



14.45-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.00-15.15	61	3	0	1	116	181		61	3.9	0	2.5	58	125.4	
15.15-15.30	69	3	0	1	129	202		69	3.9	0	2.5	64.5	139.9	
15.30-15.45	79	6	0	1	136	222		79	7.8	0	2.5	68	157.3	
15.45-16.00	84	7	1	2	148	242	847	84	9.1	1.5	5	74	173.6	596.2
16.00-16.15	96	9	2	3	161	271	937	96	11.7	3	7.5	80.5	198.7	669.5
16.15-16.30	102	11	2	5	167	287	1022	102	14.3	3	12.5	83.5	215.3	744.9
16.30-16.45	98	13	3	7	149	270	1070	98	16.9	4.5	17.5	74.5	211.4	799
16.45-17.00	86	14	3	7	134	244	1072	86	18.2	4.5	17.5	67	193.2	818.6

Rabu: 03-01-2018

Ruas: Jl.Taddan

Arah: Timur

PUKUL	Jumlah Kendaraan					Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*					Jumlah SMP per 15 menit	Hour Volume
	LV	MHV	LB	LT	MC			LV	MHV	LB	LT	MC		
06.00-06.15	49	6	0	1	120	176		49	7.8	0	2.5	60	119.3	
06.15-06.30	58	6	1	1	128	194		58	7.8	1.5	2.5	64	133.8	
06.30-06.45	69	7	1	1	130	208		69	9.1	1.5	2.5	65	147.1	
06.45-07.00	84	9	1	5	146	245	823	84	11.7	1.5	12.5	73	182.7	582.9
07.00-07.15	90	10	1	6	149	256	903	90	13	1.5	15	74.5	194	657.6
07.15-07.30	116	11	2	6	166	301	1010	116	14.3	3	15	83	231.3	755.1
07.30-07.45	120	14	3	7	178	322	1124	120	18.2	4.5	17.5	89	249.2	857.2
07.45-08.00	129	14	3	10	172	328	1207	129	18.2	4.5	25	86	262.7	937.2
08.00-08.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.00-11.15	34	4	0	2	89	129		34	5.2	0	5	44.5	88.7	
11.15-11.30	49	5	1	2	96	153		49	6.5	1.5	5	48	110	
11.30-11.45	64	5	2	3	115	189		64	6.5	3	7.5	57.5	138.5	
11.45-12.00	65	7	4	3	127	206	677	65	9.1	6	7.5	63.5	151.1	488.3



09.00-09.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.00-11.15	60	5	0	3	199	267		60	6.5	0	7.5	99.5	173.5	
11.15-11.30	90	7	1	3	211	312		90	9.1	1.5	7.5	105.5	213.6	
11.30-11.45	123	8	4	5	243	383		123	10.4	6	12.5	121.5	273.4	
11.45-12.00	125	12	6	7	269	419	1381	125	15.6	9	17.5	134.5	301.6	962.1
12.00-12.15	145	16	6	9	287	463	1577	145	20.8	9	22.5	143.5	340.8	1129.4
12.15-12.30	170	19	5	11	302	507	1772	170	24.7	7.5	27.5	151	380.7	1296.5
12.30-12.45	150	22	4	14	309	499	1888	150	28.6	6	35	154.5	374.1	1397.2
12.45-13.00	142	24	1	15	293	475	1944	142	31.2	1.5	37.5	146.5	358.7	1454.3
13.00-13.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.00-15.15	121	8	2	2	206	339		121	10.4	3	5	103	242.4	
15.15-15.30	138	10	2	3	242	395		138	13	3	7.5	121	282.5	
15.30-15.45	166	13	2	4	257	442		166	16.9	3	10	128.5	324.4	
15.45-16.00	189	15	3	5	278	490	1666	189	19.5	4.5	12.5	139	364.5	1213.8
16.00-16.15	208	18	4	7	303	540	1867	208	23.4	6	17.5	151.5	406.4	1377.8
16.15-16.30	202	24	4	9	326	565	2037	202	31.2	6	22.5	163	424.7	1520
16.30-16.45	190	28	5	12	289	524	2119	190	36.4	7.5	30	144.5	408.4	1604
16.45-17.00	172	30	5	13	264	484	2113	172	39	7.5	32.5	132	383	1622.5





14.45-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.00-15.15	40	2	1	1	86	130		40	2.6	1.5	2.5	43	89.6	
15.15-15.30	35	2	1	1	96	135		35	2.6	1.5	2.5	48	89.6	
15.30-15.45	43	3	1	1	113	161		43	3.9	1.5	2.5	56.5	107.4	
15.45-16.00	46	4	1	2	134	187	613	46	5.2	1.5	5	67	124.7	411.3
16.00-16.15	53	5	1	3	149	211	694	53	6.5	1.5	7.5	74.5	143	464.7
16.15-16.30	60	6	1	4	156	227	786	60	7.8	1.5	10	78	157.3	532.4
16.30-16.45	79	8	2	6	169	264	889	79	10.4	3	15	84.5	191.9	616.9
16.45-17.00	80	8	2	7	191	288	990	80	10.4	3	17.5	95.5	206.4	698.6

Minggu: 07-01-2018

Ruas: Jl.Taddan

Arah: Timur

PUKUL	Jumlah Kendaraan					Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*					Jumlah SMP per 15 menit	Hour Volume
	LV	MHV	LB	LT	MC			LV	MHV	LB	LT	MC		
	1	1.3	1.5	2.5	0.5									
06.00-06.15	48	2	0	0	113	163		48	2.6	0	0	56.5	107.1	
06.15-06.30	50	3	2	1	119	175		50	3.9	3	2.5	59.5	118.9	
06.30-06.45	53	3	2	1	129	188		53	3.9	3	2.5	64.5	126.9	
06.45-07.00	56	4	2	2	139	203	729	56	5.2	3	5	69.5	138.7	491.6
07.00-07.15	60	5	2	2	150	219	785	60	6.5	3	5	75	149.5	534
07.15-07.30	60	7	3	4	152	226	836	60	9.1	4.5	10	76	159.6	574.7
07.30-07.45	64	9	3	4	164	244	892	64	11.7	4.5	10	82	172.2	620
07.45-08.00	66	10	3	6	176	261	950	66	13	4.5	15	88	186.5	667.8
08.00-08.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.00-11.15	26	1	1	0	69	97		26	1.3	1.5	0	34.5	63.3	
11.15-11.30	28	2	1	0	68	99		28	2.6	1.5	0	34	66.1	
11.30-11.45	30	2	1	1	76	110		30	2.6	1.5	2.5	38	74.6	
11.45-12.00	33	3	1	1	82	120	426	33	3.9	1.5	2.5	41	81.9	285.9



09.00-09.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.00-11.15	58	3	1	1	152	215		58	3.9	1.5	2.5	76	141.9	
11.15-11.30	65	6	2	1	167	241		65	7.8	3	2.5	83.5	161.8	
11.30-11.45	76	7	2	2	199	286		76	9.1	3	5	99.5	192.6	
11.45-12.00	83	8	2	3	221	317	1059	83	10.4	3	7.5	110.5	214.4	710.7
12.00-12.15	93	10	2	4	238	347	1191	93	13	3	10	119	238	806.8
12.15-12.30	105	11	2	4	254	376	1326	105	14.3	3	10	127	259.3	904.3
12.30-12.45	110	13	3	4	264	394	1434	110	16.9	4.5	10	132	273.4	985.1
12.45-13.00	111	14	5	5	283	418	1535	111	18.2	7.5	12.5	141.5	290.7	1061.4
13.00-13.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.00-15.15	63	3	2	2	151	221		63	3.9	3	5	75.5	150.4	
15.15-15.30	60	4	2	2	166	234		60	5.2	3	5	83	156.2	
15.30-15.45	75	6	2	2	193	278		75	7.8	3	5	96.5	187.3	
15.45-16.00	82	8	2	3	220	315	1048	82	10.4	3	7.5	110	212.9	706.8
16.00-16.15	93	9	3	5	244	354	1181	93	11.7	4.5	12.5	122	243.7	800.1
16.15-16.30	102	12	3	6	252	375	1322	102	15.6	4.5	15	126	263.1	907
16.30-16.45	127	15	4	8	180	334	1378	127	19.5	6	20	90	262.5	982.2
16.45-17.00	135	16	5	12	310	478	1541	135	20.8	7.5	30	155	348.3	1117.6



14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	1	7	8		0	1.3	3.5	4.8	
15.15-15.30	1	0	9	10		1	0	4.5	5.5	
15.30-15.45	2	1	13	16		2	1.3	6.5	9.8	
15.45-16.00	2	1	15	18	52	2	1.3	7.5	10.8	30.9
16.00-16.15	3	0	17	20	64	3	0	8.5	11.5	37.6
16.15-16.30	3	0	21	24	78	3	0	10.5	13.5	45.6
16.30-16.45	2	0	14	16	78	2	0	7	9	44.8
16.45-17.00	1	0	13	14	74	1	0	6.5	7.5	41.5

Simpang: Jl.Mutiara

Arah: Barat (ST)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	40	5	105	150		40	6.5	52.5	99	
06.15-06.30	63	7	109	179		63	9.1	54.5	126.6	
06.30-06.45	75	12	114	201		75	15.6	57	147.6	
06.45-07.00	88	15	120	223	753	88	19.5	60	167.5	540.7
07.00-07.15	95	16	139	250	853	95	20.8	69.5	185.3	627
07.15-07.30	85	11	132	228	902	85	14.3	66	165.3	665.7
07.30-07.45	74	10	180	264	965	74	13	90	177	695.1
07.45-08.00	60	6	140	206	948	60	7.8	70	137.8	665.4
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	31	5	111	147		31	6.5	55.5	93	
11.15-11.30	42	11	115	168		42	14.3	57.5	113.8	



08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	4	5		1	0	2	3	
11.15-11.30	1	0	8	9		1	0	4	5	
11.30-11.45	2	0	10	12		2	0	5	7	
11.45-12.00	6	0	15	21	47	6	0	7.5	13.5	28.5
12.00-12.15	7	0	21	28	70	7	0	10.5	17.5	43
12.15-12.30	7	0	22	29	90	7	0	11	18	56
12.30-12.45	4	0	14	18	96	4	0	7	11	60
12.45-13.00	2	0	11	13	88	2	0	5.5	7.5	54
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	2	0	3	5		2	0	1.5	3.5	
15.15-15.30	4	0	5	9		4	0	2.5	6.5	
15.30-15.45	4	1	9	14		4	1.3	4.5	9.8	
15.45-16.00	5	0	16	21	49	5	0	8	13	32.8
16.00-16.15	4	0	24	28	72	4	0	12	16	45.3
16.15-16.30	7	1	30	38	101	7	1.3	15	23.3	62.1
16.30-16.45	4	0	13	17	104	4	0	6.5	10.5	62.8
16.45-17.00	3	0	10	13	96	3	0	5	8	57.8





14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	1	1	6	8		1	1.3	3	5.3	
15.15-15.30	2	0	8	10		2	0	4	6	
15.30-15.45	5	0	9	14		5	0	4.5	9.5	
15.45-16.00	7	0	13	20	52	7	0	6.5	13.5	34.3
16.00-16.15	6	0	19	25	69	6	0	9.5	15.5	44.5
16.15-16.30	4	0	27	31	90	4	0	13.5	17.5	56
16.30-16.45	3	0	10	13	89	3	0	5	8	54.5
16.45-17.00	3	0	8	11	80	3	0	4	7	48

Simpang: Jl.Mutiara

Arah: Timur (RT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
06.00-06.15	1	0	4	5		1	0	2	3	
06.15-06.30	2	0	8	10		2	0	4	6	
06.30-06.45	5	1	13	19		5	1.3	6.5	12.8	
06.45-07.00	7	0	15	22	56	7	0	7.5	14.5	36.3
07.00-07.15	9	0	19	28	79	9	0	9.5	18.5	51.8
07.15-07.30	8	0	18	26	95	8	0	9	17	62.8
07.30-07.45	6	0	7	13	89	6	0	3.5	9.5	59.5
07.45-08.00	5	0	6	11	78	5	0	3	8	53
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	4	5		1	0	2	3	
11.15-11.30	2	0	7	9		2	0	3.5	5.5	



08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	42	6	102	150		42	7.8	51	100.8	
11.15-11.30	51	8	110	169		51	10.4	55	116.4	
11.30-11.45	55	13	116	184		55	16.9	58	129.9	
11.45-12.00	60	19	125	204	707	60	24.7	62.5	147.2	494.3
12.00-12.15	63	20	128	211	768	63	26	64	153	546.5
12.15-12.30	59	11	130	200	799	59	14.3	65	138.3	568.4
12.30-12.45	67	9	127	203	818	67	11.7	63.5	142.2	580.7
12.45-13.00	63	5	110	178	792	63	6.5	55	124.5	558
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	76	6	113	195		76	7.8	56.5	140.3	
15.15-15.30	82	10	119	211		82	13	59.5	154.5	
15.30-15.45	89	13	127	229		89	16.9	63.5	169.4	
15.45-16.00	95	17	139	251	886	95	22.1	69.5	186.6	650.8
16.00-16.15	99	19	142	260	951	99	24.7	71	194.7	705.2
16.15-16.30	98	15	130	243	983	98	19.5	65	182.5	733.2
16.30-16.45	82	5	115	202	956	82	6.5	57.5	146	709.8
16.45-17.00	50	5	102	157	862	50	6.5	51	107.5	630.7



14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	84	13	243	340		84	16.9	121.5	222.4	
15.15-15.30	98	17	265	380		98	22.1	132.5	252.6	
15.30-15.45	110	28	290	428		110	36.4	145	291.4	
15.45-16.00	124	36	329	489	1637	124	46.8	164.5	335.3	1101.7
16.00-16.15	127	37	353	517	1814	127	48.1	176.5	351.6	1230.9
16.15-16.30	126	27	363	516	1950	126	35.1	181.5	342.6	1320.9
16.30-16.45	100	10	297	407	1929	100	13	148.5	261.5	1291
16.45-17.00	63	9	256	328	1768	63	11.7	128	202.7	1158.4

Minggu: 07-01-2018

Simpang: Jl.Mutiara

Arah: Barat (LT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	1	0	5	6		1	0	2.5	3.5	
06.15-06.30	1	0	8	9		1	0	4	5	
06.30-06.45	1	0	13	14		1	0	6.5	7.5	
06.45-07.00	2	0	17	19	48	2	0	8.5	10.5	26.5
07.00-07.15	2	0	22	24	66	2	0	11	13	36
07.15-07.30	2	1	20	23	80	2	1.3	10	13.3	44.3
07.30-07.45	1	0	12	13	79	1	0	6	7	43.8
07.45-08.00	1	1	8	10	70	1	1.3	4	6.3	39.6
06.00-06.15	0	0	0	0		0	0	0	0	
06.15-06.30	0	0	0	0		0	0	0	0	
06.30-06.45	0	0	0	0		0	0	0	0	
06.45-07.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	7	8		1	0	3.5	4.5	
11.15-11.30	1	0	8	9		1	0	4	5	



08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	40	2	114	156		40	2.6	57	99.6	
11.15-11.30	45	4	120	169		45	5.2	60	110.2	
11.30-11.45	46	7	123	176		46	9.1	61.5	116.6	
11.45-12.00	50	9	126	185	686	50	11.7	63	124.7	451.1
12.00-12.15	54	10	130	194	724	54	13	65	132	483.5
12.15-12.30	58	10	134	202	757	58	13	67	138	511.3
12.30-12.45	62	13	140	215	796	62	16.9	70	148.9	543.6
12.45-13.00	65	14	143	222	833	65	18.2	71.5	154.7	573.6
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	45	2	99	146		45	2.6	49.5	97.1	
15.15-15.30	48	3	115	166		48	3.9	57.5	109.4	
15.30-15.45	50	5	124	179		50	6.5	62	118.5	
15.45-16.00	54	7	129	190	681	54	9.1	64.5	127.6	452.6
16.00-16.15	58	10	133	201	736	58	13	66.5	137.5	493
16.15-16.30	59	13	137	209	779	59	16.9	68.5	144.4	528
16.30-16.45	62	15	146	223	823	62	19.5	73	154.5	564
16.45-17.00	65	17	155	237	870	65	22.1	77.5	164.6	601





14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	0	2	2		0	0	1	1	
15.15-15.30	1	0	5	6		1	0	2.5	3.5	
15.30-15.45	1	0	8	9		1	0	4	5	
15.45-16.00	1	0	10	11	28	1	0	5	6	15.5
16.00-16.15	1	0	13	14	40	1	0	6.5	7.5	22
16.15-16.30	1	0	15	16	50	1	0	7.5	8.5	27
16.30-16.45	1	0	17	18	59	1	0	8.5	9.5	31.5
16.45-17.00	2	1	20	23	71	2	1.3	10	13.3	38.8

Minggu: 07-01-2018

Simpang: Jl.Mutiara

Arah: Utara (RT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
	1	1.3	0.5							
06.00-06.15	1	0	7	8		1	0	3.5	4.5	
06.15-06.30	1	0	11	12		1	0	5.5	6.5	
06.30-06.45	1	0	14	15		1	0	7	8	
06.45-07.00	2	0	17	19	54	2	0	8.5	10.5	29.5
07.00-07.15	2	0	22	24	70	2	0	11	13	38
07.15-07.30	2	1	23	26	84	2	1.3	11.5	14.8	46.3
07.30-07.45	1	0	16	17	86	1	0	8	9	47.3
07.45-08.00	1	0	6	7	74	1	0	3	4	40.8
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	2	0	6	8		2	0	3	5	
11.15-11.30	0	0	8	8		0	0	4	4	



08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	0	0	1	1		0	0	0.5	0.5	
11.15-11.30	1	0	1	2		1	0	0.5	1.5	
11.30-11.45	1	0	1	2		1	0	0.5	1.5	
11.45-12.00	1	0	2	3	8	1	0	1	2	5.5
12.00-12.15	1	0	2	3	10	1	0	1	2	7
12.15-12.30	1	0	3	4	12	1	0	1.5	2.5	8
12.30-12.45	1	0	4	5	15	1	0	2	3	9.5
12.45-13.00	1	0	6	7	19	1	0	3	4	11.5
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	0	1	1		0	0	0.5	0.5	
15.15-15.30	1	1	1	3		1	1.3	0.5	2.8	
15.30-15.45	1	1	1	3		1	1.3	0.5	2.8	
15.45-16.00	2	2	2	6	13	2	2.6	1	5.6	11.7
16.00-16.15	2	0	2	4	16	2	0	1	3	14.2
16.15-16.30	2	0	4	6	19	2	0	2	4	15.4
16.30-16.45	2	0	6	8	24	2	0	3	5	17.6
16.45-17.00	2	0	8	10	28	2	0	4	6	18



14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	27	3	34	64		27	3.9	17	47.9	
15.15-15.30	30	4	54	88		30	5.2	27	62.2	
15.30-15.45	31	5	68	104		31	6.5	34	71.5	
15.45-16.00	34	5	75	114	370	34	6.5	37.5	78	259.6
16.00-16.15	35	7	97	139	445	35	9.1	48.5	92.6	304.3
16.15-16.30	40	9	119	168	525	40	11.7	59.5	111.2	353.3
16.30-16.45	45	12	122	179	600	45	15.6	61	121.6	403.4
16.45-17.00	49	15	130	194	680	49	19.5	65	133.5	458.9

Minggu: 07-01-2018

Total

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	84	12	273	369		84	15.6	136.5	236.1	
06.15-06.30	91	18	293	402		91	23.4	146.5	260.9	
06.30-06.45	100	24	316	440		100	31.2	158	289.2	
06.45-07.00	108	28	336	472	1683	108	36.4	168	312.4	1098.6
07.00-07.15	117	33	362	512	1826	117	42.9	181	340.9	1203.4
07.15-07.30	129	32	360	521	1945	129	41.6	180	350.6	1293.1
07.30-07.45	149	13	344	506	2011	149	16.9	172	337.9	1341.8
07.45-08.00	151	11	349	511	2050	151	14.3	174.5	339.8	1369.2
08.00-08.15					0	0	0	0	0	0
08.15-08.30					0	0	0	0	0	0
08.30-08.45					0	0	0	0	0	0
08.45-09.00					0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	62	4	195	261		62	5.2	97.5	164.7	
11.15-11.30	72	6	221	299		72	7.8	110.5	190.3	
11.30-11.45	76	9	231	316		76	11.7	115.5	203.2	
11.45-12.00	84	14	243	341	1217	84	18.2	121.5	223.7	781.9

12.00-12.15	93	18	256	367	1323	93	23.4	128	244.4	861.6
12.15-12.30	101	20	269	390	1414	101	26	134.5	261.5	932.8
12.30-12.45	110	23	281	414	1512	110	29.9	140.5	280.4	1010
12.45-13.00	114	28	294	436	1607	114	36.4	147	297.4	1083.7
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	74	6	146	226		74	7.8	73	154.8	
15.15-15.30	82	8	191	281		82	10.4	95.5	187.9	
15.30-15.45	85	11	221	317		85	14.3	110.5	209.8	
15.45-16.00	93	14	240	347	1171	93	18.2	120	231.2	783.7
16.00-16.15	98	18	271	387	1332	98	23.4	135.5	256.9	885.8
16.15-16.30	104	22	305	431	1482	104	28.6	152.5	285.1	983
16.30-16.45	112	27	326	465	1630	112	35.1	163	310.1	1083.3
16.45-17.00	120	33	353	506	1789	120	42.9	176.5	339.4	1191.5

Simpang: Jl.Prajan

Arah: Barat (LT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	1	0	4	5		1	0	2	3	
06.15-06.30	3	0	7	10		3	0	3.5	6.5	
06.30-06.45	4	0	10	14		4	0	5	9	
06.45-07.00	8	1	11	20	49	8	1.3	5.5	14.8	33.3
07.00-07.15	9	0	15	24	68	9	0	7.5	16.5	46.8
07.15-07.30	8	0	18	26	84	8	0	9	17	57.3
07.30-07.45	5	0	15	20	90	5	0	7.5	12.5	60.8
07.45-08.00	3	0	14	17	87	3	0	7	10	56
06.00-06.15	0	0	0	0		0	0	0	0	
06.15-06.30	0	0	0	0		0	0	0	0	
06.30-06.45	0	0	0	0		0	0	0	0	

06.45-07.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	1	5	7		1	1.3	2.5	4.8	
11.15-11.30	1	0	6	7		1	0	3	4	
11.30-11.45	2	0	8	10		2	0	4	6	
11.45-12.00	2	0	10	12	36	2	0	5	7	21.8
12.00-12.15	2	0	12	14	43	2	0	6	8	25
12.15-12.30	3	0	12	15	51	3	0	6	9	30
12.30-12.45	3	0	13	16	57	3	0	6.5	9.5	33.5
12.45-13.00	5	0	14	19	64	5	0	7	12	38.5
13.00-13.15					0	0	0	0	0	0
13.15-13.30					0	0	0	0	0	0
13.30-13.45					0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	0	5	5		0	0	2.5	2.5	
15.15-15.30	1	0	7	8		1	0	3.5	4.5	
15.30-15.45	2	0	9	11		2	0	4.5	6.5	
15.45-16.00	3	1	11	15	39	3	1.3	5.5	9.8	23.3
16.00-16.15	4	0	13	17	51	4	0	6.5	10.5	31.3
16.15-16.30	4	0	16	20	63	4	0	8	12	38.8
16.30-16.45	5	0	18	23	75	5	0	9	14	46.3
16.45-17.00	7	0	20	27	87	7	0	10	17	53.5





14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	30	5	108	143		30	6.5	54	90.5	
15.15-15.30	41	6	115	162		41	7.8	57.5	106.3	
15.30-15.45	72	8	124	204		72	10.4	62	144.4	
15.45-16.00	75	10	135	220	729	75	13	67.5	155.5	496.7
16.00-16.15	84	12	140	236	822	84	15.6	70	169.6	575.8
16.15-16.30	93	12	146	251	911	93	15.6	73	181.6	651.1
16.30-16.45	107	13	154	274	981	107	16.9	77	200.9	707.6
16.45-17.00	128	14	159	301	1062	128	18.2	79.5	225.7	777.8

Simpang: Jl.Prajan

Arah: Utara (LT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
06.00-06.15	3	1	10	14		3	1.3	5	9.3	
06.15-06.30	5	0	11	16		5	0	5.5	10.5	
06.30-06.45	8	1	15	24		8	1.3	7.5	16.8	
06.45-07.00	8	0	15	23	77	8	0	7.5	15.5	52.1
07.00-07.15	4	1	18	23	86	4	1.3	9	14.3	57.1
07.15-07.30	3	0	14	17	87	3	0	7	10	56.6
07.30-07.45	2	0	7	9	72	2	0	3.5	5.5	45.3
07.45-08.00	1	0	4	5	54	1	0	2	3	32.8
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	0	0	1	1		0	0	0.5	0.5	
11.15-11.30	1	1	3	5		1	1.3	1.5	3.8	



08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	0	0	4	4		0	0	2	2	
11.15-11.30	1	1	6	8		1	1.3	3	5.3	
11.30-11.45	2	0	7	9		2	0	3.5	5.5	
11.45-12.00	3	0	9	12	33	3	0	4.5	7.5	20.3
12.00-12.15	4	0	11	15	44	4	0	5.5	9.5	27.8
12.15-12.30	4	0	12	16	52	4	0	6	10	32.5
12.30-12.45	5	0	13	18	61	5	0	6.5	11.5	38.5
12.45-13.00	7	0	15	22	71	7	0	7.5	14.5	45.5
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	1	1	6	8		1	1.3	3	5.3	
15.15-15.30	1	0	7	8		1	0	3.5	4.5	
15.30-15.45	2	0	8	10		2	0	4	6	
15.45-16.00	2	0	9	11	37	2	0	4.5	6.5	22.3
16.00-16.15	2	0	11	13	42	2	0	5.5	7.5	24.5
16.15-16.30	3	0	13	16	50	3	0	6.5	9.5	29.5
16.30-16.45	3	0	14	17	57	3	0	7	10	33.5
16.45-17.00	5	0	16	21	67	5	0	8	13	40



14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	37	4	100	141		37	5.2	50	92.2	
15.15-15.30	48	7	107	162		48	9.1	53.5	110.6	
15.30-15.45	79	8	111	198		79	10.4	55.5	144.9	
15.45-16.00	82	11	116	209	710	82	14.3	58	154.3	502
16.00-16.15	91	13	123	227	796	91	16.9	61.5	169.4	579.2
16.15-16.30	100	15	129	244	878	100	19.5	64.5	184	652.6
16.30-16.45	114	17	134	265	945	114	22.1	67	203.1	710.8
16.45-17.00	129	19	139	287	1023	129	24.7	69.5	223.2	779.7

**Total**

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	94	9	273	376		94	11.7	136.5	242.2	
06.15-06.30	119	15	296	430		119	19.5	148	286.5	
06.30-06.45	158	24	312	494		158	31.2	156	345.2	
06.45-07.00	170	33	317	520	1820	170	42.9	158.5	371.4	1245.3
07.00-07.15	177	42	333	552	1996	177	54.6	166.5	398.1	1401.2
07.15-07.30	181	31	333	545	2111	181	40.3	166.5	387.8	1502.5
07.30-07.45	189	24	335	548	2165	189	31.2	167.5	387.7	1545
07.45-08.00	199	18	336	553	2198	199	23.4	168	390.4	1564
08.00-08.15					0	0	0	0	0	0
08.15-08.30					0	0	0	0	0	0
08.30-08.45					0	0	0	0	0	0
08.45-09.00					0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	104	11	246	361		104	14.3	123	241.3	
11.15-11.30	108	15	256	379		108	19.5	128	255.5	

11.30-11.45	117	17	268	402		117	22.1	134	273.1	
11.45-12.00	123	21	280	424	1566	123	27.3	140	290.3	1060.2
12.00-12.15	130	26	297	453	1658	130	33.8	148.5	312.3	1131.2
12.15-12.30	136	28	297	461	1740	136	36.4	148.5	320.9	1196.6
12.30-12.45	142	32	292	466	1804	142	41.6	146	329.6	1253.1
12.45-13.00	152	35	295	482	1862	152	45.5	147.5	345	1307.8
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	72	10	237	319		72	13	118.5	203.5	
15.15-15.30	96	13	256	365		96	16.9	128	240.9	
15.30-15.45	162	16	274	452		162	20.8	137	319.8	
15.45-16.00	171	22	295	488	1624	171	28.6	147.5	347.1	1111.3
16.00-16.15	191	27	313	531	1836	191	35.1	156.5	382.6	1290.4
16.15-16.30	212	29	332	573	2044	212	37.7	166	415.7	1465.2
16.30-16.45	244	31	350	625	2217	244	40.3	175	459.3	1604.7
16.45-17.00	287	34	364	685	2414	287	44.2	182	513.2	1770.8

Simpang: Jl.Prajjan

Arah: Barat (LT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	1	1	9	11		1	1.3	4.5	6.8	
06.15-06.30	1	1	10	12		1	1.3	5	7.3	
06.30-06.45	2	0	11	13		2	0	5.5	7.5	
06.45-07.00	2	0	12	14	50	2	0	6	8	29.6
07.00-07.15	2	0	13	15	54	2	0	6.5	8.5	31.3
07.15-07.30	3	1	14	18	60	3	1.3	7	11.3	35.3
07.30-07.45	4	2	15	21	68	4	2.6	7.5	14.1	41.9
07.45-08.00	5	2	22	29	83	5	2.6	11	18.6	52.5
06.00-06.15	0	0	0	0		0	0	0	0	

06.15-06.30	0	0	0	0		0	0	0	0	
06.30-06.45	0	0	0	0		0	0	0	0	
06.45-07.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	2	3		1	0	1	2	
11.15-11.30	1	0	4	5		1	0	2	3	
11.30-11.45	1	0	7	8		1	0	3.5	4.5	
11.45-12.00	2	0	9	11	27	2	0	4.5	6.5	16
12.00-12.15	2	0	12	14	38	2	0	6	8	22
12.15-12.30	3	1	15	19	52	3	1.3	7.5	11.8	30.8
12.30-12.45	3	0	19	22	66	3	0	9.5	12.5	38.8
12.45-13.00	4	1	23	28	83	4	1.3	11.5	16.8	49.1
13.00-13.15					0	0	0	0	0	0
13.15-13.30					0	0	0	0	0	0
13.30-13.45					0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	1	7	8		0	1.3	3.5	4.8	
15.15-15.30	1	1	9	11		1	1.3	4.5	6.8	
15.30-15.45	1	0	10	11		1	0	5	6	
15.45-16.00	3	0	12	15	45	3	0	6	9	26.6
16.00-16.15	3	1	13	17	54	3	1.3	6.5	10.8	32.6
16.15-16.30	4	0	15	19	62	4	0	7.5	11.5	37.3
16.30-16.45	5	0	17	22	73	5	0	8.5	13.5	44.8
16.45-17.00	6	1	18	25	83	6	1.3	9	16.3	52.1





14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	31	3	132	166		31	3.9	66	100.9	
15.15-15.30	33	5	134	172		33	6.5	67	106.5	
15.30-15.45	40	7	136	183		40	9.1	68	117.1	
15.45-16.00	48	9	137	194	715	48	11.7	68.5	128.2	452.7
16.00-16.15	55	10	138	203	752	55	13	69	137	488.8
16.15-16.30	65	12	140	217	797	65	15.6	70	150.6	532.9
16.30-16.45	72	14	142	228	842	72	18.2	71	161.2	577
16.45-17.00	84	15	143	242	890	84	19.5	71.5	175	623.8

Simpang: Jl.Prajjan

Arah: Utara (LT)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
06.00-06.15	1	0	4	5		1	0	2	3	
06.15-06.30	3	0	6	9		3	0	3	6	
06.30-06.45	4	0	8	12		4	0	4	8	
06.45-07.00	5	0	10	15	41	5	0	5	10	27
07.00-07.15	6	0	12	18	54	6	0	6	12	36
07.15-07.30	7	0	14	21	66	7	0	7	14	44
07.30-07.45	8	0	16	24	78	8	0	8	16	52
07.45-08.00	9	1	18	28	91	9	1.3	9	19.3	61.3
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	0	0	3	3		0	0	1.5	1.5	
11.15-11.30	1	0	5	6		1	0	2.5	3.5	



08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	3	4		1	0	1.5	2.5	
11.15-11.30	1	0	6	7		1	0	3	4	
11.30-11.45	1	0	7	8		1	0	3.5	4.5	
11.45-12.00	2	0	8	10	29	2	0	4	6	17
12.00-12.15	2	0	10	12	37	2	0	5	7	21.5
12.15-12.30	3	0	12	15	45	3	0	6	9	26.5
12.30-12.45	2	0	15	17	54	2	0	7.5	9.5	31.5
12.45-13.00	2	0	20	22	66	2	0	10	12	37.5
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	0	0	18	18		0	0	9	9	
15.15-15.30	1	0	19	20		1	0	9.5	10.5	
15.30-15.45	1	0	20	21		1	0	10	11	
15.45-16.00	2	0	23	25	84	2	0	11.5	13.5	44
16.00-16.15	2	0	25	27	93	2	0	12.5	14.5	49.5
16.15-16.30	4	1	27	32	105	4	1.3	13.5	18.8	57.8
16.30-16.45	4	0	28	32	116	4	0	14	18	64.8
16.45-17.00	6	0	30	36	127	6	0	15	21	72.3



14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	1	0	5	6		1	0	2.5	3.5	
15.15-15.30	1	0	6	7		1	0	3	4	
15.30-15.45	2	0	9	11		2	0	4.5	6.5	
15.45-16.00	3	0	9	12	36	3	0	4.5	7.5	21.5
16.00-16.15	3	1	13	17	47	3	1.3	6.5	10.8	28.8
16.15-16.30	5	0	16	21	61	5	0	8	13	37.8
16.30-16.45	7	0	19	26	76	7	0	9.5	16.5	47.8
16.45-17.00	8	0	28	36	100	8	0	14	22	62.3

Simpang: Jl.Prajan

Arah: Timur (ST)

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
06.00-06.15	40	7	127	174		40	9.1	63.5	112.6	
06.15-06.30	48	8	130	186		48	10.4	65	123.4	
06.30-06.45	49	9	134	192		49	11.7	67	127.7	
06.45-07.00	52	10	138	200	752	52	13	69	134	497.7
07.00-07.15	56	11	144	211	789	56	14.3	72	142.3	527.4
07.15-07.30	57	12	148	217	820	57	15.6	74	146.6	550.6
07.30-07.45	68	12	152	232	860	68	15.6	76	159.6	582.5
07.45-08.00	80	13	157	250	910	80	16.9	78.5	175.4	623.9
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	15	1	60	76		15	1.3	30	46.3	
11.15-11.30	21	2	63	86		21	2.6	31.5	55.1	

11.30-11.45	29	2	67	98		29	2.6	33.5	65.1	
11.45-12.00	31	4	70	105	365	31	5.2	35	71.2	237.7
12.00-12.15	32	7	75	114	403	32	9.1	37.5	78.6	270
12.15-12.30	39	9	78	126	443	39	11.7	39	89.7	304.6
12.30-12.45	45	11	82	138	483	45	14.3	41	100.3	339.8
12.45-13.00	51	13	82	146	524	51	16.9	41	108.9	377.5
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	23	2	61	86		23	2.6	30.5	56.1	
15.15-15.30	27	3	65	95		27	3.9	32.5	63.4	
15.30-15.45	28	5	69	102		28	6.5	34.5	69	
15.45-16.00	32	7	70	109	392	32	9.1	35	76.1	264.6
16.00-16.15	37	10	74	121	427	37	13	37	87	295.5
16.15-16.30	40	10	78	128	460	40	13	39	92	324.1
16.30-16.45	44	11	80	135	493	44	14.3	40	98.3	353.4
16.45-17.00	48	14	83	145	529	48	18.2	41.5	107.7	385

**Total**

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	85	16	272	373		85	20.8	136	241.8	
06.15-06.30	104	18	291	413		104	23.4	145.5	272.9	
06.30-06.45	108	19	310	437		108	24.7	155	287.7	
06.45-07.00	116	21	326	463	1686	116	27.3	163	306.3	1108.7
07.00-07.15	125	23	349	497	1810	125	29.9	174.5	329.4	1196.3
07.15-07.30	130	26	367	523	1920	130	33.8	183.5	347.3	1270.7
07.30-07.45	155	28	387	570	2053	155	36.4	193.5	384.9	1367.9
07.45-08.00	178	34	415	627	2217	178	44.2	207.5	429.7	1491.3
08.00-08.15					0	0	0	0	0	0
08.15-08.30					0	0	0	0	0	0

08.30-08.45					0	0	0	0	0	0
08.45-09.00					0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	49	2	169	220		49	2.6	84.5	136.1	
11.15-11.30	59	4	190	253		59	5.2	95	159.2	
11.30-11.45	76	6	214	296		76	7.8	107	190.8	
11.45-12.00	91	9	236	336	1105	91	11.7	118	220.7	706.8
12.00-12.15	101	15	256	372	1257	101	19.5	128	248.5	819.2
12.15-12.30	123	21	270	414	1418	123	27.3	135	285.3	945.3
12.30-12.45	137	24	287	448	1570	137	31.2	143.5	311.7	1066.2
12.45-13.00	164	29	315	508	1742	164	37.7	157.5	359.2	1204.7
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	56	6	229	291		56	7.8	114.5	178.3	
15.15-15.30	66	9	240	315		66	11.7	120	197.7	
15.30-15.45	77	12	253	342		77	15.6	126.5	219.1	
15.45-16.00	93	16	262	371	1319	93	20.8	131	244.8	839.9
16.00-16.15	107	22	276	405	1433	107	28.6	138	273.6	935.2
16.15-16.30	126	23	290	439	1557	126	29.9	145	300.9	1038.4
16.30-16.45	141	25	302	468	1683	141	32.5	151	324.5	1143.8
16.45-17.00	163	30	319	512	1824	163	39	159.5	361.5	1260.5





14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	1	1	10	12		1	1.3	5	7.3	
15.15-15.30	1	1	11	13		1	1.3	5.5	7.8	
15.30-15.45	2	1	13	16		2	1.3	6.5	9.8	
15.45-16.00	4	1	15	20	61	4	1.3	7.5	12.8	37.7
16.00-16.15	5	1	17	23	72	5	1.3	8.5	14.8	45.2
16.15-16.30	7	1	17	25	84	7	1.3	8.5	16.8	54.2
16.30-16.45	8	1	20	29	97	8	1.3	10	19.3	63.7
16.45-17.00	10	3	23	36	113	10	3.9	11.5	25.4	76.3

Rabu: 03-01-2018

Pelabuhan Tanglok (lama)

Arah: Keluar

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	1	0	10	11		1	0	5	6	
06.15-06.30	2	1	11	14		2	1.3	5.5	8.8	
06.30-06.45	4	1	13	18		4	1.3	6.5	11.8	
06.45-07.00	4	1	15	20	63	4	1.3	7.5	12.8	39.4
07.00-07.15	6	2	17	25	77	6	2.6	8.5	17.1	50.5
07.15-07.30	6	2	19	27	90	6	2.6	9.5	18.1	59.8
07.30-07.45	9	3	20	32	104	9	3.9	10	22.9	70.9
07.45-08.00	7	3	22	32	116	7	3.9	11	21.9	80
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	11	12		1	0	5.5	6.5	
11.15-11.30	2	1	13	16		2	1.3	6.5	9.8	
11.30-11.45	2	1	15	18		2	1.3	7.5	10.8	
11.45-12.00	3	1	17	21	67	3	1.3	8.5	12.8	39.9



09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	3	1	21	25		3	1.3	10.5	14.8	
11.15-11.30	4	2	23	29		4	2.6	11.5	18.1	
11.30-11.45	5	2	27	34		5	2.6	13.5	21.1	
11.45-12.00	6	2	31	39	127	6	2.6	15.5	24.1	78.1
12.00-12.15	8	3	37	48	150	8	3.9	18.5	30.4	93.7
12.15-12.30	9	3	42	54	175	9	3.9	21	33.9	109.5
12.30-12.45	14	2	35	51	192	14	2.6	17.5	34.1	122.5
12.45-13.00	17	1	32	50	203	17	1.3	16	34.3	132.7
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	2	2	15	19		2	2.6	7.5	12.1	
15.15-15.30	2	2	16	20		2	2.6	8	12.6	
15.30-15.45	4	2	22	28		4	2.6	11	17.6	
15.45-16.00	7	3	27	37	104	7	3.9	13.5	24.4	66.7
16.00-16.15	9	3	31	43	128	9	3.9	15.5	28.4	83
16.15-16.30	13	4	35	52	160	13	5.2	17.5	35.7	106.1
16.30-16.45	16	2	41	59	191	16	2.6	20.5	39.1	127.6
16.45-17.00	20	4	47	71	225	20	5.2	23.5	48.7	151.9



14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	2	0	7	9		2	0	3.5	5.5	
15.15-15.30	2	0	8	10		2	0	4	6	
15.30-15.45	2	0	11	13		2	0	5.5	7.5	
15.45-16.00	3	0	14	17	49	3	0	7	10	29
16.00-16.15	4	1	16	21	61	4	1.3	8	13.3	36.8
16.15-16.30	4	1	17	22	73	4	1.3	8.5	13.8	44.6
16.30-16.45	6	1	19	26	86	6	1.3	9.5	16.8	53.9
16.45-17.00	7	1	20	28	97	7	1.3	10	18.3	62.2

Minggu: 07-01-2018

Pelabuhan Tanglok (lama)

Arah: Keluar

PUKUL	Jumlah Kendaraan			Jumlah Kendaraan (per 15 menit)	Jumlah Kendaraan (per jam)	EMP*			Jumlah SMP per 15 menit	Hour Volume
	LV	HV	MC			LV	HV	MC		
						1	1.3	0.5		
06.00-06.15	1	0	9	10		1	0	4.5	5.5	
06.15-06.30	2	0	11	13		2	0	5.5	7.5	
06.30-06.45	2	0	12	14		2	0	6	8	
06.45-07.00	2	0	14	16	53	2	0	7	9	30
07.00-07.15	3	1	15	19	62	3	1.3	7.5	11.8	36.3
07.15-07.30	5	1	15	21	70	5	1.3	7.5	13.8	42.6
07.30-07.45	6	0	16	22	78	6	0	8	14	48.6
07.45-08.00	7	0	17	24	86	7	0	8.5	15.5	55.1
08.00-08.15	0	0	0	0	0	0	0	0	0	0
08.15-08.30	0	0	0	0	0	0	0	0	0	0
08.30-08.45	0	0	0	0	0	0	0	0	0	0
08.45-09.00	0	0	0	0	0	0	0	0	0	0
09.00-09.15	0	0	0	0	0	0	0	0	0	0
09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	1	0	8	9		1	0	4	5	
11.15-11.30	2	1	10	13		2	1.3	5	8.3	
11.30-11.45	4	0	11	15		4	0	5.5	9.5	
11.45-12.00	5	0	12	17	54	5	0	6	11	33.8



09.15-09.30	0	0	0	0	0	0	0	0	0	0
09.30-09.45	0	0	0	0	0	0	0	0	0	0
09.45-10.00	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0
11.00-11.15	2	0	14	16		2	0	7	9	
11.15-11.30	3	1	18	22		3	1.3	9	13.3	
11.30-11.45	7	0	21	28		7	0	10.5	17.5	
11.45-12.00	9	0	25	34	100	9	0	12.5	21.5	61.3
12.00-12.15	9	1	27	37	121	9	1.3	13.5	23.8	76.1
12.15-12.30	8	0	30	38	137	8	0	15	23	85.8
12.30-12.45	3	1	34	38	147	3	1.3	17	21.3	89.6
12.45-13.00	2	1	42	45	158	2	1.3	21	24.3	92.4
13.00-13.15	0	0	0	0	0	0	0	0	0	0
13.15-13.30	0	0	0	0	0	0	0	0	0	0
13.30-13.45	0	0	0	0	0	0	0	0	0	0
13.45-14.00	0	0	0	0	0	0	0	0	0	0
14.00-14.15	0	0	0	0	0	0	0	0	0	0
14.15-14.30	0	0	0	0	0	0	0	0	0	0
14.30-14.45	0	0	0	0	0	0	0	0	0	0
14.45-15.00	0	0	0	0	0	0	0	0	0	0
15.00-15.15	3	0	16	19		3	0	8	11	
15.15-15.30	3	0	18	21		3	0	9	12	
15.30-15.45	4	0	22	26		4	0	11	15	
15.45-16.00	5	0	27	32	98	5	0	13.5	18.5	56.5
16.00-16.15	8	2	30	40	119	8	2.6	15	25.6	71.1
16.15-16.30	9	2	33	44	142	9	2.6	16.5	28.1	87.2
16.30-16.45	11	2	36	49	165	11	2.6	18	31.6	103.8
16.45-17.00	16	2	40	58	191	16	2.6	20	38.6	123.9







## 2. Kapasitas

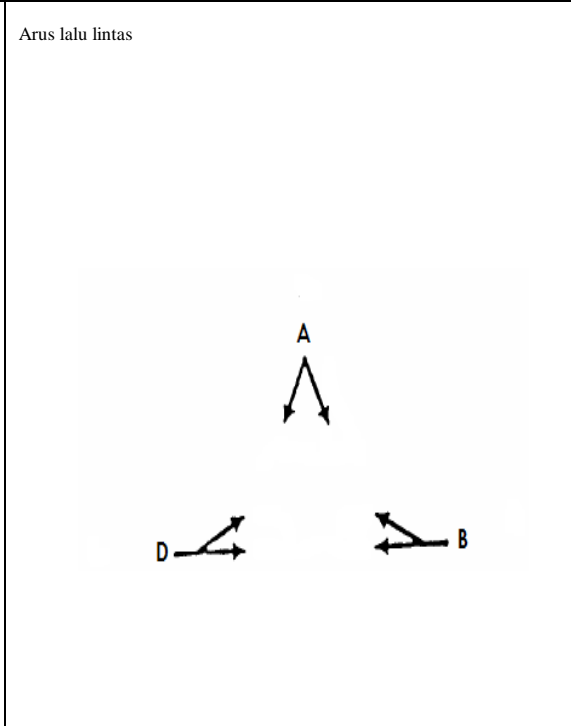
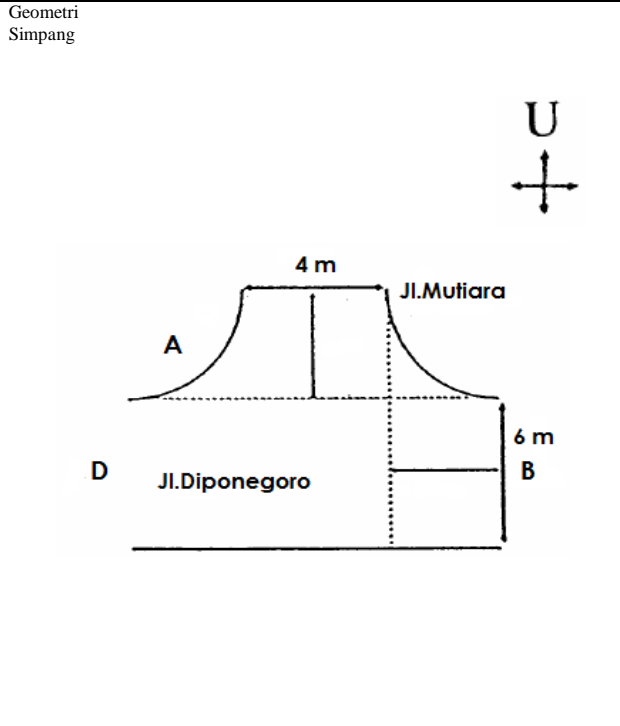
Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.02	1.10	2315

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1716	0.74	8.03	5.95	32	3.85	11.89	44.81	
								22.31	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Diponegoro		
	Jalan minor:	Jl. Mutiara		
	Soal:	Contoh	Periode: Pagi	07.00-09.00



1		Median jalan utama		L		LV%		HV%		MC%		Faktor-smp		Faktor-k	
KOMPOSISI LALU LINTAS		Ar ah		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV		Kend. tak bermotor			
ARUS LALU LINTAS				kend/jam	emp =	kend/jam	emp =	kend/jam	emp =	kend/jam	smp/jam	Rasio belok	UM kend/jam		
Pendekat					1 smp/jam		1.3 smp/jam		0.5 smp/jam						
1)		2)		3)	4)	5)	6)	7)	8)	9)	10)	11)	12)		
2	Jl. Minor A	LT		4	4	0	0	47	23.5	51	27.5	0.40			
3		ST													
4		RT		6	6	1	1.3	67	33.5	74	41	0.60			
5		Tot al		10	10	1	1.3	114	57	125	68				
6	Jl. Minor C	LT													
7		ST													
8		RT													
9		Tot al													
10	Jl. Minor total A + C			10	10	1	1.3	114	57	125	68				

11	Jl. Utama B	LT										
12		ST	279	279	43	56	614	307	936	642		
13		RT	5	5	0	0	47	23,5	52	29	0,04	
14		Tot al	284	284	43	56	661	331	988	670		
15	Jl. Utama D	LT	6	6	2	2,6	62	31	70	40	0,06	
16		ST	246	246	43	56	578	289	867	591		
17		RT										
18		Tot al	252	252	45	59	640	320	937	631		
19	Jl. Utama total B + D		536	536	88	114	1301	650,5	1925	1301		
20	Utama + Minor	LT	10	10	2	2,6	109	54,5	121	67,1	0,05	
21		ST	525	525	86	112	1192	596	1803	1233		
22		RT	11	11	1	1,3	114	57	126	69	0,05	
23	Utama + Minor total		546	546	89	116	1415	707,5	2050	1369	0,10	
24			Rasio Jl. Minor / (Jl. Utama + minor) total							0,050	UM/ MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2	2	3	3	3	2,5	2	2	322	

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.92	1.00	1.13	2282

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1369	0.60	6.12	4.57	36	3.72	9.84	31.94	
								15.11	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.95	1.04	1.12	2428

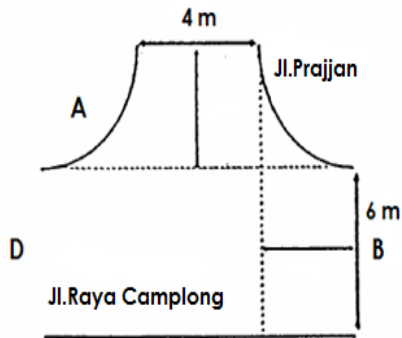
## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1771	0.73	7.84	5.82	41	3.83	11.67	43.58	
								21.64	

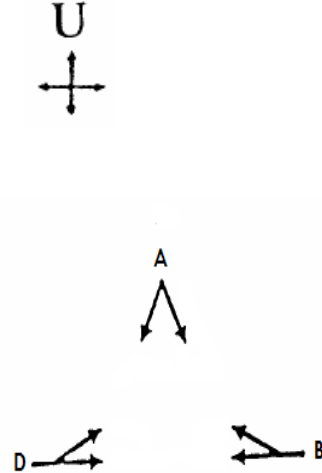
Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode:	07.00-09.00
			Pagi	

Geometri  
Simpang



Arus lalu lintas



Median jalan utama L

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Arah	LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	Sepeda motor MC kend/jam	emp = 0.5 smp/jam	Kendaraan bermotor total MV kend/jam smp/jam		Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	30	30	1	1.3	60	30	91	61.3	0.44	
3		ST										
4		RT	9	9	1	1.3	133	66.5	143	77	0.56	
5		Tot al	39	39	2	2.6	193	96.5	234	138		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		39	39	2	2.6	193	96.5	234	138		

11	Jl. Utama B	LT										
12		ST	261	261	48	62	601	301	910	624		
13		RT	18	18	1	1.3	64	32	83	51	0.08	
14		Tot al	279	279	49	64	665	333	993	675		
15	Jl. Utama D	LT	14	14	5	6.5	64	32	83	53	0.08	
16		ST	256	256	55	72	596	298	907	626		
17		RT										
18		Tot al	270	270	60	78	660	330	990	678		
19	Jl. Utama total B + D		549	549	109	142	1325	662.5	1983	1353		
20	Utama + Minor	LT	44	44	6	7.8	124	62	174	113.8	0.08	
21		ST	517	517	103	134	1197	598.5	1817	1249		
22		RT	27	27	2	2.6	197	98.5	226	128	0.09	
23	Utama + Minor total		588	588	111	144	1518	759	2217	1491	0.16	
24			Rasio Jl. Minor / (Jl. Utama + minor) total							0.093	UM/ MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajjan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Lebar pendekatan rata-rata $W_1$	Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Jalan minor		Jalan utama		
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$					
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)		
1	3	2		2	3	3	3	2.5	2	2	322	

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.96	1.01	1.09	2328

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1491	0.64	6.61	4.93	23	3.82	10.42	35.27	
								17.01	

Catatan mengenai perbandingan dengan sasaran (39)





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**2. Kapasitas**

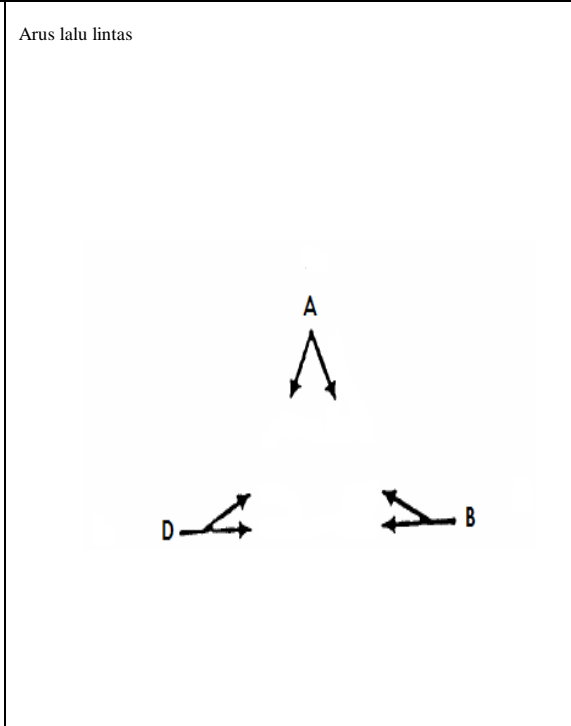
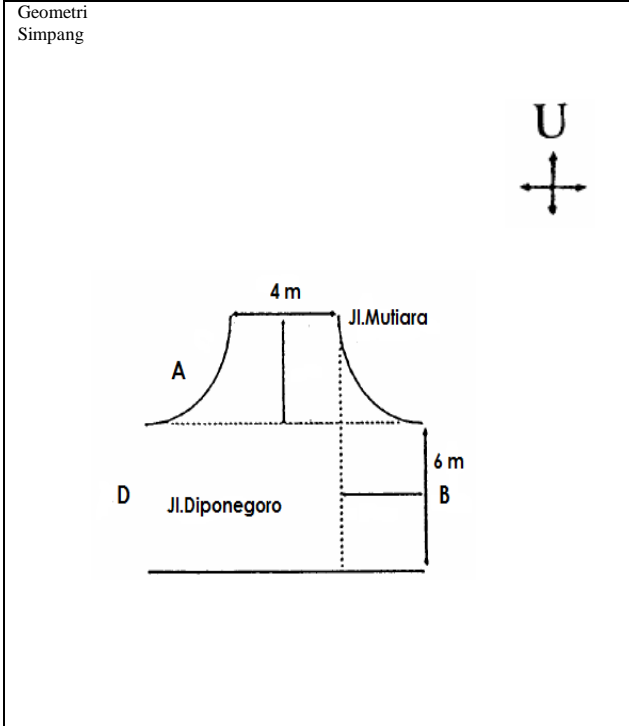
Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>Mt</sub> Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.02	1.11	2328

**3. Perilaku lalu lintas**

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mt</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1998	0.86	10.34	7.54	44	3.92	14.25	58.50	
								29.61	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Diponegoro		
	Jalan minor:	Jl. Mutiara		
	Soal:	Contoh	Periode: Pagi	07.00-09.00



Median jalan utama	L
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1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
	ARUS LALU LINTAS	Arah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)
2	Jl. Minor A	LT	4	4	0	0	58	29.1	63	33.4	0.45	
3		ST										
4		RT	6	6	1	1.3	67	33.5	74	41	0.55	
5		Tot al	10	10	1	1.3	125	62.6	137	74		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		10	10	1	1	125	62.6	137	74		



11	Jl. Utama B	LT										
12		ST	299	299	44	58	767	384	1110	740		
13		RT	5	5	0	0	59	29.4	64	35	0.04	
14		Tot al	304	304	44	58	826	413	1174	775		
15	Jl. Utama D	LT	6	6	2	2.6	62	31	70	40	0.05	
16		ST	265	265	45	58	716	358	1026	682		
17		RT										
18		Tot al	271	271	47	61	778	389	1096	721		
19	Jl. Utama total B + D		575	575	91	118	1605	802	2271	1496		
20	Utama + Minor	LT	10	10	2	3	120	60	133	73	0.05	
21		ST	564	564	89	116	1484	742	2137	1421		
22		RT	11	11	1	1.3	126	63	138	76	0.05	
23	Utama + Minor total		586	586	92	119	1730	865	2407	1570	0.09	
24			Rasio Jl. Minor / (Jl. Utama + minor) total							0.047	UM/ MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2		2	3	3	3	2.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.91	1.05	1.14	2386

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1570	0.66	6.83	5.09	42	3.76	10.58	36.79	
								17.87	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam  Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.04	1.13	2428

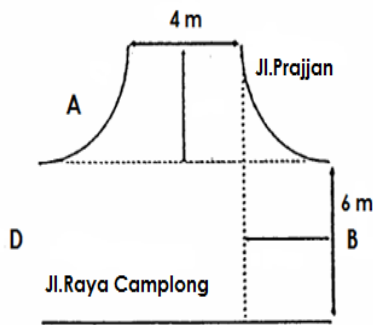
## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	2036	0.84	9.88	7.23	55	3.89	13.78	55.96	
								28.28	

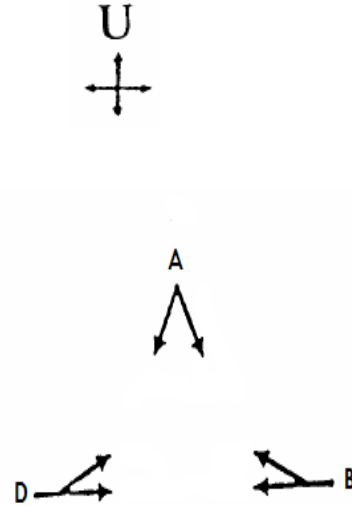
Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode:	07.00-09.00 Pagi

Geometri  
Simpang



Arus lalu lintas



Median jalan utama L

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Arah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor UM kend/jam
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	30	30	1	1.3	60	30.0	91	61.3	0.40	
3		ST										
4		RT	10	10	1	1.3	165	82.4	176	93	0.60	
5		Tot al	40	40	0	2.6	225	112.4	267	155		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		40	40	0	2.6	225	112.4	267	155		

11	Jl. Utama B	LT										
12		ST	281	281	50	65	745	372	1076	719		
13		RT	18	18	1	1.3	64	32.0	83	51	0.07	
14		Tot al	299	299	51	66	RT	404	1159	770		
15	Jl. Utama D	LT	15	15	5	7	80	40.0	100	62	0.08	
16		ST	274	274	57	74	745	372	1076	720		
17		RT										
18		Tot al	289	289	62	80	825	412	1176	782		
19	Jl. Utama total B + D		588	588	113	146	825	817	2335	1552		
20	Utama + Minor	LT	45	45	6	8	140	70	191	123	0.07	
21		ST	555	555	106	138	1490	745	2152	1439		
22		RT	28	28	2	3	229	114	259	145	0.08	
23	Utama + Minor total		628	628	115	149	1859	929	2601	1707	0.16	
24			Rasio Jl. Minor / (Jl. Utama + minor) total						0.091	UM/ MV:	0	

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajjan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2		2	3	3	3	2.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.96	1.01	1.09	2318

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1707	0.74	7.95	5.89	29	3.86	11.81	44.28	
								22.02	

Catatan mengenai perbandingan dengan sasaran (39)





8		RT											
9		Tot al											
10	Jl. Minor total A + C		149	149	3	3.698 143	299	149.7	451	302			
11	Jl. Utama B		LT										
12			ST	897	897	179	233	1265	633	2342	1763		
13			RT	70	70	0	0	144	71.8	213	142		
14			Tot al	967	967	179	233	1409	704	2555	1904		
15	Jl. Utama D		LT	21	21	0	0	131	66	152	87		
16			ST	795	795	148	192	1171	586	2114	1573		
17			RT										
18			Tot al	816	816	148	192	1302	651	2266	1659		
19	Jl. Utama total B + D			1783	1783	327	425	2711	1356	4821	3564		
20	Utama + Minor		LT	95	95	0	0	275	137	370	233		
21			ST	1692	1692	327	425	2436	1218	4456	3336		
22			RT	144	144	3	4	299	150	446	298		
23	Utama + Minor total			1932	1932	330	429	3011	1505	5272	3866		
24													
										Rasio Jl. Minor / (Jl. Utama + minor) total	0.078	UM / MV:	0

2023 sebelum pelabuhan taddan beroperasi

Jl. Mutiara

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekat dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
I	3	2		2	3	3	3	2.5	2	2	322


## 2. Kapasitas

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekat rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>Mi</sub> Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.02	1.10	2314

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>i</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mi</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3866	1.67	-14.35	-14.96	-7	4.00	-10.35	274.13	
								121.65	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.92	1.05	1.14	2388

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3049	1.28	78.93	33.51	996	4.00	82.93	138.32	
								67.07	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.04	1.13	2427

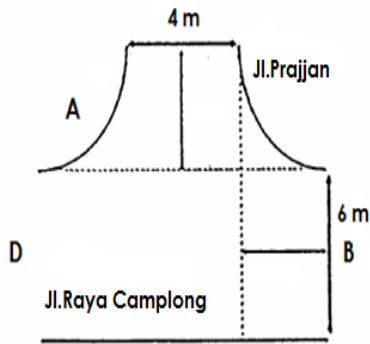
## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4012	1.65	-15.27	-16.14	-1	4.00	-11.27	266.52	
								118.76	

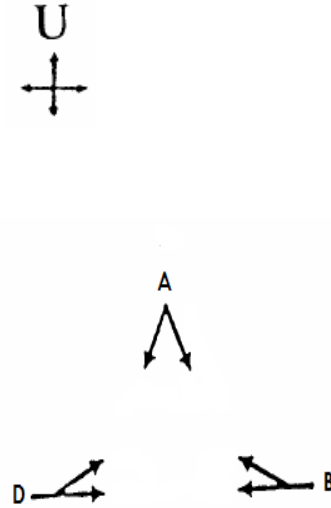
Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2023	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode: Pagi	07.00-09.00

Geometri  
Simpang



Arus lalu lintas



Median jalan utama L

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Arah	LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	70	70	3	4	123	61.5	196	135.0	0.46	
3		ST										
4		RT	21	21	3	4	273	136.4	297	161	0.54	
5		Tot al	91	91	0	7	396	197.9	492	296		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		91	91	0	7	396	197.9	492	296		

11	Jl. Utama B	LT										
12		ST	607	607	137	178	1233	616	1976	1400		
13		RT	42	42	3	4	131	65.6	176	111	0.07	
14		Tot al	649	649	139	181	1364	682	2152	1512		
15	Jl. Utama D	LT	33	33	14	18	131	65.6	178	117	0.08	
16		ST	595	595	156	203	1222	611	1974	1410		
17		RT										
18		Tot al	628	628	171	222	1354	677	2152	1526		
19	Jl. Utama total B + D		1276	1276	310	403	2717	1359	4304	3038		
20	Utama + Minor	LT	102	102	17	22	254	127	374	252	0.08	
21		ST	1202	1202	293	381	2455	1227	3950	2810		
22		RT	63	63	6	7	404	202	472	272	0.08	
23	Utama + Minor total		1367	1367	316	410	3113	1557	4796	3334	0.16	
24			Rasio Jl. Minor / (Jl. Utama + minor) total						0.089	UM/ MV:	0	

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajjan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2		2	3	3	3	2.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.96	1.01	1.09	2342

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3334	1.42	-62.99	-252.28	1880	4.00	-58.99	180.75	
								84.95	

Catatan mengenai perbandingan dengan sasaran (39)



8		RT										
9		Tot al										
10	Jl. Minor total A + C		154	154	3	4	346	173.1	503	331		
11	Jl. Utama B		LT									
12			ST	958	958	201	261	1662	831	2821	2050	
13			RT	74	74	0	0	181	90.7	256	165	
14			Tot al	1032	1032	201	261	1843	922	3077	2215	
15	Jl. Utama D		LT	21	21	0	0	131	66	152	87	
16			ST	853	853	163	212	1553	776	2569	1841	
17			RT									
18			Tot al	874	874	163	212	1684	842	2721	1928	
19	Jl. Utama total B + D			1906	1906	364	473	3527	1764	5797	4143	
20	Utama + Minor		LT	101	101	0	0	322	161	422	262	
21			ST	1811	1811	364	473	3214	1607	5389	3891	
22			RT	149	149	3	4	337	169	489	321	
23	Utama + Minor total			2060	2060	367	477	3873	1937	6301	4474	
24				Rasio Jl. Minor / (Jl. Utama + minor) total						0.074	UM / MV:	0

2023 setelah pelabuan taddan beroperasi

Jl. Mutiara

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekat dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
I	3	2		2	3	3	3	2.5	2	2	322


## 2. Kapasitas

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/totol F <sub>Mt</sub> Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.93	1.02	1.11	2327

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mt</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4474	1.92	-7.02	-6.61	-12	4.00	-3.02	401.95	
								168.31	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.91	1.05	1.14	2388

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10  30)	Derajat kejenuhan  (DS) (30) / (28)  31)	Tundaan lalu lintas simpang $DT_I$ Gbr. C-2:1  32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2  33)	Tundaan lalu lintas Jl. Minor $D_{MI}$  34)	Tundaan geometrik simpang (DG)  35)	Tundaan simpang (D) (32) + (35)  36)	Peluang antrian (QP%) Gbr. C-3:1  37)	Sasaran   38)
1	3475	1.46	-44.88	-86.96	850	4.00	-40.88	191.16	
								89.19	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam  Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.94	1.04	1.13	2420

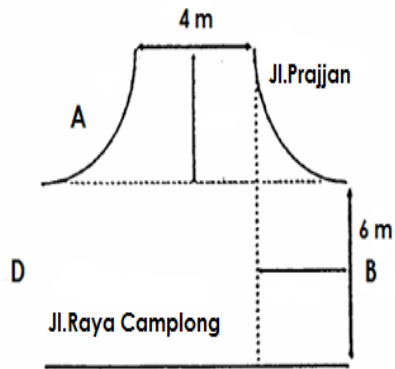
## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_M$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4586	1.90	-7.52	-7.12	-15	4.00	-3.52	386.35	
								162.77	

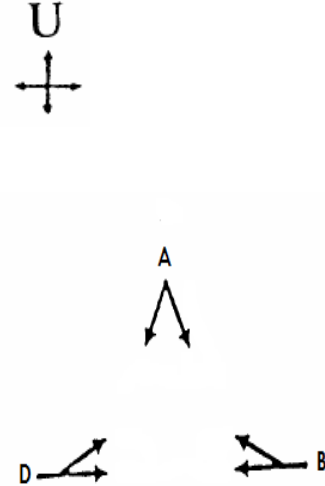
Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2023	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode: Pagi	07.00-09.00

Geometri  
Simpang



Arus lalu lintas



Median jalan utama L

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Ar ah	LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	Sepeda motor MC		Kendaraan bermotor total MV		Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	70	70	3	4	123	61.5	196	135.0	0.41	
3		ST										
4		RT	23	23	3	4	338	169.0	364	195	0.59	
5		Tot al	92	92	6	8	461	230.6	559	330		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		92	92	6	8	461	230.6	559	330		

11	Jl. Utama B	LT										
12		ST	654	654	142	184	1528	764	2324	1602		
13		RT	42	42	3	4	131	65.6	176	111	0.06	
14		Tot al	696	696	145	188	1659	829	2500	1713		
15	Jl. Utama D	LT	35	35	15	19	164	82.0	214	136	0.08	
16		ST	637	637	161	210	1528	764	2326	1610		
17		RT										
18		Tot al	672	672	176	229	1692	846	2539	1746		
19	Jl. Utama total B + D		1368	1368	320	416	3351	1675	5039	3460		
20	Utama + Minor	LT	105	105	17	23	287	144	409	271	0.07	
21		ST	1291	1291	303	394	3055	1528	4649	3213		
22		RT	64	64	6	8	469	235	540	307	0.08	
23	Utama + Minor total		1460	1460	326	424	3812	1906	5598	3790	0.15	
24			Rasio Jl. Minor / (Jl. Utama + minor) total						0.087	UM/ MV:	0	

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajjan	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang  Tbl. B-1:1  11)
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2	2	3	3	3	2.5	2	2	322	

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.92	1	0.94	0.94	0.96	1.02	1.10	2331

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3790	1.63	-16.94	-18.36	-1	4.00	-12.94	254.94	
								114.33	

Catatan mengenai perbandingan dengan sasaran (39)

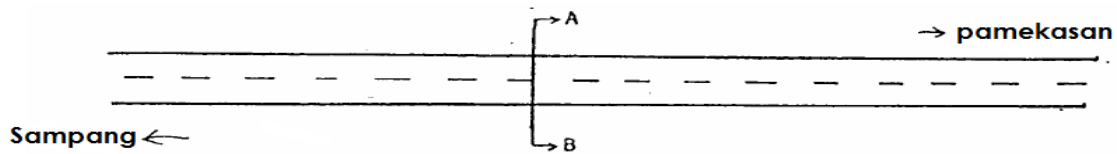


3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admmn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

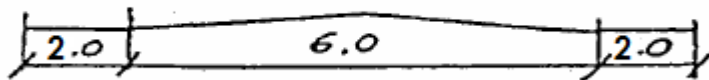


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2018 sebelum pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5	Arah %	kend/jam	smp/jam
1,1	emp arah 1	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	365	365	46	60	10	15	19	48	625	313	0.47	1065	799.8
4	2	455	455	49	64	9	14	29	73	665	333	0.53	1207	937.2
5	1+2	820	820	95	124	19	29	48	120	1290	645		2272	1737

6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun	Pemisahan arah, $SP=Q_1/(Q_{1,2})$	46.88
7		Faktor-smp $F_{smp} =$	

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2018 sebelum pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus	faktor penyesuaian untuk lebar	$FV_0 + FV_w$	Faktor penyesuaian	Kecepatan arus bebas
-----------	----------------	--------------------------------	---------------	--------------------	----------------------

	bebas dasar FVo Tabel. B-1:1 (km/jam)	jalur Fvo Tabel. B-2:1 (km/jam)	(2) + (3) (km/jam)	Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	FV (4) × (5) × (6) (km/jam)
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{sf}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>sp</sub> Tabel. C-3:1	FC <sub>sf</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1737	0.65	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat ringan

Soal/Arah	Derajat ringan DB Gbr. D:3:1
30)	31)
1	0.79

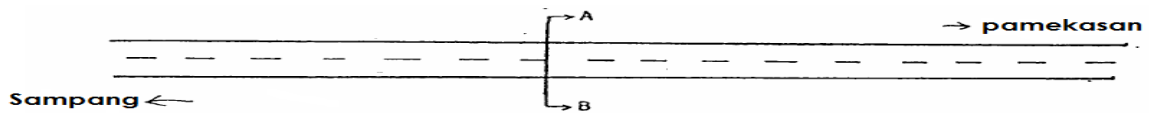
2018 sebelum pelabuhan taddan beroperasi

7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admmn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

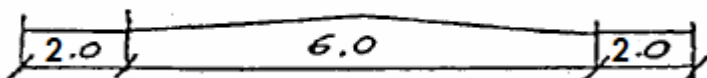


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang



	Sisi A	Sisi B	Tota l	Rata- rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentu r	Lentu r
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi Luar	A Dala m	Sisi Dala m	B Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Keriki l			Keriki l
Beda tinggi dengan jalan (cm):	0,0			0,0 0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhe nti			Berhe nti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5	Ara h %	kend/ jam	smp/j am
1,1	emp arah 1	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/ja m	kend/ jam	smp/jam	kend/ jam	smp/ja m	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	247	247	37	48	6	9	22	55	650	325	0.50	962	684. 1

4	2	250	250	31	40	11	17	16	40	642	321	0.50	950	667.8
5	1+2	497	497	68	88	17	26	38	95	1292	646		1912	1352
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1+2})$		50.31	
7											Faktor-smp $F_{smp} =$			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

#### Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar	faktor penyesuaian untuk lebar jalur	$FV_0 + FV_w$	Faktor penyesuaian		Kecepatan arus bebas
				Hambatan	Ukuran kota	

	FVo Tabel. B-1:1 (km/jam)	Fvo Tabel. B-2:1 (km/jam)	(2) + (3) (km/jam)	samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	FFV <sub>CS</sub> Tabel. B-4:1	FV (4) × (5) × (6) (km/jam)
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_W \times FC_{SP} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>W</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1352	0.50	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79



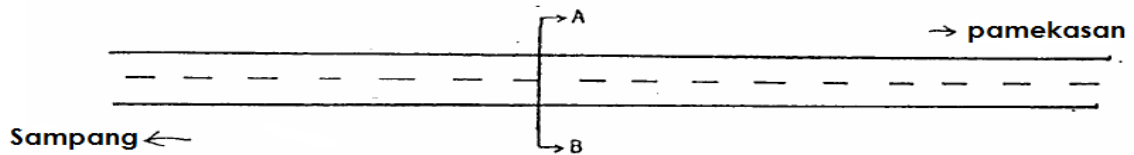
2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admmmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

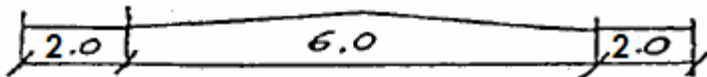


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang



	Sisi A	Sisi B	Tota l	Rata- rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentu r	Lentu r
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi Luar	A Dala m	Sisi Dala m	B Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Keriki l			Keriki l
Beda tinggi dengan jalan (cm):	0,0			0,0 0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhe nti			Berhe nti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend emp arah	Kend.ringan	Menengah berat	Bis besar	Truk besar	Sepeda motor	Arus total Q
1,1	arah 1	LV: 1	MHV: 1.3	LB: 1.5	LT: 2.5	MC: 0.5	

1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	392	392	49	64	12	18	20	50	834	417	0.48	1307	941
4	2	488	488	49	64	9	14	29	73	854	427	0.52	1428	1064
5	1+2	880	880	98	127	21	32	49	123	1688	844		2736	2005
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1-2})$		47.79	
7											Faktor-smp F			
											smp=			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
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FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Ara h	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Ara h	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C- 2:1	FC <sub>sp</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan ringan**

Soal/Ara h	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	2005	0.75	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan
	DB
	Gbr. D:3:1
30)	31)
1	0.79

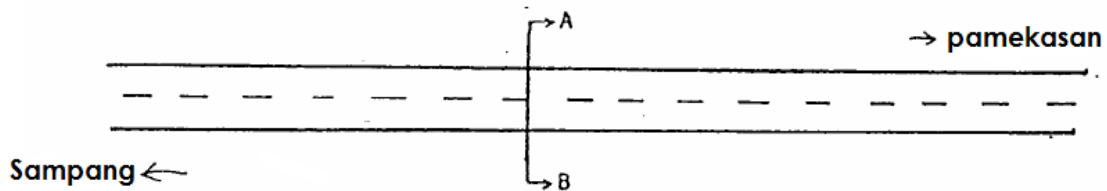
2018 sesudah pelabuhan taddan beroperasi

7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen	Antara Sampang dan Pamekasan		
	Kelas admmn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

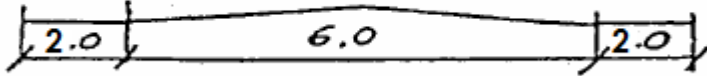


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

**Penampang melintang**



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

<b>JALAN LUAR PERKOTAAN</b> <b>FORMULIR IR-2 DATA MASUKAN</b> <b>~ ARUS LALU LINTAS</b> <b>~ HAMBATAN SAMPING</b>	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,1	emp arah 1	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	267	267	38	49	6	9	23	58	800	400	0.50	1134	783
4	2	271	271	32	42	11	17	17	43	818	409	0.50	1149	781
5	1+2	538	538	70	91	17	26	40	100	1617	809		2283	1563
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1,2})$			49.67	
7										Faktor-smp F				
										$F_{smp} =$				

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

JALAN KOTA  FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS  ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Ara h	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub>  (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Ara h	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C- 2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan  
ringan**

Soal/Ara h	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1563	0.58	40	8.3	0.21



Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan
	DB Gbr. D:3:1
30)	31)
1	0.79

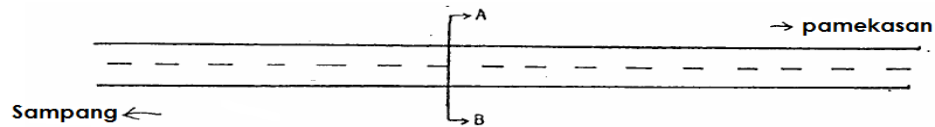
2023 sebelum pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

<b>JALAN LUAR KOTA</b> <b>FORMULIR IR-1: DATA MASUKAN</b>  ~ DATA UMUM ~ GEOMETRIK JALAN	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

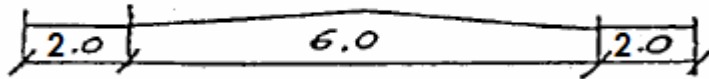


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	<i>Tidak ada</i>
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	<i>Tidak ada</i>

**Penampang melintang**



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	<i>Lentur</i>	<i>Lentur</i>
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	<i>Baik</i>	<i>Baik</i>

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	<i>Kerikil</i>			<i>Kerikil</i>
Beda tinggi dengan jalan (cm):	<i>0,0</i>			<i>0,0</i>
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	<i>Berhenti</i>			<i>Berhenti</i>

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	<i>Tidak ada</i>	Lain-lain: <i>Tidak ada</i>
Berat kotor maksimum	<i>Tidak ada</i>	

2023 sebelum pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	<i>3 januari 2018</i>	Ditangani oleh:	<i>SBL</i>
	No.ruas:		Diperiksa oleh	<i>JT</i>
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)				Faktor -k=			Pemisahan arah 1/arah 2=		
Komposisi %	LV%		HV%		LB%		LT%		MC%

Data arus per jam menurut jenis

Bari s	Tipe kend emp arah 1	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q			
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5				
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5				
2	Arah	Kend/j am	smp/j am	kend/jam	smp/ja m	kend/ jam	smp/jam	kend/ jam	smp/ja m	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am	
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)		12)	13)	14)
3	1	848	848	107	139	19	28	100	250	1282	641	0.47	2356	1907	
4	2	1058	1058	114	149	17	25	153	381	1364	682	0.53	2705	2295	
5	1+2	1906	1906	222	288	35	53	253	631	2646	1323		5061	4201	
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, SP=Q <sub>1</sub> /(Q <sub>1,2</sub> )			46.55		
7										Faktor-smp F smp=					

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

2023 sebelum pelabuhan taddan beroperasi

3 Januari 2018

Formulir  
IR-3

JALAN KOTA  FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS  ~ IRINGAN	Tanggal:	3 Januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Ara h	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub>  (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas  FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Ara h	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C- 2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan  
ringan**

Soal/Ara h	Arus lalu lintas	Derajat	Kecepatan	Panjang segmen jalan	Waktu tempuh
---------------	------------------	---------	-----------	-------------------------	--------------

	Q Formulir UR-2 smp/jam	kejuhan n DS (21) / (16)	$V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	L km	TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	4201	1.57	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Ara h	Derajat ringan DB Gbr. D:3:1
30)	31)
1	0.79

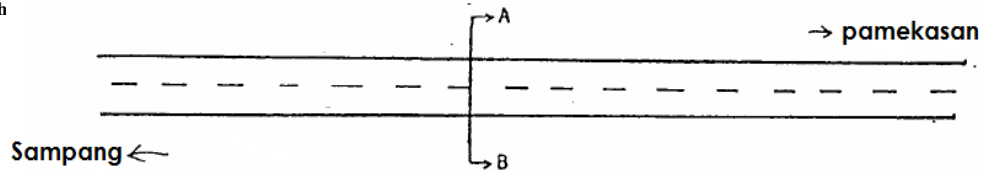
2023 sebelum pelabuhan taddan beroperasi

7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admmmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen  
h

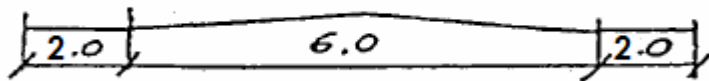


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

#### Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

#### Penampang melintang



	Sisi A	Sisi B	Total	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

#### Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

#### Kondisi pengaturan lalu-lintas

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=						
Komposisi %	LV%		HV%		LB%		LT%		MC%	

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/ja m	kend/ jam	smp/jam	kend/ jam	smp/ja m	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	574	574	86	112	11	17	116	289	1333	667	0.51	2120	1659
4	2	581	581	72	94	21	31	84	210	1317	658	0.49	2075	1575
5	1+2	1155	1155	159	206	32	48	200	500	2650	1325		4195	3234
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1+2})$			50.54	
7										Faktor-smp F $F_{smp} =$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

## 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

## 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping
-----------------------------	----------------	------------------------

30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682



**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	3234	1.21	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

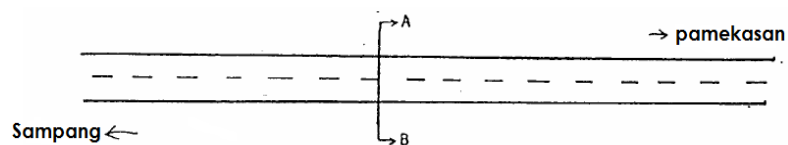
2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal

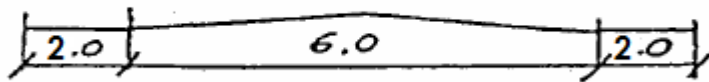


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

#### Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

#### Penampang melintang



	Sisi A	Sisi B	Total	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

#### Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal), Beton, Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik, Sedang, Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal), Beton, Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas, Parkir, Berhenti darurat	Berhenti			Berhenti

#### Kondisi pengaturan lalu-lintas

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

3 januari 2018

Formulir  
IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=						
Komposisi %	LV%		HV%		LB%		LT%		MC%	

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	912	912	114	149	22	34	105	263	1710	855	0.47	2864	2212
4	2	1133	1133	114	149	17	25	153	381	1751	875	0.53	3168	2564
5	1+2	2045	2045	228	297	39	59	258	645	3461	1731		6032	4776
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1+2})$			47.48	
7										Faktor-smp F $smp=$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

## 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan Beberapa permukiman & kegiatan rendah	Sangat rendah	VL
50 - 149		Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan pasar/perniagaan	Tinggi	H
> 350		Sangat tinggi	VH

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA  FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS  ~ IRRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur F <sub>vo</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	

10)	11)	12)	13)	14)	15)
1	3100	0.91	0.97	0.98	2682

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	4776	1.78	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

2023 setelah pelabuhan taddan beroperasi

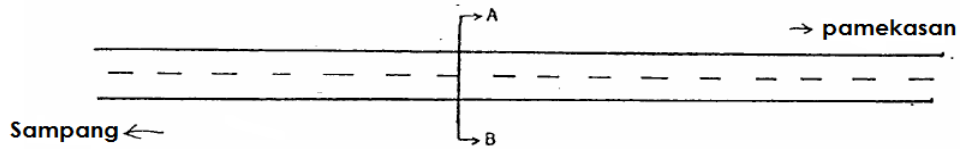
7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor

Waktu:		Nomor soal:	
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**Alinyemen horizontal**

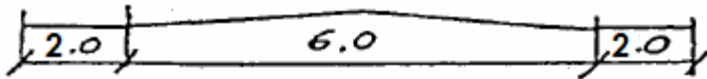


Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

**Alinyemen Vertical**

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

**Penampang melintang**



	Sisi A	Sisi B	Totol	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	3	3	6	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal), Beton, Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik, Sedang, Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi A	Sisi B
	Luar	Dalam
Tipe permukaan: Lentur(aspal), Beton, Kerikil	Kerikil	Kerikil
Beda tinggi dengan jalan (cm):	0,0	0,0
Penggunaan: Lalu-lintas, Parkir, Berhenti darurat	Berhenti	Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q			
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5	Ara h %	kend/ jam	smp/j am	
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5				
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5				
2	Arah	Kend/j am	smp/j am	kend/jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am	
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)	
3	1	621	621	89	115	11	17	121	303	1640	820	0.50	2481	1875	
4	2	630	630	75	97	21	31	89	224	1677	839	0.50	2492	1820	
5	1+2	1251	1251	163	212	32	48	210	526	3317	1659		4974	3695	
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1+2})$			49.89	
7											Faktor-smp F $smp=$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	

Total	
-------	--

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan Beberapa permukiman & kegiatan rendah	Sangat rendah	VL
50 - 149		Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan pasar/perniagaan	Tinggi	H
> 350		Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA  FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS  ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur F <sub>v0</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>sp</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)



1	3100	0.91	0.97	0.98	2682
---	------	------	------	------	------

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	3695	1.38	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79



8		RT										
9		Tot al										
10	Jl. Minor total A + C		66	66	1	1.3	169	84.4	236	152		
11	Jl. Utama B											
12		LT										
12		ST	412	412	71	92	810	405	1293	909		
13		RT	32	32	0	0	88	44.2	121	76	0.08	
14		Tot al	444	444	71	92	899	449	1414	985		
15	Jl. Utama D											
16		LT	9	9	0	0	64	32	73	41	0.05	
16		ST	367	367	57	74	757	379	1181	820		
17		RT										
18		Tot al	376	376	57	74	821	411	1254	861		
19	Jl. Utama total B + D		820	820	128	166	1720	860	2668	1846		
20	Utama + Minor											
21		LT	43	43	0	0	157	78	200	122	0.06	
21		ST	779	779	128	166	1567	784	2474	1729		
22		RT	64	64	1	1.3	164	82	230	148	0.07	
23	Utama + Minor total		886	886	129	168	1889	944	2904	1998	0.13	
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.076	UM / MV:	0

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
I	3	2		2	4	4	4	3	2	2	322


## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/tot al $F_M$ Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.94	1.02	1.11	2424

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_i$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometri k simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1998	0.82	9.57	7.02	41	3.90	13.47	54.20	
								27.36	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.91	1.05	1.14	2485

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_I$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1570	0.63	6.50	4.85	40	3.74	10.24	34.54	
								16.59	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

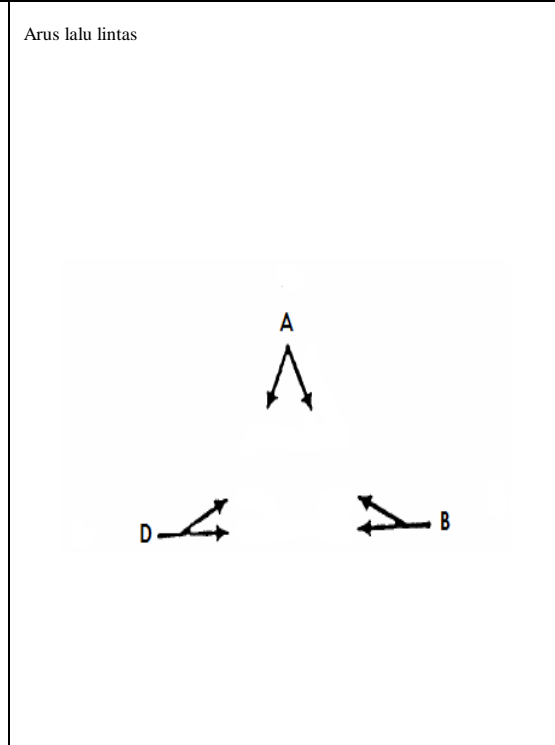
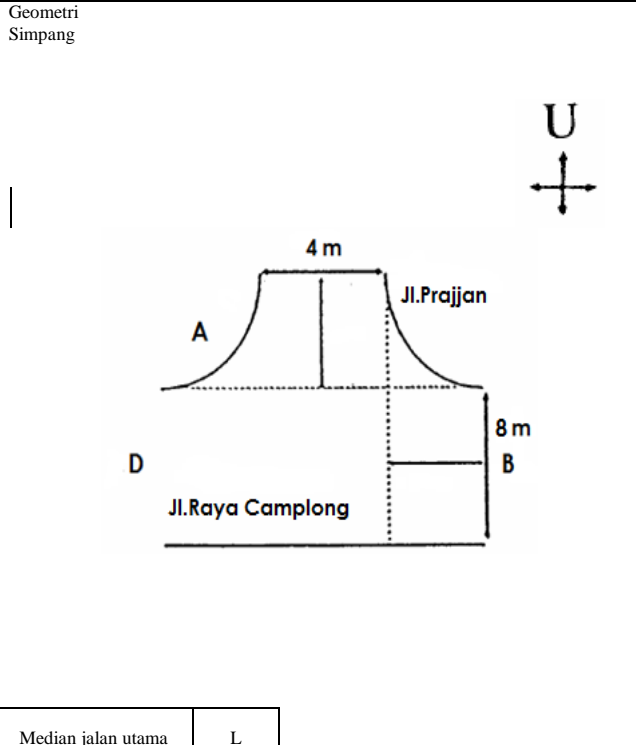
Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_{MI}$ Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.94	1.04	1.13	2528

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan $(DS)$ (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang $(D)$ (32) + (35) 36)	Peluang antrian $(QP\%)$ Gbr. C-3:1 37)	Sasaran 38)
1	2036	0.81	9.18	6.75	51	3.87	13.06	51.92	
								26.15	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode:	07.00-09.00 Pagi



Median jalan utama	L
--------------------	---

1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
	ARUS LALU LINTAS	Arah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	30	30	1	1.3	60	30.0	91	61.3	0.40	
3		ST										
4		RT	10	10	1	1.3	165	82.4	176	93	0.60	
5		Tota l	40	40	0	2.6	225	112.4	267	155		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tota l										
10	Jl. Minor total A + C		40	40	0	2.6	225	112.4	267	155		

11	Jl. Utama B	LT										
12		ST	281	281	50	65	745	372	1076	719		
13		RT	18	18	1	1.3	64	32.0	83	51	0.07	
14		Tota l	299	299	51	66	RT	404	1159	770		
15	Jl. Utama D	LT	15	15	5	7	80	40.0	100	62	0.08	
16		ST	274	274	57	74	745	372	1076	720		
17		RT										
18		Tota l	289	289	62	80	825	412	1176	782		
19	Jl. Utama total B + D		588	588	113	146	825	817	2335	1552		
20	Utama + Minor	LT	45	45	6	8	140	70	191	123	0.07	
21		ST	555	555	106	138	1490	745	2152	1439		
22		RT	28	28	2	3	229	114	259	145	0.08	
23	Utama + Minor total		628	628	115	149	1859	929	2601	1707	0.16	
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.091	UM/ MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2		2	4	4	4	3	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.96	1.01	1.09	2414

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1707	0.71	7.50	5.58	27	3.84	11.35	41.35	
								20.41	

Catatan mengenai perbandingan dengan sasaran (39)



8		RT										
9		Tot al										
10	Jl. Minor total A + C		154	154	3	4	346	173.1	503	331		
11	Jl. Utama B		LT									
12			ST	958	958	201	261	1662	831	2821	2050	
13			RT	74	74	0	0	181	90.7	256	165	0.07
14			Tot al	1032	1032	201	261	1843	922	3077	2215	
15	Jl. Utama D		LT	21	21	0	0	131	66	152	87	0.04
16			ST	853	853	163	212	1553	776	2569	1841	
17			RT									
18			Tot al	874	874	163	212	1684	842	2721	1928	
19	Jl. Utama total B + D			1906	1906	364	473	3527	1764	5797	4143	
20	Utama + Minor		LT	101	101	0	0	322	161	422	262	0.06
21			ST	1811	1811	364	473	3214	1607	5389	3891	
22			RT	149	149	3	4	337	169	489	321	0.07
23	Utama + Minor total			2060	2060	367	477	3873	1937	6301	4474	0.13
24				Rasio Jl. Minor / (Jl. Utama + minor) total						0.074	UM / MV:	0

2023 setelah pelabuan taddan beroperasi

Jl. Mutiara

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekat dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang  Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
1	3	2		2	4	4	4	3	2	2	322


## 2. Kapasitas

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>M</sub> Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.93	1.02	1.11	2423

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>M</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4474	1.85	-8.52	-8.18	-13	4.00	-4.52	359.51	
								153.15	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekat rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>M</sub> Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.91	1.05	1.14	2487

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>MI</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3475	1.40	-93.37	471.03	-12092	4.00	-89.37	172.58	
								81.58	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

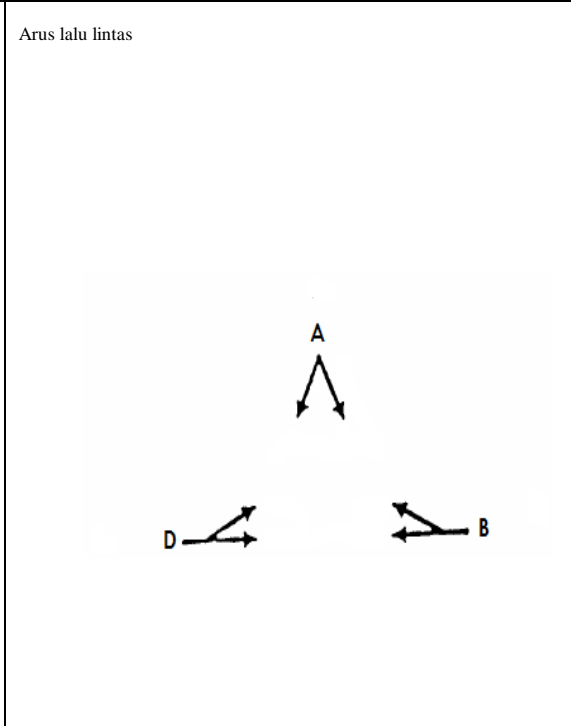
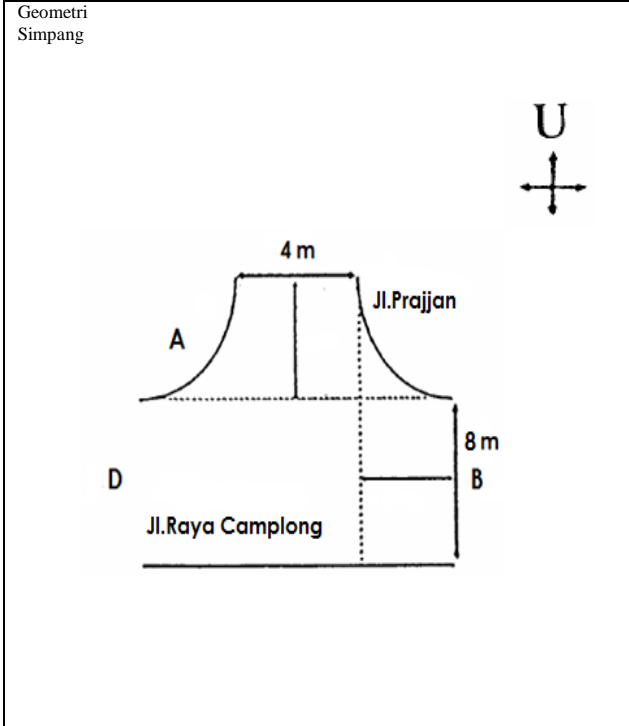
Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1  21)	Median jalan utama $F_M$ Tbl. B-4:1  22)	Ukuran kota $F_{CS}$ Tbl. B-5:1  23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1  24)	Belok kiri $F_{LT}$ Gbr. B-7:1  25)	Belok kanan $F_{RT}$ Gbr. B-8:1  26)	Rasio minor/total $F_{MI}$ Gbr. B-9:1  27)	
1	2700	0.958	1	0.94	0.94	0.94	1.04	1.13	2520

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10  30)	Derajat kejenuhan $(DS)$ (30) / (28)  31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1  32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2  33)	Tundaan lalu lintas Jl. Minor $D_{MI}$  34)	Tundaan geometrik simpang (DG)  35)	Tundaan simpang $(D)$ (32) + (35)  36)	Peluang antrian $(QP\%)$ Gbr. C-3:1  37)	Sasaran  38)
1	4586	1.82	-9.13	-8.84	-14	4.00	-5.13	345.69	
								148.15	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 2023	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode:	07.00-09.00 Pagi



Median jalan utama	L
--------------------	---

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Arah	LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	70	70	3	4	123	61.5	196	135.0	0.41	
3		ST										
4		RT	23	23	3	4	338	169.0	364	195	0.59	
5		Tot al	92	92	6	8	461	230.6	559	330		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		92	92	6	8	461	230.6	559	330		

11	Jl. Utama B	LT										
12		ST	654	654	142	184	1528	764	2324	1602		
13		RT	42	42	3	4	131	65.6	176	111	0.06	
14		Tot al	696	696	145	188	1659	829	2500	1713		
15	Jl. Utama D	LT	35	35	15	19	164	82.0	214	136	0.08	
16		ST	637	637	161	210	1528	764	2326	1610		
17		RT										
18		Tot al	672	672	176	229	1692	846	2539	1746		
19	Jl. Utama total B + D		1368	1368	320	416	3351	1675	5039	3460		
20	Utama + Minor	LT	105	105	17	23	287	144	409	271	0.07	
21		ST	1291	1291	303	394	3055	1528	4649	3213		
22		RT	64	64	6	8	469	235	540	307	0.08	
23	Utama + Minor total		1460	1460	326	424	3812	1906	5598	3790	0.15	
24			Rasio Jl. Minor / (Jl. Utama + minor) total						0.087	UM/ MV:	0	

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: - ANALISA	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2		2	4	4	4	3	2	2	322

**2. Kapasitas**



Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.958	1	0.94	0.94	0.96	1.02	1.10	2428

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3790	1.56	-22.43	-26.60	12	4.00	-18.43	229.20	
								104.35	

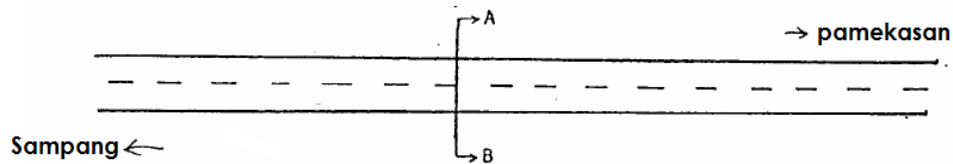
Catatan mengenai perbandingan dengan sasaran (39)

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

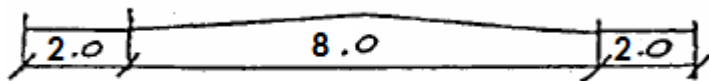
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	4	4	8	
Lebar bahu efektif (Ws, m):	2	2	4	2

Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi Luar	A Dalam	Sisi Dalam	B Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5	Arah %	kend/jam	smp/jam
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	392	392	49	64	12	18	20	50	834	417	0.48	1307	941
4	2	488	488	49	64	9	14	29	73	854	427	0.52	1428	1064
5	1+2	880	880	98	127	21	32	49	123	1688	844		2736	2005

6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun	Pemisahan arah, $SP=Q_1/(Q_{1,2})$	47.79
7		Faktor-smp F <sub>smp</sub> =	

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{sf}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>sp</sub> Tabel. C-3:1	Hambatan samping FC <sub>sf</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.08	0.97	0.98	3183

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	2005	0.63	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)

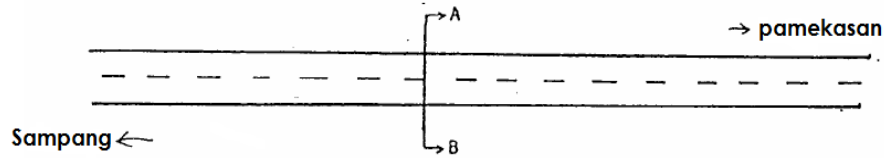
1	0.79
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7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen	Antara Sampang dan Pamekasan		
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

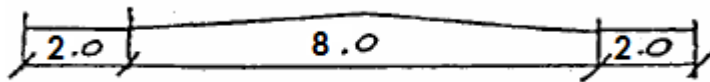
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tot al	Rata-rata
--	--------	--------	--------	-----------

Lebar jalur lalu-lintas rata-rata (Wc, m):	4	4	8	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5	Arah %	kend/jam	smp/jam
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	267	267	38	49	6	9	23	58	800	400	0.50	1134	783
4	2	271	271	32	42	11	17	17	43	818	409	0.50	1149	781

5	1+2	538	538	70	91	17	26	40	100	1617	809		2283	1563
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1,2})$		49.67		
7										Faktor-smp $F_{smp} =$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan pasar/perniagaan	Tinggi	H
> 350		Sangat tinggi	VH

7 Januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 Januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Aras	Kecepatan arus bebas dasar	faktor penyesuaian untuk lebar jalur	$FV_0 + FV_w$	Faktor penyesuaian		Kecepatan arus bebas
				Hambatan samping	Ukuran kota	



	FV <sub>0</sub> Tabel. B-1:1 (km/jam)	Fv <sub>0</sub> Tabel. B-2:1 (km/jam)	(2) + (3) (km/jam)	FFV <sub>SF</sub> Tabel. B-3:1 atau 2	FFV <sub>CS</sub> Tabel. B-4:1	FV (4) × (5) × (6) (km/jam)
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.08	0.97	0.98	3183

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1563	0.49	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

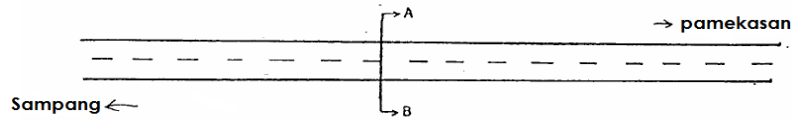
2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

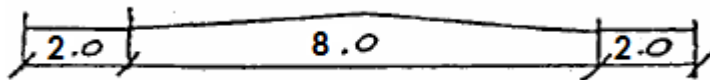
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tota l	Rata-rata
--	--------	--------	--------	-----------

Lebar jalur lalu-lintas rata-rata (Wc, m):	4	4	8	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5	Arah	kend/jam	smp/jam
1,1	emp arah 1	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
1,2	emp arah 2	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.5			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah	kend/jam	smp/jam

	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	912	912	114	149	22	34	105	263	1710	855	0.47	2864	2212
4	2	1133	1133	114	149	17	25	153	381	1751	875	0.53	3168	2564
5	1+2	2045	2045	228	297	39	59	258	645	3461	1731		6032	4776
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1,2})$		47.48	
7											Faktor-smp F <sub>smp</sub> =			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			

~ IRINGAN

Periode waktu:

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

**Kecepatan arus bebas kendaraan ringan**

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.08	0.97	0.98	3183

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	4776	1.50	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

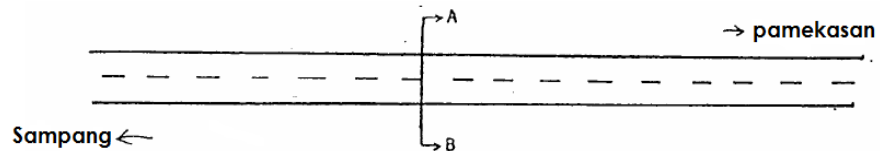
Soal/Arah	Derajat riringan DB Gbr. D:3:1
30)	31)
1	0.79

7 januari 2018

Formulir IR-1

<b>JALAN LUAR KOTA</b> <b>FORMULIR IR-1: DATA MASUKAN</b>  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode	
	Segmen	Antara Sampang dan Pamekasan	Segmen:	
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

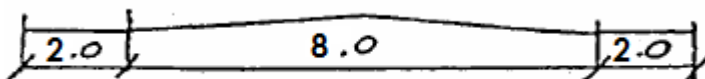
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tot al	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	4	4	8	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

<b>JALAN LUAR PERKOTAAN</b> <b>FORMULIR IR-2 DATA MASUKAN</b> <b>~ ARUS LALU LINTAS</b> <b>~ HAMBATAN SAMPING</b>	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5	
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.5	

2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	621	621	89	115	11	17	121	303	1640	820	0.50	2481	1875
4	2	630	630	75	97	21	31	89	224	1677	839	0.50	2492	1820
5	1+2	1251	1251	163	212	32	48	210	526	3317	1659		4974	3695
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1,2})$		49.89	
7											Faktor-smp F <sub>smp</sub> =			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			



**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Ara h	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub>  (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas  FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	-3	62	0.97	0.97	58

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Ara h	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas  C  smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C- 2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.08	0.97	0.98	3183

**Kecepatan kendaraan ringan**

Soal/Ara h	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	3695	1.16	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Ara h	Derajat ringan DB

	Gbr. D:3:1
30)	31)
1	0.79



8		RT											
9		Tot al											
10	Jl. Minor total A + C		66	66	1	1.3	169	84.4	236	152			
11	Jl. Utama B		LT										
12			ST	412	412	71	92	810	405	1293	909		
13			RT	32	32	0	0	88	44.2	121	76		
14			Tot al	444	444	71	92	899	449	1414	985		
15	Jl. Utama D		LT	9	9	0	0	64	32	73	41		
16			ST	367	367	57	74	757	379	1181	820		
17			RT										
18			Tot al	376	376	57	74	821	411	1254	861		
19	Jl. Utama total B + D			820	820	128	166	1720	860	2668	1846		
20	Utama + Minor		LT	43	43	0	0	157	78	200	122		
21			ST	779	779	128	166	1567	784	2474	1729		
22			RT	64	64	1	1.3	164	82	230	148		
23	Utama + Minor total			886	886	129	168	1889	944	2904	1998		
24													
										Rasio Jl. Minor / (Jl. Utama + minor) total	0.076	UM / MV:	0

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-09.00 Pagi

**1. Lebar pendekat dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
I	3	2	2	5	5	5	3.5	2	2	322	


## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekat rata-rata  $F_w$ Gbr. B-3:1  21)	Median jalan utama  $F_M$ Tbl. B-4:1  22)	Ukuran kota  $F_{CS}$ Tbl. B-5:1  23)	Hambatan samping  $F_{RSU}$ Tbl. B-6:1  24)	Belok kiri  $F_{LT}$ Gbr. B-7:1  25)	Belok kanan  $F_{RT}$ Gbr. B-8:1  26)	Rasio minor/tot al  $F_M$ Gbr. B-9:1  27)	
1	2700	0.996	1	0.94	0.94	0.94	1.02	1.11	2520

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10  30)	Derajat kejenuhan  (DS) (30) / (28)  31)	Tundaan lalu lintas simpang  $DT_i$ Gbr. C-2:1  32)	Tundaan lalu lintas Jl.Utama  $D_{MA}$ Gbr. C-2:2  33)	Tundaan lalu lintas Jl.Minor  $D_{MI}$  34)	Tundaan geometri k simpang  (DG)  35)	Tundaan simpang  (D) (32) + (35)  36)	Peluang antrian  (QP%) Gbr. C-3:1  37)	Sasaran    38)
1	1998	0.79	8.94	6.59	38	3.88	12.82	50.47	
								25.37	

Catatan mengenai perbandingan dengan sasaran (39)



10	Jl. Minor total A + C		10	10	1	1	125	62.6	137	74			
11	Jl. Utama B		LT										
12			ST	299	299	44	58	767	384	1110	740		
13			RT	5	5	0	0	59	29.4	64	35	0.04	
14			Tot al	304	304	44	58	826	413	1174	775		
15	Jl. Utama D		LT	6	6	2	2.6	62	31	70	40	0.05	
16			ST	265	265	45	58	716	358	1026	682		
17			RT										
18			Tot al	271	271	47	61	778	389	1096	721		
19	Jl. Utama total B + D		575	575	91	118	1605	802	2271	1496			
20	Utama + Minor		LT	10	10	2	3	120	60	133	73	0.05	
21			ST	564	564	89	116	1484	742	2137	1421		
22			RT	11	11	1	1.3	126	63	138	76	0.05	
23	Utama + Minor total		586	586	92	119	1730	865	2407	1570	0.09		
24										Rasio Jl. Minor / (Jl. Utama + minor) total	0.047	UM / MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-08.00 Pagi

**1. Lebar pendekat dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2		2	5	5	5	3.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekat rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>M</sub> Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.91	1.05	1.14	2583

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>MI</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1570	0.61	6.21	4.64	38	3.72	9.93	32.56	
								15.47	

Catatan mengenai perbandingan dengan sasaran (39)







## 2. Kapasitas

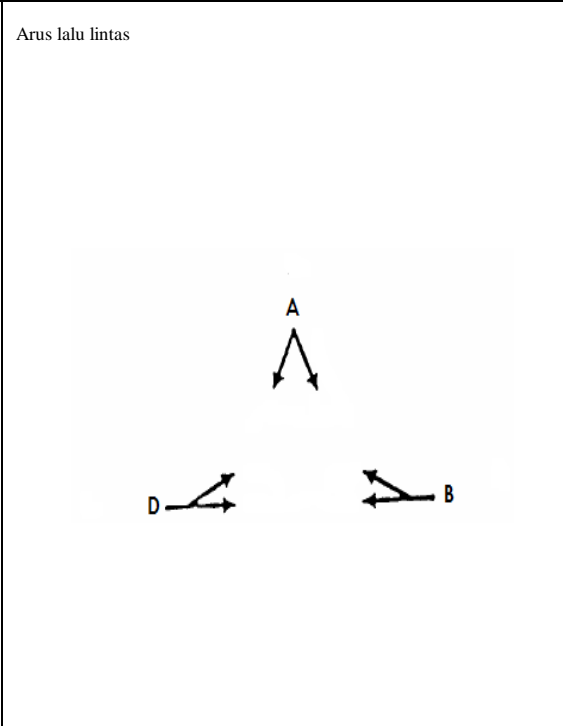
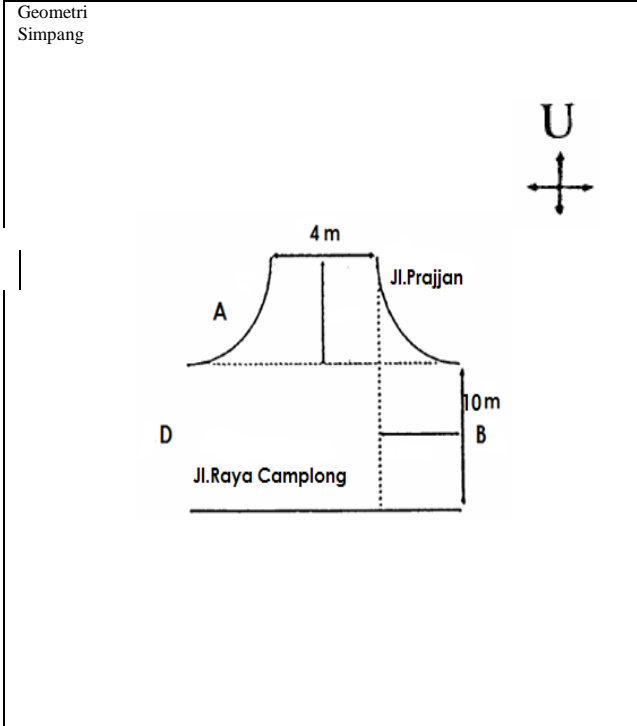
Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_{MI}$ Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.94	1.04	1.13	2628

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan $(DS)$ (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang $(D)$ (32) + (35) 36)	Peluang antrian $(QP\%)$ Gbr. C-3:1 37)	Sasaran 38)
1	2036	0.77	8.60	6.35	47	3.85	12.46	48.40	
								24.26	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode: Pagi	07.00-09.00



Median jalan utama L

1	KOMPOSISI LALU LINTAS											
	ARUS LALU LINTAS	Arah	LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	Sepeda motor MC kend/jam	emp = 0.5 smp/jam	Kendaraan bermotor total MV kend/jam smp/jam		Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	30	30	1	1.3	60	30.0	91	61.3	0.40	
3		ST										
4		RT	10	10	1	1.3	165	82.4	176	93	0.60	
5		Total	40	40	0	2.6	225	112.4	267	155		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Total										
10	Jl. Minor total A + C		40	40	0	2.6	225	112.4	267	155		

11	Jl. Utama B	LT										
12		ST	281	281	50	65	745	372	1076	719		
13		RT	18	18	1	1.3	64	32.0	83	51	0.07	
14		Tota 1	299	299	51	66	RT	404	1159	770		
15	Jl. Utama D	LT	15	15	5	7	80	40.0	100	62	0.08	
16		ST	274	274	57	74	745	372	1076	720		
17		RT										
18		Tota 1	289	289	62	80	825	412	1176	782		
19	Jl. Utama total B + D		588	588	113	146	825	817	2335	1552		
20	Utama + Minor	LT	45	45	6	8	140	70	191	123	0.07	
21		ST	555	555	106	138	1490	745	2152	1439		
22		RT	28	28	2	3	229	114	259	145	0.08	
23	Utama + Minor total		628	628	115	149	1859	929	2601	1707	0.16	
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.091	UM / MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: - ANALISA	Tanggal:	6 januari 2018	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-08.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2	2	2	5	5	5	3.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.96	1.01	1.09	2510

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl.Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl.Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1707	0.68	7.12	5.30	25	3.83	10.95	38.79	
								18.99	

Catatan mengenai perbandingan dengan sasaran (39)



8		RT											
9		Tot al											
10	Jl. Minor total A + C		154	154	3	4	346	173.1	503	331			
11	Jl. Utama B		LT										
12			ST	958	958	201	261	1662	831	2821	2050		
13			RT	74	74	0	0	181	90.7	256	165	0.07	
14			Tot al	1032	1032	201	261	1843	922	3077	2215		
15	Jl. Utama D		LT	21	21	0	0	131	66	152	87	0.04	
16			ST	853	853	163	212	1553	776	2569	1841		
17			RT										
18			Tot al	874	874	163	212	1684	842	2721	1928		
19	Jl. Utama total B + D			1906	1906	364	473	3527	1764	5797	4143		
20	Utama + Minor		LT	101	101	0	0	322	161	422	262	0.06	
21			ST	1811	1811	364	473	3214	1607	5389	3891		
22			RT	149	149	3	4	337	169	489	321	0.07	
23	Utama + Minor total			2060	2060	367	477	3873	1937	6301	4474	0.13	
24				Rasio Jl. Minor / (Jl. Utama + minor) total						0.074	UM / MV:	0	

2023 setelah pelabuan taddan beroperasi

Jl. Mutiara

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Diponegoro	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Mutiara	Hambatan sampang:	Sedang
	Soal:		Periode:	07.00-08.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang  Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
I	3	2	2	5	5	5	3.5	2	2	322	




## 2. Kapasitas

Pilihan	Kapasitas Dasar C <sub>0</sub> smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam  28)
		Lebar pendekatan rata-rata F <sub>w</sub> Gbr. B-3:1 21)	Median jalan utama F <sub>M</sub> Tbl. B-4:1 22)	Ukuran kota F <sub>CS</sub> Tbl. B-5:1 23)	Hambatan samping F <sub>RSU</sub> Tbl. B-6:1 24)	Belok kiri F <sub>LT</sub> Gbr. B-7:1 25)	Belok kanan F <sub>RT</sub> Gbr. B-8:1 26)	Rasio minor/total F <sub>Mt</sub> Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.93	1.02	1.11	2519

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mt</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4474	1.78	-10.32	-10.15	-12	4.00	-6.32	323.28	
								139.97	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_M$ Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.91	1.05	1.14	2585

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10  30)	Derajat kejenuhan  (DS) (30) / (28)  31)	Tundaan lalu lintas simpang $DT_I$ Gbr. C-2:1  32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2  33)	Tundaan lalu lintas Jl. Minor $D_{MI}$  34)	Tundaan geometrik simpang (DG)  35)	Tundaan simpang (D) (32) + (35)  36)	Peluang antrian (QP%) Gbr. C-3:1  37)	Sasaran    38)
1	3475	1.34	-3928.91	69.05	-88920	4.00	-3924.91	156.67	
								74.92	

Catatan mengenai perbandingan dengan sasaran (39)





## 2. Kapasitas

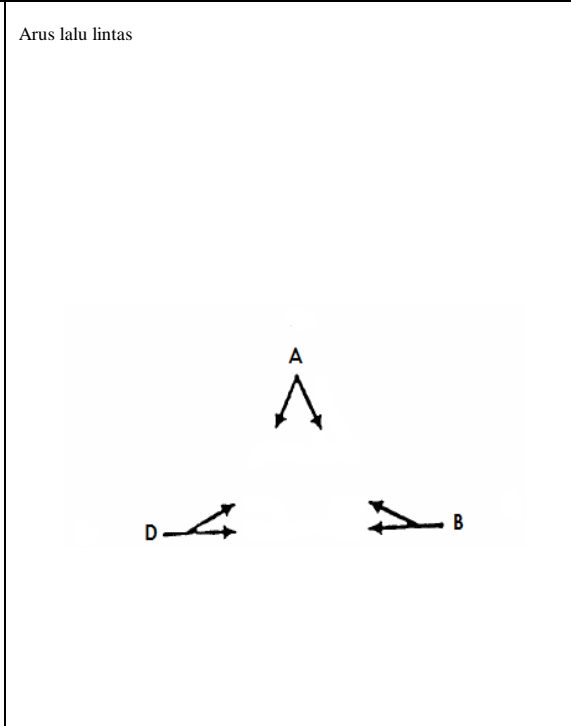
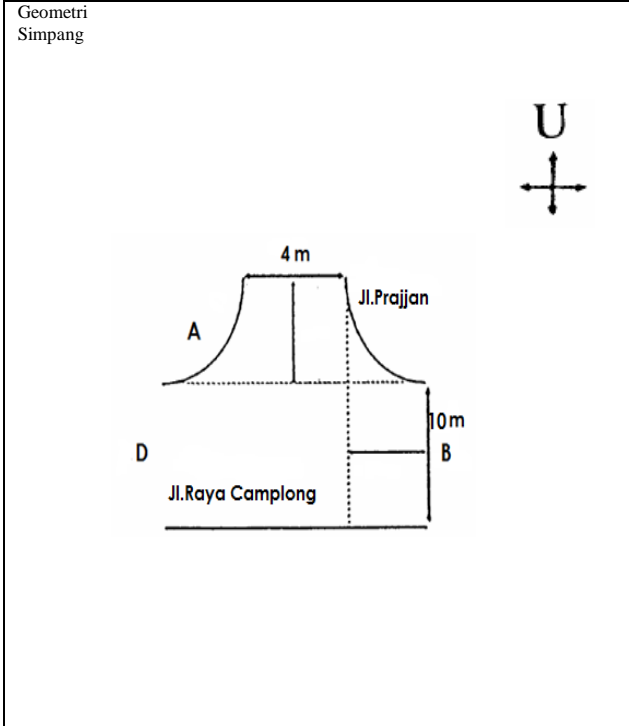
Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1  20)	Faktor penyesuaian kapasitas (F)							Kapasitas  C) smp/jam  28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/total $F_{MI}$ Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.94	1.04	1.13	2619

## 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan $(DS)$ (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang $(D)$ (32) + (35) 36)	Peluang antrian $(QP\%)$ Gbr. C-3:1 37)	Sasaran 38)
1	4586	1.75	-11.10	-11.05	-12	4.00	-7.10	310.98	
								135.43	

Catatan mengenai perbandingan dengan sasaran (39)

SIMPANG TAK BERSINYAL  FORMULIR USIG-1:  ~ GEOMETRI  ~ ARUS LALU LINTAS	Tanggal: 2023	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode: Pagi	07.00-09.00



Median jalan utama L

1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
	ARUS LALU LINTAS	Arah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			
			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)
2	Jl. Minor A	LT	70	70	3	4	123	61.5	196	135.0	0.41	
3		ST										
4		RT	23	23	3	4	338	169.0	364	195	0.59	
5		Tot al	92	92	6	8	461	230.6	559	330		
6	Jl. Minor C	LT										
7		ST										
8		RT										
9		Tot al										
10	Jl. Minor total A + C		92	92	6	8	461	230.6	559	330		



11	Jl. Utama B	LT										
12		ST	654	654	142	184	1528	764	2324	1602		
13		RT	42	42	3	4	131	65.6	176	111	0.06	
14		Tot al	696	696	145	188	1659	829	2500	1713		
15	Jl. Utama D	LT	35	35	15	19	164	82.0	214	136	0.08	
16		ST	637	637	161	210	1528	764	2326	1610		
17		RT										
18		Tot al	672	672	176	229	1692	846	2539	1746		
19	Jl. Utama total B + D		1368	1368	320	416	3351	1675	5039	3460		
20	Utama + Minor	LT	105	105	17	23	287	144	409	271	0.07	
21		ST	1291	1291	303	394	3055	1528	4649	3213		
22		RT	64	64	6	8	469	235	540	307	0.08	
23	Utama + Minor total		1460	1460	326	424	3812	1906	5598	3790	0.15	
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.087	UM/ MV:	0

7 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: - ANALISA	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Kota:	Sampang	Ukuran Kota:	0,9 J Org
	Jl. Utama:	Jl. Raya Camplong	Lingkungan jalan:	Kom
	Jl. Minor:	Jl. Prajan	Hambatan samping:	Sedang
	Soal:		Periode:	07.00-08.00 Pagi

**1. Lebar pendekatan dan tipe simpang**

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_1$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2	2	2	5	5	5	3.5	2	2	322

**2. Kapasitas**

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1 20)	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam 28)
		Lebar pendekatan rata-rata $F_w$ Gbr. B-3:1 21)	Median jalan utama $F_M$ Tbl. B-4:1 22)	Ukuran kota $F_{CS}$ Tbl. B-5:1 23)	Hambatan samping $F_{RSU}$ Tbl. B-6:1 24)	Belok kiri $F_{LT}$ Gbr. B-7:1 25)	Belok kanan $F_{RT}$ Gbr. B-8:1 26)	Rasio minor/totol $F_M$ Gbr. B-9:1 27)	
1	2700	0.996	1	0.94	0.94	0.96	1.02	1.10	2524

### 3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang $DT_1$ Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama $D_{MA}$ Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor $D_{MI}$ 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	3790	1.50	-31.39	-43.99	59	4.00	-27.39	207.19	
								95.65	

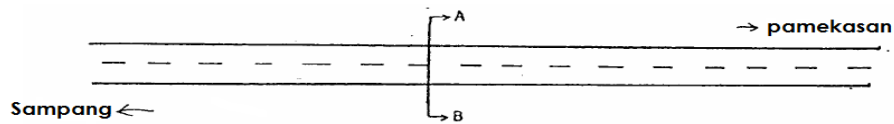
Catatan mengenai perbandingan dengan sasaran (39)

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

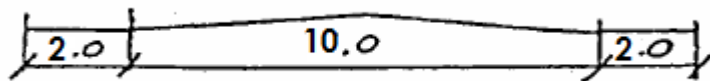
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	5	5	10	
Lebar bahu efektif (Ws, m):	2	2	4	2

Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi Luar	A Dalam	Sisi Dalam	B Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4	Arah %	kend/jam	smp/jam
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	392	392	49	64	12	18	20	50	834	334	0.48	1307	858
4	2	488	488	49	64	9	14	29	73	854	342	0.52	1428	979
5	1+2	880	880	98	127	21	32	49	123	1688	675		2736	1836

6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun	Pemisahan arah, $SP=Q_1/(Q_{1,2})$	47.79
7		Faktor-smp $F_{smp}$	

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur F <sub>v0</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{sf}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>sp</sub> Tabel. C-3:1	Hambatan samping FC <sub>sf</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.21	0.97	0.98	3566

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1836	0.51	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)

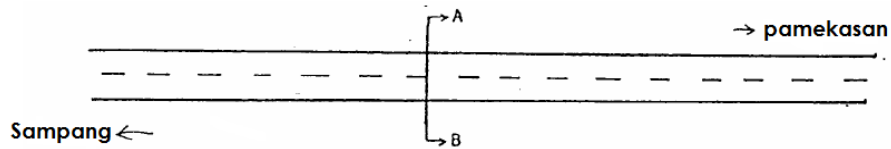
1	0.79
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7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen	Antara Sampang dan Pamekasan		
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

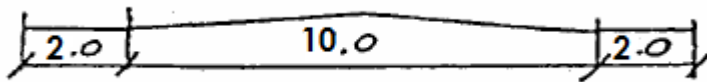
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tot al	Rata-rata
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Lebar jalur lalu-lintas rata-rata (Wc, m):	5	5	10	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4	Arah %	kend/jam	smp/jam
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	267	267	38	49	6	9	23	58	800	320	0.50	1134	703
4	2	271	271	32	42	11	17	17	43	818	327	0.50	1149	699



5	1+2	538	538	70	91	17	26	40	100	1617	647		2283	1402
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1,2})$		49.67		
7										Faktor-smp $F_{smp} =$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan pasar/perniagaan	Tinggi	H
> 350		Sangat tinggi	VH

7 Januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 Januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Aras	Kecepatan arus bebas dasar	faktor penyesuaian untuk lebar jalur	$FV_0 + FV_w$	Faktor penyesuaian		Kecepatan arus bebas
				Hambatan samping	Ukuran kota	

	FV <sub>0</sub> Tabel. B-1:1 (km/jam)	Fv <sub>0</sub> Tabel. B-2:1 (km/jam)	(2) + (3) (km/jam)	FFV <sub>SF</sub> Tabel. B-3:1 atau 2	FFV <sub>CS</sub> Tabel. B-4:1	FV (4) × (5) × (6) (km/jam)
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.21	0.97	0.98	3566

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1402	0.39	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

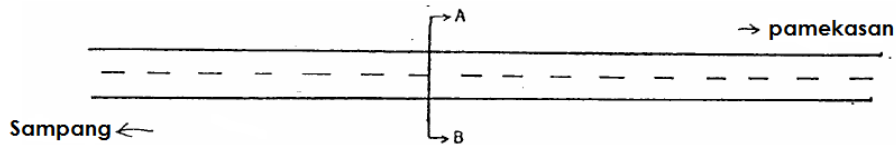
2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

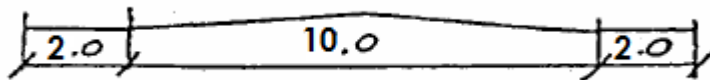
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tota l	Rata-rata
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Lebar jalur lalu-lintas rata-rata (Wc, m):	5	5	10	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4	Arah	kend/jam	smp/jam
1,1	emp arah 1	LV:	I	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	I	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah	kend/jam	smp/jam

	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	912	912	114	149	22	34	105	263	1710	684	0.47	2864	2041
4	2	1133	1133	114	149	17	25	153	381	1751	700	0.53	3168	2389
5	1+2	2045	2045	228	297	39	59	258	645	3461	1385		6032	4430
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1,2})$		47.48	
7											Faktor-smp F <sub>smp</sub> =			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan pasar/perniagaan	Tinggi	H
> 350		Sangat tinggi	VH

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			

~ IRINGAN

Periode waktu:

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

**Kecepatan arus bebas kendaraan ringan**

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur F <sub>v0</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.21	0.97	0.98	3566

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	4430	1.24	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

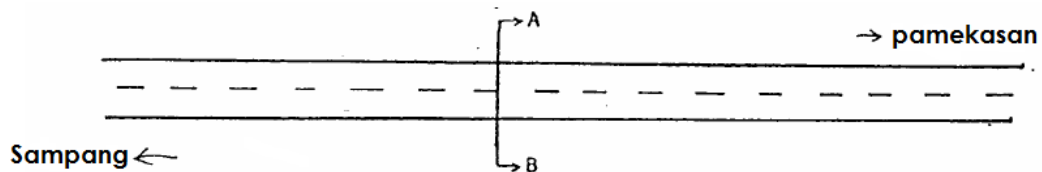
Soal/Arah	Derajat riringan DB Gbr. D:3:1
30)	31)
1	0.79

7 januari 2018

Formulir IR-1

<b>JALAN LUAR KOTA</b> <b>FORMULIR IR-1: DATA MASUKAN</b>  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode	
	Segmen	Antara Sampang dan Pamekasan	Segmen:	
	Kelas admin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

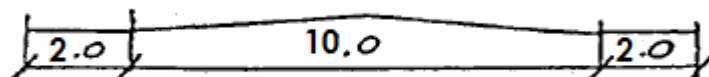
Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Tot al	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	5	5	10	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh:	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Baris	Tipe kend	Kend.ringan	Menengah berat	Bis besar	Truk besar	Sepeda motor	Arus total Q
1,1	emp arah 1	LV: 1	MHV: 1.3	LB: 1.5	LT: 2.5	MC: 0.4	
1,2	emp arah 2	LV: 1	MHV: 1.3	LB: 1.5	LT: 2.5	MC: 0.4	



2	Arah	Kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	kend/jam	smp/jam	Arah %	kend/jam	smp/jam
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	621	621	89	115	11	17	121	303	1640	656	0.50	2481	1711
4	2	630	630	75	97	21	31	89	224	1677	671	0.50	2492	1653
5	1+2	1251	1251	163	212	32	48	210	526	3317	1327		4974	3364
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun										Pemisahan arah, $SP=Q_1/(Q_{1,2})$		49.89	
7											Faktor-smp F <sub>smp</sub> =			

### Kelas hambatan samping

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

#### 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

#### 2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

JALAN KOTA  FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS  ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

**Kecepatan arus bebas kendaraan ringan**

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Ara h	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub>  (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

**Kapasitas**

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Ara h	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C- 2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.21	0.97	0.98	3566

**Kecepatan kendaraan  
ringan**

Soal/Ara h	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan V <sub>LV</sub> Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	3364	0.94	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan
	DB Gbr. D:3:1
30)	31)
1	0.79

2018 sesudah pelabuhan taddan beroperasi

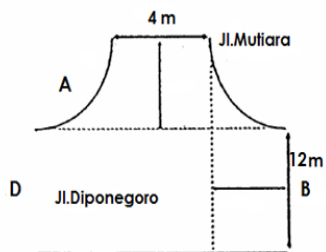
Jl. Mutiara

3 januari 2018

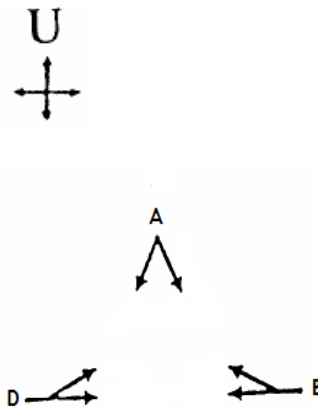
FORMULIR USIG-1

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 3 januari 2018	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Diponegoro	
	Jalan minor: Jl. Mutiara	
	Soal: Contoh	Periode: 07.00-08.00 Pagi

Geometri Simpang



Arus lalu lintas



Median jalan utama		L											
1	KOMPOSISI LALU LINTAS			LV%		HV%		MC%		Faktor-smp		Faktor-k	Kend. tak bermotor UM kend/jam
	ARUS LALU LINTAS		Arah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			
	Pendekat			kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)		
2	Jl. Minor A		LT	34	34	0	0	93	46.4	127	80.7	0.53	
3			ST										
4			RT	32	32	1	1.3	76	38	109	71	0.47	
5			Tot al	66	66	1	1.3	169	84.4	236	152		
6	Jl. Minor C		LT										
7			ST										
8			RT										
9			Tot al										
10	Jl. Minor total A + C			66	66	1	1.3	169	84.4	236	152		
11	Jl. Utama B		LT										
12			ST	412	412	71	92	810	405	1293	909		
13			RT	32	32	0	0	88	44.2	121	76	0.08	
14			Tot al	444	444	71	92	899	449	1414	985		
15	Jl. Utama D		LT	9	9	0	0	64	32	73	41	0.05	
16			ST	367	367	57	74	757	379	1181	820		
17			RT										
18			Tot al	376	376	57	74	821	411	1254	861		
19	Jl. Utama total B + D			820	820	128	166	1720	860	2668	1846		
20	Utama + Minor		LT	43	43	0	0	157	78	200	122	0.06	
21			ST	779	779	128	166	1567	784	2474	1729		
22			RT	64	64	1	1.3	164	82	230	148	0.07	
23	Utama + Minor total			886	886	129	168	1889	944	2904	1998	0.13	
24				Rasio Jl. Minor / (Jl. Utama + minor) total							0.076	UM / MV:	0

3 januari 2018

FORMULIR USIG-II

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal: <i>3 januari 2018</i>	Ditangani oleh: <i>SBL</i>
	Kota: <i>Sampang</i>	Ukuran Kota: <i>0,9 J Org</i>
	Jl. Utama: <i>Jl. Diponegoro</i>	Lingkungan jalan: <i>Kom</i>
	Jl. Minor: <i>Jl. Mutiara</i>	Hambatan samping: <i>Sedang</i>
	Soal:	Periode: <i>07.00-09.00 Pagi</i>

### 1. Lebar pendekatan dan tipe simpang

Pilihan	Jumlah lengan simpang	Lebar pendekatan (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekatan rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2		2	6	6	6	4	2	4	324

### 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam
		Lebar pendekatan rata-rata	Median jalan utama	Ukuran kota	Hambatan samping	Belok kiri	Belok kanan	Rasio minor/total	
		$F_w$ Tbl. B-3:1	$F_M$ Tbl. B-4:1	$F_{CS}$ Tbl. B-5:1	$F_{RSU}$ Tbl. B-6:1	$F_{LT}$ Tbl. B-7:1	$F_{RT}$ Tbl. B-8:1	$F_{MI}$ Tbl. B-9:1	
	20)	21)	22)	23)	24)	25)	26)	27)	28)
1	3200	0.878	1	0.94	0.94	0.94	1.02	1.52	3628

### 3. Perilaku lalu lintas

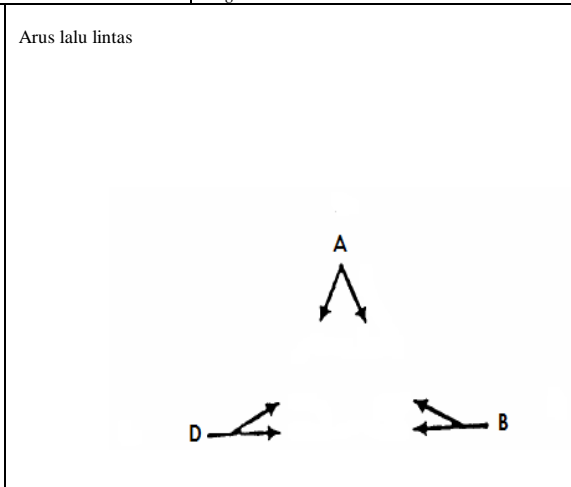
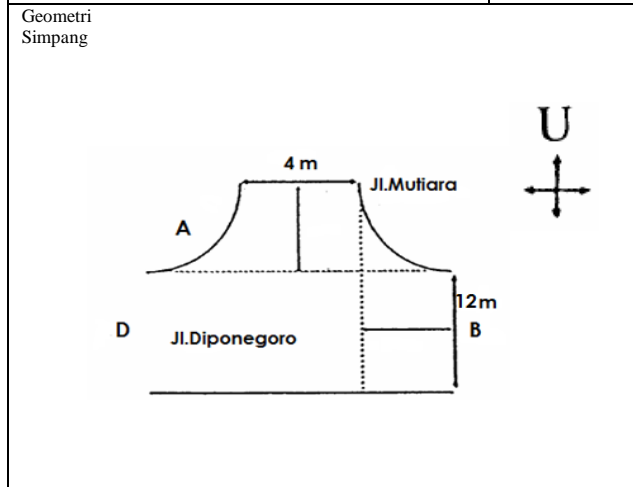
Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mi</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	1998	0.55	5.62	4.20	23	3.73	9.36	28.23	
								12.99	

Catatan mengenai perbandingan dengan sasaran (39)

7 januari 2018

FORMULIR USIG-1

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 7 januari 2018	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Diponegoro	
	Jalan minor: Jl. Mutiara	
	Soal: Contoh	Periode: 07.00-08.00 Pagi



Median jalan utama		L											
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k		
	ARUS LALU LINTAS		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor	
	Pendekat	Arah	kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	UM kend/jam	
			1)	2)	3)	4)	5)	6)	7)	8)	9)		10)
2	Jl. Minor A	LT	4	4	0	0	58	29.1	63	33.4	0.45		
3		ST											
4		RT	6	6	1	1.3	67	33.5	74	41	0.55		
5		Tot al	10	10	1	1.3	125	62.6	137	74			
6	Jl. Minor C	LT											
7		ST											
8		RT											
9		Tot al											
10	Jl. Minor total A + C		10	10	1	1	125	62.6	137	74			
11	Jl. Utama B	LT											
12		ST	299	299	44	58	767	384	1110	740			
13		RT	5	5	0	0	59	29.4	64	35	0.04		
14		Tot al	304	304	44	58	826	413	1174	775			
15	Jl. Utama D	LT	6	6	2	2.6	62	31	70	40	0.05		
16		ST	265	265	45	58	716	358	1026	682			
17		RT											
18		Tot al	271	271	47	61	778	389	1096	721			
19	Jl. Utama total B + D		575	575	91	118	1605	802	2271	1496			
20	Utama + Minor	LT	10	10	2	3	120	60	133	73	0.05		
21		ST	564	564	89	116	1484	742	2137	1421			
22		RT	11	11	1	1.3	126	63	138	76	0.05		
23	Utama + Minor total		586	586	92	119	1730	865	2407	1570	0.09		
24			Rasio Jl. Minor / (Jl. Utama + minor) total							0.047	UM / MV:	0	





	(Q) smp/jam USIG-1 Brs. 23-kol 10 30)	kejenuhan (DS) (30) / (28) 31)	lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1 32)	lalu lintas Jl.Utama D <sub>MA</sub> Gbr. C- 2:2 33)	lalu lintas Jl.Minor D <sub>Mi</sub> 34)	geometri k simpang (DG) 35)	simpang (D) (32) + (35) 36)	antrian (QP%) Gbr. C- 3:1 37)	38)
1	1570	0.40	4.13	3.08	25	3.57	7.70	19.00	
								7.72	

Catatan mengenai perbandingan dengan sasaran (39)

simpang jl. Prajjan

3 januari 2018

FORMULIR USIG-I

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 3 januari 2018	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Raya Camplong	
	Jalan minor: Jl. Prajjan	
	Soal: Contoh	Periode: Pagi 07.00-09.00
Geometri Simping 	Arus lalu lintas 	

Median jalan utama		L											
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k		
	ARUS LALU LINTAS		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor	
	Pendekat	Arah	kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	UM kend/jam	
			1)	2)	3)	4)	5)	6)	7)	8)	9)		10)
2	Jl. Minor A	LT	32	32	2	2.6	57	28.5	91	63.1	0.56		
3		ST											
4		RT	14	14	0	0	72	35.8	86	50	0.44		
5		Tot al	46	46	2	2.6	129	64.3	177	113			
6	Jl. Minor C	LT											
7		ST											
8		RT											
9		Tot al											
10	Jl. Minor total A + C		46	46	2	2.6	129	64.3	177	113			
11	Jl. Utama B	LT											
12		ST	466	466	71	92	696	348	1232	905			
13		RT	23	23	4	5.2	57	28.5	84	57	0.06		
14		Tot al	489	489	75	97	753	377	1316	962			
15	Jl. Utama D	LT	21	21	0	0	88	44.0	109	65	0.07		
16		ST	440	440	57	74	763	382	1261	896			
17		RT											
18		Tot al	461	461	57	74	851	426	1370	961			
19	Jl. Utama total B + D		950	950	132	171	1605	802	2686	1923			
20	Utama + Minor	LT	53	53	2	2.6	145	72	200	128	0.06		
21		ST	905	905	128	166	1460	730	2493	1801			
22		RT	37	37	4	5.2	129	64	170	106	0.05		
23	Utama + Minor total		996	996	134	174	1733	867	2863	2036	0.12		
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.055	UM / MV:	0	



	(Q) smp/jam USIG-1 Brs. 23-kol 10 30)	kejenuhan (DS) (30) / (28) 31)	lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1 32)	lalu lintas Jl.Utama D <sub>MA</sub> Gbr. C- 2:2 33)	lalu lintas Jl.Minor D <sub>Mi</sub> 34)	geometri k simpang (DG) 35)	simpang (D) (32) + (35) 36)	antrian (QP%) Gbr. C- 3:1 37)	38)
1	2036	0.52	5.34	3.99	28	3.69	9.03	26.32	
								11.89	

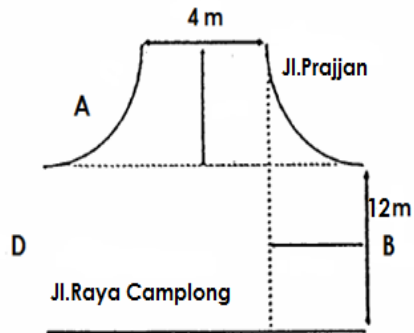
Catatan mengenai perbandingan dengan sasaran (39)

7 januari 2018

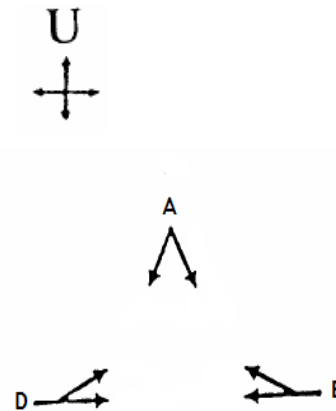
FORMULIR  
USIG-I

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 2018	7 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Raya Camplong		
	Jalan minor:	Jl. Prajjan		
	Soal:	Contoh	Periode:	07.00-09.00 Pagi

Geometri  
Simpang



Arus lalu lintas



Median jalan utama		L												
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k			
	ARUS LALU LINTAS		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor		
	Pendekat	Ar ah	kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	UM kend/jam		
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)			
2	Jl. Minor A		LT	30	30	1	1.3	60	30.0	91	61.3	0.40		
3			ST											
4			RT	10	10	1	1.3	165	82.4	176	93	0.60		
5			Tot al	40	40	0	2.6	225	112.4	267	155			
6	Jl. Minor C		LT											
7			ST											
8			RT											
9			Tot al											
10	Jl. Minor total A + C			40	40	0	2.6	225	112.4	267	155			
11	Jl. Utama B		LT											
12			ST	281	281	50	65	745	372	1076	719			
13			RT	18	18	1	1.3	64	32.0	83	51	0.07		
14			Tot al	299	299	51	66	825	404	1159	770			
15	Jl. Utama D		LT	15	15	5	7	80	40.0	100	62	0.08		
16			ST	274	274	57	74	745	372	1076	720			
17			RT											
18			Tot al	289	289	62	80	825	412	1176	782			
19	Jl. Utama total B + D			588	588	113	146	825	817	2335	1552			
20	Utama + Minor		LT	45	45	6	8	140	70	191	123	0.07		
21			ST	555	555	106	138	1490	745	2152	1439			
22			RT	28	28	2	3	229	114	259	145	0.08		
23	Utama + Minor total			628	628	115	149	1859	929	2601	1707	0.16		
24			Rasio Jl. Minor / (Jl. Utama + minor) total								0.091	UM / MV:	0	



	(Q) smp/jam USIG-1 Brs. 23-kol 10  30)	kejenuhan (DS) (30) / (28)  31)	lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1  32)	lalu lintas Jl.Utama D <sub>MA</sub> Gbr. C- 2:2  33)	lalu lintas Jl.Minor D <sub>MI</sub>  34)	geometri simpang (DG)  35)	simpang (D) (32) + (35)  36)	antrian (QP%) Gbr. C- 3:1  37)	38)
1	1707	0.48	4.87	3.63	17	3.72	8.59	23.26	
								10.13	

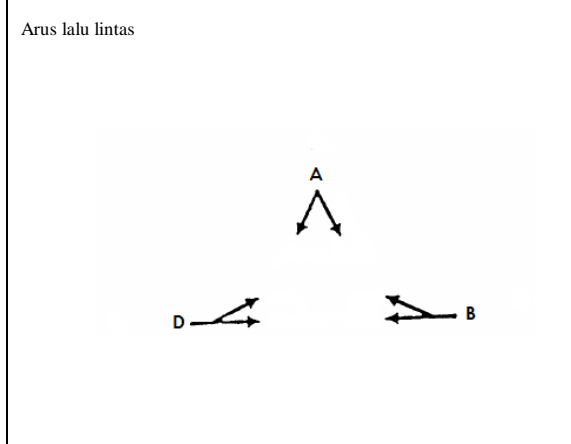
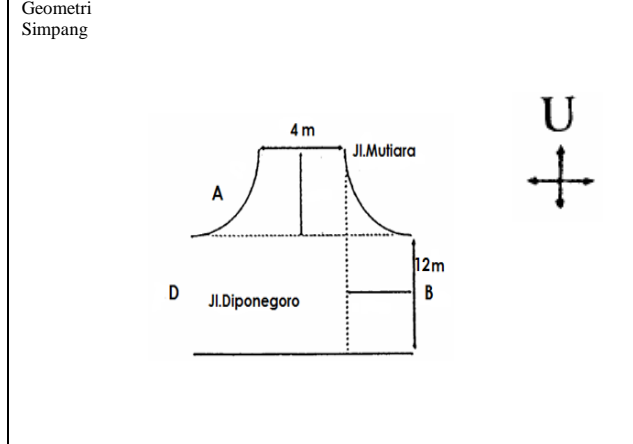
Catatan mengenai perbandingan dengan sasaran (39)

2023 setelah pelabuhan taddan beroperasi

Jl. Mutiara  
3 januari 2018

FORMULIR  
USIG-I

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 2023	3 januari	Ditangani oleh:	PHT
	Kota:	Sampang	Propinsi:	Jawa timur
	Jalan utama:	Jl. Diponegoro		
	Jalan minor:	Jl. Mutiara		
	Soal:	Contoh	Periode:	07.00-09.00 Pagi



Median jalan utama		L											
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k		Kend. tak bermotor UM kend/jam
	ARUS LALU LINTAS		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV				
	Pendekat	Arah	kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok		
1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)		
2	Jl. Minor A	LT	80	80	0	0	190	95.2	270	175.0	0.53		
3		ST											
4		RT	74	74	3	4	156	78	233	156	0.47		
5		Tot al	154	154	3	4	346	173.1	503	331			
6	Jl. Minor C	LT											
7		ST											
8		RT											
9		Tot al											
10	Jl. Minor total A + C		154	154	3	4	346	173.1	503	331			
11	Jl. Utama B	LT											
12		ST	958	958	201	261	1662	831	2821	2050			
13		RT	74	74	0	0	181	90.7	256	165	0.07		
14		Tot al	1032	1032	201	261	1843	922	3077	2215			
15	Jl. Utama D	LT	21	21	0	0	131	66	152	87	0.04		
16		ST	853	853	163	212	1553	776	2569	1841			
17		RT											
18		Tot al	874	874	163	212	1684	842	2721	1928			
19	Jl. Utama total B + D		1906	1906	364	473	3527	1764	5797	4143			
20	Utama + Minor	LT	101	101	0	0	322	161	422	262	0.06		
21		ST	1811	1811	364	473	3214	1607	5389	3891			
22		RT	149	149	3	4	337	169	489	321	0.07		
23	Utama + Minor total		2060	2060	367	477	3873	1937	6301	4474	0.13		
24			Rasio Jl. Minor / (Jl. Utama + minor) total							0.074	UM / MV:	0	





3. Perilaku lalu lintas

Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10	Derajat kejenuhan (DS) (30) / (28)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2	Tundaan lalu lintas Jl. Minor D <sub>Mi</sub>	Tundaan geometrik simpang (DG)	Tundaan simpang (D) (32) + (35)	Peluang antrian (QP%) Gbr. C-3:1	Sasaran
	30)	31)	32)	33)	34)	35)	36)	37)	38)
1	4474	1.23	46.64	24.80	320	4.00	50.64	126.77	
								62.02	

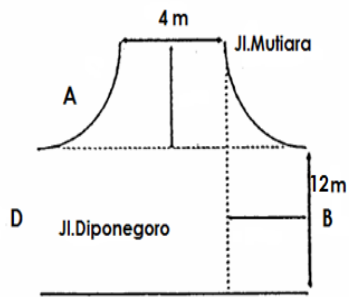
Catatan mengenai perbandingan dengan sasaran (39)

7 januari 2018

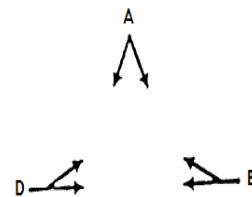
FORMULIR USIG-1

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 7 januari 2023	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Diponegoro	
	Jalan minor: Jl. Mutiara	
	Soal: Contoh	Periode: 07.00-09.00 Pagi

Geometri Simping



Arus lalu lintas



Median jalan utama		L											
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k		
	ARUS LALU LINTAS	Ar ah	Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor	
	Pendekat		kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	UM kend/jam	
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A	LT	10	10	0	0	119	59.7	129	69.8	0.45		
3		ST											
4		RT	14	14	3	4	137	69	154	86	0.55		
5		Tot al	24	24	3	4	257	128.4	284	156			
6	Jl. Minor C	LT											
7		ST											
8		RT											
9		Tot al											
10	Jl. Minor total A + C		24	24	3	4	257	128.4	284	156			
11	Jl. Utama B	LT											
12		ST	694	694	126	164	1574	787	2394	1645			
13		RT	12	12	0	0	120	60.2	133	73	0.04		
14		Tot al	707	707	126	164	1694	847	2527	1718			
15	Jl. Utama D	LT	14	14	6	7	127	64	147	85	0.05		
16		ST	617	617	127	165	1469	735	2213	1516			
17		RT											
18		Tot al	631	631	133	172	1596	798	2360	1601			
19	Jl. Utama total B + D		1337	1337	259	336	3291	1645	4886	3319			
20	Utama + Minor	LT	24	24	6	7	247	123	276	155	0.04		
21		ST	1311	1311	253	329	3043	1521	4607	3161			
22		RT	26	26	3	4	258	129	287	159	0.05		
23	Utama + Minor total		1361	1361	261	340	3547	1774	5170	3475	0.09		
24	Rasio Jl. Minor / (Jl. Utama + minor) total									0.045	UM / MV:	0	



	(Q) smp/jam USIG-1 Brs. 23-kol 10 30)	kejenuhan (DS) (30) / (28) 31)	lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1 32)	lalu lintas Jl.Utama D <sub>MA</sub> Gbr. C- 2:2 33)	lalu lintas Jl.Minor D <sub>Mi</sub> 34)	geometri k simpang (DG) 35)	simpang (D) (32) + (35) 36)	antrian (QP%) Gbr. C- 3:1 37)	38)
1	3475	0.89	11.15	8.07	76	4.00	15.15	62.75	
								31.80	

Catatan mengenai perbandingan dengan sasaran (39)

simpang jl. Prajjan

3 januari 2018

FORMULIR  
USIG-I

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 3 januari 2023	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Raya Camplong	
	Jalan minor: Jl. Prajjan	
	Soal: Contoh	Periode: 07.00-09.00 Pagi
Geometri Simpang 	Arus lalu lintas 	

Median jalan utama		L												
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k			
	ARUS LALU LINTAS		Ar ah		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV		Kend. tak bermotor	
	Pendekat		kend/jam	emp =	kend/jam	emp =	kend/jam	emp =	kend/jam	smp/jam	Rasio belok	UM kend/jam		
	1)		2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A		LT	74	74	6	7	117	58.4	197	140.2	0.57		
3			ST											
4			RT	32	32	0	0	147	73.4	179	106	0.43		
5			Tot al	107	107	6	7	264	131.9	376	246			
6	Jl. Minor C		LT											
7			ST											
8			RT											
9			Tot al											
10	Jl. Minor total A + C			107	107	6	7	264	131.9	376	246			
11	Jl. Utama B		LT											
12			ST	1082	1082	201	261	1428	714	2711	2057			
13			RT	53	53	11	15	117	58.4	182	127	0.06		
14			Tot al	1136	1136	212	276	1545	772	2892	2184			
15	Jl. Utama D		LT	50	50	0	0	180	90.2	230	140	0.06		
16			ST	1023	1023	163	212	1566	783	2751	2017			
17			RT											
18			Tot al	1072	1072	163	212	1746	873	2981	2157			
19	Jl. Utama total B + D			2208	2208	375	487	3291	1645	5873	4340			
20	Utama + Minor		LT	124	124	6	7	297	149	427	280	0.06		
21			ST	2105	2105	363	472	2993	1497	5461	4074			
22			RT	86	86	11	15	264	132	361	233	0.05		
23	Utama + Minor total			2315	2315	380	495	3554	1777	6249	4586	0.11		
24			Rasio Jl. Minor / (Jl. Utama + minor) total								0.054	UM / MV:	0	

SIMPANG TAK BERSINYAL FORMULIR USIG-II: ~ ANALISA	Tanggal: <i>3 januari 2023</i>	Ditangani oleh: <i>SBL</i>
	Kota: <i>Sampang</i>	Ukuran Kota: <i>0,9 J Org</i>
	Jl. Utama: <i>Jl. Raya Camplong</i>	Lingkungan jalan: <i>Kom</i>
	Jl. Minor: <i>Jl. Prajan</i>	Hambatan samping: <i>Sedang</i>
	Soal:	Periode: <i>07.00-09.00 Pagi</i>

### 1. Lebar pendekat dan tipe simpang

Pilihan	Jumlah lengan simpang	Lebar pendekat (m)							Jumlah lajur		Tipe simpang Tbl. B-1:1
		Jalan minor			Jalan utama			Lebar pendekat rata-rata $W_i$	Jalan minor	Jalan utama	
		$W_A$	$W_C$	$W_{AC}$	$W_B$	$W_D$	$W_{BD}$				
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
1	3	2		2	6	6	6	4	2	4	324

### 2. Kapasitas

Pilihan	Kapasitas Dasar $C_0$ smp/jam Tbl. B-2:1	Faktor penyesuaian kapasitas (F)							Kapasitas C) smp/jam
		Lebar pendekat rata-rata $F_w$ Tbl. B-3:1	Median jalan utama $F_M$ Tbl. B-4:1	Ukuran kota $F_{CS}$ Tbl. B-5:1	Hambatan samping $F_{RSU}$ Tbl. B-6:1	Belok kiri $F_{LT}$ Tbl. B-7:1	Belok kanan $F_{RT}$ Tbl. B-8:1	Rasio minor/total $F_{MI}$ Tbl. B-9:1	
1	3200	0.878	1	0.94	0.94	0.94	1.04	1.60	3900

### 3. Perilaku lalu lintas

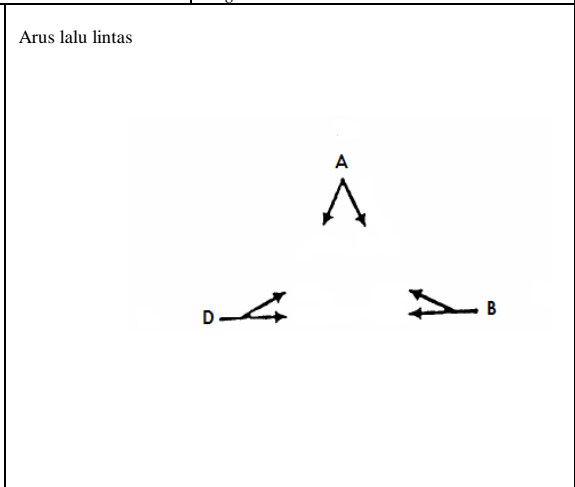
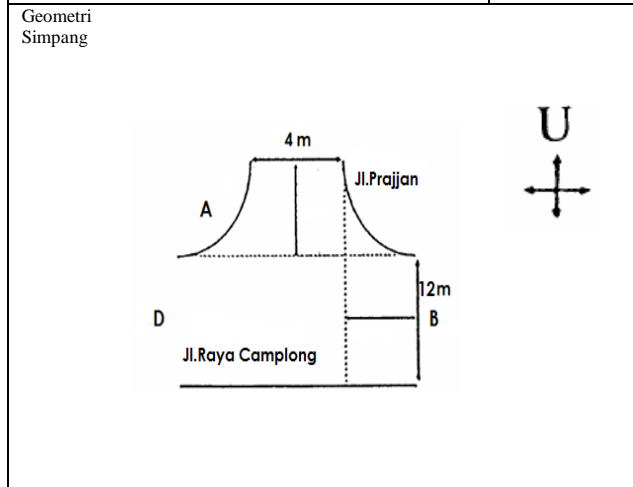
Pilihan	Arus lalu lintas (Q) smp/jam USIG-1 Brs. 23-kol 10 30)	Derajat kejenuhan (DS) (30) / (28) 31)	Tundaan lalu lintas simpang DT <sub>1</sub> Gbr. C-2:1 32)	Tundaan lalu lintas Jl. Utama D <sub>MA</sub> Gbr. C-2:2 33)	Tundaan lalu lintas Jl. Minor D <sub>Mi</sub> 34)	Tundaan geometrik simpang (DG) 35)	Tundaan simpang (D) (32) + (35) 36)	Peluang antrian (QP%) Gbr. C-3:1 37)	Sasaran 38)
1	4586	1.18	31.19	18.84	249	4.00	35.19	113.82	
								56.24	

Catatan mengenai perbandingan dengan sasaran (39)

7 januari 2018

FORMULIR USIG-1

SIMPANG TAK BERSINYAL FORMULIR USIG-1: ~ GEOMETRI ~ ARUS LALU LINTAS	Tanggal: 7 januari 2023	Ditangani oleh: PHT
	Kota: Sampang	Propinsi: Jawa timur
	Jalan utama: Jl. Raya Camplong	
	Jalan minor: Jl. Prajjan	
	Soal: Contoh	Periode: 07.00-09.00 Pagi





Median jalan utama		L												
1	KOMPOSISI LALU LINTAS		LV%		HV%		MC%		Faktor-smp		Faktor-k			
	ARUS LALU LINTAS		Arah		Kendaraan ringan LV		Kendaraan berat HV		Sepeda motor MC		Kendaraan bermotor total MV			Kend. tak bermotor
	Pendekat		kend/jam	emp = 1 smp/jam	kend/jam	emp = 1.3 smp/jam	kend/jam	emp = 0.5 smp/jam	kend/jam	smp/jam	Rasio belok	UM kend/jam		
	1)		2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	
2	Jl. Minor A		LT	70	70	3	4	123	61.5	196	135.0	0.41		
3			ST											
4			RT	23	23	3	4	338	169.0	364	195	0.59		
5			Tot al	92	92	6	8	461	230.6	559	330			
6	Jl. Minor C		LT											
7			ST											
8			RT											
9			Tot al											
10	Jl. Minor total A + C			92	92	6	8	461	230.6	559	330			
11	Jl. Utama B		LT											
12			ST	654	654	142	184	1528	764	2324	1602			
13			RT	42	42	3	4	131	65.6	176	111	0.06		
14			Tot al	696	696	145	188	1659	829	2500	1713			
15	Jl. Utama D		LT	35	35	15	19	164	82.0	214	136	0.08		
16			ST	637	637	161	210	1528	764	2326	1610			
17			RT											
18			Tot al	672	672	176	229	1692	846	2539	1746			
19	Jl. Utama total B + D			1368	1368	320	416	3351	1675	5039	3460			
20	Utama + Minor		LT	105	105	17	23	287	144	409	271	0.07		
21			ST	1291	1291	303	394	3055	1528	4649	3213			
22			RT	64	64	6	8	469	235	540	307	0.08		
23	Utama + Minor total			1460	1460	326	424	3812	1906	5598	3790	0.15		
24			Rasio Jl. Minor / (Jl. Utama + minor) total								0.087	UM / MV:	0	



	(Q) smp/jam USIG-1 Brs. 23-kol 10  30)	kejenuhan (DS) (30) / (28)  31)	lalu lintas simpang DT <sub>I</sub> Gbr. C-2:1  32)	lalu lintas Jl.Utama D <sub>MA</sub> Gbr. C- 2:2  33)	lalu lintas Jl.Minor D <sub>MI</sub>  34)	geometri k simpang (DG)  35)	simpang (D) (32) + (35)  36)	antrian (QP%) Gbr. C- 3:1  37)	38)
1	3790	1.05	17.75	12.11	45	4.00	21.75	88.50	
								44.51	

Catatan mengenai perbandingan dengan sasaran (39)

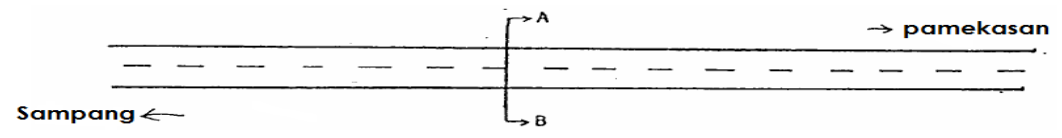
2018 sesudah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas admmin jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

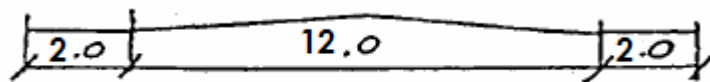
**Alinyemen Vertical**

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

**Penampang melintang**

Sisi A

Sisi B



	Sisi A	Sisi B	Total	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	6	6	12	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi A	Sisi B
	Luar Dalam	Dalam Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil	Kerikil
Beda tinggi dengan jalan (cm):	0,0	0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti	Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

3 januari 2018

Formulir  
IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=						
Komposisi %	LV%		HV%		LB%		LT%		MC%	

Data arus per jam menurut  
jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/ja m	kend/ jam	smp/jam	kend/ jam	smp/ja m	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	392	392	49	64	12	18	20	50	834	334	0.48	1307	858
4	2	488	488	49	64	9	14	29	73	854	342	0.52	1428	979
5	1+2	880	880	98	127	21	32	49	123	1688	675		2736	1836
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1+2})$			47.79	
7										Faktor-smp F $smp=$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi  
kejadianPerhitungan frekwensi berbobot kejadian per jam per  
200 m dari segmen  
jalan yang diamati, pada  
kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar Dekat perkantoran, kegiatan	Tinggi	H
> 350	pasar/perniagaan	Sangat tinggi	VH

2018 sesudah pelabuan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>SP</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	

10)	11)	12)	13)	14)	15)
1	3100	1.27	0.97	0.98	3743

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1836	0.49	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

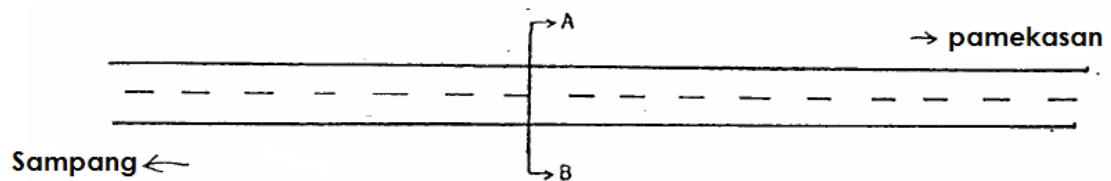
Soal/Arah	Derajat riringan DB Gbr. D:3:1
30)	31)
1	0.79

7 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen <i>Antara Sampang dan Pamekasan</i>			
	Kelas adminn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

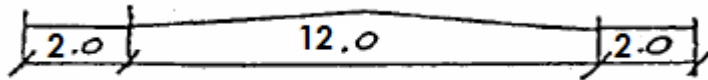
#### Alinyemen Vertical

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

#### Penampang melintang

Sisi A

Sisi B



	Sisi A	Sisi B	Total	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	6	6	12	
Lebar bahu efektif (Ws, m):	2	2	4	2

#### Kondisi Permukaan Jalan

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

#### Kondisi pengaturan lalu-lintas

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	



7 januari 2018

Formulir  
IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=						
Komposisi %	LV%		HV%		LB%		LT%		MC%	

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.4	Ara h %	kend/ jam	smp/j am
1,1	emp arah 1	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	I	MHV:	I.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	267	267	38	49	6	9	23	58	800	320	0.50	1134	703
4	2	271	271	32	42	11	17	17	43	818	327	0.50	1149	699
5	1+2	538	538	70	91	17	26	40	100	1617	647		2283	1402
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1,2})$		49.67		
7										Faktor-smp F $smp^=$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

## 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.27	0.97	0.98	3743

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	1402	0.37	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

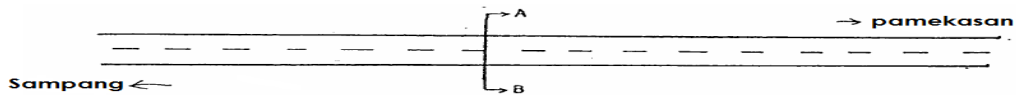
2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM ~ GEOMETRIK JALAN	Tanggal:	3 januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen dan Pamekasan	Antara Sampang		
	Kelas adminn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

Alinyemen horizontal



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

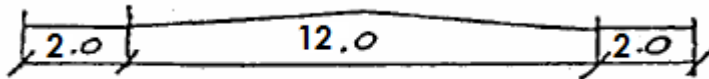
**Alinyemen Vertical**

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

**Penampang melintang**

Sisi A

Sisi B



	Sisi A	Sisi B	Tota l	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	6	6	12	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal),Beton,Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik,Sedang,Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur(aspal),Beton,Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas,Parkir,Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
Berat kotor maksimum	Tidak ada	

3 januari 2018

Formulir  
IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=						
Komposisi %	LV%		HV%		LB%		LT%		MC%	

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	912	912	114	149	22	34	105	263	1710	684	0.47	2864	2041
4	2	1133	1133	114	149	17	25	153	381	1751	700	0.53	3168	2389
5	1+2	2045	2045	228	297	39	59	258	645	3461	1385		6032	4430
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1+2})$			47.48	
7										Faktor-smp F $F_{smp} =$				

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

## 1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)		
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

2023 setelah pelabuhan taddan beroperasi

3 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	3 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FV <sub>0</sub> Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fv <sub>o</sub> Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) ×
		Lebar jalur FC <sub>w</sub> Tabel. C-2:1	Pemisahan arah FC <sub>sp</sub> Tabel. C-3:1	Hambatan samping FC <sub>SF</sub> Tabel. C-4:1 atau 2	

					(14)
10)	11)	12)	13)	14)	15)
1	3100	1.27	0.97	0.98	3743

**Kecepatan kendaraan ringan**

Soal/Arah	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuhan n DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	4430	1.18	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

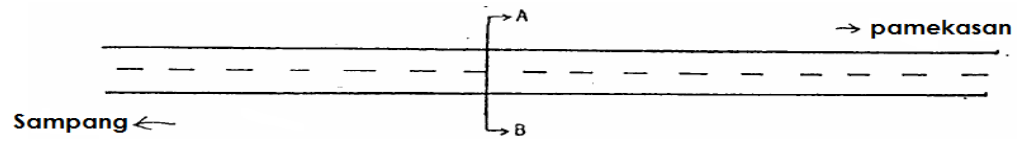
Soal/Arah	Derajat iringan DB Gbr. D:3:1
30)	31)
1	0.79

7 Januari 2018

Formulir IR-1

JALAN LUAR KOTA FORMULIR IR-1: DATA MASUKAN  ~ DATA UMUM  ~ GEOMETRIK JALAN	Tanggal:	7 Januari 2023	Ditangani oleh:	SBL
	Propinsi:	Jawa timur	Diperiksa oleh:	JT
	No.Ruas>Nama jalan		Kode Segmen:	
	Segmen Antara Sampang dan Pamekasan			
	Kelas adminn jalan:	Nasional	Tipe jalan:	2/2 UD
	Panjang (km):	10	Kelas fungsional:	Kolektor
	Waktu:		Nomor soal:	

**Alinyemen horizontal**



Lengkung horizontal (rad/km):	TIDAK ADA			Pengembangan di sisi jalan (%)	Sisi A	Sisi B	Rata-rata
Jarak pandangan >300m (%)	50	SDC:	B		25	25	25

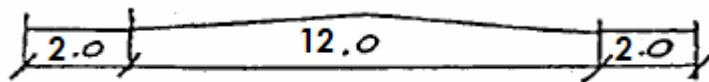
**Alinyemen Vertical**

Naik + turun (m/km)	Tidak ada	Panjang dlm km (hanya kelandaian khusus):	Tidak ada
Tipe alinyemen: (lingkari)	Datar/bukit/Gunung	Kemiringan dlm % (hanya kelandaian khusus):	Tidak ada

**Penampang melintang**

Sisi A

Sisi B



	Sisi A	Sisi B	Total	Rata-rata
Lebar jalur lalu-lintas rata-rata (Wc, m):	6	6	12	
Lebar bahu efektif (Ws, m):	2	2	4	2

**Kondisi Permukaan Jalan**

Kondisi jalur lalu-lintas	Sisi A	Sisi B
Tipe perkerasan: Lentur (aspal), Beton, Kerikil	Lentur	Lentur
Kondisi perkerasan: Baik, Sedang, Buruk IRI=	Baik	Baik

Kondisi bahu	Sisi	A	Sisi	B
	Luar	Dalam	Dalam	Luar
Tipe permukaan: Lentur (aspal), Beton, Kerikil	Kerikil			Kerikil
Beda tinggi dengan jalan (cm):	0,0			0,0
Penggunaan: Lalu-lintas, Parkir, Berhenti darurat	Berhenti			Berhenti

**Kondisi pengaturan lalu-lintas**

Batas kecepatan (km/jam):	Tidak ada	Lain-lain: Tidak ada
---------------------------	-----------	----------------------



Berat kotor maksimum	Tidak ada	
----------------------	-----------	--

7 januari 2018

Formulir IR-2

JALAN LUAR PERKOTAAN FORMULIR IR-2 DATA MASUKAN ~ ARUS LALU LINTAS ~ HAMBATAN SAMPING	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas:		Diperiksa oleh	JT
	Kode Segmen			
	Nomor soal:			

**Lalu lintas harian rata-rata tahunan**

LHRT (kend./harian)		Faktor -k=		Pemisahan arah 1/arah 2=	
Komposisi %	LV%	HV%	LB%	LT%	MC%

Data arus per jam menurut jenis

Bari s	Tipe kend	Kend.ringan		Menengah berat		Bis besar		Truk besar		Sepeda motor		Arus total Q		
		LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4	Ara h %	kend/ jam	smp/j am
1,1	emp arah 1	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
1,2	emp arah 2	LV:	1	MHV:	1.3	LB:	1.5	LT:	2.5	MC:	0.4			
2	Arah	Kend/j am	smp/j am	kend/jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/jam	kend/ jam	smp/ jam	Ara h %	kend/ jam	smp/j am
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)
3	1	621	621	89	115	11	17	121	303	1640	656	0.50	2481	1711
4	2	630	630	75	97	21	31	89	224	1677	671	0.50	2492	1653
5	1+2	1251	1251	163	212	32	48	210	526	3317	1327		4974	3364
6	Catatan: Untuk kelandaian khusus arah 1 = naik, arah 2 = turun									Pemisahan arah, $SP=Q_1/(Q_{1,2})$			49.89	
7	Faktor-smp F													

**Kelas hambatan samping**

Bila data rinci tersedia, gunakan tabel pertama untuk menentukan frekwensi berbobot kejadian, dan selanjutnya gunakan tabel kedua. Bila tidak, gunakan hanya tabel kedua.

1. Penentuan frekwensi kejadian

Perhitungan frekwensi berbobot kejadian per jam per 200 m dari segmen jalan yang diamati, pada kedua sisi jalan.

Tipe kejadian hambatan samping	Simbol	Faktor bobot	Frekwensi kejadian	Frekwensi berbobot
20)	21)	22)	23)	24)
Pejalan kaki	PED	0.6	/jam, 200m	
Parkir, kendaraan berhenti	PSV	0.8	/jam, 200m	
Kendaraan masuk + keluar	EEV	1	/jam, 200m	
Kendaraan lambat	SMV	0.4	/jam	
Total				

2. Penentuan kelas hambatan samping

Frekwensi berbobot kejadian	Kondisi khusus	Kelas hambatan samping	
		32)	33)
30)	31)	32)	33)
< 50	Perkebunan/daerah belum berkembang, tidak ada kegiatan	Sangat rendah	VL
50 - 149	Beberapa permukiman & kegiatan rendah	Rendah	L
150 - 249	Pedesaan, kegiatan pemukiman	Sedang	M
250 - 349	Pedesaan, beberapa kegiatan pasar	Tinggi	H
> 350	Dekat perkantoran, kegiatan pasar/perniagaan	Sangat tinggi	VH

7 januari 2018

Formulir IR-3

JALAN KOTA FORMULIR IR-3: ANALISA ~ KECEPATAN, KAPASITAS ~ IRINGAN	Tanggal:	7 januari 2018	Ditangani oleh:	SBL
	No.ruas>Nama jalan:		Diperiksa oleh:	JT
	Kode segmen:			
	Periode waktu:			

Kecepatan arus bebas kendaraan ringan

$$FV = (FV_0 + FV_w) \times FFV_{SF} \times FFV_{CS}$$

Soal/Arah	Kecepatan arus bebas dasar FVo Tabel. B-1:1 (km/jam)	faktor penyesuaian untuk lebar jalur Fvo Tabel. B-2:1 (km/jam)	FV <sub>0</sub> + FV <sub>w</sub> (2) + (3) (km/jam)	Faktor penyesuaian		Kecepatan arus bebas FV (4) × (5) × (6) (km/jam)
				Hambatan samping FFV <sub>SF</sub> Tabel. B-3:1 atau 2	Ukuran kota FFV <sub>CS</sub> Tabel. B-4:1	
1)	2)	3)	4)	5)	6)	7)
1	65	3	68	0.97	1	66

Kapasitas

$$C = C_0 \times FC_w \times FC_{sp} \times FC_{SF}$$

Soal/Arah	Kapasitas dasar C <sub>0</sub> Tabel. C-1:1 smp/jam	Faktor penyesuaian untuk kapasitas			Kapasitas C smp/jam (11) × (12) × (13) × (14)
		Lebar jalur	Pemisahan arah	Hambatan samping	
		FC <sub>w</sub> Tabel. C-2:1	FC <sub>SP</sub> Tabel. C-3:1	FC <sub>SF</sub> Tabel. C-4:1 atau 2	
10)	11)	12)	13)	14)	15)
1	3100	1.27	0.97	0.98	3743

**Kecepatan kendaraan ringan**

Soal/Ara h	Arus lalu lintas Q Formulir UR-2 smp/jam	Derajat kejenuha n DS (21) / (16)	Kecepatan $V_{LV}$ Gbr. D-2:1 atau 2 Km/jam	Panjang segmen jalan L km	Waktu tempuh TT (24) / (23) jam
20)	21)	22)	23)	24)	25)
1	3364	0.90	40	8.3	0.21

Hanya untuk 2/2 UD: Derajat iringan

Soal/Ara h	Derajat ringan DB Gbr. D:3:1
30)	31)
1	0.79



```

#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.941 1.017 1.095 2333
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1717 0.736 7.95 6.40 25.72 3.85 11.80 22- 44% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180625/13:02
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Purpose Operation Major road (B+D) : Jl.Diponegoro
Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road --- Major road --- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.920 1.043 1.122 2395
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1371 0.572 5.84 5.14 19.13 3.70 9.54 14- 30% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180629/8:01
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Purpose Operation Major road (B+D) : Jl.Raya Camplong
Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 0.933 1.000 0.940 0.940 0.947 1.040 1.117 2448
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 1773 0.724 7.76 6.29 31.51 3.82 11.59 21- 43% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180629/8:08
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.963 1.011 1.078 2334
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1492 0.639 6.59 5.58 16.46 3.81 10.40 17- 35% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180629/8:14
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.938 1.022 1.101 2350
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23,C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1998 0.850 10.14 7.72 39.54 3.91 14.05 29- 57% No No No All USIG-I data
Comment:
Program version 1.10F Date of run: 180705/7:01
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.915 1.045 1.127 2397
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1570 0.655 6.79 5.70 28.77 3.75 10.54 18- 37% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180705/7:14
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS
Purpose Operation
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.942 1.042 1.121 2447
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 2038 0.833 9.75 7.49 48.00 3.89 13.64 28- 55% No Yes No All USIG-I data
Comment:
Program version 1.10F Date of run: 180705/7:17
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation Major road (B+D) : Jl.Raya Camplong
Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.956 1.012 1.080 2325
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful-
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1708 0.735 7.93 6.38 23.40 3.86 11.79 22- 44% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180705/7:26
#####

```



```

K A J I Province : Jawa Timur Date : 6-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Purpose Operation Major road (B+D) : Jl.Diponegoro
Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %

1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method

2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach/Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.938 1.048 1.109 2426
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!

3. Traffic performance
Alter- Flow Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I DS=Q/C tion, DT Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg Fig F:1 of Delay Queue
R23,C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 sat. prob. (38)
Main 3164 1.304 133.8 44.02 1540. 4.00 137.8 70-146% No No No All USIG-I data
Comment: Very high degree of saturation! Use results with caution!
Program version 1.10F Date of run: 180705/8:04

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```

#####N#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA#####
Purpose Operation Major road (B+D) : Jl.Diponegoro
Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %

#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method

#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 0.933 1.000 0.940 0.940 0.915 1.046 1.124 2395
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!

#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E-1 Fig E-2 DTmi DG (32)+(35) Fig F-1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 3052 1.274 75.67 33.62 924.8 4.00 79.67 67-138% No No No All USIG-I data
#####
Comment: Very high degree of saturation! Use results with caution!

#####
Program version 1.10F Date of run: 180705/8:11
#####

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#####
K A J I Province : Jawa Timur Date : 6-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation
Major road (B+D) : Jl.Raya Camplong
Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road --- Major road --- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 3.00 3.00 3.00 2.67 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.933 1.000 0.940 0.940 0.909 1.050 1.118 2374
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC-Queue pro- Objectives ful-
native-(pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23,C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 3090 1.302 125.4 42.86 1526. 4.00 129.4 70-145% No No No All USIG-I data
Comment: Very high degree of saturation! Use results with caution!
#####
Program version 1.10F Date of run: 180705/8:30
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT : K-factor : Dir1 - Dir2
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) : : NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition(%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 36.09 4.181 0.836 2.112 56.77 100.0
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 365 365 46 60 10 15 19 48 625 313 46.87 1065 801
Dir2° 455 455 49 64 9 14 29 73 665 333 53.12 1207 939
5 1+2 820 820 95 124 19 29 48 121 1290 646 2272 1740
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 46.8%46.0%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.765
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
Village, some market activities H= high
250 - 349
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180211/16:12
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
Speed, Capacity
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.981 1.000 2768
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
#####
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1740 0.629 41.39 10.000 869.591 38.32 42.93 37.55 37.17 1+2 0.790
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180211/16:12
#####

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## Hasil kinerja eksisting ruas Jl. Taddan pada hari libur (Minggu)

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@x281C281
3ME#####I#####NI#####>
o K A J I           o Province           jawa timur   3 Date           :           7-01-2018   o
o Link number:          3 Handled by:           o
o INTERURBAN ROADS     o Segment code:          3 Checked by:           o
o C#####I#####
o Form IR-1: Input     o Segment between       sampang and       pamekasn
o o Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)]
o GENERAL DATA, C#####I#####
o ROAD GEOMETRY     o Administr. road class : Nasional 3 Functional road class: ARTERIAL
o o Road type           :           2/2UD 3 Length (km)           :           10.000
o Purpose: Operation   o Time period:           07.00-08.00 3 Case number:
#####I#####
o HORIZONTAL ALIGNMENT
o o UAA> A * * * * * -----> To:
o o * * * * * pamekasan
o To: <----- * * * * *
o sampang * * * * * * * * * * N Indicate
o * * * * * AAA> B north (N)
o o
o U#####I#####; U#####I#####;
o 3 Horizontal curvature (radians/km): NA 3 3 Roadside 3 Side A 3 Side B 3 Mean 3
o 3 Sight distance > 300 m (%): NA 3 3 development #####I#####
o 3 Sight distance class (default= B): 3 3 Default: 0% 3 0% 3 0% 3 0% 3
o #####I#####
o VERTICAL ALIGNMENT * * * * * U#####I#####
o o * * * * *
o o #####I#####;
o o #####I#####; 3 Only for specific grade analysis 3
o U#####I#####; 3 Grade length (km) 3
o 3 Rise+fall : NA m/km 3 3 Grade slope (%): 3
o 3 Alignment type: NA ( FLAT = default) 3 3 Climbing lane (Y/N) : 3
o #####I#####
o CROSS SECTION
o Undivided road | | | ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ | | |
o side A WsA WcA WcB WsB side B W
o #####I#####
o 2.00 3.00 3.00 2.00
o
o U#####I#####;
o 3 UNADJUSTED WIDTHS 3 Side A 3 Side B 3 Total 3 Mean 3
o #####I#####;
o 3 Average carriageway width, Wc (m) 3 3.00 3 3.00 3 6.00 3 3
o 3 Unobstructed shoulder width, Ws (m) 3 2.00 3 2.00 3 4.00 3 2.00 3
o #####I#####
o ROAD SURFACE CONDITIONS
o U#####I#####;
o 3 CARRIAGEWAY SURFACE CONDITIONS 3 Side A 3 Side B 3
o #####I#####;
o 3 Type [Flexible (asphalt)/Concrete/Other] 3 NotAvail 3 NotAvail 3
o 3 Surface condition [Good/Fair/Bad] 3 FAIR 3 FAIR 3
o
o #####I#####
o U#####I#####;
o 3 SHOULDER SURFACE CONDITIONS 3 ----- SIDE A ----- 3 ----- SIDE B ----- 3
o 3 Outer 3 Inner 3 Inner 3 Outer 3
o #####I#####
o 3 Surface type [Flexible/Concrete/Other] 3 NotAvail 3 3 3 NotAvail 3
o 3 Drop from carriageway to shoulder (cm) 3 0 3 3 3 0 3
o 3 Usability [Traffic/Parking/Emergency] 3 NoInput 3 ( ) 3 ( ) 3 NoInput 3
o 3 (default shoulder usability) 3 ( PARKING) 3 ( ) 3 ( ) 3 ( PARKING) 3
o #####I#####
o EFFECTIVE WIDTHS U#####I#####;
o 3 Undivided road 3 Widths (m) 3 3 Divided road 3 Side A 3 Side B 3
o #####I#####;
o 3 Shoulder, total 3 4.00 3 3 Shoulder, total 3 3 3
o 3 Shoulder, mean 3 2.00 3 3 Shoulder, mean 3 3 3
o 3 Carriageway 3 6.00 3 3 Carriageway 3 3 3
o #####I#####
o TRAFFIC CONTROL CONDITIONS
o U#####I#####;
o 3 Speed limit : 0 km/h 3 Max gross weight: 0.000 tonnes 3
o 3 Other limitations : 3
o 3 More remarks : 3
o #####I#####
o Program version 1.10E Date of run: 180223/13:34
#####I#####
  
```



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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
Speed, Capacity
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.998 1.000 2816
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1352 0.480 45.97 10.000 783.076 41.85 48.02 40.83 40.31 1+2 0.711
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180223/13:34
#####

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#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      3-01-2018
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class : Nasional      Functional road class: ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di-      Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec-      FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion      for different vehicles      adjust-      vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° 1+2      65.0      57.0      69.0      55.0      54.0      -3.0      62.0      0.980      1.000      60.76      53.28      64.49      51.41      50.47
°
°
° Comments:      User FFV, dir1: None!
°
° dir2:
°
#####
CAPACITY
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Direc-      Base Capacity      Adjustment factors for capacity      Actual capacity, C
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° 1+2      3100      0.910      0.987      1.000      2783
°
°
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di-      Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di-      Degree of
° rec-      flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec-      bunching
°
° Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° 1+2      2007      0.721      38.54      10.000      933.897      36.12      39.76      35.51      35.21      1+2      0.827
°
°
° Space for user remark:
°
° Program version 1.10F      Date of run: 180705/7:29
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 23.56 3.066 0.744 1.752 70.87 100.0
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
#####
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 267 267 38 49 6 9 23 58 800 400 49.67 1134 783
Dir2° 271 271 32 42 11 17 17 43 818 409 50.32 1149 782
5 1+2° 538 538 70 91 17 26 40 101 1618 809 2283 1565
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.6%50.0%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.685
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
#####
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180705/7:37
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administ. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.998 1.000 2815
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1565 0.556 43.63 10.000 824.993 40.05 45.42 39.15 38.71 1+2 0.754
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180705/7:37
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT : K-factor : Dir1 - Dir2
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) : : NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
User values 37.65 4.365 0.711 4.998 52.27 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 848 848 107 139 19 29 100 250 1282 641 46.54 2356 1907
Dir2° 1058 1058 114 148 17 26 153 383 1364 682 53.45 2706 2297
5 1+2° 1906 1906 221 287 36 55 253 633 2646 1323 5062 4204
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 46.5%45.3%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.830
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180705/8:40
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administ. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.979 1.000 2762
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
#####
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4204 1.522 NA 10.000 NA NA NA NA NA 1+2 0.999
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180705/8:40
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT : K-factor : Dir1 - Dir2
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) : : NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
User values 27.53 3.766 0.762 4.767 63.17 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 #####
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 574 574 86 112 11 17 116 290 1333 667 50.53 2120 1660
Dir2° 581 581 72 94 21 32 84 210 1317 659 49.46 2075 1576
#####
5 1+2 1155 1155 158 206 32 49 200 500 2650 1326 4195 3236
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 50.5% 51.2%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.771
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
#####
Total: NA
#####
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
#####
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180705/8:53
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administ. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
'Di- Base free-flow speed 'Carriage-'FVo+FVw' Adjustment factors' Actual free-flow speeds, km/h
'rec- FVo (km/h) 'way width' Light 'FFVlv = (FVo+FVw)*FFVsf*FFVrc
'tion' for different vehicles 'adjust-'vehicle' Side 'Land use
Table B-1:1 or B-1:2 'ment, FVw' 'friction'Road func' Light Other vehicle
LV 'MHV' LB 'LT' 'MC' (km/h) (km/h) Tab B2:1'(2)+(3) FFVsf FFVrc 'vehicle' types
(2) (3) (4) (5) (6) (7) 'MHV' LB 'LT' 'MC'
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: 'User FFV, dir1: None!
dir2:
#####
CAPACITY
'Direc-'Base Capacity' Adjustment factors for capacity Actual capacity, C
'tion'
Co 'Carriageway width'Directional split' Side friction 'C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 'FCw' 'FCsp' 'FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.997 1.000 2812
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
'Di- Traffic 'Degree of Actual Road Travel ACTUAL SPEEDS 'Di- Degree of
'rec- flow, Q saturation' speed,Vlv segment 'time,TT' for other vehicle types' 'rec-'bunching
'tion'Form IR-2' DS=Q/C 'Fig D2:1:/:2'length, L' (24/23) 'tion' DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) 'MHV' LB 'LT' 'MC' (31)
#####
1+2 3236 1.151 NA 10.000 NA NA NA NA NA 1+2 0.942
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180705/8:53
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 33.90 3.780 0.646 4.277 57.38 100.0
(normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
#####
Row/Dir - Light Vehicle Med Heavy Veh Large Bus Large Truck MotorCycle Total flow Q
rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
1.1' tion pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 CAAAAAAAAAAAAAAAAAAAAA
1.2' pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h Split veh/h'pcu/h
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1 912 912 114 148 22 33 105 263 1710 855 47.47 2863 2211
Dir2 1133 1133 114 148 17 26 153 383 1751 876 52.52 3168 2566
5 1+2 2045 2045 228 296 39 59 258 646 3461 1731 6031 4777
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.4% 46.2%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.792
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment. Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA (L is default)
#####
Program version 1.10F Date of run: 180705/9:01
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.985 1.000 2778
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4777 1.720 NA 10.000 NA NA NA NA NA 1+2 1.020
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180705/9:01
#####

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>
> KAJI -- INTERURBAN ROADS
> Province: Jawa timur Date: 7-01-2023
> Link number:
> Segment code:
> Form IR-2: Input
> Checked by:
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> TRAFFIC FLOW, SIDE FRICTION
> Adminstr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation
> Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC : DIRECTIONAL SPLIT :
> AADT : K-factor : Dir1 - Dir2 :
> CLASSIFIED-HOURLY : (veh/day) (default: 0.11) : (default: 50 - 50) :
> AADT : K-factor : Dir1 - Dir2 :
> (Class/Aadt/UNclass) : : NA - NA % :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Traffic LV : MHV : LB : LT : MC : Total : LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> User values : 25.15 : 3.297 : 0.643 : 4.221 : 66.68 : 100.0 : LT = Large Truck
> (normal values) : ( 57.0) : ( 23.0) : ( 7.0) : ( 4.0) : ( 9.0) : (100.0) : MC = MotorCycle
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Traffic flow data for whole segment analysis:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q :
> rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 1.1'tion° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 CAAAAAAAAAAAAAAAAAAAAAA;
> 1.2' ° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50 : : :
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; Split °veh/h°pcu/h°
> ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° (%) : : :
> 2 ° (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) :
> Dir1° 621 ° 621 ° 89 ° 116 ° 11 ° 17 ° 121 ° 303 ° 1640 ° 820 ° 49.89 ° 2482 ° 1877 :
> Dir2° 630 ° 630 ° 75 ° 98 ° 21 ° 32 ° 89 ° 223 ° 1677 ° 839 ° 50.10 ° 2492 ° 1822 :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 5 ° 1+2 ° 1251 ° 1251 ° 164 ° 214 ° 32 ° 49 ° 210 ° 526 ° 3317 ° 1659 ° : 4974 ° 3699 :
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8%°50.7% :
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.743 :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> 2. Determination of side friction class
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> Village, some market activities H= high
> 250 - 349
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA (L is default)
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Program version 1.10F Date of run: 180705/9:22
>

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 -3.0 62.0 0.980 1.000 60.76 53.28 64.49 51.41 50.47
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 0.910 0.999 1.000 2819
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3699 1.312 NA 10.000 NA NA NA NA NA NA 1+2 0.970
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180705/9:22
#####

```



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#####
* K A J I
* UNSIGNALISED INTERSECTIONS
* Form USIG-II: ANALYSIS
* Purpose Operation
* PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
* (defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
* Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
* Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
* native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
* arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
* (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 4.00 4.00 4.00 3.33 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
* Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
* native- capacity Approach Major road City size Side friction Left Right Ratio capacity
* Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
* Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
* (20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 0.983 1.000 0.940 0.940 0.938 1.022 1.101 2478
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
* Alter- Flow Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
* native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
* USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
* R23,C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
* (30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 1998 0.806 9.20 7.15 34.07 3.88 13.09 26- 52% No Yes No All USIG-I data
#####
Comment:
#####
* Program version 1.10F Date of run: 180716/10:29
#####

```



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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 4.00 4.00 4.00 3.33 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 0.983 1.000 0.940 0.940 0.915 1.045 1.127 2527
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1570 0.621 6.37 5.45 24.91 3.73 10.10 16- 34% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180716/10:34
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Purpose Operation Major road (B+D) : Jl.Raya Camplong
Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 4.00 4.00 4.00 3.33 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 0.983 1.000 0.940 0.940 0.942 1.042 1.121 2580
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 2038 0.790 8.88 6.96 41.34 3.86 12.75 25- 50% Yes Yes No All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180716/10:42
#####

```

# Hasil kinerja simpang Jl. Prajjan-Jl.Raya Camplong pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 8 meter

```

@x308C308
3ME#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS Province : Jawa Timur Date : 7-01-2018
o Form USIG-1: Geometry, City : Sampang Handled by: Sabil
o Purpose: Traffic flows City size: 0.91 millions Case :
o Operation Period : 07.00-08.00
#####
o Major road (B+D) : Jl.Raya Camplong Environment : COM (COM, RES or RA)
o Minor road (A) : Jl.Prajjan Side friction: Medium(High/Med/Low)
#####
o INTERSECTION * UA2 * . TRAFFIC CL - Classified, hourly
o GEOMETRY * A * / \ N FLOW DATA: CL UN - Un-classified, hourly
* AAU 2.00 m * AA - AADT (Average daily)
o Entry widths and * AAAA' * ( traffic )
o major road median * * Flows are
in veh/h
UA2 * v * UA2 * A
D' * B' 176 <AU AA> 91
AAU * AAU *
* * AAA' * * * * *
4.00 m * AAA> 100 83
AAA III * * * * *
* * * * * <AAA * 4.00 m * AAAAU AAAA
* * * * * D >AAAAA> 1076 1076 <AAAAA B
A - - 10 m - -
NB. Deduct
1.5 - 2 m
from width
if parking
in approach!
o Major road (B-D)
median: None
#####
o TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
o FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
#####
o 1 MOTOR VEH COMP (%): LV:24.13% HV:4.419% MC:71.44% Pcu factor: K-factor: Unmot:0.000%
o Program defaults: (40.00%) ( 3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
#####
o TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM
o FLOW tion pces=1.00 pces=1.30 pces=0.50 Turn pces=1.00
o Approach veh/h pcu/h veh/h pcu/h veh/h pcu/h veh/h pcu/h Ratio veh/h
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)
#####
o 2 Minor LT 30 30 1 1 60 30 91 61 0.39 0 A,LT
o 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST
o 4 RT 10 10 1 1 165 83 176 94 0.61 0 A,RT
o Total, minor A 40 40 2 2 225 113 267 155 0 3 aA
#####
o 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT
o 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE-
o 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN-
o Total minor road A 40 40 2 2 225 113 267 155 0 3 aA
#####
o 11 Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT
o 12 road: B ST 281 281 50 65 745 373 1076 719 0 3 B,ST
o 13 RT 18 18 1 1 64 32 83 51 0.07 0 B,RT
o Total, major B 299 299 51 66 809 405 1159 770 0 3 aB
#####
o 15 Major LT 15 15 5 7 80 40 100 62 0.08 0 D,LT
o 16 road: D ST 274 274 57 74 745 373 1076 721 0 3 D,ST
o 17 RT 3 3 3 3 3 3 3 3 3 3 3 D,RT
o Total, major D 289 289 62 81 825 413 1176 783 0 3 aD
#####
o 19 Tot major road B+D 588 588 113 147 1634 818 2335 1553 0 3 aBD
#####
o 20 Major+minor LT 45 45 6 8 140 70 191 123 0.07 0 aLT
o 21 a(A+B+D) ST 555 555 107 139 1490 746 2152 1440 0 3 aST
o 22 RT 28 28 2 2 229 115 259 145 0.08 0 aRT
o Total major+minor 628 628 115 149 1859 931 2602 1708 0 3 All
#####
o Ratio minor/(minor+major) [normal value is 0.25]: 0.102 UM/MV: 0.000
o Program version 1.10F Date of run: 180716/12:40
#####
  
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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 4.00 4.00 4.00 3.33 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 0.983 1.000 0.940 0.940 0.956 1.012 1.080 2451
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 1708 0.697 7.36 6.04 20.55 3.84 11.20 20- 40% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180716/12:40
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Aadt/UNclass) : NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
User values 32.16 3.581 0.767 1.790 61.69 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° Split °veh/h°pcu/h°
2 ° (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) °
Dir1° 392 ° 392 ° 49 ° 64 ° 12 ° 18 ° 20 ° 50 ° 834 ° 417 ° 47.77 ° 1307 ° 941 °
Dir2° 488 ° 488 ° 49 ° 64 ° 9 ° 14 ° 29 ° 73 ° 854 ° 427 ° 52.22 ° 1429 ° 1066 °
5 ° 1+2 ° 880 ° 880 ° 98 ° 128 ° 21 ° 32 ° 49 ° 123 ° 1688 ° 844 ° ° 2736 ° 2007 °
Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.7%46.8%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.733
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment. Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180716/12:42
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 1.0 66.0 0.980 1.000 64.68 56.71 68.66 54.72 53.73
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.080 0.987 1.000 3303
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
#####
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 2007 0.608 44.56 10.000 807.828 40.91 46.39 40.00 39.54 1+2 0.780
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180716/12:42
#####

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## Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 8 meter

```
@x313C313
3ME#####
o K A J I      o Province      jawa timur  Date      :      7-01-2018  o
o Link number:      Handled by :
o INTERURBAN ROADS o Segment code:      Checked by :
o #####
o Form IR-1: Input  o Segment between  sampang and      pamekasn
o Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)]
o GENERAL DATA,  #####
o ROAD GEOMETRY  o Administr. road class :  Nasional  Functional road class:  ARTERIAL
o Road type      :      2/2UD  Length (km)      :      10.000  o
o Purpose: Operation o Time period:  07.00-08.00  Case number:
#####
o HORIZONTAL ALIGNMENT
o
o          OAA> A * * * * * ----> To:      pamekasan
o          * * * * *
o To:  <----- *
o      sampang * * * * * * *
o          * * * * *
o          * * * * * * AXX> B      AAA north (N)
o
o #####; #####
o 3 Horizontal curvature (radians/km):  NA 3  Roadside  Side A  Side B  Mean 3
o 3 Sight distance > 300 m (%):  NA 3  development #####
o 3 Sight distance class (default= B):  3  Default: 0%  0 %  0 %  0 %
o #####
#####
o VERTICAL ALIGNMENT      * * * * *      O#####;
o          * * * * *          3 Only for specific grade analysis 3
o          #####;      3 Grade length (km) : 3
o 3 Rise+fall :  NA m/km 3 3 Grade slope (%) : 3
o 3 Alignment type:  NA ( FLAT = default) 3 3 Climbing lane (Y/N) : 3
o #####; #####
#####
o CROSS SECTION
o
o Undivided road  |||'2'2'2'2'UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU'2'2'2'2|||
o      side A      WSA      WCA      WcB      WsB      side B
o      #####
o      2.00 4.00      4.00 2.00
o
o #####;
o 3 UNADJUSTED WIDTHS      3 Side A 3 Side B 3 Total 3 Mean 3
o #####;
o 3 Average carriageway width, Wc (m) 3 4.00 3 4.00 3 8.00 3 3
o 3 Unobstructed shoulder width, Ws (m) 3 2.00 3 2.00 3 4.00 3 2.00 3
o #####
#####
o ROAD SURFACE CONDITIONS
o
o #####;
o CARRIAGEWAY SURFACE CONDITIONS      3 Side A 3 Side B 3
o #####;
o 3 Type [Flexible (asphalt)/Concrete/Other] 3 NotAvail 3 NotAvail 3
o 3 Surface condition [Good/Fair/Bad] 3 FAIR 3 FAIR 3
o
o #####;
o SHOULDER SURFACE CONDITIONS      3 ----- SIDE A ----- 3 ----- SIDE B ----- 3
o 3 3 Outer 3 Inner 3 Inner 3 Outer 3
o #####;
o 3 Surface type [Flexible/Concrete/Other] 3 NotAvail 3 3 NotAvail 3
o 3 Drop from carriageway to shoulder (cm) 3 0 3 0 3 0 3
o 3 Usability [Traffic/Parking/Emergency] 3 NoInput 3 ( ) 3 NoInput 3
o 3 (default shoulder usability) 3 ( PARKING) 3 ( ) 3 ( PARKING) 3
o #####
#####
o EFFECTIVE WIDTHS      O#####;
o 3 Undivided road 3 Widths (m) 3 3 Divided road 3 Side A 3 Side B 3
o #####;
o 3 Shoulder, total 3 4.00 3 3 Shoulder, total 3 3
o 3 Shoulder, mean 3 2.00 3 3 Shoulder, mean 3 3
o 3 Carriageway 3 8.00 3 3 Carriageway 3 3
o #####
#####
o TRAFFIC CONTROL CONDITIONS
o
o #####;
o 3 Speed limit :  0 km/h 3 Max gross weight: 0.000 tonnes 3
o 3 Other limitations : 3
o 3 More remarks : 3
o #####
#####
#####
o Program version 1.10F Date of run: 180716/12:43
#####
```

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>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
> Link number: Handled by:
> Segment code: Checked by:
> CA
> TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> U
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
> U
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 23.56 3.066 0.744 1.752 70.87 100.0 LT = Large Truck
> (normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0) MC = MotorCycle
> U
> Traffic flow data for whole segment analysis:
> U
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-
> 1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50
> 1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
> U
> veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° Split °veh/h°pcu/h°
> 2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> Dir1° 267 267 38 49 6 9 23 58 800 400 49.67 1134 783
> Dir2° 271 271 32 42 11 17 17 43 818 409 50.32 1149 782
> U
> 5 1+2 538 538 70 91 17 26 40 101 1618 809 2283 1565
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.6%50.0%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.685
> U
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> U
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment.
> Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> U
> Total: NA
> U
> 2. Determination of side friction class
> U
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> U
> For current case indicate side friction class: NA (L is default)
> U
> Program version 1.10F Date of run: 180716/12:43
>

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#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      7-01-2018
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class : Nasional      Functional road class: ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust-      vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° #####
° 1+2      65.0      57.0      69.0      55.0      54.0      1.0      66.0      0.980      1.000      64.68      56.71      68.66      54.72      53.73
°
° #####
° Comments:      User FFV, dir1: None!
°
° dir2:
°
#####
CAPACITY
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Direc- Base Capacity      Adjustment factors for capacity      Actual capacity, C
°
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° #####
° 1+2      3100      1.080      0.998      1.000      3341
°
° #####
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
°
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
°
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° #####
° 1+2      1565      0.468      49.17      10.000      732.117      44.53      51.49      43.37      42.79      1+2      0.704
°
° #####
° Space for user remark:
°
#####
Program version 1.10F      Date of run: 180716/12:43
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 33.90 3.780 0.646 4.277 57.38 100.0
(normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
#####
Row/Dir - Light Vehicle Med Heavy Veh Large Bus Large Truck MotorCycle Total flow Q
rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
1.1' tion pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 CAAAAAAAAAAAAAAAAAAAAA
1.2' pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA Split veh/h'pcu/h'
veh/h'pcu/h' veh/h'pcu/h' veh/h'pcu/h' veh/h'pcu/h' veh/h'pcu/h' veh/h'pcu/h' (%)
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1 912 912 114 148 22 33 105 263 1710 855 47.47 2863 2211
Dir2 1133 1133 114 148 17 26 153 383 1751 876 52.52 3168 2566
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
5 1+2 2045 2045 228 296 39 59 258 646 3461 1731 6031 4777
#####
Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.4% 46.2%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.792
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
#####
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
#####
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
#####
For current case indicate side friction class: NA (L is default)
#####
Program version 1.10F Date of run: 180716/12:47
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administ. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 1.0 66.0 0.980 1.000 64.68 56.71 68.66 54.72 53.73
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.080 0.985 1.000 3297
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4777 1.449 NA 10.000 NA NA NA NA NA 1+2 0.989
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180716/12:47
#####

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>
> KAJI -- INTERURBAN ROADS
> Province: Jawa timur Date: 7-01-2023
> Link number:
> Handled by:
> Segment code:
> Checked by:
> Form IR-2: Input
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> TRAFFIC FLOW, SIDE FRICTION
> Adminstr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation
> Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC : DIRECTIONAL SPLIT :
> AADT : K-factor : Dir1 - Dir2 :
> CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50) :
> (Class/Aadt/UNclass) : : NA - NA % :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Traffic LV : MHV : LB : LT : MC : Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> LT = Large Truck
> MC = MotorCycle
> User values : 25.15 : 3.297 : 0.643 : 4.221 : 66.68 : 100.0 :
> (normal values) : ( 57.0) : ( 23.0) : ( 7.0) : ( 4.0) : ( 9.0) : (100.0) :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> Traffic flow data for whole segment analysis:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q :
> rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> 1.1'tion° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 CAAAAAAAAAAAAAAAAAAAAA
> 1.2' ° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50 : : :
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA Split °veh/h°pcu/h°
> ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° (%) : : :
> 2 ° (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) :
> Dir1° 621 ° 621 ° 89 ° 116 ° 11 ° 17 ° 121 ° 303 ° 1640 ° 820 ° 49.89 ° 2482 ° 1877 :
> Dir2° 630 ° 630 ° 75 ° 98 ° 21 ° 32 ° 89 ° 223 ° 1677 ° 839 ° 50.10 ° 2492 ° 1822 :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> 5 ° 1+2 ° 1251 ° 1251 ° 164 ° 214 ° 32 ° 49 ° 210 ° 526 ° 3317 ° 1659 ° : 4974 ° 3699 :
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8%°50.7% :
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = : 0.743 :
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> 2. Determination of side friction class
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA ( L is default)
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> Program version 1.10F Date of run: 180716/12:48
>

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 1.0 66.0 0.980 1.000 64.68 56.71 68.66 54.72 53.73
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.080 0.999 1.000 3346
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3699 1.105 NA 10.000 NA NA NA NA NA NA 1+2 0.933
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180716/12:48
#####

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>
> KAJI -- INTERURBAN ROADS
> Province: Jawa timur Date: 7-01-2023
> Link number: Handled by:
> Segment code: Checked by:
> Form IR-2: Input
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> TRAFFIC FLOW, SIDE FRICTION
> Adminstr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation
> Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> AADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Aadt/UNclass) NA - NA %
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 25.15 3.297 0.643 4.221 66.68 100.0 LT = Large Truck
> (normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0) MC = MotorCycle
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Traffic flow data for whole segment analysis:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.50 CAAAAAAAAAAAAAAAAAAAAAA;
> 1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.50
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; Split °veh/h°pcu/h°
> veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° (%)
> 2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> Dir1° 621 621 89 116 11 17 121 303 1640 820 49.89 2482 1877
> Dir2° 630 630 75 98 21 32 89 223 1677 839 50.10 2492 1822
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 5 1+2 1251 1251 164 214 32 49 210 526 3317 1659 4974 3699
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8% 50.7%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, Fpcu = 0.743
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> 2. Determination of side friction class
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA (L is default)
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Program version 1.10F Date of run: 180716/12:48
>

```

```

#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
'Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
'rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
'tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 1.0 66.0 0.980 1.000 64.68 56.71 68.66 54.72 53.73
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
'Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
'tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.080 0.999 1.000 3346
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
'Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS 'Di- Degree of
'rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types 'rec- bunching
'tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h 'tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3699 1.105 NA 10.000 NA NA NA NA NA 1+2 0.933
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180716/12:48
#####

```



# Hasil kinerja simpang Jl. Mutiara-Jl. Diponegoro pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```

@x325C325
3ME#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS   Province :         Jawa Timur   Date       :         7-01-2018
o Form USIG-1: Geometry,              City       :         Sampang   Handled by:         Sabill
o Traffic flows                       City size: 0.91 millions   Case       :
o Purpose:                             Operation  :         Period   :
#####
o Major road (B+D) :                   Jl.Diponegoro   Environment : COM (COM, RES or RA)
o Minor road (A) :                      Jl.Mutiara     Side friction: Medium(High/Med/Low)
#####
o INTERSECTION * 0A2 * * * * * TRAFFIC CL - Classified, hourly
o GEOMETRY     * 3A * * * * * / \ N FLOW DATA: CL UN - Un-classified, hourly
o Entry widths and * AAU 2.00 m * * * * * AA - AADT (Average daily)
o major road median * AAAA * * * * * ( traffic )
o * * * * * * * * * * Flows are
o * * * * * * * * * * in veh/h
o
o 0A2 * * * * * 0A2 * * * * *
o 3D * * * * * 3B * * * * * 74 <AD AA> 62
o AAU * * * * * AAU * * * * *
o * * * * * * * * * *
o 5.00 m * AAA> * * * * * 70 64
o AAA III * * * * * ffff AAA * * * * *
o * * * * * <AAA * 5.00 m * AAAA AAAA
o * * * * * * * * * * * * * * * * D >AAAAA> 1026 1110 <AAAAA B
o
o A - - 10 m - - -
o
o NB. Deduct * * * * *
o 1.5 - 2 m * * * * *
o from width * * * * *
o if parking * * * * *
o in approach! * * * * *
o * Major road (B-D)
o * median: None
#####
o TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
o FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
#####
o 1 MOTOR VEH COMP (%): LV:24.31% HV:3.823% MC:71.86% Pcu factor: *K-factor: *Unmot:0.000%
o Program defaults: (40.00%) ( 3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
#####
o TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM
o FLOW tion * pces=1.00 * pces=1.30 * pces=0.50 * Turn pces=1.00
o Approach * veh/h * veh/h * pcu/h * veh/h * pcu/h * veh/h * pcu/h * Ratio veh/h
o (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)
#####
o 2 Minor LT 4 4 0 0 58 29 62 33 0.45 0 A,LT
o 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST
o 4 RT 6 6 1 1 67 34 74 41 0.55 0 A,RT
o
o
o 5 Total, minor A 10 10 1 1 125 63 136 74 0 0 aA
o
o
o 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT
o 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE-
o 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN-
o
o
o 9 NOT DEFINED
o
o
o 10 Tot minor road A 10 10 1 1 125 63 136 74 0 0 aA
o
o 11 Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT
o 12 road: B ST 3 299 3 299 3 44 3 57 3 767 3 384 3 1110 3 740 3 0 3 B,ST
o 13 RT 3 5 3 5 3 0 3 0 3 59 3 30 3 64 3 35 3 0.05 3 0 B,RT
o
o
o 14 Total, major B 304 304 44 57 826 414 1174 775 0 0 aB
o
o
o 15 Major LT 3 6 3 6 3 2 3 3 62 3 31 3 70 3 40 3 0.06 3 0 D,LT
o 16 road: D ST 3 265 3 265 3 45 3 58 3 716 3 358 3 1026 3 681 3 0 3 D,ST
o 17 RT 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 D,RT
o
o
o 18 Total, major D 271 271 47 61 778 389 1096 721 0 0 aD
o
o
o 19 Tot major road B+D 575 575 91 118 1604 803 2270 1496 0 0 aBD
o
o
o 20 Major+minor LT 3 10 3 10 3 2 3 3 120 3 60 3 132 3 73 3 0.05 3 0 aLT
o 21 a (A+B+D) ST 3 564 3 564 3 89 3 115 3 1483 3 742 3 2136 3 1421 3 0 3 aST
o 22 RT 3 11 3 11 3 1 3 1 3 126 3 64 3 138 3 76 3 0.05 3 0 aRT
o
o
o
o Ratio minor/(minor+major) [normal value is 0.25]: 0.056 UM/MV: 0.000
#####
o Program version 1.10F Date of run: 180718/20:49
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 1.034 1.000 0.940 0.940 0.915 1.045 1.127 2658
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1570 0.591 6.03 5.25 21.88 3.71 9.74 15- 31% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/20:49
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 1.034 1.000 0.940 0.940 0.942 1.042 1.121 2713
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful-
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 2038 0.751 8.20 6.55 36.07 3.84 12.04 23- 46% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/20:55
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 1.034 1.000 0.940 0.940 0.956 1.012 1.080 2578
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E-1 Fig E-2 DTmi DG (32)+(35) Fig F-1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1708 0.663 6.89 5.76 18.18 3.82 10.71 18- 37% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/21:00
#####

```

# Hasil kinerja simpang Jl. Prajjan-Jl.Raya Camplong pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```

@x331C331
3ME#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS o Province : Jawa Timur o Date : 7-01-2018 o
o Form USIG-1: Geometry, City : Sampang o Handled by: Sabil o
o Traffic flows o City size: 0.91 millions o Case :
o Purpose: Operation o Period : 07.00-08.00
#####
o Major road (B+D) : Jl.Raya Camplong o Environment : COM (COM, RES or RA) o
o Minor road (A) : Jl.Prajjan o Side friction: Medium(High/Med/Low) o
#####
o INTERSECTION * UAZ * . o TRAFFIC CL - Classified, hourly o
o GEOMETRY * A * / \ N o FLOW DATA: CL UN - Un-classified, hourly o
o Entry widths and * AAU 2.00 m * o AA - AADT (Average daily) o
o major road median * AAAA * o ( traffic ) o
o Flows are o
o in veh/h o
o A o
o o
o UAZ * o v * UAZ * o
o D * B * o 176 <AU AA> 91 o
o AAU * AAU o
o * * AAA * * * * * o
o 5.00 m * AAA> o 100 o 83 o
o AAA III o
o * * * * * <AAA * 5.00 m * AAAAU AAAA o
o * * * * * * * * * * D >AAAAA> 1076 1076 <AAAAA B o
o
o A - - 10 m - - ' o
o
o NB. Deduct o
o 1.5 - 2 m o
o from width o
o if parking o
o in approach! o
o UAAAAAAAAAAAAAAAAAAAAA o
o Major road (B-D) o
o median: None o
#####
o TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection) o
o FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection) o
#####
o 1 MOTOR VEH COMP (%): LV:24.13% HV:4.419% MC:71.44% o Pcu factor: o K-factor: o Unmot:0.000% o
o Program defaults: ( 40.00% ) ( 3.00% ) ( 57.00% ) o (norm value: 0.85) o (default: ) o (def: 14.0%) o
o TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM o
o FLOW tion pces=1.00 pces=1.30 pces=0.50 Turn pces=1.00 o
o Approach veh/h pcu/h veh/h pcu/h veh/h pcu/h veh/h pcu/h Ratio veh/h o
o (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) o
#####
o 2 Minor LT 30 30 1 1 60 30 91 61 0.39 0 A,LT o
o 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST o
o 4 RT 10 10 1 1 165 83 176 94 0.61 0 A,RT o
o AAAAAAAAAAAAAAAAAAAAAA o
o 5 Total, minor A 40 40 2 2 225 113 267 155 0 0 aA o
o AAAAAAAAAAAAAAAAAAAAAA o
o 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT o
o 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE- o
o 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN- o
o AAAAAAAAAAAAAAAAAAAAAA o
o 9 NOT DEFINED o
o AAAAAAAAAAAAAAAAAAAAAA o
o 10 Tot minor road A 40 40 2 2 225 113 267 155 0 0 aA o
o 11 Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT o
o 12 road: B ST 281 281 50 65 745 373 1076 719 0 0 B,ST o
o 13 RT 18 18 1 1 64 32 83 51 0.07 0 B,RT o
o AAAAAAAAAAAAAAAAAAAAAA o
o 14 Total, major B 299 299 51 66 809 405 1159 770 0 0 aB o
o AAAAAAAAAAAAAAAAAAAAAA o
o 15 Major LT 15 15 5 7 80 40 100 62 0.08 0 D,LT o
o 16 road: D ST 274 274 57 74 745 373 1076 721 0 0 D,ST o
o 17 RT 3 3 3 3 3 3 3 3 3 3 3 D,RT o
o AAAAAAAAAAAAAAAAAAAAAA o
o 18 Total, major D 289 289 62 81 825 413 1176 783 0 0 aD o
o AAAAAAAAAAAAAAAAAAAAAA o
o 19 Tot major road B+D 588 588 113 147 1634 818 2335 1553 0 0 aBD o
o 20 Major+minor LT 45 45 6 8 140 70 191 123 0.07 0 aLT o
o 21 a(A+B+D) ST 555 555 107 139 1490 746 2152 1440 0 0 aST o
o 22 RT 28 28 2 2 229 115 259 145 0.08 0 aRT o
o AAAAAAAAAAAAAAAAAAAAAA o
o 23 Total major+minor 628 628 115 149 1859 931 2602 1708 0 0 All o
o Ratio minor/(minor+major) [normal value is 0.25]: 0.102 UM/MV: 0.000 o
o Program version 1.10F o Date of run: 180718/21:00 o
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 1.034 1.000 0.940 0.940 0.956 1.012 1.080 2578
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 1708 0.663 6.89 5.76 18.18 3.82 10.71 18- 37% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180718/21:00
#####

```



# Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```
@x333C333
3M#E#####N#####
o K A J I          o Province      jawa timur  o Date       :      7-01-2018  o
o              o Link number:          o Handled by:          o
o INTERURBAN ROADS  o Segment code:          o Checked by:          o
o                  C#####
o Form IR-1: Input  o Segment between      sampang and      pamekasn
o                  o Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)]
o GENERAL DATA,  C#####
o ROAD GEOMETRY    o Administr. road class : Nasional  o Functional road class: ARTERIAL
o                  o Road type       : 2/2UD  o Length (km)       : 10.000
o Purpose: Operation  o Time period:      07.00-08.00  o Case number:
#####
o HORIZONTAL ALIGNMENT
o
o                  o AA> A * * * * * -----> To: pamekasan
o                  o * * * * *
o To: <----- * * * * *
o      sampang * * * * * * * * * *
o                  o * * * * *
o                  o AA> B AAA north (N)
o
o U#####; U#####;
o   o Horizontal curvature (radians/km): NA  o Roadside  o Side A  o Side B  o Mean
o   o Sight distance > 300 m (%): NA  o development
o   o Sight distance class (default= B):  o Default: 0%  o 0%  o 0%  o 0%
o   A#####
#####
o VERTICAL ALIGNMENT
o * * * * *
o                  o U#####;
o                  o * Only for specific grade analysis
o                  o E#####;
o U#####;
o   o Rise+fall : NA m/km
o   o Alignment type: NA ( FLAT = default)
o   A#####
#####
o CROSS SECTION
o
o Undivided road  |||2222UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU2222|||
o side A          WSA      WCA          WcB      WsB      side B
o                 A#####
o                 2.00  5.00          5.00  2.00
o
o U#####;
o   o UNADJUSTED WIDTHS          o Side A  o Side B  o Total  o Mean
o   E#####;
o   o Average carriageway width, Wc (m)  5.00  5.00  10.00
o   o Unobstructed shoulder width, Ws (m)  2.00  2.00  4.00  2.00
o   A#####
#####
o ROAD SURFACE CONDITIONS
o U#####;
o   o CARRIAGEWAY SURFACE CONDITIONS          o Side A  o Side B
o   E#####;
o   o Type [Flexible (asphalt)/Concrete/Other]  NotAvail  NotAvail
o   o Surface condition [Good/Fair/Bad]  FAIR  FAIR
o   A#####
o U#####;
o   o SHOULDER SURFACE CONDITIONS          o SIDE A          o SIDE B          o
o   o Outer  o Inner  o Inner  o Outer
o   A#####;
o   o Surface type [Flexible/Concrete/Other]  NotAvail
o   o Drop from carriageway to shoulder (cm)  0
o   o Usability [Traffic/Parking/Emergency]  NoInput
o   o (default shoulder usability)  ( PARKING)  ( PARKING)
o   A#####
#####
o EFFECTIVE WIDTHS
o U#####;
o   o Undivided road          o Widths (m)
o   o Divided road          o Side A  o Side B
o   E#####;
o   o Shoulder, total          4.00
o   o Shoulder, mean          2.00
o   o Carriageway          10.00
o   A#####
#####
o TRAFFIC CONTROL CONDITIONS
o U#####;
o   o Speed limit : 0 km/h          o Max gross weight: 0.000 tonnes
o   o Other limitations :
o   o More remarks :
o   A#####
#####
o Program version 1.10F  o Date of run: 180718/21:13
E#####
```

```

>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
> Link number: Handled by:
> Segment code: Checked by:
> CA
> TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> U
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
> U
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 23.56 3.066 0.744 1.752 70.87 100.0 LT = Large Truck
> (normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0) MC = MotorCycle
> U
> Traffic flow data for whole segment analysis:
> U
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-CA
> 1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CA
> 1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40 CA
> CA Split veh/h/pcu/h
> veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h (%)
> 2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> Dir1° 267 267 38 49 6 9 23 58 800 320 49.67 1134 703
> Dir2° 271 271 32 42 11 17 17 43 818 327 50.32 1149 700
> U
> 5 1+2 538 538 70 91 17 26 40 101 1618 647 2283 1403
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.6%50.1%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.614
> U
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> U
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Frequencies are for Parking, stopping veh. PSV 0.8 NA / h,200m NA
> both sides of the road. Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> U
> Total: NA
> U
> 2. Determination of side friction class
> U
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> U
> For current case indicate side friction class: NA (L is default)
> U
> Program version 1.10F Date of run: 180718/21:13
>

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
Speed, Capacity
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.210 0.998 1.000 3744
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
#####
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1403 0.375 53.80 10.000 669.118 48.03 56.69 46.60 45.88 1+2 0.636
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/21:13
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 33.90 3.780 0.646 4.277 57.38 100.0
(normal values) (57.0) (23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
#####
Row/Dir - Light Vehicle Med Heavy Veh Large Bus Large Truck MotorCycle Total flow Q
rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
1.1' tion pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CAAAAAAAAAAAAAAAAA
1.2' pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h veh/h'pcu/h Split veh/h'pcu/h
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1 912 912 114 148 22 33 105 263 1710 684 47.47 2863 2040
Dir2 1133 1133 114 148 17 26 153 383 1751 700 52.52 3168 2390
5 +1+2 2045 2045 228 296 39 59 258 646 3461 1384 6031 4430
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.4% 46.0%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.734
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment. Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180718/21:21
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.210 0.985 1.000 3694
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4430 1.199 NA 10.000 NA NA NA NA NA 1+2 0.951
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/21:21
#####

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#####>
KAJI -- INTERURBAN ROADS  Province:      jawa timur  Date:          7-01-2023
   Link number:           3  Handled by:
   Segment code:         3  Checked by:
   CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
   Administr. road class : Nasional  Functional road class: ARTERIAL
   Road type             :         2/2UD  Length (km)       :      10.000
   Purpose: Operation    Time period :        07.00-08.00  Case number:
#####
TRAFFIC DATA:
#####; UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; UAAAAAAAAAAAAAAAAAAAAAAAAA; UAAAAAAAAAAAAAAAAAAAA
  Type of traffic data  3 ANNUAL AVERAGE DAILY TRAFFIC  3 DIRECTIONAL SPLIT  3
#####  3 AADT  3 K-factor  3 Dir1 - Dir2  3
  CLASSIFIED-HOURLY  3 (veh/day)  3 (default: 0.11)  3 (default: 50 - 50)  3
#####  3 #####  3
  (Class/Aadt/UNclass)  3  3  3 NA - NA %  3
  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
  UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####;
  Traffic  3 LV  3 MHV  3 LB  3 LT  3 MC  3 Total  3 LV = Light Vehicle
  Composition (%)  3 (%)  3 (%)  3 (%)  3 (%)  3 (%)  3 (%)  3 MHV = Medium Heavy Vehicle
#####  3
  User values  3 25.15  3 3.297  3 0.643  3 4.221  3 66.68  3 100.0  3  LT = Large Truck
  (normal values)  3 ( 57.0)  3 ( 23.0)  3 ( 7.0)  3 ( 4.0)  3 ( 9.0)  3 (100.0)  3 MC = MotorCycle
  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
#####
Traffic flow data for whole segment analysis:
#####;
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus  3 Large Truck  3 MotorCycle ° Total flow Q  3
rec-#####
1.1' tion° pce,1= 1.00  3 pce,1= 1.30  3 pce,1= 1.50  3 pce,1= 2.50  3 pce,1= 0.40 #####
1.2' ° pce,2= 1.00  3 pce,2= 1.30  3 pce,2= 1.50  3 pce,2= 2.50  3 pce,2= 0.40 °
#####  3
veh/h'pcu/h  3 veh/h'pcu/h  3 veh/h'pcu/h  3 veh/h'pcu/h  3 veh/h'pcu/h  3 veh/h'pcu/h  3 (3)  3 3
2 (1) ° (2)  3 (3)  3 (4)  3 (5)  3 (6)  3 (7)  3 (8)  3 (9)  3 (10)  3 (11) ° (12)  3 (13)  3 (14)  3
#####  3
Dir1° 621  3 621  3 89  3 116  3 11  3 17  3 121  3 303  3 1640  3 656  3 49.89  3 2482  3 1713  3
Dir2° 630  3 630  3 75  3 98  3 21  3 32  3 89  3 223  3 1677  3 671  3 50.10  3 2492  3 1654  3
#####
5 1+2 ° 1251  3 1251  3 164  3 214  3 32  3 49  3 210  3 526  3 3317  3 1327 ° 3 4974  3 3367  3
#####  3
6 Note. If specific grade then 3 Directional split, SP= Q1/(Q1+Q2)= 3 49.8%  3 50.8%  3
dir 1 = uphill, dir 2 = downhill 3 Pcu-factor, Fpcu = 3 0.676  3
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
#####
1. Determination of frequency of events
#####;
Calculation of weighted 3 Side friction 3 Symbol 3 Weighting 3 Frequency 3 Weighted 3
frequency of events per 3 type of events 3 factor 3 of events 3 frequency 3
hour and 200 m of the 3 (20) 3 (21) 3 (22) 3 (23) 3 (24) 3
studied road segment. #####
Pedestrians  3 PED  3 0.6  3 NA / h,200m  3 NA  3
Parking, stopping veh.  3 PSV  3 0.8  3 NA / h,200m  3 NA  3
Entry+exit of vehicles  3 EEV  3 1.0  3 NA / h,200m  3 NA  3
Slow-moving vehicles  3 SMV  3 0.4  3 NA / h  3 NA  3
#####
Total:  3 NA  3
#####
2. Determination of side friction class
#####;
Weighted frequency' Typical conditions  3 Side friction  3
of events (30)  3 class  3
#####
< 50  3 Rural, agriculture or undeveloped  3 VL= very low  3
  3 with very few activities  3  3
50 - 149  3 Rural, some roadside buildings  3 L= low  3
  3 and some activities  3  3
150 - 249  3 Village, residential activities  3 M= medium  3
250 - 349  3 Village, some market activities  3 H= high  3
> 350  3 Almost urban, market and business  3 VH= very high  3
  3 activities  3  3
#####
3 For current case indicate side friction class: NA (L is default)
#####
#####;
Program version 1.10F  3 Date of run: 180718/21:28  3
#####>
```



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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.210 0.999 1.000 3749
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L' (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3367 0.898 35.16 10.000 1023.62 32.91 36.31 32.37 32.10 1+2 0.884
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/21:28
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.938 1.022 1.401 3501
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1998 0.571 5.83 5.13 14.28 3.74 9.57 14- 30% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/21:48
#####

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# Hasil kinerja simpang Jl. Mutiara-Jl. Diponegoro pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 12 meter

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@xc
3ME#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS Province : Jawa Timur Date : 7-01-2018
o Form USIG-1: Geometry, City : Sampang Handled by: Sabill
o Purpose: Traffic flows Operation : City size: 0.91 millions Case : Period :
#####
o Major road (B+D) : Jl.Diponegoro Environment : COM (COM, RES or RA)
o Minor road (A) : Jl.Mutiara Side friction: Medium(High/Med/Low)
#####
o INTERSECTION * UAZ * . TRAFFIC CL - Classified, hourly
o GEOMETRY * A * /\ N FLOW DATA: CL UN - Un-classified, hourly
o Entry widths and * AAU 2.00 m * AA - AADT (Average daily)
o major road median * AAAA * ( traffic )
o Flows are
o in veh/h A
o
o UAZ * o v * UAZ *
o D * B * 74 <AU AA> 62
o AAU * * AAU *
o * * AAA * * * * *
o 6.00 m * AAA> ^ 70 64
o AAA III ffff AAA
o * * * * * AAA 6.00 m * D AAAA> 1026 1110 <AAAAA B
o
o A - - 10 m - -
o
o NB. Deduct
o 1.5 - 2 m
o from width
o if parking
o in approach!
o Major road (B-D)
o median: None
#####
o TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
o FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
#####
o 1 MOTOR VEH COMP (%): LV:24.31% HV:3.823% MC:71.86% Pcu factor: K-factor: Unmot:0.000%
o Program defaults: (40.00%) (3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
#####
o TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Umot., UM
o FLOW tion pces=1.00 pces=1.30 pces=0.50 Turn pces=1.00
o Approach veh/h veh/h pcu/h veh/h pcu/h veh/h pcu/h Ratio veh/h
o (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)
#####
o 2 Minor LT 4 4 0 0 58 29 62 33 0.45 0 A,LT
o 3 road: A ST 3 3 3 3 3 3 3 3 3 A,ST
o 4 RT 6 6 1 1 67 34 74 41 0.55 0 A,RT
o Total, minor A 10 10 1 1 125 63 136 74 0 0 aA
#####
o 5 Total, minor A 10 10 1 1 125 63 136 74 0 0 aA
o 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 NOT
o 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 DE-
o 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 FIN-
o Total, minor B+D 271 271 47 61 778 389 1096 721 0 0 aD
#####
o 9 NOT DEFINED
o Total minor road A 10 10 1 1 125 63 136 74 0 0 aA
#####
o 10 Tot minor road A 10 10 1 1 125 63 136 74 0 0 aA
o 11 Major LT 3 3 3 3 3 3 3 3 3 B,LT
o 12 road: B ST 299 299 44 57 767 384 1110 740 0 0 B,ST
o 13 RT 5 5 0 0 59 30 64 35 0.05 0 B,RT
o Total, major B 304 304 44 57 826 414 1174 775 0 0 aB
#####
o 14 Total, major B 304 304 44 57 826 414 1174 775 0 0 aB
o 15 Major LT 6 6 2 3 62 31 70 40 0.06 0 D,LT
o 16 road: D ST 265 265 45 58 716 358 1026 681 0 0 D,ST
o 17 RT 3 3 3 3 3 3 3 3 3 D,RT
o Total, major D 271 271 47 61 778 389 1096 721 0 0 aD
#####
o 18 Total, major D 271 271 47 61 778 389 1096 721 0 0 aD
o Total major road B+D 575 575 91 118 1604 803 2270 1496 0 0 aBD
#####
o 19 Tot major road B+D 575 575 91 118 1604 803 2270 1496 0 0 aBD
o 20 Major+minor LT 10 10 2 3 120 60 132 73 0.05 0 aLT
o 21 a (A+B+D) ST 564 564 89 115 1483 742 2136 1421 0 0 aST
o 22 RT 11 11 1 1 126 64 138 76 0.05 0 aRT
#####
o 23 Total major+minor 585 585 92 119 1729 866 2406 1570 0 0 All
o Ratio minor/(minor+major) [normal value is 0.25]: 0.056 UM/MV: 0.000
#####
o Program version 1.10F Date of run: 180718/22:06
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.915 1.045 1.500 3738
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1570 0.420 4.29 4.25 5.04 3.59 7.87 8- 20% Yes Yes Yes All USIG-I data
#####
Program version 1.10F Date of run: 180718/22:06
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Purpose Operation Major road (B+D) : Jl.Raya Camplong
Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road --- Major road --- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) For method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 3200 0.921 1.000 0.940 0.940 0.942 1.042 1.500 3834
#####
Comment: Warning! Minor road flow ratio outside empirical base(0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC-Queue pro- Objectives ful-
native-(pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23,C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 2038 0.532 5.43 4.90 14.29 3.69 9.12 12- 27% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180718/22:12
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.956 1.012 1.300 3275
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1708 0.522 5.32 4.84 10.15 3.75 9.07 12- 26% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/22:18
#####

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#####>
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC : DIRECTIONAL SPLIT :
#####
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50) :
#####
(Class/Aadt/UNclass) : : NA - NA % :
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
#####
User values 32.16 3.581 0.767 1.790 61.69 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
#####
Traffic flow data for whole segment analysis:
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q °
rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
1.1'tion° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CAAAAAAAAAAAAAAAA
1.2' ° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40 ° ° ° ° °
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
veh/h'pcu/h ° veh/h'pcu/h ° veh/h'pcu/h ° veh/h'pcu/h ° veh/h'pcu/h ° Split °veh/h'pcu/h°
2 (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) °
#####
Dir1° 392 ° 392 ° 49 ° 64 ° 12 ° 18 ° 20 ° 50 ° 834 ° 334 ° 47.77 ° 1307 ° 858 °
Dir2° 488 ° 488 ° 49 ° 64 ° 9 ° 14 ° 29 ° 73 ° 854 ° 342 ° 52.22 ° 1429 ° 981 °
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
5 ° 1+2 ° 880 ° 880 ° 98 ° 128 ° 21 ° 32 ° 49 ° 123 ° 1688 ° 676 ° 2736 ° 1839 °
#####
6 ° Note. If specific grade then ° Directional split, SP= Q1/(Q1+Q2)= ° 47.7%°46.6%°
dir 1 = uphill, dir 2 = downhill ° Pcu-factor, fpcu = ° 0.672 °
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
#####
1. Determination of frequency of events
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment. #####
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
#####
Total: NA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
#####
2. Determination of side friction class
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Weighted frequency Typical conditions Side friction
of events (30) class
#####
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
#####
For current case indicate side friction class: NA ( L is default)
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
#####
Program version 1.10F Date of run: 180718/22:45
#####<

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
Speed, Capacity
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.270 0.987 1.000 3884
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1839 0.473 50.41 10.000 714.015 44.91 53.20 43.55 42.87 1+2 0.707
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/22:45
#####

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## Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 12 meter

```
@x353C353
3MEI#####N#####
° K A J I ° Province jawa timur ° Date : 7-01-2018 °
° Link number: ° Handled by :
° INTERURBAN ROADS ° Segment code: ° Checked by :
° Form IR-1: Input ° Segment between sampang and pamekasn
° Specific grade: No [NO indicates segment, YES spec grade (only 2/2UD)]
° GENERAL DATA, #####
° ROAD GEOMETRY ° Administr. road class : Nasional ° Functional road class: ARTERIAL
° Road type : 2/2UD ° Length (km) : 10.000
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number:
#####
° HORIZONTAL ALIGNMENT
°
°
°
° To: <----- * * * * * * * * * * <-----> To: pamekasan
°
° sampang * * * * * * * * * * * * * * * * * * * * N Indicate
° * * * * * * * * * * * * * * * * * * * * AAA north (N)
°
°
°
° #####; #####;
° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° Sight distance > 300 m (%): NA ° development #####
° Sight distance class (default= B): ° Default: 0% ° 0 % ° 0 % ° 0 %
° #####
#####
° VERTICAL ALIGNMENT * * * * *
°
° * * * * * * * * * *
° #####;
° ° Only for specific grade analysis °
° #####;
° Rise+fall : NA m/km ° ° Grade length (km) : °
° Alignment type: NA ( FLAT = default) ° ° Grade slope (%): °
° #####;
° #####;
#####
° CROSS SECTION
°
° Undivided road |||'2'2'2'000000000000000000000000000'2'2'2'|||
° side A WSA WCA WcB WsB side B
°
° 2.00 6.00 6.00 2.00
°
°
° #####;
° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° #####;
° Average carriageway width, Wc (m) ° 6.00 ° 6.00 ° 12.00 °
° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° #####
#####
° ROAD SURFACE CONDITIONS
°
° #####;
° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° #####;
° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
°
° #####;
° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° Outer ° Inner ° Inner ° Outer °
°
° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° (default shoulder usability) ° ( PARKING) ° ( ) ° ( ) °
° #####;
° EFFECTIVE WIDTHS #####;
° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° #####;
° Shoulder, total ° 4.00 ° ° Shoulder, total ° °
° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° ° °
° Carriageway ° 12.00 ° ° Carriageway ° ° °
° #####
#####
° TRAFFIC CONTROL CONDITIONS
°
° #####;
° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° Other limitations : °
° More remarks : °
° #####;
° Program version 1.10F ° Date of run: 180718/22:47 °
#####
```

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>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
> Link number: Handled by:
> Segment code: Checked by:
> CA
> TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> U
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
> U
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 23.56 3.066 0.744 1.752 70.87 100.0 LT = Large Truck
> (normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
> U
> Traffic flow data for whole segment analysis:
> U
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> ° rec-CA
> ° 1.1'tion° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CA
> ° 1.2' ° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
> ° CA Split °veh/h°pcu/h°
> ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° (%)
> ° 2 ° (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14)
> ° Dir1° 267 ° 267 ° 38 ° 49 ° 6 ° 9 ° 23 ° 58 ° 800 ° 320 ° 49.67 ° 1134 ° 703
> ° 4 ° Dir2° 271 ° 271 ° 32 ° 42 ° 11 ° 17 ° 17 ° 43 ° 818 ° 327 ° 50.32 ° 1149 ° 700
> ° 5 ° 1+2 ° 538 ° 538 ° 70 ° 91 ° 17 ° 26 ° 40 ° 101 ° 1618 ° 647 ° ° 2283 ° 1403
> ° 6 ° Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= °49.6%°50.1%
> ° 7 ° dir 1 = uphill, dir 2 = downhill °Pcu-factor, fpcu = °0.614°
> U
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> U
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment.
> Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
> U
> 2. Determination of side friction class
> U
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA ( L is default)
> U
> Program version 1.10F Date of run: 180718/22:47
>

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
Speed, Capacity
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
#####
Direc- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.270 0.998 1.000 3929
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
#####
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L' (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 1403 0.357 54.40 10.000 661.684 48.23 57.51 46.70 45.94 1+2 0.621
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/22:47
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
TRAFFIC FLOW, SIDE FRICTION Adminstr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
Type of traffic data : ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT : K-factor : Dir1 - Dir2
CLASSIFIED-HOURLY : (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) : : NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
User values 33.90 3.780 0.646 4.277 57.38 100.0 LT = Large Truck
(normal values) (57.0) (23.0) (7.0) (9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 912 912 114 148 22 33 105 263 1710 684 47.47 2863 2040
Dir2° 1133 1133 114 148 17 26 153 383 1751 700 52.52 3168 2390
5 1+2 2045 2045 228 296 39 59 258 646 3461 1384 6031 4430
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.4%46.0%
7 dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.734
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA (L is default)
#####
Program version 1.10F Date of run: 180718/22:49
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.270 0.985 1.000 3877
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4430 1.143 NA 10.000 NA NA NA NA NA 1+2 0.940
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/22:49
#####

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## Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2023 dengan penambahan lebar jalan mayor menjadi 12 meter

```
@x359C359
3ME#####N#####
° K A J I ° Province jawa timur ° Date : 7-01-2023 °
° ° Link number: ° Handled by: °
° INTERURBAN ROADS ° Segment code: ° Checked by: °
° CA#####
° Form IR-1: Input ° Segment between sampang and pamekasn °
° ° Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)] °
° GENERAL DATA, CA#####
° ROAD GEOMETRY ° Administr. road class : Nasional ° Functional road class: ARTERIAL °
° ° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
° °
° ° UAA> A * * * * * -----> To: pamekasn
° ° * * * * * °
° To: <----- * * * * * °
° ° sampang * * * * * * * * * * °
° ° * * * * * ° N Indicate
° ° * * * * * ° AAA north (N)
° °
° ° U#####; U#####;
° ° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° ° Sight distance > 300 m (%): NA ° development
° ° ° Sight distance class (default= B): ° Default: 0% ° 0% ° 0% ° 0%
° ° A#####U
#####
° VERTICAL ALIGNMENT * * * * * °
° ° U#####; °
° ° * * * * * ° Only for specific grade analysis °
° ° E#####u
° ° U#####; °
° ° ° Rise+fall : NA m/km ° ° Grade length (km) : °
° ° ° Alignment type: NA ( FLAT = default) ° ° Grade slope (%): °
° ° ° Climbing lane (Y/N): °
° ° A#####U
#####
° CROSS SECTION
° °
° ° Undivided road |||^|^|^|U^U^U^U^U^U^U^U^U^U^U^U^U^U^U^U^|^|^|^|^|
° ° side A WSA WCA WcB WsB side B
° ° A#####A
° ° 2.00 6.00 ° ° 6.00 2.00
° °
° ° U#####;
° ° ° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° ° E#####;
° ° ° Average carriageway width, Wc (m) ° 6.00 ° 6.00 ° 12.00 ° °
° ° ° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° ° A#####U
#####
° ROAD SURFACE CONDITIONS
° ° U#####;
° ° ° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° ° E#####;
° ° ° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° ° ° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR ° °
° ° A#####U
° ° U#####;
° ° ° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° ° Outer ° Inner ° Inner ° Outer °
° ° A#####'
° ° ° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° ° ° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° ° ° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° ° ° (default shoulder usability) ° ( PARKING) ° ( PARKING) °
° ° A#####U
#####
° EFFECTIVE WIDTHS U#####;
° ° U#####; ° ° Widths (m) °
° ° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° ° E#####;
° ° ° Shoulder, total ° 4.00 ° ° Shoulder, total ° °
° ° ° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° ° °
° ° ° Carriageway ° 12.00 ° ° Carriageway ° ° °
° ° A#####U
#####
° TRAFFIC CONTROL CONDITIONS
° ° U#####;
° ° ° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° ° ° Other limitations : °
° ° ° More remarks : °
° ° A#####U
#####
° Program version 1.10F ° Date of run: 180718/22:52 °
#####
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>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
> Link number:
> Segment code:
> Form IR-2: Input
> TRAFFIC FLOW, SIDE FRICTION Administrator: road class : Nasional Functional road class: ARTERIAL
> Road type: Length (km): 10.000
> Purpose: Operation Time period: 07.00-08.00 Case number:
> TRAFFIC DATA:
> ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> User values 25.15 3.297 0.643 4.221 66.68 100.0 LT = Large Truck
> (normal values) (57.0) (23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
> Traffic flow data for whole segment analysis:
> Row'Di-'Light Vehicle'Med Heavy Veh' Large Bus ' Large Truck ' MotorCycle ' Total flow Q
> 'rec-'
> '1.1'tion' pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40
> '1.2' pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
> '2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> 3 'Dir1' 621 621 89 116 11 17 121 303 1640 656 49.89 2482 1713
> 4 'Dir2' 630 630 75 98 21 32 89 223 1677 671 50.10 2492 1654
> 5 '1+2' 1251 1251 164 214 32 49 210 526 3317 1327 4974 3367
> 6 'Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8% 50.8%
> 7 ' dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.676
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
2. Determination of side friction class
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA (L is default)
Program version 1.10P Date of run: 180718/22:52

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#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      7-01-2023
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class :      Nasional      Functional road class:      ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust- vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° #####
° 1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
° #####
° Comments:      User FFV, dir1: None!
°
° dir2:
°
#####
CAPACITY
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Direc- Base Capacity      Adjustment factors for capacity      Actual capacity, C
°
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° #####
° 1+2      3100      1.270      0.999      1.000      3935
°
° #####
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
°
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
°
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° #####
° 1+2      3367      0.856      37.24      10.000      966.607      33.91      38.95      33.12      32.72      1+2      0.872
°
° #####
° Space for user remark:
°
#####
Program version 1.10F      Date of run: 180718/22:52
#####

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**Hasil kinerja simpang Jl. Mutiara-Jl. Diponegoro pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter**

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@x363C363
3ME#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS  o Province :         Jawa Timur  o Date       :         3-01-2018  o
o Form USIG-1: Geometry,              o City       :         Sampang   o Handled by:         Sabill   o
o Traffic flows                        o City size: 0.91 millions  o Case       :         :       o
o Purpose:                            o Operation  o Period    :         :       o
#####IN#####
o Major road (B+D) :                   Jl.Diponegoro  o Environment : COM (COM, RES or RA) o
o Minor road (A)   :                   Jl.Mutiara     o Side friction: Medium(High/Med/Low) o
#####IN#####
o INTERSECTION          * UA  * . * TRAFFIC CL - Classified, hourly o
o GEOMETRY              * A  * / \ N * FLOW DATA: CL UN - Un-classified, hourly o
o Entry widths and     * AAU 2.00 m * * AA - AADT (Average daily) o
o major road median    * AAAA * *          ( traffic ) o
o                            * * * Flows are o
o                            * * * in veh/h  o
o                            * * *      A  o
o          UA  * * v *          UA  * * * * 109 <AU AA> 127 o
o          D * * *          B * * * * o
o          AAU * * *          AAU * * * * o
o * * * AAA * * * * * o
o 5.00 m * AAA > o
o AAA iiii o
o          * * * * * iffff AAA o
o          * * * * * <AAA * 5.00 m * AAAAU AAAA o
o          * * * * * * * * * D <AAAAA> 1181 1293 <AAAAA B o
o
o          A - - 10 m - - ' o
o
o NB. Deduct o
o 1.5 - 2 m o
o from width o
o if parking  o
o in approach! o
o          UAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o          * Major road (B-D) o
o          * median: None o
#####IN#####
o 3 TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection) o
o 3 FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection) o
#####IN#####
o 1 MOTOR VEH COMP (%): LV:30.52% HV:4.443% MC:65.03% Pcu factor: *K-factor: 0Unmot:0.000% o
o Program defaults: (40.00%) (3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%) o
o 3 TRAFFIC Direc= Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM o
o 3 FLOW tion * pce=1.00 * pce=1.30 * pce=0.50 * Turn pce=1.00 o
o 3 Approach * veh/h * veh/h * pcu/h * veh/h * pcu/h * veh/h * pcu/h * Ratio veh/h * o
o 3 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) o
#####IN#####
o 2 Minor LT 34 34 0 0 93 47 127 81 0.53 0 A,LT o
o 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST o
o 4 RT 32 32 1 1 76 38 109 71 0.47 0 A,RT o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 5 Total, minor A 66 66 1 1 169 85 236 152 3 0 A o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT o
o 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE- o
o 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN- o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 9 NOT DEFINED o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 10 Tot minor road A 66 66 1 1 169 85 236 152 3 0 A o
#####IN#####
o 11 Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT o
o 12 road: B ST 412 412 71 92 810 405 1293 909 3 0 B,ST o
o 13 RT 32 32 0 0 88 44 120 76 0.08 0 B,RT o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 14 Total, major B 444 444 71 92 898 449 1413 985 3 0 AB o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 15 Major LT 9 9 0 0 64 32 73 41 0.05 0 D,LT o
o 16 road: D ST 367 367 57 74 757 379 1181 820 3 0 D,ST o
o 17 RT 3 3 3 3 3 3 3 3 3 3 3 D,RT o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 18 Total, major D 376 376 57 74 821 411 1254 861 3 0 AD o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 19 Tot major road B+D 820 820 128 166 1719 860 2667 1846 3 0 ABD o
#####IN#####
o 20 Major+minor LT 43 43 0 0 157 79 200 122 0.06 0 ALT o
o 21 A(A+B+D) ST 779 779 128 166 1567 784 2474 1729 3 0 AST o
o 22 RT 64 64 1 1 164 82 229 147 0.07 0 ART o
o AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA o
o 23 Total major+minor 886 886 129 167 1888 945 2903 1998 3 0 All o
#####IN#####
o 3 Program version 1.10F 3 Date of run: 180718/20:41 3
#####IN#####
  
```

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#####N#####
° K A J I ° Province : Jawa Timur ° Date : 3-01-2018 °
° UNSIGNALISED INTERSECTIONS ° City : Sampang ° Handled by : Sabil °
° Case : ° Period : °
° Form USIG-II: ANALYSIS CA#####
° Major road (B+D) : Jl.Diponegoro °
° Purpose ° Operation ° Minor road (A+C) : Jl.Mutiara °
#####
° PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00 °
° (defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec °
° Queue probability (35%) : < 0 % °
#####
° 1. Approach widths and intersection type °
° #####; °
° ° Alter-°No. of in-° APPROACH ENTRY WIDTHS (m) °Average° Number of lanes °Intersection°
° ° native°tersection°--- Minor road ----°--- Major road ----° width ° (Fig C-1:2) ° type °
° ° ° arms ° A ° ° ° B ° D ° (B+D)/2 ° (m) °Minor rd°Major rd°(Table C1:1) °
° ° ° (1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) °
#####
° ° Main ° 3 ° 2.00 ° 2.00 ° 5.00 ° 5.00 ° 5.00 ° 4.00 ° 2 ° 2 ° 322 °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
#####
° ° Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method °
#####
° °
° ° 2. Capacity °
° ° #####; °
° ° Alter-° Base ° CAPACITY ADJUSTMENT FACTORS (F) ° Actual °
° ° native° capacity ° Approach°Major road °City size°Side friction° Left ° Right ° Ratio ° capacity °
° ° ° Co (pcu/h) °width, Fw°median (Fm) ° Fcs ° Frsu °turning°turning°minor/tot ° C °
° ° ° Table C2:1°Fig C3:1 ° Tab C-4:1 ° Tab C-5:1 ° Table C-6:1 ° Pg C7:1°Pg C8:1°Fig C-9:1 ° pcu/h °
° ° ° (20) ° (21) ° (22) ° (23) ° (24) ° (25) ° (26) ° (27) ° (28) °
#####
° ° Main ° 2700 ° 1.034 ° 1.000 ° 0.940 ° 0.940 ° 0.938 ° 1.022 ° 1.101 ° 2605 °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
#####
° ° Comment: Warning! Minor road flow ratio outside empirical base(0.15-0.50)! °
#####
° °
° ° 3. Traffic performance °
° ° #####; °
° ° Alter-°Flow,°Q °Degree of ° TRAFFIC DELAY (sec/pcu) °GEOMETRIC° INTERSEC-°Queue pro-° Objectives ful- ° Comment °
° ° native°(pcu/h) °saturation°Intersec-° Major ° Minor ° DELAY °TION DELAY° bability ° filled (Yes/No) ° °
° ° ° USIG-I, ° DS=Q/C °tion, DTi °Rd, DTma ° road ° (sec/pcu) ° (sec/pcu) ° QP(%) ° Deg ° °
° ° ° R23,C10 ° (30)/(28) ° Fig E:1 ° Fig E:2 ° DTmi ° DG ° (32)+(35) ° Fig F:1 ° of ° Delay°Queue°
° ° ° (30) ° (31) ° (32) ° (33) ° (34) ° (35) ° (36) ° (37) ° sat.° °prob.° (38) °
#####
° ° Main ° 1998 ° 0.767 ° 8.47 ° 6.71 ° 29.82 ° 3.86 ° 12.33 ° 24- 48% ° Yes ° Yes ° No °All USIG-I data° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
#####
° ° Comment: °
#####
° ° Program version 1.10F ° Date of run: 180718/20:41 °
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 1.034 1.000 0.940 0.940 0.915 1.045 1.127 2658
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 1570 0.591 6.03 5.25 21.88 3.71 9.74 15- 31% Yes Yes Yes All USIG-I data
#####
Comment:
Program version 1.10F Date of run: 180718/20:49
#####

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# Hasil kinerja simpang Jl. Prajjan-Jl.Raya Camplong pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```
@x367C367
3MEI#####IN#####
* KAJI- UNSIGNALISED INTERSECTIONS  Province :      Jawa Timur      Date       :      3-01-2018
* Form USIG-1: Geometry,              City       :      Sampang     Handled by :      Sabill
* Purpose:      Traffic flows          City size: 0.91 millions    Case       :
* Operation                                         Period       :      16.00-17.00
#####
* Major road (B+D) :      Jl.Raya Camplong   Environment :  COM (COM, RES or RA)
* Minor road (A)   :      Jl.Prajjan      Side friction: Medium(High/Med/Low)
#####
* INTERSECTION      * UAZ *      .      TRAFFIC      CL - Classified, hourly
* GEOMETRY          * A *      / \ N      FLOW DATA: CL UN - Un-classified, hourly
* Entry widths and  * AAU 2.00 m  *      AA - AADT (Average daily)
* major road median * AAAA *      ( traffic )
* Flows are
* in veh/h
*
* UAZ *      v *      UAZ *      A
* D *      B *      86 <AU AA> 91
* AAU *      AAU
*
* * * * *
* 5.00 m * > AAA >      109      84
* AAA III      iffff AAA
* * * * * <AAA * 5.00 m * AAAAU AAAA
* * * * * * * * * * * * * * * * * D >>>>>> 1260 1233 <AAAAA B
*
* A - - 10 m - -
*
* NB. Deduct
* 1.5 - 2 m
* from width
* if parking
* in approach!
*
* *****
* Major road (B-D)
* median: None
#####
* TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
* FOR THE ARMS      Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
#####
* 1 MOTOR VEH COMP (%) : LV:34.78% HV:4.680% MC:60.53% Pcu factor:      K-factor:      Unmot:0.000%
* Program defaults: (40.00%) ( 3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
#####
* TRAFFIC Direc-> Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM
* FLOW tion * pce=1.00 * pce=1.30 * pce=0.50 * Turn pce=1.00
* Approach * veh/h * veh/h * pcu/h * veh/h * pcu/h * veh/h * pcu/h * Ratio veh/h
* (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)
#####
* 2 Minor LT 32 32 2 3 57 29 91 64 0.56 0 A,LT
* 3 road: A ST 3 3 3 3 3 3 3 3 3 A,ST
* 4 RT 14 14 0 0 72 36 86 50 0.44 0 A,RT
* *****
* 5 Total, minor A 46 46 2 3 129 65 177 114 0 0 aA
* *****
* 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 NOT
* 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 DE-
* 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 FIN-
* *****
* 9 NOT DEFINED
* *****
* 10 Tot minor road A 46 46 2 3 129 65 177 114 0 0 aA
#####
* 11 Major LT 3 3 3 3 3 3 3 3 3 B,LT
* 12 road: B ST 466 466 71 92 696 348 1233 906 0 0 B,ST
* 13 RT 23 23 4 5 57 29 84 57 0.06 0 B,RT
* *****
* 14 Total, major B 489 489 75 97 753 377 1317 963 0 0 aB
* *****
* 15 Major LT 21 21 0 3 88 44 109 65 0.07 0 D,LT
* 16 road: D ST 440 440 57 74 763 382 1260 896 0 0 D,ST
* 17 RT 3 3 3 3 3 3 3 3 3 D,RT
* *****
* 18 Total, major D 461 461 57 74 851 426 1369 961 0 0 aD
* *****
* 19 Tot major road B+D 950 950 132 171 1604 803 2686 1924 0 0 aBD
#####
* 20 Major+minor LT 53 53 2 3 145 73 200 129 0.06 0 aLT
* 21 a(A+B+D) ST 906 906 128 166 1459 730 2493 1802 0 0 aST
* 22 RT 37 37 4 5 129 65 170 107 0.05 0 aRT
* *****
* 23 Total major+minor 996 996 134 174 1733 868 2863 2038 0 0 All
#####
* Ratio minor/(minor+major) [normal value is 0.25]: 0.061 UM/MV: 0.000
#####
* Program version 1.10F Date of run: 180718/20:55
#####
```

```

#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 2700 1.034 1.000 0.940 0.940 0.942 1.042 1.121 2713
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E-1 Fig E-2 DTmi DG (32)+(35) Fig F-1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 2038 0.751 8.20 6.55 36.07 3.84 12.04 23- 46% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180718/20:55
#####

```

# Hasil kinerja simpang Jl. Prajjan-Jl.Raya Camplong pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```

@x369C369
3ME
KAIJ- UNSIGNALISED INTERSECTIONS
Form USIG-1: Geometry, Province : Jawa Timur Date : 7-01-2018
Traffic flows, City : Sampang Handled by: Sabil
Operation, City size: 0.91 millions, Case :
Purpose: Operation, Period : 07.00-08.00

Major road (B+D) : Jl.Raya Camplong Environment : COM (COM, RES or RA)
Minor road (A) : Jl.Prajjan Side friction: Medium(High/Med/Low)

INTERSECTION * UAZ * * TRAFFIC CL - Classified, hourly
GOMETRY * A * / \ N FLOW DATA: CL UN - Un-classified, hourly
Entry widths and * AAU 2.00 m * AA - AADT (Average daily)
major road median * * * ( traffic )
Flows are
in veh/h
176 <AU AA> 91

5.00 m * AAA> ^ 83
AAA iii
ffff AAA 100
<AAA> 5.00 m * AAAUU AAA
D >AAAA> 1076 1076 <AAAA> B

A - - 10 m - -

NB. Deduct
1.5 - 2 m
from width
if parking
in approach!

TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
MOTOR VEH COMP (%): LV:24.13% HV:4.419% MC:71.44% Pcu factor: *K-factor:
Program defaults: (40.00%) (3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Umot.,UM
FLOW tion pces=1.00 pces=1.30 pces=0.50 Turn pces=1.00
Approach v/veh/h pcu/h v/veh/h pcu/h v/veh/h pcu/h v/veh/h pcu/h Ratio v/veh/h
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)

Minor LT 30 30 1 1 60 30 91 61 0.39 0 A,LT
road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST
RT 10 10 1 1 165 83 176 94 0.61 0 A,RT
Total, minor A 40 40 2 2 225 113 267 155 0 3 aA
NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 NOT
NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 DE-
NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 FIN-
Total minor road A 40 40 2 2 225 113 267 155 0 3 aA
Major LT 3 3 3 3 3 3 3 3 3 3 B,LT
road: B ST 281 281 50 65 745 373 1076 719 0 3 B,ST
RT 18 18 1 1 64 32 83 51 0.07 0 B,RT
Total, major B 299 299 51 66 809 405 1159 770 0 3 aB
Major LT 15 15 5 7 80 40 100 62 0.08 0 D,LT
road: D ST 274 274 57 74 745 373 1076 721 0 3 D,ST
RT 3 3 3 3 3 3 3 3 3 3 D,RT
Total, major D 289 289 62 81 825 413 1176 783 0 3 aD
Total major road B+D 588 588 113 147 1634 818 2335 1553 0 3 aBD
Major+minor LT 45 45 6 8 140 70 191 123 0.07 0 aLT
Total (A+B+D) ST 555 555 107 139 1490 746 2152 1440 0 3 aST
RT 28 28 2 2 229 115 259 145 0.08 0 aRT
Total major+minor 628 628 115 149 1859 931 2602 1708 0 3 aAll
Ratio minor/(minor+major) [normal value is 0.25]: 0.102 UM/MV: 0.000
Program version 1.10F Date of run: 180718/21:00
  
```

```

#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %

#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road --- Major road --- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 5.00 5.00 5.00 4.00 2 2 322
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method

#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 2700 1.034 1.000 0.940 0.940 0.956 1.012 1.080 2578
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!

#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful-
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1708 0.663 6.89 5.76 18.18 3.82 10.71 18- 37% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/21:00
#####

```

## Hasil kinerja ruas Jl.Taddan pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```

@x371C371
3ME#####N#####
° K A J I ° Province jawa timur ° Date : 3-01-2018 °
° Link number: ° Handled by : °
° INTERURBAN ROADS ° Segment code: ° Checked by : °
#####
° Form IR-1: Input ° Segment between sampang and pamekasn °
° Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)] °
° GENERAL DATA, #####
° ROAD GEOMETRY ° Administr. road class : Nasional ° Functional road class: ARTERIAL °
° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
° UAA> A * * * * * -----> To:
° * * * * * * * * * * pamekasan
° To: <----- * * * * * °
° sampang * * * * * * * * * * °
° * * * * * * * * * * °
° * * * * * * * * * * N Indicate
° * * * * * * * * * * AAA north (N)
°
° #####; #####;
° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° Sight distance > 300 m (%): NA ° development #####
° ° Sight distance class (default= B): ° Default: 0% ° 0% ° 0% ° 0% °
° #####
#####
° VERTICAL ALIGNMENT * * * * *
° #####;
° ° Only for specific grade analysis °
° #####;
° ° Rise+fall : NA m/km ° ° Grade length (km) : °
° ° Alignment type: NA ( FLAT = default) ° ° Climbing lane (Y/N) : °
° #####;
#####
° CROSS SECTION
° Undivided road |||222200000000000000000000000000222|||
° side A WSA WCA WcB WsB side B
° #####;
° 2.00 5.00 #####;
° 5.00 2.00
° #####;
° #####;
° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° #####;
° Average carriageway width, Wc (m) ° 5.00 ° 5.00 ° 10.00 °
° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° #####;
#####
° ROAD SURFACE CONDITIONS
° #####;
° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° #####;
° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
° #####;
° #####;
° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° Outer ° Inner ° Inner ° Outer °
° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° (default shoulder usability) ° ( PARKING) ° ( ° ) ° ( PARKING) °
° #####;
#####
° EFFECTIVE WIDTHS #####;
° #####;
° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° #####;
° Shoulder, total ° 4.00 ° ° Shoulder, total ° °
° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° °
° Carriageway ° 10.00 ° ° Carriageway ° °
° #####;
#####
° TRAFFIC CONTROL CONDITIONS
° #####;
° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° Other limitations : °
° More remarks : °
° #####;
#####
° Program version 1.10F ° Date of run: 180718/21:04 °
#####
  
```

```

>
> KAJI -- INTERURBAN ROADS  Province:          jawa timur  Date:          3-01-2018
>                               Link number:      3          Handled by:      0
>                               Segment code:      3          Checked by:      0
>                               CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> TRAFFIC FLOW, SIDE FRICTION  Administr. road class : Nasional  Functional road class: ARTERIAL
>                               Road type         :          2/2UD  Length (km)       : 10.000
> Purpose: Operation           Time period   : 07.00-08.00  Case number:
>
> TRAFFIC DATA:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>  Type of traffic data 3 ANNUAL AVERAGE DAILY TRAFFIC 3 DIRECTIONAL SPLIT 3
> EIIIIIIIIIIIIIIIIIIIIII 3 ADT 3 K-factor 3 Dir1 - Dir2 3
> CLASSIFIED-HOURLY 3 (veh/day) 3 (default: 0.11) 3 (default: 50 - 50) 3
> EIIIIIIIIIIIIIIIIIIIIII 3 EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII 3
> (Class/Adt/UNclass) 3 3 3 NA - NA % 3
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Traffic 3 LV 3 MHV 3 LB 3 LT 3 MC 3 Total 3 LV = Light Vehicle
> Composition (%) 3 (%) 3 (%) 3 (%) 3 (%) 3 (%) 3 (%) 3 MHV = Medium Heavy Vehicle
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> User values 3 32.16 3 3.581 3 0.767 3 1.790 3 61.69 3 100.0 3 LT = Large Truck
> (normal values) 3 ( 57.0) 3 ( 23.0) 3 ( 7.0) 3 ( 4.0) 3 ( 9.0) 3 (100.0) 3 MC = MotorCycle
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> Traffic flow data for whole segment analysis:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus 3 Large Truck ° MotorCycle ° Total flow Q 3
> 3 rec-CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 1.1'tion° pce,1= 1.00 3 pce,1= 1.30 3 pce,1= 1.50 3 pce,1= 2.50 3 pce,1= 0.40 CAAAAAAAAAAAAAAAAAAAAA
> 1.2' 3 pce,2= 1.00 3 pce,2= 1.30 3 pce,2= 1.50 3 pce,2= 2.50 3 pce,2= 0.40 ° 3 3
> 3 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA Split 3veh/h'pcu/h'
> 3 veh/h'pcu/h 3 veh/h'pcu/h 3 veh/h'pcu/h 3 veh/h'pcu/h 3 veh/h'pcu/h 3 (%) 3 3
> 2 3 (1) ° (2) 3 (3) 3 (4) 3 (5) 3 (6) 3 (7) 3 (8) 3 (9) 3 (10) 3 (11) ° (12) 3 (13) 3 (14) 3
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> 3 Dir1° 392 3 392 3 49 3 64 3 12 3 18 3 20 3 50 3 834 3 334 ° 47.77 3 1307 3 858 3
> 3 Dir2° 488 3 488 3 49 3 64 3 9 3 14 3 29 3 73 3 854 3 342 ° 52.22 3 1429 3 981 3
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA-AAAAAAAAAAAAAAAAAAAAAA
> 5 1+2 ° 880 3 880 3 98 3 128 3 21 3 32 3 49 3 123 3 1688 3 676 ° 3 2736 3 1839 3
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> 6 3 Note. If specific grade then 3 Directional split, SP= Q1/(Q1+Q2)= 3 47.7% 3 46.6% 3
> 7 3 dir 1 = uphill, dir 2 = downhill 3 Pcu-factor, fpcu = 3 0.672 3
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Calculation of weighted 3 Side friction 3 Symbol 3 Weighting 3 Frequency 3 Weighted 3
> frequency of events per 3 type of events 3 factor 3 of events 3 frequency 3
> hour and 200 m of the 3 (20) 3 (21) 3 (22) 3 (23) 3 (24) 3
> studied road segment. EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> Pedestrians 3 PED 3 0.6 3 NA / h,200m 3 NA 3
> Parking, stopping veh. 3 PSV 3 0.8 3 NA / h,200m 3 NA 3
> Entry+exit of vehicles 3 EEV 3 1.0 3 NA / h,200m 3 NA 3
> Slow-moving vehicles 3 SMV 3 0.4 3 NA / h 3 NA 3
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> Total: 3 NA 3
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> 2. Determination of side friction class
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Weighted frequency 3 Typical conditions 3 Side friction 3
> of events (30) 3 class 3
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> < 50 3 Rural, agriculture or undeveloped 3 VL= very low 3
> 3 with very few activities 3 3
> 3 50 - 149 3 Rural, some roadside buildings 3 L= low 3
> 3 and some activities 3 3
> 3 150 - 249 3 Village, residential activities 3 M= medium 3
> 3 Village, some market activities 3 H= high 3
> 3 > 350 3 Almost urban, market and business 3 VH= very high 3
> 3 activities 3 3
> EIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
> 3 For current case indicate side friction class: NA ( L is default) 3
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
>
> Program version 1.10F 3 Date of run: 180718/21:04 °
>
>

```



```

#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      3-01-2018
°
° Link number:      3      Handled by:
° Segment code:      3      Checked by:
° Form IR-3: Analysis
°
° SPEED, CAPACITY
° Administr. road class :      Nasional      Functional road class:      ARTERIAL
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation
° Time period :      07.00-08.00      Case number:
#####
FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
° Base free-flow speed 'Carriage-'FVo+FVw' Adjustment factors' Actual free-flow speeds, km/h
° rec-3      FVo (km/h)      'way width' Light 'FFVlv = (FVo+FVw)*FFVsf*FFVrc
° 'tion' for different vehicles      'adjust-'vehicle' Side 'Land use
°
° Table B-1:1 or B-1:2      'ment, FVw'      'friction' Road func' Light      Other vehicle
°
° Tab B2:1' (2)+(3)      FFVsf      FFVrc      'vehicle' types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1' Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° 1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
°
° Comments:
° User FFV, dir1: None!
° dir2:
#####
CAPACITY
°
° Base Capacity' Adjustment factors for capacity      Actual capacity, C
°
° 'tion'
°
° Co      'Carriageway width' Directional split' Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° 1+2      3100      1.210      0.987      1.000      3701
°
°
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° Traffic 'Degree of' Actual      Road      Travel      ACTUAL SPEEDS      'Di- 'Degree of'
°
° rec-3 flow, Q      'saturation' speed, Vlv      segment      'time, TT'      'for other vehicle types'      'rec-'bunching
°
° 'tion' Form IR-2' DS=Q/C      'Fig D2:1/:2' length, L' (24/23)      km/h      'tion' DB
°
° pcu/h      (21)/(15)      km/h      km      sec      'Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° 1+2      1839      0.497      49.61      10.000      725.557      44.64      52.12      43.41      42.79      1+2      0.721
°
°
° Space for user remark:
#####
Program version 1.10F      Date of run: 180718/21:04
#####

```

# Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 10 meter

```

@x374C374
3ME#####N#####
° K A J I ° Province jawa timur ° Date : 7-01-2018 °
° Link number: ° Handled by: °
° INTERURBAN ROADS ° Segment code: ° Checked by: °
° Form IR-1: Input ° Segment between sampang and pamekasn °
° Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)] °
° GENERAL DATA, ° Adminstr. road class : Nasional ° Functional road class: ARTERIAL °
° ROAD GEOMETRY ° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
°
° * * * * *
° To: <----- * * * * * -----> To: pamekasn
° sampang * * * * * * * * * * N Indicate
° * * * * * * * * * * AAA> B AAA north (N)
°
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° Sight distance > 300 m (%): NA ° development ° ° ° °
° ° Sight distance class (default= B): ° Default: 0% ° 0 % ° 0 % ° 0 % °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° VERTICAL ALIGNMENT * * * * *
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Only for specific grade analysis °
° E#####
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Rise+fall : NA m/km ° ° Grade length (km) : °
° ° Alignment type: NA ( FLAT = default) ° ° Grade slope (%): °
° ° Climbing lane (Y/N): °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° CROSS SECTION
°
° Undivided road |||2222UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU2222|||
° side A WSA WCA WcB WsB side B
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° 2.00 5.00 5.00 2.00
°
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° E#####
° ° Average carriageway width, Wc (m) ° 5.00 ° 5.00 ° 10.00 ° °
° ° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° ROAD SURFACE CONDITIONS
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° E#####
° ° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° ° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° Outer ° Inner ° Inner ° Outer °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° ° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° ° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° ° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° ° (default shoulder usability) ° ( PARKING) ° ° ( PARKING) °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° EFFECTIVE WIDTHS UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; ° Widths (m) °
° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° E#####
° ° Shoulder, total ° 4.00 ° ° Shoulder, total ° ° °
° ° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° ° °
° ° Carriageway ° 10.00 ° ° Carriageway ° ° °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° TRAFFIC CONTROL CONDITIONS
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° ° Other limitations : °
° ° More remarks : °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° Program version 1.10F ° Date of run: 180718/21:13 °
E#####

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>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
> Link number: Handled by:
> Segment code: Checked by:
> CA
> TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> U
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
> U
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 23.56 3.066 0.744 1.752 70.87 100.0 LT = Large Truck
> (normal values) (57.0) (23.0) (7.0) (4.0) (9.0) (100.0) MC = MotorCycle
> U
> Traffic flow data for whole segment analysis:
> U
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-CA
> 1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CA
> 1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40 CA
> CA Split veh/h/pcu/h
> veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h veh/h/pcu/h (%)
> 2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> Dir1° 267 267 38 49 6 9 23 58 800 320 49.67 1134 703
> Dir2° 271 271 32 42 11 17 17 43 818 327 50.32 1149 700
> U
> 5 1+2 538 538 70 91 17 26 40 101 1618 647 2283 1403
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.6%50.1%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.614
> U
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> U
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Frequencies are for Parking, stopping veh. PSV 0.8 NA / h,200m NA
> both sides of the road. Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> U
> Total: NA
> U
> 2. Determination of side friction class
> U
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> U
> For current case indicate side friction class: NA (L is default)
> U
> Program version 1.10F Date of run: 180718/21:13
>

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#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      7-01-2018
°
° Link number:      Handled by:
° Segment code:      Checked by:
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class : Nasional      Functional road class: ARTERIAL
° Road type :      2/2UD      Length (km) :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA:
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust-      vehicle      Side      Land use
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
° #1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Comments:      User FFV, dir1: None!
° dir2:
#####
° CAPACITY
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA:
° Direc- Base Capacity      Adjustment factors for capacity      Actual capacity, C
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
° Table C-1:1      FCw      FCsp      FCsf
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
° (11)      (12)      (13)      (14)      (15)
° #1+2      3100      1.210      0.998      1.000      3744
°
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA: OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA: OAAAAAAAAAAAAAAAAA:
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
° #1+2      1403      0.375      53.80      10.000      669.118      48.03      56.69      46.60      45.88      1+2      0.636
°
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Space for user remark:
#####
° Program version 1.10F      Date of run: 180718/21:13
#####

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#####
KAWI -- INTERURBAN ROADS  Province:        jawa timur  Date:          3-01-2018
  Link number:             3  Handled by:           0
  Segment code:           3  Checked by:           0
  CA#####
TRAFFIC FLOW, SIDE FRICTION  Administr. road class :  Nasional  Functional road class:  ARTERIAL
  Road type                :          2/2UD  Length (km)       :      10.000
  Purpose: Operation       Time period :          07.00-08.00  Case number:         0
#####
TRAFFIC DATA:
#####
Type of traffic data      ANNUAL AVERAGE DAILY TRAFFIC  DIRECTIONAL SPLIT
ADT      K-factor      Dir1 - Dir2
CLASSIFIED-HOURLY      (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Aadt/UNclass)      NA - NA %
#####
Traffic      LV      MHV      LB      LT      MC      Total  LV = Light Vehicle
Composition(%) (%) (%) (%) (%) (%) (%)  MHV = Medium Heavy Vehicle
User values      33.90      3.780      0.646      4.277      57.38      100.0  LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)  MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
#####
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1°tion° pce,1= 1.00 ° pce,1= 1.30 ° pce,1= 1.50 ° pce,1= 2.50 ° pce,1= 0.40 #####
1.2° ° pce,2= 1.00 ° pce,2= 1.30 ° pce,2= 1.50 ° pce,2= 2.50 ° pce,2= 0.40 ° ° ° ° ° ° ° °
veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° Split °veh/h°pcu/h°
2 °(1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) °
Dir1° 912 ° 912 ° 114 ° 148 ° 22 ° 33 ° 105 ° 263 ° 1710 ° 684 ° 47.47 ° 2863 ° 2040°
Dir2° 1133 ° 1133 ° 114 ° 148 ° 17 ° 26 ° 153 ° 383 ° 1751 ° 700 ° 52.52 ° 3168 ° 2390°
5 °1+2 ° 2045 ° 2045 ° 228 ° 296 ° 39 ° 59 ° 258 ° 646 ° 3461 ° 1384 ° ° 6031 ° 4430°
6 ° Note. If specific grade then ° Directional split, SP= Q1/(Q1+Q2)= ° 47.4%°46.0%°
dir 1 = uphill, dir 2 = downhill °Pcu-factor, fpcu = ° 0.734°
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
#####
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
Village, some market activities H= high
250 - 349
> 350 Almost urban, market and business VH= very high
activities
#####
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180718/21:21
#####

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administ. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.210 0.985 1.000 3694
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 4430 1.199 NA 10.000 NA NA NA NA NA NA 1+2 0.951
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/21:21
#####

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>
> KAJI -- INTERURBAN ROADS
> Province: jawa timur Date: 7-01-2023
> Link number: Handled by:
> Segment code: Checked by:
> Form IR-2: Input
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
> TRAFFIC FLOW, SIDE FRICTION
> Administr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation
> Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> AADT K-factor Dir1 - Dir2
> CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
> AADT K-factor Dir1 - Dir2
> (Class/Aadt/UNclass) NA - NA %
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> User values 25.15 3.297 0.643 4.221 66.68 100.0 LT = Large Truck
> (normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Traffic flow data for whole segment analysis:
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-CANXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
> 1.1'tion° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 CAAAAAAAAAAAAAAAAAAAA
> 1.2' ° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
> CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA Split °veh/h°pcu/h°
> ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° (%) °
> 2 °(1) ° (2) ° (3) ° (4) ° (5) ° (6) ° (7) ° (8) ° (9) ° (10) ° (11) ° (12) ° (13) ° (14) °
> Dir1° 621 ° 621 ° 89 ° 116 ° 11 ° 17 ° 121 ° 303 ° 1640 ° 656 ° 49.89 ° 2482 ° 1713 °
> 4 °Dir2° 630 ° 630 ° 75 ° 98 ° 21 ° 32 ° 89 ° 223 ° 1677 ° 671 ° 50.10 ° 2492 ° 1654 °
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> 5 °1+2 ° 1251 ° 1251 ° 164 ° 214 ° 32 ° 49 ° 210 ° 526 ° 3317 ° 1327 ° ° 4974 ° 3367 °
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8%°50.8%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.676
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment. Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> 2. Determination of side friction class
> UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> Village, some market activities H= high
> 250 - 349
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA ( L is default)
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
>
> Program version 1.10F Date of run: 180718/21:28
>

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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY
Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.210 0.999 1.000 3749
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L' (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3367 0.898 35.16 10.000 1023.62 32.91 36.31 32.37 32.10 1+2 0.884
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/21:28
#####

```

# Hasil kinerja simpang Jl. Mutiara-Jl. Diponegoro pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 12 meter

```
@x383C383
3ME#####IN#####
* KAJI- UNSIGNALISED INTERSECTIONS Province : Jawa Timur Date : 3-01-2018
* Form USIG-1: Geometry, City : Sampang Handled by: Sabil
* Purpose: Traffic flows City size: 0.91 millions Case :
* Operation Period :
#####
* Major road (B+D) : Jl. Diponegoro Environment : COM (COM, RES or RA)
* Minor road (A) : Jl. Mutiara Side friction: Medium (High/Med/Low)
#####
* INTERSECTION * UAZ * . TRAFFIC CL - Classified, hourly
* GOMETRY * A * / \ N FLOW DATA: CL UN - Un-classified, hourly
* Entry widths and * AAU 2.00 m AA - AADT (Average daily)
* major road median * AAAA * ( traffic )
* Flows are
* in veh/h A
*
* UAZ * v * UAZ
* D * B
* AAU * AAU 109 <AA> 127
* * * * *
* 6.00 m * AAA> ^ 73 120
* AAA iii ffff AAA
* * * * * <AAA> 6.00 m AAAU AAAA
* * * * * * * * * * D >AAAAA> 1181 1293 <AAAAA B
*
* A - - 10 m - -
*
* NB. Deduct
* 1.5 - 2 m
* from width
* if parking
* in approach!
#####
* TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection)
* FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection)
#####
* 1 MOTOR VEH COMP (%): LV:30.52% HV:4.443% MC:65.03% Pcu factor: *K-factor: *Unmot:0.000%
* Program defaults: (40.00%) (3.00%) (57.00%) (norm value: 0.85) (default: ) (def: 14.0%)
#####
* TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot., UM
* FLOW tion * pces=1.00 * pces=1.30 * pces=0.50 * Turn pces=1.00
* Approach * veh/h * veh/h * pcu/h * veh/h * pcu/h * veh/h * pcu/h * Ratio veh/h *
* (1) * (2) * (3) * (4) * (5) * (6) * (7) * (8) * (9) * (10) * (11) * (12) *
#####
* 2 Minor LT 34 34 0 0 93 47 127 81 0.53 0 A,LT
* 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST
* 4 RT 32 32 1 1 76 38 109 71 0.47 0 A,RT
* 5 Total, minor A 66 66 1 1 169 85 236 152 0 0 aA
* 6 NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT
* 7 NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE-
* 8 NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN-
* 9 NOT DEFINED
#####
* 10 Tot minor road A 66 66 1 1 169 85 236 152 0 0 aA
#####
* 11 Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT
* 12 road: B ST 412 412 71 92 810 405 1293 909 0 0 B,ST
* 13 RT 32 32 0 0 88 44 120 76 0.08 0 B,RT
* 14 Total, major B 444 444 71 92 898 449 1413 985 0 0 aB
* 15 Major LT 9 9 0 0 64 32 73 41 0.05 0 D,LT
* 16 road: D ST 367 367 57 74 757 379 1181 820 0 0 D,ST
* 17 RT 3 3 3 3 3 3 3 3 3 3 3 D,RT
* 18 Total, major D 376 376 57 74 821 411 1254 861 0 0 aD
#####
* 19 Tot major road B+D 820 820 128 166 1719 860 2667 1846 0 0 aBD
#####
* 20 Major+minor LT 43 43 0 0 157 79 200 122 0.06 0 aLT
* 21 a (A+B+D) ST 779 779 128 166 1567 784 2474 1729 0 0 aST
* 22 RT 64 64 1 1 164 82 229 147 0.07 0 aRT
#####
* 23 Total major+minor 886 886 129 167 1888 945 2903 1998 0 0 All
* Ratio minor/(minor+major) [normal value is 0.25]: 0.081 UM/MV: 0.000
* Program version 1.10F Date of run: 180718/21:48
#####
```

```

#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road --- Major road --- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.938 1.022 1.401 3501
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1998 0.571 5.83 5.13 14.28 3.74 9.57 14- 30% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/21:48
#####

```



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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period :
Form USIG-II: ANALYSIS CA
Major road (B+D) : Jl.Diponegoro
Purpose Operation Minor road (A+C) : Jl.Mutiara
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersection--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.915 1.045 1.500 3738
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1570 0.420 4.29 4.25 5.04 3.59 7.87 8- 20% Yes Yes Yes All USIG-I data
#####
Program version 1.10F Date of run: 180718/22:06
#####

```

# Hasil kinerja simpang Jl. Prajjan-Jl.Raya Camplong pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 12 meter

```

@x387C387
3MEI#####IN#####
o KAJI- UNSIGNALISED INTERSECTIONS o Province : Jawa Timur o Date : 7-01-2018 o
o Form USIG-1: Geometry, City : Sampang o Handled by: Sabili o
o Purpose: Traffic flows o City size: 0.91 millions o Case :
o Operation o Period : 07.00-08.00
#####
o Major road (B+D) : Jl.Raya Camplong o Environment : COM (COM, RES or RA) o
o Minor road (A) : Jl.Prajan o Side friction: Medium(High/Med/Low) o
#####
o INTERSECTION * UAZ * . o TRAFFIC CL - Classified, hourly o
o GEOMETRY * A * / \ N o FLOW DATA: CL UN - Un-classified, hourly o
o Entry widths and * AAU 2.00 m o AA - AADT (Average daily) o
o major road median * AAAA' o ( traffic ) o
o o o o o Flows are A o
o o o o o in veh/h o
o o o o o
o UAZ * o v * UAZ * o
o *D* *B* o 176 <AU AA> 91 o
o AAU * o AAU * o
o * * AAA' * * * * * o
o 6.00 m * AAA> o 100 o 83 o
o AAA III o
o * * * * * AAA' * 6.00 m * AAAU AAAA AAAA o
o * * * * * AAA' * D AAAAA> 1076 1076 <AAAAA B o
o o o o
o A - - 10 m - - ' o
o o o o
o NB. Deduct o
o 1.5 - 2 m o
o from width o
o if parking o
o in approach! o
o Major road (B-D) o
o median: None o
#####
o TRAFFIC REGULATION Minor - A: TWO (ENT= entry only from arm to intersection) o
o FOR THE ARMS Major - B: TWO, D: TWO (TWO= two-way traffic, EXT= exit only from intersection) o
#####
o 1 MOTOR VEH COMP (%): LV:24.13% HV:4.419% MC:71.44% o Pcu factor: o K-factor: o Unmot:0.000% o
o Program defaults: (40.00%) ( 3.00%) (57.00%) o (norm value: 0.85) o (default: ) o (def: 14.0%) o
o TRAFFIC Direc- Light veh., LV Heavy veh., HV Motorcycles, MC Total motor vehicles Unmot.,UM o
o FLOW tion pces=1.00 pces=1.30 pces=0.50 Turn pces=1.00 o
o Approach v/h pcu/h v/h pcu/h v/h pcu/h v/h pcu/h Ratio v/h o
o (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) o
#####
o 2 Minor LT 30 30 1 1 60 30 91 61 0.39 0 A,LT o
o 3 road: A ST 3 3 3 3 3 3 3 3 3 3 3 A,ST o
o 4 RT 10 10 1 1 165 83 176 94 0.61 0 A,RT o
o Total, minor A 40 40 2 2 225 113 267 155 0 0 aA o
o NOT DEFINED LT 3 3 3 3 3 3 3 3 3 3 3 NOT o
o NOT DEFINED ST 3 3 3 3 3 3 3 3 3 3 3 DE- o
o NOT DEFINED RT 3 3 3 3 3 3 3 3 3 3 3 FIN- o
o NOT DEFINED o
o NOT DEFINED o
o NOT DEFINED o
o NOT DEFINED o
o Tot minor road A 40 40 2 2 225 113 267 155 0 0 aA o
o Major LT 3 3 3 3 3 3 3 3 3 3 3 B,LT o
o 12 road: B ST 281 281 50 65 745 373 1076 719 0 0 B,ST o
o 13 RT 18 18 1 1 64 32 83 51 0.07 0 B,RT o
o Total, major B 299 299 51 66 809 405 1159 770 0 0 aB o
o Major LT 15 15 5 7 80 40 100 62 0.08 0 D,LT o
o 16 road: D ST 274 274 57 74 745 373 1076 721 0 0 D,ST o
o 17 RT 3 3 3 3 3 3 3 3 3 3 3 D,RT o
o Total, major D 289 289 62 81 825 413 1176 783 0 0 aD o
o Total major road B+D 588 588 113 147 1634 818 2335 1553 0 0 aBD o
o Major+minor LT 45 45 6 8 140 70 191 123 0.07 0 aLT o
o 21 a(A+B+D) ST 555 555 107 139 1490 746 2152 1440 0 0 aST o
o 22 RT 28 28 2 2 229 115 259 145 0.08 0 aRT o
o Total major+minor 628 628 115 149 1859 931 2602 1708 0 0 All o
o Ratio minor/(minor+major) [normal value is 0.25]: 0.102 UM/MV: 0.000 o
o Program version 1.10F o Date of run: 180718/22:18 o
#####

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#####
K A J I Province : Jawa Timur Date : 7-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 07.00-08.00
Form USIG-II: ANALYSIS
Purpose Operation
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1
(20) (21) (22) (23) (24) (25) (26) (27) (28)
Main 3200 0.921 1.000 0.940 0.940 0.956 1.012 1.300 3275
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
Main 1708 0.522 5.32 4.84 10.15 3.75 9.07 12- 26% Yes Yes Yes All USIG-I data
Comment:
Program version 1.10F Date of run: 180718/22:18
#####

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#####
K A J I Province : Jawa Timur Date : 3-01-2018
UNSIGNALLISED INTERSECTIONS City : Sampang Handled by : Sabil
Case : Period : 16.00-17.00
Form USIG-II: ANALYSIS CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
Major road (B+D) : Jl.Raya Camplong
Purpose Operation Minor road (A+C) : Jl.Prajjan
PLANNING/DESIGN OBJECTIVES: Degree of saturation (0.80) : < 0.00
(defaults in parentheses) Average delay (10.0 sec) : < 0.0 sec
Queue probability (35%) : < 0 %
#####
1. Approach widths and intersection type
#####
Alter-No. of in- APPROACH ENTRY WIDTHS (m) Average Number of lanes Intersection
native-tersecion--- Minor road ---- Major road ---- width (Fig C-1:2) type
arms A B D (B+D)/2 (m) Minor rd Major rd (Table C1:1)
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)
#####
Main 3 2.00 2.00 6.00 6.00 6.00 4.67 2 4 324
#####
Comment: Narrow approaches! Outside range of empirical base (>= 3.5m) for method
#####
2. Capacity
#####
Alter- Base CAPACITY ADJUSTMENT FACTORS (F) Actual
native- capacity Approach Major road City size Side friction Left Right Ratio capacity
Co (pcu/h) width, Fw median (Fm) Fcs Frsu turning turning minor/tot C
Table C2:1 Fig C3:1 Tab C-4:1 Tab C-5:1 Table C-6:1 Pg C7:1 Pg C8:1 Fig C-9:1 pcu/h
(20) (21) (22) (23) (24) (25) (26) (27) (28)
#####
Main 3200 0.921 1.000 0.940 0.940 0.942 1.042 1.500 3834
#####
Comment: Warning! Minor road flow ratio outside empirical base (0.15-0.50)!
#####
3. Traffic performance
#####
Alter-Flow, Q Degree of TRAFFIC DELAY (sec/pcu) GEOMETRIC INTERSEC- Queue pro- Objectives ful- Comment
native- (pcu/h) saturation Intersec- Major Minor DELAY TION DELAY bability filled (Yes/No)
USIG-I, DS=Q/C tion, DTi Rd, DTma road (sec/pcu) (sec/pcu) QP(%) Deg
R23, C10 (30)/(28) Fig E:1 Fig E:2 DTmi DG (32)+(35) Fig F:1 of Delay Queue
(30) (31) (32) (33) (34) (35) (36) (37) sat. prob. (38)
#####
Main 2038 0.532 5.43 4.90 14.29 3.69 9.12 12- 27% Yes Yes Yes All USIG-I data
#####
Comment:
#####
Program version 1.10F Date of run: 180718/22:12
#####

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# Hasil kinerja ruas Jl.Taddan pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2018 dengan penambahan lebar jalan mayor menjadi 12 meter

```
@x391C391
3ME#####N#####
° K A J I ° Province Jawa timur ° Date : 3-01-2018 °
° Link number : ° Handled by : °
° INTERURBAN ROADS ° Segment code: ° Checked by: °
° Form IR-1: Input ° Segment between sampang and pamekasn
° Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)] °
° GENERAL DATA, ° Adminstr. road class : Nasional ° Functional road class: ARTERIAL °
° ROAD GEOMETRY ° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
° AA> A * * * * * -----> To: pamekasan
° * * * * *
° To: <----- * °
° sampang * * * * * * * * * * * * * * * * * * * *
° * * * * *
° AA> B AAA north (N)
° * * * * *
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° Sight distance > 300 m (%): NA ° development °
° ° Sight distance class (default= B): ° Default: 0% ° 0% ° 0% ° 0% °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° VERTICAL ALIGNMENT * * * * *
° * * * * * UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Only for specific grade analysis °
° E#####
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; ° Grade length (km) : °
° ° Rise+fall : NA m/km ° ° Grade slope (%) : °
° ° Alignment type: NA ( FLAT = default) ° ° Climbing lane (Y/N) : °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° CROSS SECTION
° Undivided road |||°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°|||
° side A WSA WCA WcB WsB side B
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° 2.00 6.00 6.00 2.00
°
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° E#####
° ° Average carriageway width, Wc (m) ° 6.00 ° 6.00 ° 12.00 ° °
° ° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° ROAD SURFACE CONDITIONS
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° E#####
° ° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° ° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° Outer ° Inner ° Inner ° Outer °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
° ° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° ° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° ° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° ° (default shoulder usability) ° ( ° PARKING) ° ( ° PARKING) °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° EFFECTIVE WIDTHS
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° E#####
° ° Shoulder, total ° 4.00 ° ° Shoulder, total ° ° °
° ° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° ° °
° ° Carriageway ° 12.00 ° ° Carriageway ° ° °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° TRAFFIC CONTROL CONDITIONS
° UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA;
° ° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° ° Other limitations : ° °
° ° More remarks : ° °
° AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
#####
° Program version 1.10F ° Date of run: 180718/22:45 °
#####
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#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
User values 32.16 3.581 0.767 1.790 61.69 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
#####
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40 #####
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40 #####
veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° veh/h°pcu/h ° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 392 392 49 64 12 18 20 50 834 334 47.77 1307 858
Dir2° 488 488 49 64 9 14 29 73 854 342 52.22 1429 981
5 1+2 880 880 98 128 21 32 49 123 1688 676 2736 1839
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.7%46.6%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.672
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment. Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180718/22:45
#####

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#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      3-01-2018
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class : Nasional      Functional road class: ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust- vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° 1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
°
° Comments:      User FFV, dir1: None!
°
° dir2:
°
#####
CAPACITY
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° Direc- Base Capacity      Adjustment factors for capacity      Actual capacity, C
°
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° 1+2      3100      1.270      0.987      1.000      3884
°
°
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA; OAAAAAAAAAAAAAAAAA
°
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
°
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
°
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° 1+2      1839      0.473      50.41      10.000      714.015      44.91      53.20      43.55      42.87      1+2      0.707
°
°
° Space for user remark:
°
° Program version 1.10F      Date of run: 180718/22:45
#####

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>
> KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2018
> Link number: Handled by:
> Segment code: Checked by:
> CA
> TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
> Road type : 2/2UD Length (km) : 10.000
> Purpose: Operation Time period : 07.00-08.00 Case number:
>
> TRAFFIC DATA:
> ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
> ADT K-factor Dir1 - Dir2
> (veh/day) (default: 0.11) (default: 50 - 50)
> (Class/Adt/UNclass) NA - NA %
>
> Traffic LV MHV LB LT MC Total LV = Light Vehicle
> Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
> LB = Large Bus
> LT = Large Truck
> MC = MotorCycle
> User values 23.56 3.066 0.744 1.752 70.87 100.0
> (normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)
>
> Traffic flow data for whole segment analysis:
> Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
> rec-
> 1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40
> 1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
> veh/h°pcu/h° Split °veh/h°pcu/h°
> 2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
> Dir1° 267 267 38 49 6 9 23 58 800 320 49.67 1134 703
> Dir2° 271 271 32 42 11 17 17 43 818 327 50.32 1149 700
> 5 1+2 538 538 70 91 17 26 40 101 1618 647 2283 1403
> Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.6%50.1%
> dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.614
>
> SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
> of events and then go to second table. If not, use second table only.
>
> 1. Determination of frequency of events
> Calculation of weighted Side friction Symbol Weighting Frequency Weighted
> frequency of events per type of events factor of events frequency
> hour and 200 m of the (20) (21) (22) (23) (24)
> studied road segment.
> Pedestrians PED 0.6 NA / h,200m NA
> Parking, stopping veh. PSV 0.8 NA / h,200m NA
> Entry+exit of vehicles EEV 1.0 NA / h,200m NA
> Slow-moving vehicles SMV 0.4 NA / h NA
> Total: NA
>
> 2. Determination of side friction class
> Weighted frequency Typical conditions Side friction
> of events (30) class
> < 50 Rural, agriculture or undeveloped VL= very low
> with very few activities
> 50 - 149 Rural, some roadside buildings L= low
> and some activities
> 150 - 249 Village, residential activities M= medium
> 250 - 349 Village, some market activities H= high
> > 350 Almost urban, market and business VH= very high
> activities
> For current case indicate side friction class: NA ( L is default)
>
> Program version 1.10F Date of run: 180718/22:47
>

```

```

#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      7-01-2018
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class :      Nasional      Functional road class:      ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
° FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
°
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust- vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° 1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
°
° Comments:      User FFV, dir1: None!
°
°
#####
CAPACITY
°
° Di- Base Capacity      Adjustment factors for capacity      Actual capacity, C
°
° tion      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° Co      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° 1+2      3100      1.270      0.998      1.000      3929
°
°
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
°
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
°
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      AAAAAAAAAAAAAAAAAAAAAAAAAA      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      MHV      LB      LT      MC      (31)
°
° 1+2      1403      0.357      54.40      10.000      661.684      48.23      57.51      46.70      45.94      1+2      0.621
°
°
° Space for user remark:
°
° Program version 1.10F      Date of run: 180718/22:47
#####

```



Hasil kinerja ruas Jl.Taddan pada hari aktif (Rabu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2023 dengan penambahan lebar jalan mayor menjadi 12 meter

```

@x397C397
3ME#####N#####
° K A J I ° Province jawa timur ° Date : 3-01-2018 °
° Link number: ° Handled by: °
° INTERURBAN ROADS ° Segment code: ° Checked by: °
° Form IR-1: Input ° Segment between sampang and pamekasn °
° Specific grade: No [NO indicates segment, YES spec grade(only 2/2UD)] °
° GENERAL DATA, ##### °
° ROAD GEOMETRY ° Administr. road class : Nasional ° Functional road class: ARTERIAL °
° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
°
°
° * * * * *
° To: <----- * * * * * -----> To: pamekasan
°
° sampang * * * * * * * * * * N Indicate
° * * * * * * * * * * AAA> B AAA north (N)
°
° #####; #####;
° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° Sight distance > 300 m (%): NA ° development ##### °
° ° Sight distance class (default= B): ° Default: 0% ° 0% ° 0% ° 0% °
° ##### ° ##### °
#####
° VERTICAL ALIGNMENT * * * * *
°
° * * * * * ° #####;
° ° Only for specific grade analysis °
° #####;
° ° Rise+fall : NA m/km ° ° Grade length (km) : °
° ° Alignment type: NA ( FLAT = default) ° ° Climbing lane (Y/N) : °
° ##### ° ##### °
#####
° CROSS SECTION
°
° Undivided road ||| ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ |||
° side A WSA WCA WcB WsB side B
° #####
° 2.00 6.00 ##### 6.00 2.00
°
° #####;
° ° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° #####;
° ° Average carriageway width, Wc (m) ° 6.00 ° 6.00 ° 12.00 ° °
° ° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° ##### ° ##### °
#####
° ROAD SURFACE CONDITIONS
°
° #####;
° ° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° #####;
° ° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° ° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
° ##### ° ##### °
° #####;
° ° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° ° Outer ° Inner ° Inner ° Outer °
° ##### ° ##### °
° ° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° NotAvail °
° ° Drop from carriageway to shoulder (cm) ° 0 ° ° 0 °
° ° Usability [Traffic/Parking/Emergency] ° NoInput ° ° NoInput °
° ° (default shoulder usability) ° ( PARKING) ° ( PARKING) °
° ##### ° ##### °
#####
° EFFECTIVE WIDTHS #####;
° ° Undivided road ° Widths (m) ° ° Divided road ° Side A ° Side B °
° #####;
° ° Shoulder, total ° 4.00 ° ° Shoulder, total ° °
° ° Shoulder, mean ° 2.00 ° ° Shoulder, mean ° °
° ° Carriageway ° 12.00 ° ° Carriageway ° °
° ##### ° ##### °
#####
° TRAFFIC CONTROL CONDITIONS
°
° #####;
° ° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° ° Other limitations : °
° ° More remarks : °
° ##### °
#####
° Program version 1.10F ° Date of run: 180718/22:49 °
#####

```

```

#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 3-01-2018
Form IR-2: Input Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
LT = Large Truck
MC = MotorCycle
User values 33.90 3.780 0.646 4.277 57.38 100.0
(normal values) (57.0) (23.0) ( 7.0) ( 4.0) ( 9.0) (100.0)
#####
Traffic flow data for whole segment analysis:
#####
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 912 912 114 148 22 33 105 263 1710 684 47.47 2863 2040
Dir2° 1133 1133 114 148 17 26 153 383 1751 700 52.52 3168 2390
5 1+2 2045 2045 228 296 39 59 258 646 3461 1384 6031 4430
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 47.4%46.0%
7 dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.734
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180718/22:49
#####

```

```

#####
KAJI -- INTERURBAN ROADS      Province:      jawa timur      Date:      3-01-2018
°
° Link number:      3      Handled by:      °
° Segment code:      3      Checked by:      °
° Form IR-3: Analysis      CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
°
° SPEED, CAPACITY      Administr. road class :      Nasional      Functional road class:      ARTERIAL
°
° Road type      :      2/2UD      Length (km)      :      10.000
° Purpose: Operation      Time period :      07.00-08.00      Case number:      °
#####
FREE FLOW SPEEDS.
° Option to enter other free flow speeds: No
°
°
° Di- Base free-flow speed      Carriage-FVo+FVw      Adjustment factors      Actual free-flow speeds, km/h
° rec- FVo (km/h)      way width      Light      FFVlv = (FVo+FVw)*FFVsf*FFVrc
° tion for different vehicles      adjust- vehicle      Side      Land use
°
° Table B-1:1 or B-1:2      ment, FVw      friction      Road func      Light      Other vehicle
°
° Tab B2:1      (2)+(3)      FFVsf      FFVrc      vehicle      types
°
° LV      MHV      LB      LT      MC      (km/h)      (km/h)      Tab B3:1      Tab B4:1      (4*5*6)
°
° (2)      (3)      (4)      (5)      (6)      (7)      MHV      LB      LT      MC
°
° 1+2      65.0      57.0      69.0      55.0      54.0      3.0      68.0      0.980      1.000      66.64      58.43      70.74      56.38      55.36
°
°
° Comments:      User FFV, dir1: None!
°
° dir2:
°
#####
CAPACITY
°
° Di- Base Capacity      Adjustment factors for capacity      Actual capacity, C
°
° tion      Carriageway width      Directional split      Side friction      C= Co*FCw*FCsp*FCsf pcu/h
°
° Table C-1:1      FCw      FCsp      FCsf
°
° pcu/h      Table C-2:1      Table C-3:1      Table C-4:1      (11)*(12)*(13)*(14)
°
° (11)      (12)      (13)      (14)      (15)
°
° 1+2      3100      1.270      0.985      1.000      3877
°
°
° ACTUAL SPEED and TRAVEL TIME for light vehicles      Only 2/2UD roads
°
° Di- Traffic      Degree of      Actual      Road      Travel      ACTUAL SPEEDS      Di- Degree of
°
° rec- flow, Q      saturation      speed, Vlv      segment      time, TT      for other vehicle types      rec- bunching
°
° tion Form IR-2      DS=Q/C      Fig D2:1/:2      length, L' (24/23)      km/h      tion      DB
°
° pcu/h      (21)/(15)      km/h      km      sec      MHV      LB      LT      MC      Fig D3:1
°
° (21)      (22)      (23)      (24)      (25)      (26)      (27)      (28)      (29)      (30)      (31)
°
° 1+2      4430      1.143      NA      10.000      NA      NA      NA      NA      NA      NA      1+2      0.940
°
°
° Space for user remark:
°
° Program version 1.10F      Date of run: 180718/22:49
#####

```

# Hasil kinerja ruas Jl.Taddan pada hari libur (Minggu) Rekomendasi setelah pelabuhan taddan beroperasi tahun 2023 dengan penambahan lebar jalan mayor menjadi 12 meter

```

@x400C400
3ME#####
° K A J I ° Province jawa timur ° Date : 7-01-2023 °
° Link number: ° Handled by: °
° INTERURBAN ROADS ° Segment code: ° Checked by: °
° Form IR-1: Input ° Segment between sampang and pamekasn °
° Specific grade: No [NO indicates segment, YES spec grade (only 2/2UD)] °
° GENERAL DATA, #####
° ROAD GEOMETRY ° Administr. road class : Nasional ° Functional road class: ARTERIAL °
° Road type : 2/2UD ° Length (km) : 10.000 °
° Purpose: Operation ° Time period: 07.00-08.00 ° Case number: °
#####
° HORIZONTAL ALIGNMENT
° ° °
° ° ° ° AAA> A * * * * * <----> To: pamekasn
° ° ° * * * * * °
° ° ° To: <----- * ° °
° ° ° sampang * * * * * * * * * * ° °
° ° ° * * * * * * * * * * ° °
° ° ° * * * * * * * * * * AAA> B AAA north (N) ° °
° ° °
° ° ° ##### °
° ° ° ° Horizontal curvature (radians/km): NA ° Roadside ° Side A ° Side B ° Mean °
° ° ° ° Sight distance > 300 m (%): NA ° development ##### °
° ° ° ° Sight distance class (default= B): ° Default: 0% ° 0% ° 0% ° 0% °
° ° ° ##### °
#####
° VERTICAL ALIGNMENT * * * * * °
° ° ° ##### °
° ° ° ° Only for specific grade analysis °
° ° ° ##### °
° ° ° ##### °
° ° ° ° Rise+fall : NA m/km ° ° ° ° Grade length (km) : °
° ° ° ° Alignment type: NA ( FLAT = default) ° ° ° ° Grade slope (%): °
° ° ° ##### °
° ° ° ##### °
#####
° CROSS SECTION °
° ° °
° ° ° Undivided road ||| 2.2.2.2.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.2.2.2.2 ||| °
° ° ° side A WsA WcA WcB WsB side B °
° ° ° ##### °
° ° ° 2.00 6.00 ° ° ° ° 6.00 2.00 °
° ° ° °
° ° ° ##### °
° ° ° ° UNADJUSTED WIDTHS ° Side A ° Side B ° Total ° Mean °
° ° ° ##### °
° ° ° ° Average carriageway width, Wc (m) ° 6.00 ° 6.00 ° 12.00 ° °
° ° ° ° Unobstructed shoulder width, Ws (m) ° 2.00 ° 2.00 ° 4.00 ° 2.00 °
° ° ° ##### °
#####
° ROAD SURFACE CONDITIONS °
° ° ° ##### °
° ° ° ° CARRIAGEWAY SURFACE CONDITIONS ° Side A ° Side B °
° ° ° ##### °
° ° ° ° Type [Flexible (asphalt)/Concrete/Other] ° NotAvail ° NotAvail °
° ° ° ° Surface condition [Good/Fair/Bad] ° FAIR ° FAIR °
° ° ° ##### °
° ° ° ##### °
° ° ° ° SHOULDER SURFACE CONDITIONS ° ----- SIDE A ----- ° ----- SIDE B ----- °
° ° ° ° ° Outer ° Inner ° Inner ° Outer °
° ° ° ##### °
° ° ° ° Surface type [Flexible/Concrete/Other] ° NotAvail ° ° ° NotAvail °
° ° ° ° Drop from carriageway to shoulder (cm) ° 0 ° ° ° 0 °
° ° ° ° Usability [Traffic/Parking/Emergency] ° NoInput ° ° ° NoInput °
° ° ° ° (default shoulder usability) ° ( PARKING) ° ° ° ( PARKING) °
° ° ° ##### °
#####
° EFFECTIVE WIDTHS ° ##### °
° ° ° ° Undivided road ° Widths (m) ° ° ° Divided road ° Side A ° Side B °
° ° ° ##### °
° ° ° ° Shoulder, total ° 4.00 ° ° ° Shoulder, total ° ° °
° ° ° ° Shoulder, mean ° 2.00 ° ° ° Shoulder, mean ° ° °
° ° ° ° Carriageway ° 12.00 ° ° ° Carriageway ° ° °
° ° ° ##### °
#####
° TRAFFIC CONTROL CONDITIONS °
° ° ° ##### °
° ° ° ° Speed limit : 0 km/h ° Max gross weight: 0.000 tonnes °
° ° ° ° Other limitations : ° ° °
° ° ° ° More remarks : ° ° °
° ° ° ##### °
#####
° Program version 1.10F ° Date of run: 180718/22:52 °
#####
    
```

```

#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
TRAFFIC FLOW, SIDE FRICTION Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
TRAFFIC DATA:
#####
Type of traffic data ANNUAL AVERAGE DAILY TRAFFIC DIRECTIONAL SPLIT
ADT K-factor Dir1 - Dir2
CLASSIFIED-HOURLY (veh/day) (default: 0.11) (default: 50 - 50)
(Class/Adt/UNclass) NA - NA %
#####
Traffic LV MHV LB LT MC Total LV = Light Vehicle
Composition (%) (%) (%) (%) (%) (%) (%) MHV = Medium Heavy Vehicle
LB = Large Bus
User values 25.15 3.297 0.643 4.221 66.68 100.0 LT = Large Truck
(normal values) ( 57.0) ( 23.0) ( 7.0) ( 4.0) ( 9.0) (100.0) MC = MotorCycle
#####
Traffic flow data for whole segment analysis:
#####
Row'Di- °Light Vehicle°Med Heavy Veh° Large Bus ° Large Truck ° MotorCycle ° Total flow Q
rec-#####
1.1° pce,1= 1.00 pce,1= 1.30 pce,1= 1.50 pce,1= 2.50 pce,1= 0.40
1.2° pce,2= 1.00 pce,2= 1.30 pce,2= 1.50 pce,2= 2.50 pce,2= 0.40
veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° veh/h°pcu/h° Split °veh/h°pcu/h°
2 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)
Dir1° 621 621 89 116 11 17 121 303 1640 656 49.89 2482 1713
Dir2° 630 630 75 98 21 32 89 223 1677 671 50.10 2492 1654
5 1+2 1251 1251 164 214 32 49 210 526 3317 1327 4974 3367
6 Note. If specific grade then Directional split, SP= Q1/(Q1+Q2)= 49.8%°50.8%
dir 1 = uphill, dir 2 = downhill Pcu-factor, fpcu = 0.676
#####
SIDE FRICTION CLASS: If detailed data are available, use first table to determine weighted frequency
of events and then go to second table. If not, use second table only.
1. Determination of frequency of events
#####
Calculation of weighted Side friction Symbol Weighting Frequency Weighted
frequency of events per type of events factor of events frequency
hour and 200 m of the (20) (21) (22) (23) (24)
studied road segment.
Pedestrians PED 0.6 NA / h,200m NA
Parking, stopping veh. PSV 0.8 NA / h,200m NA
Entry+exit of vehicles EEV 1.0 NA / h,200m NA
Slow-moving vehicles SMV 0.4 NA / h NA
#####
Total: NA
#####
2. Determination of side friction class
#####
Weighted frequency Typical conditions Side friction
of events (30) class
< 50 Rural, agriculture or undeveloped VL= very low
with very few activities
50 - 149 Rural, some roadside buildings L= low
and some activities
150 - 249 Village, residential activities M= medium
250 - 349 Village, some market activities H= high
> 350 Almost urban, market and business VH= very high
activities
#####
For current case indicate side friction class: NA ( L is default)
#####
Program version 1.10F Date of run: 180718/22:52
#####

```

```

#####
KAJI -- INTERURBAN ROADS Province: Jawa timur Date: 7-01-2023
Link number: Handled by:
Segment code: Checked by:
Form IR-3: Analysis
SPEED, CAPACITY Administr. road class : Nasional Functional road class: ARTERIAL
Road type : 2/2UD Length (km) : 10.000
Purpose: Operation Time period : 07.00-08.00 Case number:
#####
FREE FLOW SPEEDS.
Option to enter other free flow speeds: No
#####
Di- Base free-flow speed Carriage-FVo+FVw Adjustment factors Actual free-flow speeds, km/h
rec- FVo (km/h) way width Light FFVlv = (FVo+FVw)*FFVsf*FFVrc
tion for different vehicles adjust- vehicle Side Land use
Table B-1:1 or B-1:2 ment, FVw friction Road func Light Other vehicle
LV MHV LB LT MC (km/h) (km/h) Tab B2:1 (2)+(3) FFVsf FFVrc vehicle types
(2) (3) (4) (5) (6) (7) MHV LB LT MC
#####
1+2 65.0 57.0 69.0 55.0 54.0 3.0 68.0 0.980 1.000 66.64 58.43 70.74 56.38 55.36
#####
Comments: User FFV, dir1: None!
dir2:
#####
CAPACITY
Di- Base Capacity Adjustment factors for capacity Actual capacity, C
tion
Co Carriageway width Directional split Side friction C= Co*FCw*FCsp*FCsf pcu/h
Table C-1:1 FCw FCsp FCsf
pcu/h Table C-2:1 Table C-3:1 Table C-4:1 (11)*(12)*(13)*(14)
(11) (12) (13) (14) (15)
#####
1+2 3100 1.270 0.999 1.000 3935
#####
ACTUAL SPEED and TRAVEL TIME for light vehicles Only 2/2UD roads
Di- Traffic Degree of Actual Road Travel ACTUAL SPEEDS Di- Degree of
rec- flow, Q saturation speed, Vlv segment time, TT for other vehicle types rec- bunching
tion Form IR-2 DS=Q/C Fig D2:1/:2 length, L' (24/23) km/h tion DB
pcu/h (21)/(15) km/h km sec km/h tion DB
(21) (22) (23) (24) (25) MHV LB LT MC (31)
#####
1+2 3367 0.856 37.24 10.000 966.607 33.91 38.95 33.12 32.72 1+2 0.872
#####
Space for user remark:
#####
Program version 1.10F Date of run: 180718/22:52
#####

```





**UNIVERSITAS MUHAMMADIYAH SURABAYA**  
**FAKULTAS TEKNIK**  
**PROGRAM STUDI S-1 TEKNIK MESIN, S-1 TEKNIK ARSITEKTUR, S-1 TEKNIK SIPIL, S-1 TEKNIK PERKAPALAN, S-1 TEKNIK ELEKTRO, D-3 TEKNIK KOMPUTER**

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Nama : SABILA ROSADI  
 NIM : 20141333012  
 Judul Skripsi : ANALISIS ENERGI LAJU LINTAS AKSIAT PEMBANGUNAN PELABUHAN TADIAN DI KAB. SAMPAUNG  
 Pembimbing UTAMA : IR. ICZAINAL ABIDIN, MT  
 Mulai BIMBINGAN : 22 JANUARI 2018

No.	Tgl	Materi	Paraf Pembimbing		Paraf Mahasiswa
			U*	**P	
1	22/1/18	REVISI ALIR BAB 3	IR		Good
2	1/2/18	hasil revisi Bab 1, 2 & 3	IR		Good
3		Si Lunu + Lu Bab 3.			Good
4	8/2/18	Data exists & gambar yg, gambar elektro k	IR		Good
5	10/2/18	Ket hasil survei tahun?	IR		Good
6	20/2/18	Formulas setelah pedoman 600 p 200	IR		Urin
7	21/2/18	di kelas dan dan analisis akses ke hasil nya.	IR		Good
8	23/2/18	Analisis data hasil nya	IR		Good
9	3/4/18	Analisis data exists & gambar - data hasil survei & gambar	IR		Good
10					
11					
12					
13					
14					

**Catatan:**

- \*U artinya Utama dan \*\*P artinya Pendamping
- Jika Mahasiswa sudah memberikan atau mengirimkan draft proposal atau skripsi maka ybs wajib menuikannya dalam Catatan Bimbingan Skripsi yang kemudian ditandatangani oleh Pembimbing



**CATATAN BIMBINGAN SKRIPSI / TA**

Nama : SABILA ROSADI .....  
 NIM : 2011333012 .....  
 Judul Skripsi : ANALISIS KINERJA LALU LINTAS AKIBAT PEMBANGUNAN PELABUHAN TANDAN DI KAB SEM .....  
 Pembimbing Pendamping : MIFTACHUL HUDA, S.PH.D.,M.T. ....  
 Mulai Bimbingan : .....

No.	Tgl	Materi	Paraf Pembimbing		Paraf Mahasiswa
			U*	P**	
1	24/1/18	Cara Input jml kend di excel		HR	Suz
2	25/1/18	Cara mencari jam puncak arah & simpang		HR	Suz
3	26/1/18	Cara mencari jml kend yg dimatikan ke KAJI		HR	Suz
4	2/2/18	Cara input data lain simpang tak bersinyal ke KAJI		HR	Suz
5	5/2/18	Input data/hasil survei di Bab 4		HR	Suz
6	9/2/18	Persiapan pengambilan data jml penduduk & kendaraan di BPS		HR	Suz
7	13/2/18	Cara perhitungan forecasting		HR	Suz
8	22/2/18	Perbaikan perhitungan forecasting		HR	Suz
9	27/2/18	Perbaikan judul tabel		HR	Suz
10	5/3/18	Perbaikan input nilai KAJI		HR	Suz
11	6/3/18	perhitungan pertumbuhan kendaraan		HR	Suz
12	12/3/18	perhitungan pertumbuhan kendaraan pakai excel → Lanjut perhitungan KAJI		HR	Suz
13	19/3/18	Rekap PH Kend keluar masuk pelabuhan lama		HR	Suz
14	26/3/18	Perhitungan prediksi volume Kend masuk & keluar pel baru		HR	Suz

**Catatan:**

1. \*U artinya Utama dan \*\*P artinya Pendamping
2. Jika Mahasiswa sudah memberikan atau mengirimkan draft proposal atau skripsi maka ybs wajib menuliskannya dalam Catatan Bimbingan Skripsi yang kemudian ditandatangani oleh Pembimbing.



**UNIVERSITAS MUHAMMADIYAH SURABAYA**  
**FAKULTAS TEKNIK**  
**PROGRAM STUDI S-1 TEKNIK MESIN, S-1 TEKNIK ARSITEKTUR, S-1 TEKNIK SIPIL,**  
**S-1 TEKNIK PERKAPALAN, S-1 TEKNIK ELEKTRO, D-3 TEKNIK KOMPUTER**  
 Alamat : Jalan Sutorejo 59 Surabaya  
 Telp./Fax. 031-3811966 ext.138

**CATATAN BIMBINGAN SKRIPSI**

FORM S-10

Nama : SABILA ROSADI  
 NIM : 20141323013  
 Judul Skripsi : ANALISIS KINERJA LALU LINTAS AKIBAT PEMBANGUNAN PELABUHAN TANDA  
 Pembimbing Utama : DI KABUPATEN SAMPAUNG  
 Pembimbing Pendamping : NIFTACHUL HUDA, S.PD, M.T  
 Tgl. Mulai Bimbingan : 10 APRIL 2018

No.	Tgl	Materi	Paraf Pembimbing		Paraf Mahasiswa
			U*	P**	
	10/4 <sup>18</sup>	Revisi perhitungan snp → kend		✓	Sey
	16/4 <sup>18</sup>	Hitung perrentare tiap kend yg menuju dan keluar dari pelabuhan baru		✓	Sey
	17/4 <sup>18</sup>	Hitung Bangkitan Kendaraan dr segala arah yg menuju/keluar pelabuhan		✓	Sey
	23/4 <sup>18</sup>	Masukikan hasil perhitungan ke narasi bab 4		✓	Sey
	30/4 <sup>18</sup>	Revisi (tambah) arah <del>tiap</del> lengan dan perhatikan beban bangkitannya		✓	Sey
	14/5 <sup>18</sup>	Buat Form MKJI di Excel...		✓	Sey
	21/5 <sup>18</sup>	Coba masukan angka di Excel Ruar Jalan Luar Kota		✓	Sey
	3/7 <sup>18</sup>	Hitung Kinerja Forecast before & After operasi		✓	Sey




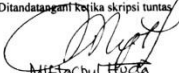
UNIVERSITAS MUHAMMADIYAH SURABAYA  
FAKULTAS TEKNIK  
PROGRAM STUDI S-1 TEKNIK MESIN, S-1 TEKNIK ARSITEKTUR, S-1 TEKNIK SIPIL,  
S-1 TEKNIK PERKAPALAN, S-1 TEKNIK ELEKTRO, D-3 TEKNIK KOMPUTER  
Alamat : Jalan Sutorejo 59 Surabaya  
Telp./Fax. 031-3811966 ext.138

30/7	Skripsi siap diujikan		ML	Sud

Catatan:  
\*U artinya Utama dan \*\*P artinya Pendamping.

Bimbingan dinyatakan selesai

Surabaya, 30 Juli 2018

<p>Pembimbing Utama Ditandatangani ketika skripsi tuntas</p>  <p>(.....)</p>	<p>Pembimbing Pendamping Ditandatangani ketika skripsi tuntas</p>  <p>Miftachul Huda (.....)</p>
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PERINCIAN ASET PELABUHAN TADDAN

No	Uraian	Volume dan Satuan	Keterangan
1	Arean Perkantoran	100 x 67 M <sup>2</sup>	
2	Pos Jaga	3 x 3 M <sup>2</sup>	
3	Rumah Genset	4 x 6 M <sup>2</sup>	
4	Genset	1 Unit	
5	Gudang	10 x 15 M <sup>2</sup>	
6	Rumah Dinas	8 x 15 M <sup>2</sup>	
7	Kantor	10 x 10 M <sup>2</sup>	
8	Gapura	6 x 22 M <sup>2</sup>	
	Lapangan Penumpukan	150 x 100 M <sup>2</sup>	
	Trestle	829,2 x 6 M <sup>2</sup>	
9	Dermaga	100 x 10 M <sup>2</sup>	
	Bollard 30 T	18 Buah	
	Vender 800 x 1500	48 Buah	
	Cleat	10 Buah	
10	Menara Tower Air dan Groundtank	1 Unit	
11	Tandon Stainless Steel	1 Unit	
12	Luas Pelabuhan Taddan	140 Ha	

Kepala Kantor  
Unit Penyelenggara Pelabuhan  
Kelas III Branta

Ttd

H. SUKO SH, MM  
Pembina (IV/a)  
NIP. 19600302 198203 1 001

Lampiran : 1. Berita Acara Serah Terima Objekas Pelabuhan  
 Nomor : BA. 08 TAHUN 2006  
 Tanggal : 14 Juni 2006

DAFTAR ASET SEMENTARA

KABUPATEN	PELABUHAN & KOORDINAT	ASET	UKURAN	TAHUN PEMBANGUNAN	NILAI PEROLEHAN ASET ( Rp )	KETERANGAN
SAMPANG	Tanglok 07-12-05' LS 113-15-00' BT	Tanah	5.850 m2		877.500.000	
			520 m2		41.600.000	
		Rumah Dinas	1250 m2		100.000.000	
		Rumah Dinas	54 m2		25.000.000	
		Dermaga Kayu	74 m2		30.000.000	
		Tok Adu Aset	( 10 x 30 ) m2		239.437.534	
	Baritoh					
TOTAL					1.313.537.534	

BUPATI SAMPANG



MENTERI PERHUBUNGAN



M. HATTA RAJASA



**UNIVERSITAS MUHAMMADIYAH SURABAYA**  
**PUSAT BAHASA**

Jl. Sutorejo 59 Surabaya 60113 Telp. 031-3811966, 3811967 Ext (130) Gd. A Lt 2  
Email: [pusba.umsby@gmail.com](mailto:pusba.umsby@gmail.com)

**ENDORSEMENT LETTER**  
320/PB-UMS/EL/VIII/2018

This letter is to certify that the abstract of the thesis below

Title : Analysis of Traffic Performance Due to Taddan Port Development in  
Sampang Regency  
Student's name : Sabila Rosadi  
Reg. Number : 20141333012  
Department : S1 Teknik Sipil

has been endorsed by Pusat Bahasa *UMSurabaya* for further approval by the examining  
committee of the faculty.

Surabaya, 20 August 2018

  
Waode Hamsia, M.Pd



SURAT KETERANGAN BUKTI BEBAS PLAGIASI

Naskah tugas akhir / skripsi / karya tulis / tesis\*) yang diserahkan atas :

Nama : SAGILA ROSADI  
 N I M : 20141333012  
 Fakultas/Jurusan : TEKNIK TEKNIK SIPIL  
 Alamat : ~~WISATA WISATA~~ DES TAMBAK KEC. CAMPLUNG KAB. SUKAMBAJI  
 Judul : ANALISIS KINERJA LAJU LINTAS AKIBAT PEMBANGUNAN PELAYANAN TERPADU  
 DI KABUPATEN SAMUDRA

telah diserahkan dan memenuhi kriteria batas maksimal yang sudah ditentukan.

Petugas perpustakaan

*Jub Atki*

Surabaya, 20 Mei 2018  
 Mahasiswa,

*Sagila*  
 SAGILA (10540)



Mengetahui,  
Kepala Perpustakaan

*Mus*  
 Dra. Mas'udah, M.A.

\*) Coret yang tidak perlu

## BIOGRAFI PENULIS



**Sabila Rosadi** adalah mahasiswa tingkat akhir lulus pada tahun 2018 di Universitas Muhammadiyah Surabaya dengan Program Studi Teknik Sipil terdaftar NIM. 20141333012. Selain sebagai mahasiswa dan hobi bermain sepak bola, Penulis lahir di Kabupaten Sampang Jawa Timur pada tanggal 14 Desember 1995 merupakan anak kedua dari dua bersaudara dari pasangan Bapak Ismail dan Siti Nurmaidah. Dimana kakak laki-laki ini telah bekerja.

Penulis pernah sekolah di SDN Tambaan 1 Camplong, Sampang (2004-2009), kemudian melanjutkan sekolah di SMPN 1 Camplong, Sampang (2009-2011) dan melanjutkan sekolah ke SMAN 3 Sampang jurusan IPA lulus pada tahun (2011-2014).