

Traffic & Microsimulation Report

Crestwood Railroad Crossing Study Oldham County

July 2021

Prepared for:



In Partnership with:



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- A. Turning Movement Count Data
- B. AM/PM Vissim Output Summary Tables for "Build" Scenarios

2.0 Data Collection Efforts

A. Historic Traffic Counts

KYTC provided historic traffic volumes, truck percentages, K-factors, and peak hour directional distributions throughout the study area as available. The most recent traffic data at each KYTC count station overlapping the study limits is summarized in **Table 1**. K-factor represents the peak hour volume as a percentage of the Average Daily Traffic (ADT) while the D-factor expresses the percentage of the peak hour volume in the peak direction.

Table 1: Historic KYTC Traffic Count Data

ID	Route	BMP	EMP	Year	ADT	Truck %	K-factor	D-factor
093B23	KY 22	1.825	3.262	2018	9,785	7.4	10.4	55
093B13 ¹	KY 22	3.262	3.544	2020	8,059	7.4	9.5	56
093B14	KY 22	3.544	3.935	2018	9,466	7.4	9.9	55
093B08	KY 146	0.630	2.150	2020	9,177	5.8	8.7	56
093B12	KY 146	2.150	2.361	2018	13,879	5.8	10.5	55
093B15	KY 146	2.361	2.642	2018	13,444	5.8	9.3	55
093B11	KY 329	7.226	8.840	2020	2,451	5.9	9.4	50
093B12 ²	KY 329	8.840	8.935	2020	4,126	5.8	8.4	56
093B19	KY 329B	0.000	1.756	2018	11,847	6.6	9.8	58
093B30	KY 329B	1.756	2.062	2020	5,466	6.6	9.8	56
093265	KY 1408	2.036	3.132	2018	4,274	5.9	10.4	55

¹ Includes KY 146/KY 22 “Reardon’s” at-grade crossing

² Includes KY 329 Railroad Ave at-grade crossing

B. 2021 Traffic Counts

Turning movement counts were conducted at seven intersections (**Figure 2**, next page) during March 4, 2021. Turning movement counts at major intersections along with recent KYTC counts were used to define existing traffic including daily, AM, and PM peak hour volumes. Twelve-hour Miovision turning movement counts were conducted, classifying vehicles into one of five categories: motorcycles, cars, buses, single-unit trucks, and articulated trucks. Any pedestrians and on-road bicyclists were also recorded.

Raw count data at each intersection is shown in **Appendix A**.

C. Vehicle Classifications

Class data collected during 2021 turning movement counts shows relatively low truck volumes using the KY 329 Railroad Avenue at-grade crossing. Raw count data showed three buses, 19 single unit trucks, and five articulated trucks using the crossing during the 12-hour count period. By comparison, there were 1,891 passenger cars at the same location during the same duration; heavier vehicles represent 1.4% of the 12-hour traffic volume.

At the KY 22/KY 146 at-grade crossing near Reardon’s, there were 74 heavy vehicles—mostly single unit trucks—representing 2.6% of the 2,874 vehicles crossing the tracks during the 12-hour count period.

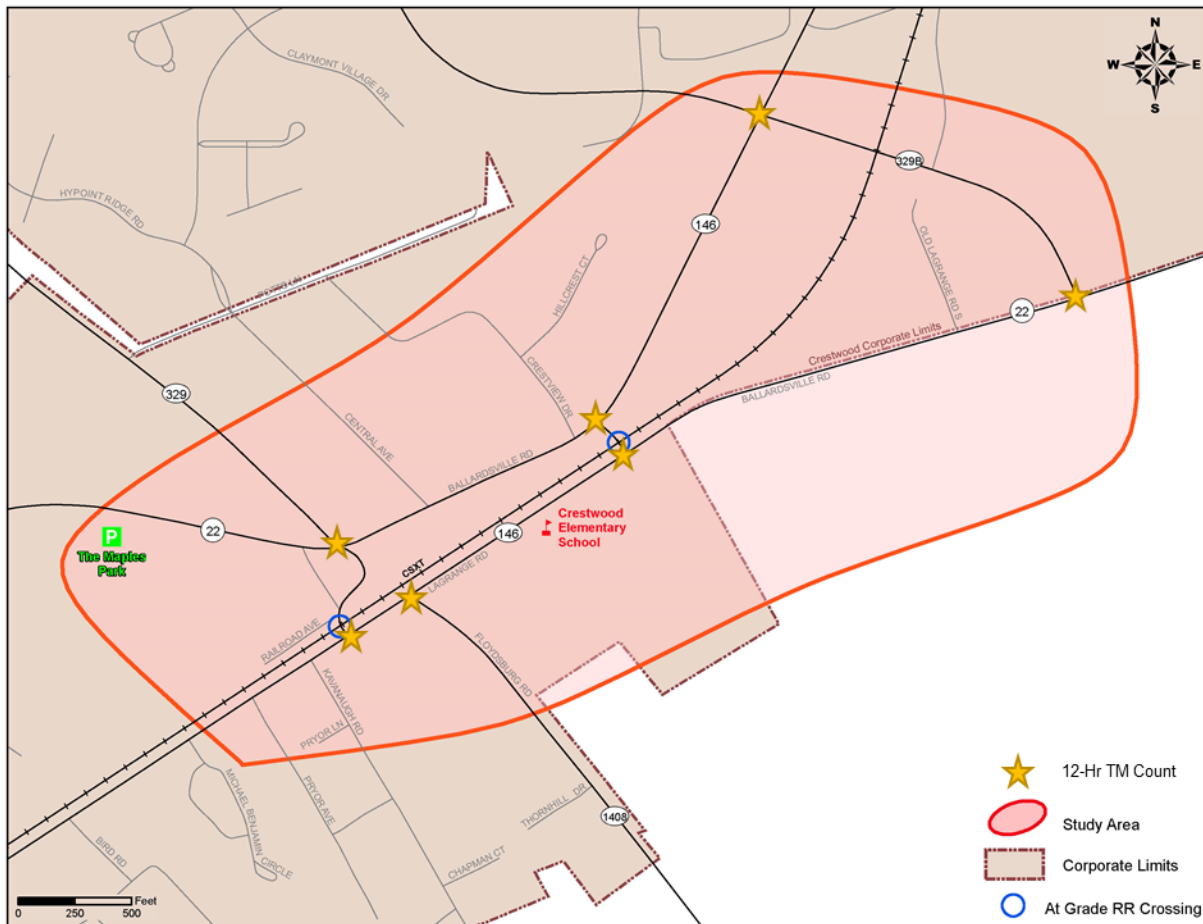


Figure 2: 2021 Count Locations

D. Queue Lengths

Residual queue lengths following each 15-minute count interval were recorded during AM (7-9 AM) and PM (3-6 PM) peak periods to quantify unmet demand at key intersections. These measurements were also used in calibrating the microsimulation model to mimic current traffic operations. To capture real time data corresponding to turning movements, drone imagery was employed.

Figure 3 and **Figure 4** on the following pages illustrate representative queue lengths during the AM and PM peak periods. Drone imagery was not collected on the same day as turning movement counts. AM peak drone imagery was collected on April 15, coincidentally overlapping with an incident on I-71 that closed one lane of northbound traffic most of the morning. Resulting queues are substantially longer throughout the downtown Crestwood area than the corresponding PM observations. The AM footage was neither factored into forecast volumes nor used for model calibrations. However, it does provide a notable comparison point.



Figure 3: AM Queue Lengths during I-71 Lane Closure



Figure 4: Representative PM Queue Lengths

E. Origin-Destination Distribution

KIPDA provided third-party origin-destination (OD) data from StreetLight to better understand traffic flow patterns. Gateways were set at each of the external links in the microsimulation network—generally corresponding to the limits of the study area—as well as at a regional scale. Gateways are shown geographically in **Figure 5**.

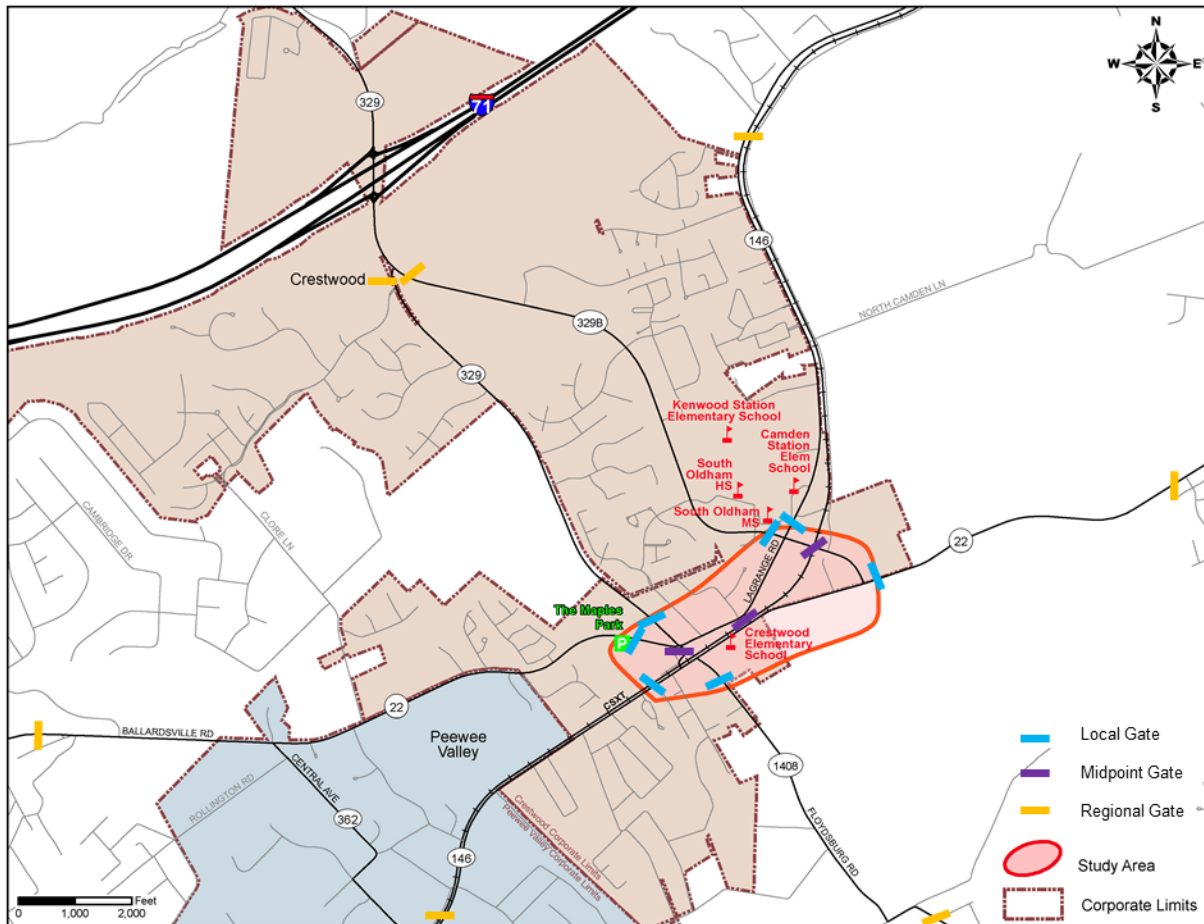


Figure 5: Gateway Locations for OD Data

The following maps summarize the results as a percentage of trips heading *away from* (**Figure 6**) and *towards* (**Figure 7**, next page) the KY 329 Railroad Avenue crossing based on 2019 weekday data. As shown, KY 146 to the west carries most of the traffic using the KY 329 at-grade crossing: about 30% of the total volume travels to/from the crossing along KY 146 towards Louisville. KY 329 also carries 16-20% of the traffic to/from the crossing.

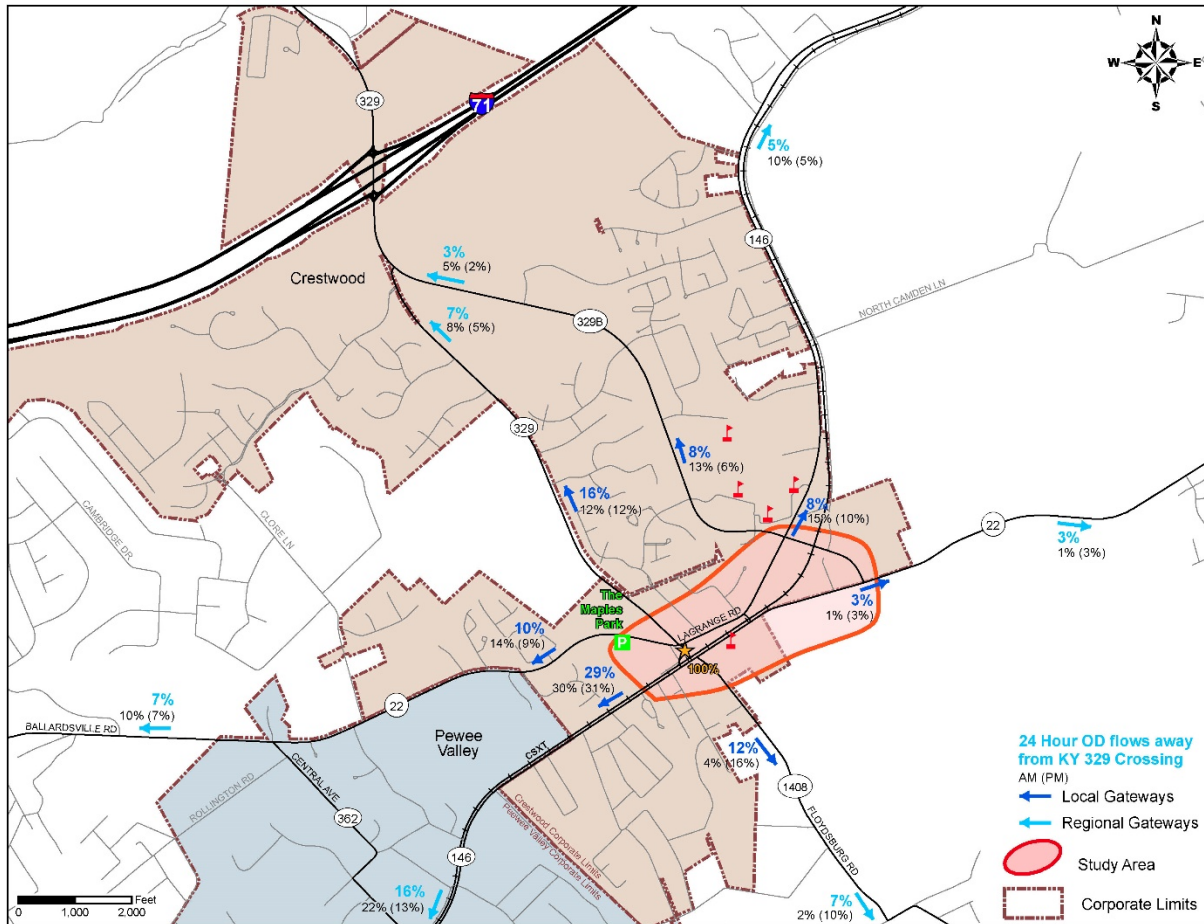


Figure 6: Local and Regional OD Flows Moving Away From KY 329 Crossing

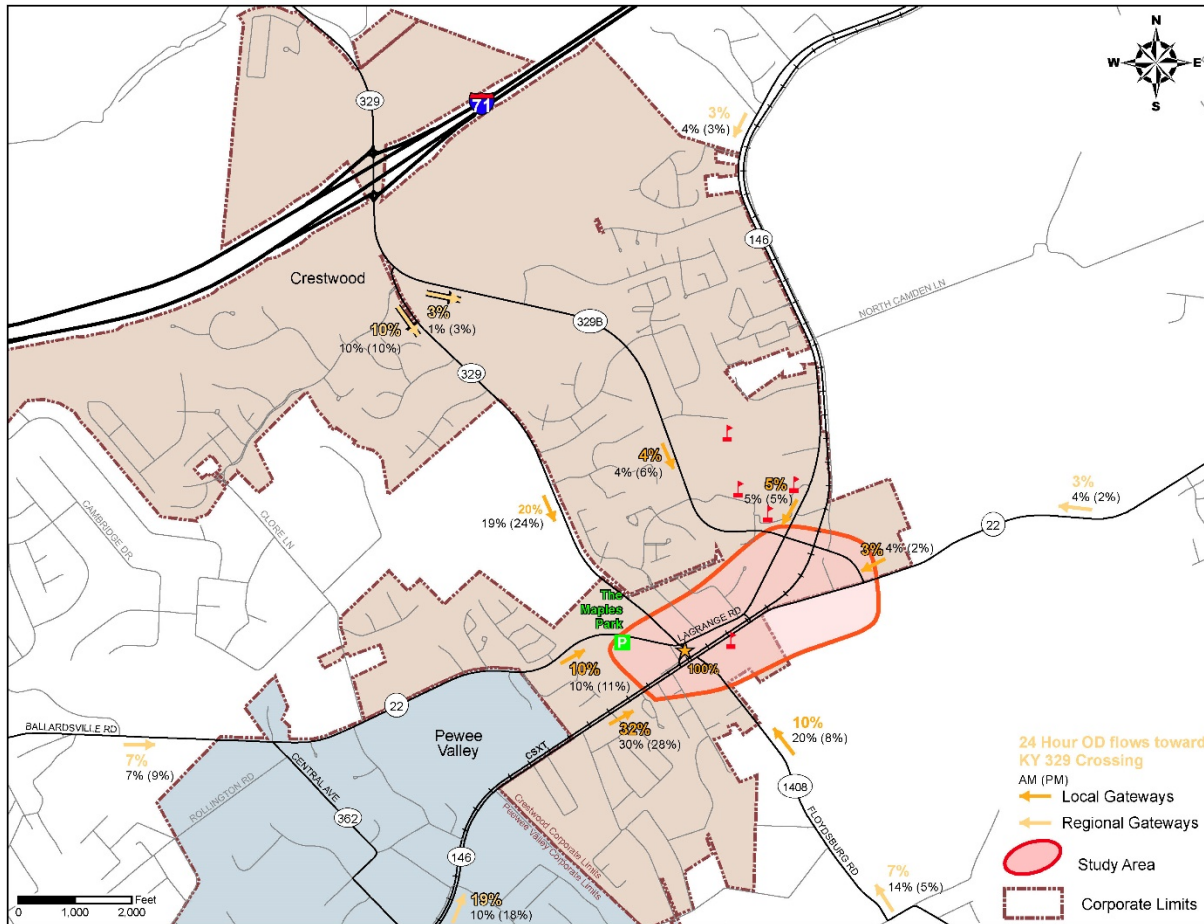


Figure 7: Local and Regional OD Flows Moving Towards KY 329 Crossing

3.0 Calibration of Existing Conditions Microsimulation Model

Microsimulation models using the Vissim software package¹ were developed for the AM and PM peak period operations during each scenario. The AM peak simulated operations 7-9 AM; the PM peak simulated operations 3-6 PM. The year 2021 Existing Conditions scenario was calibrated using collected existing conditions data (**Chapter 2.0**) to ensure models replicate existing performance. Default variables were adjusted as appropriate to reflect Kentucky driver behaviors as discussed below.

A. Vissim Inputs for Calibration

AM and PM Vissim models were built to evaluate traffic operations under the Existing, No-Build, and Build scenarios. To ensure accuracy of these models, AM and PM Existing models were calibrated by 15-minute volumes on links, observed queue lengths, peak travel speeds, and vehicle types.

¹ PTV Vissim 10.00 – 16 [79178]

The Wiedemann 74 car-following model was used to replicate local driver behavior patterns, lowering assumptions to increase driver aggression, as shown in **Table 2**. Lowering these values increases driver aggressiveness by lowering distance distributions. This results in increased flows through study area intersections. This was particularly important to model the four-way stop-controlled intersection at the school driveway.

Table 2: Car-Following Model Adjustments

Parameter	Original	Adjusted
Average Standstill Distance	6.56 ft	No change
Additive Part of Safety Distance	2.00	1.00
Multiplicative Part of Safety Distance	3.00	2.00

Vehicle fleet defaults were adjusted to reflect typical American fleet performance. The fleet composition was adjusted to support vehicle registration data from Oldham County as presented in **Table 3**.

Table 3: Fleet Composition Assumptions

Vehicle Class	% in Network
Motorcycles	2.7%
Passenger Cars, high performance	5.8%
Passenger Cars, mid performance	18.1%
Passenger Cars, low performance	13.8%
Passenger Cars, minivans	3.0%
Pickup trucks	17.8%
SUVs	32.3%
Other Pickup/SUV Types	3.7%
Buses	0.5%
Single-Unit Trucks	1.9%
Trailer Trucks	0.1%
Other Vehicle Types	0.3%

Applying these factors to the calibration process, the microsimulation results provided a reasonably accurate representation of existing conditions at each study intersection as shown in **Table 4**. **Figure 8** (page 12) provides a visual comparison of modeled versus field counted maximum queue lengths at study intersections during the PM peak.

Table 4: Comparison of Calibration Metrics

Intersection	Volumes			Queues		
	Collected	Modeled	Diff	Collected	Modeled	Diff
AM Peak						
KY 146 & Railroad Ave	1045	1045	0.0%	N/A as observed data corresponded to I-71 Incident, greatly inflating local queues		
KY 22 & Railroad Ave	1064	1029	3.3%			
KY 146 & KY 329B	1892	1776	6.1%			
KY 22 & KY 329B	1043	1115	6.9%			
KY 146 & KY 22 North	1157	1059	8.5%			
KY 146 & KY 22 South	913	980	7.3%			
PM Peak						
KY 146 & Railroad Ave	1414	1302	7.9%	775	658	15.1%
KY 22 & Railroad Ave	1561	1459	6.5%	448	400	10.7%
KY 146 & KY 329B	2336	2297	1.7%	---	---	---
KY 22 & KY 329B	1407	1300	7.6%	---	---	---
KY 146 & KY 22 North	1440	1513	5.1%	475*	623	31.2%*
KY 146 & KY 22 South	1228	1127	8.2%	700*	1,177	68.1%*

* Denotes an approximation where queue lengths extended beyond the area captured in drone footage



Figure 8: Comparison of Collected (top) vs Modeled (bottom) PM Queues

B. Existing Performance Outputs

Vissim outputs summarize volumes, queue lengths, level of service (LOS), and delay for individual turn movements in the existing scenario. Overall LOS and delay at study intersections are summarized in **Table 5**.

Table 5: Intersection LOS and Delay, Existing Scenario

Intersection	Control	AM LOS	AM Delay (sec)	PM LOS	PM Delay (sec)
KY 146 & Railroad Ave	Signal	B	17	C	20
KY 22 & Railroad Ave	Signal	C	29	C	34
KY 146 & KY 329B	Signal	D	49	E	57
KY 22 & KY 329B	Signal	B	14	C	26
KY 146 & KY 22 North	2-way Stop	A	6	B	13
KY 146 & KY 22 South	4-way Stop	C	21	F	51

The four-way stop controlled intersection with KY 146, KY 22, and the school driveway is over capacity in the Existing (2021) scenario during the PM peak. Eastbound left and thru movements operate at LOS E/F.

The KY 146/KY 329B bypass intersection is also approaching capacity during peak periods. All left turn movements and all westbound movements operate at LOS E/F in both peak hours; the eastbound right movement is also at LOS E/F in the PM peak.

The westbound left turn movement from KY 329 Railroad Avenue onto KY 22 also operates at LOS E/F during both peak periods though the overall intersection is at LOS C.

4.0 “Build” Scenarios

Forecasts for three existing year “build” scenarios were generated using KIPDA’s current (April 2021 version with 2020 base year) regional travel demand model.

- Build 1: Close KY 329 Railroad Ave crossing to all southbound traffic
- Build 2: Close KY 329 Railroad Ave crossing to all traffic
- Build 3: Close both KY 329 and KY 146 at-grade crossings to all traffic

A. Forecast Inputs from KIPDA

KIPDA model outputs at each railroad crossing for each scenario are presented in **Table 6** alongside existing traffic data from other sources discussed in **Chapter 2.0**. The 2021 counts serve as a baseline for the existing volumes in the microsimulation network. As shown, KIPDA’s model underrepresents trips using the KY 329B bypass crossing. Adjustments were made to account for this factor.

KIPDA’s model also provided an estimate for the impact on traffic using the at-grade crossings in Pewee Valley. Only one—Central Avenue—is represented in KIPDA’s model network. Volumes are presented in **Table 7**.

Table 6: Comparison of Existing vs “Build” ADTs

Scenario/Source	KY 329 Railroad Ave	KY 146 Reardon’s	KY 329B Bypass
Existing Count Volumes			
KYTC Counts, 2017	4,603 vpd, 5.8% Trucks	-	7,603 vpd, 6.7% Trucks
Miovision Counts, 2021	5,150 vpd, 1.4% Trucks	6,664 vpd, 2.8% Trucks	9,219 vpd, 3.3% Trucks
StreetLight Data, 2019	5,800 vpd	9,973 vpd	8,392 vpd
KIPDA Model Outputs			
Existing Baseline	8,406	10,667	1,012
Build 1/SB 329 Closed	3,701 (- 56%)	12,893 (+ 21%)	1,280 (+ 26%)
Build 2/All 329 Closed	X	15,031 (+ 41%)	1,392 (+ 38%)
Build 3/146 & 329 Closed	X	X	12,497 (+ 1135%)

Table 7: Pewee Valley Existing vs “Build” ADTs from KIPDA Model

Scenario	Central Ave, Pewee Valley
Existing Baseline	2,330
Build 1/SB 329 Closed	3,593 (+ 55%)
Build 2/All 329 Closed	4,742 (+ 104%)
Build 3/146 & 329 Closed	6,606 (+ 184%)

B. “Build” Performance Outputs

The three build scenarios presented above were run in Vissim with variations at key intersections to enhance network operations.

- Build 1 (close KY 329 Railroad Ave crossing to all southbound traffic) included three viable variations:
 - Converting both KY 22/KY 146 intersections to coordinated signals
 - Preserving the existing four-way stop at the KY 22/KY 146 intersection by the school driveway
 - Converting the KY 22/KY 146 intersection by the school driveway to a mini-roundabout
- Build 2 (close KY 329 Railroad Ave crossing to all traffic) included conversion of both KY 22/KY 146 intersections to coordinated signals. Other traffic control variations did not provide adequate capacity to handle anticipated traffic loads.
- Build 3 (close both KY 329 and KY 146 at-grade crossings to all traffic) did not result in any traffic control variations to provide adequate capacity to handle anticipated traffic loads.

Changes versus the existing layout for each scenario are summarized in **Figure 9** on the following page. Vissim outputs in **Appendix B** summarize volumes, queue lengths, level of service (LOS), and delay for individual intersections in each viable Build scenario. **Table 8** and **Table 9** summarize peak hour crossing volumes by direction at each of the three local crossings.



Figure 9: Modifications for Build Scenarios

Table 8: Crossing Volumes by Scenario, AM Peak

Scenario (AM)	Railroad Ave		Reardon's		Bypass		TOTAL	
	SB	NB	SB	NB	SB	NB	SB	NB
Existing	110	150	220	250	80	500	410	900
	260		470		580		1310	
One-way, signals	0	170	330	220	100	460	430	850
	170		550		560		1280	
One-way, stops	0	160	180	200	250	450	430	810
	160		380		700		1240	
One-way, Roundabout	0	160	170	230	250	460	420	850
	160		400		710		1270	
Closed, signals	0	0	340	390	100	460	440	850
	0		730		560		1290	

Table 9: Crossing Volumes by Scenario, PM Peak

Scenario (PM)	Railroad Ave		Reardon's		Bypass		TOTAL	
	SB	NB	SB	NB	SB	NB	SB	NB
Existing	190	200	340	260	400	290	930	750
	390		600		690		1680	
One-way, signals	0	180	460	230	500	290	960	700
	180		690		790		1660	
One-way, stops	0	170	360	240	600	290	960	700
	170		600		890		1660	
One-way, Roundabout	0	170	350	250	610	300	960	720
	170		600		910		1680	
Closed, signals	0	0	460	410	490	290	950	700
	0		870		780		1650	

Corresponding LOS for each build scenario during the AM (PM) peaks are shown in **Figure 10** on the following page. Aside from the KY 329B Bypass intersection with KY 146 that operates at LOS D-E today, nearly all study intersections in all viable scenarios operate at LOS C or better. The exception is maintaining a four-way stop at KY 22/KY 146/school driveway, which operates at LOS E assuming Railroad Avenue is closed to southbound traffic.

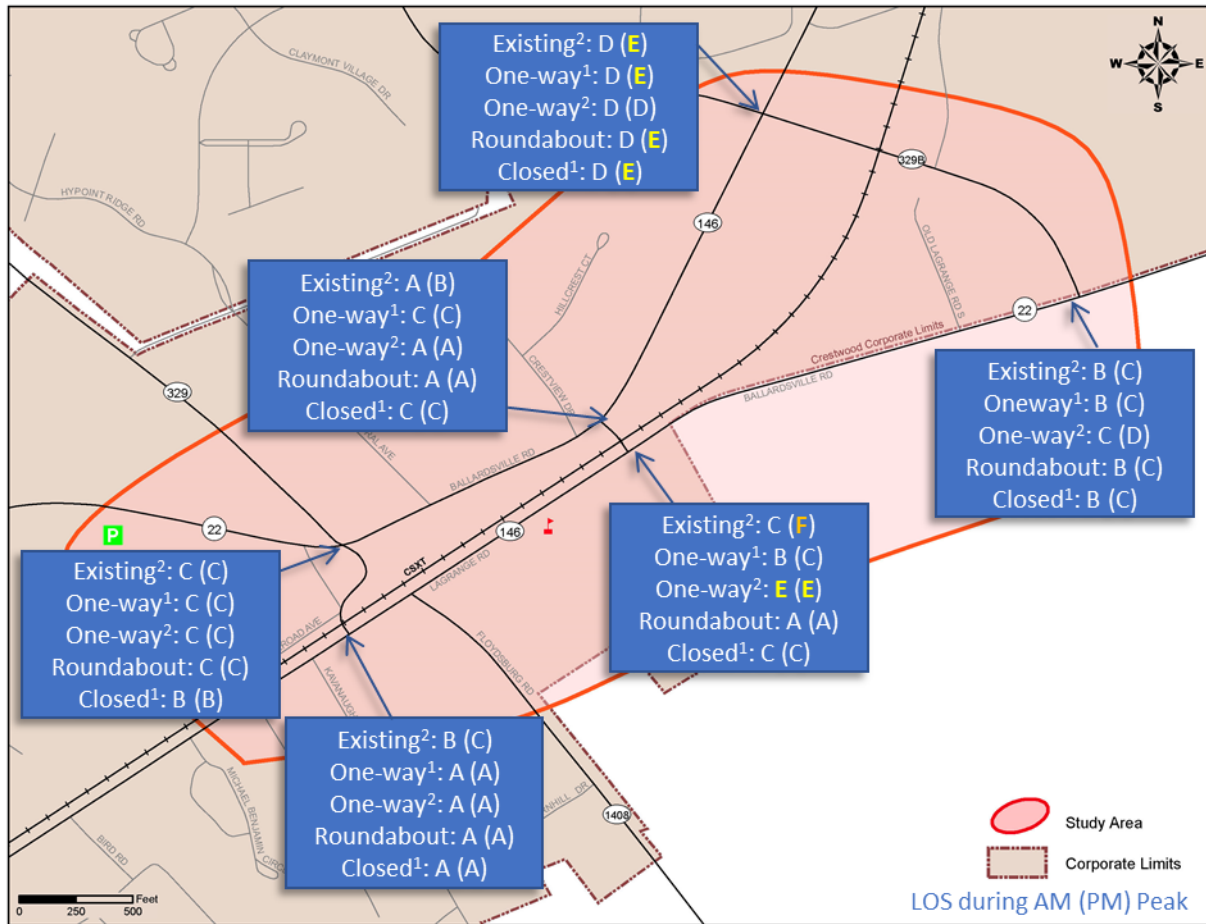


Figure 10: Summary of AM (PM) LOS by Scenario

Appendix A

Turning Movement Count Data

Study Name KY 22 & KY 146 North**Start Date 03/04/2021****Start Time 7:00 AM****Passenger Cars**

	IKY 146 Westbound		KY 146 Northbound		KY 22 Eastbound	
Start Time	Thru	Left	Right	Left	Right	Thru
7:00 AM	27	35	43	5	12	66
7:15 AM	70	38	44	9	12	95
7:30 AM	103	46	56	17	17	80
7:45 AM	75	17	41	9	23	89
8:00 AM	43	20	28	7	12	73
8:15 AM	87	33	43	15	12	96
8:30 AM	90	40	45	18	17	94
8:45 AM	63	26	30	9	9	46
9:00 AM	58	24	32	10	14	39
9:15 AM	60	35	22	6	12	55
9:30 AM	61	29	29	10	11	55
9:45 AM	66	24	41	10	23	55
10:00 AM	58	32	29	6	17	53
10:15 AM	43	33	28	8	19	68
10:30 AM	65	24	29	4	15	64
10:45 AM	67	29	26	14	14	77
11:00 AM	61	32	41	5	16	55
11:15 AM	69	23	44	8	13	66
11:30 AM	82	38	28	9	15	70
11:45 AM	78	42	38	8	17	77
12:00 PM	78	31	35	7	17	70
12:15 PM	72	31	47	10	19	73
12:30 PM	85	31	36	15	20	81
12:45 PM	57	35	47	15	24	81
1:00 PM	73	41	33	9	16	79
1:15 PM	67	48	31	18	24	72
1:30 PM	68	41	38	16	19	105
1:45 PM	77	27	34	9	28	112
2:00 PM	67	29	44	8	24	82
2:15 PM	77	39	37	12	24	86
2:30 PM	102	44	41	16	34	93
2:45 PM	70	39	39	4	23	86
3:00 PM	77	39	39	13	35	112
3:15 PM	70	35	38	11	35	104
3:30 PM	83	23	52	12	24	157
3:45 PM	109	37	31	13	37	132
4:00 PM	107	50	39	9	37	106
4:15 PM	99	46	36	8	38	131
4:30 PM	89	57	47	6	27	132
4:45 PM	99	35	42	4	39	123
5:00 PM	101	26	30	12	30	130
5:15 PM	133	52	33	6	37	145
5:30 PM	105	55	47	7	30	122
5:45 PM	80	53	45	6	34	98
6:00 PM	76	45	19	4	23	122
6:15 PM	81	62	34	7	20	80
6:30 PM	78	34	58	11	37	75
6:45 PM	65	31	37	8	24	66

Study Name KY 22 & KY 146 North**Start Date 03/04/2021****Start Time 7:00 AM****Total Vehicles**

Start Time	IKY 146 Westbound		KY 146 Northbound		KY 22 Eastbound	
	Thru	Left	Right	Left	Right	Thru
7:00 AM	29	36	44	5	12	68
7:15 AM	74	38	46	9	12	102
7:30 AM	107	46	57	17	17	81
7:45 AM	77	18	42	9	24	92
8:00 AM	48	21	28	7	12	75
8:15 AM	88	33	43	16	12	104
8:30 AM	91	42	45	19	20	95
8:45 AM	64	28	31	9	9	46
9:00 AM	59	25	34	10	14	39
9:15 AM	61	36	23	6	12	56
9:30 AM	61	29	30	11	12	56
9:45 AM	69	24	44	13	24	55
10:00 AM	61	33	31	6	17	54
10:15 AM	44	34	29	10	19	70
10:30 AM	68	24	31	5	15	65
10:45 AM	67	29	26	14	14	79
11:00 AM	64	35	41	6	17	57
11:15 AM	70	25	46	10	13	69
11:30 AM	84	40	28	10	15	71
11:45 AM	80	44	39	8	17	80
12:00 PM	82	34	38	7	18	71
12:15 PM	74	31	48	11	19	73
12:30 PM	86	32	41	15	20	81
12:45 PM	63	35	47	16	24	81
1:00 PM	74	43	36	9	16	82
1:15 PM	67	52	32	18	25	75
1:30 PM	70	41	42	16	20	107
1:45 PM	81	30	34	9	29	113
2:00 PM	69	30	45	8	24	85
2:15 PM	83	44	40	12	24	88
2:30 PM	109	46	44	16	35	97
2:45 PM	74	41	40	4	23	90
3:00 PM	80	40	40	13	35	114
3:15 PM	70	37	38	11	35	108
3:30 PM	86	26	52	12	24	157
3:45 PM	120	38	33	13	37	134
4:00 PM	109	52	40	9	41	110
4:15 PM	103	48	36	8	38	138
4:30 PM	90	57	47	6	28	135
4:45 PM	100	35	42	4	39	125
5:00 PM	101	26	31	13	30	131
5:15 PM	134	52	34	6	37	147
5:30 PM	107	57	48	7	30	122
5:45 PM	81	54	45	6	34	99
6:00 PM	77	46	19	4	23	124
6:15 PM	82	63	34	7	22	80
6:30 PM	80	34	58	11	37	76
6:45 PM	66	31	37	8	24	66

Study Name KY 22 & KY 146 South**Start Date 03/04/2021****Start Time 7:00 AM****Passenger Cars**

	KY 146 Southbound			KY 22 Westbound			Crestwood Elementary Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	38	3	7	6	65	4	0	0	0	0	31	39
7:15 AM	44	1	6	9	79	2	0	0	0	0	48	43
7:30 AM	46	1	9	11	85	2	0	0	0	0	53	58
7:45 AM	24	0	21	5	90	1	1	0	1	0	48	42
8:00 AM	28	0	9	9	68	0	0	1	2	1	72	22
8:15 AM	38	0	6	20	67	0	1	0	0	1	53	41
8:30 AM	42	0	12	19	76	0	0	2	2	0	39	41
8:45 AM	28	1	6	9	60	0	1	1	0	0	36	25
9:00 AM	30	0	9	6	53	0	0	2	0	0	36	35
9:15 AM	36	0	9	6	46	0	1	0	0	0	49	19
9:30 AM	30	0	8	9	63	0	1	0	0	0	34	29
9:45 AM	30	0	18	9	37	0	0	0	0	1	42	38
10:00 AM	36	0	14	6	38	0	0	0	3	0	27	30
10:15 AM	44	0	12	12	49	0	2	1	0	0	35	23
10:30 AM	23	0	13	6	49	0	0	0	1	0	26	28
10:45 AM	31	0	10	13	51	0	0	0	0	0	49	27
11:00 AM	37	0	11	5	39	0	0	1	0	0	45	39
11:15 AM	26	0	11	14	53	0	1	0	0	1	35	40
11:30 AM	46	0	7	7	43	1	2	1	2	0	43	26
11:45 AM	49	0	10	9	52	0	0	4	0	0	54	37
12:00 PM	33	0	13	3	49	0	0	1	1	0	58	38
12:15 PM	31	1	17	9	61	0	0	1	2	0	50	50
12:30 PM	34	1	16	14	43	0	1	0	1	0	61	35
12:45 PM	38	0	14	10	56	0	0	0	2	0	51	53
1:00 PM	42	0	14	9	58	0	0	2	1	0	44	31
1:15 PM	48	0	20	13	65	0	0	0	0	1	56	36
1:30 PM	48	1	13	15	60	1	1	0	1	0	66	39
1:45 PM	32	0	20	10	80	0	1	0	0	0	71	33
2:00 PM	43	0	12	7	46	0	1	2	1	0	72	40
2:15 PM	41	0	19	8	53	0	1	0	1	1	65	40
2:30 PM	52	0	26	12	61	0	2	0	1	0	67	48
2:45 PM	37	0	22	2	57	0	1	0	3	0	79	38
3:00 PM	43	0	29	6	53	0	1	2	1	0	65	45
3:15 PM	39	2	27	12	56	0	2	0	1	0	74	35
3:30 PM	29	0	18	11	59	0	3	3	3	0	84	46
3:45 PM	43	0	28	10	72	0	0	0	3	0	97	33
4:00 PM	58	1	31	10	81	0	1	1	2	0	82	39
4:15 PM	50	0	38	7	73	0	3	0	3	0	94	35
4:30 PM	65	0	19	4	79	0	1	3	2	0	85	45
4:45 PM	41	1	31	7	64	0	2	2	0	1	97	42
5:00 PM	31	0	23	16	107	0	1	0	2	1	86	27
5:15 PM	51	0	37	7	98	1	1	0	2	0	105	33
5:30 PM	61	0	24	6	65	0	1	0	0	0	89	47
5:45 PM	60	2	27	7	56	1	0	0	1	1	83	44
6:00 PM	44	0	22	4	45	3	2	1	3	1	102	17
6:15 PM	68	1	14	9	66	0	1	1	1	0	93	33
6:30 PM	49	0	22	10	57	0	0	0	0	0	54	58
6:45 PM	38	0	19	8	53	0	0	0	1	0	58	34

Study Name KY 22 & KY 146 South**Start Date 03/04/2021****Start Time 7:00 AM****Total Vehicles**

	KY 146 Southbound			KY 22 Westbound			Crestwood Elementary Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	39	3	7	6	65	4	0	0	0	0	31	40
7:15 AM	44	1	6	9	80	5	0	0	0	3	48	45
7:30 AM	46	1	9	11	89	4	5	0	1	1	54	58
7:45 AM	25	0	22	5	93	1	2	0	3	0	49	43
8:00 AM	28	0	9	9	70	0	0	1	2	2	74	22
8:15 AM	38	0	6	20	68	1	1	0	0	1	58	42
8:30 AM	46	0	14	19	79	4	0	2	2	0	41	41
8:45 AM	30	1	6	9	65	1	1	1	0	0	40	27
9:00 AM	31	0	9	6	56	0	0	2	0	0	36	37
9:15 AM	37	0	9	6	46	0	1	0	0	0	51	21
9:30 AM	30	0	9	10	65	0	1	0	0	0	39	29
9:45 AM	30	0	19	10	39	0	1	1	0	1	42	41
10:00 AM	37	0	15	6	39	0	0	0	3	0	27	32
10:15 AM	45	0	12	13	50	0	2	1	0	0	37	25
10:30 AM	23	0	14	7	51	0	0	0	1	0	27	30
10:45 AM	32	0	10	13	52	0	1	0	0	0	49	28
11:00 AM	41	0	11	6	41	0	0	1	0	0	47	40
11:15 AM	27	0	11	16	55	0	1	0	0	1	37	41
11:30 AM	47	1	7	9	44	2	2	1	3	0	44	27
11:45 AM	50	0	10	9	54	0	0	4	0	0	54	38
12:00 PM	36	0	14	3	51	0	0	1	1	0	60	40
12:15 PM	31	1	17	9	62	0	0	1	2	0	51	52
12:30 PM	35	1	17	14	44	0	1	0	1	0	62	39
12:45 PM	38	0	14	10	57	0	1	0	2	0	51	54
1:00 PM	44	0	14	9	58	1	1	2	1	0	47	33
1:15 PM	53	0	21	14	65	0	0	0	0	1	56	36
1:30 PM	49	1	13	15	62	1	1	0	1	0	67	43
1:45 PM	34	0	21	10	83	0	1	0	0	0	73	33
2:00 PM	44	0	12	7	48	2	1	2	1	0	78	40
2:15 PM	45	0	20	9	56	0	4	0	6	1	66	42
2:30 PM	55	0	26	12	64	0	2	0	1	0	70	51
2:45 PM	40	0	22	2	59	0	1	0	3	0	82	38
3:00 PM	44	0	29	6	56	0	1	2	1	0	69	45
3:15 PM	41	2	27	12	58	0	2	0	1	0	82	35
3:30 PM	31	0	19	11	61	0	3	3	3	0	85	46
3:45 PM	45	0	28	10	76	0	0	0	4	0	99	35
4:00 PM	60	1	33	10	83	0	1	1	2	0	84	41
4:15 PM	52	0	38	7	75	0	3	0	3	3	94	35
4:30 PM	65	0	20	4	82	2	1	3	2	0	87	45
4:45 PM	41	1	31	7	64	1	2	2	0	1	99	42
5:00 PM	31	0	23	17	108	0	1	0	2	1	88	28
5:15 PM	51	0	37	7	98	1	1	0	2	0	105	33
5:30 PM	63	0	24	6	65	0	1	0	0	0	92	48
5:45 PM	61	2	27	7	56	1	0	0	1	1	83	44
6:00 PM	45	0	22	4	46	3	2	1	3	1	103	17
6:15 PM	69	1	16	9	69	0	1	1	1	0	95	33
6:30 PM	49	0	22	10	57	0	0	0	0	0	56	58
6:45 PM	38	0	19	8	53	0	0	0	1	0	58	34

Study Name KY 22 & KY 329**Start Date 03/23/2021****Start Time 7:00 AM****Passenger Vehicles**

	KY 329 Southbound			KY 22 Westbound			KY 329 Northbound			KY 22 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	6	6	3	6	26	4	13	10	2	5	58	10
7:15 AM	25	16	3	3	66	5	18	7	15	11	76	7
7:30 AM	38	8	2	5	108	17	11	13	14	4	79	13
7:45 AM	14	11	2	6	62	7	23	7	7	1	69	9
8:00 AM	18	12	7	4	57	4	10	5	11	2	78	16
8:15 AM	19	16	8	7	82	14	20	9	13	4	76	8
8:30 AM	28	11	4	7	65	15	18	4	7	1	76	11
8:45 AM	17	15	3	7	58	16	22	16	4	8	54	5
9:00 AM	14	11	6	3	49	6	13	15	6	5	49	13
9:15 AM	20	17	3	9	62	14	19	12	11	4	35	8
9:30 AM	14	13	9	5	43	8	11	16	7	2	43	9
9:45 AM	8	13	6	7	77	18	15	9	10	4	50	13
10:00 AM	11	15	5	4	60	14	21	9	8	4	60	3
10:15 AM	10	10	7	2	66	9	15	8	6	3	62	14
10:30 AM	17	10	2	4	56	16	15	5	11	3	77	13
10:45 AM	14	8	4	4	59	13	17	8	9	5	61	8
11:00 AM	13	7	6	3	57	16	12	4	8	6	59	10
11:15 AM	18	5	3	8	70	13	20	10	11	4	64	10
11:30 AM	15	8	9	8	63	16	21	8	13	3	48	11
11:45 AM	11	16	9	9	70	19	17	5	8	5	65	10
12:00 PM	8	10	3	4	79	19	13	7	12	8	79	7
12:15 PM	23	10	8	5	75	20	28	3	3	3	71	9
12:30 PM	19	7	8	10	61	13	23	12	13	3	74	10
12:45 PM	16	13	7	5	76	22	30	9	9	11	99	15
1:00 PM	10	13	10	5	67	22	33	8	14	7	83	13
1:15 PM	13	14	5	6	76	13	14	16	11	11	86	10
1:30 PM	17	12	8	3	71	10	26	14	17	12	96	12
1:45 PM	13	8	10	6	72	25	23	9	8	2	77	18
2:00 PM	12	19	5	7	55	17	29	8	13	17	103	8
2:15 PM	19	15	9	4	68	22	25	10	10	6	90	14
2:30 PM	21	15	5	8	116	19	21	6	15	8	61	15
2:45 PM	16	11	9	8	83	14	24	19	15	8	99	21
3:00 PM	13	18	6	5	70	18	32	14	14	3	119	22
3:15 PM	18	10	4	5	71	23	34	9	14	6	120	18
3:30 PM	11	9	10	10	78	15	43	14	15	7	144	23
3:45 PM	31	31	13	10	76	23	40	10	13	6	98	10
4:00 PM	17	31	9	6	98	27	35	14	10	12	99	8
4:15 PM	14	25	10	7	93	20	49	13	15	4	113	16
4:30 PM	27	18	8	3	85	16	40	12	13	12	142	17
4:45 PM	22	20	9	10	91	22	32	12	23	10	130	11
5:00 PM	24	15	16	9	89	14	44	24	14	10	142	17
5:15 PM	28	18	10	6	96	20	62	14	16	10	135	17
5:30 PM	24	21	11	4	71	16	50	23	15	9	144	18
5:45 PM	26	16	9	6	86	15	49	11	16	7	129	17
6:00 PM	21	23	7	6	70	14	32	13	16	4	91	15
6:15 PM	10	11	4	8	76	8	27	12	10	4	83	8
6:30 PM	13	10	11	5	48	11	27	11	8	4	66	6
6:45 PM	16	15	5	6	39	13	19	9	5	5	74	8

Study Name KY 22 & KY 329**Start Date 03/23/2021****Start Time 7:00 AM****Total Vehicles**

	KY 329 Southbound			KY 22 Westbound			KY 329 Northbound			KY 22 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	6	6	3	6	31	4	13	10	2	5	60	11
7:15 AM	26	16	3	3	66	5	18	7	15	11	84	7
7:30 AM	38	8	2	5	115	17	11	13	14	4	80	14
7:45 AM	16	11	3	6	67	7	23	7	7	1	71	9
8:00 AM	19	12	7	4	62	4	10	5	11	2	81	17
8:15 AM	19	16	8	7	83	14	20	9	13	4	82	8
8:30 AM	30	11	4	8	66	15	18	4	7	1	79	12
8:45 AM	17	15	3	7	58	16	22	16	4	8	55	5
9:00 AM	17	11	6	4	50	6	14	15	6	5	52	13
9:15 AM	20	17	3	9	64	15	19	12	11	4	38	8
9:30 AM	14	14	10	5	45	8	11	16	7	2	47	9
9:45 AM	8	13	6	7	81	18	15	9	10	4	51	13
10:00 AM	12	16	5	4	60	15	21	10	8	4	61	3
10:15 AM	11	10	7	2	68	9	15	9	6	3	62	16
10:30 AM	17	10	2	4	56	16	16	6	11	3	77	13
10:45 AM	15	8	4	5	60	13	17	8	9	5	62	9
11:00 AM	14	7	6	3	58	16	12	4	9	6	59	11
11:15 AM	18	5	3	8	70	14	21	10	12	4	65	10
11:30 AM	16	8	9	8	64	16	21	9	13	3	49	11
11:45 AM	11	17	9	9	72	20	17	5	8	6	66	10
12:00 PM	8	10	4	4	79	19	13	8	12	8	80	9
12:15 PM	23	10	8	6	78	20	29	4	4	3	71	10
12:30 PM	21	7	8	10	61	13	23	12	13	3	76	10
12:45 PM	20	13	7	5	82	23	30	9	9	11	102	16
1:00 PM	12	13	10	5	67	23	33	8	14	7	88	13
1:15 PM	13	14	6	6	76	13	14	16	11	11	87	11
1:30 PM	18	13	8	3	71	11	26	14	18	12	97	15
1:45 PM	14	8	11	6	74	25	23	9	8	2	77	18
2:00 PM	12	19	5	8	56	17	30	8	13	17	106	8
2:15 PM	19	15	9	4	74	22	25	10	10	6	91	14
2:30 PM	22	15	6	8	120	19	21	6	15	8	66	15
2:45 PM	16	11	11	8	84	15	24	19	15	8	106	21
3:00 PM	13	18	6	5	75	18	32	14	14	3	122	23
3:15 PM	19	10	5	5	71	23	34	9	14	6	125	19
3:30 PM	11	9	11	10	79	15	43	14	15	7	145	23
3:45 PM	31	32	13	10	83	23	40	10	13	6	98	10
4:00 PM	17	31	10	6	102	27	35	14	11	13	105	9
4:15 PM	14	25	10	7	95	21	49	13	15	4	116	16
4:30 PM	27	19	8	3	85	16	40	12	13	12	144	18
4:45 PM	23	20	9	10	92	22	33	12	23	10	134	11
5:00 PM	24	15	16	9	90	14	44	24	14	10	144	18
5:15 PM	28	18	10	6	96	20	63	14	16	10	137	17
5:30 PM	24	21	11	4	71	16	50	23	15	9	145	18
5:45 PM	26	16	9	6	87	16	49	11	16	7	129	17
6:00 PM	21	23	7	6	72	14	32	13	16	4	91	15
6:15 PM	10	11	4	8	77	8	28	12	10	4	83	8
6:30 PM	13	10	11	5	49	11	27	11	8	4	66	6
6:45 PM	16	15	5	6	39	13	19	9	5	5	74	8

Study Name KY 22 & KY 329B**Start Date 03/04/2021****Start Time 7:00 AM****Passenger Cars**

	KY 329B Southbound		KY 22 Westbound		KY 22 Eastbound	
Start Time	Right	Left	Right	Thru	Thru	Left
7:00 AM	21	16	94	54	25	9
7:15 AM	16	33	102	78	33	23
7:30 AM	22	42	93	87	36	23
7:45 AM	13	15	77	78	46	23
8:00 AM	29	22	79	50	39	47
8:15 AM	23	37	109	66	29	23
8:30 AM	23	31	82	60	25	29
8:45 AM	19	26	55	50	23	27
9:00 AM	16	17	40	45	29	13
9:15 AM	11	34	40	42	34	20
9:30 AM	20	18	53	56	24	16
9:45 AM	15	20	37	33	32	24
10:00 AM	11	16	34	34	27	15
10:15 AM	25	23	28	38	31	19
10:30 AM	13	20	36	42	29	11
10:45 AM	15	30	42	46	45	23
11:00 AM	18	18	36	30	39	13
11:15 AM	21	29	33	48	29	20
11:30 AM	16	32	50	36	32	22
11:45 AM	19	31	37	45	48	18
12:00 PM	20	35	47	34	42	29
12:15 PM	29	41	42	39	39	26
12:30 PM	26	41	31	31	53	36
12:45 PM	25	38	47	41	44	26
1:00 PM	22	29	46	46	34	23
1:15 PM	34	36	40	52	51	29
1:30 PM	23	37	51	44	51	26
1:45 PM	56	37	41	39	53	40
2:00 PM	17	40	58	32	59	35
2:15 PM	30	45	30	29	55	22
2:30 PM	39	68	32	37	67	30
2:45 PM	21	50	40	32	82	18
3:00 PM	19	43	39	41	77	29
3:15 PM	18	43	48	51	78	27
3:30 PM	33	49	67	39	74	44
3:45 PM	36	97	79	54	77	40
4:00 PM	32	84	46	51	83	32
4:15 PM	34	70	48	46	103	34
4:30 PM	36	94	64	41	82	33
4:45 PM	31	88	62	42	91	36
5:00 PM	62	93	78	67	74	45
5:15 PM	39	82	94	52	105	45
5:30 PM	25	87	62	41	84	37
5:45 PM	28	75	54	35	82	28
6:00 PM	27	83	64	33	82	37
6:15 PM	32	69	59	44	67	55
6:30 PM	25	66	33	40	60	23
6:45 PM	25	56	34	37	58	20

Study Name KY 22 & KY 329B**Start Date 03/04/2021****Start Time 7:00 AM****Total Vehicles**

	KY 329B Southbound		KY 22 Westbound		KY 22 Eastbound	
Start Time	Right	Left	Right	Thru	Thru	Left
7:00 AM	21	16	97	54	25	9
7:15 AM	19	35	106	80	33	23
7:30 AM	27	45	93	89	39	25
7:45 AM	13	16	79	79	47	24
8:00 AM	32	24	82	50	40	48
8:15 AM	24	37	112	66	30	27
8:30 AM	29	32	84	62	27	29
8:45 AM	20	27	56	55	25	30
9:00 AM	18	17	40	46	29	15
9:15 AM	11	35	41	42	36	20
9:30 AM	22	19	53	58	27	19
9:45 AM	15	22	37	33	33	25
10:00 AM	12	18	35	34	27	15
10:15 AM	27	24	29	41	33	20
10:30 AM	14	22	37	43	31	12
10:45 AM	16	32	44	47	45	23
11:00 AM	18	18	38	32	41	13
11:15 AM	22	30	33	50	29	22
11:30 AM	16	34	51	40	32	23
11:45 AM	21	33	38	46	48	18
12:00 PM	20	36	48	35	43	31
12:15 PM	30	41	42	39	40	27
12:30 PM	27	41	32	32	55	37
12:45 PM	26	40	49	41	44	27
1:00 PM	23	31	47	46	36	24
1:15 PM	36	39	40	53	51	30
1:30 PM	24	39	53	44	51	30
1:45 PM	59	38	42	39	54	41
2:00 PM	20	41	59	33	60	40
2:15 PM	32	49	33	31	57	22
2:30 PM	40	70	33	39	68	33
2:45 PM	22	50	43	33	82	19
3:00 PM	20	45	41	44	78	34
3:15 PM	18	45	51	51	81	32
3:30 PM	34	51	67	39	75	45
3:45 PM	40	99	80	54	78	41
4:00 PM	34	87	47	52	86	32
4:15 PM	40	70	49	47	103	35
4:30 PM	39	95	67	45	84	36
4:45 PM	33	88	65	44	93	36
5:00 PM	62	94	82	67	75	46
5:15 PM	39	82	96	52	105	45
5:30 PM	25	87	62	41	84	40
5:45 PM	29	75	54	35	82	28
6:00 PM	28	83	65	33	82	37
6:15 PM	32	69	59	47	70	56
6:30 PM	25	66	34	40	60	25
6:45 PM	25	56	35	37	58	20

Study Name KY 146 & KY 329B**Start Date 03/04/2021****Start Time 7:00 AM****Passenger Vehicles**

	KY 329B Southbound			KY 146 Westbound			KY 329B Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	11	7	10	21	51	16	15	62	11	2	42	47
7:15 AM	37	38	23	36	53	11	22	89	19	3	51	73
7:30 AM	43	49	37	31	76	9	22	68	28	2	69	57
7:45 AM	11	13	26	32	64	16	23	45	23	6	75	38
8:00 AM	13	23	22	29	46	20	26	86	18	9	49	42
8:15 AM	39	30	27	38	81	21	26	67	20	8	71	59
8:30 AM	50	30	28	35	57	20	16	101	21	5	51	65
8:45 AM	28	25	25	19	48	14	21	39	22	6	39	19
9:00 AM	25	21	25	25	52	9	10	32	9	1	42	24
9:15 AM	19	20	21	21	68	14	14	31	12	3	46	19
9:30 AM	25	14	26	25	69	16	12	37	18	9	61	24
9:45 AM	21	18	17	13	62	7	16	29	16	4	62	21
10:00 AM	14	14	29	25	61	9	16	22	11	7	50	20
10:15 AM	26	23	21	36	46	18	14	21	10	6	60	26
10:30 AM	23	21	24	25	65	7	8	31	8	4	55	23
10:45 AM	20	24	31	36	69	16	18	23	17	7	62	30
11:00 AM	21	23	26	33	53	12	14	27	11	5	59	29
11:15 AM	23	21	28	23	64	17	14	27	11	3	61	35
11:30 AM	31	28	27	28	71	20	17	33	18	9	40	25
11:45 AM	40	28	47	39	76	19	15	41	13	5	73	41
12:00 PM	36	36	52	28	64	21	21	50	16	3	56	35
12:15 PM	27	36	41	42	68	24	18	25	17	10	71	41
12:30 PM	32	42	28	36	73	19	25	33	13	12	80	32
12:45 PM	42	34	30	41	58	18	24	38	17	8	75	46
1:00 PM	31	33	40	43	65	18	16	31	18	8	82	33
1:15 PM	46	39	35	28	65	20	23	34	11	3	64	37
1:30 PM	31	34	39	27	65	14	24	27	21	16	90	31
1:45 PM	41	36	33	40	63	15	28	26	10	41	62	38
2:00 PM	29	30	29	25	56	14	23	47	15	13	70	47
2:15 PM	46	46	33	31	62	19	12	36	8	6	59	42
2:30 PM	57	64	39	34	75	25	27	24	13	15	70	39
2:45 PM	28	49	38	35	59	16	21	24	15	8	83	39
3:00 PM	29	37	29	23	79	19	16	32	17	14	83	51
3:15 PM	33	35	48	40	61	17	18	33	18	8	74	33
3:30 PM	30	45	46	40	64	24	33	60	16	19	108	75
3:45 PM	67	75	55	34	61	36	31	67	24	16	63	82
4:00 PM	53	62	56	39	88	34	32	32	20	13	87	35
4:15 PM	58	67	56	40	84	30	27	42	13	24	84	45
4:30 PM	26	62	52	36	98	44	34	41	15	24	124	43
4:45 PM	39	72	53	29	80	32	35	55	22	12	83	53
5:00 PM	60	83	46	42	75	41	40	50	28	23	90	57
5:15 PM	61	74	50	31	96	46	50	63	37	17	96	47
5:30 PM	59	67	48	41	85	26	33	46	21	14	103	47
5:45 PM	46	63	40	39	70	37	26	38	17	8	62	67
6:00 PM	42	53	36	40	70	30	26	48	23	26	88	50
6:15 PM	40	56	41	19	81	35	36	48	21	15	62	32
6:30 PM	35	38	30	31	69	33	20	35	7	9	80	44
6:45 PM	34	44	31	39	51	20	17	31	5	10	63	38

Study Name KY 146 & KY 329B**Start Date 03/04/2021****Start Time 7:00 AM****Total Vehicles**

	KY 329B Southbound			KY 146 Westbound			KY 329B Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	11	7	10	21	54	16	16	63	12	2	42	48
7:15 AM	40	42	30	37	53	11	22	92	20	5	52	80
7:30 AM	46	57	37	31	76	9	22	69	29	2	69	59
7:45 AM	12	14	27	34	65	17	23	46	25	6	79	38
8:00 AM	15	26	23	31	49	20	28	87	19	10	49	43
8:15 AM	39	30	28	38	82	22	30	69	21	9	73	64
8:30 AM	52	32	30	36	58	23	16	103	21	5	52	66
8:45 AM	30	26	26	20	49	15	22	41	23	6	41	19
9:00 AM	26	22	25	27	53	9	10	35	9	1	43	24
9:15 AM	20	22	23	22	68	14	14	31	13	3	48	21
9:30 AM	26	15	27	26	69	16	13	39	18	9	62	26
9:45 AM	23	19	18	15	63	8	17	29	17	4	63	23
10:00 AM	16	18	30	26	62	9	16	23	11	7	52	22
10:15 AM	26	25	22	36	48	18	14	22	10	6	61	26
10:30 AM	25	24	25	26	66	8	8	32	8	4	58	26
10:45 AM	20	26	31	37	69	17	18	24	18	7	64	31
11:00 AM	25	23	28	33	54	12	14	30	11	5	60	30
11:15 AM	25	23	28	23	67	17	15	28	11	3	63	36
11:30 AM	31	31	28	29	72	21	18	33	18	9	42	26
11:45 AM	41	31	49	39	78	19	15	42	15	6	74	41
12:00 PM	40	39	52	29	66	21	21	51	17	3	58	36
12:15 PM	28	37	41	43	69	24	18	25	18	10	72	41
12:30 PM	33	42	29	36	74	21	25	37	13	12	82	35
12:45 PM	44	39	31	41	60	18	24	41	18	8	75	47
1:00 PM	33	34	40	44	66	18	16	32	18	9	84	34
1:15 PM	48	41	37	30	68	22	23	34	11	3	67	38
1:30 PM	32	35	40	27	65	14	26	29	22	17	90	32
1:45 PM	45	41	33	42	65	16	28	29	11	41	63	38
2:00 PM	30	30	31	25	57	17	24	50	15	13	72	49
2:15 PM	52	52	36	31	66	19	12	38	9	7	60	44
2:30 PM	63	64	41	35	79	26	27	25	14	16	73	42
2:45 PM	31	51	39	35	63	17	21	28	15	8	85	44
3:00 PM	31	39	29	24	80	19	16	36	17	14	84	52
3:15 PM	35	36	49	41	62	17	19	40	18	9	75	35
3:30 PM	33	47	48	40	66	24	35	62	16	19	108	75
3:45 PM	73	76	55	34	65	41	32	67	26	16	64	85
4:00 PM	54	65	58	39	89	34	32	33	20	13	92	35
4:15 PM	60	68	56	42	86	30	27	43	14	25	86	48
4:30 PM	27	62	52	36	98	45	36	43	15	25	125	45
4:45 PM	39	72	54	35	80	33	35	57	22	12	85	54
5:00 PM	60	83	46	44	76	42	40	55	28	23	91	59
5:15 PM	61	75	50	32	96	46	50	65	37	17	98	47
5:30 PM	60	67	48	41	85	26	33	46	22	14	105	47
5:45 PM	46	63	40	39	72	38	26	38	17	8	62	67
6:00 PM	43	53	36	40	71	30	26	48	23	26	91	50
6:15 PM	40	56	41	19	82	35	37	49	22	15	62	32
6:30 PM	36	38	30	31	69	33	21	35	8	9	80	45
6:45 PM	34	44	31	39	51	20	17	31	6	10	63	38

Study Name KY 146 & Railroad Ave**Start Date 03/04/2021****Start Time 7:00 AM****Passenger Vehicles**

	Railroad Ave Southbound			KY 146 Westbound			Northbound Approach Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	11	0	3	5	88	0	0	4	2	1	60	20
7:15 AM	16	1	17	7	110	0	0	5	12	0	81	23
7:30 AM	23	2	8	6	98	0	1	16	29	2	66	17
7:45 AM	21	1	6	7	119	0	1	12	7	3	65	41
8:00 AM	16	1	5	8	74	0	0	1	1	1	69	19
8:15 AM	25	0	4	6	101	0	1	6	6	0	74	37
8:30 AM	26	3	6	7	104	0	0	3	4	2	61	30
8:45 AM	26	0	5	4	83	0	0	1	1	0	51	22
9:00 AM	34	2	4	4	83	2	0	4	2	2	52	17
9:15 AM	23	4	6	4	79	3	0	1	4	4	54	27
9:30 AM	25	2	5	4	87	1	0	3	8	2	57	29
9:45 AM	19	1	8	15	60	0	1	1	3	2	50	24
10:00 AM	20	2	3	6	62	1	0	3	2	2	54	20
10:15 AM	7	2	5	5	61	1	0	5	1	0	47	23
10:30 AM	22	4	5	12	80	0	0	5	3	3	49	23
10:45 AM	21	2	8	8	66	1	1	3	6	4	62	20
11:00 AM	17	5	6	10	65	0	1	4	2	1	63	17
11:15 AM	26	1	6	6	77	0	0	5	3	3	60	22
11:30 AM	27	3	17	8	72	1	1	1	2	1	63	28
11:45 AM	27	1	7	10	79	1	1	3	0	1	81	30
12:00 PM	19	0	8	3	64	0	2	0	7	2	77	34
12:15 PM	28	0	6	5	76	1	1	0	4	4	77	25
12:30 PM	21	0	6	10	62	0	0	2	3	3	85	44
12:45 PM	27	1	14	4	73	0	0	1	2	1	88	31
1:00 PM	38	3	13	4	91	0	1	3	2	1	68	36
1:15 PM	38	2	9	11	98	0	0	3	5	4	88	35
1:30 PM	31	1	15	7	95	0	0	4	2	1	92	37
1:45 PM	25	2	12	7	49	2	0	5	3	3	106	42
2:00 PM	21	4	18	7	77	0	1	6	3	2	100	32
2:15 PM	30	0	9	9	62	0	0	8	8	5	92	45
2:30 PM	30	2	11	12	81	1	1	16	14	3	81	34
2:45 PM	37	3	12	12	105	1	0	6	2	3	92	31
3:00 PM	38	7	10	10	71	2	0	5	5	2	100	46
3:15 PM	21	2	14	14	80	1	1	3	4	5	100	44
3:30 PM	22	4	14	11	65	0	1	7	5	0	109	45
3:45 PM	50	3	17	8	58	1	2	14	5	5	104	56
4:00 PM	49	3	19	11	102	0	0	6	6	4	109	42
4:15 PM	45	3	13	10	94	0	0	18	5	4	105	54
4:30 PM	32	4	18	8	94	0	3	11	8	2	112	39
4:45 PM	40	2	15	7	87	0	1	12	5	1	118	64
5:00 PM	29	3	15	8	84	1	1	9	5	4	109	32
5:15 PM	28	5	28	10	92	0	3	14	6	4	93	54
5:30 PM	28	1	22	9	97	1	0	9	5	2	130	47
5:45 PM	25	0	10	9	81	0	0	7	0	2	112	58
6:00 PM	21	4	10	5	70	0	3	3	6	6	107	36
6:15 PM	30	3	17	7	87	1	0	7	3	3	95	41
6:30 PM	26	0	8	11	81	1	0	2	4	0	89	27
6:45 PM	25	0	9	8	64	0	0	1	1	0	85	25

Study Name KY 146 & Railroad Ave**Start Date 03/04/2021****Start Time 7:00 AM****Total Vehicles**

	Railroad Ave Southbound			KY 146 Westbound			Northbound Approach Northbound			KY 146 Eastbound		
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:00 AM	11	0	3	5	88	0	0	4	2	1	63	20
7:15 AM	16	1	17	8	111	0	0	5	12	0	85	23
7:30 AM	25	2	8	6	103	0	1	16	29	2	66	17
7:45 AM	21	1	6	7	122	0	1	12	7	3	67	41
8:00 AM	18	1	5	8	76	0	0	1	1	1	74	19
8:15 AM	26	0	4	6	102	0	1	6	6	0	79	37
8:30 AM	26	3	6	7	106	0	0	3	4	2	63	31
8:45 AM	27	0	5	4	90	0	0	1	1	0	53	23
9:00 AM	34	2	4	4	89	2	0	4	3	2	55	18
9:15 AM	23	4	7	4	82	3	0	1	4	4	55	28
9:30 AM	25	2	6	4	90	1	0	3	8	2	60	29
9:45 AM	20	1	8	15	61	0	1	1	3	2	57	24
10:00 AM	21	2	3	6	64	1	0	3	2	2	58	20
10:15 AM	7	2	5	6	66	1	0	5	1	0	50	25
10:30 AM	22	4	5	12	83	0	0	5	3	3	52	23
10:45 AM	21	2	8	8	69	1	1	3	6	5	63	20
11:00 AM	17	5	6	10	69	0	1	4	2	1	68	18
11:15 AM	27	1	6	7	82	0	0	6	3	3	61	22
11:30 AM	28	3	18	8	75	1	1	1	2	1	64	29
11:45 AM	28	1	7	10	80	1	1	3	0	1	82	30
12:00 PM	20	0	8	4	67	0	2	0	7	2	85	36
12:15 PM	29	1	6	5	80	1	1	0	4	4	80	25
12:30 PM	21	0	6	10	65	0	1	2	3	3	88	44
12:45 PM	28	1	14	4	75	0	0	1	2	1	89	32
1:00 PM	38	3	14	5	92	0	1	3	2	1	76	36
1:15 PM	38	2	9	11	101	0	0	3	5	4	89	36
1:30 PM	31	1	15	7	100	0	0	4	2	1	94	37
1:45 PM	27	2	12	8	52	2	0	5	3	3	108	42
2:00 PM	21	4	18	7	79	0	1	6	3	2	103	32
2:15 PM	30	0	10	9	71	0	0	8	8	5	96	46
2:30 PM	30	2	11	12	85	1	1	16	14	3	83	34
2:45 PM	37	3	12	12	108	1	0	7	2	3	93	31
3:00 PM	38	7	11	10	74	3	0	5	5	2	106	46
3:15 PM	21	2	14	15	81	1	1	3	4	5	106	45
3:30 PM	22	4	15	11	68	0	1	7	5	0	111	45
3:45 PM	50	3	17	8	63	1	2	14	5	5	106	56
4:00 PM	49	3	19	11	105	0	1	6	6	4	112	42
4:15 PM	45	3	13	10	94	0	0	19	5	4	108	54
4:30 PM	32	4	18	8	97	0	3	11	8	2	116	39
4:45 PM	40	2	15	7	94	0	1	12	5	1	122	64
5:00 PM	29	3	15	8	84	1	1	9	5	4	111	35
5:15 PM	28	5	28	10	92	0	3	14	6	4	95	54
5:30 PM	31	1	22	9	97	1	0	9	5	2	133	47
5:45 PM	25	0	10	9	81	0	0	8	0	2	112	58
6:00 PM	21	4	10	5	72	0	3	3	6	6	107	39
6:15 PM	31	3	17	7	90	1	0	7	3	3	96	41
6:30 PM	26	0	8	11	81	1	0	2	4	0	90	27
6:45 PM	25	0	9	8	64	0	0	1	1	0	85	25

Study Name KY 329 & Old Floydsburg Rd**Start Date 03/23/2021****Start Time 7:00 AM****Passenger Cars**

	KY 146 Westbound		Old Floydsburg Rd Northbound		KY 146 Eastbound	
Start Time	Thru	Left	Right	Left	Right	Thru
7:00 AM	67	7	25	14	12	38
7:15 AM	97	9	23	21	43	48
7:30 AM	111	16	37	12	26	54
7:45 AM	96	16	29	8	14	60
8:00 AM	74	13	33	15	7	75
8:15 AM	79	28	32	17	7	63
8:30 AM	120	27	26	6	9	65
8:45 AM	93	18	17	11	5	56
9:00 AM	74	11	18	19	10	54
9:15 AM	83	11	24	13	15	48
9:30 AM	90	16	20	19	14	58
9:45 AM	72	18	21	12	11	42
10:00 AM	46	13	22	13	19	53
10:15 AM	69	14	22	12	11	60
10:30 AM	59	13	16	13	10	60
10:45 AM	59	13	35	13	14	49
11:00 AM	62	15	27	10	7	38
11:15 AM	65	15	19	14	14	59
11:30 AM	60	22	24	12	15	67
11:45 AM	72	23	30	7	15	65
12:00 PM	66	25	18	15	11	62
12:15 PM	73	11	22	13	12	82
12:30 PM	67	17	24	18	12	73
12:45 PM	72	18	18	11	28	71
1:00 PM	85	21	14	13	15	65
1:15 PM	66	13	16	13	32	95
1:30 PM	82	26	29	8	25	101
1:45 PM	57	30	22	13	19	85
2:00 PM	69	25	22	13	38	66
2:15 PM	68	17	21	18	33	61
2:30 PM	94	33	23	10	19	63
2:45 PM	84	20	16	13	25	83
3:00 PM	64	23	26	11	24	116
3:15 PM	71	22	30	13	17	96
3:30 PM	86	27	27	11	18	95
3:45 PM	81	33	32	10	34	78
4:00 PM	96	42	27	6	39	108
4:15 PM	101	34	40	7	40	90
4:30 PM	75	38	25	11	32	94
4:45 PM	85	34	21	11	41	112
5:00 PM	99	29	28	6	32	87
5:15 PM	99	32	24	8	33	102
5:30 PM	68	43	27	9	25	107
5:45 PM	78	26	33	20	39	88
6:00 PM	81	20	23	14	30	89
6:15 PM	70	21	23	12	22	75
6:30 PM	55	21	29	14	21	84
6:45 PM	61	24	14	10	20	56

Study Name KY 329 & Old Floydsburg Rd**Start Date 03/23/2021****Start Time 7:00 AM****Total Vehicles**

	KY 146 Westbound		Old Floydsburg Rd Northbound		KY 146 Eastbound	
Start Time	Thru	Left	Right	Left	Right	Thru
7:00 AM	70	8	25	14	12	38
7:15 AM	97	10	24	21	43	53
7:30 AM	113	19	39	12	26	56
7:45 AM	97	19	30	8	15	60
8:00 AM	74	13	33	15	7	75
8:15 AM	79	28	34	17	7	69
8:30 AM	122	27	26	6	9	67
8:45 AM	96	18	18	11	5	57
9:00 AM	76	13	18	19	11	55
9:15 AM	85	11	24	13	15	50
9:30 AM	93	18	22	19	14	63
9:45 AM	77	18	22	12	13	47
10:00 AM	47	13	22	13	19	55
10:15 AM	70	15	22	12	11	63
10:30 AM	61	13	17	13	10	61
10:45 AM	61	14	35	13	14	50
11:00 AM	64	16	27	11	7	42
11:15 AM	70	17	19	14	14	62
11:30 AM	61	24	25	13	16	72
11:45 AM	73	23	30	7	16	69
12:00 PM	68	25	18	15	11	66
12:15 PM	75	12	22	13	12	84
12:30 PM	69	17	25	18	12	73
12:45 PM	74	18	19	11	29	72
1:00 PM	85	24	14	13	15	67
1:15 PM	71	13	18	14	32	96
1:30 PM	86	26	30	8	26	105
1:45 PM	58	30	23	13	19	85
2:00 PM	73	26	25	14	38	69
2:15 PM	70	21	22	18	33	64
2:30 PM	96	34	25	10	19	65
2:45 PM	88	20	17	13	25	87
3:00 PM	66	23	26	11	24	123
3:15 PM	72	23	33	14	17	98
3:30 PM	88	27	29	11	18	96
3:45 PM	84	35	34	10	34	79
4:00 PM	99	44	27	6	39	109
4:15 PM	103	34	41	7	40	93
4:30 PM	75	38	26	11	34	95
4:45 PM	86	34	21	11	41	113
5:00 PM	99	29	28	7	32	90
5:15 PM	100	32	24	8	34	105
5:30 PM	68	43	27	9	25	109
5:45 PM	79	26	34	20	39	90
6:00 PM	82	20	23	14	30	90
6:15 PM	71	21	23	12	22	75
6:30 PM	57	21	29	14	21	84
6:45 PM	62	24	14	10	20	58

Appendix B

AM/PM Vissim Output Summary Tables for “Build” Scenarios

2C, One-way w Coordinated Signals

AM Peak					PM Peak			
KY 146 & Railroad Avenue	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	256	0	A		380	0	A	
Eastbound, Left	129	73	A		135	93	B	
Westbound, Through	498	74	A		527	0	A	
Westbound, Right	38	74	A		45	0	A	
Northbound, Right	5	57	B		5	57	B	
Northbound, Left	33	58	B		33	58	B	
Overall			A	1.6			A	2.6

KY 22 & Railroad Ave	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	311	160	B		498	358	B	
Eastbound, Left	43	104	D		93	168	D	
Westbound, Through	214	298	C		373	567	C	
Westbound, Right	34	298	B		46	567	C	
Southbound, Left	81	114	D		106	141	D	
Southbound, Right	80	183	D		105	218	D	
Northbound, Right	75	118	D		71	93	D	
Northbound, Left	43	130	C		54	157	D	
Northbound, Through	50	130	D		56	157	E	
Overall			C	26.7			C	32.0

KY 146 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	285	340	C		328	1003	D	
Eastbound, Right	20	340	C		105	1003	D	
Eastbound, Left	278	522	E		250	1004	F	
Westbound, Through	278	678	E		395	1021	E	
Westbound, Left	17	89	E		111	590	F	
Westbound, Right	156	678	D		149	1021	E	
Southbound, Left	143	256	E		161	358	E	
Southbound, Right	156	0	B		243	43	C	
Southbound, Through	60	156	C		276	318	D	
Northbound, Right	85	0	C		80	0	C	
Northbound, Left	41	117	E		42	126	E	
Northbound, Through	331	284	D		169	162	D	
Overall			D	46.8			E	58.5

KY 22 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	58	65	A		159	199	B	
Eastbound, Left	93	221	D		69	106	D	
Westbound, Through	207	177	A		203	155	B	
Westbound, Right	363	193	A		217	187	A	
Southbound, Left	66	133	D		384	341	D	
Southbound, Right	33	133	D		93	341	D	
Overall			B	15.7			C	26.0

2C, One-way w Coordinated Signals

AM Peak					PM Peak			
KY 146 & KY 22 North	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	385	297	C		520	512	C	
Westbound, Through	224	230	C		374	449	C	
Northbound, Right	196	95	A		182	132	A	
Northbound, Left	26	95	C		42	132	C	
Westbound, Left	250	348	D		311	549	D	
Eastbound, Right	78	136	A		155	194	B	
Overall			C	24.1			C	27.0

KY 146 & KY 22 South	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	141	159	C		225	220	C	
Westbound, Through	211	261	C		247	282	C	
Westbound, Right	27	261	C		44	282	C	
Northbound, Right	8	0	A		0	0	-	
Northbound, Left	2	0	A		0	0	-	
Southbound, Left	1	146	F		3	149	D	
Southbound, Right	328	164	A		462	167	A	
Eastbound, Left	194	268	D		181	220	D	
Overall			B	19.4			C	20.7

2a, One-way w Stops

AM Peak					PM Peak			
KY 146 & Railroad Avenue	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	264	0	A		386	0	A	
Eastbound, Left	124	120	A		129	104	A	
Westbound, Through	496	0	A		512	0	A	
Westbound, Right	35	0	A		41	0	A	
Northbound, Right	5	57	B		5	57	B	
Northbound, Left	33	57	B		33	57	B	
Overall			A	2.2			A	2.4

KY 22 & Railroad Ave	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	323	232	B		491	340	B	
Eastbound, Left	43	131	C		89	168	D	
Westbound, Through	230	183	B		384	501	C	
Westbound, Right	35	183	B		46	501	C	
Southbound, Left	85	134	D		110	141	D	
Southbound, Right	85	185	D		105	194	D	
Northbound, Right	75	149	D		71	92	D	
Northbound, Left	33	109	D		45	214	D	
Northbound, Through	50	109	D		55	214	E	
Overall			C	25.9			C	30.1

KY 146 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	286	466	D		328	554	D	
Eastbound, Right	6	466	D		28	554	D	
Eastbound, Left	279	592	E		245	673	E	
Westbound, Through	153	474	D		265	944	E	
Westbound, Left	142	402	E		234	946	F	
Westbound, Right	155	474	D		147	944	E	
Southbound, Left	144	214	E		164	253	E	
Southbound, Right	114	0	B		184	0	C	
Southbound, Through	104	167	C		343	317	C	
Northbound, Right	83	0	C		82	0	B	
Northbound, Left	36	108	E		46	126	E	
Northbound, Through	338	282	D		173	162	D	
Overall			D	45.6			D	53.2

KY 22 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	72	44	A		235	134	A	
Eastbound, Left	85	160	D		70	112	E	
Westbound, Through	207	206	B		200	132	B	
Westbound, Right	364	168	A		217	136	A	
Southbound, Left	51	285	D		315	460	E	
Southbound, Right	197	285	D		271	460	E	
Overall			C	20.4			D	35.8

2a, One-way w Stops

AM Peak					PM Peak			
KY 146 & KY 22 North	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	386	0	A		437	174	A	
Eastbound, Right	96	0	A		235	174	A	
Westbound, Through	228	0	A		371	0	A	
Northbound, Right	195	115	A		183	154	A	
Northbound, Left	35	101	A		53	140	B	
Westbound, Left	78	48	A		129	133	C	
Overall			A	2.6			A	5.5

KY 146 & KY 22 South	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	141	241	C		225	247	D	
Eastbound, Left	203	241	C		192	247	C	
Westbound, Through	374	544	F		414	623	F	
Westbound, Right	27	544	E		44	623	F	
Northbound, Right	0	22	-		3	48	B	
Northbound, Left	10	22	A		17	48	A	
Southbound, Left	15	143	B		85	286	C	
Southbound, Right	157	143	B		276	286	C	
Southbound, Through	0	143	-		3	286	C	
Overall			E	38.2			E	42.0

2R, One-way w Mini-Roundabout

AM Peak					PM Peak			
KY 146 & Railroad Avenue	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	263	0	A		386	0	A	
Eastbound, Left	122	120	A		129	93	A	
Westbound, Through	495	0	A		513	0	A	
Westbound, Right	38	0	A		45	0	A	
Northbound, Right	5	57	B		5	57	B	
Northbound, Left	33	57	B		33	57	B	
Overall			A	2.2			A	2.3

KY 22 & Railroad Ave	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	312	293	B		500	400	B	
Eastbound, Left	43	104	D		91	164	D	
Westbound, Through	230	277	B		376	506	C	
Westbound, Right	35	277	B		49	506	C	
Southbound, Left	81	103	D		105	132	D	
Southbound, Right	80	193	D		105	218	D	
Northbound, Right	75	137	D		70	132	D	
Northbound, Left	35	109	D		47	153	D	
Northbound, Through	50	109	D		53	153	D	
Overall			C	25.3			C	28.8

KY 146 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	281	410	D		326	587	D	
Eastbound, Right	6	410	E		28	587	D	
Eastbound, Left	285	690	E		266	1041	F	
Westbound, Through	153	545	E		260	705	E	
Westbound, Left	139	342	E		236	707	F	
Westbound, Right	152	545	D		146	705	E	
Southbound, Left	144	214	E		164	360	E	
Southbound, Right	114	0	B		184	45	C	
Southbound, Through	104	167	C		342	356	D	
Northbound, Right	85	0	C		82	0	B	
Northbound, Left	37	106	F		42	139	F	
Northbound, Through	340	259	D		173	149	D	
Overall			D	46.9			E	56.3

KY 22 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	72	44	A		236	153	B	
Eastbound, Left	84	164	D		67	134	D	
Westbound, Through	206	142	B		199	159	B	
Westbound, Right	364	157	A		218	136	A	
Southbound, Left	51	281	D		326	376	D	
Southbound, Right	196	281	D		275	376	D	
Overall			B	18.9			C	32.2

2R, One-way w Mini-Roundabout

AM Peak					PM Peak			
KY 146 & KY 22 North	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	370	0	A		447	0	A	
Westbound, Through	229	0	A		371	0	A	
Northbound, Left	33	49	A		51	115	B	
Westbound, Left	79	43	A		124	82	A	
Northbound, Right	205	83	A		203	89	A	
Eastbound, Right	93	0	A		230	0	A	
Overall			A	1.2			A	2.0

KY 146 & KY 22 South	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	144	78	A		225	125	A	
Eastbound, Left	7	78	A		6	125	A	
Eastbound, Left	195	78	A		182	125	A	
Westbound, Through	374	239	A		418	150	A	
Westbound, Right	26	239	A		45	150	A	
Westbound, Right	0	239	-		1	150	A	
Northbound, Through	10	22	A		20	38	A	
Southbound, Left	15	126	A		87	218	A	
Southbound, Right	157	126	A		269	218	A	
Overall			A	5.4			A	7.5

1C, KY 329 Closed w Coordinated Signals

AM Peak					PM Peak			
KY 146 & Railroad Avenue	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	389	0	A		514	0	A	
Westbound, Through	514	0	A		524	0	A	
Northbound, Right	5	57	B		4	57	B	
Northbound, Left	33	58	B		34	58	B	
Overall			A	1.0			A	1.3

KY 22 & Railroad Ave	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	323	112	A		500	195	A	
Eastbound, Left	43	132	D		91	164	D	
Westbound, Through	261	310	B		424	396	B	
Westbound, Right	86	310	A		101	396	B	
Southbound, Left	84	107	C		107	132	C	
Southbound, Right	83	135	C		106	194	C	
Overall			B	13.6			B	17.3

KY 146 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	284	377	C		334	616	D	
Eastbound, Right	20	377	C		109	616	D	
Eastbound, Left	277	717	E		246	1039	F	
Westbound, Through	285	657	E		397	977	E	
Westbound, Left	17	65	E		110	512	F	
Westbound, Right	160	657	D		150	977	E	
Southbound, Left	143	260	E		157	404	E	
Southbound, Right	155	0	B		241	89	C	
Southbound, Through	61	135	C		270	284	D	
Northbound, Right	86	0	C		77	0	B	
Northbound, Left	45	105	F		42	146	E	
Northbound, Through	333	287	D		174	182	D	
Overall			D	47.6			E	56.6

KY 22 & KY 329B	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	58	50	A		158	101	A	
Eastbound, Left	94	182	D		70	87	D	
Westbound, Through	203	162	B		199	154	B	
Westbound, Right	364	219	A		218	109	A	
Southbound, Left	65	90	D		385	372	D	
Southbound, Right	33	90	D		90	372	E	
Overall			B	15.2			C	30.0

KY 146 & KY 22 North	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	327	269	C		446	513	C	
Westbound, Through	228	303	A		374	289	A	
Northbound, Right	268	219	B		256	218	B	
Northbound, Left	119	219	C		150	218	C	
Westbound, Left	255	339	D		314	411	D	
Eastbound, Right	81	122	A		149	142	B	
Overall			C	21.7			C	23.4

1C, KY 329 Closed w Coordinated Signals

AM Peak					PM Peak			
KY 146 & KY 22 South	Vol	Qmax	LOS	Delay	Vol	Qmax	LOS	Delay
Eastbound, Through	141	90	A		225	116	A	
Westbound, Through	204	275	C		236	224	C	
Northbound, Right	10	0	A		0	0	-	
Southbound, Left	1	147	A		3	260	E	
Southbound, Right	335	165	A		461	278	A	
Eastbound, Left	355	413	D		354	362	D	
Westbound, Right	32	205	F		51	148	E	
Overall			C	27.8			C	22.2