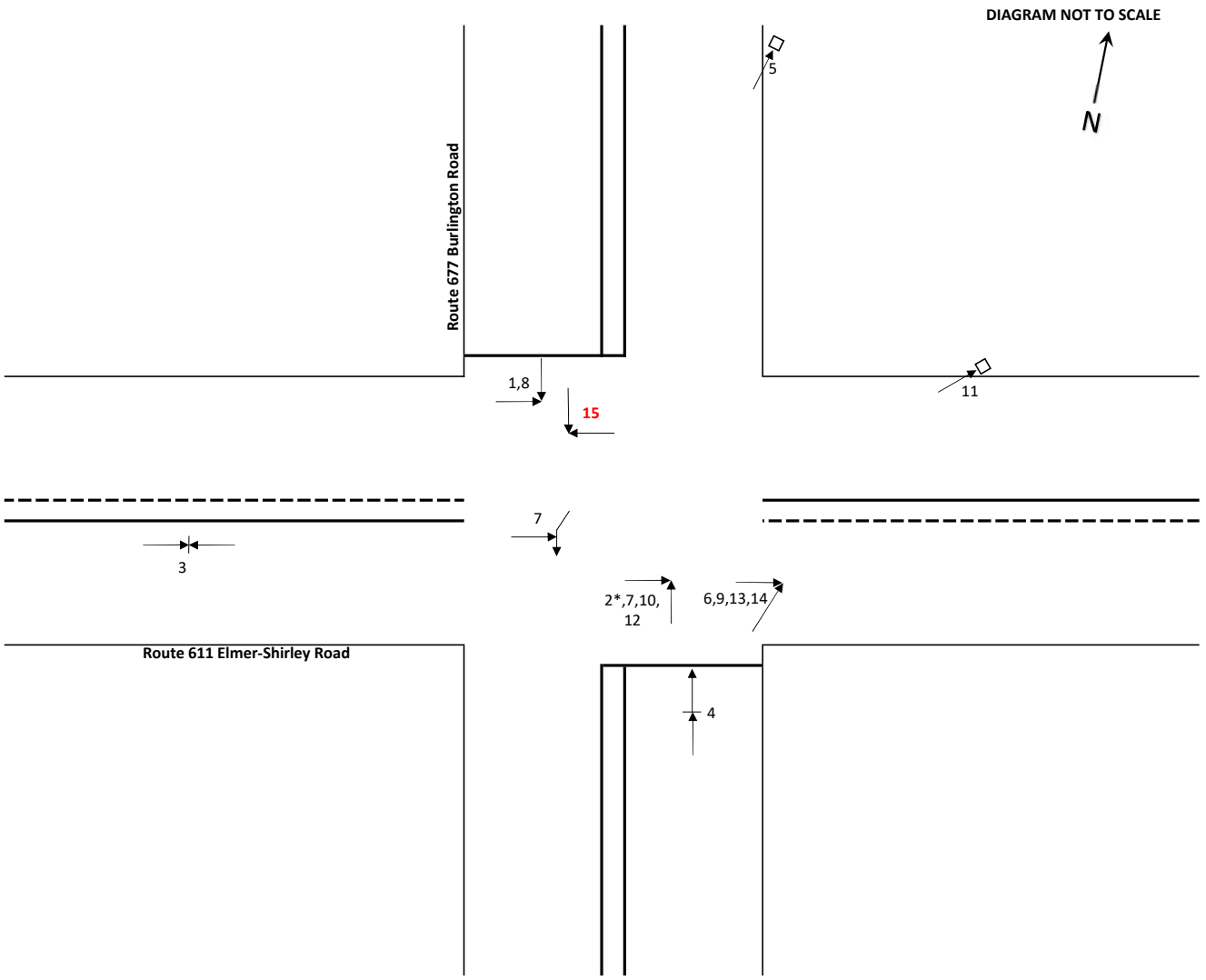


SALEM COUNTY INTERSECTION IMPROVEMENTS

APPENDIX C

CRASH DATA

COLLISION DIAGRAM - ELMER-SHIRLEY ROAD (CR 611 MP 8.98) AND BURLINGTON ROAD (CR 677 MP 3.44)
UPPER PITTSGROVE TOWNSHIP, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:

1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):

1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

ENVIRONMENTAL CONDITIONS (E/C):

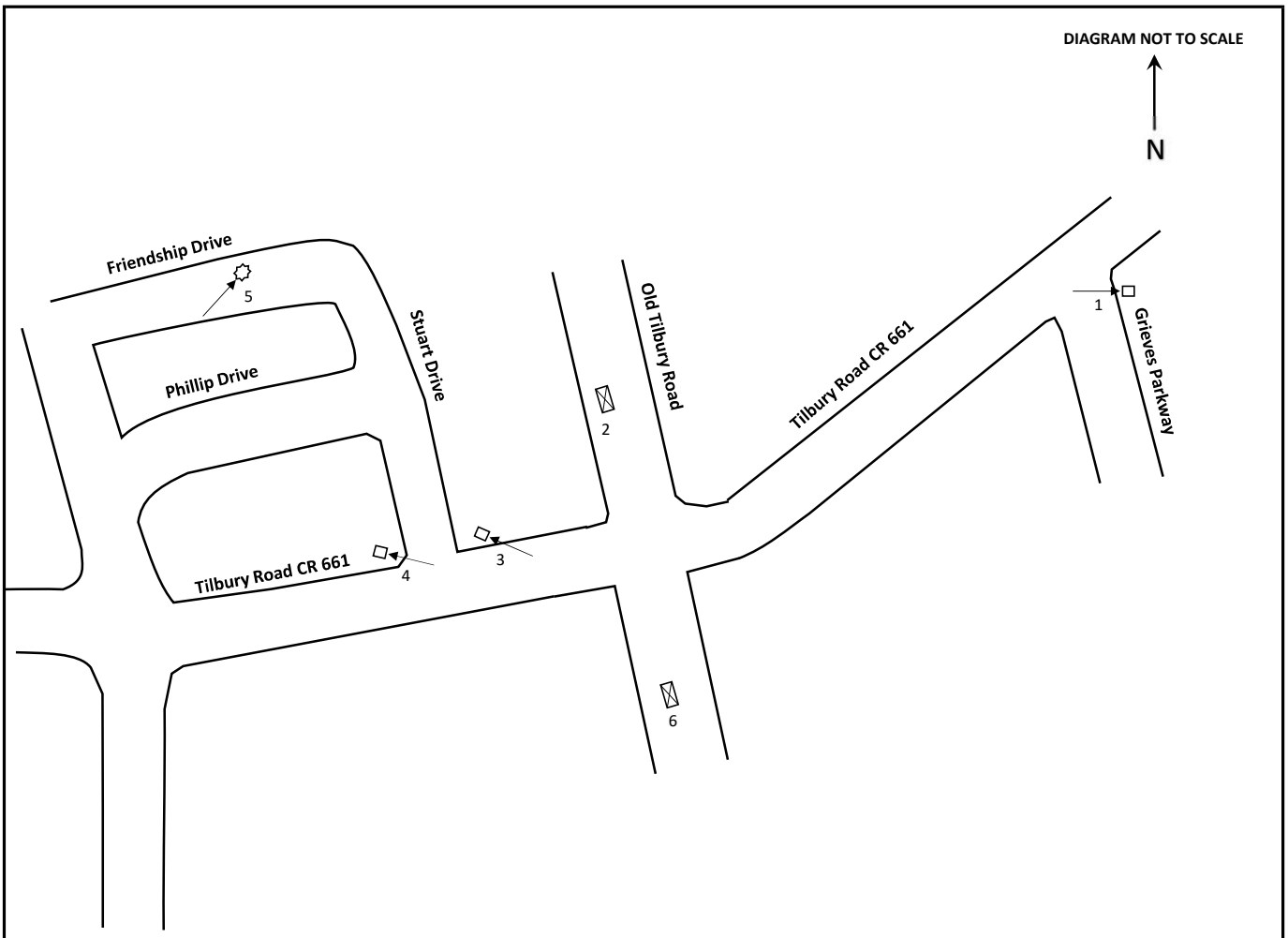
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):

1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1	4/18/2015	SA	1851	5	1	1	1
2*	7/31/2015	F	2302	1	1	1	7
3	2/15/2016	M	1824	1	4	6	5
4	4/1/2016	F	1603	5	1	1	1
5	7/1/2017	SA	553	5	1	1	2
6	4/18/2018	WE	729	1	1	1	1
7	4/28/2018	SA	1804	5	1	1	1
8	5/23/2018	WE	636	5	2	4	1
9	11/11/2018	SU	1610	1	1	1	1
10	3/1/2019	FR	1147	5	2	3	1
11	3/15/2019	FR	612	5	2	2	5
12	6/11/2019	TU	1656	5	1	1	1
13	7/3/2019	WE	1607	5	1	1	1
14	11/19/2019	TU	1036	5	1	1	1
15	**12/3/2019**	**TU**	**1727**	**10**	**1**	**1**	**5**

COLLISION DIAGRAM - SINNICKSON LANDING ROAD/TILBURY ROAD (CR 661 MP 1.83)
AND SOUTH TILBURY ROAD (CR 627 MP 0.00)
ELSINBORO TOWNSHIP, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:
1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):
1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

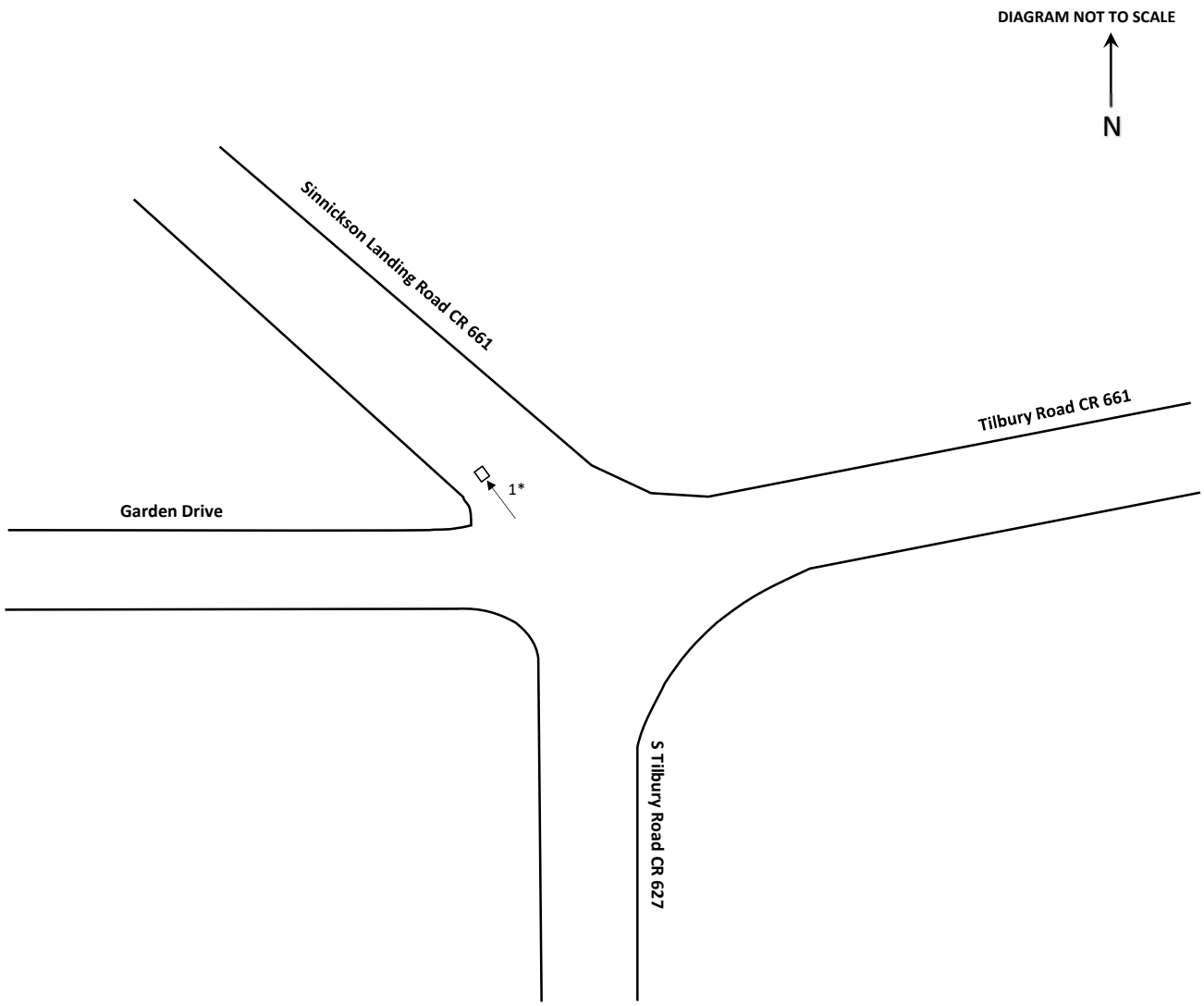
ENVIRONMENTAL CONDITIONS (E/C):
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):
1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1	2/10/2015	SA	1137	1	4	2	5
2	3/8/2015	S	1248	1	1	1	1
3	8/4/2015	TU	910	5	1	1	1
4	11/22/2015	TU	515	1	1	1	6
5	12/15/2018	S	440	1	2	2	1
6	8/13/2019	SA	1137	2	2	5	6

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C

COLLISION DIAGRAM - INTERSECTION OF SINNICKSON LANDING ROAD/TILBURY ROAD (CR 661 MP 1.83)
AND SOUTH TILBURY ROAD (CR 627 MP 0.00)
ELSINBORO TOWNSHIP, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:
1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):
1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

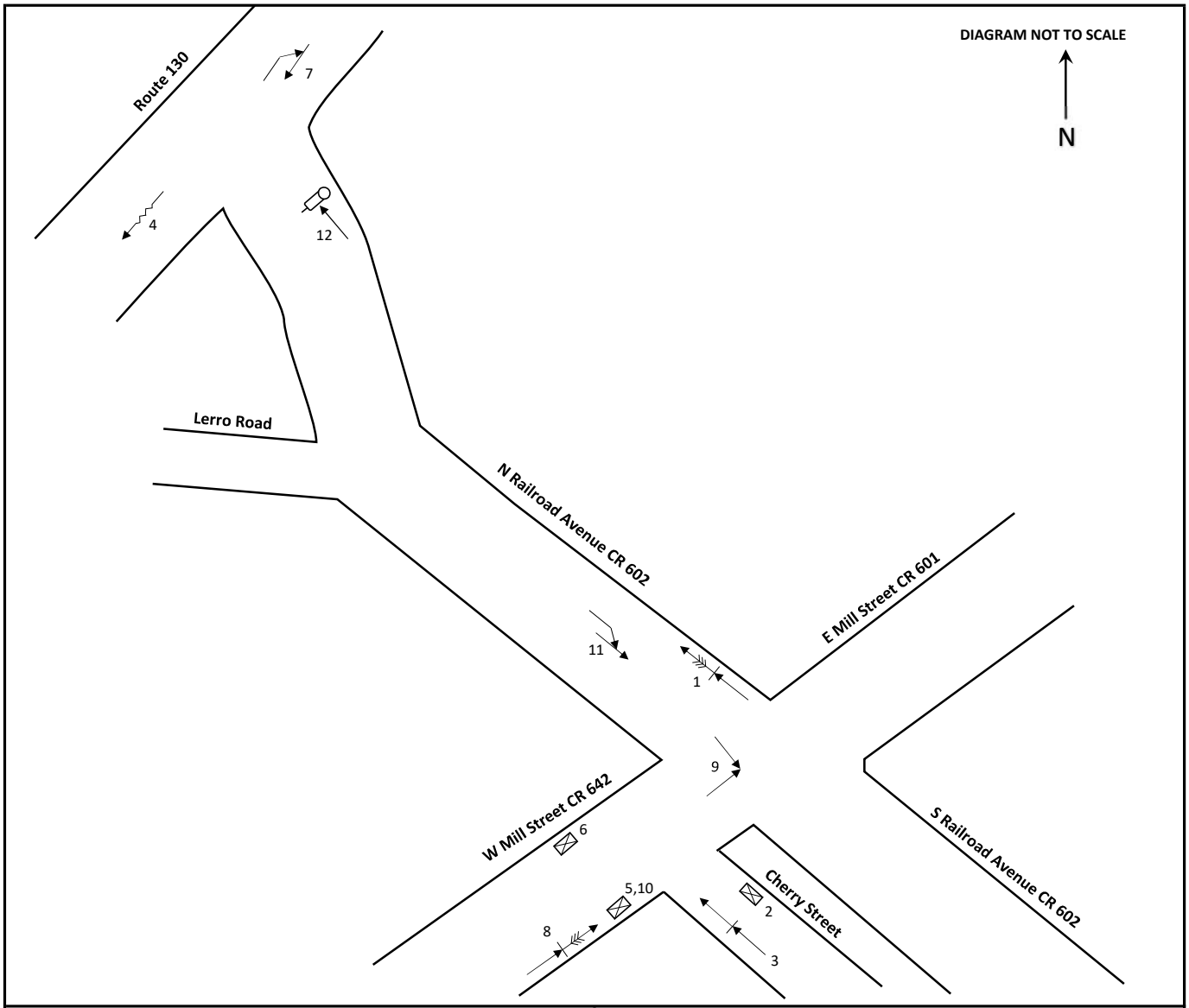
ENVIRONMENTAL CONDITIONS (E/C):
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):
1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1*	9/16/2017	SA	500	1	0	0	4

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C

COLLISION DIAGRAM - NORTH RAILROAD AVENUE (CR 602 MP 8.99 TO MP 10.43)
FROM WEST MILL STREET (CR 642 MP 1.98) TO NJ ROUTE 130 (MP7.94)
OLDMANS TOWNSHIP, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OPPOSITE DIRECTION SIDE SWIPE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:
1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):
1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

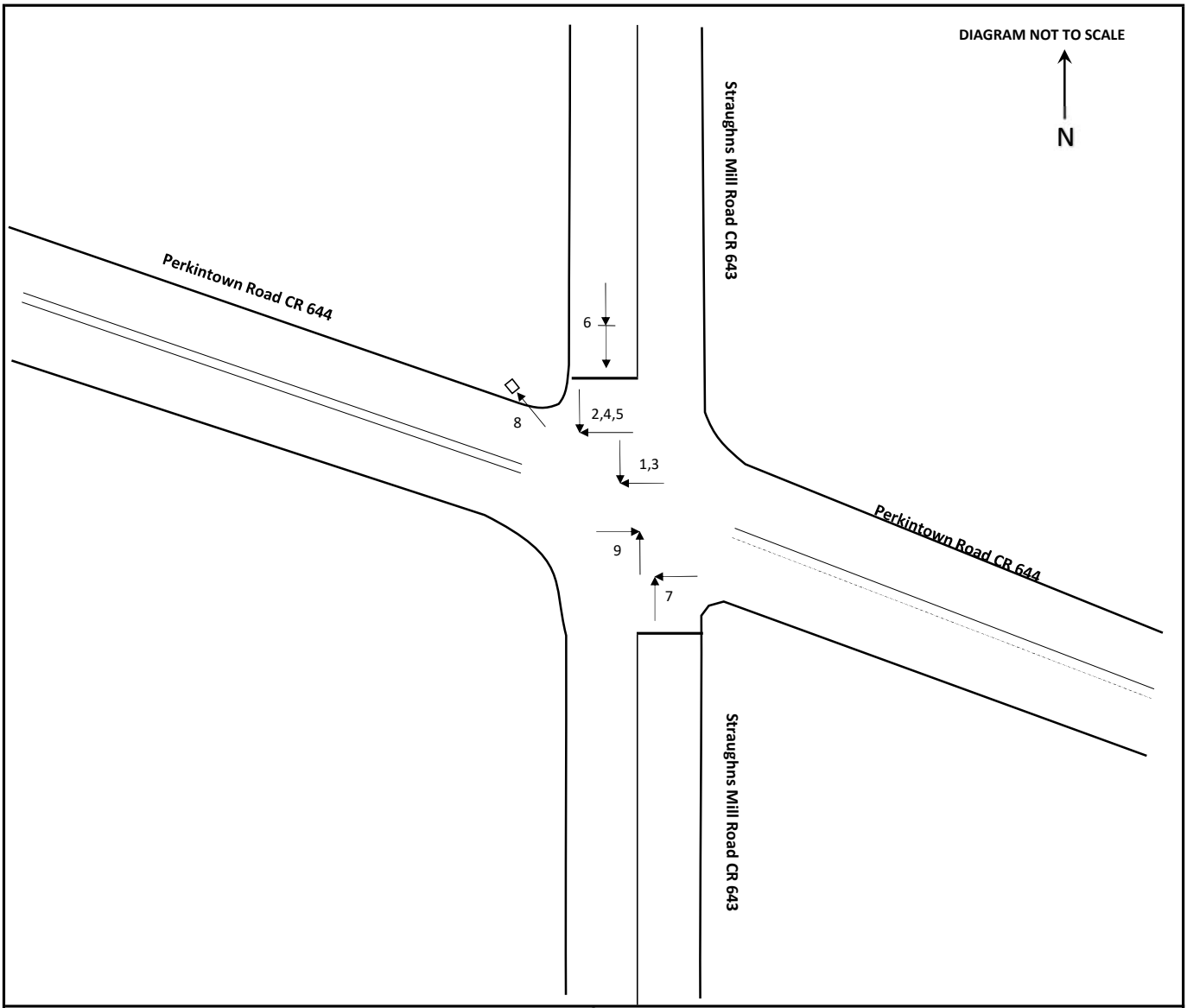
ENVIRONMENTAL CONDITIONS (E/C):
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):
1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1	1/24/2015	SA	2230	1	1	1	6
2	1/26/2016	TU	1401	1	3	1	1
3	5/12/2016	TH	2002	5	1	1	3
4	5/21/2016	SA	1326	1	2	2	1
5	6/22/2016	W	221	1	1	1	5
6	2/25/2017	SA	444	1	1	1	7
7	4/7/2017	FR	528	1	1	1	4
8	9/29/2017	FR	1816	1	1	1	1
9	2/1/2018	TH	1531	1	1	1	1
10	5/23/2019	TH	124	1	1	1	7
11	8/19/2019	MO	2141	1	1	1	6
12	11/18/2019	MO	1656	1	1	1	5

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C

COLLISION DIAGRAM - PERKINTOWN ROAD (CR 644 MP 3.00) AND STRAUGHNS MILL ROAD (CR 643 MP 1.11)
OLDMANS TOWNSHIP, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:
1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):
1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

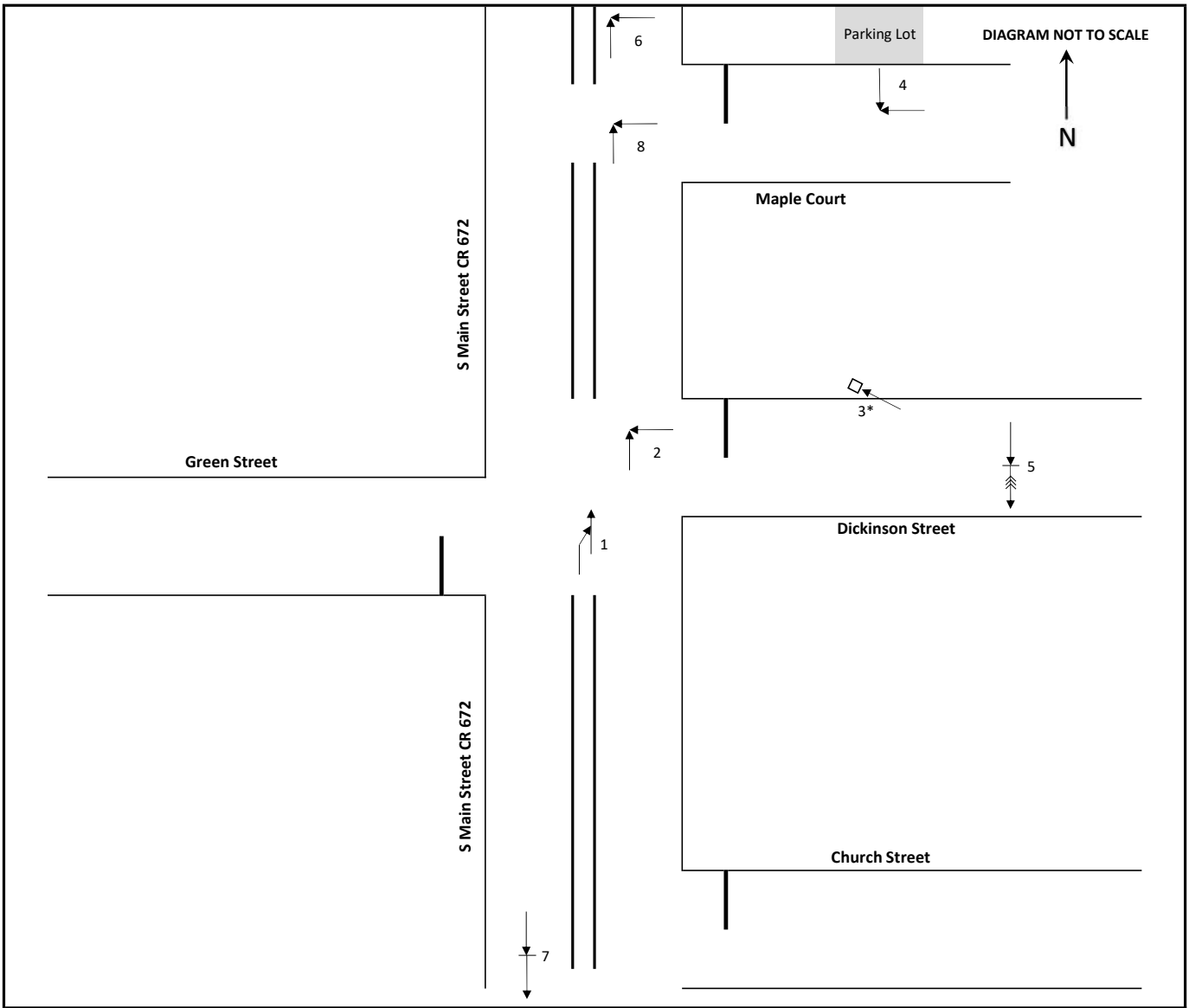
ENVIRONMENTAL CONDITIONS (E/C):
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):
1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1	11/15/2016	TU	1724	5	1	1	5
2	11/26/2016	SA	N/A	1	1	1	5
3	7/13/2017	TH	1003	5	1	1	1
4	8/17/2018	FR	1057	5	1	1	1
5	9/22/2018	SA	1303	1	1	1	1
6	10/23/2018	TU	1625	1	1	1	1
7	2/19/2019	TU	1237	5	1	1	1
8	3/1/2019	FR	807	1	5	3	1
9	10/27/2019	SU	1247	1	2	2	1

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C

COLLISION DIAGRAM - SOUTH MAIN STREET (CR 672 MP 7.73) AND DICKINSON/GREEN STREET
WOODSTOWN, SALEM COUNTY, NEW JERSEY



CRASH TYPE

REAR- END
SIDE SWIPE
ANGLE
OUT OF CONTROL (UNKNOWN)
HEAD-ON
HIT MOVING OBJECT
OVERTURNED
BACKING
HIT ANIMAL
PEDESTRIAN/ BICYCLE
TURNING MOVEMENT
HIT FIXED OBJECT
PARKED VEHICLE

EPDO:
1 = Property Damage Only
5 = Injury
10 = Fatality

* Indicates Drugs or Alcohol

ROAD SURFACE (R/S):
1 = Dry
2 = Wet
3 = Snowy
4 = Icy
5 = Slush
6 = Water

ENVIRONMENTAL CONDITIONS (E/C):
1 = Clear
2 = Rain
3 = Snow
4 = Fog/Smog/Smoke
5 = Overcast
6 = Sleet/Hail/Freezing Rain
7 = Other

LIGHT CONDITIONS (L/C):
1 = Daylight
2 = Dawn
3 = Dusk
4 = Dark - Street Lights Off
5 = Dark - No Street Lights
6 = Dark - Street Lights On - Cont.
7 = Dark - Street Lights On - Spot

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C
1	6/9/2016	TH	1115	1	1	1	1
2	7/4/2016	M	1553	5	1	1	1
3*	3/10/2017	FR	2103	1	1	1	7
4	4/3/2017	MO	1457	1	1	1	1
5	6/17/2017	SA	1309	1	1	5	1
6	11/14/2018	WE	1449	1	1	1	1
7	6/7/2019	FR	1302	1	1	1	1
8	11/1/2019	FR	806	1	1	1	1

#	DATE	DAY	TIME	EPDO	R/S	E/C	L/C

SALEM COUNTY INTERSECTION IMPROVEMENTS

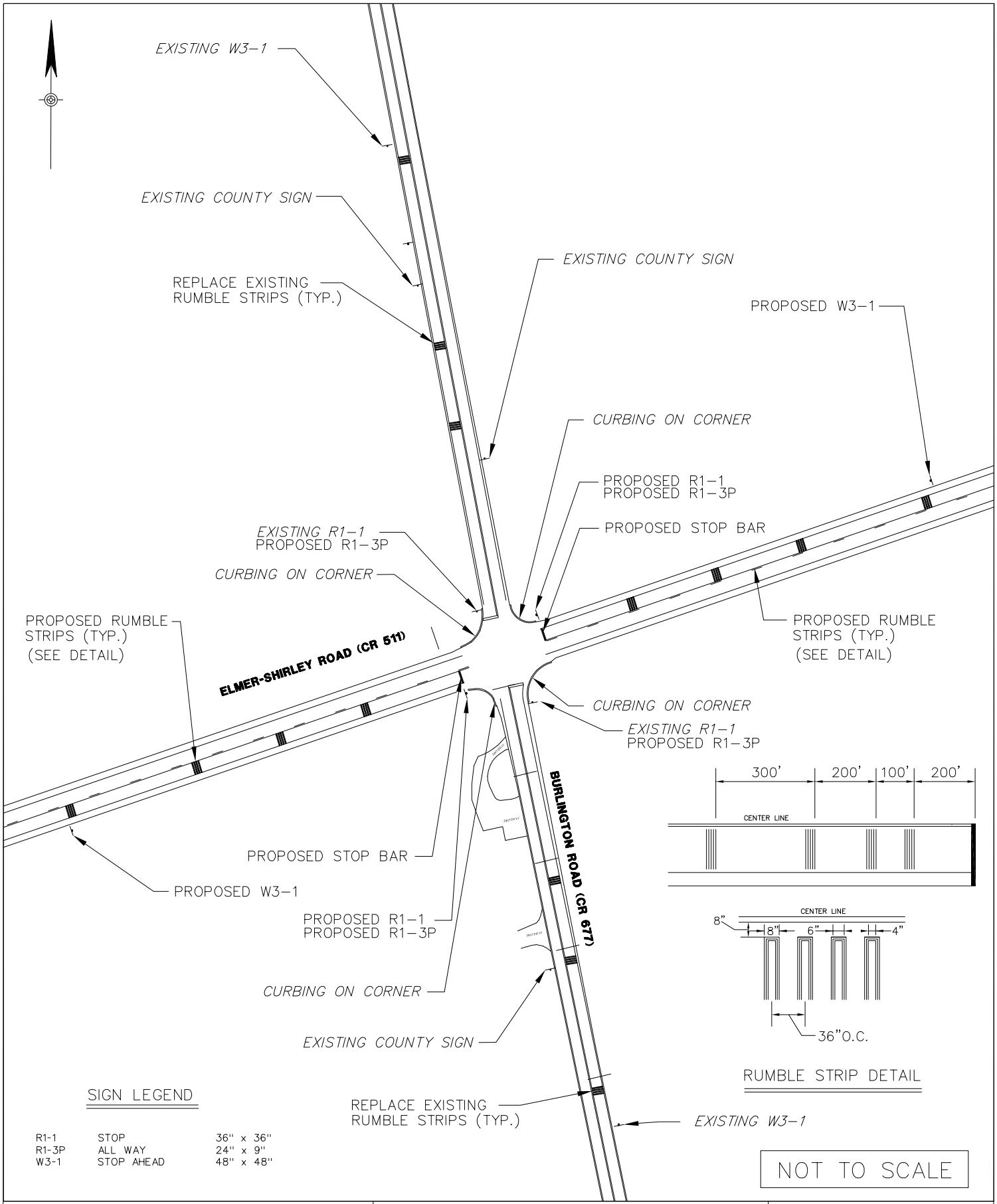
APPENDIX D

CONCEPTUAL PLANS

SALEM COUNTY
INTERSECTION IMPROVEMENTS

APPENDIX E

ENGINEERS ESTIMATE



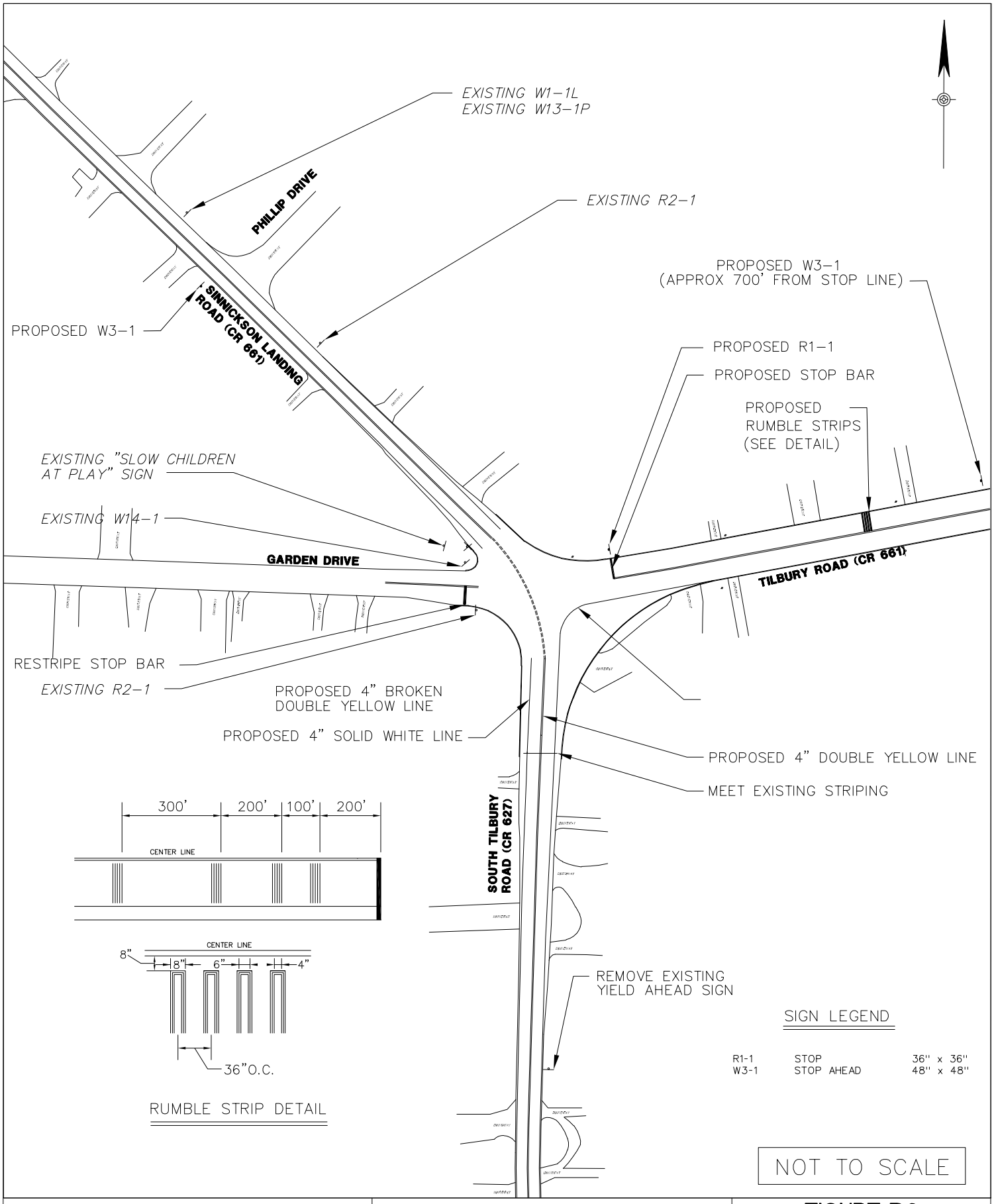
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY

Salem County, New Jersey

FIGURE D1

Elmer–Shirley Road (CR 611) & Burlington Road (CR 677)



RUMBLE STRIP DETAIL

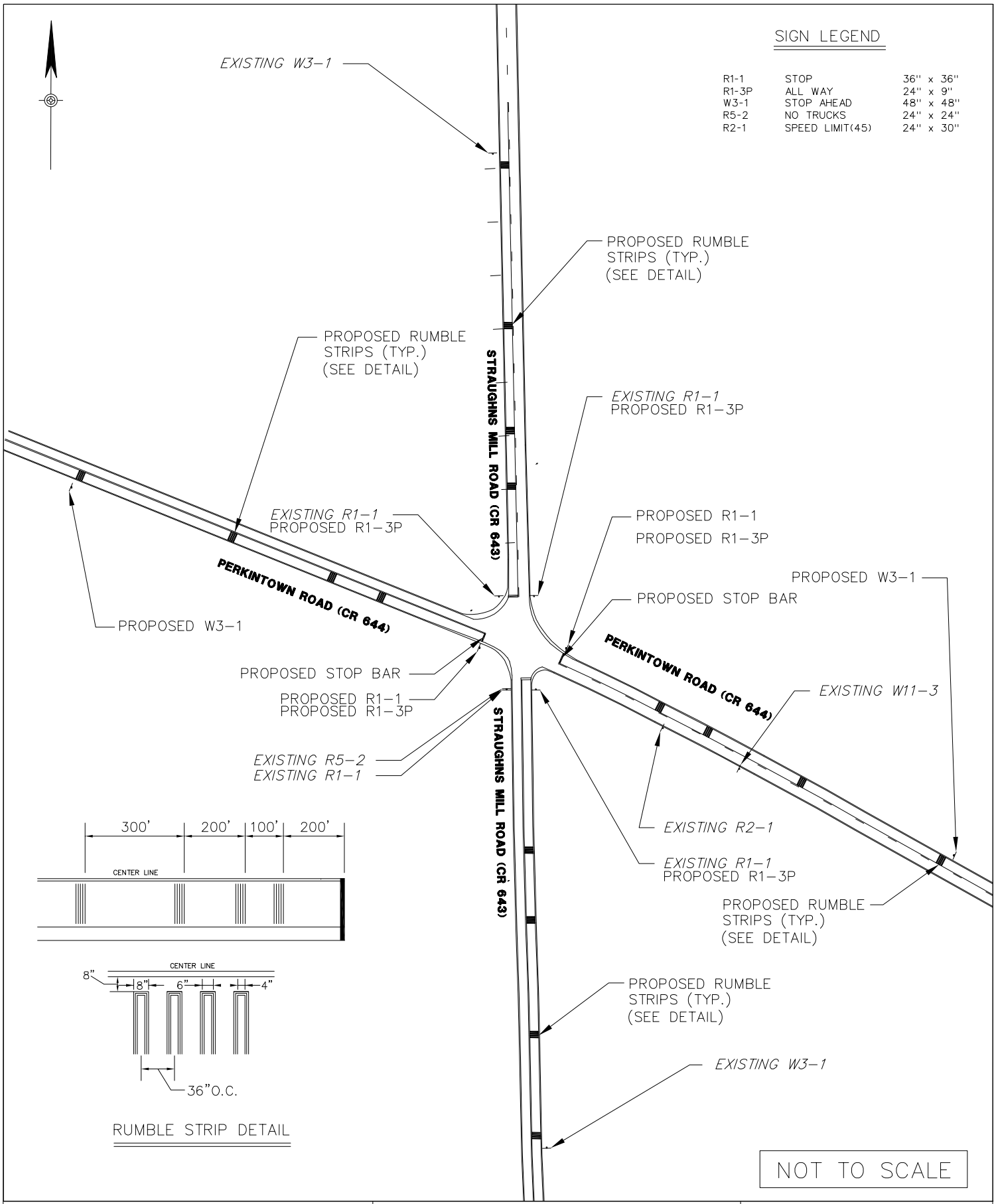
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY

Salem County, New Jersey

FIGURE D2

Sinnickson Landing Road (CR 661)/Tilbury Road (CR 661) & South Tilbury Road (CR 627) & Garden Drive



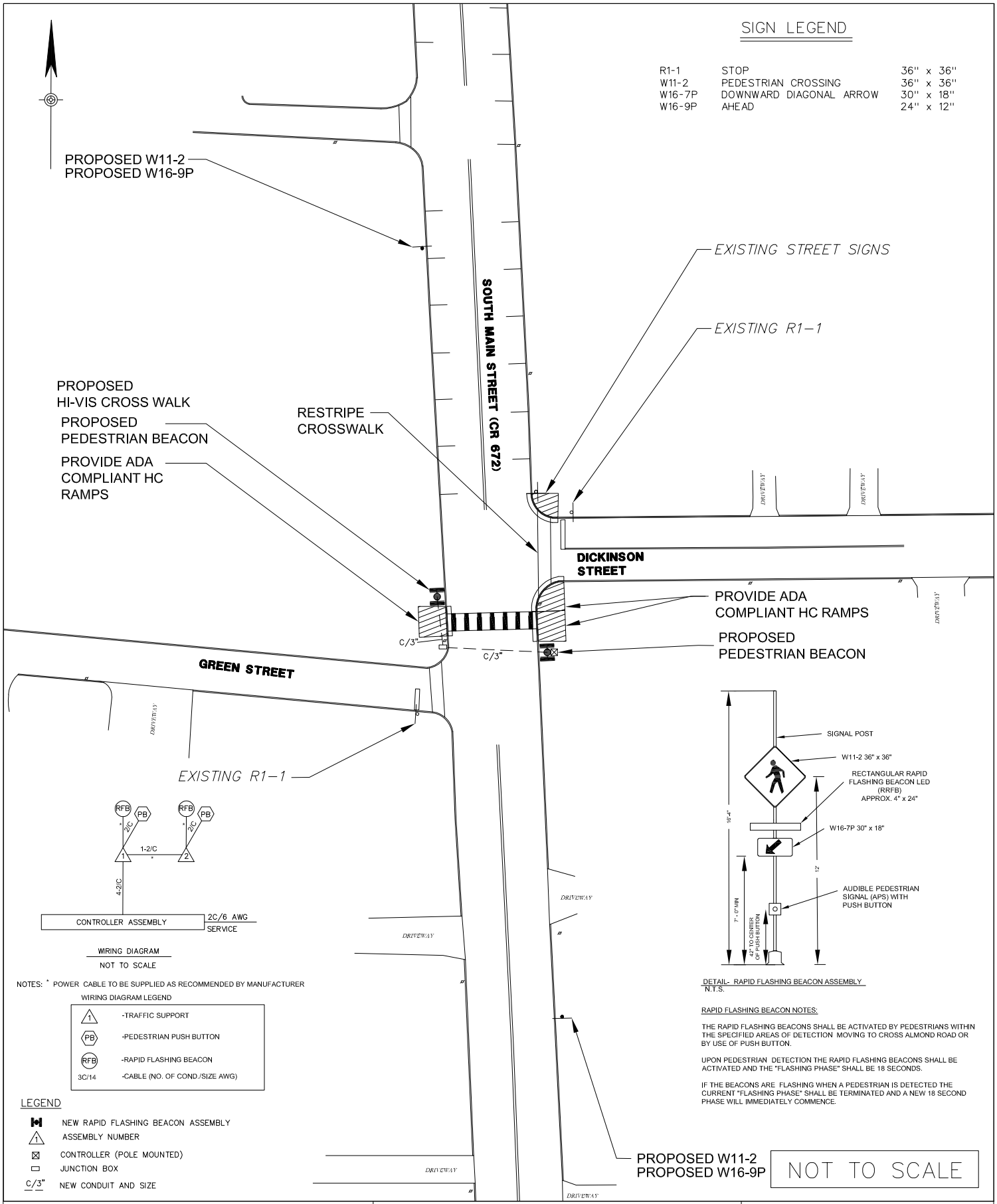
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY

Salem County, New Jersey

FIGURE D3

Perkintown Road
(CR 644) & Straughns
Mill Road (CR 643)



Pennoni
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
515 GROVE STREET
HADDON HEIGHTS, NJ

ROADWAY IMPROVEMNT STUDY
Salem County, New Jersey

FIGURE D4
South Main Street
(CR 672) & Green Street
/ Dickinson Street

SALEM COUNTY
INTERSECTION IMPROVEMENTS

APPENDIX E

ENGINEERS ESTIMATE

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME: Salem County Evaluation of Intersection Improvements
SITE LOCATION: Elmer-Shirley Rd (CR 611) & Burlington Rd (CR 677)
COUNTY PROJECT NO.: SALEM21002

DATE: 6/9/2021
REVISED
PREPARED BY: D. Merly
REVIEWED BY: B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
2	TRAFFIC MARKINGS, LONG LIFE, THERMOPLASTIC*	3408	LF	$2.50	$8,520.00
3	REGULATORY AND WARNING SIGNS	40	SF	$50.00	$2,000.00

TOTAL COST **$15,520.00**

* Quantity based on linear feet of 4" wide markings

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME: Salem County Evaluation of Intersection Improvements
SITE LOCATION: Sinnickson Landing Rd (CR 661)/Tilbury Rd (CR 661) & South Tilbury Rd (CR 627) and Garden Drive
COUNTY PROJECT NO.: SALEM21002

DATE: 6/9/2021
REVISED
PREPARED BY: D. Merly
REVIEWED BY: B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
2	TRAFFIC MARKINGS, LONG LIFE, THERMOPLASTIC*	816	LF	$2.50	$2,040.00
3	REGULATORY AND WARNING SIGNS	18	SF	$50.00	$900.00
4	TRAFFIC STRIPES, 4"	466	LF	$1.50	$699.00
5	REMOVAL OF TRAFFIC STRIPES	164	LF	$.75	$123.00

TOTAL COST **$8,762.00**

* Quantity based on linear feet of 4" wide markings

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME: Salem County Evaluation of Intersection Improvements **DATE:** 6/9/2021
SITE LOCATION: Sinnickson Landing Rd (CR 661)/Tilbury Rd (CR 661) & South Tilbury Rd (CR 627) and Garden Drive **REVISED**
COUNTY PROJECT NO.: SALEM21002 **PREPARED BY:** D. Merly
REVIEWED BY: B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
6	RADAR SPEED LIMIT SIGN	1	UNIT	$2,500.00	$2,500.00

TOTAL COST **$7,500.00**

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME: Salem County Evaluation of Intersection Improvements
SITE LOCATION: Perkintown Rd (CR 611) & Straughns Mill Rd (CR 643)
COUNTY PROJECT NO.: SALEM21002

DATE: 6/9/2021
REVISED
PREPARED BY: D. Merly
REVIEWED BY: B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
2	TRAFFIC MARKINGS, LONG LIFE, THERMOPLASTIC*	3552	LF	$2.50	$8,880.00
3	REGULATORY AND WARNING SIGNS	40	SF	$50.00	$2,000.00

TOTAL COST **$15,880.00**

* Quantity based on linear feet of 4" wide markings

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME: Salem County Evaluation of Intersection Improvements
SITE LOCATION: South Main St (CR 672) & Green St/Dickinson St
COUNTY PROJECT NO.: SALEM21002

DATE: 6/9/2021
REVISED
PREPARED BY: D. Merly
REVIEWED BY: B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
2	TRAFFIC MARKINGS, LONG LIFE, THERMOPLASTIC*	400	LF	$2.50	$1,000.00
3	REGULATORY AND WARNING SIGNS	22	SF	$50.00	$1,100.00
4	TRAFFIC STRIPES, 4"	205	LF	$1.50	$307.50
5	REMOVAL OF TRAFFIC STRIPES	93	LF	$.75	$69.75
7	PAVEMENT MARKING, SYMBOLS	96	SF	$7.00	$672.00
8	9"x16" CONCRETE VERTICAL CURB	120	LF	$35.00	$4,200.00
9	CONCRETE SIDEWALK, 4" THICK	42	SY	$125.00	$5,250.00
10	RAPID FLASHING BEACON ASSEMBLY	2	UNIT	$5,000.00	$10,000.00
11	DETECTABLE WARNING SURFACES	3	SY	$225.00	$675.00
12	HOT MIX ASPHALT PAVEMENT REPAIR	6	SY	$250.00	$1,500.00
13	3" RIGID NON-METALLIC CONDUIT	60	LF	$25.00	$1,500.00
14	18" x 36" JUNCTION BOX	1	UNIT	$2,000.00	$2,000.00

TOTAL COST **$33,274.25**

* Quantity based on linear feet of 4" wide markings

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

ENGINEER'S ESTIMATE

PROJECT NAME:	Salem County Evaluation of Intersection Improvements	**DATE:**	6/9/2021
SITE LOCATION:	North Railroad Avenue (CR 602) Corridor	**REVISED**	
COUNTY PROJECT NO.:	SALEM21002	**PREPARED BY:**	D. Merly
		REVIEWED BY:	B. Grasso

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION AND TRAFFIC CONTROL	1	LUM SUM	$5,000.00	$5,000.00
15	BEAM GUIDE RAIL	100	LF	$26.83	$2,683.00

TOTAL COST	**$7,683.00**