

**SYSTEMATIC EVALUATION OF RUN OFF ROAD CRASH
LOCATIONS IN WISCONSIN**

FINAL REPORT



DECEMBER 2004

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16. Abstract In 2000 the Wisconsin Department of Transportation put forth a Strategic Highway Safety Plan, aligned with AASHTO-recommended safety actions aiming to reduce nation-wide fatalities by 5-7 thousand per year. The present effort was conceived within a state-wide action plan to keep vehicles on the roadway and minimize the consequences of leaving the roadway; it also aimed to improve state-wide data and decision support systems. A method to systematically identify crashes on undivided State Trunk Highways (STH) was developed; crash rates, crash densities (crashes/mile) and other safety statistics were developed; a floating highway segment algorithm (PRÈCIS) that can identify crash rates at any given point along any undivided STH was also developed. Statistics were produced for two- three- and four-lane urban and rural STH, with an emphasis on two-lane two-way rural undivided highways. 335,666 non-deer crashes were reported in the state of Wisconsin between 1998 and 2000. 143,117 of those crashes occurred on STH, 60,345 of which occurred on 9,474 miles of undivided STH. Most of this mileage is rural (8900 miles), with the majority being two-lane highways (8820 miles). Crash rates, crash densities and other statistics were developed for the undivided parts of each STH, and each number of lanes/population density (urban or rural) cohort. State-wide statistics were developed as well. Crash rates and crash densities were developed for all, non-intersection, and Run-off-Road crashes. Similar crash statistics for Run-off-Road crashes were calculated for injury & fatal, wet & snow, darkness, horizontal or vertical curve and fixed object crashes. For Run-off-Road crashes on two-lane rural STH, statistics were developed for overturn, fixed object, ditch, tree, guardrail, utility pole embankment and sign post crashes. Results of the floating highway segment algorithm PRÈCIS were plotted on a GIS-based map; color-coded continuous lines parallel to a given STH alignment indicated crash rate at any given point along the STH; colored line charts accompanying the GIS map indicated crash rates at any mile point. The ability to produce special tables listing highway features and crash information (Interleaf tables) sorted by mile point was also provided. Two strategies for the identification of highway segments in need of safety improvements were provided.		
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EXECUTIVE SUMMARY

The project focused on developing a methodology to identify Run-off-Road (ROR), non-intersection crashes that occurred on the two-lane undivided portions of State Trunk Highways (STH) in the State of Wisconsin. The objectives of this project were to calculate crash statistics and identify locations requiring safety improvements using a state-wide systematic methodology.

The project addressed two of the seven action plans listed in the 2000 Wisconsin Department of Transportation (WisDOT) Strategic Highway Safety Plan, namely:

- Improve data and decision support systems; and
- Keep vehicles on the roadway/minimize the consequences of leaving the roadway.

Project objectives were met by developing state-wide and highway-specific statistics (crash rates, crash densities and other statistics) for a variety of Run-off-Road crash characteristics, and proposing strategies to evaluate the safety performance of all STH based on these statistics.

Two strategies for the systematic identification, stratification and analysis of crash locations were proposed. The first strategy required two sequential steps:

1. Multiple rankings of all State Trunk Highways based on selected crash characteristics are used to select a limited number of STH for examination.
2. Particular segments of the selected highways that require further examination for potential treatment are determined with the help of the “floating highway segment” algorithm **PRÈCIS**. (Details in **Appendix I**.)

The second strategy required processing all undivided STH through the **PRÈCIS** algorithm and selecting segments with high crash rates for treatment.

In meeting project objectives major emphasis was placed on producing a user-friendly methodology, using existing databases in an automated manner. The proposed strategies were based on a simple tabular format, using a locational reference in wide use within WisDOT. GIS-based maps presenting **PRÈCIS** results provided simple locational references, and crash rates at any point along a STH were presented by color-coded continuous lines parallel to the centerline with additional line charts providing more detailed crash rates at any mile point. The three databases used in the project (crash, Metamanager, and State Trunk Highway Log) preexisted and were consistently updated each year. The developed methodology to produce tabular state-wide statistics is automated to a great extent, requiring minimal labor for annual table updates. With some additional work on automating the state-wide application of **PRÈCIS** tables and the GIS maps displaying the information they contain, a set of maps could be created annually with minimal labor expenditure.

A wide array of crash statistics were produced for Run-off-Road crashes on the 9,471 miles of undivided STH in the state of Wisconsin. A quick reference to appropriate tables is provided in **Table 4**.

Between 1998 and 2000 a total of 60,345 crashes occurred on the 9,471 miles of undivided STH. Most (34,604) took place on rural highways (8,901 miles), where most crashes (21,947) occurred at non-intersection locations. Among those, 11,803 were Run-off-Road crashes including 207 fatal and 4,972 injury crashes.

Relationships between two-lane rural highway Run-off-Road crash characteristics and severity were examined in detail in **Appendix H**. A high percentage of fatal crashes (62.2%) occurred during nighttime—only 44% of all ROR crashes occurred during nighttime. Most fatal crashes (74.8%) occurred on dry pavements with a relatively small percentage (9.4%) occurring on pavements covered with snow, slush or ice. Statistics for all ROR crashes were 53.8% and 33.3% respectively. A large percentage of fatal crashes involved overturning vehicles (40.5%)-the overall percentage was 26.4% for ROR crashes. A disproportionate number of crashes involving motorcyclists were fatal (6.5% of all fatal crashes) given that motorcyclists were involved in 1.9% of all crashes.

The state-wide crash rate for undivided STH was 144 crashes/ 100MVM; the rate was 99 crashes/100MVM for rural highways and 368 crashes/100MVM for urban highways. Two-lane rural highways had a rate of 96 crashes/100MVM; the non-intersection rate was 62 crashes/100MVM and the ROR rate was 34 crashes/100MVM.

The state-wide crash density for undivided STH was 2 crashes/mile/year (crashes/mi/yr); urban density was 15 crashes/mi/yr; rural was 1.3 crashes/mi/yr. Two-lane rural was 1.2 crashes/mi/yr. On the same highways, the non-intersection crash density was 0.8 crashes/mi/yr and ROR density was 0.4 crashes/mi/yr.

It is recommended to include additional years of crash experience in ROR crash statistics calculations. A systematic review of results produced in the course of the present effort would be desirable; highway segments selected for safety upgrades should be documented and available through a WisDOT safety clearinghouse. It is recommended to generate a set of maps, one for each STH, to display crash rates generated through the **PRÈCIS** algorithm, and make them available through the safety clearinghouse.

APPENDIX A

CRASH RATES AND CRASH DENSITIES
FOR
2- 3- and 4-LANE
URBAN AND RURAL
UNDIVIDED
STATE TRUNK HIGHWAYS

Undivided STH All, Non-Intersection and ROR Crashes

Page A 1

Popul. Density	No of Lanes	STH Route	Miles	Crash					Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel miles/ 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR (3 Yrs)	Crash per mile/ year	Crash per 100MVM	
Rural	2	002	96.05	321	1.98	1.11	54.06	245	.85	41.26	129	.45	21.72	
		008	243.10	805	3.81	1.10	70.45	511	.70	44.72	278	.38	24.33	
		010	240.98	1200	4.81	1.66	83.21	640	.89	44.38	332	.46	23.02	
		011	113.97	543	2.35	1.59	76.98	359	1.05	50.90	185	.54	26.23	
		012	238.43	1426	4.03	1.99	117.95	872	1.22	72.13	463	.65	38.30	
		013	299.53	997	4.31	1.11	77.03	682	.76	52.69	349	.39	26.97	
		014	158.02	1177	4.17	2.48	94.15	749	1.58	59.91	347	.73	27.76	
		015	1.60	31	.07	6.46	138.34	20	4.17	89.25	5	1.04	22.31	
		016	95.56	432	1.73	1.51	83.26	267	.93	51.46	144	.50	27.75	
		017	73.70	175	.98	.79	59.49	139	.63	47.25	97	.44	32.98	
		018	89.60	521	1.73	1.94	100.66	300	1.12	57.96	142	.53	27.44	
		019	46.73	351	.89	2.50	130.99	195	1.39	72.77	94	.67	35.08	
		020	29.60	217	.49	2.44	147.76	114	1.28	77.63	66	.74	44.94	
		021	111.56	507	2.58	1.51	65.45	321	.96	41.44	161	.48	20.78	
		022	149.63	578	2.10	1.29	91.81	343	.76	54.48	191	.43	30.34	
		023	164.65	822	2.96	1.66	92.71	508	1.03	57.30	240	.49	27.07	
		025	79.18	194	.88	.82	73.70	135	.57	51.29	90	.38	34.19	
		026	70.94	478	2.05	2.25	77.89	289	1.36	47.09	139	.65	22.65	
		027	242.23	525	2.17	.72	80.53	374	.51	57.37	234	.32	35.89	
		028	49.88	241	.63	1.61	128.42	136	.91	72.47	70	.47	37.30	
		029	73.45	251	.76	1.14	110.67	153	.69	67.46	77	.35	33.95	
		031	4.35	134	.28	10.27	161.06	60	4.60	72.12	16	1.23	19.23	
		032	171.75	683	2.36	1.33	96.33	410	.80	57.83	202	.39	28.49	
		033	162.71	829	2.67	1.70	103.66	531	1.09	66.40	258	.53	32.26	
		034	22.93	53	.30	.77	59.68	37	.54	41.66	24	.35	27.02	
		035	308.00	1057	4.17	1.14	84.49	720	.78	57.55	350	.38	27.98	
		036	6.57	25	.10	1.27	84.35	18	.91	60.73	10	.51	33.74	
		037	40.17	97	.41	.80	78.84	83	.69	67.46	55	.46	44.70	
		038	5.03	74	.12	4.90	214.25	35	2.32	101.33	21	1.39	60.80	
		039	40.84	99	.14	.81	239.68	72	.59	174.32	56	.46	135.58	
		040	79.42	163	.32	.68	169.29	118	.50	122.55	79	.33	82.05	
		041	15.19	118	.61	2.59	64.50	78	1.71	42.64	34	.75	18.59	
		042	110.43	537	1.57	1.62	114.10	313	.94	66.51	139	.42	29.54	
		044	55.65	132	.60	.79	73.59	90	.54	50.18	55	.33	30.66	
		045	196.43	1077	3.78	1.83	94.85	635	1.08	55.92	296	.50	26.07	
		046	27.93	65	.38	.78	57.23	44	.53	38.74	22	.26	19.37	

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Rural	2	047	116.65	418	1.81	1.19	77.08	287	.82	52.92	154	.44	28.40
		048	88.15	171	.76	.65	74.92	110	.42	48.20	70	.26	30.67
		049	93.53	258	.89	.92	96.42	184	.66	68.76	107	.38	39.99
		050	5.64	100	.21	5.91	160.32	52	3.07	83.37	21	1.24	33.67
		051	109.67	535	2.29	1.63	77.88	374	1.14	54.44	211	.64	30.72
		052	57.60	104	.24	.60	143.67	80	.46	110.52	58	.34	80.13
		053	65.51	213	.98	1.08	72.18	162	.82	54.89	99	.50	33.55
		054	172.71	554	2.13	1.07	86.76	344	.66	53.87	193	.37	30.23
		055	134.99	273	.79	.67	115.69	165	.41	69.92	107	.26	45.34
		056	50.56	129	.22	.85	191.20	104	.69	154.15	84	.55	124.50
		057	71.65	331	1.70	1.54	65.03	225	1.05	44.21	116	.54	22.79
		058	52.84	161	.35	1.02	152.09	116	.73	109.58	58	.37	54.79
		059	85.54	408	1.26	1.59	108.18	236	.92	62.58	129	.50	34.20
		060	130.58	558	1.48	1.42	125.63	391	1.00	88.03	213	.54	47.96
		061	65.19	291	.95	1.49	102.09	164	.84	57.54	73	.37	25.61
		063	171.64	611	2.71	1.19	75.23	361	.70	44.45	192	.37	23.64
		064	234.17	477	1.69	.68	94.29	316	.45	62.47	193	.27	38.15
		065	43.50	137	.60	1.05	75.96	91	.70	50.46	67	.51	37.15
		066	14.66	81	.20	1.84	131.77	53	1.21	86.22	36	.82	58.56
		067	125.86	589	1.51	1.56	129.77	371	.98	81.74	214	.57	47.15
		068	8.49	42	.08	1.65	169.53	31	1.22	125.13	23	.90	92.84
		069	36.47	181	.76	1.65	79.23	131	1.20	57.34	78	.71	34.14
		070	213.06	345	1.86	.54	61.76	245	.38	43.86	142	.22	25.42
		071	42.62	120	.31	.94	127.62	98	.77	104.23	64	.50	68.07
		072	27.70	44	.12	.53	119.93	35	.42	95.40	28	.34	76.32
		073	214.85	548	1.95	.85	93.87	326	.51	55.84	187	.29	32.03
		075	12.10	83	.14	2.29	194.71	44	1.21	103.22	32	.88	75.07
		076	24.92	91	.16	1.22	189.34	61	.82	126.92	43	.58	89.47
		077	116.72	114	.48	.33	79.63	88	.25	61.47	70	.20	48.89
		078	85.19	245	.54	.96	149.94	174	.68	106.49	127	.50	77.72
		079	17.63	32	.10	.61	108.99	21	.40	71.52	14	.26	47.68
		080	142.60	380	1.33	.89	94.92	270	.63	67.45	178	.42	44.46
		081	85.38	179	.70	.70	85.69	137	.53	65.58	97	.38	46.44
		082	84.05	181	.69	.72	87.72	130	.52	63.00	84	.33	40.71
		083	50.01	705	1.21	4.70	194.11	378	2.52	104.08	168	1.12	46.26
		085	23.46	61	.23	.87	88.22	50	.71	72.31	33	.47	47.73

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	Crash per year	ROR Crash per 100MVM
Rural	2	086	31.63	56	.12	.59	150.36	23	.24	61.75	11	.12	29.53
		087	22.26	59	.18	.88	109.34	37	.55	68.57	18	.27	33.36
		088	29.75	39	.06	.44	211.44	35	.39	189.75	28	.31	151.80
		089	44.33	176	.54	1.32	109.19	108	.81	67.01	58	.44	35.98
		091	16.50	70	.26	1.41	91.24	53	1.07	69.08	42	.85	54.74
		092	27.12	69	.13	.85	176.97	49	.60	125.68	38	.47	97.46
		093	51.89	166	.75	1.07	73.85	114	.73	50.72	56	.36	24.91
		095	71.49	156	.38	.73	138.11	119	.55	105.35	71	.33	62.86
		096	27.04	172	.33	2.12	172.16	76	.94	76.07	30	.37	30.03
		097	33.87	102	.42	1.00	80.10	65	.64	51.05	28	.28	21.99
		098	16.20	38	.17	.78	74.34	16	.33	31.30	6	.12	11.74
		101	21.12	10	.06	.16	53.78	8	.13	43.02	8	.13	43.02
		102	18.25	26	.06	.47	148.92	17	.31	97.37	13	.24	74.46
		104	14.34	40	.11	.93	121.83	35	.81	106.60	28	.65	85.28
		105	2.75	5	.02	.61	80.48	4	.48	64.38	2	.24	32.19
		106	27.39	110	.21	1.34	178.18	70	.85	113.39	52	.63	84.23
		107	44.19	96	.22	.72	145.04	69	.52	104.25	46	.35	69.50
		108	17.89	41	.05	.76	252.82	35	.65	215.82	25	.47	154.16
		110	41.26	249	.69	2.01	120.07	141	1.14	67.99	79	.64	38.09
		111	10.61	8	.05	.25	52.56	8	.25	52.56	8	.25	52.56
		112	10.17	8	.05	.26	49.63	3	.10	18.61	3	.10	18.61
		113	26.28	157	.31	1.99	170.01	105	1.33	113.70	68	.86	73.64
		114	8.88	38	.18	1.43	71.54	19	.71	35.77	13	.49	24.47
		115	5.94	20	.02	1.12	322.02	11	.62	177.11	10	.56	161.01
		116	13.78	68	.16	1.64	141.48	47	1.14	97.79	16	.39	33.29
		117	5.13	25	.08	1.62	107.66	16	1.04	68.90	6	.39	25.84
		118	6.86	5	.02	.24	86.22	5	.24	86.22	5	.24	86.22
		120	15.44	76	.28	1.64	91.78	63	1.36	76.08	35	.76	42.27
		121	34.75	59	.17	.57	116.97	46	.44	91.19	29	.28	57.49
		122	14.69	5	.01	.11	146.57	4	.09	117.25	4	.09	117.25
		123	1.10	9	.01	2.73	276.74	6	1.82	184.49	3	.91	92.25
		124	10.63	45	.12	1.41	122.31	13	.41	35.34	8	.25	21.74
		126	4.81	7	.02	.49	108.87	5	.35	77.77	4	.28	62.21
		127	12.75	17	.04	.44	134.54	12	.31	94.97	9	.24	71.23
		128	27.04	59	.15	.73	129.62	40	.49	87.88	30	.37	65.91
		129	2.69	10	.03	1.24	101.92	1	.12	10.19	0	.00	.00

Undivided STH All, Non-Intersection and ROR Crashes

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Popul. Density	No of Lanes	STH Route	Miles	Crash						Non-int						ROR	
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per year	Crash per 100MVM	Crash per year	ROR Crash per 100MVM	Crash per year	ROR Crash per 100MVM
Rural	2	130	30.73	42	.09	.46	163.97	35	.38	136.64	28	.30	109.31				
		131	70.19	127	.34	.60	126.13	99	.47	98.32	70	.33	69.52				
		133	72.01	156	.35	.72	149.56	126	.58	120.80	94	.44	90.12				
		134	2.85	12	.01	1.40	428.20	10	1.17	356.83	10	1.17	356.83				
		136	12.53	45	.11	1.20	135.91	38	1.01	114.77	28	.74	84.57				
		137	3.74	.	.	.	.	.	.	.	.	.	.
		138	11.66	48	.21	1.37	75.20	35	1.00	54.83	21	.60	32.90				
		139	22.01	13	.08	.20	54.50	11	.17	46.12	9	.14	37.73				
		140	11.25	66	.14	1.96	162.24	47	1.39	115.54	33	.98	81.12				
		141	61.92	357	1.61	1.92	73.91	253	1.36	52.38	107	.58	22.15				
		142	16.31	55	.18	1.12	99.75	38	.78	68.92	26	.53	47.16				
		144	19.45	120	.25	2.06	162.88	80	1.37	108.59	48	.82	65.15				
		145	.41	3	.01	2.44	179.15	3	2.44	179.15	3	2.44	179.15				
		146	13.22	11	.04	.28	92.35	8	.20	67.16	7	.18	58.77				
		147	12.65	53	.13	1.40	140.86	35	.92	93.02	21	.55	55.81				
		149	24.15	75	.12	1.04	213.19	50	.69	142.13	32	.44	90.96				
		150	6.65	25	.12	1.25	68.36	20	1.00	54.69	9	.45	24.61				
		151	91.26	593	2.05	2.17	96.31	426	1.56	69.19	221	.81	35.89				
		152	7.22	6	.02	.28	90.34	4	.18	60.23	3	.14	45.17				
		153	60.24	194	.57	1.07	114.06	106	.59	62.32	60	.33	35.28				
		154	19.00	37	.08	.65	156.77	24	.42	101.69	20	.35	84.74				
		155	6.94	17	.06	.82	89.75	8	.38	42.23	7	.34	36.96				
		156	26.23	36	.15	.46	80.17	26	.33	57.90	21	.27	46.77				
		159	1.29	1	.01	.26	35.40	1	.26	35.40	1	.26	35.40				
		160	3.22	8	.03	.83	78.94	4	.41	39.47	1	.10	9.87				
		161	21.58	50	.11	.77	151.80	36	.56	109.30	26	.40	78.94				
		162	40.88	95	.14	.77	231.69	80	.65	195.11	65	.53	158.53				
		164	25.65	265	.82	3.44	107.45	114	1.48	46.22	46	.60	18.65				
		165	.78	.	.03	.	.	.	.	.	.	.	.
		167	9.41	65	.14	2.30	159.24	43	1.52	105.35	27	.96	66.15				
		168	5.93	6	.02	.34	126.23	5	.28	105.19	3	.17	63.12				
		169	17.36	2	.03	.04	24.97	2	.04	24.97	2	.04	24.97				
		170	23.90	55	.14	.77	131.98	45	.63	107.98	34	.47	81.58				
		171	33.25	57	.08	.57	235.11	53	.53	218.61	42	.42	173.24				
		172	1.40	10	.05	2.38	69.80	7	1.67	48.86	0	.00	.00				
		173	33.55	39	.23	.39	56.85	36	.36	52.48	29	.29	42.27				

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Rural	2	175	46.56	289	.49	2.07	197.65	188	1.35	128.58	123	.88	84.12
		178	20.09	81	.19	1.34	144.31	55	.91	97.99	43	.71	76.61
		179	8.80	10	.02	.38	172.67	8	.30	138.14	7	.27	120.87
		180	29.94	66	.24	.73	93.40	58	.65	82.08	37	.41	52.36
		182	29.65	20	.10	.22	66.98	14	.16	46.89	10	.11	33.49
		186	15.01	22	.11	.49	65.09	13	.29	38.46	9	.20	26.63
		187	13.87	22	.02	.53	342.83	21	.50	327.25	16	.38	249.33
		188	10.55	23	.04	.73	175.41	19	.60	144.90	14	.44	106.77
		191	13.04	23	.04	.59	199.18	22	.56	190.52	17	.43	147.22
		193	1.42	1	.01	.23	42.88	0	.00	.00	0	.00	.00
		194	11.32	12	.03	.35	140.30	10	.29	116.92	10	.29	116.92
		213	19.33	97	.17	1.67	189.64	71	1.22	138.81	55	.95	107.53
		243	.30	1	.01	1.11	60.40	1	1.11	60.40	1	1.11	60.40
		253	7.61	2	.03	.09	24.98	2	.09	24.98	2	.09	24.98
		310	6.69	72	.13	3.59	190.56	32	1.59	84.70	13	.65	34.41
		351	2.31	53	.08	7.65	232.17	24	3.46	105.13	15	2.16	65.71
Overall			8819.81	32519	113.38	1.23	95.61	20925	.79	61.52	11629	.44	34.19

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Rural	3	010	.35	8	.01	7.62	363.60	6	5.71	272.70	2	1.90	90.90
		012	2.00	8	.05	1.33	55.01	5	.83	34.38	4	.67	27.51
		013	2.46	23	.06	3.12	120.89	12	1.63	63.07	6	.81	31.54
		014	.26	15	.01	19.23	469.87	7	8.97	219.27	2	2.56	62.65
		023	1.00	11	.02	3.67	151.73	6	2.00	82.76	3	1.00	41.38
		033	5.58	41	.15	2.45	94.16	26	1.55	59.71	12	.72	27.56
		035	1.03	21	.04	6.80	159.28	16	5.18	121.36	10	3.24	75.85
		045	.22	2	.00	3.03	220.22	2	3.03	220.22	1	1.52	110.11
		051	.32	2	.01	2.08	53.17	2	2.08	53.17	0	.00	.00
		054	.12	2	.00	5.56	221.07	0	.00	.00	0	.00	.00
		057	.14	3	.00	7.14	238.07	2	4.76	158.71	1	2.38	79.36
		061	.62	11	.03	5.91	135.59	8	4.30	98.61	2	1.08	24.65
		078	.17	.	.00	.	.	.	.	.	.	.	.
		080	.41	7	.01	5.69	269.99	3	2.44	115.71	1	.81	38.57
		110	.33	.	.00	.	.	.	.	.	.	.	.
		113	.13	.	.00	.	.	.	.	.	.	.	.
		141	.62	8	.02	4.30	126.10	4	2.15	63.05	1	.54	15.76
Overall			15.76	162	.43	3.43	126.42	99	2.09	77.26	45	.95	35.12

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Rural	4	008	3.68	196	.16	17.75	396.87	59	5.34	119.47	3	.27	6.07
		010	1.78	29	.06	5.43	154.21	15	2.81	79.76	8	1.50	42.54
		012	3.15	238	.23	25.19	348.96	174	18.41	255.12	10	1.06	14.66
		013	6.83	262	.30	12.79	296.00	135	6.59	152.52	13	.63	14.69
		014	1.62	50	.08	10.29	211.56	22	4.53	93.09	3	.62	12.69
		017	1.97	13	.03	2.20	150.57	8	1.35	92.66	2	.34	23.16
		019	.28	16	.01	19.05	844.42	3	3.57	158.33	0	.00	.00
		020	.42	15	.01	11.90	401.79	5	3.97	133.93	0	.00	.00
		021	1.09	41	.04	12.54	331.89	11	3.36	89.04	0	.00	.00
		023	.37	16	.00	14.41	1347.8	1	.90	84.24	0	.00	.00
		027	.19	17	.01	29.82	620.20	9	15.79	328.34	0	.00	.00
		033	.11	7	.01	21.21	306.34	1	3.03	43.76	0	.00	.00
		041	2.92	84	.14	9.59	200.21	32	3.65	76.27	9	1.03	21.45
		045	9.23	283	.38	10.22	247.03	142	5.13	123.95	16	.58	13.97
		046	1.82	48	.05	8.79	292.73	18	3.30	109.77	2	.37	12.20
		047	.61	1	.01	.55	22.74	0	.00	.00	0	.00	.00
		048	.31	.	.00	.	.	.	.	.	.	.	.
		051	15.83	285	.64	6.00	149.02	158	3.33	82.62	42	.88	21.96
		054	.27	11	.01	13.58	462.28	6	7.41	252.15	1	1.23	42.03
		063	1.88	94	.05	16.67	640.79	32	5.67	218.14	2	.35	13.63
		064	2.92	6	.02	.68	100.65	5	.57	83.88	2	.23	33.55
		070	2.10	49	.04	7.78	459.15	22	3.49	206.15	2	.32	18.74
		082	.32	24	.01	25.00	573.34	15	15.63	358.34	0	.00	.00
		086	.36	7	.02	6.48	128.40	3	2.78	55.03	1	.93	18.34
		089	.09	.	.00	.	.	.	.	.	.	.	.
		093	.50	19	.01	12.67	1099.9	3	2.00	173.68	1	.67	57.89
		095	.32	2	.00	2.08	267.34	2	2.08	267.34	0	.00	.00
		107	.43	.	.01	.	.	.	.	.	.	.	.
		110	.93	1	.01	.36	47.37	1	.36	47.37	1	.36	47.37
		113	.12	2	.00	5.56	860.41	2	5.56	860.41	1	2.78	430.21
		141	1.46	53	.04	12.10	424.75	23	5.25	184.32	2	.46	16.03
		151	1.37	21	.04	5.11	160.14	6	1.46	45.76	1	.24	7.63
Overall			65.28	1890	2.43	9.65	259.40	913	4.66	125.31	122	.62	16.74
Overall			8900.85	34571	116.23	1.29	99.14	21937	.82	62.91	11796	.44	33.83

Popul. Density	No of Lanes	STH Route	Miles	Crash						Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	Non-int per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM		
										Crash 1	.01	.68	33.10	0	.00
Urban	2	002	.49	1	.01	.68	33.10	1	.68	33.10	0	.00	.00		
		010	1.64	12	.03	2.44	118.91	9	1.83	89.18	4	.81	39.64		
		011	11.89	363	.31	10.18	386.96	140	3.92	149.24	32	.90	34.11		
		012	7.62	271	.26	11.85	343.73	109	4.77	138.25	18	.79	22.83		
		013	4.31	85	.11	6.57	255.11	26	2.01	78.03	7	.54	21.01		
		014	5.35	142	.25	8.85	190.42	48	2.99	64.37	8	.50	10.73		
		016	11.00	433	.37	13.12	390.24	145	4.39	130.68	24	.73	21.63		
		017	3.84	120	.14	10.42	296.27	49	4.25	120.98	11	.95	27.16		
		018	6.95	368	.26	17.65	478.96	117	5.61	152.28	13	.62	16.92		
		019	6.75	428	.31	21.14	459.88	170	8.40	182.66	10	.49	10.74		
		020	.61	107	.04	58.47	1017.8	43	23.50	409.01	6	3.28	57.07		
		021	2.97	101	.10	11.34	335.98	39	4.38	129.74	5	.56	16.63		
		022	6.13	99	.15	5.38	226.48	26	1.41	59.48	5	.27	11.44		
		023	4.36	261	.17	19.95	502.21	102	7.80	196.27	21	1.61	40.41		
		025	2.10	116	.08	18.41	500.74	46	7.30	198.57	6	.95	25.90		
		026	6.41	226	.27	11.75	283.86	87	4.52	109.27	9	.47	11.30		
		027	2.84	143	.10	16.78	462.43	59	6.92	190.79	12	1.41	38.81		
		028	4.18	34	.12	2.71	94.57	10	.80	27.82	5	.40	13.91		
		029	8.57	223	.36	8.67	207.57	80	3.11	74.47	28	1.09	26.06		
		031	4.00	95	.18	7.92	171.98	37	3.08	66.98	13	1.08	23.53		
		032	38.37	1680	1.61	14.59	348.18	724	6.29	150.05	142	1.23	29.43		
		033	11.32	425	.39	12.51	363.89	160	4.71	136.99	35	1.03	29.97		
		034	.06	.	.00	.	.	.	.	.	.	.	.
		035	10.31	454	.45	14.68	336.27	195	6.30	144.43	26	.84	19.26		
		036	2.65	215	.11	27.04	665.08	93	11.70	287.69	7	.88	21.65		
		038	5.84	222	.20	12.67	375.59	88	5.02	148.88	28	1.60	47.37		
		042	2.16	50	.07	7.72	237.56	20	3.09	95.03	4	.62	19.01		
		044	2.40	89	.07	12.36	403.57	46	6.39	208.59	3	.42	13.60		
		045	13.06	309	.32	7.89	325.03	108	2.76	113.60	41	1.05	43.13		
		047	3.31	112	.11	11.28	326.31	29	2.92	84.49	7	.70	20.39		
		048	1.06	54	.01	16.98	1221.1	19	5.97	429.64	4	1.26	90.45		
		049	6.50	282	.20	14.46	459.89	135	6.92	220.16	10	.51	16.31		
		050	4.47	552	.23	41.16	807.09	227	16.93	331.90	19	1.42	27.78		
		051	10.16	442	.44	14.50	335.29	187	6.14	141.85	36	1.18	27.31		
		052	4.12	69	.06	5.58	357.54	25	2.02	129.54	3	.24	15.55		
		054	9.58	130	.28	4.52	157.41	63	2.19	76.28	16	.56	19.37		

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Urban	2	138	.32	3	.00	3.13	235.53	0	.00	.00	0	.00	.00
		141	2.27	31	.07	4.55	145.33	6	.88	28.13	2	.29	9.38
		142	.91	7	.01	2.56	194.70	2	.73	55.63	0	.00	.00
		144	.82	55	.03	22.36	575.50	28	11.38	292.98	2	.81	20.93
		145	8.60	84	.17	3.26	168.52	22	.85	44.14	10	.39	20.06
		147	2.06	56	.07	9.06	282.32	23	3.72	115.95	2	.32	10.08
		151	7.01	267	.30	12.70	294.67	125	5.94	137.95	24	1.14	26.49
		157	1.29	114	.04	29.46	914.40	20	5.17	160.42	3	.78	24.06
		158	2.31	65	.11	9.38	194.65	21	3.03	62.89	7	1.01	20.96
		164	1.70	15	.08	2.94	65.46	5	.98	21.82	0	.00	.00
		165	3.45	39	.04	3.77	322.61	22	2.13	181.99	10	.97	82.72
		167	3.72	33	.18	2.96	61.42	13	1.16	24.20	4	.36	7.44
		172	.94	8	.03	2.84	85.69	4	1.42	42.85	4	1.42	42.85
		173	1.89	49	.04	8.64	398.58	26	4.59	211.49	1	.18	8.13
		175	6.18	326	.27	17.58	397.12	181	9.76	220.49	27	1.46	32.89
		178	2.13	45	.06	7.04	248.92	15	2.35	82.97	3	.47	16.59
		180	.48	2	.01	1.39	74.47	2	1.39	74.47	1	.69	37.23
		181	8.47	277	.34	10.90	274.47	122	4.80	120.89	33	1.30	32.70
		190	.42	22	.01	17.46	532.22	9	7.14	217.73	0	.00	.00
		213	1.94	42	.03	7.22	420.10	22	3.78	220.05	8	1.37	80.02
		310	1.32	32	.03	8.08	352.07	17	4.29	187.04	2	.51	22.00
Overall			402.72	13332	13.74	11.03	323.46	5371	4.45	130.31	1036	.86	25.14

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Urban	3	012	1.59	125	.12	26.21	350.01	41	8.60	114.80	7	1.47	19.60
		013	.40	4	.02	3.33	85.27	4	3.33	85.27	2	1.67	42.64
		020	1.60	232	.11	48.33	693.84	97	20.21	290.10	13	2.71	38.88
		021	.36	16	.01	14.81	398.90	2	1.85	49.86	0	.00	.00
		022	.76	5	.03	2.19	64.47	3	1.32	38.68	1	.44	12.89
		026	.06	5	.00	27.78	352.33	3	16.67	211.40	0	.00	.00
		029	.08	48	.00	200.0	4663.4	8	33.33	777.23	2	8.33	194.31
		032	.37	51	.02	45.95	964.25	9	8.11	170.16	3	2.70	56.72
		035	.36	33	.02	30.56	513.99	8	7.41	124.60	1	.93	15.58
		038	.83	66	.03	26.51	684.72	23	9.24	238.62	8	3.21	83.00
		041	.87	46	.09	17.62	178.00	17	6.51	65.78	2	.77	7.74
		044	.68	82	.03	40.20	811.67	18	8.82	178.17	5	2.45	49.49
		054	.96	7	.03	2.43	77.66	3	1.04	33.28	2	.69	22.19
		057	.25	26	.01	34.67	598.09	11	14.67	253.04	1	1.33	23.00
		059	.53	124	.03	77.99	1403.8	57	35.85	645.31	3	1.89	33.96
		073	1.17	13	.02	3.70	182.27	10	2.85	140.21	6	1.71	84.13
		074	.43	16	.02	12.40	336.43	4	3.10	84.11	1	.78	21.03
		114	.27	27	.02	33.33	492.39	7	8.64	127.66	1	1.23	18.24
		144	.20	7	.01	11.67	387.44	1	1.67	55.35	0	.00	.00
		181	.51	11	.01	7.19	287.43	7	4.58	182.91	1	.65	26.13
		190	.25	31	.02	41.33	684.24	7	9.33	154.51	1	1.33	22.07
Overall			12.53	975	.65	25.94	499.79	340	9.04	174.29	60	1.60	30.76

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR		
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM
Urban	4	002	4.98	268	.27	17.94	331.83	97	6.49	120.10	10	.67	12.38
		010	1.85	67	.10	12.07	233.26	17	3.06	59.19	2	.36	6.96
		011	4.96	516	.37	34.68	465.76	234	15.73	211.22	21	1.41	18.96
		012	4.43	393	.30	29.57	442.66	194	14.60	218.51	18	1.35	20.27
		013	3.64	245	.19	22.44	437.07	91	8.33	162.34	14	1.28	24.98
		014	2.41	98	.18	13.55	177.86	19	2.63	34.48	1	.14	1.81
		016	3.11	358	.20	38.37	593.12	127	13.61	210.41	15	1.61	24.85
		017	1.75	24	.07	4.57	110.10	10	1.90	45.87	1	.19	4.59
		018	4.70	319	.32	22.62	332.31	105	7.45	109.38	5	.35	5.21
		019	.18	5	.01	9.26	292.59	2	3.70	117.04	1	1.85	58.52
		020	.74	122	.04	54.95	923.84	41	18.47	310.47	3	1.35	22.72
		021	1.94	227	.14	39.00	527.03	75	12.89	174.13	9	1.55	20.90
		022	3.89	256	.16	21.94	547.61	84	7.20	179.68	9	.77	19.25
		023	2.43	274	.14	37.59	672.49	134	18.38	328.88	17	2.33	41.72
		025	.25	29	.01	38.67	752.39	12	16.00	311.33	0	.00	.00
		026	2.19	199	.15	30.29	434.33	96	14.61	209.52	19	2.89	41.47
		028	2.42	193	.15	26.58	421.59	81	11.16	176.93	7	.96	15.29
		029	2.56	321	.16	41.80	672.49	76	9.90	159.22	11	1.43	23.04
		032	14.47	756	.71	17.42	356.93	359	8.27	169.49	81	1.87	38.24
		033	5.70	415	.30	24.27	461.20	117	6.84	130.02	15	.88	16.67
		035	5.26	515	.32	32.64	542.43	148	9.38	155.88	10	.63	10.53
		038	.19	25	.01	43.86	835.05	8	14.04	267.22	2	3.51	66.80
		041	2.93	284	.21	32.31	443.18	81	9.22	126.40	5	.57	7.80
		042	2.03	264	.09	43.35	962.84	89	14.61	324.59	6	.99	21.88
		044	1.64	126	.08	25.61	513.47	32	6.50	130.40	2	.41	8.15
		045	8.48	586	.41	23.03	476.89	216	8.49	175.78	27	1.06	21.97
		047	4.55	393	.28	28.79	472.43	164	12.01	197.15	8	.59	9.62
		048	.85	25	.02	9.80	345.91	6	2.35	83.02	1	.39	13.84
		049	.32	14	.01	14.58	316.85	6	6.25	135.79	1	1.04	22.63
		050	.89	97	.05	36.33	653.94	51	19.10	343.82	4	1.50	26.97
		051	18.17	1438	1.15	26.38	417.58	625	11.47	181.49	114	2.09	33.10
		054	2.59	227	.17	29.21	447.26	73	9.40	143.83	11	1.42	21.67
		055	2.18	161	.12	24.62	461.67	47	7.19	134.77	3	.46	8.60
		057	5.04	235	.37	15.54	210.58	100	6.61	89.61	16	1.06	14.34
		059	2.40	165	.16	22.92	350.56	62	8.61	131.73	7	.97	14.87
		060	.90	131	.06	48.52	681.21	38	14.07	197.60	6	2.22	31.20

Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int			ROR			
				No of Crashes (3 Yrs)	Annual Travel 100MVM	per year	Crash per 100MVM	Non-int Crashes (3 Yrs)	per mile/ year	Crash per 100MVM	ROR Crash (3 Yrs)	per mile/ year	Crash per 100MVM	
Urban	4	064	2.50	167	.13	22.27	419.62	66	8.80	165.84	11	1.47	27.64	
		065	.15	22	.01	48.89	640.87	3	6.67	87.39	0	.00	.00	
		066	1.12	61	.04	18.15	574.76	11	3.27	103.65	3	.89	28.27	
		074	1.46	37	.07	8.45	187.41	18	4.11	91.17	2	.46	10.13	
		096	4.23	148	.17	11.66	283.92	74	5.83	141.96	15	1.18	28.78	
		105	.21	.	.00	.	.	.	.	.	.	.	.
		113	.19	17	.01	29.82	433.48	8	14.04	203.99	0	.00	.00	
		114	2.48	278	.13	37.37	698.18	81	10.89	203.43	13	1.75	32.65	
		120	.55	23	.03	13.94	277.75	11	6.67	132.84	1	.61	12.08	
		125	.90	183	.09	67.78	713.10	79	29.26	307.84	4	1.48	15.59	
		141	2.86	218	.19	25.41	381.10	95	11.07	166.08	21	2.45	36.71	
		145	2.30	216	.16	31.30	460.24	64	9.28	136.37	7	1.01	14.92	
		151	1.09	12	.06	3.67	70.09	6	1.83	35.05	0	.00	.00	
		167	1.01	41	.05	13.53	281.06	13	4.29	89.12	1	.33	6.86	
		175	2.14	36	.08	5.61	145.51	12	1.87	48.50	1	.16	4.04	
		181	1.08	115	.07	35.49	534.51	37	11.42	171.97	3	.93	13.94	
		213	1.42	65	.04	15.26	594.70	17	3.99	155.54	5	1.17	45.75	
		794	1.98	22	.12	3.70	61.89	8	1.35	22.51	0	.00	.00	
Overall				154.69	11432	8.92	24.63	427.26	4320	9.31	161.45	569	1.23	21.27
Overall				569.94	25739	23.31	15.05	368.10	10031	5.87	143.46	1665	.97	23.81
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Popul. Density	No of Lanes	STH Route	Miles	Crash				Non-int				ROR			
				No of Crashes (3 Yrs)	Annual Travel miles/ year	per 100MVM	Crash Non-int (3 Yrs)	Crash Non-int per 100MVM	Crash Non-int per 100MVM	ROR Crash (3 Yrs)	per 100MVM	Crash Non-int per 100MVM	ROR Crash per 100MVM	Crash Non-int per 100MVM	ROR Crash per 100MVM
All Undivided			9470.79	60310	139.54	2.12	144.07	31968	1.13	76.36	13461	.47	32.16		

APPENDIX B

**RUN-OFF-ROAD CRASH RATES FOR
SERIOUS OUTCOME
SLIPPERY PAVEMENT
DARK CONDITIONS
HORIZONTAL OR VERTICAL CURVE, AND
FIXED OBJECT
CRASHES ON
2- 3- and 4-LANE
URBAN AND RURAL
UNDIVIDED
STATE TRUNK HIGHWAYS**

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

Page B 1

Popul Dens.	STH No	Lan Route	Miles	Annual Travel 100MVM		ROR	Inj+K Crash 100MVM		Wet+Snow Crash 100MVM		Dark Crash 100MVM		Hz/Vt Curve Crash 100MVM	Fixed obj Crash per 100MVM	
				Crashes (3_Yrs)	ROR per 100MVM	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	
Rural 2	002	96.05	1.98	129	21.72	46	7.75	65	10.95	67	11.28	16	2.69	72	12.13
	008	243.10	3.81	278	24.33	124	10.85	124	10.85	148	12.95	16	1.40	147	12.86
	010	240.98	4.81	332	23.02	141	9.78	152	10.54	159	11.02	50	3.47	211	14.63
	011	113.97	2.35	185	26.23	87	12.33	77	10.92	87	12.33	25	3.54	135	19.14
	012	238.43	4.03	463	38.30	207	17.12	179	14.81	210	17.37	89	7.36	296	24.48
	013	299.53	4.31	349	26.97	149	11.51	144	11.13	160	12.36	21	1.62	196	15.14
	014	158.02	4.17	347	27.76	142	11.36	158	12.64	175	14.00	27	2.16	225	18.00
	015	1.60	.07	5	22.31	2	8.93	3	13.39	2	8.93	0	.00	4	17.85
	016	95.56	1.73	144	27.75	60	11.56	61	11.76	70	13.49	15	2.89	90	17.34
	017	73.70	.98	97	32.98	44	14.96	48	16.32	39	13.26	10	3.40	60	20.40
	018	89.60	1.73	142	27.44	62	11.98	67	12.95	73	14.10	5	.97	99	19.13
	019	46.73	.89	94	35.08	41	15.30	39	14.55	40	14.93	18	6.72	58	21.65
	020	29.60	.49	66	44.94	25	17.02	33	22.47	32	21.79	17	11.58	48	32.69
	021	111.56	2.58	161	20.78	77	9.94	70	9.04	79	10.20	7	.90	87	11.23
	022	149.63	2.10	191	30.34	91	14.45	73	11.60	98	15.57	18	2.86	129	20.49
	023	164.65	2.96	240	27.07	96	10.83	105	11.84	98	11.05	28	3.16	142	16.02
	025	79.18	.88	90	34.19	39	14.82	41	15.58	46	17.48	13	4.94	50	19.00
	026	70.94	2.05	139	22.65	59	9.61	72	11.73	70	11.41	14	2.28	94	15.32
	027	242.23	2.17	234	35.89	127	19.48	83	12.73	106	16.26	29	4.45	125	19.17
	028	49.88	.63	70	37.30	24	12.79	36	19.18	39	20.78	10	5.33	48	25.58
	029	73.45	.76	77	33.95	26	11.46	28	12.35	39	17.20	8	3.53	46	20.28
	031	4.35	.28	16	19.23	5	6.01	5	6.01	9	10.82	3	3.61	11	13.22
	032	171.75	2.36	202	28.49	90	12.69	91	12.84	116	16.36	19	2.68	117	16.50
	033	162.71	2.67	258	32.26	117	14.63	108	13.50	137	17.13	36	4.50	146	18.26
	034	22.93	.30	24	27.02	11	12.39	10	11.26	14	15.76	1	1.13	11	12.39
	035	308.00	4.17	350	27.98	161	12.87	140	11.19	209	16.71	47	3.76	218	17.43
	036	6.57	.10	10	33.74	2	6.75	2	6.75	4	13.50	4	13.50	8	26.99
	037	40.17	.41	55	44.70	27	21.95	26	21.13	21	17.07	3	2.44	35	28.45
	038	5.03	.12	21	60.80	8	23.16	7	20.27	13	37.64	6	17.37	17	49.22
	039	40.84	.14	56	135.58	32	77.47	20	48.42	33	79.89	18	43.58	34	82.32
	040	79.42	.32	79	82.05	32	33.24	30	31.16	40	41.54	14	14.54	39	40.51
	041	15.19	.61	34	18.59	16	8.75	11	6.01	13	7.11	2	1.09	20	10.93
	042	110.43	1.57	139	29.54	56	11.90	73	15.51	62	13.17	13	2.76	94	19.97
	044	55.65	.60	55	30.66	22	12.27	21	11.71	27	15.05	4	2.23	34	18.96
	045	196.43	3.78	296	26.07	124	10.92	122	10.74	153	13.47	21	1.85	200	17.61
	046	27.93	.38	22	19.37	9	7.92	10	8.80	14	12.33	2	1.76	17	14.97
	047	116.65	1.81	154	28.40	68	12.54	69	12.72	85	15.67	14	2.58	84	15.49
	048	88.15	.76	70	30.67	36	15.77	30	13.14	32	14.02	9	3.94	37	16.21
	049	93.53	.89	107	39.99	47	17.56	42	15.70	57	21.30	13	4.86	75	28.03

Popul Dens.	STH No	Lan Route	Miles	Annual Travel 100MVM		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM		Dark Crash per 100MVM	Hz/Vt Curve Crash per 100MVM	Fixed obj Crash per 100MVM	
				Crashes (3_Yrs)	per 100MVM	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crashes (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	
Rural 2	050	5.64	.21	21	33.67	9	14.43	7	11.22	14	22.44	2	3.21	12	19.24
	051	109.67	2.29	211	30.72	89	12.96	93	13.54	93	13.54	18	2.62	106	15.43
	052	57.60	.24	58	80.13	27	37.30	29	40.06	26	35.92	4	5.53	30	41.44
	053	65.51	.98	99	33.55	33	11.18	40	13.55	53	17.96	18	6.10	72	24.40
	054	172.71	2.13	193	30.23	94	14.72	80	12.53	97	15.19	20	3.13	126	19.73
	055	134.99	.79	107	45.34	55	23.31	40	16.95	51	21.61	19	8.05	66	27.97
	056	50.56	.22	84	124.50	41	60.77	37	54.84	41	60.77	29	42.98	57	84.48
	057	71.65	1.70	116	22.79	49	9.63	48	9.43	59	11.59	14	2.75	64	12.57
	058	52.84	.35	58	54.79	30	28.34	24	22.67	32	30.23	10	9.45	32	30.23
	059	85.54	1.26	129	34.20	64	16.97	58	15.38	63	16.70	16	4.24	92	24.39
	060	130.58	1.48	213	47.96	93	20.94	100	22.51	92	20.71	27	6.08	128	28.82
	061	65.19	.95	73	25.61	25	8.77	26	9.12	33	11.58	9	3.16	56	19.65
	063	171.64	2.71	192	23.64	93	11.45	79	9.73	95	11.70	8	.98	97	11.94
	064	234.17	1.69	193	38.15	82	16.21	84	16.60	94	18.58	16	3.16	109	21.55
	065	43.50	.60	67	37.15	26	14.42	34	18.85	35	19.41	10	5.54	41	22.73
	066	14.66	.20	36	58.56	15	24.40	14	22.77	19	30.91	9	14.64	23	37.42
	067	125.86	1.51	214	47.15	86	18.95	105	23.13	115	25.34	32	7.05	154	33.93
	068	8.49	.08	23	92.84	8	32.29	19	76.69	10	40.36	1	4.04	13	52.47
	069	36.47	.76	78	34.14	37	16.20	38	16.63	38	16.63	4	1.75	49	21.45
	070	213.06	1.86	142	25.42	71	12.71	61	10.92	82	14.68	14	2.51	78	13.96
	071	42.62	.31	64	68.07	33	35.10	24	25.52	40	42.54	20	21.27	39	41.48
	072	27.70	.12	28	76.32	11	29.98	15	40.89	16	43.61	12	32.71	20	54.52
	073	214.85	1.95	187	32.03	81	13.87	74	12.68	92	15.76	17	2.91	104	17.81
	075	12.10	.14	32	75.07	13	30.50	10	23.46	16	37.53	0	.00	23	53.96
	076	24.92	.16	43	89.47	19	39.53	14	29.13	30	62.42	5	10.40	27	56.18
	077	116.72	.48	70	48.89	34	23.75	21	14.67	33	23.05	13	9.08	41	28.64
	078	85.19	.54	127	77.72	65	39.78	50	30.60	54	33.05	49	29.99	74	45.29
	079	17.63	.10	14	47.68	7	23.84	5	17.03	5	17.03	1	3.41	10	34.06
	080	142.60	1.33	178	44.46	85	21.23	67	16.74	94	23.48	27	6.74	108	26.98
	081	85.38	.70	97	46.44	44	21.06	37	17.71	44	21.06	30	14.36	66	31.59
	082	84.05	.69	84	40.71	45	21.81	39	18.90	55	26.65	18	8.72	53	25.68
	083	50.01	1.21	168	46.26	70	19.27	84	23.13	85	23.40	28	7.71	126	34.69
	085	23.46	.23	33	47.73	16	23.14	20	28.92	15	21.69	10	14.46	25	36.16
	086	31.63	.12	11	29.53	4	10.74	2	5.37	8	21.48	0	.00	7	18.79
	087	22.26	.18	18	33.36	8	14.83	9	16.68	8	14.83	1	1.85	6	11.12
	088	29.75	.06	28	151.80	15	81.32	7	37.95	11	59.64	11	59.64	11	59.64
	089	44.33	.54	58	35.98	26	16.13	26	16.13	31	19.23	9	5.58	33	20.47
	091	16.50	.26	42	54.74	25	32.58	24	31.28	20	26.07	1	1.30	34	44.32
	092	27.12	.13	38	97.46	15	38.47	18	46.17	16	41.04	7	17.95	21	53.86

Popul Dens.	STH No	Lan Route	Miles	Annual Travel 100MVM		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM	Dark Crash per 100MVM	Hz/Vt Curve Crash per 100MVM	Fixed obj Crash per 100MVM		
				Crashes (3_Yrs)	per 100MVM	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crashes (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)		
Rural 2	093	51.89	.75	56	24.91	24	10.68	26	11.57	35	15.57	3	1.33	34	15.13
	095	71.49	.38	71	62.86	27	23.90	22	19.48	38	33.64	21	18.59	50	44.27
	096	27.04	.33	30	30.03	14	14.01	17	17.02	14	14.01	1	1.00	22	22.02
	097	33.87	.42	28	21.99	12	9.42	20	15.71	16	12.56	0	.00	18	14.14
	098	16.20	.17	6	11.74	4	7.82	4	7.82	2	3.91	1	1.96	2	3.91
	101	21.12	.06	8	43.02	5	26.89	4	21.51	4	21.51	1	5.38	2	10.76
	102	18.25	.06	13	74.46	7	40.09	7	40.09	8	45.82	4	22.91	7	40.09
	104	14.34	.11	28	85.28	16	48.73	6	18.27	16	48.73	3	9.14	15	45.69
	105	2.75	.02	2	32.19	1	16.10	2	32.19	1	16.10	0	.00	1	16.10
	106	27.39	.21	52	84.23	22	35.64	25	40.50	35	56.69	10	16.20	35	56.69
	107	44.19	.22	46	69.50	21	31.73	19	28.71	26	39.28	6	9.07	25	37.77
	108	17.89	.05	25	154.16	8	49.33	10	61.66	12	74.00	11	67.83	20	123.33
	110	41.26	.69	79	38.09	30	14.47	42	20.25	42	20.25	5	2.41	58	27.97
	111	10.61	.05	8	52.56	5	32.85	5	32.85	1	6.57	0	.00	4	26.28
	112	10.17	.05	3	18.61	0	.00	2	12.41	2	12.41	1	6.20	1	6.20
	113	26.28	.31	68	73.64	22	23.82	32	34.65	32	34.65	7	7.58	34	36.82
	114	8.88	.18	13	24.47	5	9.41	7	13.18	5	9.41	0	.00	11	20.71
	115	5.94	.02	10	161.01	6	96.61	3	48.30	6	96.61	1	16.10	6	96.61
	116	13.78	.16	16	33.29	5	10.40	7	14.56	6	12.48	0	.00	10	20.81
	117	5.13	.08	6	25.84	4	17.23	1	4.31	2	8.61	0	.00	2	8.61
	118	6.86	.02	5	86.22	2	34.49	2	34.49	2	34.49	0	.00	3	51.73
	120	15.44	.28	35	42.27	17	20.53	16	19.32	20	24.15	2	2.42	21	25.36
	121	34.75	.17	29	57.49	14	27.75	10	19.82	17	33.70	0	.00	17	33.70
	122	14.69	.01	4	117.25	1	29.31	3	87.94	3	87.94	1	29.31	1	29.31
	123	1.10	.01	3	92.25	2	61.50	0	.00	2	61.50	0	.00	2	61.50
	124	10.63	.12	8	21.74	3	8.15	0	.00	2	5.44	1	2.72	4	10.87
	126	4.81	.02	4	62.21	1	15.55	3	46.66	2	31.11	1	15.55	3	46.66
	127	12.75	.04	9	71.23	5	39.57	1	7.91	5	39.57	1	7.91	7	55.40
	128	27.04	.15	30	65.91	14	30.76	14	30.76	16	35.15	7	15.38	22	48.33
	129	2.69	.03	.	.	.	.	.	.	.	.	.	.	.	.
	130	30.73	.09	28	109.31	14	54.66	8	31.23	13	50.75	10	39.04	19	74.18
	131	70.19	.34	70	69.52	34	33.77	24	23.83	40	39.72	22	21.85	38	37.74
	133	72.01	.35	94	90.12	32	30.68	46	44.10	44	42.18	18	17.26	58	55.61
	134	2.85	.01	10	356.83	8	285.47	3	107.05	6	214.10	3	107.05	6	214.10
	136	12.53	.11	28	84.57	9	27.18	9	27.18	13	39.26	7	21.14	14	42.28
	137	3.74	.	.	.	.	.	.	.	.	.	.	.	.	.
	138	11.66	.21	21	32.90	7	10.97	6	9.40	11	17.23	2	3.13	15	23.50
	139	22.01	.08	9	37.73	5	20.96	4	16.77	5	20.96	3	12.58	3	12.58
	140	11.25	.14	33	81.12	14	34.42	24	59.00	16	39.33	10	24.58	16	39.33

Popul Dens.	STH No	Lan Route	Miles	Annual Travel 100MVM		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM	Wet+Snow Crash (3_Yrs)	Dark Crash per 100MVM	Dark Crash (3_Yrs)	Hz/Vt curve Crash per 100MVM	Hz/Vt curve Crash (3_Yrs)	Fixed obj Crash per 100MVM
				Crashes (3_Yrs)	per 100MVM	(3_Yrs)	Crash per 100MVM	(3_Yrs)	Crash per 100MVM	(3_Yrs)	Crashes (3_Yrs)	per 100MVM	(3_Yrs)	Crash per 100MVM	(3_Yrs)	Crash per 100MVM
Rural 2	141		61.92	1.61	107	22.15	40	8.28	37	7.66	55	11.39	15	3.11	66	13.66
	142		16.31	.18	26	47.16	12	21.76	9	16.32	13	23.58	1	1.81	16	29.02
	144		19.45	.25	48	65.15	21	28.50	17	23.08	24	32.58	13	17.65	33	44.79
	145		.41	.01	3	179.15	2	119.43	0	.00	2	119.43	2	119.43	3	179.15
	146		13.22	.04	7	58.77	3	25.19	3	25.19	4	33.58	3	25.19	3	25.19
	147		12.65	.13	21	55.81	12	31.89	9	23.92	9	23.92	1	2.66	12	31.89
	149		24.15	.12	32	90.96	8	22.74	16	45.48	12	34.11	12	34.11	24	68.22
	150		6.65	.12	9	24.61	1	2.73	8	21.87	7	19.14	0	.00	5	13.67
	151		91.26	2.05	221	35.89	103	16.73	110	17.87	97	15.75	29	4.71	127	20.63
	152		7.22	.02	3	45.17	1	15.06	1	15.06	2	30.11	1	15.06	2	30.11
	153		60.24	.57	60	35.28	18	10.58	28	16.46	27	15.87	2	1.18	48	28.22
	154		19.00	.08	20	84.74	8	33.90	5	21.18	10	42.37	8	33.90	14	59.32
	155		6.94	.06	7	36.96	2	10.56	3	15.84	4	21.12	1	5.28	3	15.84
	156		26.23	.15	21	46.77	10	22.27	7	15.59	11	24.50	0	.00	13	28.95
	159		1.29	.01	1	35.40	0	.00	1	35.40	0	.00	0	.00	1	35.40
	160		3.22	.03	1	9.87	0	.00	0	.00	1	9.87	0	.00	0	.00
	161		21.58	.11	26	78.94	9	27.32	11	33.40	13	39.47	1	3.04	18	54.65
	162		40.88	.14	65	158.53	32	78.04	27	65.85	42	102.43	21	51.22	33	80.48
	164		25.65	.82	46	18.65	16	6.49	21	8.51	24	9.73	1	.41	28	11.35
	165		.78	.03	.	.	.	.	.	.	.	.	.	.	.	.
	167		9.41	.14	27	66.15	6	14.70	10	24.50	16	39.20	15	36.75	22	53.90
	168		5.93	.02	3	63.12	1	21.04	0	.00	1	21.04	0	.00	3	63.12
	169		17.36	.03	2	24.97	0	.00	1	12.49	1	12.49	0	.00	2	24.97
	170		23.90	.14	34	81.58	17	40.79	11	26.40	20	47.99	4	9.60	20	47.99
	171		33.25	.08	42	173.24	19	78.37	17	70.12	18	74.24	18	74.24	31	127.87
	172		1.40	.05	.	.	.	.	.	.	.	.	.	.	.	.
	173		33.55	.23	29	42.27	13	18.95	13	18.95	16	23.32	2	2.92	19	27.70
	175		46.56	.49	123	84.12	48	32.83	50	34.20	64	43.77	9	6.16	91	62.24
	178		20.09	.19	43	76.61	22	39.20	20	35.63	24	42.76	8	14.25	30	53.45
	179		8.80	.02	7	120.87	5	86.34	3	51.80	5	86.34	3	51.80	4	69.07
	180		29.94	.24	37	52.36	14	19.81	13	18.40	22	31.13	5	7.08	27	38.21
	182		29.65	.10	10	33.49	6	20.09	5	16.75	6	20.09	0	.00	7	23.44
	186		15.01	.11	9	26.63	4	11.84	3	8.88	6	17.75	0	.00	6	17.75
	187		13.87	.02	16	249.33	10	155.83	2	31.17	12	187.00	1	15.58	12	187.00
	188		10.55	.04	14	106.77	7	53.39	4	30.51	7	53.39	3	22.88	8	61.01
	191		13.04	.04	17	147.22	6	51.96	8	69.28	8	69.28	5	43.30	10	86.60
	193		1.42	.01	.	.	.	.	.	.	.	.	.	.	.	.
	194		11.32	.03	10	116.92	8	93.54	1	11.69	6	70.15	1	11.69	3	35.08
	213		19.33	.17	55	107.53	27	52.79	30	58.65	26	50.83	19	37.15	34	66.47

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel		ROR	Inj+K Crash	Inj+K Crash		Wet+Snow Crash		Dark Crash	Hz/Vt	Hz/Vt	Fixed obj	Fixed obj	
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	
Rural 2	243		.30	.01	1	60.40	1	60.40	0	.00	0	.00	0	.00	1	60.40	
	253		7.61	.03	2	24.98	1	12.49	1	12.49	0	.00	0	.00	1	12.49	
	310		6.69	.13	13	34.41	6	15.88	7	18.53	6	15.88	0	.00	5	13.23	
	351		2.31	.08	15	65.71	3	13.14	14	61.33	7	30.66	0	.00	12	52.57	
Overall				8819.81	113.38	11629	34.19	5117	15.04	4997	14.69	5839	17.17	1571	4.62	7195	21.15

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM		Dark Crash per 100MVM	Hz/Vt curve Crash per 100MVM	Fixed obj Crash per 100MVM	
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	
Rural 3	010	.35	.01	2	90.90	1	45.45	1	45.45	1	45.45	1	45.45	2	90.90
	012	2.00	.05	4	27.51	2	13.75	3	20.63	2	13.75	0	.00	1	6.88
	013	2.46	.06	6	31.54	1	5.26	5	26.28	4	21.02	0	.00	3	15.77
	014	.26	.01	2	62.65	0	.00	1	31.32	2	62.65	1	31.32	2	62.65
	023	1.00	.02	3	41.38	1	13.79	2	27.59	2	27.59	0	.00	3	41.38
	033	5.58	.15	12	27.56	5	11.48	8	18.37	8	18.37	1	2.30	8	18.37
	035	1.03	.04	10	75.85	1	7.58	7	53.09	6	45.51	0	.00	6	45.51
	045	.22	.00	1	110.11	1	110.11	0	.00	1	110.11	0	.00	0	.00
	051	.32	.01	.	.	.	.	.	.	.	.	.	.	.	.
	054	.12	.00	.	.	.	.	.	.	.	.	.	.	.	.
	057	.14	.00	1	79.36	0	.00	0	.00	1	79.36	0	.00	1	79.36
	061	.62	.03	2	24.65	0	.00	1	12.33	1	12.33	0	.00	1	12.33
	078	.17	.00	.	.	.	.	.	.	.	.	.	.	.	.
	080	.41	.01	1	38.57	0	.00	0	.00	1	38.57	0	.00	1	38.57
	110	.33	.00	.	.	.	.	.	.	.	.	.	.	.	.
	113	.13	.00	.	.	.	.	.	.	.	.	.	.	.	.
	141	.62	.02	1	15.76	0	.00	0	.00	0	.00	0	.00	0	.00
Overall		15.76	.43	45	35.12	12	9.36	28	21.85	29	22.63	3	2.34	28	21.85

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM	Wet+Snow Crash (3_Yrs)	Dark Crash per 100MVM	Dark Crash (3_Yrs)	Hz/Vt Curve Crash per 100MVM	Hz/Vt Curve Crash (3_Yrs)	Fixed obj Crash per 100MVM
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM
Rural 4	008		3.68	.16	3	6.07	2	4.05	2	4.05	2	4.05	0	.00	1	2.02
	010		1.78	.06	8	42.54	5	26.59	6	31.90	4	21.27	6	31.90	5	26.59
	012		3.15	.23	10	14.66	7	10.26	2	2.93	3	4.40	1	1.47	6	8.80
	013		6.83	.30	13	14.69	2	2.26	9	10.17	6	6.78	0	.00	9	10.17
	014		1.62	.08	3	12.69	0	.00	1	4.23	1	4.23	0	.00	3	12.69
	017		1.97	.03	2	23.16	1	11.58	1	11.58	1	11.58	0	.00	2	23.16
	019		.28	.01	.	.	.	.	.	.	.	.	.	.	.	.
	020		.42	.01	.	.	.	.	.	.	.	.	.	.	.	.
	021		1.09	.04	.	.	.	.	.	.	.	.	.	.	.	.
	023		.37	.00	.	.	.	.	.	.	.	.	.	.	.	.
	027		.19	.01	.	.	.	.	.	.	.	.	.	.	.	.
	033		.11	.01	.	.	.	.	.	.	.	.	.	.	.	.
	041		2.92	.14	9	21.45	5	11.92	5	11.92	3	7.15	0	.00	7	16.68
	045		9.23	.38	16	13.97	5	4.36	5	4.36	8	6.98	1	.87	11	9.60
	046		1.82	.05	2	12.20	1	6.10	1	6.10	0	.00	0	.00	2	12.20
	047		.61	.01	.	.	.	.	.	.	.	.	.	.	.	.
	048		.31	.00	.	.	.	.	.	.	.	.	.	.	.	.
	051		15.83	.64	42	21.96	16	8.37	19	9.93	19	9.93	3	1.57	29	15.16
	054		.27	.01	1	42.03	1	42.03	0	.00	0	.00	0	.00	0	.00
	063		1.88	.05	2	13.63	1	6.82	2	13.63	1	6.82	0	.00	2	13.63
	064		2.92	.02	2	33.55	1	16.78	1	16.78	1	16.78	1	16.78	2	33.55
	070		2.10	.04	2	18.74	0	.00	2	18.74	1	9.37	0	.00	2	18.74
	082		.32	.01	.	.	.	.	.	.	.	.	.	.	.	.
	086		.36	.02	1	18.34	0	.00	0	.00	0	.00	0	.00	0	.00
	089		.09	.00	.	.	.	.	.	.	.	.	.	.	.	.
	093		.50	.01	1	57.89	1	57.89	0	.00	1	57.89	0	.00	1	57.89
	095		.32	.00	.	.	.	.	.	.	.	.	.	.	.	.
	107		.43	.01	.	.	.	.	.	.	.	.	.	.	.	.
	110		.93	.01	1	47.37	0	.00	1	47.37	1	47.37	0	.00	1	47.37
	113		.12	.00	1	430.21	0	.00	0	.00	0	.00	0	.00	0	.00
	141		1.46	.04	2	16.03	0	.00	0	.00	2	16.03	0	.00	2	16.03
	151		1.37	.04	1	7.63	0	.00	1	7.63	0	.00	0	.00	1	7.63
Overall			65.28	2.43	122	16.74	48	6.59	58	7.96	54	7.41	12	1.65	86	11.80
Overall			8900.85	116.23	11796	33.83	5177	14.85	5083	14.58	5922	16.98	1586	4.55	7309	20.96

Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)		Wet+Snow Crash per 100MVM (3_Yrs)		Dark Crash per 100MVM (3_Yrs)		Hz/Vt Curve Crash per 100MVM (3_Yrs)		Fixed obj Crash per 100MVM	
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)
Urban 2	002		.49	.01
	010		1.64	.03	4	39.64	1	9.91	2	19.82	2	19.82	0	.00	4	39.64	
	011		11.89	.31	32	34.11	11	11.73	9	9.59	10	10.66	3	3.20	26	27.72	
	012		7.62	.26	18	22.83	7	8.88	9	11.42	5	6.34	1	1.27	13	16.49	
	013		4.31	.11	7	21.01	3	9.00	2	6.00	3	9.00	0	.00	3	9.00	
	014		5.35	.25	8	10.73	2	2.68	4	5.36	2	2.68	0	.00	7	9.39	
	016		11.00	.37	24	21.63	8	7.21	8	7.21	15	13.52	0	.00	16	14.42	
	017		3.84	.14	11	27.16	4	9.88	4	9.88	6	14.81	2	4.94	7	17.28	
	018		6.95	.26	13	16.92	3	3.90	6	7.81	7	9.11	2	2.60	11	14.32	
	019		6.75	.31	10	10.74	3	3.22	4	4.30	5	5.37	1	1.07	9	9.67	
	020		.61	.04	6	57.07	2	19.02	3	28.54	3	28.54	2	19.02	6	57.07	
	021		2.97	.10	5	16.63	3	9.98	1	3.33	2	6.65	0	.00	2	6.65	
	022		6.13	.15	5	11.44	1	2.29	1	2.29	2	4.58	0	.00	3	6.86	
	023		4.36	.17	21	40.41	8	15.39	11	21.17	11	21.17	0	.00	19	36.56	
	025		2.10	.08	6	25.90	3	12.95	3	12.95	2	8.63	1	4.32	4	17.27	
	026		6.41	.27	9	11.30	2	2.51	4	5.02	6	7.54	0	.00	6	7.54	
	027		2.84	.10	12	38.81	4	12.94	8	25.87	8	25.87	0	.00	10	32.34	
	028		4.18	.12	5	13.91	1	2.78	2	5.56	3	8.34	1	2.78	3	8.34	
	029		8.57	.36	28	26.06	10	9.31	19	17.69	10	9.31	3	2.79	18	16.75	
	031		4.00	.18	13	23.53	9	16.29	2	3.62	5	9.05	0	.00	10	18.10	
	032		38.37	1.61	142	29.43	61	12.64	51	10.57	71	14.71	4	.83	116	24.04	
	033		11.32	.39	35	29.97	14	11.99	13	11.13	20	17.12	3	2.57	25	21.41	
	034		.06	.00	.	.	.	.	.	.	.	.	.	.	.	.
	035		10.31	.45	26	19.26	7	5.18	8	5.93	17	12.59	1	.74	19	14.07	
	036		2.65	.11	7	21.65	2	6.19	3	9.28	4	12.37	0	.00	7	21.65	
	038		5.84	.20	28	47.37	15	25.38	10	16.92	12	20.30	2	3.38	21	35.53	
	042		2.16	.07	4	19.01	2	9.50	3	14.25	0	.00	0	.00	4	19.01	
	044		2.40	.07	3	13.60	0	.00	1	4.53	0	.00	0	.00	3	13.60	
	045		13.06	.32	41	43.13	18	18.93	15	15.78	20	21.04	1	1.05	33	34.71	
	047		3.31	.11	7	20.39	2	5.83	2	5.83	4	11.65	0	.00	6	17.48	
	048		1.06	.01	4	90.45	0	.00	1	22.61	4	90.45	0	.00	4	90.45	
	049		6.50	.20	10	16.31	3	4.89	5	8.15	6	9.78	0	.00	10	16.31	
	050		4.47	.23	19	27.78	7	10.23	4	5.85	12	17.55	3	4.39	15	21.93	
	051		10.16	.44	36	27.31	11	8.34	19	14.41	14	10.62	5	3.79	30	22.76	
	052		4.12	.06	3	15.55	1	5.18	3	15.55	1	5.18	0	.00	3	15.55	
	054		9.58	.28	16	19.37	6	7.27	11	13.32	13	15.74	0	.00	13	15.74	
	055		1.45	.05	2	14.38	0	.00	1	7.19	1	7.19	0	.00	1	7.19	
	057		7.02	.33	12	12.09	3	3.02	5	5.04	3	3.02	0	.00	11	11.08	
	059		9.26	.44	44	33.35	12	9.09	17	12.88	29	21.98	0	.00	33	25.01	

Popul Dens.	STH No	Lan Route	Miles	Annual Travel 100MVM		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM		Dark Crash per 100MVM	Hz/Vt Curve Crash per 100MVM	Fixed obj Crash per 100MVM	
				Crashes (3_Yrs)	per 100MVM	(3_Yrs)	Crash (3_Yrs)	Crash (3_Yrs)	per 100MVM	Crash (3_Yrs)	per 100MVM	(3_Yrs)	Crash (3_Yrs)	per 100MVM	
Urban 2	060	3.67	.17	3	5.88	1	1.96	2	3.92	0	.00	1	1.96	1	1.96
	064	8.58	.28	10	11.82	2	2.36	3	3.55	5	5.91	0	.00	8	9.45
	065	5.62	.17	9	17.66	5	9.81	1	1.96	4	7.85	0	.00	7	13.74
	066	2.26	.06	5	26.68	2	10.67	4	21.34	3	16.01	0	.00	3	16.01
	067	5.35	.13	11	27.22	3	7.42	2	4.95	4	9.90	0	.00	5	12.37
	068	1.02	.01	1	31.09	0	.00	1	31.09	1	31.09	0	.00	1	31.09
	069	.04	.00	.	.	.	.	.	.	.	.	.	.	.	.
	071	.11	.00	.	.	.	.	.	.	.	.	.	.	.	.
	073	.93	.02	2	34.79	2	34.79	0	.00	1	17.40	0	.00	2	34.79
	074	5.40	.22	11	16.74	1	1.52	7	10.65	6	9.13	1	1.52	8	12.17
	077	4.34	.07	7	34.57	0	.00	1	4.94	6	29.63	1	4.94	4	19.76
	080	5.88	.06	13	67.82	5	26.09	1	5.22	6	31.30	1	5.22	9	46.96
	081	4.35	.14	17	39.53	6	13.95	2	4.65	10	23.25	1	2.33	11	25.58
	083	8.15	.25	28	37.05	15	19.85	9	11.91	12	15.88	2	2.65	17	22.49
	089	1.28	.03	3	35.79	0	.00	0	.00	0	.00	0	.00	3	35.79
	091	1.21	.03	4	50.64	0	.00	1	12.66	1	12.66	0	.00	3	37.98
	093	.52	.04	4	37.47	0	.00	4	37.47	4	37.47	2	18.73	3	28.10
	096	5.31	.24	14	19.82	8	11.33	3	4.25	5	7.08	0	.00	12	16.99
	100	7.36	.35	17	16.42	9	8.69	5	4.83	14	13.52	1	.97	12	11.59
	105	1.76	.01	1	25.67	1	25.67	0	.00	1	25.67	1	25.67	0	.00
	106	1.83	.04	1	9.48	0	.00	0	.00	0	.00	0	.00	1	9.48
	107	2.70	.02	4	55.86	1	13.97	1	13.97	2	27.93	0	.00	3	41.90
	110	2.14	.08	9	35.54	2	7.90	4	15.80	5	19.75	0	.00	7	27.65
	112	2.41	.02	1	20.06	1	20.06	0	.00	1	20.06	0	.00	1	20.06
	113	2.38	.05	5	36.35	1	7.27	3	21.81	2	14.54	3	21.81	5	36.35
	114	2.30	.09	1	3.75	0	.00	1	3.75	1	3.75	0	.00	0	.00
	120	3.50	.11	18	52.59	10	29.21	8	23.37	5	14.61	1	2.92	15	43.82
	123	1.71	.05	4	27.62	1	6.91	1	6.91	3	20.72	0	.00	4	27.62
	124	1.89	.04	11	98.05	4	35.66	4	35.66	5	44.57	5	44.57	11	98.05
	127	1.41	.01	2	66.46	1	33.23	2	66.46	1	33.23	1	33.23	2	66.46
	131	.95	.03	1	10.86	0	.00	1	10.86	1	10.86	0	.00	1	10.86
	136	.51	.01	.	.	.	.	.	.	.	.	.	.	.	.
	137	2.51	.	.	.	.	.	.	.	.	.	.	.	.	.
	138	.32	.00	.	.	.	.	.	.	.	.	.	.	.	.
	141	2.27	.07	2	9.38	0	.00	1	4.69	1	4.69	0	.00	2	9.38
	142	.91	.01	.	.	.	.	.	.	.	.	.	.	.	.
	144	.82	.03	2	20.93	1	10.46	0	.00	0	.00	0	.00	2	20.93
	145	8.60	.17	10	20.06	7	14.04	4	8.02	5	10.03	2	4.01	10	20.06
	147	2.06	.07	2	10.08	2	10.08	1	5.04	1	5.04	0	.00	2	10.08

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		Wet+Snow Crash per 100MVM	Wet+Snow Crash (3_Yrs)	Dark Crash per 100MVM	Dark Crash (3_Yrs)	Hz/Vt curve Crash per 100MVM	Hz/Vt curve Crash (3_Yrs)	Fixed obj Crash per 100MVM	Fixed obj Crash per 100MVM
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)
Urban 2	151		7.01	.30	24	26.49	7	7.73	11	12.14	11	12.14	1	1.10	18	19.87	
	157		1.29	.04	3	24.06	0	.00	0	.00	0	.00	0	.00	3	24.06	
	158		2.31	.11	7	20.96	1	2.99	3	8.98	5	14.97	1	2.99	4	11.98	
	164		1.70	.08	.	.	.	.	.	.	.	.	.	.	.	.
	165		3.45	.04	10	82.72	6	49.63	4	33.09	5	41.36	0	.00	8	66.18	
	167		3.72	.18	4	7.44	1	1.86	2	3.72	0	.00	0	.00	2	3.72	
	172		.94	.03	4	42.85	2	21.42	1	10.71	2	21.42	0	.00	3	32.13	
	173		1.89	.04	1	8.13	1	8.13	0	.00	0	.00	0	.00	1	8.13	
	175		6.18	.27	27	32.89	6	7.31	10	12.18	13	15.84	6	7.31	24	29.24	
	178		2.13	.06	3	16.59	0	.00	2	11.06	1	5.53	1	5.53	3	16.59	
	180		.48	.01	1	37.23	1	37.23	0	.00	1	37.23	0	.00	1	37.23	
	181		8.47	.34	33	32.70	8	7.93	19	18.83	16	15.85	6	5.95	28	27.74	
	190		.42	.01	.	.	.	.	.	.	.	.	.	.	.	.
	213		1.94	.03	8	80.02	5	50.01	1	10.00	1	10.00	0	.00	4	40.01	
	310		1.32	.03	2	22.00	1	11.00	1	11.00	1	11.00	1	11.00	0	.00	
Overall			402.72	13.74	1036	25.14	379	9.20	405	9.83	510	12.37	74	1.80	805	19.53	

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)		Wet+Snow Crash per 100MVM (3_Yrs)		Dark Crash per 100MVM (3_Yrs)		Hz/Vt Curve Crash per 100MVM (3_Yrs)		Fixed obj Crash per 100MVM	
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)
Urban 3	012		1.59	.12	7	19.60	0	.00	4	11.20	3	8.40	0	.00	7	19.60	
	013		.40	.02	2	42.64	0	.00	1	21.32	0	.00	0	.00	1	21.32	
	020		1.60	.11	13	38.88	5	14.95	6	17.94	8	23.93	0	.00	11	32.90	
	021		.36	.01	.	.	.	.	.	.	.	.	.	.	.	.
	022		.76	.03	1	12.89	0	.00	0	.00	1	12.89	0	.00	1	12.89	
	026		.06	.00	.	.	.	.	.	.	.	.	.	.	.	.
	029		.08	.00	2	194.31	0	.00	1	97.15	0	.00	1	97.15	2	194.31	
	032		.37	.02	3	56.72	1	18.91	1	18.91	2	37.81	0	.00	2	37.81	
	035		.36	.02	1	15.58	1	15.58	0	.00	1	15.58	0	.00	1	15.58	
	038		.83	.03	8	83.00	2	20.75	3	31.12	4	41.50	0	.00	6	62.25	
	041		.87	.09	2	7.74	0	.00	1	3.87	1	3.87	0	.00	2	7.74	
	044		.68	.03	5	49.49	3	29.70	1	9.90	2	19.80	0	.00	4	39.59	
	054		.96	.03	2	22.19	1	11.09	1	11.09	2	22.19	0	.00	2	22.19	
	057		.25	.01	1	23.00	0	.00	1	23.00	0	.00	0	.00	1	23.00	
	059		.53	.03	3	33.96	0	.00	2	22.64	2	22.64	0	.00	3	33.96	
	073		1.17	.02	6	84.13	1	14.02	2	28.04	4	56.08	1	14.02	6	84.13	
	074		.43	.02	1	21.03	0	.00	0	.00	0	.00	0	.00	1	21.03	
	114		.27	.02	1	18.24	0	.00	0	.00	0	.00	0	.00	1	18.24	
	144		.20	.01	.	.	.	.	.	.	.	.	.	.	.	.
	181		.51	.01	1	26.13	0	.00	1	26.13	0	.00	0	.00	0	.00	
	190		.25	.02	1	22.07	0	.00	0	.00	0	.00	0	.00	1	22.07	
Overall			12.53	.65	60	30.76	14	7.18	25	12.82	30	15.38	2	1.03	52	26.66	

Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM	Inj+K Crash (3_Yrs)	Inj+K Crash per 100MVM		ROR Crash per 100MVM	Wet+Snow Crash (3_Yrs)	Wet+Snow Crash per 100MVM	Dark Crash per 100MVM	Dark Crash per 100MVM	Hz/Vt curve Crash per 100MVM	Hz/Vt curve Crash per 100MVM	Fixed obj Crash per 100MVM
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	
Urban 4	002		4.98	.27	10	12.38	2	2.48	5	6.19	7	8.67	0	.00	9	11.14	
	010		1.85	.10	2	6.96	0	.00	1	3.48	2	6.96	0	.00	0	.00	
	011		4.96	.37	21	18.96	10	9.03	5	4.51	6	5.42	0	.00	12	10.83	
	012		4.43	.30	18	20.27	3	3.38	11	12.39	7	7.88	0	.00	15	16.90	
	013		3.64	.19	14	24.98	4	7.14	3	5.35	6	10.70	2	3.57	12	21.41	
	014		2.41	.18	1	1.81	0	.00	1	1.81	0	.00	1	1.81	1	1.81	
	016		3.11	.20	15	24.85	2	3.31	5	8.28	7	11.60	1	1.66	12	19.88	
	017		1.75	.07	1	4.59	1	4.59	1	4.59	1	4.59	0	.00	1	4.59	
	018		4.70	.32	5	5.21	4	4.17	1	1.04	1	1.04	0	.00	3	3.13	
	019		.18	.01	1	58.52	0	.00	0	.00	0	.00	0	.00	1	58.52	
	020		.74	.04	3	22.72	0	.00	1	7.57	3	22.72	0	.00	3	22.72	
	021		1.94	.14	9	20.90	4	9.29	5	11.61	3	6.97	0	.00	9	20.90	
	022		3.89	.16	9	19.25	5	10.70	4	8.56	5	10.70	0	.00	4	8.56	
	023		2.43	.14	17	41.72	4	9.82	9	22.09	5	12.27	0	.00	15	36.82	
	025		.25	.01	.	.	.	.	.	.	.	.	.	.	.	.
	026		2.19	.15	19	41.47	9	19.64	12	26.19	8	17.46	2	4.37	16	34.92	
	028		2.42	.15	7	15.29	1	2.18	4	8.74	4	8.74	0	.00	6	13.11	
	029		2.56	.16	11	23.04	3	6.28	3	6.28	5	10.47	0	.00	9	18.85	
	032		14.47	.71	81	38.24	38	17.94	30	14.16	52	24.55	3	1.42	64	30.22	
	033		5.70	.30	15	16.67	6	6.67	7	7.78	11	12.22	0	.00	12	13.34	
	035		5.26	.32	10	10.53	1	1.05	5	5.27	5	5.27	0	.00	7	7.37	
	038		.19	.01	2	66.80	0	.00	1	33.40	1	33.40	0	.00	2	66.80	
	041		2.93	.21	5	7.80	4	6.24	1	1.56	3	4.68	0	.00	4	6.24	
	042		2.03	.09	6	21.88	0	.00	1	3.65	5	18.24	0	.00	5	18.24	
	044		1.64	.08	2	8.15	1	4.08	0	.00	1	4.08	0	.00	2	8.15	
	045		8.48	.41	27	21.97	12	9.77	4	3.26	13	10.58	0	.00	23	18.72	
	047		4.55	.28	8	9.62	4	4.81	3	3.61	5	6.01	0	.00	8	9.62	
	048		.85	.02	1	13.84	0	.00	1	13.84	0	.00	1	13.84	1	13.84	
	049		.32	.01	1	22.63	0	.00	0	.00	0	.00	0	.00	0	.00	
	050		.89	.05	4	26.97	0	.00	2	13.48	3	20.22	0	.00	4	26.97	
	051		18.17	1.15	114	33.10	45	13.07	51	14.81	56	16.26	16	4.65	85	24.68	
	054		2.59	.17	11	21.67	6	11.82	2	3.94	8	15.76	2	3.94	9	17.73	
	055		2.18	.12	3	8.60	0	.00	0	.00	0	.00	1	2.87	2	5.73	
	057		5.04	.37	16	14.34	1	.90	6	5.38	7	6.27	3	2.69	12	10.75	
	059		2.40	.16	7	14.87	2	4.25	2	4.25	4	8.50	0	.00	7	14.87	
	060		.90	.06	6	31.20	1	5.20	2	10.40	2	10.40	0	.00	4	20.80	
	064		2.50	.13	11	27.64	3	7.54	5	12.56	1	2.51	0	.00	8	20.10	
	065		.15	.01	.	.	.	.	.	.	.	.	.	.	.	.
	066		1.12	.04	3	28.27	0	.00	2	18.84	3	28.27	0	.00	3	28.27	

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Miles	Annual Travel Crashes		ROR Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)	Inj+K Crash per 100MVM (3_Yrs)		Wet+Snow Crash per 100MVM (3_Yrs)		Dark Crash per 100MVM (3_Yrs)	Dark Crash per 100MVM (3_Yrs)	Hz/Vt Curve Crash per 100MVM (3_Yrs)	Hz/Vt Curve Crash per 100MVM (3_Yrs)	Fixed obj Crash per 100MVM
				100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM	(3_Yrs)	100MVM
Urban 4	074		1.46	.07	2	10.13	0	.00	1	5.07	1	5.07	0	.00	2	10.13
	096		4.23	.17	15	28.78	6	11.51	8	15.35	7	13.43	0	.00	13	24.94
	105		.21	.00	.	.	.	.	.	.	.	.	.	.	.	.
	113		.19	.01	.	.	.	.	.	.	.	.	.	.	.	.
	114		2.48	.13	13	32.65	7	17.58	5	12.56	8	20.09	0	.00	12	30.14
	120		.55	.03	1	12.08	0	.00	0	.00	1	12.08	0	.00	1	12.08
	125		.90	.09	4	15.59	1	3.90	2	7.79	3	11.69	0	.00	4	15.59
	141		2.86	.19	21	36.71	9	15.73	10	17.48	20	34.96	2	3.50	15	26.22
	145		2.30	.16	7	14.92	4	8.52	0	.00	2	4.26	0	.00	3	6.39
	151		1.09	.06	.	.	.	.	.	.	.	.	.	.	.	.
	167		1.01	.05	1	6.86	1	6.86	0	.00	0	.00	0	.00	0	.00
	175		2.14	.08	1	4.04	1	4.04	0	.00	0	.00	0	.00	1	4.04
	181		1.08	.07	3	13.94	0	.00	2	9.30	0	.00	0	.00	2	9.30
	213		1.42	.04	5	45.75	1	9.15	2	18.30	4	36.60	1	9.15	5	45.75
	794		1.98	.12	.	.	.	.	.	.	.	.	.	.	.	.
Overall			154.69	8.92	569	21.27	206	7.70	226	8.45	296	11.06	35	1.31	448	16.74
Overall			569.94	23.31	1665	23.81	599	8.57	656	9.38	836	11.96	111	1.59	1305	18.66
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ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Obj Crash Rates.

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Popul Dens.	STH No	Lan Route	Travel Miles	ROR		Inj+K		Wet+Snow		Dark		Hz/Vt		Fixed		
				Annual Crashes	ROR per 100MVM (3_Yrs)	Inj+K Crash	100MVM (3_Yrs)	Crash	Wet+Snow	Crash	Dark Crashes	Dark Crash	Hz/Vt curve	Curve Crash	Fixed obj	obj Crash per 100MVM
All Undivided			9470.79	139.54	13461	32.16	5776	13.80	5739	13.71	6758	16.14	1697	4.05	8614	20.58

APPENDIX C

RUN-OFF-ROAD CRASH DENSITIES FOR
SERIOUS OUTCOME
SLIPPERY PAVEMENT
DARK CONDITIONS
HORIZONTAL OR VERTICAL CURVE, AND
FIXED OBJECT
CRASHES ON
2- 3- and 4-LANE
URBAN AND RURAL
UNDIVIDED
STATE TRUNK HIGHWAYS

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ mile/ year	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year		
Rural 2	002	96.05	1.98	129	.45	46	.16	65	.23	67	.23	16	.06	72	.25
	008	243.10	3.81	278	.38	124	.17	124	.17	148	.20	16	.02	147	.20
	010	240.98	4.81	332	.46	141	.20	152	.21	159	.22	50	.07	211	.29
	011	113.97	2.35	185	.54	87	.25	77	.23	87	.25	25	.07	135	.39
	012	238.43	4.03	463	.65	207	.29	179	.25	210	.29	89	.12	296	.41
	013	299.53	4.31	349	.39	149	.17	144	.16	160	.18	21	.02	196	.22
	014	158.02	4.17	347	.73	142	.30	158	.33	175	.37	27	.06	225	.47
	015	1.60	.07	5	1.04	2	.42	3	.63	2	.42	0	.00	4	.83
	016	95.56	1.73	144	.50	60	.21	61	.21	70	.24	15	.05	90	.31
	017	73.70	.98	97	.44	44	.20	48	.22	39	.18	10	.05	60	.27
	018	89.60	1.73	142	.53	62	.23	67	.25	73	.27	5	.02	99	.37
	019	46.73	.89	94	.67	41	.29	39	.28	40	.29	18	.13	58	.41
	020	29.60	.49	66	.74	25	.28	33	.37	32	.36	17	.19	48	.54
	021	111.56	2.58	161	.48	77	.23	70	.21	79	.24	7	.02	87	.26
	022	149.63	2.10	191	.43	91	.20	73	.16	98	.22	18	.04	129	.29
	023	164.65	2.96	240	.49	96	.19	105	.21	98	.20	28	.06	142	.29
	025	79.18	.88	90	.38	39	.16	41	.17	46	.19	13	.05	50	.21
	026	70.94	2.05	139	.65	59	.28	72	.34	70	.33	14	.07	94	.44
	027	242.23	2.17	234	.32	127	.17	83	.11	106	.15	29	.04	125	.17
	028	49.88	.63	70	.47	24	.16	36	.24	39	.26	10	.07	48	.32
	029	73.45	.76	77	.35	26	.12	28	.13	39	.18	8	.04	46	.21
	031	4.35	.28	16	1.23	5	.38	5	.38	9	.69	3	.23	11	.84
	032	171.75	2.36	202	.39	90	.17	91	.18	116	.23	19	.04	117	.23
	033	162.71	2.67	258	.53	117	.24	108	.22	137	.28	36	.07	146	.30
	034	22.93	.30	24	.35	11	.16	10	.15	14	.20	1	.01	11	.16
	035	308.00	4.17	350	.38	161	.17	140	.15	209	.23	47	.05	218	.24
	036	6.57	.10	10	.51	2	.10	2	.10	4	.20	4	.20	8	.41
	037	40.17	.41	55	.46	27	.22	26	.22	21	.17	3	.02	35	.29
	038	5.03	.12	21	1.39	8	.53	7	.46	13	.86	6	.40	17	1.13
	039	40.84	.14	56	.46	32	.26	20	.16	33	.27	18	.15	34	.28
	040	79.42	.32	79	.33	32	.13	30	.13	40	.17	14	.06	39	.16
	041	15.19	.61	34	.75	16	.35	11	.24	13	.29	2	.04	20	.44
	042	110.43	1.57	139	.42	56	.17	73	.22	62	.19	13	.04	94	.28
	044	55.65	.60	55	.33	22	.13	21	.13	27	.16	4	.02	34	.20
	045	196.43	3.78	296	.50	124	.21	122	.21	153	.26	21	.04	200	.34
	046	27.93	.38	22	.26	9	.11	10	.12	14	.17	2	.02	17	.20
	047	116.65	1.81	154	.44	68	.19	69	.20	85	.24	14	.04	84	.24
	048	88.15	.76	70	.26	36	.14	30	.11	32	.12	9	.03	37	.14
	049	93.53	.89	107	.38	47	.17	42	.15	57	.20	13	.05	75	.27

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year		
Rural 2	050	5.64	.21	21	1.24	9	.53	7	.41	14	.83	2	.12	12	.71
	051	109.67	2.29	211	.64	89	.27	93	.28	93	.28	18	.05	106	.32
	052	57.60	.24	58	.34	27	.16	29	.17	26	.15	4	.02	30	.17
	053	65.51	.98	99	.50	33	.17	40	.20	53	.27	18	.09	72	.37
	054	172.71	2.13	193	.37	94	.18	80	.15	97	.19	20	.04	126	.24
	055	134.99	.79	107	.26	55	.14	40	.10	51	.13	19	.05	66	.16
	056	50.56	.22	84	.55	41	.27	37	.24	41	.27	29	.19	57	.38
	057	71.65	1.70	116	.54	49	.23	48	.22	59	.27	14	.07	64	.30
	058	52.84	.35	58	.37	30	.19	24	.15	32	.20	10	.06	32	.20
	059	85.54	1.26	129	.50	64	.25	58	.23	63	.25	16	.06	92	.36
	060	130.58	1.48	213	.54	93	.24	100	.26	92	.23	27	.07	128	.33
	061	65.19	.95	73	.37	25	.13	26	.13	33	.17	9	.05	56	.29
	063	171.64	2.71	192	.37	93	.18	79	.15	95	.18	8	.02	97	.19
	064	234.17	1.69	193	.27	82	.12	84	.12	94	.13	16	.02	109	.16
	065	43.50	.60	67	.51	26	.20	34	.26	35	.27	10	.08	41	.31
	066	14.66	.20	36	.82	15	.34	14	.32	19	.43	9	.20	23	.52
	067	125.86	1.51	214	.57	86	.23	105	.28	115	.30	32	.08	154	.41
	068	8.49	.08	23	.90	8	.31	19	.75	10	.39	1	.04	13	.51
	069	36.47	.76	78	.71	37	.34	38	.35	38	.35	4	.04	49	.45
	070	213.06	1.86	142	.22	71	.11	61	.10	82	.13	14	.02	78	.12
	071	42.62	.31	64	.50	33	.26	24	.19	40	.31	20	.16	39	.31
	072	27.70	.12	28	.34	11	.13	15	.18	16	.19	12	.14	20	.24
	073	214.85	1.95	187	.29	81	.13	74	.11	92	.14	17	.03	104	.16
	075	12.10	.14	32	.88	13	.36	10	.28	16	.44	0	.00	23	.63
	076	24.92	.16	43	.58	19	.25	14	.19	30	.40	5	.07	27	.36
	077	116.72	.48	70	.20	34	.10	21	.06	33	.09	13	.04	41	.12
	078	85.19	.54	127	.50	65	.25	50	.20	54	.21	49	.19	74	.29
	079	17.63	.10	14	.26	7	.13	5	.09	5	.09	1	.02	10	.19
	080	142.60	1.33	178	.42	85	.20	67	.16	94	.22	27	.06	108	.25
	081	85.38	.70	97	.38	44	.17	37	.14	44	.17	30	.12	66	.26
	082	84.05	.69	84	.33	45	.18	39	.15	55	.22	18	.07	53	.21
	083	50.01	1.21	168	1.12	70	.47	84	.56	85	.57	28	.19	126	.84
	085	23.46	.23	33	.47	16	.23	20	.28	15	.21	10	.14	25	.36
	086	31.63	.12	11	.12	4	.04	2	.02	8	.08	0	.00	7	.07
	087	22.26	.18	18	.27	8	.12	9	.13	8	.12	1	.01	6	.09
	088	29.75	.06	28	.31	15	.17	7	.08	11	.12	11	.12	11	.12
	089	44.33	.54	58	.44	26	.20	26	.20	31	.23	9	.07	33	.25
	091	16.50	.26	42	.85	25	.51	24	.48	20	.40	1	.02	34	.69
	092	27.12	.13	38	.47	15	.18	18	.22	16	.20	7	.09	21	.26

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ mile/ year	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year		
Rural 2	093	51.89	.75	56	.36	24	.15	26	.17	35	.22	3	.02	34	.22
	095	71.49	.38	71	.33	27	.13	22	.10	38	.18	21	.10	50	.23
	096	27.04	.33	30	.37	14	.17	17	.21	14	.17	1	.01	22	.27
	097	33.87	.42	28	.28	12	.12	20	.20	16	.16	0	.00	18	.18
	098	16.20	.17	6	.12	4	.08	4	.08	2	.04	1	.02	2	.04
	101	21.12	.06	8	.13	5	.08	4	.06	4	.06	1	.02	2	.03
	102	18.25	.06	13	.24	7	.13	7	.13	8	.15	4	.07	7	.13
	104	14.34	.11	28	.65	16	.37	6	.14	16	.37	3	.07	15	.35
	105	2.75	.02	2	.24	1	.12	2	.24	1	.12	0	.00	1	.12
	106	27.39	.21	52	.63	22	.27	25	.30	35	.43	10	.12	35	.43
	107	44.19	.22	46	.35	21	.16	19	.14	26	.20	6	.05	25	.19
	108	17.89	.05	25	.47	8	.15	10	.19	12	.22	11	.20	20	.37
	110	41.26	.69	79	.64	30	.24	42	.34	42	.34	5	.04	58	.47
	111	10.61	.05	8	.25	5	.16	5	.16	1	.03	0	.00	4	.13
	112	10.17	.05	3	.10	0	.00	2	.07	2	.07	1	.03	1	.03
	113	26.28	.31	68	.86	22	.28	32	.41	32	.41	7	.09	34	.43
	114	8.88	.18	13	.49	5	.19	7	.26	5	.19	0	.00	11	.41
	115	5.94	.02	10	.56	6	.34	3	.17	6	.34	1	.06	6	.34
	116	13.78	.16	16	.39	5	.12	7	.17	6	.15	0	.00	10	.24
	117	5.13	.08	6	.39	4	.26	1	.06	2	.13	0	.00	2	.13
	118	6.86	.02	5	.24	2	.10	2	.10	2	.10	0	.00	3	.15
	120	15.44	.28	35	.76	17	.37	16	.35	20	.43	2	.04	21	.45
	121	34.75	.17	29	.28	14	.13	10	.10	17	.16	0	.00	17	.16
	122	14.69	.01	4	.09	1	.02	3	.07	3	.07	1	.02	1	.02
	123	1.10	.01	3	.91	2	.61	0	.00	2	.61	0	.00	2	.61
	124	10.63	.12	8	.25	3	.09	0	.00	2	.06	1	.03	4	.13
	126	4.81	.02	4	.28	1	.07	3	.21	2	.14	1	.07	3	.21
	127	12.75	.04	9	.24	5	.13	1	.03	5	.13	1	.03	7	.18
	128	27.04	.15	30	.37	14	.17	14	.17	16	.20	7	.09	22	.27
	129	2.69	.03	.	.	.	.	.	.	.	.	.	.	.	.
	130	30.73	.09	28	.30	14	.15	8	.09	13	.14	10	.11	19	.21
	131	70.19	.34	70	.33	34	.16	24	.11	40	.19	22	.10	38	.18
	133	72.01	.35	94	.44	32	.15	46	.21	44	.20	18	.08	58	.27
	134	2.85	.01	10	1.17	8	.94	3	.35	6	.70	3	.35	6	.70
	136	12.53	.11	28	.74	9	.24	9	.24	13	.35	7	.19	14	.37
	137	3.74	.	.	.	.	.	.	.	.	.	.	.	.	.
	138	11.66	.21	21	.60	7	.20	6	.17	11	.31	2	.06	15	.43
	139	22.01	.08	9	.14	5	.08	4	.06	5	.08	3	.05	3	.05
	140	11.25	.14	33	.98	14	.41	24	.71	16	.47	10	.30	16	.47

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ mile/ year	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year			
Rural 2	141	61.92	1.61	107	.58	40	.22	37	.20	55	.30	15	.08	66	.36
	142	16.31	.18	26	.53	12	.25	9	.18	13	.27	1	.02	16	.33
	144	19.45	.25	48	.82	21	.36	17	.29	24	.41	13	.22	33	.57
	145	.41	.01	3	2.44	2	1.63	0	.00	2	1.63	2	1.63	3	2.44
	146	13.22	.04	7	.18	3	.08	3	.08	4	.10	3	.08	3	.08
	147	12.65	.13	21	.55	12	.32	9	.24	9	.24	1	.03	12	.32
	149	24.15	.12	32	.44	8	.11	16	.22	12	.17	12	.17	24	.33
	150	6.65	.12	9	.45	1	.05	8	.40	7	.35	0	.00	5	.25
	151	91.26	2.05	221	.81	103	.38	110	.40	97	.35	29	.11	127	.46
	152	7.22	.02	3	.14	1	.05	1	.05	2	.09	1	.05	2	.09
	153	60.24	.57	60	.33	18	.10	28	.15	27	.15	2	.01	48	.27
	154	19.00	.08	20	.35	8	.14	5	.09	10	.18	8	.14	14	.25
	155	6.94	.06	7	.34	2	.10	3	.14	4	.19	1	.05	3	.14
	156	26.23	.15	21	.27	10	.13	7	.09	11	.14	0	.00	13	.17
	159	1.29	.01	1	.26	0	.00	1	.26	0	.00	0	.00	1	.26
	160	3.22	.03	1	.10	0	.00	0	.00	1	.10	0	.00	0	.00
	161	21.58	.11	26	.40	9	.14	11	.17	13	.20	1	.02	18	.28
	162	40.88	.14	65	.53	32	.26	27	.22	42	.34	21	.17	33	.27
	164	25.65	.82	46	.60	16	.21	21	.27	24	.31	1	.01	28	.36
	165	.78	.03	.	.	.	.	.	.	.	.	.	.	.	.
	167	9.41	.14	27	.96	6	.21	10	.35	16	.57	15	.53	22	.78
	168	5.93	.02	3	.17	1	.06	0	.00	1	.06	0	.00	3	.17
	169	17.36	.03	2	.04	0	.00	1	.02	1	.02	0	.00	2	.04
	170	23.90	.14	34	.47	17	.24	11	.15	20	.28	4	.06	20	.28
	171	33.25	.08	42	.42	19	.19	17	.17	18	.18	18	.18	31	.31
	172	1.40	.05	.	.	.	.	.	.	.	.	.	.	.	.
	173	33.55	.23	29	.29	13	.13	13	.13	16	.16	2	.02	19	.19
	175	46.56	.49	123	.88	48	.34	50	.36	64	.46	9	.06	91	.65
	178	20.09	.19	43	.71	22	.37	20	.33	24	.40	8	.13	30	.50
	179	8.80	.02	7	.27	5	.19	3	.11	5	.19	3	.11	4	.15
	180	29.94	.24	37	.41	14	.16	13	.14	22	.24	5	.06	27	.30
	182	29.65	.10	10	.11	6	.07	5	.06	6	.07	0	.00	7	.08
	186	15.01	.11	9	.20	4	.09	3	.07	6	.13	0	.00	6	.13
	187	13.87	.02	16	.38	10	.24	2	.05	12	.29	1	.02	12	.29
	188	10.55	.04	14	.44	7	.22	4	.13	7	.22	3	.09	8	.25
	191	13.04	.04	17	.43	6	.15	8	.20	8	.20	5	.13	10	.26
	193	1.42	.01	.	.	.	.	.	.	.	.	.	.	.	.
	194	11.32	.03	10	.29	8	.24	1	.03	6	.18	1	.03	3	.09
	213	19.33	.17	55	.95	27	.47	30	.52	26	.45	19	.33	34	.59

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Object Crash Densities.

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Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crashes per mile 100MVM (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Inj+K Crash/ year	Wet+Snow Crash per mile (3_Yrs)	Wet+Snow Crash per year (3_Yrs)	Dark Crash Crashes per mile (3_Yrs)	Dark Crash Crashes per year (3_Yrs)	Hz/Vt curve Crash (3_Yrs)	Hz/Vt curve Crash (3_Yrs)	Curve Crash (3_Yrs)	Fixed obj Crash/ mile/ year
Rural 2	243	.30	.01	1	1.11	1	1.11	0	.00	0	.00	0	.00	1	1.11
	253	7.61	.03	2	.09	1	.04	1	.04	0	.00	0	.00	1	.04
	310	6.69	.13	13	.65	6	.30	7	.35	6	.30	0	.00	5	.25
	351	2.31	.08	15	2.16	3	.43	14	2.02	7	1.01	0	.00	12	1.73
Overall		8819.8	113.38	11629	.44	5117	.19	4997	.19	5839	.22	1571	.06	7195	.27

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Object Crash Densities.

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Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crashes per mile 100MVM (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash Crash mile/ year	Inj+K Crash/ year	Wet+Snow Crash per mile (3_Yrs)	Wet+Snow Crash per year (3_Yrs)	Dark Crash Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year
Rural 3	010	.35	.01	2	1.90	1	.95	1	.95	1	.95	1	.95	2	1.90
	012	2.00	.05	4	.67	2	.33	3	.50	2	.33	0	.00	1	.17
	013	2.46	.06	6	.81	1	.14	5	.68	4	.54	0	.00	3	.41
	014	.26	.01	2	2.56	0	.00	1	1.28	2	2.56	1	1.28	2	2.56
	023	1.00	.02	3	1.00	1	.33	2	.67	2	.67	0	.00	3	1.00
	033	5.58	.15	12	.72	5	.30	8	.48	8	.48	1	.06	8	.48
	035	1.03	.04	10	3.24	1	.32	7	2.27	6	1.94	0	.00	6	1.94
	045	.22	.00	1	1.52	1	1.52	0	.00	1	1.52	0	.00	0	.00
	051	.32	.01	.	.	.	.	.	.	.	.	.	.	.	.
	054	.12	.00	.	.	.	.	.	.	.	.	.	.	.	.
	057	.14	.00	1	2.38	0	.00	0	.00	1	2.38	0	.00	1	2.38
	061	.62	.03	2	1.08	0	.00	1	.54	1	.54	0	.00	1	.54
	078	.17	.00	.	.	.	.	.	.	.	.	.	.	.	.
	080	.41	.01	1	.81	0	.00	0	.00	1	.81	0	.00	1	.81
	110	.33	.00	.	.	.	.	.	.	.	.	.	.	.	.
	113	.13	.00	.	.	.	.	.	.	.	.	.	.	.	.
	141	.62	.02	1	.54	0	.00	0	.00	0	.00	0	.00	0	.00
Overall		15.76	.43	45	.95	12	.25	28	.59	29	.61	3	.06	28	.59

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year			
Rural 4	008	3.68	.16	3	.27	2	.18	2	.18	2	.18	0	.00	1	.09
	010	1.78	.06	8	1.50	5	.94	6	1.12	4	.75	6	1.12	5	.94
	012	3.15	.23	10	1.06	7	.74	2	.21	3	.32	1	.11	6	.63
	013	6.83	.30	13	.63	2	.10	9	.44	6	.29	0	.00	9	.44
	014	1.62	.08	3	.62	0	.00	1	.21	1	.21	0	.00	3	.62
	017	1.97	.03	2	.34	1	.17	1	.17	1	.17	0	.00	2	.34
	019	.28	.01	.	.	.	.	.	.	.	.	.	.	.	.
	020	.42	.01	.	.	.	.	.	.	.	.	.	.	.	.
	021	1.09	.04	.	.	.	.	.	.	.	.	.	.	.	.
	023	.37	.00	.	.	.	.	.	.	.	.	.	.	.	.
	027	.19	.01	.	.	.	.	.	.	.	.	.	.	.	.
	033	.11	.01	.	.	.	.	.	.	.	.	.	.	.	.
	041	2.92	.14	9	1.03	5	.57	5	.57	3	.34	0	.00	7	.80
	045	9.23	.38	16	.58	5	.18	5	.18	8	.29	1	.04	11	.40
	046	1.82	.05	2	.37	1	.18	1	.18	0	.00	0	.00	2	.37
	047	.61	.01	.	.	.	.	.	.	.	.	.	.	.	.
	048	.31	.00	.	.	.	.	.	.	.	.	.	.	.	.
	051	15.83	.64	42	.88	16	.34	19	.40	19	.40	3	.06	29	.61
	054	.27	.01	1	1.23	1	1.23	0	.00	0	.00	0	.00	0	.00
	063	1.88	.05	2	.35	1	.18	2	.35	1	.18	0	.00	2	.35
	064	2.92	.02	2	.23	1	.11	1	.11	1	.11	1	.11	2	.23
	070	2.10	.04	2	.32	0	.00	2	.32	1	.16	0	.00	2	.32
	082	.32	.01	.	.	.	.	.	.	.	.	.	.	.	.
	086	.36	.02	1	.93	0	.00	0	.00	0	.00	0	.00	0	.00
	089	.09	.00	.	.	.	.	.	.	.	.	.	.	.	.
	093	.50	.01	1	.67	1	.67	0	.00	1	.67	0	.00	1	.67
	095	.32	.00	.	.	.	.	.	.	.	.	.	.	.	.
	107	.43	.01	.	.	.	.	.	.	.	.	.	.	.	.
	110	.93	.01	1	.36	0	.00	1	.36	1	.36	0	.00	1	.36
	113	.12	.00	1	2.78	0	.00	0	.00	0	.00	0	.00	0	.00
	141	1.46	.04	2	.46	0	.00	0	.00	2	.46	0	.00	2	.46
	151	1.37	.04	1	.24	0	.00	1	.24	0	.00	0	.00	1	.24
Overall		65.28	2.43	122	.62	48	.25	58	.30	54	.28	12	.06	86	.44
Overall		8900.8	116.23	11796	.44	5177	.19	5083	.19	5922	.22	1586	.06	7309	.27

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Inj+K Crash/ year	Inj+K Crash/ Wet+Snow Crash/ Crash per mile (3_Yrs)	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crash Crashes per mile (3_Yrs)	Dark Crash Crashes per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year
								Wet+Snow Crash/ Crash per year (3_Yrs)	Dark Crash Crashes per year (3_Yrs)	Dark Crash Crashes per mile (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year		
Urban 2	002	.49	.01	.	.	.	.	.	.	.	.	.	.	.	.
	010	1.64	.03	4	.81	1	.20	2	.41	2	.41	0	.00	4	.81
	011	11.89	.31	32	.90	11	.31	9	.25	10	.28	3	.08	26	.73
	012	7.62	.26	18	.79	7	.31	9	.39	5	.22	1	.04	13	.57
	013	4.31	.11	7	.54	3	.23	2	.15	3	.23	0	.00	3	.23
	014	5.35	.25	8	.50	2	.12	4	.25	2	.12	0	.00	7	.44
	016	11.00	.37	24	.73	8	.24	8	.24	15	.45	0	.00	16	.48
	017	3.84	.14	11	.95	4	.35	4	.35	6	.52	2	.17	7	.61
	018	6.95	.26	13	.62	3	.14	6	.29	7	.34	2	.10	11	.53
	019	6.75	.31	10	.49	3	.15	4	.20	5	.25	1	.05	9	.44
	020	.61	.04	6	3.28	2	1.09	3	1.64	3	1.64	2	1.09	6	3.28
	021	2.97	.10	5	.56	3	.34	1	.11	2	.22	0	.00	2	.22
	022	6.13	.15	5	.27	1	.05	1	.05	2	.11	0	.00	3	.16
	023	4.36	.17	21	1.61	8	.61	11	.84	11	.84	0	.00	19	1.45
	025	2.10	.08	6	.95	3	.48	3	.48	2	.32	1	.16	4	.63
	026	6.41	.27	9	.47	2	.10	4	.21	6	.31	0	.00	6	.31
	027	2.84	.10	12	1.41	4	.47	8	.94	8	.94	0	.00	10	1.17
	028	4.18	.12	5	.40	1	.08	2	.16	3	.24	1	.08	3	.24
	029	8.57	.36	28	1.09	10	.39	19	.74	10	.39	3	.12	18	.70
	031	4.00	.18	13	1.08	9	.75	2	.17	5	.42	0	.00	10	.83
	032	38.37	1.61	142	1.23	61	.53	51	.44	71	.62	4	.03	116	1.01
	033	11.32	.39	35	1.03	14	.41	13	.38	20	.59	3	.09	25	.74
	034	.06	.00	.	.	.	.	.	.	.	.	.	.	.	.
	035	10.31	.45	26	.84	7	.23	8	.26	17	.55	1	.03	19	.61
	036	2.65	.11	7	.88	2	.25	3	.38	4	.50	0	.00	7	.88
	038	5.84	.20	28	1.60	15	.86	10	.57	12	.68	2	.11	21	1.20
	042	2.16	.07	4	.62	2	.31	3	.46	0	.00	0	.00	4	.62
	044	2.40	.07	3	.42	0	.00	1	.14	0	.00	0	.00	3	.42
	045	13.06	.32	41	1.05	18	.46	15	.38	20	.51	1	.03	33	.84
	047	3.31	.11	7	.70	2	.20	2	.20	4	.40	0	.00	6	.60
	048	1.06	.01	4	1.26	0	.00	1	.31	4	1.26	0	.00	4	1.26
	049	6.50	.20	10	.51	3	.15	5	.26	6	.31	0	.00	10	.51
	050	4.47	.23	19	1.42	7	.52	4	.30	12	.89	3	.22	15	1.12
	051	10.16	.44	36	1.18	11	.36	19	.62	14	.46	5	.16	30	.98
	052	4.12	.06	3	.24	1	.08	3	.24	1	.08	0	.00	3	.24
	054	9.58	.28	16	.56	6	.21	11	.38	13	.45	0	.00	13	.45
	055	1.45	.05	2	.46	0	.00	1	.23	1	.23	0	.00	1	.23
	057	7.02	.33	12	.57	3	.14	5	.24	3	.14	0	.00	11	.52
	059	9.26	.44	44	1.58	12	.43	17	.61	29	1.04	0	.00	33	1.19

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ mile/ year	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year				
Urban	2	060	3.67	.17	3	.27	1	.09	2	.18	0	.00	1	.09	1	.09
		064	8.58	.28	10	.39	2	.08	3	.12	5	.19	0	.00	8	.31
		065	5.62	.17	9	.53	5	.30	1	.06	4	.24	0	.00	7	.42
		066	2.26	.06	5	.74	2	.29	4	.59	3	.44	0	.00	3	.44
		067	5.35	.13	11	.69	3	.19	2	.12	4	.25	0	.00	5	.31
		068	1.02	.01	1	.33	0	.00	1	.33	1	.33	0	.00	1	.33
		069	.04	.00	.	.	.	.	.	.	.	.	.	.	.	.
		071	.11	.00	.	.	.	.	.	.	.	.	.	.	.	.
		073	.93	.02	2	.72	2	.72	0	.00	1	.36	0	.00	2	.72
		074	5.40	.22	11	.68	1	.06	7	.43	6	.37	1	.06	8	.49
		077	4.34	.07	7	.54	0	.00	1	.08	6	.46	1	.08	4	.31
		080	5.88	.06	13	.74	5	.28	1	.06	6	.34	1	.06	9	.51
		081	4.35	.14	17	1.30	6	.46	2	.15	10	.77	1	.08	11	.84
		083	8.15	.25	28	1.15	15	.61	9	.37	12	.49	2	.08	17	.70
		089	1.28	.03	3	.78	0	.00	0	.00	0	.00	0	.00	3	.78
		091	1.21	.03	4	1.10	0	.00	1	.28	1	.28	0	.00	3	.83
		093	.52	.04	4	2.56	0	.00	4	2.56	4	2.56	2	1.28	3	1.92
		096	5.31	.24	14	.88	8	.50	3	.19	5	.31	0	.00	12	.75
		100	7.36	.35	17	.77	9	.41	5	.23	14	.63	1	.05	12	.54
		105	1.76	.01	1	.19	1	.19	0	.00	1	.19	1	.19	0	.00
		106	1.83	.04	1	.18	0	.00	0	.00	0	.00	0	.00	1	.18
		107	2.70	.02	4	.49	1	.12	1	.12	2	.25	0	.00	3	.37
		110	2.14	.08	9	1.40	2	.31	4	.62	5	.78	0	.00	7	1.09
		112	2.41	.02	1	.14	1	.14	0	.00	1	.14	0	.00	1	.14
		113	2.38	.05	5	.70	1	.14	3	.42	2	.28	3	.42	5	.70
		114	2.30	.09	1	.14	0	.00	1	.14	1	.14	0	.00	0	.00
		120	3.50	.11	18	1.71	10	.95	8	.76	5	.48	1	.10	15	1.43
		123	1.71	.05	4	.78	1	.19	1	.19	3	.58	0	.00	4	.78
		124	1.89	.04	11	1.94	4	.71	4	.71	5	.88	5	.88	11	1.94
		127	1.41	.01	2	.47	1	.24	2	.47	1	.24	1	.24	2	.47
		131	.95	.03	1	.35	0	.00	1	.35	1	.35	0	.00	1	.35
		136	.51	.01	.	.	.	.	.	.	.	.	.	.	.	.
		137	2.51	.	.	.	.	.	.	.	.	.	.	.	.	.
		138	.32	.00	.	.	.	.	.	.	.	.	.	.	.	.
		141	2.27	.07	2	.29	0	.00	1	.15	1	.15	0	.00	2	.29
		142	.91	.01	.	.	.	.	.	.	.	.	.	.	.	.
		144	.82	.03	2	.81	1	.41	0	.00	0	.00	0	.00	2	.81
		145	8.60	.17	10	.39	7	.27	4	.16	5	.19	2	.08	10	.39
		147	2.06	.07	2	.32	2	.32	1	.16	1	.16	0	.00	2	.32

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Object Crash Densities.

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Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year		
Urban	2	151	7.01	.30	24	1.14	7	.33	11	.52	11	.52	18	.86
		157	1.29	.04	3	.78	0	.00	0	.00	0	.00	3	.78
		158	2.31	.11	7	1.01	1	.14	3	.43	5	.72	4	.58
		164	1.70	.08	.	.	.	.	.	.	.	.	.	.
		165	3.45	.04	10	.97	6	.58	4	.39	5	.48	8	.77
		167	3.72	.18	4	.36	1	.09	2	.18	0	.00	2	.18
		172	.94	.03	4	1.42	2	.71	1	.35	2	.71	0	.00
		173	1.89	.04	1	.18	1	.18	0	.00	0	.00	1	.18
		175	6.18	.27	27	1.46	6	.32	10	.54	13	.70	24	1.29
		178	2.13	.06	3	.47	0	.00	2	.31	1	.16	3	.47
		180	.48	.01	1	.69	1	.69	0	.00	1	.69	0	.00
		181	8.47	.34	33	1.30	8	.31	19	.75	16	.63	28	1.10
		190	.42	.01	.	.	.	.	.	.	.	.	.	.
		213	1.94	.03	8	1.37	5	.86	1	.17	1	.17	0	.00
		310	1.32	.03	2	.51	1	.25	1	.25	1	.25	0	.00
Overall			402.72	13.74	1036	.86	379	.31	405	.34	510	.42	74	.06

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crash per mile (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year				
Urban	3	012	1.59	.12	7	1.47	0	.00	4	.84	3	.63	0	.00	7	1.47
		013	.40	.02	2	1.67	0	.00	1	.83	0	.00	0	.00	1	.83
		020	1.60	.11	13	2.71	5	1.04	6	1.25	8	1.67	0	.00	11	2.29
		021	.36	.01	.	.	.	.	.	.	.	.	.	.	.	.
		022	.76	.03	1	.44	0	.00	0	.00	1	.44	0	.00	1	.44
		026	.06	.00	.	.	.	.	.	.	.	.	.	.	.	.
		029	.08	.00	2	8.33	0	.00	1	4.17	0	.00	1	4.17	2	8.33
		032	.37	.02	3	2.70	1	.90	1	.90	2	1.80	0	.00	2	1.80
		035	.36	.02	1	.93	1	.93	0	.00	1	.93	0	.00	1	.93
		038	.83	.03	8	3.21	2	.80	3	1.20	4	1.61	0	.00	6	2.41
		041	.87	.09	2	.77	0	.00	1	.38	1	.38	0	.00	2	.77
		044	.68	.03	5	2.45	3	1.47	1	.49	2	.98	0	.00	4	1.96
		054	.96	.03	2	.69	1	.35	1	.35	2	.69	0	.00	2	.69
		057	.25	.01	1	1.33	0	.00	1	1.33	0	.00	0	.00	1	1.33
		059	.53	.03	3	1.89	0	.00	2	1.26	2	1.26	0	.00	3	1.89
		073	1.17	.02	6	1.71	1	.28	2	.57	4	1.14	1	.28	6	1.71
		074	.43	.02	1	.78	0	.00	0	.00	0	.00	0	.00	1	.78
		114	.27	.02	1	1.23	0	.00	0	.00	0	.00	0	.00	1	1.23
		144	.20	.01	.	.	.	.	.	.	.	.	.	.	.	.
		181	.51	.01	1	.65	0	.00	1	.65	0	.00	0	.00	0	.00
		190	.25	.02	1	1.33	0	.00	0	.00	0	.00	0	.00	1	1.33
Overall			12.53	.65	60	1.60	14	.37	25	.67	30	.80	2	.05	52	1.38

Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crash per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ mile/ year	Dark Crashes per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Curve Crash per year (3_Yrs)	Fixed obj Crash/ mile/ year				
Urban 4	002		4.98	.27	10	.67	2	.13	5	.33	7	.47	0	.00	9	.60
	010		1.85	.10	2	.36	0	.00	1	.18	2	.36	0	.00	0	.00
	011		4.96	.37	21	1.41	10	.67	5	.34	6	.40	0	.00	12	.81
	012		4.43	.30	18	1.35	3	.23	11	.83	7	.53	0	.00	15	1.13
	013		3.64	.19	14	1.28	4	.37	3	.27	6	.55	2	.18	12	1.10
	014		2.41	.18	1	.14	0	.00	1	.14	0	.00	1	.14	1	.14
	016		3.11	.20	15	1.61	2	.21	5	.54	7	.75	1	.11	12	1.29
	017		1.75	.07	1	.19	1	.19	1	.19	1	.19	0	.00	1	.19
	018		4.70	.32	5	.35	4	.28	1	.07	1	.07	0	.00	3	.21
	019		.18	.01	1	1.85	0	.00	0	.00	0	.00	0	.00	1	1.85
	020		.74	.04	3	1.35	0	.00	1	.45	3	1.35	0	.00	3	1.35
	021		1.94	.14	9	1.55	4	.69	5	.86	3	.52	0	.00	9	1.55
	022		3.89	.16	9	.77	5	.43	4	.34	5	.43	0	.00	4	.34
	023		2.43	.14	17	2.33	4	.55	9	1.23	5	.69	0	.00	15	2.06
	025		.25	.01	.	.	.	.	.	.	.	.	.	.	.	.
	026		2.19	.15	19	2.89	9	1.37	12	1.83	8	1.22	2	.30	16	2.44
	028		2.42	.15	7	.96	1	.14	4	.55	4	.55	0	.00	6	.83
	029		2.56	.16	11	1.43	3	.39	3	.39	5	.65	0	.00	9	1.17
	032		14.47	.71	81	1.87	38	.88	30	.69	52	1.20	3	.07	64	1.47
	033		5.70	.30	15	.88	6	.35	7	.41	11	.64	0	.00	12	.70
	035		5.26	.32	10	.63	1	.06	5	.32	5	.32	0	.00	7	.44
	038		.19	.01	2	3.51	0	.00	1	1.75	1	1.75	0	.00	2	3.51
	041		2.93	.21	5	.57	4	.46	1	.11	3	.34	0	.00	4	.46
	042		2.03	.09	6	.99	0	.00	1	.16	5	.82	0	.00	5	.82
	044		1.64	.08	2	.41	1	.20	0	.00	1	.20	0	.00	2	.41
	045		8.48	.41	27	1.06	12	.47	4	.16	13	.51	0	.00	23	.90
	047		4.55	.28	8	.59	4	.29	3	.22	5	.37	0	.00	8	.59
	048		.85	.02	1	.39	0	.00	1	.39	0	.00	1	.39	1	.39
	049		.32	.01	1	1.04	0	.00	0	.00	0	.00	0	.00	0	.00
	050		.89	.05	4	1.50	0	.00	2	.75	3	1.12	0	.00	4	1.50
	051		18.17	1.15	114	2.09	45	.83	51	.94	56	1.03	16	.29	85	1.56
	054		2.59	.17	11	1.42	6	.77	2	.26	8	1.03	2	.26	9	1.16
	055		2.18	.12	3	.46	0	.00	0	.00	0	.00	1	.15	2	.31
	057		5.04	.37	16	1.06	1	.07	6	.40	7	.46	3	.20	12	.79
	059		2.40	.16	7	.97	2	.28	2	.28	4	.56	0	.00	7	.97
	060		.90	.06	6	2.22	1	.37	2	.74	2	.74	0	.00	4	1.48
	064		2.50	.13	11	1.47	3	.40	5	.67	1	.13	0	.00	8	1.07
	065		.15	.01	.	.	.	.	.	.	.	.	.	.	.
	066		1.12	.04	3	.89	0	.00	2	.60	3	.89	0	.00	3	.89

ROR STH Statistics: Serious, Slippery Pavement, Dark Conditions, Horiz or Vert Curve, Fixed Object Crash Densities.

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Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crashes per mile (3_Yrs)	ROR Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash/ Crash per mile (3_Yrs)	Dark Crash per mile (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year				
Urban	4	074	1.46	.07	2	.46	0	.00	1	.23	1	.23	0	.00	2	.46
		096	4.23	.17	15	1.18	6	.47	8	.63	7	.55	0	.00	13	1.02
		105	.21	.00	.	.	.	.	.	.	.	.	.	.	.	.
		113	.19	.01	.	.	.	.	.	.	.	.	.	.	.	.
		114	2.48	.13	13	1.75	7	.94	5	.67	8	1.08	0	.00	12	1.61
		120	.55	.03	1	.61	0	.00	0	.00	1	.61	0	.00	1	.61
		125	.90	.09	4	1.48	1	.37	2	.74	3	1.11	0	.00	4	1.48
		141	2.86	.19	21	2.45	9	1.05	10	1.17	20	2.33	2	.23	15	1.75
		145	2.30	.16	7	1.01	4	.58	0	.00	2	.29	0	.00	3	.43
		151	1.09	.06	.	.	.	.	.	.	.	.	.	.	.	.
		167	1.01	.05	1	.33	1	.33	0	.00	0	.00	0	.00	0	.00
		175	2.14	.08	1	.16	1	.16	0	.00	0	.00	0	.00	1	.16
		181	1.08	.07	3	.93	0	.00	2	.62	0	.00	0	.00	2	.62
		213	1.42	.04	5	1.17	1	.23	2	.47	4	.94	1	.23	5	1.17
		794	1.98	.12	.	.	.	.	.	.	.	.	.	.	.	.
Overall			154.69	8.92	569	1.23	206	.44	226	.49	296	.64	35	.08	448	.97
Overall			569.94	23.31	1665	.97	599	.35	656	.38	836	.49	111	.06	1305	.76
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Popul Dens.	STH No	Lan Route	Annual Travel Miles	ROR Crashes per mile 100MVM (3_Yrs)	ROR	Inj+K Crash per year (3_Yrs)	Inj+K Crash/ mile/ year	Wet+Snow Crash per mile (3_Yrs)	Wet+Snow Crash per year (3_Yrs)	Dark Crash per mile (3_Yrs)	Dark Crash per year (3_Yrs)	Hz/Vt curve Crash per mile (3_Yrs)	Hz/Vt curve Crash per year (3_Yrs)	Curve Crash per mile (3_Yrs)	Fixed obj Crash/ mile/ year	
					Crashes per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)	Crash per year (3_Yrs)		
All Undivided			9470.8	139.54	13461	.47	5776	.20	5739	.20	6758	.24	1697	.06	8614	.30
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APPENDIX D

RUN-OFF-ROAD CRASH RATES FOR
OVERTURN
FIXED OBJECT
DITCH
TREE
GUARDRAIL
UTILITY POLE
EMBANKMENT AND
SIGN POST
CRASHES ON
TWO-LANE
RURAL UNDIVIDED
STATE TRUNK HIGHWAYS

ROR STH Statistics: Overturn, Fixed Object, Ditch, Tree, Guardrail, Utility Pole, Embankment, and Sign Post Crash Rates.

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STH Route	Annual Miles	Travel Crash 100MVM 3_Yr	ROR Crash/ mile/ year	ROR Crash per 100MVM	O/T 3_Yr	F/O per 100MVM	Crash per 100MVM	Ditch Crash per 100MVM	Tree Crash per 100MVM	G/R Crash per 100MVM	Util pole Crash per 100MVM	Embnk Crash per 100MVM	Sign Crash per 100MVM								
002	96.05	1.98	129	.45	21.72	43	7.24	72	12.13	13	2.19	24	4.04	6	1.01	7	1.18	2	.34	5	.84
008	243.10	3.81	278	.38	24.33	91	7.96	147	12.86	37	3.24	42	3.68	14	1.23	5	.44	6	.53	14	1.23
010	240.98	4.81	332	.46	23.02	88	6.10	211	14.63	41	2.84	23	1.59	37	2.57	25	1.73	18	1.25	20	1.39
011	113.97	2.35	185	.54	26.23	29	4.11	135	19.14	16	2.27	17	2.41	18	2.55	20	2.84	11	1.56	8	1.13
012	238.43	4.03	463	.65	38.30	111	9.18	296	24.48	67	5.54	42	3.47	29	2.40	24	1.99	31	2.56	20	1.65
013	299.53	4.31	349	.39	26.97	96	7.42	196	15.14	35	2.70	43	3.32	19	1.47	12	.93	9	.70	14	1.08
014	158.02	4.17	347	.73	27.76	81	6.48	225	18.00	29	2.32	28	2.24	39	3.12	28	2.24	21	1.68	15	1.20
015	1.60	.07	5	1.04	22.31	0	.00	4	17.85	3	13.39	0	.00	1	4.46	0	.00	0	.00	0	.00
016	95.56	1.73	144	.50	27.75	39	7.52	90	17.34	18	3.47	10	1.93	14	2.70	6	1.16	10	1.93	6	1.16
017	73.70	.98	97	.44	32.98	30	10.20	60	20.40	14	4.76	18	6.12	3	1.02	2	.68	6	2.04	1	.34
018	89.60	1.73	142	.53	27.44	27	5.22	99	19.13	16	3.09	10	1.93	9	1.74	9	1.74	9	1.74	6	1.16
019	46.73	.89	94	.67	35.08	27	10.08	58	21.65	14	5.22	9	3.36	0	.00	9	3.36	4	1.49	6	2.24
020	29.60	.49	66	.74	44.94	10	6.81	48	32.69	4	2.72	13	8.85	7	4.77	5	3.40	2	1.36	7	4.77
021	111.56	2.58	161	.48	20.78	50	6.45	87	11.23	20	2.58	18	2.32	5	.65	4	.52	4	.52	9	1.16
022	149.63	2.10	191	.43	30.34	43	6.83	129	20.49	36	5.72	17	2.70	13	2.06	6	.95	10	1.59	7	1.11
023	164.65	2.96	240	.49	27.07	66	7.44	142	16.02	26	2.93	20	2.26	18	2.03	12	1.35	13	1.47	13	1.47
025	79.18	.88	90	.38	34.19	31	11.78	50	19.00	6	2.28	5	1.90	11	4.18	5	1.90	5	1.90	4	1.52
026	70.94	2.05	139	.65	22.65	28	4.56	94	15.32	20	3.26	11	1.79	12	1.96	15	2.44	6	.98	9	1.47
027	242.23	2.17	234	.32	35.89	81	12.42	125	19.17	24	3.68	23	3.53	22	3.37	7	1.07	17	2.61	7	1.07
028	49.88	.63	70	.47	37.30	13	6.93	48	25.58	10	5.33	4	2.13	10	5.33	3	1.60	3	1.60	2	1.07
029	73.45	.76	77	.35	33.95	20	8.82	46	20.28	10	4.41	4	1.76	8	3.53	2	.88	4	1.76	4	1.76
031	4.35	.28	16	1.23	19.23	1	1.20	11	13.22	3	3.61	4	4.81	0	.00	1	1.20	0	.00	1	1.20
032	171.75	2.36	202	.39	28.49	59	8.32	117	16.50	30	4.23	12	1.69	8	1.13	16	2.26	4	.56	8	1.13
033	162.71	2.67	258	.53	32.26	82	10.25	146	18.26	33	4.13	15	1.88	23	2.88	11	1.38	13	1.63	9	1.13
034	22.93	.30	24	.35	27.02	11	12.39	11	12.39	4	4.50	1	1.13	1	1.13	0	.00	0	.00	0	.00
035	308.00	4.17	350	.38	27.98	84	6.71	218	17.43	40	3.20	31	2.48	47	3.76	11	.88	22	1.76	7	.56
036	6.57	.10	10	.51	33.74	1	3.37	8	26.99	4	13.50	0	.00	0	.00	0	.00	0	.00	0	.00
037	40.17	.41	55	.46	44.70	12	9.75	35	28.45	4	3.25	3	2.44	8	6.50	3	2.44	7	5.69	2	1.63
038	5.03	.12	21	1.39	60.80	3	8.69	17	49.22	3	8.69	0	.00	1	2.90	2	5.79	1	2.90	2	5.79
039	40.84	.14	56	.46	135.58	16	38.74	34	82.32	10	24.21	4	9.68	2	4.84	3	7.26	5	12.11	1	2.42
040	79.42	.32	79	.33	82.05	30	31.16	39	40.51	10	10.39	12	12.46	5	5.19	2	2.08	1	1.04	1	1.04
041	15.19	.61	34	.75	18.59	7	3.83	20	10.93	4	2.19	2	1.09	0	.00	0	.00	3	1.64	2	1.09
042	110.43	1.57	139	.42	29.54	25	5.31	94	19.97	12	2.55	15	3.19	10	2.12	21	4.46	8	1.70	4	.85
044	55.65	.60	55	.33	30.66	13	7.25	34	18.96	10	5.58	2	1.12	0	.00	3	1.67	1	.56	2	1.12
045	196.43	3.78	296	.50	26.07	62	5.46	200	17.61	51	4.49	31	2.73	13	1.14	20	1.76	5	.44	12	1.06
046	27.93	.38	22	.26	19.37	3	2.64	17	14.97	3	2.64	3	2.64	2	1.76	1	.88	0	.00	2	1.76
047	116.65	1.81	154	.44	28.40	42	7.74	84	15.49	19	3.50	12	2.21	6	1.11	11	2.03	6	1.11	5	.92
048	88.15	.76	70	.26	30.67	21	9.20	37	16.21	11	4.82	13	5.70	4	1.75	3	1.31	2	.88	0	.00
049	93.53	.89	107	.38	39.99	19	7.10	75	28.03	21	7.85	17	6.35	4	1.49	8	2.99	5	1.87	1	.37
050	5.64	.21	21	1.24	33.67	6	9.62	12	19.24	0	.00	7	11.22	0	.00	1	1.60	1	1.60	0	.00
051	109.67	2.29	211	.64	30.72	63	9.17	106	15.43	31	4.51	21	3.06	11	1.60	7	1.02	4	.58	7	1.02
052	57.60	.24	58	.34	80.13	23	31.77	30	41.44	12	16.58	3	4.14	0	.00	1	1.38	2	2.76	2	2.76
053	65.51	.98	99	.50	33.55	14	4.74	72	24.40	13	4.41	6	2.03	24	8.13	4	1.36	6	2.03	2	.68
054	172.71	2.13	193	.37	30.23	48	7.52	126	19.73	39	6.11	15	2.35	16	2.51	9	1.41	16	2.51	8	1.25
055	134.99	.79	107	.26	45.34	23	9.75	66	27.97	20	8.48	17	7.20	3	1.27	2	.85	5	2.12	2	.85
056	50.56	.22	84	.55	124.50	26	38.54	57	84.48	7	10.38	8	11.86	8	11.86	7	10.38	11	16.30	4	5.93

STH Route	Annual Travel Miles	ROR Crash/ year	ROR Crash/ per 100MVM	F/O			Ditch			Tree			G/R			Util pole			Embnk		
				O/T 3_Yr	O/T 100MVM	F/O 3_Yr	Crash/ 100MVM	Ditch/ 3_Yr	Crash/ 100MVM	Tree/ 3_Yr	Crash/ 100MVM	G/R 3_Yr	Crash/ 100MVM	Util pole 3_Yr	Crash/ 100MVM	Embnk 3_Yr	Crash/ 100MVM	Sign 3_Yr	Crash/ 100MVM		
057	71.65	1.70	116	.54	22.79	30	5.89	64	12.57	10	1.96	19	3.73	4	.79	7	1.38	1	.20	7	1.38
058	52.84	.35	58	.37	54.79	19	17.95	32	30.23	5	4.72	4	3.78	5	4.72	7	6.61	3	2.83	2	1.89
059	85.54	1.26	129	.50	34.20	26	6.89	92	24.39	24	6.36	8	2.12	2	.53	16	4.24	9	2.39	7	1.86
060	130.58	1.48	213	.54	47.96	60	13.51	128	28.82	31	6.98	11	2.48	15	3.38	4	.90	16	3.60	9	2.03
061	65.19	.95	73	.37	25.61	11	3.86	56	19.65	12	4.21	2	.70	14	4.91	2	.70	11	3.86	3	1.05
063	171.64	2.71	192	.37	23.64	74	9.11	97	11.94	17	2.09	26	3.20	8	.98	3	.37	9	1.11	5	.62
064	234.17	1.69	193	.27	38.15	66	13.05	109	21.55	29	5.73	22	4.35	16	3.16	3	.59	3	.59	4	.79
065	43.50	.60	67	.51	37.15	23	12.75	41	22.73	11	6.10	5	2.77	3	1.66	3	1.66	8	4.44	4	2.22
066	14.66	.20	36	.82	58.56	10	16.27	23	37.42	7	11.39	5	8.13	2	3.25	0	.00	1	1.63	3	4.88
067	125.86	1.51	214	.57	47.15	35	7.71	154	33.93	25	5.51	38	8.37	20	4.41	14	3.08	10	2.20	7	1.54
068	8.49	.08	23	.90	92.84	10	40.36	13	52.47	5	20.18	1	4.04	0	.00	2	8.07	3	12.11	0	.00
069	36.47	.76	78	.71	34.14	21	9.19	49	21.45	20	8.75	3	1.31	9	3.94	5	2.19	5	2.19	2	.88
070	213.06	1.86	142	.22	25.42	46	8.23	78	13.96	14	2.51	33	5.91	4	.72	4	.72	7	1.25	4	.72
071	42.62	.31	64	.50	68.07	23	24.46	39	41.48	6	6.38	4	4.25	8	8.51	1	1.06	9	9.57	0	.00
072	27.70	.12	28	.34	76.32	4	10.90	20	54.52	3	8.18	4	10.90	6	16.35	3	8.18	2	5.45	0	.00
073	214.85	1.95	187	.29	32.03	59	10.11	104	17.81	29	4.97	7	1.20	9	1.54	8	1.37	10	1.71	8	1.37
075	12.10	.14	32	.88	75.07	5	11.73	23	53.96	6	14.08	6	14.08	1	2.35	3	7.04	0	.00	2	4.69
076	24.92	.16	43	.58	89.47	12	24.97	27	56.18	9	18.73	3	6.24	1	2.08	6	12.48	0	.00	1	2.08
077	116.72	.48	70	.20	48.89	19	13.27	41	28.64	7	4.89	18	12.57	1	.70	2	1.40	3	2.10	1	.70
078	85.19	.54	127	.50	77.72	37	22.64	74	45.29	16	9.79	8	4.90	2	1.22	5	3.06	15	9.18	0	.00
079	17.63	.10	14	.26	47.68	3	10.22	10	34.06	5	17.03	0	.00	0	.00	2	6.81	2	6.81	0	.00
080	142.60	1.33	178	.42	44.46	55	13.74	108	26.98	31	7.74	16	4.00	9	2.25	7	1.75	9	2.25	10	2.50
081	85.38	.70	97	.38	46.44	27	12.93	66	31.59	11	5.27	4	1.91	11	5.27	3	1.44	13	6.22	2	.96
082	84.05	.69	84	.33	40.71	27	13.08	53	25.68	12	5.82	8	3.88	5	2.42	2	.97	5	2.42	1	.48
083	50.01	1.21	168	1.12	46.26	23	6.33	126	34.69	21	5.78	28	7.71	16	4.41	21	5.78	4	1.10	5	1.38
085	23.46	.23	33	.47	47.73	6	8.68	25	36.16	7	10.12	3	4.34	5	7.23	1	1.45	2	2.89	1	1.45
086	31.63	.12	11	.12	29.53	4	10.74	7	18.79	3	8.05	2	5.37	0	.00	1	2.68	0	.00	0	.00
087	22.26	.18	18	.27	33.36	10	18.53	6	11.12	2	3.71	1	1.85	1	1.85	0	.00	2	3.71	0	.00
088	29.75	.06	28	.31	151.80	14	75.90	11	59.64	2	10.84	3	16.26	0	.00	0	.00	3	16.26	1	5.42
089	44.33	.54	58	.44	35.98	16	9.93	33	20.47	7	4.34	7	4.34	2	1.24	6	3.72	4	2.48	1	.62
091	16.50	.26	42	.85	54.74	5	6.52	34	44.32	16	20.85	6	7.82	1	1.30	2	2.61	3	3.91	2	2.61
092	27.12	.13	38	.47	97.46	15	38.47	21	53.86	4	10.26	5	12.82	0	.00	2	5.13	2	5.13	4	10.26
093	51.89	.75	56	.36	24.91	16	7.12	34	15.13	7	3.11	5	2.22	5	2.22	3	1.33	7	3.11	0	.00
095	71.49	.38	71	.33	62.86	15	13.28	50	44.27	15	13.28	2	1.77	13	11.51	3	2.66	4	3.54	2	1.77
096	27.04	.33	30	.37	30.03	6	6.01	22	22.02	5	5.00	2	2.00	0	.00	2	2.00	3	3.00	1	1.00
097	33.87	.42	28	.28	21.99	10	7.85	18	14.14	4	3.14	3	2.36	0	.00	0	.00	2	1.57	4	3.14
098	16.20	.17	6	.12	11.74	4	7.82	2	3.91	0	.00	1	1.96	0	.00	0	.00	0	.00	0	.00
101	21.12	.06	8	.13	43.02	3	16.13	2	10.76	0	.00	1	5.38	0	.00	1	5.38	0	.00	0	.00
102	18.25	.06	13	.24	74.46	5	28.64	7	40.09	3	17.18	2	11.46	0	.00	0	.00	0	.00	1	5.73
104	14.34	.11	28	.65	85.28	12	36.55	15	45.69	7	21.32	4	12.18	1	3.05	0	.00	2	6.09	0	.00
105	2.75	.02	2	.24	32.19	1	16.10	1	16.10	0	.00	0	.00	0	.00	1	16.10	0	.00	0	.00
106	27.39	.21	52	.63	84.23	11	17.82	35	56.69	6	9.72	7	11.34	1	1.62	9	14.58	1	1.62	2	3.24
107	44.19	.22	46	.35	69.50	15	22.66	25	37.77	7	10.58	6	9.07	2	3.02	1	1.51	1	1.51	2	3.02
108	17.89	.05	25	.47	154.16	4	24.67	20	123.33	3	18.50	0	.00	9	55.50	1	6.17	2	12.33	1	6.17
110	41.26	.69	79	.64	38.09	14	6.75	58	27.97	19	9.16	7	3.38	2	.96	9	4.34	2	.96	4	1.93
111	10.61	.05	8	.25	52.56	4	26.28	4	26.28	1	6.57	2	13.14	0	.00	0	.00	1	6.57	0	.00

STH Route	Annual Travel Miles	ROR Crash/ year	ROR Crash/ per 100MVM 3_Yr	F/O				Ditch			Tree			Util pole				Embnk			Sign	
				O/T 3_Yr	F/O 100MVM 3_Yr	Crash per 100MVM 3_Yr	Ditch per 100MVM 3_Yr	Crash per 100MVM 3_Yr	Tree per 100MVM 3_Yr	Crash per 100MVM 3_Yr	G/R Crash per 100MVM 3_Yr	Util pole Crash per 100MVM 3_Yr	Embnk Crash per 100MVM 3_Yr	Sign Crash per 100MVM 3_Yr	Embnk Crash per 100MVM 3_Yr	Sign Crash per 100MVM 3_Yr	Embnk Crash per 100MVM 3_Yr	Sign Crash per 100MVM 3_Yr	Embnk Crash per 100MVM 3_Yr	Sign Crash per 100MVM 3_Yr		
112	10.17	.05	3	.10	18.61	1	6.20	1	6.20	0	.00	0	.00	1	6.20	0	.00	0	.00	0	.00	
113	26.28	.31	68	.86	73.64	24	25.99	34	36.82	10	10.83	4	4.33	2	2.17	5	5.41	2	2.17	1	1.08	
114	8.88	.18	13	.49	24.47	1	1.88	11	20.71	1	1.88	0	.00	2	3.77	1	1.88	0	.00	3	5.65	
115	5.94	.02	10	.56	161.01	4	64.40	6	96.61	3	48.30	0	.00	0	.00	1	16.10	0	.00	0	.00	
116	13.78	.16	16	.39	33.29	3	6.24	10	20.81	1	2.08	1	2.08	0	.00	4	8.32	1	2.08	0	.00	
117	5.13	.08	6	.39	25.84	3	12.92	2	8.61	0	.00	0	.00	0	.00	0	.00	0	.00	2	8.61	
118	6.86	.02	5	.24	86.22	2	34.49	3	51.73	2	34.49	1	17.24	0	.00	0	.00	0	.00	0	.00	
120	15.44	.28	35	.76	42.27	6	7.25	21	25.36	6	7.25	5	6.04	1	1.21	2	2.42	0	.00	0	.00	
121	34.75	.17	29	.28	57.49	9	17.84	17	33.70	4	7.93	1	1.98	2	3.96	2	3.96	1	1.98	1	1.98	
122	14.69	.01	4	.09	117.25	1	29.31	1	29.31	0	.00	1	29.31	0	.00	0	.00	0	.00	0	.00	
123	1.10	.01	3	.91	92.25	0	.00	2	61.50	0	.00	0	.00	0	.00	0	.00	1	30.75	0	.00	
124	10.63	.12	8	.25	21.74	3	8.15	4	10.87	1	2.72	0	.00	1	2.72	1	2.72	0	.00	0	.00	
126	4.81	.02	4	.28	62.21	0	.00	3	46.66	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	
127	12.75	.04	9	.24	71.23	0	.00	7	55.40	1	7.91	3	23.74	0	.00	0	.00	0	.00	0	.00	
128	27.04	.15	30	.37	65.91	5	10.98	22	48.33	7	15.38	4	8.79	2	4.39	1	2.20	1	2.20	1	2.20	
129	2.69	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
130	30.73	.09	28	.30	109.31	7	27.33	19	74.18	2	7.81	6	23.42	0	.00	1	3.90	1	3.90	0	.00	
131	70.19	.34	70	.33	69.52	25	24.83	38	37.74	10	9.93	3	2.98	7	6.95	2	1.99	8	7.94	0	.00	
133	72.01	.35	94	.44	90.12	24	23.01	58	55.61	11	10.55	9	8.63	9	8.63	2	1.92	8	7.67	3	2.88	
134	2.85	.01	10	1.17	356.83	2	71.37	6	214.10	3	107.05	0	.00	0	.00	1	35.68	0	.00	0	.00	
136	12.53	.11	28	.74	84.57	8	24.16	14	42.28	0	.00	5	15.10	3	9.06	2	6.04	2	6.04	0	.00	
137	3.74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
138	11.66	.21	21	.60	32.90	3	4.70	15	23.50	4	6.27	2	3.13	0	.00	3	4.70	1	1.57	3	4.70	
139	22.01	.08	9	.14	37.73	4	16.77	3	12.58	0	.00	1	4.19	0	.00	0	.00	1	4.19	0	.00	
140	11.25	.14	33	.98	81.12	13	31.96	16	39.33	3	7.37	4	9.83	1	2.46	1	2.46	2	4.92	3	7.37	
141	61.92	1.61	107	.58	22.15	33	6.83	66	13.66	20	4.14	6	1.24	6	1.24	6	1.24	2	.41	7	1.45	
142	16.31	.18	26	.53	47.16	6	10.88	16	29.02	2	3.63	3	5.44	3	5.44	4	7.25	0	.00	0	.00	
144	19.45	.25	48	.82	65.15	9	12.22	33	44.79	4	5.43	6	8.14	2	2.71	7	9.50	5	6.79	6	8.14	
145	.41	.01	3	2.44	179.15	0	.00	3	179.15	0	.00	0	.00	2	119.43	1	59.72	0	.00	0	.00	
146	13.22	.04	7	.18	58.77	3	25.19	3	25.19	1	8.40	0	.00	0	.00	1	8.40	0	.00	0	.00	
147	12.65	.13	21	.55	55.81	5	13.29	12	31.89	2	5.32	2	5.32	1	2.66	2	5.32	1	2.66	1	2.66	
149	24.15	.12	32	.44	90.96	6	17.06	24	68.22	4	11.37	3	8.53	0	.00	8	22.74	1	2.84	4	11.37	
150	6.65	.12	9	.45	24.61	4	10.94	5	13.67	0	.00	2	5.47	0	.00	1	2.73	0	.00	0	.00	
151	91.26	2.05	221	.81	35.89	56	9.10	127	20.63	29	4.71	3	.49	10	1.62	20	3.25	14	2.27	14	2.27	
152	7.22	.02	3	.14	45.17	1	15.06	2	30.11	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	
153	60.24	.57	60	.33	35.28	8	4.70	48	28.22	15	8.82	5	2.94	2	1.18	3	1.76	5	2.94	2	1.18	
154	19.00	.08	20	.35	84.74	4	16.95	14	59.32	0	.00	1	4.24	2	8.47	4	16.95	0	.00	2	8.47	
155	6.94	.06	7	.34	36.96	3	15.84	3	15.84	1	5.28	1	5.28	0	.00	1	5.28	0	.00	0	.00	
156	26.23	.15	21	.27	46.77	5	11.14	13	28.95	5	11.14	2	4.45	2	4.45	1	2.23	0	.00	0	.00	
159	1.29	.01	1	.26	35.40	0	.00	1	35.40	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	
160	3.22	.03	1	.10	9.87	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	
161	21.58	.11	26	.40	78.94	6	18.22	18	54.65	8	24.29	2	6.07	3	9.11	1	3.04	1	3.04	2	6.07	
162	40.88	.14	65	.53	158.53	26	63.41	33	80.48	4	9.76	2	4.88	6	14.63	3	7.32	11	26.83	1	2.44	
164	25.65	.82	46	.60	18.65	5	2.03	28	11.35	5	2.03	4	1.62	0	.00	2	.81	2	.81	2	.81	
165	.78	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
167	9.41	.14	27	.96	66.15	4	9.80	22	53.90	3	7.35	3	7.35	5	12.25	2	4.90	0	.00	4	9.80	

STH Route	Annual Travel Miles	ROR Crash/ 100MVM 3_Yr	ROR Crash/ year	ROR mile/ 100MVM 3_Yr	F/O			Ditch		Tree		G/R		Util pole		Embnk		Sign						
					O/T 3_Yr	F/O 100MVM 3_Yr	Crash per Crash 3_Yr	Ditch per Crash 3_Yr	Crash per 100MVM 3_Yr	Tree per Crash 3_Yr	Crash per 100MVM 3_Yr	G/R Crash per Crash 3_Yr	Util pole per Crash 3_Yr	Crash per 100MVM 3_Yr	Embnk Crash per Crash 3_Yr	Sign per 100MVM 3_Yr	Crash per 100MVM 3_Yr	Sign per 100MVM 3_Yr						
168	5.93	.02	3	.17	63.12	0	.00	3	63.12	0	.00	1	21.04	1	21.04	1	21.04	0	.00	0	.00			
169	17.36	.03	2	.04	24.97	0	.00	2	24.97	2	24.97	0	.00	0	.00	0	.00	0	.00	0	.00			
170	23.90	.14	34	.47	81.58	14	33.59	20	47.99	9	21.60	0	.00	1	2.40	1	2.40	2	4.80	3	7.20			
171	33.25	.08	42	.42	173.24	9	37.12	31	127.87	3	12.37	3	12.37	3	12.37	5	20.62	6	24.75	0	.00			
172	1.40	.05	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
173	33.55	.23	29	.29	42.27	9	13.12	19	27.70	8	11.66	4	5.83	0	.00	0	.00	1	1.46	1	1.46			
175	46.56	.49	123	.88	84.12	19	12.99	91	62.24	20	13.68	13	8.89	6	4.10	16	10.94	3	2.05	8	5.47			
178	20.09	.19	43	.71	76.61	10	17.82	30	53.45	7	12.47	8	14.25	4	7.13	1	1.78	3	5.34	1	1.78			
179	8.80	.02	7	.27	120.87	2	34.53	4	69.07	0	.00	0	.00	1	17.27	0	.00	2	34.53	0	.00			
180	29.94	.24	37	.41	52.36	6	8.49	27	38.21	7	9.91	6	8.49	1	1.42	1	1.42	0	.00	0	.00			
182	29.65	.10	10	.11	33.49	3	10.05	7	23.44	2	6.70	3	10.05	0	.00	0	.00	0	.00	0	.00			
186	15.01	.11	9	.20	26.63	3	8.88	6	17.75	1	2.96	0	.00	0	.00	0	.00	1	2.96	1	2.96			
187	13.87	.02	16	.38	249.33	3	46.75	12	187.00	4	62.33	0	.00	0	.00	4	62.33	1	15.58	0	.00			
188	10.55	.04	14	.44	106.77	5	38.13	8	61.01	0	.00	1	7.63	0	.00	2	15.25	1	7.63	2	15.25			
191	13.04	.04	17	.43	147.22	3	25.98	10	86.60	2	17.32	0	.00	0	.00	1	8.66	1	8.66	0	.00			
193	1.42	.01	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
194	11.32	.03	10	.29	116.92	4	46.77	3	35.08	0	.00	3	35.08	0	.00	0	.00	0	.00	0	.00			
213	19.33	.17	55	.95	107.53	19	37.15	34	66.47	17	33.24	7	13.69	1	1.96	3	5.87	2	3.91	1	1.96			
243	.30	.01	1	1.11	60.40	0	.00	1	60.40	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
253	7.61	.03	2	.09	24.98	1	12.49	1	12.49	0	.00	1	12.49	0	.00	0	.00	0	.00	0	.00			
310	6.69	.13	13	.65	34.41	5	13.23	5	13.23	0	.00	1	2.65	0	.00	1	2.65	1	2.65	0	.00			
351	2.31	.08	15	2.16	65.71	0	.00	12	52.57	0	.00	0	.00	5	21.90	1	4.38	0	.00	0	.00			
Overall				8819.81	113.38	11629	.44	34.19	3060	9.00	7195	21.15	1593	4.68	1133	3.33	802	2.36	661	1.94	613	1.80	453	1.33
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APPENDIX E

RUN-OFF-ROAD CRASH DENSITIES FOR
OVERTURN
FIXED OBJECT
DITCH
TREE
GUARDRAIL
UTILITY POLE
EMBANKMENT AND
SIGN POST
CRASHES ON
TWO-LANE
RURAL UNDIVIDED
STATE TRUNK HIGHWAYS

ROR STH Statistics: Overturn, Fixed Object, Ditch, Tree, Guardrail, Utility Pole, Embankment, and Sign Post Crash Densities.

Page E 1

STH Route	Annual Travel Miles	ROR		ROR		O/T		F/O		Ditch		Tree		G/R		Util		pole		Embnk		Sign	
		ROR Crash/ 100MVM	ROR Crash/ 3_Yr	Crash/ 100MVM	Crash/ 3_Yr	O/T per year	O/T 3_Yr	Crash/ mile/ year	Crash/ 3_Yr	F/O Crash/ Ditch	Ditch Crash/ 3_Yr	Tree Crash/ mile/ year	Tree Crash/ 3_Yr	G/R Crash/ pole	G/R Crash/ 3_Yr	Util Crash/ mile/ year	Util Crash/ 3_Yr	pole Crash/ 3_Yr	Embnk Crash/ 3_Yr	Embnk Crash/ mile/ year	Sign Crash/ 3_Yr	Sign Crash/ mile/ year	
002	96.05	1.98	129	.45	21.72	43	.15	72	.25	13	.05	24	.08	6	.02	7	.02	2	.01	5	.02		
008	243.10	3.81	278	.38	24.33	91	.12	147	.20	37	.05	42	.06	14	.02	5	.01	6	.01	14	.02		
010	240.98	4.81	332	.46	23.02	88	.12	211	.29	41	.06	23	.03	37	.05	25	.03	18	.02	20	.03		
011	113.97	2.35	185	.54	26.23	29	.08	135	.39	16	.05	17	.05	18	.05	20	.06	11	.03	8	.02		
012	238.43	4.03	463	.65	38.30	111	.16	296	.41	67	.09	42	.06	29	.04	24	.03	31	.04	20	.03		
013	299.53	4.31	349	.39	26.97	96	.11	196	.22	35	.04	43	.05	19	.02	12	.01	9	.01	14	.02		
014	158.02	4.17	347	.73	27.76	81	.17	225	.47	29	.06	28	.06	39	.08	28	.06	21	.04	15	.03		
015	1.60	.07	5	1.04	22.31	0	.00	4	.83	3	.63	0	.00	1	.21	0	.00	0	.00	0	.00		
016	95.56	1.73	144	.50	27.75	39	.14	90	.31	18	.06	10	.03	14	.05	6	.02	10	.03	6	.02		
017	73.70	.98	97	.44	32.98	30	.14	60	.27	14	.06	18	.08	3	.01	2	.01	6	.03	1	.00		
018	89.60	1.73	142	.53	27.44	27	.10	99	.37	16	.06	10	.04	9	.03	9	.03	9	.03	6	.02		
019	46.73	.89	94	.67	35.08	27	.19	58	.41	14	.10	9	.06	0	.00	9	.06	4	.03	6	.04		
020	29.60	.49	66	.74	44.94	10	.11	48	.54	4	.05	13	.15	7	.08	5	.06	2	.02	7	.08		
021	111.56	2.58	161	.48	20.78	50	.15	87	.26	20	.06	18	.05	5	.01	4	.01	4	.01	9	.03		
022	149.63	2.10	191	.43	30.34	43	.10	129	.29	36	.08	17	.04	13	.03	6	.01	10	.02	7	.02		
023	164.65	2.96	240	.49	27.07	66	.13	142	.29	26	.05	20	.04	18	.04	12	.02	13	.03	13	.03		
025	79.18	.88	90	.38	34.19	31	.13	50	.21	6	.03	5	.02	11	.05	5	.02	5	.02	4	.02		
026	70.94	2.05	139	.65	22.65	28	.13	94	.44	20	.09	11	.05	12	.06	15	.07	6	.03	9	.04		
027	242.23	2.17	234	.32	35.89	81	.11	125	.17	24	.03	23	.03	22	.03	7	.01	17	.02	7	.01		
028	49.88	.63	70	.47	37.30	13	.09	48	.32	10	.07	4	.03	10	.07	3	.02	3	.02	2	.01		
029	73.45	.76	77	.35	33.95	20	.09	46	.21	10	.05	4	.02	8	.04	2	.01	4	.02	4	.02		
031	4.35	.28	16	1.23	19.23	1	.08	11	.84	3	.23	4	.31	0	.00	1	.08	0	.00	1	.08		
032	171.75	2.36	202	.39	28.49	59	.11	117	.23	30	.06	12	.02	8	.02	16	.03	4	.01	8	.02		
033	162.71	2.67	258	.53	32.26	82	.17	146	.30	33	.07	15	.03	23	.05	11	.02	13	.03	9	.02		
034	22.93	.30	24	.35	27.02	11	.16	11	.16	4	.06	1	.01	1	.01	0	.00	0	.00	0	.00		
035	308.00	4.17	350	.38	27.98	84	.09	218	.24	40	.04	31	.03	47	.05	11	.01	22	.02	7	.01		
036	6.57	.10	10	.51	33.74	1	.05	8	.41	4	.20	0	.00	0	.00	0	.00	0	.00	0	.00		
037	40.17	.41	55	.46	44.70	12	.10	35	.29	4	.03	3	.02	8	.07	3	.02	7	.06	2	.02		
038	5.03	.12	21	1.39	60.80	3	.20	17	1.13	3	.20	0	.00	1	.07	2	.13	1	.07	2	.13		
039	40.84	.14	56	.46	135.58	16	.13	34	.28	10	.08	4	.03	2	.02	3	.02	5	.04	1	.01		
040	79.42	.32	79	.33	82.05	30	.13	39	.16	10	.04	12	.05	5	.02	2	.01	1	.00	1	.00		
041	15.19	.61	34	.75	18.59	7	.15	20	.44	4	.09	2	.04	0	.00	0	.00	3	.07	2	.04		
042	110.43	1.57	139	.42	29.54	25	.08	94	.28	12	.04	15	.05	10	.03	21	.06	8	.02	4	.01		
044	55.65	.60	55	.33	30.66	13	.08	34	.20	10	.06	2	.01	0	.00	3	.02	1	.01	2	.01		
045	196.43	3.78	296	.50	26.07	62	.11	200	.34	51	.09	31	.05	13	.02	20	.03	5	.01	12	.02		
046	27.93	.38	22	.26	19.37	3	.04	17	.20	3	.04	3	.04	2	.02	1	.01	0	.00	2	.02		
047	116.65	1.81	154	.44	28.40	42	.12	84	.24	19	.05	12	.03	6	.02	11	.03	6	.02	5	.01		
048	88.15	.76	70	.26	30.67	21	.08	37	.14	11	.04	13	.05	4	.02	3	.01	2	.01	0	.00		
049	93.53	.89	107	.38	39.99	19	.07	75	.27	21	.07	17	.06	4	.01	8	.03	5	.02	1	.00		
050	5.64	.21	21	1.24	33.67	6	.35	12	.71	0	.00	7	.41	0	.00	1	.06	1	.06	0	.00		
051	109.67	2.29	211	.64	30.72	63	.19	106	.32	31	.09	21	.06	11	.03	7	.02	4	.01	7	.02		
052	57.60	.24	58	.34	80.13	23	.13	30	.17	12	.07	3	.02	0	.00	1	.01	2	.01	2	.01		
053	65.51	.98	99	.50	33.55	14	.07	72	.37	13	.07	6	.03	24	.12	4	.02	6	.03	2	.01		
054	172.71	2.13	193	.37	30.23	48	.09	126	.24	39	.08	15	.03	16	.03	9	.02	16	.03	8	.02		
055	134.99	.79	107	.26	45.34	23	.06	66	.16	20	.05	17	.04	3	.01	2	.00	5	.01	2	.00		
056	50.56	.22	84	.55	124.50	26	.17	57	.38	7	.05	8	.05	8	.05	7	.05	11	.07	4	.03		

STH Route	Annual Travel Miles	ROR			ROR			O/T			F/O			Ditch			Tree			G/R			Util			pole			Embnk			Sign		
		100MVM	Crash/ 3_Yr	Crash/ per year	100MVM	Crash/ 3_Yr	Crash/ per year	O/T	mile/ Crash 3_Yr	F/O	Crash/ 3_Yr	Ditch	Crash/ 3_Yr	Tree	Crash/ 3_Yr	G/R	Crash/ 3_Yr	pole	Crash/ 3_Yr	Embnk	Crash/ 3_Yr	Crash/ 3_Yr	Sign	Crash/ 3_Yr	Crash/ 3_Yr	Sign	Crash/ 3_Yr	Crash/ 3_Yr	Sign					
112	10.17	.05	3	.10	18.61	1	.03	1	.03	0	.00	0	.00	1	.03	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
113	26.28	.31	68	.86	73.64	24	.30	34	.43	10	.13	4	.05	2	.03	5	.06	2	.03	1	.01	0	.00	3	.11	0	.00	0	.00	0	.01			
114	8.88	.18	13	.49	24.47	1	.04	11	.41	1	.04	0	.00	2	.08	1	.04	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
115	5.94	.02	10	.56	161.01	4	.22	6	.34	3	.17	0	.00	0	.00	1	.06	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
116	13.78	.16	16	.39	33.29	3	.07	10	.24	1	.02	1	.02	0	.00	4	.10	1	.02	0	.00	1	.02	0	.00	0	.00	0	.00	0	.00			
117	5.13	.08	6	.39	25.84	3	.19	2	.13	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	2	.13			
118	6.86	.02	5	.24	86.22	2	.10	3	.15	2	.10	1	.05	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
120	15.44	.28	35	.76	42.27	6	.13	21	.45	6	.13	5	.11	1	.02	2	.04	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
121	34.75	.17	29	.28	57.49	9	.09	17	.16	4	.04	1	.01	2	.02	2	.02	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01			
122	14.69	.01	4	.09	117.25	1	.02	1	.02	0	.00	1	.02	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
123	1.10	.01	3	.91	92.25	0	.00	2	.61	0	.00	0	.00	0	.00	0	.00	0	.00	0	.30	0	.00	0	.00	0	.00	0	.00	0	.00			
124	10.63	.12	8	.25	21.74	3	.09	4	.13	1	.03	0	.00	1	.03	1	.03	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
126	4.81	.02	4	.28	62.21	0	.00	3	.21	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
127	12.75	.04	9	.24	71.23	0	.00	7	.18	1	.03	3	.08	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
128	27.04	.15	30	.37	65.91	5	.06	22	.27	7	.09	4	.05	2	.02	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01			
129	2.69	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
130	30.73	.09	28	.30	109.31	7	.08	19	.21	2	.02	6	.07	0	.00	1	.01	1	.01	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
131	70.19	.34	70	.33	69.52	25	.12	38	.18	10	.05	3	.01	7	.03	2	.01	8	.04	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
133	72.01	.35	94	.44	90.12	24	.11	58	.27	11	.05	9	.04	9	.04	2	.01	8	.04	3	.01	0	.00	0	.00	0	.00	0	.00	0	.00			
134	2.85	.01	10	1.17	356.83	2	.23	6	.70	3	.35	0	.00	0	.00	1	.12	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
136	12.53	.11	28	.74	84.57	8	.21	14	.37	0	.00	5	.13	3	.08	2	.05	2	.05	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
137	3.74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
138	11.66	.21	21	.60	32.90	3	.09	15	.43	4	.11	2	.06	0	.00	3	.09	1	.03	3	.09	0	.00	0	.00	0	.00	0	.00	0	.00			
139	22.01	.08	9	.14	37.73	4	.06	3	.05	0	.00	1	.02	0	.00	0	.00	1	.02	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
140	11.25	.14	33	.98	81.12	13	.39	16	.47	3	.09	4	.12	1	.03	1	.03	2	.06	3	.09	0	.00	0	.00	0	.00	0	.00	0	.00			
141	61.92	1.61	107	.58	22.15	33	.18	66	.36	20	.11	6	.03	6	.03	6	.03	2	.01	7	.04	0	.00	0	.00	0	.00	0	.00	0	.00			
142	16.31	.18	26	.53	47.16	6	.12	16	.33	2	.04	3	.06	3	.06	4	.08	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
144	19.45	.25	48	.82	65.15	9	.15	33	.57	4	.07	6	.10	2	.03	7	.12	5	.09	6	.10	0	.00	0	.00	0	.00	0	.00	0	.00			
145	.41	.01	3	2.44	179.15	0	.00	3	2.44	0	.00	0	.00	2	1.63	1	.81	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
146	13.22	.04	7	.18	58.77	3	.08	3	.08	1	.03	0	.00	0	.00	1	.03	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
147	12.65	.13	21	.55	55.81	5	.13	12	.32	2	.05	2	.05	1	.03	2	.05	1	.03	1	.03	1	.03	1	.03	1	.03	1	.03	1	.03			
149	24.15	.12	32	.44	90.96	6	.08	24	.33	4	.06	3	.04	0	.00	8	.11	1	.01	4	.06	0	.00	0	.00	0	.00	0	.00	0	.00			
150	6.65	.12	9	.45	24.61	4	.20	5	.25	0	.00	2	.10	0	.00	1	.05	0	.00	1	.05	0	.00	0	.00	0	.00	0	.00	0	.00			
151	91.26	2.05	221	.81	35.89	56	.20	127	.46	29	.11	3	.01	10	.04	20	.07	14	.05	14	.05	14	.05	14	.05	14	.05	14	.05	14	.05			
152	7.22	.02	3	.14	45.17	1	.05	2	.09	2	.09	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
153	60.24	.57	60	.33	35.28	8	.04	48	.27	15	.08	5	.03	2	.01	3	.02	5	.03	2	.01	2	.01	2	.01	2	.01	2	.01	2	.01			
154	19.00	.08	20	.35	84.74	4	.07	14	.25	0	.00	1	.02	2	.04	4	.07	0	.00	2	.04	0	.00	0	.00	0	.00	0	.00	0	.00			
155	6.94	.06	7	.34	36.96	3	.14	3	.14	1	.05	1	.05	0	.00	1	.05	0	.00	1	.05	0	.00	0	.00	0	.00	0	.00	0	.00			
156	26.23	.15	21	.27	46.77	5	.06	13	.17	5	.06	2	.03	2	.03	1	.01	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
159	1.29	.01	1	.26	35.40	0	.00	1	.26	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
160	3.22	.03	1	.10	9.87	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00			
161	21.58	.11	26	.40	78.94	6	.09	18	.28	8	.12	2	.03	3	.05	1	.02	1	.02	1	.02	1	.02	1	.02	2	.03	2	.03	2	.03			
162	40.88	.14	65	.53	158.53	26	.21	33	.27	4	.03	2	.02	6	.05	3	.02	11	.09	1	.01	1	.01	1	.01	1	.01	1	.01	1	.01			
164	25.65	.82	46	.60	18.65	5	.06	28	.36	5	.06	4	.05	0	.00	2	.03	2	.03	2	.03	2	.03	2	.03	2	.03	2	.03	2	.03			
165	.78	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
167	9.41	.14	27	.96	66.15	4	.14	22	.78	3	.11	3	.11	5	.18	2	.07	0	.00	4	.1													

STH Route	Miles	ROR			ROR			O/T			F/O			Ditch			Tree			G/R			Util pole			Embnk			Sign		
		Annual Travel	ROR 100MVM	Crash/ 3_Yr	Crash/ 3_Yr	per 100MVM	Crash/ 3_Yr	O/T	per 100MVM	Crash/ 3_Yr	F/O Crash/ 3_Yr	Ditch mile/ 3_Yr	Crash/ 3_Yr	Ditch mile/ 3_Yr	Crash/ 3_Yr	Tree mile/ 3_Yr	Crash/ 3_Yr	Tree mile/ 3_Yr	Crash/ 3_Yr	G/R Crash/ 3_Yr	Pole mile/ 3_Yr	Crash/ 3_Yr	Util pole mile/ 3_Yr	Crash/ 3_Yr	Embnk Crash/ 3_Yr	Crash/ 3_Yr	Sign Crash/ 3_Yr				
168	5.93	.02	3	.17	63.12	0	.00	3	.17	0	.00	1	.06	1	.06	1	.06	1	.06	0	.00	0	.00	0	.00	0	.00				
169	17.36	.03	2	.04	24.97	0	.00	2	.04	2	.04	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00				
170	23.90	.14	34	.47	81.58	14	.20	20	.28	9	.13	0	.00	1	.01	1	.01	2	.03	3	.04	1	.01	2	.03	3	.04				
171	33.25	.08	42	.42	173.24	9	.09	31	.31	3	.03	3	.03	3	.03	5	.05	6	.06	0	.00	0	.00	0	.00	0	.00				
172	1.40	.05			
173	33.55	.23	29	.29	42.27	9	.09	19	.19	8	.08	4	.04	0	.00	0	.00	1	.01	1	.01	1	.01	1	.01	1	.01				
175	46.56	.49	123	.88	84.12	19	.14	91	.65	20	.14	13	.09	6	.04	16	.11	3	.02	8	.06	3	.02	8	.06	3	.02				
178	20.09	.19	43	.71	76.61	10	.17	30	.50	7	.12	8	.13	4	.07	1	.02	3	.05	1	.02	3	.05	1	.02	3	.05				
179	8.80	.02	7	.27	120.87	2	.08	4	.15	0	.00	0	.00	1	.04	0	.00	2	.08	0	.00	2	.08	0	.00	2	.08				
180	29.94	.24	37	.41	52.36	6	.07	27	.30	7	.08	6	.07	1	.01	1	.01	0	.00	0	.00	0	.00	0	.00	0	.00				
182	29.65	.10	10	.11	33.49	3	.03	7	.08	2	.02	3	.03	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00				
186	15.01	.11	9	.20	26.63	3	.07	6	.13	1	.02	0	.00	0	.00	0	.00	1	.02	1	.02	1	.02	1	.02	1	.02				
187	13.87	.02	16	.38	249.33	3	.07	12	.29	4	.10	0	.00	0	.00	4	.10	1	.02	0	.00	1	.02	0	.00	1	.02				
188	10.55	.04	14	.44	106.77	5	.16	8	.25	0	.00	1	.03	0	.00	2	.06	1	.03	2	.06	1	.03	2	.06	1	.03				
191	13.04	.04	17	.43	147.22	3	.08	10	.26	2	.05	0	.00	0	.00	1	.03	1	.03	0	.00	1	.03	0	.00	1	.03				
193	1.42	.01	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
194	11.32	.03	10	.29	116.92	4	.12	3	.09	0	.00	3	.09	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00				
213	19.33	.17	55	.95	107.53	19	.33	34	.59	17	.29	7	.12	1	.02	3	.05	2	.03	1	.02	3	.05	2	.03	1	.02				
243	.30	.01	1	1.11	60.40	0	.00	1	1.11	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00				
253	7.61	.03	2	.09	24.98	1	.04	1	.04	0	.00	1	.04	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00				
310	6.69	.13	13	.65	34.41	5	.25	5	.25	0	.00	1	.05	0	.00	1	.05	1	.05	1	.05	0	.00	1	.05	0	.00				
351	2.31	.08	15	2.16	65.71	0	.00	12	1.73	0	.00	0	.00	5	.72	1	.14	0	.00	0	.00	0	.00	0	.00	0	.00				
Overall		8819.81	113.38	11629	.44	34.19	3060	.12	7195	.27	1593	.06	1133	.04	802	.03	661	.02	613	.02	453	.02									
-																															

APPENDIX F

**RUN-OFF-ROAD
CRASH/STATE TRUNK HIGHWAY LOG
INTERLEAF TABLE
FOR STH 14**

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
LACR	014E 001	.00	>> C OF LA CROSSE		.		.		.	.	.
LACR	014E 004D	.82	B-32-0300	BRIDGE	.		.		.	.	.
LACR	014E 005	1.34	USH 14 WB		.		.		.	.	.
LACR	014E 007	1.83	STH 33 EB		.		.		.	.	.
LACR	014E 008	2.05			.		.		.	.	.
LACR	014E 010	2.88	STH 35 NB		.		.		.	.	.
LACR	014E 011A	3.60	EAST AVE		.		.		.	.	.
LACR	014E 011T	4.31	LOSEY BLVD		.		.		.	.	.
LACR	014E 014B	6.10	USH 61 SB		.		.		.	.	.
LACR	014E 014G	6.19	USH 61 SB		.		.		.	.	.
LACR	014E 014K	6.20	USH 61 NB		.		.		.	.	.
		6.86			6980	On Roadway	22	10/23/99	DRY	DARK	Inj	GUARDRAIL FACE
LACR	014E 016	7.22	CTH MM		.		.		.	.	.
		7.32			6980	Outside Should. Left	6	01/06/99	SNOW/SLUSH	DAWN	PDO	GUARDRAIL FACE
		7.42			6980	Outside Should. Right	12	01/06/99	SNOW/SLUSH	DAYLIGHT	PDO	GUARDRAIL FACE
		7.47			6980	Shoulder	19	03/26/99	DRY	DARK	PDO	GUARDRAIL FACE
LACR	014E 017M	7.51	JUSTIN RD		.		.		.	.	.
		7.52			6980	Shoulder	16	06/10/98	DRY	DAYLIGHT	PDO	GUARDRAIL END
		8.05			6980	Outside Should. Right	8	01/21/98	ICE	DAYLIGHT	PDO	DITCH
		8.60			6980	On Roadway	14	06/08/99	WET	DAYLIGHT	PDO	GUARDRAIL FACE
LACR	014E 018	8.60	HELKE RD		.		.		.	.	.
		8.60			6980	Outside Should. Left	4	05/10/2000	DRY	DARK	PDO	DITCH
		8.60			6980	Outside Should. Right	13	01/05/99	SNOW/SLUSH	DAYLIGHT	PDO	GUARDRAIL FACE
		9.58			6980	On Roadway	11	10/18/98	DRY	DAYLIGHT	PDO	BRIDGE RAIL
		9.58			6980	On Roadway	3	06/27/99	DRY	DARK	Inj	GUARDRAIL FACE
LACR	014E 022	9.69	BREIDEL COULEE RD		.		.		.	.	.
		9.99			6980	On Roadway	19	07/26/99	DRY	DAYLIGHT	Inj	64
LACR	014E 025	10.32	>> T OF SHELBY		.		.		.	.	.
		10.62			6980	Outside Should. Right	16	06/01/2000	WET	DAYLIGHT	PDO	EMBANKMENT
LACR	014E 026	11.05	CTH M		.		.		.	.	.
		11.05			6120	Outside Should. Right	20	11/20/2000	0	DARK LIGHTED	Inj	GUARDRAIL END
		11.15			6120	Outside Should. Left	2	11/24/2000	ICE	DARK	PDO	OVERTURN
		11.35			6120	Outside Should. Left	16	02/17/2000	SNOW/SLUSH	DAYLIGHT	Inj	DITCH
		11.55			6120	Shoulder	7	12/08/99	ICE	DAWN	Inj	OVERTURN
		11.75			6120	On Roadway	15	04/29/2000	DRY	DAYLIGHT	PDO	OTHER NON-FIXED OBJECT
LACR	014E 027	12.17	CTH MM		.		.		.	.	.
		12.58			6120	Outside Should. Right	12	12/09/99	DRY	DAYLIGHT	PDO	OVERTURN
		12.67			6120	Outside Should. Right	17	04/01/98	DRY	DAYLIGHT	PDO	GUARDRAIL FACE
		12.88			6120	On Roadway	11	02/20/2000	DRY	DAYLIGHT	PDO	OTHER NON-FIXED OBJECT
LACR	014E 029	13.28	BARTSCH RD		.		.		.	.	.
		13.28			6120	Outside Should. Right	4	01/30/99	DRY	DARK	PDO	DITCH
		13.38			6120	Outside Should. Right	14	02/12/2000	SNOW/SLUSH	DAYLIGHT	Inj	EMBANKMENT
VERN	014E 032	14.43	CTH N		.		.		.	.	.
		14.43			6440	Outside Should. Right	14	12/16/2000	SNOW/SLUSH	DAYLIGHT	PDO	TRAFFIC SIGN POST
VERN	014E 034	15.30	HOHLFELD RD		.		.		.	.	.
		15.75			6440	Outside Should. Left	8	12/07/99	ICE	DAYLIGHT	PDO	GUARDRAIL FACE
		16.05			6440	Outside Should. Left	21	11/26/99	ICE	DARK	Inj	GUARDRAIL END
		16.15			6440	Outside Should. Left	18	12/28/2000	SNOW/SLUSH	DARK	Inj	EMBANKMENT
		16.30			6440	Outside Should. Right	0	12/25/98	DRY	DARK	PDO	EMBANKMENT
VERN	014E 035	16.45	DAHLEN LA		.		.		.	.	.

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
VERN	014E 036	16.82	STH 162 NB		6440	Outside Should. Left	7	03/05/2000	DRY	DAYLIGHT	Inj	OVERTURN
		16.83					.		.	.	.
VERN	014E 038	17.67	STH 162 NB		6440	Outside Should. Right	13	07/18/98	DRY	DARK	PDO	TRAFFIC SIGN POST
		17.68			6430	Outside Should. Right	23	12/03/99	WET	DARK LIGHTED	PDO	TREE
VERN	014E 040	18.50	CTH P		.	.	.		.	.	.
VERN	014E 041T	19.21	CTH B		.	.	.		.	.	.
VERN	014E 043K	19.92	CORNELL LA		5200	Outside Should. Right	3	11/20/98	DRY	DARK	PDO	GUARDRAIL FACE
		21.11			5200	Outside Should. Right	14	11/26/99	WET	DAYLIGHT	Inj	OVERTURN
		21.21			5200	Outside Should. Right	17	03/09/99	ICE	DAYLIGHT	Inj	OVERTURN
		21.31			5200	Shoulder	0	12/23/2000	SNOW/SLUSH	DARK	PDO	TRAFFIC SIGN POST
		21.41			5200	Outside Should. Right	0	03/25/98	WET	DARK	PDO	GUARDRAIL FACE
		21.41			5200	On Roadway	16	03/08/99	SNOW/SLUSH	DAYLIGHT	PDO	GUARDRAIL FACE
VERN	014E 045	21.61	CTH GG		5200	Outside Should. Right	12	10/10/2000	DRY	DAYLIGHT	PDO	TRAFFIC SIGN POST
VERN	014E 047	22.26	VANG ST		5080	On Roadway	7	09/12/2000	DRY	DAYLIGHT	Inj	VEHICLE IN OPERATION
VERN	014E 049	23.38	VOLDEN RD		.	.	.		.	.	.
		23.69			5080	Outside Should. Right	11	02/15/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
		23.89			5080	Outside Should. Left	11	04/10/98	DRY	DAYLIGHT	PDO	EMBANKMENT
		24.34			5724	Outside Should. Left	3	07/17/99	DRY	DARK	Inj	OVERTURN
VERN	014E 051	24.45	>> T OF COON		5724	Outside Should. Right	11	05/28/2000	WET	DAYLIGHT	PDO	OVERTURN
		24.84			5724	Outside Should. Right	16	12/15/99	SNOW/SLUSH	DUSK	Inj	OVERTURN
		25.02			5724	Outside Should. Right	18	11/06/2000	WET	DARK	PDO	TRAFFIC SIGN POST
VERN	014E 052	25.62	HEGGE RD		.	.	.		.	.	.
		26.15			5724	Outside Should. Left	3	10/10/99	DRY	DARK	Inj	UTILITY POLE
VERN	014E 055A	26.71	SAUGSTAD RD		.	.	.		.	.	.
VERN	014E 056G	27.55	STH 27 NB		9520	Outside Should. Right	1	01/31/2000	DRY	DARK LIGHTED	Inj	UTILITY POLE
VERN	014E 057	28.23	MAPLE ST		.	.	.		.	.	.
		28.72			9592	Outside Should. Left	1	09/24/2000	DRY	DARK LIGHTED	PDO	MAILBOX
VERN	014E 058	29.07	>> C OF WESTBY		9592	Shoulder	5	12/03/98	DRY	DARK	PDO	GUARDRAIL FACE
		29.08			9592	Outside Should. Left	1	12/29/98	SNOW/SLUSH	DARK	PDO	GUARDRAIL FACE
		29.17			9592	Shoulder	13	12/04/2000	DRY	DAYLIGHT	PDO	GUARDRAIL END
		29.32			9592	Outside Should. Right	23	12/19/98	DRY	DARK	PDO	DITCH
VERN	014E 060	30.13	SMITH RD		.	.	.		.	.	.
		30.68			9592	Shoulder	0	03/05/98	SNOW/SLUSH	DARK	PDO	GUARDRAIL FACE
VERN	014E 061	31.23	THREE CHIMNEY RD		.	.	.		.	.	.
		31.33			9592	Outside Should. Left	13	07/01/2000	DRY	DAYLIGHT	Inj	TREE
		31.65			9592	Outside Should. Right	20	04/30/2000	DRY	DARK LIGHTED	Inj	CULVERT
		31.66			9592	Outside Should. Right	16	05/21/99	DRY	DAYLIGHT	Inj	GUARDRAIL END
		32.05			9592	Outside Should. Left	13	07/05/99	DRY	DAYLIGHT	Inj	FIRE/EXPLOSION
VERN	014E 062	32.25	CTH Y		.	.	.		.	.	.
		32.35			9592	Outside Should. Right	12	02/22/99	DRY	DAYLIGHT	PDO	GUARDRAIL END
		32.45			9592	Outside Should. Right	6	06/09/99	DRY	DAYLIGHT	PDO	GUARDRAIL FACE
		32.55			9592	On Roadway	18	05/13/2000	DRY	DUSK	PDO	GUARDRAIL FACE
VERN	014E 063	33.08	SPRINGFIELD RD		.	.	.		.	.	.

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
			33.15		9592	Outside Should. Left	8	02/02/98	ICE	DAYLIGHT	K	OVERTURN
			33.18		9592	Shoulder	18	11/10/98	SNOW/SLUSH	DARK	PDO	GUARDRAIL FACE
VERN	014E 064	33.75	>> T OF VIROQUA		.	.	.	.	.	.	.	.
VERN	014E 066	34.98	STH 56 EB		.	.	.	.	.	.	.	.
VERN	014E 067	35.62	WILLOW ST		.	.	.	.	.	.	.	.
VERN	014E 069	36.54	CTH J		.	.	.	.	.	.	.	.
VERN	014E 070	36.75	CTH SS		.	.	.	.	.	.	.	.
VERN	014E 072	37.77	STH 27 SB		.	.	.	.	.	.	.	.
		38.37		7900 Outside Should. Right	9	07/02/2000	WET		DAYLIGHT	Inj	CULVERT	
VERN	014E 073	38.93	BROOKVILLE RD		7900	Outside Should. Right	15	08/10/2000	DRY	DAYLIGHT	Inj	EMBANKMENT
		39.13		7900 On Roadway	9	07/20/98	DRY		DAYLIGHT	PDO	OTHER NON-FIXED OBJECT	
		39.13		7900 Outside Should. Left	14	11/11/98	DRY		DAYLIGHT	Inj	EMBANKMENT	
VERN	014E 074	40.19	OFFERDAHL RD		.	.	.	.	.	.	.	.
VERN	014E 075	40.48	GREEN ACRES RD		.	.	.	.	.	.	.	.
		40.98		7900 Outside Should. Left	9	02/14/98	ICE	DARK	Inj	OVERTURN		
		41.29		7900 Outside Should. Right	22	12/19/99	SNOW/SLUSH	DARK	Inj	UTILITY POLE		
VERN	014E 077	41.48	>> T OF FRANKLIN		.	.	.	.	.	.	.	.
VERN	014E 079	43.14	RILEY RD		.	.	.	.	.	.	.	.
		43.34		7900 Outside Should. Left	6	01/11/2000	SNOW/SLUSH	DAWN	PDO	EMBANKMENT		
		43.45		7900 Outside Should. Left	4	12/19/98	DRY	DARK	Inj	DITCH		
		44.01		7900 Outside Should. Left	16	01/04/98	ICE	DAYLIGHT	PDO	EMBANKMENT		
VERN	014E 081	44.21	CTH T		.	.	.	.	.	.	.	.
		44.22		7900 On Roadway	5	07/12/2000	DRY	DAWN	PDO	GUARDRAIL FACE		
VERN	014E 082	44.84	CTH M		.	.	.	.	.	.	.	.
		45.39		7900 On Roadway	17	10/27/99	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION		
VERN	014E 082M	45.42	RESID DRWY		.	.	.	.	.	.	.	.
VERN	014E 083	45.44	USH 61 NB		.	.	.	.	.	.	.	.
VERN	014E 083M	45.45	CONNECTOR FROM USH 61	NB	.	.	.	.	.	.	.	.
VERN	014E 084	45.80	STH 131 NB		.	.	.	.	.	.	.	.
VERN	014E 085	46.60	SUGAR GROVE RD		2361	On Roadway	17	11/14/98	DRY	DARK	Inj	OVERTURN
		46.90		2361 Outside Should. Right	20	10/31/99	DRY	DARK	Inj	OVERTURN		
VERN	014E 086	47.54	HOLCOMB RD		.	.	.	.	.	.	.	.
VERN	014E 087	47.84	ESPE RD		.	.	.	.	.	.	.	.
		48.14		2361 Shoulder	0	10/22/2000	DRY	DARK	PDO	GUARDRAIL FACE		
VERN	014E 088	49.00	MOORE RD		.	.	.	.	.	.	.	.
		49.61		2361 On Roadway	6	02/08/99	ICE	DAWN	Inj	GUARDRAIL FACE		
VERN	014E 089	50.06	SCHOOL RD		.	.	.	.	.	.	.	.
		50.37		2361 Outside Should. Right	21	01/31/2000	DRY	DARK	PDO	GUARDRAIL FACE		
VERN	014E 091	50.57	CTH X		.	.	.	.	.	.	.	.
		50.59		2361 Outside Should. Left	3	10/02/99	WET	DARK	Inj	OVERTURN		
		52.34		2467 On Roadway	6	07/05/99	DRY	DARK	Inj	TREE		
RICH	014E 096	52.40	CTH E		.	.	.	.	.	.	.	.
RICH	014E 097	52.51	CTH U		2467	Shoulder	7	04/04/99	WET	DARK	Inj	DITCH
		52.71		2467 Outside Should. Left	7	11/15/2000	DRY	DAYLIGHT	Inj	TREE		
RICH	014E 098	53.63	CTH EE	
		53.78		2467 Outside Should. Right	7	10/29/99	DRY	DARK	Inj	GUARDRAIL FACE		

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RICH	014E 101		54.35		2467	On Roadway	13	05/14/98	DRY	DAYLIGHT	PDO	OTHER ANIMAL
			54.65	COOK WOODS RD	.	.	.	.	.	.	.	.
			54.90		2467	On Roadway	14	06/17/98	DRY	DAYLIGHT	Inj	EMBANKMENT
RICH	014E 103		55.70	CTH G	.	.	.	.	.	.	.	.
RICH	014E 105		56.24	PRESTON RD	.	.	.	.	.	.	.	.
RICH	014E 106		57.11	HILLTOP VALLEY RD	.	.	.	.	.	.	.	.
			57.88		2467	Outside Should. Right	6	11/09/2000	SNOW/SLUSH	DAYLIGHT	PDO	EMBANKMENT
			58.28		2467	Outside Should. Right	15	10/17/2000	DRY	DAYLIGHT	Inj	OVERTURN
RICH	014E 108		58.38	ORCHARD RD	.	.	.	.	.	.	.	.
RICH	014E 109		59.02	CTH KK	.	.	.	.	.	.	.	.
			59.32		2467	Outside Should. Right	11	06/14/99	DRY	DAYLIGHT	PDO	EMBANKMENT
			59.92		2467	Outside Should. Right	1	12/15/99	0	DARK	PDO	OVERTURN
RICH	014E 112		61.48	STH 171 EB	.	.	.	.	.	.	.	.
RICH	014E 113		61.98	CTH Z	.	.	.	.	.	.	.	.
			62.98		4140	Outside Should. Left	14	08/02/98	UNKNOWN	UNKNOWN	PDO	UNKNOWN
RICH	014E 116		64.48	CTH ZZ	.	.	.	.	.	.	.	.
RICH	014E 117		65.43	TUCKAWAY VALLEY RD	.	.	.	.	.	.	.	.
			65.45		5500	Outside Should. Left	8	06/09/98	WET	DAYLIGHT	PDO	FENCE
RICH	014E 122		67.24	COVERED BRIDGE RD	.	.	.	.	.	.	.	.
RICH	014E 123		68.17	WESTSIDE DR	.	.	.	.	.	.	.	.
RICH	014E 124H		68.58	W 6TH ST	.	.	.	.	.	.	.	.
RICH	014E 124P		69.14	W SEMINARY ST	.	.	.	.	.	.	.	.
RICH	014E 125J		69.54	STH 80S	.	.	.	.	.	.	.	.
RICH	014E 125M		69.55		.	.	.	.	.	.	.	.
RICH	014E 127T		70.65	FOUNDRY DR	.	.	.	.	.	.	.	.
RICH	014E 128G		71.21	STARLITE DR	.	.	.	.	.	.	.	.
RICH	014E 129D		71.74	CTH O	.	.	.	.	.	.	.	.
			71.94		13560	Outside Should. Right	1	06/04/2000	WET	DARK	PDO	DITCH
			72.13		6117	Shoulder	11	10/14/98	DRY	DAYLIGHT	Inj	VEHICLE IN OPERATION
RICH	014E 130		72.34	SUNNY LA	.	.	.	.	.	.	.	.
RICH	014E 131M		73.43	STH 58	.	.	.	.	.	.	.	.
RICH	014E 132		73.87	>> T OF RICHLAND	.	.	.	.	.	.	.	.
			73.97		6117	Outside Should. Right	2	02/10/2000	DRY	DARK	Inj	FENCE
			74.12		6117	Outside Should. Right	8	08/17/98	WET	DAYLIGHT	PDO	TRAFFIC SIGN POST
			74.37		6117	On Roadway	1	11/07/99	DRY	DARK	Inj	UTILITY POLE
			74.83		6117	On Roadway	14	10/17/2000	DRY	DAYLIGHT	Inj	OVERTURN
			75.08		6117	Outside Should. Right	11	09/05/98	DRY	DAYLIGHT	Inj	64
RICH	014E 135B		75.33	CTH B	.	.	.	.	.	.	.	.
			75.33		6117	Shoulder	4	04/16/99	WET	DARK	PDO	FENCE
			76.26		6117	Shoulder	15	02/11/99	WET	DAYLIGHT	PDO	VEHICLE IN OPERATION
			76.36		6117	Outside Should. Right	9	01/14/98	SNOW/SLUSH	DAYLIGHT	PDO	CULVERT
			76.45		6117	On Roadway	20	12/28/98	SNOW/SLUSH	DARK	PDO	TREE
			76.75		6117	Outside Should. Right	16	03/04/99	DRY	DAYLIGHT	Inj	OVERTURN
			75.34		6117	Outside Should. Left	23	07/15/2000	DRY	DARK	PDO	OVERTURN
			75.53		6117	On Roadway	6	04/16/98	SNOW/SLUSH	DAYLIGHT	PDO	DITCH
			75.53		6117	Outside Should. Left	19	07/16/99	WET	DAYLIGHT	PDO	EMBANKMENT
RICH	014E 136M		76.67	OLD SEXTONVILLE RD	.	.	.	.	.	.	.	.
RICH	014E 137		77.47	ROHN HOLLOW RD	.	.	.	.	.	.	.	.
			77.62		6117	Outside Should. Right	2	03/30/2000	DRY	DARK	Inj	DITCH
RICH	014E 139		78.20	FAIRVIEW RD

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			78.50		6117	On Roadway	15	11/08/2000	DRY	DAYLIGHT	PDO	OTHER NON-COLLISION
			79.01		6117	Shoulder	0	09/09/2000	DRY	DARK LIGHTED	Inj	DITCH
RICH	014E 140	79.31	STH 60 EB		.	.						
		79.31			6425	On Roadway	19	10/14/2000	DRY	DARK LIGHTED	PDO	TRAFFIC SIGN POST
		79.41			6425	Outside Should. Left	15	01/03/2000	SNOW/SLUSH	DAYLIGHT	PDO	GUARDRAIL FACE
		79.81			6425	Outside Should. Left	9	03/08/98	SNOW/SLUSH	DAYLIGHT	Inj	OVERTURN
		80.00			6425	Outside Should. Right	23	05/20/2000	DRY	DARK	PDO	OVERTURN
RICH	014E 141	80.14	COFFENBERRY RD		.	.						
RICH	014E 143	81.82	MOORE RD		.	.						
		81.82			6425	On Roadway	5	02/09/99	ICE	DARK	Inj	CURB
		82.02			6425	Outside Should. Right	19	11/16/2000	ICE	DARK	PDO	OVERTURN
RICH	014E 145	82.96	OLD MILL RD		.	.						
RICH	014E 146	84.04	STH 130 NB		.	.						
		84.09			6425	On Roadway	15	04/06/98	DRY	DAYLIGHT	Inj	OVERTURN
RICH	014E 147	84.71	>> T OF BUENA VISTA		.	.						
RICH	014E 148	85.04	>> T OF BUENA VISTA		.	.						
		85.24			6155	Outside Should. Left	13	12/24/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
RICH	014E 149	86.03	PORTER RD		.	.						
		86.13			6155	Shoulder	20	11/16/2000	ICE	DARK	PDO	OVERTURN
		86.23			6155	Outside Should. Right	6	03/10/2000	ICE	DAWN	PDO	OVERTURN
		86.23			6155	Outside Should. Left	4	11/29/2000	ICE	DARK	PDO	OVERTURN
		86.53			6155	Shoulder	18	03/27/99	DRY	DARK	PDO	OVERTURN
RICH	014E 151	88.04	DYKE RD		.	.						
		88.04			6155	Outside Should. Right	15	06/21/2000	0	DAYLIGHT	Inj	VEHICLE IN OPERATION
		88.74			6155	Shoulder	12	06/15/2000	DRY	DAYLIGHT	PDO	OVERTURN
		88.84			6155	Outside Should. Left	13	01/19/2000	SNOW/SLUSH	DAYLIGHT	Inj	UTILITY POLE
SAUK	014E 152	89.04	BIG HOLLOW RD		.	.						
		89.04			6155	On Roadway	12	06/16/99	DRY	DAYLIGHT	PDO	UNKNOWN
SAUK	014E 153	90.03	PEARL RD		.	.						
		90.54			6155	Shoulder	17	08/12/98	DRY	DAYLIGHT	PDO	DITCH
SAUK	014E 154	91.04	STH 23 EB		.	.						
SAUK	014E 154B	91.25	STH 60 EB		.	.						
		91.61			6155	Shoulder	1	08/29/98	DRY	DARK	PDO	UTILITY POLE
SAUK	014E 154M	91.51	STH 23 WB		.	.						
SAUK	014E 155B	91.63	STH 23 EB		.	.						
		92.13			6155	Outside Should. Left	5	02/06/99	ICE	DARK	Inj	EMBANKMENT
SAUK	014E 156	92.22	RAINBOW RD		.	.						
		92.23			6155	On Roadway	12	08/11/98	DRY	DAYLIGHT	PDO	OTHER NON-FIXED OBJECT
		92.52			6155	On Roadway	15	01/08/99	SNOW/SLUSH	DAYLIGHT	PDO	GUARDRAIL FACE
SAUK	014E 157	92.66	B-56-0117	BRIDGE	.	.						
		93.22			7239	On Roadway	6	04/11/2000	ICE	DAYLIGHT	PDO	BRIDGE RAIL
		93.22			7239	Outside Should. Right	0	01/24/98	SNOW/SLUSH	DARK	Inj	TREE
		93.61			7239	Outside Should. Right	14	07/03/99	DRY	DAYLIGHT	PDO	OVERTURN
SAUK	014E 161	94.31	CTH C		.	.						
IOWA	014E 162	94.73	CTH C		.	.						
		94.74			7239	Outside Should. Right	2	03/08/98	DRY	DARK	Inj	OVERTURN
		95.03			7239	Outside Should. Left	21	03/09/98	ICE	DARK	Inj	OVERTURN
		95.50			7239	Outside Should. Left	17	04/28/98	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION
IOWA	014E 164	96.00	COON ROCK RD		.	.						
		96.73			7239	Shoulder	9	10/11/99	DRY	DAYLIGHT	PDO	UNKNOWN

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IOWA	014E	165	96.75	HAYWARD CROSSING RD	
			96.85		7239	Outside Should. Right	13	01/08/98	SNOW/SLUSH	DAYLIGHT	.	PDO OVERTURN	
			97.61		7239	0	18	03/15/98	ICE	DARK	.	PDO DITCH	
			98.01		7239	Outside Should. Right	7	12/08/99	ICE	DAYLIGHT	.	PDO OVERTURN	
IOWA	014E	167	98.21	CTH H	.	.	.	.	.	.	.	.
			99.25		7239	Shoulder	17	01/22/98	SNOW/SLUSH	DARK	.	PDO MAILBOX	
IOWA	014E	169	99.68	WEST ST	.	.	.	.	.	.	.	.
			100.41		7239	Outside Should. Left	6	03/05/99	0	DAWN	.	PDO UTILITY POLE	
IOWA	014E	170	100.45	>> V OF ARENA	.	.	.	.	.	.	.	.
			100.45		7239	Shoulder	13	06/16/98	WET	DAYLIGHT	.	PDO VEHICLE IN OPERATION	
			102.21		7239	Outside Should. Right	2	09/09/2000	DRY	DARK	.	Inj EMBANKMENT	
IOWA	014E	173	102.46	BLYNN RD	.	.	.	.	.	.	.	.
			102.76		7239	Outside Should. Right	10	12/24/2000	ICE	DAYLIGHT	.	PDO TREE	
			102.92		7239	Outside Should. Left	5	07/23/99	DRY	DARK	.	PDO TREE	
IOWA	014E	174	103.22	CTH K	.	.	.	.	.	.	.	.
			103.51		7239	Outside Should. Right	12	10/17/98	DRY	DAYLIGHT	.	PDO OTHER FIXED OBJECT	
			103.82		7239	On Roadway	19	05/17/99	DRY	DAYLIGHT	.	PDO VEHICLE IN OPERATION	
IOWA	014E	177	104.75	MAHOCKER RD	.	.	.	.	.	.	.	.
			104.95		7239	Outside Should. Right	8	03/19/2000	SNOW/SLUSH	DAYLIGHT	.	Inj OVERTURN	
			105.05		7239	On Roadway	13	01/27/2000	DRY	DAYLIGHT	.	PDO OTHER NON-FIXED OBJECT	
IOWA	014E	178	105.35	EMILY RD	.	.	.	.	.	.	.	.
DANE	014E	179	106.07	CTH Y	.	.	.	.	.	.	.	.
DANE	014E	180	106.33	CTH KP	.	.	.	.	.	.	.	.
			106.97		10534	Shoulder	7	01/07/2000	DRY	DAYLIGHT	.	Inj PARKED MV	
			107.27		10534	Outside Should. Right	17	02/17/2000	SNOW/SLUSH	DUSK	.	PDO MAILBOX	
DANE	014E	181	107.37	STH 19 EB	.	.	.	.	.	.	.	.
			107.40		10534	On Roadway	2	02/20/99	DRY	DARK	.	Inj OVERTURN	
			107.47		10534	Outside Should. Right	22	10/02/2000	DRY	DARK	.	PDO DITCH	
			108.07		10534	Outside Should. Right	6	09/09/2000	DRY	DAWN	.	Inj DITCH	
			108.27		10534	Shoulder	3	12/09/99	DRY	DARK	.	Inj DITCH	
			108.30		10534	Outside Should. Right	8	03/19/2000	SNOW/SLUSH	DAYLIGHT	.	PDO OVERTURN	
DANE	014E	183	108.61	FARM RD	.	.	.	.	.	.	.	.
DANE	014E	184	109.58	STH 78 NB	.	.	.	.	.	.	.	.
DANE	014E	184D	109.82	B-13-0003	BRIDGE	.	.	.	.	.	.	.
DANE	014E	184K	109.91	CTH F		.	.	.	.	.	.	.
			110.11			10930	Outside Should. Right	13	05/10/99	DRY	DAYLIGHT	.	PDO JACKKNIFE
DANE	014E	185	110.57	KAHL RD		.	.	.	.	.	.	.
			110.99			10930	Shoulder	18	03/09/98	ICE	DUSK	.	PDO PARKED MV
			111.19			10930	Outside Should. Left	6	02/20/98	DRY	DARK	.	PDO TREE
			112.10			10930	Outside Should. Right	6	03/10/2000	ICE	DAYLIGHT	.	PDO UTILITY POLE
			112.17			10930	On Roadway	3	05/10/98	DRY	DARK	.	Inj OVERTURN
DANE	014E	188	112.41	LEE RD	.	.	.	.	.	.	.	.
			112.75		10930	Shoulder	0	03/15/2000	DRY	DARK	.	Inj CULVERT	
			113.27			10930	Outside Should. Right	14	11/10/99	WET	DAYLIGHT	.	PDO OVERTURN
DANE	014E	190	114.00	CTH KP	.	.	.	.	.	.	.	.
DANE	014E	191	114.52	CTH KP	.	.	.	.	.	.	.	.
			114.56		13950	Shoulder	1	10/23/2000	DRY	DARK LIGHTED	.	PDO OTHER FIXED OBJECT	
			114.92		13950	On Roadway	13	04/07/2000	WET	DAYLIGHT	.	PDO VEHICLE IN OPERATION	
			115.02		13950	On Roadway	8	07/26/99	WET	DAYLIGHT	.	PDO OTHER FIXED OBJECT	
			115.20		13950	Outside Should. Right	14	01/23/99	SNOW/SLUSH	DAYLIGHT	.	PDO OTHER FIXED OBJECT	

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DANE	014E	192	115.31	CTH P
			115.41		13950	On Roadway	10	12/18/2000	WET	UNKNOWN	PDO	OTHER POST
			115.66		14260	Outside Should. Right	8	01/08/98	ICE	DAYLIGHT	Inj	UTILITY POLE
			116.28		14260	Outside Should. Right	7	12/29/2000	SNOW/SLUSH	DAYLIGHT	PDO	OTHER POST
			116.48		14260	Outside Should. Right	9	02/18/2000	SNOW/SLUSH	DAYLIGHT	PDO	TRAFFIC SIGN POST
			116.48		14260	Outside Should. Right	14	12/16/2000	DRY	DAYLIGHT	PDO	DITCH
			116.88		14260	Shoulder	14	10/29/98	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION
DANE	014E	194	116.98	STAGE COACH RD	.	.	.	.	.	.	.	.
			116.98		14260	Shoulder	1	12/03/99	WET	DARK	PDO	OTHER FIXED OBJECT
			117.55		14260	Shoulder	8	12/19/2000	SNOW/SLUSH	DAYLIGHT	Inj	VEHICLE IN OPERATION
			117.97		14260	On Roadway	14	08/25/98	DRY	DAYLIGHT	Inj	OVERTURN
			117.97		14260	Shoulder	21	09/24/99	DRY	DARK	PDO	GUARDRAIL FACE
			118.27		14260	Outside Should. Right	5	02/03/98	ICE	DARK	PDO	GUARDRAIL FACE
DANE	014E	197	119.15	TWIN VALLEY RD	.	.	.	.	.	.	.	.
DANE	014E	198	119.83	WAYSIDE RD	.	.	.	.	.	.	.	.
			119.93		14260	Outside Should. Right	14	08/15/2000	DRY	DAYLIGHT	PDO	CULVERT
			119.93		14260	Outside Should. Right	12	06/01/99	DRY	DAYLIGHT	Inj	VEHICLE IN OPERATION
DANE	014E	199	120.34	WAYSIDE RD	.	.	.	.	.	.	.	.
			120.34		14260	Outside Should. Right	5	04/26/98	WET	DAWN	PDO	DITCH
			120.44		14260	Shoulder	15	12/11/98	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION
			120.64		14260	Outside Should. Right	0	06/28/98	DRY	DAYLIGHT	PDO	TRAFFIC SIGN POST
			120.83		14260	On Roadway	4	05/05/98	DRY	DARK	PDO	OTHER NON-FIXED OBJECT
			120.84		14260	Outside Should. Right	12	01/06/98	DRY	DAYLIGHT	Inj	UNKNOWN
DANE	014E	200	121.43	PLEASANT VIEW RD	.	.	.	.	.	.	.	.
DANE	014E	200T	122.30	USH 14 WB	.	.	.	.	.	.	.	.
DANE	014E	201D	122.55		.	.	.	.	.	.	.	.
DANE	012E	333K	122.55	USH 14	.	.	.	.	.	.	.	.
DANE	012E	334D	123.14	B-13-0229	BRIDGE	.	.	.	.	.	.	.
DANE	012E	335K	124.21	B-13-0226	BRIDGE	.	.	.	.	.	.	.
DANE	012E	336	125.20	B-13-0221	BRIDGE	.	.	.	.	.	.	.
DANE	012E	337	125.66	B-13-0223	BRIDGE	.	.	.	.	.	.	.
DANE	012E	338	126.42	B-13-0219	BRIDGE	.	.	.	.	.	.	.
DANE	012E	340	128.04	B-13-0213	BRIDGE	.	.	.	.	.	.	.
DANE	012E	342	129.47	USH 12	.	.	.	.	.	.	.	.
DANE	012E	343	129.80	>> C OF MADISON	.	.	.	.	.	.	.	.
DANE	012E	344	130.85	B-13-0263	BRIDGE	.	.	.	.	.	.	.
DANE	012E	345	131.22	WIS.& SOUTHERN RR	.	.	.	.	.	.	.	.
DANE	012E	346	131.68	B-13-0083	BRIDGE	.	.	.	.	.	.	.
DANE	012E	347	132.23		.	.	.	.	.	.	.	.
DANE	014E	203A	132.23	USH 12 EB	.	.	.	.	.	.	.	.
DANE	014E	206F	133.41	B-13-0252	BRIDGE	.	.	.	.	.	.	.
DANE	014E	207V	134.95	B-13-0250	BRIDGE	.	.	.	.	.	.	.
DANE	014E	208Q	135.97	B-13-0249	BRIDGE	.	.	.	.	.	.	.
DANE	014E	210M	137.02	B-13-0247	BRIDGE	.	.	.	.	.	.	.
DANE	014E	211B	138.57	B-13-0245	BRIDGE	.	.	.	.	.	.	.
			139.67		15620	Shoulder	10	12/19/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			139.76		15620	On Roadway	5	03/04/2000	DRY	DARK	PDO	OTHER NON-FIXED OBJECT
DANE	014E	214B	139.86	B-13-0243	BRIDGE	.	.	.	.	.	.	.
			140.06		15620	On Roadway	20	12/01/2000	DRY	DARK	Inj	OVERTURN
			140.36		15620	Shoulder	3	03/11/99	DRY	DARK	Inj	OVERTURN

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DANE	014E	215B	140.91	STH 138 NB	
			140.91		15620	On Ramp	20	10/14/98	DRY	DARK	Inj	TRAFFIC SIGN POST
DANE	014E	216F	141.11	B-13-0241	BRIDGE	.	.	.	.	.	.
			141.19		8375	On Roadway	11	06/04/99	WET	DAYLIGHT	Inj	VEHICLE IN OPERATION
			141.21		8375	On Roadway	23	09/01/2000	DRY	DARK	PDO	GUARDRAIL FACE
			141.57		8375	Outside Should. Left	6	01/20/99	ICE	DARK	Inj	OTHER NON-FIXED OBJECT
DANE	014E	217B	141.77	HILL RD	.	.	.	.	.	.	.
			141.79		8375	Outside Should. Right	7	12/14/99	ICE	DAYLIGHT	K	FIRE/EXPLOSION
			141.87		8375	On Roadway	9	04/08/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			141.87		8375	Outside Should. Right	2	07/14/2000	DRY	DARK	Inj	DITCH
			142.24		8375	Outside Should. Left	0	04/10/2000	DRY	DARK	Inj	OVERTURN
DANE	014E	218	142.44	OAK HILL RD	.	.	.	.	.	.	.
			142.56		8375	Outside Should. Right	3	10/11/98	DRY	DARK	PDO	TREE
			142.66		8375	On Roadway	2	08/27/98	DRY	DARK	Inj	OVERTURN
			142.76		8375	Outside Should. Right	21	04/16/99	DRY	DARK	Inj	TREE
			142.76		8375	Outside Should. Left	18	04/15/99	WET	DAYLIGHT	PDO	FENCE
DANE	014E	219	142.96	CTH A	.	.	.	.	.	.	.
			143.16		8375	Off Roadway-Unknown	8	03/08/98	SNOW/SLUSH	DAYLIGHT	PDO	FENCE
			143.66		8375	Outside Should. Left	0	04/15/2000	DRY	DARK	Inj	TREE
DANE	014E	221	143.99	ROME CORNERS RD	.	.	.	.	.	.	.
DANE	014E	223	145.35	W RUTLAND RD	.	.	.	.	.	.	.
			145.35		8375	Shoulder	9	09/13/2000	0	DAYLIGHT	Inj	DITCH
			145.36		8375	Outside Should. Left	18	04/07/2000	SNOW/SLUSH	DARK	PDO	TREE
			145.45		8375	Outside Should. Left	14	02/18/2000	SNOW/SLUSH	DAYLIGHT	Inj	OVERTURN
			145.45		8375	Shoulder	18	11/13/2000	ICE	DARK	Inj	EMBANKMENT
			145.55		8375	Outside Should. Right	17	04/07/2000	SNOW/SLUSH	DAYLIGHT	Inj	VEHICLE IN OPERATION
			145.55		8375	Outside Should. Right	16	12/09/2000	SNOW/SLUSH	DUSK	PDO	DITCH
			145.55		8375	Outside Should. Right	11	03/22/99	DRY	DAYLIGHT	PDO	TREE
			145.65		8375	Outside Should. Left	7	08/24/99	DRY	DAYLIGHT	Inj	CULVERT
			145.90		8375	Outside Should. Left	6	02/24/2000	WET	DARK	PDO	UTILITY POLE
			145.90		8375	Outside Should. Left	16	09/22/2000	WET	DAYLIGHT	Inj	OVERTURN
DANE	014E	224	146.10	STH 92 WB	.	.	.	.	.	.	.
			146.10		8375	Outside Should. Right	7	01/20/99	WET	DAWN	PDO	TREE
			146.20		8375	Outside Should. Left	8	03/19/2000	SNOW/SLUSH	DAYLIGHT	PDO	UTILITY POLE
			146.40		8375	Outside Should. Left	8	01/17/99	ICE	DARK	Inj	OVERTURN
			146.60		8375	Outside Should. Left	0	01/28/99	DRY	DARK	PDO	EMBANKMENT
			147.25		7360	On Roadway	2	06/20/98	DRY	DARK	Inj	OTHER ANIMAL
DANE	014E	226	147.45	HOLT RD	.	.	.	.	.	.	.
			147.99		7360	Outside Should. Right	16	04/07/2000	SNOW/SLUSH	DAYLIGHT	PDO	UTILITY POLE
DANE	014E	227	148.01	STEWART RD	.	.	.	.	.	.	.
			148.21		7360	Outside Should. Left	14	11/17/98	DRY	DAYLIGHT	Inj	OTHER FIXED OBJECT
DANE	014E	228	148.81	STH 59 EB	.	.	.	.	.	.	.
			148.83		7360	Outside Should. Left	6	09/13/98	0	DAWN	Inj	TREE
			149.04		7360	Outside Should. Left	18	12/28/98	DRY	DARK	PDO	TRAFFIC SIGN POST
			149.37		7360	On Roadway	17	05/11/98	DRY	DAYLIGHT	Inj	OTHER NON-COLLISION
			149.37		7360	Outside Should. Right	22	12/31/98	DRY	DARK	PDO	DITCH
			149.37		7360	Outside Should. Right	18	04/02/99	DRY	DUSK	Inj	DITCH
			149.37		7360	Outside Should. Right	6	08/28/99	DRY	DAYLIGHT	Inj	OVERTURN
DANE	014E	229	149.47	BUTTS CORNERS RD	.	.	.	.	.	.	.
			149.48		7360	Outside Should. Left	2	05/24/98	WET	DARK	Inj	OVERTURN

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
DANE	014E	230	149.77		7360	Outside Should. Left	18	10/17/2000	DRY	DUSK	PDO	DITCH
			149.97	BULLARD RD	.	.	.	.	.	.	.	.
			150.07		7360	On Roadway	10	06/27/98	WET	DARK	PDO	TREE
			150.73		7360	Shoulder	17	04/07/2000	SNOW/SLUSH	DAYLIGHT	PDO	VEHICLE IN OPERATION
DANE	014E	231	150.75	ELMER RD	.	.	.	.	.	.	.	.
ROCK	014E	232D	151.67	STH 59 EB	.	.	.	.	.	.	.	.
ROCK	014E	232K	152.07	E MAIN ST	.	.	.	.	.	.	.	.
			152.07		7500	Shoulder	19	03/03/98	WET	DARK LIGHTED	Inj	TREE
ROCK	014E	233	153.11	CTH M	.	.	.	.	.	.	.	.
			153.80		7225	Outside Should. Right	7	01/20/99	ICE	DAYLIGHT	Inj	FENCE
ROCK	014E	234	153.90	WEARY RD	.	.	.	.	.	.	.	.
			154.16		7225	Outside Should. Right	18	12/28/2000	SNOW/SLUSH	DARK LIGHTED	PDO	FENCE
			154.16		7225	Outside Should. Left	18	02/24/99	SNOW/SLUSH	DARK	PDO	TRAFFIC SIGN POST
			154.18		7225	Outside Should. Right	23	02/19/2000	ICE	DARK LIGHTED	PDO	OVERTURN
			154.41		7225	Outside Should. Right	21	12/29/99	DRY	DARK	Inj	OTHER FIXED OBJECT
ROCK	014E	236	155.04	TOLLES RD	.	.	.	.	.	.	.	.
			155.04		7225	Outside Should. Left	10	06/25/98	UNKNOWN	DAYLIGHT	PDO	OTHER POST
			155.14		7225	Outside Should. Left	0	12/05/99	WET	DARK	Inj	UTILITY POLE
			155.51		7225	Outside Should. Left	22	03/26/2000	DRY	DARK	K	UTILITY POLE
			155.71		7225	Outside Should. Right	22	10/30/98	DRY	DARK	Inj	OVERTURN
ROCK	014E	237	156.01	TUTTLE RD	.	.	.	.	.	.	.	.
			156.13		7225	Outside Should. Right	17	01/03/2000	SNOW/SLUSH	DARK	PDO	OVERTURN
			156.33		7225	Outside Should. Left	18	01/03/2000	SNOW/SLUSH	DARK	PDO	FENCE
			157.29		7225	Outside Should. Left	23	07/07/99	DRY	DARK	Inj	TREE
ROCK	014E	240	157.95	CASSIDY RD	.	.	.	.	.	.	.	.
			158.05		7225	Outside Should. Right	18	01/03/2000	SNOW/SLUSH	DARK	Inj	TREE
			158.15		7225	Shoulder	4	01/06/2000	SNOW/SLUSH	DARK	PDO	GUARDRAIL FACE
			158.51		7225	Outside Should. Left	3	07/25/99	DRY	DARK	PDO	CULVERT
ROCK	014E	241	158.85	ROHERTY RD	.	.	.	.	.	.	.	.
			158.95		7225	Outside Should. Left	18	11/18/99	DRY	DARK	Inj	OVERTURN
			159.81		7225	Outside Should. Left	10	05/31/2000	WET	DAYLIGHT	Inj	OVERTURN
			159.81		7225	Outside Should. Right	7	06/14/2000	DRY	DAYLIGHT	PDO	UTILITY POLE
ROCK	014E	242	160.01	FOX RD	.	.	.	.	.	.	.	.
			160.11		7225	Outside Should. Right	1	01/23/99	WET	DARK	PDO	UTILITY POLE
			160.31		7225	Outside Should. Left	21	10/03/98	DRY	DARK	Inj	UTILITY POLE
			160.51		7225	Shoulder	17	08/27/98	DRY	DAYLIGHT	PDO	FIRE/EXPLOSION
			160.69		7225	Outside Should. Left	12	03/06/99	SNOW/SLUSH	DAYLIGHT	Inj	OVERTURN
			160.99		7225	Outside Should. Right	19	10/17/2000	DRY	DARK	PDO	MAILBOX
ROCK	014E	243	161.19	>> T OF CENTER	.	.	.	.	.	.	.	.
			161.56		7225	Outside Should. Left	22	11/12/2000	DRY	DARK	Inj	UTILITY POLE
			161.96		7225	Outside Should. Right	15	05/03/99	DRY	DAYLIGHT	PDO	UTILITY POLE
ROCK	014E	244	162.15	CONNOR RD	.	.	.	.	.	.	.	.
			162.90		7225	On Roadway	13	09/30/99	DRY	DAYLIGHT	PDO	MAILBOX
			162.99		7225	Shoulder	12	03/08/98	SNOW/SLUSH	DAYLIGHT	PDO	TRAFFIC SIGN POST
ROCK	014E	245	163.17	BURDICK RD	.	.	.	.	.	.	.	.
			163.27		7225	Outside Should. Left	21	05/23/99	DRY	DARK	Inj	UTILITY POLE
			163.37		7225	On Roadway	13	01/25/99	DRY	DAYLIGHT	PDO	MAILBOX
			163.61		7225	Outside Should. Left	20	03/07/2000	DRY	DARK	Inj	UTILITY POLE
			164.10		7225	Outside Should. Right	16	01/26/99	DRY	DAYLIGHT	Inj	TREE
			164.15		7225	On Roadway	14	09/08/98	DRY	DAYLIGHT	PDO	OTHER FIXED OBJECT

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
			164.30		7225	Outside Should. Left	15	05/24/2000	DRY	DAYLIGHT	K	CULVERT
			164.30		7225	Outside Should. Right	12	03/08/98	SNOW/SLUSH	DAYLIGHT	PDO	UTILITY POLE
ROCK	014E	246K	164.40	CTH E CONN.	.	.	1	09/06/99	DRY	DARK	.	.
ROCK	014E	246M	164.40	CTH E	7225	0	.	.	.	.	PDO	TRAFFIC SIGN POST
			164.40		7225	Shoulder	2	12/16/99	ICE	DARK	Inj	BRIDGE/PIER/ABUTMENT
			164.70		7225	Outside Should. Left	5	01/20/99	ICE	DAWN	PDO	OVERTURN
			164.80		7225	On Roadway	6	03/06/98	ICE	DAWN	PDO	GUARDRAIL FACE
			164.87		7225	On Roadway	6	03/06/98	WET	DAWN	PDO	GUARDRAIL FACE
			164.87		7225	On Roadway	9	11/04/2000	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION
			164.95		7225	On Roadway	15	12/20/98	ICE	DAYLIGHT	PDO	OVERTURN
ROCK	014E	247	164.97	N RIVER RD	.	.	.	.	.	.	.	.
			165.07		7225	Outside Should. Right	15	06/01/98	DRY	DAYLIGHT	PDO	TREE
			165.42		7225	Outside Should. Right	2	12/31/99	DRY	DARK LIGHTED	Inj	OTHER NON-COLLISION
ROCK	014E	248	165.67	CTH F	.	.	.	.	.	.	.	.
			165.87		7225	On Roadway	17	12/08/2000	DRY	DARK	PDO	OTHER NON-COLLISION
ROCK	014E	249D	166.16	USH 51 SB	.	.	.	.	.	.	.	.
ROCK	014E	249G	166.17	USH 51 NB	.	.	.	.	.	.	.	.
ROCK	014E	250M	167.24	>> T OF JANESEVILLE	.	.	.	.	.	.	.	.
ROCK	014E	251	168.13	STH 26 SB	.	.	.	.	.	.	.	.
ROCK	014E	251D	168.14	STH 26 NB	.	.	.	.	.	.	.	.
ROCK	014E	252	168.80	B-53-0065	BRIDGE	.	.	.	.	.	.	.
ROCK	014E	254	170.51	TOWN HALL RD	.	.	.	.	.	.	.	.
ROCK	014E	255	170.97	CTH A	.	.	.	.	.	.	.	.
ROCK	014E	257	172.34	CTH MM	.	.	.	.	.	.	.	.
			172.34		10810	On Roadway	5	05/21/2000	DRY	DAWN	Inj	GUARDRAIL FACE
			172.63		9700	Outside Should. Left	16	04/27/99	WET	DAYLIGHT	Inj	TREE
ROCK	014E	258M	172.97	>> T OF HARMONY	.	.	.	.	.	.	.	.
ROCK	014E	258T	173.06	STH 11 E	.	.	.	.	.	.	.	.
			173.12		9700	Outside Should. Right	23	07/20/99	DRY	DARK	Inj	UNKNOWN
			173.16		9700	Outside Should. Right	15	05/09/2000	WET	DAYLIGHT	Inj	TREE
			173.26		9700	Shoulder	16	06/29/98	WET	DAYLIGHT	PDO	DITCH
			173.56		9700	Outside Should. Right	8	12/30/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			173.56		9700	Outside Should. Left	4	03/04/98	ICE	DARK	Inj	OVERTURN
			173.58		9700	Outside Should. Right	2	02/28/98	DRY	DARK	Inj	OVERTURN
			173.88		9700	Outside Should. Left	4	03/04/98	ICE	DARK	PDO	OVERTURN
ROCK	014E	259M	173.48	CTH O	.	.	.	.	.	.	.	.
ROCK	014E	260	174.41	VAN ALLEN RD	.	.	.	.	.	.	.	.
			174.41		9700	On Roadway	13	12/04/98	DRY	DAYLIGHT	PDO	VEHICLE IN OPERATION
			174.62		9700	Outside Should. Left	6	03/04/98	UNKNOWN	UNKNOWN	PDO	UTILITY POLE
			175.12		9700	Outside Should. Left	17	03/05/99	ICE	DAYLIGHT	PDO	OVERTURN
			175.12		9700	Outside Should. Left	6	12/14/99	ICE	DARK	Inj	OVERTURN
ROCK	014E	261	175.42	S HENKE RD	.	.	.	.	.	.	.	.
			175.72		9700	Outside Should. Right	19	02/11/98	SNOW/SLUSH	DARK	Inj	CULVERT
			175.72		9700	Outside Should. Left	4	12/14/99	ICE	DARK	PDO	MAILBOX
ROCK	014E	262	176.42	>> T OF LA PRAIRIE	.	.	.	.	.	.	.	.
			176.84		9700	Outside Should. Right	9	04/22/98	DRY	DAYLIGHT	PDO	OVERTURN
			176.91		9700	Outside Should. Left	0	09/28/99	DRY	DARK	Inj	DITCH
			176.93		9700	On Roadway	5	07/03/99	WET	DAWN	PDO	OTHER NON-FIXED OBJECT
			177.11		9700	Outside Should. Right	1	05/12/99	WET	DARK	Inj	EMBANKMENT

COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
ROCK	014E	263	177.11		9700	On Roadway	5	07/03/99	WET	DAWN	PDO	OTHER NON-FIXED OBJECT
			177.14	EMERALD GROVE RD	.	.	.	.	.	.	.	.
			177.41		9700	Outside Should. Right	21	01/05/2000	SNOW/SLUSH	DARK	PDO	DITCH
			177.61		9700	Shoulder	7	07/08/98	DRY	DAYLIGHT	PDO	OVERTURN
ROCK	014E	264	177.71	STH 140 NB	.	.	.	.	.	.	.	.
			177.96		9700	Outside Should. Right	20	06/06/99	DRY	DAYLIGHT	Inj	CULVERT
			178.37		9700	Outside Should. Left	21	02/13/2000	ICE	DARK	PDO	OVERTURN
ROCK	014E	265	178.46	AVALON RD	.	.	.	.	.	.	.	.
			178.56		9700	Outside Should. Right	8	12/30/2000	0	DAYLIGHT	PDO	EMBANKMENT
			178.76		9700	Shoulder	17	05/13/98	DRY	DAYLIGHT	PDO	MAILBOX
ROCK	014E	266	179.46	KEMP RD	.	.	.	.	.	.	.	.
			179.56		9700	Outside Should. Left	11	11/05/99	DRY	DAYLIGHT	Inj	UTILITY POLE
			180.21		9700	Outside Should. Left	5	02/03/98	WET	DARK	PDO	OTHER FIXED OBJECT
			180.41		9700	Outside Should. Right	18	06/09/2000	DRY	DAYLIGHT	PDO	DITCH
ROCK	014E	267	180.47	CARVERS ROCK RD	.	.	.	.	.	.	.	.
			180.50		9700	Outside Should. Left	9	01/01/98	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			180.77		9700	On Roadway	15	09/30/98	DRY	DAYLIGHT	PDO	OTHER NON-FIXED OBJECT
			180.77		9700	Outside Should. Left	4	12/21/98	ICE	DARK	Inj	OVERTURN
			180.93		9700	Outside Should. Right	0	07/30/99	DRY	DARK	Inj	CULVERT
			181.37		9700	On Roadway	0	02/19/2000	SNOW/SLUSH	DARK	Inj	OVERTURN
ROCK	014E	269	181.47	TRESCHER RD	.	.	.	.	.	.	.	.
			181.67		9700	Outside Should. Right	5	12/21/98	ICE	DARK	PDO	TRAFFIC SIGN POST
			181.77		9700	Outside Should. Left	11	02/04/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			182.37		9700	Outside Should. Left	5	07/10/98	DRY	DAWN	PDO	UTILITY POLE
ROCK	014E	270	182.47	>> T OF BRADFORD	.	.	.	.	.	.	.	.
			182.47		8380	Outside Should. Right	19	02/23/98	WET	DARK	Inj	DITCH
			182.67		8380	Shoulder	16	06/27/98	DRY	DAYLIGHT	Inj	VEHICLE IN OPERATION
			182.77		8380	On Roadway	10	03/19/2000	SNOW/SLUSH	DAYLIGHT	PDO	OVERTURN
			184.09		8380	Outside Should. Right	14	02/15/2000	SNOW/SLUSH	DAYLIGHT	PDO	OTHER POST
ROCK	014E	272	184.19	STH 11 EB	.	.	.	.	.	.	.	.
ROCK	014E	273	185.12	CHRISTIE RD	.	.	.	.	.	.	.	.
			185.59		7160	Shoulder	16	05/03/98	DRY	DAYLIGHT	PDO	GUARDRAIL FACE
ROCK	014E	274	185.61	SCHOOL SECTION RD	.	.	.	.	.	.	.	.
			185.61		7160	Parking Lot/Private	19	05/23/99	DRY	DUSK	Inj	TREE
			186.25		7160	On Roadway	17	04/01/99	DRY	DUSK	PDO	OVERTURN
			186.43		7160	Outside Should. Left	7	04/17/99	DRY	DARK	PDO	UNKNOWN
WALW	014E	275	186.45	CTH C	.	.	.	.	.	.	.	.
			186.55		7160	Shoulder	15	04/04/98	DRY	DAYLIGHT	Inj	OVERTURN
			186.55		7160	Outside Should. Left	15	02/24/99	SNOW/SLUSH	DAYLIGHT	PDO	OTHER POST
			186.70		7160	Outside Should. Right	10	08/02/98	DRY	DAYLIGHT	PDO	OVERTURN
			186.75		7160	On Roadway	1	05/02/2000	DRY	DARK	Inj	EMBANKMENT
			187.85		7160	On Roadway	20	11/09/99	DRY	DARK	PDO	CURB
WALW	014E	278	188.59	CTH X	.	.	.	.	.	.	.	.
			188.71		6850	On Roadway	1	02/09/99	WET	DARK LIGHTED	PDO	CURB
			188.72		6850	Shoulder	6	01/20/2000	SNOW/SLUSH	DARK LIGHTED	PDO	UTILITY POLE
			188.79		6850	Outside Should. Left	15	03/08/99	ICE	DAYLIGHT	Inj	TREE
			188.79		6850	Outside Should. Left	16	03/08/99	0	DAYLIGHT	Inj	OVERTURN
			188.89		6850	Outside Should. Left	5	10/31/99	DRY	DARK	Inj	TREE
			190.26		5340	Outside Should. Right	13	01/22/2000	SNOW/SLUSH	DAYLIGHT	PDO	UTILITY POLE
WALW	014E	281	190.46	>> T OF DARIEN

Crash / State Trunk Highway Log Interleaf ROR Crashes on STH 14.

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COUNTY	HWY	REFPT	CUM_MP	FEATURE	AADT	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Most Harmful Event
WALW	014E	282	190.71	CTH K	.	.	.	.	.	.	.	.
			191.21		5340	Outside Should. Right	21	12/30/98	DRY	DARK	PDO	OVERTURN
			192.11		5340	Outside Should. Left	2	07/22/2000	DRY	DARK	PDO	MAILBOX
WALW	014E	284	192.61	CTH O	.	.	.	.	.	.	.	.
WALW	014E	285	192.87	WILLOW BEND RD	.	.	.	.	.	.	.	.
			192.93		5340	Parking Lot/Private	15	06/26/98	DRY	DAYLIGHT	Inj	UTILITY POLE
			193.03		5340	Outside Should. Right	19	03/05/99	SNOW/SLUSH	DARK	PDO	OVERTURN
			193.13		5340	On Roadway	15	05/31/99	WET	DAYLIGHT	Inj	OVERTURN
			193.43		5340	On Roadway	19	02/28/99	DRY	DARK	PDO	UNKNOWN
			194.42		5340	Outside Should. Right	15	02/24/99	SNOW/SLUSH	DAYLIGHT	PDO	OTHER FIXED OBJECT
			194.52	BRICK CHURCH RD	.	.	.	.	.	.	.	.
WALW	014E	287	195.02		5340	On Roadway	16	06/05/2000	DRY	DAYLIGHT	Inj	OTHER POST
			195.88	USH 14 WB	.	.	.	.	.	.	.	.
WALW	014E	289K	195.95	USH 14 WB	.	.	.	.	.	.	.	.
			195.95		6115	On Roadway	18	10/28/98	DRY	DAYLIGHT	Inj	UNKNOWN
			196.15		6115	Outside Should. Left	16	03/08/99	ICE	DAYLIGHT	PDO	MAILBOX
			196.20		6115	Outside Should. Left	11	02/08/99	DRY	DAYLIGHT	PDO	OTHER POST
WALW	014E	290	196.44	KNOLL RD	.	.	.	.	.	.	.	.
			197.04		6600	Outside Should. Right	8	05/10/99	DRY	DAYLIGHT	PDO	MAILBOX
WALW	014E	291	197.46	STH 67 NB	.	.	.	.	.	.	.	.
			197.56		6600	Outside Should. Right	11	11/12/99	DRY	DAYLIGHT	K	TREE
			198.06		6600	0	5	01/30/2000	SNOW/SLUSH	DARK	Inj	EMBANKMENT
			198.13		6600	Outside Should. Right	17	10/09/2000	DRY	DAYLIGHT	Inj	CULVERT
WALW	014E	292	198.43	STATE LINE RD	.	.	.	.	.	.	.	.

APPENDIX G

TWO-LANE
RURAL
UNDIVIDED
STATE TRUNK HIGHWAYS
RANK-ORDERED BY
VARIOUS CRASH RATES
CRASH DENSITIES
&
 RATIOS OF SELECT CRASH TYPES

INTRODUCTION

The present Appendix provides one-page samples of Run-off-Road (ROR) crash statistics for undivided two-lane two-way rural Wisconsin State Trunk Highways (STH). STH have been rank-ordered by a specific Crash Rate, Crash Density, or Crash Ratio of interest to the Safety Engineer. An example of table use is provided in the body of the report in the “**Table Use**” part of the “**PRODUCTS and their USES**” section.

As noted at the bottom of each sample page, only segments of three or more miles that had 20 or more Run-off-Road crashes in three years are included in the tables.

All tables provide the following information:

- STH Rank
- Route Number
- Length of undivided highway
- ROR crash total in 3 years (1998-2000)

In addition, the following **ratios of special crash categories to all ROR crashes** are provided:

- Injury + Fatal
- Wet + Snow
- Dark
- Curve (horizontal or vertical)
- Fixed Object

Table G0 below indicates the variable by which STH are ranked in each of **Tables G1-G8**.

Table G0. Appendix G Table Index.

Table	Ranked by
G1	ROR crash rate
G2	ROR crash density
G3	Injury + Fatal crash rate
G4	Wet + Snow crash rate
G5	Dark crash rate
G6	Horizontal or Vertical curve crash rate
G7	Fixed Object crash rate
G8	Sum or ratios Injury+Fatal, Wet + Snow, Dark, Curve, and Fixed Object to all ROR crashes

Table G1. Undivided segments of STH rank-ordered by ROR crash rate.

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Crashes per 100MVM	ROR To ROR Crash Ratio	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio	Dark ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
Rural	2.00	1	171	33.25	42	.08	173.24	.45	.40	.43	.43	.43	.74
		2	162	40.88	65	.14	158.53	.49	.42	.65	.32	.51	
		3	108	17.89	25	.05	154.16	.32	.40	.48	.44	.80	
		4	88	29.75	28	.06	151.80	.54	.25	.39	.39	.39	.39
		5	39	40.84	56	.14	135.58	.57	.36	.59	.32	.61	
		6	56	50.56	84	.22	124.50	.49	.44	.49	.35	.68	
		7	130	30.73	28	.09	109.31	.50	.29	.46	.36	.68	
		8	213	19.33	55	.17	107.53	.49	.55	.47	.35	.62	
		9	92	27.12	38	.13	97.46	.39	.47	.42	.18	.55	
		10	68	8.49	23	.08	92.84	.35	.83	.43	.04	.57	
		11	149	24.15	32	.12	90.96	.25	.50	.38	.38	.75	
		12	133	72.01	94	.35	90.12	.34	.49	.47	.19	.62	
		13	76	24.92	43	.16	89.47	.44	.33	.70	.12	.63	
		14	104	14.34	28	.11	85.28	.57	.21	.57	.11	.54	
		15	154	19.00	20	.08	84.74	.40	.25	.50	.40	.70	
		16	136	12.53	28	.11	84.57	.32	.32	.46	.25	.50	
		17	106	27.39	52	.21	84.23	.42	.48	.67	.19	.67	
		18	175	46.56	123	.49	84.12	.39	.41	.52	.07	.74	
		19	40	79.42	79	.32	82.05	.41	.38	.51	.18	.49	
		20	170	23.90	34	.14	81.58	.50	.32	.59	.12	.59	
		21	140	11.25	33	.14	81.12	.42	.73	.48	.30	.48	
		22	52	57.60	58	.24	80.13	.47	.50	.45	.07	.52	
		23	161	21.58	26	.11	78.94	.35	.42	.50	.04	.69	
		24	78	85.19	127	.54	77.72	.51	.39	.43	.39	.58	
		25	178	20.09	43	.19	76.61	.51	.47	.56	.19	.70	
		26	72	27.70	28	.12	76.32	.39	.54	.57	.43	.71	
		27	75	12.10	32	.14	75.07	.41	.31	.50	.00	.72	
		28	113	26.28	68	.31	73.64	.32	.47	.47	.10	.50	
		29	131	70.19	70	.34	69.52	.49	.34	.57	.31	.54	
		30	107	44.19	46	.22	69.50	.46	.41	.57	.13	.54	
		31	71	42.62	64	.31	68.07	.52	.38	.63	.31	.61	
		32	167	9.41	27	.14	66.15	.22	.37	.59	.56	.81	

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G2. Undivided segments of STH rank-ordered by ROR crashes per mile

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Crashes per mile per year	ROR Crashes		Dark To ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
								To ROR Crash Ratio	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio		
Rural	2.00	1	38	5.03	21	.12	1.39	.38	.33	.62	.29	.81
		2	50	5.64	21	.21	1.24	.43	.33	.67	.10	.57
		3	83	50.01	168	1.21	1.12	.42	.50	.51	.17	.75
		4	140	11.25	33	.14	.98	.42	.73	.48	.30	.48
		5	167	9.41	27	.14	.96	.22	.37	.59	.56	.81
		6	213	19.33	55	.17	.95	.49	.55	.47	.35	.62
		7	68	8.49	23	.08	.90	.35	.83	.43	.04	.57
		8	75	12.10	32	.14	.88	.41	.31	.50	.00	.72
		9	175	46.56	123	.49	.88	.39	.41	.52	.07	.74
		10	113	26.28	68	.31	.86	.32	.47	.47	.10	.50
		11	91	16.50	42	.26	.85	.60	.57	.48	.02	.81
		12	66	14.66	36	.20	.82	.42	.39	.53	.25	.64
		13	144	19.45	48	.25	.82	.44	.35	.50	.27	.69
		14	151	91.26	221	2.05	.81	.47	.50	.44	.13	.57
		15	120	15.44	35	.28	.76	.49	.46	.57	.06	.60
		16	41	15.19	34	.61	.75	.47	.32	.38	.06	.59
		17	20	29.60	66	.49	.74	.38	.50	.48	.26	.73
		18	136	12.53	28	.11	.74	.32	.32	.46	.25	.50
		19	14	158.02	347	4.17	.73	.41	.46	.50	.08	.65
		20	69	36.47	78	.76	.71	.47	.49	.49	.05	.63
		21	178	20.09	43	.19	.71	.51	.47	.56	.19	.70
		22	19	46.73	94	.89	.67	.44	.41	.43	.19	.62
		23	12	238.43	463	4.03	.65	.45	.39	.45	.19	.64
		24	26	70.94	139	2.05	.65	.42	.52	.50	.10	.68
		25	104	14.34	28	.11	.65	.57	.21	.57	.11	.54
		26	51	109.67	211	2.29	.64	.42	.44	.44	.09	.50
		27	110	41.26	79	.69	.64	.38	.53	.53	.06	.73
		28	106	27.39	52	.21	.63	.42	.48	.67	.19	.67
		29	138	11.66	21	.21	.60	.33	.29	.52	.10	.71
		30	164	25.65	46	.82	.60	.35	.46	.52	.02	.61

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G3. Undivided segments of STH rank-ordered by Injury + Fatal ROR crash rate

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Inj+Fat Crashes per 100MVM	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio	Dark ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
Rural	2.00	1	88	29.75	28	.06	81.32	.54	.25	.39	.39	.39
		2	171	33.25	42	.08	78.37	.45	.40	.43	.43	.74
		3	162	40.88	65	.14	78.04	.49	.42	.65	.32	.51
		4	39	40.84	56	.14	77.47	.57	.36	.59	.32	.61
		5	56	50.56	84	.22	60.77	.49	.44	.49	.35	.68
		6	130	30.73	28	.09	54.66	.50	.29	.46	.36	.68
		7	213	19.33	55	.17	52.79	.49	.55	.47	.35	.62
		8	108	17.89	25	.05	49.33	.32	.40	.48	.44	.80
		9	104	14.34	28	.11	48.73	.57	.21	.57	.11	.54
		10	170	23.90	34	.14	40.79	.50	.32	.59	.12	.59
		11	78	85.19	127	.54	39.78	.51	.39	.43	.39	.58
		12	76	24.92	43	.16	39.53	.44	.33	.70	.12	.63
		13	178	20.09	43	.19	39.20	.51	.47	.56	.19	.70
		14	92	27.12	38	.13	38.47	.39	.47	.42	.18	.55
		15	52	57.60	58	.24	37.30	.47	.50	.45	.07	.52
		16	106	27.39	52	.21	35.64	.42	.48	.67	.19	.67
		17	71	42.62	64	.31	35.10	.52	.38	.63	.31	.61
		18	140	11.25	33	.14	34.42	.42	.73	.48	.30	.48
		19	154	19.00	20	.08	33.90	.40	.25	.50	.40	.70
		20	131	70.19	70	.34	33.77	.49	.34	.57	.31	.54
		21	40	79.42	79	.32	33.24	.41	.38	.51	.18	.49
		22	175	46.56	123	.49	32.83	.39	.41	.52	.07	.74
		23	91	16.50	42	.26	32.58	.60	.57	.48	.02	.81
		24	68	8.49	23	.08	32.29	.35	.83	.43	.04	.57
		25	147	12.65	21	.13	31.89	.57	.43	.43	.05	.57
		26	107	44.19	46	.22	31.73	.46	.41	.57	.13	.54
		27	128	27.04	30	.15	30.76	.47	.47	.53	.23	.73
		28	133	72.01	94	.35	30.68	.34	.49	.47	.19	.62
		29	75	12.10	32	.14	30.50	.41	.31	.50	.00	.72
		30	72	27.70	28	.12	29.98	.39	.54	.57	.43	.71
		31	144	19.45	48	.25	28.50	.44	.35	.50	.27	.69
		32	58	52.84	58	.35	28.34	.52	.41	.55	.17	.55

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G4. Undivided segments of STH rank-ordered by Wet + Snow ROR crash rate

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Wet+Snow Crashes per 100MVM	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio	Dark To ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
Rural	2.00	1	68	8.49	23	.08	76.69	.35	.83	.43	.04	.57
		2	171	33.25	42	.08	70.12	.45	.40	.43	.43	.74
		3	162	40.88	65	.14	65.85	.49	.42	.65	.32	.51
		4	108	17.89	25	.05	61.66	.32	.40	.48	.44	.80
		5	140	11.25	33	.14	59.00	.42	.73	.48	.30	.48
		6	213	19.33	55	.17	58.65	.49	.55	.47	.35	.62
		7	56	50.56	84	.22	54.84	.49	.44	.49	.35	.68
		8	39	40.84	56	.14	48.42	.57	.36	.59	.32	.61
		9	92	27.12	38	.13	46.17	.39	.47	.42	.18	.55
		10	149	24.15	32	.12	45.48	.25	.50	.38	.38	.75
		11	133	72.01	94	.35	44.10	.34	.49	.47	.19	.62
		12	72	27.70	28	.12	40.89	.39	.54	.57	.43	.71
		13	106	27.39	52	.21	40.50	.42	.48	.67	.19	.67
		14	52	57.60	58	.24	40.06	.47	.50	.45	.07	.52
		15	88	29.75	28	.06	37.95	.54	.25	.39	.39	.39
		16	178	20.09	43	.19	35.63	.51	.47	.56	.19	.70
		17	113	26.28	68	.31	34.65	.32	.47	.47	.10	.50
		18	175	46.56	123	.49	34.20	.39	.41	.52	.07	.74
		19	161	21.58	26	.11	33.40	.35	.42	.50	.04	.69
		20	91	16.50	42	.26	31.28	.60	.57	.48	.02	.81
		21	130	30.73	28	.09	31.23	.50	.29	.46	.36	.68
		22	40	79.42	79	.32	31.16	.41	.38	.51	.18	.49
		23	128	27.04	30	.15	30.76	.47	.47	.53	.23	.73
		24	78	85.19	127	.54	30.60	.51	.39	.43	.39	.58
		25	76	24.92	43	.16	29.13	.44	.33	.70	.12	.63
		26	85	23.46	33	.23	28.92	.48	.61	.45	.30	.76
		27	107	44.19	46	.22	28.71	.46	.41	.57	.13	.54
		28	136	12.53	28	.11	27.18	.32	.32	.46	.25	.50
		29	170	23.90	34	.14	26.40	.50	.32	.59	.12	.59
		30	71	42.62	64	.31	25.52	.52	.38	.63	.31	.61
		31	167	9.41	27	.14	24.50	.22	.37	.59	.56	.81
		32	147	12.65	21	.13	23.92	.57	.43	.43	.05	.57

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G5. Undivided segments of STH rank-ordered by Dark ROR crash rate

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Dark Crashes per 100MVM	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio	Dark To ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
Rural	2.00	1	162	40.88	65	.14	102.43	.49	.42	.65	.32	.51
		2	39	40.84	56	.14	79.89	.57	.36	.59	.32	.61
		3	171	33.25	42	.08	74.24	.45	.40	.43	.43	.74
		4	108	17.89	25	.05	74.00	.32	.40	.48	.44	.80
		5	76	24.92	43	.16	62.42	.44	.33	.70	.12	.63
		6	56	50.56	84	.22	60.77	.49	.44	.49	.35	.68
		7	88	29.75	28	.06	59.64	.54	.25	.39	.39	.39
		8	106	27.39	52	.21	56.69	.42	.48	.67	.19	.67
		9	213	19.33	55	.17	50.83	.49	.55	.47	.35	.62
		10	130	30.73	28	.09	50.75	.50	.29	.46	.36	.68
		11	104	14.34	28	.11	48.73	.57	.21	.57	.11	.54
		12	170	23.90	34	.14	47.99	.50	.32	.59	.12	.59
		13	175	46.56	123	.49	43.77	.39	.41	.52	.07	.74
		14	72	27.70	28	.12	43.61	.39	.54	.57	.43	.71
		15	178	20.09	43	.19	42.76	.51	.47	.56	.19	.70
		16	71	42.62	64	.31	42.54	.52	.38	.63	.31	.61
		17	154	19.00	20	.08	42.37	.40	.25	.50	.40	.70
		18	133	72.01	94	.35	42.18	.34	.49	.47	.19	.62
		19	40	79.42	79	.32	41.54	.41	.38	.51	.18	.49
		20	92	27.12	38	.13	41.04	.39	.47	.42	.18	.55
		21	68	8.49	23	.08	40.36	.35	.83	.43	.04	.57
		22	131	70.19	70	.34	39.72	.49	.34	.57	.31	.54
		23	161	21.58	26	.11	39.47	.35	.42	.50	.04	.69
		24	140	11.25	33	.14	39.33	.42	.73	.48	.30	.48
		25	107	44.19	46	.22	39.28	.46	.41	.57	.13	.54
		26	136	12.53	28	.11	39.26	.32	.32	.46	.25	.50
		27	167	9.41	27	.14	39.20	.22	.37	.59	.56	.81
		28	38	5.03	21	.12	37.64	.38	.33	.62	.29	.81
		29	75	12.10	32	.14	37.53	.41	.31	.50	.00	.72
		30	52	57.60	58	.24	35.92	.47	.50	.45	.07	.52
		31	128	27.04	30	.15	35.15	.47	.47	.53	.23	.73
		32	113	26.28	68	.31	34.65	.32	.47	.47	.10	.50

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G6. Undivided segments of STH rank-ordered by Hz or Vt Curve ROR crash rate

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	Hz or Vt Curve		Inj+Fat Crash Ratio	Wet+Snow Crash Ratio	Dark To ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
							Crashes per 100MVM	To ROR Crash Ratio					
Rural	2.00	1	171	33.25	42	.08	74.24	.45	.40	.43	.43	.74	
		2	108	17.89	25	.05	67.83	.32	.40	.48	.44	.80	
		3	88	29.75	28	.06	59.64	.54	.25	.39	.39	.39	
		4	162	40.88	65	.14	51.22	.49	.42	.65	.32	.51	
		5	39	40.84	56	.14	43.58	.57	.36	.59	.32	.61	
		6	56	50.56	84	.22	42.98	.49	.44	.49	.35	.68	
		7	130	30.73	28	.09	39.04	.50	.29	.46	.36	.68	
		8	213	19.33	55	.17	37.15	.49	.55	.47	.35	.62	
		9	167	9.41	27	.14	36.75	.22	.37	.59	.56	.81	
		10	149	24.15	32	.12	34.11	.25	.50	.38	.38	.75	
		11	154	19.00	20	.08	33.90	.40	.25	.50	.40	.70	
		12	72	27.70	28	.12	32.71	.39	.54	.57	.43	.71	
		13	78	85.19	127	.54	29.99	.51	.39	.43	.39	.58	
		14	140	11.25	33	.14	24.58	.42	.73	.48	.30	.48	
		15	131	70.19	70	.34	21.85	.49	.34	.57	.31	.54	
		16	71	42.62	64	.31	21.27	.52	.38	.63	.31	.61	
		17	136	12.53	28	.11	21.14	.32	.32	.46	.25	.50	
		18	95	71.49	71	.38	18.59	.38	.31	.54	.30	.70	
		19	92	27.12	38	.13	17.95	.39	.47	.42	.18	.55	
		20	144	19.45	48	.25	17.65	.44	.35	.50	.27	.69	
		21	38	5.03	21	.12	17.37	.38	.33	.62	.29	.81	
		22	133	72.01	94	.35	17.26	.34	.49	.47	.19	.62	
		23	106	27.39	52	.21	16.20	.42	.48	.67	.19	.67	
		24	128	27.04	30	.15	15.38	.47	.47	.53	.23	.73	
		25	66	14.66	36	.20	14.64	.42	.39	.53	.25	.64	
		26	40	79.42	79	.32	14.54	.41	.38	.51	.18	.49	
		27	85	23.46	33	.23	14.46	.48	.61	.45	.30	.76	
		28	81	85.38	97	.70	14.36	.45	.38	.45	.31	.68	
		29	178	20.09	43	.19	14.25	.51	.47	.56	.19	.70	
		30	20	29.60	66	.49	11.58	.38	.50	.48	.26	.73	
		31	76	24.92	43	.16	10.40	.44	.33	.70	.12	.63	

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G7. Undivided segments of STH rank-ordered by Fixed Object ROR crash rate

Population Density	No of Lanes	RANK	ROUTE	Miles	Crashes (3 Yrs)	ROR Crashes 100MVM	Fixed obj		Wet+Snow Crash Ratio	Dark To ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
							Annual Travel 100MVM	Crashes per 100MVM				
Rural	2.00	1	171	33.25	42	.08	127.87	.45	.40	.43	.43	.74
		2	108	17.89	25	.05	123.33	.32	.40	.48	.44	.80
		3	56	50.56	84	.22	84.48	.49	.44	.49	.35	.68
		4	39	40.84	56	.14	82.32	.57	.36	.59	.32	.61
		5	162	40.88	65	.14	80.48	.49	.42	.65	.32	.51
		6	130	30.73	28	.09	74.18	.50	.29	.46	.36	.68
		7	149	24.15	32	.12	68.22	.25	.50	.38	.38	.75
		8	213	19.33	55	.17	66.47	.49	.55	.47	.35	.62
		9	175	46.56	123	.49	62.24	.39	.41	.52	.07	.74
		10	88	29.75	28	.06	59.64	.54	.25	.39	.39	.39
		11	154	19.00	20	.08	59.32	.40	.25	.50	.40	.70
		12	106	27.39	52	.21	56.69	.42	.48	.67	.19	.67
		13	76	24.92	43	.16	56.18	.44	.33	.70	.12	.63
		14	133	72.01	94	.35	55.61	.34	.49	.47	.19	.62
		15	161	21.58	26	.11	54.65	.35	.42	.50	.04	.69
		16	72	27.70	28	.12	54.52	.39	.54	.57	.43	.71
		17	75	12.10	32	.14	53.96	.41	.31	.50	.00	.72
		18	167	9.41	27	.14	53.90	.22	.37	.59	.56	.81
		19	92	27.12	38	.13	53.86	.39	.47	.42	.18	.55
		20	178	20.09	43	.19	53.45	.51	.47	.56	.19	.70
		21	68	8.49	23	.08	52.47	.35	.83	.43	.04	.57
		22	38	5.03	21	.12	49.22	.38	.33	.62	.29	.81
		23	128	27.04	30	.15	48.33	.47	.47	.53	.23	.73
		24	170	23.90	34	.14	47.99	.50	.32	.59	.12	.59
		25	104	14.34	28	.11	45.69	.57	.21	.57	.11	.54
		26	78	85.19	127	.54	45.29	.51	.39	.43	.39	.58
		27	144	19.45	48	.25	44.79	.44	.35	.50	.27	.69
		28	91	16.50	42	.26	44.32	.60	.57	.48	.02	.81
		29	95	71.49	71	.38	44.27	.38	.31	.54	.30	.70
		30	136	12.53	28	.11	42.28	.32	.32	.46	.25	.50
		31	71	42.62	64	.31	41.48	.52	.38	.63	.31	.61

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

Table G8. Undivided segments of STH rank-ordered by high percentage of special ROR crashes

Population Density	No of Lanes	RANK	ROUTE	Miles	ROR Crashes (3 Yrs)	Annual Travel 100MVM	ROR Crashes per 100MVM	Inj+Fat To ROR Crash Ratio	Wet+Snow To ROR Crash Ratio	Dark ROR Crash Ratio	Curve To ROR Crash Ratio	Fixed obj to ROR Crash Ratio
Rural	2.00	1	72	27.70	28	.12	76.32	.39	.54	.57	.43	.71
		2	85	23.46	33	.23	47.73	.48	.61	.45	.30	.76
		3	167	9.41	27	.14	66.15	.22	.37	.59	.56	.81
		4	82	84.05	84	.69	40.71	.54	.46	.65	.21	.63
		5	91	16.50	42	.26	54.74	.60	.57	.48	.02	.81
		6	213	19.33	55	.17	107.53	.49	.55	.47	.35	.62
		7	171	33.25	42	.08	173.24	.45	.40	.43	.43	.74
		8	39	40.84	56	.14	135.58	.57	.36	.59	.32	.61
		9	106	27.39	52	.21	84.23	.42	.48	.67	.19	.67
		10	56	50.56	84	.22	124.50	.49	.44	.49	.35	.68
		11	108	17.89	25	.05	154.16	.32	.40	.48	.44	.80
		12	71	42.62	64	.31	68.07	.52	.38	.63	.31	.61
		13	128	27.04	30	.15	65.91	.47	.47	.53	.23	.73
		14	38	5.03	21	.12	60.80	.38	.33	.62	.29	.81
		15	140	11.25	33	.14	81.12	.42	.73	.48	.30	.48
		16	178	20.09	43	.19	76.61	.51	.47	.56	.19	.70
		17	162	40.88	65	.14	158.53	.49	.42	.65	.32	.51
		18	46	27.93	22	.38	19.37	.41	.45	.64	.09	.77
		19	97	33.87	28	.42	21.99	.43	.71	.57	.00	.64
		20	20	29.60	66	.49	44.94	.38	.50	.48	.26	.73
		21	83	50.01	168	1.21	46.26	.42	.50	.51	.17	.75
		22	78	85.19	127	.54	77.72	.51	.39	.43	.39	.58
		23	67	125.86	214	1.51	47.15	.40	.49	.54	.15	.72
		24	130	30.73	28	.09	109.31	.50	.29	.46	.36	.68
		25	81	85.38	97	.70	46.44	.45	.38	.45	.31	.68
		26	59	85.54	129	1.26	34.20	.50	.45	.49	.12	.71
		27	96	27.04	30	.33	30.03	.47	.57	.47	.03	.73
		28	131	70.19	70	.34	69.52	.49	.34	.57	.31	.54
		29	144	19.45	48	.25	65.15	.44	.35	.50	.27	.69
		30	149	24.15	32	.12	90.96	.25	.50	.38	.38	.75
		31	154	19.00	20	.08	84.74	.40	.25	.50	.40	.70
		32	28	49.88	70	.63	37.30	.34	.51	.56	.14	.69

Only segments of 3 or more miles and 20 or more ROR crashes in 3 years

APPENDIX H

RUN-OFF-ROAD CRASH STATISTICS
FOR RURAL
UNDIVIDED
TWO-LANE
TWO-WAY
STATE TRUNK HIGHWAYS

Crash Severity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FATAL	206	1.8	1.8	1.8
	INJURY	4911	42.2	42.2	44.0
	PROPERTY DAMAGE	6512	56.0	56.0	100.0
	Total	11629	100.0	100.0	

TOTAL # OF PERSONS KILLED

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	11596	98.2	98.2	98.2
	1	189	1.6	1.6	99.8
	2	15	.1	.1	100.0
	3	3	.0	.0	100.0
	Total	11803	100.0	100.0	

TOTAL # OF PERSONS INJURED

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	6756	57.2	57.2	57.2
	1	4054	34.3	34.3	91.6
	2	718	6.1	6.1	97.7
	3	183	1.6	1.6	99.2
	4	67	.6	.6	99.8
	5	18	.2	.2	99.9
	6	3	.0	.0	100.0
	7	1	.0	.0	100.0
	8	1	.0	.0	100.0
	9	1	.0	.0	100.0
	11	1	.0	.0	100.0
	Total	11803	100.0	100.0	

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Light Condition at Time of Crash	DAYLIGHT	66	32.0%	2420	49.4%	3194	49.4%	5680	49.1%
	DARK	125	60.7%	2054	41.9%	2586	40.0%	4765	41.2%
	DARK LIGHTED	4	1.9%	131	2.7%	280	4.3%	415	3.6%
	DAWN	4	1.9%	168	3.4%	226	3.5%	398	3.4%
	DUSK	6	2.9%	119	2.4%	136	2.1%	261	2.3%
	UNKNOWN	1	.5%	7	.1%	49	.8%	57	.5%
	Total	206	100.0%	4899	100.0%	6471	100.0%	11576	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Pavement Condition at Time of Crash	DRY	151	74.8%	3015	64.2%	2805	45.3%	5971	53.9%
	WET	27	13.4%	524	11.2%	750	12.1%	1301	11.7%
	SNOW/SLUSH	7	3.5%	602	12.8%	1665	26.9%	2274	20.5%
	ICE	12	5.9%	518	11.0%	892	14.4%	1422	12.8%
	SAND/MUD/DIRT/OIL	0	.0%	11	.2%	8	.1%	19	.2%
	OTHER	1	.5%	15	.3%	12	.2%	28	.3%
	UNKNOWN	4	2.0%	10	.2%	57	.9%	71	.6%
Total		202	100.0%	4695	100.0%	6189	100.0%	11086	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Relation to Roadway	ON ROADWAY	28	13.8%	898	18.5%	1395	21.7%	2321	20.2%
	SHOULDER	20	9.9%	551	11.4%	896	13.9%	1467	12.8%
	OUTSIDE SHOULD. LEFT	67	33.0%	1478	30.5%	1598	24.8%	3143	27.3%
	OUTSIDE SHOULD. RIGHT	84	41.4%	1856	38.2%	2469	38.3%	4409	38.3%
	OFF ROADWAY-UNKNOWN	4	2.0%	68	1.4%	85	1.3%	157	1.4%
	UNKNOWN	0	.0%	2	.0%	0	.0%	2	.0%
	Total	203	100.0%	4853	100.0%	6443	100.0%	11499	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Horizontal Alignment	STRAIGHT	111	54.1%	2937	60.3%	4281	66.4%	7329	63.6%
	CURVE	94	45.9%	1933	39.7%	2171	33.6%	4198	36.4%
	Total	205	100.0%	4870	100.0%	6452	100.0%	11527	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Vertical Alignment	LEVEL/FLAT	140	71.1%	3459	74.0%	4395	71.2%	7994	72.4%
	HILL	57	28.9%	1218	26.0%	1774	28.8%	3049	27.6%
	Total	197	100.0%	4677	100.0%	6169	100.0%	11043	100.0%

Most Harmful Event		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
UNKNOWN	4	2.0%		178	3.7%	265	4.1%	447	3.9%
VEHICLE IN OPERATION	12	5.9%		154	3.2%	249	3.8%	415	3.6%
PARKED MV	0	.0%		23	.5%	89	1.4%	112	1.0%
PEDALCYCLE	1	.5%		2	.0%	0	.0%	3	.0%
PEDESTRIAN	1	.5%		16	.3%	0	.0%	17	.1%
TRAIN	0	.0%		0	.0%	1	.0%	1	.0%
OTHER ANIMAL	0	.0%		7	.1%	22	.3%	29	.3%
MV IN OTHER ROADWAY	2	1.0%		12	.2%	24	.4%	38	.3%
OTHER NON-FIXED OBJECT	2	1.0%		49	1.0%	241	3.7%	292	2.5%
TRAFFIC SIGN POST	0	.0%		65	1.3%	388	6.0%	453	3.9%
TRAFFIC SIGNAL	0	.0%		1	.0%	10	.2%	11	.1%
UTILITY POLE	9	4.4%		294	6.0%	358	5.5%	661	5.7%
LUMINAIRE LIGHT SUPPORT	0	.0%		7	.1%	33	.5%	40	.3%
OTHER POST	2	1.0%		32	.7%	142	2.2%	176	1.5%
TREE	28	13.7%		508	10.4%	597	9.2%	1133	9.8%
MAILBOX	1	.5%		64	1.3%	262	4.0%	327	2.8%
GUARDRAIL FACE	5	2.4%		128	2.6%	510	7.8%	643	5.5%
GUARDRAIL END	4	2.0%		63	1.3%	92	1.4%	159	1.4%
MEDIAN BARRIER	0	.0%		1	.0%	1	.0%	2	.0%
BRIDGE PARAPET END	1	.5%		0	.0%	4	.1%	5	.0%
BRIDGE/PIER/ABUTMENT	1	.5%		13	.3%	39	.6%	53	.5%
IMPACT ATTENUATOR	0	.0%		2	.0%	1	.0%	3	.0%
OVERHEAD SIGN POST	0	.0%		1	.0%	2	.0%	3	.0%
BRIDGE RAIL	1	.5%		29	.6%	43	.7%	73	.6%
CULVERT	11	5.4%		207	4.2%	122	1.9%	340	2.9%
DITCH	15	7.3%		676	13.9%	902	13.9%	1593	13.7%
CURB	0	.0%		10	.2%	28	.4%	38	.3%
EMBANKMENT	16	7.8%		330	6.8%	267	4.1%	613	5.3%
FENCE	2	1.0%		41	.8%	185	2.8%	228	2.0%
OTHER FIXED OBJECT	1	.5%		97	2.0%	213	3.3%	311	2.7%
UNKNOWN	0	.0%		1	.0%	3	.0%	4	.0%
OVERTURN	83	40.5%		1770	36.3%	1207	18.5%	3060	26.4%
FIRE/EXPLOSION	2	1.0%		5	.1%	66	1.0%	73	.6%
IMMERSION	0	.0%		4	.1%	15	.2%	19	.2%
JACKKNIFE	0	.0%		13	.3%	32	.5%	45	.4%
OTHER NON-COLLISION	1	.5%		69	1.4%	97	1.5%	167	1.4%
Total	205	100.0%		4872	100.0%	6510	100.0%	11587	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Month	JAN	10	4.9%	455	9.3%	1096	16.8%	1561	13.4%
	FEB	12	5.8%	377	7.7%	642	9.9%	1031	8.9%
	MAR	15	7.3%	390	7.9%	631	9.7%	1036	8.9%
	APR	12	5.8%	359	7.3%	371	5.7%	742	6.4%
	MAY	17	8.3%	375	7.6%	344	5.3%	736	6.3%
	JUN	16	7.8%	406	8.3%	366	5.6%	788	6.8%
	JUL	26	12.6%	426	8.7%	385	5.9%	837	7.2%
	AUG	10	4.9%	375	7.6%	347	5.3%	732	6.3%
	SEP	25	12.1%	389	7.9%	354	5.4%	768	6.6%
	OCT	22	10.7%	395	8.0%	397	6.1%	814	7.0%
	NOV	22	10.7%	413	8.4%	588	9.0%	1023	8.8%
	DEC	19	9.2%	550	11.2%	991	15.2%	1560	13.4%
Total		206	100.0%	4910	100.0%	6512	100.0%	11628	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Day of Week	SUNDAY	34	16.5%	780	15.9%	1006	15.4%	1820	15.7%
	MONDAY	16	7.8%	624	12.7%	897	13.8%	1537	13.2%
	TUESDAY	22	10.7%	649	13.2%	864	13.3%	1535	13.2%
	WEDNESDAY	33	16.0%	728	14.8%	947	14.5%	1708	14.7%
	THURSDAY	37	18.0%	677	13.8%	945	14.5%	1659	14.3%
	FRIDAY	23	11.2%	698	14.2%	1003	15.4%	1724	14.8%
	SATURDAY	41	19.9%	754	15.4%	850	13.1%	1645	14.1%
Total		206	100.0%	4910	100.0%	6512	100.0%	11628	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Hour	0	9	4.4%	238	4.8%	248	3.8%	495	4.3%
	1	15	7.3%	212	4.3%	194	3.0%	421	3.6%
	2	13	6.3%	243	4.9%	258	4.0%	514	4.4%
	3	14	6.8%	189	3.8%	182	2.8%	385	3.3%
	4	7	3.4%	130	2.6%	158	2.4%	295	2.5%
	5	6	2.9%	179	3.6%	244	3.7%	429	3.7%
	6	8	3.9%	233	4.7%	334	5.1%	575	4.9%
	7	8	3.9%	268	5.5%	404	6.2%	680	5.8%
	8	9	4.4%	202	4.1%	392	6.0%	603	5.2%
	9	6	2.9%	200	4.1%	295	4.5%	501	4.3%
	10	2	1.0%	159	3.2%	266	4.1%	427	3.7%
	11	9	4.4%	187	3.8%	256	3.9%	452	3.9%
	12	2	1.0%	186	3.8%	263	4.0%	451	3.9%
	13	8	3.9%	202	4.1%	248	3.8%	458	3.9%
	14	4	1.9%	225	4.6%	297	4.6%	526	4.5%
	15	8	3.9%	247	5.0%	367	5.6%	622	5.3%
	16	10	4.9%	263	5.4%	344	5.3%	617	5.3%
	17	4	1.9%	235	4.8%	335	5.1%	574	4.9%
	18	9	4.4%	218	4.4%	274	4.2%	501	4.3%
	19	3	1.5%	176	3.6%	245	3.8%	424	3.6%
	20	9	4.4%	154	3.1%	222	3.4%	385	3.3%
	21	13	6.3%	167	3.4%	245	3.8%	425	3.7%
	22	11	5.3%	195	4.0%	234	3.6%	440	3.8%
	23	19	9.2%	202	4.1%	207	3.2%	428	3.7%
Total		206	100.0%	4910	100.0%	6512	100.0%	11628	100.0%

Driver Action at Time of Collision		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Driver Action at Time of Collision	UNKNOWN	0	.0%	34	.7%	77	1.2%	111	1.0%
	GOING STRAIGHT	129	62.6%	3110	63.3%	4322	66.4%	7561	65.0%
	LEFT TURN	0	.0%	52	1.1%	80	1.2%	132	1.1%
	RIGHT TURN	0	.0%	21	.4%	71	1.1%	92	.8%
	SLOW/STOPPING	0	.0%	55	1.1%	137	2.1%	192	1.7%
	STOP IN TRAFFIC	0	.0%	2	.0%	8	.1%	10	.1%
	LEGALLY PARKED	0	.0%	12	.2%	37	.6%	49	.4%
	VIOL. NO PASSING	2	1.0%	15	.3%	4	.1%	21	.2%
	ILLEGALLY PARKED	0	.0%	0	.0%	3	.0%	3	.0%
	PARK MANEUVER	0	.0%	4	.1%	11	.2%	15	.1%
	BACKING	1	.5%	7	.1%	53	.8%	61	.5%
	CHANGING LANES	1	.5%	15	.3%	16	.2%	32	.3%
	OVERTAKE LEFT	7	3.4%	113	2.3%	97	1.5%	217	1.9%
	OVERTAKE RIGHT	1	.5%	20	.4%	25	.4%	46	.4%
	U TURN	0	.0%	5	.1%	6	.1%	11	.1%
	MERGING	0	.0%	1	.0%	11	.2%	12	.1%
NEGOTIATING CURVE		64	31.1%	1375	28.0%	1448	22.2%	2887	24.8%
OTHER		1	.5%	70	1.4%	106	1.6%	177	1.5%
Total		206	100.0%	4911	100.0%	6512	100.0%	11629	100.0%

Possible Contributing Circumstances		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Possible Contributing Circumstances	EXCEEDING SPEED LIMIT	32	16.8%	231	5.5%	147	3.1%	410	4.4%
	TOO FAST/COND	32	16.8%	1145	27.2%	1812	37.6%	2989	32.4%
	FAIL TO YIELD	0	.0%	24	.6%	23	.5%	47	.5%
	INATTENTIVE DRV	41	21.5%	1110	26.3%	976	20.3%	2127	23.1%
	FOLLOW TOO CLOSE	0	.0%	10	.2%	21	.4%	31	.3%
	IMPROPER TURN	0	.0%	9	.2%	16	.3%	25	.3%
	LEFT OF CENTER	10	5.2%	59	1.4%	62	1.3%	131	1.4%
	DSGRD SIGNAL	0	.0%	3	.1%	7	.1%	10	.1%
	DSGRD STOP SGN	2	1.0%	28	.7%	24	.5%	54	.6%
	IMPROPER OVERTAKE	1	.5%	2	.0%	34	.7%	37	.4%
	UNSAFE BACKING	42	22.0%	1116	26.5%	1330	27.6%	2488	27.0%
	FAIL TO CONTROL	28	14.7%	400	9.5%	253	5.3%	681	7.4%
	DRV CONDITION	0	.0%	10	.2%	5	.1%	15	.2%
	OTHER	3	1.6%	70	1.7%	103	2.1%	176	1.9%
Total		191	100.0%	4217	100.0%	4813	100.0%	9221	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Manner of Collision	NO COLL W/MV IN TRANSPORT	186	92.5%	4562	96.3%	5939	95.1%	10687	95.5%
	REAR END	2	1.0%	46	1.0%	87	1.4%	135	1.2%
	HEAD ON	4	2.0%	19	.4%	10	.2%	33	.3%
	REAR TO REAR	0	.0%	2	.0%	5	.1%	7	.1%
	ANGLE	7	3.5%	47	1.0%	79	1.3%	133	1.2%
	SIDE SWIPE SAME	0	.0%	35	.7%	79	1.3%	114	1.0%
	SIDE SWIPE OPPOSITE	2	1.0%	26	.5%	36	.6%	64	.6%
	UNKNOWN	0	.0%	2	.0%	11	.2%	13	.1%
Total		201	100.0%	4739	100.0%	6246	100.0%	11186	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Posted Speed Limit	25	3	1.5%	80	1.7%	191	3.0%	274	2.4%
	30	0	.0%	41	.9%	87	1.4%	128	1.1%
	35	4	2.0%	111	2.3%	215	3.4%	330	2.9%
	40	1	.5%	50	1.1%	69	1.1%	120	1.1%
	45	12	6.0%	154	3.2%	324	5.2%	490	4.4%
	50	1	.5%	13	.3%	21	.3%	35	.3%
	55	178	89.4%	4300	90.4%	5356	85.3%	9834	87.6%
	65	0	.0%	6	.1%	13	.2%	19	.2%
Total		199	100.0%	4755	100.0%	6276	100.0%	11230	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Operator Role	BLANK	1	.5%	38	.8%	45	.7%	84	.7%
	BICYCLIST	0	.0%	0	.0%	1	.0%	1	.0%
	DRIVER	185	93.0%	4528	95.2%	6218	99.1%	10931	97.3%
	MOTORCYCLIST	13	6.5%	186	3.9%	12	.2%	211	1.9%
	MOPED USER	0	.0%	3	.1%	0	.0%	3	.0%
	Total	199	100.0%	4755	100.0%	6276	100.0%	11230	100.0%

		Crash Severity							
		FATAL		INJURY		PROPERTY DAMAGE		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Person Drinking Alcohol	NO	97	47.1%	3775	76.9%	5812	89.3%	9684	83.3%
	YES	109	52.9%	1135	23.1%	700	10.7%	1944	16.7%
	Total	206	100.0%	4910	100.0%	6512	100.0%	11628	100.0%

APPENDIX I

PRÈCIS

INTELLIGENT MAP-BASED HIGHWAY-WIDE
SAFETY REVIEW TOOL
DESCRIPTION

Introduction

This Appendix provides a detailed overview of the intelligent GIS map-based product **PRÈCIS**¹ that was conceived as part of the “Systematic Evaluation of Run-off-Road Crash Locations” project.

The focus of this project was Run-off-Road (ROR) crashes on two-lane rural highways. This document focuses on a map of STH 14. The **PRÈCIS** map was created in a 36” x 48” format and is also available in pdf format.

The document presents:

- The general location of STH 14 within the State of Wisconsin (p. I 2)
- The meaning of color-coded information (p. I 3)
 - on the map and
 - in line graphs
- The underlying databases created by **PRÈCIS** (pp. I 4-I 5)
 - Mile point
 - crash frequency and
 - crash rate
- The relationship of map-displayed information with the Crash/State Trunk Highway Log (STH Log) Interleaf product created during the present effort (pp. I 6-I 7).

¹ Etymology: French, from *précis* *précise*: a concise summary of essential points, statements, or facts
Source: Merriam-Webster Online Dictionary; <http://webster.com/> accessed 1/6/2005

STH 14

STH 14 is a 200-mile route that runs in a North-West to South-East direction in the state of Wisconsin. Most of its length (160 miles) is a rural two-lane two-way highway.

Figure I 1 shows STH 14 in light blue; the red arrow points at the section that is presented in more detail in the rest of this document.

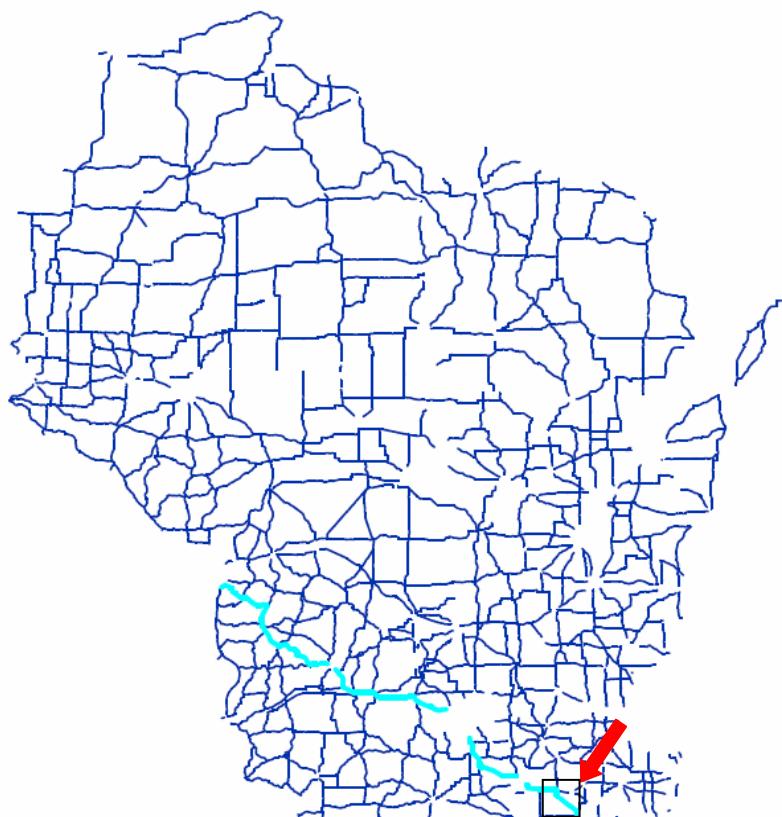


Figure I 1 - STH 14

Data displayed on the STH 14 PRÈCIS map

Figure I 2 displays the entire STH 14 alignment. Two color-coded lines, parallel to the STH 14 alignment are used to display crash rates: a thin line representing overall crash rate and a thick line representing ROR crash rate (see square insert--crash rate ranges explained in the legend).

The map is enhanced with the names of all major and many minor intersecting highways. The line graphs at the bottom of the figure indicate crash rate (y-axis, in crashes/100 MVM) at any given mile point² along STH 14.

Details about the underlying database, created by PRÈCIS, are presented in the next two pages.

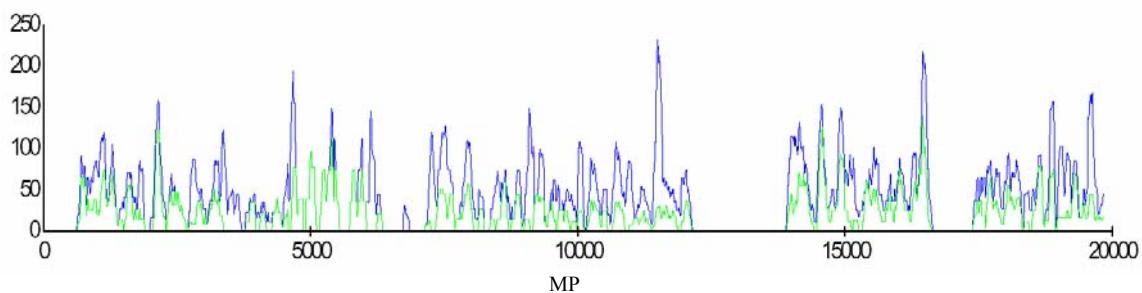
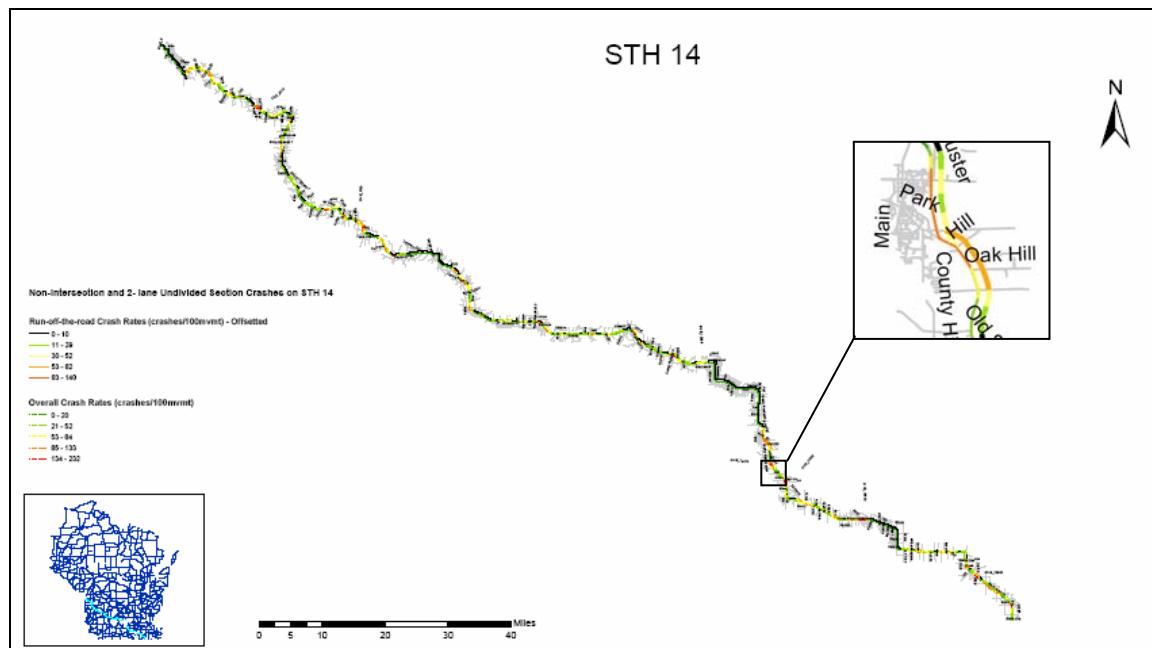


Figure I 2 - STH 14 ROR and Overall Crash Rates

² This is the cumulative mile point used in the WisDOT State Trunk Highway Log publication.

PRÈCIS crash frequency database

Table I 1 presents a sample of the crash frequency database used to produce color-coded statistics for **Figure I 2**. Each record contains the number of crashes along the 1/10th of a mile, which starts at the indicated mile point. The meaning of each table column is explained below the table. For example, four ROR crashes were reported at mile point 188.70 (crashes between MP 188.70 and 188.79); there were 2 non-intersection, non-ROR crashes on dry pavement, and 1 non-intersection crash on wet pavement; this was a ROR crash.

Each record also stored travel data (not shown in Table I 1).

Table I 1- STH 14 Non-Intersection³ Crash Frequency Database Sample

MP	RP	C_ROR_NON	C_DRY_NON	C_DRY_ROR	C_WET_NON	C_WET_ROR
014E_18820	014E275 175	0	0	0	0	0
014E_18830	014E275 185	0	0	0	0	0
014E_18840	014E275 195	0	0	0	0	0
014E_18850	014E275 205	0	1	0	0	0
014E_18860	014E278 001	0	0	0	0	0
014E_18870	014E278 011	4	2	0	1	1
014E_18880	014E278 021	1	1	1	0	0
014E_18890	014E278 031	0	1	0	0	0
014E_18900	014E278 041	0	1	0	0	0
014E_18910	014E278 051	0	0	0	0	0
014E_18920	014E278 061	0	0	0	0	0

MP STL cumulative mile point (014E_18820 is cumulative mile point 188.20 along STH 14 as listed in the STL)

RP Reference point (014E275 175 represents a location 175 ft downstream from Reference Point number 275 along STH 14 when traveled in the eastbound direction)

C_ROR_NON_ Number of ROR crashes (1998-2000)

C_DRY_NON_ Number of non-intersection crashes on dry pavement (1998-2000)

C_DRY_ROR_ Number of ROR crashes on dry pavement (1998-2000)

C_WET_NON_ Number of non-intersection crashes on wet pavement (1998-2000)

C_WET_ROR_ Number of ROR crashes on wet pavement (1998-2000)

³ ROR crashes were a subset of non-intersection crashes.

PRÈCIS crash rate database

Crash rates were calculated using a floating 1-mile segment. The floating segment moved 0.1 mile at a time (step = 0.1 mile), until the entire highway length was processed.⁴

Table I 2, shows ROR crash rates (see R_ROR_NON_ column) calculated at each 1/10th of a mile, for mile points 188.20 through 189.20. Note that the crash rate shown at mile point 188.20 relied on the number of crashes and ADT information at mile points 187.6 through 188.7 (a one-mile section).

Table I 2 –STH 14 Crash Rate Database Sample

MP	RP	R_ROR_NON_
014E_18820	014E275 175	40
014E_18830	014E275 185	67
014E_18840	014E275 195	67
014E_18850	014E275 205	67
014E_18860	014E278 001	67
014E_18870	014E278 011	68
014E_18880	014E278 021	70
014E_18890	014E278 031	71
014E_18900	014E278 041	73
014E_18910	014E278 051	75
014E_18920	014E278 061	46

⁴ Floating segment and step lengths are adjustable to suit the user's needs.

Locating PRÈCIS information on the STH Log

A commonly used WisDOT locational reference is the annually published State Trunk Highway Log, a 4,160-page reference volume containing detailed descriptions of roadside and roadway cross-section features along each STH (see **Table I 3** below).

Because location information on a PRÈCIS map is based on the same cumulative mile point used in the State Trunk Highway Log book, Safety Engineers can quickly relate information between these two sources. Using the cumulative mile point eliminates the need to use the more complex and labor-intensive Reference Point system.

Table I 3. Sample STH Log for STH 14 (mile points 188.09 through 190.46)⁵ abbreviated.

RP	PLUS	CUM MILES	FEATURE
	1.64	188.09	BELLA VISTA DR
	1.79	188.24	MADISON ST
	1.79	188.24	USH 14 WB
	2.01	188.46	B-64-0659 BRIDGE
	2.01	188.46	CMSTPP RR OVER
	2.09	188.54	W FREMONT ST
278	0.00	188.59	CTH X
	0.00	188.59	BELOIT ST
	0.12	188.71	PARK ST
	0.13	188.72	SHARON ST
	0.40	188.99	SWEET RD
	0.58	189.17	>> V OF DARIEN
	0.58	189.17	>> T OF DARIEN
281	0.00	190.46	>> T OF DARIEN

Notes: RP = Reference Point Number; PLUS = Distance from upstream RP; CUM MILES = Cumulative miles; FEATURE = Roadside feature.

A quick reference summary, incorporating STH log and crash data was developed for this project, the “**Crash/State Trunk Highway Log Interleaf**” printout, consisting of crash and STH Log records sorted by cumulative mile point (see **Table I 4** next page).

Information on the map shown in **Figure I 1** can be readily related to the STH Log interleaf printout, using cumulative mile point and/or intersecting street name.

⁵ Data current as of 06-09-2004.

Table I 4- Interleaved Run-off-Road Crash and State Trunk Highway Log Data

COUNTY	Hwy	REFPT	CUM_MP	FEATURE	DIV	UND	(AADT)	Hwy Functional Class	Relation to Roadway	HR	DATE	Rd Cond	Lgt Cond	Sev	Crash Type	No	Spd limit	Microfilm		
ROCK	014E	274	185.59	SCHOOL SECTION RD		U	7160	PRINC ART Rural	Shoulder	16	05/03/98	DRY	DAYLIGHT	PDO GUARDRAIL FACE	1	55	98161380095			
			185.61						Parking Lot/Private		19	05/23/99	DRY	DUSK	Inj DITCH					
			186.25						On Roadway		17	04/01/99	DRY	DUSK	PDO OVERTURN					
			186.43						Outside Should. Left		7	04/17/99	DRY	DARK	PDO FENCE					
WALN	014E	275	186.45	CTH C	U		7160	PRINC ART Rural	Shoulder	15	04/04/98	DRY	DAYLIGHT	Inj OVERTURN	1	55	98121050459			
			186.55						Outside Should. Left		15	02/24/99	SNOW/SLUSH	DAYLIGHT	PDO OTHER POST					
			186.55						Outside Should. Right		10	08/02/98	DRY	DAYLIGHT	PDO OVERTURN					
			186.70						On Roadway		1	05/02/2000	DRY	DARK	Inj EMBANKMENT					
			186.75						On Roadway		20	11/09/99	DRY	DARK	PDO CURB					
			187.85						MINOR ART Rural		1				45 99413201327					
			188.59						CTH X		U	6850	MINOR ART Rural	On Roadway	WET	DARK LIGHTED	PDO CURB	25 99080500620		
			188.71						Shoulder		6	01/20/2000	SNOW/SLUSH	DARK LIGHTED	PDO UTILITY POLE					
			188.72						Outside Should. Left		15				35 50251538					
			188.79						Outside Should. Right		16	03/08/99	ICE	DAYLIGHT	Inj TREE					
			188.79						Outside Should. Left		16				55 99120820805					
			188.89						Outside Should. Left		5	10/31/99	DRY	DARK	Inj TREE					
			190.26						Outside Should. Right		13				45 99423230666 70420427					
WALN	014E	281	190.46	>> T OF DARIEN	CTH K	U	5340	MINOR ART Rural	Outside Should. Right	21	12/30/98	DRY	DARK	PDO OVERTURN	1	55	99030140297			
			190.71						Outside Should. Left		2	07/22/2000	DRY	DARK	PDO MAILBOX					
WALN	014E	284	192.61	CTH O	WILLOW BEND RD	U	5340	MINOR ART Rural	Outside Should. Left	15	06/26/98	DRY	DAYLIGHT	Inj DITCH	1	55	98231940219			
			192.87						Parking Lot/Private		19	03/05/99	SNOW/SLUSH	DARK	PDO OVERTURN					
			192.93						Outside Should. Right		15				0 99120820817					
			193.03						On Roadway		15	03/19/99	WET	DAYLIGHT	Inj TRAFFIC SIGN POST					
			193.13						On Roadway		19				55 99221660660					
			193.43						On Roadway		15	02/28/99	DRY	DARK	PDO OTHER NON-FIXED OBJECT					
			194.42						Outside Should. Right		15				55 99100690678					
			194.52						Outside Should. Right		16	06/05/2000	DRY	DAYLIGHT	Inj OTHER POST					
			195.02						On Roadway		16				45 251710982					
WALN	014E	289	195.88	USH 14 WB	1	-	6115	MINOR ART Rural	On Roadway	18	10/28/98	DRY	DAYLIGHT	Inj UTILITY POLE	1	30	98373100735			
			195.95						Outside Should. Left		16	03/08/99	ICE	DAYLIGHT	PDO MAILBOX					
WALN	014E	290	196.15	KNOLL RD	U	6115	MINOR ART Rural	Outside Should. Left	11	02/08/99	DRY	DAYLIGHT	PDO OTHER POST							
			196.20						Outside Should. Left		11							55 99090560398		
			196.44						Outside Should. Right		8	05/10/99	DRY	DAYLIGHT	PDO MAILBOX					
			197.04						On Roadway		8				55 99191451987					
WALN	014E	291	197.46	STH 67 NB	U	6600	MINOR ART Rural	Outside Should. Right	11	11/12/99	DRY	DAYLIGHT	K TREE	1	55	99433280034				
			197.56						Outside Should. Right		5	01/30/2000	SNOW/SLUSH	DARK	Inj EMBANKMENT					
			198.06						On Roadway		17				55 70450696					
WALN	014E	292	198.13	STATE LINE RD	U	6600	MINOR ART Rural	Outside Should. Right	17	10/09/2000	DRY	DAYLIGHT	Inj OTHER NON-COLLISION	1	55	443010445				
			198.43						On Roadway		17						55 443010445			