Summer Shade Solar - Traffic Analysis

March 20, 2025

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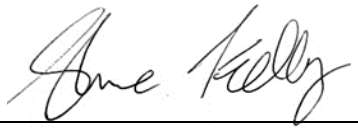
Approved by  _____
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REFERENCES

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KYTC General Highway Information Map, https://maps.kytc.ky.gov/generalhighway
KYTC Traffic Count Database, https://datamart.kytc.ky.gov/EDSB_SOLUTIONS/CTS
Kentucky State Data Center, http://ksdc.louisville.edu/data-downloads/estimates
2023 Multimodal Quality/Level of Service Handbook, fdot_glos_handbook_v6-0_clean.pdf
Highway Capacity Manual, Sixth Edition, https://www.trb.org/Publications/Blurbs/175169.aspx

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Executive Summary

Summer Shade Solar, LLC is proposing to construct and operate the Summer Shade Solar Project (Project) located in the vicinity of Summer Shade, Kentucky in southern Metcalfe County. The petitioner proposes to establish a solar and battery energy storage (BESS) facilities. The development comprises multiple adjacent parcels with access points into the facility from KY 90 (Summer Shade Road), Joe Bowles Road, Apple Grove Road, Goodson School Cyclone Road, Cliff Smith Road, George Lynn Road, Larry Hope Road, Dr. Evans Road, and Harold Paull Road. Analyses of the base year existing conditions (based on most recent counts provided by the Kentucky Transportation Cabinet, KYTC) and the 2027 construction year were performed. The traffic impact study (TIS) evaluated the operating conditions for the AM and PM peak hours at the roadway segments below, listed by KYTC count station:

- Station 005286: KY 90 (Summer Shade Road) from MP 17.987 to 21.949
- Station 085503: KY 90 (Summer Shade Road) from MP 0.000 to MP 4.769
- Station 085296: KY 90 (Summer Shade Road) from MP 4.769 to MP 5.554
- Station 085502: KY 640 from MP 0.000 to 1.617
- Station 085518: KY 2387 from MP 0.000 to MP 5.338
- Station 086001: KY 163 from MP 0.000 to 2.189
- Station 085532: KY 163 from MP 2.189 to MP 2.907
- Station 085292: KY 163 from MP 2.907 to MP 8.815
- Station 086010: KY 1520 from MP 0.000 to MP 2.633
- Station 086011: KY 678 from MP 18.767 to MP 22.605
- Station 086751: KY 839 from MP 7.214 to MP 9.819
- Station 005331: KY 839 from MP 0.000 to MP 3.714
- Station 005289: KY 839 from MP 3.741 to MP 6.790

Based on the results of the analysis, the following conclusions were developed:

- During construction, all highway segments are anticipated to continue to operate at acceptable level of service (LOS) standards during the peak hours. Therefore, the construction for this Project will not adversely affect traffic operations on any of the roadways in and around the Project area.

- After construction is complete, the site will be managed with negligible added traffic demand. During the operational phase of the project, the surrounding roadway network will continue to operate at an acceptable LOS during the peak hours.

1.0 INTRODUCTION

The purpose of this study is to estimate the traffic impacts of the proposed Summer Shade Solar Project ("Summer Shade Solar" or the "Project") which is located in the vicinity of Summer Shade, Kentucky in southern Metcalfe County. The development comprises multiple adjacent parcels. The Project site can be generally described as west of KY 163, south of KY 90 (Summer Shade Road), east of the Barren / Metcalfe County line, and north of the Monroe / Metcalfe County line. The proposed Project site is shown in **Figure 1**.

The Project is a proposed 106-megawatt (MW) photovoltaic electrical generating facility with 424 megawatt-hour (MWH) battery energy storage system (BESS) to be located on approximately 1,580.98 acres (736.74 acres inside fence). The facility will consist of solar photovoltaic panels and their associated racking systems, inverters, collection system, transmission line, project substation, and other project equipment. Arrays of photovoltaic modules will be mounted on fixed tilt racks arranged in rows. Power conversion systems will be distributed throughout the Project area, comprised of inverters, substation, and utility switching station. The equipment will connect via underground electrical wiring to a proposed substation and switchyard located at the northern portion of the Project area. The Project will have sixteen access points from public roadways – three from Apple Grove Road, two from KY 90 (Summer Shade Road), two from Joe Bowles Road, two from Clifton Smith Road, two from Larry Hope Road, and one each from Goodson School Cyclone Road, Dr. Evans Road, George Lynn Road, Ernie Ferrell Road and Harold Paul Road for construction vehicle deliveries. The construction year is assumed to be 2026.

INTRODUCTION

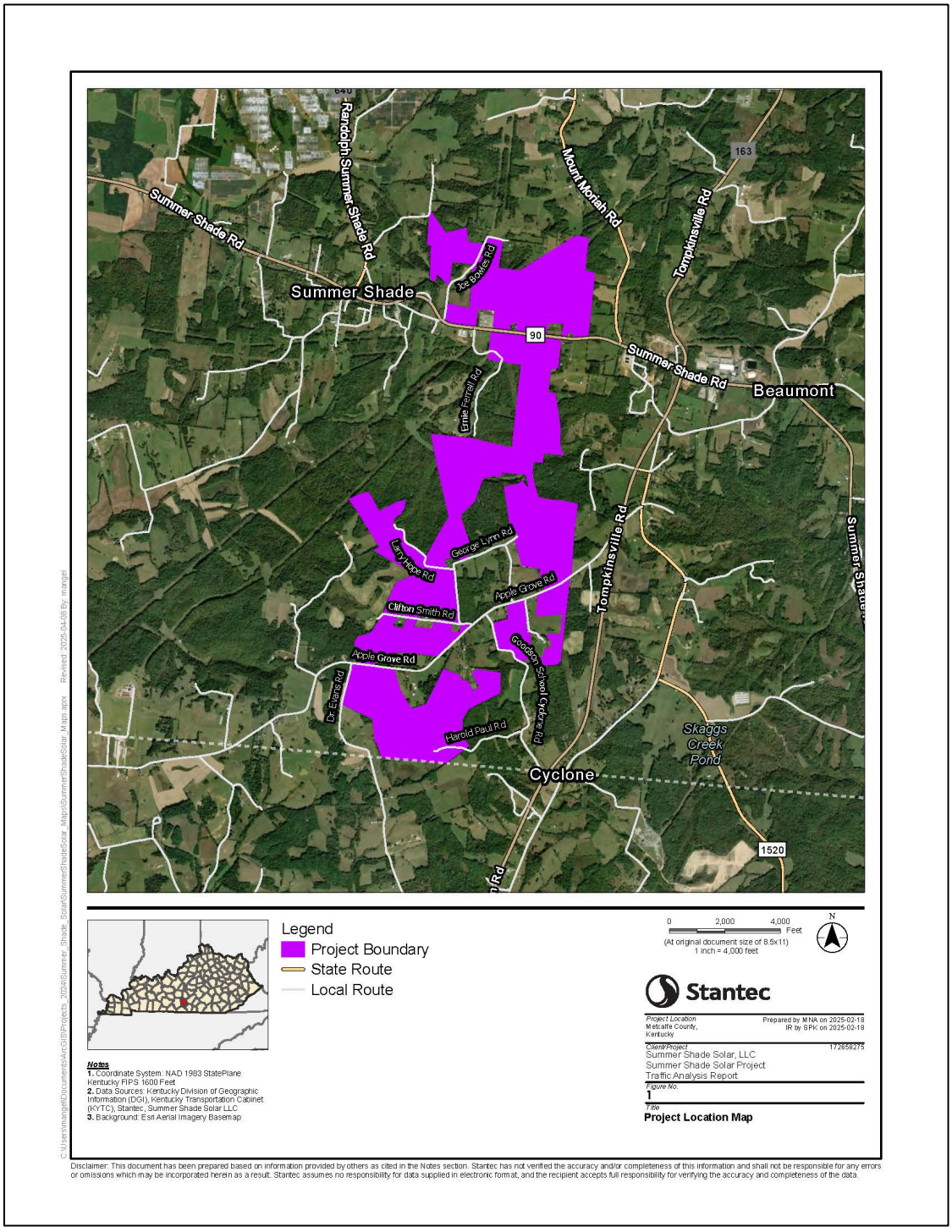

Figure 1: Project Location

2.0 DATA COLLECTION

Annual Average Daily Traffic (AADT) traffic counts were obtained from the Kentucky Transportation Cabinet (KYTC) to establish the existing traffic conditions.[1] **Figure 2** shows the locations of the primary / adjacent count stations used in this analysis. The summarized count data for each of these stations (plus additional stations outside the immediate area) is included in **Appendix A** for the following count stations:

- Station 005286: KY 90 (Summer Shade Road) from MP 17.987 to 21.949
- Station 085503: KY 90 (Summer Shae Road) from MP 0.000 to MP 4.769
- Station 085296: KY 90 (Summer Shade Road) from MP 4.769 to MP 5.554
- Station 085502: KY 640 from MP 0.000 to 1.617
- Station 085518: KY 2387 from MP 0.000 to MP 5.338
- Station 086001: KY 163 from MP 0.000 to 2.189
- Station 085532: KY 163 from MP 2.189 to MP 2.907
- Station 085292: KY 163 from MP 2.907 to MP 8.815
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- Station 086011: KY 678 from MP 18.767 to MP 22.605
- Station 086751: KY 839 from MP 7.214 to MP 9.819
- Station 005331: KY 839 from MP 0.000 to MP 3.714
- Station 005289: KY 839 from MP 3.741 to MP 6.790

KY 90 (Summer Shade Road) is a two-lane, rural minor arterial with a posted speed limit ranging between 35 and 55 miles per hour (mph) and daily traffic of ranging between 2,400 vehicles per day (VPD) and 5,800 VPD. KY 640 is a two-lane rural minor collector with a daily traffic volume of 300 VPD and statutory speed limit of 55 mph. KY 2387 is two-lane local road with a daily traffic of 300 VPD and statutory speed limit of 55 mph. KY 163 is a rural major collector with a daily traffic ranging between 2,000 VPD and 4,700 VPD and statutory speed limit ranging between 45 and 55 mph. KY 1520 is a rural minor collector with a daily traffic of 300 VPD and a posted speed limit of 55 mph.KY 678 is a two-lane local road with a daily traffic of 300 VPD with a speed limit of 55 mph. KY 839 is a two-lane rural minor collector with a daily traffic ranging between 800 VPD and 1,100 VPD with a speed limit of 55 mph.

The Project will have sixteen access points from public roadways including two from KY 90 (Summer Shade Road). The other fourteen access points will be from local roadways including three from Apple Grove Road, two from Joe Bowles Road, two from Clifton Smith Road, two from Larry Hope Road, and one each from Goodson School Cyclone Road, Dr. Evans Road, George Lynn Road, Ernie Ferrell Road and Harold Paul Road for construction vehicle deliveries. The local roads are not state maintained, so traffic count data is unavailable. For this analysis, all local roads were assumed to have a minimum of 100 VPD which is greater than would be anticipated for cul-de-sacs with low residential density. **Figure 3**

[1] https://maps.kytc.ky.gov/trafficcounts

shows the locations of the local roads which will provide access points to a parcel of the facility and an estimated daily traffic for each.

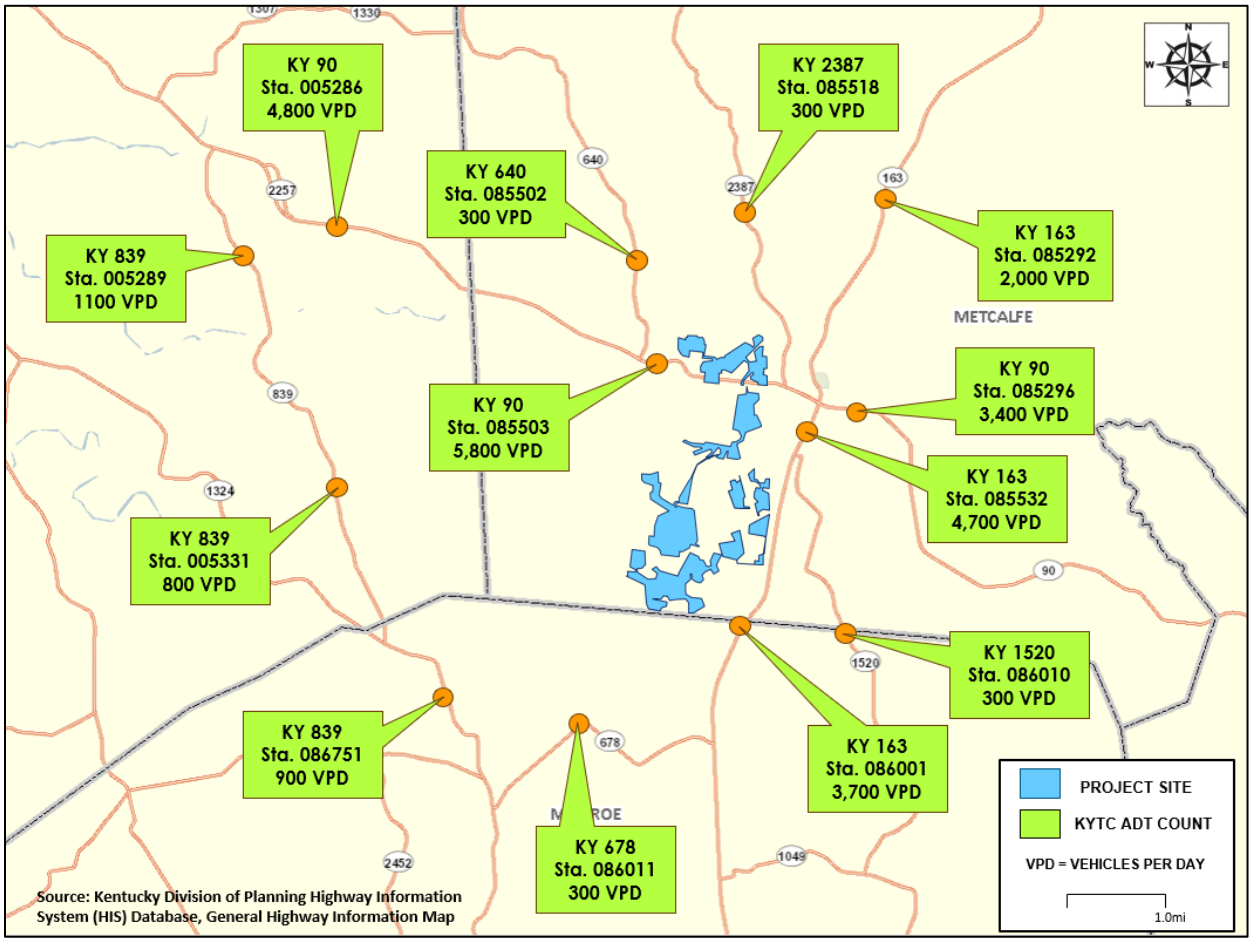


Figure 2: KYTC Count Station[2]

[2] https://maps.kytc.ky.gov/generalhighway

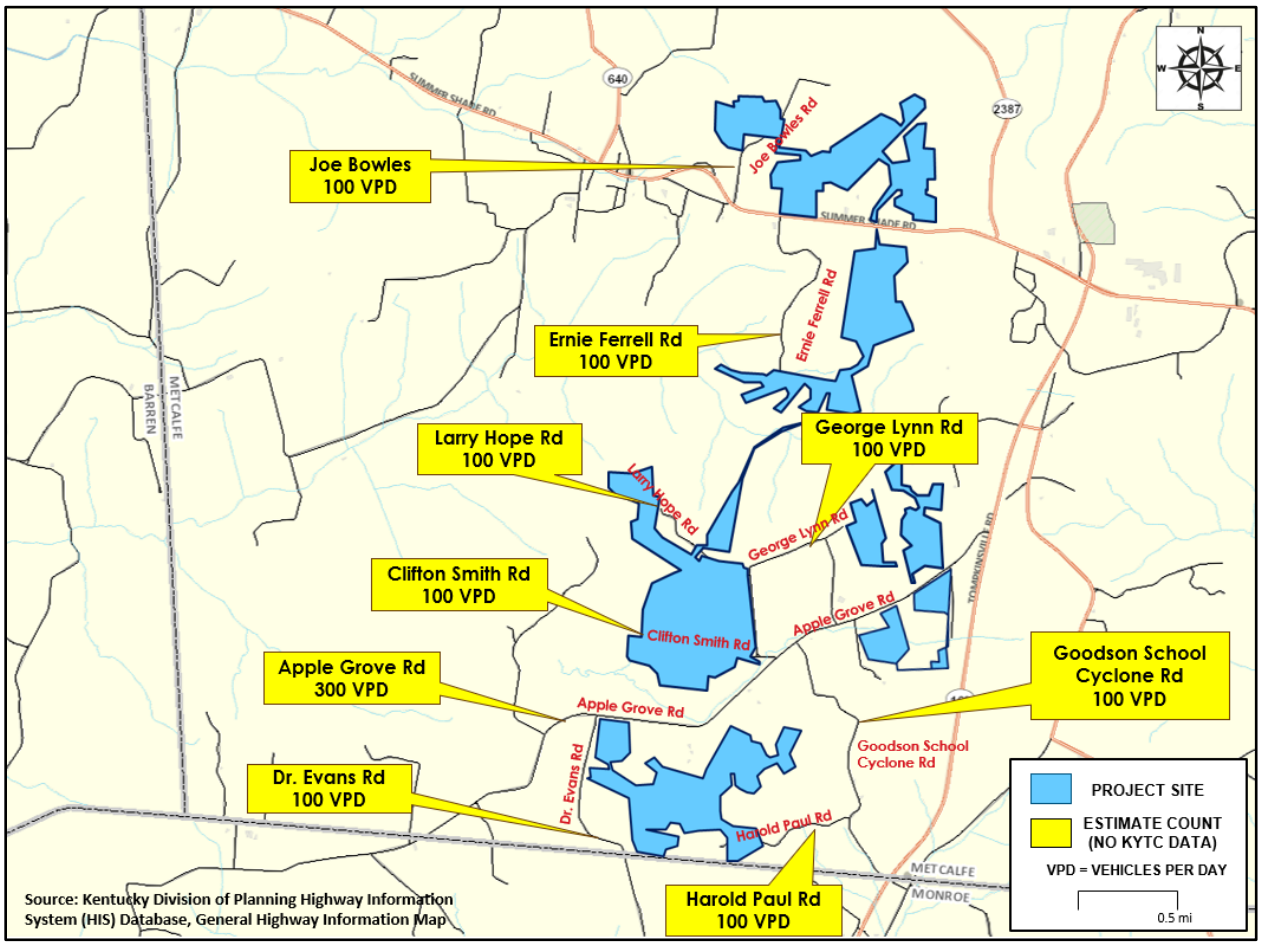


Figure 3: Estimated Daily Traffic (VPD) for Local Roads[2]

Figure 4 summarizes historical volumes from the KYTC traffic count database, showing daily traffic on KY 90 and KY 163 has generally increased slightly over the past 20 years.[3] All other routes within the study area for which historical counts are available show that traffic growth has been relatively flat over the past 20 years.

[3] https://datamart.kytc.ky.gov/EDSB_SOLUTIONS/CTS/

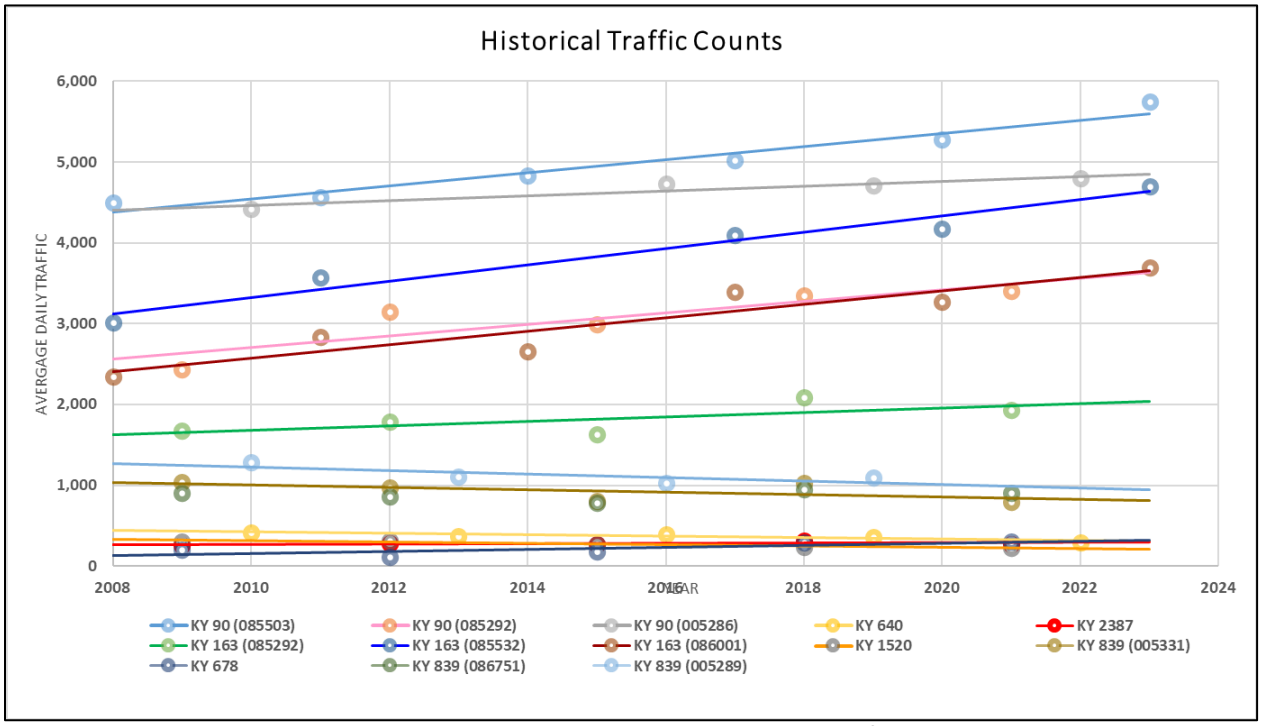


Figure 4: Historical Traffic Volumes[3]

The parcels for the proposed solar farm are located in southwestern Metcalfe County. Population estimates and projections for both Metcalf and Monroe County are included in **Figure 5** and **Figure 6**, respectively. Metcalfe County population estimates have increased slightly since 2010, but the general trend is expected to decrease through 2050. The anticipated population decrease represents a -0.24% annual decline between 2020 and 2050. Monroe County population estimates have increased slightly since 2010, and that general trend is expected through 2050. The anticipated population increase represents a 0.026% annual increase between 2020 and 2050. While the population of Monroe County has increased, the northern part of the county in the vicinity of the Project has not developed to the same extent. Therefore, based on trends from the historical volumes and flat development for both

southwestern Metcalfe County and northern Monroe County, a growth factor was not applied to the latest traffic count data to the construction year of 2026.

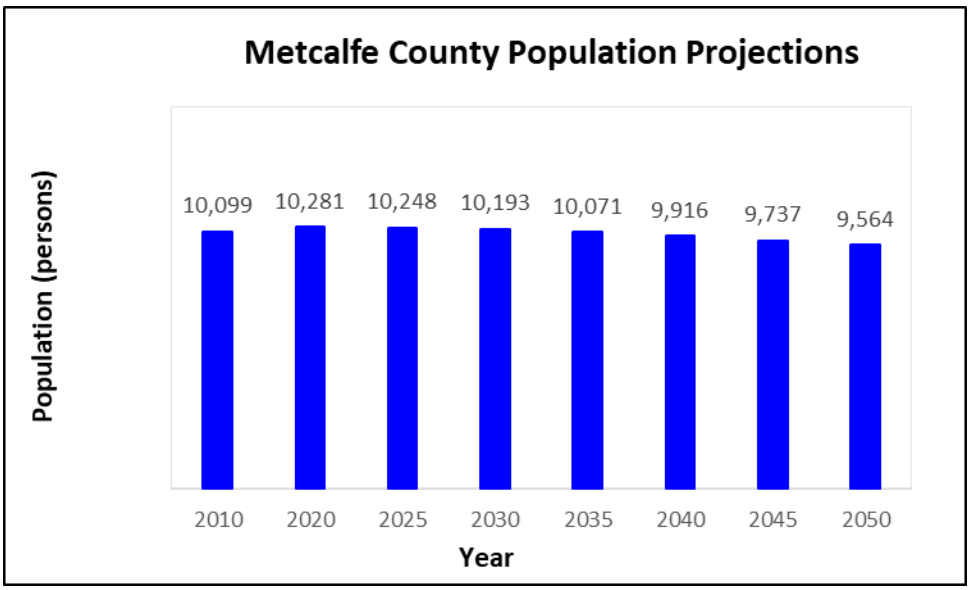


Figure 5: Metcalfe County Population Estimates & Projections
(Source: Kentucky State Data Center, August 2023)[4]

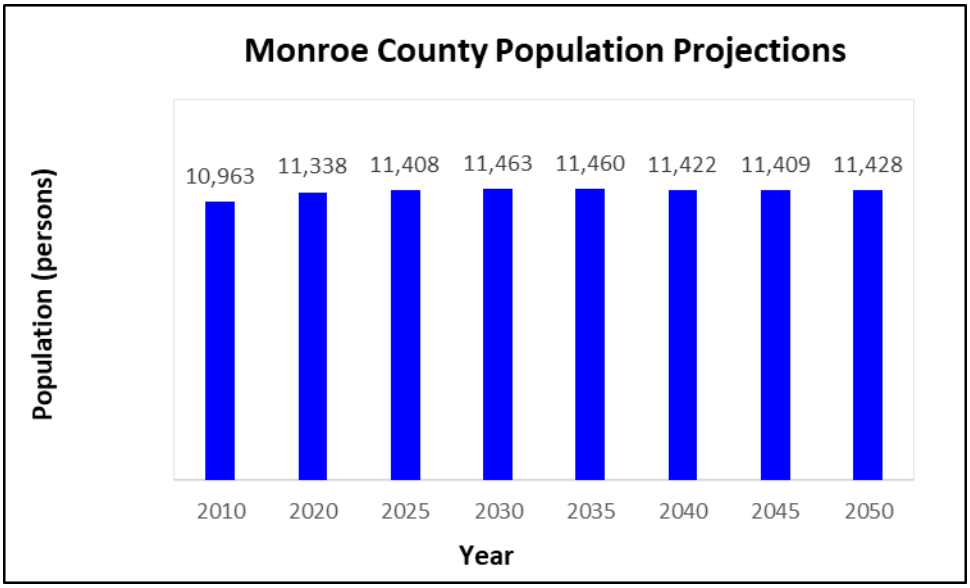


Figure 6: Monroe County Population Estimates & Projections
(Source: Kentucky State Data Center, August 2023)[4]

[4] http://ksdc.louisville.edu/data-downloads/estimates/

An evaluation was performed based on KYTC's AADT and the associated K factor (the proportion of AADT that occurs during the peak hour) for each count station. For county routes where the K factor was not available, 0.15 or 15% is assumed as K is generally higher in rural areas with low AADT. The data were used to estimate the design hourly volume (DHV), the 30th highest hourly traffic volume (in both directions) in the year in which data were collected, in vehicles per hour (VPH). For the purposes of this study, the design hourly volume is considered analogous to the peak hour volume for both directions of each two-way roadway.

The data were used to quantify the Level of Service (LOS) by roadway type and land use or context. LOS provides a measure of the quality of traffic flow provided by a roadway facility, expressed in terms of letter grades with LOS A representing the highest quality traffic flow and minimal delay, and LOS F representing poor traffic operations and significant delay. For rural areas, LOS C or better is generally considered to be acceptable. In urban areas, LOS D or better is generally considered acceptable**. Figure 7** provides an example of motorized vehicle LOS.

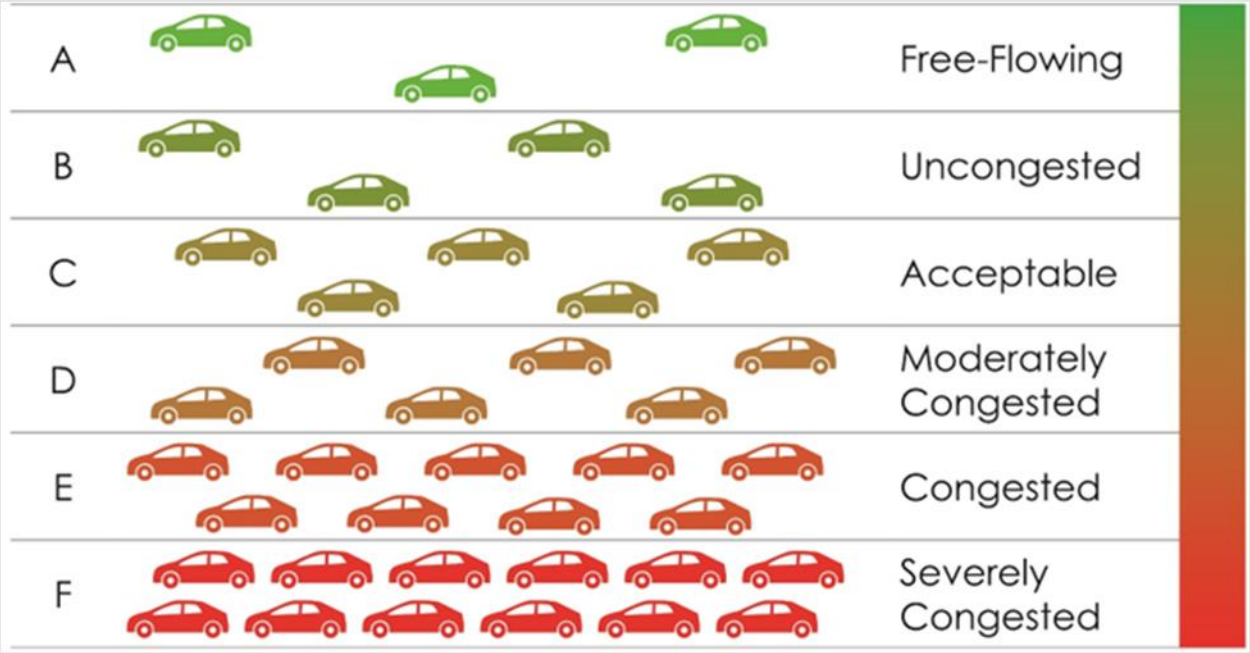


Figure 7: Examples of Motorized Vehicle LOS for Arterials

Motor Vehicle Highway Generalized Service Volume Tables (GSVT) were used to evaluate the roadways based on methods described in the *2023 Multimodal Quality/Level of Service (Q/LOS) Handbook*.[5] The handbook is intended to be used by engineers, planners, and decision-makers to evaluate roadway users' quality/level of service (Q/LOS) at generalized planning levels. The Generalized Service Volume Tables are the primary tools for conducting generalized planning and are based on the Highway Capacity Manual (HCM) Sixth Edition and roadway, traffic volumes, traffic control characteristics and multimodal data.[6]

For all two-lane roadways, the *Motor Vehicle Highway Generalized Service Volume Table* using Peak Hour Two-Way volumes for rural roadways was used for this evaluation and is shown in **Table 1**. Each GSVT provides generalized peak hour directional, peak hour two-way, and annual average daily traffic (AADT) maximum service volumes for a given LOS by roadway type and land use or context classification. Rural freeways and roadways are in areas with a population less than 5,000 and not immediately adjacent to core urbanized, urbanized, or transitioning areas. "Rural" refers to sparsely developed lands that may include agricultural land mixed with grassland, woodland, or wetlands. Based on the values in **Table 1**, a two-lane roadway with a two-way volume of less than 440 VPH would operate at LOS A, and a roadway with a two-way volume between 440 and 780 VPH would operate at LOS B.

Table 1: Generalized Service Volume Table using Peak Hour Two-Way Volume Thresholds for Rural Roadways

Roadway Type	Level of Service (LOS)			
	B	C	D	E
Two-Lane	440	780	1,330	2,710
Four-Lane	3,040	4,800	5,290	6,070

Source: 2023 Multimodal Quality/Level of Service Handbook, Appendix B

[5] fdot_qlos_handbook_v6-0_clean.pdf
[6] https://www.trb.org/Publications/Blurbs/175169.aspx

The results of the existing peak hour traffic analyses for two-lane rural roadways are summarized in **Table 2**. The results indicate that all existing roadways in the vicinity of the Project currently operate at acceptable LOS during the peak hour.

Table 2: Existing Peak Hour Two-Lane Highway Analysis

Route / Roadway Name	Segment Description	AADT (VPD)	K Factor	Peak Hr. (VPH)	LOS
KY 90 (Summer Shade Rd.)	from MP 17.987 to MP 21.949 (Barren Co.)	4,800	9.7%	466	B
	from MP 0.000 to MP 4.769	5,800	9.4%	545	B
	from MP 4.769 to MP 5.554	3,400	9.9%	337	A
KY 640	from MP 0.000 to MP 1.617	300	16.5%	50	A
KY 2387	from MP 0.000 to MP 5.338	300	12.1%	36	A
KY 163	from MP 0.000 to MP 2.189	3,700	9.3%	344	A
	from MP 2.189 to MP 2.907	4,700	9.7%	456	B
	from MP 2.907 to MP 8.815	2,000	8.5%	170	A
KY 1520	from MP 0.000 to MP 2.633	300	18.4%	55	A
KY 678	from MP 18.767 to MP 22.605 (Monroe Co.)	300	11%	33	A
KY 839	from MP 0.000 to MP 3.714 (Barren Co.)	800	11.9%	95	A
	from MP 3.714 to MP 6.790 (Barren Co.)	1,100	10%	110	A
	from MP 7.214 to MP 9.819 (Monroe Co.)	900	10.6%	95	A
Joe Bowles Rd.	cul-de-sac from KY 90	100	15%	15	A
Ernie Ferrell Rd.	cul-de-sac from KY 90	100	15%	15	A
Larry Hope Rd.	cul-de-sac from George Lynn Rd.	100	15%	15	A
George Lynn Rd.	cul-de-sac from Clifton Smith Rd.	100	15%	15	A
Clifton Smith Rd.	cul-de-sac from Apple Grove Rd.	100	15%	15	A
Apple Grove Rd.	from KY 163 to KY 839 (5.5 miles)	300	15%	45	A
Goodson Sch. Cyclone Rd.	from Apple Grove Rd. to KY 163 (1.3 miles)	100	15%	15	A
Dr. Evans Rd.	from Apple Grove Rd. to KY 678 (2.5 miles)	100	15%	15	A
Harold Paul Rd.	cul-de-sac from Goodson Sch. Cyclone Rd.	100	15%	15	A

Specifically, the results indicate both stations of KY 90 (Summer Shade Rd.) west of KY 163 have peak hour volumes greater than 440 (the threshold for LOS B) and, therefore, operate at a LOS B. The section of KY 163 between KY 90 and KY 1520 also has peak hour volumes greater than 440 and, therefore, operates at LOS B. All other existing two-lane roadways in the vicinity of the Project have peak hour volumes below 440 vehicles per hour and, therefore, operate at LOS A.

3.0 PROJECT TRIP GENERATION

3.1 CONSTRUCTION

The trip generation analysis for the construction of the Project would generally be based on the number of workers and the associated construction and delivery truck trips expected during the construction of the Project. Construction workers will consist of laborers, equipment operators, electricians, supervisory personnel, support personnel, and construction management personnel. It is envisioned workers will arrive/depart from passenger vehicles and trucks daily during the AM (6:00 – 9:00 AM) and PM (3:00 – 7:00 PM) peak periods. Equipment deliveries will occur on trailers, flatbeds, or other large vehicles at various times during the day. While specific details concerning construction duration and intensity are not currently known, this study has employed a sensitivity analysis to demonstrate likely construction traffic levels will not have a significant, adverse effect on peak hour traffic operations. For this analysis, all existing peak hour traffic volumes on roadways were increased by five percent which is greater than would be anticipated for the actual construction of the Project.

3.1.1 CONSTRUCTION ANALYSIS

The 2026 construction year analysis assumed no changes to the existing roadway network as discussed above. The results of the construction year peak hour two-lane analysis are summarized in **Table 3**. The results indicate that all analyzed roadway segments are anticipated to continue to operate at an acceptable LOS during construction for the peak hour as there are no changes from the analysis for the existing scenario.

Table 3: Construction Year (2026) Peak Two-Lane Highway Analysis

Route / Roadway Name	Segment Description	AADT (VPD)	K Factor	Peak Hr. (VPH)	LOS
KY 90 (Summer Shade Rd.)	from MP 17.987 to MP 21.949 (Barren Co.)	5,040	9.7%	489	B
	from MP 0.000 to MP 4.769	6,090	9.4%	572	B
	from MP 4.769 to MP 5.554	3,570	9.9%	353	A
KY 640	from MP 0.000 to MP 1.617	315	16.5%	52	A
KY 2387	from MP 0.000 to MP 5.338	315	12.1%	38	A
KY 163	from MP 0.000 to MP 2.189	3,885	9.3%	361	A
	from MP 2.189 to MP 2.907	4,935	9.7%	479	B
	from MP 2.907 to MP 8.815	2,100	8.5%	179	A
KY 1520	from MP 0.000 to MP 2.633	315	18.4%	58	A
KY 678	from MP 18.767 to MP 22.605 (Monroe Co.)	315	11%	35	A
KY 839	from MP 0.000 to MP 3.714 (Barren Co.)	840	11.9%	100	A
	from MP 3.714 to MP 6.790 (Barren Co.)	1,155	10%	116	A
	from MP 7.214 to MP 9.819 (Monroe Co.)	945	10.6%	100	A
Joe Bowles Rd.	cul-de-sac from KY 90	105	15%	16	A
Ernie Ferrell Rd.	cul-de-sac from KY 90	105	15%	16	A
Larry Hope Rd.	cul-de-sac from George Lynn Rd.	105	15%	16	A
George Lynn Rd.	cul-de-sac from Clifton Smith Rd.	105	15%	16	A
Clifton Smith Rd.	cul-de-sac from Apple Grove Rd.	105	15%	16	A
Apple Grove Rd.	from KY 163 to KY 839 (5.5 miles)	315	15%	47	A
Goodson Sch. Cyclone Rd.	from Apple Grove Rd. to KY 163 (1.3 miles)	105	15%	16	A
Dr. Evans Rd.	from Apple Grove Rd. to KY 678 (2.5 miles)	105	15%	16	A
Harold Paul Rd.	cul-de-sac from Goodson Sch. Cyclone Rd.	105	15%	16	A

3.1.2 TRUCK WEIGHT LIMITS

Kentucky Revised Statute (KRS) 189.222 requires weight limits on the state-maintained highway system. KY 90 and KY 163 are classified as a AAA highway so a truck, semitrailer, truck / trailer unit (including load) can haul a gross weight up to 80,000 lbs. KY 640 and KY 839 are classified as AA Highways indicating trucks can haul up to 62,000 lbs. KY 1520 and KY 2387 are classified as A Highways indicating

trucks can haul a gross weight up to 44,000 lbs. The gross truck weight limit for all other local roads is up to 36,000 lbs.

All trucks must conform to the posted bridge weight limit on any bridge on its route to the Project. The bridge over Glover Creek on KY 90 (milepoint 1.13) approximately 1.2 mile west of the intersection with KY 640 has a posted weight limit of 44,000 lbs. No other bridges with posted weight limits were identified on routes in the immediate vicinity of the study area.

3.2 OPERATION

Once operational, the facility will be managed and monitored by a small number of employees. The facility will have up to three full-time employees on site for 40 hours per week for site inspections and repair. Operations workers are expected to commute to and from the Project site individually during the peak AM and PM hours. Work can also be conducted at night, but this is anticipated to be minimal. This additional volume of daily traffic is considered negligible, and the operational phase of the project will have no measurable impact on the traffic and/or transportation infrastructure.

4.0 CONCLUSION

As demonstrated in the traffic analysis, the construction period will not produce significant operational changes to existing roadways. All roadways within the Project area will continue to operate at an acceptable LOS (A or B) during peak construction traffic. Although no significant adverse traffic impacts are expected during Project construction or operation, using mitigation measures such as ridesharing between construction workers, using appropriate traffic controls, or allowing flexible working hours outside of peak hours could be implemented to minimize any potential for delays during the AM and PM peak hours.

Appendix A

HISTORICAL TRAFFIC COUNT DATA

Historical Traffic Volume Summary

Station Details:

Sta ID:	005286
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Barren
Route:	005-KY-0090 -000
Route Desc:	BURKESVILLE RD

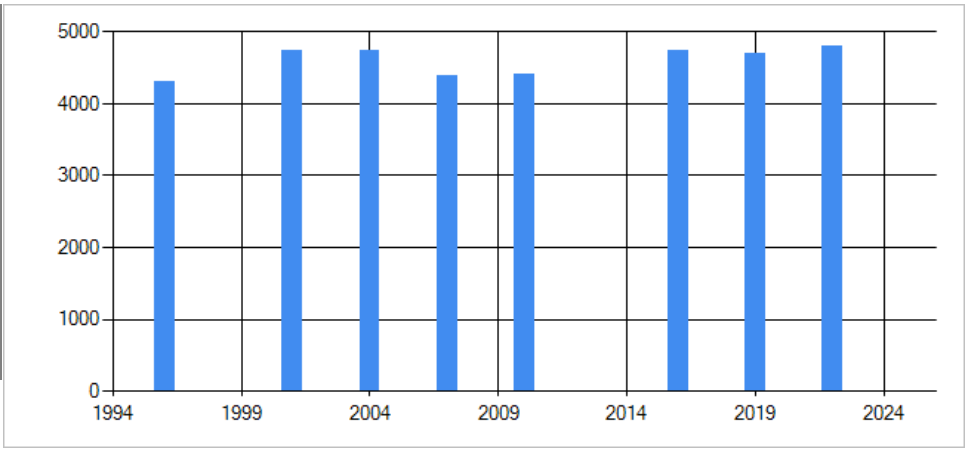
Begin MP:	17.9870
Begin Desc:	KY 839
End Mp:	21.9490
End Desc:	METCALFE COUTNY LINE
Impact Year:	
Year Added:	

Newest Count:

AADT:	4796
Year:	2022
% Single:	8.6180
% Combo:	6.26
K Factor:	9.70
D Factor:	58

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	
2024		2014		2004	4740
2023		2013		2003	
2022	4796	2012		2002	
2021		2011		2001	4750
2020		2010	4420	2000	
2019	4708	2009		1999	
2018		2008		1998	
2017		2007	4400	1997	
2016	4735	2006		1996	4310



Historical Traffic Volume Summary

Station Details:

Sta ID:	085503
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0090 -000
Route Desc:	SUMMER SHADE RD

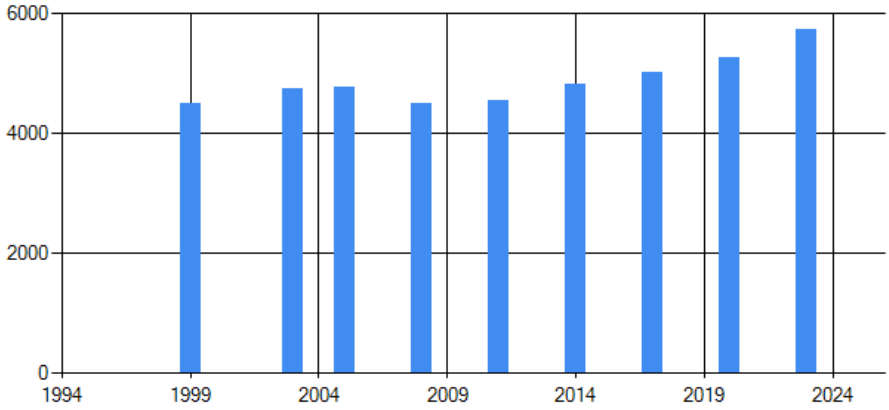
Begin MP:	0
Begin Desc:	BARREN COUNTY LINE
End Mp:	4.7690
End Desc:	KY 163
Impact Year:	
Year Added:	

Newest Count:

AADT:	5743
Year:	2023
% Single:	8.6180
% Combo:	6.26
K Factor:	9.40
D Factor:	56

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	4770
2024		2014	4832	2004	
2023	5743	2013		2003	4760
2022		2012		2002	
2021		2011	4560	2001	
2020	5276	2010		2000	
2019		2009		1999	4490
2018		2008	4500	1998	
2017	5025	2007		1997	
2016		2006		1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	085296
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0090 -000
Route Desc:	SUMMER SHADE RD

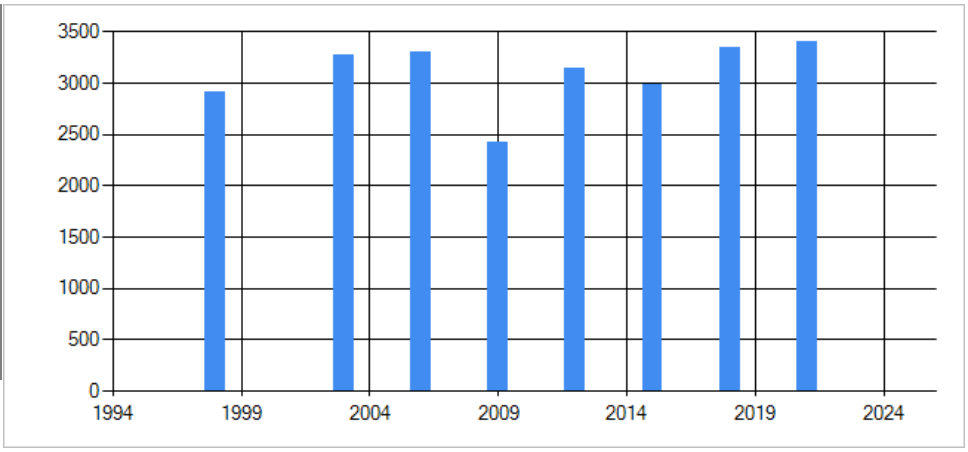
Begin MP:	4.7690
Begin Desc:	KY 163
End Mp:	5.5540
End Desc:	LONE STAR RIDGE ROAD
Impact Year:	
Year Added:	

Newest Count:

AADT:	3400
Year:	2021
% Single:	8.6180
% Combo:	6.26
K Factor:	9.90
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	2992	2005	
2024		2014		2004	
2023		2013		2003	3280
2022		2012	3150	2002	
2021	3400	2011		2001	
2020		2010		2000	
2019		2009	2430	1999	
2018	3351	2008		1998	2920
2017		2007		1997	
2016		2006	3310	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	085502
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0640 -000
Route Desc:	RANDOLPH SUMMER SHADE RD

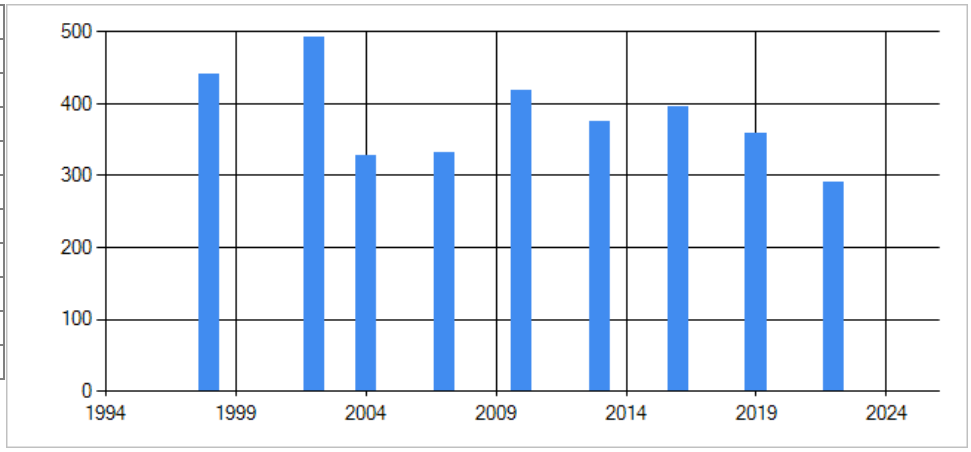
Begin MP:	0
Begin Desc:	KY 90 AT SUMMER SHADE
End Mp:	1.6170
End Desc:	PEDIGO LANE
Impact Year:	
Year Added:	

Newest Count:

AADT:	291
Year:	2022
% Single:	
% Combo:	
K Factor:	16.50
D Factor:	58

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	
2024		2014		2004	327
2023		2013	375	2003	
2022	291	2012		2002	493
2021		2011		2001	
2020		2010	419	2000	
2019	358	2009		1999	
2018		2008		1998	442
2017		2007	331	1997	
2016	395	2006		1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	085518
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-2387 -000
Route Desc:	MOUNT MORIAH RD+RANDOLPH GOODLUCK RD

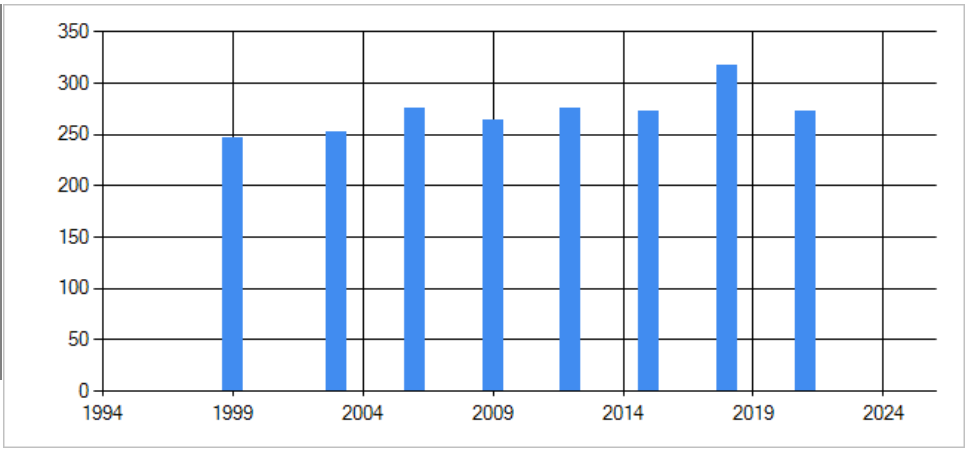
Begin MP:	0
Begin Desc:	KY 90
End Mp:	5.3380
End Desc:	WILBUR GLASS ROAD
Impact Year:	
Year Added:	

Newest Count:

AADT:	272
Year:	2021
% Single:	
% Combo:	
K Factor:	12.10
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	272	2005	
2024		2014		2004	
2023		2013		2003	252
2022		2012	276	2002	
2021	272	2011		2001	
2020		2010		2000	
2019		2009	264	1999	247
2018	317	2008		1998	
2017		2007		1997	
2016		2006	276	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	086001
Sta Type:	In Adjacent County
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0163 -000
Route Desc:	TOMPKINSVILLE RD

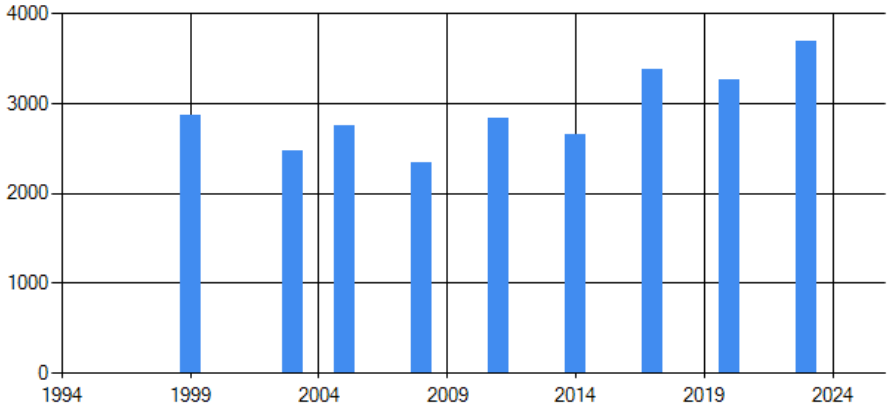
Begin MP:	0
Begin Desc:	MONROE COUNTY LINE
End Mp:	2.1890
End Desc:	KY 1520 ROY LEE HUMES ROAD
Impact Year:	
Year Added:	

Newest Count:

AADT:	3696
Year:	2023
% Single:	9.41
% Combo:	10.01
K Factor:	9.30
D Factor:	52

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	2750
2024		2014	2661	2004	
2023	3696	2013		2003	2480
2022		2012		2002	
2021		2011	2840	2001	
2020	3272	2010		2000	
2019		2009		1999	2870
2018		2008	2350	1998	
2017	3388	2007		1997	
2016		2006		1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	085532
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0163 -000
Route Desc:	TOMPKINSVILLE RD

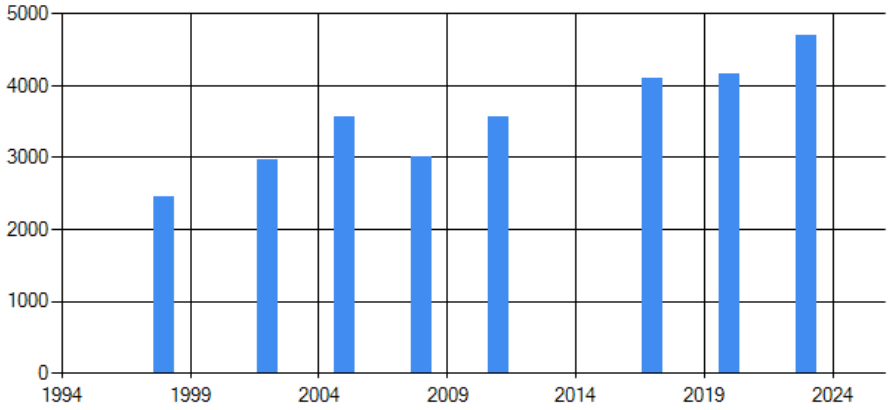
Begin MP:	2.1890
Begin Desc:	KY 1520/ROY LEE HUMES RD
End Mp:	2.9070
End Desc:	KY 90
Impact Year:	
Year Added:	

Newest Count:

AADT:	4696
Year:	2023
% Single:	9.41
% Combo:	10.01
K Factor:	9.70
D Factor:	56

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	3560
2024		2014		2004	
2023	4696	2013		2003	
2022		2012		2002	2970
2021		2011	3570	2001	
2020	4169	2010		2000	
2019		2009		1999	
2018		2008	3010	1998	2460
2017	4094	2007		1997	
2016		2006		1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	085292
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-0163 -000
Route Desc:	TOMPKINSVILLE RD

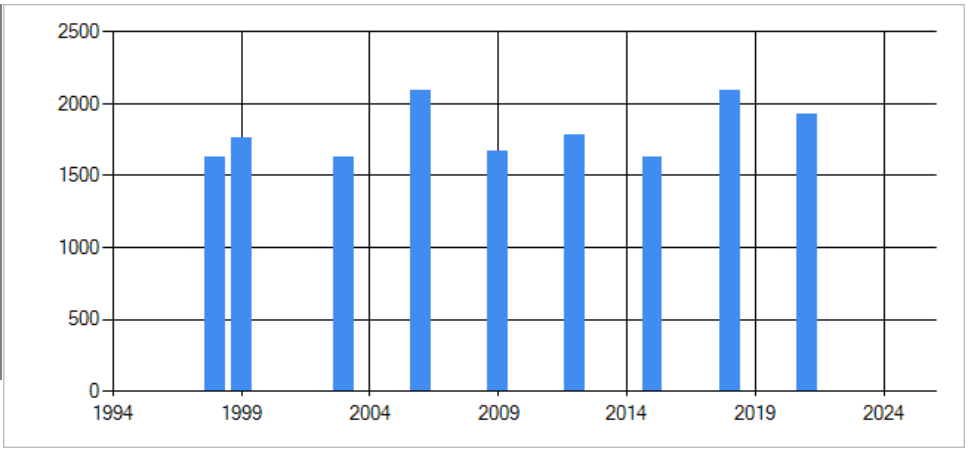
Begin MP:	2.9070
Begin Desc:	KY 90
End Mp:	8.8150
End Desc:	CEDAR FLATS-CURTIS ROAD
Impact Year:	
Year Added:	

Newest Count:

AADT:	1927
Year:	2021
% Single:	4.2340
% Combo:	4.6680
K Factor:	8.50
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	1633	2005	
2024		2014		2004	
2023		2013		2003	1630
2022		2012	1784	2002	
2021	1927	2011		2001	
2020		2010		2000	
2019		2009	1670	1999	1760
2018	2094	2008		1998	1630
2017		2007		1997	
2016		2006	2090	1996	



Historical Traffic Volume Summary
Station Details:

Sta ID:	086010
Sta Type:	In Adjacent County
Map:	MapIt
District:	3
County:	Metcalfe
Route:	085-KY-1520 -000
Route Desc:	OLD TRACE RD+OLD TOMPKINSVILLE RD+ROY LEE HUMES RD

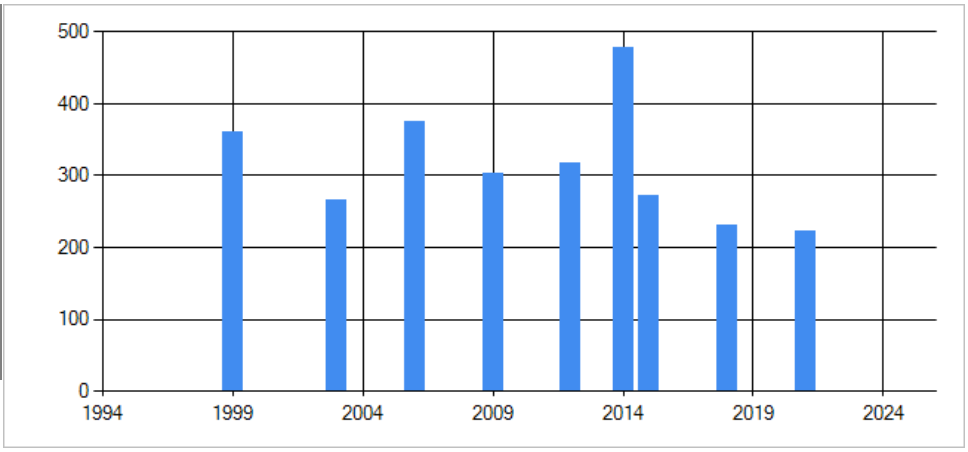
Begin MP:	0
Begin Desc:	MONROE COUNTY LINE
End Mp:	2.6330
End Desc:	KY 163
Impact Year:	
Year Added:	

Newest Count:

AADT:	223
Year:	2021
% Single:	
% Combo:	
K Factor:	18.40
D Factor:	58

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	272	2005	
2024		2014	478	2004	
2023		2013		2003	265
2022		2012	318	2002	
2021	223	2011		2001	
2020		2010		2000	
2019		2009	303	1999	361
2018	232	2008		1998	
2017		2007		1997	
2016		2006	376	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	086011
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Monroe
Route:	086-KY-0678 -000
Route Desc:	SULPHUR LICK RD+HOMER BARTLEY RD

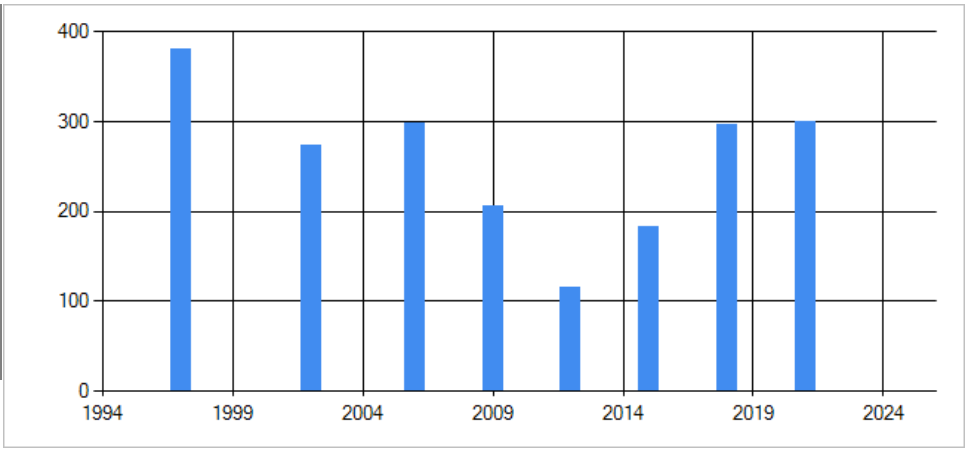
Begin MP:	18.7670
Begin Desc:	KY 839
End Mp:	22.6050
End Desc:	KY 163
Impact Year:	
Year Added:	

Newest Count:

AADT:	300
Year:	2021
% Single:	
% Combo:	
K Factor:	11
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	183	2005	
2024		2014		2004	
2023		2013		2003	
2022		2012	116	2002	274
2021	300	2011		2001	
2020		2010		2000	
2019		2009	206	1999	
2018	297	2008		1998	
2017		2007		1997	381
2016		2006	299	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	086751
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Monroe
Route:	086-KY-0839 -000
Route Desc:	SULPHUR LICK RD

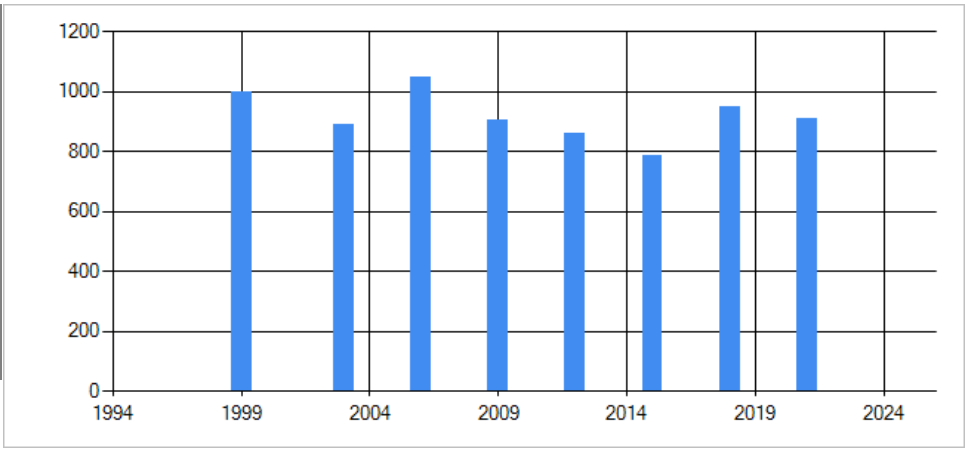
Begin MP:	7.2140
Begin Desc:	KY 678 DEPARTURE
End Mp:	9.8190
End Desc:	BARREN COUNTY LINE
Impact Year:	
Year Added:	

Newest Count:

AADT:	909
Year:	2021
% Single:	
% Combo:	
K Factor:	10.60
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	788	2005	
2024		2014		2004	
2023		2013		2003	891
2022		2012	863	2002	
2021	909	2011		2001	
2020		2010		2000	
2019		2009	904	1999	1000
2018	949	2008		1998	
2017		2007		1997	
2016		2006	1050	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	005331
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Barren
Route:	005-KY-0839 -000
Route Desc:	NOBOB RD

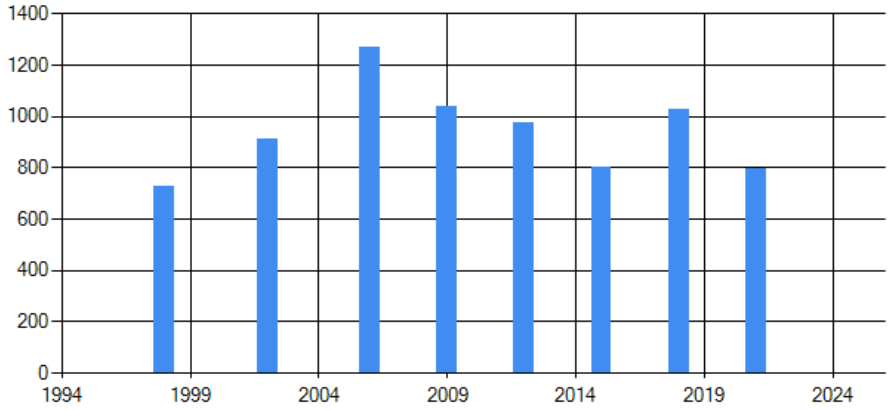
Begin MP:	0
Begin Desc:	MONROE COUNTY LINE
End Mp:	3.7140
End Desc:	GARRETT ROAD
Impact Year:	
Year Added:	

Newest Count:

AADT:	798
Year:	2021
% Single:	
% Combo:	
K Factor:	11.90
D Factor:	57

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015	804	2005	
2024		2014		2004	
2023		2013		2003	
2022		2012	976	2002	913
2021	798	2011		2001	
2020		2010		2000	
2019		2009	1040	1999	
2018	1026	2008		1998	728
2017		2007		1997	
2016		2006	1270	1996	



Historical Traffic Volume Summary

Station Details:

Sta ID:	005289
Sta Type:	Full Coverage
Map:	MapIt
District:	3
County:	Barren
Route:	005-KY-0839 -000
Route Desc:	NOBOB RD

Begin MP:	3.7140
Begin Desc:	GARRETT ROAD
End Mp:	6.79
End Desc:	KY 90
Impact Year:	
Year Added:	

Newest Count:

AADT:	1090
Year:	2019
% Single:	
% Combo:	
K Factor:	10
D Factor:	58

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2025		2015		2005	
2024		2014		2004	1330
2023		2013	1105	2003	
2022		2012		2002	
2021		2011		2001	1310
2020		2010	1280	2000	
2019	1090	2009		1999	
2018		2008		1998	
2017		2007	1350	1997	
2016	1023	2006		1996	1120