

Appendix B

Table B1. Light vehicle statistics

Road	Site*	Number of vehicles sampled	Noise level at 110km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
M18**	1	125	85.0	48.6	21.8	0.32	110.2	12.9
M18**	2	126	86.6	47.4	23.2	0.43	106.2	12.8
M20	1	125	88.3	18.4	34.2	0.62	105.7	13.3
M20	2	126	90.6	31.2	29.1	0.46	111.7	11.1
M20	3	126	88.3	25.6	30.7	0.51	110.6	12.8
M20***	4	118	87.0	22.8	31.4	0.43	111.5	10.9
M20	5	129	87.7	33.0	26.8	0.50	114.0	12.8
M20	6	123	86.5	12.1	36.5	0.59	111.6	12.0
M20	7	122	88.3	19.6	33.7	0.66	114.4	11.5
M20	8	126	87.8	30.8	27.9	0.46	108.8	11.5
M20	9	126	87.1	25.2	30.3	0.58	113.9	12.7
M23**	1	118	84.4	46.7	22.4	0.43	106.1	10.9
M23**	2	115	84.4	32.7	29.3	0.49	105.8	10.4
M1-A1 Link	1	117	89.6	44.7	22.0	0.41	109.2	11.3
M1-A1 Link	2	119	92.0	34.7	28.0	0.47	109.3	10.7
M1-A1 Link	3	120	87.6	42.0	22.3	0.38	107.9	11.7
M1-A1 Link	4	117	93.4	41.7	25.3	0.40	106.5	10.3
A11	1	123	88.4	15.1	35.9	0.60	110.4	10.3
A11	2	123	88.5	19.8	33.6	0.53	116.9	11.5
A11	3	121	88.8	23.1	32.2	0.59	108.4	12.4
A11	4	130	89.6	24.0	32.1	0.55	111.5	12.4
A11	5	133	87.4	12.3	36.8	0.68	113.7	11.4
A13	1	119	85.9	28.0	28.4	0.57	114.8	12.6
A13	2	110	85.9	32.5	26.2	0.56	102.9	12.0
A27	1	122	91.0	37.6	26.2	0.37	112.6	9.9
A27	2	126	90.5	24.5	32.3	0.50	110.9	11.5
A27	3	126	89.2	28.5	29.7	0.54	112.3	14.6
A27	4	129	90.0	23.6	32.5	0.62	110.2	11.0
A27	5	128	90.0	19.9	34.3	0.52	108.1	10.3
A27	6	118	89.7	23.1	32.6	0.68	109.1	12.6
A30	1	123	89.3	34.2	27.0	0.56	112.6	14.0
A30	2	124	88.4	14.1	36.4	0.60	111.6	13.3
A30	3	122	88.4	29.0	29.1	0.41	106.0	9.5
A30	4	116	90.2	20.9	34.0	0.64	112.1	12.5
A30	5	125	88.4	11.9	37.5	0.50	111.1	9.9
A30	6	118	90.7	30.9	29.3	0.44	106.8	10.5

Road	Site	Number of vehicles sampled	Noise level at 110km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
A34	1	123	91.3	30.5	29.8	0.36	105.7	10.6
A34	2	111	93.0	42.3	24.8	0.46	97.4	10.6
A34	3	112	89.9	42.2	23.4	0.42	98.4	10.8
A34	4	123	90.6	39.2	25.2	0.46	101.3	11.2
A35	1	131	87.6	28.3	29.1	0.69	106.6	15.5
A35	2	123	89.4	4.2	41.8	0.71	111.3	11.9
A35	3	128	87.8	25.1	30.7	0.67	112.5	12.5
A35	4	129	87.5	24.2	31.0	0.58	117.4	13.2
A50 Doveridge	1	123	89.4	27.9	30.1	0.53	111.9	12.3
A50 Doveridge	2	119	91.1	28.4	30.7	0.55	112.7	11.7
A50 Doveridge	3	125	89.1	27.4	30.2	0.58	110.0	11.8
A50 Derby Southern	1	115	85.8	16.2	34.1	0.59	118.8	10.0
A50 Derby Southern	2	124	85.7	23.0	30.7	0.52	115.1	11.7
A50 Foston Hatton Hilton	1	125	84.5	39.9	21.9	0.47	114.1	12.1
A50 Foston Hatton Hilton	2	121	84.9	37.7	23.1	0.55	113.2	12.6
A50 Foston Hatton Hilton	3	118	85.8	33.2	25.8	0.64	114.3	13.3
A52	1	121	87.0	26.0	29.9	0.59	100.0	13.6
A52	2	107	87.4	20.0	33.0	0.74	96.4	12.7
A249	1	124	87.1	25.7	30.1	0.59	107.2	14.2
A249	2	127	86.8	24.3	30.6	0.53	102.3	13.0
A249	3	124	87.1	20.9	32.4	0.65	102.2	13.8
A249	4	124	86.0	32.8	26.1	0.54	98.8	11.8
A417 / A419	1	120	91.9	26.8	31.9	0.52	114.8	12.3
A417 / A419	2	127	89.0	31.1	28.3	0.44	115.7	12.0
A417 / A419	3	119	89.6	36.5	26.0	0.50	115.3	12.7
A417 / A419	4	121	88.7	32.8	27.4	0.53	110.7	11.4
A417 / A419	5	126	92.2	30.2	30.4	0.45	108.8	13.0
A417 / A419	6	127	91.6	23.4	33.4	0.54	114.5	13.3
A483	1	132	87.7	25.5	30.5	0.52	106.7	11.9
A483	2	124	87.1	33.4	26.3	0.50	100.2	11.8
A483	3	126	89.1	17.2	35.2	0.57	104.6	10.7

* The site numbering is in the order surveyed. This is not necessarily the order that the sites are located along the road

** Noise levels corrected for use with Backing Board

*** Removed from final analysis due to poor meteorological conditions

Table B2. Ta vehicle statistics

Road	Site*	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
M18**	1	38	89.0	57.4	20.3	0.29	92.3	8.0
M18**	2	41	89.1	62.0	18.0	0.19	89.9	7.0
M20	1	43	89.6	32.7	29.1	0.63	91.3	8.8
M20	2	42	91.6	52.9	19.8	0.31	94.1	8.4
M20	3	40	90.6	54.1	18.7	0.34	91.0	10.1
M20***	4	48	89.4	43.9	23.3	0.39	91.4	9.7
M20	5	38	89.9	50.7	20.0	0.47	92.6	10.6
M20	6	41	88.9	36.5	26.8	0.40	92.4	7.3
M20	7	48	90.1	53.6	18.6	0.39	97.9	10.7
M20	8	41	90.6	60.9	15.2	0.19	92.1	8.1
M20	9	44	89.5	43.4	23.6	0.46	91.6	8.4
M23**	1	43	87.0	69.5	13.1	0.24	93.4	8.7
M23**	2	45	87.6	65.0	15.7	0.26	91.4	8.0
M1-A1 Link	1	48	90.7	41.9	25.0	0.43	92.3	8.3
M1-A1 Link	2	46	93.3	48.3	23.0	0.17	89.6	5.4
M1-A1 Link	3	44	89.4	62.5	13.8	0.22	91.7	7.8
M1-A1 Link	4	52	93.5	52.7	20.9	0.23	90.2	7.8
A11	1	35	89.6	30.8	30.0	0.53	91.9	9.9
A11	2	47	89.8	33.6	28.8	0.53	94.7	10.9
A11	3	39	90.0	28.8	31.3	0.49	90.0	9.0
A11	4	36	90.7	28.4	31.9	0.51	88.5	8.3
A11	5	35	89.5	58.7	15.8	0.15	88.1	8.1
A13	1	33	88.2	40.7	24.3	0.46	93.2	9.1
A13	2	41	87.2	42.8	22.7	0.35	90.8	7.8
A27	1	35	91.4	29.7	31.6	0.69	93.8	8.8
A27	2	40	91.3	44.1	24.2	0.55	92.6	8.7
A27	3	44	91.0	41.6	25.3	0.33	90.4	7.8
A27	4	43	91.4	52.3	20.0	0.28	91.4	8.0
A27	5	39	91.6	28.4	32.4	0.48	87.8	8.1
A27	6	50	91.4	43.6	24.5	0.40	90.7	10.1
A30	1	43	90.3	44.2	23.6	0.44	89.1	8.7
A30	2	41	89.6	63.4	13.4	0.14	86.6	7.0
A30	3	49	89.4	48.4	21.0	0.35	88.2	8.5
A30	4	45	90.9	45.5	23.2	0.40	91.8	10.2
A30	5	47	90.2	48.8	21.2	0.37	88.4	9.5
A30	6	43	90.8	36.4	27.8	0.54	88.0	8.1
A34	1	46	93.1	51.5	21.3	0.26	90.4	9.5
A34	2	47	93.5	50.8	21.9	0.31	90.5	7.7
A34	3	44	90.9	59.2	16.2	0.27	89.4	7.3
A34	4	41	91.5	63.1	14.5	0.23	88.1	7.4

Road	Site	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
A35	1	41	89.0	43.2	23.5	0.29	88.1	6.5
A35	2	47	90.0	25.8	32.9	0.56	89.3	8.5
A35	3	38	89.4	54.7	17.7	0.33	93.7	8.5
A35	4	39	88.9	20.6	35.0	0.61	91.9	10.6
A50 Doveridge	1	43	91.3	50.2	21.0	0.43	93.1	9.9
A50 Doveridge	2	44	92.2	42.2	25.6	0.31	91.4	8.1
A50 Doveridge	3	48	91.0	49.4	21.2	0.41	92.4	7.6
A50 Derby Southern	1	36	88.6	34.6	27.7	0.60	94.8	10.2
A50 Derby Southern	2	46	89.3	49.1	20.5	0.30	91.9	8.6
A50 Foston Hatton Hilton	1	39	86.8	49.8	18.9	0.35	90.1	6.5
A50 Foston Hatton Hilton	2	39	86.4	50.8	18.2	0.25	92.8	6.2
A50 Foston Hatton Hilton	3	38	87.2	36.6	25.9	0.66	94.5	9.8
A52	1	34	88.2	19.6	35.1	0.61	85.7	7.4
A52	2	32	88.7	14.0	38.2	0.68	81.3	8.4
A249	1	43	88.8	15.5	37.5	0.54	90.6	7.0
A249	2	33	89.5	32.1	29.4	0.41	88.5	7.9
A249	3	34	88.6	49.3	20.1	0.34	91.0	8.9
A249	4	37	88.8	30.4	29.9	0.45	84.0	8.2
A417 / A419	1	36	92.1	36.6	28.4	0.30	89.7	7.0
A417 / A419	2	34	89.7	51.0	19.8	0.55	91.9	10.1
A417 / A419	3	41	90.4	47.9	21.7	0.39	92.0	10.4
A417 / A419	4	41	90.0	42.8	24.2	0.39	88.4	6.3
A417 / A419	5	43	92.2	35.9	28.8	0.34	89.4	7.5
A417 / A419	6	43	92.1	41.4	25.9	0.32	90.5	8.0
A483	1	34	89.4	38.5	26.0	0.37	90.5	7.4
A483	2	33	89.7	30.2	30.5	0.41	84.3	7.1
A483	3	38	90.3	35.3	28.1	0.38	89.8	8.5

* The site numbering is in the order surveyed. This is not necessarily the order that the sites are located along the road

** Noise levels corrected for use with Backing Board

*** Removed from final analysis due to poor meteorological conditions

Table B3. Tb vehicle statistics

Road	Site*	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
M18**	1	42	92.7	-58.6	81.6	0.36	87.4	1.9
M18**	2	43	92.3	43.4	29.2	0.18	87.6	2.6
M20	1	52	93.7	9.0	43.3	0.34	88.4	3.1
M20	2	49	95.5	43.6	26.6	0.22	88.6	3.7
M20	3	50	93.6	3.8	45.9	0.16	88.0	2.4
M20***	4	53	92.2	-3.9	49.1	0.44	87.6	3.5
M20	5	51	92.8	32.1	31.1	0.18	89.1	3.5
M20	6	54	92.9	-13.4	54.4	0.29	88.6	2.9
M20	7	50	93.3	8.0	43.6	0.35	88.4	3.6
M20	8	47	92.8	6.3	44.2	0.19	89.8	2.4
M20	9	48	92.1	-5.2	49.8	0.35	89.0	3.0
M23**	1	51	89.2	43.5	27.5	0.17	87.2	2.7
M23**	2	55	89.7	18.5	40.6	0.43	87.2	3.5
M1-A1 Link	1	49	93.4	33.9	30.4	0.12	87.6	3.1
M1-A1 Link	2	49	96.2	38.1	29.7	0.28	86.1	4.1
M1-A1 Link	3	52	92.1	30.7	31.4	0.11	87.9	2.6
M1-A1 Link	4	39	97.0	-8.8	54.2	0.30	86.7	2.4
A11	1	63	92.5	33.4	30.2	0.35	84.2	5.0
A11	2	45	93.0	8.4	43.3	0.55	85.5	4.5
A11	3	42	92.7	42.0	25.9	0.31	86.8	5.3
A11	4	55	93.5	10.4	42.5	0.40	86.6	4.3
A11	5	50	92.1	10.4	41.8	0.36	85.6	3.5
A13	1	56	90.9	16.9	37.8	0.37	88.9	4.2
A13	2	47	89.9	32.1	29.6	0.44	86.8	6.2
A27	1	49	94.5	43.4	26.1	0.26	87.7	5.2
A27	2	49	94.1	37.8	28.8	0.24	86.1	4.6
A27	3	44	94.5	10.0	43.2	0.17	87.3	2.4
A27	4	42	94.6	33.3	31.3	0.24	86.4	3.9
A27	5	49	94.1	6.3	44.9	0.18	86.2	3.2
A27	6	50	93.8	-5.7	50.9	0.33	85.7	3.9
A30	1	54	93.4	24.5	35.3	0.29	84.7	4.4
A30	2	41	92.9	53.7	20.1	0.12	85.1	3.1
A30	3	41	92.2	28.8	32.4	0.48	83.8	5.6
A30	4	52	93.5	19.6	37.8	0.35	86.0	6.0
A30	5	49	92.6	8.1	43.3	0.38	86.1	4.5
A30	6	40	93.8	55.1	19.8	0.21	81.6	5.4
A34	1	47	95.7	38.2	29.4	0.13	87.3	4.0
A34	2	52	96.4	34.1	31.9	0.32	84.0	5.2
A34	3	56	94.9	-2.2	49.7	0.50	84.5	4.8
A34	4	50	94.5	25.9	35.1	0.26	85.3	3.9

Road	Site	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
A35	1	43	92.2	28.4	32.7	0.38	83.2	5.1
A35	2	45	92.9	46.1	24.0	0.28	86.8	4.7
A35	3	51	92.2	22.3	35.8	0.26	86.9	3.7
A35	4	49	91.6	9.4	42.1	0.23	87.4	3.5
A50 Doveridge	1	50	94.1	56.7	19.1	0.17	85.7	4.4
A50 Doveridge	2	50	95.1	11.5	42.8	0.37	87.0	4.0
A50 Doveridge	3	43	94.3	17.7	39.2	0.38	87.2	2.9
A50 Derby Southern	1	54	91.7	-6.1	50.1	0.46	87.1	3.5
A50 Derby Southern	2	52	92.1	-17.6	56.1	0.45	87.0	3.0
A50 Foston Hatton Hilton	1	48	88.6	26.1	32.0	0.35	87.0	3.4
A50 Foston Hatton Hilton	2	48	88.4	55.6	16.8	0.20	86.4	3.9
A50 Foston Hatton Hilton	3	61	89.8	9.6	41.0	0.37	86.5	3.4
A52	1	46	90.8	32.4	29.9	0.28	84.6	4.2
A52	2	48	91.3	19.3	36.9	0.74	76.2	7.5
A249	1	50	91.2	29.9	31.4	0.45	87.3	5.5
A249	2	58	92.2	11.1	41.5	0.54	86.5	5.6
A249	3	59	92.2	20.8	36.5	0.42	85.5	5.1
A249	4	49	91.7	49.0	21.8	0.36	84.1	5.2
A417 / A419	1	54	95.5	43.3	26.7	0.18	85.5	3.6
A417 / A419	2	56	92.9	22.7	35.9	0.32	86.1	4.4
A417 / A419	3	58	93.4	25.4	34.8	0.19	86.7	3.3
A417 / A419	4	54	93.5	27.3	33.9	0.30	85.1	5.1
A417 / A419	5	52	95.8	30.6	33.3	0.18	86.3	4.1
A417 / A419	6	45	95.9	4.6	46.7	0.13	87.5	2.1
A483	1	49	91.9	48.6	22.1	0.23	84.8	5.0
A483	2	53	92.2	59.2	16.9	0.15	81.5	5.3
A483	3	55	93.1	34.3	30.1	0.32	85.1	4.1

* The site numbering is in the order surveyed. This is not necessarily the order that the sites are located along the road

** Noise levels corrected for use with Backing Board

*** Removed from final analysis due to poor meteorological conditions

Table B4. Combined heavy (Ta and Tb) vehicle statistics

Road	Site*	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
M18**	1	80	90.5	93.7	2.5	0.00	89.8	6.1
M18**	2	84	90.6	85.4	6.8	0.01	88.7	5.3
M20	1	95	91.8	58.1	17.2	0.05	89.7	6.5
M20	2	91	93.8	102.7	-4.6	0.00	91.1	6.9
M20	3	90	92.1	68.0	12.3	0.04	89.3	7.1
M20***	4	101	90.7	54.4	18.6	0.13	89.4	7.3
M20	5	89	91.6	66.9	12.6	0.06	90.6	7.6
M20	6	95	91.0	76.7	7.3	0.01	90.2	5.5
M20	7	98	91.8	88.5	1.7	0.00	93.0	9.2
M20	8	88	91.7	70.7	10.8	0.03	90.9	5.9
M20	9	92	90.8	54.4	18.6	0.10	90.3	6.3
M23**	1	94	96.2	95.9	0.1	0.00	90.1	6.9
M23**	2	100	96.7	76.5	10.3	0.05	89.1	6.3
M1-A1 Link	1	97	92.0	71.5	10.5	0.03	89.9	6.6
M1-A1 Link	2	95	94.5	83.8	5.5	0.01	87.8	5.1
M1-A1 Link	3	96	90.7	89.3	0.7	0.00	89.6	5.9
M1-A1 Link	4	91	94.7	76.6	9.2	0.02	88.7	6.3
A11	1	98	91.2	65.5	13.1	0.08	86.9	8.0
A11	2	92	91.2	62.2	14.9	0.12	90.2	9.6
A11	3	81	91.3	49.0	21.7	0.15	88.3	7.5
A11	4	91	92.3	34.1	29.8	0.21	87.4	6.2
A11	5	85	90.7	60.7	15.3	0.07	86.6	6.0
A13	1	89	89.9	59.4	15.6	0.08	90.5	6.7
A13	2	88	88.5	59.5	14.9	0.08	88.7	7.2
A27	1	84	93.2	69.9	11.9	0.05	90.2	7.5
A27	2	89	92.7	74.5	9.3	0.04	89.0	7.5
A27	3	88	92.5	68.0	12.5	0.03	88.9	5.9
A27	4	85	92.8	83.1	5.0	0.01	88.9	6.7
A27	5	88	92.8	30.3	33.7	0.18	86.9	5.9
A27	6	100	92.2	51.1	21.0	0.18	88.2	8.0
A30	1	97	91.7	64.4	14.0	0.06	86.7	7.0
A30	2	82	91.1	77.0	7.2	0.01	85.9	5.5
A30	3	90	90.4	60.4	15.3	0.11	86.2	7.6
A30	4	97	92.1	55.7	18.6	0.14	88.7	8.7
A30	5	96	91.2	48.1	22.1	0.19	87.3	7.4
A30	6	83	91.9	77.5	7.3	0.02	84.9	7.6
A34	1	93	94.3	64.5	15.3	0.06	88.8	7.4
A34	2	99	94.7	78.4	8.3	0.03	87.1	7.3
A34	3	100	92.5	73.0	10.0	0.02	86.6	6.5
A34	4	91	92.8	72.4	10.4	0.03	86.6	5.9

Road	Site	Number of vehicles sampled	Noise level at 90km/h (dB(A))	Constant	Slope	R ²	Average speed (km/h)	Standard deviation of speed (km/h)
A35	1	84	90.2	72.6	9.0	0.02	85.6	6.3
A35	2	92	91.4	46.8	22.8	0.15	88.1	6.9
A35	3	89	90.8	86.1	2.4	0.00	89.8	7.1
A35	4	88	90.3	39.3	26.1	0.20	89.4	7.8
A50 Doveridge	1	93	92.7	83.8	4.5	0.01	89.1	8.3
A50 Doveridge	2	94	93.5	64.2	15.0	0.06	89.0	6.6
A50 Doveridge	3	91	92.4	88.9	1.8	0.00	90.0	6.4
A50 Derby Southern	1	90	90.3	65.5	12.7	0.07	90.2	7.9
A50 Derby Southern	2	98	90.4	66.6	12.2	0.05	89.3	6.7
A50 Foston Hatton Hilton	1	87	87.6	61.9	13.2	0.08	88.4	5.2
A50 Foston Hatton Hilton	2	87	87.5	88.8	-0.7	0.00	89.3	5.9
A50 Foston Hatton Hilton	3	99	88.6	64.7	12.2	0.09	89.6	7.6
A52	1	80	89.7	31.7	29.7	0.21	85.1	5.8
A52	2	80	89.7	35.1	27.9	0.37	78.3	8.2
A249	1	93	90.1	42.8	24.2	0.18	88.8	6.4
A249	2	91	91.1	32.3	30.1	0.25	87.2	6.6
A249	3	93	90.5	71.7	9.6	0.03	87.5	7.2
A249	4	86	90.5	35.6	28.1	0.20	84.1	6.6
A417 / A419	1	90	93.8	83.2	5.4	0.01	87.2	5.6
A417 / A419	2	90	91.4	71.8	10.0	0.04	88.3	7.6
A417 / A419	3	99	92.0	71.4	10.5	0.04	88.9	7.6
A417 / A419	4	95	91.7	64.7	13.8	0.04	86.5	5.9
A417 / A419	5	95	93.9	64.9	14.9	0.04	87.7	6.0
A417 / A419	6	88	93.8	69.8	12.3	0.02	89.0	6.0
A483	1	83	90.6	74.1	8.5	0.03	87.1	6.7
A483	2	86	91.0	63.6	14.0	0.06	82.6	6.2
A483	3	93	91.7	63.1	14.6	0.07	87.0	6.7

* The site numbering is in the order surveyed. This is not necessarily the order that the sites are located along the road

** Noise levels corrected for use with Backing Board

*** Removed from final analysis due to poor meteorological conditions