

Table 2 (Appendix A)
Design Assumptions & Cost Estimates
Mountain Parkway Extension/US 460/KY 114 Programming Study

	Mountain Parkway (Campton to Heleechewa)			Mountain Parkway (Heleechewa to Salyersville)			US 460 (Salyersville)			KY 114 (Salyersville to KY 404 near Prestonsburg)		
	Corridor Segment 1B			Corridor Segment 2A			Corridor Segment 2B			Corridor Segment 3		
	Full Design (KYTC 1998 Design)	Practical Design 1 (Reduced Typical Section)	Practical Design 2 (Reduced Design Speed & Typical Section)	Full Design (KYTC 1999 & 2007 Design)	Practical Design 1 (Reduced Typical Section)	Practical Design 2 (Reduced Design Speed & Typical Section)	Full Design A KYTC 1999 Design	Full Design B KYTC 2004 Design Plus New Connection to Segment 2A	Practical Design "Through Salyersville"	Full Design (KYTC 1999 Design)	Practical Design 1 (Reduced Typical)	Practical Design 2 (Reduced Design Speed & Typical Section)
Design Controls												
Classification	Rural Parkway	Rural Parkway	Rural Parkway	Rural Parkway	Rural Parkway	Rural Parkway	Rural Arterial	Rural Arterial	Urban Arterial	Rural Arterial	Rural Arterial	Rural Arterial
Terrain	Mountainous	Mountainous	Mountainous	Mountainous	Mountainous	Mountainous	Rolling	Rolling	Level	Mountainous	Mountainous	Mountainous
Design Speed (Design Year Standards)	70 mph	70 mph	60 mph	70 mph	70 mph	60 mph	65 mph	70 mph	45 mph	60 mph	60 mph	55 mph
Design Speed (2010 Standards)	65 mph	65 mph	60 mph	65 mph	65 mph	60 mph	65 mph	65 mph	45 mph	60 mph	60 mph	55 mph
Access Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control	Partial Control	Partial Control	Partial Control	Partial Control
ADT (Existing 2009)	3,790 vpd to 4,380 vpd			4,380 vpd to 6,650 vpd			KY 9009 6,650 vpd to 8,790 vpd, US 460/KY 114 12,000 vpd to 15,300 vpd, KY 114 6470 vpd			5,370 vpd to 11,900 vpd		
ADT (Future No-Build 2030)	4,600 vpd to 5,900 vpd			5,900 vpd to 8,100 vpd			KY 9009 8,100 vpd to 10,700 vpd, US 460/KY 114 14,600 vpd to 18,700 vpd, KY 114 7,900 vpd			5,600 vpd to 14,500 vpd		
ADT (Future With Improvement 2030)	5,200 vpd to 6,000 vpd			6,200 vpd to 9,100 vpd			US 460 16,400 vpd to 21,000 vpd			7,300 vpd to 16,300 vpd		
Typical Section												
Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes	Four 12-ft Lanes
Outside Shoulder	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)	Curb & Gutter, 5 ft berm & 5 ft sidewalk	12 ft (10 ft Paved)	12 ft (10 ft Paved)	12 ft (10 ft Paved)
Median	40 ft Depressed	14 ft Flush with Barrier	14 ft Flush with Barrier	40 ft Depressed	14 ft Flush with Barrier	14 ft Flush with Barrier	40 ft Depressed	40 ft Depressed	14 ft Raised with Turn Lanes as Needed	40 ft Depressed and 14 ft Flush	14 ft Flush with Barrier or Center Turn Lane	14 ft Flush with Barrier or Center Turn Lane
Existing Roadway Segment Length	10.8 miles	10.8 miles	10.8 miles	17.0 miles	17.0 miles	17.0 miles	5.6 miles	4.4 miles	4.4 miles	14.1 miles	14.1 miles	14.1 miles
Proposed Design Segment Length	10.8 miles	10.8 miles	10.8 miles	16.22 miles	16.22 miles	16.22 miles	5.3 miles	4.3 miles	4.4 miles	13.9 miles	13.9 miles	13.9 miles
Alignment												
emax	8%	8%	6%	8%	8%	6%	8%	8%	4%	6%	6%	6%
Min. Radius	1,480 ft	1,480 ft	1,330 ft	1,480 ft	1,480 ft	1,330 ft	1,485 ft	1,485 ft	711 ft	1,340 ft	1,340 ft	1,065 ft
Max Grade	6%	6%	7%	6%	6%	7%	4%	4%	6%	6%	6%	6%
Vertical Clearance	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft	16 ft
Preliminary Cost Estimates (in Millions) (in 2010 Dollars)												
Construction Cost	\$113.1	\$106.4	\$104.1	\$207.0	\$184.2	\$165.6	\$119.8	\$87.0	\$45.5	\$185.9	\$172.8	\$154.3
Design Cost	\$11.3	\$10.6	\$10.4	\$10.3	\$9.2	\$8.3	\$6.0	\$6.1	\$4.6	\$9.3	\$8.6	\$7.7
Utility Cost	\$1.2	\$1.2	\$1.2	\$1.8	\$1.8	\$1.8	\$1.4	\$1.5	\$2.7	\$6.2	\$6.2	\$6.2
ROW Cost	\$5.8	\$5.8	\$5.8	\$14.5	\$14.5	\$14.5	\$13.0	\$11.4	\$4.7	\$32.9	\$32.9	\$32.9
Total Cost	\$131.5	\$124.0	\$121.5	\$233.6	\$209.7	\$190.2	\$140.3	\$106.0	\$57.4	\$234.2	\$220.6	\$201.0
Preliminary Cost Estimates Per Mile (in Millions) (in 2010 Dollars)												
Construction Cost Per Mile	\$10.5	\$9.8	\$9.6	\$12.8	\$11.4	\$10.2	\$22.6	\$20.2	\$10.3	\$13.4	\$12.4	\$11.1
Utility Cost Per Mile	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.3	\$0.4	\$0.6	\$0.4	\$0.4	\$0.4
ROW Cost Per Mile	\$0.5	\$0.5	\$0.5	\$0.9	\$0.9	\$0.9	\$2.5	\$2.7	\$1.1	\$2.4	\$2.4	\$2.4
Total Cost Per Mile	\$12.2	\$11.5	\$11.3	\$14.4	\$12.9	\$11.7	\$26.5	\$24.7	\$13.1	\$16.9	\$15.9	\$14.5