## PROGRAMMING STUDY KY 88 HART AND GRAYSON COUNTIES MUNFORDVILLE TO KY 479 ITEM NO. 4-8101.00

The project termini are defined as US 31W in or near Munfordville in Hart County on the east and the intersection of KY 88 and KY 479 in Grayson County on the west. The major part of any reconstruction of this roadway segment is expected to consist of a two-lane roadway with paved shoulders; curb and gutter with sidewalks should be considered for the portions of the roadway that pass through Cub Run, Kessinger, and Munfordville due to the residential nature of these areas. The paved shoulders and/or the sidewalks in the residential areas would serve bicycle and pedestrian traffic. The length of the project along the existing road is 18.8 miles and there are only two existing structures within the project limits.

Current year traffic ranges from about 700 vehicles per day just east of the Grayson-Hart County line to almost 2200 vehicles per day near the CSX railroad crossing just outside of Munfordville. Projected future year (2030) average daily traffic volumes range from about 1200 vehicles just east of the Grayson-Hart County line to about 3800 vehicles near the CSX railroad crossing just outside of Munfordville.

The primary goal is to address safety and traffic flow problems created by the unique traffic composition; i.e. cars, trucks, recreational vehicles, and horse drawn buggies. The short sight distances and the narrow cross section of the roadway increase these problems. Potential benefits of the project include improved safety resulting from increased sight distance, increased stopping sight distance, and a wider roadway cross section; better access from I-65 to Nolin River Lake; and potentially improved access to areas of economic growth if the KY 88 corridor were relocated between Mt. Beulah and US 31W north and west of Munfordville.

The priority segments should begin at Munfordville and extend to the west. There are two options for the first segment. The first option would begin at US 31W in Munfordville and follow the existing alignment, except for curve improvements, to near KY 2786. The second option for the first segment would begin at US 31W between the existing I-65 – US 31W interchange and the KY 1140 – US 31W intersection and would follow a new alignment to the existing alignment near Mt. Beulah, then along the existing alignment to near KY 2786. The second segment would follow the existing alignment, except for curve improvement, from KY 2786 to the West Side of Cub Run. This section is expected to follow the existing alignment through Kessinger and Cub Run. The third segment would be from the West Side of Cub Run to the intersection of KY 88 and KY 479 in Grayson County. This section would follow the existing alignment, except for curve improvement, and would use the existing bridge over Nolin River Lake. An alternative of spot improvements should also be considered for each of the three segments.

Estimated costs are shown in Table ES-1.

TABLE ES-1 COST ESTIMATES BY SECTION

THE REAL PROPERTY.	SEGMENT	SEGMENT DESCRIPTION	The second second			Phase Co	Phase Cost Estimates (Millions)	es (Million:	s)		
Segment	EASTERN TERMINUS	WESTERN TERMINUS	TYPE OF IMPROVEMENT	APPROXIMATE LENGTH (MILES)	Project Planning/ Location Approval	Phase II Design	R/W	Utilities	Construction	Total Cost Estimated Estimated Cost per Millions) (Millions)	Estimated Cost per Mile (Millions)
7-4	US 31W in Munfordville	KY 2786	Reconstruction without grade separation @ RR crossing	5.6	\$0.60	\$1.50	\$3.00	\$1.00	\$11.00	\$17.10	\$3.05
			Reconstruction with								
-	US 31W in Munfordville	KY 2786	grade separation @ RR crossing	5.6	\$0.75	\$1.70	\$4.00	\$1.00	\$12.50	\$19.95	\$3.56
1a	US 31W between the existing 1-65 – US 31W interchange and the KY 1140 – US 31W intersection	KY 2786	Reconstruction <u>without</u> grade  separation @ RR  crossing	3.7	\$0.40	\$1.00	\$2.00	\$0.50	\$8.50	\$12.40	\$3.35
	US 31W between the existing	The second secon									
13	1-65 – US 31W interchange and the KY 1140 – US 31W intersection	KY 2786	Reconstruction with grade separation @ RR crossing	3.7	\$0.40	\$1.20	\$2.00	\$0.50	\$10.00	\$14.10	\$3.81
2	KY 2786	West Side of Cub Run	Reconstruction	7.1	\$0.75	\$1.75	\$3.50	\$1.10	\$12.50	\$19.60	\$2.76
3	West Side of Cub Run	KY 479	Reconstruction	6.1	\$1.00	\$1.50	\$3.00	\$1.00	\$13.00	\$19.50	\$3.20
	US 31W in Munfordville	KY 2786	Spot Improvements	5.6	\$0.00	\$0.70	\$1.00	\$0.33	\$9.17	\$11.20	\$2.00
2	KY 2786	West Side of Cub Run	Spot Improvements	7.1	\$0.00	\$0.89	\$1.17	\$0.37	\$11.78	\$14.20	\$2.00
3	West Side of Cub Run	KY 479	Spot Improvements	6.1	\$0.00	\$0.76	\$1.00	\$0.33	\$10.10	\$12.20	\$2.00