

# **Appendix F**

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## **Noise Modeling**



**VARIEL NOISE STUDY**

2008 2035 No Project-- No Bridge 2035 No ProjectP -- w/Bridge 2035 With WCSP -- No Bridge 2035 With WCSP -- w/Bridge	TOT. # VEH.	VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			CALC. NOISE LEV. (15 m from rdwy ctr)	Recept. Dist. fr. Rdwy Ctr (m)	Adjusted Noise Level (dBA)	Recept. Dist. fr. Rdwy Ctr (m)	Adjusted Noise Level (dBA)
		Auto		MT		HT		Auto		MT		HT		Auto	MT	HT					
		%	Auto	%	MT	%	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT					
	131	96	125.76	2	2.62	2	2.62	19.65	31.44	19	30.4	19	30.4	47.4	42.8	51.1	53.1	10	54.8	50	47.8
	531	96	509.76	2	10.62	2	10.62	19.22	30.75	19	30.4	19	30.4	53.2	48.9	57.2	59.1	10	60.8	50	53.9
	560	96	537.6	2	11.2	2	11.2	18.74	29.98	18	28.8	18	28.8	53.2	48.5	57.1	59.0	10	60.7	50	53.7
	344	96	330.24	2	6.88	2	6.88	20.59	32.94	20	32	20	32	52.2	47.5	55.6	57.7	10	59.4	50	52.5
	666	96	639.36	2	13.32	2	13.32	20.29	32.46	20	32	20	32	54.9	50.4	58.5	60.5	10	62.3	50	55.3

2008 2035 No Project -- No Bridge 2035 No Project -- w/Bridge 2035 With WCSP -- No Bridge 2035 With WCSP -- w/Bridge	TOT. # VEH.	VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			CALC. NOISE LEV. (15 m from rdwy ctr)	Recept. Dist. fr. Rdwy Ctr (m)	Adjusted Noise Level (dBA)	Recept. Dist. fr. Rdwy Ctr (m)	Adjusted Noise Level (dBA)
		Auto		MT		HT		Auto		MT		HT		Auto	MT	HT					
		%	Auto	%	MT	%	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT					
	313	96	300.48	2	6.26	2	6.26	21.62	34.59	21	33.6	21	33.6	52.4	47.6	55.5	57.7	10	59.4	50	52.5
	367	96	352.32	2	7.34	2	7.34	21.14	33.82	21	33.6	21	33.6	52.8	48.3	56.2	58.3	10	60.1	50	53.1
	445	96	427.2	2	8.9	2	8.9	20.61	32.98	20	32	20	32	53.3	48.6	56.7	58.8	10	60.6	50	53.6
	407	96	390.72	2	8.14	2	8.14	20.5	32.8	20	32	20	32	52.9	48.2	56.3	58.4	10	60.2	50	53.2
	725	96	696	2	14.5	2	14.5	19.91	31.86	20	32	20	32	55.0	50.7	58.8	60.8	10	62.6	50	55.6