

Appendix F

Manslick Road/I-264 Interchange Crash Analysis

Methodology

Safety along the study area roads was analyzed using crash analysis. Crash analysis is an analysis tool for finding roadway sections with abnormally high crash rates and, therefore, sections with potentially correctable hazards to traffic safety. Historical crash data from the five-year period January 2001 – December 2005 was used to identify study area roadway sections with abnormally high crash rates, thus indicating a possible need for safety improvements. Only crashes with a valid mile-point listing were considered in the analysis.

Crash analysis procedures involve assigning reported crashes to roadway locations by mile-point. Crashes are normally classified by severity into one of three categories: fatal, injury, or property damage only (PDO). Then, the average crash rate for roadway sections of various lengths is determined. Generally, the analysis procedure includes analyzing the entire roadway length under study, followed by analyzing successively smaller roadway sections, especially those containing higher concentrations of crashes. Roadway sections are classified as either spots or segments depending on their length — sections less than 0.30 miles are classified as a spot location, and sections over 0.30 miles are classified as a segment. Roadway section crash rates were normalized for comparison by either hundred-million-vehicle-miles traveled (HMVM) for segments, or millions-of-vehicles (MV) for spots. Using the average crash rate, the critical crash rate is obtained from Kentucky Transportation Research Center's (KTRC) *Analysis of Traffic Crash Data in Kentucky (2000-2004)*. The critical crash rate is the maximum crash rate expected to occur on a roadway section, given the statewide average crash rate for that functional road class, the average daily traffic (ADT) volume, and the roadway section length. The ratio of these two rates (*i.e.*, the actual annual crash rate to the critical crash rate) produces a critical rate factor (CRF), or a measure of crash frequency for each segment or spot location. If the roadway section's actual crash rate exceeds the critical rate (*i.e.*, the CRF is greater than 1.0), then that section is classified as a high crash location. In other words, if the CRF exceeds 1.0, then that highway section has more crashes than is statistically probable based on random occurrence. If the CRF is between 0.90 and 1.0, then that section is considered a potentially high crash location, with the potential increasing as 1.0 is approached.

Exhibit 4 in Appendix A provides a graphic presentation of the crashes and high crash areas.

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMV M				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
I-264	5.000	11	6.000	88,300	6	U	92.00	1	414	922	1337	161	9.669	0.10	42.82	95.36	138.28	100.00	1.38
	5.000	5.300	0.300	61,000	6	U	0.28	0	31	65	96	111	0.334	0.00	0.28	0.58	0.86	0.41	2.08
	5.100	5.400	0.300	50,500	6	U	0.28	0	27	53	80	92.2	0.276	0.00	0.29	0.58	0.87	0.43	2.03
	5.200	5.500	0.300	50,500	6	U	0.28	0	21	44	65	92.2	0.276	0.00	0.23	0.48	0.71	0.43	1.65
	5.300	5.600	0.300	50,500	6	U	0.28	0	11	32	43	92.2	0.276	0.00	0.12	0.35	0.47	0.43	1.09
	5.400	5.700	0.300	50,500	6	U	0.28	0	8	22	30	92.2	0.276	0.00	0.09	0.24	0.33	0.43	0.76
	5.500	5.800	0.300	50,500	6	U	0.28	0	9	24	33	92.2	0.276	0.00	0.10	0.26	0.36	0.43	0.84
	5.600	5.900	0.300	50,500	6	U	0.28	0	4	11	15	92.2	0.276	0.00	0.04	0.12	0.16	0.43	0.38
	5.700	6.000	0.300	50,500	6	U	0.28	0	4	13	17	92.2	0.276	0.00	0.04	0.14	0.18	0.43	0.43
	5.800	6.100	0.300	50,500	6	U	0.28	0	3	10	13	92.2	0.276	0.00	0.03	0.11	0.14	0.43	0.33
	5.900	6.200	0.300	50,500	6	U	0.28	0	3	11	14	92.2	0.276	0.00	0.03	0.12	0.15	0.43	0.36
	6.000	6.300	0.300	50,500	6	U	0.28	0	7	15	22	92.2	0.276	0.00	0.08	0.16	0.24	0.43	0.56
	6.100	6.400	0.300	50,500	6	U	0.28	0	13	13	26	92.2	0.276	0.00	0.14	0.14	0.28	0.43	0.66
	6.200	6.500	0.300	50,500	6	U	0.28	0	13	21	34	92.2	0.276	0.00	0.14	0.23	0.37	0.43	0.86
	6.300	6.600	0.300	50,500	6	U	0.28	0	10	15	25	92.2	0.276	0.00	0.11	0.16	0.27	0.43	0.63
	6.400	6.700	0.300	50,500	6	U	0.28	0	7	17	24	92.2	0.276	0.00	0.08	0.18	0.26	0.43	0.61
	6.500	6.800	0.300	50,500	6	U	0.28	0	16	14	30	92.2	0.276	0.00	0.17	0.15	0.33	0.43	0.76
	6.600	6.900	0.300	50,500	6	U	0.28	0	15	17	32	92.2	0.276	0.00	0.16	0.18	0.35	0.43	0.81
	6.700	7.000	0.300	50,500	6	U	0.28	0	12	20	32	92.2	0.276	0.00	0.13	0.22	0.35	0.43	0.81
	6.800	7.100	0.300	50,500	6	U	0.28	0	10	24	34	92.2	0.276	0.00	0.11	0.26	0.37	0.43	0.86
	6.900	7.200	0.300	50,500	6	U	0.28	0	11	25	36	92.2	0.276	0.00	0.12	0.27	0.39	0.43	0.91
	7.000	7.300	0.300	50,500	6	U	0.28	0	17	33	50	92.2	0.276	0.00	0.18	0.36	0.54	0.43	1.27
	7.100	7.400	0.300	50,500	6	U	0.28	0	31	76	107	92.2	0.276	0.00	0.34	0.82	1.16	0.43	2.72
	7.200	7.500	0.300	50,500	6	U	0.28	0	75	160	235	92.2	0.276	0.00	0.81	1.74	2.55	0.43	5.97
	7.300	7.600	0.300	87,300	6	U	0.28	0	92	211	303	159	0.478	0.00	0.58	1.32	1.90	0.39	4.86
	7.400	7.700	0.300	87,300	6	U	0.28	0	81	180	261	159	0.478	0.00	0.51	1.13	1.64	0.39	4.19
	7.500	7.800	0.300	87,300	6	U	0.28	0	41	103	144	159	0.478	0.00	0.26	0.65	0.90	0.39	2.31
	7.600	7.900	0.300	87,300	6	U	0.28	0	18	42	60	159	0.478	0.00	0.11	0.26	0.38	0.39	0.96
	7.700	8.000	0.300	87,300	6	U	0.28	0	8	23	31	159	0.478	0.00	0.05	0.14	0.19	0.39	0.50
	7.800	8.100	0.300	87,300	6	U	0.28	0	9	28	37	159	0.478	0.00	0.06	0.18	0.23	0.39	0.59
	7.900	8.200	0.300	87,300	6	U	0.28	0	8	28	36	159	0.478	0.00	0.05	0.18	0.23	0.39	0.58
	8.000	8.300	0.300	87,300	6	U	0.28	0	15	38	53	159	0.478	0.00	0.09	0.24	0.33	0.39	0.85
	8.100	8.400	0.300	87,300	6	U	0.28	0	10	23	33	159	0.478	0.00	0.06	0.14	0.21	0.39	0.53
	8.200	8.500	0.300	87,300	6	U	0.28	0	8	21	29	159	0.478	0.00	0.05	0.13	0.18	0.39	0.47
	8.300	8.600	0.300	87,300	6	U	0.28	0	2	11	13	159	0.478	0.00	0.01	0.07	0.08	0.39	0.21
	8.400	8.700	0.300	87,300	6	U	0.28	0	1	11	12	159	0.478	0.00	0.01	0.07	0.08	0.39	0.19
	8.500	8.800	0.300	87,300	6	U	0.28	0	1	8	9	159	0.478	0.00	0.01	0.05	0.06	0.39	0.14
	8.600	8.900	0.300	87,300	6	U	0.28	0	1	8	9	159	0.478	0.00	0.01	0.05	0.06	0.39	0.14
	8.700	9.000	0.300	87,300	6	U	0.28	0	3	12	15	159	0.478	0.00	0.02	0.08	0.09	0.39	0.24
	8.800	9.100	0.300	87,300	6	U	0.28	1	23	42	66	159	0.478	0.01	0.14	0.26	0.41	0.39	1.06
	8.900	9.200	0.300	87,300	6	U	0.28	1	35	60	96	159	0.478	0.01	0.22	0.38	0.60	0.39	1.54
	9.000	9.300	0.300	136,200	6	U	0.28	1	40	81	122	249	0.746	0.00	0.16	0.33	0.49	0.37	1.33
	9.100	9.400	0.300	136,200	6	U	0.28	0	22	55	77	249	0.746	0.00	0.09	0.22	0.31	0.37	0.84
	9.200	9.500	0.300	136,200	6	U	0.28	0	9	36	45	249	0.746	0.00	0.04	0.14	0.18	0.37	0.49
	9.300	9.600	0.300	136,200	6	U	0.28	0	2	18	20	249	0.746	0.00	0.01	0.07	0.08	0.37	0.22
	9.400	9.700	0.300	136,200	6	U	0.28	0	2	18	20	249	0.746	0.00	0.01	0.07	0.08	0.37	0.22

Yellow Shading - High Crash Location

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMVM				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
	9.500	9.800	0.300	136,200	6	U	0.28	0	4	17	21	249	0.746	0.00	0.02	0.07	0.08	0.37	0.23
	9.600	9.900	0.300	136,200	6	U	0.28	0	4	12	16	249	0.746	0.00	0.02	0.05	0.06	0.37	0.17
	9.700	10.000	0.300	136,200	6	U	0.28	0	8	20	28	249	0.746	0.00	0.03	0.08	0.11	0.37	0.31
	9.800	10.100	0.300	136,200	6	U	0.28	0	60	102	162	249	0.746	0.00	0.24	0.41	0.65	0.37	1.77
	9.900	10.200	0.300	136,200	6	U	0.28	0	67	129	196	249	0.746	0.00	0.27	0.52	0.79	0.37	2.14
	10.000	10.300	0.300	146,500	6	U	0.28	0	73	159	232	267	0.802	0.00	0.27	0.59	0.87	0.37	2.38
	10.100	10.400	0.300	146,500	6	U	0.28	0	25	82	107	267	0.802	0.00	0.09	0.31	0.40	0.37	1.10
	10.200	10.500	0.300	146,500	6	U	0.28	0	28	64	92	267	0.802	0.00	0.10	0.24	0.34	0.37	0.94
	10.300	10.600	0.300	146,500	6	U	0.28	0	34	45	79	267	0.802	0.00	0.13	0.17	0.30	0.37	0.81
	10.400	10.700	0.300	146,500	6	U	0.28	0	36	63	99	267	0.802	0.00	0.13	0.24	0.37	0.37	1.01
	10.500	10.800	0.300	146,500	6	U	0.28	0	27	56	83	267	0.802	0.00	0.10	0.21	0.31	0.37	0.85
	10.600	10.900	0.300	146,500	6	U	0.28	0	15	41	56	267	0.802	0.00	0.06	0.15	0.21	0.37	0.57
	10.700	11.000	0.300	146,500	6	U	0.28	0	12	30	42	267	0.802	0.00	0.04	0.11	0.16	0.37	0.43

Yellow Shading - High Crash Location

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMVM				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
US 31 W	13.000	17.000	4.000	38,400	4	U	278.00	2	603	1492	2097	70.1	2.803	0.71	215.11	532.25	748.07	283.14	2.64
	13.000	13.300	0.300	53,200	6	U	0.84	0	23	84	107	97.1	0.291	0.00	0.24	0.87	1.10	1.08	1.02
	13.100	13.400	0.300	53,200	6	U	0.84	0	29	101	130	97.1	0.291	0.00	0.30	1.04	1.34	1.08	1.23
	13.200	13.500	0.300	53,200	6	U	0.84	0	18	43	61	97.1	0.291	0.00	0.19	0.44	0.63	1.08	0.58
	13.300	13.600	0.300	53,200	6	U	0.84	0	20	33	53	97.1	0.291	0.00	0.21	0.34	0.55	1.08	0.50
	13.400	13.700	0.300	53,200	6	U	0.84	0	9	15	24	97.1	0.291	0.00	0.09	0.15	0.25	1.08	0.23
	13.500	13.800	0.300	53,200	6	U	0.84	0	11	15	26	97.1	0.291	0.00	0.11	0.15	0.27	1.08	0.25
	13.600	13.900	0.300	62,300	6	U	0.84	0	37	106	143	114	0.341	0.00	0.33	0.93	1.26	1.07	1.18
	13.700	14.000	0.300	62,300	6	U	0.84	0	70	228	298	114	0.341	0.00	0.62	2.01	2.62	1.07	2.46
	13.800	14.100	0.300	62,300	6	U	0.84	0	83	255	338	114	0.341	0.00	0.73	2.24	2.97	1.07	2.79
	13.900	14.200	0.300	62,300	6	U	0.84	0	70	189	259	114	0.341	0.00	0.62	1.66	2.28	1.07	2.14
	14.000	14.300	0.300	62,300	6	U	0.84	1	51	98	150	114	0.341	0.01	0.45	0.86	1.32	1.07	1.24
	14.100	14.400	0.300	62,300	6	U	0.84	1	70	124	195	114	0.341	0.01	0.62	1.09	1.72	1.07	1.61
	14.200	14.500	0.300	62,300	6	U	0.84	1	104	274	379	114	0.341	0.01	0.91	2.41	3.33	1.07	3.13
	14.300	14.600	0.300	62,300	4	U	0.84	0	95	288	383	114	0.341	0.00	0.84	2.53	3.37	1.07	3.16
	14.400	14.700	0.300	62,300	4	U	0.84	0	61	248	309	114	0.341	0.00	0.54	2.18	2.72	1.07	2.55
	14.500	14.800	0.300	62,300	4	U	0.84	0	27	110	137	114	0.341	0.00	0.24	0.97	1.20	1.07	1.13
	14.600	14.900	0.300	62,300	4	U	0.84	0	32	97	129	114	0.341	0.00	0.28	0.85	1.13	1.07	1.06
	14.700	15.000	0.300	62,300	4	U	0.84	0	35	105	140	114	0.341	0.00	0.31	0.92	1.23	1.07	1.16
	14.800	15.100	0.300	62,300	4	U	0.84	0	24	102	126	114	0.341	0.00	0.21	0.90	1.11	1.07	1.04
	14.900	15.200	0.300	33,300	4	U	0.84	0	70	177	247	60.8	0.182	0.00	1.15	2.91	4.06	1.15	3.53
	15.000	15.300	0.300	33,300	4	U	0.84	0	88	193	281	60.8	0.182	0.00	1.45	3.18	4.62	1.15	4.02
	15.100	15.400	0.300	33,300	4	U	0.84	1	129	261	391	60.8	0.182	0.02	2.12	4.29	6.43	1.15	5.59
	15.200	15.500	0.300	33,300	4	U	0.84	1	75	178	254	60.8	0.182	0.02	1.23	2.93	4.18	1.15	3.63
	15.300	15.600	0.300	33,300	4	U	0.84	1	75	174	250	60.8	0.182	0.02	1.23	2.86	4.11	1.15	3.57
	15.400	15.700	0.300	19,100	4	U	0.84	0	38	79	117	34.9	0.105	0.00	1.09	2.27	3.36	1.25	2.68
	15.500	15.800	0.300	19,100	4	U	0.84	0	61	105	166	34.9	0.105	0.00	1.75	3.01	4.76	1.25	3.80
	15.600	15.900	0.300	19,100	4	U	0.84	0	44	70	114	34.9	0.105	0.00	1.26	2.01	3.27	1.25	2.61
	15.700	16.000	0.300	19,100	4	U	0.84	0	49	79	128	34.9	0.105	0.00	1.41	2.27	3.67	1.25	2.93
	15.800	16.100	0.300	19,100	4	U	0.84	0	38	71	109	34.9	0.105	0.00	1.09	2.04	3.13	1.25	2.49
	15.900	16.200	0.300	19,100	4	U	0.84	0	41	88	129	34.9	0.105	0.00	1.18	2.52	3.70	1.25	2.95
	16.000	16.300	0.300	19,100	4	U	0.84	0	35	83	118	34.9	0.105	0.00	1.00	2.38	3.39	1.25	2.70
	16.100	16.400	0.300	19,100	4	U	0.84	0	17	56	73	34.9	0.105	0.00	0.49	1.61	2.09	1.25	1.67
	16.200	16.500	0.300	19,100	4	U	0.84	0	22	56	78	34.9	0.105	0.00	0.63	1.61	2.24	1.25	1.78
	16.300	16.600	0.300	19,100	4	U	0.84	0	19	49	68	34.9	0.105	0.00	0.55	1.41	1.95	1.25	1.56
	16.400	16.700	0.300	19,100	4	U	0.84	0	25	36	61	34.9	0.105	0.00	0.72	1.03	1.75	1.25	1.40
	16.500	16.800	0.300	19,100	4	U	0.84	0	18	21	39	34.9	0.105	0.00	0.52	0.60	1.12	1.25	0.89
	16.600	16.900	0.300	19,100	4	U	0.84	0	18	24	42	34.9	0.105	0.00	0.52	0.69	1.20	1.25	0.96
	16.700	17.000	0.300	19,100	4	U	0.84	0	22	38	60	34.9	0.105	0.00	0.63	1.09	1.72	1.25	1.37

Yellow Shading - High Crash Location

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMVM				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
US 60 A	0.000	3.000	3.000	15,300	4	U	438.00	0	122	101	223	27.9	0.838	0.00	145.64	120.57	266.21	448.22	0.59
	0.000	0.300	0.300	15,700	4	U	1.31	0	51	44	95	28.7	0.086	0.00	1.78	1.54	3.32	1.88	1.77
	0.100	0.400	0.300	15,700	4	U	1.31	0	59	61	120	28.7	0.086	0.00	2.06	2.13	4.19	1.88	2.23
	0.200	0.500	0.300	15,700	4	U	1.31	0	51	46	97	28.7	0.086	0.00	1.78	1.61	3.39	1.88	1.80
	0.300	0.600	0.300	15,700	4	U	1.31	0	41	40	81	28.7	0.086	0.00	1.43	1.40	2.83	1.88	1.51
	0.400	0.700	0.300	13,300	4	U	1.31	0	17	12	29	24.3	0.073	0.00	0.70	0.49	1.19	1.93	0.62
	0.500	0.800	0.300	13,300	4	U	1.31	0	0	3	3	24.3	0.073	0.00	0.00	0.12	0.12	1.93	0.06
	0.600	0.900	0.300	13,300	4	U	1.31	0	5	0	5	24.3	0.073	0.00	0.21	0.00	0.21	1.93	0.11
	0.700	1.000	0.300	13,300	4	U	1.31	0	5	0	5	24.3	0.073	0.00	0.21	0.00	0.21	1.93	0.11
	0.800	1.100	0.300	13,300	4	U	1.31	0	5	2	7	24.3	0.073	0.00	0.21	0.08	0.29	1.93	0.15
	0.900	1.200	0.300	13,300	4	U	1.31	0	7	2	9	24.3	0.073	0.00	0.29	0.08	0.37	1.93	0.19
	1.000	1.300	0.300	13,300	4	U	1.31	0	7	2	9	24.3	0.073	0.00	0.29	0.08	0.37	1.93	0.19
	1.100	1.400	0.300	13,300	4	U	1.31	0	7	0	7	24.3	0.073	0.00	0.29	0.00	0.29	1.93	0.15
	1.200	1.500	0.300	13,300	4	U	1.31	0	6	3	9	24.3	0.073	0.00	0.25	0.12	0.37	1.93	0.19
	1.300	1.600	0.300	19,400	4	U	1.31	0	6	4	10	35.4	0.106	0.00	0.17	0.11	0.28	1.82	0.16
	1.400	1.700	0.300	19,400	4	U	1.31	0	8	5	13	35.4	0.106	0.00	0.23	0.14	0.37	1.82	0.20
	1.500	1.800	0.300	19,400	4	U	1.31	0	2	4	6	35.4	0.106	0.00	0.06	0.11	0.17	1.82	0.09
	1.600	1.900	0.300	19,400	4	U	1.31	0	6	4	10	35.4	0.106	0.00	0.17	0.11	0.28	1.82	0.16
	1.700	2.000	0.300	19,400	4	U	1.31	0	5	3	8	35.4	0.106	0.00	0.14	0.08	0.23	1.82	0.12
	1.800	2.100	0.300	19,400	4	U	1.31	0	5	2	7	35.4	0.106	0.00	0.14	0.06	0.20	1.82	0.11
	1.900	2.200	0.300	19,400	4	U	1.31	0	2	2	4	35.4	0.106	0.00	0.06	0.06	0.11	1.82	0.06
	2.000	2.300	0.300	19,400	4	U	1.31	0	2	5	7	35.4	0.106	0.00	0.06	0.14	0.20	1.82	0.11
	2.100	2.400	0.300	11,900	4	U	1.31	0	3	4	7	21.7	0.065	0.00	0.14	0.18	0.32	1.97	0.16
	2.200	2.500	0.300	11,900	4	U	1.31	0	4	3	7	21.7	0.065	0.00	0.18	0.14	0.32	1.97	0.16
	2.300	2.600	0.300	11,900	4	U	1.31	0	3	0	3	21.7	0.065	0.00	0.14	0.00	0.14	1.97	0.07
	2.400	2.700	0.300	11,900	4	U	1.31	0	2	0	2	21.7	0.065	0.00	0.09	0.00	0.09	1.97	0.05
	2.500	2.800	0.300	11,900	4	U	1.31	0	0	2	2	21.7	0.065	0.00	0.00	0.09	0.09	1.97	0.05
	2.600	2.900	0.300	14,100	4	U	1.31	0	0	2	2	25.7	0.077	0.00	0.00	0.08	0.08	1.91	0.04
	2.700	3.000	0.300	14,100	4	U	1.31	0	0	2	2	25.7	0.077	0.00	0.00	0.08	0.08	1.91	0.04

Yellow Shading - High Crash Location

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMVM				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
KY 1865	4.000	6.200	2.200	28,000	4	U	438.00	0	95	148	243	51.1	1.124	0.00	84.50	131.65	216.15	445.55	0.49
	4.000	4.300	0.300	21,600	4	U	1.31	0	7	4	11	39.4	0.118	0.00	0.18	0.10	0.28	1.79	0.16
	4.100	4.400	0.300	29,100	4	U	1.31	0	10	13	23	53.1	0.159	0.00	0.19	0.24	0.43	1.72	0.25
	4.200	4.500	0.300	29,100	4	U	1.31	0	11	14	25	53.1	0.159	0.00	0.21	0.26	0.47	1.72	0.27
	4.300	4.600	0.300	29,100	4	U	1.31	0	10	13	23	53.1	0.159	0.00	0.19	0.24	0.43	1.72	0.25
	4.400	4.700	0.300	29,100	4	U	1.31	0	2	5	7	53.1	0.159	0.00	0.04	0.09	0.13	1.72	0.08
	4.500	4.800	0.300	29,100	4	U	1.31	0	6	3	9	53.1	0.159	0.00	0.11	0.06	0.17	1.72	0.10
	4.600	4.900	0.300	29,100	4	U	1.31	0	7	5	12	53.1	0.159	0.00	0.13	0.09	0.23	1.72	0.13
	4.700	5.000	0.300	29,100	4	U	1.31	0	10	7	17	53.1	0.159	0.00	0.19	0.13	0.32	1.72	0.19
	4.800	5.100	0.300	29,100	4	U	1.31	0	28	16	44	53.1	0.159	0.00	0.53	0.30	0.83	1.72	0.48
	4.900	5.200	0.300	29,100	4	U	1.31	0	28	16	44	53.1	0.159	0.00	0.53	0.30	0.83	1.72	0.48
	5.000	5.300	0.300	29,100	4	U	1.31	0	31	29	60	53.1	0.159	0.00	0.58	0.55	1.13	1.72	0.66
	5.100	5.400	0.300	29,100	4	U	1.31	0	9	23	32	53.1	0.159	0.00	0.17	0.43	0.60	1.72	0.35
	5.200	5.500	0.300	29,100	4	U	1.31	0	8	20	28	53.1	0.159	0.00	0.15	0.38	0.53	1.72	0.31
	5.300	5.600	0.300	29,100	4	U	1.31	0	10	23	33	53.1	0.159	0.00	0.19	0.43	0.62	1.72	0.36
	5.400	5.700	0.300	29,100	4	U	1.31	0	9	24	33	53.1	0.159	0.00	0.17	0.45	0.62	1.72	0.36
	5.500	5.800	0.300	29,100	4	U	1.31	0	14	39	53	53.1	0.159	0.00	0.26	0.73	1.00	1.72	0.58
	5.600	5.900	0.300	29,100	4	U	1.31	0	13	33	46	53.1	0.159	0.00	0.24	0.62	0.87	1.72	0.50
	5.700	6.000	0.300	29,100	4	U	1.31	0	21	32	53	53.1	0.159	0.00	0.40	0.60	1.00	1.72	0.58
	5.800	6.100	0.300	29,100	4	U	1.31	0	19	33	52	53.1	0.159	0.00	0.36	0.62	0.98	1.72	0.57
	5.900	6.200	0.300	29,100	4	U	1.31	0	14	38	52	53.1	0.159	0.00	0.26	0.72	0.98	1.72	0.57

Yellow Shading - High Crash Location

Manslick Road Interchange
Crash Analysis
January 2001 – December 2005

	Begin MP	End MP	Length (Miles)	Average ADT	Number Lanes	Rural / Urban	Functional Class Rate	ACCIDENTS				MV	HMV M	Rates per HMVM				Critical Rate	Critical Rate Factor
								Fatal	Injury	PDO	Total			Fatal Rate	Injury Rate	PDO Rate	Total Rate		
KY 1931	6.000	10.000	4.000	17,100	2	U	438.00	4	134	171	309	31.2	1.248	3.20	107.35	136.99	247.54	447.67	0.55
	6.000	6.300	0.300	20,000	2	R	1.31	0	6	2	8	36.5	0.110	0.00	0.16	0.05	0.22	1.81	0.12
	6.100	6.400	0.300	13,300	2	R	1.31	0	4	2	6	24.3	0.073	0.00	0.16	0.08	0.25	1.93	0.13
	6.200	6.500	0.300	13,300	2	R	1.31	0	9	18	27	24.3	0.073	0.00	0.37	0.74	1.11	1.93	0.58
	6.300	6.600	0.300	13,300	2	R	1.31	0	12	33	45	24.3	0.073	0.00	0.49	1.36	1.85	1.93	0.96
	6.400	6.700	0.300	13,300	2	R	1.31	0	10	34	44	24.3	0.073	0.00	0.41	1.40	1.81	1.93	0.94
	6.500	6.800	0.300	13,300	2	R	1.31	0	6	18	24	24.3	0.073	0.00	0.25	0.74	0.99	1.93	0.51
	6.600	6.900	0.300	13,300	2	R	1.31	0	2	6	8	24.3	0.073	0.00	0.08	0.25	0.33	1.93	0.17
	6.700	7.000	0.300	13,300	2	R	1.31	0	2	3	5	24.3	0.073	0.00	0.08	0.12	0.21	1.93	0.11
	6.800	7.100	0.300	13,300	2	R	1.31	0	2	3	5	24.3	0.073	0.00	0.08	0.12	0.21	1.93	0.11
	6.900	7.200	0.300	13,300	2	U	1.31	0	4	4	8	24.3	0.073	0.00	0.16	0.16	0.33	1.93	0.17
	7.000	7.300	0.300	13,300	2	U	1.31	0	4	7	11	24.3	0.073	0.00	0.16	0.29	0.45	1.93	0.23
	7.100	7.400	0.300	13,300	2	U	1.31	0	4	8	12	24.3	0.073	0.00	0.16	0.33	0.49	1.93	0.26
	7.200	7.500	0.300	13,300	2	U	1.31	0	2	5	7	24.3	0.073	0.00	0.08	0.21	0.29	1.93	0.15
	7.300	7.600	0.300	13,300	4	U	1.31	0	2	2	4	24.3	0.073	0.00	0.08	0.08	0.16	1.93	0.09
	7.400	7.700	0.300	13,300	4	U	1.31	0	0	3	3	24.3	0.073	0.00	0.00	0.12	0.12	1.93	0.06
	7.500	7.800	0.300	13,300	4	U	1.31	0	0	3	3	24.3	0.073	0.00	0.00	0.12	0.12	1.93	0.06
	7.600	7.900	0.300	13,300	4	U	1.31	0	0	3	3	24.3	0.073	0.00	0.00	0.12	0.12	1.93	0.06
	7.700	8.000	0.300	13,300	4	U	1.31	1	9	11	21	24.3	0.073	0.04	0.37	0.45	0.87	1.93	0.45
	7.800	8.100	0.300	13,300	4	U	1.31	1	9	13	23	24.3	0.073	0.04	0.37	0.54	0.95	1.93	0.49
	7.900	8.200	0.300	13,300	4	U	1.31	1	9	16	26	24.3	0.073	0.04	0.37	0.66	1.07	1.93	0.56
	8.000	8.300	0.300	13,300	4	U	1.31	0	1	6	7	24.3	0.073	0.00	0.04	0.25	0.29	1.93	0.15
	8.100	8.400	0.300	13,300	4	U	1.31	0	6	6	12	24.3	0.073	0.00	0.25	0.25	0.49	1.93	0.26
	8.200	8.500	0.300	13,300	4	U	1.31	0	11	10	21	24.3	0.073	0.00	0.45	0.41	0.87	1.93	0.45
	8.300	8.600	0.300	20,000	4	U	1.31	1	19	27	47	36.5	0.110	0.03	0.52	0.74	1.29	1.81	0.71
	8.400	8.700	0.300	20,000	4	U	1.31	2	19	28	49	36.5	0.110	0.05	0.52	0.77	1.34	1.81	0.74
	8.500	8.800	0.300	20,000	4	U	1.31	2	17	28	47	36.5	0.110	0.05	0.47	0.77	1.29	1.81	0.71
	8.600	8.900	0.300	20,000	4	U	1.31	1	9	12	22	36.5	0.110	0.03	0.25	0.33	0.60	1.81	0.33
	8.700	9.000	0.300	20,000	4	U	1.31	0	7	8	15	36.5	0.110	0.00	0.19	0.22	0.41	1.81	0.23
	8.800	9.100	0.300	20,000	4	U	1.31	0	5	2	7	36.5	0.110	0.00	0.14	0.05	0.19	1.81	0.11
	8.900	9.200	0.300	20,000	4	U	1.31	1	6	3	10	36.5	0.110	0.03	0.16	0.08	0.27	1.81	0.15
	9.000	9.300	0.300	20,000	4	U	1.31	1	3	4	8	36.5	0.110	0.03	0.08	0.11	0.22	1.81	0.12
	9.100	9.400	0.300	20,000	4	U	1.31	1	3	5	9	36.5	0.110	0.03	0.08	0.14	0.25	1.81	0.14
	9.200	9.500	0.300	20,000	4	U	1.31	0	1	6	7	36.5	0.110	0.00	0.03	0.16	0.19	1.81	0.11
	9.300	9.600	0.300	20,000	4	U	1.31	0	6	15	21	36.5	0.110	0.00	0.16	0.41	0.58	1.81	0.32
	9.400	9.700	0.300	20,000	4	U	1.31	0	30	35	65	36.5	0.110	0.00	0.82	0.96	1.78	1.81	0.98
	9.500	9.800	0.300	20,000	4	U	1.31	0	36	39	75	36.5	0.110	0.00	0.99	1.07	2.05	1.81	1.13
	9.600	9.900	0.300	20,000	4	U	1.31	0	51	41	92	36.5	0.110	0.00	1.40	1.12	2.52	1.81	1.39
	9.700	10.000	0.300	20,000	4	U	1.31	0	33	22	55	36.5	0.110	0.00	0.90	0.60	1.51	1.81	0.83

Yellow Shading - High Crash Location