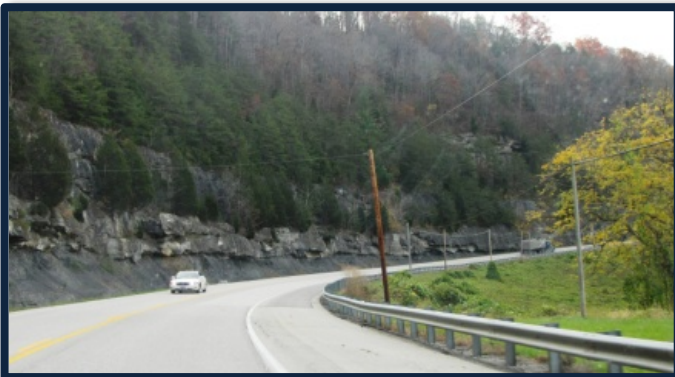
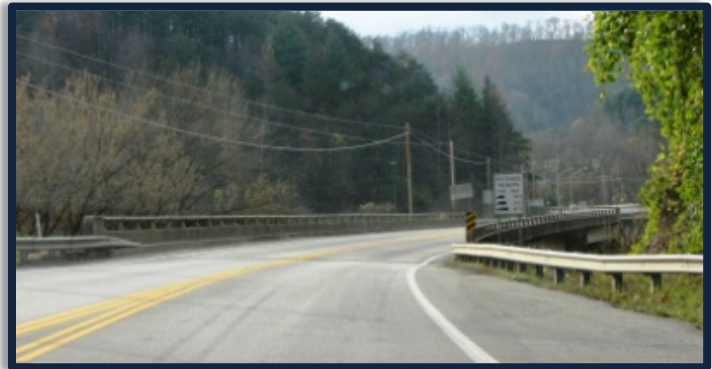


KY 15 From Campton to Hazard

Programming Study

Perry, Breathitt, and Wolfe Counties



EXECUTIVE SUMMARY

April 2013

Prepared For:



Prepared By:



EXECUTIVE SUMMARY

1.1 PURPOSE OF STUDY

The Kentucky Transportation Cabinet (KYTC) has undertaken this review of previous planning, design, and environmental analysis work on KY 15 from the Bert T. Combs Mountain Parkway Exit 43 at Campton in Wolfe County (including KY 15S from KY 15 at Milepoint [MP] 9.5 to the Parkway) to MP 14.5 north of Hazard in Perry County. This 47.9-mile section of KY 15 in Wolfe, Breathitt, and Perry counties is referenced in this report as the “KY 15 Study Area.” The primary purpose of this study is to provide sufficient information to make an informed decision about how best to move forward with the widening of KY 15. Proposed roadway improvements with fewer than four lanes and/or with a design speed less than 60 mph were excluded from the development of new alternative alignments or the evaluation of potential cost savings for previously proposed design sections. This examination:

- 15 Provides an independent evaluation of the previous work with regard to deficiencies, projects, and priorities, including a review of design plans and a review and update of the purpose and need statement and project goals.
- 15 Identifies new improvements with consideration to practical solutions and other design parameters to reduce costs.
- 15 Reviews previous cost estimates and prepares updated planning-level cost estimates.
- 15 Develops a project development plan for each Corridor Segment including cost estimates by phase, and priority sections for programming.

1.2. PREVIOUS STUDIES

The following studies have been developed in recent years by KYTC for KY 15 along and near the section that is the subject of this study:

- 15 *Scoping Study, KY 15, Jeff to Grapevine*, prepared for KYTC by Bernardin, Lochmueller and Associates, December 1996.
- 15 *Preliminary Line and Grade Design Report, KY 15 and KY 15/KY 550 Interchange, Perry County, Item Number 10-269.0*, prepared for KYTC by GRW Engineers, Inc., October 1995.
- 15 *Project Scoping Report, Perry – Breathitt – Wolfe Counties, KY 15, Hazard to Campton Road*, prepared for KYTC by WMB Inc., January 1994.
- 15 *Advanced Planning Study, KY 15, Hazard to Campton*, prepared for KYTC by WSA, August 1998.
- 15 *Finding of No Significant Impact, KY 15 from Morton Boulevard in Perry County (MP 14.5) to the vicinity of KY 28 (MP 20.7)*, approved by KYTC in June 2004 and by FHWA in July 2004.
- 15 *Draft Environmental Assessment, KY 15 from the vicinity of KY 28 in Perry County (MP 20.7) to 0.5 mile north of KY 1110 near Haddix in Breathitt County (MP 9.0)*, June 1999.
- 15 *Finding of No Significant Impact and Appended Environmental Assessment, KY 15 from 0.6 miles north of KY 476 near Haddix in Breathitt County (MP 8.3) to 0.4 miles north of KY 205 near Vancleve*, May 2000.

In addition to the studies listed, the following project development activities have occurred on the following sections of KY 15:

- 15 The section between MP 20.7 and MP 24.4 in Breathitt County has been reconstructed and was opened to traffic in 2008.
- 15 The section between MP 17.9 and MP 20.7 in Breathitt County is currently undergoing reconstruction at the time of this report.
- 15 The section in Breathitt County between KY 476 near Haddix (MP 7.6) and MP 17.9 was approximately 50% complete in Phase II Design before work was halted.
- 15 The section between MP 7.6 in Breathitt County and the vicinity of KY 28 in Perry County (MP 20.7) was approximately 90% complete in Phase I Design before work was halted.
- 15 The section between MP 16.9 and MP 20.7 in Perry County had proceeded to plans for a Preliminary Line-and-Grade Inspection before work was halted.

1.3 CORRIDOR SECTIONS

The KY 15 Study Area has been divided into seven sections (Sections A-G) that may be considered “Segments of Independent Utility” (SIUs). An eighth section (Section H), between MP 14.5 and MP 16.9 in Perry County, was included in the analysis for system continuity, and because the previous environmental analysis of the section between MP 16.9 and MP 21.5 extended southward to MP 14.5. Those corridor sections are shown in Figure ES-1 and are described as follows:

CORRIDOR SECTION	LOCATION	DISTANCE
Section A	KY 15 From MP 24.4 in Breathitt County to the Mountain Parkway Exit 43 at Campton Via KY 15S	12.8 miles
Section B	KY 15 From MP 20.7 to MP 24.4 in Breathitt County	3.7 miles
Section C	KY 15 From MP 17.9 to MP 20.7 in Breathitt County	2.8 miles
Section D	KY 15 From MP 7.7 to MP 17.9 in Breathitt County	10.2 miles
Section E	KY 15 From MP 5.4 to MP 7.7 in Breathitt County	2.3 miles
Section F	KY 15 From MP 21.5 in Perry County to MP 5.4 in Breathitt County	9.1 miles
Section G	KY 15 From MP 16.9 to MP 21.5 in Perry County	4.6 miles
Section H	KY 15 From MP 14.5 to MP 16.9 in Perry County	2.4 miles
TOTAL LENGTH OF ALL SECTIONS		47.9 miles

1.4 PURPOSE AND NEED

The Appalachian Regional Commission (ARC) was established by Congress in the 1965 Appalachian Development Act. That same Act established the Appalachian Development Highway System (ADHS),

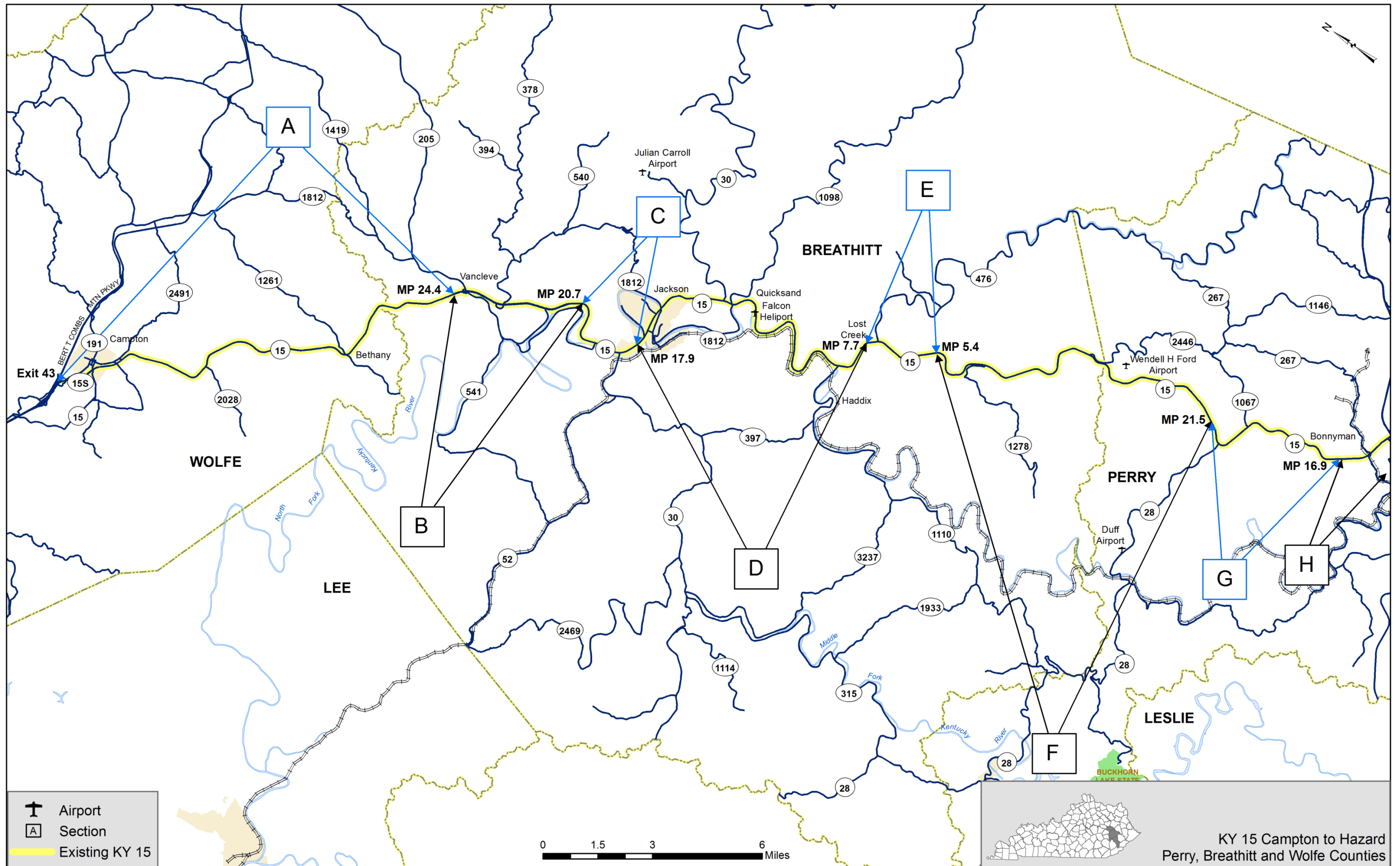


Figure ES-1: KY 15 Study Sections

intended to provide both access and connectivity to assist in fostering economic development in the region. KY 15 in the project study area is part of ADHS Corridor I, which begins at the KY 15/US 119 junction in Whitesburg and ends 126.2 miles north at the Mountain Parkway junction with I-64 near Winchester. Early improvements on this corridor using both State and ADHS funds led to this route being declared complete sometime in the late 1960's or early 1970's. However, in today's economic market, this route is still in need of the below discussed improvements in an effort to provide a transportation system that helps to deliver economic opportunities to distressed Appalachian counties.

Notwithstanding ARC's declaration that, in effect, Corridor I was complete, the purpose of further improvements is to enhance mobility and improve safety while enhancing access for economic development opportunities for north-south travel from the Mountain Parkway to the Hal Rogers Parkway between I-75, 50 miles to the west, and US 23, 35 miles to the east. The needs are to improve the roadway geometrics, reduce the number of crashes, reduce travel times, increase passing opportunities, and enhance the quality of life in this distressed region.

1.5 SUMMARY OF STAGED IMPROVEMENTS

KY 15 between the Hal Rogers Parkway at Hazard and the Bert T. Combs Mountain Parkway at Campton is characterized by deficient roadway geometrics, the presence of slower moving heavy trucks, and restricted passing opportunities. These conditions are more prevalent between Hazard and Jackson than between Jackson and Campton.

Improvements to KY 15 have been discussed for nearly 50 years. The Appalachian Development Highway System included this roadway, as well as sections to the north and to the south, as part of ADHS Corridor I. A planning study to recommend priorities was initiated by KYTC nearly 20 years ago.

Roadway design activities have advanced to the point of right-of-way purchase at the southern end of the corridor north of Hazard. One section north of Jackson has been reconstructed and a second section is currently being reconstructed. A strategy for staged improvements to the corridor has been recommended, and may be summarized in these stages:

- i. *Address the current congestion on KY 15 near Jackson by reconstruction along the existing alignment.*
- ii. *Complete improvements between Hazard and Jackson beginning at the south end and proceeding northward in affordable construction sections.*
- iii. *Complete improvements in the vicinity of Campton.*
- iv. *Construct a Jackson Bypass east of the current KY 15 alignment.*
- v. *Complete the corridor improvements from Campton to Vancleve.*

The total estimated cost of these recommendations is \$456 million. Priorities for improvements to KY 15 in Perry, Breathitt, and Wolfe counties are shown below in Table ES-1 and depicted in Figure ES-2. Options for combining several of the improvements are listed based on what may be acceptable construction phase costs. Completion of corridor improvements is a high regional priority, and this would be facilitated by having the fewest stages possible. Criteria for recommending the priorities include traffic volume served, crash frequency, current LOS, and continuity of construction segments.

KY 15 RECOMMENDED PRIORITIES

Priority	County (ies)	Section	Segment	Description	Beginning MP	Ending MP	Length (Miles)	CONSTRUCTION ESTIMATE (MILLIONS)					Design and Environmental Status	Estimated 2035 Daily Traffic	Current CCRF	Current LOS
								Design	R/W	Utilities	Construction	Alternate Construction				
1	Breathitt	D Existing	3 Urban	From existing construction near Panbowl Road north of Jackson to just south of the intersection with Miller Hollow Road	17.9	16.3	1.6	\$1.1	\$4.8	\$0.8	\$4.9	\$33.7	No previous Design work; EA would need to be both updated and revised	21,000	1.15-1.67	E
	Breathitt	D Existing	3 Rural	From just south of the intersection with Miller Hollow Road to just south of Walmart Shopping Center	16.3	15.6	0.7	\$0.5	\$0.5	\$0.2	\$11.2			14,400	1.2	E
2	Breathitt	D Existing	2	From just south of Walmart shopping center to a half-mile south of the intersection with KY 30 East	15.6	14.1	1.5	\$1.8	\$0.3	\$0.8	\$17.6			13,800	0.61-0.82	E
3	Perry	G Existing	All	Along existing alignment (except for a new KY 28 interchange) from north of a new interchange at KY 28 to near Capitol Hill Drive	21.5	16.9	4.6	\$3.2	\$6.3	\$1.2	\$40.1	\$56.1	No Design work along existing alignment; FONSI would need to be revised and updated. R/W purchase has begun on new alignment alternative.	10,200	0.35	E
4	Perry	F	1	Along existing alignment from just north of Wendell Ford Airport entrance road to north of new interchange at KY 28	24.3	21.5	2.8	\$1.6	\$1.5	\$1.0	\$16.0		Phase I Design 90% completed; EA would need to be updated	7,600	0.35	D-E
5	Breathitt/Perry	F	2	Along existing alignment from vicinity of Noble Road south of Watts in Breathitt County to just north of Wendell Ford Airport entrance road in Perry County	3.0	24.3	3.9	\$2.5	\$2.7	\$1.3	\$29.5	\$53.7	Phase I Design 90% completed; EA would need to be updated	7,600	0.35	D
6	Breathitt	F	3	Along existing alignment from approx 2.2 miles south of KY 476 East to vicinity of Noble Road south of Watts	5.4	3.0	2.4	\$2.3	\$1.6	\$0.9	\$24.2		Phase I Design 90% completed; EA would need to be updated	7,600	0.24	D
7	Breathitt	E	All	Along existing alignment from approx 300 feet north of KY 476 East to approx 2.2 miles south of KY 476 East	7.7	5.4	2.3	\$2.5	\$1.5	\$0.8	\$27.8	\$27.8	Phase I Design 90% completed; EA would need to be updated	8,500	0.37	E
8	Breathitt	D East	1	New alignment (east of existing) from a half-mile south of the intersection with KY 30 East to approx 300 feet north of KY 476 East	14.1*	7.7	3.9	\$3.5	\$0.6	\$0.1	\$43.3	\$43.3	No previous Design work; EA would need to be both updated and revised	6,900-8,800	0.30-1.04	C-D
9	Wolfe	A	3	5-lane Curb & Gutter segment in Campton from KY 15S at the Mountain Parkway to just south of current 3-lane section near MP 8.2 on KY 15 **	1.1	8.2	2.6	\$1.8	\$1.6	\$1.0	\$17.9***	\$17.9***	No previous Design work or Environmental Analysis	5,100	0.36	E*****
10	Breathitt	D East	3	From near the north end of existing construction to just south of Walmart Shopping Center on new alignment east of existing KY 15	17.9*	15.6*	3.5	\$4.6	\$0.9	\$0.3	\$77.0****	\$77.0****	No previous Design work; EA would need to be both updated and revised	5,400	0.39	C
11	Wolfe	A	2	Along existing alignment from 5-lane curb and gutter segment in priority 9 above to approx MP 2.9 north of Bethany	8.2	2.9	5.3	\$3.0	\$2.6	\$1.7	\$37.4	\$37.4	No previous Design work or Environmental Analysis	4,800	0.31-0.42	C
12	Breathitt/Wolfe	A	1	Along existing alignment from approx MP 2.9 in Wolfe County north of Bethany to north end of existing 4-lane (MP 24.4 in Breathitt County)	2.9	24.4	4.9	\$3.1	\$2.3	\$1.6	\$38.6	\$38.6	No previous Design work or Environmental Analysis			

* Milepoints of existing alignment. New alignment will result in milepoint modifications. Thus, length does not equal difference in milepoints.

** Another option would be to stop this at the intersection with KY 3355, which would be 0.7 mile shorter.

*** Use of a rural 5-lane cross section would reduce this cost by 8-9%

**** High construction phase cost of this segment due in part to a \$15 million structure

***** Currently LOS E. If Priority 1 were to be constructed before Priority 10, the LOS would be A or B

Notes: Construction cost estimates include a generalized additional amount for frontage roads. Specific locations and lengths of frontage roads will be determined in subsequent project development phases. Also, Section B has been constructed, Section C is currently under construction and Section H is included in the KYTC Highway Plan; therefore, they are omitted from this table.

Table ES-1: KY 15 Recommended Priorities

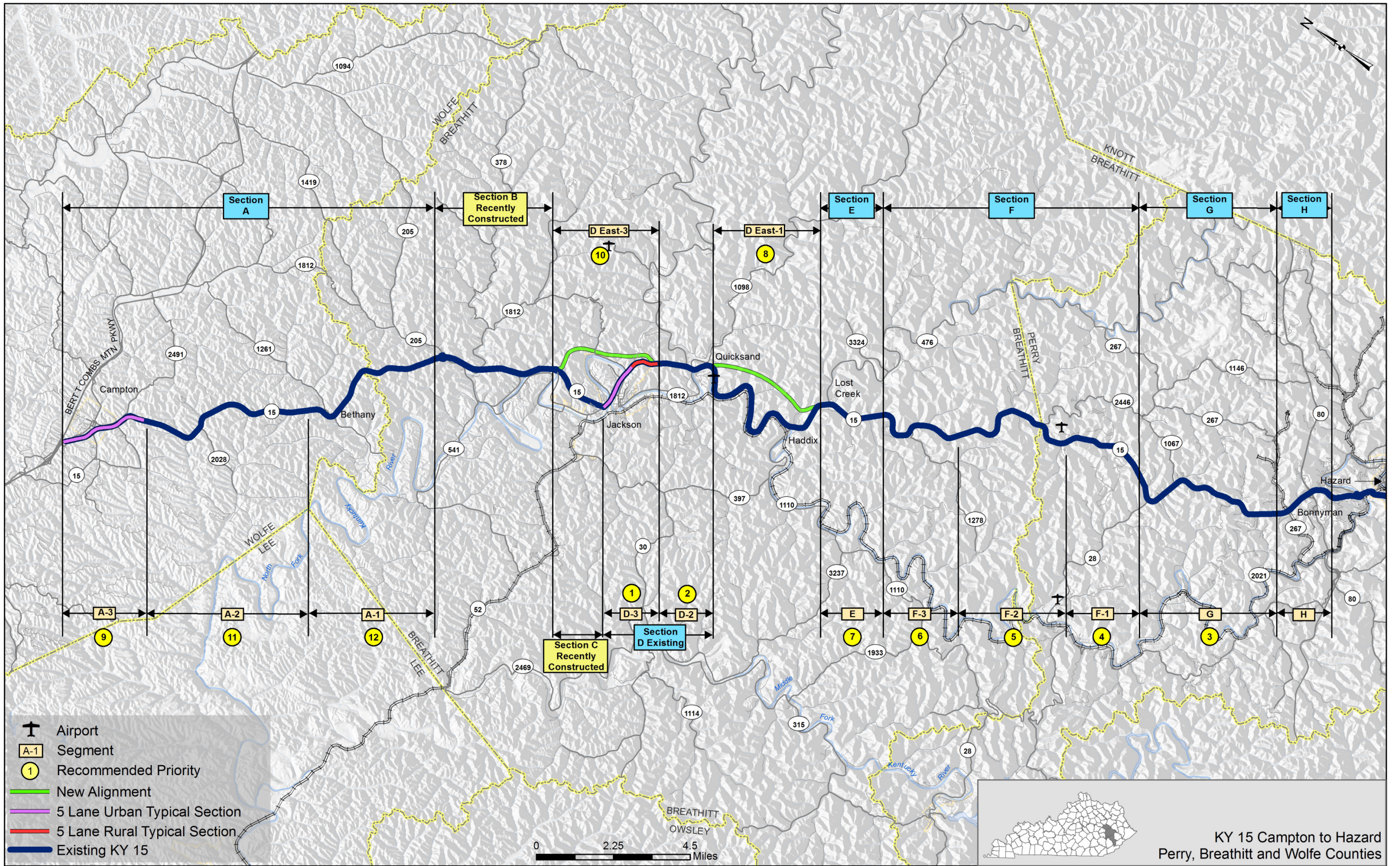


Figure ES-2: KY 15 Recommended Priorities