# Appendix A – Traffic Forecast Report

BOYD and GREENUP COUNTIES

Item No. 9-406.00

# Traffic Forecast Report

## Small Urban Area Study

KENTUCKY TRANSPORTATION CABINET

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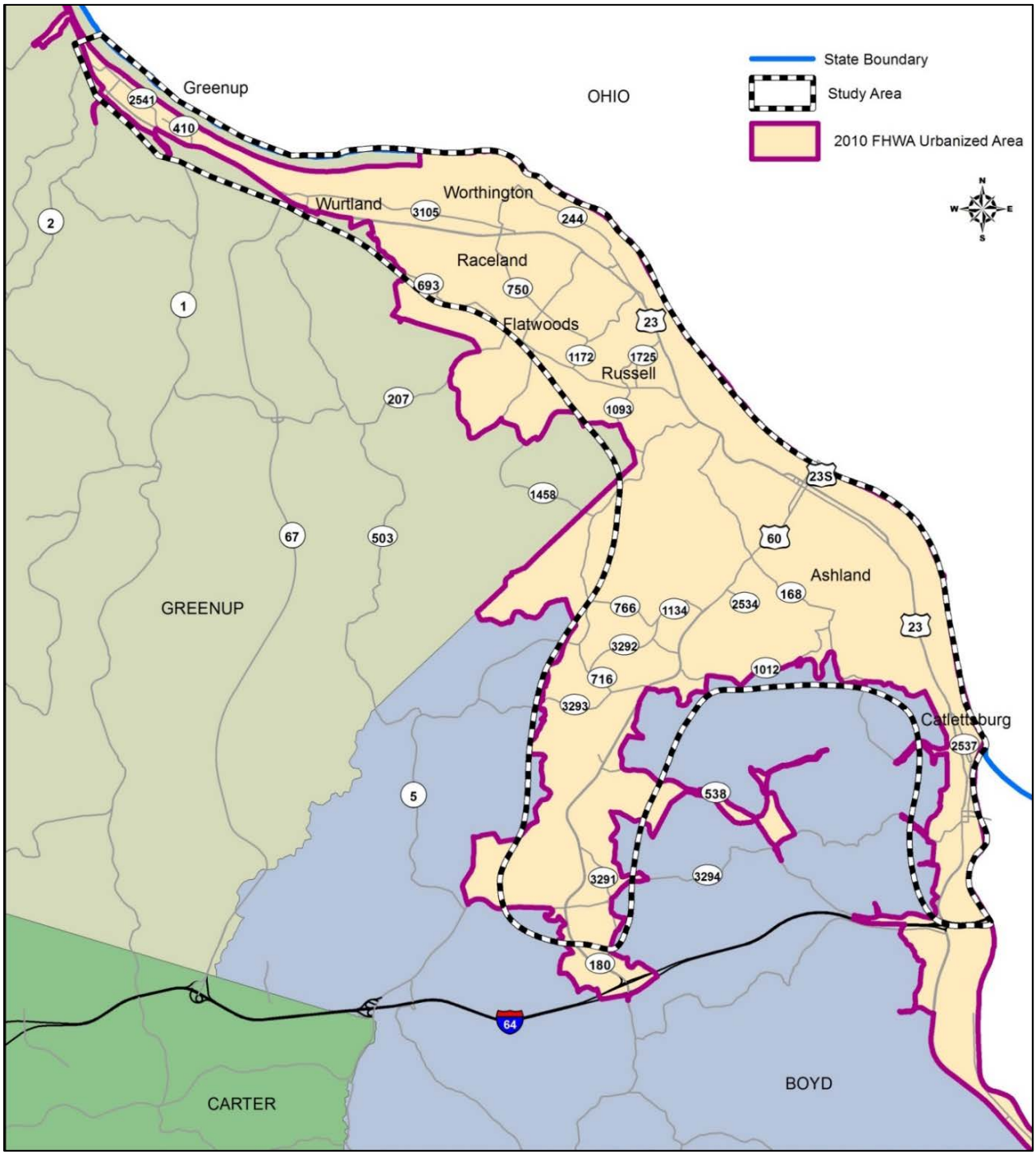

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## 1.0 PROJECT DESCRIPTION

The Kentucky Transportation Cabinet (KYTC) initiated a Small Urban Area (SUA) study for the urbanized areas of Boyd and Greenup Counties, Kentucky. The SUA study identified and examined transportation issues related to safety and congestion in the corresponding cities and surrounding developed areas. Boyd and Greenup counties are part of the Kentucky, Ohio and West Virginia Interstate Planning Commission (KYOVA), the Metropolitan Planning Organization (MPO) for the tristate area of West Virginia, Kentucky, and Ohio. Both counties are included in the Five County Area Development District (FIVCO).

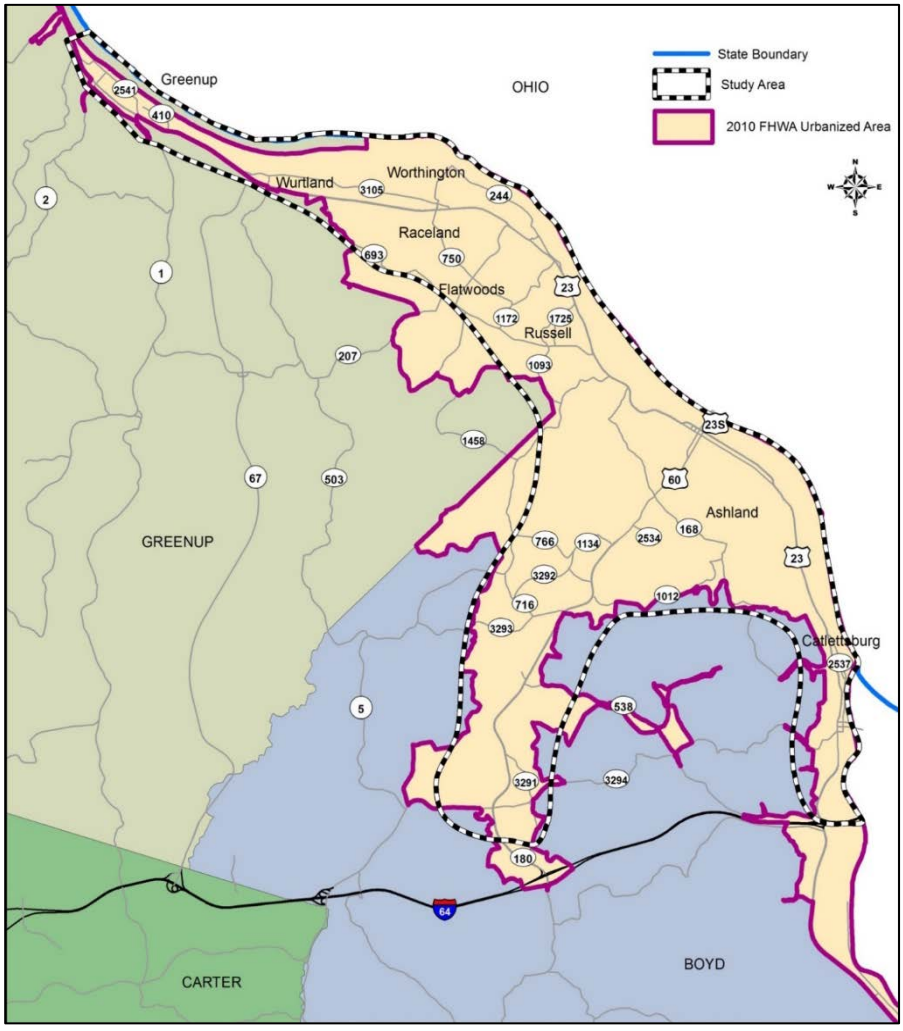



Figure 1: Study Area

The study area, illustrated in **Figure 1,** mostly encompasses urbanized areas in Boyd and Greenup counties. The study boundary begins at I-64 in Boyd County, passes through the city of Ashland including the US 60 corridor, and extends past the Industrial Parkway (KY 67) to the city of Greenup in Greenup County. The study area covers roughly 50 square miles. SUA study efforts were focused on approximately 90 miles of state-maintained routes functionally classified as collectors and arterials, and nearly 11 miles of local routes integral to traffic operations within study area boundaries. Study area routes are listed in **Table 1** and **Table 2**.

This report summarizes methodologies and analysis procedures associated with the development of traffic analyses to support the small urban area study.

Table 1: Boyd County Study Routes

| Boyd | Road Name | BMP | EMP |
|---|---|---|---|
| US 23 | WINCHESTER AVE | 10.600 | 20.938 |
| US 23S | 13TH ST | 0.000 | 0.483 |
| US 23S-1 | MARTIN LUTHER KING BLVD | 0.483 | 0.000 |
| US 23X | WINCHESTER AVE | 0.000 | 1.796 |
| US 60 | US ROUTE 60 | 3.100 | 12.409 |
| US 60 | US ROUTE 60 | 12.409 | 12.880 |
| US 60 | MARTIN LUTHER KING BLVD | 11.752 | 12.128 |
| US 60 | 10TH ST | 12.329 | 12.409 |
| KY 5 | KY 5 | 6.647 | 7.578 |
| KY 5 | BELLEFONTE PRINCESS RD | 9.700 | 10.781 |
| KY 168 | KY 168 | 0.000 | 0.670 |
| KY 168 | KY 168 | 2.574 | 8.179 |
| KY 180 | KY 180 | 1.900 | 2.514 |
| KY 538 | SHOPES CREEK | 0.000 | 1.000 |
| KY 538 | LAKE BONITA RD | 6.200 | 6.617 |
| KY 716 | KY 716 | 0.000 | 1.565 |
| KY 766 | BOB MCCULLOUGH DR | 0.000 | 2.044 |
| KY 1012 | BOY SCOUT RD | 0.000 | 3.036 |
| KY 1134 | ROBERTS DR | 0.000 | 0.897 |
| KY 2534 | BERRY ST | 0.000 | 0.178 |
| KY 2535 | 23RD ST UNDERPASS | 0.000 | 0.065 |
| KY 2536 | 23RD ST | 0.000 | 0.043 |
| KY 2537 | BROADWAY ST | 0.000 | 0.404 |
| KY 3291 | MIDLAND TRL | 0.300 | 2.135 |
| KY 3292 | ROBERTS DR | 0.000 | 1.174 |
| KY 3293 | LITTLE GARNER RD | 1.000 | 2.407 |
| KY 3294 | CANNONSBURG RD | 0.000 | 1.200 |
| KY 3295 | KY 3294 | 6.500 | 9.445 |
| KY 3533 | HALEE LN | 0.000 | 0.166 |
| CR-1047 | W CENTRAL AVE | 0.000 | 0.797 |
| CS-2349 | 6TH ST | 0.000 | 0.752 |
| CS-2350 | CENTRAL AVE | 0.000 | 2.441 |
| CS-2492 | LEXINGTON AVE | 0.000 | 1.281 |
| CS-2530 | CARTER AVE | 0.000 | 2.282 |
| CS-2615 | RIVER HILL DR | 0.000 | 0.368 |

Table 2: Greenup County Study Routes

| Greenup | Road Name | BMP | EMP |
|---|---|---|---|
| US 23 | US 23 | 0.000 | 12.100 |
| KY 1 | E K RD | 16.500 | 17.126 |
| KY 2 | KY HWY 2 | 17.000 | 17.463 |
| KY 5 | BELLEFONTE PRINCESS RD | 0.000 | 0.792 |
| KY 67 | INDUSTRIAL PKWY | 12.900 | 13.039 |
| KY 207 | BELLEFONTE PRINCESS RD | 15.590 | 17.645 |
| KY 244 | STEWART AVE | 0.000 | 3.654 |
| KY 410 | E MAIN ST | 0.000 | 0.681 |
| KY 503 | KY HWY 503 | 9.000 | 9.287 |
| KY 693 | DIEDERICK BLVD | 0.000 | 5.812 |
| KY 750 | LEXINGTON AVE | 0.000 | 3.713 |
| KY 1093 | COUNTRY CLUB DR | 0.000 | 1.954 |
| KY 1172 | RED DEVIL LN | 0.000 | 0.482 |
| KY 1725 | ASHLAND DR | 0.000 | 0.905 |
| KY 2541 | MAIN ST | 0.000 | 1.619 |
| KY 2543 | FERRY ST | 0.000 | 0.153 |
| KY 3105 | GREENUP AVE | 0.000 | 3.823 |
| CR-1948 | RIVERSIDE BLVD | 0.000 | 1.543 |
| CS-5009 | RIVERSIDE DR | 0.000 | 1.318 |
| CS-7006 | INDUSTRIAL RD | 0.000 | 0.107 |

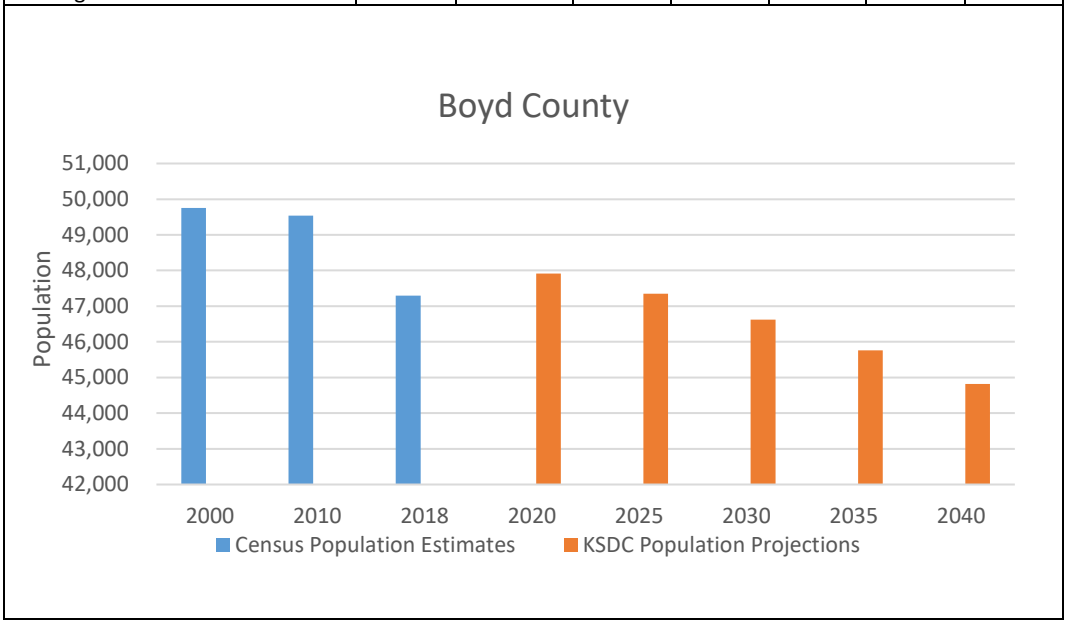
## 2.0 DATA COLLECTION EFFORTS

KYTC provided Qk4 with available existing traffic volumes for study area roadways, including truck percentages, K-factors, and peak hour directional distributions as available. Most traffic volumes were collected from 2014 to 2018. To grow this data to 2020 levels, historic traffic counts for each segment were used to determine a growth rate for that roadway section. These growth rates were then used to project the latest KYTC counts to 2020. Using this methodology, some counts showed negative growth. For all segments showing negative growth, a growth rate of zero was used for both cars and trucks. The results of this analysis showed historic annual growth rates ranging from negative to four percent on a couple of routes. According to the Kentucky State Data Center (KSDC)[1] most segments showed little to no growth, corresponding to overall population growth in Boyd and Greenup County (**Table 3** and **Table 4**). Population projections in both counties show continuous decline through 2040.

No additional traffic counts were collected. District Nine personnel were to provide intersection turning movement counts, if desired. No new turning movement counts have been provided to date.

Table 3: KSDC Boyd County Population Forecasts

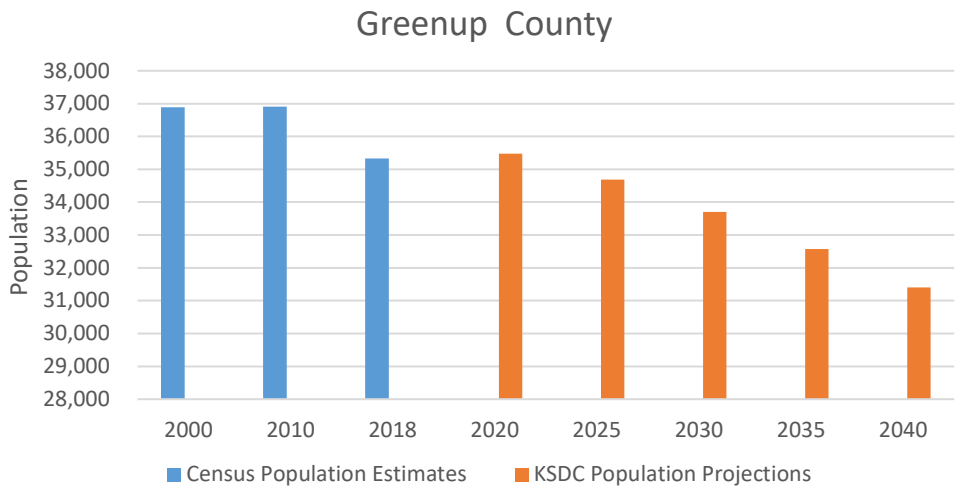
| Boyd County | Census 2010 | Estimate 2018 | Projections | | | | |
|---|---|---|---|---|---|---|---|
| | | | 2020 | 2025 | 2030 | 2035 | 2040 |
| Total Population | 49,542 | 47,292 | 47,912 | 47,353 | 46,626 | 45,763 | 44,820 |
| Population in Households | 47,204 | | 45,597 | 44,993 | 44,221 | 43,312 | 42,322 |
| Population in Group Quarters | 2,338 | | 2,315 | 2,360 | 2,405 | 2,451 | 2,498 |
| Total Households | 19,787 | 21,625 | 19,321 | 19,055 | 18,757 | 18,425 | 18,019 |
| Average Household Size | 2.39 | | 2.36 | 2.36 | 2.36 | 2.35 | 2.35 |




[1]The Kentucky State Data Center (KSDC) is the state's lead agency in the U.S. Census Bureau's State Data Center Program and Kentucky's official clearinghouse for Census data. The State Data Center program was initiated by the U.S. Census Bureau in 1978 in order to facilitate the dissemination of Census data to data users across the state and to provide a vehicle for user feedback to the Census Bureau. The Kentucky State Data Center is housed in the Department of Urban and Public Affairs in the College of Arts and Sciences at the University of Louisville.

Table 4: KSDC Greenup County Population Forecasts

| Greenup County | Census 2010 | Estimate 2018 | Projections | | | | |
|---|---|---|---|---|---|---|---|
| | | | 2020 | 2025 | 2030 | 2035 | 2040 |
| Total Population | 36,910 | 35,335 | 35,475 | 34,686 | 33,706 | 32,570 | 31,407 |
| Population in Households | 36,456 | | 35,017 | 34,224 | 33,240 | 32,100 | 30,933 |
| Population in Group Quarters | 454 | | 458 | 462 | 466 | 470 | 474 |
| Total Households | 14,671 | 16,342 | 14,654 | 14,571 | 14,399 | 14,098 | 13,759 |
| Average Household Size | 2.48 | | 2.39 | 2.35 | 2.31 | 2.28 | 2.25 |




## 3.0 KYOVA TRAVEL DEMAND MODEL

KYOVA's 2018 Travel Demand Model was built using a 2015 base year, model script version 9-4-2018, having no significant build changes since. Year 2050 forecasts were generated using KYOVA's Travel Demand Model with a 2050 horizon year. The year 2020 served as the "existing" baseline scenario. Future year No-Build and Build forecasts were determined. The KYOVA model runs in TransCAD7, which meshes best with 32-bit software packages and is a 24-hour model, with no time-of-day components. Truck trips are assigned based on origin-destination data.

### 3.1 Future Year Traffic

The KYOVA Travel Demand Model was used to determine future year growth for all study area roadway segments. Regional growth has been static, even trending downward based on some estimates. According to local officials, Braidy Industries is planning to open a major industrial facility west of the study area although the timeline is uncertain. Based on latest estimates showing approximately 650 jobs at the facility by 2021 with an additional 3,600 satellite jobs supporting its operations, an assumed 3000 additional jobs were included in KYOVA's Traffic Demand Model. Braidy Industries future plant is located outside the study boundary but is expected to impact regional traffic volumes and patterns.

In recent weeks, Braidy Industries future has become uncertain. However, 2050 traffic volumes based on predicted job creation included in the KYOVA Traffic Model are conservative and remain in use.

## 3.2 Socioeconomic Data

A traffic analysis zone (TAZ) is a geographical area delineated by state and/or local transportation officials for tabulating traffic-related data, especially journey-to-work statistics. A TAZ usually consists of one or more census blocks, block groups, or census tracts. According to FIVCO's Socioeconomic Report, the Boyd County portion of the study area contains 13 census tracts and 34 block groups (**Figure 2**): Greenup County 6 and 18, respectively.

Modest job growth is predicted in the study area between the years 2020 and 2040 as shown in **Figure 3** and **Figure 4** however, household numbers remain steady. Predicted traffic volume increases of 3000 jobs resulting from Braidy Industries are outside study boundaries in TAZ 2108 and included in the model. TAZ boundaries matched between the KYOVA and KY Statewide Models. No adjustments were made to TAZ boundaries. The shapes of the urbanized areas and tri-state jurisdiction present unique challenges in synthesizing procedures, planning products, and timelines.

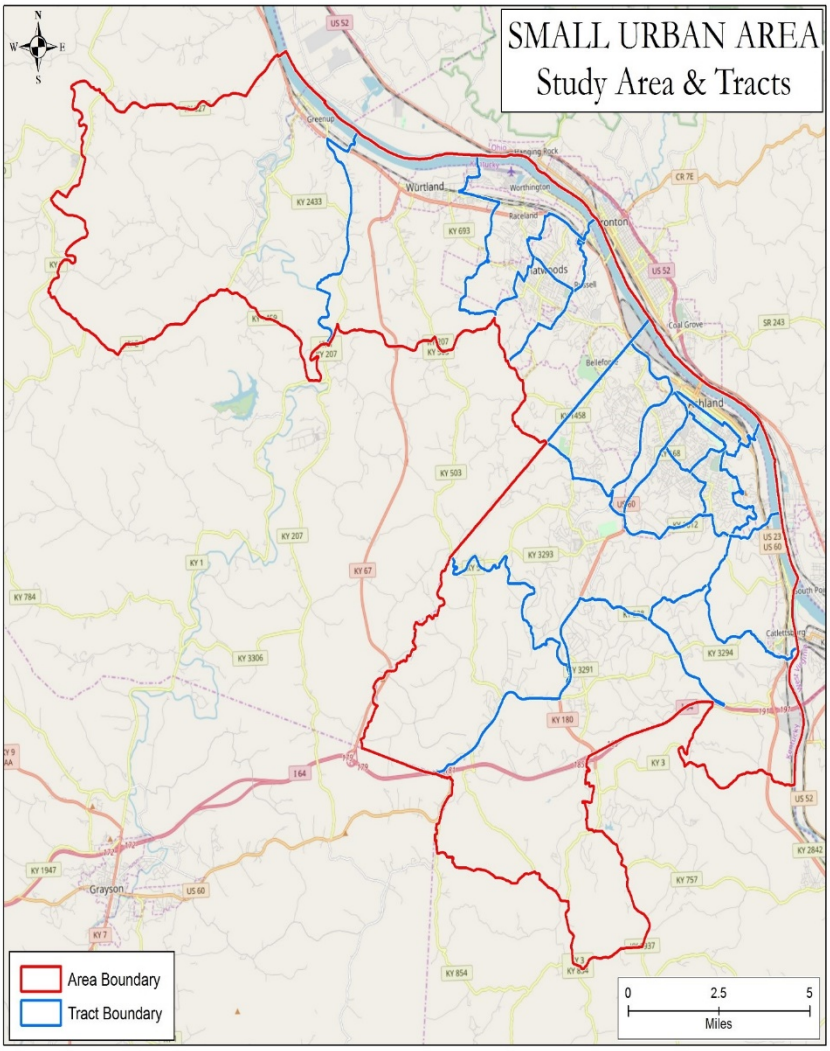



Figure 2: Study Area Census Tracts

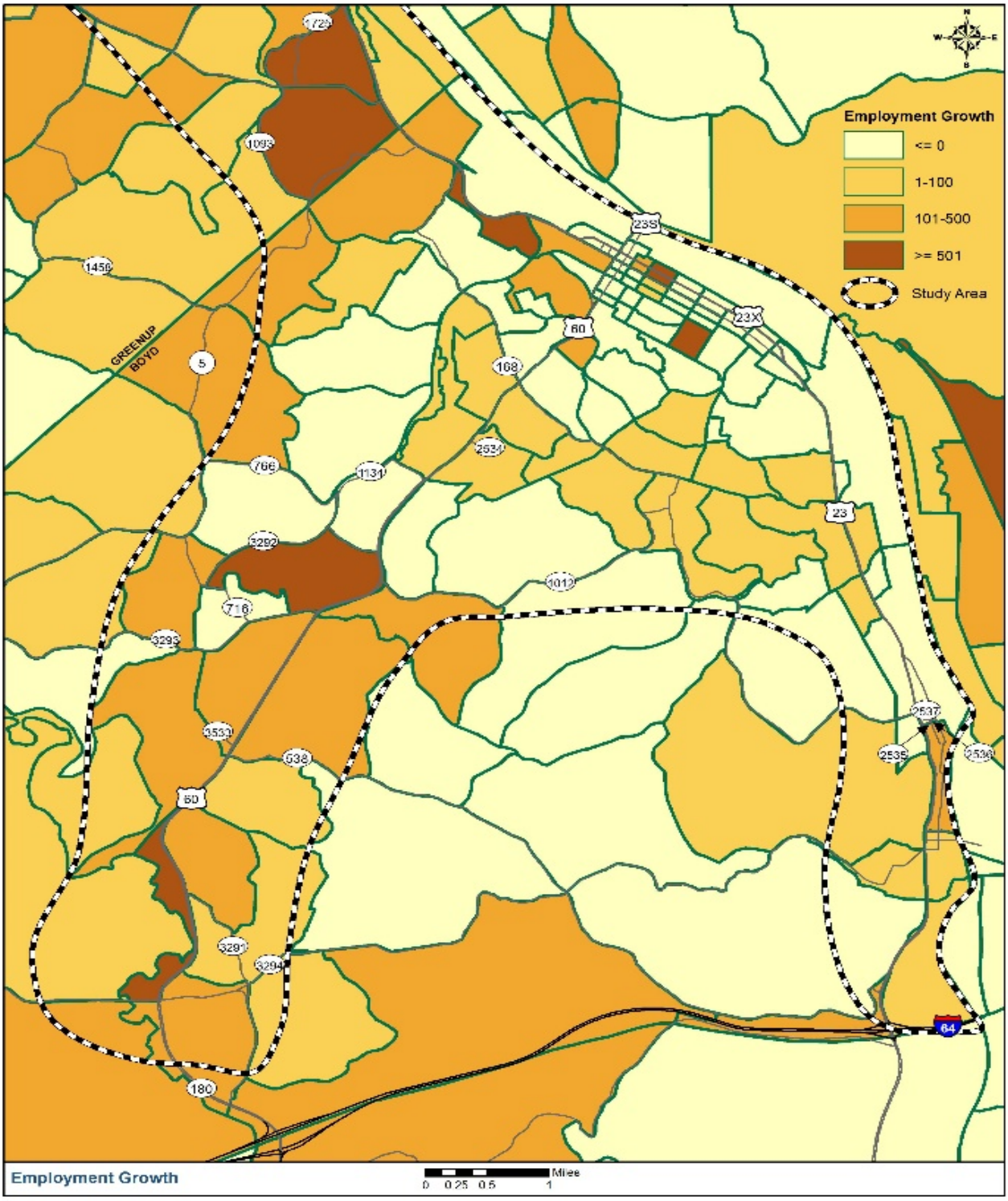



Figure 3: Boyd County Employment Growth

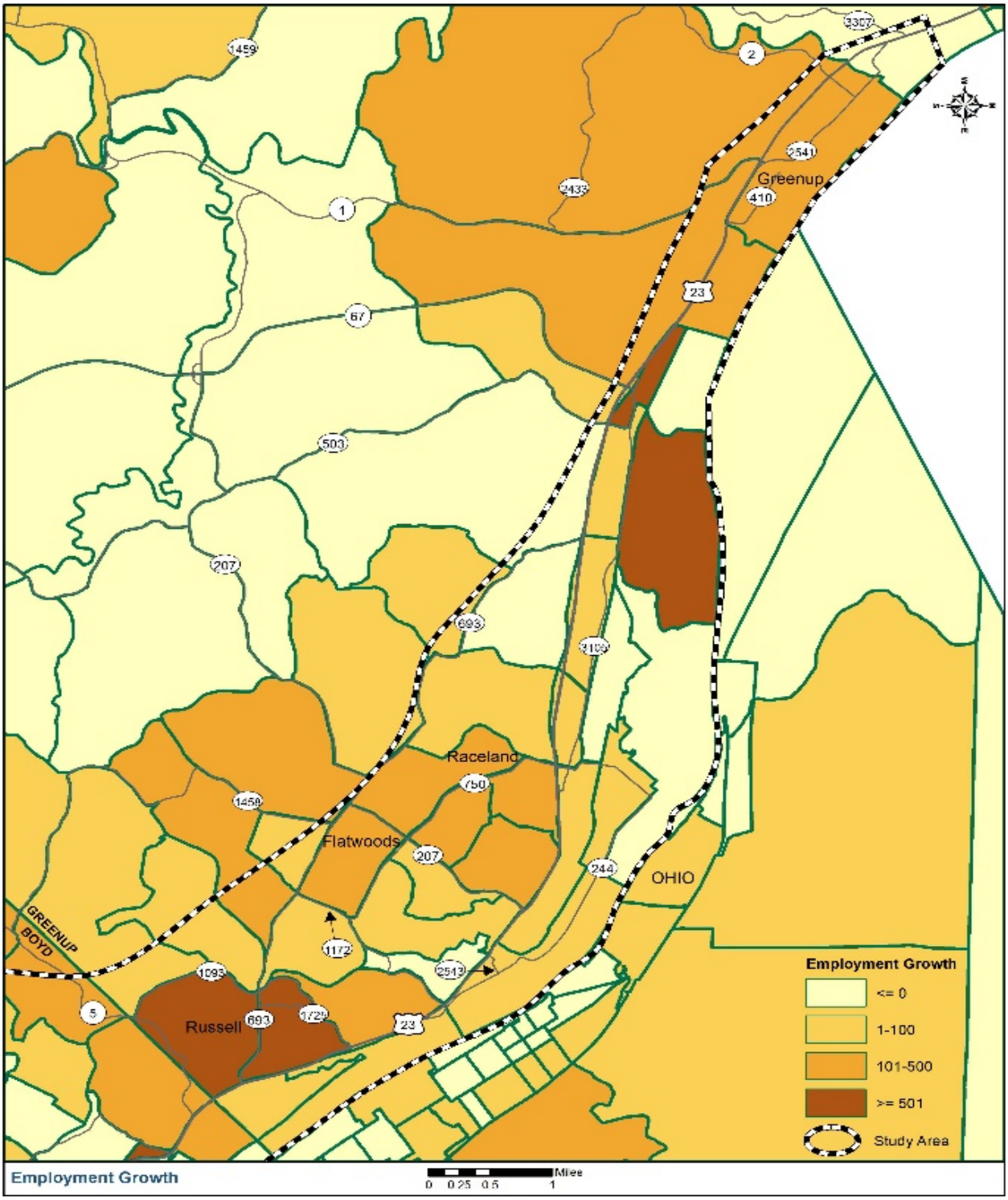



Figure 4: Greenup County Employment Growth

## 3.3 2050 Traffic Projections

Existing volumes were held steady for 2050 forecasts on segments having lower future year assignment compared to existing year volumes. On roadway segments showing positive growth, future year model assignments were adjusted using differences and ratios between existing volumes and model assignments. Adjusted future year model assignments were then averaged to determine future year average daily traffic (ADT) and design hourly vehicle (DHV) volumes for each segment. Study area 2020 and 2050 ADT and two operational metrics—Level of Service (LOS) and volume-to-capacity (v/c)—are listed in **Table 5** and **Table 6**.

Table 5: Boyd County 2020 and 2050 Traffic Operations

| Route | County | BMP | EMP | 2020 AADT | 2020 LOS | 2020 v/c | 2050 AADT | 2050 LOS | 2050 v/c |
|---|---|---|---|---|---|---|---|---|---|
| US 23 | Boyd | 9.161 | 20.938 | 9470-30970 | A-C | 0.16-0.47 | 12200-34600 | A-C | 0.20-0.52 |
| US 23S | Boyd | 0.000 | 0.483 | 10750 | A | 0.22 | 11600 | A | 0.24 |
| US 23S1 | Boyd | 0.000 | 0.483 | 14270 | C | 0.45 | 15400 | C | 0.48 |
| US 23X | Boyd | 0.000 | 1.796 | 7810-16030 | A-B | 0.12-0.28 | 9000-18100 | A-B | 0.14-0.32 |
| US 60 | Boyd | 3.150 | 12.880 | 2890-19550 | A-D | 0.06-0.33 | 1700-29500 | A-E | 0.06-0.47 |
| KY 5 | Boyd | 6.647 | 10.781 | 2380-6920 | B-E | 0.08-0.63 | 3800-9900 | B-E | 0.13-0.90 |
| KY 168 | Boyd | 0.000 | 8.179 | 4460-6640 | A-D | 0.18-0.24 | 1800-7400 | A-D | 0.09-0.24 |
| KY 180 | Boyd | 0.200 | 2.514 | 10360 | A | 0.14 | 14800 | A | 0.20 |
| KY 538 | Boyd | 0.000 | 6.631 | 1560-1890 | B-D | 0.07-0.09 | 2100-2400 | C-D | 0.10 |
| KY 716 | Boyd | 0.000 | 1.565 | 4680-5510 | C-D | 0.18-0.19 | 10300-27200 | D-F | 0.36-1.11 |
| KY 766 | Boyd | 0.000 | 2.044 | 1910-2580 | B-C | 0.08-0.09 | 2400-2700 | B-C | 0.10 |
| KY 1012 | Boyd | 0.000 | 3.036 | 1670-2340 | C | 0.07-0.09 | 3100-3700 | C | 0.11-0.15 |
| KY 1134 | Boyd | 0.000 | 0.897 | 2570 | C | 0.10 | 4200 | C | 0.17 |
| KY 2534 | Boyd | 0.000 | 0.178 | 3290 | B | 0.10 | 3300 | B | 0.17 |
| KY 2535 | Boyd | 0.000 | 0.065 | 930 | A | 0.03 | 1500 | A | 0.05 |
| KY 2536 | Boyd | 0.000 | 0.043 | 160 | A | 0.01 | 200 | A | 0.01 |
| KY 2537 | Boyd | 0.000 | 0.404 | 110-680 | A | 0.01-0.04 | 100-1000 | A | 0.01-0.05 |
| KY 3291 | Boyd | 0.000 | 2.135 | 2110 | C | 0.11 | 5400 | D | 0.3 |
| KY 3292 | Boyd | 0.000 | 1.223 | 2790 | C | 0.11 | 5700 | C | 0.23 |
| KY 3293 | Boyd | 0.986 | 2.407 | 720-1830 | A-B | 0.03-0.09 | 1400-8000 | B-D | 0.06-0.38 |
| KY 3294 | Boyd | 0.000 | 9.445 | 1310-2430 | A-B | 0.05-0.11 | 1300-4200 | A-C | 0.06-0.16 |
| KY 3533 | Boyd | 0.000 | 0.166 | 90 | C | 0.01 | 100 | C | 0.01 |
| CR 1047D | Boyd | 0.000 | 0.797 | No Volumes | | | No Volumes | | |
| CS 2349 | Boyd | 0.000 | 0.651 | 5380-7120 | C | 0.20 | 7600-8300 | C | 0.28-0.30 |
| CS 2350 | Boyd | 0.000 | 1.571 | 2720-9490 | A-D | 0.08-0.37 | 4400-12200 | A-E | 0.13-0.48 |
| CS 2492 | Boyd | 0.000 | 1.281 | 5950-9170 | C | 0.23-0.30 | 6000-14900 | C-E | 0.20-0.53 |
| CS 2530 | Boyd | 0.255 | 1.808 | No Volumes | | | No Volumes | | |
| CS 2615 | Boyd | 0.000 | 0.368 | 12300 | D | 0.43 | 15400 | E | 0.55 |

Table 6: Greenup County 2020 and 2050 Traffic Operations

| Route | County | BMP | EMP | 2020 AADT | 2020 LOS | 2020 v/c | 2050 AADT | 2050 LOS | 2050 v/c |
|---|---|---|---|---|---|---|---|---|---|
| US 23 | Greenup | 0.000 | 12.100 | 13690-30970 | A-C | 0.16-0.47 | 13300-34800 | A-C | 0.21-0.52 |
| KY 1 | Greenup | 16.573 | 17.134 | 2270 | C | 0.1 | 2900 | C | 0.13 |
| KY 2 | Greenup | 17.112 | 17.463 | 940-2070 | A-B | 0.04-0.08 | 900-2100 | A-B | 0.04-0.08 |
| KY 5 | Greenup | 0.000 | 0.792 | 3710 | C | 0.14 | 4100 | C | 0.15 |
| KY 67 | Greenup | 12.900 | 13.039 | 4780 | C | 0.16 | 6600 | C | 0.22 |
| KY 207 | Greenup | 15.590 | 17.645 | 5630-10660 | C-D | 0.19-0.44 | 5800-12400 | C-E | 0.21-0.51 |
| KY 244 | Greenup | 0.000 | 3.654 | 1810-3370 | B-C | 0.08-0.15 | 1800-4900 | C-D | 0.08-0.22 |
| KY 410 | Greenup | 0.000 | 0.681 | 430 | A | 0.02 | 400 | A | 0.02 |
| KY 503 | Greenup | 9.052 | 9.287 | 1080 | B | 0.04 | 1700 | B | 0.06 |
| KY 693 | Greenup | 0.000 | 5.812 | 940-15560 | B-E | 0.04-0.51 | 1600-20900 | B-E | 0.06-0.63 |
| KY 750 | Greenup | 0.000 | 3.713 | 1290-4470 | B-D | 0.05-0.25 | 1800-7000 | B-D | 0.07-0.32 |
| KY 1093 | Greenup | 0.000 | 1.954 | 4880-5730 | C | 0.19-0.20 | 7400-9000 | D | 0.30-0.36 |
| KY 1172 | Greenup | 0.000 | 0.482 | 3760 | C | 0.21 | 5500 | C | 0.31 |
| KY 1725 | Greenup | 0.000 | 0.905 | 3290-4230 | C | 0.12-0.18 | 3300-6400 | C-D | 0.12-0.27 |
| KY 2541 | Greenup | 0.000 | 1.619 | 740-2350 | A-B | 0.03-0.09 | 700-2400 | A-B | 0.03-0.09 |
| KY 2543 | Greenup | 0.000 | 0.183 | 3620 | C | 0.13 | 3900 | C | 0.15 |
| KY 3105 | Greenup | 0.000 | 3.568 | 740-1230 | A-B | 0.04-0.05 | 1400-2800 | B-C | 0.08-0.10 |
| CR 1948 | Greenup | 0.000 | 1.543 | 1440 | A | 0.06 | 500-1400 | A | 0.06 |
| CS 5009 | Greenup | 0.000 | 1.318 | 1510 | B | 0.05 | 3900 | C | 0.13 |
| CS 7006 | Greenup | 0.000 | 0.107 | 1440 | B | 0.06 | 1400 | B | 0.06 |

ADT and DHV volumes were calculated for two intersections. Without turning movement counts to provide existing traffic flows, forecasts were limited to approach ADT and DHV volumes, shown in **Figure 5** and **Figure 6**.


Figure 5: ADT/DHV at US 60/KY 168 Intersection


Figure 6: ADT/DHV at northern US 23/US 23X Intersection

## 4.0 BUILD TRAFFIC

Initial improvement concepts are summarized in **Table 7** on the following page and shown on **Figure 7** (page 12). Most recommended improvement concepts were smaller in scale or focused on improving safety leading to minor impacts on routine traffic operations. A planning effort to examine the potential effects of a US 23X Winchester Avenue Road diet is expected to begin later in 2020. The KYOVA travel demand model was run, assuming the existing four-lane section from 13th to 18th Streets drops to two lanes. Changes in ADT and DHV versus the 2050 No-Build scenario are shown in **Figure 8** (page 13).

Table 7: Initial Improvement Concepts

| LONG-TERM | |
|---|---|
| **MAP ID** | **Description** |
| A | Construct a left turn lane on southbound US 60 |
| B | Intersection improvements at US 60/KY 168 Blackburn Avenue |
| C | Construct TWLTL on US 60 |
| D | Intersection realignment at US 23 Greenup Avenue/US 23X Winchester Avenue |
| E | Construct dedicated eastbound right turn lane on KY 5 |
| F | Construct multi-use path on south side of US 23 |
| G | Construct mini-roundabout at intersection of KY 716/KY 3293/ Summitt Drive |
| H | Signal improvements/add turn lane on Thompson Road/continuous green right turn lane on KY 693 |
| I | Install traffic signal on US 23 at Caroline Road |
| SHORT-TERM | |
| **MAP ID** | **Description** |
| J | Intersection improvements at US 60/KY 538 Shopes Creek Road |
| K | Intersection improvements at US 60/Summit Road (Boyd County Middle School) |
| L | Intersection improvements at US 60/Oakview Road (Tennis Center) |
| M | Intersection improvements at Lexington Avenue/US 60 (12th and 13th Streets) |
| N | Intersection improvements at KY 5 Bellefonte-Princess Road/KY 1093 Country Club Drive |
| O1 | Intersection improvements at KY 693 Diederick Blvd/KY 207 Greenbo Blvd |
| O2 | Intersection improvements at KY 693 Diederick Blvd/KY 207 Argillite Road |
| P | Intersection Improvements at KY 693 Bellefonte Road/KY 1725 St. Christopher Drive |
| Q | Intersection improvements at KY 693 Diederick Blvd./US 23 |
| R | Intersection improvements at KY 168 Hoods Creek Pike/US 23 |
| S | Pedestrian crosswalk improvements at US 23/15th and 16th Streets |
| LOCAL | |
| **MAP ID** | **Description** |
| T | Signal and intersection improvements on KY 693 at Hobby Lobby/Kroger entrances |
| U | Reconstruct Caroline Road for school traffic |
| V | Add striping on Espy Lane to separate traffic lanes |
| W | Intersection improvements along Central Avenue |
| X | Improve access to Ashland Regional Airport |

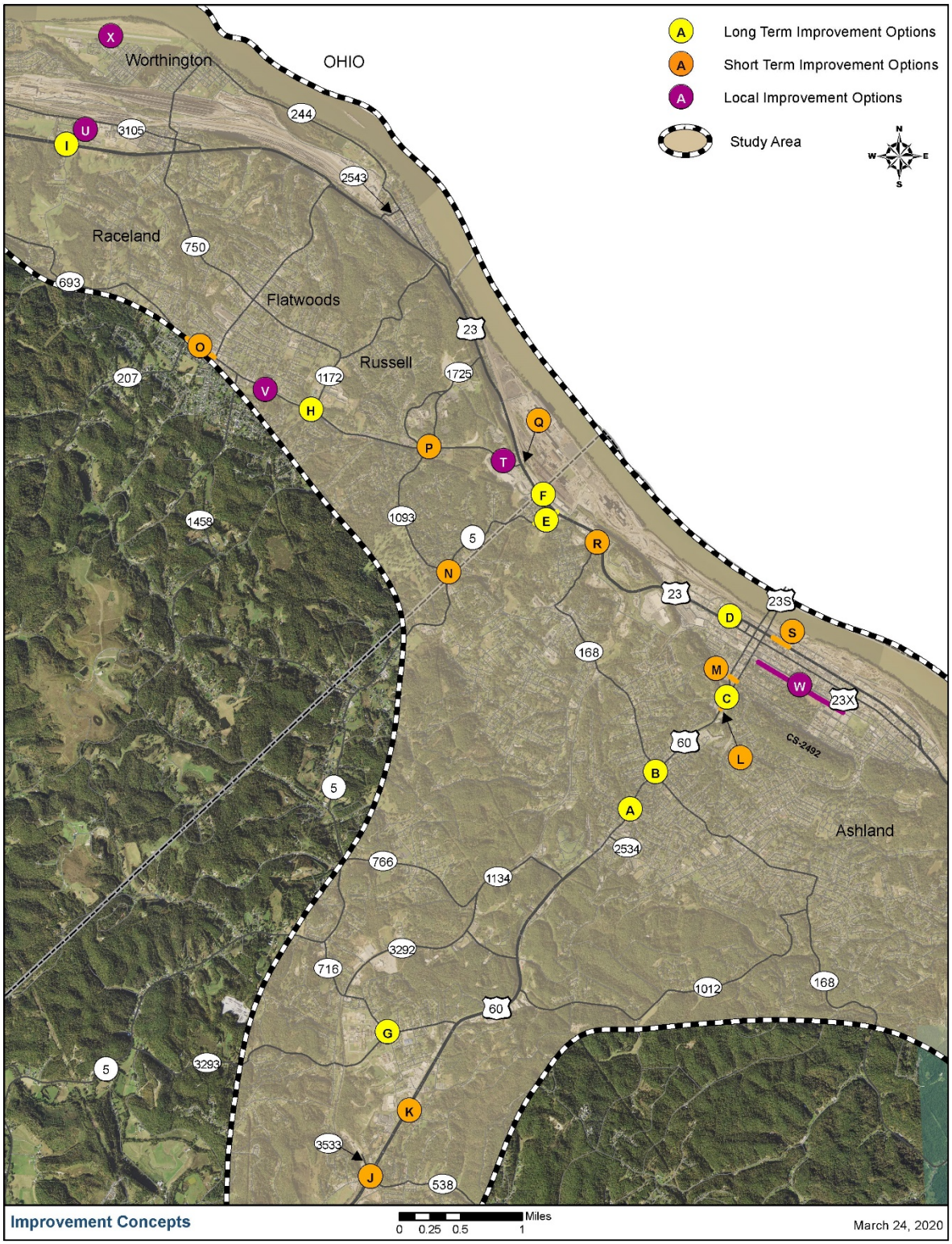



Figure 7: Improvement Concept Locations

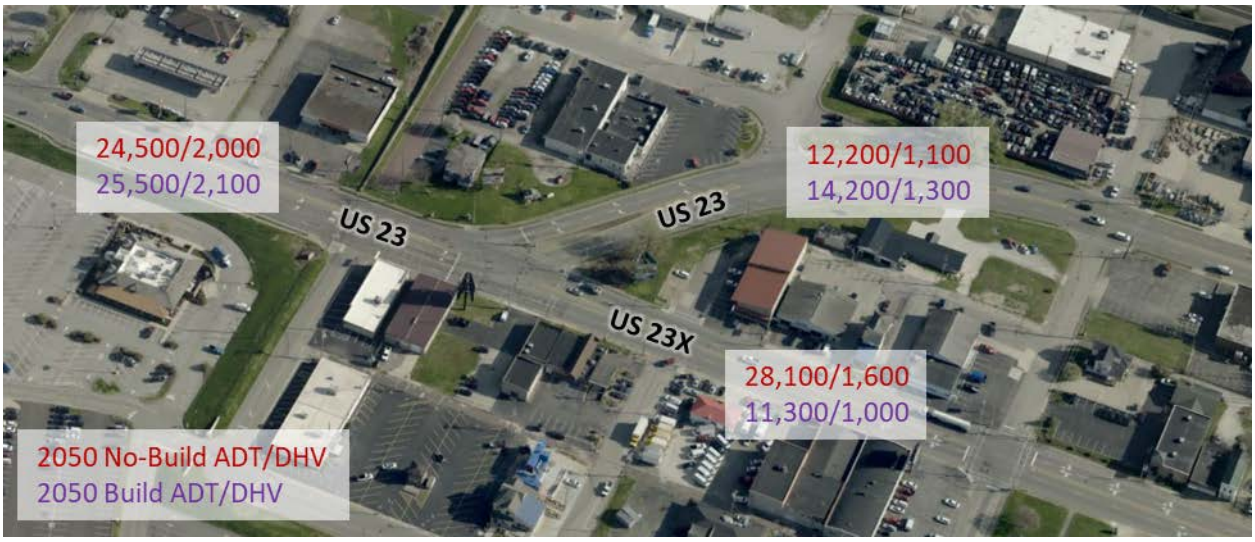



Figure 8: 2050 ADT/DHV at northern US 23/US 23X Intersection

Appendix A: Segment Level Traffic Forecasts

| County | Routes for Model and Capacity Analysis | Station ID | Count Year | Count Year AADT | Historical Growth Rate % | Years to 2020 | 2020 AADT | 2050 AADT |
|---|---|---|---|---|---|---|---|---|
| Boyd | US 23 | 010I01 | 2018 | 12717 | 0.00 | 2 | 12720 | 22600 |
| | | 010I01 | 2018 | 12717 | 0.00 | 2 | 12720 | 15000 |
| | | 010D23 | 2018 | 18063 | 0.00 | 2 | 18070 | 20600 |
| | | 010D15 | 2018 | 14430 | 0.00 | 2 | 14430 | 18500 |
| | | 010A54 | 2016 | 14698 | 0.00 | 4 | 14700 | 17100 |
| | | 010A54 | 2016 | 14698 | 0.00 | 4 | 14700 | 17900 |
| | | 010A54 | 2016 | 14698 | 0.00 | 4 | 14700 | 18300 |
| | | 010A52 | 2017 | 17942 | 0.00 | 3 | 17950 | 20800 |
| | | 010B09 | 2018 | 13079 | 0.00 | 2 | 13080 | 16200 |
| | | 010A96 | 2017 | 9469 | 0.00 | 3 | 9470 | 12200 |
| | | 010B71 | 2018 | 23301 | 0.00 | 2 | 23310 | 24500 |
| | | 010A05 | 2018 | 21091 | 0.00 | 2 | 21100 | 26700 |
| | | 010B82 | 2014 | 21997 | 0.00 | 6 | 22000 | 25300 |
| | | 045E34 | 2016 | 30965 | 0.00 | 4 | 30970 | 34600 |
| Boyd | US 23S | 010044 | 2016 | 10746 | 0.00 | 4 | 10750 | 11600 |
| Boyd | US 23S -1 | 010045 | 2018 | 14267 | 0.00 | 2 | 14270 | 15400 |
| Boyd | US 23X | 010B16 | 2017 | 7808 | 0.00 | 3 | 7810 | 9000 |
| | | 010B10 | 2016 | 9686 | 0.00 | 4 | 9690 | 16300 |
| | | 010A25 | 2018 | 16022 | 0.00 | 2 | 16030 | 18100 |
| Boyd | US 60 | 010756 | 2017 | 11844 | 0.00 | 3 | 11850 | 15200 |
| | | 101C41 | 2018 | 22579 | 0.00 | 2 | 22580 | 29500 |
| | | 010C39 | 2018 | 21642 | 0.00 | 2 | 21650 | 28400 |
| | | 010C36 | 2016 | 17893 | 0.00 | 4 | 17900 | 23400 |
| | | 010A82 | 2014 | 13142 | 0.00 | 6 | 13150 | 16700 |
| | | 010A82 | 2014 | 13142 | 0.00 | 6 | 13150 | 15500 |
| | | 010A21 | 2018 | 19545 | 0.00 | 2 | 19550 | 21700 |
| | | 010B34 | 2016 | 9415 | 0.00 | 4 | 9420 | 14600 |
| | | 010B34 | 2016 | 9415 | 0.00 | 4 | 9420 | 10000 |
| | | 010A26 | 2017 | 15983 | 0.00 | 3 | 15990 | 16800 |
| | | 010A25 | 2018 | 16022 | 0.00 | 2 | 16030 | 16700 |
| | | 010B39 | 2014 | 2886 | 0.00 | 6 | 2890 | 3100 |
| | | 10005 | 2018 | 12717 | 0.00 | 2 | 12720 | 19400 |
| Boyd | US 60 -1 | 010B34 | 2016 | 9415 | 0.00 | 4 | 9420 | 10000 |
| | | 010B34 | 2016 | 9415 | 0.00 | 4 | 9420 | 11500 |
| Boyd | US 60 -2 | 010B38 | 2018 | 1488 | 0.04 | 2 | 1620 | 1700 |
| Boyd | KY 5 | 010C25 | 2017 | 2377 | 0.00 | 3 | 2380 | 3800 |
| | | 010C08 | 2017 | 6059 | 0.00 | 3 | 6060 | 7500 |
| | | 010B29 | 2016 | 6915 | 0.00 | 4 | 6920 | 9900 |
| | | 010B81 | 2018 | 4471 | 0.00 | 2 | 4480 | 4900 |
| Boyd | KY 168 | 010B55 | 2016 | 1669 | 0.00 | 4 | 1670 | 1800 |
| | | 010A64 | 2015 | 4459 | 0.00 | 5 | 4460 | 4900 |
| | | 010A64 | 2015 | 4459 | 0.00 | 5 | 4460 | 4900 |
| | | 010A20 | 2018 | 6638 | 0.00 | 2 | 6640 | 7300 |
| | | 010A13 | 2017 | 4623 | 0.00 | 3 | 4630 | 5400 |
| | | 010A79 | 2016 | 5737 | 0.00 | 4 | 5740 | 7400 |
| | | 010A79 | 2016 | 5737 | 0.00 | 4 | 5740 | 6500 |
| Boyd | KY 180 | 010C49 | 2017 | 10359 | 0.00 | 3 | 10360 | 14800 |
| Boyd | KY538 | 010C37 | 2016 | 1882 | 0.00 | 4 | 1890 | 2200 |
| | | 010C37 | 2016 | 1882 | 0.00 | 4 | 1890 | 2100 |
| | | 010D43 | 2017 | 1557 | 0.00 | 3 | 1560 | 2400 |
| | | 010D43 | 2017 | 1557 | 0.00 | 3 | 1560 | 2400 |

| County | Routes for Model and Capacity Analysis | Station ID | Count Year | Count Year AADT | Historical Growth Rate % | Years to 2020 | 2020 AADT | 2050 AADT |
|---|---|---|---|---|---|---|---|---|
| Boyd | KY 716 | 010C20 | 2018 | 4675 | 0.00 | 2 | 4680 | 27200 |
| | | 010C27 | 2017 | 5506 | 0.00 | 3 | 5510 | 10300 |
| Boyd | KY 766 | 010C15 | 2018 | 1904 | 0.00 | 2 | 1910 | 2500 |
| | | 010C15 | 2018 | 1904 | 0.00 | 2 | 1910 | 2400 |
| | | 010C17 | 2016 | 2571 | 0.00 | 4 | 2580 | 2700 |
| Boyd | KY 1012 | 010B56 | 2018 | 1667 | 0.00 | 2 | 1670 | 3700 |
| | | 010B59 | 2017 | 2239 | 0.01 | 3 | 2340 | 3100 |
| Boyd | KY 1134 | 010A87 | 2017 | 2565 | 0.00 | 3 | 2570 | 4200 |
| Boyd | KY 2534 | 010C52 | 2016 | 3044 | 0.02 | 4 | 3290 | 3300 |
| Boyd | KY 2535 | 010D45 | 2014 | 925 | 0.00 | 6 | 930 | 1500 |
| Boyd | KY 2536 | 010D46 | 2018 | 151 | 0.00 | 2 | 160 | 200 |
| Boyd | KY 2537 | 010D22 | 2014 | 673 | 0.00 | 6 | 680 | 1000 |
| | | 010D11 | 2016 | 103 | 0.00 | 4 | 110 | 100 |
| Boyd | KY 3291 | 010C46 | 2016 | 2110 | 0.00 | 4 | 2110 | 5400 |
| Boyd | KY 3292 | 010C22 | 2018 | 2784 | 0.00 | 2 | 2790 | 5700 |
| Boyd | KY 3293 | 010C51 | 2017 | 717 | 0.00 | 3 | 720 | 1400 |
| | | 010C30 | 2018 | 1823 | 0.00 | 2 | 1830 | 8000 |
| Boyd | KY 3294 | 010C48 | 2016 | 2220 | 0.00 | 4 | 2220 | 3300 |
| | | 010027 | 2018 | 1336 | 0.00 | 2 | 1340 | 2600 |
| | | 010D40 | 2017 | 1302 | 0.00 | 3 | 1310 | 1600 |
| | | 010D40 | 2017 | 1302 | 0.00 | 3 | 1310 | 1300 |
| | | 010D21 | 2014 | 2301 | 0.00 | 6 | 2310 | 4200 |
| | | 010D21 | 2014 | 2301 | 0.00 | 6 | 2310 | 3100 |
| | | 010D21 | 2014 | 2301 | 0.00 | 6 | 2310 | 3700 |
| | | 010D19 | 2016 | 2241 | 0.02 | 4 | 2430 | 3500 |
| | | 010D05 | 2018 | 2240 | | 2 | 2240 | 3300 |
| | | 010D05 | 2018 | 2240 | | 2 | 2240 | 3300 |
| Boyd | KY 3533 | 010C55 | 2017 | 84 | 0.00 | 3 | 90 | 100 |
| Boyd | CR-1047D | 010D47 | | | | 2020 | 0 | 0 |
| | | 010D51 | | | | 2020 | 0 | 300 |
| Boyd | CS-2349 | 010A15 | 2016 | 7117 | 0.00 | 4 | 7120 | 8300 |
| | | 010A68 | 2014 | 5375 | 0.00 | 6 | 5380 | 7600 |
| Boyd | CS-2350 | 010B69 | 2018 | 9485 | 0.00 | 2 | 9490 | 12200 |
| | | 010A97 | 2016 | 4835 | 0.00 | 4 | 4840 | 6000 |
| | | 010B04 | 2017 | 2715 | 0.00 | 3 | 2720 | 4400 |
| | | 010B13 | 2018 | 3596 | 0.00 | 2 | 3600 | 4900 |
| Boyd | CS-2492 | 010A98 | 2014 | 8576 | 0.00 | 6 | 8580 | 14900 |
| | | 010A60 | 2018 | 9170 | 0.00 | 2 | 9170 | 10700 |
| | | 010A49 | 2016 | 5949 | 0.00 | 4 | 5950 | 6000 |
| Boyd | CS-2530 | 010A71 | | | | 2020 | 0 | 0 |
| | | 010A71 | | | | 2020 | 0 | 0 |
| | | 010B12 | | | | 2020 | 0 | 300 |
| | | 010B12 | | | | 2020 | 0 | 400 |
| | | 010B12 | | | | 2020 | 0 | 200 |
| | | 010A95 | | | | 2020 | 0 | 200 |
| | | 010A95 | | | | 2020 | 0 | 0 |
| Boyd | CS-2615 | 010C56 | 2018 | 11381 | 0.04 | 2 | 12300 | 15400 |

| County | Routes for Model and Capacity Analysis | Station ID | Count Year | Count Year AADT | Historical Growth Rate % | Years to 2020 | 2020 AADT | 2050 AADT |
|---|---|---|---|---|---|---|---|---|
| Greenup | US 23 | 045E34 | 2016 | 30965 | 0.00 | 4 | 30970 | 34800 |
| | | 045E47 | 2016 | 17621 | 0.00 | 4 | 17630 | 20700 |
| | | 045E38 | 2014 | 20675 | 0.00 | 6 | 20680 | 24800 |
| | | 045E02 | 2014 | 18203 | 0.00 | 6 | 18210 | 21800 |
| | | 045E02 | 2014 | 18203 | 0.00 | 6 | 18210 | 19400 |
| | | 045E01 | 2016 | 13809 | 0.00 | 4 | 13810 | 15100 |
| | | 045E72 | 2018 | 12610 | 0.00 | 2 | 12610 | 13300 |
| | | 045E44 | 2016 | 12630 | 0.00 | 4 | 12630 | 17200 |
| | | 045E77 | 2014 | 14247 | 0.00 | 6 | 14250 | 16900 |
| | | 045004 | 2018 | 15517 | 0.00 | 2 | 15520 | 19400 |
| | | 045A43 | 2017 | 14521 | 0.00 | 3 | 14530 | 20700 |
| | | 045001 | 2018 | 13452 | 0.01 | 2 | 13690 | 18400 |
| Greenup | KY 1 | 045003 | 2018 | 2270 | 0.00 | 2 | 2270 | 2900 |
| | | 045003 | 2018 | 2270 | 0.00 | 2 | 2270 | 2900 |
| Greenup | KY 2 | 045A48 | 2018 | 2063 | 0.00 | 2 | 2070 | 2100 |
| | | 045A16 | 2016 | 933 | 0.00 | 4 | 940 | 900 |
| Greenup | KY 5 | 045E30 | 2018 | 3709 | 0.00 | 2 | 3710 | 4100 |
| Greenup | KY 67 | 045061 | 2016 | 4373 | 0.02 | 4 | 4780 | 6600 |
| Greenup | KY 207 | 045E08 | 2016 | 9543 | 0.00 | 4 | 9550 | 11700 |
| | | 045E13 | 2018 | 10654 | 0.00 | 2 | 10660 | 12400 |
| | | 045E15 | 2018 | 5625 | 0.00 | 2 | 5630 | 7600 |
| | | 045E03 | 2015 | 5373 | 0.00 | 5 | 5380 | 5800 |
| Greenup | KY 244 | 045E23 | 2018 | 3095 | 0.00 | 2 | 3100 | 3100 |
| | | 045E46 | 2016 | 1804 | 0.00 | 4 | 1810 | 4100 |
| | | 045E46 | 2016 | 1804 | 0.00 | 4 | 1810 | 1800 |
| | | 045E46 | 2016 | 1804 | 0.00 | 4 | 1810 | 3200 |
| | | 045E19 | 2018 | 3369 | 0.00 | 2 | 3370 | 4400 |
| | | 045E19 | 2018 | 3369 | 0.00 | 2 | 3370 | 4900 |
| Greenup | KY 410 | 045A15 | 2018 | 422 | 0.00 | 2 | 430 | 400 |
| Greenup | KY 503 | 045E51 | 2016 | 1080 | 0.00 | 4 | 1080 | 1700 |
| Greenup | KY 693 | 045E53 | 2016 | 940 | 0.00 | 4 | 940 | 1600 |
| | | 045E85 | 2014 | 1507 | 0.00 | 6 | 1510 | 2300 |
| | | 045E71 | 2018 | 3875 | 0.00 | 2 | 3880 | 6700 |
| | | 045E65 | 2016 | 12972 | 0.00 | 4 | 12980 | 17300 |
| | | 045E48 | 2014 | 13023 | 0.00 | 6 | 13030 | 17200 |
| | | 045E52 | 2015 | 15557 | 0.00 | 5 | 15560 | 17400 |
| | | 045E52 | 2015 | 15557 | 0.00 | 5 | 15560 | 20900 |
| Greenup | KY 750 | 045E73 | 2014 | 3124 | 0.00 | 6 | 3130 | 3800 |
| | | 045E04 | 2018 | 4465 | 0.00 | 2 | 4470 | 5600 |
| | | 045E04 | 2018 | 4465 | 0.00 | 2 | 4470 | 7000 |
| | | 045E04 | 2018 | 4465 | 0.00 | 2 | 4470 | 5700 |
| | | 045E14 | 2018 | 4721 | 0.00 | 2 | 4730 | 6100 |
| | | 045E14 | 2018 | 4721 | 0.00 | 2 | 4730 | 5600 |
| | | 045E40 | 2016 | 3310 | 0.00 | 4 | 3310 | 4300 |
| | | 045E39 | 2015 | 1281 | 0.00 | 5 | 1290 | 1800 |
| Greenup | KY 1093 | 045E29 | 2014 | 5729 | 0.00 | 6 | 5730 | 9300 |
| | | 045E49 | 2018 | 4872 | 0.00 | 2 | 4880 | 7400 |
| Greenup | KY 1172 | 045E61 | 2017 | 3756 | 0.00 | 3 | 3760 | 5500 |
| Greenup | KY 1725 | 045E63 | 2017 | 3215 | 0.01 | 3 | 3290 | 3300 |
| | | 045E37 | 2016 | 4227 | 0.00 | 4 | 4230 | 6400 |

| County | Routes for Model and Capacity Analysis | Station ID | Count Year | Count Year AADT | Historical Growth Rate % | Years to 2020 | 2020 AADT | 2050 AADT |
|---|---|---|---|---|---|---|---|---|
| Greenup | KY 2541 | 045A38 | 2017 | 2350 | 0.00 | 3 | 2350 | 2400 |
| | | 045A38 | 2017 | 2350 | 0.00 | 3 | 2350 | 2400 |
| | | 045A09 | 2018 | 1496 | 0.00 | 2 | 1500 | 1500 |
| | | 045A01 | 2018 | 677 | 0.04 | 2 | 740 | 700 |
| | | 045A01 | 2018 | 677 | 0.04 | 2 | 740 | 700 |
| Greenup | KY 2543 | 045E70 | 2018 | 3616 | 0.00 | 2 | 3620 | 3900 |
| Greenup | KY 3105 | 045E59 | 2015 | 1221 | 0.00 | 5 | 1230 | 2800 |
| | | 045E59 | 2015 | 1221 | 0.00 | 5 | 1230 | 2700 |
| | | 045E74 | 2018 | 738 | 0.00 | 2 | 740 | 1400 |
| | | 045E74 | 2018 | 738 | 0.00 | 2 | 740 | 1700 |
| | | 045E74 | 2018 | 738 | 0.00 | 2 | 740 | 1400 |
| Greenup | CR-1948 | 045F03 | 2018 | 1440 | 0.00 | 2 | 1440 | 1400 |
| | | 045F07 | | | | 2020 | 0 | 0 |
| | | 045F07 | | | | 2020 | 0 | 600 |
| | | 045F07 | | | | 2020 | 0 | 500 |
| Greenup | CS-5009 | 045E79 | 2018 | 1506 | 0.00 | 2 | 1510 | 3900 |
| Greenup | CS-7006 | 045F03 | 2018 | 1440 | 0.00 | 2 | 1440 | 1400 |