

# Appendix A – US 62 Traffic Forecast Report

US 62 Corridor Planning Study

*Hardin County, KY*  
May 19, 2023

KENTUCKY TRANSPORTATION CABINET (KYTC)

# US 62 TRAFFIC FORECAST REPORT

## US 62 PLANNING STUDY

MARCH 06, 2023

ELIZABETHTOWN, KY



WSP



# US 62 TRAFFIC FORECAST REPORT

## US 62 PLANNING STUDY

KYTC

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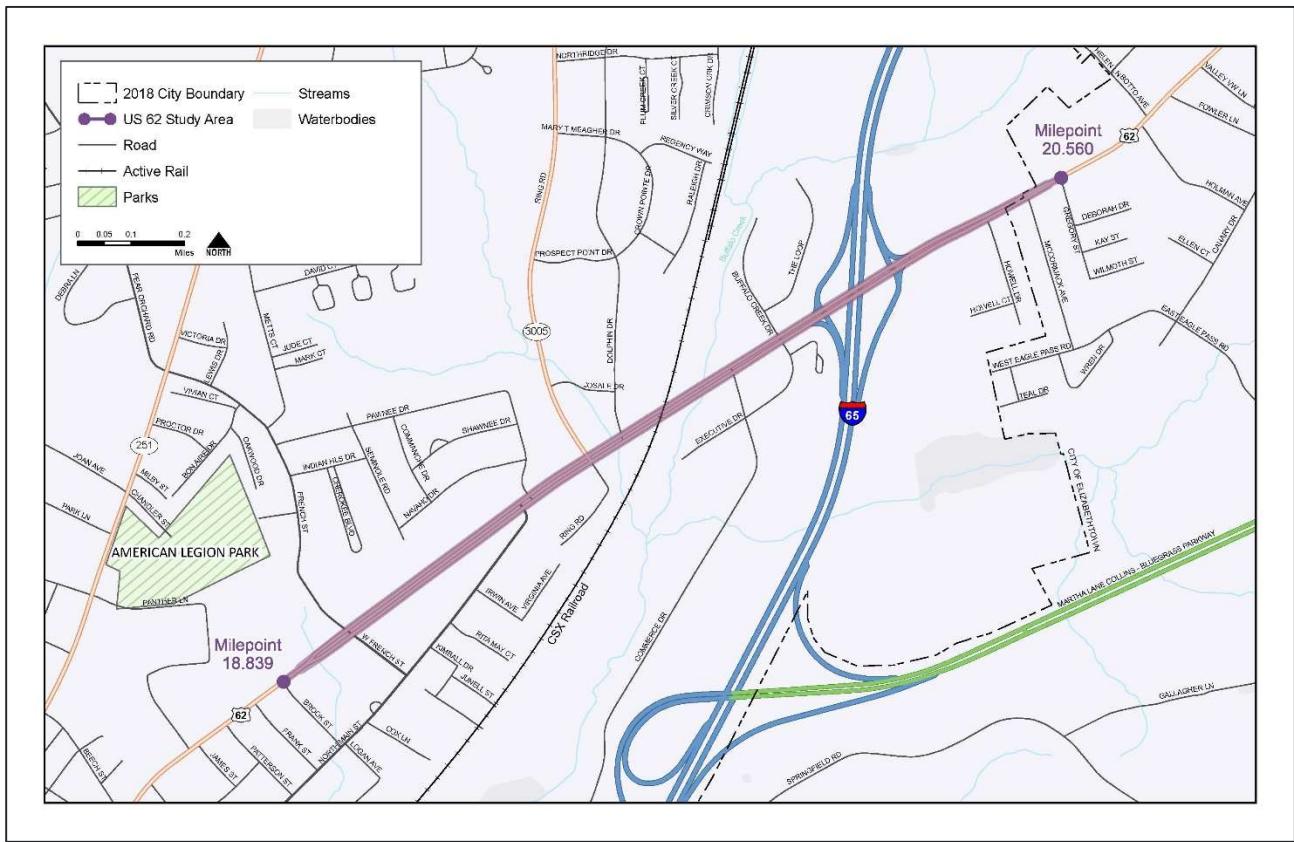
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# 1 INTRODUCTION AND STUDY AREA

The Kentucky Transportation Cabinet (KYTC) initiated a study to evaluate US 62 in Elizabethtown, KY between Brook Street (milepost 18.839) and Gregory Street (milepost 20.56), approximately 1.72 miles, shown in **Figure 1**. The objective of this planning study is to identify and evaluate potential improvement concepts to address safety, congestion, and access management. This report summarizes the methodology used to develop the US 62 Planning Study traffic forecast.

**Figure 1: Study Area Base Map**



## 1.1 TRAFFIC FORECAST TYPE

The traffic forecasts developed for the US 62 corridor addressed total vehicular volume as well as truck volumes for both 2022 and 2045. The forecast results include:

- 2022 and 2045 Annual Average Daily Traffic (AADT) and Design Hourly Volume (DHV) volumes
- 2022 and 2045 Truck AADT and DHV volumes

## 2 BASE TRAFFIC DATA

KYTC provided historical count data for each count station, as well as 48-hour traffic count data from the most recent years available. **Table 1** highlights the study area traffic count station details, along with the segments selected for evaluation. **Table 2** lists the intersections evaluated as part of this study. Peak period intersection turning movement counts (TMC's) were obtained from District 4 (D4), StreetLight (SL) data, and a prior study from 2020, the *East Elizabethtown Connectivity Study* (2020 EECS). No adjustment factor was used for any counts for this project. The project team utilized turning movement volumes estimated from SL Data for intersections where counts were not already available.

**Table 1: Study Area Count Stations**

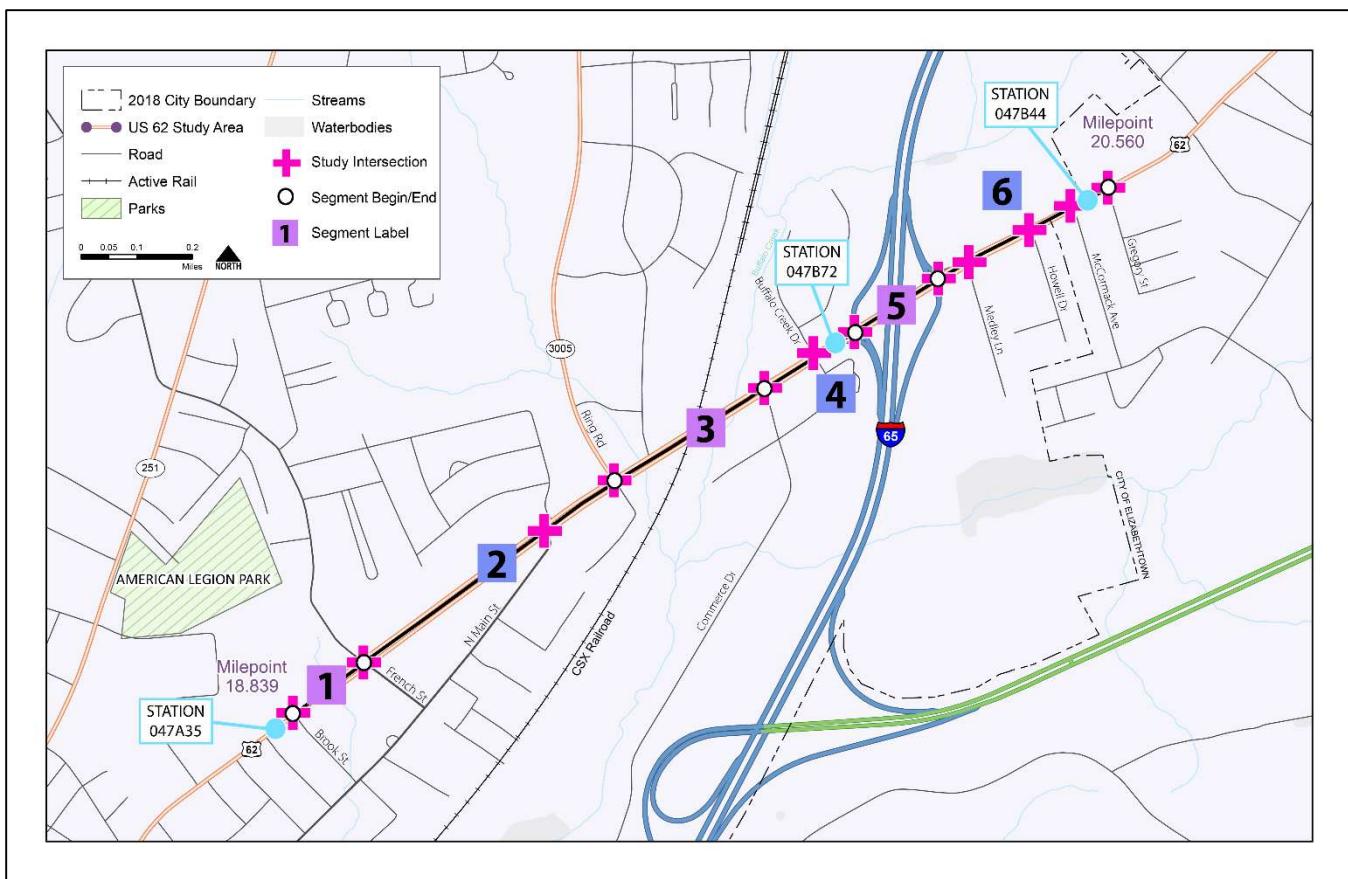
Count Station	Year	AADT	Study Area Segment	Beginning Description	End Description
047A35	2022	12,375	1	Brook St.	W. French St.
			2	W. French St.	Ring Road (KY 3005)
047B72	2022	23,378	3	Ring Road (KY 3005)	Commerce Dr.
			4	Commerce Dr.	I-65 SB Ramp
047B44	2017	8,918	5	I-65 SB Ramp	I-65 NB Ramp
			6	I-65 NB Ramp	Gregory St.

**Table 2: Study Area Intersections for Evaluation**

Intersection #	Cross Street	Control Type	Count Source
1	Brook St.	Stop	SL
2	W. French St.	Signalized	D4
3	N. Main St.	Stop	EECS
4	Ring Road (KY 3005)	Signalized	D4
5	Dolphin Dr.	Stop	EECS
6	Commerce Dr.	Signalized	EECS
7	Buffalo Creek Dr.	Signalized	D4
8	I-65 SB Ramp	Signalized	D4
9	I-65 NB Ramp	Signalized	D4
10	Medley Ln.	Stop	SL
11	Howell Dr.	Stop	SL
12	McCormack Ave.	Stop	SL
13	Gregory St.	Stop	SL

Figure 2 highlights the study area segments and intersections chosen for the forecast.

**Figure 2: Study Area Segments and Intersections**



## 2.1 BASE CORRIDOR VOLUME

### 2.1.1 SEGMENT VOLUMES

AM and PM DHV for the segments were determined by using the maximum realized volume between intersections from the balanced intersection volume in segments 1-5. The project team determined a DHV between the highest and lowest balanced volume would be used in Segment 6, as there are multiple intersections between the ends of the segment. The AADT chosen for the segment forecast is the maximum calculated by combining AM and PM DHV's with the relative peak hour K-Factor. The 2022 Truck % was pulled from the most recent class count information of the study area count stations. **Appendix A** contains the turning movement counts received from KYTC D4, the 2020 EECS, SL, and count station data. **Table 3** highlights the 2022 Base segment volume summary.

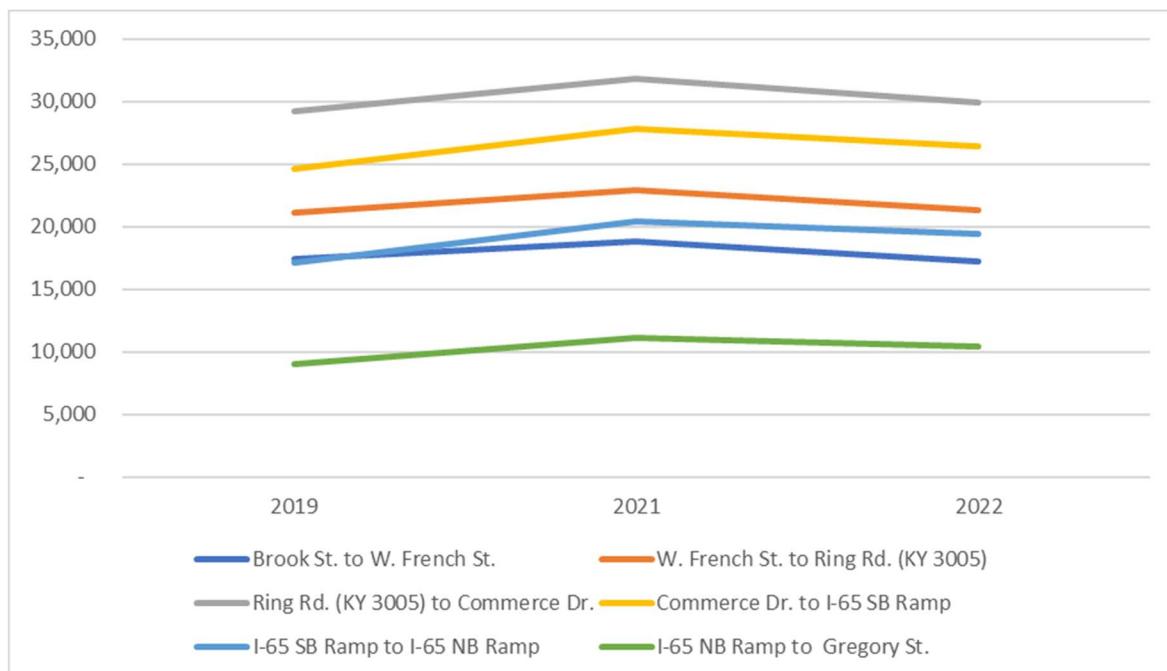
**Table 3: 2022 Base Corridor Volume**

SEGMENT	BEGINNING DESCRIPTION	ENDING DESCRIPTION	2022 Base AADT	2022 Truck % ADT	2022 Trucks (Daily)	2022 AM K Factor	2022 AM DHV	2022 AM TDHV	2022 PM K Factor	2022 PM DHV	2022 PM TDHV
1	Brook St.	W. French St.	16,470	5.7%	940	6.8%	1,075	65	8.5%	1,400	80
2	W. French St.	Ring Road (KY 3005)	23,110	5.7%	1,320	6.4%	1,340	85	8.2%	1,895	110
3	Ring Road (KY 3005)	Commerce Dr.	32,850	5.7%	1,880	5.9%	1,905	110	7.9%	2,595	150
4	Commerce Dr.	I-65 SB Ramp	30,760	5.7%	1,760	5.9%	1,810	105	7.9%	2,430	140
5	I-65 SB Ramp	I-65 NB Ramp	19,155	9.1%	1,750	8.7%	1,475	150	8.9%	1,705	155
6	I-65 NB Ramp	Gregory St.	13,200	9.1%	1,205	8.7%	1,050	105	8.9%	1,175	105

## 2.1.2 INTERSECTION VOLUMES

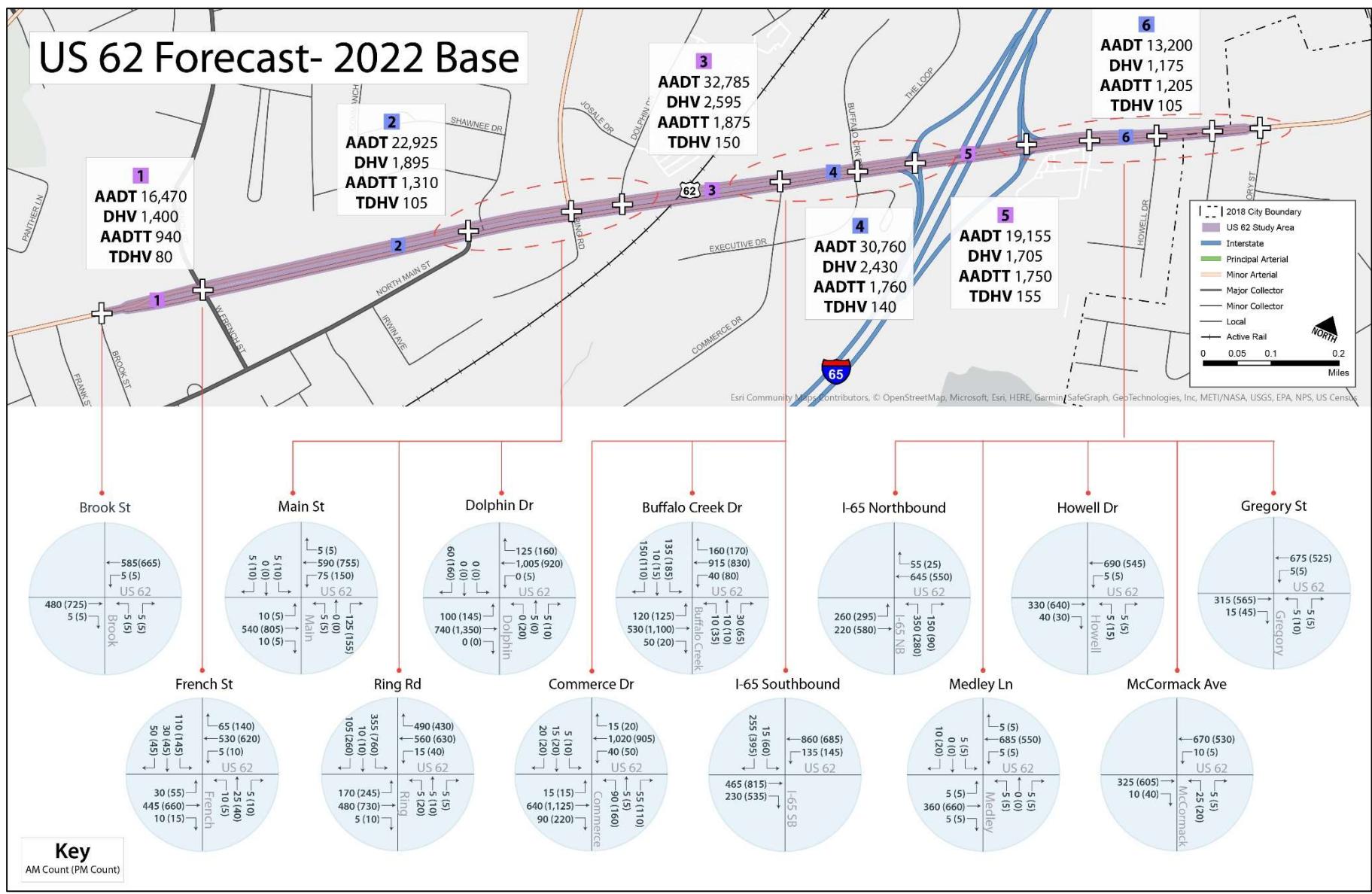
The project team chose all 13 study area intersections to evaluate based on safety issues, potential development, and operational impact to the corridor. Intersection TMC's were collected from D4, the 2020 EECS, and SL where necessary. Previous year KYTC AADT's and previous year SL Average Daily Traffic (ADT) were evaluated to determine if the TMCs from the 2020 EECS should be forecasted to a base year of 2022. KYTC historical growth tendencies consistently show negative growth, discussed in Section 3.1, and SL ADT shows relatively no growth from 2019-2022, **Figure 3**. Counts from 2020 were excluded from this analysis as they consistently showed lower volume than would be expected in each location. The project team determined that no growth would be necessary.

**Figure 3: Historical StreetLight ADT**



The intersection counts were rounded and balanced using the assumption that the 2022 counts collected by D4 were the most accurate, being the most recently collected and visually counted. Volumes were balanced throughout the study area to best reflect the 2022 counts. **Appendix B** contains the progression from raw volume, to rounded, base balanced, and forecasted 2045 volumes. **Figure 4** summarizes base (2022) intersection and corridor volume used for this study.

**Figure 4: US 62 Base Segment and Intersection Volume**



# 3 TRAFFIC GROWTH RATES

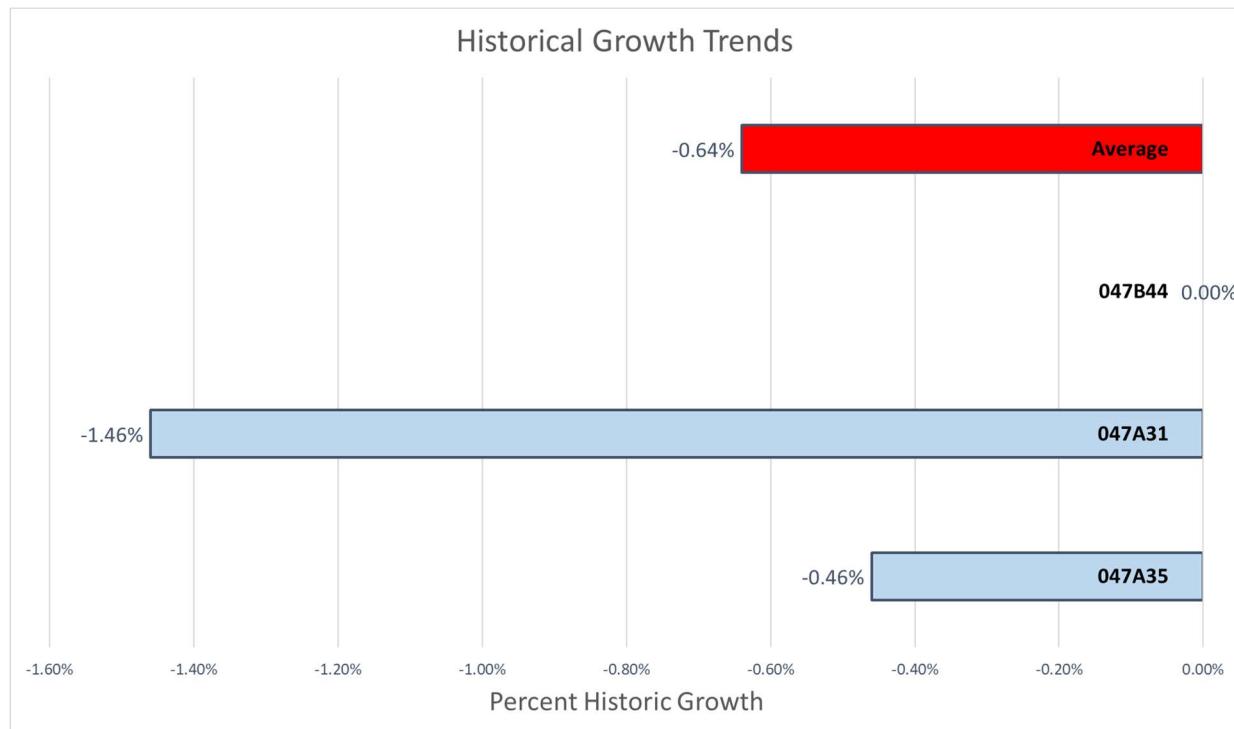
2022 was selected as the baseline year for analysis, with a forecast year of 2045. One growth rate was chosen for the entire study area, and only one growth scenario was used in this study. The growth rate for the study area was determined by comparing the results from multiple independent assessments:

1. Historical traffic counts for growth trends
2. Results from travel demand models
  - a. KYTC Hardin-Meade Model
  - b. Kentucky Statewide Travel Demand Model (KYSTM Build 5976)
3. Expected population growth in Hardin County

## 3.1 HISTORICAL TRAFFIC COUNT TRENDS

Current and historical AADT information, up to 15 years in the past (back to 2007), was obtained from KYTC for count stations in the corridor study area. AADTs collected did not include a count each year. **Figure 5** highlights the calculated annual historical growth of each count station in the study area. Note: Count Station 047A35 incurs a negative skew due to the data available; counts available include 2007, 2010, and 2020. The 2020 counts are about 4,000 vehicles per day less than previous year counts and SL data, indicating a historical growth closer to 0.0% would be more realistic.

**Figure 5: Historical Growth by Count Station**



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## 3.2 TRAVEL DEMAND MODEL RESULTS

The following travel demand models were used in establishing a growth rate for the US 62 corridor:

- KYTC Hardin-Meade Model: 2017 and 2045 model runs
- KYSTM Build 5976: 2018 & 2045 model runs

The Hardin-Meade travel demand model was reviewed against observed base condition volume data and was then calibrated for the study area. Socioeconomic data was also reviewed (future employment) in the model. The calibration methodology and results are presented in the Travel Demand Modeling Methodology Memorandum (see [Appendix C](#)).

Future model network projects near the US 62 study area were examined. These projects were used to create the following scenarios for the Hardin-Meade Base model:

- 2045 No-Build: Hardin-Meade Base model
- 2045 Build: Hardin-Meade Build model including two new projects:
  - Commerce Drive Extension to East Dixie Avenue (US 31W)
  - Ring Road (KY 3005) Extension to I-65

The 2045 Build network projects are shown in [Appendix C](#).

The Hardin-Meade model was the primary model used for the determination of the proposed growth rates, while the KYSTM was used as another datapoint to compare to. KYTC provided 2018 and 2045 KYSTM runs, and no edits or changes were made to either of these.

The following overall length weighted average growth rates were estimated from these travel demand models:

- KYTC Hardin-Meade Model: 0.36% annual growth
- KYSTM Model: 1.3% annual growth

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## 3.3 POPULATION GROWTH

Historical census data and population projections for Hardin County were examined to assess the past and expected future population growth in the area, shown in [Table 4](#). The data was obtained from the University of Louisville State Data Center. The average annual population growth for Hardin County from 2010 to 2020 was approximately 0.5%. For the 2020 to 2045 projected time period, population growth in the county is expected to be approximately 0.6% per year.

**Table 4: Kentucky and Hardin County Population Data**

Location	Census		Projections				Extrapolation	Annual Growth		Total Growth
	2010	2020	2025	2030	2035	2040		2010 to 2020	2020 to 2045	
Kentucky	4,339,367	4,505,836	4,580,143	4,641,150	4,686,067	4,721,118	4,750,369	0.4%	0.2%	5.4%
Hardin County	105,543	110,702	115,110	118,974	122,367	125,394	128,130	0.5%	0.6%	15.7%

## 3.4 PROPOSED GROWTH RATES

Based on the evaluation of each of the three sources detailed, the annual growth rate of the study area chosen by the project team and agreed upon by KYTC was 0.5%.

# 4 2045 TRAFFIC VOLUMES

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## 4.1 DESIGN YEAR

AASHTO's *A Policy on Geometric Design of Highways and Streets, 7<sup>th</sup> Edition* (2018) recommends that the design for new construction or improvements to existing roadways consider future traffic volumes expected to use the facility, with these future traffic volumes typically being at least 20 years into the future.

The project team forecasted the 2022 segment and intersection volumes to design year 2045 using the proposed growth rate.

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## 4.2 2045 FORECAST VOLUME

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### 4.2.1 2045 SEGMENT VOLUMES

**Table 5** highlights the 2045 AADT, Average Annual Daily Truck Traffic (AADTT), DHV, and Truck DHV (TDHV). K-factor values were assumed to be the same in 2045 as in 2022.

US 62 is classified as Functional Class 4 (FC 4), Minor Arterial, for Segments 1-5 of this forecast study area and FC 5, Major Collector, for Segment 6. A review of the KYTC Pavement Design Factors form for shows a 0.5% annual growth in truck traffic for both FC 4 and 5. Truck AADTT and DHV is rounded to nearest 5 vehicles per hour (vph). The 2045 DHVs were estimated by applying the K-factor to the calculated 2045 AADTs.

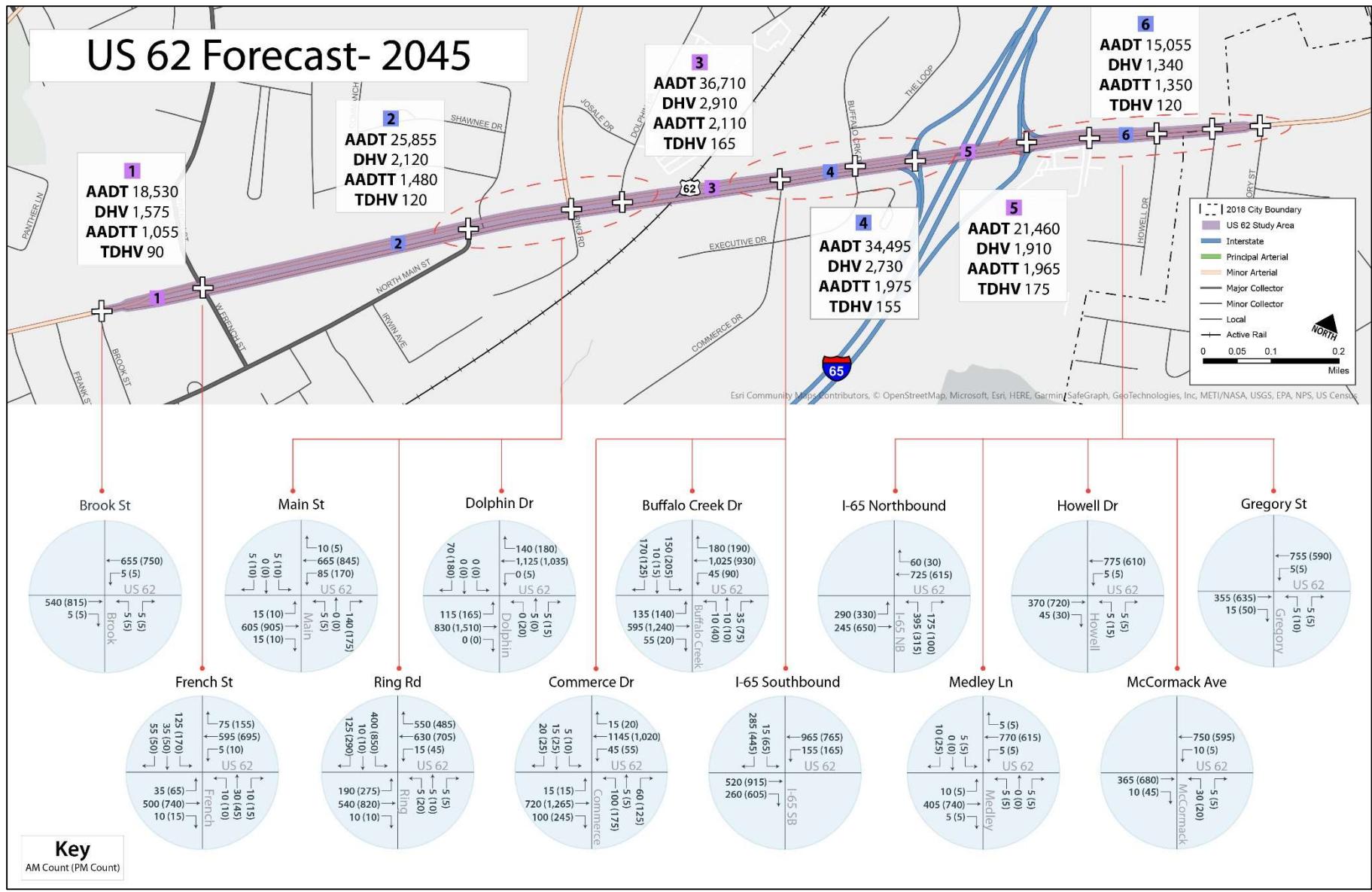
**Table 5: 2045 Segment Forecast**

SEGMENT	BEGINNING DESCRIPTION	ENDING DESCRIPTION	2022 Base AADT	2022 AM DHV	2022 PM DHV	No-Build Growth Rate	2045 ADT	2045 Truck % ADT	2045 Trucks (Daily)	2045 AM K Factor	2045 AM DHV	2045 AM TDHV	2045 PM K Factor	2045 PM DHV	2045 PM TDHV
1	Brook St.	W. French St.	16,470	1,075	1,400	0.50%	18,530	5.7%	1,055	6.8%	1,205	70	8.5%	1,575	90
2	W. French St.	Ring Road (KY 3005)	23,110	1,340	1,895	0.50%	25,855	5.7%	1,480	6.4%	1,510	95	8.2%	2,120	120
3	Ring Road (KY 3005)	Commerce Dr.	32,850	1,905	2,595	0.50%	36,835	5.7%	2,110	5.9%	2,140	125	7.9%	2,910	165
4	Commerce Dr.	I-65 SB Ramp	30,760	1,810	2,430	0.50%	34,555	5.7%	1,975	5.9%	2,030	115	7.9%	2,730	155
5	I-65 SB Ramp	I-65 NB Ramp	19,155	1,475	1,705	0.50%	21,460	9.1%	1,965	8.7%	1,655	170	8.9%	1,910	175
6	I-65 NB Ramp	Gregory St.	13,200	1,050	1,175	0.50%	15,055	9.1%	1,350	8.7%	1,170	115	8.9%	1,340	120

### 4.2.2 2045 INTERSECTION VOLUMES

The 2045 intersection forecast, along with the segment summary, is shown in **Figure 6**.

**Figure 6: US 62 2045 Segment and Intersection Forecast**



# APPENDIX

## A TRAFFIC DATA

	East			South			West				
	Mulberry WB Approach (Westbound)			Brook NB Approach (Northbound)			Mulberry EB Approach (Eastbound)				
	Left	Thru	Total	Left	Right	Total	Thru	Right	Total	Total	
7:00am	0	72	72	0	0	0	81	0	81	153	
7:15am	0	99	99	0	0	0	105	1	106	205	
7:30am	0	144	144	0	0	0	100	0	100	244	
7:45am	0	236	236	0	0	0	106	0	106	342	
Hourly Total	0	551	551	0	0	0	392	1	393	944	
8:00am	0	160	160	0	0	0	104	0	104	264	
8:15am	0	117	117	0	0	0	103	0	103	220	
8:30am	0	90	90	0	0	0	89	0	89	179	
8:45am	0	90	90	0	0	0	95	0	95	185	
Hourly Total	0	457	457	0	0	0	391	0	391	848	
9:00am	0	77	77	0	0	0	97	0	97	174	
9:15am	0	75	75	0	0	0	86	0	86	161	
9:30am	0	89	89	0	0	0	95	0	95	184	
9:45am	0	103	103	0	0	0	98	0	98	201	
Hourly Total	0	344	344	0	0	0	376	0	376	720	
10:00am	0	96	96	0	0	0	92	0	92	188	
10:15am	0	96	96	0	0	0	102	0	102	198	
10:30am	0	103	103	0	0	0	116	0	116	219	
10:45am	0	106	106	0	0	0	117	0	117	223	
Hourly Total	0	401	401	0	0	0	427	0	427	828	
11:00am	0	103	103	0	0	0	119	0	119	222	
11:15am	0	106	106	0	0	0	110	0	110	216	
11:30am	0	113	113	0	0	0	121	0	121	234	
11:45am	0	119	119	0	0	0	140	0	140	259	
Hourly Total	0	441	441	0	0	0	490	0	490	931	
12:00pm	0	118	118	0	0	0	139	0	139	257	
12:15pm	0	131	131	0	0	0	136	0	136	267	
12:30pm	0	133	133	0	0	0	141	0	141	274	
12:45pm	0	134	134	0	0	0	130	0	130	264	
Hourly Total	0	516	516	0	0	0	546	0	546	1062	
1:00pm	0	133	133	0	0	0	137	0	137	270	
1:15pm	0	127	127	0	0	0	138	0	138	265	
1:30pm	0	137	137	0	0	0	152	0	152	289	
1:45pm	0	135	135	0	0	0	151	1	152	287	
Hourly Total	0	532	532	0	0	0	578	1	579	1111	
2:00pm	0	131	131	0	0	0	147	1	148	279	
2:15pm	0	127	127	0	0	0	129	0	129	256	
2:30pm	0	142	142	0	0	0	143	0	143	285	
2:45pm	0	158	158	0	0	0	136	0	136	294	
Hourly Total	0	558	558	0	0	0	555	1	556	1114	
3:00pm	0	143	143	0	0	0	151	1	152	295	
3:15pm	0	144	144	0	0	0	156	0	156	300	
3:30pm	0	147	147	0	1	1	254	0	254	402	
3:45pm	0	164	164	0	3	3	278	0	278	445	
Hourly Total	0	598	598	0	4	4	839	1	840	1442	
4:00pm	0	165	165	0	1	1	199	0	199	365	
4:15pm	0	179	179	0	0	0	174	0	174	353	
4:30pm	0	184	184	0	0	0	195	0	195	379	
4:45pm	0	184	184	0	0	0	199	0	199	383	
Hourly Total	0	712	712	0	1	1	767	0	767	1480	
5:00pm	0	200	200	0	0	0	199	0	199	399	
5:15pm	0	201	201	0	1	1	194	0	194	396	
5:30pm	0	187	187	0	1	1	163	0	163	351	
5:45pm	0	180	180	0	0	0	168	0	168	348	
Hourly Total	0	768	768	0	2	2	724	0	724	1494	
6:00pm	0	169	169	0	0	0	156	0	156	325	
6:15pm	0	168	168	0	0	0	147	0	147	315	
6:30pm	0	144	144	0	0	0	149	0	149	293	
6:45pm	0	142	142	0	0	0	146	0	146	288	
Hourly Total	0	623	623	0	0	0	598	0	598	1221	
Grand Total	0	6501	6501	0	7	7	6683	4	6687	13195	

# D4 COUNT

File Name: US 62 at West French St.  
 Start Date: 10/25/2022  
 Start Time: 7:00:00 AM  
 Site Code: 47621900

Start Time	W. French St. From North				US 62 From East				W. French St. From South				US 62 From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:00 AM	8	0	21	0	9	79	1	0	1	3	3	0	1	70	5	0
07:15 AM	25	3	32	0	16	101	1	0	1	4	3	0	1	82	5	0
07:30 AM	17	8	25	0	12	137	1	0	1	7	3	0	3	91	8	0
07:45 AM	14	9	28	0	17	153	1	0	4	6	2	0	1	122	8	0
08:00 AM	10	7	34	0	15	112	0	0	0	6	1	0	0	111	8	0
08:15 AM	10	4	21	0	17	102	1	0	1	4	1	0	6	119	6	0
	51	28	108	61	504	3			6	23	7		10	443	30	
08:30 AM	4	5	11	0	18	91	1	0	2	2	1	0	0	86	1	1
08:45 AM	1	3	20	0	12	83	0	0	1	3	1	0	2	91	10	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	12	10	25	0	35	170	2	0	2	10	0	0	3	155	8	0
04:15 PM	16	9	24	0	30	125	2	0	2	6	1	0	0	121	9	0
04:30 PM	12	9	35	0	29	132	1	0	3	12	2	0	3	174	13	0
04:45 PM	11	6	31	0	43	166	2	0	4	10	1	0	4	147	18	0
05:00 PM	13	10	45	0	47	177	5	0	0	10	2	0	1	181	15	0
05:15 PM	11	19	26	0	23	144	3	3	4	10	2	0	5	129	11	1
	47	44	137		142	619	11		11	42	7		13	631	57	
05:30 PM	6	11	27	0	29	138	2	0	2	7	2	0	0	101	20	2
05:45 PM	14	5	24	0	29	131	3	0	0	7	2	0	2	106	12	0

# EECS COUNT

Study Name US 62 & Main St  
 Start Date 10/15/2020  
 Start Time 7:00 AM  
 Site Code

Start Time	Entrance Southbound				US 62 Westbound				Main St Northbound				US 62 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	0	0	0	87	7	0	20	0	0	0	0	1	91	1	0
7:15 AM	0	0	0	0	103	11	0	24	0	1	0	1	112	1	0	0
7:30 AM	0	0	1	0	113	25	0	32	0	0	0	0	129	1	0	0
7:45 AM	0	0	1	0	138	22	0	39	0	1	0	2	100	0	0	0
8:00 AM	1	0	0	0	100	11	0	28	0	0	0	0	115	1	0	0
	1	2	7	454	69	123		2		3	456	3				
8:15 AM	0	0	1	0	107	13	0	32	0	0	0	0	92	2	0	0
8:30 AM	0	0	0	0	95	12	0	14	0	0	0	0	92	1	0	0
8:45 AM	0	0	1	0	97	14	0	28	0	2	0	0	116	0	0	0
9:00 AM	1	1	2	0	97	18	0	28	1	1	0	0	106	2	0	0
9:15 AM	0	1	1	0	123	20	0	17	2	0	0	0	93	0	0	0
9:30 AM	1	0	1	0	108	17	0	23	1	2	0	2	90	3	0	0
9:45 AM	2	0	3	0	102	19	0	25	0	0	0	1	136	1	0	0
10:00 AM	1	0	1	0	121	14	0	38	0	1	0	1	88	2	0	0
10:15 AM	2	0	0	0	101	28	0	24	0	2	0	0	104	0	1	0
10:30 AM	3	0	3	0	108	19	0	32	0	1	0	0	122	1	0	0
10:45 AM	2	0	0	0	100	20	0	24	0	2	0	0	116	1	0	0
11:00 AM	0	0	0	0	138	14	0	24	0	1	0	2	136	0	0	0
11:15 AM	3	0	0	0	132	22	0	32	0	2	0	0	118	3	0	0
11:30 AM	0	1	3	0	152	22	0	27	0	0	0	0	125	3	0	0
11:45 AM	3	0	1	0	136	22	0	32	1	1	0	4	125	1	0	0
12:00 PM	2	0	1	0	134	25	0	33	0	1	0	3	155	0	0	0
12:15 PM	2	0	0	0	137	29	1	35	0	1	0	1	120	1	0	0
12:30 PM	3	0	3	0	124	17	0	27	0	1	0	0	135	3	0	0
12:45 PM	3	0	2	0	141	24	2	35	0	3	0	1	142	3	0	0
1:00 PM	3	0	3	0	142	33	0	37	0	0	0	2	137	2	0	0
1:15 PM	3	0	2	0	150	21	0	30	0	2	0	4	128	0	0	0
1:30 PM	2	0	3	0	153	25	0	34	1	2	0	0	128	4	1	0
1:45 PM	2	0	5	0	129	22	0	28	1	4	0	1	126	1	0	0
2:00 PM	3	0	3	0	121	27	0	28	1	1	0	2	146	5	0	0
2:15 PM	3	2	2	0	156	33	0	23	1	1	0	3	119	3	0	0
2:30 PM	3	0	1	0	138	23	0	25	0	4	0	1	118	2	0	0
2:45 PM	2	1	1	0	148	23	0	39	0	2	0	2	149	0	0	0
3:00 PM	1	0	3	0	144	34	0	27	1	1	0	2	158	1	0	0
3:15 PM	1	1	1	0	163	22	0	31	1	4	0	1	152	2	1	0
3:30 PM	1	0	1	0	171	29	0	28	0	0	0	0	170	1	0	0
3:45 PM	6	0	4	0	148	25	0	52	1	1	0	1	177	4	0	0
4:00 PM	7	1	4	0	170	40	0	26	0	0	0	3	192	1	0	0
4:15 PM	0	0	2	0	168	31	0	43	0	2	0	1	180	2	0	0
4:30 PM	4	0	3	0	164	32	0	32	0	1	0	2	170	2	0	0
4:45 PM	2	0	3	0	171	38	0	37	0	2	0	3	193	2	0	0
5:00 PM	6	0	0	0	191	48	0	33	0	0	0	0	194	0	0	0
	12	0	8	5	694	149		145		5		6	737	6		
5:15 PM	0	0	1	0	171	34	0	30	0	0	0	1	181	0	0	0
5:30 PM	3	0	2	0	170	33	0	40	0	3	0	1	139	3	0	0
5:45 PM	3	0	1	0	171	35	0	34	0	2	0	1	122	2	0	0
6:00 PM	2	0	4	0	169	29	0	29	0	1	0	7	128	0	1	0
6:15 PM	0	0	0	0	133	24	0	26	1	2	0	2	121	0	0	0
6:30 PM	1	0	2	0	139	28	0	22	0	1	0	0	101	0	0	0
6:45 PM	4	0	2	0	122	23	0	26	0	2	0	0	92	1	0	0

# D4 COUNT

File Name: US 62 at KY 3005  
 Start Date: 10/27/2022  
 Start Time: 7:00:00 AM  
 Site Code: 47623005

Start Time	KY 3005 From North				US 62 From East				Ring Rd From South				US 62 From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:00 AM	13	0	66	0	112	94	0	0	0	0	0	0	0	95	18	0
07:15 AM	17	2	70	0	128	116	2	0	0	0	0	0	3	84	27	1
<b>07:30 AM</b>	<b>24</b>	<b>5</b>	<b>89</b>	<b>0</b>	<b>160</b>	<b>148</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>116</b>	<b>28</b>	<b>0</b>
07:45 AM	28	3	76	0	147	181	3	0	0	0	0	0	4	116	41	0
08:00 AM	33	3	94	0	89	138	7	0	1	0	0	0	1	119	39	0
08:15 AM	22	0	72	0	102	118	3	0	0	0	0	0	1	94	38	0
	107	11	331		498	585	16		2	0	0	0	7	445	146	
08:30 AM	16	1	72	0	138	86	4	0	2	1	2	0	3	107	44	1
08:45 AM	28	0	86	0	109	92	3	0	2	2	1	0	0	81	35	1
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>04:00 PM</b>	<b>59</b>	<b>2</b>	<b>167</b>	<b>0</b>	<b>109</b>	<b>153</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>175</b>	<b>63</b>	<b>0</b>
04:15 PM	58	1	168	0	103	148	6	2	0	3	5	0	2	162	58	0
04:30 PM	65	3	184	1	92	148	10	0	2	1	5	0	0	158	61	0
04:45 PM	65	3	189	0	114	154	16	0	0	1	3	0	2	185	53	0
	247	9	708		418	603	40		4	8	16		6	680	235	
05:00 PM	91	2	135	0	116	154	11	0	2	4	4	0	1	154	50	0
05:15 PM	58	1	178	0	77	172	13	0	2	2	2	0	2	160	36	0
05:30 PM	53	3	136	0	84	135	11	0	3	2	1	0	3	128	35	0
05:45 PM	42	0	118	0	98	151	9	0	0	1	3	0	4	138	48	0

# EECS COUNT

Study Name KY 62 & Dolphin Dr  
 Start Date 03/10/2021  
 Start Time 7:00 AM  
 Site Code  
 Project

Type Road Classification Totals																		
	Dolphin Dr Southbound				KY 62 Westbound				Entrance Northbound				KY 62 Eastbound					
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn		
7:00 AM	12	0	1	0	14	185	1	0	0	0	1	0	0	141	12	0		
7:15 AM	8	0	0	0	31	236	0	0	0	0	0	0	0	186	22	0		
7:30 AM	9	0	0	0	39	251	0	0	0	0	0	0	0	165	28	0		
7:45 AM	12	0	2	0	29	235	0	0	0	0	0	0	0	201	20	0		
8:00 AM	14	0	3	0	28	177	0	1	0	3	0	0	0	177	20	2		
			5		127	899	0			3	0			729	90			
8:15 AM	8	1	0	0	30	186	0	0	0	6	0	0	1	164	18	0		
8:30 AM	13	0	0	0	26	211	0	0	0	3	0	0	0	157	26	0		
8:45 AM	18	0	0	0	34	208	0	0	0	0	1	0	0	129	20	0		
9:00 AM	18	0	0	0	12	161	0	1	0	3	0	0	0	150	19	0		
9:15 AM	27	0	3	0	37	150	0	1	1	0	0	0	2	148	22	0		
9:30 AM	28	0	1	0	32	149	0	0	0	1	0	0	2	151	19	0		
9:45 AM	27	0	3	0	19	178	2	1	0	1	0	0	1	162	19	1		
10:00 AM	25	0	2	0	36	176	0	0	0	0	2	0	4	167	18	1		
10:15 AM	22	0	0	0	20	205	1	1	2	2	1	0	4	152	24	0		
10:30 AM	24	1	1	0	27	188	0	0	0	2	1	0	3	175	20	0		
10:45 AM	32	0	2	0	28	175	0	0	0	3	2	0	3	167	32	1		
11:00 AM	30	0	0	0	31	187	0	0	1	0	0	0	2	195	36	2		
11:15 AM	29	0	0	0	31	176	0	0	0	2	1	0	3	221	21	1		
11:30 AM	23	0	0	0	32	185	1	1	2	0	0	0	2	212	29	2		
11:45 AM	30	0	0	0	32	172	2	0	1	0	0	0	3	224	26	0		
12:00 PM	26	0	4	0	22	204	0	1	1	0	2	0	3	289	25	2		
12:15 PM	32	0	0	0	23	191	1	0	2	0	4	0	4	272	31	1		
12:30 PM	29	0	0	0	21	207	0	2	2	1	1	0	9	210	31	1		
12:45 PM	24	1	3	0	40	190	0	0	3	1	4	0	4	216	21	1		
1:00 PM	30	1	1	0	38	192	2	0	3	1	3	0	4	225	30	1		
1:15 PM	37	0	4	0	23	194	0	0	2	0	1	0	3	230	22	2		
1:30 PM	27	1	3	0	31	216	0	0	3	0	2	0	5	235	13	0		
1:45 PM	21	0	0	0	32	180	0	0	1	2	3	0	5	236	21	2		
2:00 PM	26	0	1	0	31	194	1	1	1	2	4	0	8	234	31	1		
2:15 PM	43	0	1	0	21	211	0	0	7	0	8	0	7	209	44	0		
2:30 PM	33	0	5	0	40	193	0	0	1	2	6	0	2	241	24	2		
2:45 PM	29	1	0	0	30	198	0	1	2	0	3	0	4	240	23	1		
3:00 PM	26	0	3	0	35	217	2	0	4	0	3	0	2	239	25	1		
3:15 PM	30	0	4	1	41	196	1	0	1	1	6	0	5	290	32	2		
3:30 PM	36	0	0	0	33	203	0	0	2	0	6	0	3	269	41	1		
3:45 PM	36	0	0	0	37	236	0	0	0	0	0	0	3	295	35	0		
4:00 PM	39	0	2	0	37	212	0	1	3	1	0	0	2	274	35	1		
4:15 PM	35	0	2	0	36	196	1	0	0	2	1	0	2	300	29	2		
4:30 PM	42	0	0	0	42	220	1	0	2	0	2	0	2	295	36	2		
4:45 PM	45	0	2	1	30	263	0	0	3	0	2	0	0	314	42	2		
5:00 PM	36	0	3	0	46	228	1	2	6	1	6	0	0	367	36	1		
5:15 PM	31	0	3	0	36	229	1	0	0	0	6	0	0	295	39	5		
	154	8		154	940	3	2	11	1	16	0			1271	153	10		
5:30 PM	35	0	2	1	36	220	0	0	0	0	1	0	0	298	21	1		
5:45 PM	30	0	0	0	32	222	0	0	0	0	0	0	0	266	28	1		
6:00 PM	19	0	0	0	25	205	0	0	0	3	0	0	0	262	33	0		
6:15 PM	36	0	5	0	25	188	0	0	0	2	2	0	0	216	27	4		
6:30 PM	34	0	0	1	23	203	0	0	0	1	0	0	0	207	26	0		
6:45 PM	21	0	2	0	22	182	0	0	0	2	0	0	0	162	18	2		

# EECS COUNT

Study Name KY 62 & Commerce Dr  
Start Date 03/10/2021  
Start Time 7:00 AM  
Site Code  
Project

# D4 COUNT

File Name: US 62 at Buffalo Creek Dr./Executive Dr.  
 Start Date: 11/2/2022  
 Start Time: 7:00:00 AM  
 Site Code: 47621998

	Buffalo Creek Dr From North				US 62 From East				Executive Dr From South				US 62 From West			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:00 AM	31	2	33	2	28	135	1	0	2	3	5	1	1	134	28	0
07:15 AM	34	0	28	1	41	194	4	0	5	3	1	0	5	137	29	0
07:30 AM	42	5	37	0	43	233	11	0	10	0	4	0	11	110	25	0
07:45 AM	36	0	33	0	36	205	8	0	2	1	1	0	18	130	32	1
08:00 AM	30	3	32	0	38	189	17	0	8	5	6	0	9	128	22	0
	142	8	130		158	821	40		25	9	12		43	505	108	
08:15 AM	26	0	27	0	28	176	19	0	8	2	9	0	8	116	24	0
08:30 AM	28	2	18	0	32	158	11	1	12	3	12	0	15	135	29	0
08:45 AM	25	2	32	0	40	195	13	0	9	3	10	0	12	109	23	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	20	0	35	0	31	188	12	0	7	2	11	0	8	234	34	0
04:15 PM	24	1	34	0	23	190	19	1	3	1	4	0	6	235	28	0
04:30 PM	15	1	23	0	27	197	11	2	7	0	4	0	5	259	32	1
04:45 PM	22	2	34	0	38	214	19	0	14	2	16	0	4	255	28	0
05:00 PM	28	5	40	0	34	222	19	0	9	3	6	0	3	277	32	0
05:15 PM	31	6	43	0	46	198	15	1	6	2	5	0	3	262	26	2
05:30 PM	29	4	40	0	40	198	22	0	15	2	8	0	3	204	28	1
	110	17	157		158	832	75		44	9	35		13	998	114	
05:45 PM	24	5	32	0	37	208	14	1	10	5	8	0	5	190	39	0

# D4 COUNT

File Name: I-65 Southbound Ramps at US 62  
 Start Date: 11/3/2022  
 Start Time: 7:00:00 AM  
 Site Code: 47622005

Start Time	I-6 SB RAMP TO US 62 From North				US 62 From East				US 62 RAMP TO SB I-65 To South				US 62 From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:00 AM	47	0	0	0	0	130	39	0	0	0	0	0	49	105	0	0
07:15 AM	65	0	2	0	1	202	47	0	0	0	0	0	47	99	0	0
07:30 AM	78	1	4	0	0	230	28	0	0	0	0	0	68	94	0	0
07:45 AM	53	0	6	0	0	218	33	0	0	0	0	0	55	111	0	1
08:00 AM	57	0	1	0	0	172	25	0	0	0	0	0	56	126	0	0
	253	1	13			822	133						226	430		
08:15 AM	85	0	3	0	0	160	20	0	0	0	0	0	65	94	0	1
08:30 AM	60	0	6	0	0	163	15	1	0	0	0	0	59	95	0	0
08:45 AM	57	0	4	0	0	155	20	0	0	0	0	0	41	103	0	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	88	1	9	0	0	162	42	1	0	0	0	0	115	177	0	0
04:15 PM	95	0	12	0	0	175	33	2	0	0	0	0	121	171	0	1
04:30 PM	75	0	8	0	0	170	35	0	0	0	0	0	136	190	0	6
04:45 PM	98	0	9	0	0	177	24	1	0	0	0	0	111	175	0	1
05:00 PM	111	0	15	0	0	162	47	0	0	0	0	0	123	206	0	0
05:15 PM	98	1	18	0	0	196	34	0	0	0	0	0	144	222	0	0
05:30 PM	87	0	17	0	0	189	41	0	0	0	0	0	132	173	0	0
	394	1	59			724	146	1					510	776		
05:45 PM	122	0	11	0	0	177	25	0	0	0	0	0	91	126	0	1

# D4 COUNT

File Name: Northbound I-65 Ramps at US 62  
 Start Date: 11/1/2022  
 Start Time: 7:00:00 AM  
 Site Code: 62652222

Start Time	Ramp to NB I-65 From North				US 62 From East				Ramp from NB I-65 to US 62 From South				US 62 From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:00 AM	0	0	0	0	12	99	0	0	39	0	59	0	4	51	59	0
07:15 AM	0	0	0	0	12	185	0	0	45	0	72	0	0	51	56	0
07:30 AM	0	0	0	0	10	140	0	0	21	0	118	0	0	34	53	0
07:45 AM	0	0	0	0	10	161	0	0	33	0	103	0	0	56	55	0
					44	585			138		352		4	192	223	
08:00 AM	0	0	0	0	11	124	0	0	24	0	66	0	0	56	40	0
08:15 AM	0	0	0	0	5	82	0	0	18	0	94	0	0	61	51	0
08:30 AM	0	0	0	0	9	91	0	0	8	0	68	0	0	51	38	0
08:45 AM	0	0	0	0	5	103	0	0	12	0	64	0	0	61	51	0
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	1	0	0	13	116	1	0	23	0	72	0	0	122	56	0
04:15 PM	0	0	0	0	13	116	0	0	37	0	78	0	0	139	54	0
04:30 PM	0	0	0	0	11	137	0	0	23	0	89	0	0	143	63	0
04:45 PM	0	0	0	0	12	118	0	0	27	0	63	0	0	141	68	0
05:00 PM	0	0	0	0	2	163	0	0	29	0	56	0	0	156	73	0
05:15 PM	0	0	0	0	9	140	0	0	33	0	63	0	0	161	78	0
					34	558			112		271			601	282	
05:30 PM	0	0	0	0	6	135	0	0	26	0	82	0	0	118	46	0
05:45 PM	0	0	0	0	11	115	0	0	28	0	75	0	0	129	42	0

## File Name: US 62 at Medley Ln

Source: StreetLight Data

	East				South				West				North				
	US 62 WB Approach (Westbound)				Medley NB Approach (Northbound)				US 62 EB Approach (Eastbound)				Denny's (Southbound)				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
7:00am	0	131	0	131	0	0	0	0	0	0	73	0	0	1	1	205	
7:15am	0	140	0	140	0	0	0	0	64	0	64	0	0	0	0	204	
7:30am	0	223	0	223	0	0	0	0	0	53	0	53	0	0	0	276	
7:45am	0	248	0	248	0	0	0	0	0	67	0	67	0	0	1	316	
Hourly Total	0	742	0	742	0	0	0	0	0	257	0	257	0	0	2	2	1001
8:00am	0	108	0	108	0	0	0	0	0	59	0	59	0	0	1	1	168
8:15am	0	79	0	79	0	0	0	0	0	44	0	44	0	0	1	1	124
8:30am	0	66	0	66	0	0	0	0	0	52	0	52	0	0	1	1	119
8:45am	0	57	0	57	0	0	0	0	0	45	0	45	0	0	1	1	103
Hourly Total	0	310	0	310	0	0	0	0	0	200	0	200	0	0	4	4	514
9:00am	0	57	0	57	0	0	0	0	0	42	0	42	0	0	1	1	100
9:15am	0	61	0	61	0	0	0	0	0	43	0	43	0	0	1	1	105
9:30am	0	84	0	84	0	0	0	0	0	41	0	41	0	0	1	1	126
9:45am	0	77	0	77	0	0	0	0	0	44	0	44	0	0	1	1	122
Hourly Total	0	279	0	279	0	0	0	0	0	170	0	170	0	0	4	4	453
10:00am	0	71	0	71	0	0	0	0	0	46	0	46	0	0	0	0	117
10:15am	0	67	0	67	0	0	0	0	0	53	0	53	0	0	1	1	121
10:30am	1	74	0	75	0	0	0	0	0	54	0	54	0	0	1	1	130
10:45am	0	69	0	69	0	0	0	0	0	60	0	60	0	0	1	1	130
Hourly Total	1	281	0	282	0	0	0	0	0	213	0	213	0	0	3	3	498
11:00am	0	67	0	67	0	0	0	0	0	60	0	60	0	0	1	1	128
11:15am	0	73	0	73	0	0	0	0	0	69	0	69	0	0	1	1	143
11:30am	0	82	0	82	0	0	0	0	0	69	0	69	1	0	1	2	153
11:45am	0	75	0	75	0	0	0	0	0	68	0	68	1	0	1	2	145
Hourly Total	0	297	0	297	0	0	0	0	0	266	0	266	2	0	4	6	569
12:00pm	0	79	0	79	0	0	0	0	0	79	0	79	1	0	2	3	161
12:15pm	0	76	1	77	0	0	0	0	0	81	0	81	1	0	1	2	160
12:30pm	0	84	0	84	0	0	0	0	0	98	0	98	1	0	1	2	184
12:45pm	0	75	0	75	0	0	0	0	0	90	0	90	0	0	0	0	165
Hourly Total	0	314	1	315	0	0	0	0	0	348	0	348	3	0	4	7	670
1:00pm	0	87	0	87	0	0	0	0	0	93	0	93	0	0	0	0	180
1:15pm	0	83	0	83	0	0	0	0	0	91	0	91	1	0	1	2	176
1:30pm	0	77	0	77	0	0	0	0	0	102	0	102	0	0	0	0	179
1:45pm	0	80	0	80	0	0	0	0	0	113	0	113	1	0	1	2	195
Hourly Total	0	327	0	327	0	0	0	0	0	399	0	399	2	0	2	4	730
2:00pm	0	76	0	76	0	0	0	0	0	109	0	109	1	0	1	2	187
2:15pm	0	94	0	94	0	0	0	0	0	102	0	102	1	0	0	1	197
2:30pm	0	130	0	130	0	0	0	0	0	101	0	101	1	0	1	2	233
2:45pm	0	98	0	98	0	0	0	0	0	101	0	101	1	0	1	2	201
Hourly Total	0	398	0	398	0	0	0	0	0	413	0	413	4	0	3	7	818
3:00pm	0	95	0	95	0	0	0	0	0	107	0	107	1	0	1	2	204
3:15pm	0	84	0	84	1	0	0	1	0	148	0	148	1	0	1	2	235
3:30pm	0	103	0	103	1	0	0	1	0	168	0	168	1	0	1	2	274
3:45pm	0	110	0	110	1	0	0	1	0	211	0	211	1	0	1	2	324
Hourly Total	0	392	0	392	3	0	0	3	0	634	0	634	4	0	4	8	1037
4:00pm	0	99	0	99	0	0	0	0	0	139	0	139	0	0	1	1	239
4:15pm	1	102	0	103	0	0	0	0	0	137	0	137	0	0	1	1	241
4:30pm	1	112	0	113	0	0	0	0	0	134	0	134	1	0	1	2	249
4:45pm	1	120	0	121	0	0	0	0	0	142	0	142	1	0	1	2	265
Hourly Total	3	433	0	436	0	0	0	0	0	552	0	552	2	0	4	6	994
5:00pm	0	116	0	116	0	0	0	0	0	151	0	151	1	0	1	2	269
5:15pm	0	129	0	129	0	0	0	0	0	157	0	157	1	0	1	2	288
5:30pm	0	127	0	127	0	0	0	0	0	131	0	131	1	0	1	2	260
5:45pm	0	111	0	111	0	0	0	0	0	118	0	118	1	0	1	2	231
Hourly Total	0	483	0	483	0	0	0	0	0	557	0	557	4	0	4	8	1048
6:00pm	0	105	0	105	0	0	0	0	0	112	0	112	1	0	1	2	219
6:15pm	0	102	0	102	0	0	0	0	0	107	0	107	0	0	0	0	209
6:30pm	0	99	0	99	0	0	0	0	0	106	0	106	1	0	1	2	207
6:45pm	0	85	0	85	0	0	0	0	0	115	0	115	1	0	1	2	202
Hourly Total	0	391	0	391	0	0	0	0	0	440	0	440	3	0	3	6	837
Grand Total	4	4647	1	4652	3	0	0	3	0	4449	0	4449	24	0	41	65	9169

	East			South			West					
	US 62 WB Approach (Westbound)			Howell NB Approach (Northbound)			US 62 EB Approach (Eastbound)					
	Left	Thru	Total	Left	Right	Total	Thru	Right	Total	Total	Total	
7:00am	0	127	127	0	0	0	71	3	74	201		
7:15am	0	129	129	0	0	0	64	3	67	196		
7:30am	1	215	216	0	0	0	45	6	51	267		
7:45am	0	236	236	0	0	0	51	10	61	297		
Hourly Total	1	707	708	0	0	0	231	22	253	961		
8:00am	0	98	98	0	0	0	44	6	50	148		
8:15am	0	70	70	1	0	1	34	4	38	109		
8:30am	0	59	59	1	0	1	39	3	42	102		
8:45am	0	49	49	1	0	1	34	3	37	87		
Hourly Total	0	276	276	3	0	3	151	16	167	446		
9:00am	0	46	46	3	0	3	34	2	36	85		
9:15am	0	51	51	4	0	4	36	1	37	92		
9:30am	0	73	73	4	0	4	32	2	34	111		
9:45am	0	63	63	4	0	4	36	1	37	104		
Hourly Total	0	233	233	15	0	15	138	6	144	392		
10:00am	0	62	62	4	0	4	38	2	40	106		
10:15am	0	55	55	3	0	3	43	2	45	103		
10:30am	0	65	65	3	0	3	46	3	49	117		
10:45am	0	56	56	2	0	2	48	3	51	109		
Hourly Total	0	238	238	12	0	12	175	10	185	435		
11:00am	0	58	58	2	0	2	51	3	54	114		
11:15am	0	61	61	3	0	3	58	3	61	125		
11:30am	0	70	70	3	0	3	63	3	66	139		
11:45am	0	64	64	3	0	3	62	3	65	132		
Hourly Total	0	253	253	11	0	11	234	12	246	510		
12:00pm	0	67	67	3	0	3	69	3	72	142		
12:15pm	0	69	69	2	0	2	73	3	76	147		
12:30pm	0	74	74	2	0	2	89	3	92	168		
12:45pm	0	65	65	2	0	2	82	4	86	153		
Hourly Total	0	275	275	9	0	9	313	13	326	610		
1:00pm	0	77	77	3	0	3	84	3	87	167		
1:15pm	0	68	68	3	0	3	84	4	88	159		
1:30pm	0	66	66	3	0	3	96	3	99	168		
1:45pm	0	71	71	2	0	2	109	3	112	185		
Hourly Total	0	282	282	11	0	11	373	13	386	679		
2:00pm	0	64	64	2	0	2	101	4	105	171		
2:15pm	0	85	85	2	0	2	94	4	98	185		
2:30pm	0	120	120	3	0	3	94	4	98	221		
2:45pm	0	83	83	3	0	3	92	3	95	181		
Hourly Total	0	352	352	10	0	10	381	15	396	758		
3:00pm	0	83	83	3	0	3	100	3	103	189		
3:15pm	0	72	72	3	1	4	138	4	142	218		
3:30pm	0	92	92	3	1	4	165	5	170	266		
3:45pm	0	96	96	3	0	3	206	6	212	311		
Hourly Total	0	343	343	12	2	14	609	18	627	984		
4:00pm	0	87	87	3	1	4	129	5	134	225		
4:15pm	0	91	91	2	1	3	130	4	134	228		
4:30pm	0	104	104	2	0	2	127	4	131	237		
4:45pm	0	110	110	3	0	3	132	6	138	251		
Hourly Total	0	392	392	10	2	12	518	19	537	941		
5:00pm	0	101	101	4	1	5	142	5	147	253		
5:15pm	0	113	113	4	1	5	148	5	153	271		
5:30pm	0	113	113	3	1	4	122	3	125	242		
5:45pm	0	100	100	3	2	5	107	3	110	215		
Hourly Total	0	427	427	14	5	19	519	16	535	981		
6:00pm	0	97	97	3	2	5	107	3	110	212		
6:15pm	0	89	89	3	1	4	100	3	103	196		
6:30pm	0	90	90	3	1	4	97	3	100	194		
6:45pm	0	74	74	2	1	3	106	4	110	187		
Hourly Total	0	350	350	11	5	16	410	13	423	789		
Grand Total	1	4128	4129	118	14	132	4052	173	4225	8486		

	East			South			West			US 62 WB Approach (Westbound)	
	US 62 WB Approach (Westbound)			McCormack NB Approach (Northbound)			US 62 EB Approach (Eastbound)				
	Left	Thru	Total	Left	Right	Total	Thru	Right	Total	Total	
7:00am	0	126	126	2	1	3	71	0	71	200	
7:15am	0	126	126	5	2	7	64	0	64	197	
7:30am	2	212	214	8	1	9	43	0	43	266	
7:45am	9	220	229	7	0	7	49	0	49	285	
Hourly Total	11	684	695	22	4	26	227	0	227	948	
8:00am	2	93	95	4	0	4	44	1	45	144	
8:15am	0	68	68	2	0	2	32	2	34	104	
8:30am	0	57	57	2	0	2	37	2	39	98	
8:45am	0	48	48	2	0	2	33	1	34	84	
Hourly Total	2	266	268	10	0	10	146	6	152	430	
9:00am	0	46	46	1	0	1	34	1	35	82	
9:15am	0	49	49	2	0	2	34	1	35	86	
9:30am	0	70	70	2	0	2	33	1	34	106	
9:45am	0	62	62	2	0	2	35	1	36	100	
Hourly Total	0	227	227	7	0	7	136	4	140	374	
10:00am	0	61	61	1	0	1	37	1	38	100	
10:15am	0	54	54	1	0	1	43	1	44	99	
10:30am	0	64	64	2	0	2	48	1	49	115	
10:45am	0	56	56	1	0	1	49	1	50	107	
Hourly Total	0	235	235	5	0	5	177	4	181	421	
11:00am	0	55	55	1	0	1	47	2	49	105	
11:15am	0	60	60	3	0	3	58	2	60	123	
11:30am	0	66	66	4	0	4	62	2	64	134	
11:45am	0	62	62	4	0	4	64	2	66	132	
Hourly Total	0	243	243	12	0	12	231	8	239	494	
12:00pm	0	64	64	3	0	3	67	2	69	136	
12:15pm	0	66	66	2	0	2	70	2	72	140	
12:30pm	1	73	74	2	0	2	90	2	92	168	
12:45pm	0	63	63	2	0	2	81	3	84	149	
Hourly Total	1	266	267	9	0	9	308	9	317	593	
1:00pm	0	75	75	2	0	2	84	3	87	164	
1:15pm	0	65	65	2	0	2	84	3	87	154	
1:30pm	0	63	63	3	0	3	95	3	98	164	
1:45pm	0	70	70	3	0	3	108	3	111	184	
Hourly Total	0	273	273	10	0	10	371	12	383	666	
2:00pm	0	62	62	3	0	3	99	4	103	168	
2:15pm	0	80	80	3	0	3	93	4	97	180	
2:30pm	0	117	117	3	0	3	91	3	94	214	
2:45pm	0	81	81	3	0	3	91	3	94	178	
Hourly Total	0	340	340	12	0	12	374	14	388	740	
3:00pm	0	80	80	3	0	3	100	4	104	187	
3:15pm	0	70	70	2	0	2	135	6	141	213	
3:30pm	0	88	88	2	1	3	166	6	172	263	
3:45pm	0	90	90	2	0	2	202	8	210	302	
Hourly Total	0	328	328	9	1	10	603	24	627	965	
4:00pm	0	83	83	2	0	2	126	6	132	217	
4:15pm	0	86	86	4	0	4	129	6	135	225	
4:30pm	0	99	99	4	0	4	122	7	129	232	
4:45pm	0	107	107	4	0	4	128	8	136	247	
Hourly Total	0	375	375	14	0	14	505	27	532	921	
5:00pm	0	96	96	6	0	6	138	6	144	246	
5:15pm	0	108	108	5	0	5	148	6	154	267	
5:30pm	0	110	110	4	0	4	122	5	127	241	
5:45pm	0	98	98	3	0	3	105	5	110	211	
Hourly Total	0	412	412	18	0	18	513	22	535	965	
6:00pm	0	92	92	3	0	3	107	5	112	207	
6:15pm	0	86	86	4	0	4	97	5	102	192	
6:30pm	0	82	82	3	0	3	97	4	101	186	
6:45pm	0	72	72	2	0	2	106	4	110	184	
Hourly Total	0	332	332	12	0	12	407	18	425	769	
Grand Total	14	3981	3995	140	5	145	3998	148	4146	8286	

File Name: US 62 at Gregory St

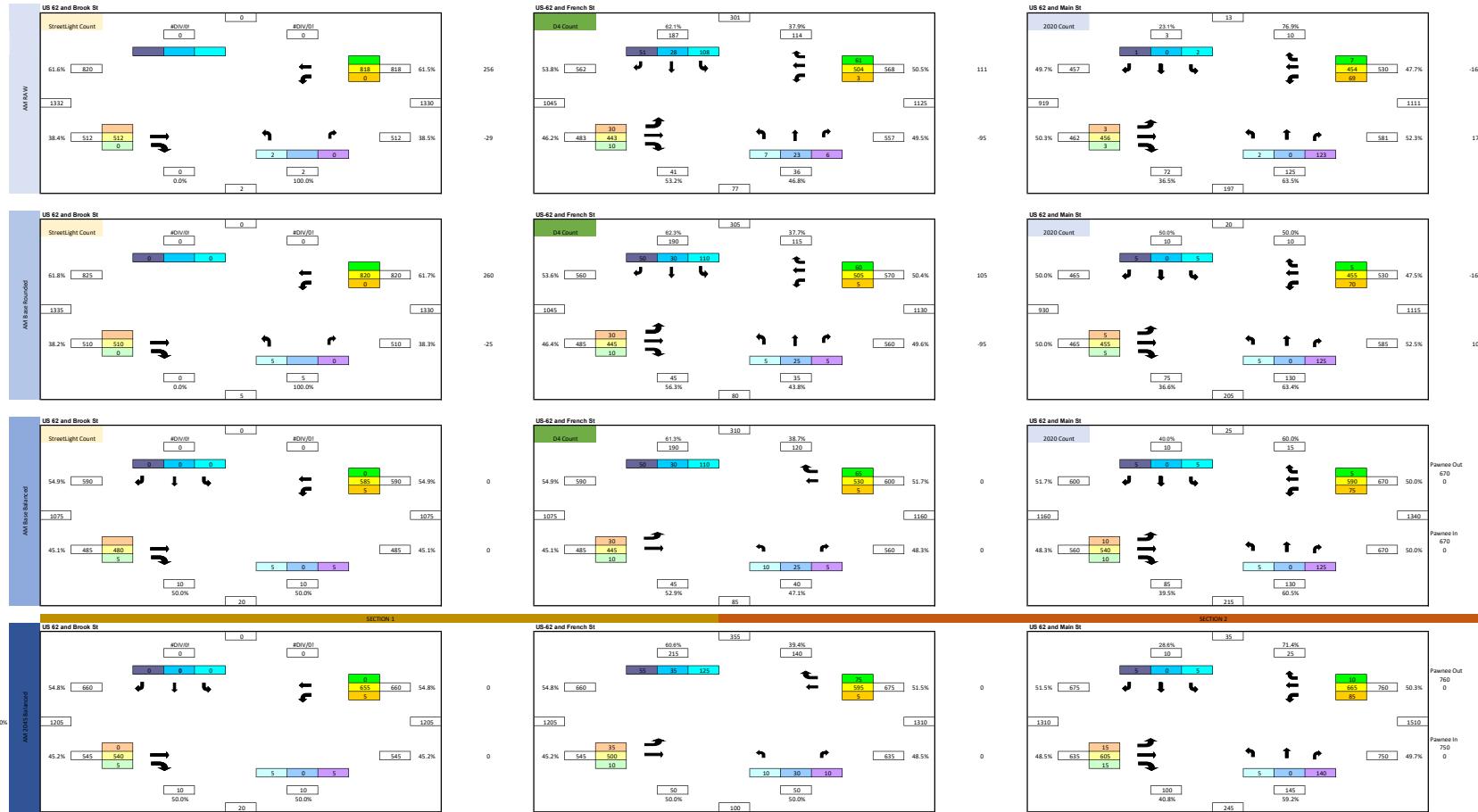
Source: StreetLight Data

	East			South			West			
	US 62 WB Approach (Westbound)			Gregory NB Approach (Northbound)			US 62 EB Approach (Eastbound)			
	Left	Thru	Total	Left	Right	Total	Thru	Right	Total	Total
7:00am	0	114	114	3	0	3	55	2	57	174
7:15am	0	107	107	1	0	1	42	6	48	156
7:30am	0	204	204	0	0	0	32	2	34	238
7:45am	0	218	218	0	0	0	42	0	42	260
Hourly Total	0	643	643	4	0	4	171	10	181	828
8:00am	0	91	91	0	0	0	38	0	38	129
8:15am	0	65	65	1	0	1	24	0	24	90
8:30am	0	53	53	1	0	1	29	0	29	83
8:45am	0	43	43	1	0	1	28	0	28	72
Hourly Total	0	252	252	3	0	3	119	0	119	374
9:00am	0	43	43	1	0	1	31	0	31	75
9:15am	0	44	44	1	0	1	31	1	32	77
9:30am	0	67	67	1	0	1	29	0	29	97
9:45am	0	59	59	1	0	1	32	0	32	92
Hourly Total	0	213	213	4	0	4	123	1	124	341
10:00am	0	57	57	1	0	1	32	0	32	90
10:15am	0	50	50	1	0	1	36	1	37	88
10:30am	0	60	60	0	0	0	40	1	41	101
10:45am	0	53	53	0	0	0	42	1	43	96
Hourly Total	0	220	220	2	0	2	150	3	153	375
11:00am	0	52	52	1	0	1	44	1	45	98
11:15am	0	57	57	1	0	1	50	1	51	109
11:30am	0	62	62	1	0	1	54	1	55	118
11:45am	0	56	56	1	0	1	56	1	57	114
Hourly Total	0	227	227	4	0	4	204	4	208	439
12:00pm	0	59	59	1	0	1	60	1	61	121
12:15pm	0	61	61	1	0	1	62	2	64	126
12:30pm	0	68	68	1	0	1	79	3	82	151
12:45pm	0	59	59	1	0	1	71	3	74	134
Hourly Total	0	247	247	4	0	4	272	9	281	532
1:00pm	0	70	70	0	0	0	76	2	78	148
1:15pm	0	61	61	0	0	0	76	2	78	139
1:30pm	0	58	58	2	0	2	84	2	86	146
1:45pm	0	61	61	8	0	8	102	3	105	174
Hourly Total	0	250	250	10	0	10	338	9	347	607
2:00pm	0	55	55	3	0	3	89	5	94	152
2:15pm	0	75	75	1	0	1	83	6	89	165
2:30pm	0	111	111	1	0	1	74	11	85	197
2:45pm	0	74	74	2	0	2	79	6	85	161
Hourly Total	0	315	315	7	0	7	325	28	353	675
3:00pm	0	73	73	1	0	1	88	3	91	165
3:15pm	0	64	64	1	0	1	122	2	124	189
3:30pm	0	81	81	1	0	1	152	2	154	236
3:45pm	0	80	80	1	0	1	188	2	190	271
Hourly Total	0	298	298	4	0	4	550	9	559	861
4:00pm	0	77	77	1	0	1	113	2	115	193
4:15pm	0	79	79	1	0	1	119	2	121	201
4:30pm	0	93	93	1	0	1	109	3	112	206
4:45pm	0	98	98	2	0	2	116	4	120	220
Hourly Total	0	347	347	5	0	5	457	11	468	820
5:00pm	0	91	91	2	0	2	120	9	129	222
5:15pm	1	99	100	3	0	3	127	11	138	241
5:30pm	2	98	100	4	0	4	105	5	110	214
5:45pm	1	88	89	4	0	4	94	3	97	190
Hourly Total	4	376	380	13	0	13	446	28	474	867
6:00pm	0	85	85	3	0	3	94	3	97	185
6:15pm	0	79	79	2	0	2	84	2	86	167
6:30pm	0	77	77	2	0	2	83	3	86	165
6:45pm	0	65	65	1	0	1	93	2	95	161
Hourly Total	0	306	306	8	0	8	354	10	364	678
Grand Total	4	3694	3698	68	0	68	3509	122	3631	7397

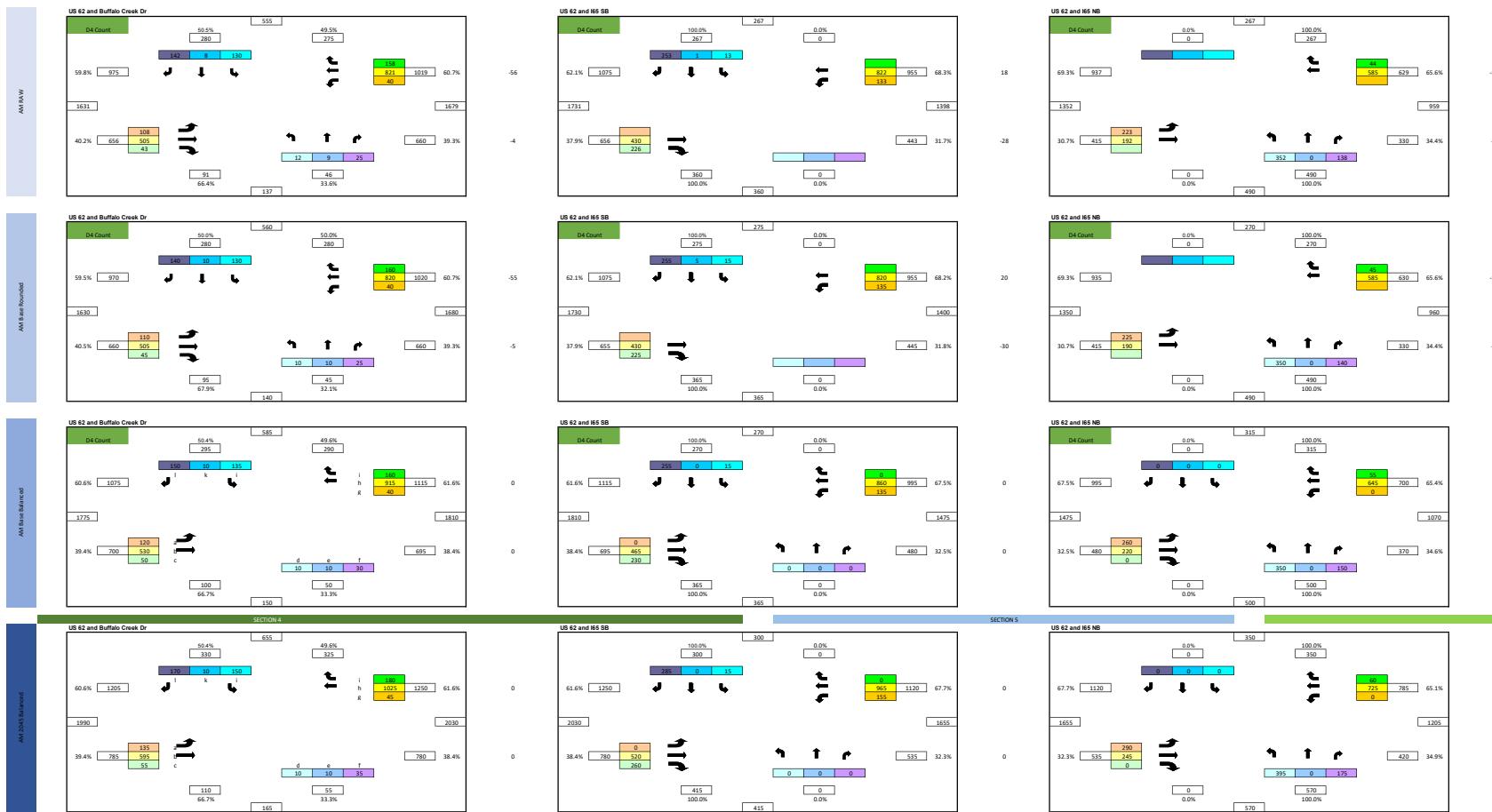
# **APPENDIX**

## **B AM & PM INTERSECTION FORECAST**

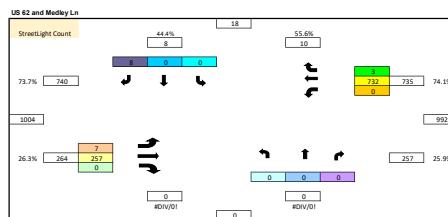
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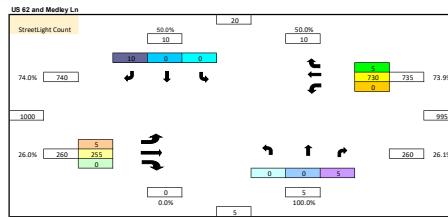




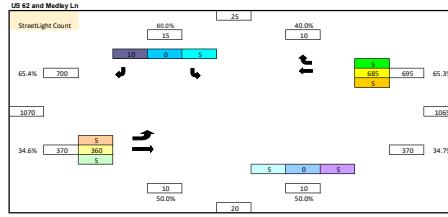
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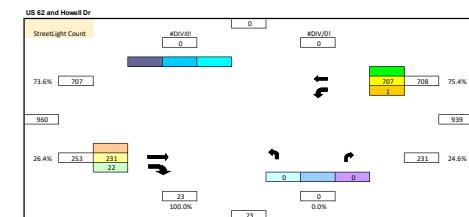
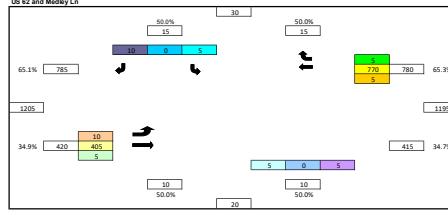
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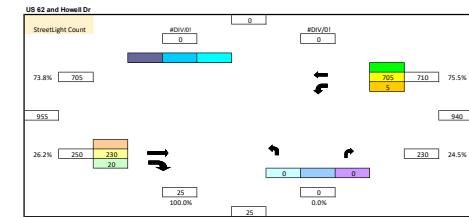
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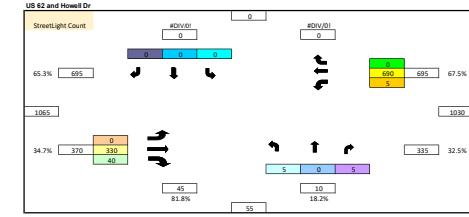
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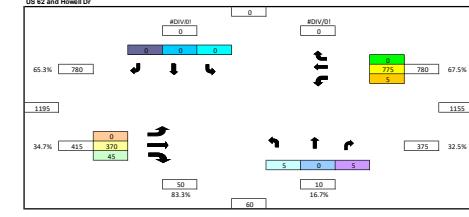


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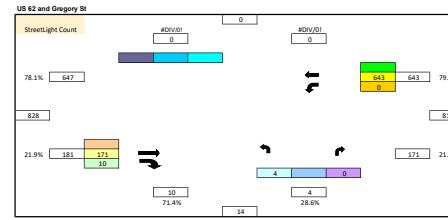
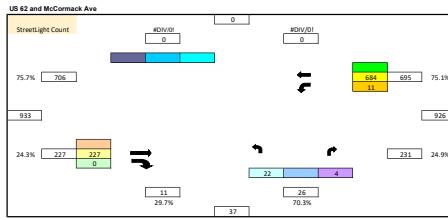
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SECTION 6

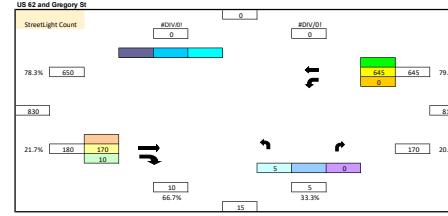
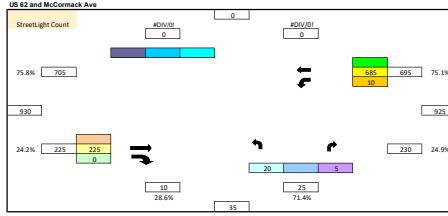


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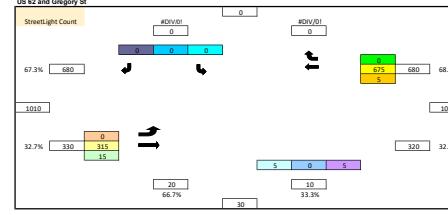
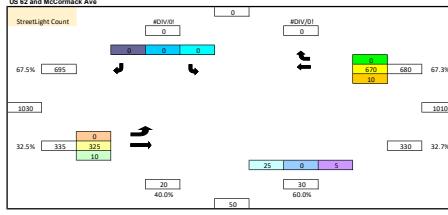
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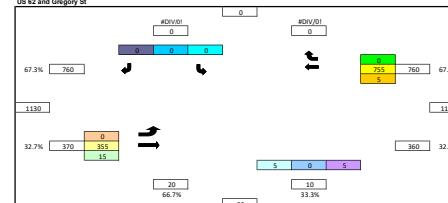
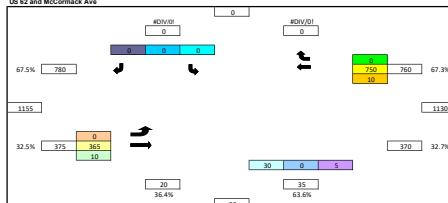
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AVS Best/Balanced

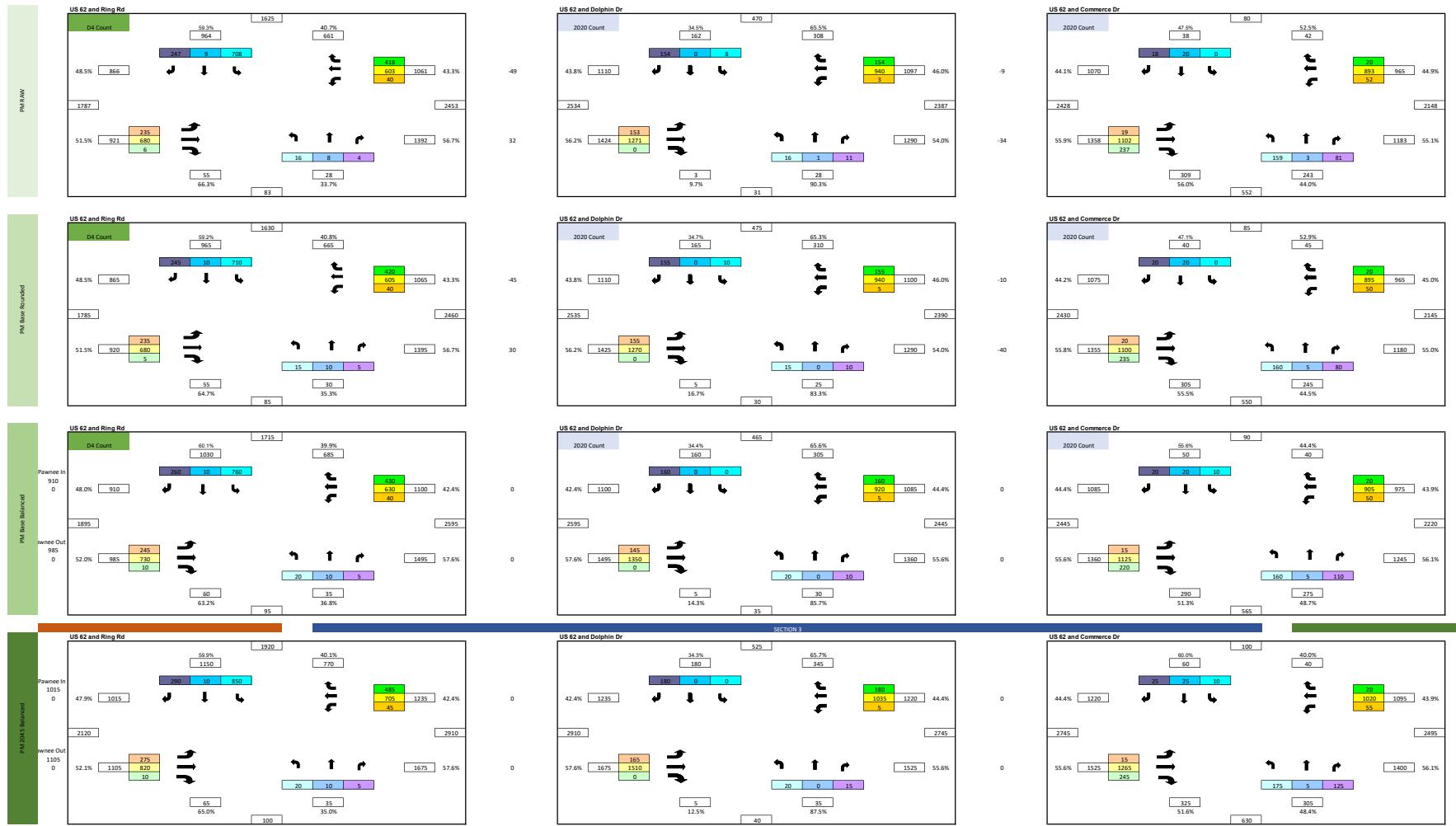


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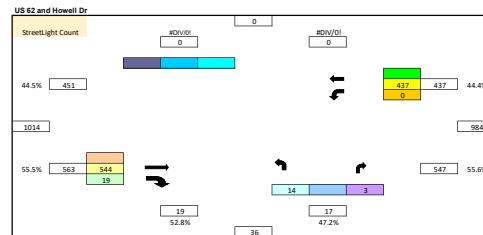
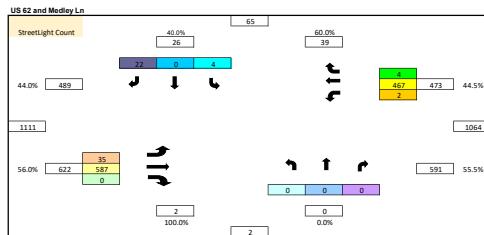
# PM Intersection Forecast



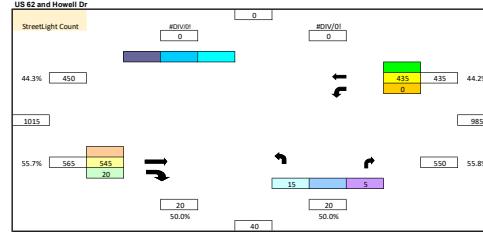
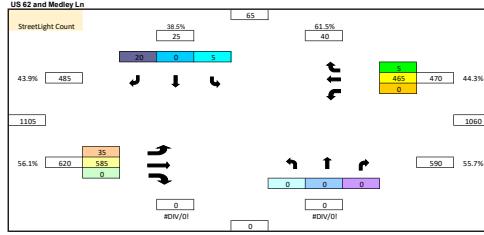




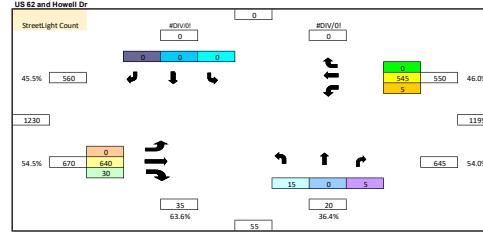
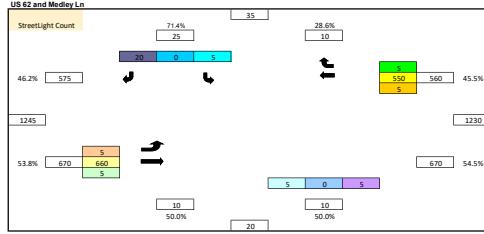
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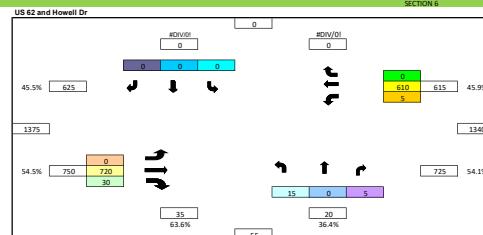
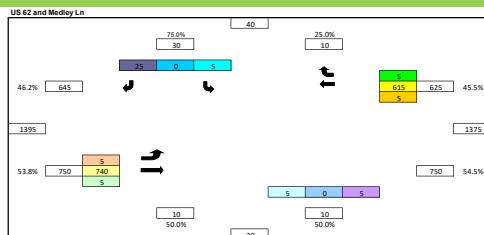
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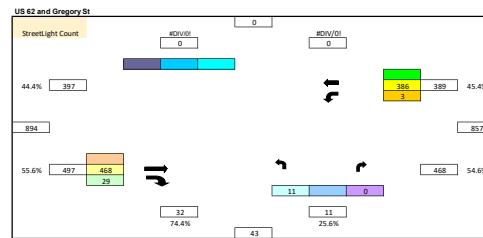
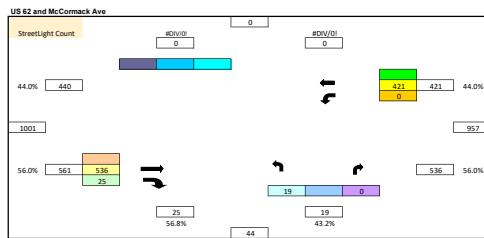


PAI 2015 Estimated

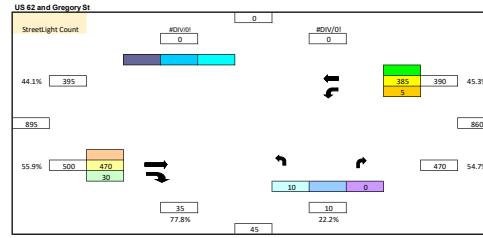
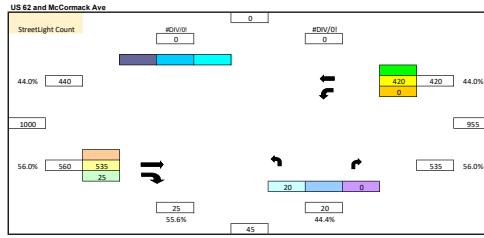


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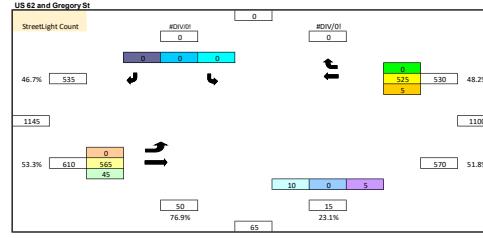
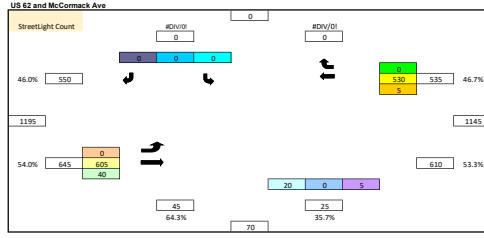
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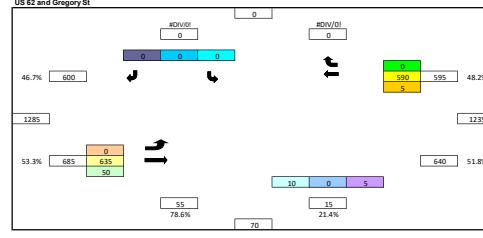
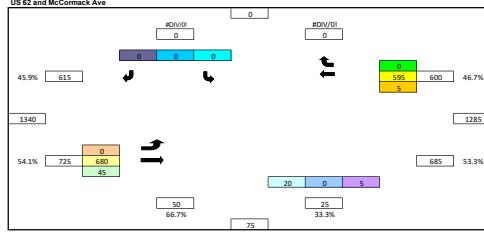
PAI Bulk Rounded



PAI Bulk Balanced



PAI 2015 Estimated



# APPENDIX

C

TRAVEL  
DEMAND  
MODELING  
METHODOLOGY  
MEMORANDUM

# Travel Demand Modeling Methodology Memorandum

US 62 Corridor Planning Study

*Hardin County, Kentucky*

February 28, 2023

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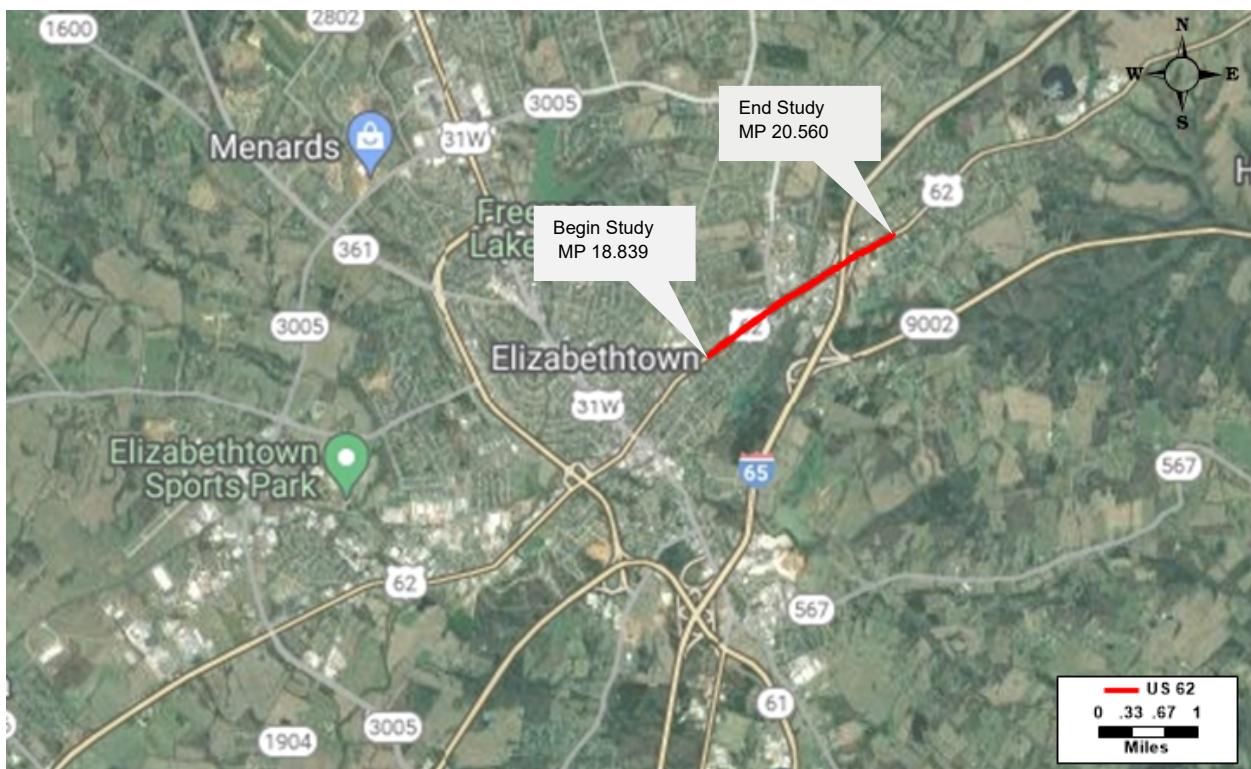
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## Introduction

The Kentucky Transportation Cabinet (KYTC) initiated a corridor planning study that will evaluate an approximately 1.7-mile section of the US 62 corridor in Hardin County from MP 18.839 (Brook Street) to MP 20.560 (Gregory Street). The study area corridor is located on the eastern side of Elizabethtown and is classified as an urban minor arterial from Brook Street to I-65 and as an urban major collector from I-65 to Gregory Street. This memorandum discusses the travel demand modeling methodology to support the selection of a growth rate for the US 62 corridor. The US 62 project area is shown in **Figure 1**.



**Figure 1: Study Area**

## Travel Demand Models

The following travel demand models were used to establish a growth rate for the US 62 corridor:

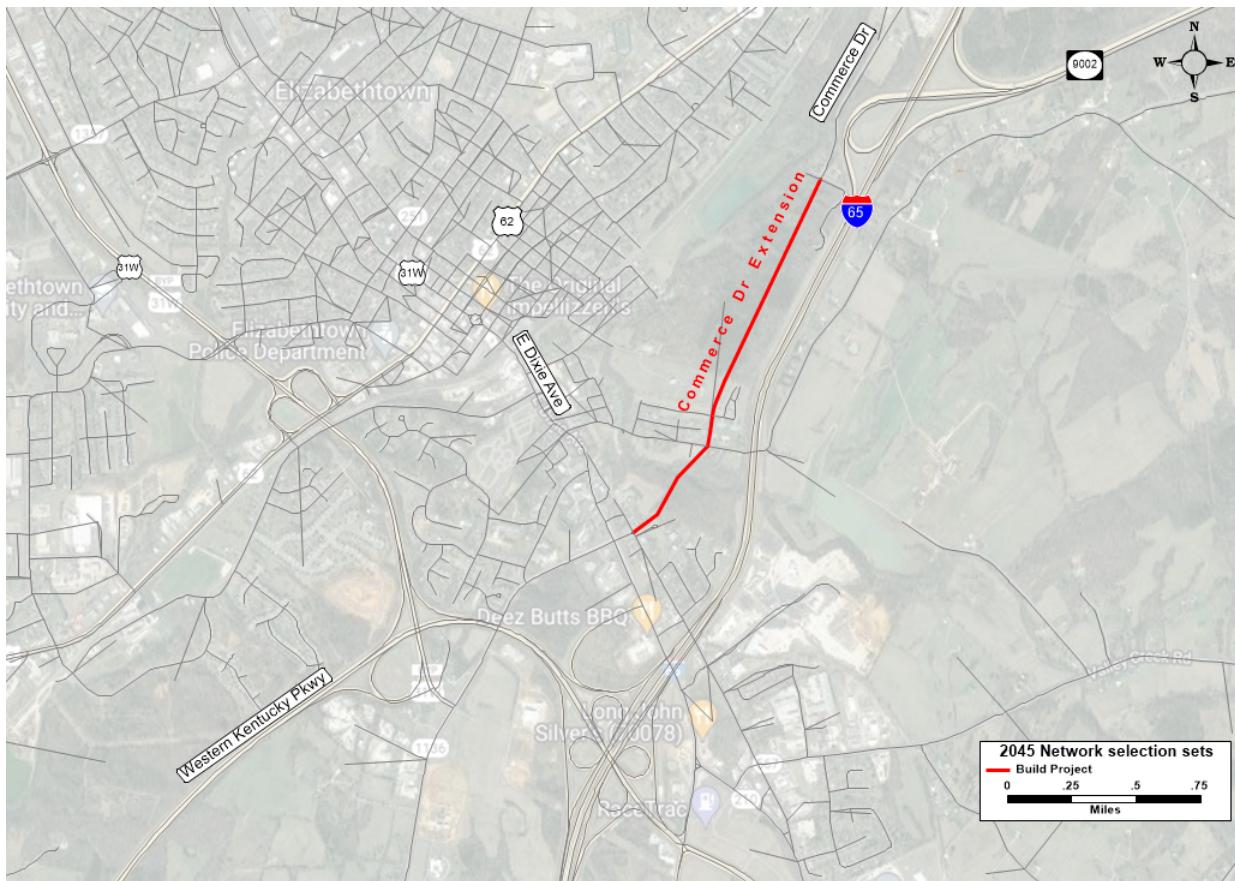
- KYTC Hardin-Meade Model: 2017 and 2045 model runs
- Kentucky Statewide Travel Demand Model (KYSTM Build 5976): 2018 & 2045 model runs

The Hardin-Meade travel demand model was reviewed against observed base condition volume data and was then calibrated for the study area. Socioeconomic data was also reviewed (future employment) in the model. The calibration methodology and results are presented in the following sections.

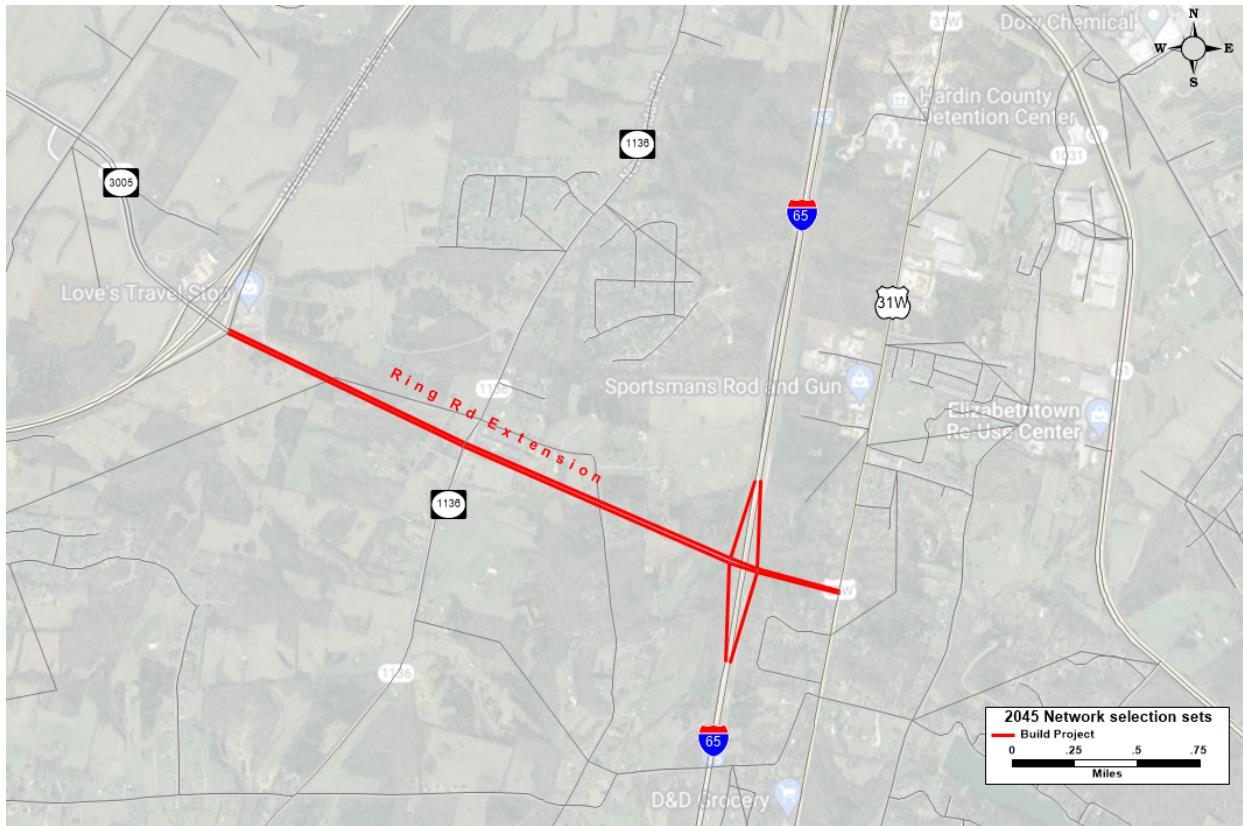
Future model network projects near the US 62 study area were examined. These projects were used to create the following scenarios for the Hardin-Meade Base model:

- 2045 No-Build: – Hardin-Meade Base model
- 2045 Build:– Hardin-Meade Build model including two new projects:
  - Commerce Drive (KY 3005) Extension to East Dixie Avenue (US 31W)
  - Ring Road (KY 3005) Extension to I-65

The 2045 Build network projects are shown in **Figure 2** and **Figure 3**. The travel demand model analysis was performed using TransCAD Version 8.0



**Figure 2: Build Network Project - Commerce Drive Extension to East Dixie Avenue (US 31W)**



**Figure 3: Build Network Project - Ring Road (KY 3005) Extension to I-65**

The Hardin-Meade model was the primary model used for the determination of the proposed growth rates, while the KYSTM was used as another datapoint to compare to. For comparison purposes, KYTC provided 2018 and 2045 KYSTM runs and no edits or changes were made to either of these. A growth rate was estimated from the KYSTM runs and compared with other resources to establish a final study area growth rate.

## Land Use Data

The project team reviewed the future land use in the Hardin-Meade model and estimated realistic future land-use assumptions. Only employment data was adjusted. **Figure 4** and **Figure 5** show the updated Traffic Analysis Zones (TAZ). **Table 1** presents changes for each TAZ in Hardin County. The county control totals remained unchanged.

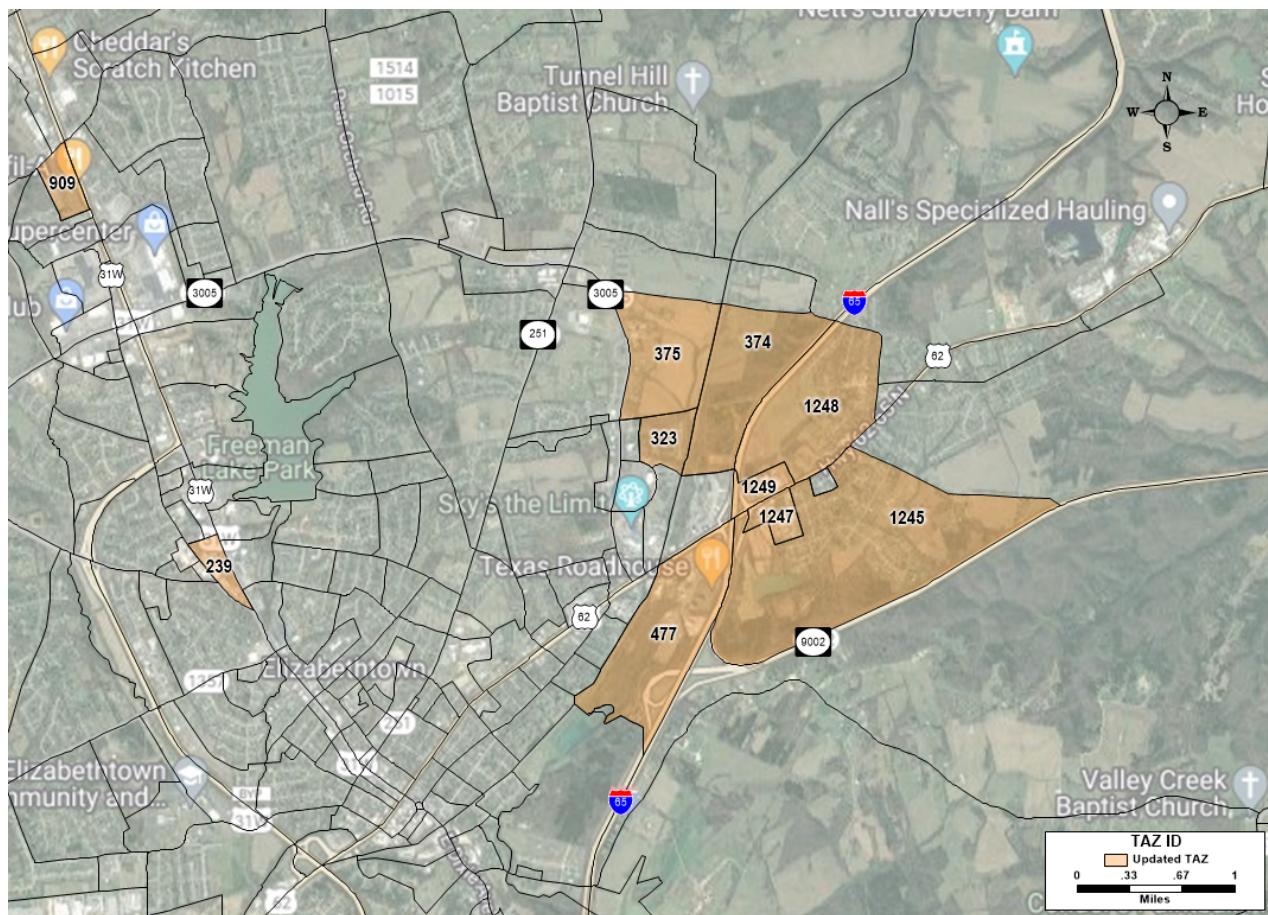
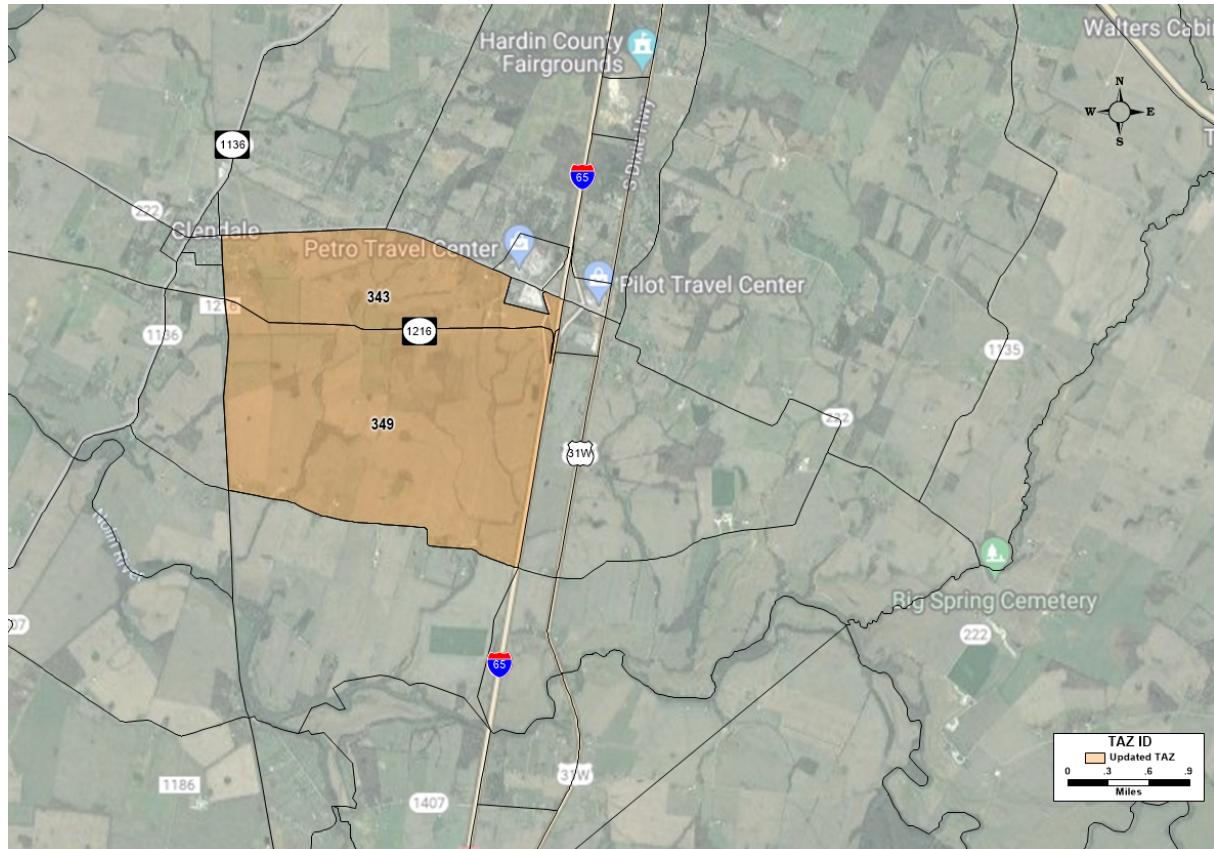


Figure 4: Selected TAZs for Employment Data Update – Area 1



**Figure 5: Selected TAZs for Employment Data Update – Area 2**

**Table 1: TAZ Employment Data**

TAZ ID	Original 2017 Total Employment	Original 2045 Total Employment	Changes to 2045 Total Employment	Updated 2045 Total Employment
239	2586	4504	-150	4354
323	198	426	-100	326
343	694	229	-200	29
349	1782	4700	200	4900
374	0	0	100	100
375	193	345	50	395
477	692	1219	25	1244
909	740	1232	-150	1082
1245	46	68	50	118
1247	119	199	25	224
1248	10	13	100	113
1249	124	208	50	258
<b>Sum</b>	<b>7184</b>	<b>13143</b>	<b>0</b>	<b>13143</b>

## Network Model

The network inputs of the base Hardin-Meade model for the project area were calibrated to improve the percent root mean square error (%RMSE).

%RMSE is a measure of the accuracy of the traffic assignment, estimating the average error between the observed and modeled traffic volumes on links with traffic counts. A low %RMSE

value indicates that the estimated and observed data are close to each other, suggesting a better overall accuracy for the model. This metric is typically summarized by facility type. Summarizing the measures by geography can also provide good validation information, especially if the measures continue to be stratified by facility type. **Table 2** shows the %RMSE by facility type for two geographic areas: the US 62 analysis area (see **Figure 6**) and Hardin and Meade Counties (full model network).

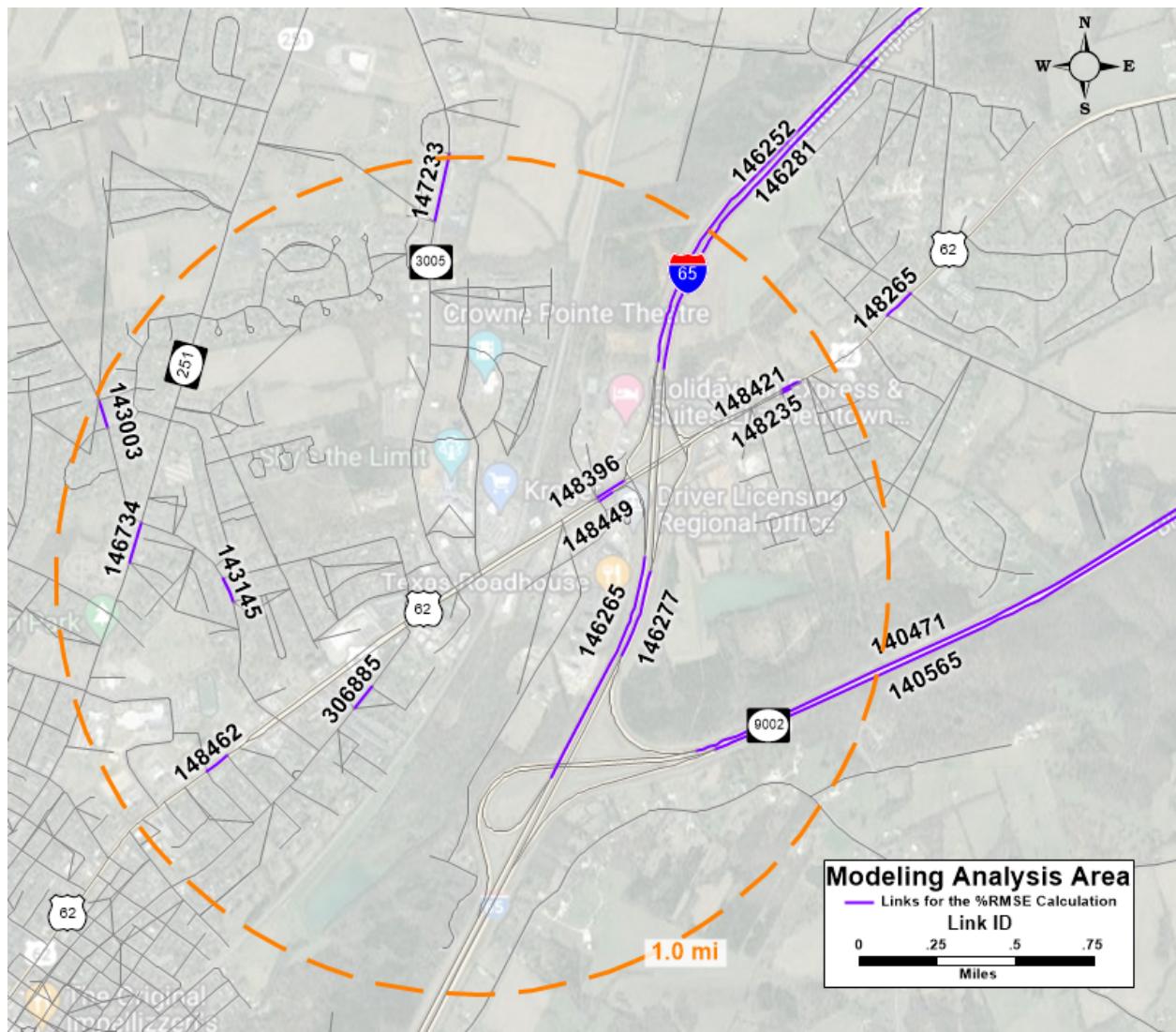
The calibrated base model improved the %RMSE for the study corridor (US 62) by 7.6% (32.7% to 25.1%). The total %RMSE for the modeling analysis area was also enhanced from 22.3% to 20.1% in the calibrated base model. The US 62 modeling analysis area for %RMSE calculation is shown in **Figure 6**.

**Table 2: %RMSE Results for Base and Calibrated Hardin-Meade Models**

Link Type	Modeling Analysis Area*			Hardin and Meade Counties**
	Number of Links	2017 % RMSE Base Model	2017 % RMSE Calibrated Model	
Interstate	4	11.6%	11.4%	15.4%
Other Freeway / Expressway	2	17.2%	17.3%	25.7%
Minor Arterial	5	26.2%	20.8%	40.8%
Major Collector	6	46.6%	45.4%	64.7%
Total	17	22.3%	20.1%	47.8%
Study Corridor: US 62	6	32.7%	25.1%	32.7%

\* The Modeling Analysis Area is shown in Figure 6.

\*\* Full model network.



**Figure 6: Selected Links for %RMSE Calculation (Links with Count Stations)**

The selected links volumes for %RMSE calculation are presented in **Table 3**.

**Table 3: Selected Links Volumes for %RMSE Calculation**

Link ID	Link Name	Dual Link	Station ID	Volumes*		
				2017 Count	2017 Base Model	2017 Calibrated Model
148462	US 62	0	047A35	16241	21713	20230
148396	US 62	1	047B72	12927	15276	14846
148449	US 62	1	047B72	12927	17342	16026
148265	US 62	0	047B95	8319	5896	5900
148235	US 62	1	047B44	4459	3645	3655
148421	US 62	1	047B44	4459	3307	3299
146265	I-65	1	047144	29710	29758	28891
146277	I-65	1	047144	29710	28522	28550
146252	I-65	1	047174	25637	29807	29717
146281	I-65	1	047174	25637	30349	30250
147233	KY 3005 (Ring Rd.)	0	047B75	17555	16956	16120
143003	Pear Orchard Rd.	0	047A16	5119	2596	2912
146734	North Miles St.	0	047A19	10367	6890	7051
306885	North Main St.	0	047A29	5189	800	737
143145	W. French St.	0	047A18	4717	2678	2916
140471	Bluegrass Pkwy.	1	047168	6316	4981	4961
140565	Bluegrass Pkwy.	1	047168	6316	5554	5570

\*Vehicles per day

The model was calibrated by adjusting the link speed. **Figure 7** shows selected links for speed adjustment. The speeds were adjusted based on the results of 2021 HERE speed data as presented in **Table 4**.

**Table 4: Selected Links for Speed Adjustment**

Link ID	2017 Base Model		2017 Calibrated Model	
	Posted Speed*	Calculated Speed*	Posted Speed*	Calculated Speed*
146447	55.0	55.0	25.0	25.0
146462	35.0	35.0	15.0	15.0
146474	55.0	55.0	35.0	35.0
146490	55.0	55.0	25.0	25.0
146507	55.0	55.0	25.0	25.0
146516	55.0	55.0	25.0	25.0
146522	55.0	55.0	15.0	15.0
146540	55.0	55.0	35.0	35.0
146553	55.0	55.0	25.0	25.0
146569	55.0	55.0	25.0	25.0
147042	50.0	53.4	40.0	43.4
147140	50.0	53.4	30.0	33.4
147278	50.0	53.4	35.0	38.4
147350	50.0	53.4	45.0	48.4
147371	50.0	53.4	45.0	48.4
148302	35.0	30.8	30.0	25.8
148316	35.0	31.2	30.0	26.2
148373	35.0	33.4	30.0	28.4
148432	35.0	33.4	30.0	28.4
306997	50.0	53.4	30.0	33.4
307054	50.0	53.4	45.0	48.4
307069	50.0	53.4	45.0	48.4
146284	35.0	35.0	50.0	50.0

\*Miles per hour

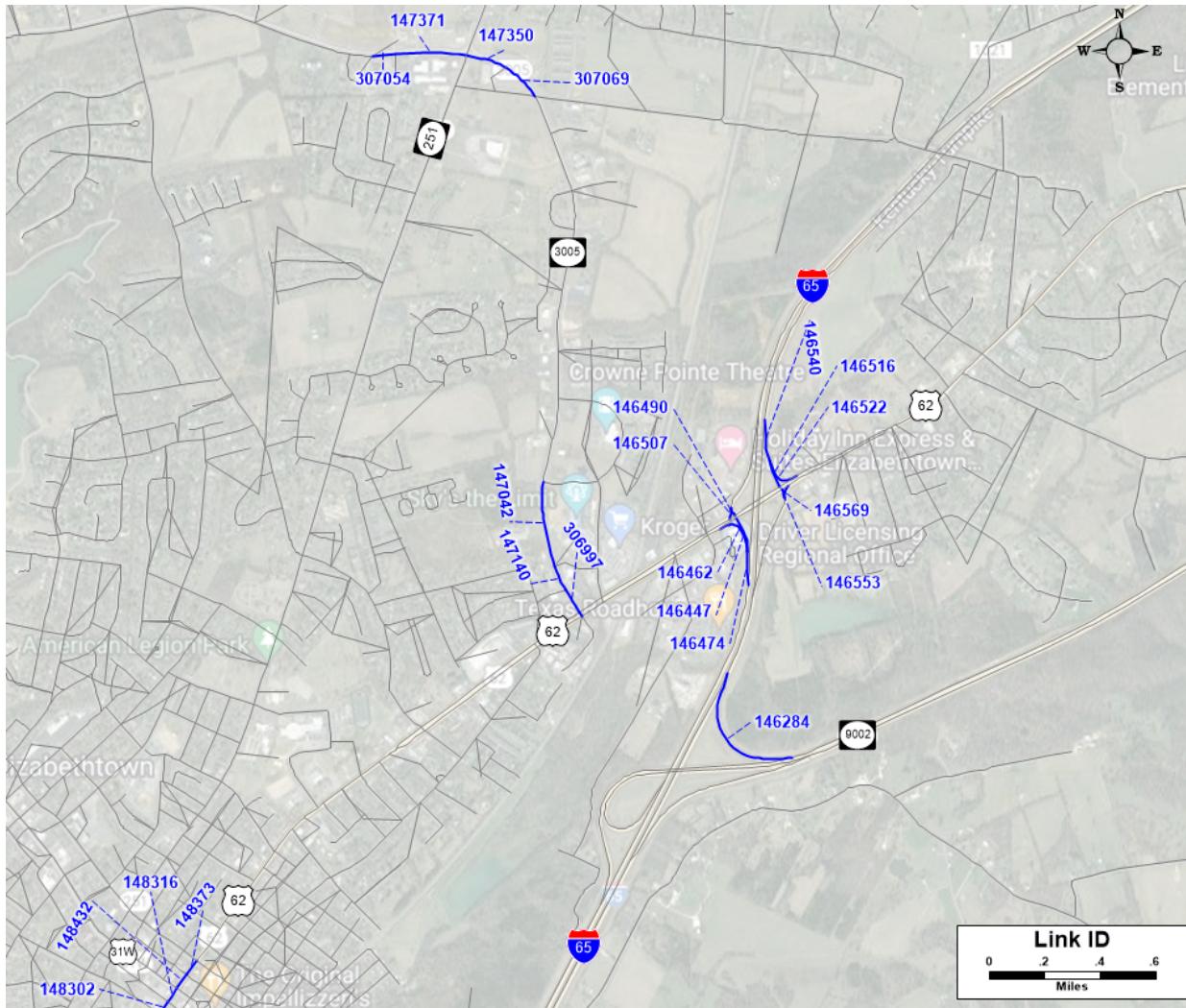


Figure 7: Selected Links for Speed Adjustment

## Growth Rates

Results from the Hardin-Meade and KYSTM models were used to estimate a growth rate for the study corridor. **Table 5** and **Table 6** show the volumes and annual growth rates for the links along the US 62 study corridor (see **Figure 1**) obtained from the Hardin-Meade and KYSTM models, respectively.

The following overall length weighted average growth rates were estimated from these models:

- KYTC Hardin-Meade Model: 0.36% annual growth
- KYSTM: 1.3% annual growth

**Table 5: Annual Growth Rate from Hardin-Meade Model**

Link ID	Length	2017 Volume* (Calibrated No-Build Model)	2045 Volume* (Build Model)	Annual Growth Rate
148213	0.03	20230	21633	0.20%
148215	0.01	6953	8560	0.70%
148220	0.07	17080	18778	0.30%
148222	0.11	16248	17546	0.30%
148226	0.11	4590	5830	0.90%
148228	0.01	6088	7454	0.70%
148235	0.02	3655	4470	0.70%
148240	0.09	3655	4470	0.70%
148247	0.01	6953	8560	0.70%
148331	0.13	10784	11194	0.10%
148345	0.10	9521	10071	0.20%
148353	0.02	10551	10918	0.10%
148357	0.40	10189	10506	0.10%
148362	0.02	8394	9859	0.60%
148375	0.07	9210	11024	0.60%
148388	0.08	15888	16954	0.20%
148393	0.01	20199	21662	0.20%
148396	0.08	14846	15573	0.20%
148398	0.10	10678	11591	0.30%
148400	0.40	11489	12116	0.20%
148406	0.11	15101	16042	0.20%
148408	0.02	20199	21662	0.20%
148409	0.08	9210	11024	0.60%
148410	0.13	12122	12847	0.20%
148413	0.24	16082	17525	0.30%
148414	0.06	4283	5510	0.90%
148418	0.07	4283	5510	0.90%
148420	0.02	11863	12545	0.20%
148421	0.05	3299	4090	0.80%
148422	0.17	17080	18778	0.30%
148427	0.07	16822	18133	0.30%
148428	0.09	3299	4090	0.80%
148431	0.09	11216	11868	0.20%
148436	0.02	3879	4910	0.80%
148440	0.07	4590	5830	0.90%
148443	0.06	11216	11868	0.20%
148444	0.06	16026	17123	0.20%
148449	0.04	16026	17123	0.20%
148454	0.03	3655	4470	0.70%
148462	0.07	20230	21633	0.20%
307901	0.07	4255	5474	0.90%
<b>Length Weighted Average Growth Rate</b>				<b>0.36%</b>

\*Vehicles per day

Table 6: Annual Growth Rate from KYSTM

ID	Length	2018 Volume*	2045 Volume*	Annual Growth Rate
582379	0.12	6038	3101	2.5%
140489	0.07	12467	6974	2.2%
582038	0.03	12467	6974	2.2%
138807	0.40	5371	3066	2.1%
582040	0.01	6429	3873	1.9%
582044	0.05	6429	3873	1.9%
582048	0.07	6429	3873	1.9%
140491	0.03	7672	5034	1.6%
140765	0.05	7672	5034	1.6%
140769	0.07	7672	5034	1.6%
140777	0.03	7672	5034	1.6%
140781	0.05	7672	5034	1.6%
141056	0.17	7672	5034	1.6%
478079	0.01	9015	6350	1.3%
138808	0.02	9544	6985	1.2%
138809	0.13	9544	6985	1.2%
138530	0.08	17993	13474	1.1%
138531	0.24	17993	13474	1.1%
138532	0.04	17993	13474	1.1%
137359	0.02	15300	11479	1.1%
137361	0.03	15300	11479	1.1%
137363	0.01	15300	11479	1.1%
506044	0.08	18514	13983	1.0%
506045	0.07	18514	13983	1.0%
505751	0.02	16671	12654	1.0%
138534	0.09	8133	6174	1.0%
138535	0.05	8133	6174	1.0%
548558	0.16	8133	6174	1.0%
138533	0.08	20736	15904	1.0%
639889	0.07	20736	15904	1.0%
548559	0.04	6929	5317	1.0%
137066	0.04	8547	6569	1.0%
137070	0.03	8547	6569	1.0%
137349	0.01	8547	6569	1.0%
137351	0.02	8531	6557	1.0%
137353	0.09	8531	6557	1.0%
137355	0.02	8531	6557	1.0%
137357	0.03	8531	6557	1.0%
640748	0.08	8531	6557	1.0%
136773	0.04	10934	8420	1.0%
141060	0.02	10934	8420	1.0%
141064	0.07	10934	8420	1.0%
141068	0.02	10934	8420	1.0%
505754	0.03	15485	12226	0.9%
506028	0.04	15485	12226	0.9%
506032	0.03	15485	12226	0.9%

ID	Length	2018 Volume*	2045 Volume*	Annual Growth Rate
506036	0.06	15485	12226	0.9%
548853	0.03	14223	11295	0.9%
506040	0.02	6601	5249	0.9%
136774	0.03	22617	18154	0.8%
136782	0.01	22617	18154	0.8%
136786	0.03	22617	18154	0.8%
136790	0.17	22617	18154	0.8%
136794	0.01	22617	18154	0.8%
137050	0.06	22617	18154	0.8%
137058	0.04	22617	18154	0.8%
137062	0.06	22533	18110	0.8%
548845	0.02	22533	18110	0.8%
548849	0.04	22533	18110	0.8%
628641	0.01	22533	18110	0.8%
<b>Length Weighted Average Growth Rate</b>				<b>1.3%</b>

\*Vehicles per day

## Conclusion

This study aimed to develop a growth rate for the US 62 corridor from MP 18.839 (Brook Street) to MP 20.560 (Gregory Street) in Hardin County using the Hardin-Meade model and the KYSTM. The Hardin-Meade model was the primary model used for the determination of the proposed growth rates. This model was reviewed against observed base condition volume data and was then calibrated. Future employment data was adjusted based on the recent development in the area. Future model network projects near the US 62 study area were also examined and included in the Build Model. The Hardin-Meade model results showed a 0.36% annual growth for the US 62 corridor. KYSTM was used as another model for comparison. KYTC provided 2018 and 2045 KYSTM runs, and no adjustments were made to the scenarios. KYSTM results showed a 1.3% annual growth. The results of this study will be used along with the historical traffic count trends and population growth to develop a single growth rate for the US 62 corridor.