

**APPENDIX A
CENSUS DATA**

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Appendix A

Table 1

South Dakota Census Blocks - 1990 and 2000 Data Comparison

South Dakota													
County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Hughes	9776	1	287	1520	429.62	132	570	72	180	54.5	0.32	1	0.07
	9776	2	409	669	63.57	156	262	70	136	44.9	0.52	0.9	0.01
	9776	4	476			168		74		44		29.4	
	9777	2	726	687	-5.37	228	273	74	101	32.5	0.37	4.7	0.07
	9777	3	819	674	-17.70	315	274	106	74	33.7	0.27	16.9	0.08
	9777	4	1511	1757	16.28	676	753	234	242	34.6	0.32	5.4	0.07
	9777	5	796	869	9.17	357	439	73	120	20.4	0.27	3.2	0.07
	9778	3	605	591	-2.31	237	217	62	32	26.2	0.15	1.5	0.01
	9778	4	785	670	-14.65	298	273	77	55	25.8	0.20	5.3	0.04
	9778	2	965	929	-3.73	311	351	63	79	20.3	0.23	5.9	0.12
	9778	5	941	753	-19.98	432	384	165	131	38.2	0.34	16.2	0.11
	9778	1	1535	2305	50.16	514	738	218	280	42.4	0.38	11.3	0.14
	9779	3	683	1393	103.95	321	741	183	402	57	0.54	13.9	0.16
	9779	2	662	731	10.42	269	263	170	136	63.2	0.52	11.2	0.05
	9779	1	1461	1592	8.97	454	521	1350	112	29.7	0.21	8.6	0.19
9779	4	564			339		235		69.3		6.2		
	County Total		14817	16481	11.23	5780	6512	2911	2159	50.4	33.20	7.4	11.10
Hyde	9766	2	4193	926	-77.92	149	408	70	207	47.6	0.51	9.3	0.02
	9766	3	8954			411		213		51.8		2.1	
	9766	1	382	600	57.07	124	221	60	88	48.4	0.41	0	0.01
	County Total		1696	1671	-1.47	680	679	468	325	68.9	0.48	3.5	0.09
Stanley	9891	2	805	2211	174.66	304	883	103	288	33.8	0.33	7.7	0.08
	9891	3	1195			451		211		46.8		7	
	9891	1	453	539	18.98	187	226	82	83	43.9	0.37	2.9	0.00
	County Total		2453	2772	13.00	921	1111	553	378	60.0	0.34	6.5	0.07
Jackson	9911	1	433	591	36.49	166	236	63	134	37.9	0.57	6.9	0.07
	County Total		2811	2930	4.23	903	945	673	601	74.5	0.64	42.8	0.50
Fall River	9941	5	277			108		50		46.3		5	
	9941	1	695	707	1.73	218	307	114	163	52.3	0.53	3.5	0.09
	9941	3	240	1148	378.33	107	515	53	274	49.5	0.53	1.3	0.05
	9941	6	295			112		38		33.9		1	
		County Total		7353	7453	1.36	2864	3127	1889	1566	66.0	50.10	7.4
Custer	9951	1	818	2044	149.88	308	812	159	336	51.6	0.41	4.5	0.06
	County Total		6179	7275	17.74	2352	2970	1455	1250	61.9	0.42	2.9	0.06
Brookings	9586	3	692	891	28.76	222	344	70	114	31.5	0.33	1.7	0.01
	9586	5	977			286		121		42.3		1	
	9586	4	821	920	12.06	318	335	163	139	51.2	0.41	0.5	0.01
	9587	4	478	1054	120.50	155	401	41	85	26.4	0.21	2.7	0.01
	9587	5	1317			523		213		40.7		0.6	
	9587	6	369			133		48		36		0	
	9587	8	501			176		34		19.3		0	
	9588	4	910	949	4.29	350	497	211	313	60.2	0.63	6.7	0.05
	9588	1	1263	1902	50.59	505	726	292	429	57.8	0.59	2.8	0.04
	9588	2	870	867	-0.34	395	399	138	155	34.9	0.39	2.9	0.06
	9588	3	1436	1160	-19.22	362	364	166	170	45.8	0.47	3.5	0.08
	9588	5	1304	1670	28.07	694	776	498	471	71.7	0.61	2.1	0.05
	9589	1	2275	2196	-3.47	94	95	44	19	46.8	0.20	3.9	0.01
	9589	2	2097	2331	11.16	919	1029	576	659	62.6	0.64	5.2	0.09
	9589	3	686	486	-29.15	300	252	146	149	48.6	0.59	0.9	0.03
	9589	4	791	751	-5.06	337	343	166	121	49.2	0.35	0	0.02
	9589	5	1131	1040	-8.05	385	382	47	43	12.2	0.11	0	0.03
	9589	6	1458			621		232		37.3		2.9	
	9589	7	1283			539		246		45.6		5.2	
		County Total		25207	28220	11.95	8910	10665	5546	4513	62.2	42.30	2.2
	9566	4	166			58		21		36.2		0	
	9566	3	491	741	50.92	178	273	76	104	42.6	0.38	0	0.01
	9567	3	369			166		104		62.6		0.5	
	9567	4	131			44		12		27.2		0	
	9567	6	654			246		94		38.2		0.8	
	9568	3	676			270		126		46.6		2.8	

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County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Beadle	9568	2	761	696	-8.54	317	301	186	180	58.6	0.60	2.4	0.08
	9568	1	434	900	107.37	195	351	100	147	51.2	0.42	0.5	0.00
	9569	4	1147			491		251		51.1		7.9	
	9569	3	555	998	79.82	234	379	96	188	41	0.50	3.8	0.12
	9569	2	704	1152	63.64	348	554	161	391	46.2	0.71	2.3	0.03
	9569	1	894	752	-15.88	368	325	159	169	43.2	0.52	0.9	0.01
	9570	4	1429	1438	0.63	527	602	202	351	38.3	0.58	2.9	0.02
	9570	3	1115	1026	-7.98	440	453	230	232	52.2	0.51	1.5	0.02
	9571	2	944	856	-9.32	395	377	136	174	34.4	0.46	2	0.05
	9571	1	175	1238	607.43	48	561	37	261	77	0.47	1.7	0.02
	County Total		18253	17023	-6.74	7341	7210	4563	3571	62.2	0.50	1.7	0.03
Haakon	9901	4	791			261		96		36.7		2.8	
	9901	3	577	1073	85.96	572	436	15	206	2.6	0.47	2.6	0.05
	9901	2	499	558	11.82	194	215	93	114	47.9	0.53	0.4	0.00
	County Total		2624	2196	-16.31	926	870	608	435	65.7	0.50	2.1	0.04
Pennington*	116	1	488	517	5.94	173	194	77	85	44.5	0.44	1.6	0.03
	116	2	780	732	-6.15	363	318	140	137	38.5	0.43	3.1	0.07
	116	3	681	707	3.82	256	261	104	105	40.6	0.40	0.4	0.04
	County Total		81343	88565	8.88	30553	34641	16753	13624	54.8	0.39	10.5	0.13
Jones	9916	2	176			58		24		41.3		1.1	
	County Total		1324	1193	-9.89	519	509	345	248	66.5	48.70	0.6	4.20
Kingsbury	9581	4	857	669	-21.94	366	294	221	167	60.3	0.57	0.8	0.00
	9581	3	293	1075	266.89	112	437	50	187	44.6	0.43	0.7	0.02
	9582	3	407	650	59.71	133	302	68	167	51.1	0.55	0.5	0.01
	9582	5	624			255		131		51.3		0.2	
	9582	4	764			317		151		47.6		0.1	
	9581	5	974			422		234		55.4		0.4	
	County Total		5925	5815	-1.86	2357	2406	1552	1151	65.8	47.80	0.3	1.50
Hand	9757	2	1029			437		217		49.6		0.6	
	9757	1	266	1926	624.06	110	879	68	429	61.8	0.49	0.4	0.01
	9757	3	768			360		186		51.6		0.3	
	9756	6	362			108		49		45.3		0	
	9756	5	232			88		46		52.2		0	
	County Total		4272	3741	-12.43	1625	1543	1156	688	71.1	44.60	0.5	0.70
	State Total		696004	754844		260059	290336	156531	122315	60.2	42.10	22.6	11.30

¹Total population data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total population for a specific tract and block was obtained from the table "P1. Total Population."

²Total household data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of households for a specific tract and block was obtained from the table "P14. Household Type by Household Size."

³The U.S. Federal poverty level for 2000 (\$17,603) was obtained from "<http://www.census.gov/hhes/poverty/threshld/thresh00.html>." The size of the family unit was assumed to be four persons. The low-income level was assumed to be 1.5 times the poverty level (\$26,405). Census table data is broken down into ranges for household income. Data was taken from the \$25,000-\$29,000 household income range, since the assumed low-income level (\$26,405) falls within this range. All households within this range were included in the count. The household income data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of low-income households for a specific tract and block was obtained from the table "P52. Household Income in 1999."

⁴Minority data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of minorities for a specific tract and block was obtained from the table "P6. Race" by summing the non-white residents. The minority percentage was calculated by dividing the total number of minorities by the total population.

*SEA identified two additional census block groups in Custer County and 29 in Pennington County that were affected by proposed Alternative D. Further analysis of these census blocks was not conducted since Alternative D was eliminated from consideration.

Appendix A
Table 2
Minnesota Census Blocks - 1990 and 2000 Data Comparison

Minnesota													
County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Blue Earth	9701	2	1194	1353	11.75	429	490	141	142	32.8	0.29	1.90	0.02
	9701	3	1702	1819	6.43	575	654	188	174	32.6	0.27	0.70	0.04
	9702	3	1137			402		118		29.3		2.10	
	9702	4	317			104		15		14.4		0.00	
	9702	5	1029			346		116		33.5		0.70	
	9703	1	1296	1284	-0.93	424	489	208	213	49	0.44	5.40	0.03
	9703	2	1009	1018	0.88	434	425	147	120	33.8	0.28	0.00	0.06
	9703	3	1115	908	-22.80	426	367	168	144	39.4	0.39	0.40	0.03
	9706	1	859	740	-16.08	390	356	224	175	57.4	0.49	4.50	0.02
	9706	2	728	710	-2.54	411	375	318	224	77.3	0.60	1.50	0.07
	9706	3	1013	848	-19.46	320	314	141	143	44	0.46	13.40	0.04
	9707	4	724			405		276		68		0.80	
	9707	6	1264			463		231		49.8		6.70	
	9708	1	1087	787	-38.12	406	328	163	161	40.1	0.49	3.80	0.00
	9708	2	614	811	24.29	256	333	92	114	35.9	0.34	0.00	0.01
	9708	3	1010	1200	15.83	378	444	83	72	21.9	0.16	0.50	0.01
	9708	4	2121	1685	-25.88	759	688	92	118	12.1	0.17	2.40	0.00
	9709	3	1373	1345	-2.08	466	468	157	138	33.6	0.29	2.30	0.06
	9709	4	918			321		94		29.2		1.00	
	9709	5	831			301		103		34.2		0.40	
9712	6	1737			559		275		49.1		6.30		
9713	6	1141			400		127		31.7		1.40		
9713	7	1140			405		93		22.9		0.00		
9713	8	968			322		69		21.4		0.70		
9806	4				304		80		26.3		5.70		
	County Total		54044	55941	3.39	19277	21062	10450	7713	54.2	36.60	2.60	5.00
Brown	9601	1	877	2130	58.83	302	662	132	328	43.7	0.50	0.60	0.04
	9601	2	544	1054	48.39	353	411	185	159	52.4	0.39	0.00	0.07
	9601	3	935	980	4.59	403	445	154	220	38.2	0.49	2.50	0.01
	9601	4	935			353		132		37.3		1.20	
	9602	1	849	964	11.93	294	408	54	113	18.3	0.28	1.10	0.00
	9602	2	959	858	-11.77	389	363	96	90	24.6	0.25	1.00	0.03
	9602	4	911	860	-5.93	347	303	133	95	38.3	0.31	0.00	0.02
	9604	2	1035	946	-9.41	368	339	160	114	43.4	0.34	0.20	0.01
	9604	3	1073	1075	0.19	458	479	192	179	41.9	0.37	0.30	0.05
	9604	4	943	954	1.15	316	324	99	52	31.3	0.16	0.00	0.01
	9604	5	1195	1374	13.03	398	560	149	213	37.4	0.38	0.70	0.00
	9605	1	1557	1598	2.57	562	661	205	250	36.4	0.38	1.30	0.06
	9605	2	863	904	4.54	450	366	257	171	57	0.47	0.90	0.02
	9605	3	822	736	-11.68	249	251	89	91	35.7	0.36	1.70	0.04
	9605	4	780	702	-11.11	339	290	192	123	56.6	0.42	10.90	0.09
	9606	1	830	1054	21.25	275	388	107	152	38.9	0.39	3.80	0.00
	9606	3	1030	973	-5.86	403	384	209	165	51.8	0.43	0.20	0.02
	9606	4	824			381		169		44.3		0.90	
	9607	3	1135	1141	0.53	378	405	87	120	23	0.30	0.00	0.01
	9603	1	1076	1055	-1.99	512	439	246	139	48	0.32	0.00	0.05
9603	3	825	808	-2.10	352	349	122	149	34.6	0.43	3.00	0.00	
9603	4	739	664	-11.30	279	321	123	156	44	0.49	6.30	0.01	
	County Total		26984	26911	-0.27	10321	10958	5692	3814	55.1	0.35	0.70	0.02

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County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Olmsted	0001	1	783	1043	24.93	566	549	346	352	61.1	0.64	0.00	0.07
	0001	2	427	575	25.74	262	460	219	377	83.5	0.82	13.40	0.15
	0002	1	731	1014	27.91	312	432	113	209	36.2	0.48	2.70	0.13
	0002	2	1731	1700	-1.82	734	467	282	156	38.4	0.33	13.40	0.15
	0002	3	768	796	3.52	332	320	105	70	31.6	0.22	0.00	0.12
	0002	4	1107	747	-48.19	435	355	187	104	42.9	0.29	26.70	0.09
	0002	5	1001	1678	40.35	301	587	112	399	37.2	0.68	3.10	0.55
	0003	1	735	705	-4.26	214	272	88	127	41.1	0.47	0.20	0.20
	0005	1	1138	438	-159.82	467	222	220	83	22.1	0.37	22.20	0.30
	0005	2	1177	851	-38.31	623	471	300	204	48.1	0.43	3.80	0.24
	0005	3	1167	997	-17.05	622	401	325	182	52.2	0.45	10.20	0.22
	0006	1	928	1109	16.32	366	453	149	256	40.7	0.57	2.70	0.16
	0006	2	608	783	22.35	247	446	89	288	36	0.65	27.70	0.15
	0006	3	1135	1049	-8.20	444	499	128	292	28.8	0.59	4.40	0.18
	0006	4	2137	991	-115.64	850	271	388	89	45.6	0.33	5.10	0.16
	0007	1	2472	822	-200.73	884	342	140	126	15.8	0.37	2.40	0.06
	0007	2	778	934	16.70	305	403	130	122	42.6	0.30	4.00	0.01
	0007	3	743	609	-22.00	372	258	101	93	27.1	0.36	3.20	0.06
	0008	9	780			NA		NA	NA	NA		44.90	
	0009	1	314	485	35.26	133	175	10	44	7.5	0.25	0.00	0.00
	0009	8	1195			378		51		13.4		1.30	
	0009	9	918			306		56		18.3		1.10	
	0012	4	1605			506		16		3.1		0.30	
	0013	1	3783	1469	-157.52	1181	543	102	47	8.6	0.09	3.80	0.15
	0014	2	1624	1219	-33.22	655	494	122	76	18.6	0.15	1.40	0.03
	0014	3	60			26		0		0		0.00	
	0018	1	1199	1983	39.54	402	627	92	114	22.8	0.18	0.70	0.02
	0018	2	1384	1610	14.04	446	571	81	113	18.1	0.20	2.10	0.03
	0019	6	612	584	-4.79	193	208	34	35	17.6	0.17	0.00	0.03
	0020	1	1152	1176	2.04	392	436	91	103	23.2	0.24	0.10	0.01
	0020	3	1084	1073	-1.03	317	385	113	127	30.3	0.33	0.20	0.04
	0020	4	1539	1693	9.10	540	611	162	155	30	0.25	0.70	0.02
0021	1	960	1046	8.22	373	382	117	166	31.3	0.43	2.50	0.03	
0022	1	871	847	-2.83	295	325	75	55	25.4	0.17	0.70	0.02	
0022	2	1007	1048	3.91	352	365	94	77	26.7	0.21	0.20	0.01	
0022	3	737	802	8.10	283	313	72	73	25.4	0.23	0.50	0.02	
0022	4	712	834	14.63	213	298	45	36	21.1	0.12	0.90	0.02	
	County Total		106470	124277	14.33	40058	47807	14606	12255	36.5	0.26	4.30	0.10
Winona	9701	4	1081	2708	60.08	379	928	104	282	27.4	0.30	0.40	0.03
	9701	5	562			181		57		31.4		0.00	
	9701	6	2280			688		172		25		2.80	
	9702	1	255	1780	85.67	75	736	15	233	20	0.32	5.60	0.05
	9702	2	1412	1156	-22.15	476	520	89	157	18.6	0.30	1.30	0.00
	9702	3	1199			493		135		27.3		0.00	
	9703	1	1400	1617	13.42	392	584	131	291	33.4	0.50	6.90	0.04
	9703	2	846	761	-11.17	393	398	218	191	55.4	0.48	4.00	0.03
	9703	4	752	615	-22.28	342	179	270	98	78.9	0.55	1.80	0.53
	9704	2	689	859	19.79	251	280	102	114	40.6	0.41	2.60	0.07
	9704	3	773	840	7.98	297	322	122	187	41	0.58	2.20	0.01
	9704	4	1136	928	-22.41	536	405	233	203	43.4	0.50	0.50	0.05
	9704	5	810	832	2.64	333	391	95	190	28.5	0.49	0.00	0.01

**Appendix A
Table 2
Minnesota Census Blocks - 1990 and 2000 Data Comparison**

County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
	9704	6	673	559	-20.39	289	289	96	126	33.2	0.44	4.40	0.03
	9705	1	629	610	-3.11	457	443	418	382	91.4	0.86	5.00	0.07
	9705	2	861	719	-19.75	311	308	153	148	49.1	0.48	3.80	0.15
	9705	3	750	762	1.57	234	234	136	108	58.1	0.46	6.60	0.02
	9709	1	1463	1625	9.97	463	540	173	175	37.3	0.32	1.20	0.01
	9709	2	1345	1400	3.93	447	523	178	169	39.8	0.32	0.30	0.01
	9710	2	1033	1852	44.22	294	603	113	166	38.4	0.28	0.50	0.06
	9710	3	1063			414		138		33.3		4.60	
	9710	4	911			325		108		33.2		0.10	
	9710	5	717			276		104		37.6		1.30	
	County Total		47828	49985	4.32	16930	18744	9005	7151	53.2	38.20	2.00	4.20
Steele	9601	3	1015	972	-4.42	347	360	83	75	23.9	0.21	0.20	0.02
	9602	3	1779	1595	-11.54	594	586	172	149	58.9	0.25	8.90	0.04
	9602	4	960	1270	24.41	331	480	84	108	25.3	0.23	8.10	0.02
	9603	6	1002	1252	19.97	399	492	118	174	29.5	0.35	1.60	0.06
	9604	1	602	1082	44.36	317	492	169	248	53.3	0.50	4.50	0.13
	9604	2	1171	1301	9.99	411	472	143	197	34.7	0.42	8.10	0.19
	9604	3	1408	1856	24.14	492	735	127	225	25.8	0.31	5.00	0.14
	9604	4	555			328		143		43.5		18.10	
	9605	5	1300	1216	-6.91	428	454	106	91	24.7	0.20	0.30	0.01
	9607	5	1048	947	-10.67	430	401	108	54	25.1	0.13	3.10	0.05
	County Total		30729	33680	8.76	11342	12846	4964	3659	43.8	0.29	1.50	0.05
Waseca	9901	1	1186	2040	41.86	458	785	207	247	45.1	0.31	1.80	0.02
	9901	2	806	1240	35.00	298	455	109	130	36.5	0.29	0.90	0.01
	9901	3	1117			358		118		32.9		1.40	
	9903	1	663	866	23.44	245	247	78	89	31.8	0.36	1.00	0.10
	9903	3	208	925	77.51	49	329	23	67	46.9	0.20	3.00	0.00
	9904	2	671	1764	61.96	331	710	141	237	42.5	0.33	3.20	0.06
	9904	4	707	1502	52.93	285	630	79	220	27.7	0.35	0.30	0.04
	9904	5	962			357		123		34.4		4.20	
	9905	1	1418	2545	44.28	457	627	157	318	34.3	0.51	3.90	0.20
	9905	2	1490	1967	24.25	555	785	147	219	26.4	0.28	1.10	0.05
	9905	3	492			236		169		71.6		0.00	
	9905	4	809			260		54		20.7		0.00	
	County Total		18079	19526	7.41	6649	7059	3394	2301	51	0.33	1.10	0.05
Dodge	9501	2	948	1009	6.05	308	357	72	70	23.3	0.20	0.60	0.02
	9501	3	1157	1757	34.15	404	579	119	95	29.4	0.16	1.10	0.02
	9502	4	959			282		55		19.5		0.60	
	9502	5	1082			374		124		33.1		1.40	
	9502	6	1348			505		202		40		6.40	
	9503	6	718			238		69		28.9		1.50	
	9503	7	774			287		104		36.2		1.10	
	9504	1	1550	874		518	287	135	72	26	0.25	0.50	0.01
	9505	4	1412			511		157		30.7		1.50	
	9505	5	1205			441		106		24		0.40	
	9505	6	687			275		148		53.8		4.00	
	County Total		15731	17731	11.28	5538	6420	2597	1762	46.9	0.27	1.30	0.03
Lyon	9606	1	796	686	-16.03	291	295	155	113	53.2	0.38	0.40	0.00
	9606	2	912	835	-9.22	329	305	131	102	39.8	0.33	0.00	0.01
	9606	3	792	707	-12.02	258	260	100	101	38.7	0.39	0.80	0.02
	9607	1	511	641	20.28	224	252	128	125	57.1	0.50	1.20	0.12
	9607	3	860	973	11.61	331	343	158	153	47.7	0.45	3.40	0.21
	9607	4	692	639	-8.29	282	317	120	151	42.5	0.48	2.80	0.03
	County Total		24789	25425	2.50	9073	9715	5016	3670	55.3	0.38	1.50	0.06

Appendix A
Table 2
Minnesota Census Blocks - 1990 and 2000 Data Comparison

County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Lincoln	9502	1	951	954	0.31	393	399	188	187	47.8	0.47	0.20	0.02
	9502	2	547	1045	47.66	219	415	106	177	48.4	0.43	0.00	0.00
	9502	3	595	727	18.16	205	349	92	175	44.8	0.50	2.20	0.01
	9502	4	738			326		195		59.8		0.30	
	9502	5	554			187		74		39.5		0.00	
County Total			6890	6429	-7.17	2704	2653	1848	1234	68.3	0.47	0.50	0.01
Redwood	9505	3	616	551	-11.80	202	194	62	58	30.6	0.30	1.60	0.01
	9505	4	668	629	-6.20	327	308	176	178	53.8	0.58	0.70	0.02
	9506	1	934	818	-14.18	388	368	221	190	56.9	0.52	0.00	0.00
	9506	2	609	517	-17.79	232	206	99	106	42.6	0.51	2.90	0.02
	9506	3	740	669	-10.61	272	270	131	87	48.1	0.32	0.90	0.00
County Total			17254	16815	-2.61	6554	6674	3999	2614	61	39.20	2.20	5.00
State Total			4375099	4919479	11.07	1648825	1896209	156531	561517	9.5	29.6	5.5	10.5

¹Total population data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&_lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total population for a specific tract and block was obtained from the table "P1. Total Population."

²Total household data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&_lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of households for a specific tract and block was obtained from the table "P14. Household Type by Household Size."

³The U.S. Federal poverty level for 2000 (\$17,603) was obtained from "<http://www.census.gov/hhes/poverty/threshld/thresh00.html>." The size of the family unit was assumed to be four persons. The low-income level was assumed to be 1.5 times the poverty level (\$26,405). Census table data is broken down into ranges for household income. Data was taken from the \$25,000-\$29,000 household income range, since the assumed low-income level (\$26,405) falls within this range. All households within this range were included in the count. The household income data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&_lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of low-income households for a specific tract and block was obtained from the table "P52. Household Income in 1999."

⁴Minority data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&_lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of minorities for a specific tract and block was obtained from the table "P6. Race" by summing the non-white residents. The minority percentage was calculated by dividing the total number of minorities by the total population.

Appendix A
Table 3
Wyoming Census Blocks - 1990 and 2000 Data Comparison

Wyoming

County	Tract	Block	Total Population			Total Households		Low Income Households		Low Income Household Percentage		Minority Percentage	
			1990	2000 ¹	% Change	1990	2000 ²	1990	2000 ³	1990	2000	1990	2000 ⁴
Converse	9561	1	44	55**		20	24**	20		100		8.3	5.5**
County Total			11128	12052	8.30	4046	4694	2032	1772	50.2	37.8	3.7	5.3
Weston*	9511	4	387			151		42		27.8		2.8	
	9511	5	18			9		0		0		0	
	9511	6	72	994**		20	371**	8		40		0	3.4**
	9511	7	40			19		0		0		2.5	
	9511	8	64			20		0		0		0	
County Total			6518	6644	1.93	2419	2624	1296	1220	53.6	46.5	2	4.1
Niobrara	9571	1	65	137**		51	57**	25		49		0.00	2.2**
	9572	1	54	848	1470.37	14	354	0	183	0	0.52	0.00	0.01
County Total			2499	2407	-3.68	1032	1011	638	517	61.9	0.51	2.00	0.02
Campbell*	9528	1	685			219		32		14.6		1.6	
	9528	2	19	746**		3	262**	0		0		0	2.0**
	9528	3	70			23		0		0		0	
	9529.98	1	131			42		2		4.7		3.1	
	9529.98	5	20	377**		6	126**	0		0		0	2.9**
	9529.98	6	43			10		0		0		0	
County Total			29370	33698	14.74	9968	12207	3519	3188	35.3	26.1	2.4	3.9
State Total			453588	493782	8.86	169309	193959	76164	75264	45	38.8	5.8	8.8

¹Total population data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total population for a specific tract and block was obtained from the table "P1. Total Population."

²Total household data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of households for a specific tract and block was obtained from the table "P14. Household Type by Household Size."

³The U.S. Federal poverty level for 2000 (\$17,603) was obtained from "<http://www.census.gov/hhes/poverty/threshld/thresh00.html>." The size of the family unit was assumed to be four persons. The low-income level was assumed to be 1.5 times the poverty level (\$26,405). Census table data is broken down into ranges for household income. Data was taken from the \$25,000-\$29,000 household income range, since the assumed low-income level (\$26,405) falls within this range. All households within this range were included in the count. The household income data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of low-income households for a specific tract and block was obtained from the table "P52. Household Income in 1999."

⁴Minority data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&_ts=180973719312) for the appropriate county, tract, and block. The total number of minorities for a specific tract and block was obtained from the table "P6. Race" by summing the non-white residents. The minority percentage was calculated by dividing the total number of minorities by the total population.

*SEA identified 10 additional census block groups in Weston County, 2 in Campbell County, and 3 in Crook County that were affected by proposed Alternative D. Further analysis on these census blocks was not conducted since Alternative D was eliminated from consideration.

** Data for Total Population, Total Households, and Minority Percentage for 2000 was obtained by comparing census tract and block boundaries from 1990 to 2000. Many census tracts and blocks from 1990 have been given different boundaries in 2000, with specific tracts and blocks in 1990 having been divided into numerous smaller blocks in 2000. Data was collected by mapping targeted tracts and blocks in 1990, and then manually counting population and household numbers from corresponding areas in 2000. These numbers are estimated numbers.

**APPENDIX B
SAFETY DATA TABLES**

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Appendix B
Pre-Construction Accident Prediction Summary
Minnesota - 20 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	32	3	2	30	1	2	1	0.009	0.007	0.005
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	1050	3	2	35	1	1	2	0.038	0.088	0.046
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	220	3	2	35	1	2	2	0.018	0.014	0.010
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	64	3	2	35	1	2	2	0.012	0.009	0.006
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	2958	3	2	35	3	1	4	0.059	0.038	0.019
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	3800	3	2	35	1	1	2	0.064	0.041	0.022
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	64	3	2	30	1	2	2	0.011	0.009	0.006
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	25	3	2	30	1	2	2	0.008	0.006	0.004
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	70	3	2	30	1	2	2	0.012	0.009	0.006
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	566	3	2	35	1	1	2	0.048	0.032	0.023
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	111	3	2	35	1	1	2	0.026	0.019	0.014
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	1543	3	2	35	1	1	2	0.027	0.020	0.010
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	4115	3	2	35	1	1	2	0.067	0.042	0.022
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	9645	3	2	35	1	1	2	0.094	0.055	0.029
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	1228	3	2	20	1	1	2	0.041	0.028	0.015
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	13889	3	2	12	1	1	2	0.110	0.061	0.032
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	1119	3	2	20	1	1	2	0.055	0.036	0.026
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	11381	3	2	5	2	1	4	0.076	0.047	0.023
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	24000	3	2	5	1	1	4	0.081	0.128	0.063
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	6078	3	2	5	2	1	4	0.063	0.040	0.020
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	9259	3	2	20	2	1	4	0.071	0.044	0.022
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	4887	3	2	20	1	1	4	0.103	0.058	0.031
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	1055	3	2	35	1	1	2	0.038	0.026	0.014
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	15946	3	2	20	2	1	4	0.084	0.050	0.025
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	8873	3	2	35	1	1	2	0.091	0.053	0.028
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	2894	3	2	35	1	1	2	0.058	0.037	0.020
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	965	3	2	35	1	1	2	0.037	0.026	0.014
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	129	3	2	35	1	2	2	0.013	0.010	0.005
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	3940	3	2	35	1	1	4	0.094	0.055	0.029
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	5658	3	2	35	1	1	4	0.109	0.061	0.032
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	322	3	2	35	1	1	2	0.023	0.017	0.009
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	129	3	2	35	1	2	2	0.015	0.011	0.008
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	900	3	2	35	1	1	2	0.056	0.106	0.076
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	12000	3	2	35	1	1	2	0.050	0.033	0.016
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	748	3	2	35	1	1	2	0.053	0.035	0.025
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	441	3	2	35	1	1	2	0.043	0.030	0.021
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	1054	3	2	35	2	1	2	0.060	0.039	0.028
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	11400	3	2	30	1	1	2	0.101	0.058	0.030
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	74	3	2	35	1	2	2	0.012	0.009	0.007
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	662	3	2	35	1	1	2	0.050	0.034	0.024
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	55	3	2	35	1	2	2	0.011	0.008	0.006
193359K	006840	MN	DODGE	AIRPORT DRIVE N.	DODGE CENTER	PASSIVE	166	3	2	35	2	1	2	0.030	0.022	0.015
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	2	2	0.022	0.122	0.087

Appendix B
Pre-Construction Accident Prediction Summary
Minnesota - 20 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.027	0.020
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	1	2	0.039	0.027	0.020
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.089	0.064
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	4046	3	2	35	1	1	2	0.066	0.115	0.061
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	613	3	2	35	1	1	2	0.049	0.033	0.023
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	12	3	2	35	1	2	2	0.006	0.005	0.004
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	380	3	2	35	1	1	2	0.041	0.028	0.020
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	60	3	2	35	1	2	2	0.011	0.009	0.006
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	699	3	2	35	1	1	2	0.051	0.034	0.024
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	466	3	2	35	3	2	1	0.024	0.018	0.013
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	674	3	2	35	1	1	2	0.051	0.101	0.072
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Post-Construction Accident Prediction Summary
Minnesota - 20 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER Y B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	32	11	7	49	1	2	2	0.026	0.019	0.013
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	32	11	7	49	1	2	2	0.026	0.019	0.013
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	32	11	7	49	1	2	1	0.026	0.019	0.013
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	1050	11	7	49	1	1	2	0.086	0.132	0.070
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	PASSIVE	220	11	7	49	1	2	2	0.052	0.035	0.025
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	64	11	7	49	1	2	2	0.033	0.023	0.017
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	2958	11	7	49	3	1	4	0.137	0.071	0.035
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	3800	11	7	49	1	1	2	0.146	0.074	0.039
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	64	11	7	49	2	2	2	0.033	0.023	0.017
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	25	11	7	49	2	2	2	0.023	0.017	0.012
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	70	11	7	49	1	2	2	0.034	0.024	0.017
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	566	11	7	49	1	1	2	0.134	0.070	0.050
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	111	11	7	49	1	1	2	0.073	0.045	0.033
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	1543	11	7	49	1	1	2	0.063	0.040	0.020
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4115	11	7	49	1	1	2	0.151	0.075	0.040
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	9645	11	7	49	1	1	2	0.214	0.092	0.049
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1228	11	7	49	1	1	2	0.092	0.054	0.028
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	13889	11	7	49	1	1	2	0.249	0.100	0.053
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	1119	11	7	49	1	1	2	0.173	0.082	0.059
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	11381	11	7	49	2	1	4	0.174	0.082	0.040
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	24000	11	7	49	1	1	4	0.187	0.194	0.095
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	6078	11	7	49	2	1	4	0.145	0.073	0.036
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	9259	11	7	49	2	1	4	0.164	0.079	0.039
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4887	11	7	49	1	1	4	0.233	0.097	0.051
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1055	11	7	49	1	1	2	0.086	0.051	0.027
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	15946	11	7	49	2	1	4	0.193	0.087	0.043
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	8873	11	7	49	1	1	2	0.207	0.091	0.048
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	2894	11	7	49	1	1	2	0.131	0.069	0.036
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	965	11	7	49	1	1	2	0.083	0.050	0.026
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	129	11	7	49	1	2	2	0.030	0.022	0.011
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	3940	11	7	49	1	1	4	0.214	0.092	0.049
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	5658	11	7	49	1	1	4	0.248	0.100	0.053
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	322	11	7	49	1	1	2	0.053	0.035	0.019
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	129	11	7	49	1	2	2	0.043	0.029	0.021
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	PASSIVE	900	11	7	49	2	1	2	0.159	0.180	0.129
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	67	11	7	49	1	2	2	0.034	0.024	0.017
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	12000	11	7	49	1	1	2	0.115	0.063	0.031
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	748	11	7	49	1	1	2	0.075	0.046	0.024
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	PASSIVE	441	11	7	49	1	1	2	0.122	0.066	0.047
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	FLASHING LIGHTS	1054	11	7	49	2	1	2	0.105	0.059	0.031
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	11400	11	7	49	1	1	2	0.113	0.062	0.031
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	74	11	7	49	1	2	2	0.035	0.024	0.018
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	662	11	7	49	2	1	2	0.086	0.051	0.027
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	55	11	7	49	1	2	2	0.031	0.022	0.016
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	PASSIVE	166	11	7	49	2	1	2	0.085	0.051	0.036
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	1	2	2	0.069	0.192	0.138

Appendix B
Post-Construction Accident Prediction Summary
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FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	2	1	2	0.125	0.067	0.048
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	1	1	2	0.125	0.067	0.048
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	2	1	2	0.125	0.160	0.115
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	1	1	2	0.125	0.067	0.048
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	PASSIVE	466	11	7	49	1	1	2	0.125	0.067	0.048
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	GATES	4046	11	7	49	1	1	2	0.083	0.130	0.064
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	613	11	7	49	1	1	2	0.069	0.043	0.023
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	67	11	7	49	1	2	2	0.034	0.024	0.017
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	12	11	7	49	1	2	2	0.018	0.013	0.010
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	PASSIVE	380	11	7	49	1	1	2	0.116	0.063	0.045
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	60	11	7	49	1	2	2	0.032	0.023	0.016
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	67	11	7	49	1	2	2	0.034	0.024	0.017
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	67	11	7	49	1	2	2	0.034	0.024	0.017
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	699	11	7	49	1	1	2	0.073	0.045	0.024
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	PASSIVE	466	11	7	49	3	2	1	0.069	0.043	0.031
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	674	11	7	49	1	1	2	0.072	0.120	0.064
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	67	11	7	49	1	2	2	0.034	0.024	0.017

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
Minnesota - 20 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	0.005	0.013	B	0.00827	121	NO
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	0.005	0.013	B	0.00827	121	NO
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	0.005	0.013	B	0.00845	118	NO
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	0.046	0.070	B	0.02370	42	NO
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	PASSIVE	0.010	0.025	B	0.01485	67	NO
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	0.006	0.017	B	0.01030	97	NO
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	0.019	0.035	B	0.01585	63	NO
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.039	B	0.017	58	NO
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	0.006	0.017	B	0.011	95	NO
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.004	0.012	B	0.008	128	NO
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.006	0.017	B	0.011	92	NO
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	0.023	0.050	B	0.027	37	NO
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	0.014	0.033	B	0.019	53	NO
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	0.010	0.020	B	0.010	100	NO
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.040	B	0.018	57	NO
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.049	B	0.020	50	NO
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.015	0.028	B	0.014	73	NO
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.053	B	0.021	49	NO
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	0.026	0.059	B	0.033	30	NO
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	0.023	0.040	B	0.018	57	NO
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	0.063	0.095	B	0.032	31	NO
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	0.020	0.036	B	0.016	61	NO
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	0.022	0.039	B	0.017	58	NO
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.031	0.051	B	0.020	49	NO
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.027	B	0.013	76	NO
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	0.025	0.043	B	0.018	55	NO
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.028	0.048	B	0.020	51	NO
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.036	B	0.017	61	NO
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.026	B	0.013	78	NO
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	0.005	0.011	B	0.006	176	NO
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.049	B	0.020	51	NO
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.053	B	0.020	49	NO
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.009	0.019	B	0.009	106	NO
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	0.008	0.021	B	0.013	79	NO
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	PASSIVE	0.076	0.129	A	0.05285	19	YES
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	0.007	0.017	B	0.01045	96	NO
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	0.016	0.031	B	0.01456	69	NO
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	0.025	0.024	B	-0.00053	-1,883	NO
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	PASSIVE	0.021	0.047	B	0.02589	39	NO
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	PASSIVE	0.028	0.031	B	0.00354	283	NO
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	0.030	0.031	B	0.00013	7,843	NO
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	0.007	0.018	B	0.01077	93	NO
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	0.024	0.027	B	0.00315	318	NO
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	0.006	0.016	B	0.00982	102	NO
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	PASSIVE	0.015	0.036	B	0.02098	48	NO
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.087	0.138	A	0.05058	20	YES
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.048	B	0.02820	35	NO
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.048	B	0.02820	35	NO
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	PASSIVE	0.064	0.115	B	0.05076	20	YES
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.048	B	0.02617	38	NO
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.048	B	0.02617	38	NO
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	FLASHING LIGHTS	0.061	0.064	B	0.00292	343	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
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FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	0.023	0.023	B	-0.00055	-1,813	NO
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	0.007	0.017	B	0.01045	96	NO
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	0.004	0.010	B	0.00598	167	NO
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	PASSIVE	0.020	0.045	B	0.02515	40	NO
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	0.006	0.016	B	0.01009	99	NO
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	0.007	0.017	B	0.01045	96	NO
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	0.007	0.017	B	0.01045	96	NO
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.024	0.024	B	-0.00054	-1,860	NO
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	PASSIVE	0.013	0.031	B	0.01818	55	NO
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.072	0.064	B	-0.00844	-118	NO
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	0.007	0.017	B	0.01045	96	NO

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre-Construction Accident Prediction Summary
Minnesota - 50 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	32	3	2	30	1	2	1	0.009	0.007	0.005
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	1050	3	2	35	1	1	2	0.038	0.088	0.046
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	220	3	2	35	1	2	2	0.018	0.014	0.010
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	64	3	2	35	1	2	2	0.012	0.009	0.006
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	2958	3	2	35	3	1	4	0.059	0.038	0.019
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	3800	3	2	35	1	1	2	0.064	0.041	0.022
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	64	3	2	30	1	2	2	0.011	0.009	0.006
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	25	3	2	30	1	2	2	0.008	0.006	0.004
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	70	3	2	30	1	2	2	0.012	0.009	0.006
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	566	3	2	35	1	1	2	0.048	0.032	0.023
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	111	3	2	35	1	1	2	0.026	0.019	0.014
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	1543	3	2	35	1	1	2	0.027	0.020	0.010
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	4115	3	2	35	1	1	2	0.067	0.042	0.022
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	9645	3	2	35	1	1	2	0.094	0.055	0.029
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	1228	3	2	20	1	1	2	0.041	0.028	0.015
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	13889	3	2	12	1	1	2	0.110	0.061	0.032
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	1119	3	2	20	1	1	2	0.055	0.036	0.026
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	11381	3	2	5	2	1	4	0.076	0.047	0.023
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	24000	3	2	5	1	1	4	0.081	0.128	0.063
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	6078	3	2	5	2	1	4	0.063	0.040	0.020
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	9259	3	2	20	2	1	4	0.071	0.044	0.022
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	4887	3	2	20	1	1	4	0.103	0.058	0.031
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	1055	3	2	35	1	1	2	0.038	0.026	0.014
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	15946	3	2	20	2	1	4	0.084	0.050	0.025
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	8873	3	2	35	1	1	2	0.091	0.053	0.028
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	2894	3	2	35	1	1	2	0.058	0.037	0.020
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	965	3	2	35	1	1	2	0.037	0.026	0.014
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	129	3	2	35	1	2	2	0.013	0.010	0.005
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	3940	3	2	35	1	1	4	0.094	0.055	0.029
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	5658	3	2	35	1	1	4	0.109	0.061	0.032
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	322	3	2	35	1	1	2	0.023	0.017	0.009
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	129	3	2	35	1	2	2	0.015	0.011	0.008
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	900	3	2	35	1	1	2	0.056	0.106	0.076
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	12000	3	2	35	1	1	2	0.050	0.033	0.016
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	748	3	2	35	1	1	2	0.053	0.035	0.025
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	441	3	2	35	1	1	2	0.043	0.030	0.021
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	1054	3	2	35	2	1	2	0.060	0.039	0.028
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	11400	3	2	30	1	1	2	0.101	0.058	0.030
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	74	3	2	35	1	2	2	0.012	0.009	0.007
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	662	3	2	35	1	1	2	0.050	0.034	0.024
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	55	3	2	35	1	2	2	0.011	0.008	0.006
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	166	3	2	35	2	1	2	0.030	0.022	0.015
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	2	2	0.022	0.122	0.087
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.027	0.020
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	1	2	0.039	0.027	0.020
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.089	0.064
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	4046	3	2	35	1	1	2	0.066	0.115	0.061

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193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	613	3	2	35	1	1	2	0.049	0.033	0.023
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	12	3	2	35	1	2	2	0.006	0.005	0.004
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	380	3	2	35	1	1	2	0.041	0.028	0.020
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	60	3	2	35	1	2	2	0.011	0.009	0.006
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	699	3	2	35	1	1	2	0.051	0.034	0.024
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	466	3	2	35	3	2	1	0.024	0.018	0.013
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	674	3	2	35	1	1	2	0.051	0.101	0.072
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Post-Construction Accident Prediction Summary
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FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	32	21	13	49	1	2	2	0.041	0.028	0.020
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	32	21	13	49	1	2	2	0.041	0.028	0.020
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	32	21	13	49	1	2	1	0.041	0.028	0.020
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	1050	21	13	49	1	1	2	0.130	0.163	0.086
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	PASSIVE	220	21	13	49	1	2	2	0.083	0.050	0.036
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	64	21	13	49	1	2	2	0.053	0.035	0.025
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	2958	21	13	49	3	1	4	0.207	0.091	0.045
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	3800	21	13	49	1	1	2	0.220	0.094	0.050
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	64	21	13	49	2	2	2	0.053	0.035	0.025
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	25	21	13	49	2	2	2	0.037	0.026	0.018
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	70	21	13	49	1	2	2	0.054	0.036	0.026
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	566	21	13	49	1	1	2	0.214	0.092	0.066
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	111	21	13	49	1	1	2	0.117	0.064	0.046
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	1543	21	13	49	1	1	2	0.095	0.055	0.027
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4115	21	13	49	1	1	2	0.227	0.095	0.050
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	9645	21	13	49	1	1	2	0.322	0.113	0.060
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1228	21	13	49	1	1	2	0.138	0.071	0.038
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	13889	21	13	49	1	1	2	0.374	0.120	0.063
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	1119	21	13	49	1	1	2	0.275	0.105	0.075
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	11381	21	13	49	2	1	4	0.264	0.103	0.051
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	24000	21	13	49	1	1	4	0.283	0.231	0.114
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	6078	21	13	49	2	1	4	0.220	0.094	0.046
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	9259	21	13	49	2	1	4	0.249	0.100	0.049
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4887	21	13	49	1	1	4	0.351	0.117	0.062
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1055	21	13	49	1	1	2	0.130	0.068	0.036
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	15946	21	13	49	2	1	4	0.292	0.108	0.053
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	8873	21	13	49	1	1	2	0.311	0.111	0.059
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	2894	21	13	49	1	1	2	0.197	0.088	0.047
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	965	21	13	49	1	1	2	0.125	0.067	0.035
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	129	21	13	49	1	2	2	0.046	0.031	0.015
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	3940	21	13	49	1	1	4	0.321	0.113	0.060
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	5658	21	13	49	1	1	4	0.373	0.120	0.063
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	322	21	13	49	1	1	2	0.080	0.048	0.026
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	129	21	13	49	1	2	2	0.068	0.043	0.031
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	PASSIVE	900	21	13	49	2	1	2	0.254	0.221	0.158
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	67	21	13	49	1	2	2	0.053	0.035	0.025
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	12000	21	13	49	1	1	2	0.174	0.082	0.040
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	748	21	13	49	1	1	2	0.113	0.062	0.033
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	FLASHING LIGHTS	441	21	13	49	1	1	2	0.091	0.053	0.028
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	FLASHING LIGHTS	1054	21	13	49	2	1	2	0.157	0.077	0.041
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	11400	21	13	49	1	1	2	0.171	0.081	0.040
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	74	21	13	49	1	2	2	0.055	0.036	0.026
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	662	21	13	49	2	1	2	0.130	0.068	0.036
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	55	21	13	49	1	2	2	0.050	0.033	0.024
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	PASSIVE	166	21	13	49	2	1	2	0.136	0.070	0.050
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	1	2	2	0.093	0.221	0.117
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	2	1	2	0.112	0.062	0.033
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	1	1	2	0.093	0.054	0.029
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	2	1	2	0.112	0.152	0.080

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193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	1	1	2	0.093	0.054	0.029
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	21	13	49	1	1	2	0.093	0.054	0.029
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	GATES	4046	21	13	49	1	1	2	0.126	0.161	0.079
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	613	21	13	49	1	1	2	0.104	0.059	0.031
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	67	21	13	49	1	2	2	0.053	0.035	0.025
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	12	21	13	49	1	2	2	0.028	0.020	0.015
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	FLASHING LIGHTS	380	21	13	49	1	1	2	0.085	0.051	0.027
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	60	21	13	49	1	2	2	0.051	0.034	0.024
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	67	21	13	49	1	2	2	0.053	0.035	0.025
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	67	21	13	49	1	2	2	0.053	0.035	0.025
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	699	21	13	49	1	1	2	0.110	0.061	0.032
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	FLASHING LIGHTS	466	21	13	49	3	2	1	0.114	0.062	0.033
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	674	21	13	49	1	1	2	0.108	0.149	0.079
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	67	21	13	49	1	2	2	0.053	0.035	0.025

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
Minnesota - 50 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Increase in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	0.005	0.020	B	0.0150	67	NO
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	0.005	0.020	B	0.0150	67	NO
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	0.005	0.020	B	0.0152	66	NO
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	0.046	0.086	B	0.0399	25	NO
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	PASSIVE	0.010	0.036	B	0.0258	39	NO
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	0.006	0.025	B	0.0185	54	NO
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	0.019	0.045	B	0.0256	39	NO
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.050	B	0.028	36	NO
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	0.006	0.025	B	0.019	54	NO
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.004	0.018	B	0.014	71	NO
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.006	0.026	B	0.019	52	NO
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	0.023	0.066	B	0.043	23	NO
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	0.014	0.046	B	0.032	31	NO
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	0.010	0.027	B	0.017	57	NO
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.050	B	0.028	36	NO
911202N	004710	MN	OLMSTED	E. Circle Dr./City Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.060	B	0.031	33	NO
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.015	0.038	B	0.023	44	NO
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.063	B	0.031	32	NO
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	0.026	0.075	B	0.049	20	NO
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	0.023	0.051	B	0.028	36	NO
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	0.063	0.114	B	0.051	20	YES
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	0.020	0.046	B	0.026	38	NO
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	0.022	0.049	B	0.027	37	NO
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.031	0.062	B	0.031	32	NO
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.036	B	0.022	45	NO
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	0.025	0.053	B	0.028	35	NO
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.028	0.059	B	0.030	33	NO
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.047	B	0.027	37	NO
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.035	B	0.022	46	NO
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	0.005	0.015	B	0.010	97	NO
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.060	B	0.031	33	NO
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.063	B	0.031	32	NO
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.009	0.026	B	0.017	60	NO
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	0.008	0.031	B	0.022	45	NO
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	PASSIVE	0.076	0.158	A	0.0823	12	YES
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	0.007	0.025	B	0.0187	53	NO
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	0.016	0.040	B	0.0240	42	NO
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	0.025	0.033	B	0.0080	126	NO
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	PASSIVE	0.021	0.028	B	0.0070	142	NO
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	PASSIVE	0.028	0.041	B	0.0132	76	NO
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	0.030	0.040	B	0.0095	105	NO
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	0.007	0.026	B	0.0192	52	NO
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	0.024	0.036	B	0.0122	82	NO
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	0.006	0.024	B	0.0177	57	NO
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	PASSIVE	0.015	0.050	B	0.0349	29	NO
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.087	0.117	B	0.0298	34	NO
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.033	B	0.0133	75	NO
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.029	B	0.0092	109	NO
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	PASSIVE	0.064	0.080	B	0.0165	60	NO
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.029	B	0.0071	140	NO
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.029	B	0.0071	140	NO
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	FLASHING LIGHTS	0.061	0.079	B	0.0181	55	NO
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	0.023	0.031	B	0.0076	131	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
Minnesota - 50 MNT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Increase in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	0.007	0.025	B	0.0187	53	NO
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	0.004	0.015	B	0.0110	91	NO
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	PASSIVE	0.020	0.027	B	0.0068	148	NO
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	0.006	0.024	B	0.0181	55	NO
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	0.007	0.025	B	0.0187	53	NO
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	0.007	0.025	B	0.0187	53	NO
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.024	0.032	B	0.0078	128	NO
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	PASSIVE	0.013	0.033	B	0.0203	49	NO
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.072	0.079	B	0.0065	153	NO
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	0.007	0.025	B	0.0187	53	NO

 Updated ADT information

 ADT Information increased based on population increase for county

Appendix B
Pre-Construction Accident Prediction Summary
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	32	3	2	35	1	2	2	0.009	0.007	0.005
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	32	3	2	30	1	2	1	0.009	0.007	0.005
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	1050	3	2	35	1	1	2	0.038	0.088	0.046
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	220	3	2	35	1	2	2	0.018	0.014	0.010
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	64	3	2	35	1	2	2	0.012	0.009	0.006
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	2958	3	2	35	3	1	4	0.059	0.038	0.019
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	3800	3	2	35	1	1	2	0.064	0.041	0.022
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	64	3	2	30	1	2	2	0.011	0.009	0.006
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	25	3	2	30	1	2	2	0.008	0.006	0.004
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	70	3	2	30	1	2	2	0.012	0.009	0.006
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	566	3	2	35	1	1	2	0.048	0.032	0.023
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	111	3	2	35	1	1	2	0.026	0.019	0.014
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	1543	3	2	35	1	1	2	0.027	0.020	0.010
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	4115	3	2	35	1	1	2	0.067	0.042	0.022
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	9645	3	2	35	1	1	2	0.094	0.055	0.029
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	1228	3	2	20	1	1	2	0.041	0.028	0.015
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	13889	3	2	12	1	1	2	0.110	0.061	0.032
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	1119	3	2	20	1	1	2	0.055	0.036	0.026
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	11381	3	2	5	2	1	4	0.076	0.047	0.023
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	24000	3	2	5	1	1	4	0.081	0.128	0.063
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	6078	3	2	5	2	1	4	0.063	0.040	0.020
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	9259	3	2	20	2	1	4	0.071	0.044	0.022
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	4887	3	2	20	1	1	4	0.103	0.058	0.031
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	1055	3	2	35	1	1	2	0.038	0.026	0.014
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	15946	3	2	20	2	1	4	0.084	0.050	0.025
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	8873	3	2	35	1	1	2	0.091	0.053	0.028
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	2894	3	2	35	1	1	2	0.058	0.037	0.020
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	965	3	2	35	1	1	2	0.037	0.026	0.014
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	129	3	2	35	1	2	2	0.013	0.010	0.005
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	3940	3	2	35	1	1	4	0.094	0.055	0.029
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	5658	3	2	35	1	1	4	0.109	0.061	0.032
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	322	3	2	35	1	1	2	0.023	0.017	0.009
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	129	3	2	35	1	2	2	0.015	0.011	0.008
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	900	3	2	35	1	1	2	0.056	0.106	0.076
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	12000	3	2	35	1	1	2	0.050	0.033	0.016
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	748	3	2	35	1	1	2	0.053	0.035	0.025
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	441	3	2	35	1	1	2	0.043	0.030	0.021
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	1054	3	2	35	2	1	2	0.060	0.039	0.028
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	11400	3	2	30	1	1	2	0.101	0.058	0.030
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	74	3	2	35	1	2	2	0.012	0.009	0.007
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	662	3	2	35	1	1	2	0.050	0.034	0.024
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	55	3	2	35	1	2	2	0.011	0.008	0.006
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	166	3	2	35	2	1	2	0.030	0.022	0.015
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	2	2	0.022	0.122	0.087
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.027	0.020
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	466	3	2	20	1	1	2	0.039	0.027	0.020
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	466	3	2	20	2	1	2	0.039	0.089	0.064
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	466	3	2	35	1	1	2	0.044	0.030	0.022
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	4046	3	2	35	1	1	2	0.066	0.115	0.061

Appendix B
Pre-Construction Accident Prediction Summary
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	613	3	2	35	1	1	2	0.049	0.033	0.023
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	12	3	2	35	1	2	2	0.006	0.005	0.004
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	380	3	2	35	1	1	2	0.041	0.028	0.020
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	60	3	2	35	1	2	2	0.011	0.009	0.006
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	699	3	2	35	1	1	2	0.051	0.034	0.024
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	466	3	2	35	3	2	1	0.024	0.018	0.013
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	674	3	2	35	1	1	2	0.051	0.101	0.072
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	67	3	2	35	1	2	2	0.012	0.009	0.007

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Post-Construction Accident Prediction Summary
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING	PROPOSED	ADT c	TRNS PER DAY t	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	32	37	23	49	1	2	2	0.061	0.039	0.028
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	32	37	23	49	1	2	2	0.061	0.039	0.028
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	32	37	23	49	1	2	1	0.061	0.039	0.028
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	1050	37	23	49	1	1	2	0.186	0.194	0.102
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	FLASHING LIGHTS	220	37	23	49	1	2	2	0.098	0.056	0.030
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	64	37	23	49	1	2	2	0.079	0.048	0.034
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	2958	37	23	49	3	1	4	0.299	0.109	0.054
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	3800	37	23	49	1	1	2	0.315	0.112	0.059
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	64	37	23	49	2	2	2	0.079	0.048	0.034
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	25	37	23	49	2	2	2	0.056	0.037	0.026
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	70	37	23	49	1	2	2	0.082	0.049	0.035
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	566	37	23	49	1	1	2	0.322	0.113	0.081
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	111	37	23	49	1	1	2	0.176	0.083	0.059
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	1543	37	23	49	1	1	2	0.137	0.071	0.035
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4115	37	23	49	1	1	2	0.326	0.113	0.060
911202N	004710	MN	OLMSTED	E. Circle Dr./City Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	9645	37	23	49	1	1	2	0.462	0.130	0.069
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1228	37	23	49	1	1	2	0.198	0.088	0.047
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	13889	37	23	49	1	1	2	0.537	0.136	0.072
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	1119	37	23	49	1	1	2	0.415	0.125	0.089
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	11381	37	23	49	2	1	4	0.382	0.121	0.059
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	24000	37	23	49	1	1	4	0.409	0.263	0.130
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	6078	37	23	49	2	1	4	0.318	0.112	0.055
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	9259	37	23	49	2	1	4	0.360	0.118	0.058
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	4887	37	23	49	1	1	4	0.504	0.134	0.071
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	1055	37	23	49	1	1	2	0.186	0.085	0.045
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	15946	37	23	49	2	1	4	0.422	0.126	0.062
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	8873	37	23	49	1	1	2	0.447	0.128	0.068
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	2894	37	23	49	1	1	2	0.282	0.106	0.056
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	965	37	23	49	1	1	2	0.180	0.084	0.044
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	129	37	23	49	1	2	2	0.066	0.042	0.021
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	3940	37	23	49	1	1	4	0.461	0.130	0.069
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	5658	37	23	49	1	1	4	0.535	0.136	0.072
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	322	37	23	49	1	1	2	0.114	0.063	0.033
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	129	37	23	49	1	2	2	0.103	0.058	0.042
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	FLASHING LIGHTS	900	37	23	49	2	1	2	0.212	0.205	0.108
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	67	37	23	49	1	2	2	0.081	0.049	0.035
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	12000	37	23	49	1	1	2	0.251	0.100	0.049
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	748	37	23	49	1	1	2	0.162	0.079	0.042
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	FLASHING LIGHTS	441	37	23	49	1	1	2	0.130	0.069	0.036
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	FLASHING LIGHTS	1054	37	23	49	2	1	2	0.226	0.095	0.050
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	11400	37	23	49	1	1	2	0.247	0.099	0.049
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	74	37	23	49	1	2	2	0.084	0.050	0.036
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	662	37	23	49	2	1	2	0.186	0.085	0.045
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	55	37	23	49	1	2	2	0.075	0.046	0.033
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	166	37	23	49	2	1	2	0.106	0.059	0.031
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	1	2	2	0.133	0.261	0.138
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	2	1	2	0.161	0.078	0.042

Appendix B
Post-Construction Accident Prediction Summary
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING	PROPOSED	ADT	TRNS PER DAY	FRA RATIO OF THRU TRNS/DAY DAYLIGHT	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	1	1	2	0.133	0.070	0.037
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	2	1	2	0.161	0.181	0.096
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	1	1	2	0.133	0.070	0.037
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	466	37	23	49	1	1	2	0.133	0.070	0.037
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	GATES	4046	37	23	49	1	1	2	0.182	0.192	0.094
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	613	37	23	49	1	1	2	0.149	0.075	0.040
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	67	37	23	49	1	2	2	0.081	0.049	0.035
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	12	37	23	49	1	2	2	0.043	0.029	0.021
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	FLASHING LIGHTS	380	37	23	49	1	1	2	0.123	0.066	0.035
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	60	37	23	49	1	2	2	0.077	0.047	0.034
193367C	7780	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	67	37	23	49	1	2	2	0.081	0.049	0.035
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	67	37	23	49	1	2	2	0.081	0.049	0.035
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	699	37	23	49	1	1	2	0.157	0.077	0.041
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	FLASHING LIGHTS	466	37	23	49	3	2	1	0.163	0.079	0.042
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	674	37	23	49	1	1	2	0.155	0.178	0.094
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	67	37	23	49	1	2	2	0.081	0.049	0.035

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Increase in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193258Y	003010	MN	OLMSTED	TWP 668	ST CHARLES	PASSIVE	PASSIVE	0.005	0.028	B	0.0232	43	NO
193259F	003040	MN	OLMSTED	19TH AVE/ TWP 591	DOVER	PASSIVE	PASSIVE	0.005	0.028	B	0.0232	43	NO
193195W	003090	MN	OLMSTED	TWP 667	DOVER	PASSIVE	PASSIVE	0.005	0.028	B	0.0234	43	NO
193260A	003220	MN	OLMSTED	CHATFIELD ST	DOVER	FLASHING LIGHTS	FLASHING LIGHTS	0.046	0.102	B	0.0561	18	YES
193261G	003420	MN	OLMSTED	CSAH 32	DOVER	PASSIVE	PASSIVE	0.010	0.030	B	0.0199	50	NO
193262N	003530	MN	OLMSTED	140 AVE SE/TWP 90	EYOTA	PASSIVE	PASSIVE	0.006	0.034	B	0.0281	36	NO
193263V	003680	MN	OLMSTED	Center Ave/ CSAH 7	EYOTA	GATES	GATES	0.019	0.054	B	0.0347	29	NO
193264C	003740	MN	OLMSTED	CSAH 7	EYOTA	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.059	B	0.037	27	NO
193216M	003860	MN	OLMSTED	110th Ave SE/ Twp 112	EYOTA	PASSIVE	PASSIVE	0.006	0.034	B	0.028	35	NO
193219H	003940	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.004	0.026	B	0.022	46	NO
193220C	004030	MN	OLMSTED	Cnty Rd. 102	EYOTA	PASSIVE	PASSIVE	0.006	0.035	B	0.029	35	NO
193266R	004270	MN	OLMSTED	Haverhill Rd.	EYOTA	PASSIVE	PASSIVE	0.023	0.081	B	0.058	17	YES
193267X	004340	MN	OLMSTED	60th Ave. SE/ Twp 211	ROCHESTER	PASSIVE	PASSIVE	0.014	0.059	B	0.046	22	NO
193269L	004450	MN	OLMSTED	50TH AV. S.E.	ROCHESTER	GATES	GATES	0.010	0.035	B	0.025	40	NO
193270F	004540	MN	OLMSTED	COLLEGE VIEW RD E	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.022	0.060	B	0.038	27	NO
911202N	004710	MN	OLMSTED	E. Circle Dr./Cty Rd 22	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.069	B	0.040	25	NO
193272U	004820	MN	OLMSTED	15TH AVE. N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.015	0.047	B	0.032	31	NO
193273B	004850	MN	OLMSTED	11TH AVE N.E.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.072	B	0.040	25	NO
193275P	004870	MN	OLMSTED	7TH AVE. N.E.	ROCHESTER	PASSIVE	PASSIVE	0.026	0.089	B	0.064	16	YES
193276W	004900	MN	OLMSTED	2ND AVE NE	ROCHESTER	GATES	GATES	0.023	0.059	B	0.037	27	NO
193277D	004910	MN	OLMSTED	BROADWAY NO.	ROCHESTER	GATES	GATES	0.063	0.130	A	0.066	15	YES
193278K	004920	MN	OLMSTED	1ST AVE N.W.	ROCHESTER	GATES	GATES	0.020	0.055	B	0.035	28	NO
193280L	004940	MN	OLMSTED	4TH AVE. N.W.	ROCHESTER	GATES	GATES	0.022	0.058	B	0.036	28	NO
193281T	004960	MN	OLMSTED	6TH AVE. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.031	0.071	B	0.040	25	NO
193274H	4850	MN	OLMSTED	9TH AVE NE	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.045	B	0.031	32	NO
193282A	005000	MN	OLMSTED	11TH AVE. N.W.	ROCHESTER	GATES	GATES	0.025	0.062	B	0.037	27	NO
193232W	005130	MN	OLMSTED	7TH ST. N.W.	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.028	0.068	B	0.040	25	NO
193235S	005420	MN	OLMSTED	Cnty Rd. 104	ROCHESTER	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.056	B	0.036	28	NO
193285V	005680	MN	OLMSTED	CSAH 3	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.014	0.044	B	0.031	33	NO
193236Y	005780	MN	OLMSTED	10th Ave. NE	BYRON	GATES	GATES	0.005	0.021	B	0.016	64	NO
193286C	005870	MN	OLMSTED	BYRON AVE. N.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.029	0.069	B	0.040	25	NO
193287J	005890	MN	OLMSTED	SECOND AVE. N.W.	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.032	0.072	B	0.040	25	NO
911209L	5910	MN	OLMSTED	9TH AVE NW	BYRON	FLASHING LIGHTS	FLASHING LIGHTS	0.009	0.033	B	0.024	41	NO
193288R	006030	MN	OLMSTED	19th Ave. NW/Twp 202	BYRON	PASSIVE	PASSIVE	0.008	0.042	B	0.034	30	NO
193289X	006130	MN	DODGE	CO RD 15	BYRON	PASSIVE	PASSIVE	0.076	0.108	B	0.0323	31	NO
193290S	006230	MN	DODGE	TWP 30	KASSON	PASSIVE	PASSIVE	0.007	0.035	B	0.0284	35	NO
193291Y	006350	MN	DODGE	MANTORVILLE AVE.	KASSON	GATES	GATES	0.016	0.049	B	0.0329	30	NO
193292F	006360	MN	DODGE	SECOND AVE S.W.	KASSON	PASSIVE	FLASHING LIGHTS	0.025	0.042	B	0.0166	60	NO
193293M	006370	MN	DODGE	THIRD AVE SW	KASSON	PASSIVE	PASSIVE	0.021	0.036	B	0.0151	66	NO
193294U	006430	MN	DODGE	EIGHTH AVE. S.W.	KASSON	PASSIVE	PASSIVE	0.028	0.050	B	0.0225	44	NO
196630L	006520	MN	DODGE	US HWY 14	KASSON	FLASHING LIGHTS	GATES	0.030	0.049	B	0.0185	54	NO
193296H	006530	MN	DODGE	CO RD 34/ TWP 134	KASSON	PASSIVE	PASSIVE	0.007	0.036	B	0.0292	34	NO
193357W	006630	MN	DODGE	CO RD 9	KASSON	PASSIVE	FLASHING LIGHTS	0.024	0.045	B	0.0212	47	NO
193358D	006740	MN	DODGE	TWP 139	DODGE CENTER	PASSIVE	PASSIVE	0.006	0.033	B	0.0270	37	NO
193359K	006840	MN	DODGE	AIRPORT DRIVE S.	DODGE CENTER	PASSIVE	PASSIVE	0.015	0.031	B	0.0160	63	NO
193297P	006890	MN	DODGE	4TH AVE. S.E.	DODGE CENTER	PASSIVE	FLASHING LIGHTS	0.087	0.138	A	0.0510	20	YES
193360E	006900	MN	DODGE	SECOND AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.042	B	0.0220	45	NO
193361L	006910	MN	DODGE	FIRST AVE. S.E.	DODGE CENTER	PASSIVE	PASSIVE	0.020	0.037	B	0.0173	58	NO
193298W	006920	MN	DODGE	CENTRAL AVE	DODGE CENTER	PASSIVE	FLASHING LIGHTS	0.064	0.096	B	0.0322	31	NO
193362T	006930	MN	DODGE	FIRST AVE S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.037	B	0.0153	66	NO
193299D	006940	MN	DODGE	2ND AVE. S.W.	DODGE CENTER	PASSIVE	PASSIVE	0.022	0.037	B	0.0153	66	NO
193363A	006950	MN	DODGE	THIRD AVE N.W.	DODGE CENTER	FLASHING LIGHTS	FLASHING LIGHTS	0.061	0.094	B	0.0334	30	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
Minnesota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Increase in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193300V	007000	MN	DODGE	CO RD H	DODGE CENTER	PASSIVE	FLASHING LIGHTS	0.023	0.040	B	0.0161	62	NO
193364G	007140	MN	DODGE	TWP 145	DODGE CENTER	PASSIVE	PASSIVE	0.007	0.035	B	0.0284	35	NO
193303R	7190	MN	DODGE	Twp 153	DODGE CENTER	PASSIVE	PASSIVE	0.004	0.021	B	0.0174	58	NO
193365N	007270	MN	DODGE	CO RD 5	CLAREMONT	PASSIVE	PASSIVE	0.020	0.035	B	0.0146	68	NO
193366V	007320	MN	DODGE	TWP 180	CLAREMONT	PASSIVE	PASSIVE	0.006	0.034	B	0.0276	36	NO
193367C	7370	MN	DODGE	TWP 154	CLAREMONT	PASSIVE	PASSIVE	0.007	0.035	B	0.0284	35	NO
193368J	007480	MN	DODGE	TWP 157	CLAREMONT	PASSIVE	PASSIVE	0.007	0.035	B	0.0284	35	NO
193369R	007580	MN	DODGE	CO RD 3	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.024	0.041	B	0.0165	61	NO
193370K	007640	MN	DODGE	ELM	CLAREMONT	PASSIVE	PASSIVE	0.013	0.042	B	0.0290	34	NO
193371S	007680	MN	DODGE	CO RD 1	CLAREMONT	PASSIVE	FLASHING LIGHTS	0.072	0.094	B	0.0220	46	NO
193307T	007780	MN	DODGE	TWP 171	CLAREMONT	PASSIVE	PASSIVE	0.007	0.035	B	0.0284	35	NO

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 20 NMT

FRA ID	MLEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	50	10	6	35	1	2	2	0.017	0.013	0.009
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	1736	10	6	35	1	1	2	0.113	0.062	0.045
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	310	10	6	35	1	2	2	0.033	0.023	0.017
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	372	10	6	35	1	1	2	0.064	0.041	0.029
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	945	10	6	35	1	1	2	0.090	0.053	0.038
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	43	10	6	35	1	2	2	0.016	0.012	0.009
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	48	10	6	35	1	2	2	0.017	0.012	0.009
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	45	10	6	35	1	2	2	0.016	0.012	0.009
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	41	10	6	35	1	2	2	0.016	0.012	0.008
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	115	10	6	35	1	2	2	0.023	0.017	0.012
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	51	10	6	35	1	2	2	0.017	0.013	0.009
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	58	10	6	35	1	2	2	0.018	0.013	0.009
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	33	10	6	35	1	2	2	0.014	0.011	0.008
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	53	10	6	35	1	2	2	0.017	0.013	0.009
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	52	10	6	35	1	2	2	0.017	0.013	0.009
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	38	10	6	35	1	2	2	0.015	0.011	0.008
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	6	10	6	35	1	2	2	0.008	0.006	0.004
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	172	10	6	35	1	1	2	0.048	0.032	0.023
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	26	10	6	35	1	2	2	0.013	0.010	0.007
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	15752	10	6	20	1	1	4	0.274	0.352	0.186
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	3751	10	6	20	1	1	2	0.106	0.059	0.031
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	7986	10	6	20	1	1	2	0.144	0.073	0.039
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	9905	10	6	10	1	1	4	0.227	0.095	0.050
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	3261	8	5	20	1	1	2	0.089	0.052	0.028
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	37	8	5	20	1	2	2	0.012	0.009	0.006
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	97	8	5	20	1	2	2	0.017	0.013	0.009
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	25	8	5	20	1	2	2	0.010	0.008	0.006
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	43	8	5	20	2	2	2	0.013	0.010	0.007
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	57	8	5	35	1	2	2	0.013	0.010	0.005
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	2216	8	5	35	1	1	2	0.076	0.046	0.025
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	2703	8	5	35	1	1	2	0.082	0.049	0.026
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	1178	8	5	35	1	1	2	0.058	0.038	0.020
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	2900	8	5	35	1	1	2	0.085	0.051	0.027
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	21	8	5	35	1	2	1	0.011	0.008	0.006
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	211	8	5	35	1	1	2	0.046	0.096	0.069
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	31	8	5	35	1	2	2	0.012	0.009	0.007
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	19	8	5	20	2	2	2	0.009	0.007	0.005
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	3666	8	5	20	1	1	4	0.134	0.070	0.037
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	368	4	3	30	3	1	2	0.037	0.208	0.110
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	178	4	3	30	1	1	2	0.029	0.021	0.015
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	43	4	3	30	1	2	1	0.009	0.007	0.005
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	43	4	3	30	1	2	2	0.009	0.007	0.005
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	20	4	3	30	1	2	1	0.007	0.005	0.004
189812F	45130	SD	HUGHES	310TH AVE	BLUNT	PASSIVE	11	4	3	30	1	2	1	0.006	0.004	0.003
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	11	4	3	30	2	2	2	0.006	0.004	0.003

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 20 NMT

FRA ID	MLEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	187	4	3	30	1	1	2	0.029	0.021	0.015
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	100	4	3	30	1	2	2	0.013	0.010	0.007
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	98	4	3	30	1	1	2	0.023	0.017	0.012
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	37	4	3	30	1	1	2	0.016	0.012	0.009
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	1	4	3	30	1	1	2	0.004	0.003	0.002
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	2350	4	3	30	2	1	2	0.074	0.046	0.033
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	5580	4	3	30	2	1	2	0.102	0.145	0.104
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	905	4	3	30	2	1	2	0.052	0.035	0.025
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	17125	4	3	30	2	1	4	0.214	0.092	0.049
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	2055	4	3	30	1	1	2	0.071	0.044	0.032
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	6260	4	3	30	1	1	2	0.081	0.049	0.026
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	5265	4	3	30	1	1	2	0.075	0.046	0.025
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	4300	4	3	30	1	1	2	0.069	0.043	0.023
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	5642	4	3	30	1	1	2	0.078	0.047	0.025
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	77	4	3	30	1	2	2	0.012	0.009	0.006
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	605	4	3	30	2	2	2	0.025	0.072	0.052
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	325	4	3	30	2	2	2	0.020	0.015	0.010
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	1167	4	3	30	1	1	2	0.057	0.037	0.027
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	4841	4	3	30	1	1	2	0.097	0.056	0.040
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	626	4	3	30	1	2	2	0.025	0.018	0.013
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	595	4	3	30	1	2	2	0.025	0.018	0.013
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	23	4	3	30	1	2	1	0.007	0.006	0.004
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	15	4	3	30	1	2	1	0.006	0.005	0.004

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Post-Construction Accident Prediction Summary
South Dakota - 20 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	NO. OBSERVED ACCIDENTS 1993-1997 N	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	50	11	49	2	2	2	0.020	0	0.010
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	PASSIVE	1736	11	49	1	1	2	0.133	0	0.050
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	PASSIVE	310	11	49	1	2	2	0.039	0	0.019
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	FLASHING LIGHTS	372	11	49	1	1	2	0.043	0	0.016
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	FLASHING LIGHTS	945	11	49	1	1	2	0.063	0	0.021
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	43	11	49	1	2	2	0.019	0	0.010
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	48	11	49	1	2	2	0.019	0	0.010
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	45	11	49	1	2	2	0.019	0	0.010
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	41	11	49	1	2	2	0.018	0	0.010
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	115	11	49	1	2	2	0.027	0	0.014
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	51	11	49	1	2	2	0.020	0	0.011
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	58	11	49	1	2	2	0.021	0	0.011
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	33	11	49	1	2	2	0.017	0	0.009
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	PASSIVE	53	11	49	1	2	2	0.020	0	0.011
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	52	11	49	1	2	2	0.020	0	0.011
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	38	11	49	1	2	2	0.018	0	0.010
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	6	11	49	1	2	2	0.009	0	0.005
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	PASSIVE	172	11	49	1	1	2	0.056	0	0.026
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	26	11	49	1	2	2	0.015	0	0.008
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	12	11	49	1	2	2	0.012	0	0.006
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	12	11	49	1	2	2	0.012	0	0.006
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	15752	11	49	1	1	4	0.108	2	0.116
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	3751	11	49	1	1	2	0.053	0	0.017
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	7986	11	49	1	1	2	0.066	0	0.021
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	9905	11	49	1	1	4	0.094	0	0.027
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	3261	11	49	1	1	2	0.051	0	0.017
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	PASSIVE	37	11	49	2	2	2	0.018	0	0.009
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	97	11	49	2	2	2	0.025	0	0.013
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	25	11	49	2	2	2	0.015	0	0.008
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	43	11	49	3	2	2	0.019	0	0.010
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	57	11	49	2	2	2	0.018	0	0.007
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2216	11	49	1	1	2	0.089	0	0.028
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2703	11	49	1	1	2	0.097	0	0.030
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	1178	11	49	1	1	2	0.069	0	0.023
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	25	11	49	1	2	2	0.015	0	0.008
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	2900	11	49	1	1	2	0.049	0	0.016
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	37	11	49	1	2	2	0.018	0	0.009
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	21	11	49	1	2	1	0.014	0	0.008
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	PASSIVE	211	11	49	1	1	2	0.061	1	0.079
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	31	11	49	1	2	2	0.017	0	0.009
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	37	11	49	1	2	2	0.018	0	0.009
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	25	11	49	1	2	2	0.015	0	0.008
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	19	11	49	2	2	2	0.014	0	0.007
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	3666	11	49	1	1	4	0.158	0	0.041
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	25	11	49	1	2	1	0.015	0	0.008
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	25	11	49	1	2	1	0.015	0	0.008
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	368	11	49	3	1	2	0.063	3	0.136

Appendix B
Post-Construction Accident Prediction Summary
South Dakota - 20 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	NO. OBSERVED ACCIDENTS 1993-1997 N	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	PASSIVE	178	11	49	2	1	2	0.057	0	0.027
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	43	11	49	2	2	1	0.019	0	0.010
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	43	11	49	1	2	2	0.019	0	0.010
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	20	11	49	1	2	1	0.014	0	0.008
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	PASSIVE	11	11	49	2	2	1	0.011	0	0.006
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	11	11	49	3	2	2	0.011	0	0.006
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	PASSIVE	187	11	49	2	1	2	0.058	0	0.027
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	100	11	49	1	2	2	0.025	0	0.013
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	98	11	49	1	1	2	0.046	0	0.022
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	37	11	49	1	1	2	0.032	0	0.016
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	1	11	40	1	1	2	0.008	0	0.004
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	PASSIVE	2350	11	40	2	1	2	0.139	0	0.051
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	FLASHING LIGHTS	5580	11	40	2	1	2	0.158	1	0.095
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	905	11	40	2	1	2	0.075	0	0.024
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	17125	11	40	2	1	4	0.129	0	0.033
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	2055	11	40	1	1	2	0.087	0	0.027
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	6260	11	40	1	1	2	0.062	0	0.020
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	5265	11	40	1	1	2	0.059	0	0.019
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	4300	11	40	1	1	2	0.117	0	0.034
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	5642	11	40	1	1	2	0.060	0	0.019
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	77	11	40	1	2	2	0.022	0	0.011
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	FLASHING LIGHTS	605	11	40	2	2	2	0.064	1	0.060
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	PASSIVE	325	11	40	2	2	2	0.037	0	0.018
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	1167	11	40	1	1	2	0.069	0	0.023
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	4841	11	40	1	1	2	0.057	0	0.018
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	PASSIVE	626	11	40	1	2	2	0.047	0	0.023
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	PASSIVE	595	11	49	1	2	2	0.049	0	0.024
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	23	11	49	2	2	1	0.015	0	0.008
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	15	11	49	1	2	1	0.013	0	0.007

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 20 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.010	B	0.001	692	NO
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	FLASHING LIGHTS	0.045	0.050	B	0.005	198	NO
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	PASSIVE	0.017	0.019	B	0.002	400	NO
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	PASSIVE	0.029	0.016	B	-0.014	-73	NO
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	PASSIVE	0.038	0.021	B	-0.017	-60	NO
193791VW	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.010	B	0.001	727	NO
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.010	B	0.001	701	NO
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.010	B	0.001	716	NO
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	0.008	0.010	B	0.001	738	NO
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	0.012	0.014	B	0.002	534	NO
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	0.009	0.011	B	0.001	688	NO
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.011	B	0.002	660	NO
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	0.008	0.009	B	0.001	792	NO
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.011	B	0.001	680	NO
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.011	B	0.001	684	NO
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	0.008	0.010	B	0.001	756	NO
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	0.004	0.005	B	0.001	1,407	NO
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	PASSIVE	0.023	0.026	B	0.003	307	NO
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	0.007	0.008	B	0.001	856	NO
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	0.005	0.006	B	0.001	1,109	NO
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	0.005	0.006	B	0.001	1,109	NO
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.186	0.116	A	-0.070	-14	NO
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	0.031	0.017	B	-0.014	-71	NO
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.039	0.021	B	-0.018	-56	NO
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.050	0.027	B	-0.023	-43	NO
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.028	0.017	B	-0.011	-91	NO
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	PASSIVE	0.006	0.009	B	0.003	340	NO
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	0.009	0.013	B	0.004	249	NO
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.006	0.008	B	0.003	387	NO
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.007	0.010	B	0.003	324	NO
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	0.005	0.007	B	0.002	614	NO
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.025	0.028	B	0.003	306	NO
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.026	0.030	B	0.003	294	NO
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.023	B	0.003	353	NO
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.008	B	0.002	520	NO
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	0.027	0.016	B	-0.011	-95	NO
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	0.007	0.009	B	0.002	457	NO
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.008	B	0.002	551	NO
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	PASSIVE	0.069	0.079	A	0.010	96	YES
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.009	B	0.002	484	NO
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.009	B	0.002	457	NO
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.006	0.008	B	0.002	520	NO
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	0.005	0.007	B	0.002	425	NO
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	0.037	0.041	B	0.004	245	NO
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.008	B	0.004	251	NO
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.008	B	0.004	251	NO
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	0.110	0.136	A	0.026	39	YES
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	PASSIVE	0.015	0.027	B	0.012	84	NO
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	0.005	0.010	B	0.005	209	NO
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	0.005	0.010	B	0.005	209	NO
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	0.004	0.008	B	0.004	271	NO
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	PASSIVE	0.003	0.006	B	0.003	332	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 20 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	0.003	0.006	B	0.003	332	NO
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	PASSIVE	0.015	0.027	B	0.012	83	NO
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	0.007	0.013	B	0.006	159	NO
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	0.012	0.022	B	0.010	99	NO
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	0.009	0.016	B	0.008	131	NO
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	0.027	0.033	B	0.007	154	NO
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	PASSIVE	0.033	0.051	A	0.018	55	YES
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	PASSIVE	0.104	0.095	A	-0.009	-117	NO
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	0.025	0.024	B	0.000	-2,926	NO
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	0.049	0.033	B	-0.015	-65	NO
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	0.032	0.027	B	-0.004	-230	NO
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	0.026	0.020	B	-0.006	-157	NO
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	0.025	0.019	B	-0.006	-172	NO
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	0.035	0.036	B	0.001	859	NO
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	0.025	0.019	B	-0.006	-166	NO
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	0.006	0.011	B	0.005	199	NO
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN RD	FORT PIERRE	PASSIVE	PASSIVE	0.052	0.060	A	0.008	127	NO
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	PASSIVE	0.010	0.018	B	0.008	127	NO
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	0.027	0.023	B	-0.004	-255	NO
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	0.040	0.018	B	-0.022	-46	NO
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.023	B	0.010	105	NO
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.024	B	0.011	93	NO
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.008	B	0.004	258	NO
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.007	B	0.003	299	NO

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 50 NMT

FRA ID	MILEPOST	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193785T	027360	BROOKINGS	487TH AVE	ELKTON	PASSIVE	50	10	6	35	1	2	2	0.017	0.013	0.009
193786A	027440	BROOKINGS	ELK ST	ELKTON	PASSIVE	1736	10	6	35	1	1	2	0.113	0.062	0.045
193787G	027460	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	310	10	6	35	1	2	2	0.033	0.023	0.017
193788N	027470	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	372	10	6	35	1	1	2	0.064	0.041	0.029
193789V	027480	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	945	10	6	35	1	1	2	0.090	0.053	0.038
193791W	027570	BROOKINGS	485TH AVE	ELKTON	PASSIVE	43	10	6	35	1	2	2	0.016	0.012	0.009
193792D	027680	BROOKINGS	484TH AVE	ELKTON	PASSIVE	48	10	6	35	1	2	2	0.017	0.012	0.009
193794S	027780	BROOKINGS	483RD AVE	ELKTON	PASSIVE	45	10	6	35	1	2	2	0.016	0.012	0.009
193795Y	027810	BROOKINGS	216TH ST	ELKTON	PASSIVE	41	10	6	35	1	2	2	0.016	0.012	0.008
197475M	27880	BROOKINGS	482ND AVE	ELKTON	PASSIVE	115	10	6	35	1	2	2	0.023	0.017	0.012
193805C	027990	BROOKINGS	481ST AVE	AURORA	PASSIVE	51	10	6	35	1	2	2	0.017	0.013	0.009
197476U	028090	BROOKINGS	480TH AVE	AURORA	PASSIVE	58	10	6	35	1	2	2	0.018	0.013	0.009
197477B	028150	BROOKINGS	215TH ST	AURORA	PASSIVE	33	10	6	35	1	2	2	0.014	0.011	0.008
193806J	028200	BROOKINGS	479TH AVE	AURORA	PASSIVE	53	10	6	35	1	2	2	0.017	0.013	0.009
193807R	028300	BROOKINGS	478TH AVE	AURORA	PASSIVE	52	10	6	35	1	2	2	0.017	0.013	0.009
193808X	028410	BROOKINGS	477TH AVE	AURORA	PASSIVE	38	10	6	35	1	2	2	0.015	0.011	0.008
197424C	028490	BROOKINGS	HULL AVE	AURORA	PASSIVE	6	10	6	35	1	2	2	0.008	0.006	0.004
197425J	028510	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	172	10	6	35	1	1	2	0.048	0.032	0.023
197426R	028620	BROOKINGS	475TH AVE	AURORA	PASSIVE	26	10	6	35	1	2	2	0.013	0.010	0.007
197429L	028830	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197430F	28870	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197478H	028930	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	15752	10	6	20	1	1	4	0.274	0.352	0.186
197479P	28960	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	3751	10	6	20	1	1	2	0.106	0.059	0.031
197480J	029030	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	7986	10	6	20	1	1	2	0.144	0.073	0.039
197481R	029090	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	9905	10	6	10	1	1	4	0.227	0.095	0.050
197482X	029110	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	3261	8	5	20	1	1	2	0.089	0.052	0.028
197483E	029210	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	37	8	2	20	1	2	2	0.010	0.008	0.006
197484L	029240	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	97	8	5	20	1	2	2	0.017	0.013	0.009
197485T	029350	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	25	8	5	20	1	2	2	0.010	0.008	0.006
197487G	029460	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	43	8	5	20	2	2	2	0.013	0.010	0.007
197440L	29650	BROOKINGS	CASPIAN	VOLGA	GATES	57	8	5	35	1	2	2	0.013	0.010	0.005
197441T	029720	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	2216	8	5	35	1	1	2	0.076	0.046	0.025
197442A	029730	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	2703	8	5	35	1	1	2	0.082	0.049	0.026
197443G	029740	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	1178	8	5	35	1	1	2	0.058	0.038	0.020
197445V	029840	BROOKINGS	463RD AVE	VOLGA	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197493K	029870	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	2900	8	5	35	1	1	2	0.085	0.051	0.027
197446C	029960	BROOKINGS	462ND AVE	VOLGA	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197447J	030170	BROOKINGS	460TH AVE	VOLGA	PASSIVE	21	8	5	35	1	2	1	0.011	0.008	0.006
197448R	030280	BROOKINGS	459TH AVE	VOLGA	PASSIVE	211	8	5	35	1	1	2	0.046	0.096	0.069
197449X	030380	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	31	8	5	35	1	2	2	0.012	0.009	0.007
197450S	030480	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197502G	030680	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197503N	030730	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	19	8	5	20	2	2	2	0.009	0.007	0.005
197451Y	030800	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	3666	8	5	20	1	1	4	0.134	0.070	0.037
189799U	043820	HUGHES	323RD AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189800L	043920	HUGHES	322ND AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189801T	43990	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	368	4	3	30	3	1	2	0.037	0.208	0.110

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 50 NMT

FRA ID	MILEPOST	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189802A	044020	HUGHES	321ST AVE	HARROLD	PASSIVE	178	4	3	30	1	1	2	0.029	0.021	0.015
189805V	44320	HUGHES	318TH AVE	HARROLD	PASSIVE	43	4	3	30	1	2	1	0.009	0.007	0.005
189809X	044720	HUGHES	314TH AVE	BLUNT	PASSIVE	43	4	3	30	1	2	2	0.009	0.007	0.005
189810S	44920	HUGHES	312TH AVE	BLUNT	PASSIVE	20	4	3	30	1	2	1	0.007	0.005	0.004
189812F	45130	HUGHES	310TH AVE		PASSIVE	11	4	3	30	1	2	1	0.006	0.004	0.003
189813M	45220	HUGHES	309TH AVE	BLUNT	PASSIVE	11	4	3	30	2	2	2	0.006	0.004	0.003
189816H	045330	HUGHES	CANNING RD	BLUNT	PASSIVE	187	4	3	30	1	1	2	0.029	0.021	0.015
189822L	046110	HUGHES	CHELSEY RD	BLUNT	PASSIVE	100	4	3	30	1	2	2	0.013	0.010	0.007
189839P	47790	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	98	4	3	30	1	1	2	0.023	0.017	0.012
189840J	47840	HUGHES	UPS RD	PIERRE	PASSIVE	37	4	3	30	1	1	2	0.016	0.012	0.009
189841R	47890	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	1	4	3	30	1	1	2	0.004	0.003	0.002
189842X	47950	HUGHES	LOWELL RD	PIERRE	PASSIVE	2350	4	3	30	2	1	2	0.074	0.046	0.033
189843E	48000	HUGHES	INDUSTRIAL	PIERRE	PASSIVE	4653	4	3	30	2	1	2	0.096	0.055	0.040
189844L	48050	HUGHES	HARRISON	PIERRE	PASSIVE	5580	4	3	30	2	1	2	0.102	0.145	0.104
189845T	48070	HUGHES	MONROE	PIERRE	PASSIVE	905	4	3	30	2	1	2	0.052	0.035	0.025
189846A	48110	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	17125	4	3	30	2	1	4	0.214	0.092	0.049
189847G	48140	HUGHES	REE ST	PIERRE	PASSIVE	2055	4	3	30	1	1	2	0.071	0.044	0.032
189848N	48160	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	6260	4	3	30	1	1	2	0.081	0.049	0.026
189850P	48190	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	5265	4	3	30	1	1	2	0.075	0.046	0.025
189851W	48220	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	4300	4	3	30	1	1	2	0.069	0.043	0.023
189856F	48350	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	5642	4	3	30	1	1	2	0.078	0.047	0.025
189857M	48370	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	77	4	3	30	1	2	2	0.012	0.009	0.006
189858U	048410	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	605	4	3	30	2	2	2	0.025	0.072	0.052
189859B	48430	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	325	4	3	30	2	2	2	0.020	0.015	0.010
189860V	48450	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	1167	4	3	30	1	1	2	0.057	0.037	0.027
189861C	048460	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	4841	4	3	30	1	1	2	0.097	0.056	0.040
189862J	48490	STANLEY	PARK	FORT PIERRE	PASSIVE	626	4	3	30	1	2	2	0.025	0.018	0.013
189864X	48590	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	595	4	3	30	1	2	2	0.025	0.018	0.013
189870B	048940	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	23	4	3	30	1	2	1	0.007	0.006	0.004
189889T	050300	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	15	4	3	30	1	2	1	0.006	0.005	0.004

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Post-Construction Accident Prediction Summary
South Dakota - 50 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	50	21	49	2	2	2	0.028	0.020	0.014
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	FLASHING LIGHTS	1736	21	49	1	1	2	0.113	0.062	0.033
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	FLASHING LIGHTS	310	21	49	1	2	2	0.056	0.037	0.019
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	FLASHING LIGHTS	372	21	49	1	1	2	0.060	0.039	0.021
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	FLASHING LIGHTS	945	21	49	1	1	2	0.088	0.052	0.028
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	43	21	49	1	2	2	0.026	0.019	0.014
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	48	21	49	1	2	2	0.028	0.020	0.014
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	45	21	49	1	2	2	0.027	0.019	0.014
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	41	21	49	1	2	2	0.026	0.019	0.013
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	115	21	49	1	2	2	0.038	0.026	0.019
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	51	21	49	1	2	2	0.028	0.020	0.015
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	58	21	49	1	2	2	0.030	0.021	0.015
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	33	21	49	1	2	2	0.024	0.018	0.013
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	PASSIVE	53	21	49	1	2	2	0.029	0.021	0.015
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	52	21	49	1	2	2	0.028	0.020	0.015
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	38	21	49	1	2	2	0.025	0.018	0.013
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	6	21	49	1	2	2	0.013	0.010	0.007
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	FLASHING LIGHTS	172	21	49	1	1	2	0.044	0.030	0.016
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	26	21	49	1	2	2	0.022	0.016	0.012
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	12	21	49	1	2	2	0.017	0.012	0.009
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	12	21	35	1	1	2	0.027	0.019	0.014
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	15752	21	49	1	1	4	0.146	0.272	0.134
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	3751	21	49	1	1	2	0.072	0.045	0.022
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	7986	21	49	1	1	2	0.090	0.053	0.026
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	9905	21	49	1	1	4	0.127	0.067	0.033
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	3261	21	49	1	1	2	0.069	0.043	0.021
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	PASSIVE	37	21	49	2	2	2	0.025	0.018	0.013
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	97	21	49	2	2	2	0.036	0.025	0.018
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	25	21	49	2	2	2	0.022	0.016	0.011
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	43	21	49	3	2	2	0.026	0.019	0.014
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	57	21	49	2	2	2	0.024	0.018	0.009
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2216	21	49	1	1	2	0.125	0.067	0.035
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2703	21	49	1	1	2	0.136	0.070	0.037
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	1178	21	49	1	1	2	0.097	0.056	0.029
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	25	21	49	1	2	2	0.022	0.016	0.011
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	2900	21	49	1	1	2	0.067	0.042	0.021
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	37	21	49	1	2	2	0.025	0.018	0.013
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	21	21	49	1	2	2	0.020	0.015	0.011
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	FLASHING LIGHTS	211	21	49	1	1	2	0.048	0.098	0.052
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	31	21	49	1	2	2	0.023	0.017	0.012
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	37	21	49	1	2	2	0.025	0.018	0.013
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	25	21	49	1	2	2	0.022	0.016	0.011
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	19	21	49	2	2	2	0.020	0.015	0.010
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	3666	21	49	1	1	4	0.222	0.094	0.050
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	25	21	49	1	2	1	0.022	0.016	0.011
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	25	21	49	1	2	1	0.022	0.016	0.011
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	368	21	49	3	1	2	0.088	0.297	0.157

Appendix B
Post-Construction Accident Prediction Summary
South Dakota - 50 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	ADT c	TRNS PER DAY t	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	PASSIVE	178	21	49	2	1	2	0.081	0.049	0.035
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	43	21	49	2	2	1	0.026	0.019	0.014
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	43	21	49	1	2	2	0.026	0.019	0.014
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	20	21	49	1	2	1	0.020	0.015	0.011
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	PASSIVE	11	21	49	2	2	1	0.016	0.012	0.009
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	11	21	49	3	2	2	0.016	0.012	0.009
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	PASSIVE	187	21	49	2	1	2	0.083	0.050	0.036
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	100	21	49	1	2	2	0.036	0.025	0.018
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	98	21	49	1	1	2	0.065	0.041	0.030
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	37	21	49	1	1	2	0.045	0.031	0.022
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	1	21	40	1	1	2	0.011	0.009	0.006
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	FLASHING LIGHTS	2350	21	40	2	1	2	0.155	0.077	0.041
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	FLASHING LIGHTS	5580	21	40	2	1	2	0.222	0.209	0.111
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	905	21	40	2	1	2	0.105	0.059	0.031
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	17125	21	40	2	1	4	0.174	0.082	0.040
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	2055	21	40	1	1	2	0.121	0.065	0.035
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	6260	21	40	1	1	2	0.084	0.050	0.025
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	5265	21	40	1	1	2	0.080	0.048	0.024
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	4300	21	40	1	1	2	0.164	0.079	0.042
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	5642	21	40	1	1	2	0.081	0.049	0.024
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	77	21	40	1	2	2	0.031	0.022	0.016
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	GATES	605	21	40	2	2	2	0.049	0.099	0.049
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	PASSIVE	325	21	40	2	2	2	0.052	0.035	0.025
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	1167	21	40	1	1	2	0.096	0.056	0.029
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	4841	21	40	1	1	2	0.078	0.047	0.023
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	FLASHING LIGHTS	626	21	40	1	2	2	0.075	0.046	0.024
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	FLASHING LIGHTS	595	21	49	1	2	2	0.073	0.045	0.024
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	23	21	49	2	2	1	0.021	0.016	0.011
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	15	21	49	1	2	1	0.018	0.013	0.010

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 50 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Frequency	Trip Threshold
								Pre-Construction	Post-Construction				
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.014	B	0.005	185	NO
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	FLASHING LIGHTS	0.045	0.033	B	-0.012	-86	NO
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	PASSIVE	0.017	0.019	B	0.003	379	NO
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	PASSIVE	0.029	0.021	B	-0.009	-115	NO
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	PASSIVE	0.038	0.028	B	-0.010	-96	NO
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.014	B	0.005	194	NO
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.014	B	0.005	187	NO
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.014	B	0.005	191	NO
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	0.008	0.013	B	0.005	197	NO
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	0.012	0.019	B	0.007	144	NO
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	0.009	0.015	B	0.005	184	NO
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.015	B	0.006	177	NO
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	0.008	0.013	B	0.005	211	NO
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.015	B	0.006	182	NO
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.015	B	0.005	183	NO
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	0.008	0.013	B	0.005	201	NO
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	0.004	0.007	B	0.003	370	NO
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	PASSIVE	0.023	0.016	B	-0.007	-136	NO
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	0.007	0.012	B	0.004	227	NO
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	0.005	0.009	B	0.003	293	NO
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	0.005	0.014	B	0.008	118	NO
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.186	0.134	A	-0.053	-19	NO
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	0.031	0.022	B	-0.009	-106	NO
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.039	0.026	B	-0.013	-79	NO
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.050	0.033	B	-0.017	-58	NO
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.028	0.021	B	-0.006	-156	NO
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	PASSIVE	0.006	0.013	B	0.007	134	NO
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	0.009	0.018	B	0.009	113	NO
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.006	0.011	B	0.006	173	NO
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.007	0.014	B	0.007	145	NO
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	0.005	0.009	B	0.004	265	NO
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.025	0.035	B	0.011	93	NO
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.026	0.037	B	0.011	90	NO
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.029	B	0.009	106	NO
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.011	B	0.005	196	NO
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	0.027	0.021	B	-0.006	-166	NO
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	0.007	0.013	B	0.006	172	NO
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.011	B	0.005	207	NO
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	FLASHING LIGHTS	0.069	0.052	A	-0.017	-59	NO
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.012	B	0.005	182	NO
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.013	B	0.006	172	NO
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.006	0.011	B	0.005	196	NO
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	0.005	0.010	B	0.005	189	NO
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	0.037	0.050	B	0.013	78	NO
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.011	B	0.007	139	NO
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.011	B	0.007	139	NO
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	0.110	0.157	A	0.047	21	YES
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	PASSIVE	0.015	0.035	B	0.020	49	NO
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	0.005	0.014	B	0.009	117	NO
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	0.005	0.014	B	0.009	117	NO
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	0.004	0.011	B	0.007	150	NO
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	PASSIVE	0.003	0.009	B	0.005	183	NO
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	0.003	0.009	B	0.005	183	NO
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	PASSIVE	0.015	0.036	B	0.021	48	NO
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	0.007	0.018	B	0.011	90	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 50 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Frequency	Trip Threshold
								Pre-Construction	Post-Construction				
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	0.012	0.030	B	0.018	57	NO
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	0.009	0.022	B	0.013	75	NO
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	0.022	0.017	B	-0.005	-220	NO
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	FLASHING LIGHTS	0.033	0.041	B	0.008	129	NO
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	FLASHING LIGHTS	0.104	0.111	A	0.007	140	NO
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	0.025	0.031	B	0.007	153	NO
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	0.049	0.040	B	-0.008	-119	NO
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	0.032	0.035	B	0.003	333	NO
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	0.026	0.025	B	-0.001	-823	NO
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	0.025	0.024	B	-0.001	-1,283	NO
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	0.023	0.042	B	0.019	53	NO
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	0.025	0.024	B	-0.001	-1,052	NO
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	0.006	0.016	B	0.009	107	NO
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN RD	FORT PIERRE	PASSIVE	PASSIVE	0.052	0.049	B	-0.003	-314	NO
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	PASSIVE	0.010	0.025	B	0.014	70	NO
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	0.027	0.029	B	0.003	374	NO
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	0.040	0.023	B	-0.017	-60	NO
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.024	B	0.011	89	NO
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.024	B	0.011	90	NO
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.011	B	0.007	143	NO
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.010	B	0.006	165	NO

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	50	10	6	35	1	2	2	0.017	0.013	0.009
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	1736	10	6	35	1	1	2	0.113	0.062	0.045
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	310	10	6	35	1	2	2	0.033	0.023	0.017
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	372	10	6	35	1	1	2	0.064	0.041	0.029
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	945	10	6	35	1	1	2	0.090	0.053	0.038
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	43	10	6	35	1	2	2	0.016	0.012	0.009
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	48	10	6	35	1	2	2	0.017	0.012	0.009
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	45	10	6	35	1	2	2	0.016	0.012	0.009
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	41	10	6	35	1	2	2	0.016	0.012	0.008
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	115	10	6	35	1	2	2	0.023	0.017	0.012
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	51	10	6	35	1	2	2	0.017	0.013	0.009
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	58	10	6	35	1	2	2	0.018	0.013	0.009
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	33	10	6	35	1	2	2	0.014	0.011	0.008
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	53	10	6	35	1	2	2	0.017	0.013	0.009
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	52	10	6	35	1	2	2	0.017	0.013	0.009
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	38	10	6	35	1	2	2	0.015	0.011	0.008
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	6	10	6	35	1	2	2	0.008	0.006	0.004
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	172	10	6	35	1	1	2	0.048	0.032	0.023
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	26	10	6	35	1	2	2	0.013	0.010	0.007
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	12	10	6	35	1	2	2	0.010	0.008	0.005
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	15752	10	6	20	1	1	4	0.274	0.352	0.186
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	3751	10	6	20	1	1	2	0.106	0.059	0.031
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	7986	10	6	20	1	1	2	0.144	0.073	0.039
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	9905	10	6	10	1	1	4	0.227	0.095	0.050
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	3261	8	5	20	1	1	2	0.089	0.052	0.028
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	37	8	5	20	1	2	2	0.012	0.009	0.006
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	97	8	5	20	1	2	2	0.017	0.013	0.009
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	25	8	5	20	1	2	2	0.010	0.008	0.006
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	43	8	5	20	2	2	2	0.013	0.010	0.007
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	57	8	5	35	1	2	2	0.013	0.010	0.005
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	2216	8	5	35	1	1	2	0.076	0.046	0.025
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	2703	8	5	35	1	1	2	0.082	0.049	0.026
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	1178	8	5	35	1	1	2	0.058	0.038	0.020
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	2900	8	5	35	1	1	2	0.085	0.051	0.027
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	21	8	5	35	1	2	1	0.011	0.008	0.006
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	211	8	5	35	1	1	2	0.046	0.096	0.069
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	31	8	5	35	1	2	2	0.012	0.009	0.007
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	37	8	5	35	1	2	2	0.013	0.010	0.007
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	25	8	5	35	1	2	2	0.012	0.009	0.006
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	19	8	5	20	2	2	2	0.009	0.007	0.005
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	3666	8	5	20	1	1	4	0.134	0.070	0.037
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	25	4	3	30	1	2	1	0.008	0.006	0.004
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	368	4	3	30	3	1	2	0.037	0.028	0.110
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	178	4	3	30	1	1	2	0.029	0.021	0.015
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	43	4	3	30	1	2	1	0.009	0.007	0.005
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	43	4	3	30	1	2	2	0.009	0.007	0.005
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	20	4	3	30	1	2	1	0.007	0.005	0.004
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	11	4	3	30	1	2	1	0.006	0.004	0.003

Appendix B
Pre-Construction Accident Prediction Summary
South Dakota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	ADT c	TRNS PER DAY t	NO. THRU TRNS/DAY DAYLIGHT d	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	11	4	3	30	2	2	2	0.006	0.004	0.003
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	187	4	3	30	1	1	2	0.029	0.021	0.015
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	100	4	3	30	1	2	2	0.013	0.010	0.007
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	98	4	3	30	1	1	2	0.023	0.017	0.012
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	37	4	3	30	1	1	2	0.016	0.012	0.009
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	1	4	3	30	1	1	2	0.004	0.003	0.002
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	2350	4	3	30	2	1	2	0.074	0.046	0.033
189843E	48000	SD	HUGHES	INDUSTRIAL	PIERRE	PASSIVE	4653	4	3	30	2	1	2	0.096	0.055	0.040
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	5580	4	3	30	2	1	2	0.102	0.145	0.104
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	905	4	3	30	2	1	2	0.052	0.035	0.025
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	17125	4	3	30	2	1	4	0.214	0.092	0.049
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	2055	4	3	30	1	1	2	0.071	0.044	0.032
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	6260	4	3	30	1	1	2	0.081	0.049	0.026
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	5265	4	3	30	1	1	2	0.075	0.046	0.025
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	4300	4	3	30	1	1	2	0.069	0.043	0.023
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	5642	4	3	30	1	1	2	0.078	0.047	0.025
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	77	4	3	30	1	2	2	0.012	0.009	0.006
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	605	4	3	30	2	2	2	0.025	0.072	0.052
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	325	4	3	30	2	2	2	0.020	0.015	0.010
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	1167	4	3	30	1	1	2	0.057	0.037	0.027
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	4841	4	3	30	1	1	2	0.097	0.056	0.040
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	626	4	3	30	1	2	2	0.025	0.018	0.013
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	595	4	3	30	1	2	2	0.025	0.018	0.013
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	23	4	3	30	1	2	1	0.007	0.006	0.004
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	15	4	3	30	1	2	1	0.006	0.005	0.004

Updated ADT information

ADT Information increased based on population increase for county

Appendix B
 Post-Construction Accident Prediction Summary
 South Dakota - 100 NMT

FRA ID	MILEPOST	COUNTY	STREET	CITY	EXISTING	PROPOSED	ADT	TRNS PER DAY	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR)	PREDICTED ACCIDENTS PER YR	ESTIMATED ANNUAL ACCIDENT FREQUENCY
							c	t					a	B	A
193785T	027360	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	50	37	49	2	2	2	0.038	0.026	0.019
193786A	027440	BROOKINGS	ELK ST	ELKTON	PASSIVE	FLASHING LIGHTS	1736	37	49	1	1	2	0.152	0.076	0.040
193787G	027460	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	FLASHING LIGHTS	310	37	49	1	2	2	0.075	0.046	0.024
193788N	027470	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	FLASHING LIGHTS	372	37	49	1	1	2	0.081	0.049	0.026
193789V	027480	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	FLASHING LIGHTS	945	37	49	1	1	2	0.119	0.064	0.034
193791W	027570	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	43	37	49	1	2	2	0.036	0.025	0.018
193792D	027680	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	48	37	49	1	2	2	0.038	0.026	0.019
193794S	027780	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	45	37	49	1	2	2	0.037	0.026	0.018
193795Y	027810	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	41	37	49	1	2	2	0.035	0.025	0.018
197475M	27880	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	115	37	49	1	2	2	0.052	0.034	0.025
193805C	027990	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	51	37	49	1	2	2	0.038	0.027	0.019
197476U	028090	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	58	37	49	1	2	2	0.040	0.028	0.020
197477B	028150	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	33	37	49	1	2	2	0.033	0.023	0.017
193806J	028200	BROOKINGS	479TH AVE		PASSIVE	PASSIVE	53	37	49	1	2	2	0.039	0.027	0.019
193807R	028300	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	52	37	49	1	2	2	0.039	0.027	0.019
193808X	028410	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	38	37	49	1	2	2	0.034	0.024	0.017
197424C	028490	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	6	37	49	1	2	2	0.017	0.013	0.009
197425J	028510	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	FLASHING LIGHTS	172	37	49	1	1	2	0.059	0.038	0.020
197426R	028620	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	26	37	49	1	2	2	0.030	0.021	0.015
197429L	028830	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	12	37	49	1	2	2	0.022	0.017	0.012
197430F	28870	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	12	37	35	1	1	2	0.037	0.026	0.018
197478H	028930	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	15752	37	49	1	1	4	0.191	0.305	0.150
197479P	28960	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	3751	37	49	1	1	2	0.094	0.055	0.027
197480J	029030	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	7986	37	49	1	1	2	0.117	0.064	0.031
197481R	029090	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	9905	37	49	1	1	4	0.166	0.080	0.039
197482X	029110	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	3261	37	49	1	1	2	0.090	0.053	0.026
197483E	029210	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	FLASHING LIGHTS	37	37	49	2	2	2	0.038	0.026	0.014
197484L	029240	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	97	37	49	2	2	2	0.049	0.033	0.023
197485T	029350	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	25	37	49	2	2	2	0.030	0.021	0.015
197487G	029460	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	43	37	49	3	2	2	0.036	0.025	0.018
197440L	29650	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	57	37	49	2	2	2	0.032	0.023	0.011
197441T	029720	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2216	37	49	1	1	2	0.168	0.080	0.043
197442A	029730	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	2703	37	49	1	1	2	0.183	0.084	0.045
197443G	029740	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	1178	37	49	1	1	2	0.130	0.068	0.036
197445V	029840	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	25	37	49	1	2	2	0.030	0.021	0.015
197493K	029870	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	2900	37	49	1	1	2	0.087	0.052	0.025
197446C	029960	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	37	37	49	1	2	2	0.034	0.024	0.017
197447J	030170	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	21	37	49	1	2	1	0.028	0.020	0.014
197448R	030280	BROOKINGS	459TH AVE	VOLGA	PASSIVE	FLASHING LIGHTS	211	37	49	1	1	2	0.064	0.113	0.060
197449X	030380	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	31	37	49	1	2	2	0.032	0.023	0.016
197450S	030480	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	37	37	49	1	2	2	0.034	0.024	0.017
197502G	030680	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	25	37	49	1	2	2	0.030	0.021	0.015
197503N	030730	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	19	37	49	2	2	2	0.027	0.019	0.014
197451Y	030800	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	3666	37	49	1	1	4	0.298	0.109	0.058

Appendix B
Post-Construction Accident Prediction Summary
South Dakota - 100 NMT

FRA ID	MILEPOST	COUNTY	STREET	CITY	EXISTING	PROPOSED	ADT c	TRNS PER DAY t	MAX. TT SPEED (MPH)	NO. MAIN TRKS	HWY PAVED YES=1 NO=2	NO. HWY LANES	BASIC FORMULA INITIAL (ACCIDENTS/YR) a	PREDICTED ACCIDENTS PER YR B	ESTIMATED ANNUAL ACCIDENT FREQUENCY A
189799U	043820	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	25	37	49	1	2	1	0.030	0.021	0.015
189800L	043920	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	25	37	49	1	2	1	0.030	0.021	0.015
189801T	43990	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	368	37	49	3	1	2	0.118	0.338	0.179
189802A	044020	HUGHES	321ST AVE	HARROLD	PASSIVE	FLASHING LIGHTS	178	37	49	2	1	2	0.072	0.045	0.024
189805V	44320	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	43	37	49	2	2	1	0.036	0.025	0.018
189809X	044720	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	43	37	49	1	2	2	0.036	0.025	0.018
189810S	44920	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	20	37	49	1	2	1	0.027	0.020	0.014
189812F	45130	HUGHES	310TH AVE		PASSIVE	PASSIVE	11	37	49	2	2	1	0.022	0.016	0.011
189813M	45220	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	11	37	49	3	2	2	0.022	0.016	0.011
189816H	045330	HUGHES	CANNING RD	BLUNT	PASSIVE	FLASHING LIGHTS	187	37	49	2	1	2	0.074	0.046	0.024
189822L	046110	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	100	37	49	1	2	2	0.049	0.033	0.024
189839P	47790	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	98	37	49	1	1	2	0.089	0.052	0.038
189840J	47840	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	37	37	49	1	1	2	0.062	0.040	0.028
189841R	47890	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	1	11	40	1	1	2	0.008	0.006	0.004
189842X	47950	HUGHES	LOWELL RD	PIERRE	PASSIVE	FLASHING LIGHTS	2350	37	40	2	1	2	0.209	0.091	0.048
189844L	48050	HUGHES	HARRISON	PIERRE	PASSIVE	PASSIVE	5580	37	40	2	1	2	0.370	0.255	0.182
189845T	48070	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	905	37	40	2	1	2	0.141	0.072	0.038
189846A	48110	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	17125	37	40	2	1	4	0.227	0.095	0.047
189847G	48140	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	2055	37	40	1	1	2	0.163	0.079	0.042
189848N	48160	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	6260	37	40	1	1	2	0.109	0.061	0.030
189850P	48190	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	5265	37	40	1	1	2	0.104	0.059	0.029
189851W	48220	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	4300	11	40	1	1	2	0.117	0.064	0.034
189856F	48350	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	5642	37	40	1	1	2	0.106	0.060	0.029
189857M	48370	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	77	37	40	1	2	2	0.042	0.029	0.020
189858U	048410	STANLEY	7TH AVE/SALEBARN RD	FORT PIERRE	PASSIVE	GATES	605	37	40	2	2	2	0.064	0.113	0.056
189859B	48430	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	GATES	325	37	40	2	2	2	0.053	0.035	0.017
189860V	48450	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	1167	37	40	1	1	2	0.129	0.068	0.036
189861C	048460	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	4841	37	40	1	1	2	0.101	0.058	0.028
189862J	48490	STANLEY	PARK	FORT PIERRE	PASSIVE	FLASHING LIGHTS	626	37	40	1	2	2	0.100	0.057	0.030
189864X	48590	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	FLASHING LIGHTS	595	37	49	1	2	2	0.098	0.056	0.030
189870B	048940	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	23	37	49	2	2	1	0.029	0.021	0.015
189889T	050300	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	15	37	49	1	2	1	0.024	0.018	0.013

 Updated ADT information

 ADT Information increased based on population increase for county

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
193785T	027360	SD	BROOKINGS	487TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.019	B	0.010	101	NO
193786A	027440	SD	BROOKINGS	ELK ST	ELKTON	PASSIVE	FLASHING LIGHTS	0.045	0.040	B	-0.005	-218	NO
193787G	027460	SD	BROOKINGS	N BUFFALO ST	ELKTON	PASSIVE	PASSIVE	0.017	0.024	B	0.008	129	NO
193788N	027470	SD	BROOKINGS	CORNELL AVE	ELKTON	PASSIVE	PASSIVE	0.029	0.026	B	-0.003	-300	NO
193789V	027480	SD	BROOKINGS	SD HWY 13	ELKTON	PASSIVE	PASSIVE	0.038	0.034	B	-0.004	-251	NO
193791W	027570	SD	BROOKINGS	485TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.018	B	0.010	105	NO
193792D	027680	SD	BROOKINGS	484TH AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.019	B	0.010	102	NO
193794S	027780	SD	BROOKINGS	483RD AVE	ELKTON	PASSIVE	PASSIVE	0.009	0.018	B	0.010	104	NO
193795Y	027810	SD	BROOKINGS	216TH ST	ELKTON	PASSIVE	PASSIVE	0.008	0.018	B	0.009	107	NO
197475M	27880	SD	BROOKINGS	482ND AVE	ELKTON	PASSIVE	PASSIVE	0.012	0.025	B	0.013	79	NO
193805C	027990	SD	BROOKINGS	481ST AVE	AURORA	PASSIVE	PASSIVE	0.009	0.019	B	0.010	100	NO
197476U	028090	SD	BROOKINGS	480TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.020	B	0.010	96	NO
197477B	028150	SD	BROOKINGS	215TH ST	AURORA	PASSIVE	PASSIVE	0.008	0.017	B	0.009	114	NO
193806J	028200	SD	BROOKINGS	479TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.019	B	0.010	99	NO
193807R	028300	SD	BROOKINGS	478TH AVE	AURORA	PASSIVE	PASSIVE	0.009	0.019	B	0.010	99	NO
193808X	028410	SD	BROOKINGS	477TH AVE	AURORA	PASSIVE	PASSIVE	0.008	0.017	B	0.009	109	NO
197424C	028490	SD	BROOKINGS	HULL AVE	AURORA	PASSIVE	PASSIVE	0.004	0.009	B	0.005	198	NO
197425J	028510	SD	BROOKINGS	BROADWAY AVE	AURORA	PASSIVE	PASSIVE	0.023	0.020	B	-0.003	-341	NO
197426R	028620	SD	BROOKINGS	475TH AVE	AURORA	PASSIVE	PASSIVE	0.007	0.015	B	0.008	123	NO
197429L	028830	SD	BROOKINGS	34THAAVE	BROOKINGS	PASSIVE	PASSIVE	0.005	0.012	B	0.006	157	NO
197430F	28870	SD	BROOKINGS	INDUSTRIAL/ 8TH ST	BROOKINGS	PASSIVE	PASSIVE	0.005	0.018	B	0.013	78	NO
197478H	028930	SD	BROOKINGS	22ND AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.186	0.150	A	-0.036	-28	NO
197479P	28960	SD	BROOKINGS	17TH AVE SO.	BROOKINGS	FLASHING LIGHTS	GATES	0.031	0.027	B	-0.005	-221	NO
197480J	029030	SD	BROOKINGS	MEDARY AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.039	0.031	B	-0.007	-138	NO
197481R	029090	SD	BROOKINGS	MAIN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.050	0.039	B	-0.011	-91	NO
197482X	029110	SD	BROOKINGS	WESTERN AVE	BROOKINGS	FLASHING LIGHTS	GATES	0.028	0.026	B	-0.002	-613	NO
197483E	029210	SD	BROOKINGS	6TH ST W	BROOKINGS	PASSIVE	PASSIVE	0.006	0.014	B	0.007	134	NO
197484L	029240	SD	BROOKINGS	16TH AVE W	BROOKINGS	PASSIVE	PASSIVE	0.009	0.023	B	0.014	70	NO
197485T	029350	SD	BROOKINGS	468TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.006	0.015	B	0.009	106	NO
197487G	029460	SD	BROOKINGS	467TH AVE	BROOKINGS	PASSIVE	PASSIVE	0.007	0.018	B	0.011	89	NO
197440L	29650	SD	BROOKINGS	CASPIAN	VOLGA	GATES	GATES	0.005	0.011	B	0.006	163	NO
197441T	029720	SD	BROOKINGS	HANSINA ST.	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.025	0.043	B	0.018	56	NO
197442A	029730	SD	BROOKINGS	KASAN ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.026	0.045	B	0.018	54	NO
197443G	029740	SD	BROOKINGS	SAMARA ST	VOLGA	FLASHING LIGHTS	FLASHING LIGHTS	0.020	0.036	B	0.016	62	NO
197445V	029840	SD	BROOKINGS	463RD AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.015	B	0.009	113	NO
197493K	029870	SD	BROOKINGS	HWY 14	VOLGA	FLASHING LIGHTS	GATES	0.027	0.025	B	-0.001	-761	NO
197446C	029960	SD	BROOKINGS	462ND AVE	VOLGA	PASSIVE	PASSIVE	0.007	0.017	B	0.010	100	NO
197447J	030170	SD	BROOKINGS	460TH AVE	VOLGA	PASSIVE	PASSIVE	0.006	0.014	B	0.008	120	NO
197448R	030280	SD	BROOKINGS	459TH AVE	VOLGA	PASSIVE	FLASHING LIGHTS	0.069	0.060	A	-0.009	-115	NO
197449X	030380	SD	BROOKINGS	458TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.016	B	0.009	106	NO
197450S	030480	SD	BROOKINGS	457TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.007	0.017	B	0.010	100	NO
197502G	030680	SD	BROOKINGS	455TH AVE	ARLINGTON	PASSIVE	PASSIVE	0.006	0.015	B	0.009	113	NO
197503N	030730	SD	BROOKINGS	209TH ST	ARLINGTON	PASSIVE	PASSIVE	0.005	0.014	B	0.009	115	NO
197451Y	030800	SD	BROOKINGS	US HWY 81	ARLINGTON	FLASHING LIGHTS	FLASHING LIGHTS	0.037	0.058	A	0.021	49	YES
189799U	043820	SD	HUGHES	323RD AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.015	B	0.011	92	NO
189800L	043920	SD	HUGHES	322ND AVE	HARROLD	PASSIVE	PASSIVE	0.004	0.015	B	0.011	92	NO
189801T	43990	SD	HUGHES	WYMAN AVE	HARROLD	FLASHING LIGHTS	FLASHING LIGHTS	0.110	0.179	A	0.069	15	YES
189802A	044020	SD	HUGHES	321ST AVE	HARROLD	PASSIVE	PASSIVE	0.015	0.024	B	0.009	110	NO
189805V	44320	SD	HUGHES	318TH AVE	HARROLD	PASSIVE	PASSIVE	0.005	0.018	B	0.013	77	NO
189809X	044720	SD	HUGHES	314TH AVE	BLUNT	PASSIVE	PASSIVE	0.005	0.018	B	0.013	77	NO
189810S	44920	SD	HUGHES	312TH AVE	BLUNT	PASSIVE	PASSIVE	0.004	0.014	B	0.010	99	NO
189812F	45130	SD	HUGHES	310TH AVE		PASSIVE	PASSIVE	0.003	0.011	B	0.008	120	NO
189813M	45220	SD	HUGHES	309TH AVE	BLUNT	PASSIVE	PASSIVE	0.003	0.011	B	0.008	120	NO
189816H	045330	SD	HUGHES	CANNING RD	BLUNT	PASSIVE	PASSIVE	0.015	0.024	B	0.009	109	NO
189822L	046110	SD	HUGHES	CHELSEY RD	BLUNT	PASSIVE	PASSIVE	0.007	0.024	B	0.017	60	NO

Appendix B
Pre/Post-Construction Accident Prediction Comparison
South Dakota - 100 NMT

FRA ID	MILEPOST	STATE	COUNTY	STREET	CITY	EXISTING DEVICE	PROPOSED DEVICE	Estimated Annual Accident Frequency		Category	Change in Frequency	1/Freq.	Trip Threshold
								Pre-Construction	Post-Construction				
189839P	47790	SD	HUGHES	FARM ISLAND RD	PIERRE	PASSIVE	PASSIVE	0.012	0.038	B	0.025	39	NO
189840J	47840	SD	HUGHES	UPS RD	PIERRE	PASSIVE	PASSIVE	0.009	0.028	B	0.020	50	NO
189841R	47890	SD	HUGHES	RECREATIONAL/ GOLF	PIERRE	PASSIVE	PASSIVE	0.002	0.004	B	0.002	507	NO
189842X	47950	SD	HUGHES	LOWELL RD	PIERRE	PASSIVE	FLASHING LIGHTS	0.033	0.048	B	0.015	65	NO
189844L	48050	SD	HUGHES	HARRISON	PIERRE	PASSIVE	PASSIVE	0.104	0.182	A	0.079	13	YES
189845T	48070	SD	HUGHES	MONROE	PIERRE	PASSIVE	FLASHING LIGHTS	0.025	0.038	B	0.013	74	NO
189846A	48110	SD	HUGHES	HWY 14/ 34	PIERRE	FLASHING LIGHTS	GATES	0.049	0.047	B	-0.002	-514	NO
189847G	48140	SD	HUGHES	REE ST	PIERRE	PASSIVE	FLASHING LIGHTS	0.032	0.042	B	0.010	98	NO
189848N	48160	SD	HUGHES	HIGHLAND AVE	PIERRE	FLASHING LIGHTS	GATES	0.026	0.030	B	0.004	248	NO
189850P	48190	SD	HUGHES	CENTRAL ST	PIERRE	FLASHING LIGHTS	GATES	0.025	0.029	B	0.004	230	NO
189851W	48220	SD	HUGHES	POPLAR	PIERRE	FLASHING LIGHTS	FLASHING LIGHTS	0.023	0.034	B	0.011	93	NO
189856F	48350	SD	STANLEY	HWY 14/ 34	FORT PIERRE	FLASHING LIGHTS	GATES	0.025	0.029	B	0.004	237	NO
189857M	48370	SD	STANLEY	STANLEY RD	FORT PIERRE	PASSIVE	PASSIVE	0.006	0.020	B	0.014	71	NO
189858U	048410	SD	STANLEY	7TH AVE/SALEBARN R	FORT PIERRE	PASSIVE	GATES	0.052	0.056	A	0.004	259	NO
189859B	48430	SD	STANLEY	FIFTH AVE	FORT PIERRE	PASSIVE	PASSIVE	0.010	0.017	B	0.007	147	NO
189860V	48450	SD	STANLEY	SECOND AVE	FORT PIERRE	PASSIVE	FLASHING LIGHTS	0.027	0.036	B	0.009	107	NO
189861C	048460	SD	STANLEY	MAIN AVE	FORT PIERRE	PASSIVE	GATES	0.040	0.028	B	-0.012	-86	NO
189862J	48490	SD	STANLEY	PARK	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.030	B	0.017	58	NO
189864X	48590	SD	STANLEY	BAD RIVER RD	FORT PIERRE	PASSIVE	PASSIVE	0.013	0.030	B	0.017	59	NO
189870B	048940	SD	STANLEY	TRAIL PLACE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.015	B	0.011	94	NO
189889T	050300	SD	STANLEY	WENDTE RD	FORT PIERRE	PASSIVE	PASSIVE	0.004	0.013	B	0.009	109	NO

Updated ADT information

ADT Information increased based on population increase for county

**APPENDIX C
TRANSPORTATION DATA TABLES**

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Appendix C
Pre/Post-Construction Delays
Minnesota - 20 MNT
Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Train Speed (mph)	Train Length (feet)	Pre-Construction						Post-Construction						Difference Average Delay/ Veh. (min.)	Trip Threshold				
						Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train			Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)
						Day	Hour								Day	Hour							
193291Y	006350	2	12000	20	7400	3	0.1	4.7	2.7	117.6	56.5	3.1	45.0	7400	11	0.5	2.4	1.5	217.1	28.4	3.2	-1.2	NO
196630L	006520	2	11400	20	7400	3	0.1	4.7	2.7	111.7	53.6	3.1	45.0	7400	11	0.5	2.4	1.5	206.3	27.0	3.2	-1.2	NO
911202N	004710	2	9645	20	7400	3	0.1	4.7	2.7	94.5	45.4	3.1	45.0	7400	11	0.5	2.4	1.5	174.5	22.8	3.2	-1.2	NO
193273B	004850	2	13889	20	7400	3	0.1	4.7	2.7	136.1	65.3	3.1	45.0	7400	11	0.5	2.4	1.5	251.3	32.9	3.2	-1.2	NO
193276W	004900	4	11381	20	7400	3	0.1	4.7	2.7	111.5	28.8	3.1	45.0	7400	11	0.5	2.4	1.5	205.9	13.5	3.2	-1.2	NO
193277D	004910	4	24000	20	7400	3	0.1	4.7	2.7	235.2	56.5	3.1	45.0	7400	11	0.5	2.4	1.5	434.3	28.4	3.2	-1.2	NO
193278K	004920	4	6078	20	7400	3	0.1	4.7	2.7	59.6	14.3	3.1	45.0	7400	11	0.5	2.4	1.5	110.0	7.2	3.2	-1.2	NO
193280L	004940	4	9259	20	7400	3	0.1	4.7	2.7	90.7	21.8	3.1	45.0	7400	11	0.5	2.4	1.5	167.5	11.0	3.2	-1.2	NO
193282A	005000	4	15946	20	7400	3	0.1	4.7	2.7	156.3	37.5	3.1	45.0	7400	11	0.5	2.4	1.5	288.5	18.9	3.2	-1.2	NO
193232W	005130	2	8873	20	7400	3	0.1	4.7	2.7	87.0	41.7	3.1	45.0	7400	11	0.5	2.4	1.5	160.5	21.0	3.2	-1.2	NO
193287J	005890	4	5658	20	7400	3	0.1	4.7	2.7	55.5	13.3	3.1	45.0	7400	11	0.5	2.4	1.5	102.4	6.7	3.2	-1.2	NO

Appendix C
Pre/Post-Construction Delays
Minnesota - 50 NMT
Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Pre-Construction									Post-Construction									Difference Average Delay/ Veh. (min.)	Trip Threshold
				Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)		
						Day	Hour								Day	Hour							
193291Y	006350	2	12000	20	7400	3	0.1	4.7	2.7	117.6	56.5	3.1	45.0	7400	21	0.9	2.4	1.5	414.5	28.4	6.2	-1.2	NO
196630L	006520	2	11400	20	7400	3	0.1	4.7	2.7	111.7	53.6	3.1	45.0	7400	21	0.9	2.4	1.5	393.8	27.0	6.2	-1.2	NO
911202N	004710	2	9645	20	7400	3	0.1	4.7	2.7	94.5	45.4	3.1	45.0	7400	21	0.9	2.4	1.5	333.2	22.8	6.2	-1.2	NO
193273B	004850	2	13889	20	7400	3	0.1	4.7	2.7	136.1	65.3	3.1	45.0	7400	21	0.9	2.4	1.5	479.8	32.9	6.2	-1.2	NO
193276W	004900	4	11381	20	7400	3	0.1	4.7	2.7	111.5	26.8	3.1	45.0	7400	21	0.9	2.4	1.5	393.1	13.5	6.2	-1.2	NO
193277D	004910	4	24000	20	7400	3	0.1	4.7	2.7	235.2	56.5	3.1	45.0	7400	21	0.9	2.4	1.5	829.0	28.4	6.2	-1.2	NO
193278K	004920	4	6078	20	7400	3	0.1	4.7	2.7	59.6	14.3	3.1	45.0	7400	21	0.9	2.4	1.5	210.0	7.2	6.2	-1.2	NO
193280L	004940	4	9259	20	7400	3	0.1	4.7	2.7	90.7	21.8	3.1	45.0	7400	21	0.9	2.4	1.5	319.8	11.0	6.2	-1.2	NO
193282A	005000	4	15946	20	7400	3	0.1	4.7	2.7	156.3	37.5	3.1	45.0	7400	21	0.9	2.4	1.5	550.8	18.9	6.2	-1.2	NO
193232W	005130	2	8873	20	7400	3	0.1	4.7	2.7	87.0	41.7	3.1	45.0	7400	21	0.9	2.4	1.5	306.5	21.0	6.2	-1.2	NO
193287J	005890	4	5658	20	7400	3	0.1	4.7	2.7	55.5	13.3	3.1	45.0	7400	21	0.9	2.4	1.5	195.4	6.7	6.2	-1.2	NO

Appendix C
Pre/Post-Construction Delays
Minnesota - 100 NMT
Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Pre-Construction									Post-Construction									Difference Average Delay/ Veh. (min.)	Trip Threshold
				Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Delay for all Vehicles		
						Day	Hour								Day	Hour							
193291Y	006350	2	12000	20	7400	12	0.5	4.7	2.7	470.5	56.5	12.5	45.0	7400	37	1.5	2.4	1.5	730.3	28.4	10.8	-1.2	NO
196630L	006520	2	11400	20	7400	12	0.5	4.7	2.7	446.9	53.6	12.5	45.0	7400	37	1.5	2.4	1.5	693.8	27.0	10.8	-1.2	NO
911202N	004710	2	9645	20	7400	3	0.1	4.7	2.7	94.5	45.4	3.1	45.0	7400	37	1.5	2.4	1.5	587.0	22.8	10.8	-1.2	NO
193273B	004850	2	13889	20	7400	3	0.1	4.7	2.7	136.1	65.3	3.1	45.0	7400	37	1.5	2.4	1.5	845.3	32.9	10.8	-1.2	NO
193276W	004900	4	11381	20	7400	3	0.1	4.7	2.7	111.5	26.8	3.1	45.0	7400	37	1.5	2.4	1.5	692.7	13.5	10.8	-1.2	NO
193277D	004910	4	24000	20	7400	3	0.1	4.7	2.7	235.2	56.5	3.1	45.0	7400	37	1.5	2.4	1.5	1460.7	28.4	10.8	-1.2	NO
193278K	004920	4	6078	20	7400	3	0.1	4.7	2.7	59.6	14.3	3.1	45.0	7400	37	1.5	2.4	1.5	369.9	7.2	10.8	-1.2	NO
193280L	004940	4	9259	20	7400	3	0.1	4.7	2.7	90.7	21.8	3.1	45.0	7400	37	1.5	2.4	1.5	563.5	11.0	10.8	-1.2	NO
193282A	005000	4	15946	20	7400	3	0.1	4.7	2.7	156.3	37.5	3.1	45.0	7400	37	1.5	2.4	1.5	970.5	18.9	10.8	-1.2	NO
193232W	005130	2	8873	20	7400	3	0.1	4.7	2.7	87.0	41.7	3.1	45.0	7400	37	1.5	2.4	1.5	540.0	21.0	10.8	-1.2	NO
193287J	005890	4	5658	20	7400	3	0.1	4.7	2.7	55.5	13.3	3.1	45.0	7400	37	1.5	2.4	1.5	344.4	6.7	10.8	-1.2	NO

Appendix C
 Pre/Post-Construction Delays
 South Dakota - 20 NMT
 Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Pre-Construction									Post-Construction									Difference Average Delay/ Veh. (min.)	Trip Threshold
				Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)		
						Day	Hour								Day	Hour							
197478H	028930	4	15752	28	7400	10	0.4	3.5	2.1	383.2	27.6	6.0	45.0	7400	11	0.5	2.4	1.5	285.0	18.7	3.2	-0.6	NO
197480J	029030	2	7986	28	7400	10	0.4	3.5	2.1	194.3	28.0	6.0	45.0	7400	11	0.5	2.4	1.5	144.5	18.9	3.2	-0.6	NO
197481R	029090	4	9905	28	7400	10	0.4	3.5	2.1	241.0	17.3	6.0	45.0	7400	11	0.5	2.4	1.5	179.2	11.7	3.2	-0.6	NO
189844L	48050	2	5580	30	7400	4	0.2	3.3	2.0	51.2	18.4	2.1	40.0	7400	11	0.5	2.6	1.6	110.9	14.5	3.8	-0.4	NO
189846A	48110	4	17125	30	7400	4	0.2	3.3	2.0	157.1	28.3	2.1	40.0	7400	11	0.5	2.6	1.6	340.4	22.3	3.8	-0.4	NO
189848N	48160	2	6260	30	7400	4	0.2	3.3	2.0	57.4	20.7	2.1	40.0	7400	11	0.5	2.6	1.6	124.4	16.3	3.8	-0.4	NO
189850P	48190	2	5265	30	7400	4	0.2	3.3	2.0	48.3	17.4	2.1	40.0	7400	11	0.5	2.6	1.6	104.7	13.7	3.8	-0.4	NO
189856F	48350	2	5642	30	7400	4	0.2	3.3	2.0	51.8	18.6	2.1	40.0	7400	11	0.5	2.6	1.6	112.2	14.7	3.8	-0.4	NO

Appendix C
 Pre/Post-Construction Delays
 South Dakota - 50 NMT
 Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Pre-Construction										Post-Construction								Difference Average Delay/ Veh. (min.)	Trip Threshold
				Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)		
						Day	Hour								Day	Hour							
197478H	028930	4	15752	28	7400	10	0.4	3.5	2.1	383.2	27.6	6.0	45.0	7400	21	0.9	2.4	1.5	544.1	18.7	6.2	-0.6	NO
197480J	029030	2	7986	28	7400	10	0.4	3.5	2.1	194.3	28.0	6.0	45.0	7400	21	0.9	2.4	1.5	275.9	18.9	6.2	-0.6	NO
197481R	029090	4	9905	28	7400	10	0.4	3.5	2.1	241.0	17.3	6.0	45.0	7400	21	0.9	2.4	1.5	342.2	11.7	6.2	-0.6	NO
189844L	48050	2	5580	30	7400	4	0.2	3.3	2.0	51.2	18.4	2.1	40.0	7400	21	0.9	2.6	1.6	211.8	14.5	7.3	-0.4	NO
189846A	48110	4	17125	30	7400	4	0.2	3.3	2.0	157.1	28.3	2.1	40.0	7400	21	0.9	2.6	1.6	649.9	22.3	7.3	-0.4	NO
189848N	48160	2	6260	30	7400	4	0.2	3.3	2.0	57.4	20.7	2.1	40.0	7400	21	0.9	2.6	1.6	237.6	16.3	7.3	-0.4	NO
189850P	48190	2	5265	30	7400	4	0.2	3.3	2.0	48.3	17.4	2.1	40.0	7400	21	0.9	2.6	1.6	199.8	13.7	7.3	-0.4	NO
189856F	48350	2	5642	30	7400	4	0.2	3.3	2.0	51.8	18.6	2.1	40.0	7400	21	0.9	2.6	1.6	214.1	14.7	7.3	-0.4	NO

Appendix C
Pre/Post-Construction Delays
South Dakota -100 NMT
Train Length = 7,400 Feet

FRA ID	MILEPOST	Number of Roadway Lanes	ADT	Pre-Construction										Post-Construction										Difference Average Delay/ Veh. (min.)	Trip Threshold
				Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Speed (mph)	Train Length (feet)	Trains Per		Total Blocked Time/ Train	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)				
						Day	Hour								Day	Hour									
197478H	028930	4	15752	28	7400	10	0.4	3.5	2.1	383.2	27.6	6.0	45.0	7400	37	1.5	2.4	1.5	958.7	18.7	10.8	-0.6	NO		
197480J	029030	2	7986	28	7400	10	0.4	3.5	2.1	194.3	28.0	6.0	45.0	7400	37	1.5	2.4	1.5	486.0	18.9	10.8	-0.6	NO		
197481R	029090	4	9905	28	7400	10	0.4	3.5	2.1	241.0	17.3	6.0	45.0	7400	37	1.5	2.4	1.5	602.8	11.7	10.8	-0.6	NO		
189844L	48050	2	5580	30	7400	4	0.2	3.3	2.0	51.2	18.4	2.1	40.0	7400	37	1.5	2.6	1.6	373.1	14.5	12.8	-0.4	NO		
189846A	48110	4	17125	30	7400	4	0.2	3.3	2.0	157.1	28.3	2.1	40.0	7400	37	1.5	2.6	1.6	1145.0	22.3	12.8	-0.4	NO		
189848N	48160	2	6260	30	7400	4	0.2	3.3	2.0	57.4	20.7	2.1	40.0	7400	37	1.5	2.6	1.6	418.6	16.3	12.8	-0.4	NO		
189850P	48190	2	5265	30	7400	4	0.2	3.3	2.0	48.3	17.4	2.1	40.0	7400	37	1.5	2.6	1.6	352.0	13.7	12.8	-0.4	NO		
189856F	48350	2	5642	30	7400	4	0.2	3.3	2.0	51.8	18.6	2.1	40.0	7400	37	1.5	2.6	1.6	377.2	14.7	12.8	-0.4	NO		

**APPENDIX D
ENVIRONMENTAL JUSTICE DATA TABLES**

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Appendix D
Table 1
Summary of Potential Environmental Justice Community Impacts - South Dakota

South Dakota								Comments	
County	Tract	Block	Total Population	Total Households	Low Income Households	% Low Income Households	Minority Percentage		
			2000 ¹	2000 ²	2000 ³	2000	2000 ⁴		
Brookings	9586	2	606	229	71	31	2.6		
	9586	3	891	344	114	33.1	0.9		
	9586	4	920	335	139	41.5	0.7		
	9587	1	1194	457	138	30.2	1.3		
	9587	2	889	331	93	28.1	0		
	9587	3	1512	602	193	32.1	0.7		
	9587	4	1054	401	85	21.2	0.9		
									Potential EJ community based on low income criteria, boundaries only slightly changed from 1990, no disproportionate impacts identified.
	9588	1	1902	726	429	59.1	4.4		
	9588	2	867	399	155	38.8	5.9		
	9588	3	1160	364	170	46.7	8.2		
								Potential EJ community based on low income criteria, boundaries unchanged from 1990, potential disproportionate impacts due to safety (Medary Ave and Main Ave).	
	9588	4	949	497	313	63	5.2		
								Potential EJ community based on low income criteria, boundaries unchanged from 1990. Potential disproportionate impacts due to safety (Medary Ave and Main Ave).	
	9588	5	1670	776	471	60.7	5.4		
								Potential EJ community based on low income criteria, new tract and block since 1990, potential disproportionate impacts due to safety (Medary Ave) and noise.	
	9589	3	486	252	149	59.1	3.3		
	9589	4	751	343	121	35.3	2.4		
	9589	5	1040	382	43	11.3	3.2		
	9590	1	1451	645	278	43.1	5.6		
	9590	2	2217	919	347	37.8	1.9		
	County Total		28220	10665	4513	42.3	3.6		
Stanley	9891	1	539	226	83	36.7	0.4		
	9891	2	2211	883	288	32.6	8.4		
	County Total		2772	1111	378	34	7		
Hughes	9776	1	1520	570	180	31.6	6.5		
								Potential EJ community due to low income criteria, similar to tract 9776 block 4 in 1990 census, potential disproportionate impacts due to noise.	
	9776	2	669	262	136	51.9	0.6		
	9777	1	1123	423	60	14.2	2.8		
	9777	2	687	273	101	37	7.4		
								Potential EJ community due to low income criteria, same boundary as 1990 but was not E.J. in 1990, potential disproportionate impacts due to safety.	
	9777	4	1757	753	425	56.4	6.8		
	9777	5	869	439	120	27.3	7.4		
	9778	1	2305	738	280	37.9	13.5		
	9778	3	591	217	32	14.7	1.2		
	9778	4	670	273	55	20.1	4.2		
	9778	5	753	384	131	34.1	10.8		
									Potential EJ community due to low income criteria, same boundary as 1990 but was not E.J. in 1990, potential disproportionate impacts due to noise and safety.
	9779	1	1592	521	112	21.5	18.9		
									Potential EJ community based on low income criteria, boundaries unchanged from 1990, potential disproportionate impacts due to safety
9779	2	731	263	136	51.7	5.5			
								Potential EJ community based on low income criteria, boundaries unchanged from 1990, potential disproportionate impacts due to safety	
	9779	3	1393	741	402	54.3	16.4		
	County Total		16481	6512	2159	33.2	11.1		
	State Total		754844	290336	122315	42.1	11.3		

¹Total population data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total population for a specific tract and block was obtained from the table "P1. Total Population."

²Total household data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of households for a specific tract and block was obtained from the table "P14. Household Type by Household Size."

³The U.S. Federal poverty level for 2000 (\$17,603) was obtained from "<http://www.census.gov/hhes/poverty/threshld/thresh00.html>." The size of the family unit was assumed to be four persons. The low-income level was assumed to be 1.5 times the poverty level (\$26,405). Census table data is broken down into ranges for household income. Data was taken from the \$25,000-\$29,000 household income range, since the assumed low-income level (\$26,405) falls within this range. All households within this range were included in the count. The house income data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of low-income households for a specific tract and block was obtained from the table "P52. Household Income in 1999."

⁴Minority data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of minorities for a specific tract and block was obtained from the table "P6. Race" by summing the non-white residents. The minority percentage was calculated by dividing the total number of minorities by the total population.

Appendix D
Table 2
Summary of Potential Environmental Justice Community Impacts - Minnesota

Minnesota

County	Tract	Block	Total Population	Total Households	Low Income Households	% Low Income Households	Minority Percentage	Comments	
			2000 ¹	2000 ²	2000 ³	2000	2000 ⁴		
Dodge	9503	1	946	380	139	36.6	4.7		
	9503	2	701	237	53	22.4	0.4		
	9503	3	877	330	118	35.8	10.1		
	9502	1	980	333	67	20.1	2		
	9502	2	1300	467	159	34	11.6		
	9502	3	1347	494	151	30.6	4.8		
	9501	2	1009	357	70	19.6	1.8		
	9501	3	1757	579	95	16.4	1.5		
	9505	1	1578	551	94	17.1	1.9		
	9505	2	1627	600	140	23.3	1.4		
		9505	3	1277	570	263	46.1	6	Potential EJ community due to low income criteria, essentially the same as 1990 tract 9505-6. No disproportionate impacts identified.
		9504	3	1208	426	86	20.2	0.3	
	County		17731	6420	1762	27	3		
Olmstead	20	3	1073	385	127	33	4.1		
	20	4	1693	611	155	25.4	2.1		
	9.03	1	302	142	34	24	8.3		
	9.03	2	918	295	28	9.5	3.3		
	9.01	1	485	175	44	25.1	0		
	9.01	2	1307	509	207	40.7	13.7		
	9.01	3	1258	445	75	16.9	0		
	7	1	822	342	126	36.8	6.3		
	7	3	609	258	93	36	5.7		
	7	4	1135	396	24	6.1	4.8		
	8	1	264	no data	no data	no data	45.5		
		6	2	783	446	288	64.6	15.3	Potential EJ community due to low income criteria, essentially the same as 1990 tract 6-2. Potential disproportionate impacts due to safety.
		6	3	1049	499	292	58.5	18	Potential EJ community due to low income and minority criteria, not identified as EJ in 1990, potential disproportionate impacts due to safety.
		6	5	736	336	113	33.6	7.7	
		5	1	438	222	118	53.2	30.4	Potential EJ community due to low income and minority criteria, not identified as EJ in 1990, includes portions of EJ tracts 1-1 and 1-2 from 1990. No disproportionate impacts identified.
		5	2	851	471	204	43.3	23.6	Potential EJ community due to low income criteria, not identified as EJ in 1990, includes portions of EJ tracts 1-1 and 1-2 from 1990. No disproportionate impacts identified.
		13.01	1	1469	543	47	8.7	15.4	Potential EJ community due to minority criteria, new tract and block since 1990, potential disproportionate impacts due to noise.
		13.01	2	266	106	0	0	0	
		14.01	2	1219	494	76	15.4	3	
		13.02	1	1914	542	31	5.7	4.4	
		14.02	1	1109	318	21	6.6	5.6	
		18	1	1983	627	114	18.2	2.1	
		18	2	1610	571	113	19.8	2.5	
		19	6	584	208	35	16.8	2.7	
		22	1	847	325	55	16.9	1.5	
		County		124277	47807	12255	26	10	
	State Total			4919479	1896209	561517	29.6	10.5	

¹Total population data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total population for a specific tract and block was obtained from the table "P1. Total Population."

²Total household data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of households for a specific tract and block was obtained from the table "P14. Household Type by Household Size."

³The U.S. Federal poverty level for 2000 (\$17,603) was obtained from "<http://www.census.gov/hhes/poverty/threshld/thresh00.html>." The size of the family unit was assumed to be four persons. The low-income level was assumed to be 1.5 times the poverty level (\$26,405). Census table data is broken down into ranges for household income. Data was taken from the \$25,000-\$29,000 household income range, since the assumed low-income level (\$26,405) falls within this range. All households within this range were included in the count. The household income data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of low-income households for a specific tract and block was obtained from the table "P52. Household Income in 1999."

⁴Minority data for 2000 was found on the U.S. Census Bureau Web site (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=180973719312) for the appropriate county, tract, and block. The total number of minorities for a specific tract and block was obtained from the table "P6. Race" by summing the non-white residents. The minority percentage was calculated by dividing the total number of minorities by the total population.