APPENDIX A. SAMPLE OF THE INPUT DATA FILES

Program Control

Program Name	Version	Prog Level	LicenseOS	LicenseSC	LicenseHT	CurrUnits	SteelCode	ConcCode
Text	Text	Text	Yes/No	Yes/No	Yes/No	Text	Text	Text
SAP2000	21.2.0	Ultimate	Yes	Yes	No	Kip, ft, F	AISC 360-10	ACI 318-14

Vehicles Definition Table 1

TABLE: Vehicles 2 - General Vehicles 1 - General		
VehName	NumInter	StayInLane
Text	Unitless	Yes/No
HS20_1	3	No
HS20_2_10	6	No
HS20_2_11	6	No
HS20_2_12	6	No
HS20_2_13	6	No
HS20_2_14	6	No
HS20_2_15	6	No
HS20_2_16	6	No
HS20_2_17	6	No
HS20_2_18	6	No
HS20_2_19	6	No
HS20_2_20	6	No
HS20_2_21	6	No
HS20_2_22	6	No
HS20_2_23	6	No
HS20_2_24	6	No
HS20_2_25	6	No
HS20_2_26	6	No
HS20_2_27	6	No
HS20_2_28	6	No
HS20_2_29	6	No
HS20_2_30	6	No
HS20_3_10	9	No
HS20_3_11	9	No
HS20_3_12	9	No
HS20_3_13	9	No

Vehicles Definition Table 2

TABLE: Vehicles 3 - General Vehicles 2 - Loads				
VehName	**LoadType**	**InterUnif**	**InterAxle**	**InterMinD**
Text	Text	Kip/ft	Kip	ft
HS20_1	Fixed Length	0	32	0.1
HS20_1	Fixed Length	0	32	14
HS20_1	Fixed Length	0	8	14
HS20_2_10	Fixed Length	0	32	0.1
HS20_2_10	Fixed Length	0	32	14
HS20_2_10	Fixed Length	0	8	14
HS20_2_10	Fixed Length	0	32	10
HS20_2_10	Fixed Length	0	32	14
HS20_2_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	0.1
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	10
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	10
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	0.1
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14

Vehicles Definition Table 3

TABLE: Vehicles 3 - General Vehicles 2 - Loads				
VehName	**LoadType**	**InterUnif**	**InterAxle**	**InterMinD**
Text	Text	Kip/ft	Kip	ft
HS20_1	Fixed Length	0	32	0.1
HS20_1	Fixed Length	0	32	14
HS20_1	Fixed Length	0	8	14
HS20_2_10	Fixed Length	0	32	0.1
HS20_2_10	Fixed Length	0	32	14
HS20_2_10	Fixed Length	0	8	14
HS20_2_10	Fixed Length	0	32	10
HS20_2_10	Fixed Length	0	32	14
HS20_2_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	0.1
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	10
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_3_10	Fixed Length	0	32	10
HS20_3_10	Fixed Length	0	32	14
HS20_3_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	0.1
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14
HS20_4_10	Fixed Length	0	32	10
HS20_4_10	Fixed Length	0	32	14
HS20_4_10	Fixed Length	0	8	14

APPENDIX B. SIMPLE SPAN BRIDGE RESULTS

Maximum Bending Moment

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_1	1	0	160	627.68	1075.2	1523.84	1973.12	2422.56	2872.23	3321.92
HS20_2_10	2	10	162	659.68	1376.64	2265.6	3158.78	4054.4	4951.13	5848.8
HS20_2_11	2	11	160	641.28	1345.28	2233.2	3125.57	4020.8	4917.12	5814.6
HS20_2_12	2	12	160	636.48	1314.56	2200.8	3092.74	3987.2	4883.38	5780.4
HS20_2_13	2	13	160	632	1283.84	2168.64	3059.9	3953.76	4849.65	5746.32
HS20_2_14	2	14	160	627.68	1263.36	2136.96	3027.07	3920.64	4815.91	5712.48
HS20_2_15	2	15	160	627.68	1244.16	2105.28	2994.43	3887.52	4782.31	5678.64
HS20_2_16	2	16	160	627.68	1224.96	2073.6	2962.18	3854.4	4748.98	5644.8
HS20_2_17	2	17	160	627.68	1205.87	2042.16	2929.92	3821.44	4715.66	5611.08
HS20_2_18	2	18	160	627.68	1187.2	2011.2	2897.66	3788.8	4682.33	5577.6
HS20_2_19	2	19	160	627.68	1168.53	1980.24	2865.6	3756.16	4649.14	5544.12
HS20_2_20	2	20	160	627.68	1149.87	1949.28	2833.92	3723.52	4616.23	5510.64
HS20_2_21	2	21	160	627.68	1131.2	1918.56	2802.24	3691.04	4583.31	5477.28
HS20_2_22	2	22	160	627.68	1115.09	1888.32	2770.56	3658.88	4550.4	5444.16
HS20_2_23	2	23	160	627.68	1100.8	1858.08	2739.07	3626.72	4517.62	5411.04
HS20_2_24	2	24	160	627.68	1086.72	1827.84	2707.97	3594.56	4485.12	5377.92
HS20_2_25	2	25	160	627.68	1081.28	1797.84	2676.86	3562.56	4452.62	5344.92
HS20_2_26	2	26	160	627.68	1077.76	1768.32	2645.76	3530.88	4420.11	5312.16
HS20_2_27	2	27	160	627.68	1075.2	1738.8	2614.85	3499.2	4387.75	5279.4
HS20_2_28	2	28	160	627.68	1075.2	1709.28	2584.32	3467.52	4355.66	5246.64
HS20_2_29	2	29	160	627.68	1075.2	1680	2553.79	3436	4323.57	5214

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_2_30	2	30	160	627.68	1075.2	1661.12	2523.26	3404.8	4291.47	5181.6
HS20_3_10	3	10	162	659.68	1380.69	2424.64	3743.36	5091.68	6440.69	7789.76
HS20_3_11	3	11	160	641.28	1348.8	2372.88	3671.36	5019.68	6368.69	7717.76
HS20_3_12	3	12	160	636.48	1316.91	2321.12	3599.36	4947.68	6296.69	7645.76
HS20_3_13	3	13	160	632	1285.01	2269.36	3527.36	4875.68	6224.69	7573.76
HS20_3_14	3	14	160	627.68	1263.36	2217.6	3455.36	4803.68	6152.69	7501.76
HS20_3_15	3	15	160	627.68	1244.16	2166	3383.36	4731.68	6080.69	7429.76
HS20_3_16	3	16	160	627.68	1224.96	2114.4	3311.36	4659.68	6008.69	7357.76
HS20_3_17	3	17	160	627.68	1205.87	2062.8	3239.36	4587.68	5936.69	7285.76
HS20_3_18	3	18	160	627.68	1187.2	2011.2	3169.28	4515.68	5864.69	7213.76
HS20_3_19	3	19	160	627.68	1168.53	1980.24	3101.5	4443.68	5792.69	7141.76
HS20_3_20	3	20	160	627.68	1149.87	1949.28	3033.73	4371.68	5720.69	7069.76
HS20_3_21	3	21	160	627.68	1131.2	1918.56	2965.95	4299.68	5648.69	6997.76
HS20_3_22	3	22	160	627.68	1115.09	1888.32	2905.6	4227.68	5576.69	6925.76
HS20_3_23	3	23	160	627.68	1100.8	1858.08	2853.18	4155.68	5504.69	6853.76
HS20_3_24	3	24	160	627.68	1086.72	1827.84	2801.92	4083.68	5432.69	6781.76
HS20_3_25	3	25	160	627.68	1081.28	1797.84	2750.72	4011.68	5360.69	6709.76
HS20_3_26	3	26	160	627.68	1077.76	1768.32	2699.52	3939.68	5288.69	6637.76
HS20_3_27	3	27	160	627.68	1075.2	1738.8	2648.32	3867.68	5216.69	6565.76
HS20_3_28	3	28	160	627.68	1075.2	1709.28	2597.12	3795.68	5144.69	6493.76
HS20_3_29	3	29	160	627.68	1075.2	1680	2553.79	3723.68	5072.69	6421.76
HS20_3_30	3	30	160	627.68	1075.2	1661.12	2523.26	3652.05	5000.69	6349.76
HS20_4_10	4	10	162	659.68	1380.69	2435.84	3764.1	5372.8	7166.26	8961.6
HS20_4_11	4	11	160	641.28	1348.8	2376.96	3684.8	5233.6	7026.24	8821.2
HS20_4_12	4	12	160	636.48	1316.91	2321.12	3608.32	5121.71	6886.77	8680.8

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_4_13	4	13	160	632	1285.01	2269.36	3531.84	5010.24	6747.29	8540.64
HS20_4_14	4	14	160	627.68	1263.36	2217.6	3455.36	4898.77	6607.82	8400.96
HS20_4_15	4	15	160	627.68	1244.16	2166	3383.36	4787.31	6468.62	8261.28
HS20_4_16	4	16	160	627.68	1224.96	2114.4	3311.36	4680.32	6329.97	8121.6
HS20_4_17	4	17	160	627.68	1205.87	2062.8	3239.36	4595.2	6191.31	7982.16
HS20_4_18	4	18	160	627.68	1187.2	2011.2	3169.28	4515.68	6053.21	7843.2
HS20_4_19	4	19	160	627.68	1168.53	1980.24	3101.5	4443.68	5942.17	7704.24
HS20_4_20	4	20	160	627.68	1149.87	1949.28	3033.73	4371.68	5831.31	7565.28
HS20_4_21	4	21	160	627.68	1131.2	1918.56	2965.95	4299.68	5720.46	7426.56
HS20_4_22	4	22	160	627.68	1115.09	1888.32	2905.6	4227.68	5611.52	7288.32
HS20_4_23	4	23	160	627.68	1100.8	1858.08	2853.18	4155.68	5514.56	7150.08
HS20_4_24	4	24	160	627.68	1086.72	1827.84	2801.92	4083.68	5434.88	7011.84
HS20_4_25	4	25	160	627.68	1081.28	1797.84	2750.72	4011.68	5360.69	6875.76
HS20_4_26	4	26	160	627.68	1077.76	1768.32	2699.52	3939.68	5288.69	6764.96
HS20_4_27	4	27	160	627.68	1075.2	1738.8	2648.32	3867.68	5216.69	6654.16
HS20_4_28	4	28	160	627.68	1075.2	1709.28	2597.12	3795.68	5144.69	6543.36
HS20_4_29	4	29	160	627.68	1075.2	1680	2553.79	3723.68	5072.69	6440
HS20_4_30	4	30	160	627.68	1075.2	1661.12	2523.26	3652.05	5000.69	6354.56
HS20_5_10	5	10	162	659.68	1380.69	2435.84	3764.1	5377.07	7312.91	9521.6
HS20_5_11	5	11	160	641.28	1348.8	2376.96	3684.8	5236.8	7137.05	9305.6
HS20_5_12	5	12	160	636.48	1316.91	2321.12	3608.32	5122.13	6961.19	9089.6
HS20_5_13	5	13	160	632	1285.01	2269.36	3531.84	5010.45	6785.33	8873.6
HS20_5_14	5	14	160	627.68	1263.36	2217.6	3455.36	4898.77	6609.65	8661.12
HS20_5_15	5	15	160	627.68	1244.16	2166	3383.36	4787.31	6468.62	8453.44
HS20_5_16	5	16	160	627.68	1224.96	2114.4	3311.36	4680.32	6329.97	8258.56

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_5_17	5	17	160	627.68	1205.87	2062.8	3239.36	4595.2	6191.31	8082.96
HS20_5_18	5	18	160	627.68	1187.2	2011.2	3169.28	4515.68	6053.21	7907.52
HS20_5_19	5	19	160	627.68	1168.53	1980.24	3101.5	4443.68	5942.17	7732.32
HS20_5_20	5	20	160	627.68	1149.87	1949.28	3033.73	4371.68	5831.31	7565.28
HS20_5_21	5	21	160	627.68	1131.2	1918.56	2965.95	4299.68	5720.46	7426.56
HS20_5_22	5	22	160	627.68	1115.09	1888.32	2905.6	4227.68	5611.52	7288.32
HS20_5_23	5	23	160	627.68	1100.8	1858.08	2853.18	4155.68	5514.56	7150.08
HS20_5_24	5	24	160	627.68	1086.72	1827.84	2801.92	4083.68	5434.88	7011.84
HS20_5_25	5	25	160	627.68	1081.28	1797.84	2750.72	4011.68	5360.69	6875.76
HS20_5_26	5	26	160	627.68	1077.76	1768.32	2699.52	3939.68	5288.69	6764.96
HS20_5_27	5	27	160	627.68	1075.2	1738.8	2648.32	3867.68	5216.69	6654.16
HS20_5_28	5	28	160	627.68	1075.2	1709.28	2597.12	3795.68	5144.69	6543.36
HS20_5_29	5	29	160	627.68	1075.2	1680	2553.79	3723.68	5072.69	6440
HS20_5_30	5	30	160	627.68	1075.2	1661.12	2523.26	3652.05	5000.69	6354.56

Maximum Shear Force

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_1	1	0	41.6	58.56	63.04	65.28	66.624	67.52	68.16	68.64
HS20_2_10	2	10	41.6	66.88	89.6	103.2	111.36	116.8	120.686	123.6
HS20_2_11	2	11	41.6	66.08	88.64	102.48	110.784	116.32	120.274	123.24
HS20_2_12	2	12	41.6	65.28	87.68	101.76	110.208	115.84	119.863	122.88
HS20_2_13	2	13	41.6	64.48	86.72	101.04	109.632	115.36	119.451	122.52
HS20_2_14	2	14	41.6	63.68	85.76	100.32	109.056	114.88	119.04	122.16
HS20_2_15	2	15	41.6	63.04	84.8	99.6	108.48	114.4	118.629	121.8
HS20_2_16	2	16	41.6	62.4	83.84	98.88	107.904	113.92	118.217	121.44
HS20_2_17	2	17	41.6	61.76	82.88	98.16	107.328	113.44	117.806	121.08
HS20_2_18	2	18	41.6	61.12	81.92	97.44	106.752	112.96	117.394	120.72
HS20_2_19	2	19	41.6	60.48	80.96	96.72	106.176	112.48	116.983	120.36
HS20_2_20	2	20	41.6	59.84	80.107	96	105.6	112	116.571	120
HS20_2_21	2	21	41.6	59.2	79.253	95.28	105.024	111.52	116.16	119.64
HS20_2_22	2	22	41.6	58.56	78.4	94.56	104.448	111.04	115.749	119.28
HS20_2_23	2	23	41.6	58.56	77.547	93.84	103.872	110.56	115.337	118.92
HS20_2_24	2	24	41.6	58.56	76.693	93.12	103.296	110.08	114.926	118.56
HS20_2_25	2	25	41.6	58.56	75.84	92.4	102.72	109.6	114.514	118.2
HS20_2_26	2	26	41.6	58.56	74.987	91.68	102.144	109.12	114.103	117.84
HS20_2_27	2	27	41.6	58.56	74.133	90.96	101.568	108.64	113.691	117.48
HS20_2_28	2	28	41.6	58.56	73.28	90.24	100.992	108.16	113.28	117.12
HS20_2_29	2	29	41.6	58.56	72.427	89.52	100.416	107.68	112.869	116.76
HS20_2_30	2	30	41.6	58.56	71.573	88.8	99.84	107.2	112.457	116.4
HS20_3_10	3	10	41.6	66.88	90.453	114.72	134.208	147.84	157.577	164.88

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_3_11	3	11	41.6	66.08	89.28	112.56	132.48	146.4	156.343	163.8
HS20_3_12	3	12	41.6	65.28	88.107	110.4	130.752	144.96	155.109	162.72
HS20_3_13	3	13	41.6	64.48	86.933	108.24	129.024	143.52	153.874	161.64
HS20_3_14	3	14	41.6	63.68	85.76	106.08	127.296	142.08	152.64	160.56
HS20_3_15	3	15	41.6	63.04	84.8	104.08	125.568	140.64	151.406	159.48
HS20_3_16	3	16	41.6	62.4	83.84	102.72	123.84	139.2	150.171	158.4
HS20_3_17	3	17	41.6	61.76	82.88	101.36	122.112	137.76	148.937	157.32
HS20_3_18	3	18	41.6	61.12	81.92	100	120.384	136.32	147.703	156.24
HS20_3_19	3	19	41.6	60.48	80.96	98.64	118.656	134.88	146.469	155.16
HS20_3_20	3	20	41.6	59.84	80.107	97.28	116.928	133.44	145.234	154.08
HS20_3_21	3	21	41.6	59.2	79.253	95.92	115.264	132	144	153
HS20_3_22	3	22	41.6	58.56	78.4	94.56	113.664	130.56	142.766	151.92
HS20_3_23	3	23	41.6	58.56	77.547	93.84	112.064	129.12	141.531	150.84
HS20_3_24	3	24	41.6	58.56	76.693	93.12	110.464	127.68	140.297	149.76
HS20_3_25	3	25	41.6	58.56	75.84	92.4	108.864	126.24	139.063	148.68
HS20_3_26	3	26	41.6	58.56	74.987	91.68	107.264	124.8	137.829	147.6
HS20_3_27	3	27	41.6	58.56	74.133	90.96	105.664	123.36	136.594	146.52
HS20_3_28	3	28	41.6	58.56	73.28	90.24	104.32	121.92	135.36	145.44
HS20_3_29	3	29	41.6	58.56	72.427	89.52	103.232	120.48	134.126	144.36
HS20_3_30	3	30	41.6	58.56	71.573	88.8	102.144	119.04	132.891	143.28
HS20_4_10	4	10	41.6	66.88	90.453	114.72	137.792	160.853	178.834	192.48
HS20_4_11	4	11	41.6	66.08	89.28	112.56	135.104	157.973	176.366	190.32
HS20_4_12	4	12	41.6	65.28	88.107	110.4	132.416	155.093	173.897	188.16
HS20_4_13	4	13	41.6	64.48	86.933	108.24	129.728	152.213	171.429	186
HS20_4_14	4	14	41.6	63.68	85.76	106.08	127.296	149.333	168.96	183.84

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_4_15	4	15	41.6	63.04	84.8	104.08	125.568	146.613	166.491	181.68
HS20_4_16	4	16	41.6	62.4	83.84	102.72	123.84	143.893	164.023	179.52
HS20_4_17	4	17	41.6	61.76	82.88	101.36	122.112	141.173	161.554	177.36
HS20_4_18	4	18	41.6	61.12	81.92	100	120.384	138.88	159.086	175.2
HS20_4_19	4	19	41.6	60.48	80.96	98.64	118.656	136.8	156.617	173.04
HS20_4_20	4	20	41.6	59.84	80.107	97.28	116.928	134.72	154.149	170.88
HS20_4_21	4	21	41.6	59.2	79.253	95.92	115.264	132.64	151.68	168.72
HS20_4_22	4	22	41.6	58.56	78.4	94.56	113.664	130.56	149.349	166.56
HS20_4_23	4	23	41.6	58.56	77.547	93.84	112.064	129.12	147.017	164.4
HS20_4_24	4	24	41.6	58.56	76.693	93.12	110.464	127.68	144.686	162.24
HS20_4_25	4	25	41.6	58.56	75.84	92.4	108.864	126.24	142.354	160.08
HS20_4_26	4	26	41.6	58.56	74.987	91.68	107.264	124.8	140.206	157.92
HS20_4_27	4	27	41.6	58.56	74.133	90.96	105.664	123.36	138.423	155.76
HS20_4_28	4	28	41.6	58.56	73.28	90.24	104.32	121.92	136.64	153.6
HS20_4_29	4	29	41.6	58.56	72.427	89.52	103.232	120.48	134.857	151.44
HS20_4_30	4	30	41.6	58.56	71.573	88.8	102.144	119.04	133.074	149.36
HS20_5_10	5	10	41.6	66.88	90.453	114.72	137.792	161.493	185.417	206.4
HS20_5_11	5	11	41.6	66.08	89.28	112.56	135.104	158.4	181.303	202.8
HS20_5_12	5	12	41.6	65.28	88.107	110.4	132.416	155.307	177.189	199.2
HS20_5_13	5	13	41.6	64.48	86.933	108.24	129.728	152.213	173.623	195.6
HS20_5_14	5	14	41.6	63.68	85.76	106.08	127.296	149.333	170.24	192
HS20_5_15	5	15	41.6	63.04	84.8	104.08	125.568	146.613	167.04	188.4
HS20_5_16	5	16	41.6	62.4	83.84	102.72	123.84	143.893	164.023	184.96
HS20_5_17	5	17	41.6	61.76	82.88	101.36	122.112	141.173	161.554	181.52
HS20_5_18	5	18	41.6	61.12	81.92	100	120.384	138.88	159.086	178.08

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_5_19	5	19	41.6	60.48	80.96	98.64	118.656	136.8	156.617	174.96
HS20_5_20	5	20	41.6	59.84	80.107	97.28	116.928	134.72	154.149	172.16
HS20_5_21	5	21	41.6	59.2	79.253	95.92	115.264	132.64	151.68	169.36
HS20_5_22	5	22	41.6	58.56	78.4	94.56	113.664	130.56	149.349	166.56
HS20_5_23	5	23	41.6	58.56	77.547	93.84	112.064	129.12	147.017	164.4
HS20_5_24	5	24	41.6	58.56	76.693	93.12	110.464	127.68	144.686	162.24
HS20_5_25	5	25	41.6	58.56	75.84	92.4	108.864	126.24	142.354	160.08
HS20_5_26	5	26	41.6	58.56	74.987	91.68	107.264	124.8	140.206	157.92
HS20_5_27	5	27	41.6	58.56	74.133	90.96	105.664	123.36	138.423	155.76
HS20_5_28	5	28	41.6	58.56	73.28	90.24	104.32	121.92	136.64	153.6
HS20_5_29	5	29	41.6	58.56	72.427	89.52	103.232	120.48	134.857	151.44
HS20_5_30	5	30	41.6	58.56	71.573	88.8	102.144	119.04	133.074	149.36

APPENDIX C. TWO-SPAN BRIDGE RESULTS

Maximum Positive Bending Moment

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_1	1	0	132.748	500.76	865.109	1233.84	1604.59	1976.26	2348.36	2720.81
HS20_2_10	2	10	135.934	526.05	1088.05	1784.99	2503.15	3231.2	3964.79	4702.07
HS20_2_11	2	11	133.979	516.502	1065.55	1759.19	2475.51	3202.31	3935.32	4671.87
HS20_2_12	2	12	132.748	512.246	1043.54	1733.69	2448.29	3173.69	3905.86	4641.67
HS20_2_13	2	13	132.748	508.197	1022.11	1708.73	2421.13	3145.58	3876.65	4611.6
HS20_2_14	2	14	132.748	504.148	1001.28	1684.18	2394.39	3117.47	3847.51	4581.94
HS20_2_15	2	15	132.748	502.405	980.928	1659.85	2367.79	3089.59	3818.66	4552.4
HS20_2_16	2	16	132.748	500.76	964.229	1635.93	2341.62	3061.98	3789.93	4522.93
HS20_2_17	2	17	132.748	500.76	950.947	1612.32	2315.87	3034.43	3761.64	4493.77
HS20_2_18	2	18	132.748	500.76	937.952	1589.04	2290.12	3007.14	3733.35	4464.63
HS20_2_19	2	19	132.748	500.76	926.3	1566.08	2264.87	2980.34	3705.31	4435.67
HS20_2_20	2	20	132.748	500.76	917.102	1543.47	2239.61	2953.69	3677.28	4406.99
HS20_2_21	2	21	132.748	500.76	908.133	1521.19	2214.85	2927.15	3649.62	4378.51
HS20_2_22	2	22	132.748	500.76	899.396	1499.39	2190.09	2900.92	3622.06	4350.11
HS20_2_23	2	23	132.748	500.76	890.896	1478.02	2165.93	2874.84	3594.78	4321.86
HS20_2_24	2	24	132.748	500.76	882.636	1456.96	2142.04	2848.88	3567.77	4293.8
HS20_2_25	2	25	132.748	500.76	875.223	1436.27	2118.38	2823.24	3540.77	4265.81
HS20_2_26	2	26	132.748	500.76	873.283	1415.91	2094.98	2797.94	3514.09	4238.08
HS20_2_27	2	27	132.748	500.76	871.403	1395.92	2071.83	2772.8	3487.41	4210.56
HS20_2_28	2	28	132.748	500.76	869.584	1376.26	2048.94	2747.91	3461.01	4183.05
HS20_2_29	2	29	132.748	500.76	867.826	1358.66	2026.31	2723.31	3434.85	4155.82
HS20_2_30	2	30	132.748	500.76	866.13	1342.63	2003.93	2698.77	3409.05	4128.89

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_3_10	3	10	135.934	526.05	1090.45	1879.74	2891.9	3957.33	5042.15	6136.94
HS20_3_11	3	11	133.979	516.502	1067.51	1828.38	2833.75	3896.51	4979.71	6073.22
HS20_3_12	3	12	132.748	512.246	1045	1781.87	2776.47	3836.15	4917.53	6009.54
HS20_3_13	3	13	132.748	508.197	1022.92	1739.83	2720.05	3776.25	4855.42	5946.11
HS20_3_14	3	14	132.748	504.148	1001.28	1700.16	2663.64	3716.47	4793.63	5882.97
HS20_3_15	3	15	132.748	502.405	980.928	1664.13	2608.88	3657.31	4732.32	5820.13
HS20_3_16	3	16	132.748	500.76	964.229	1637.71	2556.22	3598.16	4671.22	5757.35
HS20_3_17	3	17	132.748	500.76	950.947	1612.32	2504.19	3539.56	4610.49	5694.87
HS20_3_18	3	18	132.748	500.76	937.952	1589.04	2452.16	3481.16	4550.12	5632.97
HS20_3_19	3	19	132.748	500.76	926.3	1566.08	2400.77	3423.54	4489.75	5571.08
HS20_3_20	3	20	132.748	500.76	917.102	1543.47	2350.12	3366.01	4429.64	5509.54
HS20_3_21	3	21	132.748	500.76	908.133	1521.19	2299.74	3308.95	4370.13	5448.01
HS20_3_22	3	22	132.748	500.76	899.396	1499.39	2250.03	3252.18	4310.69	5386.79
HS20_3_23	3	23	132.748	500.76	890.896	1478.02	2202.38	3195.89	4251.51	5325.77
HS20_3_24	3	24	132.748	500.76	882.636	1456.96	2160.98	3139.6	4192.88	5265.17
HS20_3_25	3	25	132.748	500.76	875.223	1436.27	2124.09	3084.62	4134.46	5204.73
HS20_3_26	3	26	132.748	500.76	873.283	1415.91	2097.79	3032.05	4076.46	5144.59
HS20_3_27	3	27	132.748	500.76	871.403	1395.92	2071.83	2980.01	4018.75	5084.46
HS20_3_28	3	28	132.748	500.76	869.584	1376.26	2048.94	2928.54	3961.12	5024.72
HS20_3_29	3	29	132.748	500.76	867.826	1358.66	2026.31	2877.34	3903.76	4965.41
HS20_3_30	3	30	132.748	500.76	866.13	1342.63	2003.93	2826.69	3846.81	4906.34
HS20_4_10	4	10	135.934	526.05	1090.45	1879.74	2913.21	4161.88	5554.12	6978.26
HS20_4_11	4	11	133.979	516.502	1067.51	1830.33	2848.5	4060.95	5443.56	6863.38
HS20_4_12	4	12	132.748	512.246	1045	1785.7	2784.61	3961.42	5333.76	6749.21
HS20_4_13	4	13	132.748	508.197	1022.92	1741.61	2721.37	3863.56	5225.24	6635.92

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_4_14	4	14	132.748	504.148	1001.28	1700.16	2663.64	3766.92	5118.21	6523.4
HS20_4_15	4	15	132.748	502.405	980.928	1664.13	2608.88	3687.26	5012.13	6411.99
HS20_4_16	4	16	132.748	500.76	964.229	1637.71	2556.22	3617.55	4907.08	6301.56
HS20_4_17	4	17	132.748	500.76	950.947	1612.32	2504.19	3554.74	4803.58	6191.93
HS20_4_18	4	18	132.748	500.76	937.952	1589.04	2452.16	3492.34	4705.68	6083.38
HS20_4_19	4	19	132.748	500.76	926.3	1566.08	2400.77	3430.52	4609.79	5975.74
HS20_4_20	4	20	132.748	500.76	917.102	1543.47	2350.12	3368.84	4515.12	5869.38
HS20_4_21	4	21	132.748	500.76	908.133	1521.19	2299.74	3308.95	4421.5	5764.03
HS20_4_22	4	22	132.748	500.76	899.396	1499.39	2250.03	3252.18	4339.36	5659.4
HS20_4_23	4	23	132.748	500.76	890.896	1478.02	2202.38	3195.89	4270.61	5555.45
HS20_4_24	4	24	132.748	500.76	882.636	1456.96	2160.98	3139.6	4207.93	5456.15
HS20_4_25	4	25	132.748	500.76	875.223	1436.27	2124.09	3084.62	4145.4	5360.18
HS20_4_26	4	26	132.748	500.76	873.283	1415.91	2097.79	3032.05	4083.28	5265.05
HS20_4_27	4	27	132.748	500.76	871.403	1395.92	2071.83	2980.01	4021.58	5170.86
HS20_4_28	4	28	132.748	500.76	869.584	1376.26	2048.94	2928.54	3961.12	5077.23
HS20_4_29	4	29	132.748	500.76	867.826	1358.66	2026.31	2877.34	3903.76	4992.84
HS20_4_30	4	30	132.748	500.76	866.13	1342.63	2003.93	2826.69	3846.81	4924.49
HS20_5_10	5	10	135.934	526.05	1090.45	1879.74	2913.21	4162.03	5607.51	7320.56
HS20_5_11	5	11	133.979	516.502	1067.51	1830.33	2848.5	4060.95	5464.44	7148.97
HS20_5_12	5	12	132.748	512.246	1045	1785.7	2784.61	3961.42	5348.37	6978.51
HS20_5_13	5	13	132.748	508.197	1022.92	1741.61	2721.37	3863.56	5233.94	6810.27
HS20_5_14	5	14	132.748	504.148	1001.28	1700.16	2663.64	3766.92	5121.42	6646.38
HS20_5_15	5	15	132.748	502.405	980.928	1664.13	2608.88	3687.26	5012.13	6486.14
HS20_5_16	5	16	132.748	500.76	964.229	1637.71	2556.22	3617.55	4907.08	6327.79
HS20_5_17	5	17	132.748	500.76	950.947	1612.32	2504.19	3554.74	4803.58	6208.58

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_5_18	5	18	132.748	500.76	937.952	1589.04	2452.16	3492.34	4705.68	6094.66
HS20_5_19	5	19	132.748	500.76	926.3	1566.08	2400.77	3430.52	4609.79	5981.23
HS20_5_20	5	20	132.748	500.76	917.102	1543.47	2350.12	3368.84	4515.12	5869.72
HS20_5_21	5	21	132.748	500.76	908.133	1521.19	2299.74	3308.95	4421.5	5764.03
HS20_5_22	5	22	132.748	500.76	899.396	1499.39	2250.03	3252.18	4339.36	5659.4
HS20_5_23	5	23	132.748	500.76	890.896	1478.02	2202.38	3195.89	4270.61	5555.45
HS20_5_24	5	24	132.748	500.76	882.636	1456.96	2160.98	3139.6	4207.93	5456.15
HS20_5_25	5	25	132.748	500.76	875.223	1436.27	2124.09	3084.62	4145.4	5360.18
HS20_5_26	5	26	132.748	500.76	873.283	1415.91	2097.79	3032.05	4083.28	5265.05
HS20_5_27	5	27	132.748	500.76	871.403	1395.92	2071.83	2980.01	4021.58	5170.86
HS20_5_28	5	28	132.748	500.76	869.584	1376.26	2048.94	2928.54	3961.12	5077.23
HS20_5_29	5	29	132.748	500.76	867.826	1358.66	2026.31	2877.34	3903.76	4992.84
HS20_5_30	5	30	132.748	500.76	866.13	1342.63	2003.93	2826.69	3846.81	4924.49

Maximum Negative Bending Moment

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_1	1	0	-119.27	-296.06	-484.82	-666.35	-844.70	-1021.34	-1197.08	-1372.14
HS20_2_10	2	10	-125.35	-578.86	-810.06	-1116.98	-1514.01	-1895.37	-2267.23	-2632.93
HS20_2_11	2	11	-123.55	-579.43	-819.02	-1105.76	-1504.84	-1887.62	-2260.46	-2627.02
HS20_2_12	2	12	-121.66	-579.26	-827.07	-1094.39	-1495.50	-1879.71	-2253.65	-2620.96
HS20_2_13	2	13	-119.71	-580.61	-835.03	-1082.80	-1485.82	-1871.50	-2246.59	-2614.79
HS20_2_14	2	14	-119.27	-582.87	-845.37	-1070.86	-1476.05	-1863.24	-2239.40	-2608.38
HS20_2_15	2	15	-119.27	-584.70	-856.02	-1058.69	-1466.04	-1854.72	-2232.04	-2601.96
HS20_2_16	2	16	-119.27	-585.72	-865.99	-1046.40	-1455.71	-1845.97	-2224.44	-2595.30
HS20_2_17	2	17	-119.27	-586.34	-875.62	-1041.03	-1445.31	-1837.17	-2216.82	-2588.52
HS20_2_18	2	18	-119.27	-586.16	-884.58	-1055.65	-1434.66	-1828.06	-2208.93	-2581.61
HS20_2_19	2	19	-119.27	-585.60	-893.20	-1069.99	-1423.71	-1818.80	-2200.89	-2574.46
HS20_2_20	2	20	-119.27	-584.27	-901.17	-1083.79	-1412.68	-1809.42	-2192.75	-2567.32
HS20_2_21	2	21	-119.27	-582.57	-908.81	-1097.31	-1401.43	-1799.74	-2184.29	-2559.93
HS20_2_22	2	22	-119.27	-580.14	-915.81	-1110.29	-1389.87	-1789.97	-2175.81	-2552.41
HS20_2_23	2	23	-119.27	-577.35	-922.48	-1122.99	-1378.22	-1780.03	-2167.22	-2544.79
HS20_2_24	2	24	-119.27	-573.85	-928.52	-1135.17	-1366.38	-1769.80	-2158.31	-2536.93
HS20_2_25	2	25	-119.27	-570.01	-934.25	-1147.07	-1354.26	-1759.52	-2149.34	-2529.04
HS20_2_26	2	26	-119.27	-565.49	-939.35	-1158.45	-1341.96	-1749.04	-2140.23	-2520.95
HS20_2_27	2	27	-119.27	-560.64	-944.15	-1169.56	-1329.57	-1738.28	-2130.90	-2512.69
HS20_2_28	2	28	-119.27	-555.14	-948.35	-1180.15	-1330.48	-1727.47	-2121.43	-2504.37
HS20_2_29	2	29	-119.27	-549.33	-952.24	-1190.48	-1345.18	-1716.48	-2111.84	-2495.82
HS20_2_30	2	30	-119.27	-542.90	-955.53	-1200.30	-1359.45	-1705.21	-2102.06	-2487.18
HS20_3_10	3	10	-125.35	-627.39	-1187.95	-1587.31	-1870.07	-2487.17	-3091.35	-3676.06

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_3_11	3	11	-123.55	-614.76	-1179.25	-1594.62	-1887.68	-2457.56	-3065.28	-3653.04
HS20_3_12	3	12	-121.66	-601.85	-1169.16	-1600.82	-1904.19	-2427.31	-3038.73	-3629.45
HS20_3_13	3	13	-119.71	-598.84	-1157.72	-1605.73	-1919.63	-2396.38	-3011.70	-3605.28
HS20_3_14	3	14	-119.27	-594.68	-1145.37	-1609.36	-1933.91	-2364.86	-2983.90	-3580.70
HS20_3_15	3	15	-119.27	-593.77	-1133.63	-1611.74	-1947.04	-2332.74	-2955.62	-3555.52
HS20_3_16	3	16	-119.27	-591.70	-1120.97	-1612.89	-1959.03	-2299.93	-2926.76	-3529.78
HS20_3_17	3	17	-119.27	-589.53	-1107.12	-1612.84	-1969.91	-2266.66	-2897.30	-3503.52
HS20_3_18	3	18	-119.27	-586.22	-1092.13	-1611.59	-1979.69	-2258.61	-2867.32	-3476.83
HS20_3_19	3	19	-119.27	-585.60	-1076.02	-1609.26	-1988.37	-2276.68	-2836.77	-3449.52
HS20_3_20	3	20	-119.27	-584.27	-1058.86	-1605.98	-1995.98	-2293.91	-2805.65	-3421.66
HS20_3_21	3	21	-119.27	-582.57	-1041.12	-1601.58	-2002.56	-2310.17	-2774.02	-3393.41
HS20_3_22	3	22	-119.27	-580.14	-1022.36	-1596.09	-2008.26	-2325.46	-2741.90	-3364.66
HS20_3_23	3	23	-119.27	-577.35	-1003.74	-1589.51	-2012.92	-2339.80	-2709.17	-3335.29
HS20_3_24	3	24	-119.27	-573.85	-996.05	-1581.88	-2016.56	-2353.18	-2675.94	-3305.52
HS20_3_25	3	25	-119.27	-570.01	-989.04	-1573.21	-2019.19	-2365.62	-2644.38	-3275.19
HS20_3_26	3	26	-119.27	-565.49	-982.64	-1563.68	-2020.82	-2377.13	-2663.01	-3244.41
HS20_3_27	3	27	-119.27	-560.64	-976.02	-1553.30	-2021.48	-2387.92	-2680.79	-3213.17
HS20_3_28	3	28	-119.27	-555.14	-968.60	-1541.95	-2021.17	-2397.81	-2697.72	-3181.58
HS20_3_29	3	29	-119.27	-549.33	-969.37	-1529.66	-2020.17	-2406.80	-2713.81	-3149.26
HS20_3_30	3	30	-119.27	-542.90	-969.87	-1516.44	-2019.41	-2414.90	-2729.14	-3116.72
HS20_4_10	4	10	-125.35	-627.39	-1394.47	-2156.45	-2700.83	-3098.09	-3566.39	-4406.02
HS20_4_11	4	11	-123.55	-614.76	-1363.66	-2146.76	-2711.47	-3125.51	-3504.61	-4350.44
HS20_4_12	4	12	-121.66	-601.85	-1330.80	-2134.50	-2720.19	-3150.29	-3477.60	-4293.79
HS20_4_13	4	13	-119.71	-598.84	-1296.40	-2122.05	-2727.14	-3173.23	-3513.48	-4235.90

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_4_14	4	14	-119.27	-594.68	-1259.88	-2108.84	-2734.63	-3196.86	-3549.07	-4176.95
HS20_4_15	4	15	-119.27	-593.77	-1225.74	-2093.61	-2740.03	-3219.12	-3584.91	-4116.77
HS20_4_16	4	16	-119.27	-591.70	-1199.59	-2076.03	-2743.00	-3239.07	-3618.58	-4055.47
HS20_4_17	4	17	-119.27	-589.53	-1174.49	-2056.57	-2743.96	-3257.05	-3650.39	-3993.15
HS20_4_18	4	18	-119.27	-586.22	-1148.55	-2034.91	-2742.61	-3272.79	-3680.08	-4001.19
HS20_4_19	4	19	-119.27	-585.60	-1121.03	-2011.54	-2739.33	-3286.63	-3707.97	-4040.61
HS20_4_20	4	20	-119.27	-584.27	-1098.19	-1986.13	-2733.83	-3298.29	-3733.79	-4078.09
HS20_4_21	4	21	-119.27	-582.57	-1080.87	-1959.12	-2726.51	-3308.13	-3757.85	-4113.90
HS20_4_22	4	22	-119.27	-580.14	-1062.25	-1930.25	-2717.08	-3315.85	-3779.90	-4147.81
HS20_4_23	4	23	-119.27	-577.35	-1043.13	-1899.93	-2705.90	-3321.81	-3800.23	-4180.09
HS20_4_24	4	24	-119.27	-573.85	-1022.92	-1867.89	-2692.71	-3325.73	-3818.60	-4210.51
HS20_4_25	4	25	-119.27	-570.01	-1009.69	-1834.56	-2677.88	-3327.95	-3835.30	-4239.34
HS20_4_26	4	26	-119.27	-565.49	-1000.29	-1800.02	-2661.13	-3328.20	-3850.09	-4266.34
HS20_4_27	4	27	-119.27	-560.64	-990.65	-1766.94	-2642.84	-3326.81	-3863.26	-4291.79
HS20_4_28	4	28	-119.27	-555.14	-980.12	-1732.53	-2622.73	-3323.52	-3874.57	-4315.46
HS20_4_29	4	29	-119.27	-549.33	-969.37	-1697.05	-2601.17	-3318.66	-3884.31	-4337.61
HS20_4_30	4	30	-119.27	-542.90	-969.87	-1660.43	-2577.88	-3311.98	-3892.24	-4358.01
HS20_5_10	5	10	-125.35	-627.39	-1399.57	-2363.20	-3290.58	-3999.05	-4556.84	-5002.44
HS20_5_11	5	11	-123.55	-614.76	-1363.67	-2310.37	-3268.01	-4005.09	-4584.90	-5048.78
HS20_5_12	5	12	-121.66	-601.85	-1330.80	-2255.41	-3241.64	-4007.31	-4609.27	-5091.61
HS20_5_13	5	13	-119.71	-598.84	-1296.40	-2217.58	-3211.79	-4005.79	-4630.01	-5130.98
HS20_5_14	5	14	-119.27	-594.68	-1259.88	-2177.51	-3180.54	-4000.61	-4647.18	-5166.95
HS20_5_15	5	15	-119.27	-593.77	-1225.74	-2134.94	-3146.24	-3991.82	-4660.84	-5199.56
HS20_5_16	5	16	-119.27	-591.70	-1199.59	-2093.88	-3108.75	-3979.79	-4671.09	-5229.09

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_5_17	5	17	-119.27	-589.53	-1174.49	-2069.70	-3068.10	-3964.50	-4678.21	-5255.36
HS20_5_18	5	18	-119.27	-586.22	-1148.55	-2042.95	-3024.38	-3945.91	-4682.02	-5278.42
HS20_5_19	5	19	-119.27	-585.60	-1121.03	-2014.76	-2977.77	-3924.09	-4682.57	-5298.30
HS20_5_20	5	20	-119.27	-584.27	-1098.19	-1986.13	-2928.79	-3899.13	-4679.94	-5315.07
HS20_5_21	5	21	-119.27	-582.57	-1080.87	-1959.12	-2877.24	-3871.12	-4674.14	-5328.78
HS20_5_22	5	22	-119.27	-580.14	-1062.25	-1930.25	-2823.12	-3840.24	-4665.33	-5339.48
HS20_5_23	5	23	-119.27	-577.35	-1043.13	-1899.93	-2778.61	-3806.75	-4653.68	-5347.20
HS20_5_24	5	24	-119.27	-573.85	-1022.92	-1867.89	-2742.99	-3770.49	-4639.23	-5352.25
HS20_5_25	5	25	-119.27	-570.01	-1009.69	-1834.56	-2708.52	-3731.49	-4621.91	-5354.42
HS20_5_26	5	26	-119.27	-565.49	-1000.29	-1800.02	-2679.37	-3689.94	-4601.78	-5353.77
HS20_5_27	5	27	-119.27	-560.64	-990.65	-1766.94	-2656.14	-3645.98	-4578.92	-5350.28
HS20_5_28	5	28	-119.27	-555.14	-980.12	-1732.53	-2631.11	-3599.74	-4553.37	-5344.12
HS20_5_29	5	29	-119.27	-549.33	-969.37	-1697.05	-2604.53	-3551.27	-4525.21	-5335.29
HS20_5_30	5	30	-119.27	-542.90	-969.87	-1660.43	-2577.88	-3500.42	-4494.76	-5323.84

Maximum Shear Force Results

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_1	1	0	44.29	62.03	66.00	67.76	68.74	69.36	69.78	70.09
HS20_2_10	2	10	44.49	72.89	97.99	112.28	120.14	125.03	128.32	130.68
HS20_2_11	2	11	44.46	71.95	96.89	111.53	119.59	124.60	127.97	130.39
HS20_2_12	2	12	44.41	71.00	95.79	110.78	119.03	124.17	127.63	130.10
HS20_2_13	2	13	44.36	70.04	94.68	110.02	118.47	123.73	127.27	129.80
HS20_2_14	2	14	44.29	69.08	93.57	109.25	117.91	123.28	126.91	129.49
HS20_2_15	2	15	44.29	68.11	92.45	108.48	117.34	122.84	126.55	129.19
HS20_2_16	2	16	44.29	67.14	91.32	107.71	116.76	122.40	126.18	128.89
HS20_2_17	2	17	44.29	66.17	90.19	106.93	116.19	121.95	125.82	128.58
HS20_2_18	2	18	44.29	65.92	89.06	106.14	115.61	121.49	125.45	128.28
HS20_2_19	2	19	44.29	65.67	87.94	105.35	115.02	121.03	125.09	127.97
HS20_2_20	2	20	44.29	65.41	86.90	104.55	114.43	120.57	124.71	127.66
HS20_2_21	2	21	44.29	65.14	85.88	103.76	113.84	120.11	124.33	127.34
HS20_2_22	2	22	44.29	64.86	84.86	102.95	113.24	119.65	123.95	127.03
HS20_2_23	2	23	44.29	64.73	83.84	102.14	112.64	119.18	123.57	126.71
HS20_2_24	2	24	44.29	64.60	82.81	101.33	112.04	118.70	123.19	126.39
HS20_2_25	2	25	44.29	64.45	81.77	100.52	111.43	118.23	122.81	126.07
HS20_2_26	2	26	44.29	64.30	80.73	99.69	110.82	117.75	122.43	125.75
HS20_2_27	2	27	44.29	64.15	79.69	98.87	110.21	117.27	122.04	125.43
HS20_2_28	2	28	44.29	63.98	78.65	98.04	109.59	116.79	121.64	125.10
HS20_2_29	2	29	44.29	63.82	77.60	97.21	108.96	116.31	121.24	124.77
HS20_2_30	2	30	44.29	63.65	76.55	96.38	108.34	115.82	120.85	124.44
HS20_3_10	3	10	44.49	77.73	104.33	126.83	148.02	162.29	171.92	178.81

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_3_11	3	11	44.46	76.62	103.26	124.35	146.12	160.80	170.71	177.79
HS20_3_12	3	12	44.41	75.49	102.20	121.86	144.20	159.28	169.48	176.77
HS20_3_13	3	13	44.36	74.33	101.10	119.36	142.27	157.75	168.24	175.73
HS20_3_14	3	14	44.29	73.16	100.00	116.85	140.32	156.22	167.00	174.69
HS20_3_15	3	15	44.29	72.17	98.87	114.84	138.37	154.68	165.73	173.63
HS20_3_16	3	16	44.29	71.17	97.73	114.13	136.41	153.13	164.47	172.58
HS20_3_17	3	17	44.29	70.15	96.57	113.40	134.44	151.56	163.19	171.51
HS20_3_18	3	18	44.29	69.11	95.41	112.66	132.45	149.99	161.91	170.44
HS20_3_19	3	19	44.29	68.06	94.21	111.90	130.46	148.41	160.63	169.36
HS20_3_20	3	20	44.29	67.00	93.15	111.14	128.45	146.82	159.33	168.28
HS20_3_21	3	21	44.29	65.93	92.06	110.37	126.52	145.22	158.02	167.19
HS20_3_22	3	22	44.29	64.86	90.97	109.58	124.67	143.61	156.70	166.08
HS20_3_23	3	23	44.29	64.73	89.86	108.78	122.81	142.00	155.37	164.97
HS20_3_24	3	24	44.29	64.60	88.74	107.98	120.94	140.37	154.04	163.85
HS20_3_25	3	25	44.29	64.45	87.60	107.16	119.06	138.74	152.70	162.73
HS20_3_26	3	26	44.29	64.30	86.46	106.33	117.41	137.10	151.37	161.62
HS20_3_27	3	27	44.29	64.15	85.30	105.49	116.83	135.47	150.02	160.49
HS20_3_28	3	28	44.29	63.98	84.14	104.64	116.24	133.81	148.67	159.35
HS20_3_29	3	29	44.29	63.82	82.96	103.79	115.64	132.15	147.29	158.19
HS20_3_30	3	30	44.29	63.65	81.78	102.93	115.04	130.48	145.91	157.03
HS20_4_10	4	10	44.49	77.73	106.29	133.18	153.41	178.54	197.97	212.22
HS20_4_11	4	11	44.46	76.62	105.00	130.77	151.62	175.32	195.28	209.97
HS20_4_12	4	12	44.41	75.49	103.70	128.33	149.81	172.08	192.58	207.70
HS20_4_13	4	13	44.36	74.33	102.35	125.88	147.98	168.82	189.86	205.42
HS20_4_14	4	14	44.29	73.16	101.00	123.41	146.13	165.55	187.14	203.13

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_4_15	4	15	44.29	72.17	99.61	120.93	144.27	162.26	184.37	200.80
HS20_4_16	4	16	44.29	71.17	98.22	119.22	142.40	158.96	181.59	198.46
HS20_4_17	4	17	44.29	70.15	96.91	117.49	140.50	157.14	178.80	196.11
HS20_4_18	4	18	44.29	69.11	95.69	115.84	138.60	155.67	176.01	193.75
HS20_4_19	4	19	44.29	68.06	94.45	114.50	136.68	154.16	173.21	191.39
HS20_4_20	4	20	44.29	67.00	93.33	113.41	134.74	152.65	170.39	189.00
HS20_4_21	4	21	44.29	65.93	92.19	112.32	132.87	151.14	167.55	186.60
HS20_4_22	4	22	44.29	64.86	91.04	111.19	131.07	149.60	164.87	184.17
HS20_4_23	4	23	44.29	64.73	89.89	110.21	129.26	148.06	162.18	181.73
HS20_4_24	4	24	44.29	64.60	88.74	109.21	127.44	146.49	159.74	179.30
HS20_4_25	4	25	44.29	64.45	87.60	108.20	125.61	144.92	158.48	176.86
HS20_4_26	4	26	44.29	64.30	86.46	107.18	123.77	143.35	157.22	174.41
HS20_4_27	4	27	44.29	64.15	85.30	106.15	121.92	141.78	155.94	171.95
HS20_4_28	4	28	44.29	63.98	84.14	105.11	120.37	140.18	154.65	169.46
HS20_4_29	4	29	44.29	63.82	82.96	104.06	119.14	138.56	153.33	166.97
HS20_4_30	4	30	44.29	63.65	81.78	103.16	117.90	136.93	152.01	164.57
HS20_5_10	5	10	44.49	77.73	107.26	137.79	159.83	183.90	206.24	229.43
HS20_5_11	5	11	44.46	76.62	105.73	135.10	157.94	180.78	201.56	225.42
HS20_5_12	5	12	44.41	75.49	104.18	132.38	156.02	177.63	197.18	221.39
HS20_5_13	5	13	44.36	74.33	102.59	129.64	154.06	174.47	194.58	217.33
HS20_5_14	5	14	44.29	73.16	101.00	126.87	152.07	171.29	191.96	213.29
HS20_5_15	5	15	44.29	72.17	99.61	124.26	150.07	168.07	189.30	209.22
HS20_5_16	5	16	44.29	71.17	98.22	122.45	148.02	165.13	186.61	205.20
HS20_5_17	5	17	44.29	70.15	96.91	120.62	145.96	163.58	183.91	201.26
HS20_5_18	5	18	44.29	69.11	95.69	118.77	143.88	162.01	181.22	198.55

			Span (ft)							
CODE	**No. Trucks**	**Spacing (ft)**	**20**	**50**	**75**	**100**	**125**	**150**	**175**	**200**
HS20_5_19	5	19	44.29	68.06	94.45	116.89	141.77	160.40	178.50	196.27
HS20_5_20	5	20	44.29	67.00	93.33	115.00	139.63	158.80	175.77	193.97
HS20_5_21	5	21	44.29	65.93	92.19	113.11	137.55	157.17	173.02	191.65
HS20_5_22	5	22	44.29	64.86	91.04	111.19	135.54	155.51	170.42	189.30
HS20_5_23	5	23	44.29	64.73	89.89	110.21	133.51	153.84	167.80	186.95
HS20_5_24	5	24	44.29	64.60	88.74	109.21	131.47	152.14	166.18	184.59
HS20_5_25	5	25	44.29	64.45	87.60	108.20	129.40	150.42	164.84	182.24
HS20_5_26	5	26	44.29	64.30	86.46	107.18	127.31	148.70	163.49	179.86
HS20_5_27	5	27	44.29	64.15	85.30	106.15	125.20	146.98	162.12	177.46
HS20_5_28	5	28	44.29	63.98	84.14	105.11	123.40	145.21	160.74	175.05
HS20_5_29	5	29	44.29	63.82	82.96	104.06	121.92	143.42	159.32	172.62
HS20_5_30	5	30	44.29	63.65	81.78	103.16	120.42	141.61	157.89	170.29

APPENDIX D. REGRESSION MODELS FOR MOMENTS

No. Trucks	Headway (ft.)	Linear Equation	R^2	Polynomial Equation	R^2	Exponential Equation	R^2
1	N/A	$y = 17.862x - 257.27$	0.9999	$y = 0.0026x^2 + 17.293x - 233.34$	0.9999		
2	10	$y = 33.294x - 945.58$	0.9939	$y = 0.0461x^2 + 23.149x - 519.05$	0.9982		
2	11	$y = 33.124x - 953.4$	0.9933	$y = 0.0483x^2 + 22.506x - 506.97$	0.9981	$y = 1.2482x^{1.6111}$	0.9940
2	12	$y = 32.941x - 959.21$	0.9928	$y = 0.0505x^2 + 21.823x - 491.76$	0.9981	$y = 1.225x^{1.6127}$	0.9944
2	13	$y = 32.755x - 964.46$	0.9921	$y = 0.0529x^2 + 21.125x - 475.45$	0.998	$y = 1.2099x^{1.613}$	0.9948
2	14	$y = 32.561x - 968.07$	0.9915	$y = 0.0551x^2 + 20.436x - 458.24$	0.998	$y = 1.1996x^{1.6126}$	0.9953
2	15	$y = 32.351x - 969.1$	0.9908	$y = 0.0575x^2 + 19.708x - 437.5$	0.9979	$y = 1.2052x^{1.6095}$	0.9957
2	16	$y = 32.141x - 970$	0.9901	$y = 0.0598x^2 + 18.985x - 416.84$	0.9979	$y = 1.211x^{1.6064}$	0.9962
2	17	$y = 31.923x - 969.27$	0.9894	$y = 0.062x^2 + 18.276x - 395.5$	0.9979	$y = 1.2209x^{1.6027}$	0.9966
2	18	$y = 31.703x - 968.05$	0.9887	$y = 0.0642x^2 + 17.577x - 374.13$	0.9979	$y = 1.232x^{1.5988}$	0.9970
2	19	$y = 31.481x - 966.49$	0.9879	$y = 0.0664x^2 + 16.882x - 352.68$	0.9979	$y = 1.2441x^{1.5948}$	0.9974
2	20	$y = 31.253x - 963.57$	0.9872	$y = 0.0684x^2 + 16.209x - 331.04$	0.9979	$y = 1.2594x^{1.5903}$	0.9977
2	21	$y = 31.024x - 960.33$	0.9864	$y = 0.0703x^2 + 15.548x - 309.62$	0.998	$y = 1.2753x^{1.5858}$	0.9980
2	22	$y = 30.792x - 956.37$	0.9856	$y = 0.0722x^2 + 14.9x - 288.17$	0.998	$y = 1.293x^{1.581}$	0.9982
2	23	$y = 30.557x - 951.68$	0.9849	$y = 0.074x^2 + 14.268x - 266.8$	0.998	$y = 1.3125x^{1.5761}$	0.9984
2	24	$y = 30.321x - 946.61$	0.9841	$y = 0.0757x^2 + 13.657x - 245.96$	0.9981	$y = 1.3326x^{1.5711}$	0.9986
2	25	$y = 30.081x - 940.59$	0.9834	$y = 0.0773x^2 + 13.066x - 225.18$	0.9982	$y = 1.355x^{1.5658}$	0.9987
2	26	$y = 29.841x - 934.32$	0.9826	$y = 0.0789x^2 + 12.486x - 204.63$	0.9982	$y = 1.3783x^{1.5605}$	0.9988
2	27	$y = 29.599x - 927.45$	0.9818	$y = 0.0803x^2 + 11.935x - 184.79$	0.9983	$y = 1.4026x^{1.5551}$	0.9988

No. Trucks	Headway (ft.)	Linear Equation	R^2	Polynomial Equation	R^2	Exponential Equation	R^2
2	28	$y = 29.353x - 919.76$	0.9811	$y = 0.0816x^2 + 11.41x - 165.32$	0.9984	$y = 1.4288x^{1.5496}$	0.9988
2	29	$y = 29.109x - 912.07$	0.9804	$y = 0.0828x^2 + 10.887x - 145.94$	0.9984	$y = 1.4558x^{1.544}$	0.9988
2	30	$y = 28.862x - 903.56$	0.9797	$y = 0.0839x^2 + 10.409x - 127.68$	0.9985	$y = 1.4839x^{1.5383}$	0.9987
3	10	$y = 44.811x - 1616.4$	0.9792	$y = 0.1291x^2 + 16.409x - 422.19$	0.9977	$y = 0.7076x^{1.7657}$	0.9971
3	11	$y = 44.348x - 1614.8$	0.9778	$y = 0.1328x^2 + 15.136x - 386.57$	0.9977	$y = 0.6894x^{1.7677}$	0.9975
3	12	$y = 43.869x - 1610.7$	0.9763	$y = 0.1365x^2 + 13.836x - 347.91$	0.9978	$y = 0.6847x^{1.7657}$	0.9978
3	13	$y = 43.384x - 1604.8$	0.9748	$y = 0.14x^2 + 12.584x - 309.85$	0.9979	$y = 0.6849x^{1.7622}$	0.9981
3	14	$y = 42.888x - 1597.1$	0.9733	$y = 0.1434x^2 + 11.349x - 271.07$	0.998	$y = 0.6879x^{1.758}$	0.9984
3	15	$y = 42.371x - 1585.5$	0.9717	$y = 0.1465x^2 + 10.144x - 230.47$	0.9981	$y = 0.7008x^{1.7509}$	0.9986
3	16	$y = 41.854x - 1573.4$	0.9701	$y = 0.1495x^2 + 8.9694x - 190.72$	0.9982	$y = 0.7142x^{1.7438}$	0.9987
3	17	$y = 41.325x - 1558.7$	0.9685	$y = 0.1521x^2 + 7.8597x - 151.69$	0.9984	$y = 0.7308x^{1.7359}$	0.9987
3	18	$y = 40.794x - 1543.3$	0.9669	$y = 0.1546x^2 + 6.7908x - 113.66$	0.9985	$y = 0.7486x^{1.7279}$	0.9986
3	19	$y = 40.259x - 1526.7$	0.9653	$y = 0.1567x^2 + 5.7826x - 77.16$	0.9986	$y = 0.7677x^{1.7196}$	0.9984
3	20	$y = 39.718x - 1508.5$	0.9638	$y = 0.1586x^2 + 4.8275x - 41.538$	0.9987	$y = 0.7893x^{1.7108}$	0.9982
3	21	$y = 39.176x - 1489.4$	0.9623	$y = 0.1601x^2 + 3.9465x - 8.1003$	0.9989	$y = 0.812x^{1.702}$	0.9979
3	22	$y = 38.631x - 1469.2$	0.9608	$y = 0.1615x^2 + 3.1027x + 24.585$	0.999	$y = 0.8366x^{1.6929}$	0.9974
3	23	$y = 38.084x - 1447.8$	0.9593	$y = 0.1625x^2 + 2.3385x + 55.087$	0.9991	$y = 0.863x^{1.6836}$	0.9970
3	24	$y = 37.536x - 1425.8$	0.9579	$y = 0.1632x^2 + 1.6225x + 84.153$	0.9992	$y = 0.8907x^{1.6742}$	0.9964
3	25	$y = 36.985x - 1402.5$	0.9566	$y = 0.1636x^2 + 0.9858x + 111.11$	0.9992	$y = 0.9206x^{1.6646}$	0.9958
3	26	$y = 36.436x - 1378.7$	0.9553	$y = 0.1638x^2 + 0.3939x + 136.68$	0.9993	$y = 0.9519x^{1.6549}$	0.9952

No. Trucks	Headway (ft.)	Linear Equation	R^2	Polynomial Equation	R^2	Exponential Equation	R^2
3	27	$y = 35.888x - 1354.1$	0.9542	$y = 0.1637x^2 - 0.1169x + 159.71$	0.9993	$y = 0.9847x^{1.6453}$	0.9945
3	28	$y = 35.338x - 1328.5$	0.9531	$y = 0.1632x^2 - 0.5616x + 180.93$	0.9993	$y = 1.0197x^{1.6354}$	0.9938
3	29	$y = 34.792x - 1302.8$	0.9520	$y = 0.1625x^2 - 0.9655x + 200.67$	0.9993	$y = 1.0561x^{1.6255}$	0.9930
3	30	$y = 34.247x - 1276.1$	0.9511	$y = 0.1615x^2 - 1.2757x + 217.51$	0.9992	$y = 1.0941x^{1.6157}$	0.9923
4	10	$y = 50.348x - 1993.1$	0.9633	$y = 0.2045x^2 + 5.3578x - 101.51$	0.9995	$y = 0.5692x^{1.8212}$	0.9995
4	11	$y = 49.384x - 1961.8$	0.9619	$y = 0.2048x^2 + 4.3225x - 67.149$	0.9996	$y = 0.5655x^{1.818}$	0.9995
4	12	$y = 48.419x - 1927.6$	0.9606	$y = 0.2046x^2 + 3.3975x - 34.642$	0.9997	$y = 0.5725x^{1.811}$	0.9994
4	13	$y = 47.462x - 1892.1$	0.9595	$y = 0.2039x^2 + 2.5982x - 5.8284$	0.9998	$y = 0.5834x^{1.8028}$	0.9992
4	14	$y = 46.51x - 1855$	0.9584	$y = 0.2027x^2 + 1.9113x + 20.144$	0.9998	$y = 0.5967x^{1.7939}$	0.9990
4	15	$y = 45.559x - 1814.5$	0.9575	$y = 0.2008x^2 + 1.3773x + 43.172$	0.9999	$y = 0.6183x^{1.7825}$	0.9987
4	16	$y = 44.632x - 1774.6$	0.9568	$y = 0.1986x^2 + 0.9422x + 62.403$	0.9999	$y = 0.6403x^{1.7712}$	0.9984
4	17	$y = 43.714x - 1733.2$	0.9562	$y = 0.1959x^2 + 0.6169x + 78.898$	0.9999	$y = 0.6652x^{1.7595}$	0.9981
4	18	$y = 42.817x - 1692.1$	0.9557	$y = 0.193x^2 + 0.3659x + 92.739$	0.9999	$y = 0.6913x^{1.7478}$	0.9978
4	19	$y = 41.946x - 1651.7$	0.9554	$y = 0.1898x^2 + 0.1921x + 103.86$	0.9999	$y = 0.7183x^{1.7362}$	0.9975
4	20	$y = 41.097x - 1611.3$	0.9551	$y = 0.1865x^2 + 0.0724x + 113.56$	0.9998	$y = 0.7476x^{1.7244}$	0.9971
4	21	$y = 40.274x - 1571.7$	0.9549	$y = 0.183x^2 + 0.0139x + 121.04$	0.9998	$y = 0.7776x^{1.7128}$	0.9968
4	22	$y = 39.479x - 1533.2$	0.9548	$y = 0.1797x^2 - 0.0474x + 128.67$	0.9997	$y = 0.809x^{1.7013}$	0.9965
4	23	$y = 38.716x - 1495.8$	0.9546	$y = 0.1764x^2 - 0.0939x + 135.93$	0.9997	$y = 0.8417x^{1.6898}$	0.9961
4	24	$y = 37.986x - 1460.2$	0.9544	$y = 0.1734x^2 - 0.1652x + 143.88$	0.9996	$y = 0.8749x^{1.6787}$	0.9957
4	25	$y = 37.289x - 1425.8$	0.9541	$y = 0.1707x^2 - 0.254x + 152.71$	0.9996	$y = 0.9095x^{1.6676}$	0.9953

No. Trucks	Headway (ft.)	Linear Equation	R^2	Polynomial Equation	R^2	Exponential Equation	R^2
4	26	$y = 36.635x - 1394.1$	0.9536	$y = 0.1686x^2 - 0.4465x + 165.04$	0.9995	$y = 0.9444x^{1.6569}$	0.9948
4	27	$y = 36.002x - 1363$	0.9531	$y = 0.1664x^2 - 0.616x + 176.64$	0.9994	$y = 0.9803x^{1.6464}$	0.9942
4	28	$y = 35.389x - 1332.5$	0.9526	$y = 0.1645x^2 - 0.7924x + 188.8$	0.9994	$y = 1.0177x^{1.6359}$	0.9937
4	29	$y = 34.81x - 1304.1$	0.9518	$y = 0.163x^2 - 1.0457x + 203.41$	0.9993	$y = 1.0553x^{1.6257}$	0.9930
4	30	$y = 34.251x - 1276.4$	0.9511	$y = 0.1616x^2 - 1.2947x + 218.16$	0.9992	$y = 1.0939x^{1.6157}$	0.9923