Appendices

Appendix A

Technical Memorandum – Existing Conditions

Memorandum

To:	Brad Reed VDOT Staunton District	Date:	October 31, 2018 Revised December 3, 2018
Cc:	Ann Cundy, HRMPO Dastan Khaleel, HPWD Tom Hartman, HPWD		
From:	Lisa Simpson, P.E. Chuck Conran, E.I.T.	Re:	Port Republic Road Existing Conditions VISSIM Calibration

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The purpose of this memorandum is to document the study methodology and model development for AM and PM peak hour traffic operations for Port Republic Road in Harrisonburg, Virginia. The model utilizes the microsimulation traffic software, *PTV VISSIM 8.0*, and was coded according to the procedures outlined in VDOT's TOSAM (Traffic Operations and Safety Analysis Manual) and VDOT's VISSIM User Guide (hereafter referred to as "Guide"). The limits of the study corridor (**Figure 1**) extend from the Port Republic Road / Maryland Avenue / South Main Street intersection southeast approximately one mile to the Port Republic Road / Devon Lane intersection, encompassing ten total intersections, six of which are signalized.

Figure 1: VISSIM Study Network

The City of Harrisonburg ("City") provided much of the base data for network coding, including traffic counts for the ten study intersections and signal timing plans for the six signalized intersections. VHB obtained and/or collected the remaining data needed to code and calibrate the VISSIM model.

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Model Development

Geometry

Links were coded over aerial imagery within VISSIM to ensure accurate modeled 2-D link geometry such as length and curvature. Turn bays are coded as separate parallel links according to the procedures in the Guide. Due to the significant gradients on Port Republic Road, VHB obtained 3-D data from a topographic map on the City's website and utilized this map to code the elevations of each link. Link gradient is thus calculated from elevation change rather than from inputted gradient value. Following Guide instruction, links are only broken into separate segments when the number of lanes change or there is a significant topographical change.

Intersection Control

Six of the study intersections are signalized (Port Republic Road at South Main Street, at Bluestone Drive / Hillside Avenue, at I-81 southbound ramps, at I-81 northbound ramps, at Forest Hill Road / JMU Parking Lot, and at Devon Lane). The remaining four (Port Republic Road at Hillcrest Drive, at Crawford Avenue, at Hunters Road, and at Bradley Drive) are unsignalized, minor-street stop-control intersections. The City provided timing plans for each of the signalized intersections from which the signal controllers in VISSIM were coded. Video detection is utilized along the corridor. Within VISSIM, VHB modeled 40-foot signal detection zones on side streets and mainline left turns (two feet of detection was placed beyond the stop bar per VDOT convention), and a pair of 6-foot detection zones on mainline through approaches (separated by approximately 250-feet per VDOT convention on a 35-mph road). During the field visit, VHB verified the locations of the stop signs on the stop-control approaches and modeled these intersections in VISSIM with stop signs and conflict areas. Stop signs were also used to code right-turn-on-red at the signalized intersections.

Volume Balancing

The traffic counts for the ten study intersections on the Port Republic Road corridor were not collected on the same day; rather, many were collected by the City over the course of the past year. Two of the unsignalized intersection counts (Hunters Road and Bradley Drive) date further back to a 2016 Traffic Impact Analysis report, which projected 2017 counts at these two intersections with the opening of the associated retail parcel. The City pulled counts from their GRIDSMART cameras at the intersections of Main Street and Devon Lane on October 3rd, 2018, when VHB was in the field collecting additional data.

A microsimulation traffic network requires a balanced volume network to accurately model conditions. Unbalanced volumes always exist due to uncaptured and unmodeled minor streets and driveway entrances, but unbalanced volumes were particularly prevalent in this study due to the varying dates traffic volumes were collected. After corridor-wide peak hours of 8:00-9:00 AM and 4:45-5:45 PM were determined from the count data, a balanced volume network was developed in which the October 3rd intersection counts, taken at Port Republic Road / South Main Street and Port Republic Road / Devon Lane, were held as key balancing nodes.

Input Volumes

Volumes were coded in 15-minute intervals according to the existing peak hour volume distributions present in the traffic counts. This varied hourly distribution achieves the same effect as the "peak hour factor" parameter in macroscopic traffic simulation such as Synchro. All inputs were set to "Exact Volume" as specified by TOSAM instead of the default "Stochastic Volume."

A 30-minute preloading interval was coded to load the network with traffic prior to the start of the analysis peak hour. This period is sufficient for vehicles to fully traverse and populate the network.

Vehicle Composition

The only vehicle counts from the study corridor that included vehicle classification data were the counts from the retail Traffic Impact Analysis report. These counts identified a 4% heavy vehicle composition. In lieu of additional data, a 4% heavy vehicle composition was modeled on the majority of the corridor. At the direction of VDOT, a 1% heavy vehicle composition was modeled on both Bluestone Drive and Forest Hill Road. The "North American" vehicle fleet was used to represent the passenger vehicle and heavy vehicle model distribution.

Static Routing Decisions

Due to the short distance between many of the study intersections VHB decided to develop a full origin-destination (O-D) matrix for the network in which vehicles entering on each link are assigned a destination exiting the network. This methodology improves the accuracy of modeled lane changes as vehicles can realistically position themselves in the appropriate lane upstream of their next turning movement. The O-D matrix was developed based on the existing traffic patterns/turning movements, engineering judgement, and specified input from VDOT on certain vehicle movements.

Partial Routing Decisions

Two partial routing decisions are coded to accurately model lane utilization of dual-lefts in the study corridor:

- Southbound South Main Street to eastbound Port Republic Road, and
- Westbound Port Republic Road to southbound South Main Street.

Speed Data

Free flow speed data was not collected during the off-peak period to derive desired speed distributions for the modeled network. Instead, the future conditions methodology outlined in TOSAM was utilized to set desired speed distributions. This methodology is a +/- 5mph linear distribution around the posted speed limit. The posted speed limit on Port Republic Road and South Main Street (south of Port Republic Road) is 35 mph; the posted warning speed on the I-81 ramps is 30mph; the posted speed limit on all other study streets is 25 mph.

Reduced speed distributions on turns were coded according to TOSAM and Guide procedures. A linear distribution between 7.5 and 15.50 mph was coded for right turns, and a linear distribution between 12.10 and 18.60 mph was coded for left turns.

Transit

Harrisonburg Department of Public Transportation (HDPT) operates a number of bus lines along the study corridor, primarily serving James Madison University students traveling between campus and off-campus housing. In-lane bus stops impact traffic operations by stopping a lane of traffic and causing other vehicles to weave around the stopped bus. It was important to capture the impact of bus operations on the corridor's traffic operations. VHB obtained transit route maps and time schedules from HDPT's website, and a HDPT representative provided typical loading volumes at bus stops along the corridor. Bus dwell time was modeled as a 10-20 second distribution per input from HDPT. This information was all coded into the VISSIM model.

Model Calibration

The focus of this model calibration effort is to replicate the traffic volumes, travel time, and queue data and the overall congestion observed in the field. After the initial VISSIM model was developed, multiple runs (10 runs with random

seeding) of the existing AM and PM peak hour conditions were conducted to simulate vehicle loadings and the nature of vehicle arrivals. Model calibration is the process of adjusting the model to better simulate the local driving behavior.

To calibrate and validate the model, base driver behavior parameters were changed from their default values as defined in **Table 1**. These changes were necessary for calibration in the Existing Condition AM model, but not the Existing Condition PM model. Initial model runs utilizing the default driver behavior parameters produced modeled AM traffic flow better than observed conditions, while modeled PM traffic flow was near observed conditions. Decreasing the modeled AM saturation flow rate with these parameter changes improved the calibration of the AM conditions. The modified values of the driver behavior parameters fall within the defined allowable limits set by TOSAM.

Table 1: Driver Behavior Calibration Parameters

Calibration Parameter	Default Value	Modified Value
W74bxAdd	2.00	2.20
W74bxMult	3.00	3.30

Notes
** W74bxAdd (Additive Part of Safety Distance) helps define the average desired distance between two cars. Adjustment of this value changes the saturation flow of the modeled roadway.*
** W74bxMult (Multiplicative Part of Safety Distance) helps define the average desired distance between two cars. Adjustment of this value changes the saturation flow of the modeled roadway.*

Calibration Results

After several iterations of adjusting the driver behaviors and lane changing parameters, the model started to simulate the level of congestion observed in the field. The evaluation criteria used to analyze the study area roadways and intersections are based on the measures of effectiveness (MOEs) provided by the VISSIM traffic simulation model. The VISSIM output includes a variety of MOEs, which are used to evaluate the operational qualities within the study area. These MOEs include volume throughput, delays, average and maximum queue lengths, and speeds/travel times). All model results reported in this evaluation are based on an average of ten model runs (with different random seed values) to accurately model the stochastic (random) nature of the simulation model.

Volume Throughput

TOSAM outlines the calibration thresholds for microsimulation models. The requisite volume-based thresholds vary depending on the quantity of volume completing the movement. **Table 2** contains the TOSAM threshold requirements.

Table 2: Volume Calibration Thresholds

Movement Volume Quantity	Calibration Threshold*
< 100 VPH (Vehicle per Hour)	20%
≥ 100 and < 300 VPH	15%
≥ 300 and < 1000 VPH	10%
≥ 1000 VPH	5%

** Maximum allowable difference between coded and modeled volume.*

Table 3 shows a comparison between the coded/observed volumes and simulated volumes for the AM and PM peak hour networks. The differences between these volumes are within the requisite calibration threshold. A more detailed volumes comparison for every intersection movement and approach is provided in **Appendix A**.

Table 3: Volume Calibration Results

Peak Hour	Coded Volume	Simulated Volume	Difference	Percentage Difference	Calibration Threshold
AM Network	20,857	20,864	7	0.03%	5%
PM Network	26,962	26,883	79	0.29%	5%

Travel Time

VHB collected average corridor travel time data on October 3rd and 4th during a field visit. Travel time run segments were collected to/from 480 feet west of South Main Street from/to 390 feet east of Devon Lane. TOSAM specifies a 30% maximum difference between observed and modeled travel times on an arterial network for the model to be considered properly calibrated. As shown in **Table 4,** the differences between the observed travel time and the simulated traffic time for each segment along the corridor are within the calibration threshold of 30%.

Table 4: Travel Time Calibration Results

Peak Hour	Travel Time Run Segment	Observed Travel Time (sec)	Observed Travel Time (M:SS)	Simulated Travel Time (sec)	Simulated Travel Time (M:SS)	Δ Travel Time (M:SS)	% Difference
AM Peak Hour	Port Republic Eastbound	233.92	03:53.9	217.55	03:37.5	**00:16.4**	(-7%)
	Port Republic Westbound	265.70	04:25.7	232.73	03:52.7	**00:33.0**	(-12%)
	Port Republic EB to I-81 NB Ramps	156.66	02:36.7	152.75	02:32.8	**00:03.9**	(-2%)
	Port Republic WB to I-81 SB Ramps	140.27	02:20.3	103.23	01:43.2	**00:37.0**	(-26%)
PM Peak Hour	Port Republic Eastbound	238.03	03:58.0	261.92	04:21.9	**00:23.9**	10%
	Port Republic Westbound	247.39	04:07.4	256.04	04:16.0	**00:08.6**	3%
	Port Republic EB to I-81 NB Ramps	177.83	02:57.8	185.40	03:05.4	**00:07.6**	4%
	Port Republic WB to I-81 SB Ramps	102.33	01:42.3	127.73	02:07.7	**00:25.4**	25%

Queues

VHB recorded and observed the average and maximum queue lengths on some of the critical movements/approaches along the corridor during the AM and PM peak hours. Queue length was noted using a combination of two techniques: number of queued vehicles multiplied by an average vehicle length and extent of queue noted on an aerial printout (distance later determined using aerial imagery).

In oversaturated conditions, TOSAM states that the calibrated average and maximum queue lengths should be within 20% of observed condition length. In undersaturated conditions, the average queue length should be within 20% (movements with > 10 VPH) or 30% (movements with ≤ 10 VPH), while the maximum queue should be within 25%. TOSAM provides the *HCM 2010* definition for undersaturated and saturated flow; one of the key elements of saturated flow is that traffic flow is affected by downstream conditions. This flow description applies to the peak periods of both the AM and PM peak hour on Port Republic Road, where multiple downstream signals (particularly around the I-81 interchange) impact upstream flow in both directions. The saturated queue calibration thresholds are therefore applied.

Table 5 shows the observed and simulated maximum queue lengths for critical movements and the numerical and percentage difference between observed and simulated length; the queue lengths meet the 20% calibration threshold.

Table 5: Key Queue Calibration Results

Peak Hour	Critical Max Queue	Observed Queue Length [ft]	Simulated Queue Length [ft]	Difference [ft]	Percentage Difference	Calibration Threshold
AM	Port Republic WBT at South Main St	850	742	-108	-13%	20%
	Port Republic EBL at Bluestone	275	260	-15	-6%	20%
	Port Republic WBT at Forest Hill	1,300	1,262	-38	-3%	20%
	Devon Lane NBL/T at Port Republic	400	371	-29	-7%	20%
PM	Port Republic WBT at South Main St	525	593	68	13%	20%
	Port Republic EBL at Bluestone	800	777	-23	-3%	20%
	Port Republic WBT at Forest Hill	1,000	801	-199	-20%	20%
	Devon Lane NBL/T at Port Republic	375	382	7	2%	20%

Calibration Conclusion

Given that traffic volumes, travel time, and queue lengths are fully calibrated to TOSAM requirements, VHB considers the AM and PM peak hour Existing Conditions VISSIM models calibrated and validated. Visual inspection of the simulation further revealed that the modeled traffic flow matches the field conditions conveyed to and observed in the field by VHB, further validating the accuracy of the model. Speed maps of the calibrated VISSIM models are provided in **Appendix B**. The darker the color, the slower the average vehicle speed on that segment of roadway. These maps are an easy way to visualize the simulated traffic congestion.

Appendix A - Weekday AM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	46	44	-2	-4%	369	364	-5	-1%	10%	YES
				EBT	232	229	-3	-1%						
				EBR	91	91	0	0%						
			Port Republic Road	WBL	147	151	4	3%	1,020	1,000	-20	-2%	5%	YES
				WBT	252	246	-6	-2%						
				WBR	621	603	-18	-3%						
			South Main Street	SBL	135	139	4	3%	393	397	4	1%	10%	YES
				SBT	230	231	1	0%						
				SBR	28	27	-1	-4%						
			South Main Street	NBL	67	66	-1	-1%	776	781	5	1%	10%	YES
				NBT	469	472	3	1%						
				NBR	240	243	3	1%						
			Intersection		**2,558**	**2,542**	**-16**	**-1%**	**2,558**	**2,542**	**-16**	**-1%**	**5%**	**YES**
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	3	3	0	0%	607	613	6	1%	10%	YES
				EBT	604	610	6	1%						
				EBR	0	0	0	0%						
			Port Republic Road	WBL	1	2	1	100%	1,030	1,004	-26	-3%	5%	YES
				WBT	1,015	990	-25	-2%						
				WBR	14	12	-2	-14%						
			Hillcrest Drive	SBL	14	14	0	0%	19	19	0	0%	20%	YES
				SBR	5	5	0	0%						
			Hillcrest Drive	NBL	0	0	0	0%	1	1	0	0%	20%	YES
				NBR	1	1	0	0%						
			Intersection		**1,657**	**1,637**	-20	**-1%**	**1,657**	**1,637**	**-20**	**-1%**	**5%**	**YES**
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	17	17	0	0%	20%	YES
				NBR	17	17	0	0%						
			Port Republic Road	EBT	619	632	13	2%	619	632	13	2%	10%	YES
				EBR	0	0	0	0%						
			Port Republic Road	WBL	12	10	-2	-17%	1,042	1,022	-20	-2%	5%	YES
				WBT	1,030	1012	-18	-2%						
			Intersection		**1,678**	**1,671**	-7	**0%**	**1,678**	**1,671**	**-7**	**0%**	**5%**	**YES**
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	39	37	-2	-5%	101	99	-2	0%	15%	YES
				NBT	16	17	1	6%						
				NBR	46	45	-1	-2%						
			Bluestone Drive	SBL	65	72	7	11%	117	121	4	0%	15%	YES
				SBT	10	11	1	10%						
				SBR	42	38	-4	-10%						
			Port Republic Road	EBL	104	103	-1	-1%	636	652	16	3%	10%	YES
				EBT	493	509	16	3%						
				EBR	39	40	1	3%						
			Port Republic Road	WBL	102	101	-1	-1%	1,305	1,292	-13	-1%	5%	YES
				WBT	961	954	-7	-1%						
				WBR	242	237	-5	-2%						
			Intersection		**2,159**	**2,164**	5	**0%**	**2,159**	**2,164**	**5**	**0%**	**5%**	**YES**
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	142	149	7	5%	314	319	5	2%	10%	YES
				SBR	172	170	-2	-1%						
			Port Republic Road	EBT	523	543	20	4%	604	625	21	0%	10%	YES
				EBR	81	82	1	1%						
			Port Republic Road	WBL	156	153	-3	-2%	1,289	1,275	-14	-1%	5%	YES
				WBT	1,133	1,122	-11	-1%						
			Intersection		**2,207**	**2,219**	12	**1%**	**2,207**	**2,219**	**12**	**1%**	**5%**	**YES**

Appendix A - Weekday AM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
6														
	Port Republic Road at NB I-81 Ramps	Signal	NB I-81 Off-Ramp	NBL	228	223	-5	-2%	452	450	-2	0%	10%	YES
				NBR	224	227	3	1%						
			Port Republic Road	EBL	116	119	3	3%	665	689	24	4%	10%	YES
				EBT	549	570	21	4%						
			Port Republic Road	WBT	1,061	1,051	-10	-1%	1,234	1,225	-9	0%	5%	YES
				WBR	173	174	1	1%						
			Intersection		**2,351**	**2,364**	13	**1%**	**2,351**	**2,364**	**13**	**1%**	**5%**	**YES**
7														
	Port Republic Road at JMU Parking / Forest Hill Road	Signal	JMU Parking Lot	NBL	4	4	0	0%	12	11	-1	-8%	20%	YES
				NBT	6	5	-1	-17%						
				NBR	2	2	0	0%						
			Forest Hill Road	SBL	58	59	1	2%	204	203	-1	0%	15%	YES
				SBT	11	12	1	9%						
				SBR	135	132	-3	-2%						
			Port Republic Road	EBL	161	166	5	3%	773	797	24	3%	10%	YES
				EBT	579	598	19	3%						
				EBR	33	33	0	0%						
			Port Republic Road	WBT	1,095	1,091	-4	0%	1,295	1,288	-7	0%	5%	YES
				WBR	200	197	-3	-2%						
			Intersection		**2,284**	**2,299**	15	**1%**	**2,284**	**2,299**	**15**	**1%**	**5%**	**YES**
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	67	67	0	0%	87	84	-3	-3%	20%	YES
				NBR	20	17	-3	-15%						
			Port Republic Road	EBT	583	597	14	2%	639	657	18	3%	10%	YES
				EBR	56	60	4	7%						
			Port Republic Road	WBL	63	59	-4	-6%	1,291	1,279	-12	-1%	5%	YES
				WBT	1,228	1,220	-8	-1%						
			Intersection		**2,017**	**2,020**	3	**0%**	**2,017**	**2,020**	**3**	**0%**	**5%**	**YES**
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	41	42	1	2%	83	81	-2	-2%	20%	YES
				NBR	42	39	-3	-7%						
			Port Republic Road	EBT	596	605	9	2%	603	613	10	2%	10%	YES
				EBR	7	8	1	14%						
			Port Republic Road	WBL	6	6	0	0%	1,256	1,243	-13	-1%	5%	YES
				WBT	1,250	1,237	-13	-1%						
			Intersection		**1,942**	**1,937**	-5	**0%**	**1,942**	**1,937**	**-5**	**0%**	**5%**	**YES**
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	241	239	-2	-1%	274	275	1	0%	15%	YES
				NBT	17	18	1	6%						
				NBR	16	18	2	13%						
			Devon Lane	SBL	22	22	0	0%	191	197	6	3%	15%	YES
				SBT	6	7	1	17%						
				SBR	163	168	5	3%						
			Port Republic Road	EBL	41	45	4	10%	638	648	10	2%	10%	YES
				EBT	555	559	4	1%						
				EBR	42	44	2	5%						
			Port Republic Road	WBL	30	32	2	7%	901	891	-10	-1%	10%	YES
				WBT	852	837	-15	-2%						
				WBR	19	22	3	16%						
			Intersection		**2,004**	**2,011**	7	**0%**	**2,004**	**2,011**	**7**	**0%**	**5%**	**YES**
	Total Study Area Roadways/Intersections								20,857	20,864	**7**	**0.03%**	5%	YES

Appendix A - Weekday PM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	16	16	0	0%	369	370	1	0%	10%	YES
				EBT	254	254	0	0%						
				EBR	99	100	1	1%						
			Port Republic Road	WBL	298	292	-6	-2%	1,029	996	-33	-3%	5%	YES
				WBT	365	353	-12	-3%						
				WBR	366	351	-15	-4%						
			South Main Street	SBL	579	575	-4	-1%	1,253	1,252	-1	0%	5%	YES
				SBT	623	624	1	0%						
				SBR	51	53	2	4%						
			South Main Street	NBL	93	91	-2	-2%	946	939	-7	-1%	10%	YES
				NBT	492	491	-1	0%						
				NBR	361	357	-4	-1%						
			Intersection		**3,597**	**3,557**	**-40**	**-1%**	**3,597**	**3,557**	**-40**	**-1%**	**5%**	**YES**
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	1	1	0	0%	1,194	1,186	-8	-1%	5%	YES
				EBT	1,192	1,184	-8	-1%						
				EBR	1	1	0	0%						
			Port Republic Road	WBL	4	5	1	25%	1,031	998	-33	-3%	5%	YES
				WBT	1,023	989	-34	-3%						
				WBR	4	4	0	0%						
			Hillcrest Drive	SBL	7	7	0	0%	13	13	0	0%	20%	YES
				SBR	6	6	0	0%						
			Hillcrest Drive	NBL	0	0	0	0%	1	1	0	0%	20%	YES
				NBR	1	1	0	0%						
			Intersection		**2,239**	**2,198**	-41	**-2%**	**2,239**	**2,198**	**-41**	**-2%**	**5%**	**YES**
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	20	20	0	0%	20%	YES
				NBR	20	20	0	0%						
			Port Republic Road	EBT	1,200	1192	-8	-1%	1,200	1,192	-8	-1%	5%	YES
				EBR	0	0	0	0%						
			Port Republic Road	WBL	15	15	0	0%	1,046	1,017	-29	-3%	5%	YES
				WBT	1,031	1002	-29	-3%						
			Intersection		**2,266**	**2,229**	-37	**-2%**	**2,266**	**2,229**	**-37**	**-2%**	**5%**	**YES**
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	30	26	-4	-13%	129	127	-2	0%	15%	YES
				NBT	20	18	-2	-10%						
				NBR	79	83	4	5%						
			Bluestone Drive	SBL	277	291	14	5%	452	458	6	0%	10%	YES
				SBT	18	16	-2	-11%						
				SBR	157	151	-6	-4%						
			Port Republic Road	EBL	132	135	3	2%	1,220	1,216	-4	0%	5%	YES
				EBT	1,064	1,057	-7	-1%						
				EBR	24	24	0	0%						
			Port Republic Road	WBL	54	52	-2	-4%	1,145	1,135	-10	-1%	5%	YES
				WBT	859	845	-14	-2%						
				WBR	232	238	6	3%						
			Intersection		**2,946**	**2,936**	-10	**0%**	**2,946**	**2,936**	**-10**	**0%**	**5%**	**YES**
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	154	159	5	3%	338	334	-4	-1%	10%	YES
				SBR	184	175	-9	-5%						
			Port Republic Road	EBT	1,156	1,169	13	1%	1,420	1,428	8	0%	5%	YES
				EBR	264	259	-5	-2%						
			Port Republic Road	WBL	232	221	-11	-5%	1,193	1,179	-14	-1%	5%	YES
				WBT	961	958	-3	0%						
			Intersection		**2,951**	**2,941**	-10	**0%**	**2,951**	**2,941**	**-10**	**0%**	**5%**	**YES**

Appendix A - Weekday PM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
6														
	Port Republic Road at NB I-81 Ramps	Signal	NB I-81 Off-Ramp	NBL	173	163	-10	-6%	401	390	-11	-3%	10%	YES
				NBR	228	227	-1	0%						
			Port Republic Road	EBL	219	218	-1	0%	1,310	1,323	13	1%	5%	YES
				EBT	1,091	1,105	14	1%						
			Port Republic Road	WBT	1,020	1,016	-4	0%	1,221	1,222	1	0%	5%	YES
				WBR	201	206	5	2%						
			Intersection		**2,932**	**2,935**	3	**0%**	**2,932**	**2,935**	**3**	**0%**	**5%**	**YES**
7														
	Port Republic Road at JMU Parking / Forest Hill Road	Signal	JMU Parking Lot	NBL	56	56	0	0%	78	78	0	0%	20%	YES
				NBT	19	18	-1	-5%						
				NBR	3	4	1	33%						
			Forest Hill Road	SBL	187	191	4	2%	452	451	-1	0%	10%	YES
				SBT	3	3	0	0%						
				SBR	262	257	-5	-2%						
			Port Republic Road	EBL	209	212	3	1%	1,319	1,330	11	1%	5%	YES
				EBT	1,101	1,108	7	1%						
				EBR	9	10	1	11%						
			Port Republic Road	WBT	903	912	9	1%	1,056	1,071	15	0%	5%	YES
				WBR	153	159	6	4%						
			Intersection		**2,905**	**2,930**	25	**1%**	**2,905**	**2,930**	**25**	**1%**	**5%**	**YES**
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	43	41	-2	-5%	62	59	-3	-5%	20%	YES
				NBR	19	18	-1	-5%						
			Port Republic Road	EBT	1,198	1,200	2	0%	1,291	1,299	8	1%	5%	YES
				EBR	93	99	6	6%						
			Port Republic Road	WBL	30	30	0	0%	1,043	1,057	14	1%	5%	YES
				WBT	1,013	1,027	14	1%						
			Intersection		**2,396**	**2,415**	19	**1%**	**2,396**	**2,415**	**19**	**1%**	**5%**	**YES**
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	24	26	2	8%	59	61	2	3%	20%	YES
				NBR	35	35	0	0%						
			Port Republic Road	EBT	1,140	1,137	-3	0%	1,217	1,216	-1	0%	5%	YES
				EBR	77	79	2	3%						
			Port Republic Road	WBL	19	16	-3	-16%	1,038	1,047	9	1%	5%	YES
				WBT	1,019	1,031	12	1%						
			Intersection		**2,314**	**2,324**	10	**0%**	**2,314**	**2,324**	**10**	**0%**	**5%**	**YES**
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	208	212	4	2%	262	262	0	0%	15%	YES
				NBT	19	17	-2	-11%						
				NBR	35	33	-2	-6%						
			Devon Lane	SBL	62	58	-4	-6%	212	217	5	2%	15%	YES
				SBT	24	23	-1	-4%						
				SBR	126	136	10	8%						
			Port Republic Road	EBL	158	161	3	2%	1,175	1,171	-4	0%	5%	YES
				EBT	790	783	-7	-1%						
				EBR	227	227	0	0%						
			Port Republic Road	WBL	31	31	0	0%	767	768	1	0%	10%	YES
				WBT	704	701	-3	0%						
				WBR	32	36	4	13%						
			Intersection		**2,416**	**2,418**	2	**0%**	**2,416**	**2,418**	**2**	**0%**	**5%**	**YES**
			Total Study Area Roadways/Intersections						26,962	26,883	**-79**	**-0.29%**	5%	YES

Appendix A - Weekday AM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	46	44	-2	-4%	369	364	-5	-1%	10%	YES
				EBT	232	229	-3	-1%						
				EBR	91	91	0	0%						
			Port Republic Road	WBL	147	151	4	3%	1,020	1,000	-20	-2%	5%	YES
				WBT	252	246	-6	-2%						
				WBR	621	603	-18	-3%						
			South Main Street	SBL	135	139	4	3%	393	397	4	1%	10%	YES
				SBT	230	231	1	0%						
				SBR	28	27	-1	-4%						
			South Main Street	NBL	67	66	-1	-1%	776	781	5	1%	10%	YES
				NBT	469	472	3	1%						
				NBR	240	243	3	1%						
			Intersection		**2,558**	**2,542**	**-16**	**-1%**	**2,558**	**2,542**	**-16**	**-1%**	**5%**	**YES**
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	3	3	0	0%	607	613	6	1%	10%	YES
				EBT	604	610	6	1%						
				EBR	0	0	0	0%						
			Port Republic Road	WBL	1	2	1	100%	1,030	1,004	-26	-3%	5%	YES
				WBT	1,015	990	-25	-2%						
				WBR	14	12	-2	-14%						
			Hillcrest Drive	SBL	14	14	0	0%	19	19	0	0%	20%	YES
				SBR	5	5	0	0%						
			Hillcrest Drive	NBL	0	0	0	0%	1	1	0	0%	20%	YES
				NBR	1	1	0	0%						
			Intersection		**1,657**	**1,637**	-20	**-1%**	**1,657**	**1,637**	**-20**	**-1%**	**5%**	**YES**
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	17	17	0	0%	20%	YES
				NBR	17	17	0	0%						
			Port Republic Road	EBT	619	632	13	2%	619	632	13	2%	10%	YES
				EBR	0	0	0	0%						
			Port Republic Road	WBL	12	10	-2	-17%	1,042	1,022	-20	-2%	5%	YES
				WBT	1,030	1012	-18	-2%						
			Intersection		**1,678**	**1,671**	-7	**0%**	**1,678**	**1,671**	**-7**	**0%**	**5%**	**YES**
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	39	37	-2	-5%	101	99	-2	0%	15%	YES
				NBT	16	17	1	6%						
				NBR	46	45	-1	-2%						
			Bluestone Drive	SBL	65	72	7	11%	117	121	4	0%	15%	YES
				SBT	10	11	1	10%						
				SBR	42	38	-4	-10%						
			Port Republic Road	EBL	104	103	-1	-1%	636	652	16	3%	10%	YES
				EBT	493	509	16	3%						
				EBR	39	40	1	3%						
			Port Republic Road	WBL	102	101	-1	-1%	1,305	1,292	-13	-1%	5%	YES
				WBT	961	954	-7	-1%						
				WBR	242	237	-5	-2%						
			Intersection		**2,159**	**2,164**	5	**0%**	**2,159**	**2,164**	**5**	**0%**	**5%**	**YES**
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	142	149	7	5%	314	319	5	2%	10%	YES
				SBR	172	170	-2	-1%						
			Port Republic Road	EBT	523	543	20	4%	604	625	21	0%	10%	YES
				EBR	81	82	1	1%						
			Port Republic Road	WBL	156	153	-3	-2%	1,289	1,275	-14	-1%	5%	YES
				WBT	1,133	1,122	-11	-1%						
			Intersection		**2,207**	**2,219**	12	**1%**	**2,207**	**2,219**	**12**	**1%**	**5%**	**YES**

Appendix A - Weekday AM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
6														
	Port Republic Road at NB I-81 Ramps	Signal	NB I-81 Off-Ramp	NBL	228	223	-5	-2%	452	450	-2	0%	10%	YES
				NBR	224	227	3	1%						
			Port Republic Road	EBL	116	119	3	3%	665	689	24	4%	10%	YES
				EBT	549	570	21	4%						
			Port Republic Road	WBT	1,061	1,051	-10	-1%	1,234	1,225	-9	0%	5%	YES
				WBR	173	174	1	1%						
			Intersection		**2,351**	**2,364**	13	**1%**	**2,351**	**2,364**	**13**	**1%**	**5%**	**YES**
7														
	Port Republic Road at JMU Parking / Forest Hill Road	Signal	JMU Parking Lot	NBL	4	4	0	0%	12	11	-1	-8%	20%	YES
				NBT	6	5	-1	-17%						
				NBR	2	2	0	0%						
			Forest Hill Road	SBL	58	59	1	2%	204	203	-1	0%	15%	YES
				SBT	11	12	1	9%						
				SBR	135	132	-3	-2%						
			Port Republic Road	EBL	161	166	5	3%	773	797	24	3%	10%	YES
				EBT	579	598	19	3%						
				EBR	33	33	0	0%						
			Port Republic Road	WBT	1,095	1,091	-4	0%	1,295	1,288	-7	0%	5%	YES
				WBR	200	197	-3	-2%						
			Intersection		**2,284**	**2,299**	15	**1%**	**2,284**	**2,299**	**15**	**1%**	**5%**	**YES**
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	67	67	0	0%	87	84	-3	-3%	20%	YES
				NBR	20	17	-3	-15%						
			Port Republic Road	EBT	583	597	14	2%	639	657	18	3%	10%	YES
				EBR	56	60	4	7%						
			Port Republic Road	WBL	63	59	-4	-6%	1,291	1,279	-12	-1%	5%	YES
				WBT	1,228	1,220	-8	-1%						
			Intersection		**2,017**	**2,020**	3	**0%**	**2,017**	**2,020**	**3**	**0%**	**5%**	**YES**
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	41	42	1	2%	83	81	-2	-2%	20%	YES
				NBR	42	39	-3	-7%						
			Port Republic Road	EBT	596	605	9	2%	603	613	10	2%	10%	YES
				EBR	7	8	1	14%						
			Port Republic Road	WBL	6	6	0	0%	1,256	1,243	-13	-1%	5%	YES
				WBT	1,250	1,237	-13	-1%						
			Intersection		**1,942**	**1,937**	-5	**0%**	**1,942**	**1,937**	**-5**	**0%**	**5%**	**YES**
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	241	239	-2	-1%	274	275	1	0%	15%	YES
				NBT	17	18	1	6%						
				NBR	16	18	2	13%						
			Devon Lane	SBL	22	22	0	0%	191	197	6	3%	15%	YES
				SBT	6	7	1	17%						
				SBR	163	168	5	3%						
			Port Republic Road	EBL	41	45	4	10%	638	648	10	2%	10%	YES
				EBT	555	559	4	1%						
				EBR	42	44	2	5%						
			Port Republic Road	WBL	30	32	2	7%	901	891	-10	-1%	10%	YES
				WBT	852	837	-15	-2%						
				WBR	19	22	3	16%						
			Intersection		**2,004**	**2,011**	7	**0%**	**2,004**	**2,011**	**7**	**0%**	**5%**	**YES**
	Total Study Area Roadways/Intersections								20,857	20,864	**7**	**0.03%**	5%	YES

Appendix A - Weekday PM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	16	16	0	0%	369	370	1	0%	10%	YES
				EBT	254	254	0	0%						
				EBR	99	100	1	1%						
			Port Republic Road	WBL	298	292	-6	-2%	1,029	996	-33	-3%	5%	YES
				WBT	365	353	-12	-3%						
				WBR	366	351	-15	-4%						
			South Main Street	SBL	579	575	-4	-1%	1,253	1,252	-1	0%	5%	YES
				SBT	623	624	1	0%						
				SBR	51	53	2	4%						
			South Main Street	NBL	93	91	-2	-2%	946	939	-7	-1%	10%	YES
				NBT	492	491	-1	0%						
				NBR	361	357	-4	-1%						
			Intersection		**3,597**	**3,557**	**-40**	**-1%**	**3,597**	**3,557**	**-40**	**-1%**	**5%**	**YES**
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	1	1	0	0%	1,194	1,186	-8	-1%	5%	YES
				EBT	1,192	1,184	-8	-1%						
				EBR	1	1	0	0%						
			Port Republic Road	WBL	4	5	1	25%	1,031	998	-33	-3%	5%	YES
				WBT	1,023	989	-34	-3%						
				WBR	4	4	0	0%						
			Hillcrest Drive	SBL	7	7	0	0%	13	13	0	0%	20%	YES
				SBR	6	6	0	0%						
			Hillcrest Drive	NBL	0	0	0	0%	1	1	0	0%	20%	YES
				NBR	1	1	0	0%						
			Intersection		**2,239**	**2,198**	-41	**-2%**	**2,239**	**2,198**	**-41**	**-2%**	**5%**	**YES**
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	20	20	0	0%	20%	YES
				NBR	20	20	0	0%						
			Port Republic Road	EBT	1,200	1192	-8	-1%	1,200	1,192	-8	-1%	5%	YES
				EBR	0	0	0	0%						
			Port Republic Road	WBL	15	15	0	0%	1,046	1,017	-29	-3%	5%	YES
				WBT	1,031	1002	-29	-3%						
			Intersection		**2,266**	**2,229**	-37	**-2%**	**2,266**	**2,229**	**-37**	**-2%**	**5%**	**YES**
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	30	26	-4	-13%	129	127	-2	0%	15%	YES
				NBT	20	18	-2	-10%						
				NBR	79	83	4	5%						
			Bluestone Drive	SBL	277	291	14	5%	452	458	6	0%	10%	YES
				SBT	18	16	-2	-11%						
				SBR	157	151	-6	-4%						
			Port Republic Road	EBL	132	135	3	2%	1,220	1,216	-4	0%	5%	YES
				EBT	1,064	1,057	-7	-1%						
				EBR	24	24	0	0%						
			Port Republic Road	WBL	54	52	-2	-4%	1,145	1,135	-10	-1%	5%	YES
				WBT	859	845	-14	-2%						
				WBR	232	238	6	3%						
			Intersection		**2,946**	**2,936**	-10	**0%**	**2,946**	**2,936**	**-10**	**0%**	**5%**	**YES**
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	154	159	5	3%	338	334	-4	-1%	10%	YES
				SBR	184	175	-9	-5%						
			Port Republic Road	EBT	1,156	1,169	13	1%	1,420	1,428	8	0%	5%	YES
				EBR	264	259	-5	-2%						
			Port Republic Road	WBL	232	221	-11	-5%	1,193	1,179	-14	-1%	5%	YES
				WBT	961	958	-3	0%						
			Intersection		**2,951**	**2,941**	-10	**0%**	**2,951**	**2,941**	**-10**	**0%**	**5%**	**YES**

Appendix A - Weekday PM Existing Conditions Volume Calibration

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes Calibration Thresholds									
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Counted Link Volumes (vph)	Simulated Link Volumes (vph)	Difference	% Difference	Calibration Threshold	
													Within ±	Met Threshold?
6														
	Port Republic Road at NB I-81 Ramps	Signal	NB I-81 Off-Ramp	NBL	173	163	-10	-6%	401	390	-11	-3%	10%	YES
				NBR	228	227	-1	0%						
			Port Republic Road	EBL	219	218	-1	0%	1,310	1,323	13	1%	5%	YES
				EBT	1,091	1,105	14	1%						
			Port Republic Road	WBT	1,020	1,016	-4	0%	1,221	1,222	1	0%	5%	YES
				WBR	201	206	5	2%						
			Intersection		**2,932**	**2,935**	3	**0%**	**2,932**	**2,935**	**3**	**0%**	**5%**	**YES**
7														
	Port Republic Road at JMU Parking / Forest Hill Road	Signal	JMU Parking Lot	NBL	56	56	0	0%	78	78	0	0%	20%	YES
				NBT	19	18	-1	-5%						
				NBR	3	4	1	33%						
			Forest Hill Road	SBL	187	191	4	2%	452	451	-1	0%	10%	YES
				SBT	3	3	0	0%						
				SBR	262	257	-5	-2%						
			Port Republic Road	EBL	209	212	3	1%	1,319	1,330	11	1%	5%	YES
				EBT	1,101	1,108	7	1%						
				EBR	9	10	1	11%						
			Port Republic Road	WBT	903	912	9	1%	1,056	1,071	15	0%	5%	YES
				WBR	153	159	6	4%						
			Intersection		**2,905**	**2,930**	25	**1%**	**2,905**	**2,930**	**25**	**1%**	**5%**	**YES**
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	43	41	-2	-5%	62	59	-3	-5%	20%	YES
				NBR	19	18	-1	-5%						
			Port Republic Road	EBT	1,198	1,200	2	0%	1,291	1,299	8	1%	5%	YES
				EBR	93	99	6	6%						
			Port Republic Road	WBL	30	30	0	0%	1,043	1,057	14	1%	5%	YES
				WBT	1,013	1,027	14	1%						
			Intersection		**2,396**	**2,415**	19	**1%**	**2,396**	**2,415**	**19**	**1%**	**5%**	**YES**
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	24	26	2	8%	59	61	2	3%	20%	YES
				NBR	35	35	0	0%						
			Port Republic Road	EBT	1,140	1,137	-3	0%	1,217	1,216	-1	0%	5%	YES
				EBR	77	79	2	3%						
			Port Republic Road	WBL	19	16	-3	-16%	1,038	1,047	9	1%	5%	YES
				WBT	1,019	1,031	12	1%						
			Intersection		**2,314**	**2,324**	10	**0%**	**2,314**	**2,324**	**10**	**0%**	**5%**	**YES**
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	208	212	4	2%	262	262	0	0%	15%	YES
				NBT	19	17	-2	-11%						
				NBR	35	33	-2	-6%						
			Devon Lane	SBL	62	58	-4	-6%	212	217	5	2%	15%	YES
				SBT	24	23	-1	-4%						
				SBR	126	136	10	8%						
			Port Republic Road	EBL	158	161	3	2%	1,175	1,171	-4	0%	5%	YES
				EBT	790	783	-7	-1%						
				EBR	227	227	0	0%						
			Port Republic Road	WBL	31	31	0	0%	767	768	1	0%	10%	YES
				WBT	704	701	-3	0%						
				WBR	32	36	4	13%						
			Intersection		**2,416**	**2,418**	2	**0%**	**2,416**	**2,418**	**2**	**0%**	**5%**	**YES**
			Total Study Area Roadways/Intersections						26,962	26,883	**-79**	**-0.29%**	5%	YES

Appendix B

Signal Timing Data

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X	X	X	X	X	X	X								

Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	54FC
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase Disable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto		X	X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto		X	X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack								

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: No
Enable SDLC Stop Time: No
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

Controller IP:	192.168.40.27
Subnet Mask:	255.255.254.0
Default Gateway IP:	192.168.40.1
Server IP:	192.168.40.1

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	TERMINAL	NTCIP	ECPIP
Enable	No	No	No
Data Rate (BPS)	9600	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.9
Duplex - Half or Full	Half	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	14.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Backlight Enable:	Yes
LED Mode:	Auto
Display Mode:	Basic
Screen Format:	Advanced
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Solutions that Move the World
Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 02.64.00
OS (Boot) Version: 01.14.03

City of Harrisonburg, VA

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Logic Processor Page 1
Logic Statement Control (MM)
1-8-1

Logic #	Statement Control

City of Harrisonburg, VA

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Logic Processor Page 2

Logic Statements (MM) 1-8-2

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Min Green	7	10	7	7	7	10	7	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	30	0	27	0	27	0	24	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	45	30	45	30	45	25	35	35	35	35	35	35	35	35	35
Max2	10	25	10	15	10	25	10	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.6	3.0	3.5	3.1	3.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	4.1	2.0	3.5	2.0	4.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Min Green	7	10	7	7	7	10	7	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	30	0	27	0	27	0	24	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	40	20	35	30	40	20	35	35	35	35	35	35	35	35	35
Max2	10	25	10	15	10	25	10	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.6	3.0	3.5	3.1	3.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	4.1	2.0	3.5	2.0	4.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Min Green	7	10	7	7	7	10	7	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	30	0	27	0	27	0	24	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.6	3.0	3.5	3.1	3.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	4.1	2.0	3.5	2.0	4.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Min Green	7	10	7	7	7	10	7	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	30	0	27	0	27	0	24	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	10	35	10	15	10	35	10	15	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.6	3.0	3.5	3.1	3.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	4.1	2.0	3.5	2.0	4.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
A	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
A	1	Yes	No	No	No		No	No	.

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	2.0	5
B02	5	0	7	3.0	2.0	5
C03	5	0	7	3.0	2.0	5
D04	5	0	7	3.0	2.0	5
E05	5	0	7	3.0	2.0	5
F06	5	0	7	3.0	2.0	5
G07	5	0	7	3.0	2.0	5
H08	5	0	7	3.0	2.0	5
I09	5	0	7	3.0	2.0	5
J10	5	0	7	3.0	2.0	5
K11	5	0	7	3.0	2.0	5
L12	5	0	7	3.0	2.0	5
M13	5	0	7	3.0	2.0	5
N14	5	0	7	3.0	2.0	5
O15	5	0	7	3.0	2.0	5
P16	5	0	7	3.0	2.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	G
3	.
4	.
5	.
6	G
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 5
All Red: 5
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: G
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

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Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	Yes
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	114	Std (COS)	9	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	2		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 1)	21	38	20	35	18	41	20	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	114s	114s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	128	Std (COS)	17	Offsets In	Seconds
Offset Value	51s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 2)	26	42	20	40	18	50	25	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	128s	128s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	150	Std (COS)	25	Offsets In	Seconds
Offset Value	63s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 3)	33	52	20	45	30	55	30	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	114	Std (COS)	33	Offsets In	Seconds
Offset Value	36s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	2		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 4)	21	37	15	35	15	37	21	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	108s	108s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	108	Std (COS)	41	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 5)	21	37	20	30	15	37	20	30	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	108s	102s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 15

Split Pattern	15	TS2 (Pat-Off)	4-3	Splits In	Seconds
Cycle	130	Std (COS)	169	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	2		
Phase Reservice	No	Action Plan	15		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 15)	27	43	20	40	20	50	25	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	130s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 16

Split Pattern	16	TS2 (Pat-Off)	5-1	Splits In	Seconds
Cycle	130	Std (COS)	201	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	2		
Phase Reservice	No	Action Plan	16		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 16)	28	43	18	41	20	51	24	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	130s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 17

Split Pattern	17	TS2 (Pat-Off)	5-2	Splits In	Seconds
Cycle	150	Std (COS)	209	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	2		
Phase Reservice	No	Action Plan	17		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 17)	40	43	20	47	27	56	30	37	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 20

Split Pattern	20	TS2 (Pat-Off)	6-2	Splits In	Seconds
Cycle	150	Std (COS)	233	Offsets In	Seconds
Offset Value	39s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	20		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 20)	28	59	17	46	22	65	28	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 21

Split Pattern	21	TS2 (Pat-Off)	6-3	Splits In	Seconds
Cycle	150	Std (COS)	10	Offsets In	Seconds
Offset Value	127s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	21		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 21)	35	51	17	47	22	64	29	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 22

Split Pattern	22	TS2 (Pat-Off)	7-1	Splits In	Seconds
Cycle	150	Std (COS)	18	Offsets In	Seconds
Offset Value	145s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	22		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 22)	33	52	17	48	20	65	30	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 23

Split Pattern	23	TS2 (Pat-Off)	7-2	Splits In	Seconds
Cycle	150	Std (COS)	26	Offsets In	Seconds
Offset Value	9s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	23		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 23)	27	37	17	69	19	45	51	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 24

Split Pattern	24	TS2 (Pat-Off)	7-3	Splits In	Seconds
Cycle	150	Std (COS)	34	Offsets In	Seconds
Offset Value	16s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	24		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 24)	27	37	17	69	19	45	51	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 25

Split Pattern	25	TS2 (Pat-Off)	8-1	Splits In	Seconds
Cycle	150	Std (COS)	42	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	25		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 25)	50	38	17	45	20	68	27	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 26

Split Pattern	26	TS2 (Pat-Off)	8-2	Splits In	Seconds
Cycle	150	Std (COS)	74	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	26		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 26)	50	38	17	45	20	68	27	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 33

Split Pattern	33	TS2 (Pat-Off)	10-3	Splits In	Seconds
Cycle	150	Std (COS)	154	Offsets In	Seconds
Offset Value	24s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	33		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 33)	50	40	17	43	20	70	25	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 50

Split Pattern	50	TS2 (Pat-Off)	0-0	Splits In	Seconds
Cycle	70	Std (COS)	107	Offsets In	Seconds
Offset Value	23s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	4		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	50		
Max Select	None	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 50)	17	20	15	18	15	20	15	18	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	70s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 51

Split Pattern	51	TS2 (Pat-Off)	0-0	Splits In	Seconds
Cycle	70	Std (COS)	139	Offsets In	Seconds
Offset Value	23s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	4		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	51		
Max Select	None	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Splits (Split Pat 51)	17	20	15	18	15	20	15	18	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	70s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

City of Harrisonburg, VA

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Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	21	38	20	35	18	41	20	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	114s	114s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	26	42	20	40	18	50	25	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	128s	128s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	33	52	20	45	30	55	30	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	21	37	15	35	15	37	21	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	108s	108s	0s	0s

Split Pattern # 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	21	37	20	30	15	37	20	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	108s	102s	0s	0s

Split Pattern # 15

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	27	43	20	40	20	50	25	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	130s	130s	0s	0s

Split Pattern # 16

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	28	43	18	41	20	51	24	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	130s	130s	0s	0s

Split Pattern # 17

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	40	43	20	47	27	56	30	37	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 20

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	28	59	17	46	22	65	28	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 21

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	35	51	17	47	22	64	29	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 22

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	33	52	17	48	20	65	30	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 23

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	27	37	17	69	19	45	51	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 24

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	27	37	17	69	19	45	51	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 25

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	50	38	17	45	20	68	27	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																

Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 26

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	50	38	17	45	20	68	27	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 33

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	50	40	17	43	20	70	25	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 50

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	17	20	15	18	15	20	15	18	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	68s	0s	0s

Split Pattern # 51

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB								
Split (seconds)	17	20	15	18	15	20	15	18	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	68s	0s	0s

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	X	X	X	.	.	X	X	X	.	.	.	.	.	.	.	.
Cycling Ped		X				X		X								
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	12	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	Yes	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	CRD
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	Yes	Yes	Yes	Yes

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	3.6	4.6
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	10	0	0	3.5	3.5
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	0	3.6	4.6

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	Yes	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	CRD
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	3.6	4.6
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	3.5	2.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	0.0	60	3.6	4.1

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	Yes	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	CRD
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	3.6	4.6
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	3.5	2.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	0.0	60	3.6	4.6

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off

Conditional Delay	Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	Yes	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	CRD
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	3.6	4.6
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	3.5	2.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	10	0.0	60	3.5	3.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	Yes	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off

Linked Pmt	0	FL Exit Color	Grn	Exit Options	CRD
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	3.6	4.6
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	3.5	2.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	0.0	60	3.5	3.9

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

City of Harrisonburg, VA

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Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 100

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Time Base Clock/Calendar

Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	2	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	2	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 5

Pattern	5	Override Sys	No
Timing Plan	2	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 11

Pattern	Free	Override Sys	No
Timing Plan	4	Sequence	1
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 15

Pattern	15	Override Sys	No
Timing Plan	1	Sequence	2
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 16

Pattern	16	Override Sys	No
Timing Plan	1	Sequence	2
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 17

Pattern	17	Override Sys	No
Timing Plan	1	Sequence	2
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 20

Pattern	20	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 21

Pattern	21	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 22

Pattern	22	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 23

Pattern	23	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 24

Pattern	24	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 25

Pattern	25	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 26

Pattern	26	Override Sys	No
Timing Plan	1	Sequence	5
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 33

Pattern	33	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 50

Pattern	50	Override Sys	No
Timing Plan	4	Sequence	0
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 51

Pattern	51	Override Sys	No
Timing Plan	4	Sequence	0
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	10	06:00
2	2	07:15
3	2	10:45
4	3	12:00
5	2	18:00
6	1	19:00
7	10	20:45
8	11	00:00

Day Plan #2

Event	Action Plan	Start Time
1	10	06:00
2	2	07:15
3	2	10:45
4	3	12:00
5	1	18:00
6	10	20:00
7	11	00:00

Day Plan #3

Event	Action Plan	Start Time
1	10	06:00
2	1	10:00
3	10	19:00
4	11	00:00

Day Plan #4

Event	Action Plan	Start Time
1	10	06:00
2	1	12:00
3	10	18:30
4	11	00:00

Day Plan #5

Event	Action Plan	Start Time
1	10	06:00
2	1	07:45
3	2	11:30
4	1	17:30
5	10	19:00
6	11	00:00

Day Plan #6

Event	Action Plan	Start Time
1	10	06:00
2	1	07:45
3	2	11:30
4	1	17:30

5	10	19:00
6	11	00:00

Day Plan #7

Event	Action Plan	Start Time
1	10	06:00
2	1	09:45
3	10	17:15
4	11	00:00

Day Plan #8

Event	Action Plan	Start Time
1	10	06:00
2	1	12:00
3	10	14:00
4	11	00:00

Day Plan #11

Event	Action Plan	Start Time
1	10	06:00
2	15	07:30
3	16	10:00
4	17	15:00
5	16	17:45
6	10	20:00
7	11	00:00

Day Plan #12

Event	Action Plan	Start Time
1	10	06:00
2	15	07:30
3	16	10:00
4	17	11:45
5	16	18:15
6	10	21:15
7	11	00:00

Day Plan #13

Event	Action Plan	Start Time
1	10	06:00
2	16	09:30
3	10	19:45
4	11	00:00

Day Plan #14

Event	Action Plan	Start Time
1	10	06:00
2	16	10:45
3	10	18:45
4	11	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 11

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X		

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 12

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
						X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 13

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 14

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-060 - S Main St @ Port Republic Rd - Econolite Type - ASC/3

Time Base Exceptions

Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-540 - Port Republic Rd @ Bluestone Dr - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		NB	EBLT	WB		SB								
Min Green	5	10	0	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	21	0	22	0	22	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	0	15	15	45	0	40	40	35	35	35	35	35	35	35
Max2	10	25	0	15	10	25	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.5	3.0	3.5	4.5	4.5	3.5	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.6	2.6	3.9	4.4	2.6	2.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		NB	EBLT	WB		SB								
Min Green	5	10	0	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	21	0	22	0	22	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	0	30	15	45	0	30	35	35	35	35	35	35	35	35
Max2	10	25	0	15	10	25	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.5	3.0	3.5	4.5	4.5	3.5	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.6	2.6	3.9	4.4	2.6	2.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		NB	EBLT	WB		SB								
Min Green	5	10	0	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	21	0	22	0	22	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	0	30	15	45	0	30	35	35	35	35	35	35	35	35
Max2	10	25	0	15	10	25	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.5	3.0	3.5	4.5	4.5	3.5	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.6	2.6	3.9	4.4	2.6	2.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		NB	EBLT	WB		SB								
Min Green	5	10	0	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	21	0	22	0	22	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	10	35	0	15	10	35	0	15	35	35	35	35	35	35	35	35
Max2	10	25	0	15	10	25	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.5	3.0	3.5	4.5	4.5	3.5	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.6	2.6	3.9	4.4	2.6	2.6	2.0	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Harrisonburg, VA

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Solutions that Move the World™

I-540 - Port Republic Rd @ Bluestone Dr - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
A	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	2.0	5
B02	5	0	7	3.0	2.0	5
C03	5	0	7	3.0	2.0	5
D04	5	0	7	3.0	2.0	5
E05	5	0	7	3.0	2.0	5
F06	5	0	7	3.0	2.0	5
G07	5	0	7	3.0	2.0	5
H08	5	0	7	3.0	2.0	5
I09	5	0	7	3.0	2.0	5
J10	5	0	7	3.0	2.0	5
K11	5	0	7	3.0	2.0	5
L12	5	0	7	3.0	2.0	5
M13	5	0	7	3.0	2.0	5
N14	5	0	7	3.0	2.0	5
O15	5	0	7	3.0	2.0	5
P16	5	0	7	3.0	2.0	5

City of Harrisonburg, VA

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I-540 - Port Republic Rd @ Bluestone Dr - Econolite Type - ASC/3

Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

City of Harrisonburg, VA

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I-540 - Port Republic Rd @ Bluestone Dr - Econolite Type - ASC/3

Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	G
3	.
4	.
5	.
6	G
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 5
All Red: 5
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No

City of Harrisonburg, VA

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I-540 - Port Republic Rd @ Bluestone Dr - Econolite Type - ASC/3

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service		X		X		X		X								
Rest In Walk																
Flashing Walk																
Ped Clr-Yel				X				X								
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

Plan # 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																

Max Recall															
Soft Recall															
No Rest															
Al Calc															

Plan # 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

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I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X		X		X										

Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	8A62
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase Disable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto		X	X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto		X	X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		SB		WB										
Min Green	5	10	0	7	5	10	0	0	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	27	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	30	45	0	35	0	45	0	0	35	35	35	35	35	35	35	35
Max2	15	25	0	60	0	25	0	0	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.0	2.0	2.0	3.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Harrisonburg, VA

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Solutions that Move the World™

I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
A	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.5	2.0	5
B02	5	0	7	3.5	2.0	5
C03	5	0	7	3.5	2.0	5
D04	5	0	7	3.5	2.0	5
E05	5	0	7	3.5	2.0	5
F06	5	0	7	3.5	2.0	5
G07	5	0	7	3.5	2.0	5
H08	5	0	7	3.5	2.0	5
I09	5	0	7	3.5	2.0	5
J10	5	0	7	3.5	2.0	5
K11	5	0	7	3.5	2.0	5
L12	5	0	7	3.5	2.0	5
M13	5	0	7	3.5	2.0	5
N14	5	0	7	3.5	2.0	5
O15	5	0	7	3.5	2.0	5
P16	5	0	7	3.5	2.0	5

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I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

City of Harrisonburg, VA

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I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	Yes
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	114	Std (COS)	9	Offsets In	Seconds
Offset Value	98s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Splits (Split Pat 1)	20	54	0	40	0	74	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	114s	74s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	134	Std (COS)	17	Offsets In	Seconds
Offset Value	80s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Splits (Split Pat 2)	30	72	0	32	0	102	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	134s	102s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	108	Std (COS)	25	Offsets In	Seconds
Offset Value	89s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Splits (Split Pat 3)	20	48	0	40	0	68	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	108s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	128	Std (COS)	33	Offsets In	Seconds
Offset Value	88s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Splits (Split Pat 4)	37	56	0	35	0	93	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	128s	93s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	144	Std (COS)	81	Offsets In	Seconds
Offset Value	76s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Splits (Split Pat 7)	30	80	0	34	0	110	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	144s	110s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	20	54	0	40	0	74	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	114s	74s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	30	72	0	32	0	102	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	134s	102s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	20	48	0	40	0	68	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	108s	68s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	37	56	0	35	0	93	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	128s	93s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	30	80	0	34	0	110	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	144s	110s	0s	0s

Split Pattern # 20

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	35	80	0	35	0	115	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 21

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	35	80	0	35	0	115	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 22

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	35	80	0	35	0	115	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 23

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	25	55	0	70	0	80	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	80s	0s	0s

Split Pattern # 24

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	25	45	0	80	0	70	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	70s	0s	0s

Split Pattern # 25

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	35	80	0	35	0	115	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 26

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	35	80	0	35	0	115	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 27

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	25	65	0	80	0	90	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	170s	90s	0s	0s

Split Pattern # 31

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	50	75	0	25	0	125	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																

Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	125s	0s	0s

Split Pattern # 50

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	13	35	0	22	0	48	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	48s	0s	0s

Split Pattern # 51

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		SB		WB										
Split (seconds)	13	35	0	22	0	48	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase	X								X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	48s	0s	0s

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Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-550 - Port Republic Rd @ I-81 SB Ramp - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	07:35
4	2	08:00
5	2	08:35
6	2	09:05
7	2	10:30
8	1	19:45
9	10	22:15
10	11	00:00

Day Plan #2

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	08:15
4	2	09:00
5	2	10:30
6	1	19:45
7	10	23:15
8	11	00:00

Day Plan #3

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	23:15
4	11	00:00

Day Plan #4

Event	Action Plan	Start Time
1	10	06:00
2	1	09:45
3	10	21:15
4	11	00:00

Day Plan #5

Event	Action Plan	Start Time
1	10	06:00
2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #6

Event	Action Plan	Start Time
1	10	06:00

2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #7

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	22:00
4	11	00:00

Day Plan #8

Event	Action Plan	Start Time
1	10	06:00
2	1	10:30
3	10	21:00
4	11	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X		

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
						X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X		X	X	X										

Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	E0A6
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase Disable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto		X	X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto		X	X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	4	P				-	Auto			
10	2	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB	EBLT	WB										
Min Green	0	10	0	7	5	10	0	0	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	20	0	0	0	16	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	45	0	35	15	45	0	0	35	35	35	35	35	35	35	35
Max2	0	25	0	60	15	25	0	0	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.0	2.0	2.0	3.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
A	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.5	2.0	5
B02	5	0	7	3.5	2.0	5
C03	5	0	7	3.5	2.0	5
D04	5	0	7	3.5	2.0	5
E05	5	0	7	3.5	2.0	5
F06	5	0	7	3.5	2.0	5
G07	5	0	7	3.5	2.0	5
H08	5	0	7	3.5	2.0	5
I09	5	0	7	3.5	2.0	5
J10	5	0	7	3.5	2.0	5
K11	5	0	7	3.5	2.0	5
L12	5	0	7	3.5	2.0	5
M13	5	0	7	3.5	2.0	5
N14	5	0	7	3.5	2.0	5
O15	5	0	7	3.5	2.0	5
P16	5	0	7	3.5	2.0	5

City of Harrisonburg, VA

ECONOLITE
CONTROL PRODUCTS, INC.
Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	Yes
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	114	Std (COS)	9	Offsets In	Seconds
Offset Value	104s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Splits (Split Pat 1)	0	74	0	40	20	54	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	114s	74s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	134	Std (COS)	17	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Splits (Split Pat 2)	0	102	0	32	30	72	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	134s	102s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	108	Std (COS)	25	Offsets In	Seconds
Offset Value	84s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Splits (Split Pat 3)	0	68	0	40	20	48	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	108s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	128	Std (COS)	33	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Splits (Split Pat 4)	0	93	0	35	35	58	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	128s	93s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	144	Std (COS)	81	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Splits (Split Pat 7)	0	110	0	34	30	80	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	144s	110s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

City of Harrisonburg, VA

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I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	74	0	40	20	54	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	114s	74s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	102	0	32	30	72	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	134s	102s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	68	0	40	20	48	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	108s	68s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	93	0	35	35	58	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	128s	93s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	110	0	34	30	80	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	144s	110s	0s	0s

Split Pattern # 20

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	110	0	40	60	50	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	110s	0s	0s

Split Pattern # 21

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	70	0	80	25	45	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	70s	0s	0s

Split Pattern # 22

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	70	0	80	25	45	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	70s	0s	0s

Split Pattern # 23

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	115	0	35	35	80	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 24

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	115	0	35	35	80	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	115s	0s	0s

Split Pattern # 25

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	110	0	40	40	70	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	110s	0s	0s

Split Pattern # 26

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	110	0	40	40	70	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	110s	0s	0s

Split Pattern # 27

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	120	0	25	80	65	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	145s	145s	0s	0s

Split Pattern # 31

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	120	0	30	28	92	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																

Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	120s	0s	0s

Split Pattern # 50

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	50	0	20	13	35	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	48s	0s	0s

Split Pattern # 51

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB										
Split (seconds)	0	50	0	20	13	35	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase					X				X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	48s	0s	0s

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Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-560 - Port Republic Rd @ I-81 NB Ramp - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	07:35
4	2	08:00
5	2	08:35
6	2	09:05
7	2	10:30
8	1	19:45
9	10	22:15
10	11	00:00

Day Plan #2

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	08:15
4	2	09:00
5	2	10:30
6	1	19:45
7	10	23:15
8	11	00:00

Day Plan #3

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	23:15
4	11	00:00

Day Plan #4

Event	Action Plan	Start Time
1	10	06:00
2	1	09:45
3	10	21:15
4	11	00:00

Day Plan #5

Event	Action Plan	Start Time
1	10	06:00
2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #6

Event	Action Plan	Start Time
1	10	06:00

2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #7

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	22:00
4	11	00:00

Day Plan #8

Event	Action Plan	Start Time
1	10	06:00
2	1	10:30
3	10	21:00
4	11	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X		

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
						X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

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Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	4	8	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	.	.	11	12	15	16	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X		X	X	X		X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	7BF8
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
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7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase Disable	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto		X	X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto		X	X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

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I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB	EBLT	WB		SB								
Min Green	0	10	7	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	5	0	7	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	17	0	19	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	45	30	15	20	45	0	30	35	35	35	35	35	35	35	35
Max2	0	25	15	10	10	25	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.7	4.7	4.2	3.0	4.7	4.7	3.5	4.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.6	2.6	3.8	2.8	2.6	2.6	2.0	3.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
A	5	6	Yellow Ped	11	2.0	0.0	0	n/a

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	2.0	5
B02	5	0	7	3.0	2.0	5
C03	5	0	7	3.0	2.0	5
D04	5	0	7	3.0	2.0	5
E05	5	0	7	3.0	2.0	5
F06	5	0	7	3.0	2.0	5
G07	5	0	7	3.0	2.0	5
H08	5	0	7	3.0	2.0	5
I09	5	0	7	3.0	2.0	5
J10	5	0	7	3.0	2.0	5
K11	5	0	7	3.0	2.0	5
L12	5	0	7	3.0	2.0	5
M13	5	0	7	3.0	2.0	5
N14	5	0	7	3.0	2.0	5
O15	5	0	7	3.0	2.0	5
P16	5	0	7	3.0	2.0	5

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Solutions that Move the World™

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

City of Harrisonburg, VA

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Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	Yes
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	114	Std (COS)	9	Offsets In	Seconds
Offset Value	109s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Splits (Split Pat 1)	0	68	0	26	23	45	0	20	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	114s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	134	Std (COS)	17	Offsets In	Seconds
Offset Value	107s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Splits (Split Pat 2)	0	79	0	26	25	54	0	29	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	134s	79s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	108	Std (COS)	25	Offsets In	Seconds
Offset Value	87s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Splits (Split Pat 3)	0	40	0	28	21	40	0	19	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	87s	61s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	128	Std (COS)	33	Offsets In	Seconds
Offset Value	111s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Splits (Split Pat 4)	0	48	0	28	23	48	0	29	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	105s	71s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	144	Std (COS)	81	Offsets In	Seconds
Offset Value	108s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Splits (Split Pat 7)	0	87	0	26	26	61	0	31	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	144s	87s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	68	0	26	23	45	0	20	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	114s	68s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	79	0	26	25	54	0	29	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	134s	79s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	40	0	28	21	40	0	19	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	87s	61s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	48	0	28	23	48	0	29	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	105s	71s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	87	0	26	26	61	0	31	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	144s	87s	0s	0s

Split Pattern # 20

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 21

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 22

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 23

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 24

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 25

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 26

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	92	0	28	28	64	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	92s	0s	0s

Split Pattern # 27

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	84	0	28	28	84	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	142s	112s	0s	0s

Split Pattern # 31

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	71	0	28	26	45	0	51	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																

Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	71s	0s	0s

Split Pattern # 50

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	38	0	13	15	24	0	18	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	69s	39s	0s	0s

Split Pattern # 51

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB	EBLT	WB		SB								
Split (seconds)	0	38	0	13	15	24	0	18	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase					X				X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	69s	39s	0s	0s

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	3
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall		X				X										
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-780 - Port Republic Rd @ Forest Hill Rd - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	07:35
4	2	08:00
5	2	08:35
6	2	09:05
7	2	10:30
8	1	19:45
9	10	22:15
10	11	00:00

Day Plan #2

Event	Action Plan	Start Time
1	10	06:00
2	1	07:00
3	2	08:15
4	2	09:00
5	2	10:30
6	1	19:45
7	10	23:15
8	11	00:00

Day Plan #3

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	23:15
4	11	00:00

Day Plan #4

Event	Action Plan	Start Time
1	10	06:00
2	1	09:45
3	10	21:15
4	11	00:00

Day Plan #5

Event	Action Plan	Start Time
1	10	06:00
2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #6

Event	Action Plan	Start Time
1	10	06:00

2	1	07:15
3	1	10:30
4	1	19:00
5	10	22:00
6	11	00:00

Day Plan #7

Event	Action Plan	Start Time
1	10	06:00
2	1	09:30
3	10	22:00
4	11	00:00

Day Plan #8

Event	Action Plan	Start Time
1	10	06:00
2	1	10:30
3	10	21:00
4	11	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X		

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
						X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	4	8	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	.	.	11	12	15	16	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X		X	X	X		X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	0617
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	2	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto		X	X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto		X	X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

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I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	WBLT	EB		NB	EBLT	WB		SB								
Min Green	5	10	0	7	5	10	0	7	7	7	7	7	7	7	7	7
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	5	0	7	0	5	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	15	0	23	0	15	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	0	20	15	45	0	20	35	35	35	35	35	35	35	35
Max2	10	45	0	20	10	45	0	15	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.5	3.5	3.0	3.5	3.5	3.5	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	2.5	2.5	2.0	3.0	2.5	2.5	2.0	3.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Harrisonburg, VA

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Solutions that Move the World™

I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
A	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	2.0	5
B02	5	0	7	3.0	2.0	5
C03	5	0	7	3.0	2.0	5
D04	5	0	7	3.0	2.0	5
E05	5	0	7	3.0	2.0	5
F06	5	0	7	3.0	2.0	5
G07	5	0	7	3.0	2.0	5
H08	5	0	7	3.0	2.0	5
I09	5	0	7	3.0	2.0	5
J10	5	0	7	3.0	2.0	5
K11	5	0	7	3.0	2.0	5
L12	5	0	7	3.0	2.0	5
M13	5	0	7	3.0	2.0	5
N14	5	0	7	3.0	2.0	5
O15	5	0	7	3.0	2.0	5
P16	5	0	7	3.0	2.0	5

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Solutions that Move the World™

I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

City of Harrisonburg, VA

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I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	114	Std (COS)	9	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Splits (Split Pat 1)	18	37	0	34	15	40	0	25	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	114s	55s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	134	Std (COS)	17	Offsets In	Seconds
Offset Value	9s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Splits (Split Pat 2)	18	48	0	34	18	48	0	34	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	134s	66s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	128	Std (COS)	33	Offsets In	Seconds
Offset Value	5s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Splits (Split Pat 4)	18	43	0	34	18	43	0	33	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	128s	61s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Split (seconds)	18	37	0	34	15	40	0	25	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	114s	55s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Split (seconds)	18	48	0	34	18	48	0	34	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	134s	66s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Split (seconds)	18	43	0	34	18	43	0	33	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	128s	61s	0s	0s

Split Pattern # 50

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Split (seconds)	13	24	0	18	13	24	0	15	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	37s	0s	0s

Split Pattern # 51

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	WBLT	EB		NB	EBLT	WB		SB								
Split (seconds)	13	24	0	18	13	24	0	15	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase	X				X				X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	70s	37s	0s	0s

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Solutions that Move the World™

I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	2	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Harrisonburg, VA

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

I-670 - Port Republic Rd @ Devon Ln - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	10	06:00
2	10	07:00
3	2	15:00
4	10	18:30
5	11	00:00

Day Plan #2

Event	Action Plan	Start Time
1	10	06:00
2	2	14:00
3	10	18:00
4	11	02:00

Day Plan #3

Event	Action Plan	Start Time
1	10	06:00
2	10	09:30
3	10	23:15
4	11	02:00

Day Plan #4

Event	Action Plan	Start Time
1	10	06:00
2	10	09:45
3	10	21:15
4	11	00:00

Day Plan #5

Event	Action Plan	Start Time
1	10	06:00
2	10	07:15
3	10	10:30
4	10	19:00
5	10	22:00
6	11	00:00

Day Plan #6

Event	Action Plan	Start Time
1	10	06:00
2	10	07:15
3	10	10:30
4	10	19:00
5	10	22:00
6	11	00:00

Day Plan #7

Event	Action Plan	Start Time

1	10	06:00
2	10	09:30
3	10	22:00
4	11	00:00

Day Plan #8

Event	Action Plan	Start Time
1	10	06:00
2	10	10:30
3	10	21:00
4	11	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 5

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X		

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 6

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
						X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 7

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 8

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Appendix C

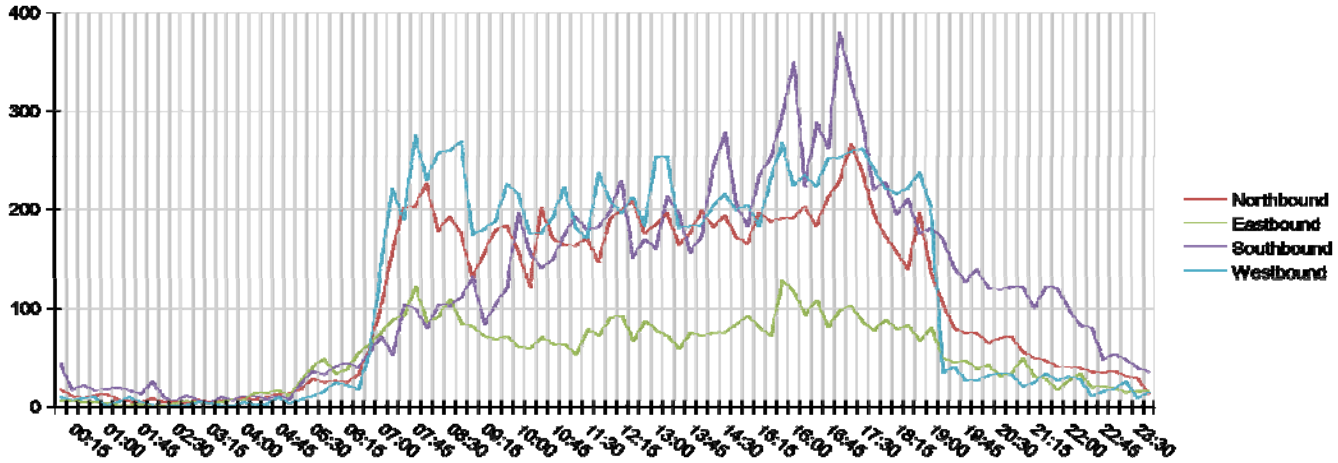
October 3, 2018 Port Republic Road Turning Movement Counts

GRIDSMART.

Turning Movement Counts

Intersection S Main st & Port Republic
Date 10/3/2018

	Right	Through	Left	UTurn	Total
Northbound	3763	5789	721	16	10289
Eastbound	1349	3340	356	26	5071
Southbound	573	6055	4992	68	11688
Westbound	5231	3368	2723	24	11346
Total	**10916**	**18552**	**8792**	**134**	**38394**



	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00	12	6	0	0	1	5	0	0	2	17	25	0	6	2	2	0
00:15	4	7	0	0	0	6	1	0	0	8	9	0	5	1	1	0
00:30	6	3	0	0	0	5	0	0	3	5	14	0	7	0	2	0
00:45	9	3	0	0	0	5	0	0	2	7	8	0	4	3	3	0
01:00	7	6	0	0	0	3	1	0	0	8	10	0	1	0	0	0
01:15	4	4	0	0	1	1	0	0	0	6	14	0	5	0	0	0
01:30	4	2	0	0	0	2	0	0	0	8	8	1	6	1	3	0
01:45	2	2	1	0	1	2	0	0	0	8	5	0	4	0	1	0
02:00	6	3	0	0	0	0	0	0	1	12	13	0	2	0	0	0
02:15	2	3	0	0	0	1	0	0	0	7	3	0	2	0	0	0
02:30	3	2	0	0	1	3	0	0	0	3	3	0	1	0	0	0
02:45	1	3	0	0	2	3	1	0	1	9	2	0	1	0	1	0
03:00	2	6	0	0	0	5	0	0	0	3	4	0	4	1	0	0
03:15	2	3	0	0	2	2	0	0	0	4	0	0	3	0	1	0
03:30	3	3	0	0	3	2	0	0	1	7	2	0	1	1	0	0
03:45	2	6	0	0	2	4	2	0	1	5	1	0	0	0	1	0
04:00	3	6	0	0	4	3	0	0	0	4	7	0	4	1	0	0
04:15	4	4	0	0	8	6	1	0	0	10	1	0	2	0	0	0
04:30	4	6	0	0	7	7	0	0	0	6	2	0	0	1	2	0
04:45	7	6	0	0	7	10	0	0	1	10	0	0	7	1	2	0
05:00	6	7	1	0	3	8	0	0	0	6	2	0	4	0	0	0
05:15	9	9	0	0	14	13	0	0	0	21	3	0	6	2	0	0
05:30	17	12	0	0	21	19	1	0	1	32	4	0	8	2	1	0
05:45	15	10	0	0	20	27	2	0	3	23	7	0	10	3	3	0
06:00	20	7	0	0	12	22	0	0	1	29	11	0	17	5	3	0
06:15	14	11	0	0	8	27	3	0	1	27	17	0	17	1	4	0
06:30	20	12	1	0	10	44	1	0	0	31	9	0	11	4	2	1
06:45	29	30	1	0	22	41	1	0	7	36	13	0	22	19	16	0
07:00	33	65	6	0	20	52	3	1	2	42	27	1	80	30	31	1
07:15	54	93	10	0	10	67	11	1	0	37	15	1	118	62	42	0
07:30	63	129	9	1	16	69	8	0	4	62	38	0	115	50	24	0
07:45	55	130	18	0	28	85	9	1	4	47	43	6	160	76	39	1
08:00	59	149	18	1	22	58	5	1	4	48	24	4	140	58	32	0
08:15	60	104	14	0	23	59	8	2	9	58	38	0	152	62	43	1
08:30	47	128	18	0	28	65	16	1	8	57	36	2	163	67	29	1
08:45	71	88	17	0	18	50	17	0	7	67	37	1	161	65	43	1
09:00	46	77	7	0	22	54	5	1	4	84	44	0	86	64	24	0
09:15	46	98	11	0	21	45	5	1	3	54	27	0	81	62	37	0
09:30	65	106	8	0	26	37	6	0	7	57	39	2	112	49	27	0
09:45	67	104	13	0	21	42	8	1	7	66	44	5	119	55	52	0
10:00	50	97	10	0	15	41	4	1	11	102	83	1	111	61	44	0
10:15	43	74	5	0	17	40	3	0	5	89	60	2	90	43	42	0
10:30	60	132	10	0	25	43	3	0	0	88	50	2	103	38	35	0
10:45	50	115	5	0	20	42	2	0	8	90	49	2	85	65	42	0
11:00	50	98	16	0	18	41	4	1	5	91	78	0	102	71	50	0

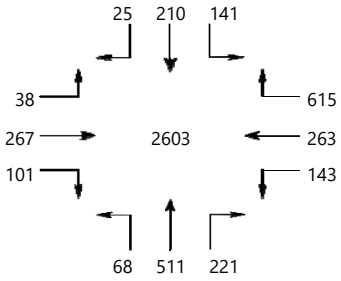
11:15	49	102	11	1	16	27	9	1	1	109	83	0	81	61	40	0
11:30	63	100	8	0	24	47	8	0	11	106	61	1	90	47	32	0
11:45	47	82	16	1	27	40	5	1	5	104	73	0	111	74	53	0
12:00	64	108	19	0	25	59	7	0	8	107	83	0	82	76	51	0
12:15	69	114	16	0	32	56	5	0	4	113	113	0	69	68	57	2
12:30	60	137	12	0	18	43	5	1	5	90	56	0	95	57	60	1
12:45	65	90	18	2	24	56	6	2	5	115	50	0	93	51	39	0
13:00	53	103	29	0	24	45	9	0	9	88	62	1	113	74	67	0
13:15	61	114	21	0	19	46	5	2	7	114	91	2	105	75	74	0
13:30	58	101	5	0	16	39	4	0	4	109	83	0	92	49	40	0
13:45	56	103	17	0	19	53	3	1	4	98	53	1	87	42	54	0
14:00	72	118	9	0	15	45	11	1	4	111	57	1	84	55	45	0
14:15	52	116	13	1	22	50	4	0	7	122	114	1	98	56	50	0
14:30	70	111	12	1	20	55	1	0	12	136	131	0	69	70	77	0
14:45	50	101	21	0	28	49	7	0	10	113	83	0	87	53	57	2
15:00	62	92	11	0	21	66	5	1	6	102	75	0	87	61	57	0
15:15	67	121	9	0	12	64	5	0	14	112	107	1	70	61	52	0
15:30	61	110	17	0	13	53	6	0	22	117	114	0	111	66	53	1
15:45	72	105	14	0	25	94	10	0	10	133	152	2	116	76	75	1
16:00	73	95	23	0	30	83	4	1	9	150	189	2	70	85	67	2
16:15	75	116	11	1	25	64	5	0	12	128	83	0	87	71	77	0
16:30	75	86	22	0	27	73	9	0	15	146	126	2	93	66	64	0
16:45	81	112	19	0	23	58	0	0	10	134	117	1	98	81	73	0
17:00	97	110	20	1	16	75	7	0	14	191	173	2	88	95	69	1
17:15	91	143	33	0	31	69	3	0	14	146	167	2	87	95	75	2
17:30	91	127	21	0	29	52	6	0	13	152	122	0	87	94	81	0
17:45	71	106	19	0	15	52	11	0	8	117	91	4	96	81	65	0
18:00	68	92	13	0	27	53	9	0	14	103	110	1	71	80	70	1
18:15	73	67	17	0	20	54	5	0	9	101	83	2	88	74	54	0
18:30	58	66	14	1	17	57	8	1	3	90	114	4	102	73	47	0
18:45	81	102	11	3	18	47	2	0	3	78	93	1	104	58	76	0
19:00	58	73	5	0	30	45	4	2	6	79	96	0	75	69	57	1
19:15	44	61	0	0	15	32	3	0	12	82	76	1	10	14	10	1
19:30	32	48	0	0	9	30	6	0	9	69	60	3	19	14	8	0
19:45	31	43	1	0	10	33	4	0	5	61	61	0	15	7	5	0
20:00	36	38	1	0	16	22	1	0	13	66	60	0	7	7	11	2
20:15	37	27	0	1	10	32	1	0	14	53	54	0	10	10	12	0
20:30	35	33	2	0	6	23	2	0	11	51	58	0	9	16	9	0
20:45	25	44	3	0	10	22	2	0	13	54	54	1	15	12	5	1
21:00	25	29	1	1	10	39	1	0	7	56	59	0	11	7	3	0
21:15	25	21	4	0	9	20	2	0	18	45	37	0	9	7	9	0
21:30	27	20	0	0	13	14	2	0	11	44	67	1	13	6	15	0
21:45	22	19	0	0	4	12	1	0	16	60	45	0	13	11	3	0
22:00	22	19	0	0	5	18	4	0	11	49	40	0	13	8	10	0
22:15	24	16	0	0	5	27	2	0	13	31	39	0	11	9	8	0
22:30	23	11	2	0	3	17	0	0	9	32	40	0	4	5	2	0
22:45	19	16	0	0	0	21	0	0	6	20	21	1	7	5	4	0
23:00	16	19	2	0	5	12	2	0	6	28	20	0	11	2	5	0
23:15	17	14	0	0	5	9	1	0	4	20	24	0	11	4	11	0
23:30	16	14	0	0	4	10	2	0	1	14	25	0	9	0	0	0
23:45	8	5	0	0	3	12	1	0	3	15	18	0	10	4	1	0
Total	**3763**	**5789**	**721**	**16**	**1349**	**3340**	**356**	**26**	**573**	**6055**	**4992**	**68**	**5231**	**3368**	**2723**	**24**

GRIDSMART.

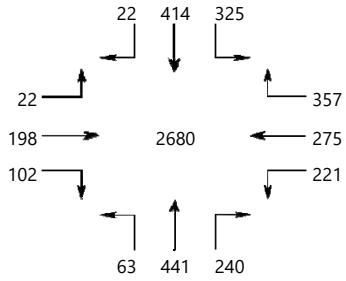
Turning Movement Counts

Intersection S Main st & Port Republic
Date 10/3/2018

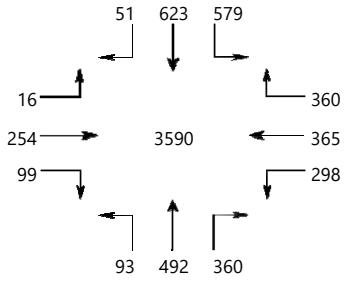
AM PEAK HOUR VOLUME (0:00-10:45)
FROM 07:45 TO 08:45



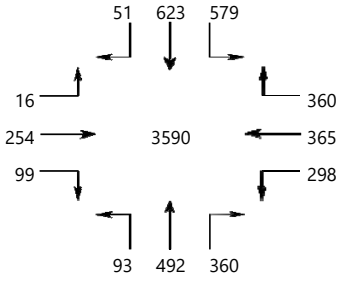
MID-DAY PEAK HOUR VOLUME (11:00-14:00)
FROM 11:45 TO 12:45



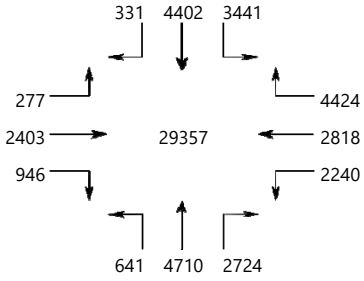
PM PEAK HOUR VOLUME (14:15-23:45)
FROM 16:45 TO 17:45



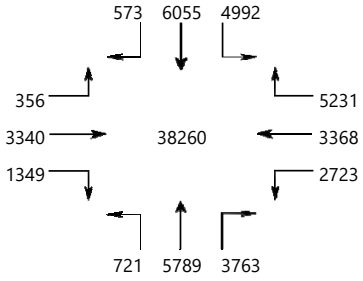
OVERALL PEAK HOUR VOLUME
FROM 16:45 TO 17:45



DAYTIME TOTAL VOLUME
FROM 07:00 TO 18:00



SELECTED TIME VOLUME
FROM 00:00 TO 23:59

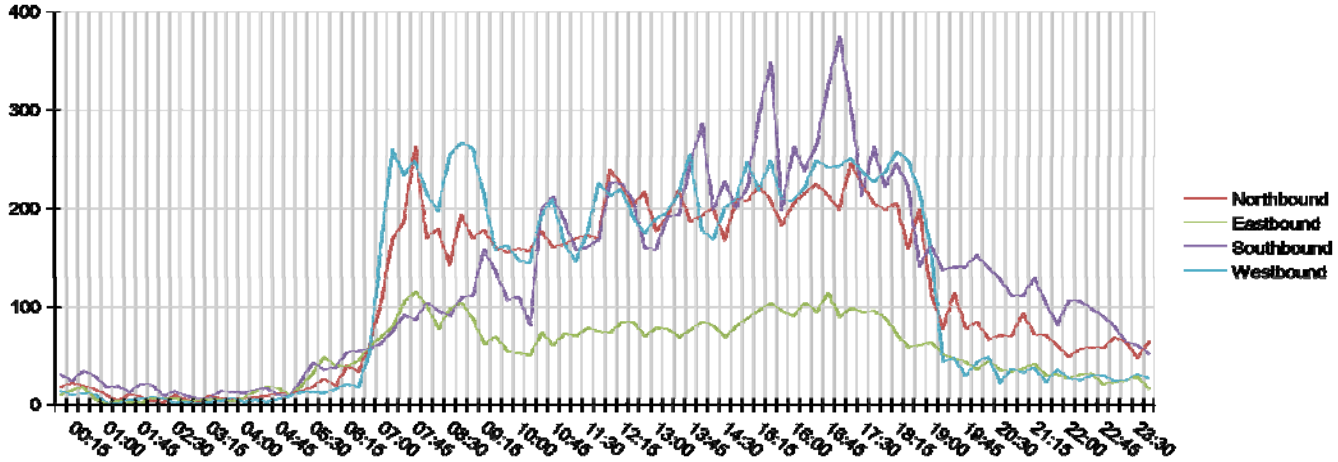


GRIDSMART.

Turning Movement Counts

Intersection S Main st & Port Republic
Date 10/4/2018

	Right	Through	Left	UTurn	Total
Northbound	4045	6207	750	24	11026
Eastbound	1508	3207	370	18	5103
Southbound	622	6265	5096	61	12044
Westbound	5103	3315	2829	29	11276
Total	**11278**	**18994**	**9045**	**132**	**39449**



	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00	10	8	0	0	2	7	1	0	1	20	10	0	9	3	2	0
00:15	18	4	0	0	4	8	3	0	7	7	10	0	6	3	1	0
00:30	9	10	0	0	5	12	1	0	4	16	15	0	7	3	2	0
00:45	11	5	0	0	1	4	1	0	2	9	18	0	7	2	2	0
01:00	3	7	0	0	0	0	1	0	1	11	6	0	1	0	1	0
01:15	3	1	0	0	0	3	1	0	3	8	8	0	0	0	1	0
01:30	6	5	0	0	0	3	0	0	1	3	9	0	1	1	3	0
01:45	2	6	0	0	0	1	1	0	0	6	15	0	6	0	0	0
02:00	2	2	0	0	5	2	0	0	2	10	8	0	7	1	0	0
02:15	2	1	0	0	2	3	1	0	0	3	6	0	3	3	0	0
02:30	4	5	1	0	1	6	0	0	1	8	5	0	1	1	0	0
02:45	2	3	0	0	1	2	0	0	0	4	5	0	3	0	0	0
03:00	0	3	0	0	0	4	0	0	0	6	1	0	1	0	0	0
03:15	3	6	0	0	4	2	0	0	0	5	2	0	1	1	1	0
03:30	4	3	0	0	2	3	0	0	1	9	4	0	2	0	2	0
03:45	3	3	0	0	1	3	0	0	0	9	4	0	3	2	2	0
04:00	6	1	0	0	3	4	0	0	1	9	2	0	2	1	0	0
04:15	2	6	0	0	9	5	0	0	1	11	3	0	5	0	0	0
04:30	4	5	0	0	8	10	0	0	0	12	5	0	1	2	0	0
04:45	9	3	0	0	6	11	0	0	0	7	3	0	4	2	0	0
05:00	7	4	0	0	1	8	1	0	1	7	1	0	3	3	3	0
05:15	7	7	0	0	7	12	0	0	2	19	4	0	11	2	0	0
05:30	10	8	0	0	19	12	1	0	2	31	10	0	11	1	1	0
05:45	10	17	0	0	25	21	3	0	5	29	2	0	6	1	5	0
06:00	12	7	0	0	11	28	1	0	4	22	12	0	10	4	2	0
06:15	25	15	0	0	10	28	1	0	1	39	14	0	16	3	2	0
06:30	15	19	0	0	14	29	2	0	5	36	14	0	10	5	3	0
06:45	32	28	1	0	19	38	2	0	5	36	16	0	27	15	13	0
07:00	42	60	3	1	21	44	5	0	3	38	22	0	97	30	34	0
07:15	62	96	10	1	22	52	6	0	1	53	22	0	172	48	40	0
07:30	58	121	8	0	15	82	9	0	2	51	39	0	152	56	26	0
07:45	62	184	17	0	30	73	12	1	3	54	27	3	144	73	31	1
08:00	63	94	10	3	27	65	9	0	8	64	32	1	126	51	39	0
08:15	67	99	13	1	25	48	5	0	5	56	31	4	112	52	33	0
08:30	23	110	10	0	31	55	12	0	9	49	31	2	147	69	39	0
08:45	61	118	16	0	23	61	21	0	5	70	32	3	164	74	29	0
09:00	55	101	14	0	25	60	3	0	5	62	42	3	160	67	34	0
09:15	57	107	15	0	18	36	7	1	7	83	69	0	113	61	40	0
09:30	49	98	12	2	26	41	3	0	4	87	45	1	67	53	39	0
09:45	54	92	10	0	26	27	2	0	3	70	32	2	73	44	46	0
10:00	53	91	16	0	18	27	8	0	3	70	38	0	77	35	36	0
10:15	48	100	9	0	18	28	5	0	3	43	32	3	67	44	34	0
10:30	65	105	7	1	25	24	24	1	10	115	74	0	104	56	33	0
10:45	43	109	9	0	20	37	3	1	13	90	108	1	106	55	49	0
11:00	55	102	6	1	18	48	6	1	4	101	83	1	57	48	60	0

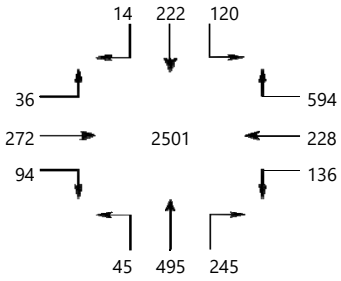
11:15	56	98	16	0	25	38	5	2	6	96	55	2	56	44	47	0
11:30	62	99	12	0	25	46	7	1	9	104	48	0	79	54	42	0
11:45	54	104	12	0	28	44	3	0	9	103	55	2	110	53	63	0
12:00	73	140	25	2	31	33	8	2	8	119	99	1	90	62	60	1
12:15	60	142	22	0	20	59	5	1	6	104	114	1	96	72	51	1
12:30	65	124	14	0	29	51	5	0	2	105	102	0	78	60	52	2
12:45	67	135	15	0	27	36	6	1	8	102	50	1	61	63	48	3
13:00	63	98	16	0	20	52	7	0	13	90	54	2	83	58	49	0
13:15	56	123	13	0	26	50	2	0	5	110	76	1	93	56	47	0
13:30	70	138	10	1	12	54	3	0	10	110	71	3	101	49	66	0
13:45	67	105	14	1	16	54	6	1	11	119	113	2	108	79	69	0
14:00	76	101	16	0	35	45	4	1	8	135	144	0	64	59	56	0
14:15	55	126	20	0	32	43	6	0	7	111	80	0	61	49	59	0
14:30	55	106	7	0	14	50	5	0	9	126	91	2	71	62	68	0
14:45	68	125	17	0	25	54	2	0	8	118	73	1	90	65	54	0
15:00	72	118	18	0	23	66	0	0	3	102	115	2	107	83	58	0
15:15	75	128	20	0	19	68	10	0	12	136	148	2	82	69	67	0
15:30	75	121	13	0	36	62	5	1	14	166	169	0	101	77	67	4
15:45	55	112	15	1	32	51	13	0	15	97	85	1	67	85	56	1
16:00	79	112	14	0	27	57	7	0	7	132	123	1	73	63	72	0
16:15	75	119	22	0	30	73	2	0	10	129	97	2	83	72	67	0
16:30	84	117	24	0	24	66	5	0	12	134	120	0	95	95	58	1
16:45	87	105	22	0	34	79	2	0	13	142	169	2	112	65	65	0
17:00	76	102	20	1	19	65	6	0	18	187	169	1	82	80	81	0
17:15	85	126	34	1	27	69	2	1	14	168	118	0	91	89	69	2
17:30	105	99	20	1	25	60	10	0	12	110	90	1	76	91	71	0
17:45	77	118	11	0	29	59	7	1	9	131	123	0	86	79	62	0
18:00	75	105	18	1	27	56	6	0	6	120	95	1	97	81	59	0
18:15	70	115	21	0	18	48	6	0	8	107	130	1	113	70	74	1
18:30	68	79	13	0	10	48	1	0	4	101	118	0	107	71	71	0
18:45	76	110	11	3	9	48	4	0	4	67	70	0	104	58	55	0
19:00	53	54	6	0	20	40	4	0	13	84	67	0	47	59	53	0
19:15	26	52	0	0	20	27	5	0	16	58	64	0	16	14	12	2
19:30	47	68	0	0	13	29	5	0	10	71	60	0	20	13	14	1
19:45	32	43	3	0	8	34	2	0	6	67	68	0	7	11	10	1
20:00	38	42	5	0	12	22	2	0	16	69	67	1	15	13	16	0
20:15	28	38	0	1	13	26	6	0	13	61	67	0	19	15	12	3
20:30	31	38	2	0	14	21	1	0	12	59	56	2	10	5	7	0
20:45	30	38	2	0	12	20	2	0	11	50	51	0	18	7	11	1
21:00	52	40	2	0	11	24	2	0	17	54	41	0	8	9	15	1
21:15	28	43	1	0	11	30	1	0	15	70	44	1	17	10	10	1
21:30	34	37	0	0	11	18	1	0	3	48	53	0	8	7	8	0
21:45	35	23	3	0	6	22	3	0	4	40	38	0	18	8	10	0
22:00	26	23	0	0	7	18	1	1	7	48	52	0	9	7	10	1
22:15	33	21	3	0	10	16	5	0	8	44	53	1	11	7	6	1
22:30	36	23	0	0	7	22	3	0	17	32	49	0	8	9	13	0
22:45	33	23	2	0	4	15	2	0	11	44	36	0	12	8	10	0
23:00	43	23	2	1	5	17	1	0	8	41	31	0	7	8	9	0
23:15	41	22	1	0	8	15	2	0	3	37	24	0	11	7	7	0
23:30	34	13	1	0	10	18	1	0	7	28	26	0	12	7	12	0
23:45	46	14	5	0	4	12	0	0	7	31	14	0	11	3	13	0
Total	**4045**	**6207**	**750**	**24**	**1508**	**3207**	**370**	**18**	**622**	**6265**	**5096**	**61**	**5103**	**3315**	**2829**	**29**

GRIDSMART.

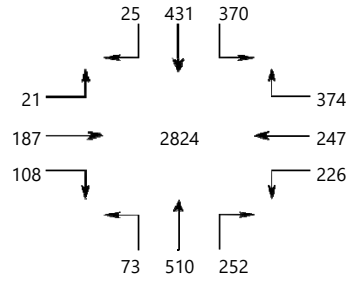
Turning Movement Counts

Intersection S Main st & Port Republic
Date 10/4/2018

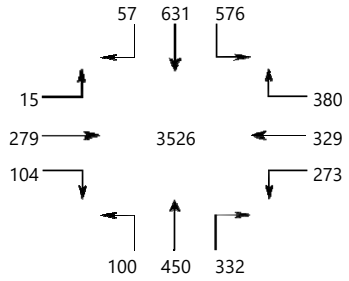
AM PEAK HOUR VOLUME (0:00-10:45)
FROM 07:15 TO 08:15



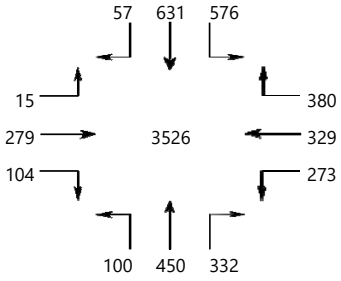
MID-DAY PEAK HOUR VOLUME (11:00-14:00)
FROM 11:45 TO 12:45



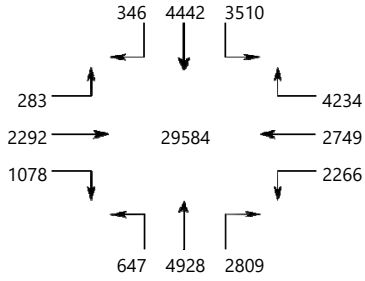
PM PEAK HOUR VOLUME (14:15-23:45)
FROM 16:30 TO 17:30



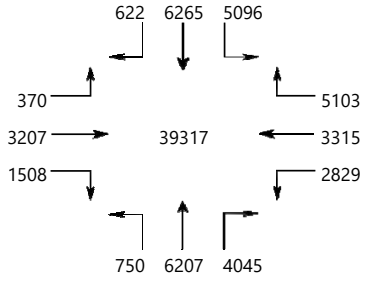
OVERALL PEAK HOUR VOLUME
FROM 16:30 TO 17:30



DAYTIME TOTAL VOLUME
FROM 07:00 TO 18:00



SELECTED TIME VOLUME
FROM 00:00 TO 23:59



Port Republic Road and Hillcrest Drive

Time	WB Left	NB Right	NB Left	EB Right
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	1
7:45	0	1	0	1
8:00	1	0	0	0
8:15	0	1	0	0
8:30	0	0	0	0
8:45	0	0	0	0
9:00	0	0	1	0
9:15	0	0	0	0
9:30	0	0	0	0
9:45	0	0	1	0
11:00	0	1	0	0
11:15	0	0	0	1
11:30	0	0	0	0
11:45	1	1	0	1
12:00	0	0	0	0
12:15	0	0	0	1
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	0	0
13:15	1	0	0	0
13:30	0	0	0	1
13:45	0	1	0	0
16:00	0	5	1	1
16:15	1	1	0	1
16:30	0	0	0	3
16:45	0	0	0	1
17:00	2	0	0	0
17:15	1	1	0	0
17:30	1	0	0	0
17:45	3	0	1	1
18:00	3	1	0	0
18:15	1	0	0	0
18:30	3	0	0	1
18:45	2	0	0	0

Port Republic and Hillside Drive - North Leg

Time	SB Right	SB Thru	SB Left	WB Right	WB Thru	WB Left	NB Right	NB Thru	NB Left	EB Right	EB Thru	EB Left
7:00	0	0	0	0	0	0				0	0	0
7:15	2	0	3	1	0	0				0	0	0
7:30	0	0	1	4	0	0				0	0	0
7:45	0	0	1	1	0	0				0	0	0
8:00	1	0	2	2	0	0				0	0	1
8:15	3	0	5	6	0	0				0	0	1
8:30	0	0	4	3	0	0				0	0	1
8:45	1	0	3	3	0	0				0	0	0
9:00	0	0	5	2	0	0				0	0	0
9:15	1	0	2	1	0	0				0	0	0
9:30	0	0	1	1	0	0				0	0	0
9:45	0	0	4	2	0	0				0	0	0
10:00												
16:00	2	0	4	4	0	0				0	0	2
16:15	0	0	1	4	0	0				0	0	1
16:30	0	0	0	0	0	0				0	0	0
16:45	0	0	3	0	0	0				0	0	3
17:00	4	0	1	0	0	0				0	0	0
17:15	2	0	3	3	0	0				0	0	0
17:30	0	0	0	1	0	0				0	0	0
17:45	0	0	3	7	0	0				0	0	0
18:00	0	0	0	4	0	0				0	0	0
18:15	0	0	2	5	0	0				0	0	0
18:30	0	0	3	0	0	0				0	0	0
18:45	0	0	0	3	0	0				0	0	2

Port Republic Road and Crawford Avenue

Time	WB Left	NB Right	NB Left	EB Right
7:00	4	9	1	1
7:15	2	4	0	0
7:30	6	7	0	0
7:45	2	10	0	2
8:00	6	6	0	0
8:15	2	7	0	0
8:30	2	1	0	0
8:45	2	3	0	0
11:00	3	2	1	0
11:15	2	1	0	0
11:30	1	1	1	1
11:45	4	6	1	3
12:00	2	4	0	2
12:15	4	5	0	2
12:30	6	2	1	2
12:45	4	5	0	0
13:00	4	3	0	2
13:15	2	2	0	0
13:30	2	3	1	0
13:45	3	6	0	2
16:00	3	3	0	0
16:15	2	9	0	0
16:30	5	2	0	0
16:45	4	4	0	0
17:00	2	6	0	0
17:15	4	2	0	0
17:30	5	8	0	0
17:45	10	13	1	1
18:00	8	8	0	0
18:15	9	6	0	5
18:30	4	3	0	3
18:45	5	12	1	1

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road — Date: April 04, 2018 — Wednesday

and: Bluestone Drive - Hillside Avenue — Weather: Mild, Light Rain

Location: Rockingham County, Virginia — Entered by: CK — Star Rating: 5

TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: Bluestone Drive					TRAFFIC FROM WEST on: Hillside Avenue					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	4	80	10	0	94	24	106	19	0	149	4	1	7	0	12	11	2	6	0	19	274
7:15 - 7:30	9	121	26	0	156	59	180	21	0	260	3	1	6	0	10	14	3	10	0	27	453
7:30 - 7:45	5	77	30	0	112	131	226	31	0	388	14	0	8	0	22	9	3	14	0	26	548
7:45 - 8:00	4	108	43	0	155	95	247	24	0	366	10	2	10	0	22	14	6	10	0	30	573
8:00 - 8:15	9	120	28	0	157	47	214	21	0	282	10	1	10	1	22	12	4	9	0	25	486
8:15 - 8:30	8	140	29	0	177	46	202	22	0	270	7	1	11	0	19	9	3	9	0	21	487
8:30 - 8:45	8	111	17	0	136	55	255	30	0	340	11	4	10	0	25	14	6	14	0	34	535
8:45 - 9:00	17	133	35	0	185	69	261	29	0	359	14	4	34	0	52	11	3	6	0	20	616
9:00 - 9:15	11	128	22	0	161	57	189	26	1	273	38	1	64	0	103	14	5	6	0	25	562
9:15 - 9:30	9	112	13	0	134	39	140	14	0	193	4	0	14	0	18	14	1	6	0	21	366
9:30 - 9:45	16	114	19	0	149	32	179	31	0	242	12	4	17	0	33	16	4	6	0	26	450
9:45 - 10:00	11	167	28	0	206	77	201	43	0	321	20	0	23	0	43	14	3	8	0	25	595
10:00 - 10:15	14	150	21	0	185	36	149	30	0	215	42	7	57	0	106	27	3	10	0	40	546
10:15 - 10:30	10	130	17	0	157	31	187	26	0	244	8	5	15	0	28	19	3	10	0	32	461
10:30 - 10:45	7	173	19	0	199	20	159	30	0	209	15	4	19	0	38	18	3	7	0	28	474
10:45 - 11:00	13	148	22	0	183	63	178	26	0	267	17	3	30	0	50	20	5	12	0	37	537
11:00 - 11:15	10	161	35	0	206	51	156	27	0	234	24	7	62	0	93	29	3	10	0	42	575
11:15 - 11:30	17	180	16	0	213	36	156	18	0	210	25	4	34	0	63	22	4	12	0	38	524
11:30 - 11:45	11	168	19	0	198	27	161	17	0	205	18	2	22	0	42	16	4	6	0	26	471
11:45 - 12:00	8	164	19	0	191	43	161	22	0	226	13	4	28	0	45	16	4	11	0	31	493
12:00 - 12:15	11	148	8	0	167	58	173	26	0	257	15	8	35	0	58	25	6	11	0	42	524
12:15 - 12:30	12	184	27	0	223	26	177	28	1	232	29	4	55	0	88	45	3	16	0	64	607
12:30 - 12:45	9	180	17	0	206	37	193	27	0	257	43	5	25	0	73	19	5	10	0	34	570
12:45 - 1:00	10	138	16	0	164	37	176	28	0	241	18	2	31	0	51	28	5	7	0	40	496
1:00 - 1:15	15	170	30	0	215	58	198	20	0	276	27	2	47	0	76	26	3	7	0	36	603
1:15 - 1:30	18	232	26	0	276	41	190	15	0	246	36	1	51	0	88	29	6	11	0	46	656
1:30 - 1:45	8	174	29	0	211	23	138	23	0	184	18	4	37	0	59	25	0	15	0	40	494
1:45 - 2:00	6	171	20	0	197	33	174	23	0	230	24	2	36	0	62	22	4	12	0	38	527
2:00 - 2:15	6	177	26	0	209	58	193	18	0	269	34	0	39	0	73	19	5	9	0	33	584
2:15 - 2:30	9	211	21	0	241	34	163	17	0	214	34	1	64	0	99	15	6	10	0	31	585
2:30 - 2:45	6	214	27	0	247	25	150	12	0	187	22	4	37	0	63	21	3	9	0	33	530
2:45 - 3:00	2	196	12	0	210	34	151	11	0	196	23	1	33	0	57	20	3	3	0	26	489
3:00 - 3:15	8	194	31	0	233	22	185	13	0	220	30	0	34	0	64	7	0	2	0	9	526
3:15 - 3:30	8	204	26	0	238	32	176	12	0	220	26	3	45	0	74	11	0	14	0	25	557
3:30 - 3:45	10	218	41	0	269	60	208	14	0	282	38	6	66	0	110	22	5	11	0	38	699
3:45 - 4:00	8	231	40	0	279	74	191	18	0	283	39	6	70	0	115	36	5	12	0	53	730
4:00 - 4:15	16	286	33	0	335	39	168	19	0	226	28	3	70	0	101	32	6	11	0	49	711
4:15 - 4:30	10	237	34	0	281	52	170	13	0	235	20	1	43	0	64	27	2	14	0	43	623
4:30 - 4:45	11	242	21	0	274	40	193	11	0	244	38	4	42	0	84	21	3	8	0	32	634
4:45 - 5:00	7	256	30	0	293	37	210	12	0	259	30	2	40	0	72	14	6	8	0	28	652
5:00 - 5:15	4	265	34	0	303	54	219	19	0	292	40	3	87	0	130	12	7	10	0	29	754
5:15 - 5:30	9	265	29	0	303	77	190	10	0	277	47	10	90	0	147	27	4	5	0	36	763
5:30 - 5:45	4	271	39	0	314	64	217	13	0	294	37	3	60	0	100	26	3	6	0	35	743
5:45 - 6:00	5	194	24	0	223	54	206	10	0	270	43	5	42	0	90	10	4	10	0	24	607
6:00 - 6:15	4	204	22	0	230	42	183	22	0	247	24	11	35	0	70	23	5	6	0	34	581
6:15 - 6:30	5	220	19	0	244	51	204	11	0	266	30	3	43	0	76	13	4	5	0	22	608
6:30 - 6:45	8	204	34	0	246	54	191	8	0	253	26	0	56	0	82	13	2	4	0	19	600
6:45 - 7:00	4	166	42	0	212	74	174	8	0	256	38	3	77	0	118	19	4	10	0	33	619
12 Hr Totals	434	8537	1226	0	10197	2328	8868	968	2	12166	1166	152	1871	1	3190	926	181	438	0	1545	27098

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road — Date: April 04, 2018 — Wednesday

and: Bluestone Drive - Hillside Avenue — Weather: Mild, Light Rain

Location: Rockingham County, Virginia — Entered by: CK — Star Rating: 5

TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: Bluestone Drive					TRAFFIC FROM WEST on: Hillside Avenue					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
1 Hr Totals																					
7:00 - 8:00	22	386	109	0	517	309	759	95	0	1163	31	4	31	0	66	48	14	40	0	102	1848
7:15 - 8:15	27	426	127	0	580	332	867	97	0	1296	37	4	34	1	76	49	16	43	0	108	2060
7:30 - 8:30	26	445	130	0	601	319	889	98	0	1306	41	4	39	1	85	44	16	42	0	102	2094
7:45 - 8:45	29	479	117	0	625	243	918	97	0	1258	38	8	41	1	88	49	19	42	0	110	2081
8:00 - 9:00	42	504	109	0	655	217	932	102	0	1251	42	10	65	1	118	46	16	38	0	100	2124
8:15 - 9:15	44	512	103	0	659	227	907	107	1	1242	70	10	119	0	199	48	17	35	0	100	2200
8:30 - 9:30	45	484	87	0	616	220	845	99	1	1165	67	9	122	0	198	53	15	32	0	100	2079
8:45 - 9:45	53	487	89	0	629	197	769	100	1	1067	68	9	129	0	206	55	13	24	0	92	1994
9:00 - 10:00	47	521	82	0	650	205	709	114	1	1029	74	5	118	0	197	58	13	26	0	97	1973
9:15 - 10:15	50	543	81	0	674	184	669	118	0	971	78	11	111	0	200	71	11	30	0	112	1957
9:30 - 10:30	51	561	85	0	697	176	716	130	0	1022	82	16	112	0	210	76	13	34	0	123	2052
9:45 - 10:45	42	620	85	0	747	164	696	129	0	989	85	16	114	0	215	78	12	35	0	125	2076
10:00 - 11:00	44	601	79	0	724	150	673	112	0	935	82	19	121	0	222	84	14	39	0	137	2018
10:15 - 11:15	40	612	93	0	745	165	680	109	0	954	64	19	126	0	209	86	14	39	0	139	2047
10:30 - 11:30	47	662	92	0	801	170	649	101	0	920	81	18	145	0	244	89	15	41	0	145	2110
10:45 - 11:45	51	657	92	0	800	177	651	88	0	916	84	16	148	0	248	87	16	40	0	143	2107
11:00 - 12:00	46	673	89	0	808	157	634	84	0	875	80	17	146	0	243	83	15	39	0	137	2063
11:15 - 12:15	47	660	62	0	769	164	651	83	0	898	71	18	119	0	208	79	18	40	0	137	2012
11:30 - 12:30	42	664	73	0	779	154	672	93	1	920	75	18	140	0	233	102	17	44	0	163	2095
11:45 - 12:45	40	676	71	0	787	164	704	103	1	972	100	21	143	0	264	105	18	48	0	171	2194
12:00 - 1:00	42	650	68	0	760	158	719	109	1	987	105	19	146	0	270	117	19	44	0	180	2197
12:15 - 1:15	46	672	90	0	808	158	744	103	1	1006	117	13	158	0	288	118	16	40	0	174	2276
12:30 - 1:30	52	720	89	0	861	173	757	90	0	1020	124	10	154	0	288	102	19	35	0	156	2325
12:45 - 1:45	51	714	101	0	866	159	702	86	0	947	99	9	166	0	274	108	14	40	0	162	2249
1:00 - 2:00	47	747	105	0	899	155	700	81	0	936	105	9	171	0	285	102	13	45	0	160	2280
1:15 - 2:15	38	754	101	0	893	155	695	79	0	929	112	7	163	0	282	95	15	47	0	157	2261
1:30 - 2:30	29	733	96	0	858	148	668	81	0	897	110	7	176	0	293	81	15	46	0	142	2190
1:45 - 2:45	27	773	94	0	894	150	680	70	0	900	114	7	176	0	297	77	18	40	0	135	2226
2:00 - 3:00	23	798	86	0	907	151	657	58	0	866	113	6	173	0	292	75	17	31	0	123	2188
2:15 - 3:15	25	815	91	0	931	115	649	53	0	817	109	6	168	0	283	63	12	24	0	99	2130
2:30 - 3:30	24	808	96	0	928	113	662	48	0	823	101	8	149	0	258	59	6	28	0	93	2102
2:45 - 3:45	28	812	110	0	950	148	720	50	0	918	117	10	178	0	305	60	8	30	0	98	2271
3:00 - 4:00	34	847	138	0	1019	188	760	57	0	1005	133	15	215	0	363	76	10	39	0	125	2512
3:15 - 4:15	42	939	140	0	1121	205	743	63	0	1011	131	18	251	0	400	101	16	48	0	165	2697
3:30 - 4:30	44	972	148	0	1164	225	737	64	0	1026	125	16	249	0	390	117	18	48	0	183	2763
3:45 - 4:45	45	996	128	0	1169	205	722	61	0	988	125	14	225	0	364	116	16	45	0	177	2698
4:00 - 5:00	44	1021	118	0	1183	168	741	55	0	964	116	10	195	0	321	94	17	41	0	152	2620
4:15 - 5:15	32	1000	119	0	1151	183	792	55	0	1030	128	10	212	0	350	74	18	40	0	132	2663
4:30 - 5:30	31	1028	114	0	1173	208	812	52	0	1072	155	19	259	0	433	74	20	31	0	125	2803
4:45 - 5:45	24	1057	132	0	1213	232	836	54	0	1122	154	18	277	0	449	79	20	29	0	128	2912
5:00 - 6:00	22	995	126	0	1143	249	832	52	0	1133	167	21	279	0	467	75	18	31	0	124	2867
5:15 - 6:15	22	934	114	0	1070	237	796	55	0	1088	151	29	227	0	407	86	16	27	0	129	2694
5:30 - 6:30	18	889	104	0	1011	211	810	56	0	1077	134	22	180	0	336	72	16	27	0	115	2539
5:45 - 6:45	22	822	99	0	943	201	784	51	0	1036	123	19	176	0	318	59	15	25	0	99	2396
6:00 - 7:00	21	794	117	0	932	221	752	49	0	1022	118	17	211	0	346	68	15	25	0	108	2408
PEAK HOUR																					
8:15 - 9:15	44	512	103	0	659	227	907	107	1	1242	70	10	119	0	199	48	17	35	0	100	2200
4:45 - 5:45	24	1057	132	0	1213	232	836	54	0	1122	154	18	277	0	449	79	20	29	0	128	2912

Port Republic and Southbound Ramps

Leg	South		North			East		
Direction	Northbound		Southbound			Westbound		
Start Time	Left	Thru	Left	Thru	Right	Left	Thru	Right
2018-04-04 07:00:00	39	112	0	72	28	14	0	40
2018-04-04 07:15:00	48	208	0	92	33	26	0	43
2018-04-04 07:30:00	36	352	0	92	21	34	0	48
2018-04-04 07:45:00	41	288	0	97	34	53	0	73
2018-04-04 08:00:00	29	234	0	96	35	27	0	34
2018-04-04 08:15:00	35	248	0	133	29	32	0	55
2018-04-04 08:30:00	27	289	0	124	13	39	0	33
2018-04-04 08:45:00	36	304	0	154	13	34	0	43
2018-04-04 09:00:00	29	246	0	178	35	36	0	30
2018-04-04 09:15:00	24	176	0	117	35	26	0	35
2018-04-04 09:30:00	22	206	0	118	18	20	1	29
2018-04-04 09:45:00	18	278	0	165	12	20	1	34
2018-04-04 10:00:00	24	213	0	232	28	19	1	22
2018-04-04 10:15:00	27	205	0	145	18	24	2	40
2018-04-04 10:30:00	38	165	0	175	30	23	0	33
2018-04-04 10:45:00	30	234	0	164	30	29	0	35
2018-04-04 11:00:00	33	237	0	218	20	21	0	22
2018-04-04 11:15:00	40	169	0	203	25	29	0	35
2018-04-04 11:30:00	44	166	0	164	28	19	0	37
2018-04-04 11:45:00	38	208	0	182	22	22	0	28
2018-04-04 12:00:00	45	234	0	194	21	20	0	31
2018-04-04 12:15:00	53	183	0	270	22	27	0	31
2018-04-04 12:30:00	48	227	0	188	31	42	0	37
2018-04-04 12:45:00	39	211	0	191	25	26	0	39
2018-04-04 13:00:00	42	223	0	192	32	23	0	41
2018-04-04 13:15:00	52	216	0	260	32	25	0	33
2018-04-04 13:30:00	53	168	0	217	38	22	0	28
2018-04-04 13:45:00	24	207	0	214	30	25	0	32
2018-04-04 14:00:00	37	227	0	185	20	22	0	35
2018-04-04 14:15:00	36	194	0	237	27	29	0	32
2018-04-04 14:30:00	58	163	0	242	48	25	0	33
2018-04-04 14:45:00	50	157	0	206	40	31	0	30
2018-04-04 15:00:00	54	167	0	184	35	29	0	41
2018-04-04 15:15:00	45	186	0	215	41	37	0	38
2018-04-04 15:30:00	43	252	0	277	52	25	0	41
2018-04-04 15:45:00	46	248	0	267	24	24	0	37
2018-04-04 16:00:00	44	191	0	336	48	39	0	33
2018-04-04 16:15:00	72	226	0	275	69	25	0	32
2018-04-04 16:30:00	80	187	0	219	60	32	0	43
2018-04-04 16:45:00	73	224	0	243	57	39	0	31
2018-04-04 17:00:00	47	254	0	304	66	42	0	52
2018-04-04 17:15:00	57	239	0	325	66	34	0	47
2018-04-04 17:30:00	55	221	0	290	57	39	0	50
2018-04-04 17:45:00	48	219	0	209	33	33	0	40
2018-04-04 18:00:00	38	230	0	238	30	31	0	44
2018-04-04 18:15:00	45	235	0	250	31	24	0	40
2018-04-04 18:30:00	38	212	0	227	34	28	0	32
2018-04-04 18:45:00	41	219	0	242	21	26	0	42

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road | Date: April 04, 2018 | Wednesday

and: I-81NB On Ramp - I-81NB Off Ramp | Weather: Mild, Light Rain

Location: Rockingham County, Virginia | Entered by: CK | Star Rating: 4

TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: I-81NB On Ramp					TRAFFIC FROM WEST on: I-81NB Off Ramp					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	0	57	25	0	82	23	119	0	0	142	0	0	0	0	0	32	0	28	0	60	284
7:15 - 7:30	0	88	32	0	120	21	204	0	0	225	0	0	0	0	0	37	0	56	0	93	438
7:30 - 7:45	0	97	27	0	124	26	333	0	0	359	0	0	0	0	0	44	0	59	0	103	586
7:45 - 8:00	0	126	29	0	155	36	272	0	0	308	0	0	0	0	0	51	1	55	0	107	570
8:00 - 8:15	0	94	32	0	126	30	200	0	0	230	0	0	0	0	0	50	1	63	0	114	470
8:15 - 8:30	0	127	25	0	152	34	240	0	0	274	0	0	0	0	0	61	0	48	0	109	535
8:30 - 8:45	0	141	31	0	172	27	282	0	0	309	0	0	0	0	0	50	0	48	0	98	579
8:45 - 9:00	0	161	33	0	194	21	274	0	0	295	0	0	0	0	0	53	0	63	0	116	605
9:00 - 9:15	0	184	24	0	208	28	220	0	0	248	0	0	0	0	0	46	0	46	0	92	548
9:15 - 9:30	0	114	28	0	142	25	168	0	1	194	0	0	0	0	0	41	0	36	0	77	413
9:30 - 9:45	0	110	33	0	143	18	188	0	0	206	0	0	0	0	0	44	0	44	0	88	437
9:45 - 10:00	0	176	22	0	198	24	269	0	0	293	0	0	0	0	0	45	1	35	0	81	572
10:00 - 10:15	0	210	29	0	239	21	205	0	0	226	0	0	0	0	0	35	0	21	0	56	521
10:15 - 10:30	0	139	30	0	169	25	188	0	0	213	0	0	0	0	0	31	1	39	0	71	453
10:30 - 10:45	0	155	39	0	194	20	174	0	0	194	0	0	0	0	0	50	0	29	0	79	467
10:45 - 11:00	0	163	33	0	196	31	247	0	0	278	0	0	0	0	0	51	0	31	0	82	556
11:00 - 11:15	0	202	46	0	248	29	235	0	0	264	0	0	0	0	0	40	0	23	0	63	575
11:15 - 11:30	0	205	39	0	244	28	183	0	0	211	0	0	0	0	0	41	0	22	0	63	518
11:30 - 11:45	0	147	35	0	182	30	174	0	0	204	0	0	0	0	0	47	0	28	0	75	461
11:45 - 12:00	0	171	26	0	197	47	218	0	0	265	0	0	0	0	0	37	0	31	0	68	530
12:00 - 12:15	0	185	41	0	226	37	253	0	0	290	0	0	0	0	0	68	0	24	0	92	608
12:15 - 12:30	0	258	32	0	290	31	190	0	0	221	0	0	0	0	0	56	2	33	0	91	602
12:30 - 12:45	0	194	32	0	226	35	247	0	0	282	0	0	0	0	0	60	0	38	0	98	606
12:45 - 1:00	0	179	36	0	215	35	219	0	0	254	0	0	0	0	0	51	0	32	0	83	552
1:00 - 1:15	0	199	28	0	227	34	228	0	0	262	0	0	0	0	0	46	0	41	0	87	576
1:15 - 1:30	0	249	44	0	293	28	235	0	0	263	0	0	0	0	0	51	0	29	0	80	636
1:30 - 1:45	0	186	43	0	229	22	196	0	0	218	0	0	0	0	0	52	0	27	0	79	526
1:45 - 2:00	0	199	44	0	243	46	207	0	0	253	0	0	0	0	0	46	0	24	0	70	566
2:00 - 2:15	0	175	38	0	213	28	243	0	0	271	0	0	0	0	0	50	0	31	0	81	565
2:15 - 2:30	0	232	46	0	278	27	214	0	0	241	0	0	0	0	0	38	0	17	0	55	574
2:30 - 2:45	0	216	39	0	255	31	200	0	0	231	0	0	0	0	0	37	0	23	0	60	546
2:45 - 3:00	0	203	49	0	252	34	182	0	0	216	0	0	0	0	0	38	0	31	0	69	537
3:00 - 3:15	0	185	42	0	227	28	201	0	0	229	0	0	0	0	0	38	0	27	0	65	521
3:15 - 3:30	0	200	37	0	237	30	210	0	0	240	0	0	0	0	0	58	0	29	0	87	564
3:30 - 3:45	0	255	52	0	307	43	272	0	0	315	0	0	0	0	0	51	0	27	0	78	700
3:45 - 4:00	0	252	53	0	305	49	238	0	0	287	0	0	0	0	0	53	0	44	0	97	689
4:00 - 4:15	0	304	53	0	357	47	211	0	0	258	0	0	0	0	0	45	0	41	0	86	701
4:15 - 4:30	0	240	58	0	298	60	260	0	0	320	0	0	0	0	0	62	0	41	0	103	721
4:30 - 4:45	0	223	49	0	272	45	237	0	0	282	0	0	0	0	0	52	0	33	0	85	639
4:45 - 5:00	0	237	52	0	289	73	239	0	0	312	0	0	0	0	0	62	0	38	0	100	701
5:00 - 5:15	0	267	57	0	324	53	294	0	0	347	0	0	0	0	0	41	1	35	0	77	748
5:15 - 5:30	0	319	57	0	376	55	246	0	0	301	0	0	0	0	0	62	0	38	0	100	777
5:30 - 5:45	0	283	53	0	336	52	236	0	0	288	0	0	0	0	0	66	0	42	0	108	732
5:45 - 6:00	0	194	42	0	236	36	242	0	0	278	0	0	0	0	0	40	0	26	0	66	580
6:00 - 6:15	0	227	39	0	266	32	238	0	0	270	0	0	0	0	0	43	0	28	0	71	607
6:15 - 6:30	0	238	42	0	280	37	221	0	0	258	0	0	0	0	0	52	0	42	0	94	632
6:30 - 6:45	0	207	44	0	251	31	220	0	0	251	0	0	0	0	0	37	0	25	0	62	564
6:45 - 7:00	0	233	36	0	269	34	241	0	0	275	0	0	0	0	0	34	0	19	0	53	597
12 Hr Totals	0	9206	1856	0	11062	1637	10813	0	1	12451	0	0	0	0	0	2275	7	1690	0	3972	27485

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road — Date: April 04, 2018 — Wednesday

and: I-81NB On Ramp - I-81NB Off Ramp — Weather: Mild, Light Rain

Location: Rockingham County, Virginia — Entered by: CK — Star Rating: 4

TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: I-81NB On Ramp					TRAFFIC FROM WEST on: I-81NB Off Ramp					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
1 Hr Totals																					
7:00 - 8:00	0	368	113	0	481	106	928	0	0	1034	0	0	0	0	0	164	1	198	0	363	1878
7:15 - 8:15	0	405	120	0	525	113	1009	0	0	1122	0	0	0	0	0	182	2	233	0	417	2064
7:30 - 8:30	0	444	113	0	557	126	1045	0	0	1171	0	0	0	0	0	206	2	225	0	433	2161
7:45 - 8:45	0	488	117	0	605	127	994	0	0	1121	0	0	0	0	0	212	2	214	0	428	2154
8:00 - 9:00	0	523	121	0	644	112	996	0	0	1108	0	0	0	0	0	214	1	222	0	437	2189
8:15 - 9:15	0	613	113	0	726	110	1016	0	0	1126	0	0	0	0	0	210	0	205	0	415	2267
8:30 - 9:30	0	600	116	0	716	101	944	0	1	1046	0	0	0	0	0	190	0	193	0	383	2145
8:45 - 9:45	0	569	118	0	687	92	850	0	1	943	0	0	0	0	0	184	0	189	0	373	2003
9:00 - 10:00	0	584	107	0	691	95	845	0	1	941	0	0	0	0	0	176	1	161	0	338	1970
9:15 - 10:15	0	610	112	0	722	88	830	0	1	919	0	0	0	0	0	165	1	136	0	302	1943
9:30 - 10:30	0	635	114	0	749	88	850	0	0	938	0	0	0	0	0	155	2	139	0	296	1983
9:45 - 10:45	0	680	120	0	800	90	836	0	0	926	0	0	0	0	0	161	2	124	0	287	2013
10:00 - 11:00	0	667	131	0	798	97	814	0	0	911	0	0	0	0	0	167	1	120	0	288	1997
10:15 - 11:15	0	659	148	0	807	105	844	0	0	949	0	0	0	0	0	172	1	122	0	295	2051
10:30 - 11:30	0	725	157	0	882	108	839	0	0	947	0	0	0	0	0	182	0	105	0	287	2116
10:45 - 11:45	0	717	153	0	870	118	839	0	0	957	0	0	0	0	0	179	0	104	0	283	2110
11:00 - 12:00	0	725	146	0	871	134	810	0	0	944	0	0	0	0	0	165	0	104	0	269	2084
11:15 - 12:15	0	708	141	0	849	142	828	0	0	970	0	0	0	0	0	193	0	105	0	298	2117
11:30 - 12:30	0	761	134	0	895	145	835	0	0	980	0	0	0	0	0	208	2	116	0	326	2201
11:45 - 12:45	0	808	131	0	939	150	908	0	0	1058	0	0	0	0	0	221	2	126	0	349	2346
12:00 - 1:00	0	816	141	0	957	138	909	0	0	1047	0	0	0	0	0	235	2	127	0	364	2368
12:15 - 1:15	0	830	128	0	958	135	884	0	0	1019	0	0	0	0	0	213	2	144	0	359	2336
12:30 - 1:30	0	821	140	0	961	132	929	0	0	1061	0	0	0	0	0	208	0	140	0	348	2370
12:45 - 1:45	0	813	151	0	964	119	878	0	0	997	0	0	0	0	0	200	0	129	0	329	2290
1:00 - 2:00	0	833	159	0	992	130	866	0	0	996	0	0	0	0	0	195	0	121	0	316	2304
1:15 - 2:15	0	809	169	0	978	124	881	0	0	1005	0	0	0	0	0	199	0	111	0	310	2293
1:30 - 2:30	0	792	171	0	963	123	860	0	0	983	0	0	0	0	0	186	0	99	0	285	2231
1:45 - 2:45	0	822	167	0	989	132	864	0	0	996	0	0	0	0	0	171	0	95	0	266	2251
2:00 - 3:00	0	826	172	0	998	120	839	0	0	959	0	0	0	0	0	163	0	102	0	265	2222
2:15 - 3:15	0	836	176	0	1012	120	797	0	0	917	0	0	0	0	0	151	0	98	0	249	2178
2:30 - 3:30	0	804	167	0	971	123	793	0	0	916	0	0	0	0	0	171	0	110	0	281	2168
2:45 - 3:45	0	843	180	0	1023	135	865	0	0	1000	0	0	0	0	0	185	0	114	0	299	2322
3:00 - 4:00	0	892	184	0	1076	150	921	0	0	1071	0	0	0	0	0	200	0	127	0	327	2474
3:15 - 4:15	0	1011	195	0	1206	169	931	0	0	1100	0	0	0	0	0	207	0	141	0	348	2654
3:30 - 4:30	0	1051	216	0	1267	199	981	0	0	1180	0	0	0	0	0	211	0	153	0	364	2811
3:45 - 4:45	0	1019	213	0	1232	201	946	0	0	1147	0	0	0	0	0	212	0	159	0	371	2750
4:00 - 5:00	0	1004	212	0	1216	225	947	0	0	1172	0	0	0	0	0	221	0	153	0	374	2762
4:15 - 5:15	0	967	216	0	1183	231	1030	0	0	1261	0	0	0	0	0	217	1	147	0	365	2809
4:30 - 5:30	0	1046	215	0	1261	226	1016	0	0	1242	0	0	0	0	0	217	1	144	0	362	2865
4:45 - 5:45	0	1106	219	0	1325	233	1015	0	0	1248	0	0	0	0	0	231	1	153	0	385	2958
5:00 - 6:00	0	1063	209	0	1272	196	1018	0	0	1214	0	0	0	0	0	209	1	141	0	351	2837
5:15 - 6:15	0	1023	191	0	1214	175	962	0	0	1137	0	0	0	0	0	211	0	134	0	345	2696
5:30 - 6:30	0	942	176	0	1118	157	937	0	0	1094	0	0	0	0	0	201	0	138	0	339	2551
5:45 - 6:45	0	866	167	0	1033	136	921	0	0	1057	0	0	0	0	0	172	0	121	0	293	2383
6:00 - 7:00	0	905	161	0	1066	134	920	0	0	1054	0	0	0	0	0	166	0	114	0	280	2400
PEAK HOUR																					
8:15 - 9:15	0	613	113	0	726	110	1016	0	0	1126	0	0	0	0	0	210	0	205	0	415	2267
4:45 - 5:45	0	1106	219	0	1325	233	1015	0	0	1248	0	0	0	0	0	231	1	153	0	385	2958

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road | Date: April 04, 2018 | Wednesday

and: Forest Hill Road - Parking Lot | Weather: Mild, Light Rain

Location: Rockingham County, Virginia | Entered by: CK | Star Rating: 3

TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: Forest Hill Road					TRAFFIC FROM WEST on: Parking Lot					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	1	65	21	0	87	15	129	0	0	144	17	1	8	0	26	0	0	1	0	1	258
7:15 - 7:30	2	100	21	0	123	26	190	0	0	216	32	4	6	0	42	0	2	0	0	2	383
7:30 - 7:45	4	108	20	0	132	31	323	0	0	354	35	1	12	0	48	0	0	1	0	1	535
7:45 - 8:00	1	139	41	0	181	32	273	0	0	305	32	0	11	0	43	0	0	1	0	1	530
8:00 - 8:15	3	106	35	0	144	27	194	0	0	221	34	1	14	0	49	0	1	1	0	2	416
8:15 - 8:30	5	141	39	0	185	25	240	0	0	265	23	1	12	0	36	0	1	2	0	3	489
8:30 - 8:45	13	144	38	0	195	50	294	0	0	344	35	2	12	0	49	0	1	1	0	2	590
8:45 - 9:00	22	144	49	0	215	52	248	0	0	300	43	7	16	0	66	1	3	0	0	4	585
9:00 - 9:15	32	168	32	0	232	25	193	0	0	218	29	9	23	0	61	1	6	0	0	7	518
9:15 - 9:30	14	115	29	0	158	26	162	0	0	188	26	5	10	0	41	0	4	2	0	6	393
9:30 - 9:45	4	106	40	0	150	58	178	0	0	236	31	5	11	0	47	0	3	3	0	6	439
9:45 - 10:00	7	166	51	0	224	84	237	0	0	321	50	1	15	0	66	0	0	3	0	3	614
10:00 - 10:15	4	177	54	0	235	39	168	0	0	207	47	0	26	0	73	0	4	7	0	11	526
10:15 - 10:30	1	126	48	0	175	21	166	0	0	187	55	1	18	0	74	0	1	1	0	2	438
10:30 - 10:45	2	152	51	0	205	24	167	0	0	191	32	3	10	0	45	0	6	3	0	9	450
10:45 - 11:00	6	153	51	0	210	63	206	0	0	269	49	1	17	0	67	1	2	1	0	4	550
11:00 - 11:15	1	184	49	0	234	27	207	0	0	234	57	2	26	0	85	0	3	4	0	7	560
11:15 - 11:30	4	185	66	0	255	23	153	0	0	176	57	2	40	0	99	0	2	3	0	5	535
11:30 - 11:45	4	130	61	0	195	15	143	0	0	158	62	2	20	0	84	0	5	3	0	8	445
11:45 - 12:00	10	158	35	0	203	42	202	0	0	244	53	4	22	0	79	0	0	3	0	3	529
12:00 - 12:15	14	191	53	0	258	36	220	0	0	256	44	0	24	0	68	3	9	24	0	36	618
12:15 - 12:30	29	233	55	0	317	25	160	0	0	185	53	1	50	0	104	4	3	22	0	29	635
12:30 - 12:45	21	190	47	0	258	30	176	0	0	206	69	0	36	0	105	1	8	16	0	25	594
12:45 - 1:00	27	153	46	0	226	41	200	0	0	241	46	0	28	0	74	0	6	9	0	15	556
1:00 - 1:15	22	176	46	0	244	56	211	0	0	267	68	6	33	0	107	0	1	2	0	3	621
1:15 - 1:30	6	234	54	0	294	26	181	0	0	207	70	7	48	0	125	1	2	7	0	10	636
1:30 - 1:45	6	173	52	0	231	23	151	0	0	174	45	2	34	0	81	3	2	3	0	8	494
1:45 - 2:00	5	188	57	0	250	31	203	0	0	234	57	1	26	0	84	0	3	5	0	8	576
2:00 - 2:15	1	174	55	0	230	38	212	0	0	250	55	0	43	0	98	0	1	3	0	4	582
2:15 - 2:30	3	209	55	0	267	26	154	0	0	180	67	2	57	0	126	0	1	2	0	3	576
2:30 - 2:45	3	200	46	0	249	25	150	0	0	175	79	1	63	0	143	0	1	3	0	4	571
2:45 - 3:00	4	191	47	0	242	27	168	0	0	195	51	0	38	0	89	0	3	2	0	5	531
3:00 - 3:15	3	187	35	0	225	35	162	0	0	197	60	0	40	0	100	1	0	1	0	2	524
3:15 - 3:30	6	198	38	0	242	34	183	0	0	217	58	0	50	0	108	1	2	3	0	6	573
3:30 - 3:45	2	261	49	0	312	22	254	0	0	276	66	0	37	0	103	0	0	8	0	8	699
3:45 - 4:00	2	257	51	0	310	35	226	0	0	261	60	1	58	0	119	0	0	9	0	9	699
4:00 - 4:15	4	283	62	0	349	28	152	0	0	180	66	0	46	0	112	0	5	28	0	33	674
4:15 - 4:30	8	239	43	0	290	34	216	0	0	250	58	1	32	0	91	0	7	37	0	44	675
4:30 - 4:45	4	231	44	1	280	42	226	0	0	268	57	1	46	0	104	0	2	17	0	19	671
4:45 - 5:00	2	242	48	0	292	38	222	0	0	260	60	0	42	0	102	0	10	30	0	40	694
5:00 - 5:15	2	242	50	0	294	29	249	0	0	278	68	2	51	0	121	3	5	11	0	19	712
5:15 - 5:30	1	344	48	1	394	32	243	0	0	275	63	0	46	0	109	0	1	6	0	7	785
5:30 - 5:45	4	291	63	0	358	57	203	0	0	260	71	1	51	0	123	0	3	9	0	12	753
5:45 - 6:00	2	178	57	0	237	45	209	0	0	254	53	0	44	0	97	0	3	3	0	6	594
6:00 - 6:15	0	204	54	0	258	43	195	0	0	238	68	0	41	0	109	0	2	2	0	4	609
6:15 - 6:30	2	233	53	0	288	46	205	0	0	251	55	0	40	0	95	0	0	3	0	3	637
6:30 - 6:45	2	206	34	0	242	55	201	0	0	256	53	0	35	0	88	0	1	0	0	1	587
6:45 - 7:00	1	219	49	0	269	37	201	0	0	238	67	0	56	0	123	0	0	1	0	1	631
12 Hr Totals	326	8894	2222	2	11444	1701	9606	0	0	11307	2486	78	1524	0	4088	20	125	306	0	451	27290

VEHICLES TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: Port Republic Road — Date: April 04, 2018 — Wednesday

and: Forest Hill Road - Parking Lot — Weather: Mild, Light Rain

Location: Rockingham County, Virginia — Entered by: CK — Star Rating: 5

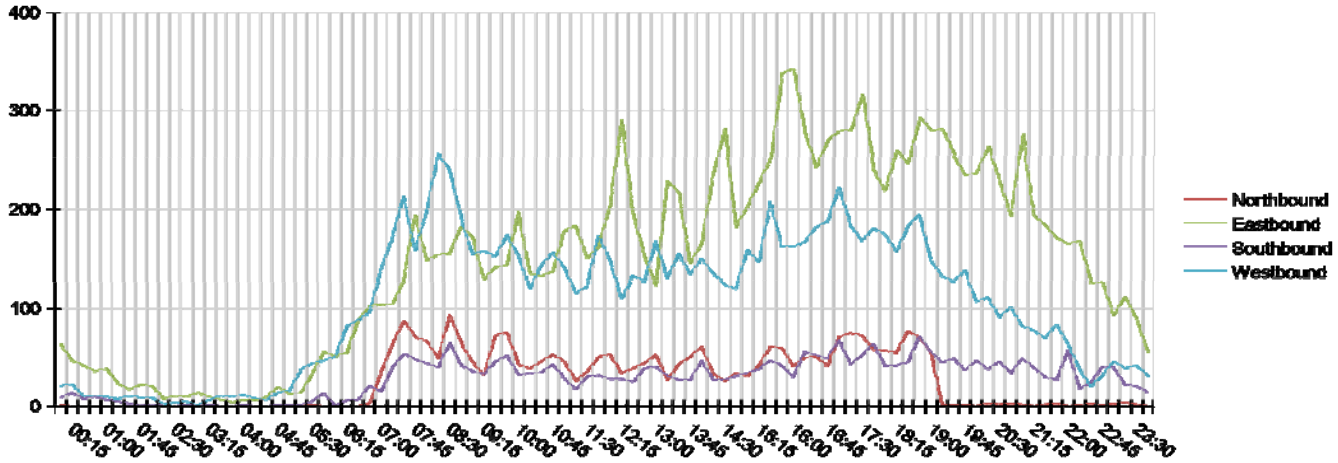
TIME	TRAFFIC FROM NORTH on: Port Republic Road					TRAFFIC FROM SOUTH on: Port Republic Road					TRAFFIC FROM EAST on: Forest Hill Road					TRAFFIC FROM WEST on: Parking Lot					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
1 Hr Totals																					
7:00 - 8:00	8	412	103	0	523	104	915	0	0	1019	116	6	37	0	159	0	2	3	0	5	1706
7:15 - 8:15	10	453	117	0	580	116	980	0	0	1096	133	6	43	0	182	0	3	3	0	6	1864
7:30 - 8:30	13	494	135	0	642	115	1030	0	0	1145	124	3	49	0	176	0	2	5	0	7	1970
7:45 - 8:45	22	530	153	0	705	134	1001	0	0	1135	124	4	49	0	177	0	3	5	0	8	2025
8:00 - 9:00	43	535	161	0	739	154	976	0	0	1130	135	11	54	0	200	1	6	4	0	11	2080
8:15 - 9:15	72	597	158	0	827	152	975	0	0	1127	130	19	63	0	212	2	11	3	0	16	2182
8:30 - 9:30	81	571	148	0	800	153	897	0	0	1050	133	23	61	0	217	2	14	3	0	19	2086
8:45 - 9:45	72	533	150	0	755	161	781	0	0	942	129	26	60	0	215	2	16	5	0	23	1935
9:00 - 10:00	57	555	152	0	764	193	770	0	0	963	136	20	59	0	215	1	13	8	0	22	1964
9:15 - 10:15	29	564	174	0	767	207	745	0	0	952	154	11	62	0	227	0	11	15	0	26	1972
9:30 - 10:30	16	575	193	0	784	202	749	0	0	951	183	7	70	0	260	0	8	14	0	22	2017
9:45 - 10:45	14	621	204	0	839	168	738	0	0	906	184	5	69	0	258	0	11	14	0	25	2028
10:00 - 11:00	13	608	204	0	825	147	707	0	0	854	183	5	71	0	259	1	13	12	0	26	1964
10:15 - 11:15	10	615	199	0	824	135	746	0	0	881	193	7	71	0	271	1	12	9	0	22	1998
10:30 - 11:30	13	674	217	0	904	137	733	0	0	870	195	8	93	0	296	1	13	11	0	25	2095
10:45 - 11:45	15	652	227	0	894	128	709	0	0	837	225	7	103	0	335	1	12	11	0	24	2090
11:00 - 12:00	19	657	211	0	887	107	705	0	0	812	229	10	108	0	347	0	10	13	0	23	2069
11:15 - 12:15	32	664	215	0	911	116	718	0	0	834	216	8	106	0	330	3	16	33	0	52	2127
11:30 - 12:30	57	712	204	0	973	118	725	0	0	843	212	7	116	0	335	7	17	52	0	76	2227
11:45 - 12:45	74	772	190	0	1036	133	758	0	0	891	219	5	132	0	356	8	20	65	0	93	2376
12:00 - 1:00	91	767	201	0	1059	132	756	0	0	888	212	1	138	0	351	8	26	71	0	105	2403
12:15 - 1:15	99	752	194	0	1045	152	747	0	0	899	236	7	147	0	390	5	18	49	0	72	2406
12:30 - 1:30	76	753	193	0	1022	153	768	0	0	921	253	13	145	0	411	2	17	34	0	53	2407
12:45 - 1:45	61	736	198	0	995	146	743	0	0	889	229	15	143	0	387	4	11	21	0	36	2307
1:00 - 2:00	39	771	209	0	1019	136	746	0	0	882	240	16	141	0	397	4	8	17	0	29	2327
1:15 - 2:15	18	769	218	0	1005	118	747	0	0	865	227	10	151	0	388	4	8	18	0	30	2288
1:30 - 2:30	15	744	219	0	978	118	720	0	0	838	224	5	160	0	389	3	7	13	0	23	2228
1:45 - 2:45	12	771	213	0	996	120	719	0	0	839	258	4	189	0	451	0	6	13	0	19	2305
2:00 - 3:00	11	774	203	0	988	116	684	0	0	800	252	3	201	0	456	0	6	10	0	16	2260
2:15 - 3:15	13	787	183	0	983	113	634	0	0	747	257	3	198	0	458	1	5	8	0	14	2202
2:30 - 3:30	16	776	166	0	958	121	663	0	0	784	248	1	191	0	440	2	6	9	0	17	2199
2:45 - 3:45	15	837	169	0	1021	118	767	0	0	885	235	0	165	0	400	2	5	14	0	21	2327
3:00 - 4:00	13	903	173	0	1089	126	825	0	0	951	244	1	185	0	430	2	2	21	0	25	2495
3:15 - 4:15	14	999	200	0	1213	119	815	0	0	934	250	1	191	0	442	1	7	48	0	56	2645
3:30 - 4:30	16	1040	205	0	1261	119	848	0	0	967	250	2	173	0	425	0	12	82	0	94	2747
3:45 - 4:45	18	1010	200	1	1229	139	820	0	0	959	241	3	182	0	426	0	14	91	0	105	2719
4:00 - 5:00	18	995	197	1	1211	142	816	0	0	958	241	2	166	0	409	0	24	112	0	136	2714
4:15 - 5:15	16	954	185	1	1156	143	913	0	0	1056	243	4	171	0	418	3	24	95	0	122	2752
4:30 - 5:30	9	1059	190	2	1260	141	940	0	0	1081	248	3	185	0	436	3	18	64	0	85	2862
4:45 - 5:45	9	1119	209	1	1338	156	917	0	0	1073	262	3	190	0	455	3	19	56	0	78	2944
5:00 - 6:00	9	1055	218	1	1283	163	904	0	0	1067	255	3	192	0	450	3	12	29	0	44	2844
5:15 - 6:15	7	1017	222	1	1247	177	850	0	0	1027	255	1	182	0	438	0	9	20	0	29	2741
5:30 - 6:30	8	906	227	0	1141	191	812	0	0	1003	247	1	176	0	424	0	8	17	0	25	2593
5:45 - 6:45	6	821	198	0	1025	189	810	0	0	999	229	0	160	0	389	0	6	8	0	14	2427
6:00 - 7:00	5	862	190	0	1057	181	802	0	0	983	243	0	172	0	415	0	3	6	0	9	2464
PEAK HOUR																					
8:15 - 9:15	72	597	158	0	827	152	975	0	0	1127	130	19	63	0	212	2	11	3	0	16	2182
4:45 - 5:45	9	1119	209	1	1338	156	917	0	0	1073	262	3	190	0	455	3	19	56	0	78	2944

GRIDSMART.

Turning Movement Counts

Intersection Port Republic Rd & Devon Ln
Date 10/3/2018

	Right	Through	Left	UTurn	Total
Northbound	257	178	2169	1	2605
Eastbound	2724	9795	1773	20	14312
Southbound	1913	235	625	3	2776
Westbound	509	9021	510	6	10046
Total	**5403**	**19229**	**5077**	**30**	**29739**



	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00	0	0	1	0	28	24	12	0	4	0	5	0	2	16	3	0
00:15	0	0	0	0	10	25	12	0	8	1	5	0	0	20	3	0
00:30	0	0	0	0	15	17	10	0	5	2	1	0	0	10	0	0
00:45	0	0	0	0	12	12	12	0	9	0	1	0	0	11	0	0
01:00	0	0	0	0	14	16	9	0	4	1	2	0	0	9	1	0
01:15	0	0	0	0	6	15	3	0	3	2	0	0	0	7	1	0
01:30	0	0	0	0	3	9	5	0	2	1	0	0	0	10	1	0
01:45	0	0	0	0	6	11	5	0	0	0	0	0	0	9	0	0
02:00	0	0	0	0	9	8	4	0	0	0	2	0	0	8	1	0
02:15	0	0	0	0	0	7	1	0	0	0	0	0	0	2	0	0
02:30	0	0	0	0	1	10	0	0	0	0	0	0	0	3	1	0
02:45	0	0	0	0	1	8	1	0	0	0	1	0	0	5	0	0
03:00	0	0	0	0	3	10	1	0	0	0	0	0	0	1	0	0
03:15	0	0	0	0	4	6	0	0	0	0	1	0	0	7	0	0
03:30	0	0	0	0	1	6	0	0	0	0	0	0	0	11	0	0
03:45	0	0	0	0	0	4	0	0	0	0	0	0	0	10	0	0
04:00	0	0	0	0	0	7	0	0	0	0	1	0	1	10	1	0
04:15	0	0	0	0	0	6	0	0	0	0	0	0	0	8	0	0
04:30	0	0	0	0	0	10	0	0	0	0	0	0	0	7	0	0
04:45	0	0	0	0	3	17	0	0	1	0	0	0	0	14	0	0
05:00	0	0	0	0	0	13	0	0	0	0	1	0	0	16	0	0
05:15	0	0	0	0	0	14	0	0	0	0	1	0	0	36	2	0
05:30	0	1	0	0	0	32	2	0	5	0	0	0	0	43	1	0
05:45	0	0	0	0	4	50	2	0	11	1	2	0	0	47	0	0
06:00	0	0	0	0	0	45	6	0	1	0	0	0	1	49	1	0
06:15	0	0	0	0	2	52	1	0	4	1	1	0	2	80	0	0
06:30	0	0	0	0	8	71	9	0	5	0	2	0	3	82	3	0
06:45	0	2	1	0	8	87	8	0	17	1	3	0	3	92	2	0
07:00	2	0	33	0	4	96	4	0	14	1	0	0	0	134	4	0
07:15	2	4	58	0	2	95	8	0	39	0	1	0	1	168	2	0
07:30	6	1	81	0	10	109	10	0	49	1	4	0	1	208	5	0
07:45	5	4	62	0	6	175	9	5	44	0	4	0	3	143	12	0
08:00	8	7	52	0	7	133	8	0	34	1	9	0	6	185	7	0
08:15	1	3	45	0	9	136	9	0	33	4	3	0	2	244	10	0
08:30	6	5	83	0	14	124	15	2	56	1	8	0	4	229	8	0
08:45	1	2	61	1	12	162	9	0	40	0	2	0	7	180	5	0
09:00	5	3	37	0	29	129	14	0	27	3	6	0	4	139	11	0
09:15	4	2	26	0	14	111	4	0	30	0	3	0	3	150	5	0
09:30	5	6	62	0	11	123	7	0	44	0	2	0	2	146	4	0
09:45	5	3	68	0	19	108	16	0	48	1	3	0	3	161	10	0
10:00	4	1	38	0	33	143	22	0	27	1	4	0	6	141	6	0
10:15	5	1	33	0	15	106	13	1	25	1	8	0	2	114	4	0
10:30	6	3	37	0	13	107	12	0	28	2	5	0	3	137	3	0
10:45	5	3	45	0	13	112	12	0	34	0	9	0	4	148	4	0
11:00	0	3	43	0	45	114	19	0	20	3	6	0	5	133	3	0

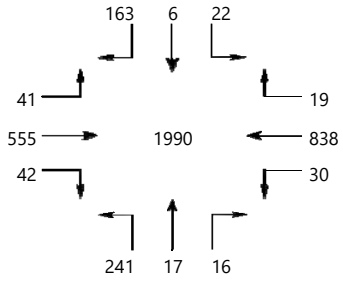
11:15	2	1	23	0	45	116	22	1	12	2	3	0	4	109	3	0
11:30	4	1	31	0	16	126	8	0	24	1	6	0	6	115	2	0
11:45	7	2	42	0	15	125	22	0	25	1	6	0	3	168	3	0
12:00	5	1	47	0	30	156	18	0	21	1	6	0	6	134	8	0
12:15	5	2	27	0	53	210	27	0	18	2	8	0	7	98	5	0
12:30	3	1	35	0	25	148	24	0	19	0	6	0	4	120	9	0
12:45	3	1	40	0	19	122	12	0	28	0	11	0	5	118	4	0
13:00	7	1	45	0	12	102	9	0	33	0	8	0	4	154	10	0
13:15	3	3	21	0	47	155	27	0	24	2	5	0	7	119	4	0
13:30	4	3	36	0	33	163	22	0	19	1	7	0	11	141	3	0
13:45	6	3	42	0	22	106	17	0	22	1	4	0	5	123	6	0
14:00	7	3	51	0	26	123	16	0	39	4	4	0	3	145	2	0
14:15	3	5	26	0	44	162	30	0	19	2	6	0	16	117	2	0
14:30	4	2	20	0	47	186	49	0	15	1	11	0	6	111	8	0
14:45	6	1	27	0	32	129	21	0	24	2	5	0	4	107	8	1
15:00	3	5	23	0	40	144	18	1	28	3	3	0	8	147	4	0
15:15	6	1	35	0	37	157	33	0	26	5	7	0	13	122	11	0
15:30	1	1	59	0	43	174	33	1	29	6	12	0	8	196	4	0
15:45	6	1	53	0	68	211	57	2	33	4	5	0	10	148	4	0
16:00	8	5	28	0	63	231	49	0	18	0	12	0	7	147	8	0
16:15	7	6	37	0	40	202	33	1	39	7	10	0	8	153	6	0
16:30	2	5	44	0	29	187	27	0	37	6	9	0	7	167	7	1
16:45	6	0	35	0	42	197	31	0	32	5	12	0	8	174	6	0
17:00	8	6	57	0	45	200	34	0	36	11	21	0	6	209	8	0
17:15	12	5	58	0	54	188	37	1	27	4	12	0	15	161	8	0
17:30	9	6	58	0	56	205	56	0	31	4	17	0	3	156	9	0
17:45	6	5	47	0	37	171	33	0	43	3	18	0	11	158	11	1
18:00	5	3	49	0	37	158	24	0	22	5	15	0	3	167	5	0
18:15	7	6	42	0	45	181	33	0	25	1	16	0	7	141	9	0
18:30	15	3	59	0	43	174	30	0	35	2	8	0	19	153	11	0
18:45	11	4	56	0	52	192	48	1	48	7	17	0	9	174	12	0
19:00	5	3	48	0	65	180	34	0	33	7	16	0	18	117	13	0
19:15	0	1	0	0	77	173	31	0	29	1	15	0	16	108	7	1
19:30	0	1	0	0	80	135	39	1	34	3	11	1	25	90	11	1
19:45	0	1	0	0	72	137	26	0	25	4	8	0	16	101	21	0
20:00	0	0	0	0	66	133	37	1	26	4	16	1	17	78	12	0
20:15	0	3	0	0	81	143	40	0	19	7	12	0	21	76	15	0
20:30	1	1	0	0	67	121	42	0	20	11	14	1	11	62	17	1
20:45	0	3	0	0	55	104	34	0	19	4	11	0	13	78	11	0
21:00	0	2	0	0	84	156	36	0	23	11	15	0	6	63	13	0
21:15	0	0	0	0	50	114	30	0	25	4	11	0	10	62	6	0
21:30	0	2	0	0	52	98	34	0	10	8	12	0	14	42	14	0
21:45	0	3	0	0	50	85	35	1	14	2	11	0	11	67	6	0
22:00	0	0	0	0	61	76	28	0	34	11	13	0	12	45	7	0
22:15	0	1	0	0	49	83	35	1	7	4	7	0	2	31	5	0
22:30	0	3	0	0	41	61	24	0	11	8	5	0	3	15	2	0
22:45	0	0	1	0	48	60	19	0	15	9	17	0	3	26	3	0
23:00	0	2	1	0	37	42	14	0	21	2	17	0	2	38	6	0
23:15	0	4	0	0	39	59	15	0	7	11	4	0	3	26	10	0
23:30	0	2	0	0	38	35	16	0	10	2	9	0	2	34	6	0
23:45	0	0	0	0	21	24	10	0	9	0	5	0	3	27	1	0
Total	**257**	**178**	**2169**	**1**	**2724**	**9795**	**1773**	**20**	**1913**	**235**	**625**	**3**	**509**	**9021**	**510**	**6**

GRIDSMART.

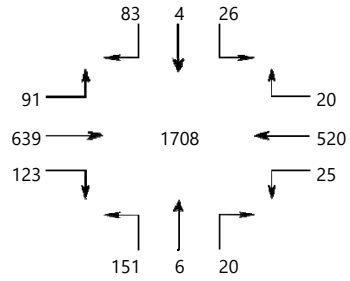
Turning Movement Counts

Intersection Port Republic Rd & Devon Ln
Date 10/3/2018

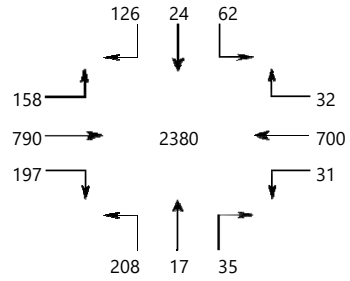
AM PEAK HOUR VOLUME (0:00-10:45)
FROM 08:00 TO 09:00



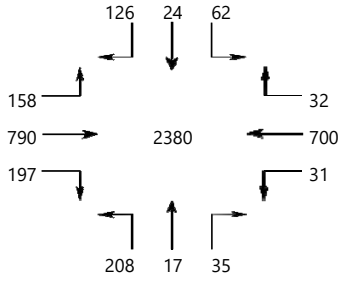
MID-DAY PEAK HOUR VOLUME (11:00-14:00)
FROM 11:45 TO 12:45



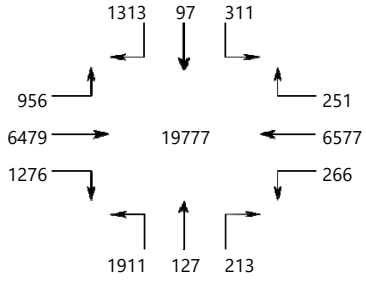
PM PEAK HOUR VOLUME (14:15-23:45)
FROM 16:45 TO 17:45



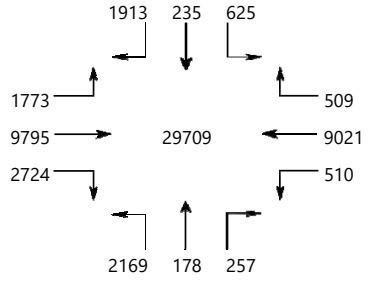
OVERALL PEAK HOUR VOLUME
FROM 16:45 TO 17:45



DAYTIME TOTAL VOLUME
FROM 07:00 TO 18:00



SELECTED TIME VOLUME
FROM 00:00 TO 23:59

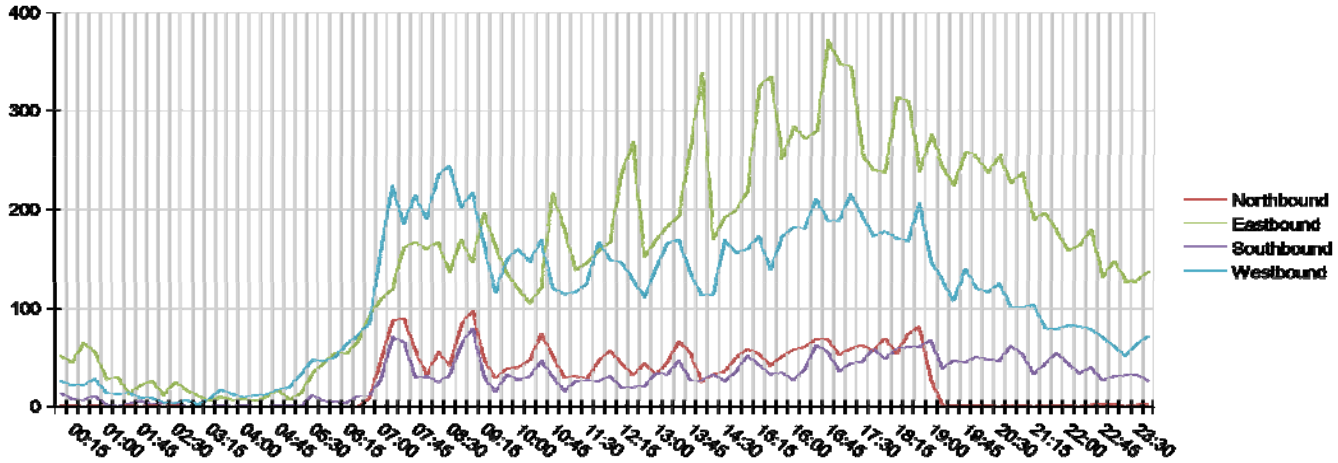


GRIDSMART.

Turning Movement Counts

Intersection Port Republic Rd & Devon Ln
Date 10/4/2018

	Right	Through	Left	UTurn	Total
Northbound	292	182	2153	0	2627
Eastbound	2965	10212	1776	14	14967
Southbound	1909	292	621	1	2823
Westbound	548	9428	638	12	10626
Total	**5714**	**20114**	**5188**	**27**	**31043**



	Northbound			Eastbound				Southbound				Westbound			
	R	T	L	R	T	L	U	R	T	L	U	R	T	L	U
00:00	0	1	0	18	22	12	0	7	1	6	0	1	22	3	0
00:15	0	1	0	11	19	15	0	3	1	4	0	0	20	2	0
00:30	0	0	0	20	34	11	0	2	2	3	0	2	20	0	0
00:45	0	1	0	20	25	11	0	7	3	1	0	0	22	6	0
01:00	0	0	0	7	17	4	0	1	1	0	0	1	8	5	0
01:15	0	0	0	13	12	5	0	0	0	0	0	0	13	0	0
01:30	0	1	0	1	8	4	0	3	0	0	0	1	10	3	0
01:45	0	0	0	9	11	2	0	4	0	2	0	1	7	1	0
02:00	0	1	0	11	10	5	0	0	1	1	0	0	9	0	0
02:15	0	0	0	3	6	3	0	1	1	2	0	0	4	0	0
02:30	0	1	0	2	20	3	0	2	1	0	0	0	3	0	0
02:45	0	0	0	6	10	1	0	0	0	0	0	0	6	1	0
03:00	0	0	0	3	6	2	0	0	0	0	0	0	2	0	0
03:15	0	0	0	1	4	1	0	0	0	0	0	0	8	0	0
03:30	0	0	0	0	7	3	0	1	0	0	0	0	17	0	0
03:45	0	0	0	0	7	0	0	0	0	0	0	0	13	0	0
04:00	0	0	0	2	6	0	0	0	1	0	0	0	9	0	0
04:15	0	0	0	1	4	1	0	0	0	0	0	0	12	0	0
04:30	0	0	0	0	10	0	0	0	0	0	0	0	12	0	0
04:45	0	0	0	0	17	0	0	1	0	0	0	0	15	2	0
05:00	0	0	0	1	6	0	0	0	0	1	0	0	19	1	0
05:15	0	0	0	1	13	0	0	0	0	0	0	0	33	0	0
05:30	0	0	0	4	30	0	0	11	0	1	0	0	47	1	0
05:45	0	0	0	3	39	3	0	6	0	0	0	0	46	0	0
06:00	0	0	0	0	51	4	0	4	0	1	0	1	50	0	0
06:15	0	0	0	2	48	4	0	4	0	0	0	1	62	1	0
06:30	0	0	0	0	61	6	0	10	0	1	0	0	71	2	0
06:45	0	1	8	5	84	4	0	11	0	0	0	1	81	4	0
07:00	3	1	44	3	100	7	0	25	2	2	0	1	152	4	0
07:15	3	2	83	4	113	3	0	66	2	3	0	2	221	2	0
07:30	4	3	83	8	148	5	0	51	2	13	0	4	170	11	0
07:45	7	3	47	5	156	6	0	25	0	4	0	4	187	24	0
08:00	3	0	29	8	142	10	0	23	3	5	0	5	168	17	0
08:15	9	3	44	6	158	3	0	22	0	3	0	4	211	20	0
08:30	1	1	40	10	119	7	0	29	1	2	0	5	233	7	0
08:45	13	5	66	12	140	18	0	54	1	9	0	1	196	5	0
09:00	8	5	85	10	124	12	0	74	1	5	0	4	208	5	0
09:15	5	0	43	29	143	25	0	23	1	6	0	8	147	10	0
09:30	2	1	26	12	133	18	0	11	1	3	0	4	109	3	0
09:45	6	3	30	14	116	5	0	26	2	5	0	3	140	5	1
10:00	4	3	33	8	101	11	0	20	1	6	0	9	142	9	0
10:15	10	2	36	11	87	8	0	27	2	2	0	5	138	4	0
10:30	6	1	68	17	93	12	0	36	4	7	0	4	158	7	0
10:45	4	3	44	43	156	18	0	25	0	5	0	5	113	3	0
11:00	2	1	27	39	128	14	0	10	3	3	0	3	110	2	0

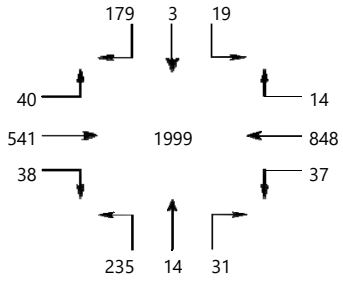
11:15	6	1	24	22	109	7	0	19	2	5	0	3	109	5	0
11:30	2	1	26	10	120	16	0	22	0	5	0	0	120	6	0
11:45	2	3	42	16	127	15	0	20	0	6	0	4	161	2	0
12:00	4	1	52	15	136	15	1	23	4	4	0	3	138	8	0
12:15	7	4	33	40	161	36	0	14	2	3	0	3	140	3	0
12:30	8	0	24	53	185	29	1	12	1	7	0	6	115	8	0
12:45	6	3	35	24	119	9	0	13	2	6	0	7	104	1	0
13:00	2	1	30	17	139	13	0	25	2	7	0	7	128	5	0
13:15	8	2	35	29	134	19	1	21	2	10	0	5	152	9	0
13:30	4	8	55	36	137	20	0	41	2	4	0	2	165	2	0
13:45	4	4	47	45	191	26	1	19	2	6	0	3	128	5	0
14:00	2	3	20	81	208	50	0	19	2	5	0	5	102	6	1
14:15	6	1	26	18	131	21	0	18	1	14	0	18	86	9	1
14:30	5	3	28	32	143	17	0	17	1	8	0	9	158	2	0
14:45	8	2	40	26	149	24	0	29	0	7	0	10	141	5	0
15:00	6	3	50	31	160	28	0	44	4	4	0	4	148	8	0
15:15	3	3	48	67	218	40	0	27	6	10	0	4	165	3	1
15:30	8	2	32	61	217	57	0	21	5	7	0	9	122	7	0
15:45	4	8	39	35	197	19	0	21	4	10	0	7	157	7	1
16:00	8	3	47	44	220	20	0	23	1	3	0	12	162	8	0
16:15	8	3	50	44	203	24	0	25	1	12	0	8	166	7	0
16:30	9	3	57	44	201	32	2	42	6	15	0	6	189	14	2
16:45	11	7	51	69	237	66	0	43	3	10	0	10	165	12	2
17:00	9	4	40	77	231	40	0	21	4	11	0	6	170	13	0
17:15	9	8	42	54	243	47	1	27	8	9	0	10	194	11	1
17:30	5	6	52	40	189	27	0	29	7	10	0	11	171	12	0
17:45	5	1	51	46	175	20	0	35	7	17	0	10	157	6	0
18:00	7	3	60	50	165	23	0	34	4	11	0	7	163	8	0
18:15	7	4	43	58	224	31	1	36	6	17	0	16	144	11	0
18:30	14	4	56	61	205	42	1	35	7	19	0	15	144	9	0
18:45	10	10	62	57	139	43	0	42	6	13	0	10	180	17	0
19:00	4	5	19	67	168	41	0	34	11	23	0	13	125	9	0
19:15	0	2	0	66	144	33	1	21	8	10	0	16	99	14	0
19:30	0	1	0	72	109	43	1	28	6	13	0	18	81	9	0
19:45	1	0	0	75	142	41	0	19	11	15	0	20	108	12	0
20:00	0	1	0	89	127	38	0	28	8	15	0	17	91	13	0
20:15	0	1	0	60	140	38	0	26	13	9	0	11	87	18	1
20:30	0	0	0	79	132	44	0	25	11	11	0	21	88	17	0
20:45	0	2	0	64	121	42	0	34	7	21	0	15	74	12	1
21:00	0	1	0	73	123	41	1	28	14	12	0	7	77	17	0
21:15	0	0	0	51	106	33	0	18	6	9	0	16	81	7	0
21:30	0	1	1	71	103	23	0	24	5	15	0	9	59	12	0
21:45	0	1	0	70	84	24	0	32	4	19	0	10	60	9	0
22:00	0	1	0	57	83	18	0	22	9	12	1	5	69	9	0
22:15	0	0	0	66	72	26	0	17	7	10	0	5	58	19	0
22:30	0	2	0	61	96	23	0	26	6	8	0	12	51	16	0
22:45	0	3	0	47	63	20	1	14	6	7	0	7	53	11	0
23:00	0	3	0	57	65	25	1	19	5	7	0	7	49	6	0
23:15	0	0	0	46	58	24	0	19	4	9	0	4	39	9	0
23:30	0	2	0	48	57	23	0	20	7	6	0	11	43	10	0
23:45	0	3	0	61	62	14	0	13	4	9	0	14	48	10	0
Total	**292**	**182**	**2153**	**2965**	**10212**	**1776**	**14**	**1909**	**292**	**621**	**1**	**548**	**9428**	**638**	**12**

GRIDSMART.

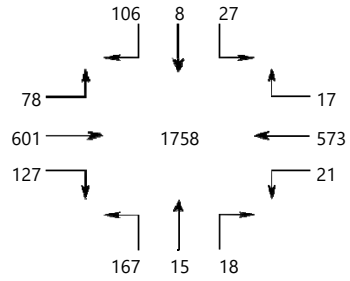
Turning Movement Counts

Intersection Port Republic Rd & Devon Ln
Date 10/4/2018

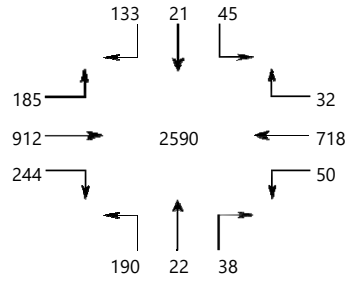
AM PEAK HOUR VOLUME (0:00-10:45)
FROM 08:15 TO 09:15



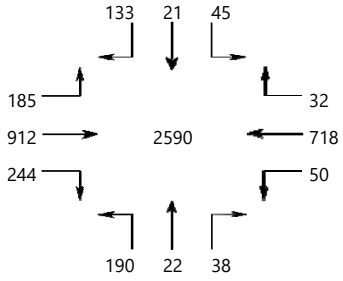
MID-DAY PEAK HOUR VOLUME (11:00-14:00)
FROM 13:00 TO 14:00



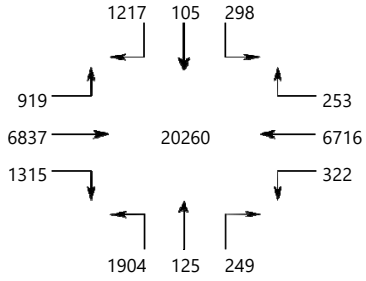
PM PEAK HOUR VOLUME (14:15-23:45)
FROM 16:30 TO 17:30



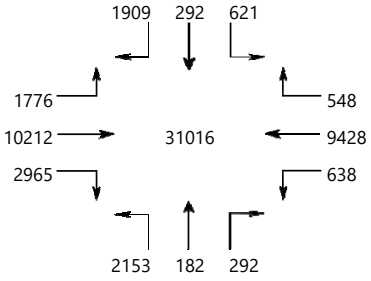
OVERALL PEAK HOUR VOLUME
FROM 16:30 TO 17:30



DAYTIME TOTAL VOLUME
FROM 07:00 TO 18:00



SELECTED TIME VOLUME
FROM 00:00 TO 23:59



AM PEAK HOUR TOTAL VEHICLES Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Hunters Road

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15																	0
7:15 to 7:30																	0
7:30 to 7:45																	0
7:45 to 8:00																	0
8:00 to 8:15																	0
8:15 to 8:30																	0
8:30 to 8:45																	0
8:45 to 9:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15	0	4	0	0	0	0	0	0	0	1	148	0	0	0	79	0	232
7:15 to 7:30	0	4	0	0	0	0	0	0	0	1	214	0	0	0	103	5	327
7:30 to 7:45	0	9	0	7	0	0	0	0	0	0	256	0	0	0	135	2	409
7:45 to 8:00	0	5	0	5	0	0	0	0	0	0	296	0	0	0	154	4	464
8:00 to 8:15	0	4	0	1	0	0	0	0	0	0	220	0	0	0	156	1	382
8:15 to 8:30	0	7	0	0	0	0	0	0	0	2	219	0	0	0	145	1	374
8:30 to 8:45	0	5	0	1	0	0	0	0	0	0	341	0	0	0	145	2	494
8:45 to 9:00	0	8	0	0	0	0	0	0	0	0	342	0	0	0	170	1	521

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 8:00	0	22	0	12	0	0	0	0	0	2	914	0	0	0	471	11	1432
7:15 to 8:15	0	22	0	13	0	0	0	0	0	1	986	0	0	0	548	12	1582
7:30 to 8:30	0	25	0	13	0	0	0	0	0	2	991	0	0	0	590	8	1629
7:45 to 8:45	0	21	0	7	0	0	0	0	0	2	1076	0	0	0	600	8	1714
8:00 to 9:00	0	24	0	2	0	0	0	0	0	2	1122	0	0	0	616	5	1771

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
8:00 to 9:00	0	24	0	2	0	0	0	0	0	2	1122	0	0	0	616	5	1771

PEAK HOUR FACTOR BY APPROACH

	EB	WB	NB	SB	
7:00 to 7:15	4	0	149	79	232
7:15 to 7:30	4	0	215	108	327
7:30 to 7:45	16	0	256	137	409
7:45 to 8:00	10	0	296	158	464
8:00 to 8:15	5	0	220	157	382
8:15 to 8:30	7	0	221	146	374
8:30 to 8:45	6	0	341	147	494
8:45 to 9:00	8	0	342	171	521
PHF	0.81	####	0.82	0.91	0.85

AM PEAK HOUR TRUCKS Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Hunters Road

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15																	0
7:15 to 7:30																	0
7:30 to 7:45																	0
7:45 to 8:00																	0
8:00 to 8:15																	0
8:15 to 8:30																	0
8:30 to 8:45																	0
8:45 to 9:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15	0	0	0	0	0	0	0	0	0	1	4	0	0	0	5	0	10
7:15 to 7:30	0	0	0	0	0	0	0	0	0	0	3	0	0	0	12	2	17
7:30 to 7:45	0	0	0	0	0	0	0	0	0	0	8	0	0	0	3	0	11
7:45 to 8:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
8:00 to 8:15	0	0	0	0	0	0	0	0	0	0	8	0	0	0	10	1	19
8:15 to 8:30	0	0	0	0	0	0	0	0	0	1	4	0	0	0	10	0	15
8:30 to 8:45	0	0	0	0	0	0	0	0	0	0	13	0	0	0	6	1	20
8:45 to 9:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	9	0	12

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 8:00	0	0	0	0	0	0	0	0	0	1	17	0	0	0	23	2	43
7:15 to 8:15	0	0	0	0	0	0	0	0	0	0	21	0	0	0	28	3	52
7:30 to 8:30	0	0	0	0	0	0	0	0	0	1	22	0	0	0	26	1	50
7:45 to 8:45	0	0	0	0	0	0	0	0	0	1	27	0	0	0	29	2	59
8:00 to 9:00	0	0	0	0	0	0	0	0	0	1	28	0	0	0	35	2	66

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
8:00 to 9:00	0	0	0	0	0	0	0	0	0	1	28	0	0	0	35	2	66

PERCENTAGE TRUCKS

EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
####	0%	####	0%	####	####	####	####	####	50%	2%	####	####	####	6%	40%	4%

PM PEAK HOUR TOTAL VEHICLES Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Hunters Road

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
3:45 to 4:00																	
4:00 to 4:15																	0
4:15 to 4:30																	0
4:30 to 4:45																	0
4:45 to 5:00																	0
5:00 to 5:15																	0
5:15 to 5:30																	0
5:30 to 5:45																	0
5:45 to 6:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 4:15	0	5	0	3	0	0	0	0	0	2	217	0	0	0	327	9	563
4:15 to 4:30	0	12	0	2	0	0	0	0	0	6	224	0	0	0	254	10	508
4:30 to 4:45	0	13	0	2	0	0	0	0	0	2	218	0	0	0	259	6	500
4:45 to 5:00	0	6	0	1	0	0	0	0	0	2	269	0	0	0	285	9	572
5:00 to 5:15	0	2	0	3	0	0	0	0	0	1	255	0	0	0	308	12	581
5:15 to 5:30	0	7	0	3	0	0	0	0	0	1	252	0	1	0	371	13	648
5:30 to 5:45	0	5	0	5	0	0	0	0	0	2	253	0	0	0	311	9	585
5:45 to 6:00	0	5	0	1	0	0	0	0	0	3	248	0	0	0	262	7	526

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 5:00	0	36	0	8	0	0	0	0	0	12	928	0	0	0	1125	34	2143
4:15 to 5:15	0	33	0	8	0	0	0	0	0	11	966	0	0	0	1106	37	2161
4:30 to 5:30	0	28	0	9	0	0	0	0	0	6	994	0	1	0	1223	40	2301
4:45 to 5:45	0	20	0	12	0	0	0	0	0	6	1029	0	1	0	1275	43	2386
5:00 to 6:00	0	19	0	12	0	0	0	0	0	7	1008	0	1	0	1252	41	2340

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:45 to 5:45	0	20	0	12	0	0	0	0	0	6	1029	0	1	0	1275	43	2386

PEAK HOUR FACTOR BY APPROACH

	EB	WB	NB	SB	
4:00 to 4:15	8	0	219	336	563
4:15 to 4:30	14	0	230	264	508
4:30 to 4:45	15	0	220	265	500
4:45 to 5:00	7	0	271	294	572
5:00 to 5:15	5	0	256	320	581
5:15 to 5:30	10	0	253	384	647
5:30 to 5:45	10	0	255	320	585
5:45 to 6:00	6	0	251	269	526
PHF	0.80	####	0.95	0.86	0.92

PM PEAK HOUR TRUCKS Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Hunters Road

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
3:45 to 4:00																	
4:00 to 4:15																	0
4:15 to 4:30																	0
4:30 to 4:45																	0
4:45 to 5:00																	0
5:00 to 5:15																	0
5:15 to 5:30																	0
5:30 to 5:45																	0
5:45 to 6:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 4:15	0	0	0	1	0	0	0	0	0	0	6	0	0	0	8	1	16
4:15 to 4:30	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14
4:30 to 4:45	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	0	11
4:45 to 5:00	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	1	13
5:00 to 5:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	1	6
5:15 to 5:30	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	1	11
5:30 to 5:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
5:45 to 6:00	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	1	9

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 5:00	0	0	0	1	0	0	0	0	0	0	30	0	0	0	21	2	54
4:15 to 5:15	0	0	0	0	0	0	0	0	0	0	26	0	0	0	16	2	44
4:30 to 5:30	0	0	0	0	0	0	0	0	0	0	24	0	0	0	14	3	41
4:45 to 5:45	0	0	0	0	0	0	0	0	0	0	16	0	0	0	13	3	32
5:00 to 6:00	0	0	0	0	0	0	0	0	0	0	14	0	0	0	11	3	28

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:45 to 5:45	0	0	0	0	0	0	0	0	0	0	16	0	0	0	13	3	32

PERCENTAGE TRUCKS

EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
####	0%	####	0%	####	####	####	####	####	0%	2%	####	0%	####	1%	7%	1%

AM PEAK HOUR TOTAL VEHICLES Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Bradley Drive

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15																	0
7:15 to 7:30																	0
7:30 to 7:45																	0
7:45 to 8:00																	0
8:00 to 8:15																	0
8:15 to 8:30																	0
8:30 to 8:45																	0
8:45 to 9:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15	0	6	0	1	0	0	0	0	0	2	145	0	0	0	79	1	234
7:15 to 7:30	0	6	0	1	0	0	0	0	0	0	217	0	0	0	97	1	322
7:30 to 7:45	0	7	0	5	0	0	0	0	2	1	270	0	0	0	149	0	434
7:45 to 8:00	0	4	0	4	0	0	0	0	0	0	289	0	0	0	158	2	457
8:00 to 8:15	0	4	0	3	0	0	0	0	0	1	188	0	0	0	154	2	352
8:15 to 8:30	0	0	0	6	0	0	0	0	0	2	225	0	0	0	145	2	380
8:30 to 8:45	0	9	0	5	0	0	0	0	0	0	348	0	0	0	150	3	515
8:45 to 9:00	0	8	0	1	0	0	0	0	0	2	311	0	0	0	166	0	488

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 8:00	0	23	0	11	0	0	0	0	2	3	921	0	0	0	483	4	1447
7:15 to 8:15	0	21	0	13	0	0	0	0	2	2	964	0	0	0	558	5	1565
7:30 to 8:30	0	15	0	18	0	0	0	0	2	4	972	0	0	0	606	6	1623
7:45 to 8:45	0	17	0	18	0	0	0	0	0	3	1050	0	0	0	607	9	1704
8:00 to 9:00	0	21	0	15	0	0	0	0	0	5	1072	0	0	0	615	7	1735

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
8:00 to 9:00	0	21	0	15	0	0	0	0	0	5	1072	0	0	0	615	7	1735

PEAK HOUR FACTOR BY APPROACH

	EB	WB	NB	SB	
7:00 to 7:15	7	0	147	80	234
7:15 to 7:30	7	0	217	98	322
7:30 to 7:45	12	0	271	149	432
7:45 to 8:00	8	0	289	160	457
8:00 to 8:15	7	0	189	156	352
8:15 to 8:30	6	0	227	147	380
8:30 to 8:45	14	0	348	153	515
8:45 to 9:00	9	0	313	166	488
PHF	0.64	####	0.77	0.94	0.84

AM PEAK HOUR TRUCKS Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Bradley Drive

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15																	0
7:15 to 7:30																	0
7:30 to 7:45																	0
7:45 to 8:00																	0
8:00 to 8:15																	0
8:15 to 8:30																	0
8:30 to 8:45																	0
8:45 to 9:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 7:15	0	1	0	0	0	0	0	0	0	0	4	0	0	0	5	0	10
7:15 to 7:30	0	0	0	1	0	0	0	0	0	0	4	0	0	0	11	0	16
7:30 to 7:45	0	0	0	1	0	0	0	0	0	0	7	0	0	0	3	0	11
7:45 to 8:00	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7
8:00 to 8:15	0	0	0	1	0	0	0	0	0	0	5	0	0	0	9	0	15
8:15 to 8:30	0	0	0	1	0	0	0	0	0	0	5	0	0	0	12	0	18
8:30 to 8:45	0	0	0	1	0	0	0	0	0	0	17	0	0	0	6	0	24
8:45 to 9:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	9	0	11

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
7:00 to 8:00	0	1	0	2	0	0	0	0	0	0	19	0	0	0	22	0	44
7:15 to 8:15	0	0	0	3	0	0	0	0	0	0	20	0	0	0	26	0	49
7:30 to 8:30	0	0	0	3	0	0	0	0	0	0	21	0	0	0	27	0	51
7:45 to 8:45	0	0	0	3	0	0	0	0	0	0	31	0	0	0	30	0	64
8:00 to 9:00	0	0	0	3	0	0	0	0	0	0	29	0	0	0	36	0	68

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
8:00 to 9:00	0	0	0	3	0	0	0	0	0	0	29	0	0	0	36	0	68

PERCENTAGE TRUCKS

	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
	####	0%	####	20%	####	####	####	####	####	0%	3%	####	####	####	6%	0%	4%

PM PEAK HOUR TOTAL VEHICLES Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Bradley Drive

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
3:45 to 4:00																	
4:00 to 4:15																	0
4:15 to 4:30																	0
4:30 to 4:45																	0
4:45 to 5:00																	0
5:00 to 5:15																	0
5:15 to 5:30																	0
5:30 to 5:45																	0
5:45 to 6:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 4:15	0	10	0	11	0	0	0	0	0	6	197	0	0	0	318	11	553
4:15 to 4:30	0	6	0	3	0	0	0	0	0	1	217	0	0	0	247	4	478
4:30 to 4:45	0	6	0	3	0	0	0	0	0	8	236	0	0	0	258	4	515
4:45 to 5:00	0	8	0	7	0	0	0	0	0	2	242	0	0	0	287	4	550
5:00 to 5:15	0	4	0	7	0	0	0	0	0	3	250	0	0	0	293	11	568
5:15 to 5:30	0	6	0	6	0	0	0	0	0	6	255	0	0	0	371	6	650
5:30 to 5:45	0	6	0	4	0	0	0	0	0	8	244	0	0	0	299	6	567
5:45 to 6:00	0	5	0	8	0	0	0	0	0	5	239	0	0	0	257	9	523

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 5:00	0	30	0	24	0	0	0	0	0	17	892	0	0	0	1110	23	2096
4:15 to 5:15	0	24	0	20	0	0	0	0	0	14	945	0	0	0	1085	23	2111
4:30 to 5:30	0	24	0	23	0	0	0	0	0	19	983	0	0	0	1209	25	2283
4:45 to 5:45	0	24	0	24	0	0	0	0	0	19	991	0	0	0	1250	27	2335
5:00 to 6:00	0	21	0	25	0	0	0	0	0	22	988	0	0	0	1220	32	2308

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:45 to 5:45	0	24	0	24	0	0	0	0	0	19	991	0	0	0	1250	27	2335

PEAK HOUR FACTOR BY APPROACH

	EB	WB	NB	SB	
4:00 to 4:15	21	0	203	329	553
4:15 to 4:30	9	0	218	251	478
4:30 to 4:45	9	0	244	262	515
4:45 to 5:00	15	0	244	291	550
5:00 to 5:15	11	0	253	304	568
5:15 to 5:30	12	0	261	377	650
5:30 to 5:45	10	0	252	305	567
5:45 to 6:00	13	0	244	266	523
PHF	0.80	####	0.97	0.85	0.90

PM PEAK HOUR TRUCKS Date: Wed, 4/20/16

COUNTS CONDUCTED THE TRAFFIC GROUP

LOCATION: Rt. 253 Port Republic Road/Bradley Drive

CUMULATIVE 15 MINUTE COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
3:45 to 4:00																	
4:00 to 4:15																	0
4:15 to 4:30																	0
4:30 to 4:45																	0
4:45 to 5:00																	0
5:00 to 5:15																	0
5:15 to 5:30																	0
5:30 to 5:45																	0
5:45 to 6:00																	0

Count Sheet

15 MINUTE INTERVAL COUNTS

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 4:15	0	0	0	2	0	0	0	0	0	0	4	0	0	0	7	0	13
4:15 to 4:30	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14
4:30 to 4:45	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	0	10
4:45 to 5:00	0	0	0	1	0	0	0	0	0	0	7	0	0	0	6	0	14
5:00 to 5:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5
5:15 to 5:30	0	0	0	1	0	0	0	0	0	0	7	0	0	0	3	0	11
5:30 to 5:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
5:45 to 6:00	0	0	0	1	0	0	0	0	0	0	5	0	0	0	4	0	10

HOUR INTERVAL

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:00 to 5:00	0	0	0	3	0	0	0	0	0	0	28	0	0	0	20	0	51
4:15 to 5:15	0	0	0	1	0	0	0	0	0	0	25	0	0	0	17	0	43
4:30 to 5:30	0	0	0	2	0	0	0	0	0	0	23	0	0	0	15	0	40
4:45 to 5:45	0	0	0	2	0	0	0	0	0	0	16	0	0	0	15	0	33
5:00 to 6:00	0	0	0	2	0	0	0	0	0	0	14	0	0	0	13	0	29

PEAK HOUR TURNING MOVEMENT VOLUMES

TIME	EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
4:45 to 5:45	0	0	0	2	0	0	0	0	0	0	16	0	0	0	15	0	33

PERCENTAGE TRUCKS

EB Uturn	EB Left	EB Thru	EB Right	WB Uturn	WB Left	WB Thru	WB Right	NB Uturn	NB Left	NB Thru	NB Right	SB Uturn	SB Left	SB Thru	SB Right	Total
####	0%	####	8%	####	####	####	####	####	0%	2%	####	####	####	1%	0%	1%

Appendix D

VDOT Ramp Relocation Design Plans

1/16/2019
9:59:18 AM
t0880906(04).dgn
Plotted By: k.montgomery

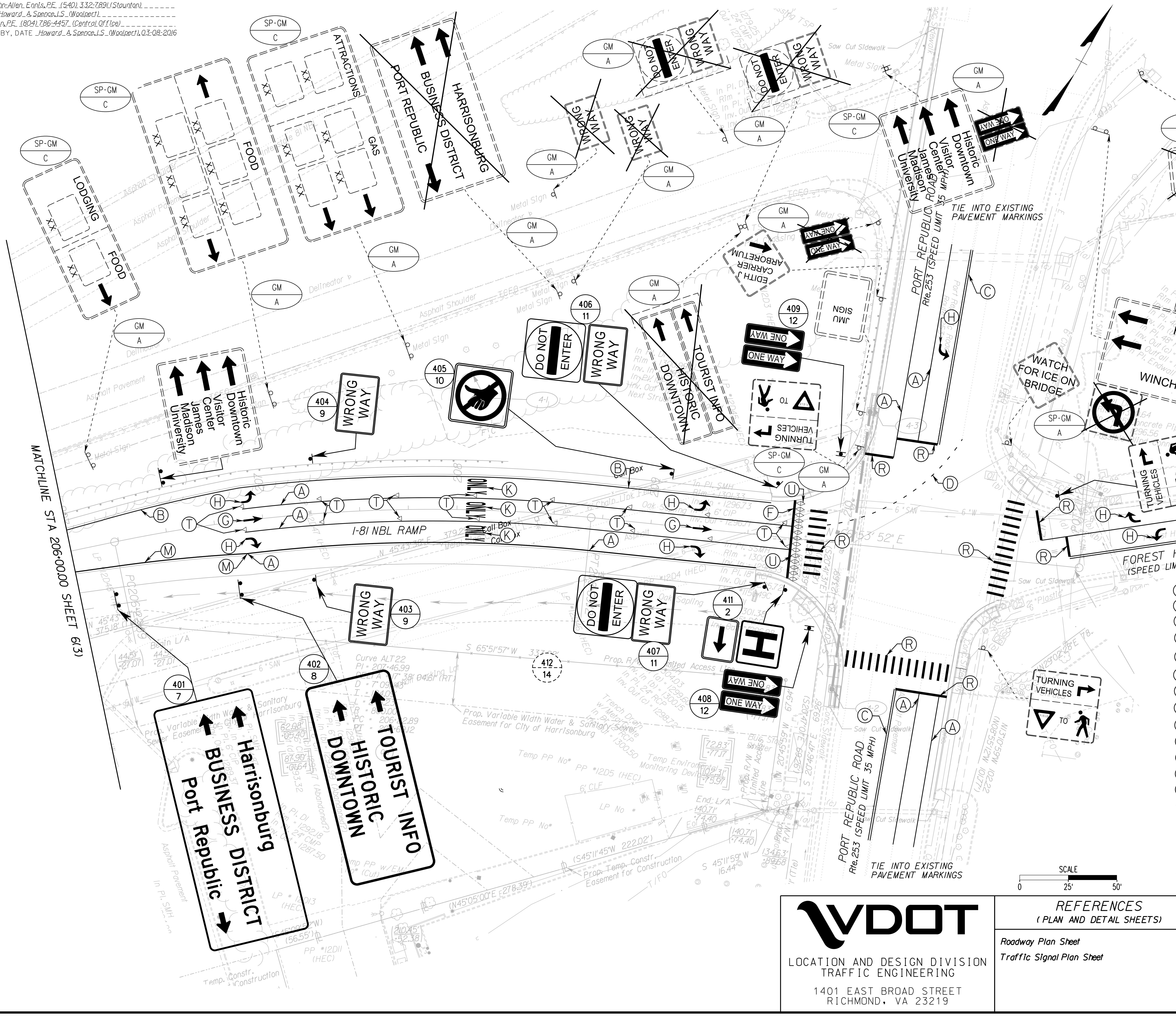
REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	81	0081-115-833,C-501	6(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

COMMONWEALTH OF VIRGINIA
PAUL TIMOTHY SARAHAN
Lic. No. 049369
PROFESSIONAL ENGINEER

VDOT Location & Design
Richmond, Virginia
TRAFFIC ENGINEER

PROJECT MANAGER John-Allen Ennis, P.E. (540) 332-7891 (Staunton)
SURVEYED BY, DATE Howard A. Spence, L.S. (Woolpert)
DESIGN BY Paul Sarahan, P.E. (804) 786-4457 (Central Office)
SUBSURFACE UTILITY BY, DATE Howard A. Spence, L.S. (Woolpert), 03-08-2016



PAVEMENT MARKING LEGEND

- (A) TYPE A WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE A, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (C) TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (D) TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH (2' LINE, 4' SPACE)
- (E) TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS II, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (G) PAVEMENT SYMBOL MARKING (THRU ARROW) TYPE B, CLASS II
- (H) PAVEMENT SYMBOL MARKING (SINGLE TURN ARROW) TYPE B, CLASS II
- (J) PAVEMENT SYMBOL MARKING (DOUBLE TURN ARROW THRU/LT OR RT) TYPE B, CLASS II
- (K) PAVEMENT MESSAGE MARKING (ONLY) TYPE B, CLASS II
- (L) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (M) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (N) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (P) TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (R) TYPE A WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (S) PAVEMENT SYMBOL MARKING (SINGLE TURN ARROW) TYPE A
- (T) ONE-WAY SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- (U) ONE-WAY SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

SCALE 0 25' 50'

VDOT
LOCATION AND DESIGN DIVISION
TRAFFIC ENGINEERING
1401 EAST BROAD STREET
RICHMOND, VA 23219

REFERENCES
(PLAN AND DETAIL SHEETS)

Roadway Plan Sheet	4
Traffic Signal Plan Sheet	7(4)

TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKINGS PLAN

CITY OF HARRISONBURG

PROJECT	SHEET NO.
0081-115-833	6(4)

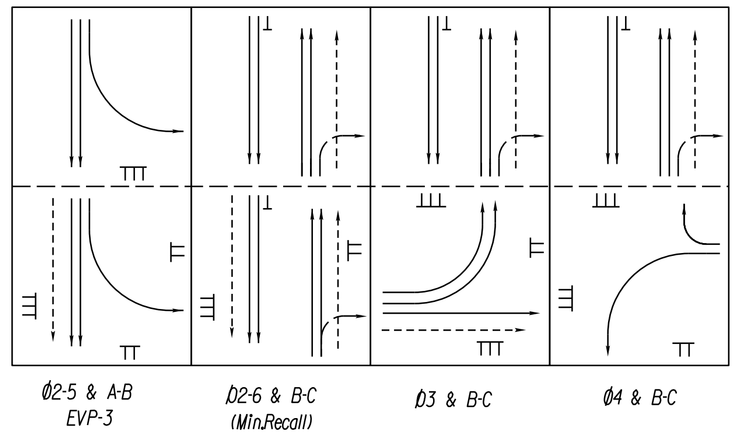
PROJECT MANAGER _ John-Allen Ennis,PE (540) 332-7891 (Staunton)
SURVEYED BY, DATE _____
DESIGN BY _ James Elliott (804) 371-2537 (Central Office)
SUBSURFACE UTILITY BY, DATE _____

Color Sequence

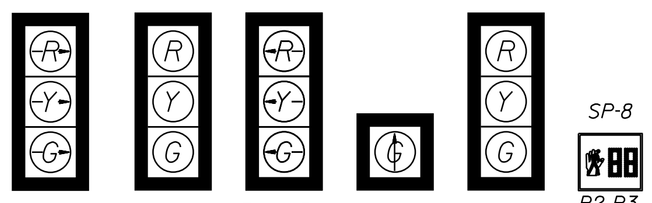
SIGNALS	PHASES												COMBINATIONS				FLASH
SIGNAL	2	3	3A	3B	4	4A	4B	5	6	A	B	C	2-5 & A-B	2-6 & B-C	3 & B-C	4 & B-C	
2	G												G	G			Y
3		G													G		
3A			→G												→G		
3B				G←											G←		
4					G											G	
4A						→G										→G	
4B							G←									G←	
5								→G					→G				
6									G					G			Y
A										→G			→G				
B											↓G		↓G	↓G	↓G	↓G	Y
C												G		G	G	G	Y
P2	W												W	W			BLANK
P3		W													W		BLANK
P6									W					W			BLANK
PC												W		W	W	W	BLANK

Empty box denotes RED indication (Red ball or red arrow as appropriate) or DW for pedestrian signals.
Signal faces P2,P3,P6 and PC to be DW during all Preempts.

Phasing Diagram



Proposed Signals

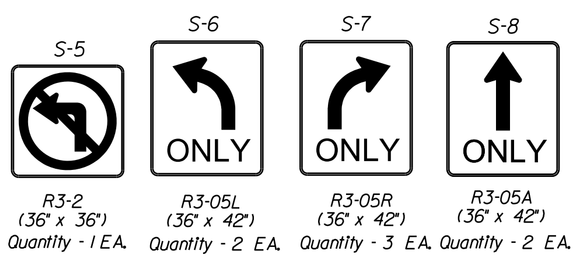


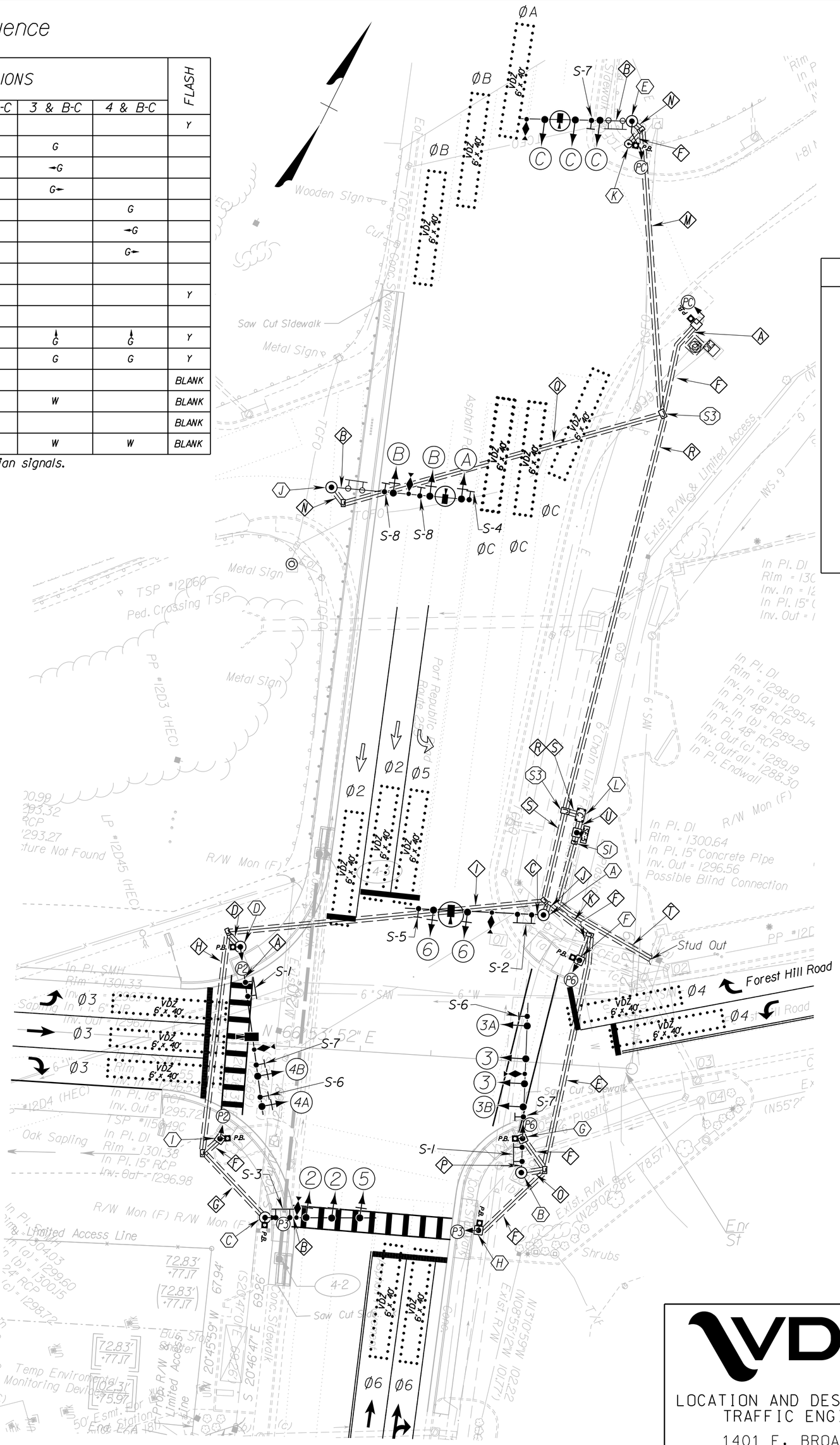
Proposed Signs

S-1 (Figure 1)
Port Republic Rd
(120" x 18")
QUANTITY - 1 EA.

S-2 (Figure 2)
Forest Hill Rd →
(114" x 18")
QUANTITY - 1 EA.

S-3 (Figure 3)
← Forest Hill Rd
(114" x 18")
QUANTITY - 1 EA.





JUNCTION BOX LEGEND

All Junction Boxes shall conform to St'd.JB-S2 unless otherwise noted on the plans.

(S1) *Denotes St'd.JB-S1*
(S3) *Denotes St'd.JB-S3*

SPEED LIMITS

Port Republic Road	35 MPH
Forest Hill Road	25 MPH

COMMONWEALTH OF VIRGINIA
PAUL TIMOTHY SARAHAN
Lic. No. 049369
PROFESSIONAL ENGINEER

VDOT Location & Design
Richmond, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	81	0081-115-833, C501	7(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

CABLE AND CONDUIT LEGEND

(A) 2-14/5c,1-EPDC,1-EPLC,1-VDC
(B) 3-14/5c,1-EPDC,1-EPLC
(C) 2-14/5c,1-VDC,1-EPDC,1-EPLC
(D) 2" Conduit - 2-14/5c,1-EPDC,1-EPLC,1-EGC(*),1-VDC
(E) 3" Conduit - 8-14/5c,1-EPDC,1-EPLC,1-EGC(*)
2-2" Spare Conduit,1-1" Spare Conduit
(F) 2" Conduit - 2-14/5,1-EGC(*)
(G) 3" Conduit - 5-14/5c,1-EPDC,1-EPLC,1-EGC(*)
(H) 3" Conduit - 7-14/5c,1-EPDC,1-EPLC,1-EGC(*)
2-2" Spare Conduits,1-1" Spare Conduit
(I) 3" Conduit - 11-14/5cJ-VDC,
2" Conduit - 2-EPDC,2-EPLC,1-EGC(*)
2-2" Spare Conduits,1-1" Spare Conduit
(J) 2" Conduit - 2-14/5c,1-VDC,1-EPDC,1-EPLC,1-EGC(*)
(K) 3" Conduit - 10-14/5cJ-EPDCJ-EPLCJ-EGC(*)
(L) 3" Conduit - 1-14/7c,2-14/5c,3-14/3c,3-14/2c
2-VDC,2-EPDC,2-EPLC,1-EGC(*)
3" Conduit - 2-14/5c,3-14/3c,3-14/2c,
2-VDC,2-EPDC,2-EPLC,1-EGC(*)
(M) 3" Conduit - 5-14/5cJ-VDC,1-EPDC,1-EPLC,1-EGC(*)
2-2" Spare Conduit,1-1" Spare Conduit
(N) 2" Conduit - 3-14/5cJ-VDC,1-EPDC,1-EPLC,1-EGC(*)
(O) 3" Conduit - 4-14/5cJ-VDC,1-EPDC,1-EPLC,1-EGC(*)
(P) 4-14/5c,1-VDC,1-EPDC,1-EPLC
(Q) 3" Conduit - 3-14/5cJ-VDC,1-EPDC,1-EPLC,1-EGC(*)
2-2" Spare Conduit,1-1" Spare Conduit
(R) 2-3" Conduit - 10-14/5c,2-VDC,2-EPDC,2-EPLC,2-EGC(*)
(S) 3" Conduit - 10-14/5cJ-EPDCJ-EPLCJ-EGC(*)
3" Conduit - 11-14/5cJ-VDC,
3" Conduit - 2-14/5c,1-VDC,3-EPDC,3-EPLC,1-EGC(*)
(T) 2" Conduit - For Power Source
(U) 2" Conduit - 8/3c

VDC - Video Detection Cable(s) per Special Provisions
EGC - Equipment Grounding Conductor
EPLC - Emergency Preemption Light Cable (14/3c)
EPDC - Emergency Preemption Detector Cable
** If required for a Bonded System (See General Notes)*

Signal Pole & Controller Legend

(ALL DIMENSIONS ARE TO CENTER OF POLE)

(L) *MASTER CONTROLLER CABINET & FOUNDATION (CF-4)*
Cabinet door hinge located on right side of pad.

(A) *MAST ARM POLE TYPE A*
52' LT. of Exit 245 Off Ramp Constr. ℄ Sta.210+88
49' Arm 178° Angle to Exit 245 Off Ramp
Signal Placement: 27',39'
Sign Placement: 5',44'
Video Detector: 33'
Emergency Preemption Detector: 18'

(B) *MAST ARM POLE TYPE A*
39' RT of Exit 245 Off Ramp Constr. ℄ Sta.210+85
60' Arm 90° Angle to Exit 245 Off Ramp
Signal Placement: 23',31',40',52'
Sign Placement: 4',43',55'
Emergency Preemption Detector: 34'

(C) *MAST ARM POLE TYPE A*
60' LT. of Exit 245 Off Ramp Constr. ℄ Sta.209+92
40' Arm 360° Angle to Exit 245 Off Ramp
Signal Placement: 14',23',34'
Sign Placement: 4',38'
Emergency Preemption Detector: 11'

(D) *MAST ARM POLE TYPE A*
34' LT. of Exit 245 Off Ramp Constr. ℄ Sta.209+82
49' Arm 178° Angle to Exit 245 Off Ramp
Signal Placement: 27',39'
Sign Placement: 5',44'
Video Detector: 18'
Emergency Preemption Detector: 32'

(F) *PEDESTAL POLE (PF-2), 10'*
37' LT. of Exit 245 Off Ramp Constr. ℄ Sta.211+00

(G) *PEDESTAL POLE (PF-2), 10'*
27' RT. of Exit 245 Off Ramp Constr. ℄ Sta.210+85

(H) *PEDESTAL POLE (PF-2), 10'*
60' RT. of Exit 245 Off Ramp Constr. ℄ Sta.210+71

(I) *PEDESTAL POLE (PF-2), 10'*
34' RT. of Exit 245 Off Ramp Constr. ℄ Sta.209+76

(J) *MAST ARM POLE TYPE A*
52' LT. of Exit 245 Off Ramp Constr. ℄ Sta.xxx+xx
49' Arm xxx° Angle to Exit 245 Off Ramp
Signal Placement: 22',35',46'
Sign Placement: 19',31',48'
Video Detector: 40'

(E) *MAST ARM POLE TYPE A*
xx' LT. of Exit 245 Off Ramp Constr. ℄ Sta.xxx+xx
40' Arm xxx° Angle to Exit 245 Off Ramp
Signal Placement: 11',20',30'
Sign Placement: 14'
Video Detector: 24'
Emergency Preemption Detector: 37'
** Relocate PTZ Camera onto New Pole **

(K) *PEDESTAL POLE (PF-2), 10'*
xx' LT. of Exit 245 Off Ramp Constr. ℄ Sta.xxx+xx

VDOT
LOCATION AND DESIGN DIVISION
TRAFFIC ENGINEERING
1401 E. BROAD STREET
RICHMOND, VA 23219

REFERENCES
(PLAN AND DETAIL SHEETS)

Roadway Plan Sheet	4
Pavement Marking Plan	6(4)

TRAFFIC CONTROL DEVICE PLANS

SIGNAL PLAN

Port Republic Road &
Forest Hill Road
CITY OF HARRISONBURG

SCALE	PROJECT	SHEET NO.
0 25' 50'	0081-115-833	7(3)

PROJECT MANAGER _John-Allen, Ennis, PE (540) 332-7891 (Staunton)_____
SURVEYED BY, DATE _Howard & Spence, LS (Woolpert)_____
DESIGN BY _Paul Sarahan, PE (804) 786-4457 (Central Office)_____
SUBSURFACE UTILITY BY, DATE _Howard & Spence, LS (Woolpert), 03-08-2016

PAVEMENT MARKING LEGEND

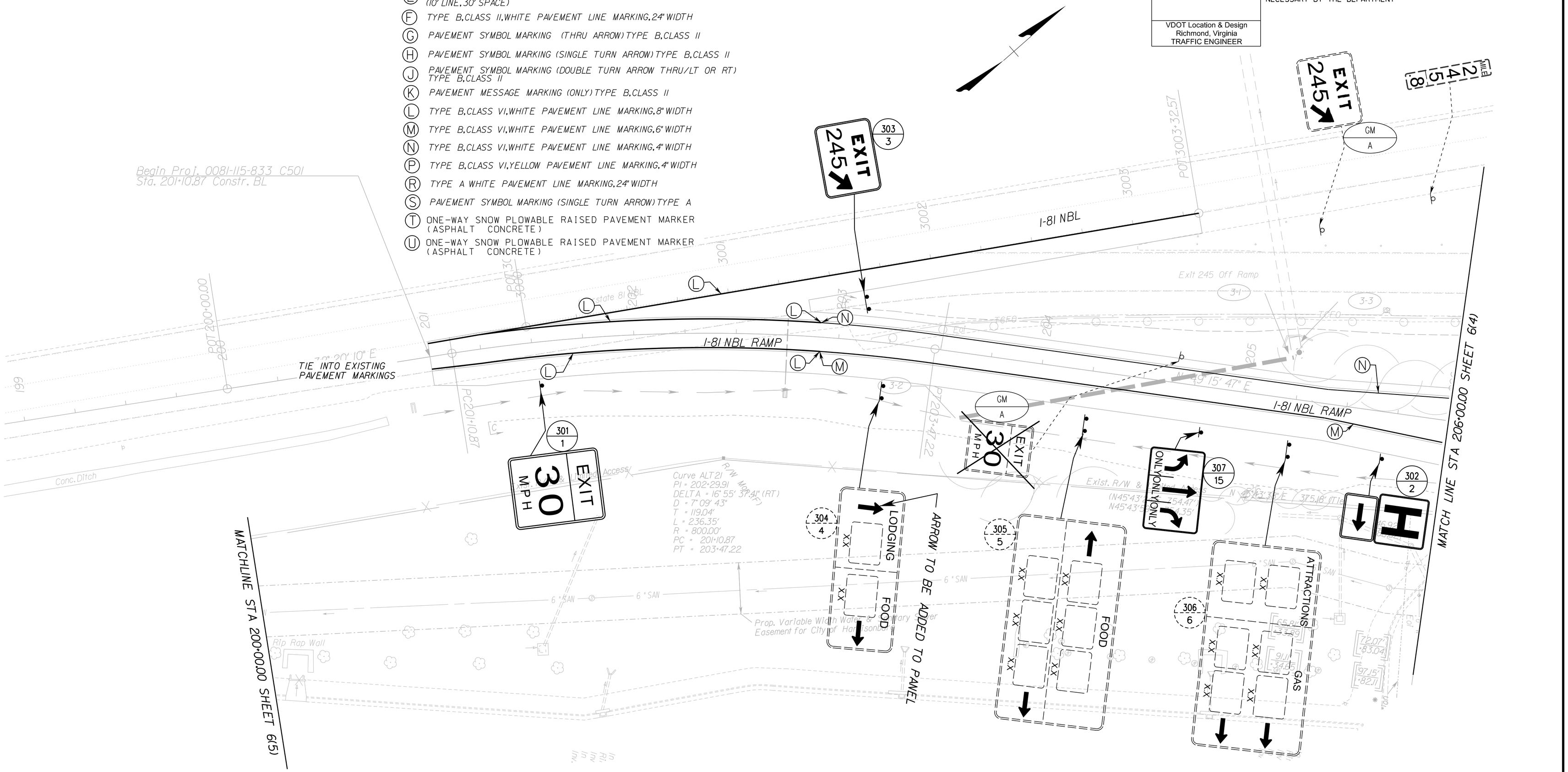
- (A) TYPE A WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE A, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (C) TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (D) TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH (2' LINE, 4' SPACE)
- (E) TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS II, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (G) PAVEMENT SYMBOL MARKING (THRU ARROW) TYPE B, CLASS II
- (H) PAVEMENT SYMBOL MARKING (SINGLE TURN ARROW) TYPE B, CLASS II
- (J) PAVEMENT SYMBOL MARKING (DOUBLE TURN ARROW THRU/LT OR RT) TYPE B, CLASS II
- (K) PAVEMENT MESSAGE MARKING (ONLY) TYPE B, CLASS II
- (L) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (M) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (N) TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (P) TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (R) TYPE A WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (S) PAVEMENT SYMBOL MARKING (SINGLE TURN ARROW) TYPE A
- (T) ONE-WAY SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- (U) ONE-WAY SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

COMMONWEALTH OF VIRGINIA
PAUL TIMOTHY SARAHAN
Lic. No. 049369
PROFESSIONAL ENGINEER

VDOT Location & Design
Richmond, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	81	0081-115-833, C-501	6(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



SCALE
0 25' 50'

VDOT
LOCATION AND DESIGN DIVISION
TRAFFIC ENGINEERING
1401 EAST BROAD STREET
RICHMOND, VA 23219

REFERENCES
(PLAN AND DETAIL SHEETS)
Roadway Plan Sheet 3

TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKINGS PLAN
CITY OF HARRISONBURG

PROJECT	SHEET NO.
0081-115-833	6(3)

Appendix E

Technical Memorandum – 2030 No Build Conditions

Memorandum

To:	Brad Reed VDOT Staunton District	Date:	December 3, 2018
Cc:	Ann Cundy, HRMPO Dastan Khaleel, HPWD Tom Hartman, HPWD		
From:	Lisa Simpson, P.E. Chuck Conran, E.I.T.	Re:	Port Republic Road No Build Conditions VISSIM Development

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The purpose of this memorandum is to document the study methodology and model development for the 2030 No Build AM and PM peak hour traffic operations for Port Republic Road in Harrisonburg, Virginia. The model utilizes the microsimulation traffic software, *PTV VISSIM 8.0*, and was coded according to the procedures outlined in VDOT's TOSAM (Traffic Operations and Safety Analysis Manual) and VDOT's VISSIM User Guide (hereafter referred to as "Guide"). The limits of the study corridor (**Figure 1**) extend from the Port Republic Road / Maryland Avenue / South Main Street intersection southeast approximately one mile to the Port Republic Road / Devon Lane intersection, encompassing ten total intersections, six of which are signalized.

Figure 1: VISSIM Study Network

The 2018 Existing Conditions AM and PM VISSIM models, following a revision to address comments, was considered to be calibrated by VDOT, the City of Harrisonburg, and HRMPO. These models were utilized as the foundation for the No Build models. The 2018 existing models were copied and then altered as needed to produce the No Build models.

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No Build Model Assumptions and Modifications

Geometry and Volume Rerouting

Coordination with the client team indicated that there are two road design projects in the study network that will be constructed by the 2030 No Build analysis year for this project. The first of these projects is to extend the length of the southbound, dual left-turn lanes from South Main Street onto eastbound Port Republic Road. VHB obtained the design plans from the City and modified the coded VISSIM geometry to mirror the new geometry. No intersection control changes, volume rerouting, or other modifications accompanied this geometric alteration.

The second, and more significant, road design project in the network is the realignment of the northbound I-81 off-ramp. Plans received from VDOT indicate that the ramp will be realigned from its current location opposite the northbound on-ramp to opposite Forest Hill Road a couple hundred feet to the east. The new off-ramp will have a left only, through only, right only lane configuration and will be accompanied by signal changes at the Port Republic / Forest Hill / New Off-Ramp intersection. The eradication of the existing off-ramp terminus opposite the on-ramp will also remove a signal phase from the Port Republic / Northbound I-81 intersection. Finally, the off-ramp is being relocated through the old exit of the JMU parking lot onto Port Republic; a new entrance to the parking lot will be constructed that will provide access via Hunters Road and Bradley Drive.

Initial VISSIM simulation of the No Build conditions assumed 100% of the JMU parking lot traffic would now utilize Hunters Road to access Port Republic Road; however, initial model results in the PM peak hour revealed excessive delay and queueing on Hunters Road at Port Republic because of the high volume of left turns that were unable to enter Port Republic due to the heavy westbound queueing on Port Republic at Forest Hill Road and the lack of a signal to facilitate the left turn. Vehicles exiting the new JMU parking lot access can easily use Bradley Drive to access Port Republic, which places them farther upstream where they are more likely to avoid the Forest Hill queue, and thus able to complete their left turn. Analysis indicated that rerouting 90% of the parking lot traffic that intends to travel west on Port Republic Road balanced the system, meaning Hunters Road and Bradley Drive had similar delay and queueing metrics.

Initial VISSIM simulation also revealed that the SB I-81 off-ramp was not processing all the demand. To attempt to capture the extent of the congestion, the off-ramp was extended from the ramp gore (Existing Conditions model limit) to the start of the off-ramp deceleration lane. As can be seen in Table 1, there is still unmet demand with this geometry, but the model limits cannot be extended further with accurate simulation due to interaction with southbound I-81.

Volume Growth

The No Build analysis year of 2030 is twelve years after existing traffic counts were collected. At the kick-off meeting for this study, the client team indicated that a 1% annual growth rate should be utilized. Across twelve years of traffic growth, this annual growth rate correlates to a 12.68% growth in traffic volumes. 2030 volumes were computed and coded in VISSIM using the same methodology as for the Existing Conditions models. No additional background growth due to known developments was discussed by the client team or included in the 2030 No Build models.

Intersection Control

The previously mentioned modifications to signal phasing were applied at the intersections of Port Republic Road and the I-81 northbound on-ramp and Port Republic Road and Forest Hill/relocated I-81 northbound off-ramp as shown in the ramp relocation design plans. Additionally, signal timings including cycle length, splits, and offsets were optimized for No Build geometry and volumes utilizing the traffic software *Synchro Professional Version 9*. As conditions on the corridor change over the next twelve years, the City will continue to update their signal timings to maintain system

optimization. This No Build optimization process does not include any study of or mediation to signal phasing. That will be a Build model condition if it is identified as a potential need and solution.

Cycle length optimization was limited to 5-second interval values between 110 and 135 seconds to maintain minimum timing parameters and limit pedestrian wait time. A 135 second cycle length was used, which closely matches the existing coordinated cycle length of 134 seconds. Traffic signal splits and offsets were updated throughout the corridor.

No Build Measures of Effectiveness

Volume Throughput

Table 1 shows a comparison between the observed and served volumes for several underserved input volumes in the AM and PM peak hour networks. An underserved input volume is a volume group that is not able to fully enter the network during the simulation period due to impeding congestion within the network. These are critical locations that need to be addressed in the Build condition model.

Table 1: Unmet Demand

Peak Hour	Movement	Observed Vehicles	Vehicles Served	Unmet Demand	Percent Served
AM Network	SB I-81 Off-Ramp	354	315	39	88.98%
PM Network	SB I-81 Off-Ramp	381	342	39	89.76%
	NB Bradley	142	87	55	61.27%
	NB Devon	292	165	127	56.51%
	WB Port Republic	865	788	77	91.10%

Travel Time

The same travel time segments from the Existing model are recorded in the No Build. The results are shown in **Table 2**.

Table 2: Travel Time Results

Peak Hour	Travel Time Run Segment	Simulated Travel Time (sec)	Simulated Travel Time (M:SS)
AM Peak Hour	Port Republic Eastbound	260.88	04:20.9
	Port Republic Westbound	274.93	04:34.9
	Port Republic EB to I-81 NB Ramps	171.43	02:51.4
	Port Republic WB to I-81 SB Ramps	181.24	03:01.2
PM Peak Hour	Port Republic Eastbound	334.32	05:34.3
	Port Republic Westbound	478.60	07:58.6
	Port Republic EB to I-81 NB Ramps	228.51	03:48.5
	Port Republic WB to I-81 SB Ramps	385.08	06:25.1

Delay, Level of Service, and Queue Length

Delay, level of service (LOS), and average and maximum queue lengths were recorded for each vehicle movement in both the AM and PM peak hour models. This full set of MOEs can be found in **Appendix A**.

Appendix A - Weekday AM 2030 No Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes				No Build MOEs					
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Movement Delay (sec/veh)	Estimated Movement LOS	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	52	53	1	2%	89.6	F	45.1	D	29	200
				EBT	261	266	5	2%	50.3	D			56	318
				EBR	103	103	0	0%	8.9	A			1	67
			Port Republic Road	WBL	166	161	-5	-3%	32.4	C	32.1	C	21	144
				WBT	284	273	-11	-4%	22.3	C			52	787
				WBR	700	650	-50	-7%	36.2	D			263	900
			South Main Street	SBL	152	150	-2	-1%	60.6	E	36.9	D	39	148
				SBT	259	252	-7	-3%	24.1	C			28	177
				SBR	32	31	-1	-3%	26.4	C			26	179
			South Main Street	NBL	75	72	-3	-4%	59.5	E	22.4	C	26	167
				NBT	528	528	0	0%	26.5	C			52	381
				NBR	271	275	4	1%	4.7	A			2	135
			Intersection		**2,883**	**2,814**	**-69**	**-2%**	31.8	C	**31.8**	**C**		
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	3	3	0	0%	13.4	B	0.4	A	1	55
				EBT	681	689	8	1%	0.4	A			0	21
				EBR	0	0	0	0%	0.0	A			0	21
			Port Republic Road	WBL	1	1	0	0%	2.2	A	3.9	A	10	209
				WBT	1,144	1,101	-43	-4%	3.9	A			17	289
				WBR	16	14	-2	-13%	5.6	A			14	249
			Hillcrest Drive	SBL	16	14	-2	-13%	21.1	C	17.1	C	2	66
				SBR	6	6	0	0%	7.9	A			1	67
			Hillcrest Drive	NBL	0	0	0	0%	0.0	A	8.8	A	0	41
				NBR	1	1	0	0%	8.8	A			0	42
			Intersection		**1,868**	**1,829**	-39	**-2%**	2.7	A	**2.7**	**A**		
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	0.0	A	9.5	A	1	85
				NBR	19	17	-2	-11%	9.5	A			2	109
			Port Republic Road	EBT	698	704	6	1%	0.3	A	0.3	A	0	3
				EBR	0	0	0	0%	0.0	A			0	3
			Port Republic Road	WBL	14	13	-1	-7%	2.5	A	2.4	A	3	212
				WBT	1,161	1124	-37	-3%	2.4	A			2	163
			Intersection		**1,892**	**1,858**	-34	**-2%**	1.7	A	**1.7**	**A**		
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	44	44	0	0%	53.1	D	34.1	C	20	172
				NBT	18	19	1	6%	55.5	E			20	172
				NBR	52	52	0	0%	10.2	B			1	55
			Bluestone Drive	SBL	73	78	5	7%	50.0	D	42.9	D	18	96
				SBT	11	10	-1	-9%	53.0	D			18	96
				SBR	48	46	-2	-4%	28.8	C			20	101
			Port Republic Road	EBL	117	115	-2	-2%	58.1	E	33.4	C	42	371
				EBT	556	574	18	3%	29.3	C			67	461
				EBR	44	43	-1	-2%	22.4	C			3	253
			Port Republic Road	WBL	115	112	-3	-3%	22.8	C	20.1	C	14	123
				WBT	1,083	1,048	-35	-3%	20.8	C			170	367
				WBR	273	262	-11	-4%	15.9	B			35	367
			Intersection		**2,434**	**2,403**	-31	**-1%**	26.1	C	**26.1**	**C**		
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	160	144	-16	-10%	67.6	E	148.7	F	940	1672
				SBR	194	171	-23	-12%	217.0	F			1137	1775
			Port Republic Road	EBT	590	617	27	5%	7.7	A	7.1	A	19	313
				EBR	91	92	1	1%	3.0	A			0	56
			Port Republic Road	WBL	176	172	-4	-2%	15.1	B	17.5	B	12	358
				WBT	1,277	1,252	-25	-2%	17.8	B			77	467
			Intersection		**2,488**	**2,448**	-40	**-2%**	31.3	C	**31.3**	**C**		

Appendix A - Weekday AM 2030 No Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes				No Build MOEs					
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Movement Delay (sec/veh)	Estimated Movement LOS	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
6														
	Port Republic Road at NB I-81 On-Ramp	Signal	Port Republic Road	EBL	131	137	6	5%	50.2	D	12.6	B	46	326
				EBT	619	623	4	1%	4.3	A			0	24
			Port Republic Road	WBT	1,453	1,409	-44	-3%	4.5	A	4.1	A	15	302
				WBR	196	193	-3	-2%	1.3	A			0	46
			Intersection		**2,399**	**2,362**	-37	**-2%**	6.9	A	**6.9**	**A**		
7														
	Port Republic Road at NB I-81 Off-Ramp / Forest Hill Road	Signal	NB I-81 Off-Ramp	NBL	258	255	-3	-1%	62.4	E	47.1	D	110	510
				NBT	128	129	1	1%	53.9	D			44	227
				NBR	125	128	3	2%	9.8	A			6	118
			Forest Hill Road	SBL	77	78	1	1%	79.3	E	33.6	C	41	197
				SBR	152	150	-2	-1%	9.8	A			41	197
			Port Republic Road	EBL	54	58	4	7%	33.5	C	16.8	B	9	120
				EBT	566	563	-3	-1%	15.1	B			38	237
			Port Republic Road	WBT	1,239	1,195	-44	-4%	31.8	C	33.3	C	2025	2293
				WBR	232	222	-10	-4%	41.3	D			2025	2293
			Intersection		**2,831**	**2,778**	-53	**-2%**	32.2	C	**32.2**	**C**		
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	87	75	-12	-14%	139.5	F	135.5	F	115	496
				NBR	25	20	-5	-20%	120.4	F			113	496
			Port Republic Road	EBT	655	652	-3	0%	2.0	A	2.1	A	2	182
				EBR	112	111	-1	-1%	2.8	A			3	225
			Port Republic Road	WBL	71	69	-2	-3%	21.5	C	26.3	D	219	1863
				WBT	1,384	1,363	-21	-2%	26.6	D			201	1863
			Intersection		**2,334**	**2,290**	-44	**-2%**	22.8	C	**22.8**	**C**		
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	46	46	0	0%	35.6	E	28.3	D	17	178
				NBR	47	48	1	2%	21.2	C			16	179
			Port Republic Road	EBT	672	659	-13	-2%	0.5	A	0.5	A	0	7
				EBT	8	11	3	38%	0.7	A			0	10
			Port Republic Road	WBL	7	6	-1	-14%	6.9	A	12.8	B	71	1263
				WBT	1,409	1,406	-3	0%	12.8	B			62	1263
			Intersection		**2,189**	**2,176**	-13	**-1%**	9.7	A	**9.7**	**A**		
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	272	270	-2	-1%	43.8	D	41.7	D	89	435
				NBT	19	21	2	11%	42.4	D			89	435
				NBR	18	21	3	17%	14.6	B			0	32
			Devon Lane	SBL	25	25	0	0%	37.6	D	17.4	B	7	87
				SBT	7	8	1	14%	43.1	D			7	87
				SBR	184	187	3	2%	13.6	B			11	181
			Port Republic Road	EBL	46	50	4	9%	22.2	C	18.5	B	5	77
				EBT	625	614	-11	-2%	18.5	B			43	342
				EBR	48	49	1	2%	14.7	B			41	344
			Port Republic Road	WBL	34	35	1	3%	29.2	C	38.3	D	3	65
				WBT	960	955	-5	-1%	38.7	D			180	688
				WBR	21	24	3	14%	36.1	D			179	687
			Intersection		**2,259**	**2,259**	0	**0%**	30.5	D	**30.5**	**C**		
	Total Study Area Roadways/Intersections													

Appendix A - Weekday PM 2030 No Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes				No Build MOEs					
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Movement Delay (sec/veh)	Estimated Movement LOS	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
1														
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	18	18	0	0%	91.8	F	43.3	D	9	70
				EBT	286	288	2	1%	52.8	D			62	302
				EBR	112	113	1	1%	11.4	B			1	74
			Port Republic Road	WBL	336	275	-61	-18%	37.0	D	21.5	C	43	419
				WBT	411	350	-61	-15%	21.3	C			56	482
				WBR	413	350	-63	-15%	9.6	A			14	350
			South Main Street	SBL	652	646	-6	-1%	74.7	E	53.7	D	347	1,301
				SBT	702	704	2	0%	35.7	D			192	1,254
				SBR	57	60	3	5%	39.0	D			192	1,255
			South Main Street	NBL	105	105	0	0%	60.7	E	35.4	D	37	174
				NBT	554	562	8	1%	43.9	D			110	588
				NBR	407	402	-5	-1%	17.0	B			24	418
			Intersection		**4,053**	**3,873**	**-180**	**-4%**	39.4	D	**39.4**	**D**		
2														
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBL	1	1	0	0%	13.5	B	13.3	B	84	687
				EBT	1,343	1,312	-31	-2%	13.3	B			75	641
				EBR	1	1	0	0%	31.1	D			75	641
			Port Republic Road	WBL	5	4	-1	-20%	10.0	A	1.3	A	1	153
				WBT	1,153	994	-159	-14%	1.2	A			1	111
				WBR	5	4	-1	-20%	1.7	A			1	77
			Hillcrest Drive	SBL	8	7	-1	-13%	34.2	D	22.8	C	2	61
				SBR	7	6	-1	-14%	9.4	A			1	62
			Hillcrest Drive	NBL	0	0	0	0%	0.0	A	36.9	E	0	37
				NBR	1	1	0	0%	36.9	E			0	38
			Intersection		**2,524**	**2,330**	-194	**-8%**	8.2	A	**8.2**	A		
3														
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBL	0	0	0	0%	0.0	A	83.7	F	5	105
				NBR	23	20	-3	-13%	83.7	F			14	129
			Port Republic Road	EBT	1,352	1309	-43	-3%	22.7	C	22.7	C	170	681
				EBR	0	0	0	0%	0.0	A			170	681
			Port Republic Road	WBL	17	14	-3	-18%	72.7	F	7.9	A	46	544
				WBT	1,163	1009	-154	-13%	7.0	A			37	502
			Intersection		**2,555**	**2,352**	-203	**-8%**	16.7	B	**16.7**	C		
4														
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	34	30	-4	-12%	64.5	E	31.8	C	19	183
				NBT	23	21	-2	-9%	58.3	E			19	183
				NBR	90	95	5	6%	15.7	B			2	82
			Bluestone Drive	SBL	312	309	-3	-1%	98.0	F	101.5	F	387	1136
				SBT	20	18	-2	-10%	122.1	F			387	1136
				SBR	178	166	-12	-7%	105.6	F			404	1157
			Port Republic Road	EBL	149	146	-3	-2%	92.4	F	44.4	D	136	2336
				EBT	1,199	1,153	-46	-4%	38.7	D			3358	3630
				EBR	27	27	0	0%	29.9	C			17	3630
			Port Republic Road	WBL	61	50	-11	-18%	24.7	C	23.1	C	5	85
				WBT	968	834	-134	-14%	24.6	C			167	359
				WBR	261	230	-31	-12%	17.1	B			30	349
			Intersection		**3,322**	**3,079**	-243	**-7%**	45.2	D	**45.2**	**D**		
5														
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	174	163	-11	-6%	75.8	E	78.4	E	122	633
				SBR	207	179	-28	-14%	80.7	F			160	685
			Port Republic Road	EBT	1,302	1,273	-29	-2%	7.9	A	6.9	A	47	405
				EBR	299	282	-17	-6%	2.2	A			1	68
			Port Republic Road	WBL	261	210	-51	-20%	26.7	C	34.3	C	31	372
				WBT	1,083	935	-148	-14%	36.1	D			103	454
			Intersection		**3,326**	**3,042**	-284	**-9%**	25.2	C	**25.2**	**C**		

Appendix A - Weekday PM 2030 No Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Simulated Traffic Volumes				No Build MOEs					
					Counted / Coded Volumes (vph)	Simulated Volumes (vph)	Difference	% Difference	Movement Delay (sec/veh)	Estimated Movement LOS	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
6														
	Port Republic Road at NB I-81 On-Ramp	Signal	Port Republic Road	EBL	247	241	-6	-2%	38.8	D	19.2	B	77	451
				EBT	1,229	1,179	-50	-4%	15.2	B			23	393
			Port Republic Road	WBT	1,344	1,136	-208	-15%	10.7	B	9.8	A	54	337
				WBR	228	191	-37	-16%	4.5	A			3	279
			Intersection		**3,048**	**2,747**	-301	**-10%**	14.7	B	**14.7**	**B**		
7														
	Port Republic Road at NB I-81 Off-Ramp / Forest Hill Road	Signal	NB I-81 Off-Ramp	NBL	196	188	-8	-4%	73.0	E	49.3	D	101	505
				NBT	114	115	1	1%	53.3	D			37	197
				NBR	145	145	0	0%	15.5	B			10	133
			Forest Hill Road	SBL	214	216	2	1%	67.3	E	48.0	D	116	393
				SBR	295	289	-6	-2%	33.5	C			116	393
			Port Republic Road	EBL	123	119	-4	-3%	35.2	D	13.9	B	29	240
				EBT	1,107	1,057	-50	-5%	11.5	B			92	354
			Port Republic Road	WBT	1,081	853	-228	-21%	65.8	E	69.0	E	1682	2238
				WBR	193	152	-41	-21%	86.9	F			1682	2238
			Intersection		**3,468**	**3,134**	-334	**-10%**	42.1	D	**42.1**	**D**		
8														
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBL	56	45	-11	-20%	371.5	F	358.5	F	216	583
				NBR	24	17	-7	-29%	324.4	F			216	584
			Port Republic Road	EBT	1,347	1,295	-52	-4%	3.7	A	3.8	A	8	327
				EBR	118	117	-1	-1%	5.0	A			9	362
			Port Republic Road	WBL	34	30	-4	-12%	57.0	F	78.1	F	494	1808
				WBT	1,213	973	-240	-20%	78.8	F			463	1808
			Intersection		**2,792**	**2,477**	-315	**-11%**	42.7	E	**42.7**	**E**		
9														
	Port Republic Road at Bradley Drive	Two-Way Stop	Bradley Drive	NBL	103	64	-39	-38%	386.2	F	387.9	F	334	486
				NBR	39	23	-16	-41%	392.7	F			334	487
			Port Republic Road	EBT	1,285	1,226	-59	-5%	5.9	A	5.8	A	22	1216
				EBT	86	85	-1	-1%	4.3	A			26	1216
			Port Republic Road	WBL	21	16	-5	-24%	59.9	F	61.2	F	277	1208
				WBT	1,149	968	-181	-16%	61.2	F			252	1208
			Intersection		**2,683**	**2,382**	-301	**-11%**	42.2	E	**42.2**	**E**		
10														
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	234	134	-100	-43%	219.3	F	201.5	F	273	472
				NBT	19	10	-9	-47%	177.9	F			273	472
				NBR	39	21	-18	-46%	99.6	F			0	22
			Devon Lane	SBL	70	68	-2	-3%	55.3	E	52.3	D	31	240
				SBT	27	26	-1	-4%	58.6	E			31	240
				SBR	142	145	3	2%	49.7	D			46	342
			Port Republic Road	EBL	178	172	-6	-3%	69.1	E	37.9	D	78	479
				EBT	890	833	-57	-6%	33.1	C			154	1721
				EBR	256	246	-10	-4%	32.5	C			155	1721
			Port Republic Road	WBL	35	31	-4	-11%	52.2	D	86.6	F	4	66
				WBT	794	720	-74	-9%	88.5	F			340	720
				WBR	36	37	1	3%	79.7	E			339	720
			Intersection		**2,720**	**2,443**	-277	**-10%**	65.4	F	**65.4**	**E**		

Total Study Area Roadways/Intersections

Appendix F

Technical Memorandum – 2030 Build Conditions

Memorandum

To:	Brad Reed VDOT Staunton District	Date:	March 29, 2019
Cc:	Ann Cundy, HRMPO Dastan Khaleel, HPWD Tom Hartman, HPWD		
From:	Lisa Simpson, P.E. Chuck Conran, E.I.T.	Re:	Port Republic Road Build Conditions VISSIM Development

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The purpose of this memorandum is to document the study methodology and model development for the 2030 Build AM and PM peak hour traffic operations for Port Republic Road in Harrisonburg, Virginia. The model utilizes the microsimulation traffic software, *PTV VISSIM 8.0*, and was coded according to the procedures outlined in VDOT's TOSAM (Traffic Operations and Safety Analysis Manual) and VDOT's VISSIM User Guide (hereafter referred to as "Guide"). The limits of the study corridor (**Figure 1**) extend from the Port Republic Road / Maryland Avenue / South Main Street intersection southeast approximately one mile to the Port Republic Road / Devon Lane intersection, encompassing ten total intersections, seven of which are signalized.

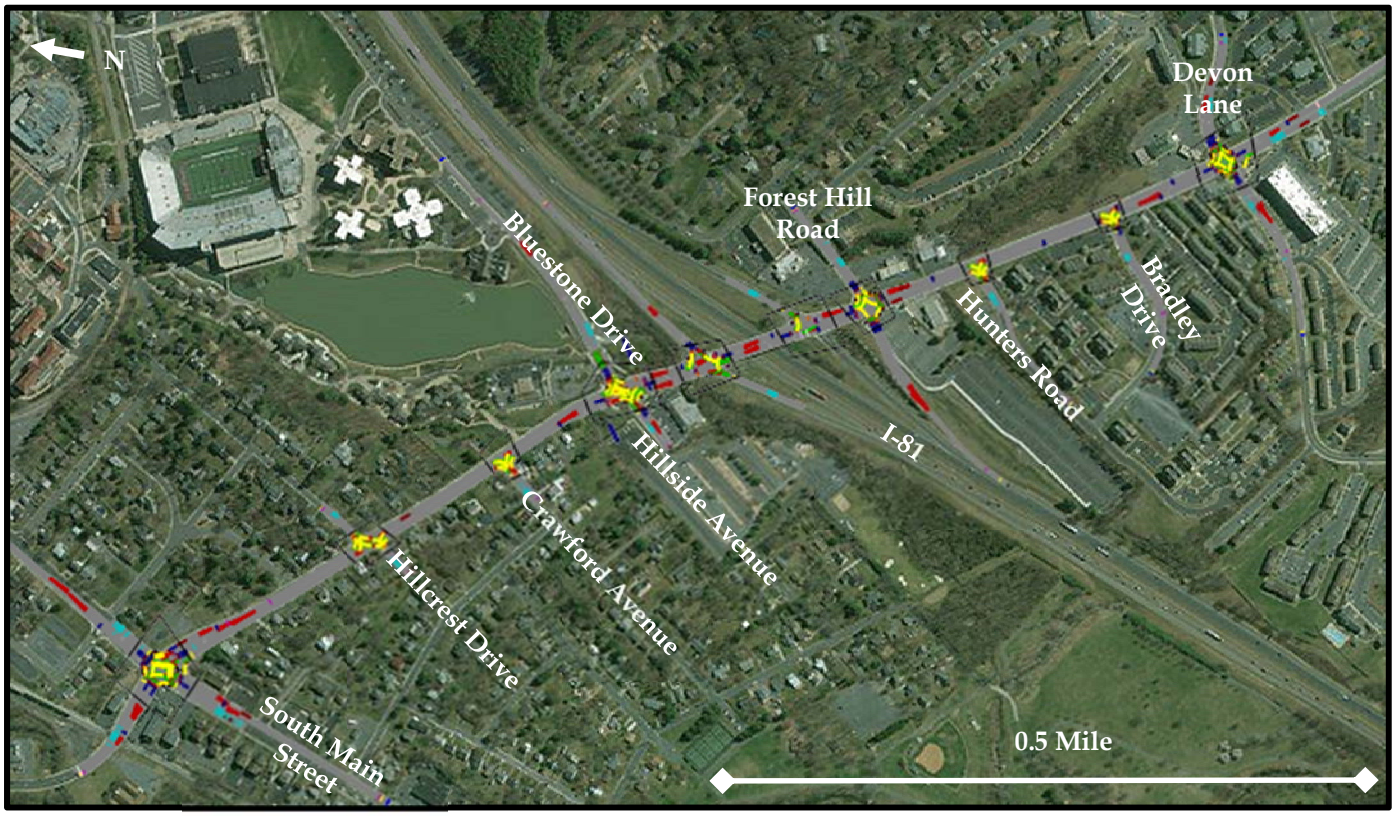


Figure 1: VISSIM Study Network

4500 Main Street
Suite 400
Virginia Beach, VA
23462-3361
P 757.490.0132

The 2018 Existing Conditions AM and PM VISSIM models, following a revision to address comments, were considered to be calibrated by VDOT, the City of Harrisonburg, and HRMPO. The 2030 No Build AM and PM VISSIM models identified congestion hot spots that needed to be addressed with targeted improvements. The No Build models also establish baseline conditions to which the Build models will be compared. The Existing and No Build models were utilized as the foundation for the Build models; the 2030 No Build models were copied and then altered as needed to produce the Build models.

Build Model Assumptions and Modifications

Base Model

The 2030 Build model was constructed utilizing the 2030 No Build model as a base. The No Build model already incorporates several planned roadway projects, including the northbound I-81 off-ramp realignment and the extension of the southbound South Main Street left turn lanes at Port Republic Road. Other than recommended build improvements, there are no geometric changes from the No Build to Build model.

The No Build and Build model analysis years are both 2030; therefore, both models have identical volume inputs and base condition routing through the study network. Some Build model volumes are rerouted due to recommended build improvements.

Recommended Build Improvements

The following list of roadway construction, lane configuration, signal timing and phasing, and turning restrictions were identified by the consultant, approved by the client team, and incorporated in the Build VISSIM models. More detail on these improvements can be found in the main body of the Build operations report.

- General Corridor Signal Optimization – FYA, lead/lag, offsets, cycle length
    - These values were optimized within Synchro and then imported to the VISSIM signal controllers
- Eliminate split phase at northbound I-81 Off-Ramp / Forest Hill Road signal
    - The ramp realignment plans that the consultant received showed proposed split phase signal control. The lane configuration of the off-ramp is outdated on this set of plans, and hence the proposed signal phasing may also be outdated. Regardless, elimination of the split phase optimizes signal operation.
- Eliminate split phase at Devon Lane signal by adding 150-foot turn bays on Devon Lane to separate through and left turn movements
- Add a 50-foot storage westbound right turn lane on Port Republic Road at Forest Hill Road
- Lane reconfiguration of westbound Port Republic Road approach at South Main Street to include two left turn lanes, one through lane, one through/right lane, and one right turn lane
- Pedestrian overpass across Port Republic Road at Bluestone Drive / Hillside Avenue
- Peak hour left turning restrictions at Hillcrest Drive, Crawford Avenue., and Hunters Road
- Signal installation at Bradley Drive
- Extend Port Republic eastbound left turn bay storage at Bluestone/Hillside from 100 feet to 300 feet

All recommend build improvements should follow VDOT design standards. The study area roads have posted speed limits of 35 mph or less, which dictates a minimum of a 100-foot taper for single turn lanes and a minimum of a 150-foot taper for dual turn lanes. This specification can be found in Appendix F, Figure 3-1, of the Road Design Manual.

Build Measures of Effectiveness

Volume Throughput

The No Build models had several underserved input volumes in the AM and PM peak hour networks. An underserved input volume is a volume group that is not able to fully enter the network during the simulation period due to impeding congestion within the network. Underserved input volumes in the No Build models included the southbound I-81 off-ramp in both the AM and PM peak hours, and northbound Bradley Drive, northbound Devon Lane, and westbound Port Republic Road, all in the PM peak hour. These critical locations were addressed by recommended improvements included in the Build model, and there are no remaining underserved input volumes.

Travel Time

The same travel time segments from the Existing and No Build models are recorded in the Build model. The Build model results are shown in **Table 1** and compared to No Build model results. No Build corridor length travel times are reduced by 21-37% with the package of recommended Build improvements.

Table 1: Travel Time Results

Peak Hour	Travel Time Run Segment	No Build Model		Build Model		Percent Improvement
		Simulated Travel Time (sec)	Simulated Travel Time (M:SS)	Simulated Travel Time (sec)	Simulated Travel Time (M:SS)	
AM Peak Hour	Port Republic Eastbound	260.88	04:20.9	208.04	03:28.0	20.25%
	Port Republic Westbound	274.93	04:34.9	207.65	03:27.6	24.47%
	Port Republic EB to I-81 NB Ramps	171.43	02:51.4	131.55	02:11.5	23.26%
	Port Republic WB to I-81 SB Ramps	181.24	03:01.2	93.99	01:34.0	48.14%
PM Peak Hour	Port Republic Eastbound	334.32	05:34.3	258.00	4:18.0	22.83%
	Port Republic Westbound	478.60	07:58.6	302.26	5:02.3	36.84%
	Port Republic EB to I-81 NB Ramps	228.51	03:48.5	165.28	2:45.3	27.67%
	Port Republic WB to I-81 SB Ramps	385.08	06:25.1	167.10	2:47.1	56.61%

Delay, Level of Service, Vehicle Stops, and Queue Length

Delay, level of service (LOS), vehicle stops, and average and maximum queue lengths were recorded for each vehicle movement in both the AM and PM peak hour models. This full set of MOEs can be found in **Appendix A**.

Appendix A - Weekday AM 2030 Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Build MOEs						
					Movement Delay (sec/veh)	Estimated Movement LOS	Stops per Vehicle	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
1											
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	57.6	E	1.0	31.5	C	17	119
				EBT	36.0	D	0.7			40	247
				EBR	7.2	A	1.0			1	68
			Port Republic Road	WBL	59.8	E	1.0	32.1	C	41	190
				WBT	37.1	D	0.9			99	660
				WBR	22.8	C	1.2			99	660
			South Main Street	SBL	57.3	E	0.9	36.8	D	41	159
				SBT	25.2	C	0.7			28	172
				SBR	17.4	B	0.7			25	174
			South Main Street	NBL	57.6	E	0.9	23.8	C	24	155
				NBT	29.2	C	0.7			57	323
				NBR	4.4	A	0.2			2	119
			Intersection		30.3	C	0.8	**30.3**	**C**		
2											
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBT	0.3	A	0.0	0.3	A	0	0
				EBR	0.0	A	0.0			0	0
			Port Republic Road	WBT	1.7	A	0.0	1.7	A	0	0
				WBR	2.6	A	0.1			0	2
			Hillcrest Drive	SBR	11.7	B	1.5	11.7	B	0	44
			Hillcrest Drive	NBR	9.3	A	1.3	9.3	A	0	42
			Intersection		1.2	A	0.0	**1.2**	**A**		
3											
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBR	9.8	A	1.2	9.8	A	1	109
			Port Republic Road	EBT	0.3	A	0.0	0.3	A	0	0
				EBR	0.0	A	0.0			0	0
			Port Republic Road	WBT	0.4	A	0.0	0.4	A	0	0
			Intersection		0.5	A	0.0	**0.5**	**A**		
4											
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	54.5	D	0.9	37.2	D	41	207
				NBT	63.9	E	1.0			42	208
				NBR	10.5	B	1.1			1	60
			Bluestone Drive	SBL	53.5	D	0.9	43.0	D	20	95
				SBT	48.0	D	1.0			20	95
				SBR	28.2	C	1.2			22	118
			Port Republic Road	EBL	34.8	C	1.4	17.2	B	21	174
				EBT	13.5	B	0.4			29	263
				EBR	11.3	B	0.4			3	187
			Port Republic Road	WBL	12.3	B	0.6	8.4	A	5	104
				WBT	8.3	A	0.2			56	346
				WBR	7.3	A	0.4			4	232
			Intersection		14.3	B	0.4	**14.3**	**B**		
5											
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	49.4	D	0.9	32.4	C	53	262
				SBR	18.1	B	1.9			18	186
			Port Republic Road	EBT	5.8	A	0.2	5.3	A	13	249
				EBR	2.3	A	0.2			0	56
			Port Republic Road	WBL	6.9	A	0.4	8.8	A	3	204
				WBT	9.0	A	0.4			36	429
			Intersection		11.3	B	0.5	**11.3**	**B**		

Appendix A - Weekday AM 2030 Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Build MOEs						
					Movement Delay (sec/veh)	Estimated Movement LOS	Stops per Vehicle	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
6											
	Port Republic Road at NB I-81 On-Ramp	Signal	Port Republic Road	EBL	21.5	C	1.3	4.4	A	10	176
				EBT	0.8	A	0.0			0	4
			Port Republic Road	WBT	2.0	A	0.1	1.8	A	6	255
				WBR	0.6	A	0.0			0	33
			Intersection		2.7	A	0.1	**2.7**	**A**		
7											
	Port Republic Road at NB I-81 Off-Ramp / Forest Hill Road	Signal	NB I-81 Off-Ramp	NBL	41.3	D	0.9	35.5	D	69	354
				NBT	50.8	D	0.9			41	216
				NBR	8.3	A	1.3			5	110
			Forest Hill Road	SBL	54.1	D	0.9	25.6	C	28	193
				SBR	11.4	B	1.6			28	193
			Port Republic Road	EBL	26.5	C	1.2	7.1	A	5	93
				EBT	5.1	A	0.2			10	166
			Port Republic Road	WBT	12.9	B	0.4	13.9	B	208	992
				WBR	18.9	B	0.7			208	992
			Intersection		17.2	B	0.6	**17.2**	**B**		
8											
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBR	5.9	A	1.1	5.9	A	1	67
			Port Republic Road	EBT	0.7	A	0.0	0.8	A	0	0
				EBR	1.6	A	0.0			0	8
			Port Republic Road	WBT	4.5	A	0.2	4.5	A	20	562
			Intersection		3.2	A	0.1	**3.2**	**A**		
9											
	Port Republic Road at Bradley Drive	Signal	Bradley Drive	NBL	56.0	E	1.0	51.5	D	62	334
				NBR	39.3	D	1.1			66	341
			Port Republic Road	EBT	7.1	A	0.2	7.1	A	18	192
				EBT	6.2	A	0.3			22	225
			Port Republic Road	WBL	11.2	B	0.7	7.6	A	36	-39
				WBT	7.5	A	0.3			36	-39
			Intersection		11.0	B	0.4	**11.0**	**B**		
10											
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	47.9	D	0.9	45.0	D	95	537
				NBT	43.1	D	0.9			5	55
				NBR	7.4	A	0.3			0	33
			Devon Lane	SBL	44.7	D	0.8	17.7	B	7	77
				SBT	63.5	E	1.0			3	38
				SBR	12.6	B	2.3			12	167
			Port Republic Road	EBL	20.2	C	1.0	10.8	B	4	77
				EBT	10.1	B	0.3			23	211
				EBR	9.0	A	2.3			23	212
			Port Republic Road	WBL	16.9	B	0.9	14.6	B	2	57
				WBT	14.5	B	0.5			50	458
				WBR	14.5	B	0.5			49	458
			Intersection		17.8	C	0.7	**17.8**	**B**		

Appendix A - Weekday PM 2030 Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Build MOEs						
					Movement Delay (sec/veh)	Estimated Movement LOS	Stops per Vehicle	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
1											
	Port Republic Road / Maryland Avenue at South Main Street	Signal	Maryland Avenue	EBL	62.8	E	1.1	37.2	D	6	63
				EBT	46.5	D	0.8			55	237
				EBR	10.0	A	1.2			1	72
			Port Republic Road	WBL	100.3	F	1.1	48.6	D	131	492
				WBT	40.3	D	0.6			74	485
				WBR	12.9	B	0.5			74	485
			South Main Street	SBL	65.3	E	1.0	45.6	D	295	1,178
				SBT	28.6	C	0.7			145	1,099
				SBR	31.2	C	0.7			145	1,101
			South Main Street	NBL	62.2	E	1.0	31.2	C	39	191
				NBT	37.7	D	0.8			90	500
				NBR	13.9	B	0.6			18	306
			Intersection		41.8	D	0.8	**41.8**	**D**		
2											
	Port Republic Road at Hillcrest Drive	Two-Way Stop	Port Republic Road	EBT	2.0	A	0.1	2.0	A	3	110
				EBR	0.8	A	0.0			3	110
			Port Republic Road	WBT	1.5	A	0.0	1.5	A	0	18
				WBR	1.8	A	0.0			0	0
			Hillcrest Drive	SBR	7.0	A	1.0	7.0	A	0	47
			Hillcrest Drive	NBR	21.8	C	1.7	21.8	C	0	38
			Intersection		1.8	A	0.0	**1.8**	A		
3											
	Port Republic Road at Crawford Avenue	Two-Way Stop	Crawford Avenue	NBR	35.9	E	2.2	35.9	E	5	115
			Port Republic Road	EBT	9.9	A	0.3	9.9	A	58	546
				EBR	0.0	A	0.0			58	546
			Port Republic Road	WBT	0.8	A	0.0	0.8	A	0	0
			Intersection		5.9	A	0.2	**5.9**	A		
4											
	Port Republic Road at Hillside Avenue / Bluestone Drive	Signal	Hillside Avenue	NBL	59.4	E	0.9	31.1	C	19	171
				NBT	56.0	E	0.9			19	171
				NBR	16.8	B	1.7			2	78
			Bluestone Drive	SBL	68.2	E	1.5	68.7	E	183	1129
				SBT	79.5	E	1.8			183	1129
				SBR	68.6	E	2.0			196	1150
			Port Republic Road	EBL	89.6	F	2.4	35.5	D	92	1114
				EBT	29.1	C	0.7			431	1295
				EBR	24.7	C	0.6			6	1295
			Port Republic Road	WBL	40.9	D	1.4	22.3	C	7	85
				WBT	22.7	C	0.3			179	352
				WBR	16.8	B	0.7			44	366
			Intersection		35.4	D	0.9	**35.4**	**D**		
5											
	Port Republic Road at SB I-81 Ramps	Signal	SB I-81 Off-Ramp	SBL	57.2	E	0.9	85.0	F	67	311
				SBR	110.1	F	4.3			190	742
			Port Republic Road	EBT	7.0	A	0.2	6.3	A	43	409
				EBR	2.8	A	0.2			1	98
			Port Republic Road	WBL	34.8	C	1.5	24.6	C	54	411
				WBT	22.2	C	0.7			72	463
			Intersection		22.3	C	0.7	**22.3**	**C**		

Appendix A - Weekday PM 2030 Build Conditions

Node No.	Intersection	Traffic Control	Approach	Movement	Build MOEs						
					Movement Delay (sec/veh)	Estimated Movement LOS	Stops per Vehicle	Approach Delay (sec/veh)	Estimated Approach LOS	Average Queue Length (ft)	Max Queue Length (ft)
6											
	Port Republic Road at NB I-81 On-Ramp	Signal	Port Republic Road	EBL	18.0	B	1.2	7.8	A	21	378
				EBT	5.8	A	0.2			4	163
			Port Republic Road	WBT	8.8	A	0.3	8.2	A	54	312
				WBR	4.9	A	0.3			5	263
			Intersection		8.0	A	0.3	**8.0**	**A**		
7											
	Port Republic Road at NB I-81 Off-Ramp / Forest Hill Road	Signal	NB I-81 Off-Ramp	NBL	37.7	D	1.1	34.5	C	45	273
				NBT	57.8	E	0.9			41	206
				NBR	11.8	B	1.3			7	122
			Forest Hill Road	SBL	53.2	D	1.0	35.1	D	81	363
				SBR	21.9	C	1.8			81	363
			Port Republic Road	EBL	44.5	D	1.5	13.3	B	38	261
				EBT	9.9	A	0.2			54	328
			Port Republic Road	WBT	36.2	D	0.9	34.3	C	431	1295
				WBR	23.5	C	1.3			431	1295
			Intersection		26.9	C	0.8	**26.9**	**C**		
8											
	Port Republic Road at Hunters Road	Two-Way Stop	Hunters Road	NBR	8.5	A	1.5	8.5	A	1	67
			Port Republic Road	EBT	1.9	A	0.0	2.0	A	1	116
				EBR	2.7	A	0.0			1	129
			Port Republic Road	WBT	19.1	C	0.6	19.1	C	104	865
			Intersection		10.0	A	0.3	**10.0**	**A**		
9											
	Port Republic Road at Bradley Drive	Signal	Bradley Drive	NBL	56.7	E	1.0	54.7	D	73	354
				NBR	45.2	D	1.1			78	362
			Port Republic Road	EBT	11.2	B	0.3	11.1	B	53	453
				EBR	10.4	B	0.4			65	484
			Port Republic Road	WBL	32.3	C	1.3	11.7	B	47	265
				WBT	10.7	B	0.4			47	265
			Intersection		14.5	B	0.4	**14.5**	**B**		
10											
	Port Republic Road at Devon Lane	Signal	Devon Lane	NBL	54.2	D	1.0	49.5	D	93	469
				NBT	78.0	E	1.3			8	74
				NBR	6.3	A	0.3			0	45
			Devon Lane	SBL	38.0	D	0.8	28.9	C	16	183
				SBT	61.6	E	1.0			9	81
				SBR	19.0	B	1.9			14	224
			Port Republic Road	EBL	29.3	C	1.1	17.4	B	30	281
				EBT	15.6	B	0.4			63	511
				EBR	14.9	B	0.6			63	512
			Port Republic Road	WBL	30.2	C	1.0	24.2	C	4	79
				WBT	24.0	C	0.6			74	459
				WBR	23.4	C	0.7			73	459
			Intersection		24.1	C	0.7	**24.1**	**C**		

Total Study Area Roadways/Intersections

Appendix G

Port Republic Road and South Main Street

Alternative Intersection Analysis

VDOT Junction Screening Tool

Input Worksheet

Project Title:	*Port Republic and Main Street*
E-W Facility:	*Port Republic Road*
N-S Facility:	*Main Street*
Date:	*December 10, 2018*

Traffic Volume Demand

Direction	Volume (veh/hr)			Truck Percent (%)
	U-Turn / Left	Through	Right	
Eastbound	18	286	112	4.00%
Westbound	336	411	406	4.00%
Northbound	105	554	406	4.00%
Southbound	652	702	57	4.00%
Adjustment Factor	0.80 / 0.95		0.85	
Suggested	**U - 0.8 / L - 0.95**		**0.85**	
Truck to PCE Factor		**Suggested = 2.00**		2.00
Critical Lane Volume		1600		

Equivalent Passenger Car Volume

	Volume (pc/hr)			
	U-Turn / Left	Through	Right	Approach
Eastbound	19	297	116	432
Westbound	349	427	422	1198
Northbound	109	576	422	1107
Southbound	678	730	59	1467

Notes:

Left-turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation value for critical lane volume sum at an intersection*

VDOT Junction Screening Tool

Possible Configurations

Indicate with a "Y" or "N" if each intersection or interchange configuration should or should not be considered. Use the information links for guidance. Then, click the "Show/Hide Configurations button" to hide the worksheets for the configurations that will not be considered.

#	Intersections	Information	Consider?	Justification
	Signalized Intersections			
1	Conventional	-	Y	
2	Bowtie	Link	N	Right-of-way restrictions identified
3	Center Turn Overpass	Link	N	Financial constraints identified
4	Continuous Green-T	Link	N	Not feasible for roadway facility type
5	Echelon	Link	N	Financial constraints identified
6	Full Displaced Left Turn	Link	Y	
7	Median U-Turn	Link	N	Insufficient intersection spacing
8	Partial Displaced Left Turn	Link	Y	
9	Partial Median U-Turn	Link	N	Insufficient intersection spacing
10	Quadrant Roadway N-E	Link	N	Right-of-way restrictions identified
11	Quadrant Roadway N-W	Link	N	Right-of-way restrictions identified
12	Quadrant Roadway S-E	Link	N	Right-of-way restrictions identified
13	Quadrant Roadway S-W	Link	N	Right-of-way restrictions identified
14	Restricted Crossing U-Turn	Link	N	Unable to accommodate traffic patterns
15	Single Loop	Link	N	Right-of-way restrictions identified
16	Split Intersection	Link	N	Right-of-way restrictions identified
	Unsignalized Intersections			
17	50 Mini Roundabout	Link	N	Not feasible for roadway facility type
18	75 Mini Roundabout	Link	N	Not feasible for roadway facility type
19	Roundabout	Link	Y	
20	Two-Way Stop Control	-	Y	
#	Interchanges	Information	Consider?	Justification
21	Traditional Diamond	Link	N	Not feasible for roadway facility type
22	Contraflow Left	Link	N	Not feasible for roadway facility type
23	Displaced Left Turn	Link	N	Not feasible for roadway facility type
24	Diverging Diamond	Link	N	Not feasible for roadway facility type
25	Double Roundabout	Link	N	Not feasible for roadway facility type
26	Michigan Urban Diamond	Link	N	Not feasible for roadway facility type
27	Partial Cloverleaf	Link	N	Not feasible for roadway facility type
28	Single Point	Link	N	Not feasible for roadway facility type
29	Single Roundabout	Link	N	Not feasible for roadway facility type

VDOT Junction Screening Tool

Directional Questions and Base Lane Configurations

Before entering a base number of through lanes for each direction, answer all applicable directional question for each intersection or interchange configuration selected for consideration. Navigate to the lane configuration worksheet for example diagrams, if provided.

Intersections	Question	Direction
Bowtie	N/A	N/A
Continuous Green-T	N/A	N/A
Echelon	N/A	N/A
Median U-Turn	N/A	N/A
Partial Displaced Left Turn	Select the roadway with the displaced left turns from the drop-down list.	NB-SB
Partial Median U-Turn	N/A	N/A
Restricted Crossing U-Turn	N/A	N/A
Single Loop	N/A	N/A
Split Intersection	N/A	N/A
Interchanges	**Question**	**Direction**
All	N/A	N/A

Base Number of Through Lanes

Enter a base number of through lanes for each direction. The number of through lanes entered will populate on each non-roundabout lane configuration worksheet. This tool also allows the user to enter the number of through lanes on the lane configuration worksheets directly. This base number may be overwritten on individual lane configuration worksheets. Turn lanes, shared lanes, and channelized lanes must still be entered in each lane configuration worksheet.

Eastbound	2
Westbound	2
Northbound	2
Southbound	2

VDOT Junction Screening Tool

Results Worksheet

General Information	
Project Title:	Port Republic and Main Street
EW Facility:	Port Republic Road
NS Facility:	Main Street
Date:	December 10, 2018

Volumes (veh/hr)	U-Turn / Left	Through	Right
Eastbound	18	286	112
Westbound	336	411	406
Northbound	105	554	406
Southbound	652	702	57

General Instructions: All intersection and interchange configurations have a default assumption of one exclusive lane per movement. No results shall be interpreted until the user has verified the lane configurations on each worksheet.

Intersection Results

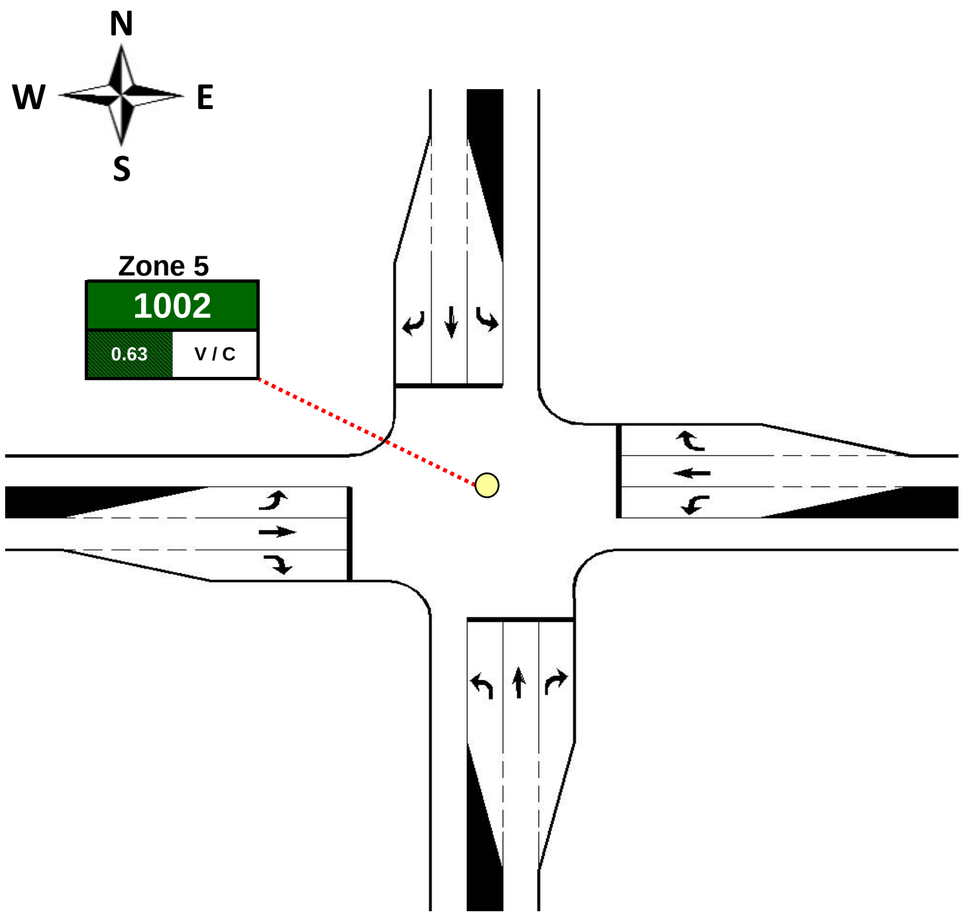
		Congestion	Pedestrian	Safety	Notes
Type	**Dir**	**Maximum V/C**	**Accommodation Compared to Conventional**	**Weighted Total Conflict Points**	
Conventional	-	0.63		48	
Full Displaced Left Turn	-	0.68	-	40	
Partial Displaced Left Turn	-	0.63	-	44	
Roundabout	-	2.01		8	
Two-Way Stop Control	-	12.45		48	

Information	
Congestion	The maximum v/c ratio represents the worst v/c of all zones that make up an intersection.
Pedestrian	Compares the potential of each design to accommodate pedestrians based on safety, wayfinding, and delay. Potential is qualitatively defined as better (+), similar (blank cell), or worse (-) than a conventional intersection or traditional diamond interchange.
Safety	Weighted Total = (2 x Crossing Conflicts) + Merging Conflicts + Diverging Conflicts

Conventional

DESIGN AND RESULTS

		Critical Lane Volume Sum			
Project Name:	Port Republic and Main Street	< 1200	1200 - 1399	1400 - 1599	≥ 1600
EW Facility:	Port Republic Road	VOLUME / CAPACITY RATIO:		0.63	
NS Facility:	Main Street				
Date:	December 10, 2018				

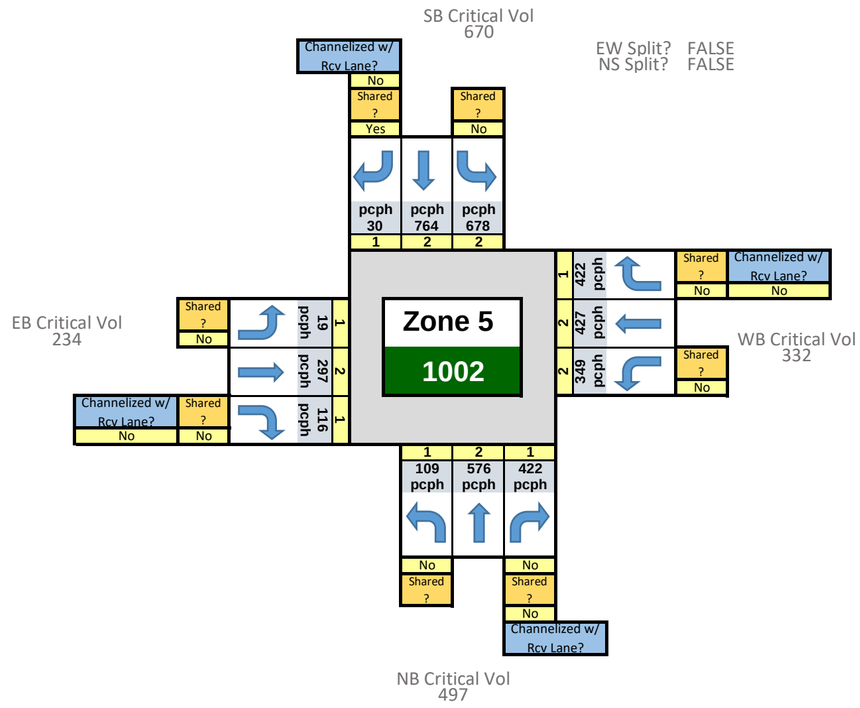


Note: This diagram does not reflect the actual lane configuration of the intersection

Conventional

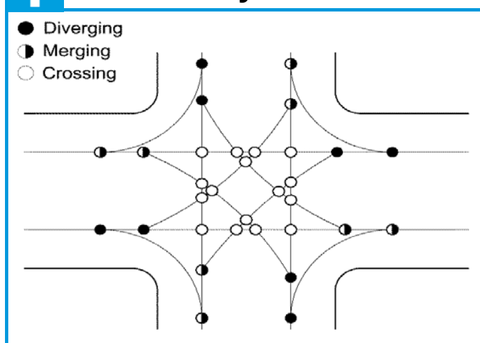
DATA INPUT AND CONFIGURATION

Enter the lane configurations in the yellow cells.



Back to Results

Safety - Conflict Point Diagram



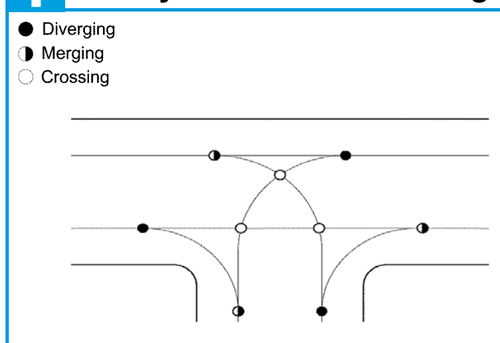
Conflict Type	Count
Crossing	16
Merging	8
Diverging	8
Total	**32**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

Weighted Total Conflict Points

48

Safety - Conflict Point Diagram (Three Legs)



Conflict Type	Count
Crossing	3
Merging	3
Diverging	3
Total	**9**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

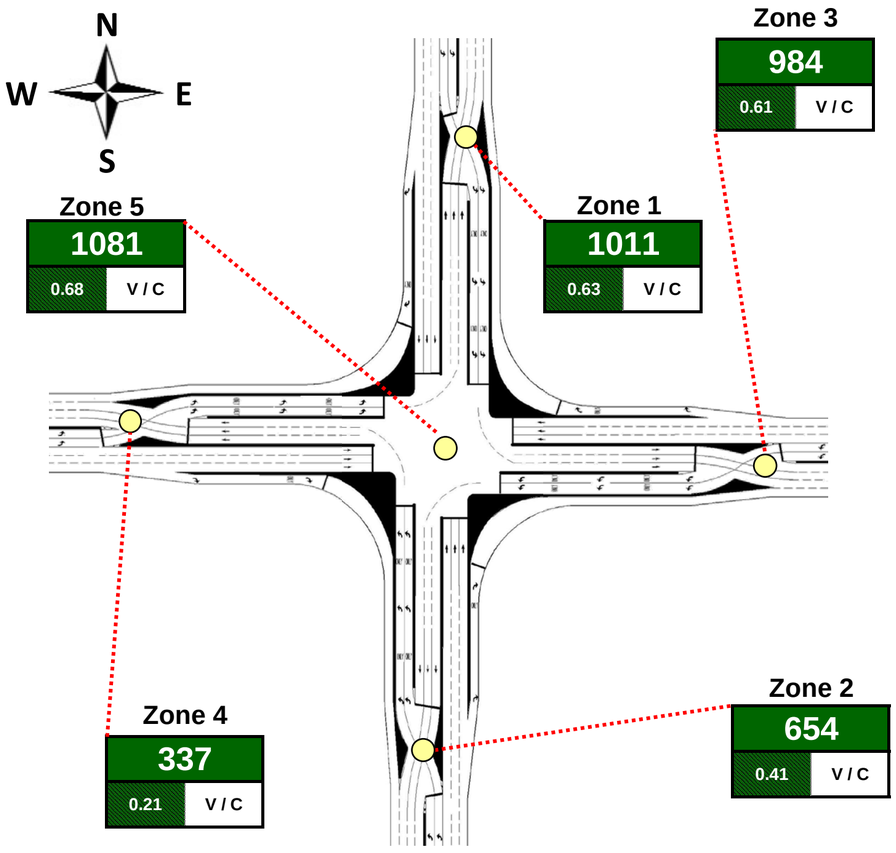
Weighted Total Conflict Points

12

Full Displaced Left Turn Intersection

DESIGN AND RESULTS

		Critical Lane Volume Sum			
Project Name:	*Port Republic and Main Street*	< 1200	1200 - 1399	1400 - 1599	≥ 1600
EW Facility:	*Port Republic Road*				
NS Facility:	*Main Street*	VOLUME / CAPACITY RATIO:		0.68	
Date:	*December 10, 2018*				

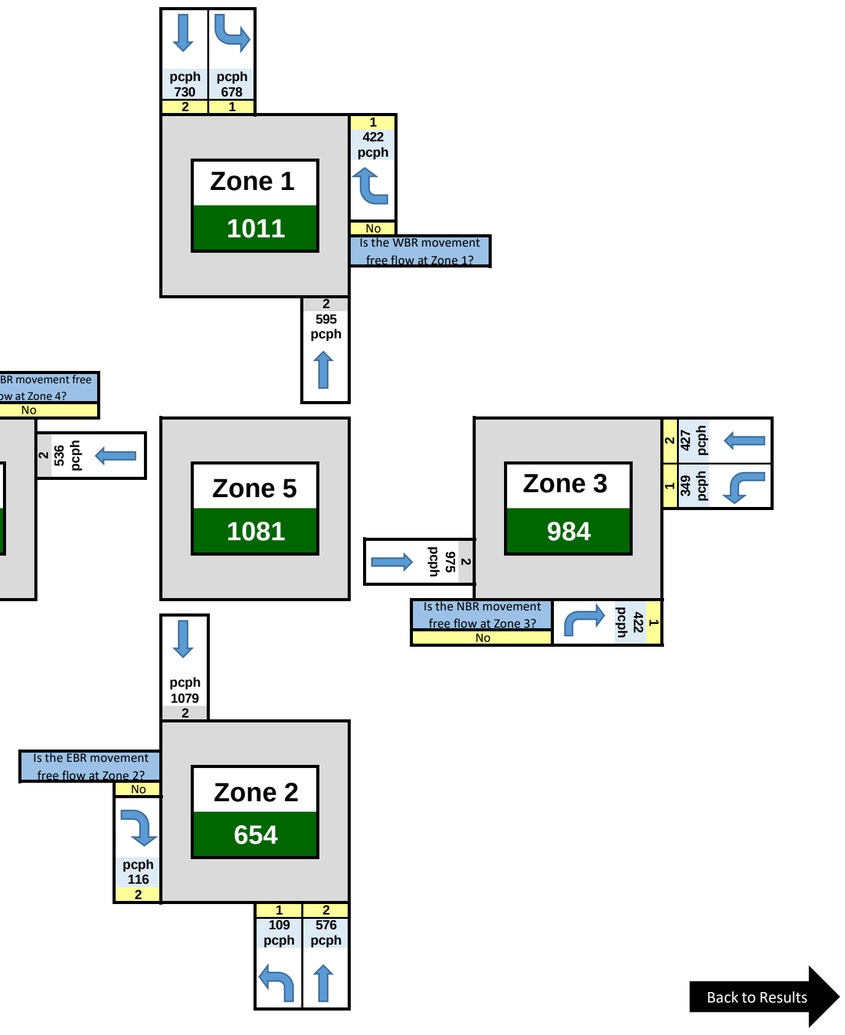


Note: This diagram does not reflect the actual lane configuration of the intersection

Full Displaced Left Turn Intersection

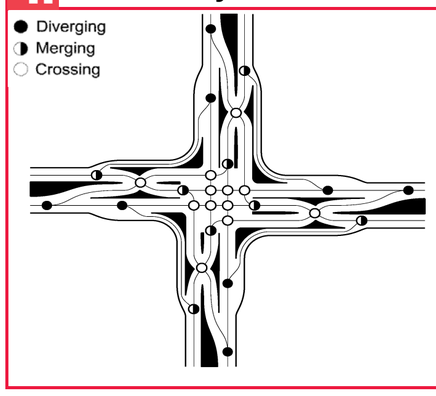
DATA INPUT AND CONFIGURATION

Enter the lane configurations in the yellow cells.



Back to Results

Safety - Conflict Point Diagram



Conflict Type	Count
Crossing	12
Merging	8
Diverging	8
Total	**28**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

Weighted Total Conflict Points

40

Assumptions

- CLV calculations at Zone 5 do not include right-turn movements.
- The number of through lanes entered in one zone is assumed to be equal to the number of through lanes in all zones that the movement passes through.

Partial Displaced Left Turn Intersection

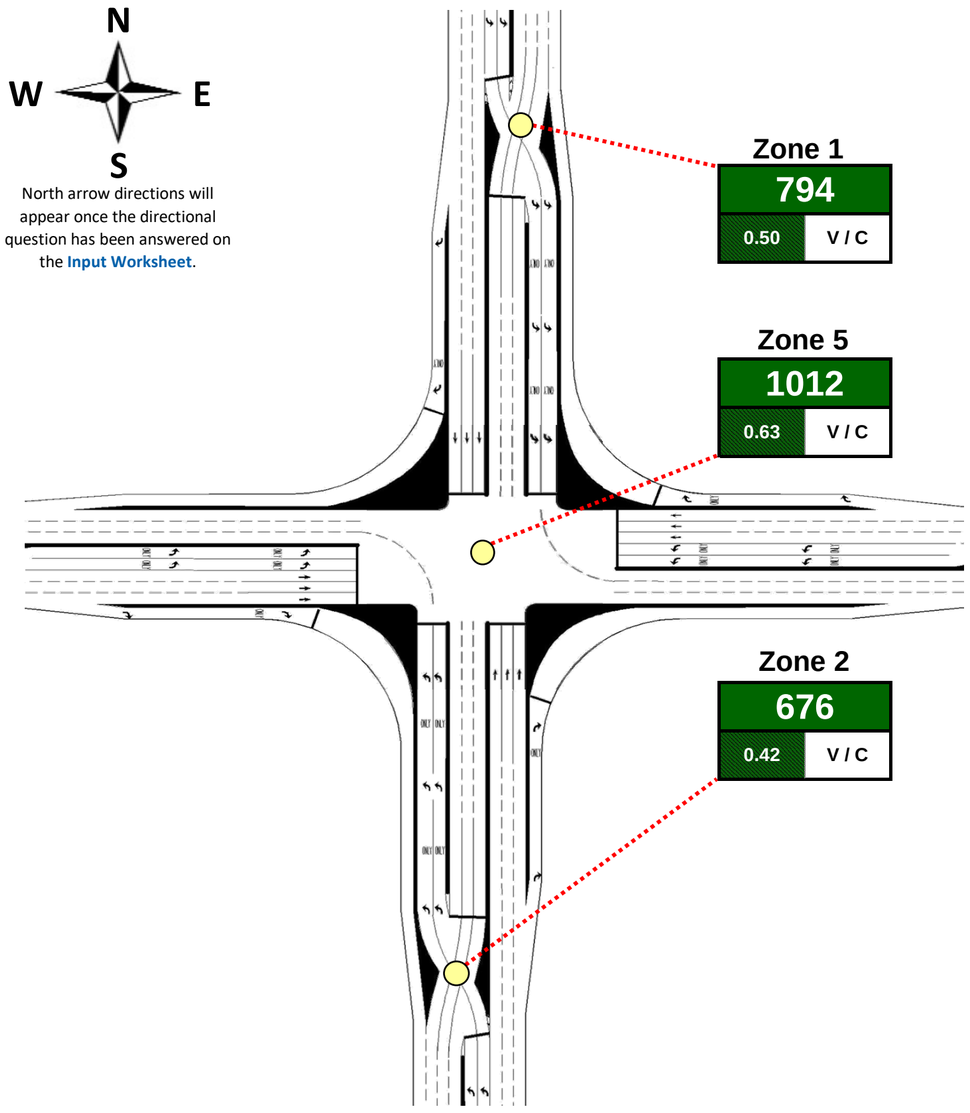
DESIGN AND RESULTS

Project Name:	*Port Republic and Main Street*
EW Facility:	*Port Republic Road*
NS Facility:	*Main Street*
Date:	*December 10, 2018*

Critical Lane Volume Sum			
< 1200	1200 - 1399	1400 - 1599	≥ 1600
VOLUME / CAPACITY RATIO:		0.63	

N
W E
S

North arrow directions will appear once the directional question has been answered on the **Input Worksheet**.

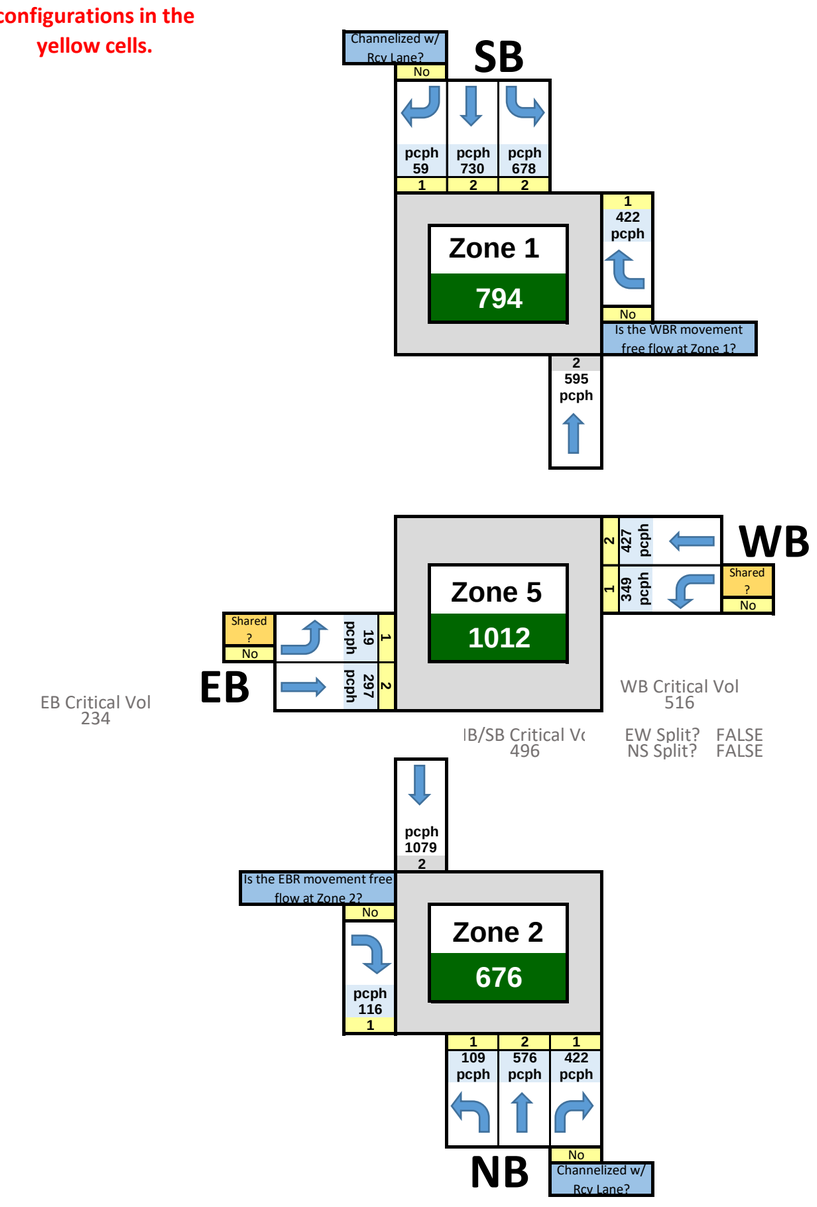


Note: This diagram does not reflect the actual lane configuration of the intersection

Partial Displaced Left Turn Intersection

DATA INPUT AND CONFIGURATION

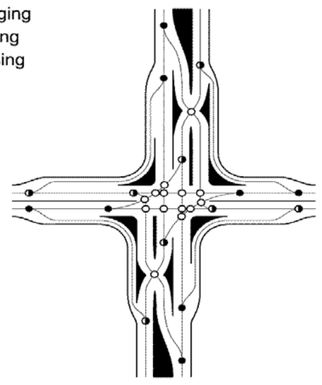
Enter the lane configurations in the yellow cells.



Back to Results

Safety - Conflict Point Diagram

- Diverging
- Merging
- Crossing



Conflict Type	Count
Crossing	14
Merging	8
Diverging	8
Total	**30**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

Weighted Total Conflict Points

44

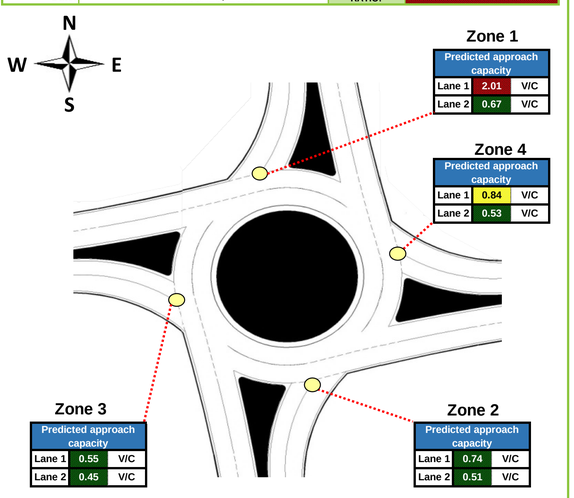
Assumptions

- CLV calculations at Zone 5 do not include the right-turn movements from the non-displaced-left approaches.
- The number of through lanes entered in one zone is assumed to be equal to the number of through lanes in all zones that the movement passes through.

Roundabout

DESIGN AND RESULTS

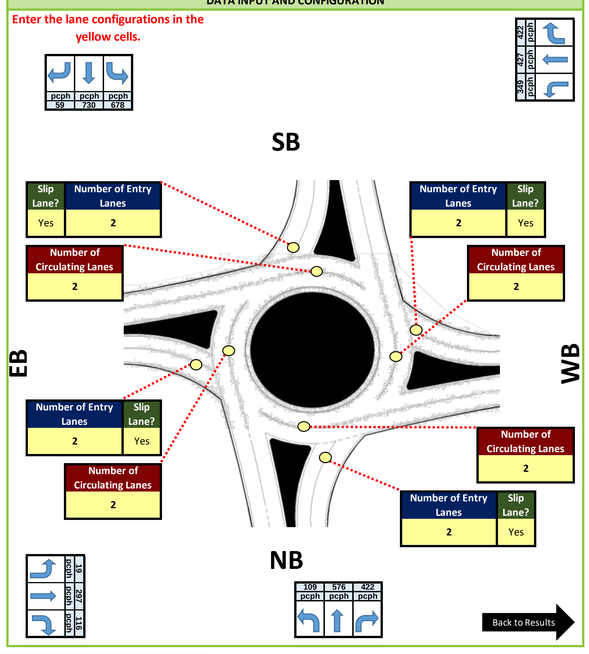
Project Name:	*Port Republic and Main Street*	*Critical Lane Volume Sum*			
EW Facility:	*Port Republic Road*	< 1200	1200 - 1399	1400 - 1599	≥ 1600
NS Facility:	*Main Street*	VOLUME / CAPACITY RATIO:	2.01		
Date:	*December 10, 2018*				



Roundabout

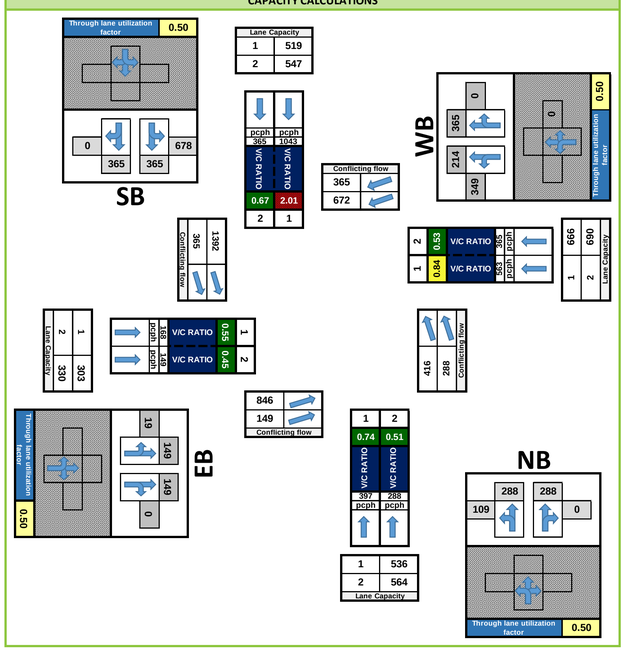
DATA INPUT AND CONFIGURATION

Enter the lane configurations in the yellow cells.



Roundabout

CAPACITY CALCULATIONS



EQUATION: A x exp(-B x Q)

Number of Entry Lanes	Number of Circulating Lanes	Lane	A	B
1	1	-	1130	0.001
1	2	-	1130	0.0007
2	1	Left	1130	0.001
2	1	Right	1130	0.001
2	2	Left	1130	0.00075
2	2	Right	1130	0.0007

Safety - Conflict Point Diagram

Conflict Type	Count
Crossing	0
Merging	4
Diverging	4
Total	**8**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

Weighted Total Conflict Points

8

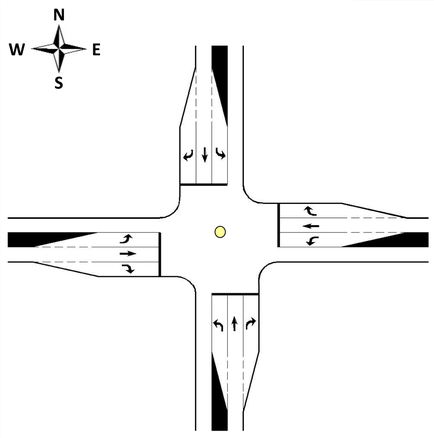
Assumptions

- The number of circulating lanes in one quadrant is assumed to be equal to the number of exiting lanes in the next quadrant.
- The roundabout is limited to a maximum of two entry lanes and two circulating lanes.
- All left-turning vehicles are assumed to stay in the innermost lane until exiting the roundabout.
- This worksheet does not use the CLV methodology. The calculations are based on the *HCM 2010* .

Two-Way Stop Control (TWSC)

DESIGN AND RESULTS

		Critical Lane Volume Sum			
Project Name:	Port Republic and Main Street	< 1200	1200 - 1399	1400 - 1599	≥ 1600
EW Facility:	Port Republic Road				
NS Facility:	Main Street	VOLUME / CAPACITY RATIO:			12.45
Date:	December 10, 2018				



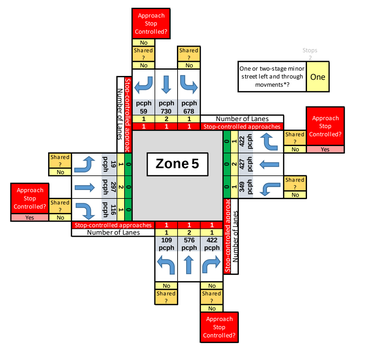
Note: This diagram does not reflect the actual lane configuration of the intersection

Two-Way Stop Control (TWSC)

DATA INPUT AND CONFIGURATION

Step 1: Identify which approaches are stop-controlled by selecting "Yes" from the drop-down

Step 2: Enter the lane configurations in the yellow cells.



Back to Results

Two-Way Stop Control (TWSC)

HCM 2010 CALCULATIONS

Priority	MVMT	Rank
1	EBL	2
2	EBT	1
3	EBR	1
4	WBL	2
5	WBT	1
6	WBR	1
7	NBL	4
8	NBT	3
9	NBR	2
10	SBL	4
11	SBT	3
12	SBR	2

MAJOR	MINOR
EB	NB
WB	SB

Major street lanes	4
M1 Shared?	FALSE
M4 Shared?	FALSE

Priority	Rank	Flow Rates	Lanes	Shared?	Stop controlled?	Truck %
1	2	19	1	No		0.04
4	2	349	1	No		0.04
7	4	109	1	No	Yes	0.04
8	3	576	2		Yes	0.04
9	2	422	1	No	Yes	0.04
10	4	678	1	No	Yes	0.04
11	3	730	2		Yes	0.04
12	2	59	1	No	Yes	0.04
2	1	297	2			0.04
3	1	116	1	No	No	0.04
5	1	427	2			0.04
6	1	422	1	No	No	0.04

Conflicting Flows		Critical Headways		Follow-Up Headways	
vc1	849.00	tc1	4.18	fc1	2.24
vc4	413.00	tc4	4.18	fc4	2.24
vc7	2065.50	tc7	7.58	fc7	3.54
vc8	1882.00	tc8	6.58	fc8	4.04
vc9	148.50	tc9	6.98	fc9	3.34
vc10	1868.50	tc10	7.58	fc10	3.54
vc11	1576.00	tc11	6.58	fc11	4.04
vc12	213.50	tc12	6.98	fc12	3.34
vci7	335.00	tci7	6.58		
vci17	1730.50	tci17	6.58		
vci8	335.00	tci8	5.58		
vci18	1547.00	tci18	5.58		
vci10	1125.00	tci10	6.58		
vci110	743.50	tci110	6.58		
vci11	1125.00	tci11	5.58		
vci111	451.00	tci111	5.58		

a	0.91

*Assumption: One storage space in median (n_s = 1) for two-stage turns

Saturation Flow Rates	
Through	1800
Right	1500

Potential Capacities		Movement Capacities		Shared Movement Capacities		Movement Capacities		Movement V/C		Intersection V/C
cp1	771.98	cm1	771.98			1	771.98	1	0.02	
cp4	1128.24	cm4	1128.24			2	3600.00	2	0.08	
cp7	30.71	c7	0.00	0		3	1500.00	3	0.08	
cp8	68.66	c8	46.25	0	0.00	4	1128.24	4	0.31	
cp9	865.14	cm9	865.14	0		5	3600.00	5	0.12	
cp10	43.47	c10	0.00	0		6	1500.00	6	0.28	
cp11	106.60	c11	71.81	0	0.00	7	0.00	7	0.00	
cp12	785.38	cm12	785.38	0		8	46.25	8	12.45	
						9	865.14	9	0.49	
cp27	647.07	cm7	0.00	cm7	0.00	10	0.00	10	0.00	
cp17	89.53	cm17	0.00	cm8	46.25	11	71.81	11	10.17	
cp18	636.05	cm8	220.00	cm10	0.00	12	785.38	12	0.08	
cp118	170.73	cm18	59.05	cm11	71.81					
cp110	215.07	cm110	0.00							
cp110	368.33	cm110	0.00							
cp111	293.96	cm111	103.68							
cp111	564.42	cm111	195.22							
y2	0.00	cT7	0.00							
y8	-28.01	cT8	36.35							
y10	0.00	cT10	0.00							
y11	-0.13	cT11	96.97							
Mvmt 1, excl left		p01	0.98							
Mvmt 4, excl left		p04	0.69							
Mvmt 1, shared left		p01	0.97	p08	0.00	p09	0.51			
Mvmt 4, shared left		p04	0.36	p011	0.00	p012	0.92			
Mvmt 7, 4-leg		p'07	0.00	p'07	0.00	fp7	0.00			
Mvmt 10, 4-leg		p'010	0.00	p'010	0.00	fp10	0.00			
		x1|,1+2	0.24							
		x4|,1+2	0.52							
One Stage		f8	0.35							
	(T-int. only)	f11	0.35							
	(T-int. only)	f7	0.00							
	(T-int. only)	f10	0.00							

Safety - Conflict Point Diagram

- Diverging
- Merging
- Crossing

Conflict Type	Count
Crossing	16
Merging	8
Diverging	8
Total	**32**

Conflict Type	Weight
Crossing	2
Merging	1
Diverging	1

Weighted Total Conflict Points
48

Assumptions

- This worksheet does not use the CLV methodology. The calculations are based on the *HCM 2010*; however, this tool converts vehicles to passenger cars.

Appendix H

Crash Locations per Intersection

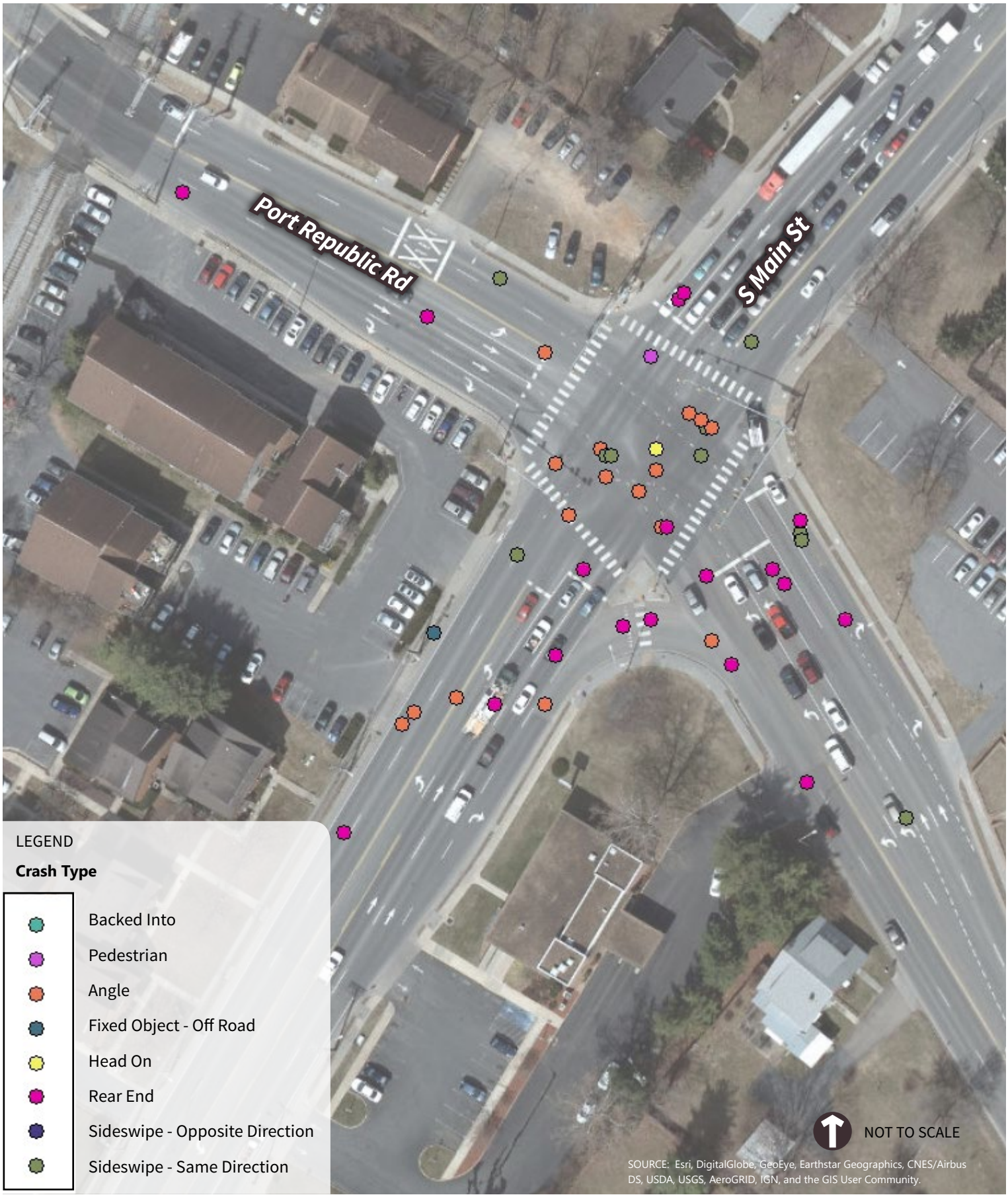


FIGURE H-1

CRASH LOCATIONS - SOUTH MAIN ST AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

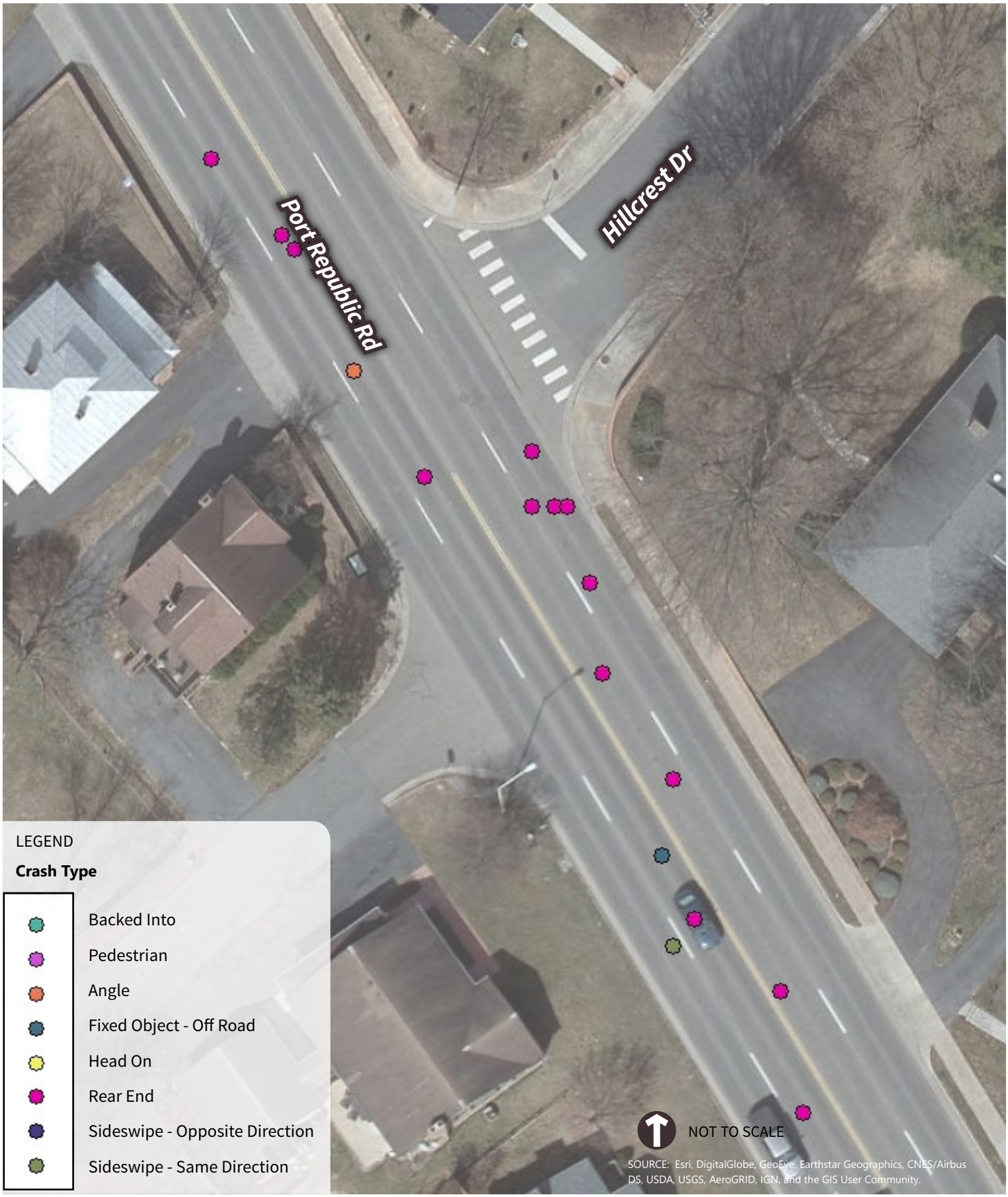


FIGURE H-2

CRASH LOCATIONS - HILLCREST DR AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

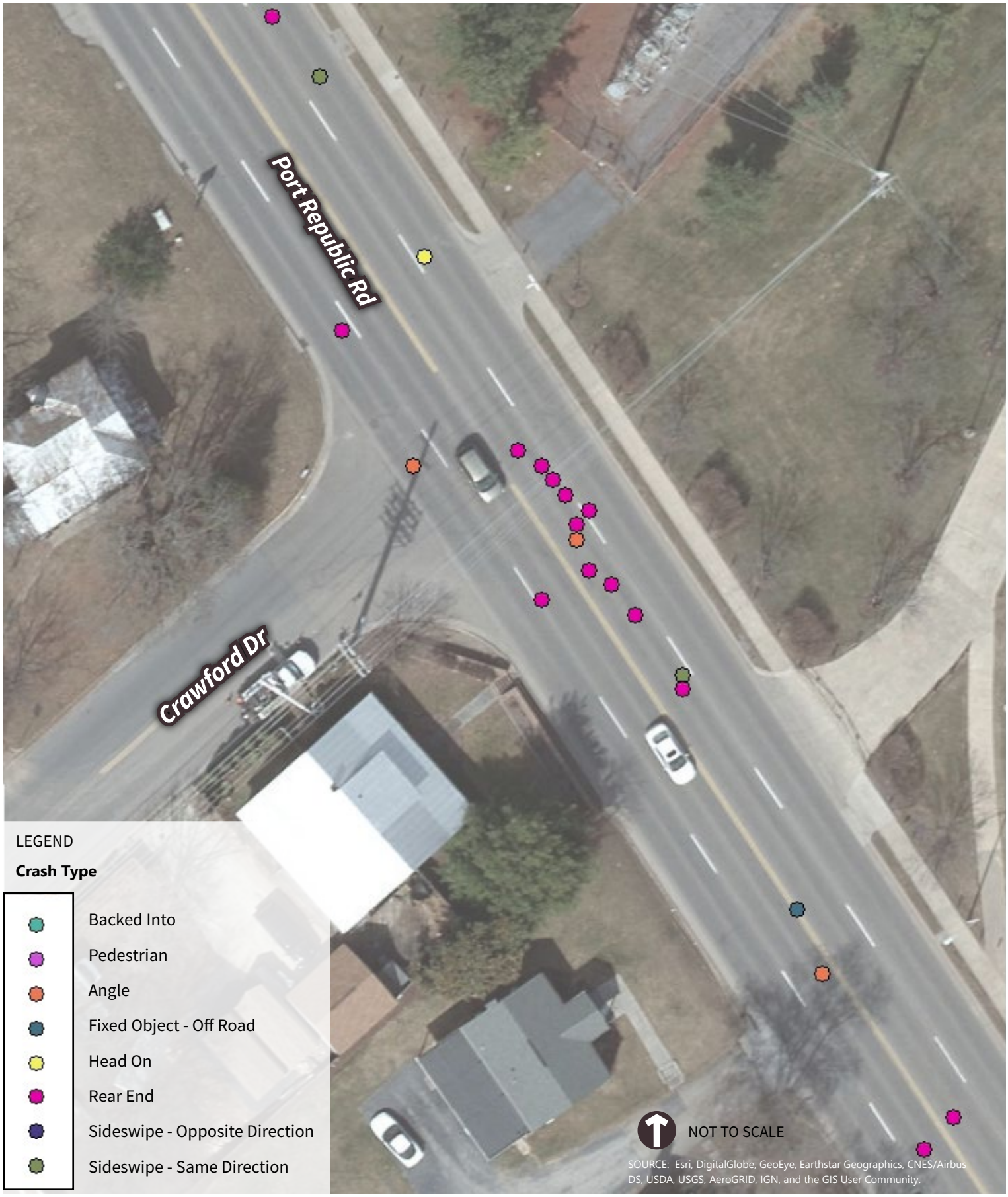


FIGURE H-3

CRASH LOCATIONS - CRAWFORD DR AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

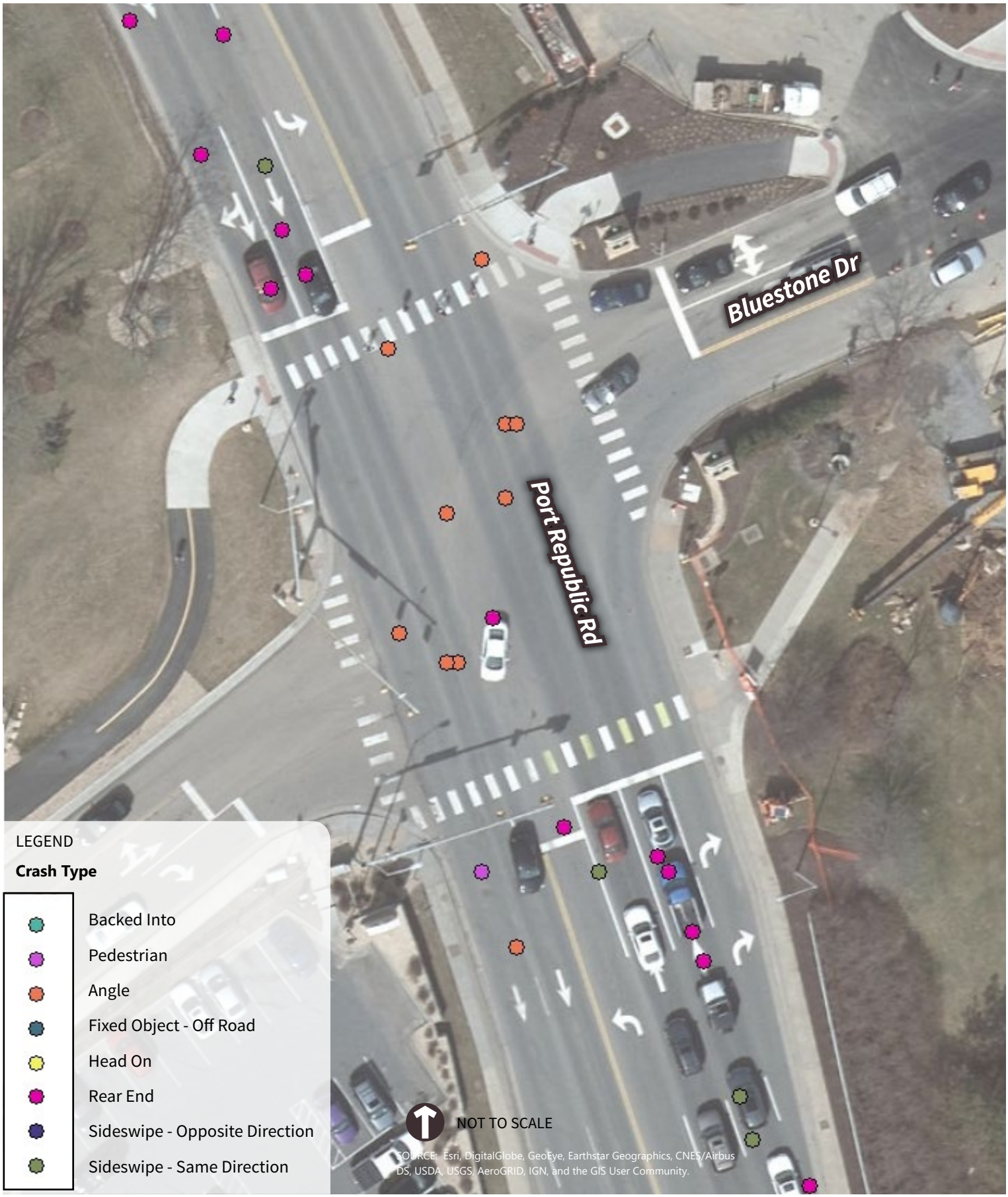


FIGURE H-4

CRASH LOCATIONS - BLUESTONE DR AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

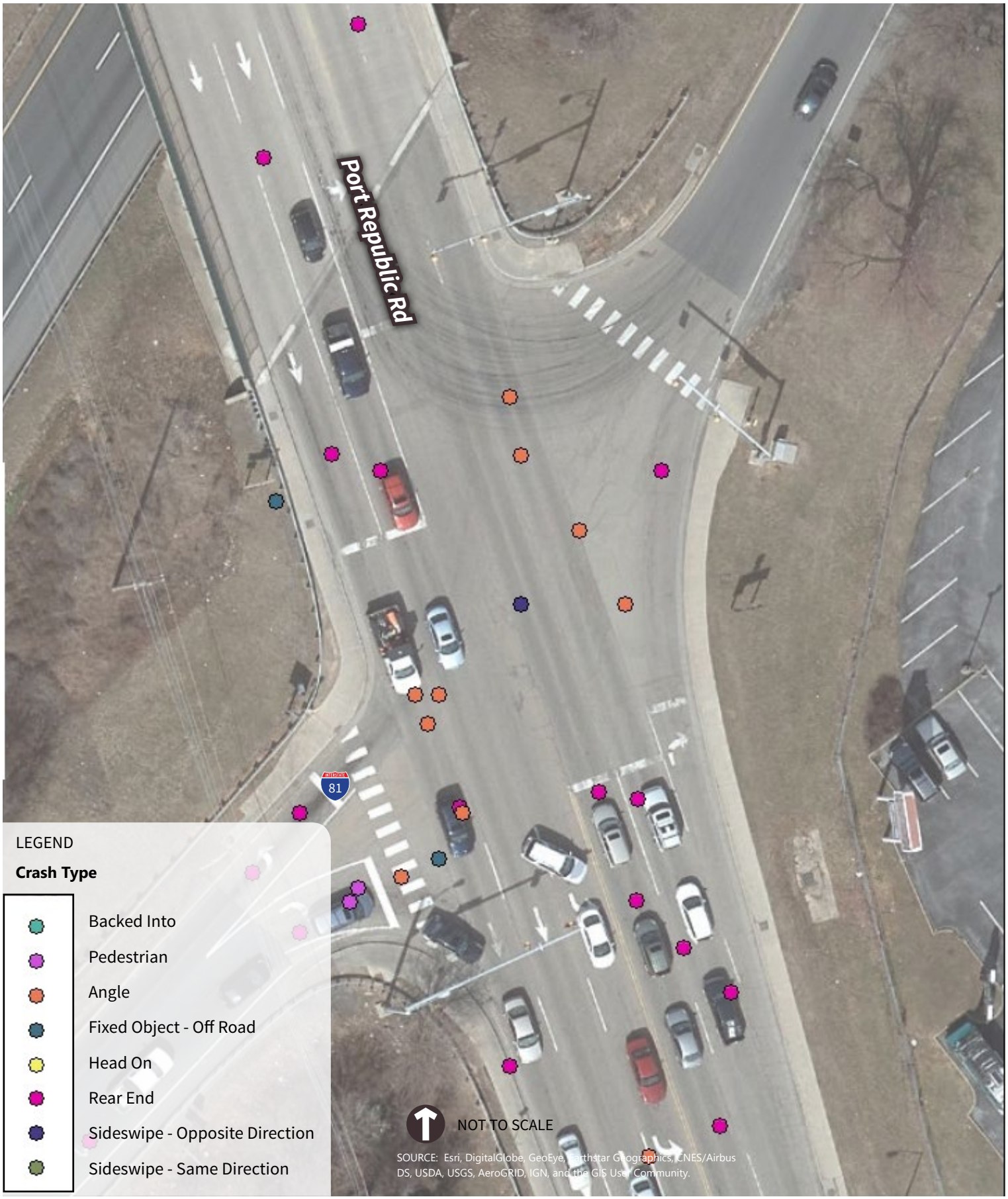


FIGURE H-5

CRASH LOCATIONS - I-81 NB RAMP AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

vhb

FIGURE H-6
CRASH LOCATIONS - I-81 SB RAMP AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

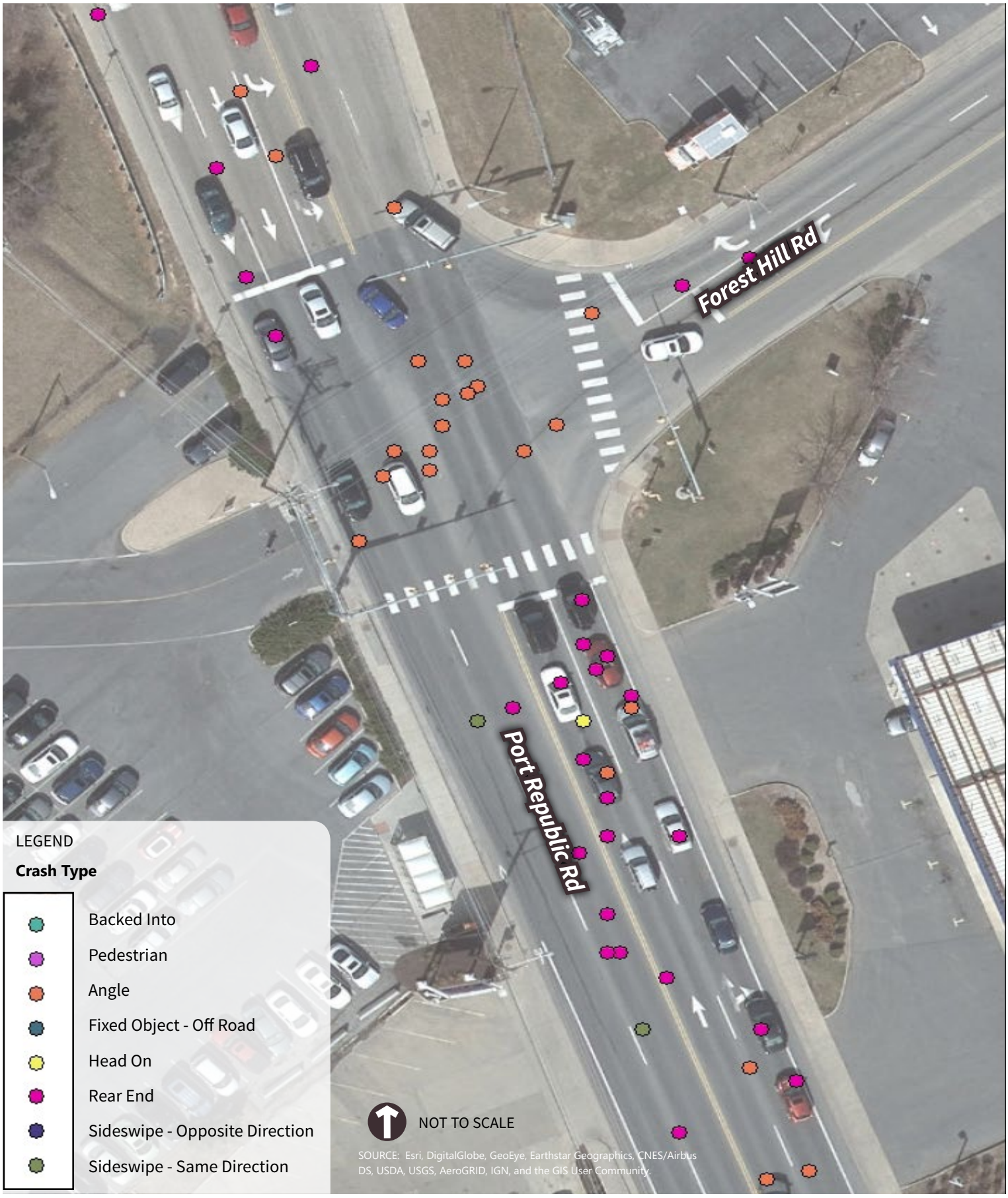


FIGURE H-7

CRASH LOCATIONS - FOREST HILL RD AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

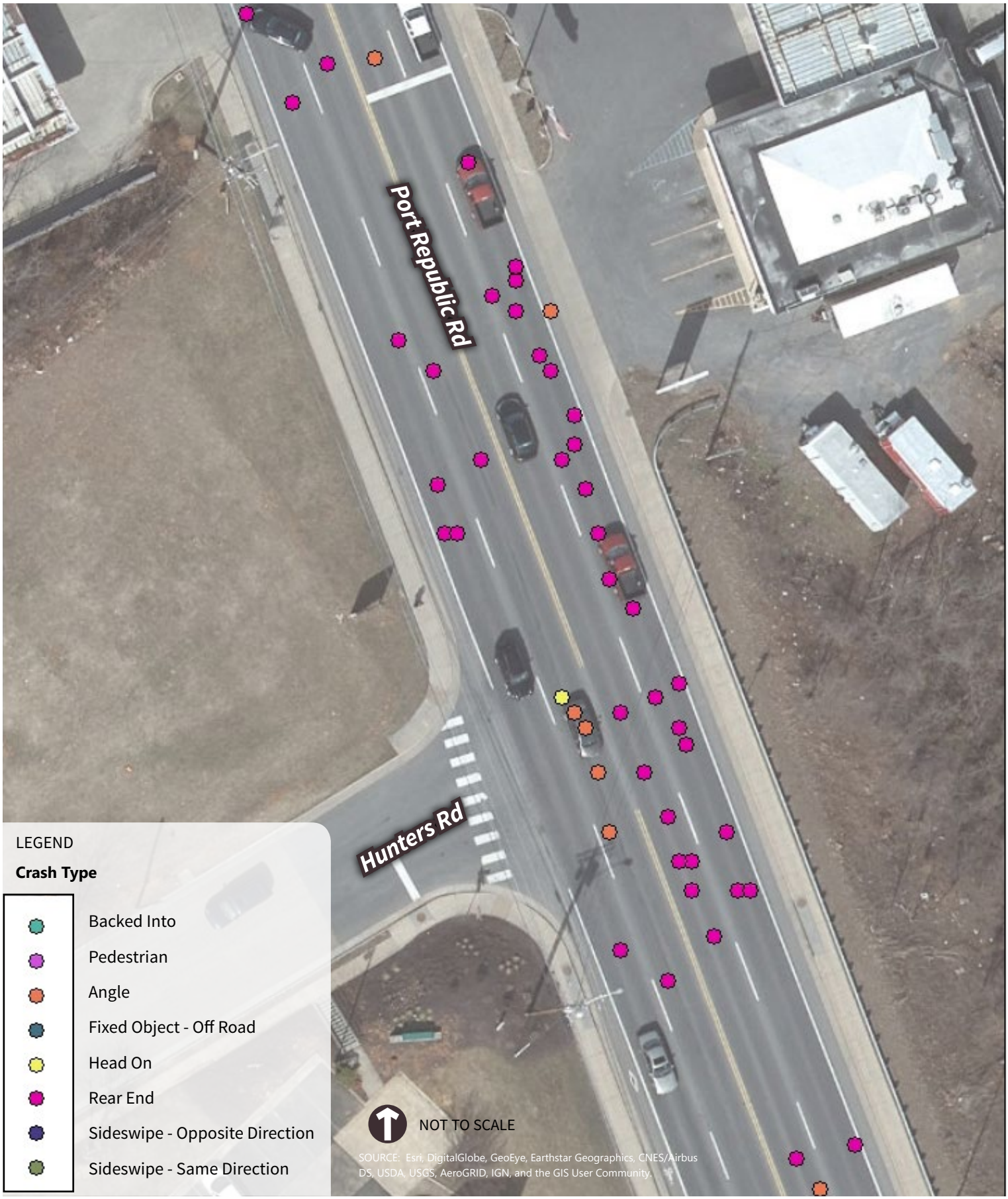


FIGURE H-8

CRASH LOCATIONS - HUNTERS RD AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

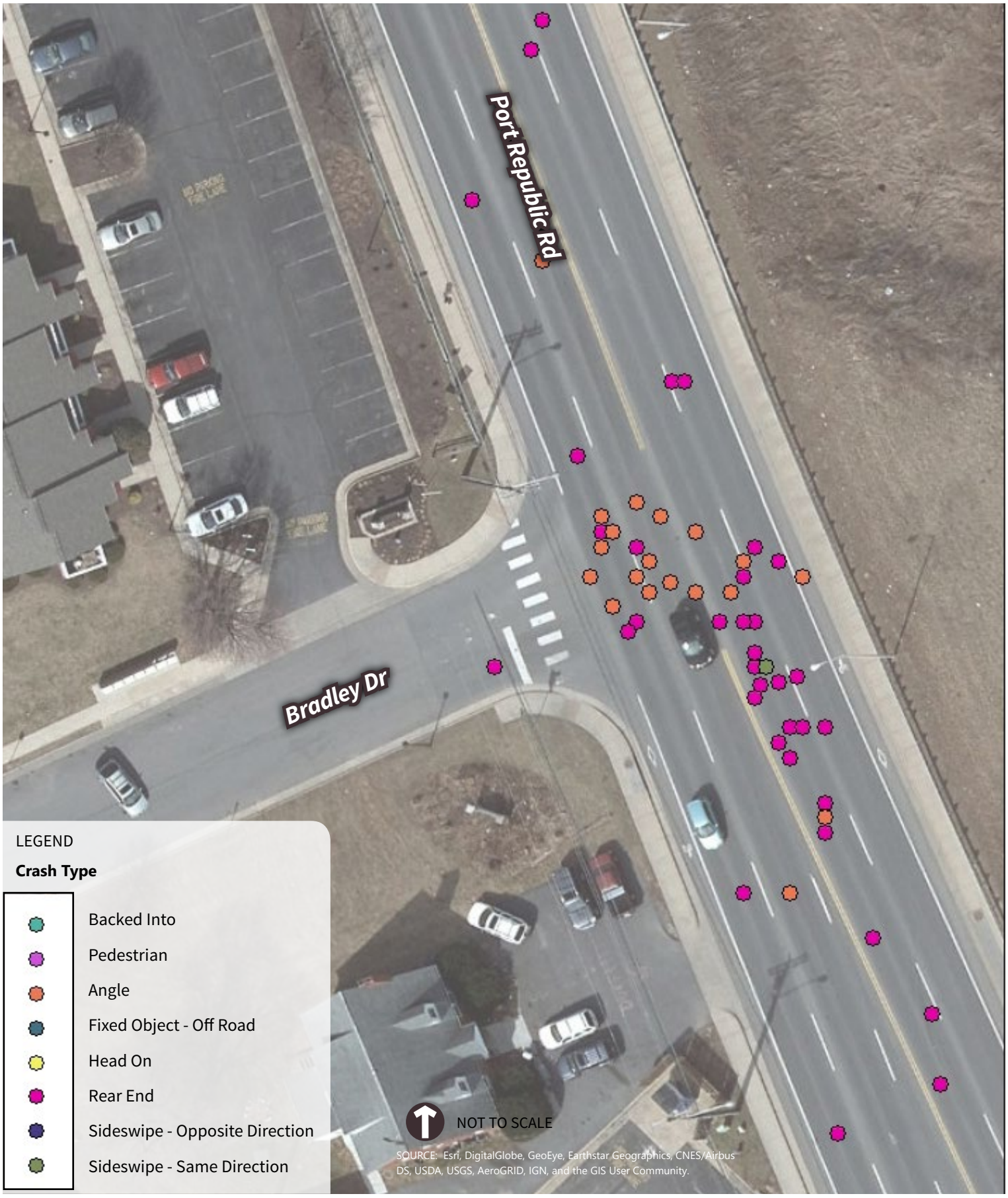


FIGURE H-9

CRASH LOCATIONS -BRADLEY DR AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

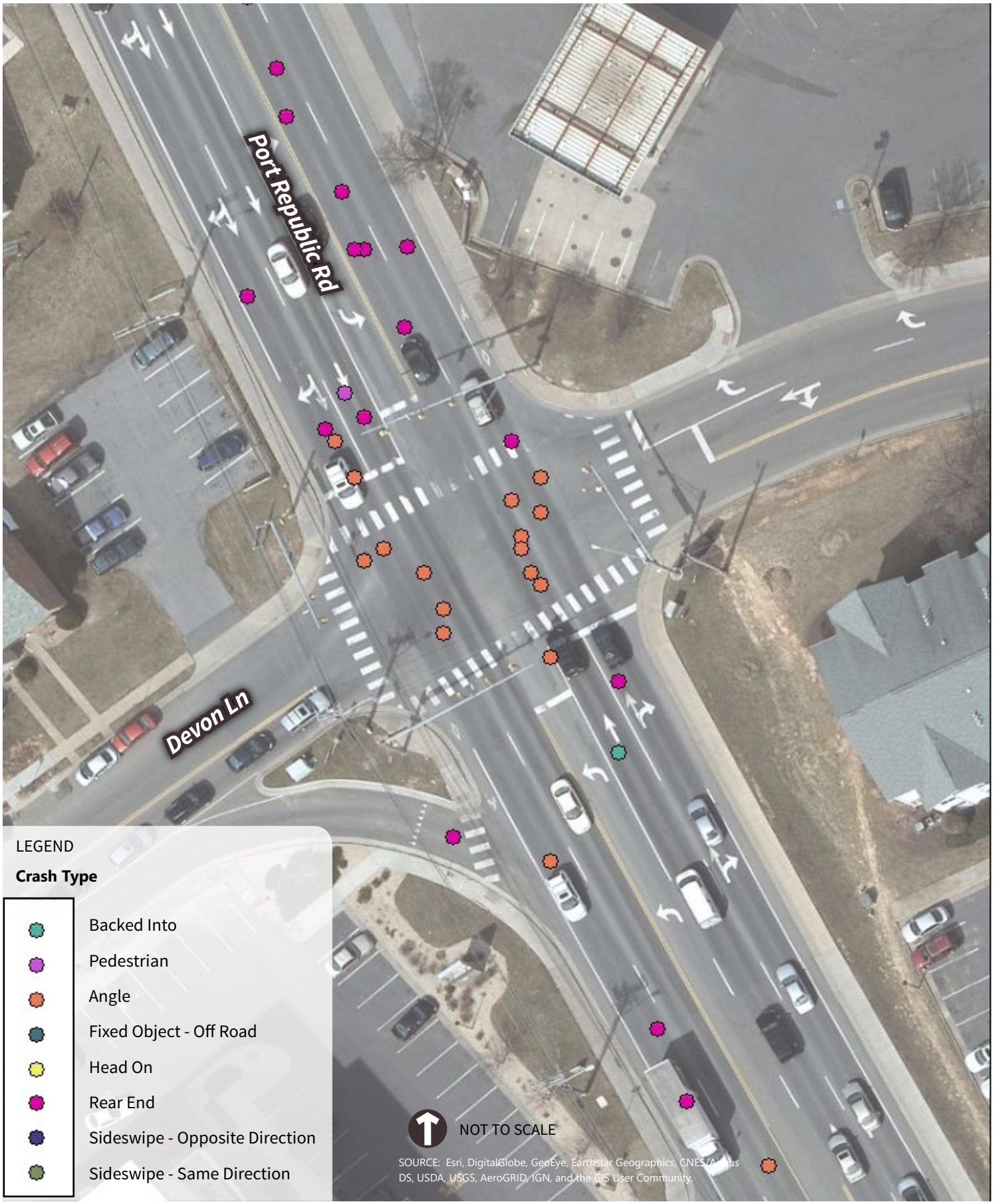


FIGURE H-10

CRASH LOCATIONS - DEVON LN AND PORT REPUBLIC RD

Port Republic Road Access Management Study

Harrisonburg, Virginia

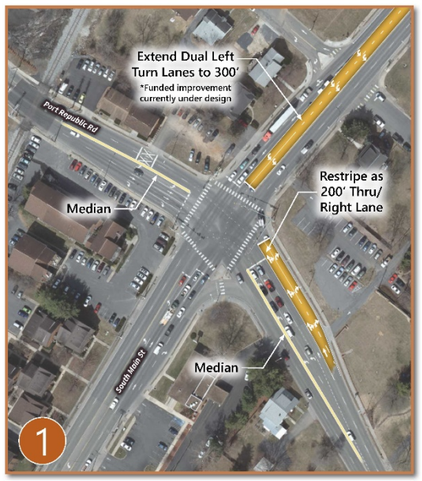
Appendix I

Intersections and Improvements

Recommended Conceptual Intersection Improvements

Port Republic Road Safety and Operations Study

Harrisonburg, Virginia



Port Republic Road at South Main Street

Port Republic Road at Hillcrest Drive

Port Republic Road at Crawford Avenue

Port Republic Road at Bluestone Drive

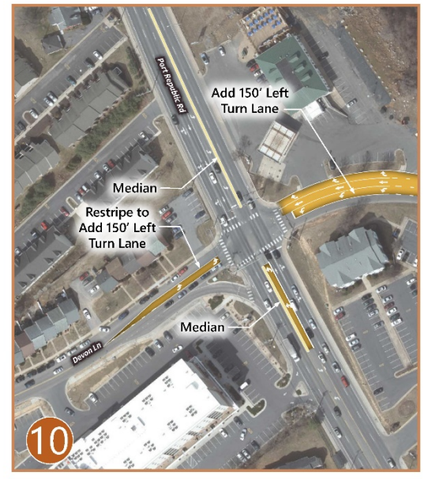
Port Republic Road at I-81, Exit 245 SB Ramp

Port Republic Road at I-81, Exit 245 NB Ramp

Port Republic Road at Forest Hill Road

Port Republic Road at Hunters Road

Port Republic Road at Bradley Drive



Port Republic Road at Devon Lane

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CITY OF HARRISONBURG VIRGINIA

Harrisonburg Rockingham Metropolitan Planning Organization

JAMES MADISON UNIVERSITY

HDPT

VDOT Virginia Department of Transportation

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