

BAB VI

KESIMPULAN DAN SARAN

A. Kesimpulan

Berdasarkan hasil penelitaian, analisis data dan pembahasan yang telah dilakukan maka didapat kesimpulan sebagai berikut :

1. Hasil penelitian pada lokasi T.1 – T.8 menggunakan alat menghasilkan kebisingan tertinggi di T.2 sebesar 68,48 dBA dan nilai terendah T.4 (dalam ruangan) sebesar 48,79 dBA .
2. Nilai tertinggi kebisingan hasil hitungan T.1 sebesar 70.53 dBA dan nilai terendah kebisingan terjadi di T.3 sebesar 55,40 dBA (dalam ruangan).
3. Secara keseluruhan semua lokasi dari hasil penelitian dari alat dan hasil analisis, Jika ditinjau dari baku mutu yang di ijinakan KEPMEN LH 48 Tahun 1996 untuk permukiman, hampir semua lokasi melampaui kriteria tidak memenuhi ≥ 55 dBA. Sementara untuk dalam ruangan (T.3, T4) dan di lorong sawit (T.7) memenuhi kriteria ≤ 55 dBA.
4. Hasil penelitian menggunakan alat *sound level meter* dan yang sudah dianalisis menunjukkan korelasi positif disetiap titik lokasi penelitian, dari analisa dan pembahasan menunjukkan tinggi volume kendaraan di Bangko Mukti sangat berpengaruh langsung pada kebisingan

5. Pengendalian kebisingan menggunakan penghalang buatan menerus bata dari alat maupun yang sudah di analisis secara keseluruhan mampu mengurangi kebisingan dan memenuhi persyaratan kebisingan untuk permukiman kecuali hasil analisis $T.1 = 70,53 \geq 55$ dBA
6. Pengendalian kebisingan menggunakan penghalang alami tanaman heliconia sp hasil dari alat maupun yang sudah di analisis secara keseluruhan belum mampu mengurangi kebisingan dan hanya dalam ruangan (T.3, T.4) dan lorong sawit (T.7) yang memenuhi persyaratan kebisingan ≤ 55 dBA
7. Pengendalian kebisingan menggunakan kombinasi penghalang buatan dan alami dari penghalang menerus bata dan tanaman heliconia sp, hasil dari alat maupun yang sudah di analisis kombinasi ini mampu mengurangi kebisingan untuk keseluruhan lokasi penelitian dan memenuhi persyaratan kebisingan untuk permukiman ≤ 55 dBA
8. Simulasi perhitungan tingkat kebisingan dengan skenario prediksi pertumbuhan lalu lintas, penurunan kecepatan lalu lintas pada jalan annas ma'amun 30 km/jam dan jalan PKS 35 km/jam akan menurunkan tingkat kebisingan apabila kecepatan lalu lintas lebih rendah lagi dari 30 km/jam dan 35 km/jam maka tingkat kebisingan akan naik kembali. Hal ini disebabkan dari kecepatan dan putaran mesin tinggi sehingga menghasilkan gesekan jalan raya juga besar sehingga menghasilkan kebisingan yang tinggi. Sebaliknya jika kecepatan rendah akibat muatan yang berat dari

truk yang membawa sawit juga akan menghasilkan kebisingan. Sehingga pertumbuhan lalu lintas akan berdampak langsung pada kebisingan.

B. Saran

Upaya untuk pengendalian kebisingan yang terjadi pada lalu lintas sekitar permukiman Bangko Mukti antara lain:

1. Pengurangan penggunaan knalpot racing khususnya pada sepeda motor
2. Service rutin mesin kendaraan khusus kendaraan berat, sebagai upaya pencegahan kebisingan
3. Upaya pengendalian kebisingan berdasarkan analisis menggunakan kombinasi penghalang buatan dari susunan bata dan penghalang alami dari tanaman heliconia sp

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DATA PENELITIAN KEBISINGAN

T.1

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/jam)						KEBISINGAN (dB)		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Mln	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)	
09.00 - 09.05	18	17	2	0	0	0	59.02	58.06	46.15	0.00	0.00	0.00	58.3	76.8	67.55
09.05 - 09.10	20	20	2	0	4	0	56.25	55.38	44.44	0.00	42.86	0.00	46.5	74.1	60.3
09.10 - 09.15	25	24	4	2	1	4	43.06	53.73	67.92	57.14	46.15	55.38	52.7	82.4	67.55
09.15 - 09.20	20	23	1	3	0	0	50.14	50.70	55.38	58.06	0.00	0.00	56.7	76.3	66.5
09.20 - 09.25	21	24	2	3	2	3	50.56	49.32	58.06	50.70	40.00	54.55	48.5	72.8	60.65
09.25 - 09.30	23	22	2	4	3	4	50.78	60.00	63.16	54.55	41.38	57.14	57.1	84.7	70.9
09.30 - 09.35	25	22	0	2	1	1	58.82	46.15	0.00	56.25	50.00	50.70	52.7	76.9	64.8
09.35 - 09.40	21	24	3	4	1	1	44.39	48.00	50.00	55.38	43.37	62.07	52.3	80.1	66.2
09.40 - 09.45	25	19	1	1	1	1	49.45	49.32	57.14	50.00	45.57	58.06	55.8	75.7	65.75
09.45 - 09.50	22	25	2	0	1	1	49.66	63.16	56.25	0.00	48.00	55.38	54.9	77.6	66.25
09.50 - 09.55	24	22	2	1	0	1	46.39	46.75	63.16	49.32	0.00	34.95	57.2	82.5	69.85
09.55 - 10.00	23	20	2	2	2	0	52.17	40.45	58.06	58.06	43.37	0.00	56.7	77.9	67.3
10.00 - 10.05	19	16	3	2	2	1	55.38	52.94	63.16	57.14	32.43	42.86	54.5	77.4	65.95
10.05 - 10.10	21	24	3	0	0	2	59.02	67.92	59.02	0.00	0.00	43.90	53.5	85.3	69.4
10.10 - 10.15	25	24	1	1	1	1	67.92	61.02	50.70	57.14	41.86	40.45	57.9	76.4	67.15
10.15 - 10.20	29	27	0	1	3	0	55.38	62.07	0.00	50.70	47.37	0.00	52.7	74.1	63.4
10.20 - 10.25	22	31	1	2	2	1	69.23	67.92	62.07	48.65	48.00	56.25	54.4	75.1	64.75
10.25 - 10.30	22	25	3	4	2	3	59.02	49.32	58.06	52.94	48.00	55.38	55.8	75.9	65.85
10.30 - 10.35	17	24	1	3	0	2	85.71	50.00	53.73	51.43	0.00	44.44	57.3	82.9	70.1
10.35 - 10.40	22	21	2	5	1	1	67.92	66.67	50.70	52.17	59.02	38.30	55.2	76.2	65.7
10.40 - 10.45	25	19	1	1	1	2	63.16	43.37	48.00	55.05	50.70	52.94	58.6	83.5	71.05
10.45 - 10.50	24	21	4	3	1	1	67.92	56.25	63.16	57.14	51.43	52.17	54.3	76.6	65.45
10.50 - 10.55	20	18	5	4	1	1	50.70	81.82	67.92	48.65	61.02	48.00	49.7	75.3	62.5
10.55 - 11.00	19	22	3	6	1	1	54.55	75.00	53.73	47.37	58.06	45.57	51.6	82.3	66.95
11.00 - 11.05	24	18	3	6	1	1	50.70	73.47	59.02	53.73	56.25	55.38	54.1	76.1	65.1
11.05 - 11.10	27	20	1	2	1	2	50.00	67.92	50.00	52.17	40.91	53.73	55.8	79.7	67.75
11.10 - 11.15	25	24	2	5	2	2	55.38	63.16	50.70	55.38	60.00	57.14	59.2	76.2	67.7
11.15 - 11.20	21	20	1	1	1	2	67.92	56.25	55.38	58.06	55.38	52.17	57.2	78.2	67.7
11.20 - 11.25	25	27	2	1	2	1	65.45	70.59	58.06	59.02	43.90	43.90	58.2	74.8	66.5
11.25 - 11.30	25	19	1	0	1	1	80.00	76.60	55.38	0.00	58.06	48.00	59.4	81.8	70.6
11.30 - 11.35	28	23	4	1	1	1	57.14	73.47	58.06	50.00	52.17	50.70	56.3	80.2	68.25
11.35 - 11.40	30	21	5	1	2	2	50.00	59.02	54.55	58.06	60.00	54.55	58.4	73.5	65.95
11.40 - 11.45	25	29	2	3	1	1	49.32	67.92	50.00	50.70	43.37	56.25	55.3	76.2	65.75
11.45 - 11.50	25	22	2	2	1	1	53.73	70.59	48.00	49.32	50.70	50.70	58.7	77.5	68.1
11.50 - 11.55	23	26	2	2	1	1	75.00	62.07	48.00	52.94	56.25	45.57	55.9	83.1	69.5
11.55 - 12.00	27	20	1	1	1	0	72.00	65.45	57.14	48.65	42.86	0.00	54.1	79.6	66.85

DATA PENELITIAN KEBISINGAN

T.1

12.00 - 12.05	20	23	3	1	2	2	55.38	78.26	66.67	59.02	41.86	43.37	58.1	81.1	69.6	67.97
12.05 - 12.10	22	24	3	1	2	2	57.14	50.00	55.38	49.32	52.94	42.35	53.7	83.4	68.55	
12.10 - 12.15	23	24	1	1	1	1	59.02	59.02	52.17	50.00	52.94	55.38	55.4	78.6	67	
12.15 - 12.20	27	25	2	1	3	3	50.70	49.32	52.94	48.00	52.17	54.55	58.5	80.3	69.4	
12.20 - 12.25	21	25	1	2	2	1	57.14	56.25	56.25	55.38	50.70	53.73	53.8	77.9	65.85	
12.25 - 12.30	24	21	3	4	2	3	48.65	70.59	49.32	52.17	50.00	41.86	54.7	82.4	68.55	
12.30 - 12.35	24	24	1	3	2	2	75.00	67.92	50.00	57.14	50.70	43.90	53.2	85.2	69.2	
12.35 - 12.40	23	21	1	7	1	1	55.38	83.72	48.65	52.94	57.14	56.25	48.3	75.7	62	
12.40 - 12.45	25	22	5	1	1	2	52.94	50.70	53.73	50.70	43.37	56.25	57.2	73.6	65.4	
12.45 - 12.50	21	25	4	3	3	2	63.16	59.02	50.70	56.25	42.35	50.70	58	88.3	73.15	
12.50 - 12.55	30	23	5	7	1	1	67.92	56.25	50.00	52.94	61.02	57.14	54.3	75.9	65.1	
12.55 - 13.00	27	25	3	6	2	1	59.02	58.06	57.14	57.14	44.39	55.38	57.8	85.8	71.8	
13.00 - 13.05	25	23	2	1	1	1	73.47	67.92	50.70	54.55	42.35	55.38	54.9	81.5	68.2	68.39
13.05 - 13.10	23	27	2	2	2	1	70.59	63.16	52.94	52.94	50.70	57.14	54.8	82.3	68.55	
13.10 - 13.15	25	22	3	3	2	1	65.45	67.92	53.73	52.17	44.44	46.15	52.5	82.2	67.35	
13.15 - 13.20	21	26	2	2	2	2	67.92	63.16	55.38	43.90	50.70	64.29	59.3	81.7	70.5	
13.20 - 13.25	25	22	4	2	1	2	53.73	53.73	50.70	57.14	54.55	61.02	53.5	78.5	66	
13.25 - 13.30	28	25	2	4	1	3	57.14	73.47	56.25	49.32	55.38	44.44	58.3	80.1	69.2	
13.30 - 13.35	25	23	2	2	3	2	67.92	70.59	57.14	50.00	39.56	34.62	49.7	77.6	63.65	
13.35 - 13.40	27	25	5	1	2	3	66.67	56.25	64.29	57.14	45.57	31.30	56.2	78.4	67.3	
13.40 - 13.45	25	21	3	1	2	2	66.67	58.06	63.16	50.00	59.02	50.70	57.8	78.4	68.1	
13.45 - 13.50	27	23	4	3	2	1	56.25	58.06	56.25	57.14	40.45	56.25	53.1	97.5	75.3	
13.50 - 13.55	30	27	2	1	1	1	55.38	67.92	53.73	55.38	52.94	59.02	55.4	78.2	66.8	
13.55 - 14.00	32	29	3	0	1	1	50.00	62.07	59.02	0.00	50.00	61.02	58.3	81.2	69.75	
14.00 - 14.05	34	20	2	1	2	2	50.00	69.23	49.32	55.38	46.15	50.70	53.2	93	73.1	69.30
14.05 - 14.10	27	30	2	1	1	2	50.70	64.29	48.65	62.07	52.94	59.02	64.4	83.2	73.8	
14.10 - 14.15	35	28	3	1	1	2	54.55	58.06	50.70	57.14	49.32	40.45	58.5	80.6	69.55	
14.15 - 14.20	20	25	2	1	2	1	69.23	65.45	50.00	52.17	47.37	39.13	55.4	78.5	66.95	
14.20 - 14.25	35	30	4	2	2	1	76.60	69.23	52.17	61.02	52.94	35.64	59.2	84.9	72.05	
14.25 - 14.30	33	26	2	3	2	3	78.26	57.14	48.65	50.70	57.14	43.37	56.8	76.8	66.8	
14.30 - 14.35	28	33	2	1	3	2	76.60	70.59	55.38	49.32	50.00	57.14	57.5	86.7	72.1	
14.35 - 14.40	22	29	3	4	2	1	59.02	51.43	55.38	55.38	58.06	52.17	57.8	78.3	68.05	
14.40 - 14.45	25	30	4	5	2	1	66.67	59.02	48.65	62.07	48.65	47.37	53.7	74.6	64.15	
14.45 - 14.50	30	27	4	5	4	1	63.16	75.00	48.65	61.02	42.35	43.37	60.4	81.1	70.75	
14.50 - 14.55	28	30	5	5	4	2	69.23	80.00	62.07	54.55	59.02	59.02	57.1	80.3	68.7	
14.55 - 15.00	25	24	2	2	3	3	56.25	66.67	46.15	55.38	43.90	55.38	55.9	75.3	65.6	
TOTAL	1779	1710	177	169	116	109	RATA - RATA									
	masuk	2072		keluar	1988		59.95	61.80	53.14	49.34	45.99	46.27				
	4060						60.87		51.24		45.13					
%	85.94		8.52		5.54		52.75									

DATA PENELITIAN KEBISINGAN

T.2

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/Jam)						KEBISINGAN (dB)		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Mln	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)	
09.00 - 09.05	15	19	1	0	2	1	50.70	52.94	48.00	0.00	50.00	44.44	56.3	75.7	66
09.05 - 09.10	18	21	1	1	2	2	52.94	44.44	45.57	53.73	52.17	47.37	54	81.6	67.8
09.10 - 09.15	20	20	1	2	1	2	50.00	48.65	64.29	49.32	45.57	55.38	55.3	76.7	66
09.15 - 09.20	20	18	2	1	1	0	55.38	59.02	57.14	48.00	0.00	0.00	57.4	80.5	68.95
09.20 - 09.25	19	25	1	3	2	1	44.44	48.65	55.38	54.55	46.15	52.94	54.1	85.1	69.6
09.25 - 09.30	18	18	1	2	2	1	57.14	47.37	55.38	48.00	54.55	30.77	58.3	78.1	68.2
09.30 - 09.35	19	22	1	0	1	1	50.70	42.35	64.29	0.00	45.57	52.17	52.5	78.9	65.7
09.35 - 09.40	24	16	3	1	1	0	42.86	75.00	62.07	52.94	46.75	0.00	54.7	75.4	65.05
09.40 - 09.45	25	21	2	1	0	1	64.29	63.16	56.25	42.86	0.00	58.06	57.3	81.7	69.5
09.45 - 09.50	23	20	1	0	1	1	53.73	56.25	55.38	0.00	31.30	55.38	52.1	75.5	63.8
09.50 - 09.55	22	18	2	1	0	2	62.07	43.37	50.70	47.37	0.00	32.14	57.9	77.8	67.85
09.55 - 10.00	21	26	0	3	1	0	69.23	46.15	0.00	42.35	40.45	0.00	51.1	81.4	66.25
10.00 - 10.05	20	17	2	1	1	1	53.73	61.02	44.44	49.32	53.73	36.73	55.6	78.1	66.85
10.05 - 10.10	19	21	3	1	1	2	63.16	53.73	50.70	0.00	0.00	44.44	53.6	82.7	68.15
10.10 - 10.15	23	24	1	1	1	1	65.45	48.65	52.94	54.55	34.29	45.57	57.4	74.5	65.95
10.15 - 10.20	22	24	1	2	2	0	52.94	48.00	0.00	48.00	45.57	0.00	57.1	76.1	66.6
10.20 - 10.25	20	21	2	2	1	1	54.55	48.00	66.67	52.17	37.11	48.65	58.9	78.3	68.6
10.25 - 10.30	23	20	1	2	1	2	52.94	52.17	53.73	43.37	41.86	48.00	56.1	85.2	70.65
10.30 - 10.35	21	23	2	1	1	1	50.00	80.00	56.25	55.38	0.00	46.75	53.6	74.6	64.1
10.35 - 10.40	20	22	1	3	2	1	48.65	58.06	45.00	52.17	48.65	34.29	57.8	76.9	67.35
10.40 - 10.45	21	20	2	1	1	2	42.35	49.32	48.65	48.65	41.86	52.94	53.1	77.5	65.3
10.45 - 10.50	21	15	1	2	0	1	63.16	43.90	64.29	50.70	0.00	43.37	59.5	75.3	67.4
10.50 - 10.55	20	21	0	2	1	1	65.45	67.92	0.00	48.65	46.75	40.91	55.1	83.6	69.35
10.55 - 11.00	19	25	2	1	1	1	60.00	61.02	63.16	46.15	54.55	48.00	58.3	75.4	66.85
11.00 - 11.05	17	15	2	2	1	1	48.65	60.00	67.92	43.37	53.73	30.77	56.3	82.7	69.5
11.05 - 11.10	19	20	3	2	1	2	52.94	55.38	62.07	55.38	46.15	35.64	55.7	83.3	69.5
11.10 - 11.15	23	25	2	3	0	1	52.94	48.65	64.29	52.94	0.00	46.75	49.4	81.2	65.3
11.15 - 11.20	21	25	2	2	2	1	70.59	43.90	53.73	54.55	41.86	47.37	58.9	75.7	67.3
11.20 - 11.25	24	25	0	1	1	1	42.86	76.60	0.00	53.73	45.57	45.57	58.9	88.7	73.8
11.25 - 11.30	21	21	1	2	2	2	63.16	70.59	52.17	0.00	46.75	50.70	54.1	79.2	66.65
11.30 - 11.35	30	25	2	1	2	1	53.73	63.16	50.70	57.14	46.75	50.70	56	81.8	68.9
11.35 - 11.40	19	22	2	0	2	2	54.55	56.25	52.17	0.00	53.73	43.37	57.1	83.4	70.25
11.40 - 11.45	21	26	2	2	1	1	63.16	67.92	55.38	48.00	42.35	52.17	54.7	77.8	66.25
11.45 - 11.50	22	24	1	1	3	1	67.92	72.00	66.67	45.00	38.30	46.15	53.8	81.1	67.45
11.50 - 11.55	21	19	3	1	1	1	53.73	45.57	61.02	54.55	48.65	44.44	55.4	73.8	64.6
11.55 - 12.00	23	20	3	2	1	1	62.07	55.38	50.70	45.57	47.37	0.00	53.5	74.8	64.15

T.2

70.35

DATA PENELITIAN KEBISINGAN

T.3

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/jam)						KEBISINGAN (dB) DALAM RUANG			KEBISINGAN (dB) HALAMAN		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Min	Max	Rata - Rata	Min	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)		(-)	(+)	
09.00 - 09.05	11	12	1	0	0	2	60.00	55.38	45.00	54.55	48.65	46.15	39.8	51.2	45.5	55.7	65.5	60.6
09.05 - 09.10	18	14	2	2	0	1	59.02	59.02	50.70	56.25	46.15	45.00	45.6	56.4	51	50.1	67.3	58.7
09.10 - 09.15	9	12	1	2	3	1	57.14	60.00	65.45	51.43	46.15	41.86	47.6	54.2	50.9	57.1	65.5	61.3
09.15 - 09.20	11	9	2	0	0	1	61.02	60.00	54.55	61.02	42.35	45.57	42.8	55.6	49.2	57.9	67.8	62.85
09.20 - 09.25	10	14	1	1	0	1	59.02	63.16	55.38	56.25	41.38	43.90	41.3	57.4	49.35	52.1	57.9	55
09.25 - 09.30	13	11	2	2	1	0	55.38	59.02	62.07	54.55	42.35	47.37	40.8	54.2	47.5	56.8	71.2	64
09.30 - 09.35	12	8	1	1	1	1	58.82	62.07	60.00	53.73	47.37	42.35	42.6	54.7	48.65	51.4	70.8	61.1
09.35 - 09.40	11	11	3	2	2	2	61.02	59.02	49.32	52.94	40.91	43.37	39.7	52.7	46.2	55.6	67.8	61.7
09.40 - 09.45	10	9	1	3	2	1	53.73	67.92	48.00	55.38	40.45	37.89	38.5	55.6	47.05	55.1	58.1	56.6
09.45 - 09.50	9	11	1	1	1	1	64.29	54.55	52.17	52.94	37.89	46.15	37.2	57.3	47.25	59.1	64.7	61.9
09.50 - 09.55	13	10	2	2	1	1	61.02	55.38	50.00	49.32	48.65	46.15	41.3	56.8	49.05	58.6	69.7	64.15
09.55 - 10.00	8	8	1	3	0	1	58.06	69.23	46.15	53.73	41.38	49.32	37.7	51	44.35	56.4	67.9	62.15
10.00 - 10.05	10	13	2	3	0	1	61.02	59.02	46.75	52.94	34.95	47.37	45.4	55.8	50.6	57.8	67.1	62.45
10.05 - 10.10	8	11	0	2	1	0	60.00	62.07	48.00	53.73	47.37	49.32	40.5	53.7	47.1	55.2	69.4	62.3
10.10 - 10.15	11	16	1	2	1	1	55.38	65.45	47.37	55.38	48.00	47.37	41.8	56.3	49.05	58.5	68.3	63.4
10.15 - 10.20	14	11	2	2	1	2	65.45	60.00	46.15	51.43	46.75	41.38	44.2	56.7	50.45	57.2	71.1	64.15
10.20 - 10.25	15	11	1	0	1	1	51.43	60.00	63.16	50.00	46.15	48.00	38.2	51.8	45	50.1	64.4	57.25
10.25 - 10.30	15	10	2	2	2	1	60.00	59.02	64.29	53.73	48.65	42.35	37.2	52.1	44.65	59.3	64.1	61.7
10.30 - 10.35	14	9	3	0	0	2	55.38	59.02	55.38	52.94	40.45	41.38	42.7	62.7	52.7	56.2	58.7	57.45
10.35 - 10.40	11	10	0	1	1	1	62.07	57.14	54.55	56.25	38.30	49.32	41.5	57.5	49.5	59.8	68.1	63.95
10.40 - 10.45	11	15	0	2	1	2	65.45	61.02	57.14	52.17	41.86	46.15	34.2	53.4	43.8	54.6	68.1	61.35
10.45 - 10.50	16	10	1	0	1	1	55.38	62.07	62.07	54.55	43.37	48.00	41.7	58.2	49.95	57.1	65.2	61.15
10.50 - 10.55	10	13	2	2	1	0	57.14	53.73	63.16	48.00	47.37	48.65	39.6	55.9	47.75	50.6	64.9	57.75
10.55 - 11.00	12	11	3	2	1	0	54.55	59.02	56.25	53.73	53.73	46.75	43.2	54.6	48.9	57.1	62.8	59.95
11.00 - 11.05	11	10	3	4	1	2	60.00	59.02	55.38	54.55	33.33	48.00	40.8	57.3	49.05	58.5	68.3	63.4
11.05 - 11.10	13	12	0	2	1	1	57.14	54.55	53.73	53.73	42.35	50.00	42.3	52.1	47.2	53.4	70.1	61.75
11.10 - 11.15	11	9	1	2	1	1	55.38	50.70	57.14	55.38	42.35	42.35	38.2	58.3	48.25	55.3	69.1	62.2
11.15 - 11.20	11	10	2	1	2	1	66.67	54.55	63.16	52.17	41.38	43.37	35.6	60.2	47.9	56.1	66.2	61.15
11.20 - 11.25	13	11	2	3	2	3	63.16	51.43	57.14	60.00	41.38	41.38	42.1	62.1	52.1	58.1	67.4	62.75
11.25 - 11.30	13	12	1	2	1	1	61.02	59.02	55.38	57.14	37.89	41.86	39	55.3	47.15	50.2	68.2	59.2
11.30 - 11.35	12	11	3	2	2	2	55.38	66.67	59.02	58.06	38.71	48.65	36.8	58.2	47.5	57.1	71.6	64.35
11.35 - 11.40	16	10	2	0	2	1	51.43	62.07	54.55	52.17	47.37	48.65	40.5	61.8	51.15	52.1	65.8	58.95
11.40 - 11.45	13	13	2	2	1	2	50.70	59.02	58.06	48.65	48.00	61.02	37.4	57.2	47.3	59.3	67.7	63.5
11.45 - 11.50	10	11	2	3	1	1	59.02	61.02	50.70	50.70	46.75	48.65	38.5	55.6	47.05	57	61.8	59.4
11.50 - 11.55	13	12	1	1	0	0	63.16	62.07	52.94	48.00	42.86	48.65	37.5	56.5	47	55.1	62.6	58.85
11.55 - 12.00	14	10	2	1	1	1	57.14	53.73	51.43	59.02	42.86	31.30	42.1	57.5	49.8	55.3	65.3	60.3

DATA PENELITIAN KEBISINGAN

T.3

12.00 - 12.05	14	18	4	2	1	2	65.45	62.07	63.16	52.17	47.37	45.57	42.7	61.3	52	57.3	70.7	64			
12.05 - 12.10	17	15	2	3	1	1	66.67	61.02	58.06	51.43	48.00	44.44	41.8	60.6	51.2	53.8	67.1	60.45			
12.10 - 12.15	17	20	2	1	1	1	60.00	62.07	52.94	48.65	56.25	53.73	37.5	58.2	47.85	58.7	68.3	63.5			
12.15 - 12.20	16	13	2	1	1	2	58.06	64.29	55.38	46.75	51.43	52.94	37.3	53.7	45.5	53.3	67.9	60.6			
12.20 - 12.25	15	11	1	1	1	1	60.00	60.00	56.25	52.94	48.00	52.94	44.7	57.4	51.05	56.1	71.3	63.7			
12.25 - 12.30	12	12	2	2	1	1	75.00	57.14	50.70	56.25	50.70	42.35	38.5	57.3	47.9	54.1	73.6	63.85			
12.30 - 12.35	11	10	1	2	2	1	60.00	59.02	52.17	48.65	42.86	43.37	38.4	57.8	48.1	53.1	68.2	60.65			
12.35 - 12.40	18	13	3	1	1	2	63.16	61.02	51.43	55.38	48.00	43.90	47.2	55.3	51.25	47.5	66.1	56.8			
12.40 - 12.45	12	10	2	3	1	1	55.38	57.14	55.38	57.14	42.35	51.43	40.5	58.1	49.3	58.9	64.2	61.55			
12.45 - 12.50	14	12	4	0	2	1	65.45	60.00	54.55	52.94	43.90	42.35	38.2	61.8	50	54.8	68.1	61.45			
12.50 - 12.55	11	14	2	2	2	2	60.00	62.07	52.94	50.70	38.71	48.00	39.5	58.2	48.85	55.1	70.9	63			
12.55 - 13.00	19	12	5	3	2	1	58.06	65.45	56.25	50.70	31.30	49.32	39.5	54.2	46.85	53.7	71.7	62.7			
13.00 - 13.05	14	22	3	2	2	2	61.02	65.45	51.43	50.00	38.30	46.15	42.8	58.3	50.55	55.3	66.3	60.8			
13.05 - 13.10	11	13	3	1	1	2	62.07	62.07	53.73	54.55	46.15	43.37	38.9	59.4	46.15	47.5	66.5	57			
13.10 - 13.15	21	13	5	2	2	2	62.07	63.16	53.73	53.73	42.86	49.32	37.7	57.5	47.6	58.4	64.6	61.5			
13.15 - 13.20	15	15	2	1	1	1	61.02	61.02	55.38	46.75	43.37	48.65	38.4	55.6	47	57.2	62.8	60			
13.20 - 13.25	18	21	2	3	2	1	60.00	65.45	52.17	52.94	47.37	48.00	35.1	57.3	46.2	49.5	65.2	57.35			
13.25 - 13.30	13	14	1	1	1	1	60.00	59.02	50.70	57.14	54.55	46.15	41.8	58.9	50.35	58.3	65.7	62			
13.30 - 13.35	12	20	2	2	1	2	65.45	51.43	47.37	51.43	50.00	52.17	42.7	62.1	52.4	56.7	71.9	64.3			
13.35 - 13.40	14	15	2	2	1	3	58.06	50.70	50.00	54.55	46.75	50.70	40.4	63.8	52.1	58.2	75.2	66.7			
13.40 - 13.45	17	13	0	2	3	1	60.00	62.07	62.07	53.73	43.90	40.45	39.6	65.1	52.35	56.3	78.5	67.4			
13.45 - 13.50	14	19	3	3	1	1	59.02	65.45	61.02	55.38	42.35	34.62	47.4	63.2	55.3	58.2	83.6	70.9			
13.50 - 13.55	17	13	2	2	2	1	57.14	51.43	60.00	58.06	40.91	37.89	37.1	62.5	49.8	47.5	72.9	60.2			
13.55 - 14.00	15	16	4	0	2	1	63.16	64.29	56.25	55.38	38.71	48.00	35.9	61.2	48.55	50.8	71.1	60.95			
14.00 - 14.05	15	17	2	2	1	1	55.38	66.67	59.02	50.70	48.00	46.15	41.8	63.2	52.5	47.8	72.8	60.3			
14.05 - 14.10	20	14	3	2	2	2	57.14	53.73	51.43	52.94	53.73	48.65	38.5	62.8	50.65	56.1	73.6	64.85			
14.10 - 14.15	18	21	2	1	2	1	58.06	56.25	52.17	56.25	52.17	31.30	42.5	58.9	50.7	53.6	72.9	63.25			
14.15 - 14.20	13	14	3	1	1	1	65.45	65.45	52.17	52.17	48.65	33.33	40.6	60.2	50.4	56.8	74.9	65.85			
14.20 - 14.25	21	21	2	1	1	2	73.47	66.67	53.73	56.25	49.32	31.03	44.4	62.1	53.25	44.8	70.7	57.75			
14.25 - 14.30	19	22	3	1	2	1	70.59	60.00	48.00	52.94	47.37	42.35	41.9	65.5	53.7	54.1	75.5	64.8			
14.30 - 14.35	19	20	1	2	2	2	62.07	66.67	61.02	55.38	46.15	43.37	40.8	59.2	50	58.7	72.9	65.8			
14.35 - 14.40	17	20	2	3	1	1	55.38	59.02	53.73	55.38	41.38	48.00	37.3	57.9	47.6	55.7	68.8	62.25			
14.40 - 14.45	16	15	3	2	1	1	62.07	62.07	48.00	62.07	40.91	45.57	32.8	63.1	47.95	56.1	69.1	62.6			
14.45 - 14.50	18	16	3	2	3	2	65.45	63.16	55.38	65.45	47.37	45.00	37.4	65.3	51.35	54.1	70.4	62.25			
14.50 - 14.55	21	13	2	1	1	1	55.38	64.29	52.94	59.02	35.29	43.90	39.5	60.1	49.8	55.3	76.5	65.9			
14.55 - 15.00	20	17	4	2	2	2	59.02	51.43	51.43	51.43	31.30	46.75	39.7	62.2	50.95	57.3	75.4	66.35			
TOTAL	1006	964	145	122	91	92	RATA - RATA														
	masuk	1242			keluar		1178		60.11	60.06	54.50	53.80	44.33	45.36							
	2420						60.08		54.15		44.85										
%	81.40		11.03		7.56		53.03														

DATA PENELITIAN KEBISINGAN

T.4

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/jam)						KEBISINGAN (dB) Dalam Ruangan			KEBISINGAN (dB) Halaman		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Min	Max	Rata - Rata	Min	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)		(-)	(+)	
09.00 - 09.05	7	9	1	0	0	2	57.14	55.38	45.00	57.14	50.70	44.44	38.8	56.1	47.45	53.7	67.1	60.4
09.05 - 09.10	16	10	2	3	0	1	56.25	56.25	50.00	56.25	46.15	45.00	41.7	58.1	49.9	50.1	69.7	56.9
09.10 - 09.15	13	8	1	2	1	1	55.38	60.00	56.25	51.43	46.15	41.86	38.5	54.2	46.35	52.1	66.5	59.3
09.15 - 09.20	11	13	2	0	0	1	59.02	55.38	54.55	61.02	42.35	45.57	39.5	55.6	47.55	54.5	67.8	61.15
09.20 - 09.25	9	13	1	1	0	1	59.02	63.16	50.70	56.25	41.38	43.90	37.9	57.4	47.65	52.1	69.7	57.9
09.25 - 09.30	14	11	2	2	1	0	59.02	52.94	58.06	50.00	42.35	47.37	38.7	57.8	48.25	56.8	69.5	63.15
09.30 - 09.35	12	13	1	1	1	1	58.82	59.02	60.00	53.73	47.37	42.35	40.8	59.3	50.05	51.4	71.4	61.4
09.35 - 09.40	8	8	5	2	2	1	51.43	56.25	49.32	50.70	40.91	43.37	34.9	54.7	44.8	48.3	64.8	56.55
09.40 - 09.45	13	7	1	3	2	1	53.73	60.00	48.00	55.38	40.45	37.89	41.6	55.6	48.6	55.1	70.2	62.65
09.45 - 09.50	6	6	1	1	1	1	63.16	54.55	46.75	52.94	37.89	43.90	37.2	57.3	47.25	54.9	71.6	63.25
09.50 - 09.55	12	10	2	2	1	1	69.23	59.02	50.00	49.32	48.65	46.15	41.3	58.6	49.95	52.4	65.1	58.75
09.55 - 10.00	8	5	1	3	0	1	58.06	62.07	45.15	53.73	41.38	49.32	33.6	54.7	44.15	53.8	64.1	58.95
10.00 - 10.05	12	18	1	3	0	1	52.17	59.02	46.75	52.94	34.95	47.37	45.4	58.4	51.9	58.2	68.5	63.35
10.05 - 10.10	18	12	1	1	1	0	61.02	62.07	48.00	53.73	47.37	49.32	42.1	55.4	48.75	53.5	67.5	60.5
10.10 - 10.15	15	16	1	2	1	1	58.06	65.45	47.37	55.38	48.00	47.37	45.8	56.3	51.05	55.8	65.5	60.65
10.15 - 10.20	6	12	2	3	1	2	53.73	60.00	46.15	51.43	46.75	41.38	34.5	56.7	45.6	53.7	68.4	61.05
10.20 - 10.25	14	18	1	0	1	1	59.02	60.00	45.57	50.00	46.15	48.00	40.3	52.6	45.45	55.9	69.6	62.75
10.25 - 10.30	15	16	2	2	2	1	62.07	59.02	53.73	48.00	48.65	42.35	41.8	52.1	46.95	54.3	66.4	60.35
10.30 - 10.35	25	23	3	0	0	2	57.14	59.02	59.02	50.70	40.45	41.38	47.5	64.8	56.15	57.1	68	62.55
10.35 - 10.40	24	25	0	1	1	1	62.07	57.14	54.55	56.25	38.30	49.32	42.8	54.3	48.55	52.2	67.2	59.7
10.40 - 10.45	20	23	0	4	1	1	58.06	59.02	49.32	52.17	40.91	46.15	38.9	54.6	46.75	57.5	63.6	60.55
10.45 - 10.50	20	15	1	0	1	1	55.38	62.07	58.06	52.17	43.37	48.00	48.6	55.8	52.2	55.6	67.1	61.35
10.50 - 10.55	25	21	2	2	2	0	57.14	53.73	50.00	48.00	46.75	48.65	41.5	56	48.75	56.9	68.4	62.65
10.55 - 11.00	18	19	3	2	2	0	54.55	59.02	56.25	53.73	53.73	42.86	35.2	54.6	44.9	59.5	65.1	62.3
11.00 - 11.05	18	22	3	4	1	1	56.25	58.06	54.55	52.94	33.33	48.00	42.1	59.1	50.6	55.1	64.1	59.6
11.05 - 11.10	15	16	0	2	1	1	56.25	53.73	55.38	53.73	41.38	50.00	39.3	57.7	48.5	58.4	69.2	63.8
11.10 - 11.15	16	19	1	2	1	1	55.38	48.00	55.38	52.94	42.35	42.35	43.5	62.2	52.85	53.7	66.3	60
11.15 - 11.20	12	13	2	1	2	1	66.67	57.14	63.16	52.17	41.38	41.38	37.4	60.2	48.8	52.8	62.4	57.6
11.20 - 11.25	16	25	2	3	2	3	63.16	51.43	57.14	55.38	41.38	41.38	43.5	61.4	52.45	57.9	68.2	63.05
11.25 - 11.30	21	22	1	2	1	1	61.02	59.02	55.38	55.38	37.89	41.86	41.8	53.2	47.5	55.8	67.3	61.55
11.30 - 11.35	12	18	6	2	1	2	55.38	66.67	59.02	58.06	38.71	48.65	36.8	58.2	47.5	59.1	69.4	64.25
11.35 - 11.40	15	20	2	0	1	1	51.43	62.07	54.55	52.17	44.44	48.65	42.8	61.8	52.3	54.6	70.1	62.35
11.40 - 11.45	18	20	2	2	1	2	50.70	59.02	58.06	48.65	48.00	61.02	38.9	57.2	48.05	57.3	68.2	62.75
11.45 - 11.50	16	24	2	3	1	2	58.06	61.02	50.70	50.70	46.75	40.91	42.2	56.4	49.3	55.1	67.7	61.4
11.50 - 11.55	15	20	2	1	0	0	63.16	62.07	52.94	48.00	42.86	48.65	38.5	52.5	45.5	55.1	68.4	61.75
11.55 - 12.00	17	18	2	1	1	1	57.14	53.73	51.43	59.02	42.86	31.30	40.3	57.1	48.7	57.4	65.5	61.45

T.4

12.00 - 12.05	18	21	4	2	1	2	59.02	59.02	58.06	50.70	47.37	45.57	41.3	59.5	50.4	49.64	53.7	66.1	59.9	62.03		
12.05 - 12.10	19	24	2	3	1	1	63.16	61.02	58.06	51.43	48.00	44.44	40.4	61.2	50.8		54.8	67.3	61.05			
12.10 - 12.15	15	19	2	1	2	1	60.00	62.07	52.94	48.00	56.25	53.73	36.6	58.2	47.4		52.1	69	60.55			
12.15 - 12.20	16	18	2	1	1	2	56.25	60.00	55.38	46.75	48.65	52.94	43.2	58.5	50.85		55.8	68.1	61.98			
12.20 - 12.25	18	16	1	1	1	1	61.02	60.00	56.25	52.94	48.00	52.94	38.6	55.9	47.25		53.3	72.1	62.7			
12.25 - 12.30	17	20	2	2	1	1	58.06	57.14	49.32	56.25	44.44	42.35	39.7	61.4	50.85		53.9	71	62.45			
12.30 - 12.35	13	29	1	2	2	1	60.00	55.38	52.17	48.65	42.86	43.37	39.4	57.8	48.6		55.5	68.5	62			
12.35 - 12.40	15	20	3	1	1	2	62.07	61.02	48.00	55.38	48.00	43.90	41.7	58.3	50		58.4	67.3	62.85			
12.40 - 12.45	12	22	2	3	2	1	55.38	57.14	55.38	57.14	42.35	50.00	43.2	56.4	49.8		54.2	67.8	61			
12.45 - 12.50	18	18	4	0	2	1	63.16	60.00	52.17	52.94	42.35	42.35	38.1	60.1	49.1		56.8	72.6	64.7			
12.50 - 12.55	19	20	2	2	3	2	60.00	62.07	52.94	48.65	38.71	46.75	39.5	61.5	50.5	57.9	71.1	64.5				
12.55 - 13.00	20	17	5	3	2	1	58.06	65.45	56.25	50.70	31.30	49.32	41.5	59.3	50.4	54.2	67.2	60.7				
13.00 - 13.05	22	20	3	2	2	2	61.02	57.14	52.17	50.00	38.30	48.00	41.7	61.3	51.5	50.16	58.2	75.7	66.95	62.48		
13.05 - 13.10	23	21	3	1	1	2	58.06	63.16	50.00	54.55	46.15	43.37	42.1	55.9	49		54.5	67.3	60.9			
13.10 - 13.15	17	16	5	2	2	2	65.45	63.16	53.73	53.73	42.86	49.32	39.5	58.3	48.9		57.2	71.9	64.55			
13.15 - 13.20	18	18	2	1	1	1	61.02	61.02	55.38	46.75	43.37	48.65	37.9	57.8	47.85		56.8	68.5	62.65			
13.20 - 13.25	25	24	2	3	2	1	58.06	65.45	52.17	52.94	47.37	48.00	38.6	55.9	47.25		57.2	69.1	63.15			
13.25 - 13.30	19	20	1	1	1	1	59.02	59.02	50.70	57.14	54.55	46.15	42.6	56.1	49.85		56.8	67.4	62.1			
13.30 - 13.35	12	13	2	2	2	2	61.02	64.29	47.37	51.43	50.00	52.17	38.1	61.5	49.8		55.7	62.8	59.25			
13.35 - 13.40	25	21	2	2	1	3	55.38	59.02	50.00	54.55	46.75	50.70	41.5	59.6	50.55		59.1	69.7	64.4			
13.40 - 13.45	14	13	0	2	3	1	60.00	58.06	62.07	53.73	43.90	40.45	40.7	61.5	51.1		54.7	71.6	63.15			
13.45 - 13.50	24	20	3	3	2	2	59.02	65.45	61.02	55.38	42.35	34.62	47.4	62.8	55.1		55.4	66.3	60.85			
13.50 - 13.55	21	19	2	2	2	1	57.14	50.70	60.00	58.06	40.91	37.89	39.4	58.2	48.8	54.3	65.8	60.05				
13.55 - 14.00	20	21	4	0	2	1	63.16	64.29	56.25	55.38	38.71	48.00	42.7	62.8	52.75	51.5	72.1	61.8				
14.00 - 14.05	31	27	2	2	2	1	62.07	58.06	52.94	50.00	48.65	50.00	40.8	59.3	50.05	50.56	55.7	68.1	61.9	63.17		
14.05 - 14.10	20	19	3	2	2	3	55.38	59.73	51.43	51.43	50.00	48.65	42.7	60.9	51.8		56.1	65.3	60.7			
14.10 - 14.15	25	21	4	1	2	1	61.02	56.25	52.17	52.94	52.17	31.30	38.1	58.9	48.5		58.3	71.7	65			
14.15 - 14.20	21	20	3	1	1	1	65.45	65.45	51.43	52.17	48.65	33.33	41.8	60.2	51		56.8	69.1	62.95			
14.20 - 14.25	27	21	3	1	1	2	73.47	66.67	53.73	53.73	49.32	31.03	44.4	62.1	53.25		58.4	70.8	64.6			
14.25 - 14.30	19	15	3	1	3	1	70.59	60.00	48.00	52.94	47.37	42.35	39.7	57.5	48.6		54.1	65.7	59.9			
14.30 - 14.35	31	26	1	2	2	2	62.07	66.67	61.02	55.38	46.15	43.37	40.5	59.2	49.85		58.7	71.1	64.9			
14.35 - 14.40	27	21	6	3	2	1	59.02	59.02	53.73	55.38	41.38	48.00	40.2	58.3	49.25		57.9	73.5	65.7			
14.40 - 14.45	16	15	3	2	2	1	62.07	62.07	48.00	62.07	40.91	45.57	37.9	63.1	50.5		56.1	68.3	62.2			
14.45 - 14.50	25	22	5	2	3	3	65.45	63.16	55.38	65.45	47.37	45.00	41.3	63.1	52.2		59.1	69.2	64.15			
14.50 - 14.55	16	13	5	1	1	1	55.38	64.29	52.94	59.02	35.29	43.90	38.7	60.1	49.4	55.3	67.4	61.35				
14.55 - 15.00	28	20	4	2	3	2	59.02	51.43	51.43	51.43	31.30	46.75	42.4	62.2	52.3	57.3	72.1	64.7				
TOTAL	1258	1278	163		125		99		93		RATA - RATA											
	masuk	1520		keluar		1496		59.32	59.44	53.16	53.29	44.09	45.16									
	3016						59.38	53.22		44.63												
	%	84.08		9.55		6.37		52.41														

DATA PENELITIAN KEBISINGAN

T.5

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/Jam)						KEBISINGAN (dB)		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Min	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)	
09.00 - 09.05	2	4	3	1	2	1	60.00	54.55	50.00	60.00	60.00	48.00	47.8	72.4	60.1
09.05 - 09.10	1	2	1	2	2	2	61.02	58.06	53.73	54.55	54.55	43.90	49.5	77.3	63.4
09.10 - 09.15	2	1	1	1	1	0	53.73	63.16	47.37	55.38	55.38	0.00	39.6	76.2	57.9
09.15 - 09.20	4	0	2	0	2	3	57.14	0.00	50.00	0.00	59.02	48.00	45.7	68.3	57
09.20 - 09.25	1	2	0	0	0	1	55.38	59.02	0.00	0.00	0.00	42.86	48.3	74.8	61.55
09.25 - 09.30	3	1	1	0	1	2	62.07	60.00	51.43	0.00	57.14	42.35	51.3	75.7	63.5
09.30 - 09.35	1	2	0	1	1	0	64.29	59.02	0.00	52.94	52.94	0.00	47.8	69.2	58.5
09.35 - 09.40	2	0	1	0	0	2	57.14	0.00	50.70	0.00	0.00	45.57	48.5	74.3	61.4
09.40 - 09.45	1	1	0	0	2	2	64.29	63.16	0.00	0.00	55.38	49.32	45.7	77.2	61.45
09.45 - 09.50	2	2	2	2	0	0	58.06	57.14	53.73	0.00	0.00	0.00	50.1	78.9	64.5
09.50 - 09.55	1	1	1	0	1	1	61.02	53.73	52.17	0.00	53.73	47.37	45.7	77.2	61.45
09.55 - 10.00	3	3	1	0	2	1	56.25	52.17	50.70	0.00	59.02	46.75	48.5	74.2	61.35
10.00 - 10.05	1	2	2	1	3	1	60.00	63.16	46.75	55.38	55.38	53.73	52.1	82.6	67.35
10.05 - 10.10	1	0	1	1	1	0	63.16	0.00	50.70	0.00	52.94	0.00	48.2	74.7	61.45
10.10 - 10.15	0	2	1	0	2	1	0.00	78.26	54.55	0.00	54.55	57.14	47.5	72.6	60.05
10.15 - 10.20	4	3	1	1	1	1	59.02	53.73	0.00	57.14	57.14	48.00	46.8	76.3	61.55
10.20 - 10.25	0	0	3	0	0	2	0.00	0.00	56.25	0.00	0.00	46.15	45.1	73.7	59.4
10.25 - 10.30	2	2	2	2	2	0	57.14	53.73	50.00	56.25	56.25	0.00	46.9	80.3	63.6
10.30 - 10.35	3	0	2	1	0	2	58.06	0.00	48.65	55.38	0.00	48.00	50.1	72.4	61.25
10.35 - 10.40	1	1	1	0	2	3	55.38	63.16	49.32	0.00	60.00	53.73	48.8	74.7	61.75
10.40 - 10.45	1	1	0	0	2	1	54.55	58.06	0.00	0.00	61.02	42.35	47.6	82.4	65
10.45 - 10.50	2	2	0	0	1	2	58.06	59.02	0.00	0.00	50.00	52.17	46.9	73.1	60
10.50 - 10.55	1	2	1	1	1	1	56.25	62.07	49.32	57.14	57.14	48.00	46.1	73.9	60
10.55 - 11.00	4	1	0	1	2	2	61.02	52.17	0.00	53.73	53.73	52.94	44.7	75.5	60.1
11.00 - 11.05	3	2	1	1	1	2	65.45	64.29	52.17	63.16	63.16	47.37	46.1	74.7	60.4
11.05 - 11.10	1	2	1	2	1	1	63.16	50.00	0.00	59.02	59.02	42.86	45.7	75.1	60.4
11.10 - 11.15	2	1	0	1	2	1	59.02	58.06	0.00	57.14	57.14	43.90	43.1	75.4	59.25
11.15 - 11.20	2	0	1	0	1	0	58.06	0.00	50.70	0.00	59.02	0.00	50.5	73.8	62.15
11.20 - 11.25	0	3	1	1	0	2	0.00	58.06	52.17	57.14	0.00	45.57	47.3	74.3	60.8
11.25 - 11.30	2	0	3	0	2	1	62.07	0.00	52.94	0.00	50.70	42.86	47.3	81.2	64.25
11.30 - 11.35	2	3	1	2	2	1	63.16	53.73	49.32	57.14	57.14	49.32	47.2	82.7	64.95
11.35 - 11.40	4	2	3	0	1	1	59.02	62.07	50.00	0.00	63.16	42.86	47.9	76.5	62.2
11.40 - 11.45	0	0	1	1	2	0	0.00	0.00	0.00	67.92	67.92	0.00	50.5	76.6	63.55
11.45 - 11.50	1	3	0	0	1	1	54.55	67.92	0.00	0.00	58.06	42.35	46.2	87.3	66.75
11.50 - 11.55	3	2	1	1	2	2	53.73	59.02	48.65	53.73	53.73	46.15	48.2	85.4	66.8
11.55 - 12.00	1	2	1	0	1	1	58.06	57.14	52.94	0.00	56.25	47.37	43.4	71	57.2

T.5

DATA PENELITIAN KEBISINGAN

T.6 & T.7

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/jam)						KEBISINGAN (dB) LORONG SAWIT			KEBISINGAN (dB) DIBALIK SAWIT		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Min	Max	Rata - Rata	Min	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)		(-)	(+)	
09.00 - 09.05	1	3	0	4	2	2	58.06	64.29	0.00	66.67	43.90	62.07	52.2	72.1	62.15	51.8	67.4	59.6
09.05 - 09.10	3	1	0	0	0	0	61.02	63.16	0.00	0.00	0.00	0.00	58.4	70.8	64.6	55.3	56.6	55.95
09.10 - 09.15	1	2	0	0	1	2	56.25	66.67	0.00	0.00	50.70	69.23	55	73.5	64.25	52.7	67.2	59.95
09.15 - 09.20	2	1	1	1	2	1	57.14	65.45	56.25	61.02	0.00	0.00	53.7	73.6	63.65	50.9	56.6	53.75
09.20 - 09.25	1	3	1	0	1	1	66.67	65.45	56.25	0.00	50.70	61.02	46.3	71.5	58.9	49.6	57.7	53.65
09.25 - 09.30	1	2	1	0	0	3	50.70	66.06	0.00	0.00	0.00	64.29	45.1	70.7	57.9	46.2	57.5	51.85
09.30 - 09.35	1	3	0	1	1	1	64.29	64.29	0.00	52.94	52.94	50.70	57.7	62.4	60.05	52.3	52.7	52.5
09.35 - 09.40	1	2	1	1	3	3	58.06	69.23	48.00	54.55	55.38	0.00	43	68.5	55.75	46.1	54.3	50.2
09.40 - 09.45	0	2	1	3	3	0	0.00	58.06	67.92	56.25	0.00	0.00	48.9	70.1	59.5	45.3	55.7	50.5
09.45 - 09.50	1	1	1	0	2	1	67.92	56.25	53.73	0.00	54.55	50.00	51.8	65.4	58.6	48.7	67.3	58
09.50 - 09.55	2	1	2	2	1	1	52.94	56.25	54.55	66.67	0.00	52.94	42.1	68.2	55.15	47.8	57.3	52.55
09.55 - 10.00	2	3	2	3	1	1	53.73	67.92	0.00	61.02	53.73	67.92	45.2	71.9	58.55	45.1	58.2	51.65
10.00 - 10.05	2	3	3	2	2	0	57.14	55.38	57.14	55.38	53.73	0.00	51.2	77.1	64.15	47.7	63.1	55.4
10.05 - 10.10	4	3	2	1	2	2	66.67	64.29	49.32	0.00	0.00	64.29	47.5	68.3	57.9	48.4	55.1	51.75
10.10 - 10.15	2	3	5	1	5	2	65.45	63.16	48.00	53.73	54.55	65.45	52.4	72.1	62.25	48.7	57.3	53
10.15 - 10.20	2	2	2	2	0	0	65.45	64.29	0.00	66.67	0.00	0.00	43.2	63.1	53.15	41.9	57.2	49.55
10.20 - 10.25	1	2	1	1	3	0	65.45	63.16	53.73	42.86	54.55	0.00	50.3	73.1	61.7	48.6	67.4	58
10.25 - 10.30	3	3	2	0	1	1	59.02	52.17	49.32	0.00	50.70	58.06	55.1	58.8	56.95	50.6	57.4	54
10.30 - 10.35	2	2	1	0	2	1	59.02	50.70	46.75	0.00	0.00	50.70	46.5	72.7	59.6	45.4	65.3	55.35
10.35 - 10.40	1	0	1	1	0	0	0.00	0.00	48.00	52.94	0.00	0.00	57.2	67.2	62.2	51.8	63.2	57.5
10.40 - 10.45	1	1	2	0	1	1	55.38	55.38	44.44	0.00	52.17	58.06	56.6	70.1	63.35	52.4	60.1	56.25
10.45 - 10.50	2	0	0	2	2	2	0.00	0.00	0.00	53.73	50.70	61.02	45.1	73.3	59.2	43.3	64.2	53.75
10.50 - 10.55	1	2	0	1	2	1	63.16	53.73	0.00	48.65	55.38	66.67	57.9	71.1	64.5	55.8	62.1	58.95
10.55 - 11.00	1	2	1	0	1	1	56.25	54.55	52.17	0.00	53.73	50.00	48.2	67.2	57.7	45.1	57.3	51.2
11.00 - 11.05	2	3	0	2	1	2	69.10	66.67	0.00	52.17	52.17	67.92	52.7	70.4	61.55	47.5	68.3	57.9
11.05 - 11.10	1	2	1	2	2	2	63.16	64.29	48.00	61.02	57.14	61.02	53.6	72.7	63.15	49.5	67.1	58.3
11.10 - 11.15	4	2	2	3	1	1	64.29	65.45	49.32	59.02	0.00	72.00	48.7	66.9	57.8	41.8	57.7	49.75
11.15 - 11.20	3	3	0	2	3	2	56.25	67.92	0.00	55.38	48.00	62.07	53.6	72.9	63.25	50.5	62.1	56.3
11.20 - 11.25	2	1	0	1	2	0	57.14	56.25	0.00	60.00	44.44	0.00	48.9	65.2	57.05	42.6	51.7	47.15
11.25 - 11.30	3	3	1	2	0	3	63.16	56.25	50.70	0.00	0.00	53.06	52.6	76.4	64.5	48.4	69.5	58.95
11.30 - 11.35	4	1	2	1	3	2	63.16	69.23	52.17	52.17	55.38	55.38	46.3	73.5	59.9	43.8	60.1	51.95
11.35 - 11.40	1	2	0	0	1	3	69.23	65.45	0.00	0.00	56.25	64.29	59.4	72.5	62.95	49.6	68.3	59.95
11.40 - 11.45	3	0	0	2	1	1	57.14	0.00	0.00	50.00	59.02	62.07	48.2	74.7	61.45	43.5	71.5	57.5
11.45 - 11.50	2	1	3	1	0	2	57.14	48.65	52.17	69.23	0.00	57.14	54.7	69.1	61.9	52.5	61.6	57.05
11.50 - 11.55	3	2	0	1	2	0	64.29	55.38	0.00	64.29	53.73	0.00	56.2	71.9	64.05	51.5	61.7	56.6
11.55 - 12.00	8	2	0	2	1	2	66.67	57.14	0.00	63.16	50.70	54.55	50.1	52.1	51.1	44.2	50.7	47.45

T.6 & T.7

DATA PENELITIAN KEBISINGAN

T.8

TIME	VOLUME KENDARAAN						KECEPATAN KENDARAAN (km/Jam)						KEBISINGAN (dB)		
	Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Sepeda Motor		Mobil Penumpang		Kendaraan Berat		Min	Max	Rata - Rata
	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	masuk	keluar	(-)	(+)	
09.00 - 09.05	3	2	1	2	2	1	61.02	69.23	46.15	57.14	46.15	64.29	48.9	76.1	62.5
09.05 - 09.10	2	1	1	1	1	1	61.02	57.14	48.00	53.73	43.90	48.00	45.8	74.3	60.05
09.10 - 09.15	0	2	0	1	2	3	55.38	58.06	50.70	59.02	47.37	56.25	49.1	74.1	61.6
09.15 - 09.20	2	4	0	0	2	1	58.06	59.02	49.32	57.14	46.15	57.14	55.5	68.3	61.9
09.20 - 09.25	1	0	1	1	0	2	52.94	54.55	48.65	56.25	43.37	53.73	48.4	77.2	62.8
09.25 - 09.30	1	2	2	1	1	1	63.16	62.07	52.94	55.38	43.90	58.06	49.7	75.3	62.5
09.30 - 09.35	1	0	0	1	2	0	62.07	56.25	47.37	55.38	48.00	57.14	55.8	69.4	62.6
09.35 - 09.40	1	1	0	0	2	1	59.02	57.14	49.32	53.73	45.57	49.32	47.5	73.6	60.55
09.40 - 09.45	0	1	1	0	1	2	61.02	53.73	48.65	57.14	42.35	62.07	46.1	68.4	57.25
09.45 - 09.50	3	1	0	1	2	0	54.55	67.92	48.00	0.00	41.86	61.02	50.4	75.6	63
09.50 - 09.55	1	0	2	1	0	2	65.45	53.73	46.75	54.55	43.90	59.02	46.7	68.3	57.5
09.55 - 10.00	5	0	1	1	1	1	63.16	57.14	46.75	56.25	53.73	58.06	47.1	75.3	61.2
10.00 - 10.05	0	6	1	2	1	2	65.45	61.02	48.00	58.06	43.37	55.38	47.1	68.2	57.65
10.05 - 10.10	0	0	1	1	2	1	58.06	60.00	50.00	0.00	49.32	56.25	45.5	73.7	59.6
10.10 - 10.15	2	2	1	1	2	2	59.02	58.06	51.43	56.25	50.70	52.17	45.8	73.2	59.5
10.15 - 10.20	1	0	0	1	2	1	59.02	67.92	0.00	53.73	48.00	54.55	47.1	68.6	57.85
10.20 - 10.25	2	3	3	1	0	3	63.16	67.92	48.00	52.17	47.37	50.70	47.3	84.2	65.75
10.25 - 10.30	2	2	0	0	3	1	53.73	58.06	49.32	57.14	56.25	50.00	45.8	73.5	59.65
10.30 - 10.35	2	0	1	4	0	0	55.38	53.73	48.00	56.25	50.70	52.94	48.2	74.2	61.2
10.35 - 10.40	2	3	2	0	4	0	63.16	54.55	49.32	58.06	51.43	56.25	46.3	77.4	61.85
10.40 - 10.45	0	0	0	0	2	1	61.02	58.06	52.94	55.38	52.17	50.00	47.5	81.2	64.35
10.45 - 10.50	2	3	1	3	1	0	66.67	63.16	52.17	56.25	52.94	48.65	48.2	75.4	61.8
10.50 - 10.55	1	1	0	0	2	0	58.06	58.06	48.65	53.73	43.37	58.06	49.1	72.7	60.9
10.55 - 11.00	0	0	0	1	1	1	57.14	56.25	49.32	52.94	52.94	50.00	49.5	78.2	63.85
11.00 - 11.05	3	1	3	1	2	1	57.14	58.06	48.00	53.73	50.70	49.32	47.3	78.1	62.7
11.05 - 11.10	1	0	1	2	0	1	57.14	52.94	45.57	59.02	53.73	59.02	51.6	69.3	60.45
11.10 - 11.15	0	2	0	1	2	2	53.73	57.14	43.37	57.14	52.17	59.02	46.3	75.8	61.05
11.15 - 11.20	1	0	4	0	1	3	65.45	58.06	50.70	56.25	43.90	61.02	45.2	79.6	62.4
11.20 - 11.25	3	1	2	1	2	1	63.16	55.38	48.65	53.73	50.70	50.70	47.2	74.3	60.75
11.25 - 11.30	0	2	2	0	0	1	57.14	57.14	49.32	0.00	48.65	52.17	48.4	81.2	64.8
11.30 - 11.35	4	0	1	3	2	3	55.38	62.07	49.32	56.25	43.90	52.94	46.2	75.1	60.65
11.35 - 11.40	1	5	1	0	0	1	57.14	58.06	48.65	52.94	53.73	50.70	48.5	68.4	58.45
11.40 - 11.45	0	1	2	1	1	0	59.02	56.25	48.00	58.06	55.38	57.14	49.2	76.6	62.9
11.45 - 11.50	4	1	0	2	2	1	60.00	70.59	46.75	55.38	52.17	45.57	47.3	81.5	64.4
11.50 - 11.55	1	0	1	1	2	2	56.78	50.70	46.75	58.06	52.94	52.17	50.1	78.3	64.2
11.55 - 12.00	1	3	2	0	2	1	57.14	67.92	46.75	52.25	50.00	59.02	48.3	74.7	61.5

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12.00 - 12.05	4	2	1	0	0	1	53.73	56.25	50.00	56.25	50.00	63.16	48.9	78.2	63.55	62.20
12.05 - 12.10	0	2	2	0	2	0	62.07	52.94	51.43	57.14	42.86	58.06	46.4	75.3	60.85	
12.10 - 12.15	3	1	0	1	1	1	66.67	55.38	53.73	53.73	46.15	62.07	44.6	74.7	59.65	
12.15 - 12.20	1	0	1	2	2	2	57.14	59.02	52.17	58.06	52.94	69.23	47.1	75.8	61.45	
12.20 - 12.25	2	5	1	0	3	0	53.73	57.14	47.37	56.25	52.17	53.73	45.8	73.6	59.7	
12.25 - 12.30	0	2	3	2	1	1	63.16	63.16	42.35	52.17	50.00	50.70	52.1	74.3	63.2	
12.30 - 12.35	2	3	0	2	2	3	59.02	57.14	47.37	57.14	46.15	54.55	46.7	82.3	64.5	
12.35 - 12.40	2	0	3	1	1	2	53.73	56.25	49.32	55.38	54.55	43.37	46.4	76.8	61.6	
12.40 - 12.45	1	1	1	0	2	1	58.06	57.14	42.35	55.38	43.90	56.25	47.3	80.4	63.85	
12.45 - 12.50	2	0	2	2	0	2	57.14	53.73	50.00	57.14	54.55	52.17	43.9	81.8	62.85	
12.50 - 12.55	5	3	1	2	3	1	61.02	53.73	46.75	57.14	52.94	62.07	47.1	78.3	62.7	
12.55 - 13.00	1	3	0	1	1	1	65.45	55.38	46.15	58.06	44.44	52.17	48.5	76.5	62.5	
13.00 - 13.05	4	3	3	2	1	2	59.02	63.16	49.32	59.02	52.17	53.73	48.1	77.9	63	63.12
13.05 - 13.10	1	0	0	1	2	0	57.14	58.06	48.00	59.11	53.73	52.94	47.2	82.1	64.65	
13.10 - 13.15	0	2	2	1	3	2	58.06	53.73	46.75	53.73	60.00	52.17	48.4	75.1	61.75	
13.15 - 13.20	3	3	1	1	1	3	64.29	55.38	48.65	56.25	53.73	51.43	43.7	75.3	59.5	
13.20 - 13.25	0	1	1	2	2	2	62.07	55.38	43.90	58.06	52.17	49.32	46.3	80.1	63.2	
13.25 - 13.30	2	2	3	0	2	1	52.94	57.14	48.65	56.25	55.38	52.17	48.1	76.5	62.3	
13.30 - 13.35	1	0	1	3	2	2	58.06	52.94	47.37	52.94	50.70	48.65	47.2	80.3	63.75	
13.35 - 13.40	2	4	1	2	1	0	52.17	52.17	40.91	55.38	50.00	50.70	48.8	75.6	62.2	
13.40 - 13.45	1	2	0	1	2	3	56.78	64.29	44.44	56.25	53.73	52.17	53.8	76.4	65.1	
13.45 - 13.50	2	4	1	2	0	1	55.38	58.06	43.90	58.06	46.15	61.02	46.1	81.4	63.75	
13.50 - 13.55	0	0	1	1	2	2	54.55	54.55	46.15	52.17	54.55	58.06	48.3	77.5	62.9	
13.55 - 14.00	3	0	2	0	1	1	62.07	58.06	43.37	0.00	48.65	50.70	51.7	78.9	65.3	
14.00 - 14.05	0	1	2	3	2	0	56.25	55.38	47.37	53.73	53.73	50.00	47.3	77.5	62.4	64.05
14.05 - 14.10	4	0	1	1	1	2	52.94	57.14	48.65	53.73	52.94	49.32	53.6	78.9	66.25	
14.10 - 14.15	1	2	1	2	3	2	58.06	52.94	46.15	58.06	50.00	46.15	46.7	80.4	63.55	
14.15 - 14.20	1	1	0	3	2	1	57.14	57.14	49.32	52.17	52.94	52.94	48.1	77.8	62.95	
14.20 - 14.25	1	2	2	0	2	2	59.02	57.14	43.90	58.06	50.00	52.17	46.6	78.9	62.75	
14.25 - 14.30	3	2	1	2	2	2	57.14	55.38	48.65	56.25	52.94	63.16	47.5	78.3	62.9	
14.30 - 14.35	0	1	1	2	1	1	56.25	54.55	47.37	59.02	58.06	59.02	46.2	84.4	65.3	
14.35 - 14.40	4	0	3	1	2	2	62.07	61.02	42.86	55.38	55.38	49.32	50.5	82.9	66.7	
14.40 - 14.45	2	2	2	1	1	1	69.23	67.92	44.44	55.38	56.25	50.70	46.8	78.4	62.6	
14.45 - 14.50	1	0	0	0	2	2	59.02	58.06	43.37	56.25	52.94	52.17	47.8	80.4	64.1	
14.50 - 14.55	2	1	2	2	3	1	58.06	52.94	48.00	52.94	49.32	58.06	46.3	79.5	62.9	
14.55 - 15.00	3	6	2	2	2	3	54.55	54.55	48.00	59.02	44.44	48.00	48.2	84.2	66.2	
	117	111	86	84	112	97	RATA - RATA									
TOTAL	masuk	315		keluar		292	58.88	57.94	47.08	52.77	50.05	54.30				
	607						58.41		43.93		52.17					
%	37.56		28.01		34.43		53.50									

DOKUMENTASI

T.1



T.2



T.3



T.4



T.5



T.6 & T.7



T.8



← Jln PKS



← Team
Kebisingan