

**Traffic Forecast Report
KY 168
Boyd County, Kentucky
Item No. 9-125**

**Final Report
October 30, 2023**

Prepared for:



Prepared by:



9920 Corporate Campus Drive
Suite 1200
Louisville, Kentucky 40223
502-585-2222

Contents

Forecast Summary 1
Types of Forecasts 1
KYTC Count Stations 1
Data Collection 2
Design Hour Volumes 3
Design-Year/Growth Factors 3
Truck Percentages 6

Figures

Figure 1: Count Station Map 1
Figure 2: Historic Traffic Data 2
Figure 3: Population Data 4
Figure 4: Comparison of Model Assignments with Adjusted Employment 5
Figure 5: Traffic Summary Map 7

Tables

Table 1: Current Traffic Count Data 2
Table 2: Historic Count Station Growth Rates 4
Table 3: TAZ Growth Assumption Adjustments 5
Table 4: KYOVA Model Growth along KY 168 6

Appendices

- A. Turning Movement Count Data
- B. 2023 Traffic Forecast
- C. 2045 Traffic Forecast

Traffic Forecast Report Boyd County: KY 168 Planning Study Item No. 9-125

Forecast Summary

The purpose of this report is to forecast traffic for the section of KY 168 between US 60 and Hoods Creek Road in Boyd County, Kentucky (**Figure 1**). The forecast will be used to determine the need for and design of future improvements along this corridor.

The sections which follow provide background and details concerning the types of forecasts that were developed for the project. A summary of the forecast methods and data include:

- current year (2023) traffic volumes
- design year (2045) growth factors
- design hour traffic volumes
- percentages of truck traffic
- turning movements

Types of Forecasts

The following types of forecasts were developed:

- Build 2023 and 2045 Average Daily Traffic
- Build 2023 and 2045 Design-Hour Volumes (AM and PM)
- Build 2023 and 2045 Percent Trucks (ADT & Design Hour)

KYTC Count Stations

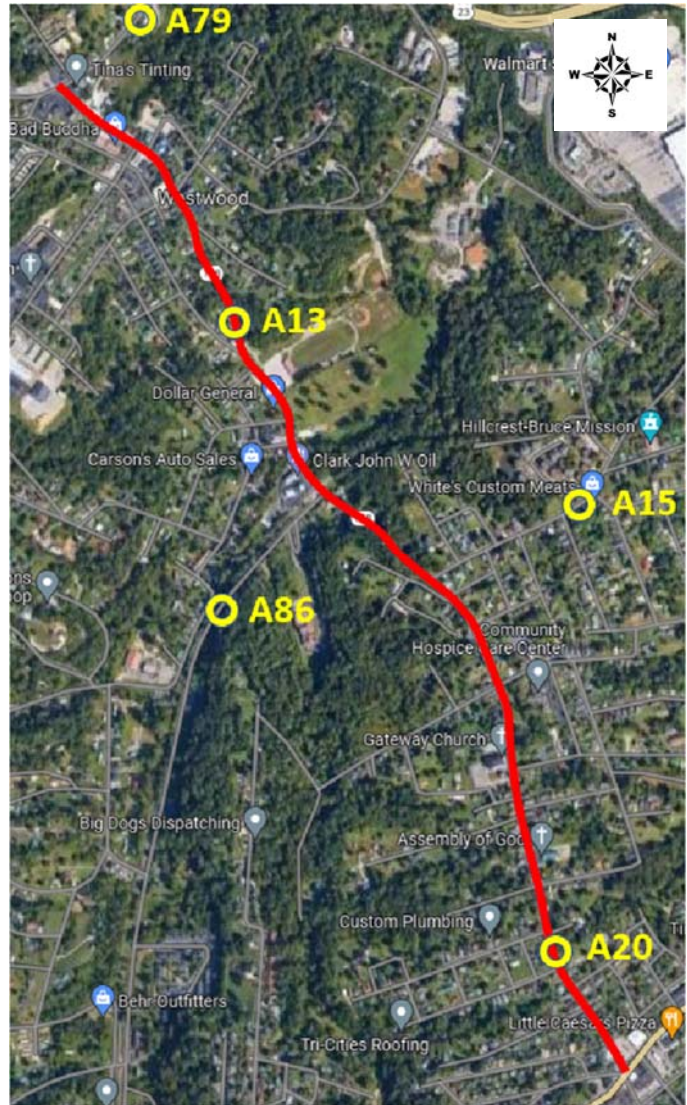


Figure 1: Count Station Map

Existing traffic count stations in the vicinity of the project are shown on **Figure 1**. Data from the most recent counts at stations near the study area is summarized in **Table 1** and **Figure 2**.

Table 1: Current Traffic Count Data

Route	KYTC Station	From	To	ADT	Year of Last Count	Daily Truck %	Peak Truck %
KY 168	010A20	5.804	6.579	5,659	2021	3.83%	2.85%
KY 168	010A13	6.579	7.217	4,623	2017	3.83%	2.85%
KY 168	010A79	7.217	8.179	5,164	2019	3.83%	2.85%
CS 2349	010A15	0.000	0.320	6,286	2019	n/a	n/a
CS 2341	010A86	0.098	0.705	4,964	2017*	n/a	n/a

*2020 count for station 010A86 was not used to large drop in volume

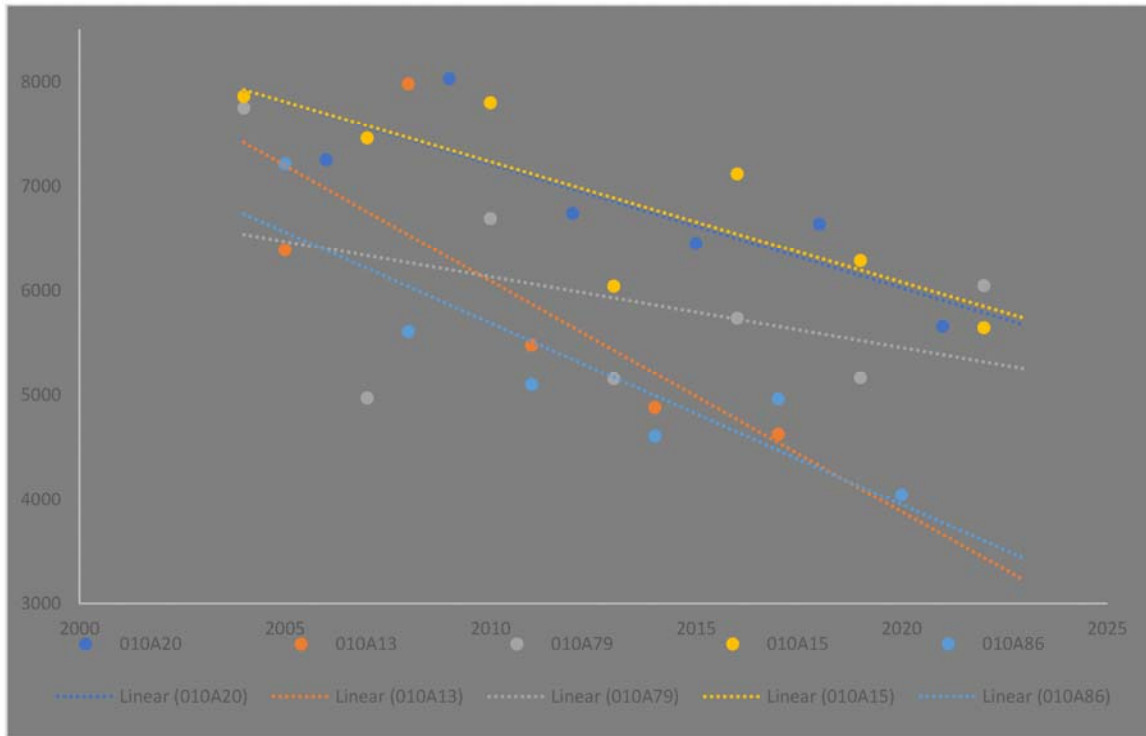


Figure 2: Historic Traffic Data

Data Collection

Peak period (7 AM - 9 AM and 3 PM - 6 PM) turning movement counts were collected at the following intersections with KY 168 on March 23, 2023:

- Dixon Street
- Kirk / Pollard
- 6th Street
- Roberts Drive

- Main Street
- Hoods Creek Pike

An additional count at the KY 168 intersection with US 60 was collected on February 16, 2022, as part of an HSIP project along US 60. This count was conducted between 7 AM and 7 PM.

Finally, three additional 12-hour counts (7 AM to 7 PM) were collected on September 19, 2023 at the following intersections to provide additional traffic information for the development of planning-level build concepts:

- KY 168/6th Street
- KY 168/Roberts Drive
- US 60/Cherokee Avenue

Summaries of each traffic count are included in **Appendix A**.

Design Hour Volumes

Design hourly volumes were determined from turning movement counts noted above. These counts were adjusted by functional class, month of count, and weekday to determine design-hour turning movements for 2023. Existing year turning movement sheets including ADT, AM and PM peak hours are included in **Appendix B**.

Design-Year/Growth Factors

Multiple sources, including historical traffic volume counts, past population data, and future population projections were analyzed to develop a traffic volume growth rate. Population projections prepared by the Kentucky State Data Center (2022 vintage) in **Figure 3** show slightly negative growth for Boyd County between 2025 and 2045.

Boyd County	Census 2010	Projections					
		2020	2025	2030	2035	2040	2045
Total Population	49,542	48,261	48,261	46,111	44,864	43,575	42,270
Population in Households	47,204	45,978	45,344	44,182	42,919	41,614	40,292
Population in Group Quarters	2,338	2,283	1,913	1,929	1,945	1,961	1,978
Total Households	19,787	19,296	19,309	18,974	18,486	17,912	17,226
Average Household Size	2.39	2.38	2.35	2.33	2.32	2.32	2.34

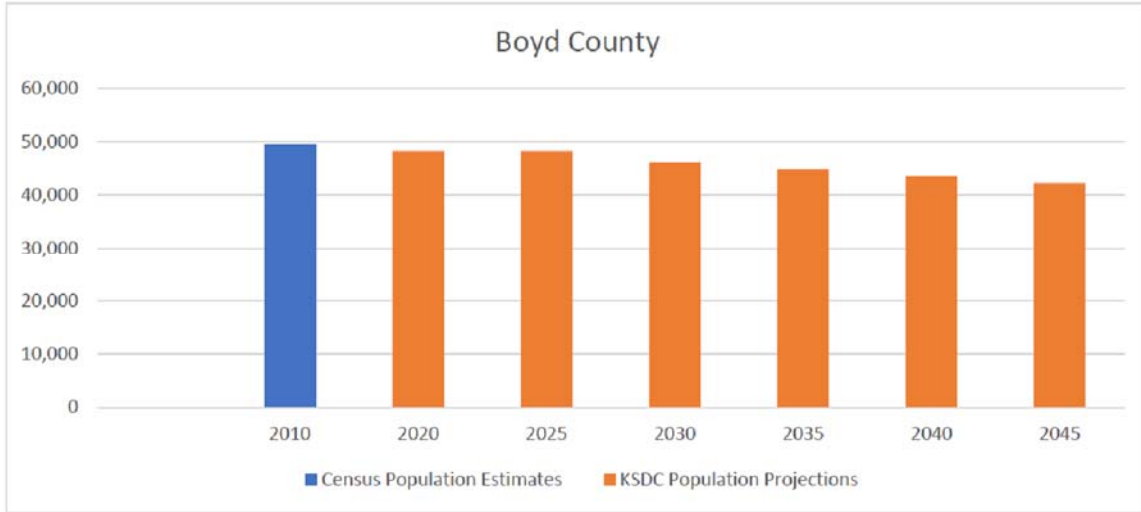


Figure 3: Population Data

KYTC traffic counts in the study area over the past 20 years show negative growth as seen on **Table 2**.

Table 2: Historic Count Station Growth Rates

Route	KYTC Station #	Historic Growth
KY 168	010A20	-2.00%
KY 168	010A13	-13.00%
KY 168	010A79	-2.90%
CS 2349	010A15	-1.60%
CS 2341	010A86*	-4.16%

*2020 count for station 010A86 was not used in calculations

Analysts also applied KYOVA’s regional travel demand model (KYOVA 2015 Travel Demand Model) to evaluate growth rates. Assumed growth patterns for households and jobs by zone were adjusted based on coordination with local officials and stakeholders in July 2023. According, 2050 growth assumptions were adjusted in the following zones:

Table 3: TAZ Growth Assumption Adjustments

Zone	Initial 2050 Employment	Adjusted 2050 Employment
2005	95	105
2006	291	320
2007	235	259
2008	214	235
2009	87	96
2084	197	225
2088	39	80

These growth assumptions resulted in changes to the 2050 model assignment shown in **Figure 4**.

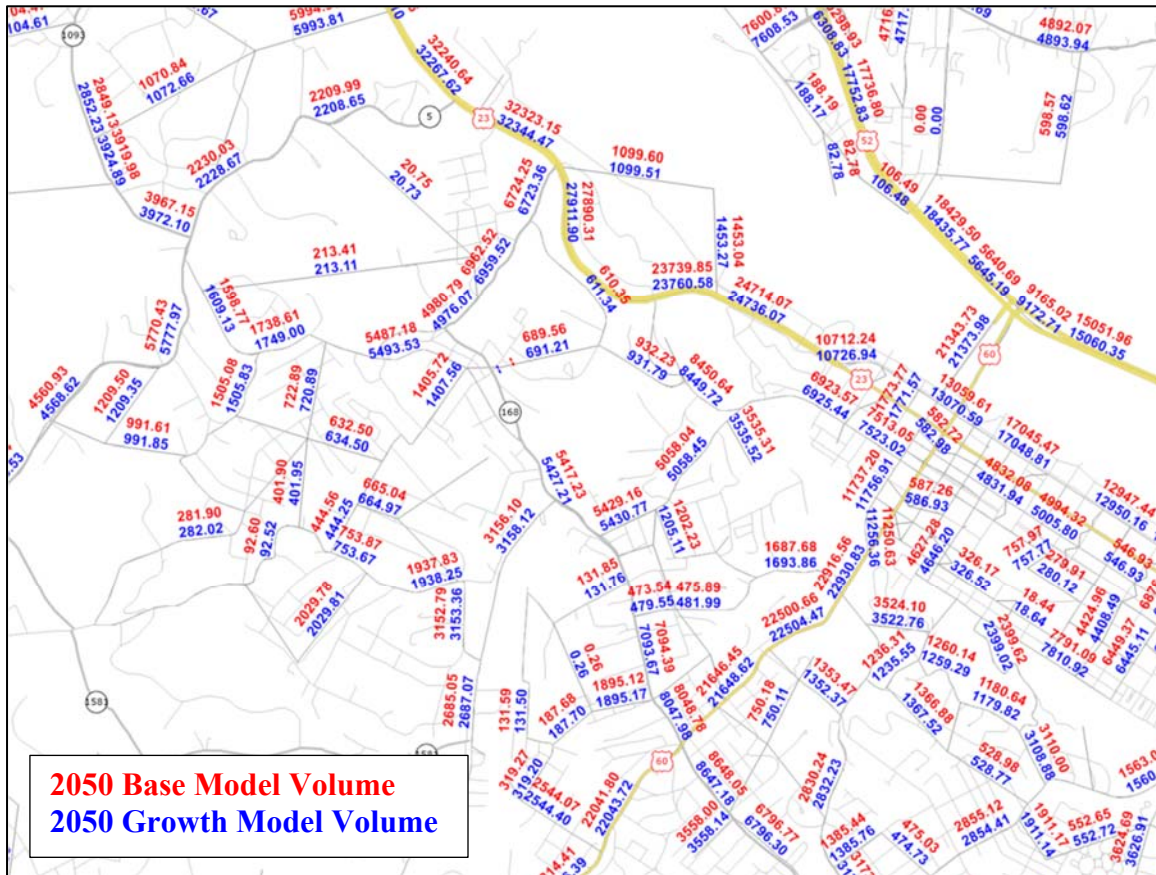


Figure 4: Comparison of Model Assignments with Adjusted Employment

Model assignment on segments grew anywhere between 0.1% and 0.6% between these years. **Table 4** summarizes these model assignments and growth.

Table 4: KYOVA Model Growth along KY 168

Model Segment		Model Assignment		Model Growth
From	To	2020	2050	
US 60	Crawford St	6818	8050	0.6%
Crawford St	Dixon St	5954	7096	0.6%
Dixon St	Kirk St	6336	7470	0.6%
Kirk St	Sanders Rd	6446	7602	0.6%
Sanders Rd	6th St	6256	7401	0.6%
6th St	Roberts Dr	6909	7149	0.1%
Roberts Dr	Bellefonte Rd	5008	5416	0.3%
Bellefonte Rd	Houston	5008	5416	0.3%
Houston	Main St	5008	5416	0.3%
Main St	Hoods Creek	5111	5486	0.2%

Taking into account these sources of data, it was decided a conservative growth rate of 0.6% would be applied to determine future year 2045 traffic volumes. Year 2045 turning movement sheets including ADT, AM, and PM design hour vehicles (DHV) are included in **Appendix C**, which also show the respective values for each segment of KY 168.

Truck Percentages

KYTC count stations 010A20, 010A13, and 010A79 showed a daily truck percentage of 3.83 and a peak hour truck percentage of 2.85%. These numbers will be used for existing and future traffic analysis. **Figure 5** summarizes ADT volumes, DHV, truck ADT, and design hour truck volumes.

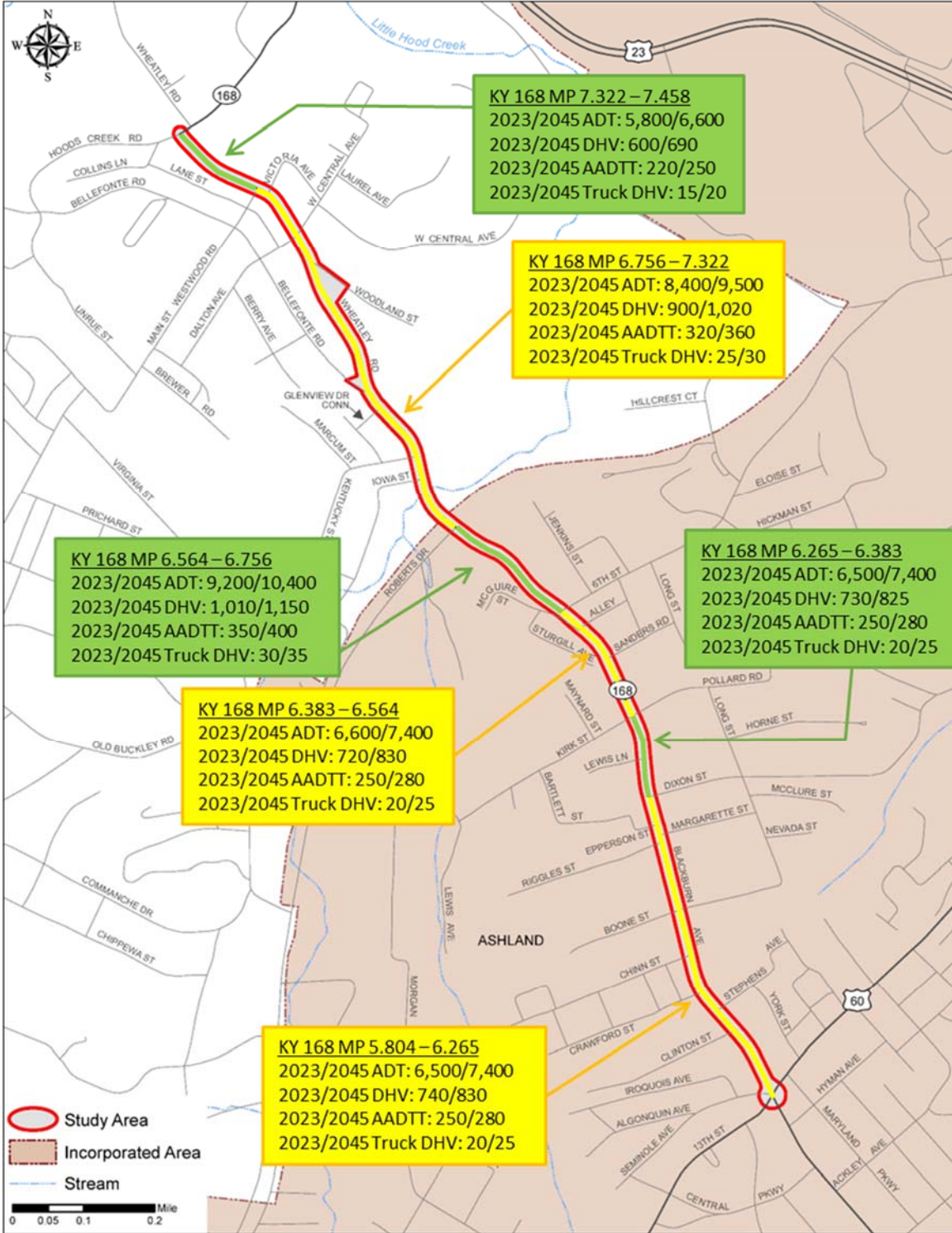


Figure 5: Traffic Summary Map

APPENDIX A

TURNING MOVEMENT COUNT DATA

Study Name AM KY 168 & 6th St
 Start Date 03/23/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound			6th Street Westbound			KY 168 Northbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
7:00 AM	18	25	0	13	2	0	7	30	0
7:15 AM	33	23	0	14	6	0	4	35	0
7:30 AM	53	39	0	25	4	0	10	49	0
7:45 AM	58	63	0	29	8	0	10	55	0
8:00 AM	43	51	0	15	8	0	12	35	0
8:15 AM	31	39	0	17	5	0	14	41	0
8:30 AM	28	24	0	21	8	0	10	20	0
8:45 AM	31	38	0	22	9	0	14	26	0

Study Name PM KY 168 & 6th St
 Start Date 03/23/2023
 Start Time 3:00 PM
 Site Code

Start Time	KY 168 Southbound			6th Street Westbound			KY 168 Northbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
3:00 PM	49	32	0	58	29	0	24	36	0
3:15 PM	68	51	0	56	16	0	15	46	0
3:30 PM	46	58	0	60	30	0	21	56	0
3:45 PM	53	48	0	65	32	0	23	67	0
4:00 PM	59	44	0	76	22	0	21	60	0
4:15 PM	52	62	0	56	28	0	29	55	0
4:30 PM	65	37	0	51	29	0	15	43	0
4:45 PM	51	50	0	67	20	0	14	53	0
5:00 PM	54	48	0	66	39	0	18	56	0
5:15 PM	56	56	0	64	23	0	23	57	0
5:30 PM	79	39	1	52	22	0	13	60	0
5:45 PM	61	40	0	67	24	0	13	46	0

Study Name AM KY 168 & Dixon St
 Start Date 03/23/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound				Dixon St Westbound				KY 168 Northbound				Eastbound Approach Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	0	27	0	0	0	0	0	0	0	31	0	0	0	0	0	0
7:15 AM	0	45	0	0	1	0	1	0	1	44	0	0	0	0	0	0
7:30 AM	0	63	0	0	1	0	1	0	2	56	0	0	0	0	0	0
7:45 AM	0	70	0	0	1	0	0	0	2	67	0	0	0	0	0	0
8:00 AM	0	50	1	0	0	0	1	0	1	48	0	0	0	0	0	0
8:15 AM	0	41	0	0	1	0	0	0	2	45	0	0	0	0	0	0
8:30 AM	0	34	1	0	1	0	0	0	1	31	0	0	0	0	0	0
8:45 AM	0	39	1	0	1	0	0	0	1	43	0	0	0	0	0	0

Study Name AM KY 168 & Hoods Creek Pike
 Start Date 03/23/2023
 Start Time 7:00 AM
 Site Code

Start Time	Hoods Creek Pike Westbound			KY 168 Northbound			Hoods Creek Pike Eastbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
7:00 AM	2	18	0	31	4	0	3	5	0
7:15 AM	1	50	0	26	4	0	2	7	0
7:30 AM	5	52	0	50	6	0	4	5	0
7:45 AM	3	53	0	60	5	0	4	5	0
8:00 AM	2	41	0	42	4	0	8	5	0
8:15 AM	5	35	0	39	7	0	3	5	0
8:30 AM	5	25	0	25	3	0	1	2	0
8:45 AM	6	32	0	35	5	0	5	4	0

Study Name PM KY 168 & Hoods Creek Pike
 Start Date 03/23/2023
 Start Time 3:00 PM
 Site Code

Start Time	Hoods Creek Pike Westbound			KY 168 Northbound			Hoods Creek Pike Eastbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
3:00 PM	8	60	0	40	12	0	4	5	0
3:15 PM	15	62	0	63	17	0	5	11	0
3:30 PM	11	50	0	64	16	0	8	16	0
3:45 PM	12	50	0	50	18	0	3	6	0
4:00 PM	11	48	0	54	16	0	8	7	0
4:15 PM	26	50	0	51	20	0	3	8	0
4:30 PM	19	50	0	52	12	0	3	5	0
4:45 PM	8	59	0	46	16	0	9	11	0
5:00 PM	10	67	0	46	13	0	8	10	0
5:15 PM	10	64	0	57	8	0	2	2	0
5:30 PM	7	51	0	52	8	0	4	6	0
5:45 PM	9	64	0	49	12	0	2	5	0

Study Name AM KY 168 & Pollard_Kirk
 Start Date 03/23/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound				Pollard Rd Westbound				KY 168 Northbound				Kirk St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	0	23	0	0	2	0	3	0	0	32	0	0	0	0	2	0
7:15 AM	1	39	1	0	2	1	5	0	1	35	0	0	1	1	3	0
7:30 AM	0	55	4	0	0	0	5	0	7	56	1	0	0	0	1	0
7:45 AM	2	63	1	0	7	0	2	0	4	59	0	0	2	1	0	0
8:00 AM	1	45	3	0	2	0	4	0	1	47	0	0	1	1	2	0
8:15 AM	0	38	1	0	3	0	3	0	2	47	0	0	0	1	1	0
8:30 AM	0	33	2	0	0	0	0	0	1	29	0	0	1	2	2	0
8:45 AM	4	37	1	0	2	0	3	0	1	39	0	0	0	0	2	0

Study Name PM KY 168 & Roberts Dr
 Start Date 03/23/2023
 Start Time 3:00 PM
 Site Code

Start Time	KY 168 Southbound			KY 168 Northbound			Roberts Dr Eastbound		
	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn
3:00 PM	23	60	0	50	42	0	19	18	0
3:15 PM	30	94	0	58	39	0	33	26	0
3:30 PM	30	70	0	76	39	0	25	19	0
3:45 PM	22	67	0	78	52	0	33	13	0
4:00 PM	30	85	0	81	49	0	20	23	0
4:15 PM	26	73	0	75	41	0	38	19	0
4:30 PM	30	76	0	60	32	0	27	23	0
4:45 PM	32	70	0	77	44	0	27	13	0
5:00 PM	31	81	0	74	46	0	27	16	0
5:15 PM	25	73	0	65	51	0	42	18	0
5:30 PM	18	82	0	76	39	0	28	18	0
5:45 PM	15	76	0	73	43	0	24	15	0

Study Name AM KY 168 & Roberts Dr
 Start Date 03/23/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound			KY 168 Northbound			Roberts Dr Eastbound		
	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn
7:00 AM	8	25	0	37	5	0	22	12	0
7:15 AM	21	34	0	36	12	0	17	11	0
7:30 AM	22	66	0	52	21	0	28	17	0
7:45 AM	35	79	0	63	19	0	44	16	0
8:00 AM	21	61	0	37	17	0	30	14	0
8:15 AM	26	39	0	43	12	0	31	15	0
8:30 AM	18	34	0	30	11	0	15	12	0
8:45 AM	17	43	0	37	12	0	25	10	0

Study Name KY 168 & Roberts Dr 12-hour Count
 Start Date 09/19/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound			KY 168 Northbound			Roberts Dr Eastbound		
	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn
7:00 AM	13	36	0	28	3	0	14	13	0
7:15 AM	19	40	0	38	14	0	18	16	0
7:30 AM	30	76	0	57	15	0	29	17	0
7:45 AM	34	71	0	59	23	0	37	17	0
8:00 AM	23	50	0	41	15	0	28	13	0
8:15 AM	10	37	0	39	13	0	26	15	0
8:30 AM	17	42	0	40	10	0	15	12	0
8:45 AM	24	43	0	53	12	0	22	11	0
9:00 AM	16	30	0	35	8	0	17	18	0
9:15 AM	16	22	0	30	17	0	25	12	0
9:30 AM	18	32	0	30	17	0	17	4	0
9:45 AM	15	37	0	31	11	0	17	14	0
10:00 AM	11	22	0	39	21	0	15	12	0
10:15 AM	8	29	0	33	15	0	24	7	0
10:30 AM	18	39	0	28	20	0	15	8	0
10:45 AM	20	43	0	34	18	0	23	10	0
11:00 AM	15	28	0	32	21	0	26	14	0
11:15 AM	11	27	0	35	29	0	27	14	0
11:30 AM	18	37	0	35	27	0	20	15	0
11:45 AM	21	49	0	42	24	0	22	10	0
12:00 PM	10	44	0	47	21	0	23	19	0
12:15 PM	16	49	0	42	20	0	28	21	0
12:30 PM	20	38	0	47	26	0	25	10	0
12:45 PM	19	53	0	48	22	0	19	10	0
1:00 PM	18	57	0	43	30	0	20	8	0
1:15 PM	9	50	0	47	29	0	21	12	0
1:30 PM	19	54	0	51	31	0	23	10	0
1:45 PM	18	51	0	42	20	0	16	11	0
2:00 PM	21	43	0	55	36	0	11	10	0
2:15 PM	22	52	0	56	29	0	24	24	0
2:30 PM	25	57	0	69	25	0	28	19	0
2:45 PM	30	68	0	51	29	0	24	18	0
3:00 PM	17	50	0	46	45	0	39	18	0
3:15 PM	25	73	0	70	31	0	36	18	0
3:30 PM	33	80	0	68	35	0	41	19	0
3:45 PM	22	61	0	81	35	0	20	7	0
4:00 PM	22	55	0	67	27	0	18	16	0
4:15 PM	32	63	0	71	42	0	25	20	0
4:30 PM	25	71	0	81	40	0	20	12	0
4:45 PM	37	78	0	70	31	0	18	11	0
5:00 PM	28	54	0	86	37	0	24	14	0
5:15 PM	27	69	0	75	45	0	22	18	0
5:30 PM	31	58	0	60	31	0	32	13	0
5:45 PM	22	63	0	62	36	0	32	14	0
6:00 PM	25	52	0	49	40	0	20	13	0
6:15 PM	14	48	0	49	27	0	35	13	0
6:30 PM	16	57	0	41	33	0	17	15	0
6:45 PM	15	46	0	43	34	0	16	8	0

Study Name KY 168 & 6th St 12-hour Count
 Start Date 09/19/2023
 Start Time 7:00 AM
 Site Code

Start Time	KY 168 Southbound			6th St Westbound			KY 168 Northbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
7:00 AM	22	31	0	11	3	0	4	19	0
7:15 AM	34	28	0	9	5	0	6	43	0
7:30 AM	58	44	0	14	8	0	13	55	0
7:45 AM	59	53	0	22	10	0	19	56	0
8:00 AM	51	35	0	14	10	0	12	43	0
8:15 AM	36	31	0	12	9	0	16	42	0
8:30 AM	33	24	0	20	5	0	8	33	0
8:45 AM	29	35	0	25	10	0	18	37	0
9:00 AM	23	28	0	10	9	0	13	31	0
9:15 AM	16	30	0	22	9	0	6	26	0
9:30 AM	34	14	0	24	5	0	13	21	0
9:45 AM	27	27	0	17	9	0	7	25	0
10:00 AM	11	22	0	31	5	0	10	31	0
10:15 AM	27	30	0	24	8	0	14	22	0
10:30 AM	31	26	0	27	5	0	13	20	0
10:45 AM	33	36	0	23	6	0	14	30	0
11:00 AM	19	36	0	21	14	0	19	34	0
11:15 AM	18	34	0	34	9	0	22	27	0
11:30 AM	29	31	0	41	18	0	15	21	0
11:45 AM	31	43	0	36	12	0	13	30	0
12:00 PM	37	33	0	29	7	0	12	38	0
12:15 PM	35	41	0	29	11	0	16	32	0
12:30 PM	32	34	0	45	17	0	15	28	0
12:45 PM	34	41	0	37	12	0	14	30	0
1:00 PM	50	27	0	36	14	0	26	39	0
1:15 PM	40	35	0	31	12	0	10	42	0
1:30 PM	42	37	0	52	13	0	17	31	0
1:45 PM	52	25	0	32	12	0	13	31	0
2:00 PM	28	22	0	53	16	0	18	44	0
2:15 PM	42	41	0	51	14	0	13	29	0
2:30 PM	49	35	0	38	5	0	12	60	0
2:45 PM	58	36	0	37	6	0	11	45	0
3:00 PM	47	47	0	49	12	0	14	39	0
3:15 PM	59	49	0	45	24	0	11	57	0
3:30 PM	62	53	0	49	16	0	21	48	0
3:45 PM	55	35	0	44	16	0	16	72	0
4:00 PM	39	41	0	24	11	0	19	67	0
4:15 PM	54	37	0	53	10	0	12	59	0
4:30 PM	51	38	0	50	12	0	16	76	0
4:45 PM	68	32	0	37	14	0	17	62	0
5:00 PM	53	34	0	39	9	0	19	84	0
5:15 PM	56	32	0	64	17	0	13	60	0
5:30 PM	56	38	0	47	15	0	13	51	0
5:45 PM	54	48	0	46	18	0	14	48	0
6:00 PM	36	36	0	48	19	0	24	45	0
6:15 PM	41	45	0	40	17	0	25	37	0
6:30 PM	41	35	0	44	19	0	13	30	0
6:45 PM	32	33	0	50	15	0	8	26	0

Study Name US 60 & Blackburn Ave
 Start Date 02/16/2022
 Start Time 7:00 AM
 Site Code

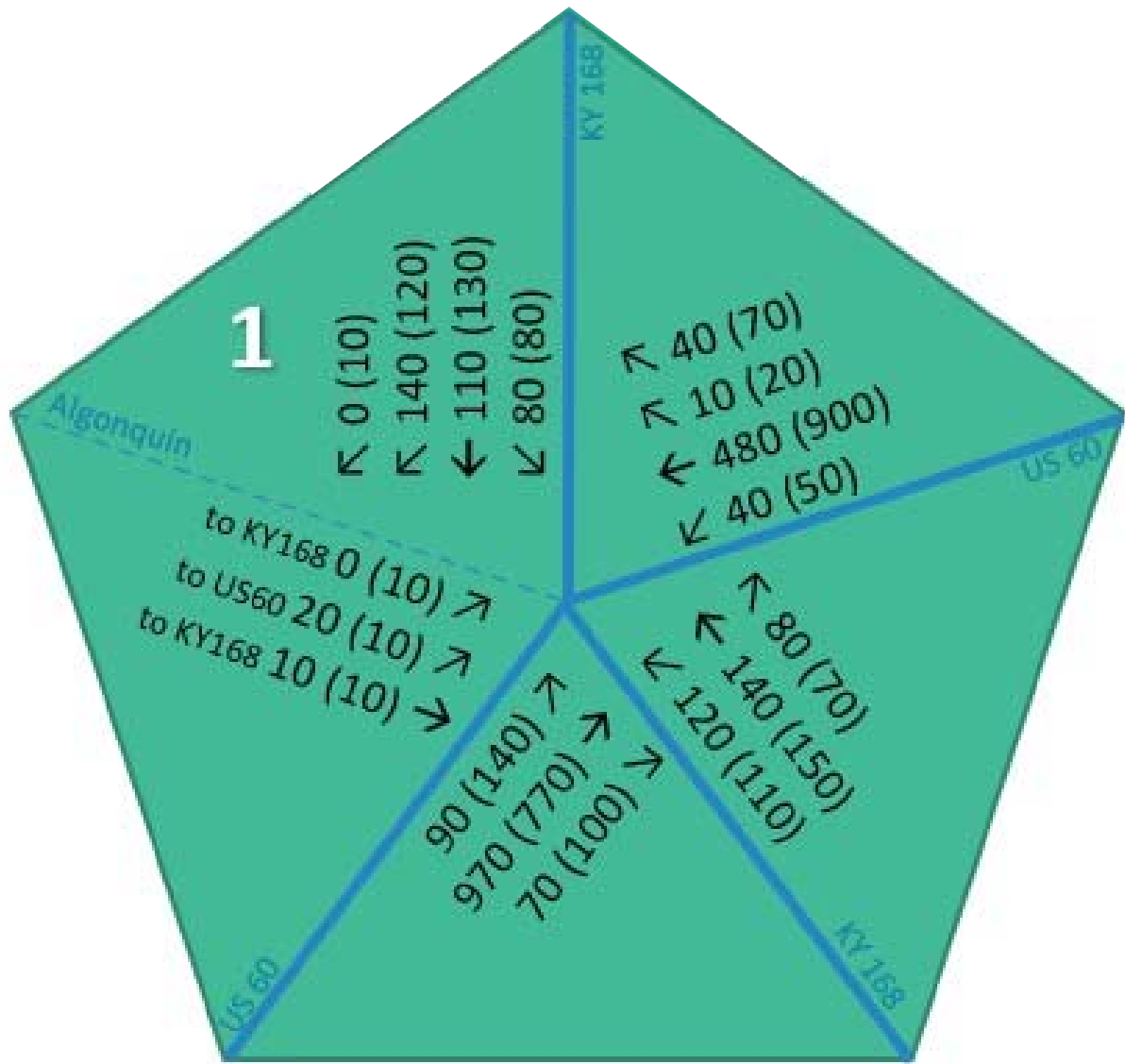
Start Time	Blackburn Ave Southbound				US 60 Westbound				Blackburn Ave Northbound				US 60 Eastbound				Southeastbound Approach Southeastbound			
	Hard Right	Right	Thru	Left	Right	Bear Right	Thru	Left	Right	Thru	Bear Left	Left	Right	Thru	Left	Hard Left	Hard Right	Bear Right	Bear Left	Hard Left
7:00 AM	0	16	8	9	4	1	55	2	3	15	0	6	7	94	11	1	1	0	1	1
7:15 AM	0	14	21	14	6	0	84	2	12	21	0	7	11	150	8	0	0	3	6	0
7:30 AM	0	29	36	16	13	1	88	11	19	34	0	22	21	202	19	0	0	2	4	0
7:45 AM	0	33	26	27	10	1	129	14	25	35	0	31	15	233	18	0	0	2	6	2
8:00 AM	1	38	19	17	8	1	124	7	10	33	0	33	14	217	24	0	0	3	2	0
8:15 AM	0	23	14	13	7	1	82	3	13	23	1	19	10	202	23	0	3	1	2	0
8:30 AM	1	12	19	17	7	2	84	2	5	18	0	6	7	181	19	0	0	0	3	0
8:45 AM	0	14	11	22	7	2	91	7	5	18	0	11	9	141	11	0	1	1	1	1
9:00 AM	1	3	16	11	7	2	94	1	10	13	0	12	2	139	9	0	0	0	0	0
9:15 AM	0	15	7	8	10	1	88	2	2	14	0	7	6	127	16	0	1	1	2	0
9:30 AM	0	11	18	8	7	1	81	2	8	11	0	9	6	142	16	1	0	0	0	1
9:45 AM	0	13	15	10	6	1	88	0	11	12	0	4	9	136	18	0	0	0	2	3
10:00 AM	0	11	12	16	5	1	111	3	11	18	0	11	8	144	18	0	0	1	1	0
10:15 AM	0	20	9	18	8	3	103	4	16	14	0	13	6	126	23	0	0	1	0	1
10:30 AM	1	8	13	13	15	2	97	4	2	9	1	8	3	131	15	0	0	0	1	4
10:45 AM	0	15	12	16	10	1	105	3	5	16	0	15	13	168	18	0	0	0	1	0
11:00 AM	2	13	15	12	17	1	114	5	7	15	3	5	9	128	16	0	0	1	2	2
11:15 AM	4	18	20	9	5	0	129	1	10	14	0	14	6	147	21	0	0	1	1	1
11:30 AM	0	10	18	12	15	2	111	9	7	17	0	10	13	126	20	0	0	0	1	1
11:45 AM	1	15	17	10	11	1	131	7	11	25	0	8	5	129	21	0	0	0	2	0
12:00 PM	0	14	19	14	11	1	147	4	10	20	0	15	9	136	26	0	0	0	3	0
12:15 PM	1	14	14	12	7	3	154	2	3	17	1	5	12	151	19	0	0	1	0	1
12:30 PM	1	25	21	14	9	0	119	1	7	19	0	10	8	157	20	0	0	1	0	2
12:45 PM	0	11	25	16	21	2	146	4	9	18	0	15	8	142	12	0	2	0	2	0
1:00 PM	2	15	27	8	6	2	123	3	10	25	0	7	5	138	16	0	0	0	4	0
1:15 PM	1	17	17	14	11	2	120	3	6	24	1	7	8	162	24	0	0	0	2	3
1:30 PM	1	21	31	15	14	3	140	4	9	18	0	9	7	148	24	0	0	0	1	0
1:45 PM	1	18	23	13	10	1	127	3	11	15	0	13	9	146	26	0	1	1	3	0
2:00 PM	0	23	21	13	17	1	136	6	3	17	1	15	7	151	18	0	0	0	2	1
2:15 PM	2	26	38	10	8	3	179	9	13	26	0	10	17	146	18	1	0	0	3	1
2:30 PM	0	16	25	13	9	1	127	13	7	15	0	9	8	126	21	0	0	0	2	1
2:45 PM	1	24	25	15	13	3	175	13	4	21	0	17	15	155	25	0	0	0	3	3
3:00 PM	1	25	23	17	10	5	153	5	15	37	0	21	11	158	30	0	1	0	0	2
3:15 PM	1	26	42	14	14	1	183	9	17	25	0	21	15	143	24	0	0	1	4	1
3:30 PM	0	26	30	18	9	4	201	10	13	23	1	22	26	191	36	0	0	2	4	1
3:45 PM	0	17	27	16	16	4	198	13	16	34	0	28	22	185	31	0	0	0	1	3
4:00 PM	1	26	23	16	18	0	181	8	16	31	0	26	15	140	27	0	0	2	1	3
4:15 PM	1	31	36	23	17	1	178	13	15	32	0	24	25	154	30	0	0	0	3	0
4:30 PM	3	24	29	16	15	2	220	12	7	26	0	13	18	151	23	0	1	3	0	0
4:45 PM	0	25	32	14	9	2	214	14	20	40	0	20	13	152	19	0	2	1	4	2
5:00 PM	0	36	26	18	11	1	219	10	15	47	5	19	20	163	26	0	0	3	1	2
5:15 PM	1	33	29	18	12	4	225	8	9	39	2	18	17	159	35	1	0	1	1	0
5:30 PM	2	26	42	16	11	2	199	9	15	31	0	18	17	133	22	0	1	1	2	2
5:45 PM	2	28	31	15	24	6	152	3	4	27	0	20	18	146	15	1	0	1	0	3
6:00 PM	0	36	33	17	11	6	150	6	6	28	1	13	8	131	36	1	2	2	2	0
6:15 PM	0	29	22	13	14	4	134	3	10	33	1	9	10	133	17	1	0	2	1	0
6:30 PM	0	18	23	14	11	3	151	10	13	18	1	18	17	135	28	0	0	2	3	3
6:45 PM	0	30	31	17	14	2	116	7	2	16	0	12	12	112	22	2	0	1	1	2

Study Name US 60 & Cherokee Ave
 Start Date 09/19/2023
 Start Time 7:00 AM
 Site Code

Start Time	Cherokee Ave Southbound				US 60 Westbound				Cherokee Ave Northbound				US 60 Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	2	0	0	0	0	75	1	0	2	0	0	0	0	112	4	0
7:15 AM	4	0	1	0	0	121	0	0	1	0	0	0	0	173	1	0
7:30 AM	5	0	1	0	0	156	0	0	1	0	3	0	0	287	2	0
7:45 AM	6	0	0	0	1	177	0	0	1	0	0	0	1	281	3	0
8:00 AM	13	1	0	0	0	191	0	0	1	1	0	0	0	263	4	0
8:15 AM	3	0	0	0	0	136	1	0	0	0	0	0	0	267	2	0
8:30 AM	2	0	0	0	0	123	0	0	0	0	0	0	0	192	2	0
8:45 AM	1	0	0	0	0	136	1	0	0	0	0	0	0	185	0	0
9:00 AM	4	0	0	0	0	85	1	0	1	0	0	0	0	165	0	0
9:15 AM	7	0	0	0	0	106	0	0	1	0	0	0	0	160	1	0
9:30 AM	4	0	0	0	1	117	0	0	1	0	0	0	0	138	0	0
9:45 AM	2	0	0	0	0	132	0	0	0	0	0	0	0	157	0	0
10:00 AM	7	1	0	0	0	133	0	0	3	0	0	0	0	156	1	0
10:15 AM	7	0	0	0	2	111	0	0	1	0	0	0	0	153	1	0
10:30 AM	3	0	0	0	0	123	0	0	1	0	0	0	0	143	0	0
10:45 AM	3	0	0	0	0	129	1	0	0	0	0	0	0	160	1	0
11:00 AM	2	0	0	0	0	135	0	0	0	0	0	0	0	162	0	0
11:15 AM	9	0	0	0	0	151	0	0	0	0	1	0	0	157	0	0
11:30 AM	3	0	0	0	0	154	0	0	0	0	0	0	0	159	1	0
11:45 AM	6	0	0	0	0	140	0	0	0	0	0	0	0	178	0	0
12:00 PM	4	0	0	0	0	169	0	0	0	0	0	0	1	168	1	0
12:15 PM	4	0	0	0	0	138	0	0	0	0	0	0	0	202	0	0
12:30 PM	5	0	0	0	0	144	0	0	0	0	0	0	0	172	0	0
12:45 PM	2	0	0	0	2	162	0	0	1	0	2	0	0	167	3	0
1:00 PM	3	0	0	0	0	157	1	0	1	0	1	0	0	171	1	0
1:15 PM	1	0	0	0	0	157	0	0	2	0	0	0	1	154	1	0
1:30 PM	4	0	0	0	1	150	0	0	0	0	0	0	0	190	0	0
1:45 PM	7	0	0	0	0	159	0	0	3	0	1	0	0	176	1	0
2:00 PM	6	0	0	0	1	173	0	0	2	0	0	0	1	176	1	0
2:15 PM	3	0	0	0	0	169	0	0	0	1	0	0	1	152	0	0
2:30 PM	8	1	0	0	0	184	0	0	1	0	0	0	2	222	1	0
2:45 PM	3	0	0	0	0	218	0	0	0	0	0	0	1	141	0	0
3:00 PM	6	1	0	0	1	200	0	0	1	0	5	0	1	181	0	0
3:15 PM	5	0	0	0	1	218	2	0	0	0	0	0	1	205	2	0
3:30 PM	8	0	1	0	0	226	2	0	0	0	0	0	0	266	3	0
3:45 PM	4	0	0	0	0	187	0	0	1	0	1	0	2	219	1	0
4:00 PM	1	0	0	0	0	234	1	0	0	0	1	0	0	195	8	0
4:15 PM	3	0	0	0	0	208	1	0	0	0	0	0	0	202	2	0
4:30 PM	3	0	0	0	0	238	0	0	1	0	0	0	0	171	2	0
4:45 PM	2	0	0	0	0	236	0	0	1	0	0	0	0	199	4	0
5:00 PM	3	0	0	0	1	244	0	0	1	0	1	0	0	208	2	0
5:15 PM	1	0	0	0	0	264	1	0	1	0	0	0	0	207	2	0
5:30 PM	1	0	1	0	0	224	1	0	0	0	0	0	1	168	2	0
5:45 PM	2	0	0	0	0	206	0	0	1	0	0	0	2	148	2	0
6:00 PM	3	0	0	0	1	179	0	0	1	0	0	0	0	157	1	0
6:15 PM	2	0	0	0	0	146	1	0	0	0	1	0	0	160	3	0
6:30 PM	2	0	0	0	0	132	0	0	0	0	0	0	0	141	2	0
6:45 PM	0	0	0	0	0	136	0	0	1	0	0	0	0	138	1	0

APPENDIX B

2023 TRAFFIC FORECAST

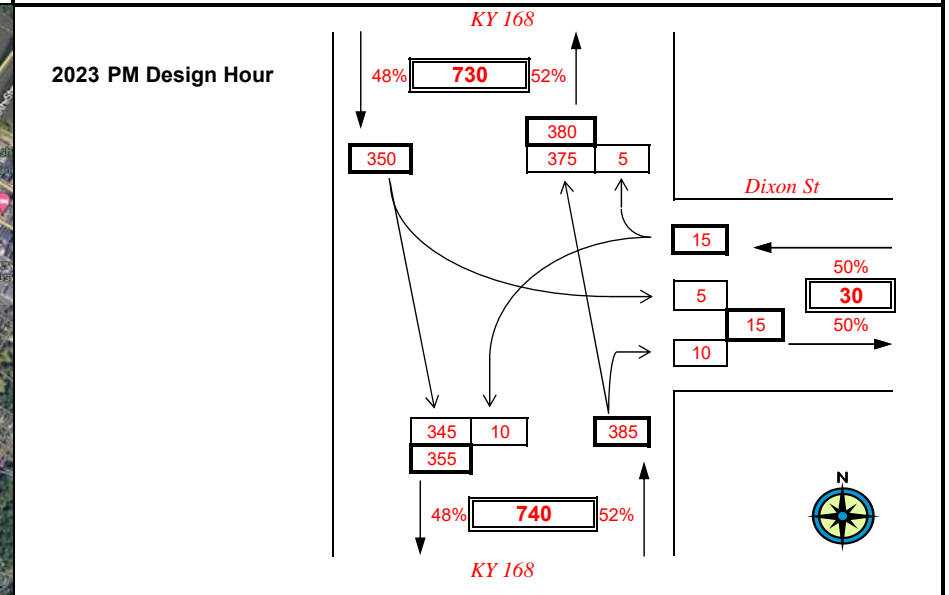
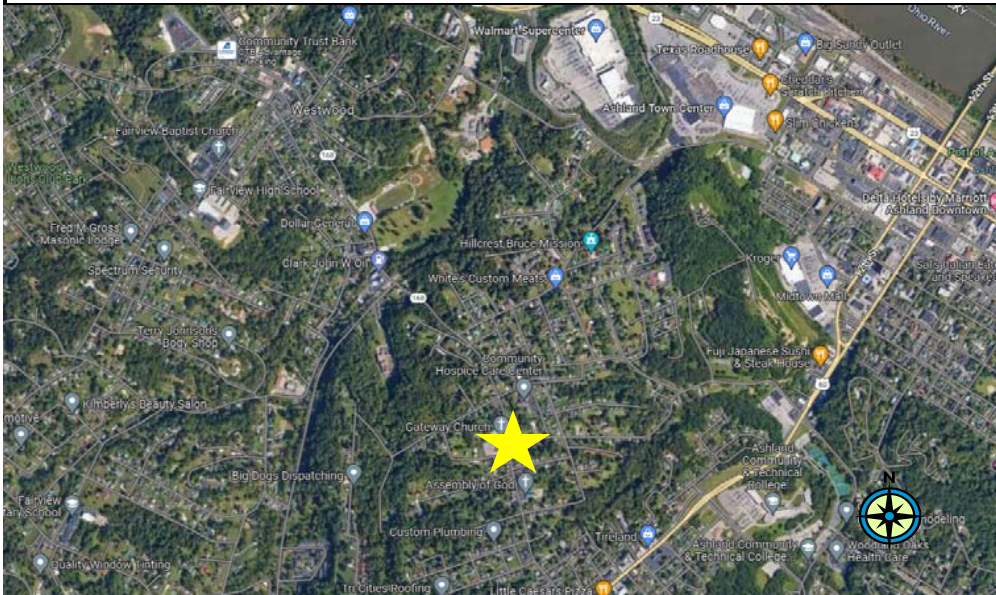
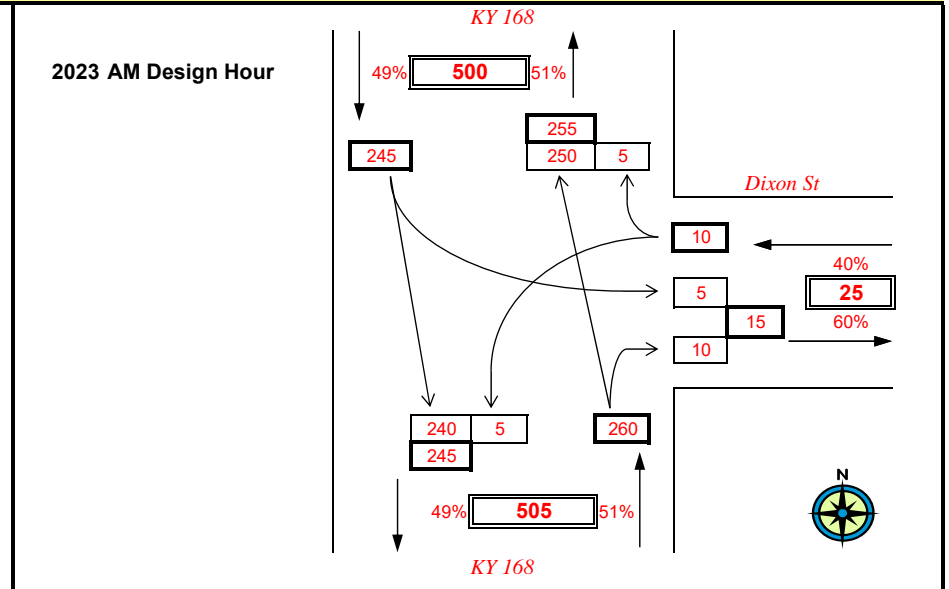
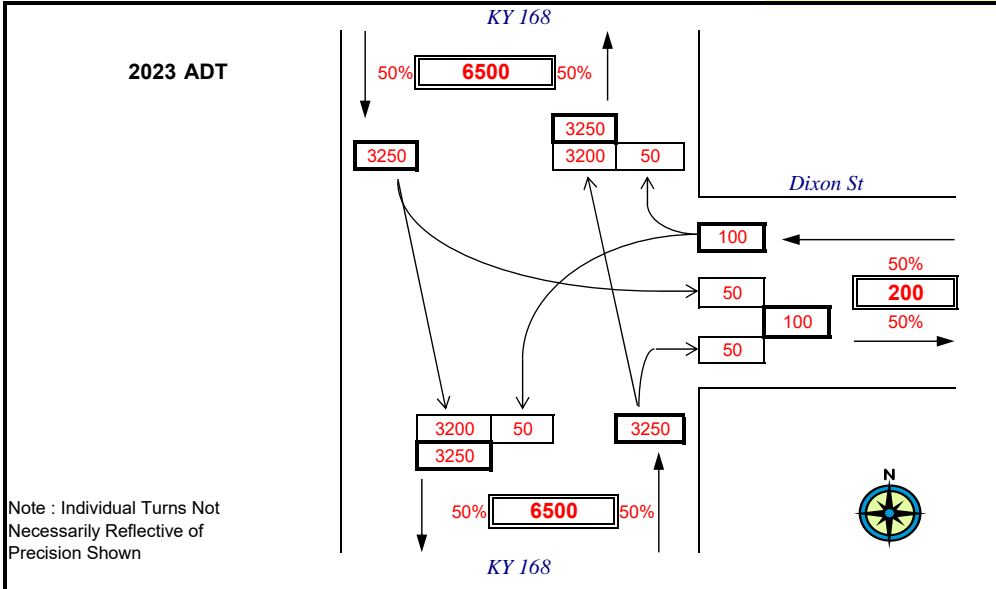


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2023 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Dixon St

NOTE: Directional distributions were determined from a 2023 turning movement count.

TURN MOVEMENT 2 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

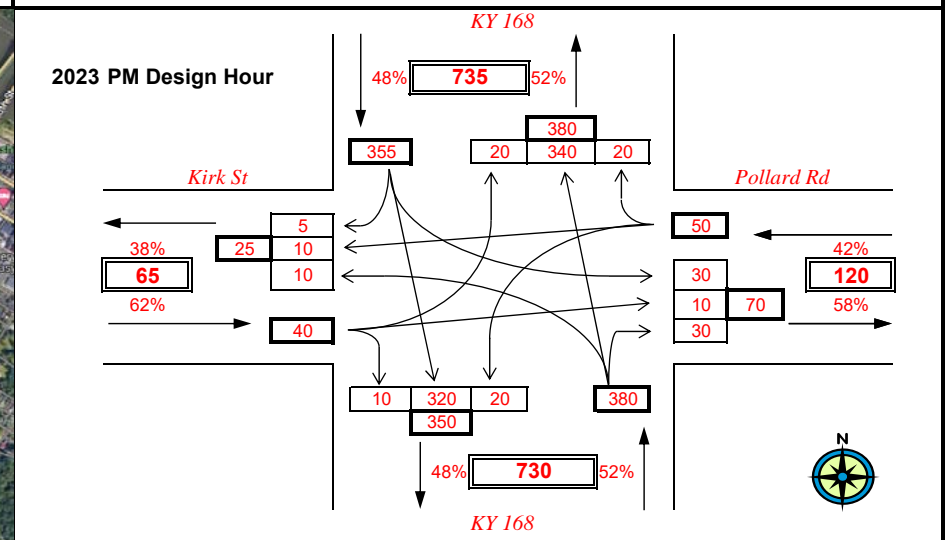
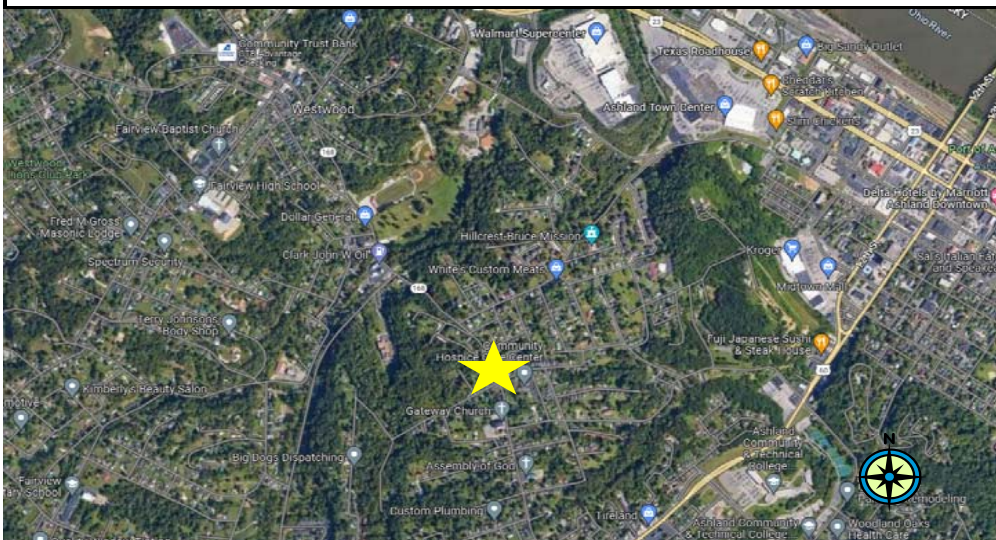
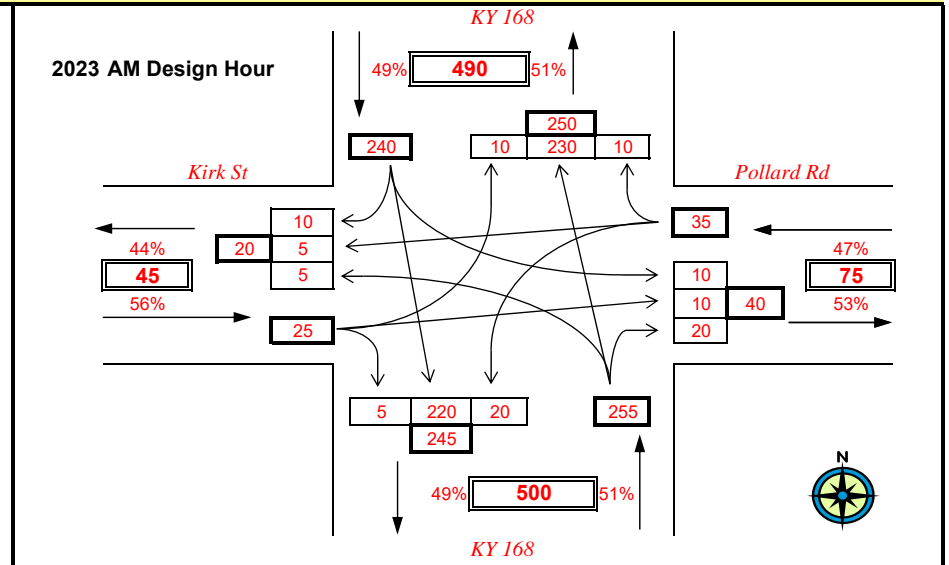
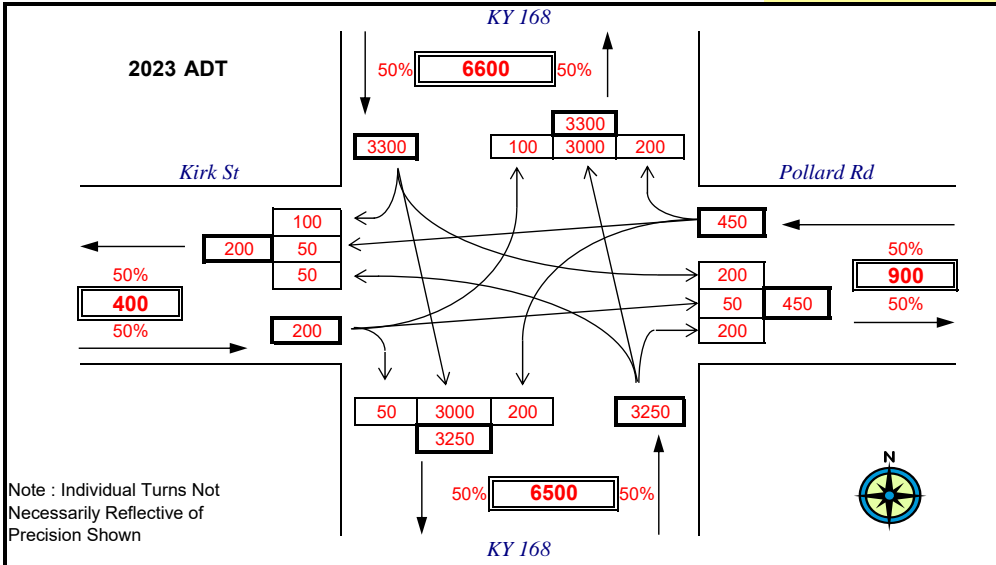


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2023 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Kirk/Pollard

NOTE: Directional distributions were determined from a 2023 turning movement count.

TURN MOVEMENT 3 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

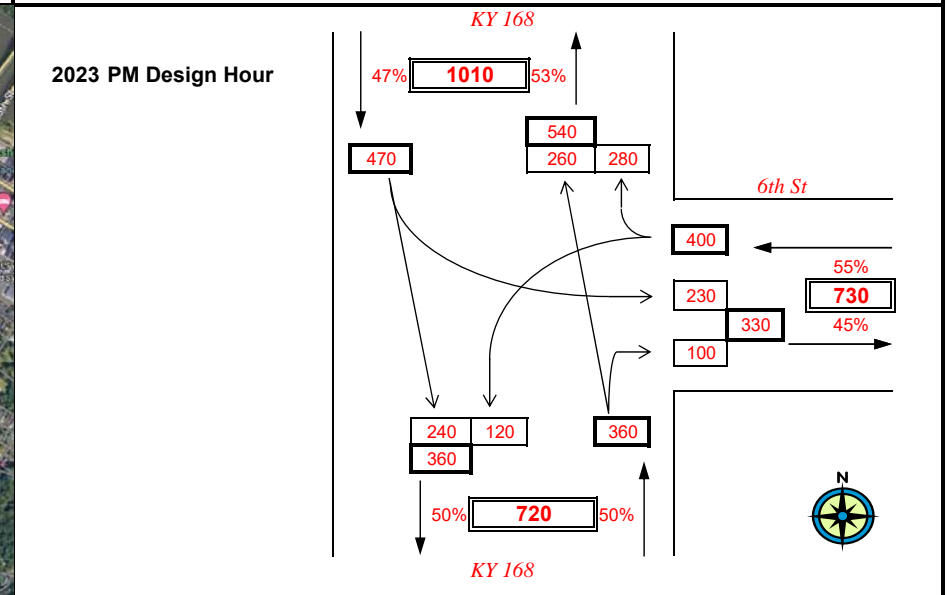
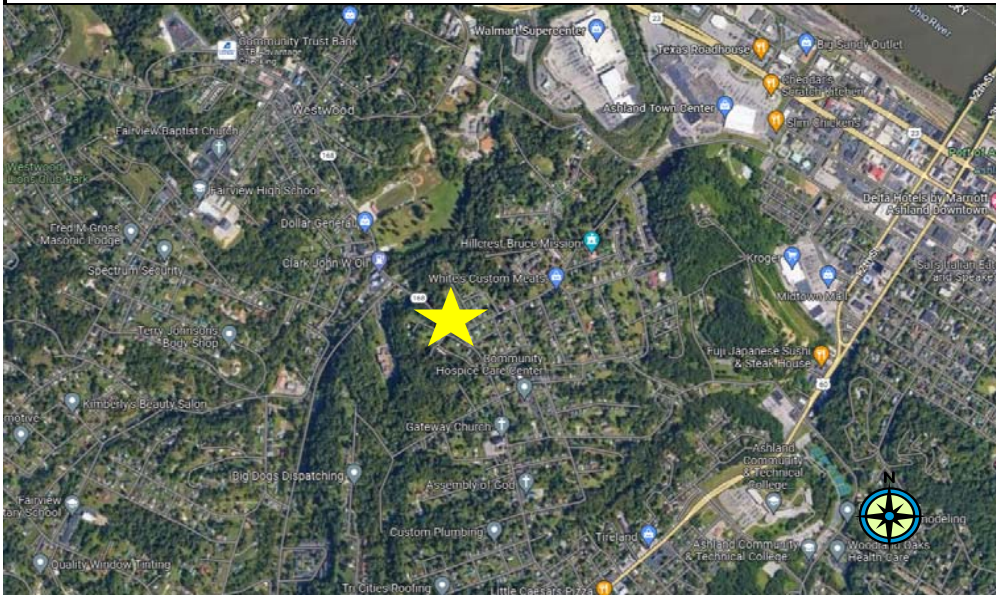
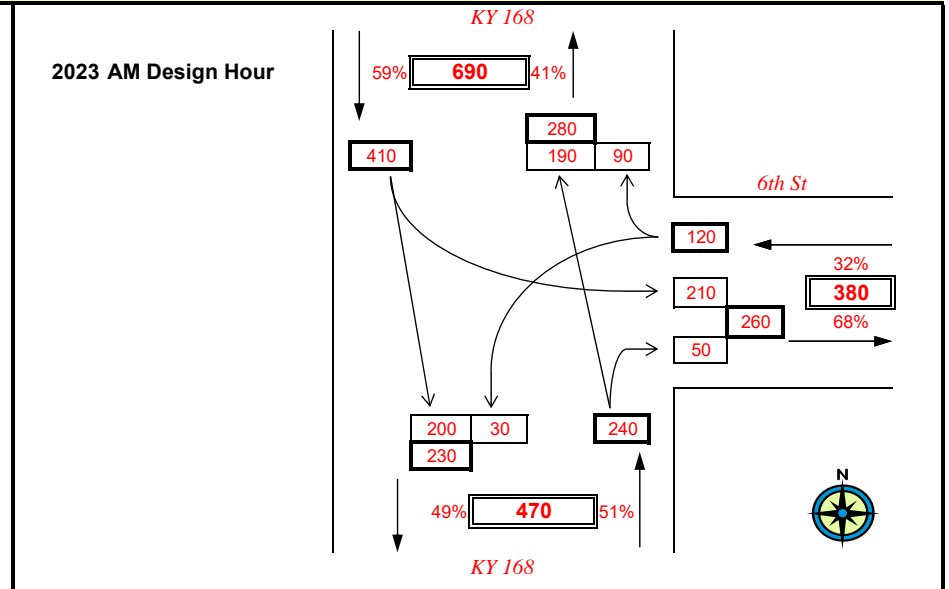
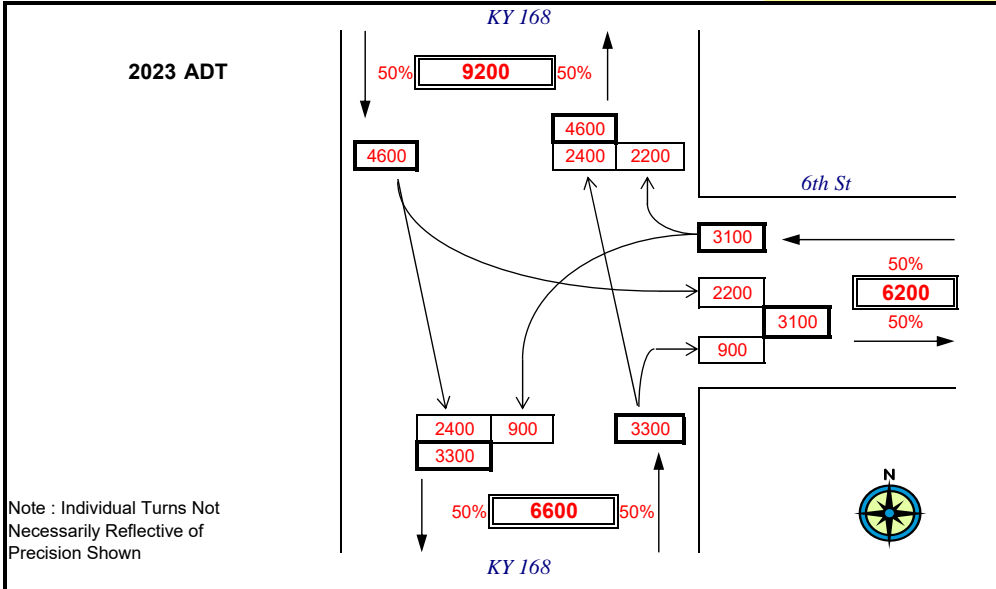


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2023 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & 6th St

NOTE: Directional distributions were determined from a 2023 turning movement count.

TURN MOVEMENT 4 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

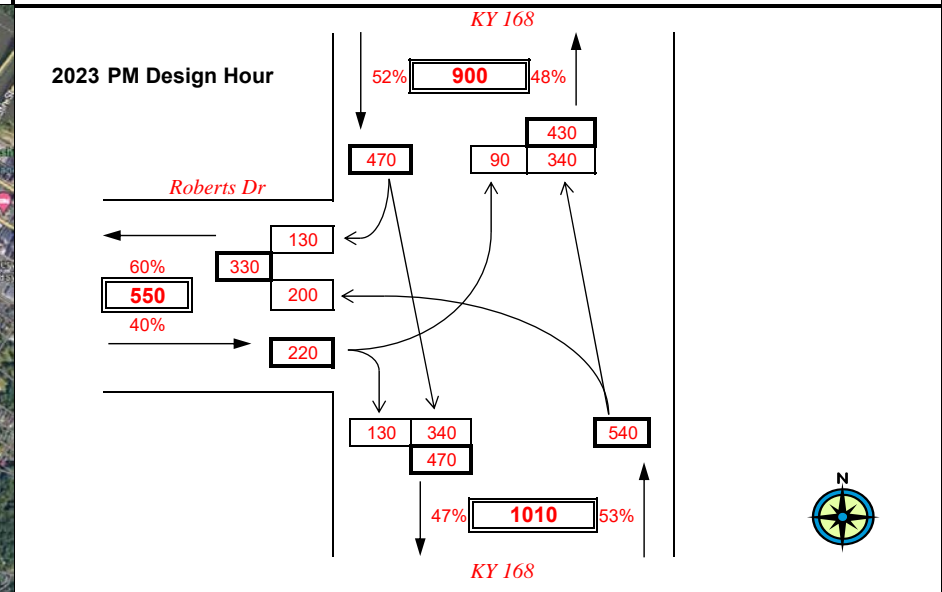
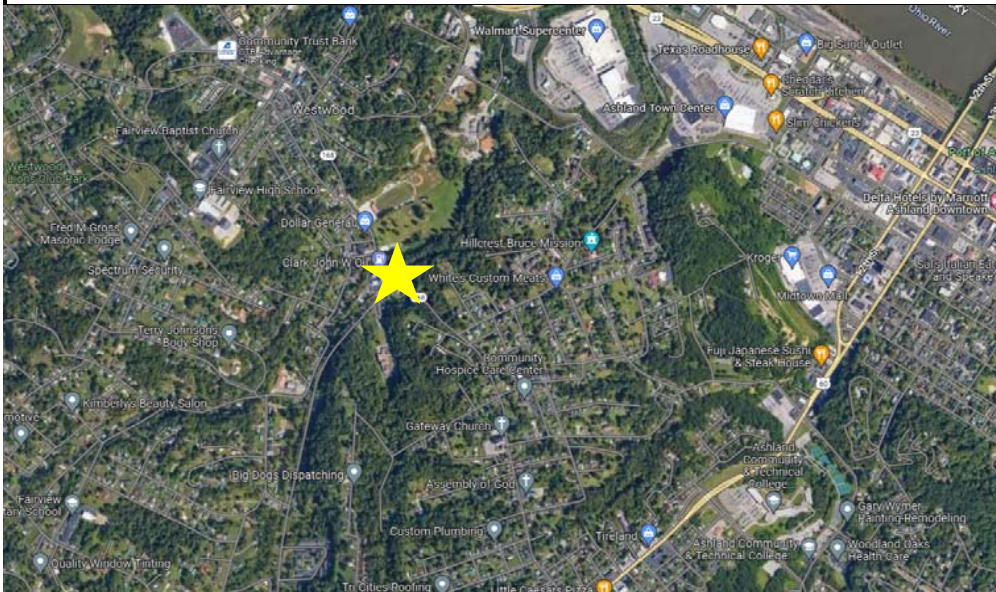
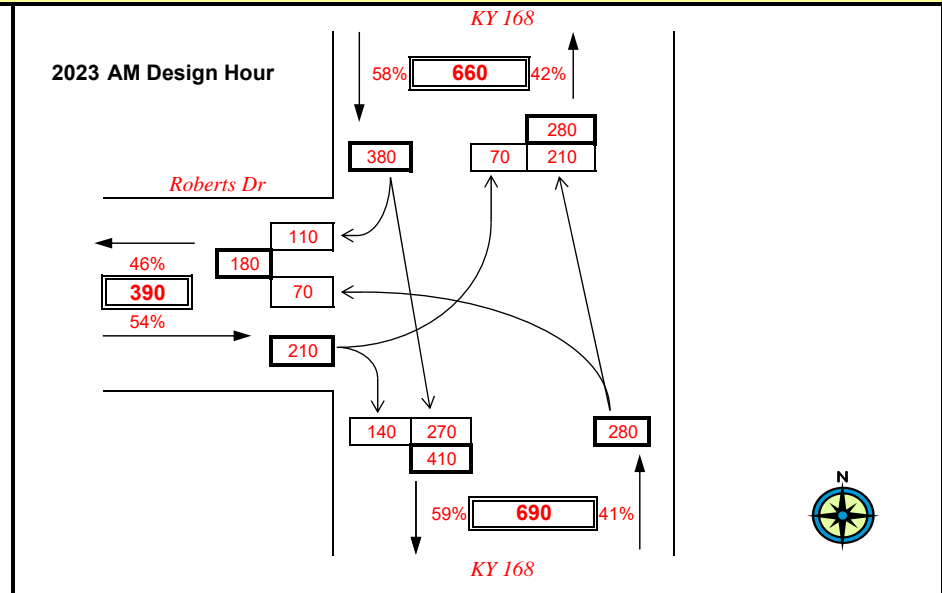
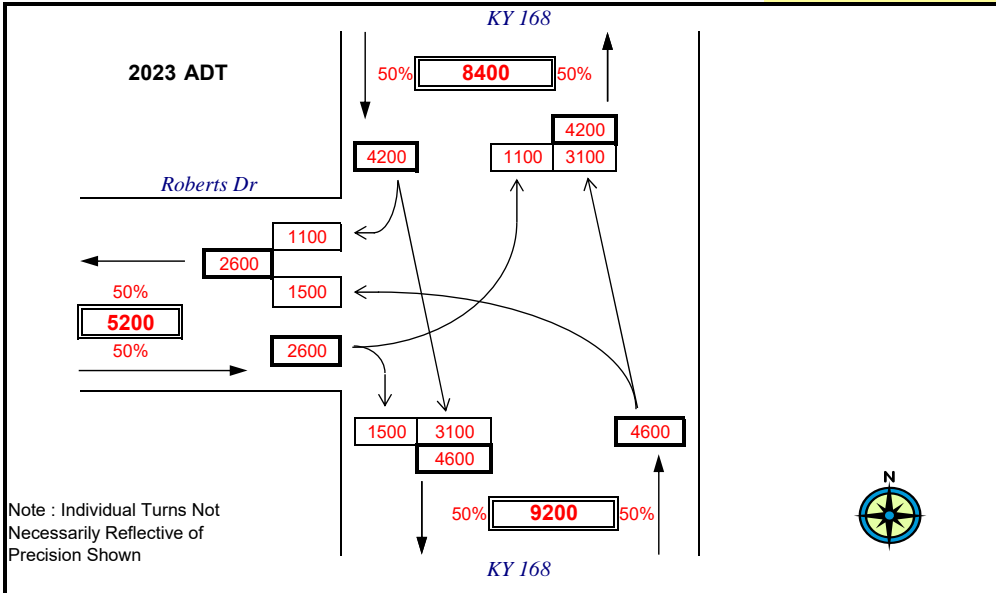


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2023 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Roberts Dr

NOTE: Directional distributions were determined from a 2023 turning movement count.

TURN MOVEMENT 5 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**



PROJECT: KY 168 Ashland Planning Study

ITEM NUMBER: 9-125

MARS NUMBER: 0

REQUEST DATE: Saturday, January 0, 1900

ANALYST: 0

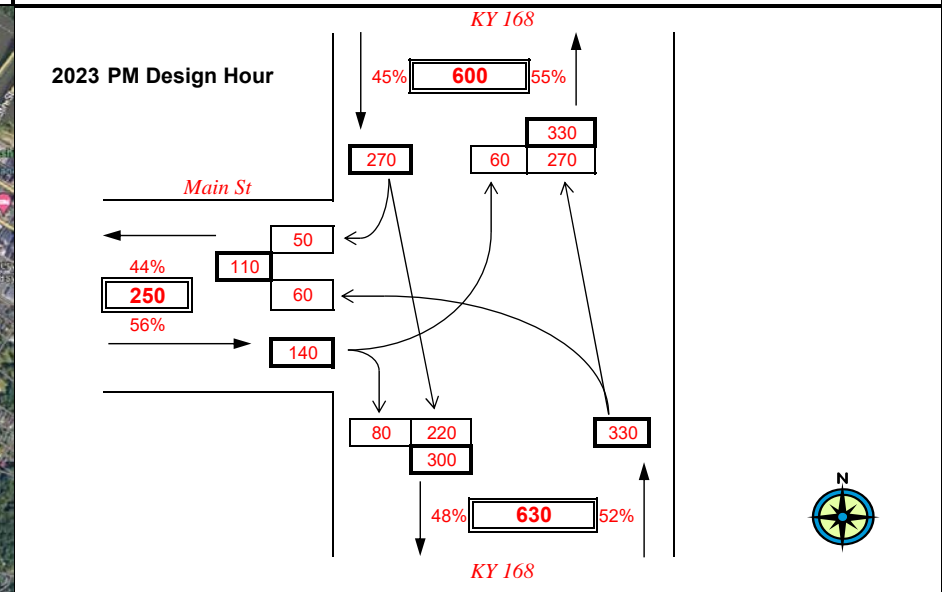
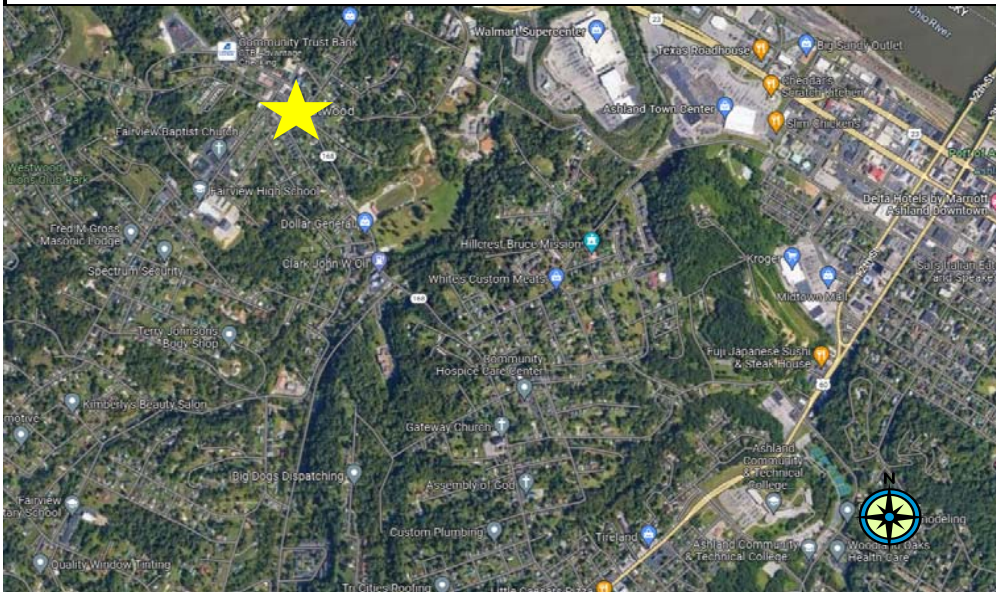
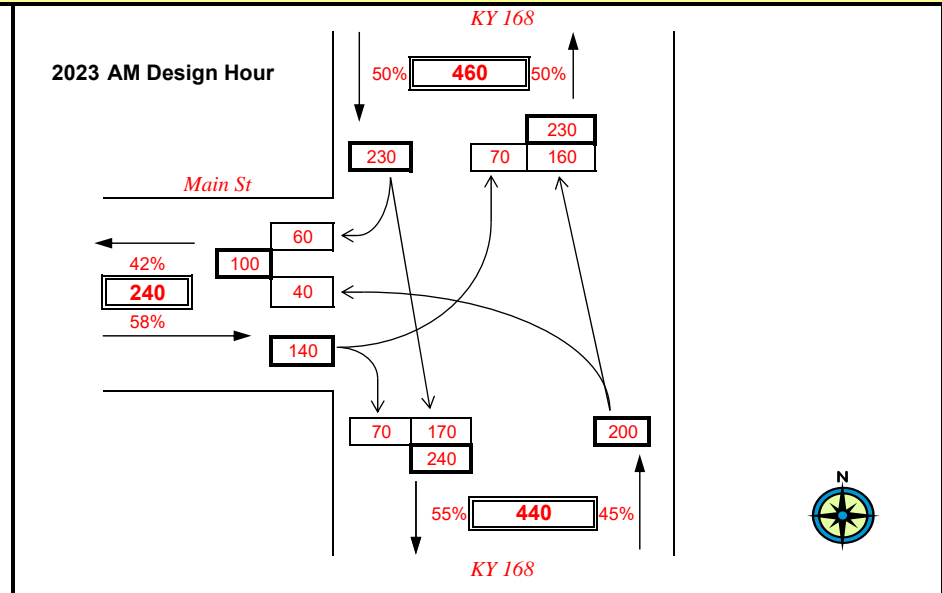
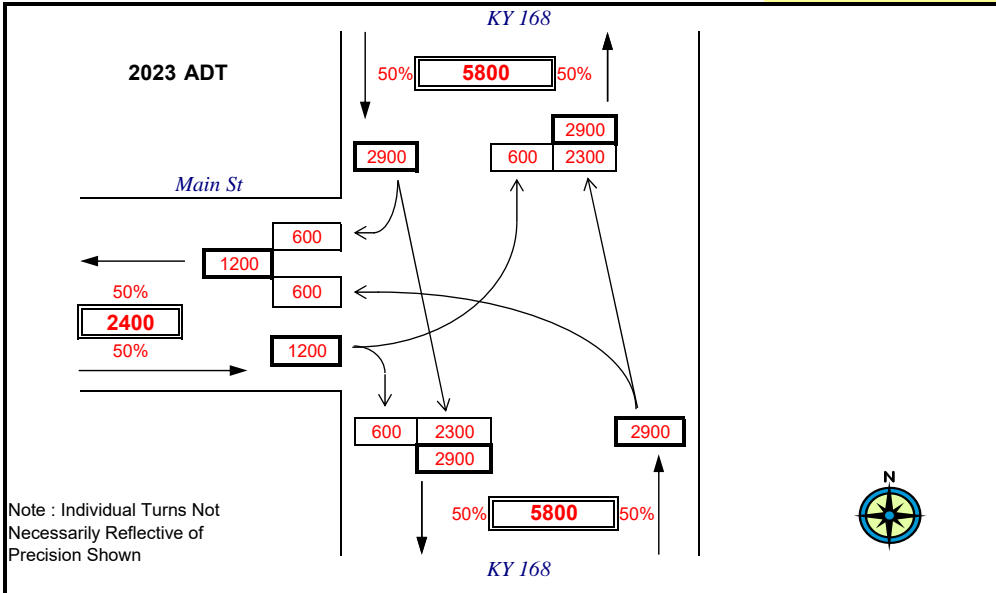
YEAR: 2023 ADT and Design Hour Volumes

INTERSECTION: KY 168 & Main St

NOTE: Directional distributions were determined from a 2023 turning movement count.

TURN MOVEMENT 6 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

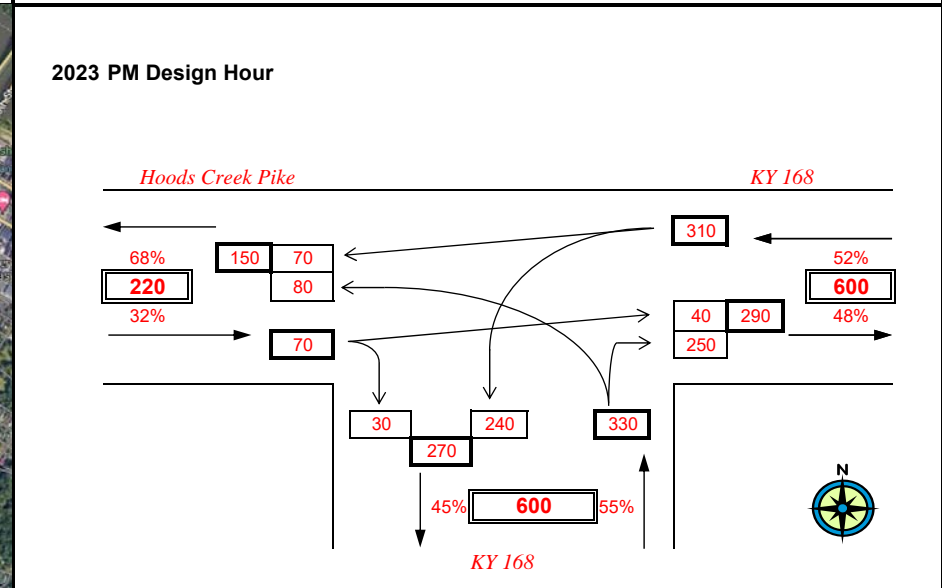
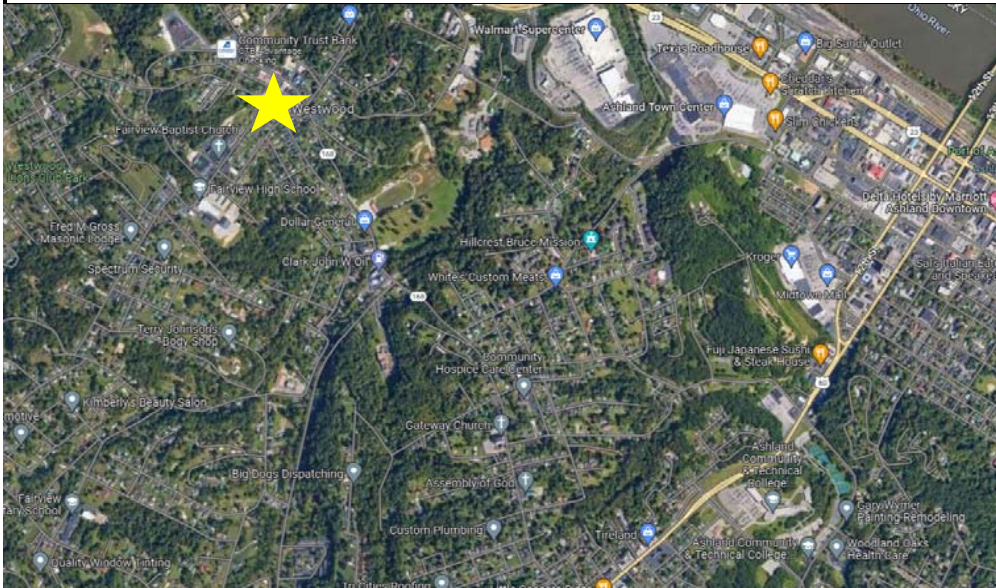
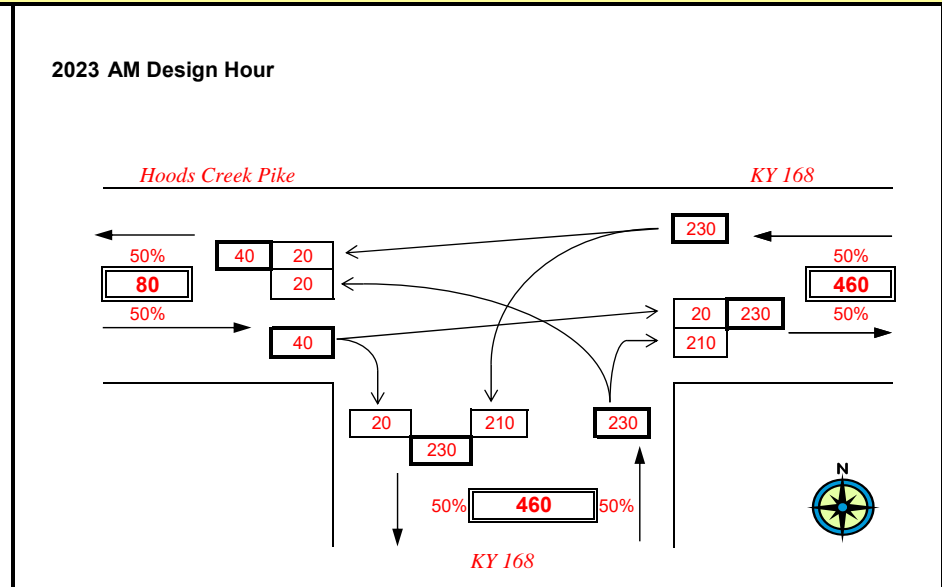
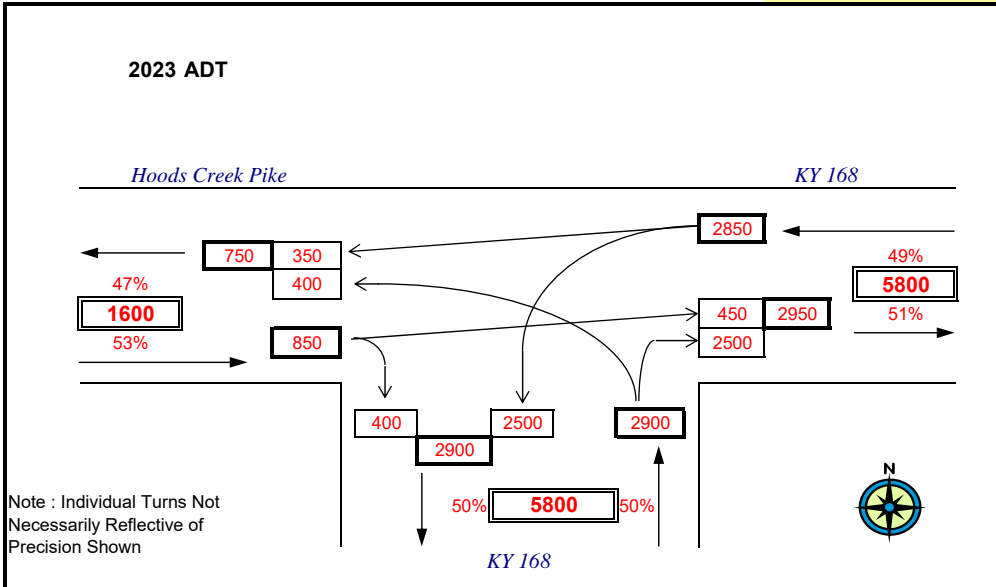


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2023 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Hooks Creek Pike

NOTE: Directional distributions were determined from a 2023 turning movement count.

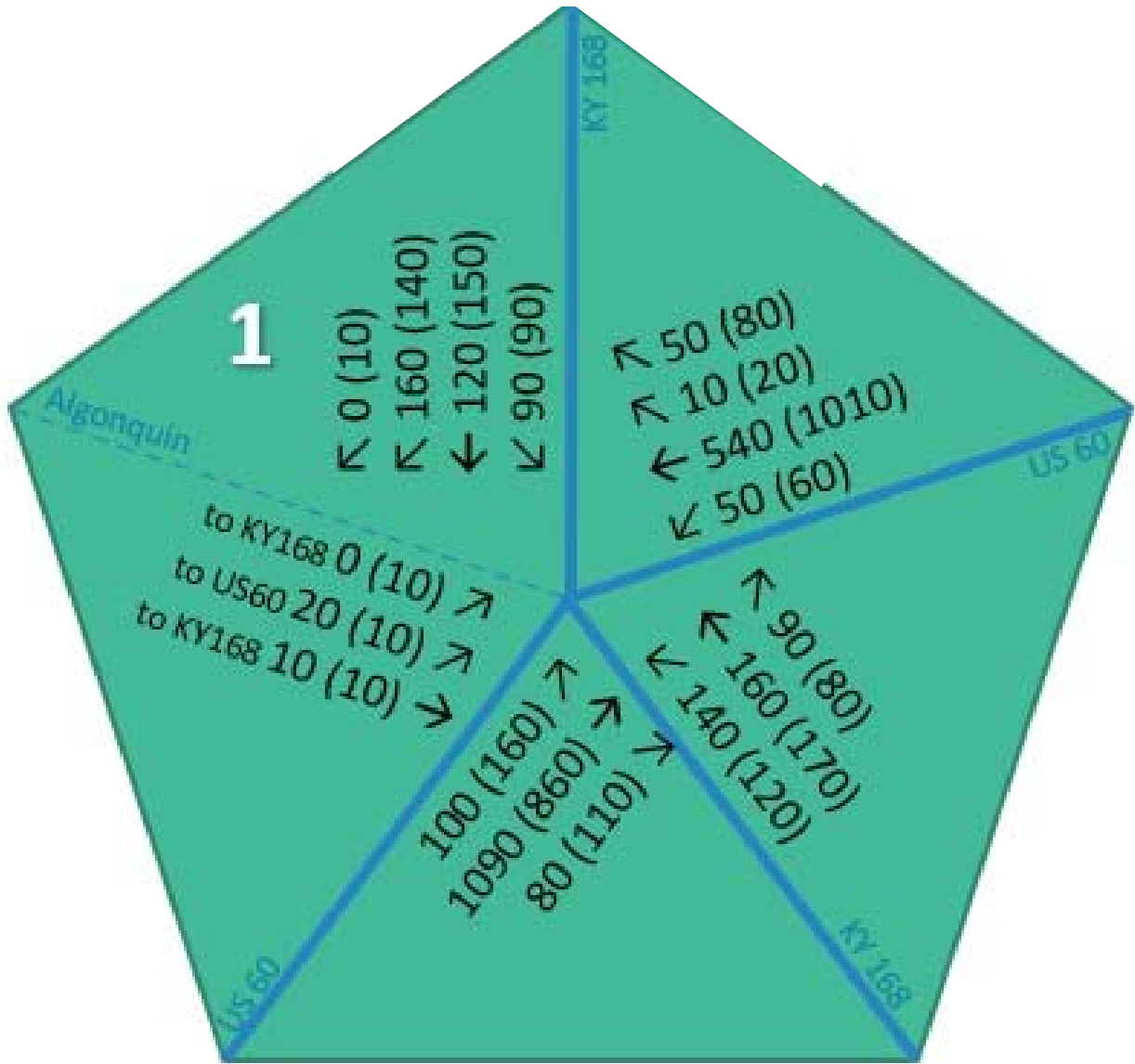
TURN MOVEMENT 7 (2023)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**



APPENDIX C

2045 TRAFFIC FORECAST



1

Algonquin

KY 168

US 60

KY 168

US 60

to KY168 0 (10) →
 to US60 20 (10) →
 to KY168 10 (10) →

100 (160) →
 1090 (860) →
 80 (110) →

↑ 90 (80)
 ← 160 (170)
 ← 140 (120)

← 50 (80)
 ← 10 (20)
 ← 540 (1010)
 ← 50 (60)

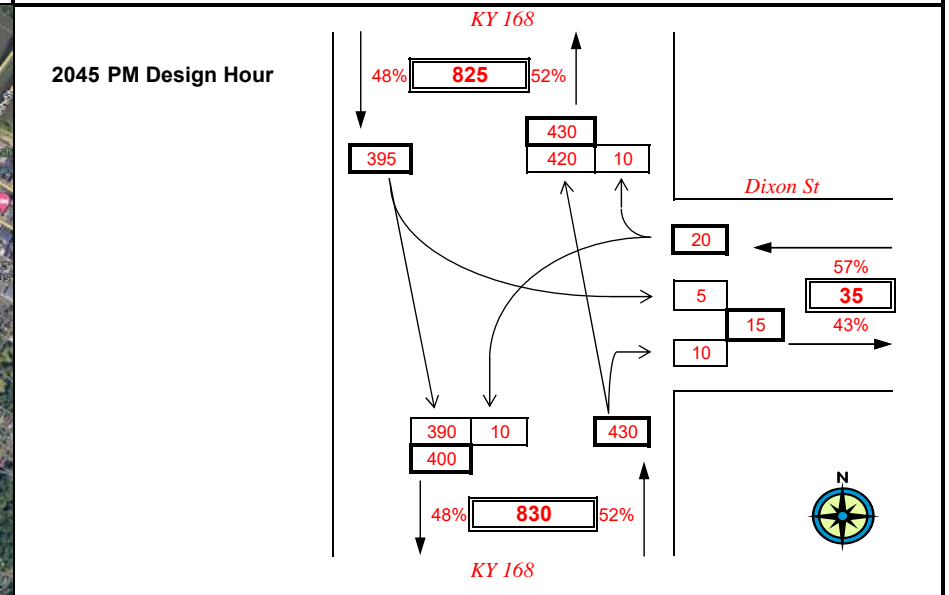
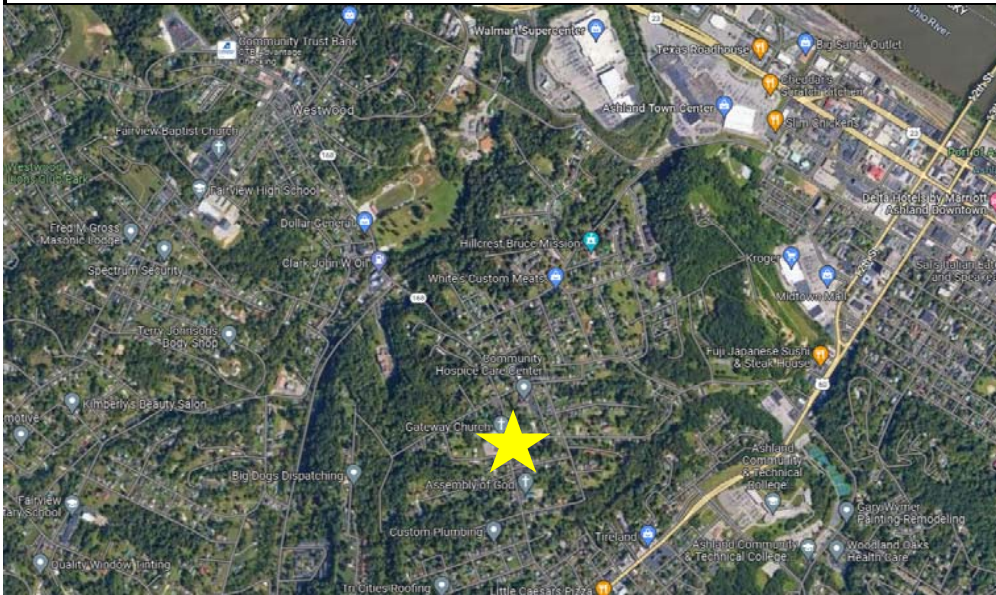
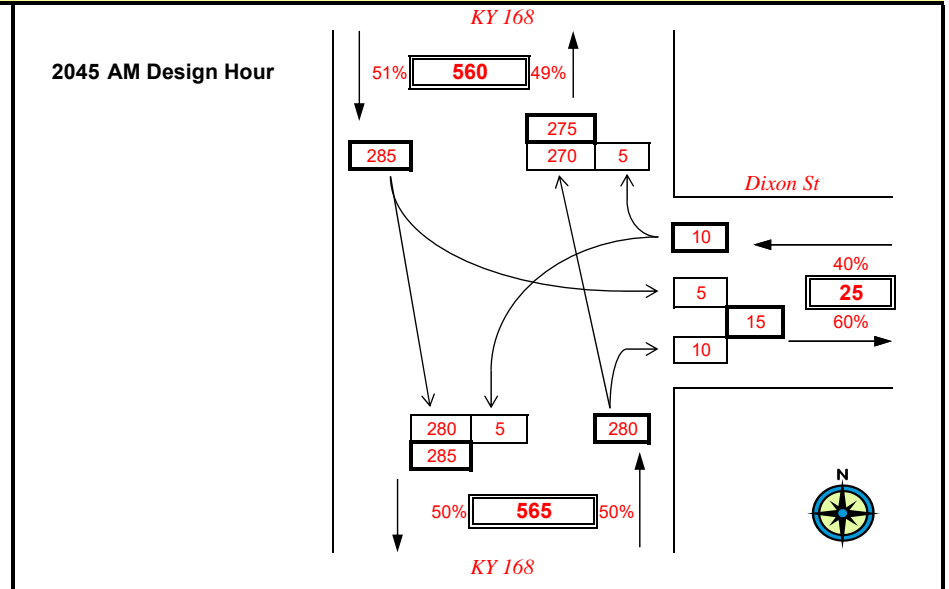
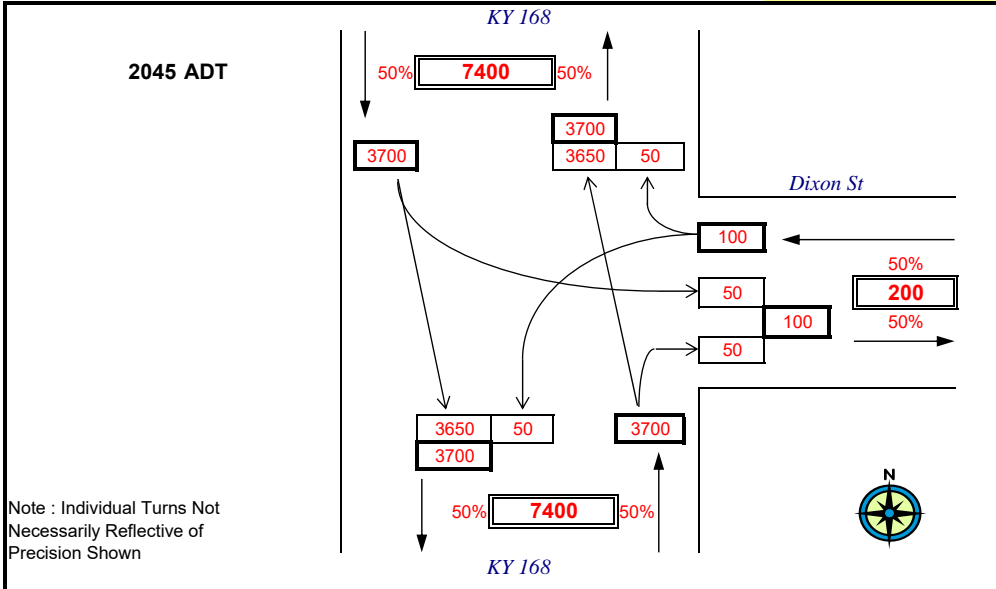
← 0 (10)
 ← 160 (140)
 ← 120 (150)
 ← 90 (90)

PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2045 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Dixon St

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 2 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

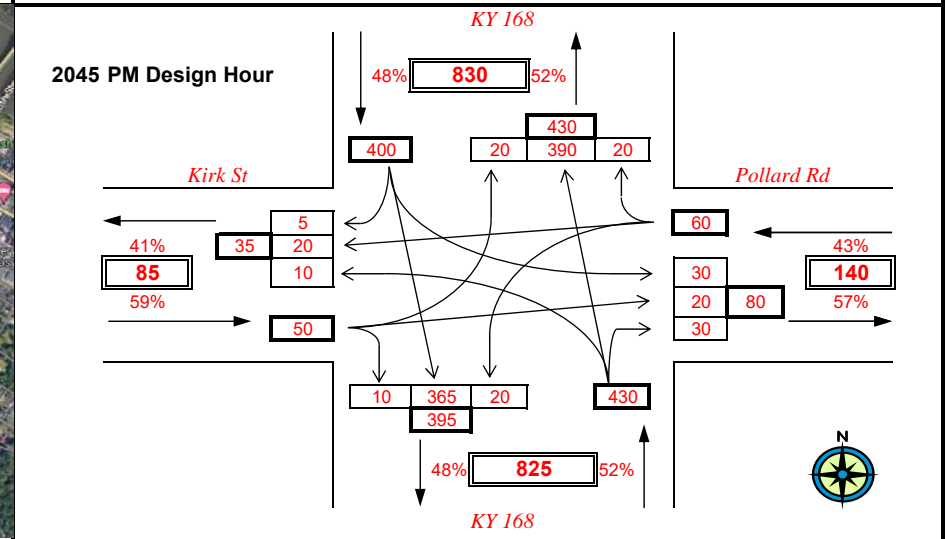
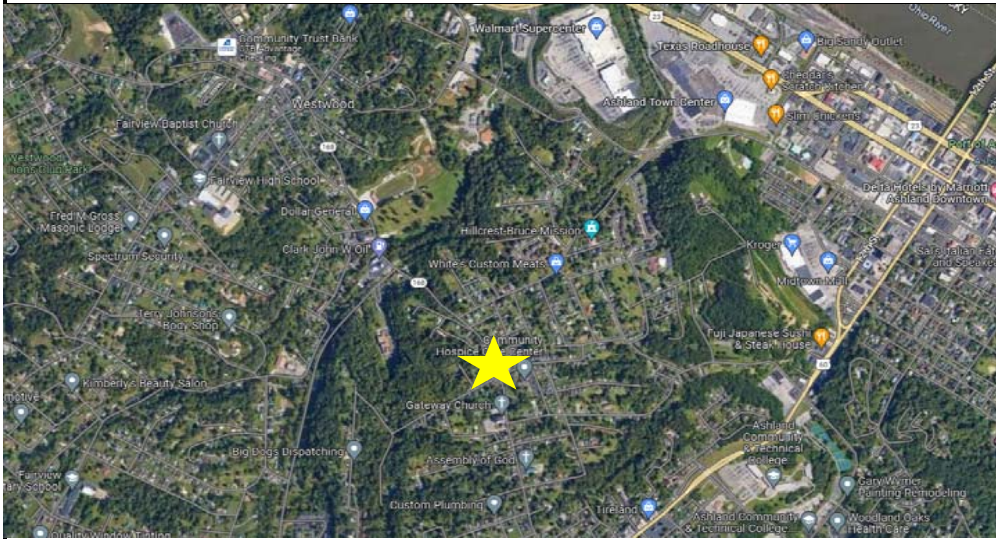
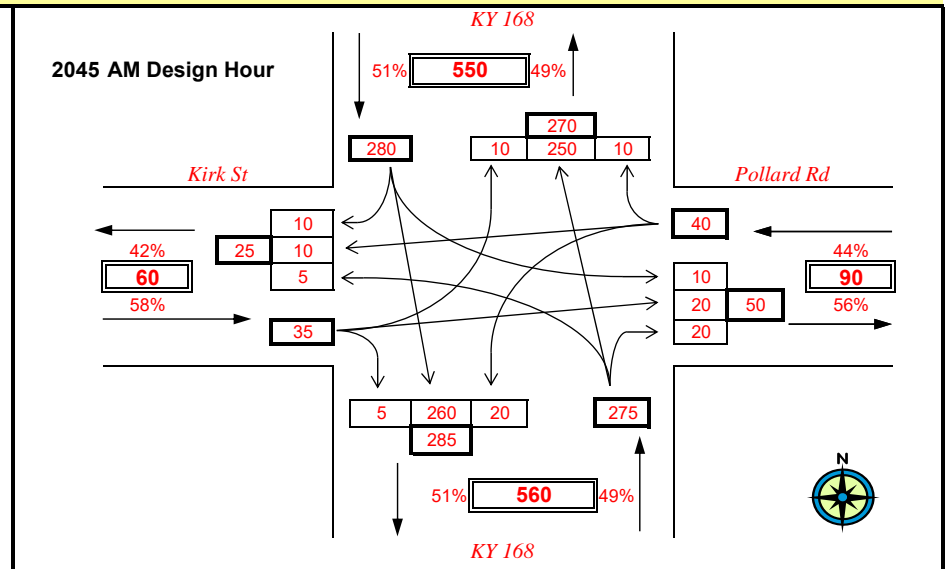
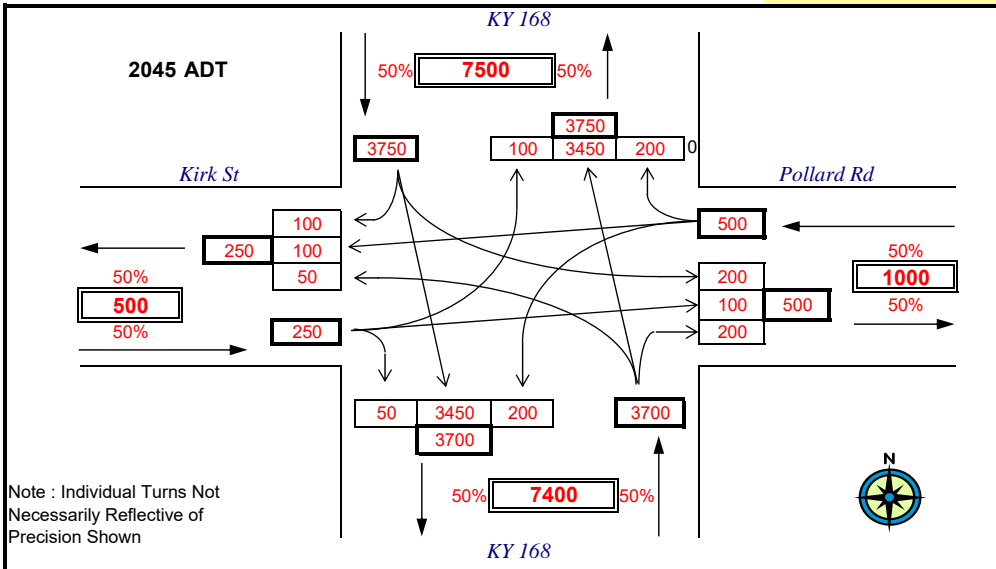


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2045 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Kirk/Pollard

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 3 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

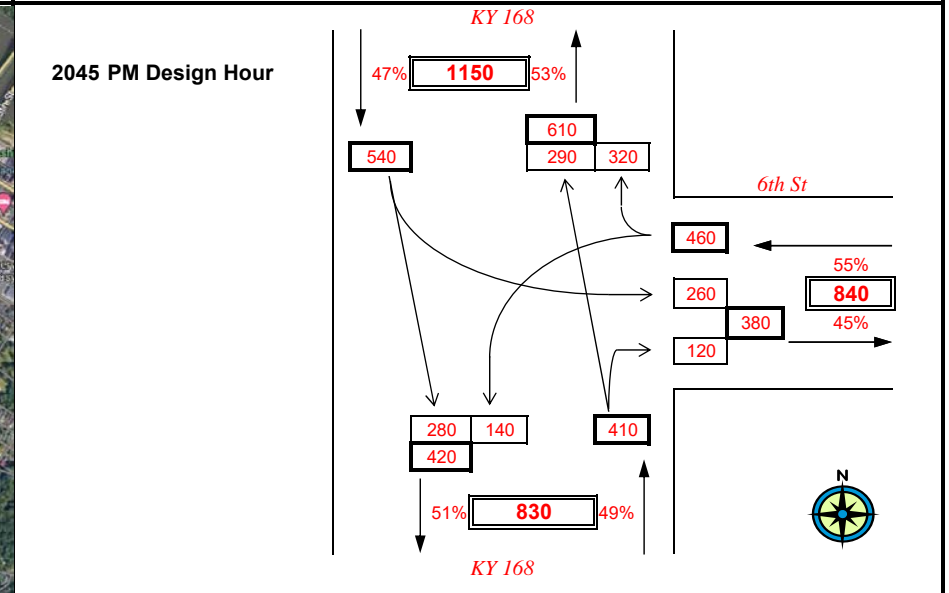
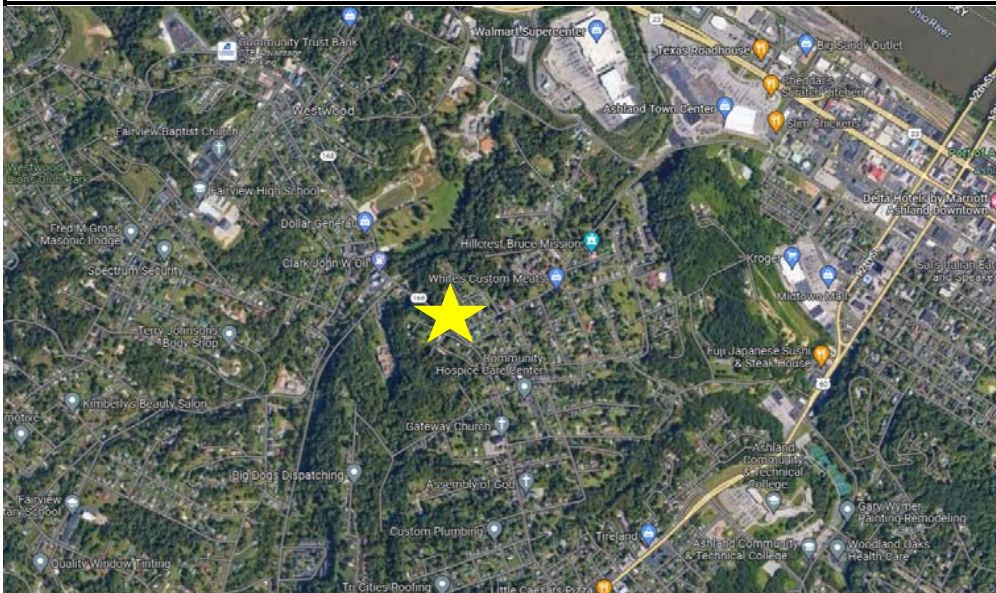
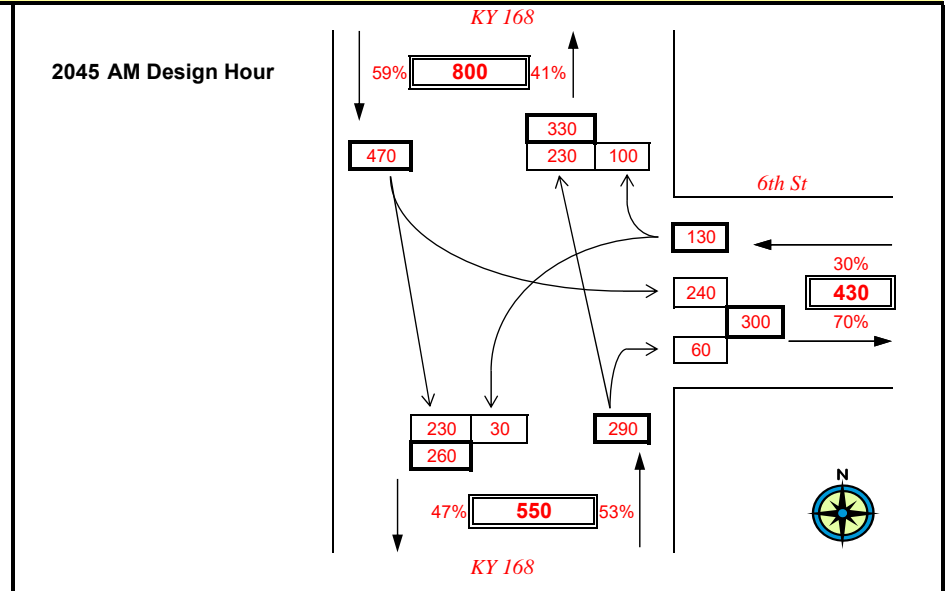
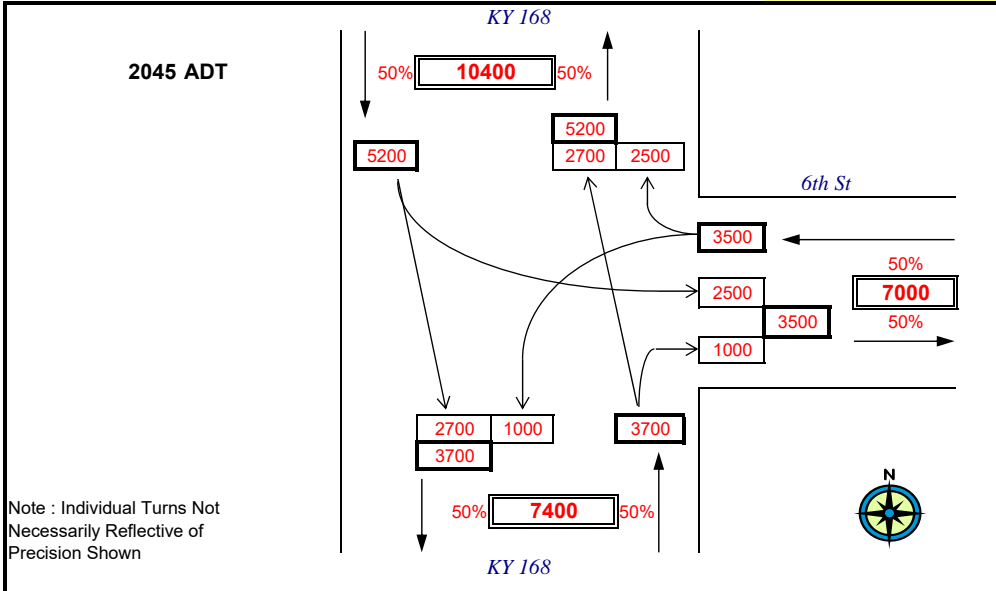


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2045 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & 6th St

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 4 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**



PROJECT: KY 168 Ashland Planning Study

ITEM NUMBER: 9-125

MARS NUMBER: 0

REQUEST DATE: Saturday, January 0, 1900

ANALYST: 0

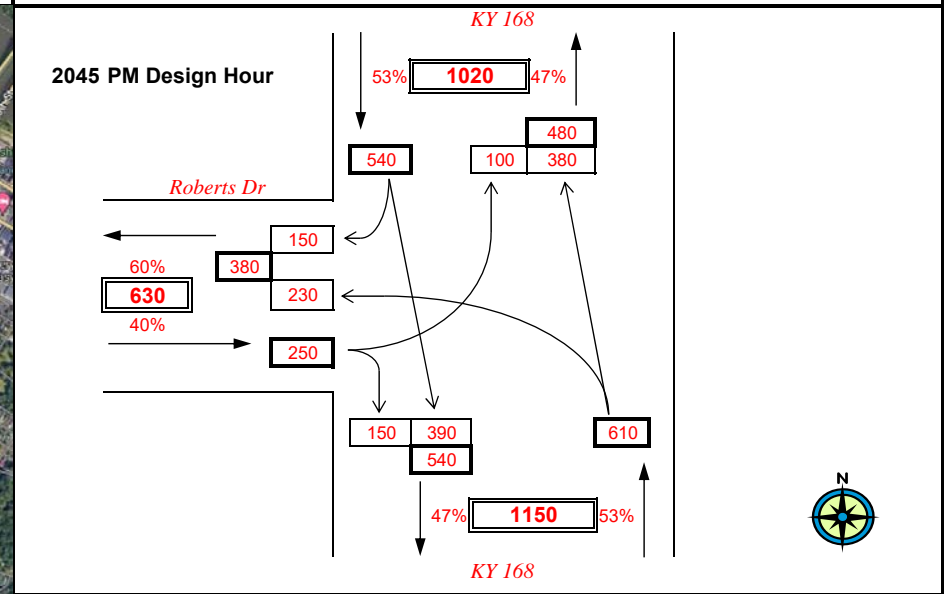
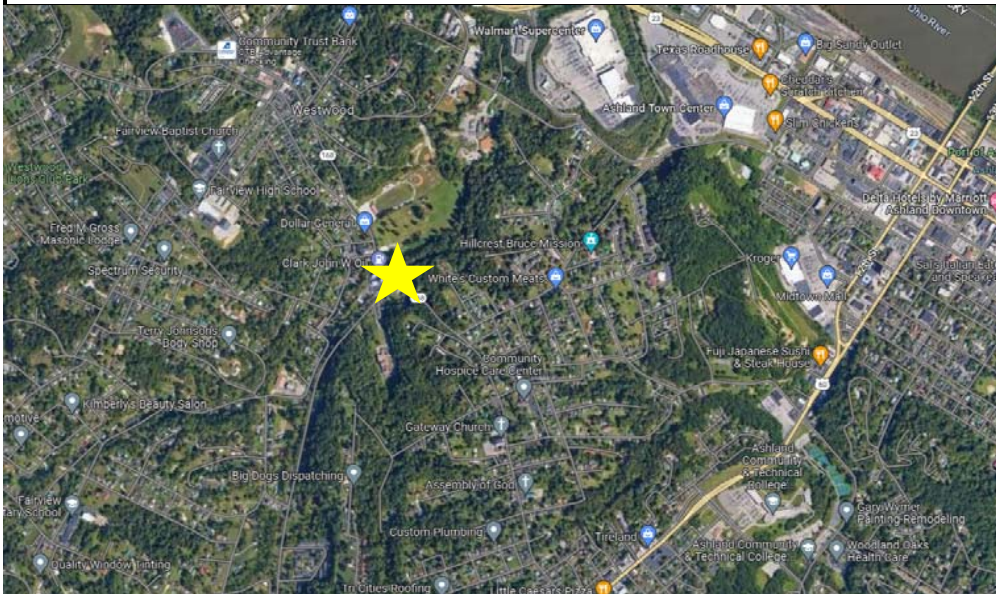
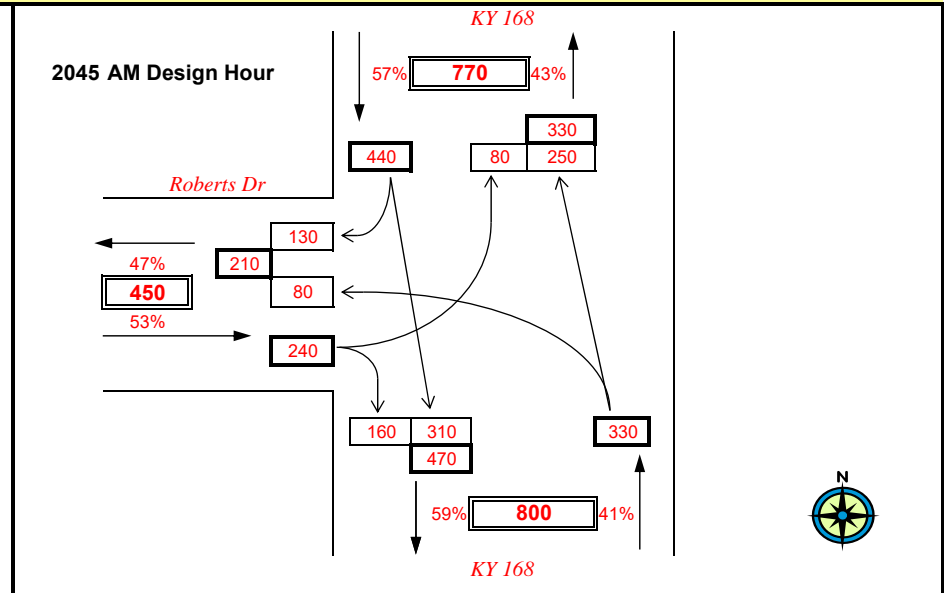
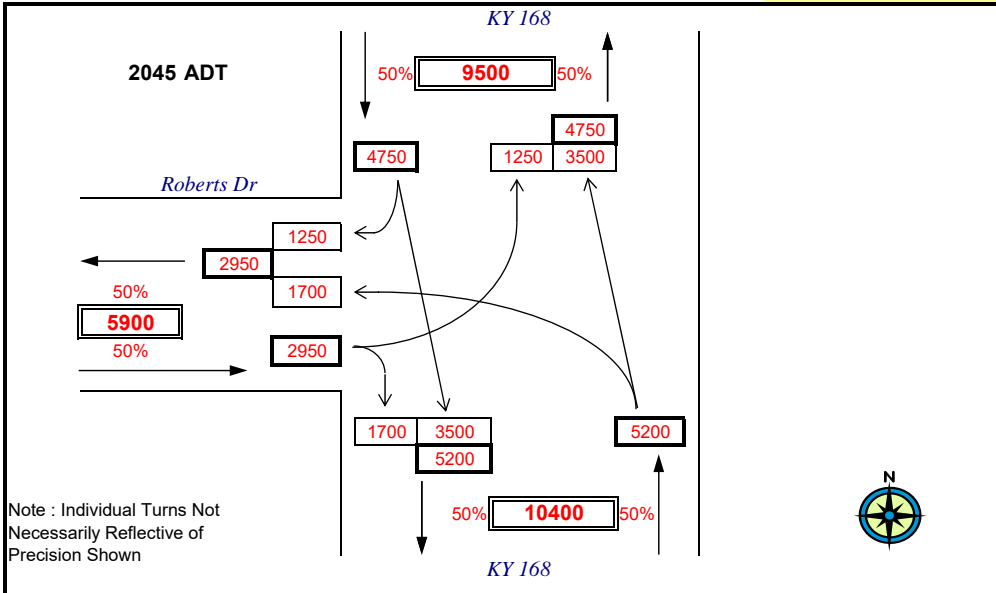
YEAR: 2045 ADT and Design Hour Volumes

INTERSECTION: KY 168 & Roberts Dr

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 5 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

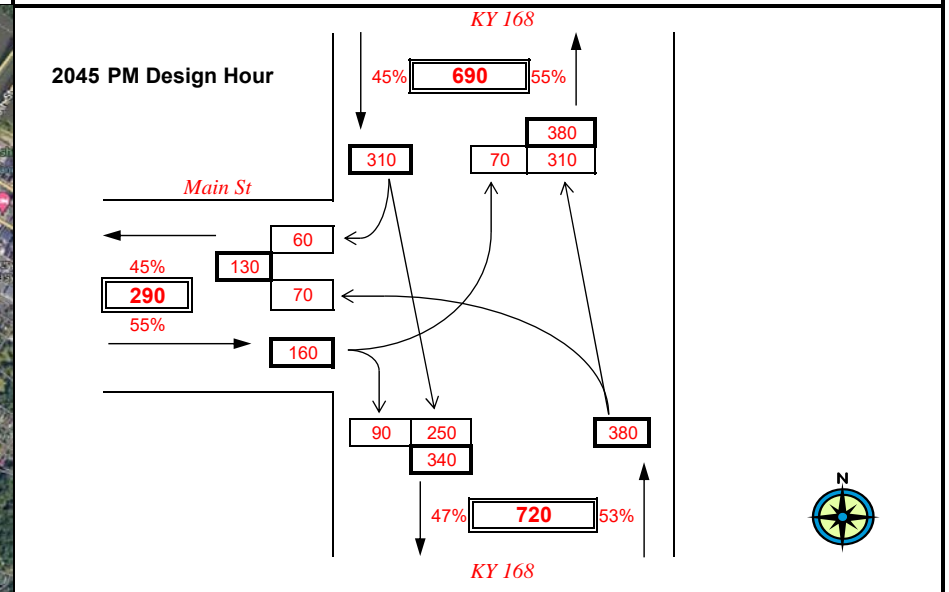
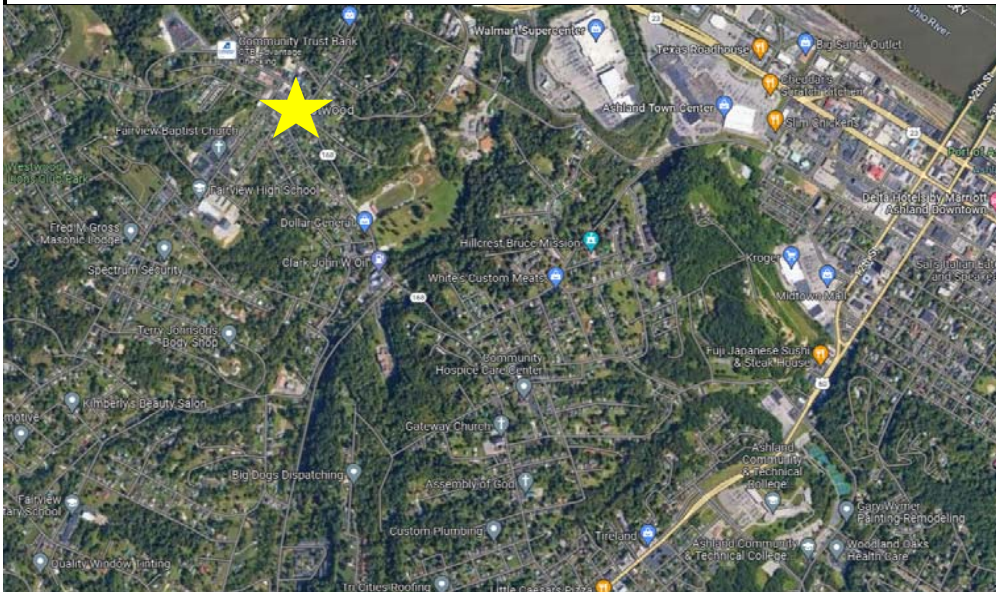
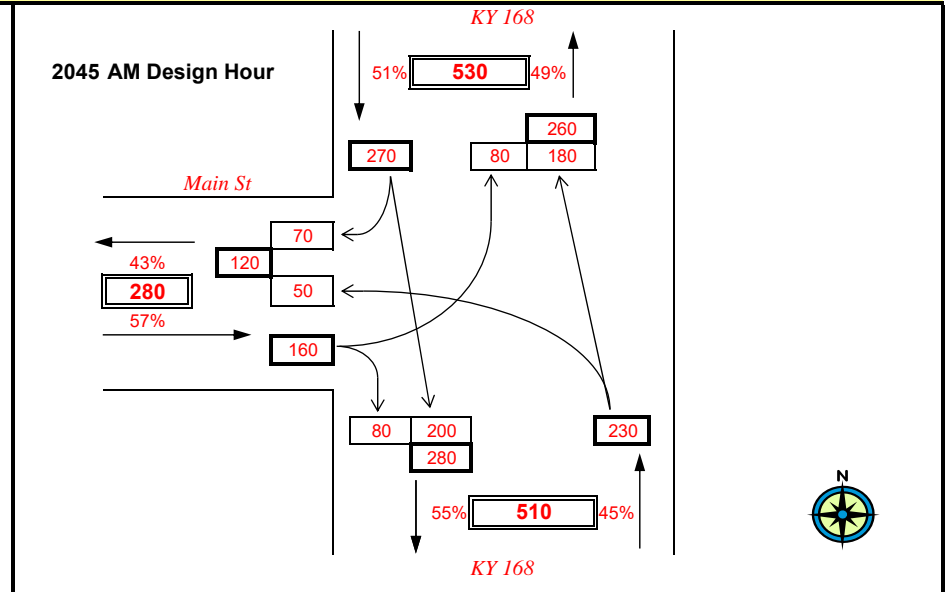
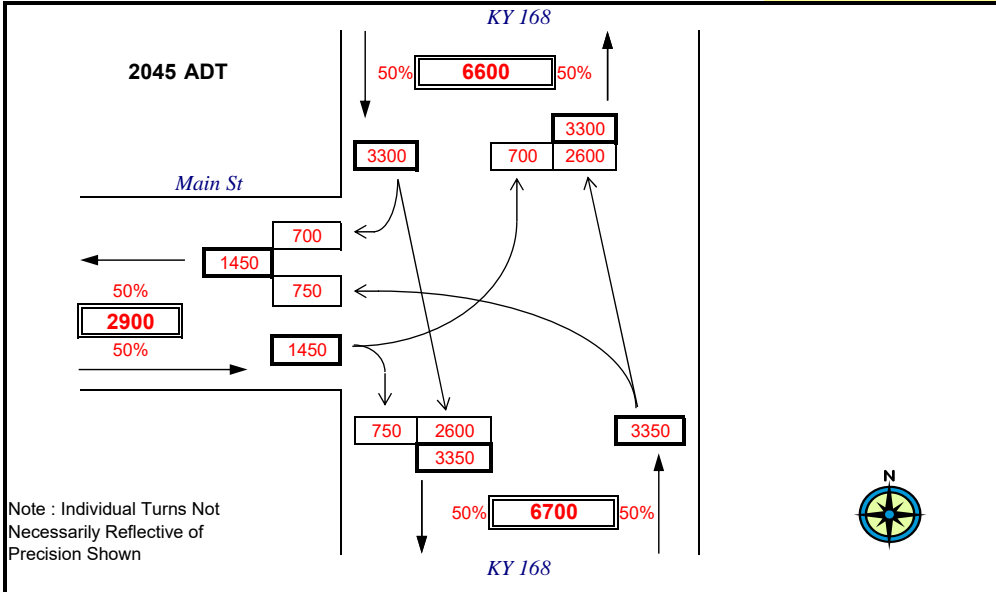


PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2045 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Main St

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 6 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**



PROJECT: KY 168 Ashland Planning Study
 ITEM NUMBER: 9-125
 MARS NUMBER: 0
 REQUEST DATE: Saturday, January 0, 1900
 ANALYST: 0
 YEAR: 2045 ADT and Design Hour Volumes
 INTERSECTION: KY 168 & Hooks Creek Pike

NOTE: Directional distributions were determined from a calculated turning movement count.

TURN MOVEMENT 7 (2045)

****DHV TURN MOVEMENT FORECASTS SHOULD NOT BE USED FOR SIGNAL TIMING OR WARRANT ANALYSIS**

