



MINISTRY OF WORKS MALAYSIA
Highway Planning Division

ROAD TRAFFIC VOLUME MALAYSIA

2012



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PENDAHULUAN

PENGARAH BAHAGIAN PERANCANG JALAN

Assalamualaikum Warahmatullahi Wabarakatuh,

Sistem rangkaian jalan raya di Malaysia kini semakin berkembang pesat seiring dengan keperluan pengguna jalan raya dan pertumbuhan sosio ekonomi negara. Bahagian Perancang Jalan (BPJ), Kementerian Kerja Raya Malaysia telah mengumpul dan menganalisa data trafik di seluruh Malaysia serta menerbitkannya di dalam Laporan Road Traffic Volume Malaysia (RTVM) setiap tahun. Penerbitan Laporan RTVM ini diharap dapat membantu membangunkan rangkaian jalan raya dengan lebih sistematik. Sistem pengangkutan jalan raya juga dapat dirancang dengan lebih baik dalam usaha memastikan ianya selamat dan ekonomik.

BPJ sentiasa mengalu-alukan sebarang pendapat dan maklum balas daripada semua pihak agar sebarang kelemahan yang terdapat di dalam laporan ini dapat diperbaiki dan sekaligus dapat mempertingkatkan kualiti Laporan RTVM di masa hadapan.

Akhir sekali, saya ingin merakamkan setinggi penghargaan kepada semua agensi yang terlibat khususnya kepada Jabatan Kerja Raya Malaysia, Lembaga Lebuhraya Malaysia, Jabatan Pengangkutan Jalan Malaysia dan lain-lain agensi yang telah bekerjasama membantu penerbitan Laporan RTVM.

Sekian, terima kasih.

DATO' IR. DR. AZMI BIN HASSAN

Pengarah
Bahagian Perancang Jalan
Kementerian Kerja Raya Malaysia

Jun 2013

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Note to users

➤ National Traffic Census

There are a total of 554 traffic census stations in Malaysia and the census data in both directions are recorded hourly for the Federal Roads and the State Roads in Malaysia. The forms used for the manual data collections are as in Appendix “A” and Appendix “B”.

The traffic census is carried out twice a year during the month of March and September, conducted by the State Public Works Department (JKR Negeri) and coordinated by the Highway Planning Division. The census data will be submitted to Highway Planning Division for data analysing and processing.

Data collections are divided into three types as follows:

- Type 0 : 7 days ; 24 hours
- Type 1 : 7 days ; 16 hours (6.00am – 10.00pm)
- Type 3 : 1 day ; 16 hours (6.00am – 10.00pm)

In RTVM, the vehicles are classified into six classes which are:

- Class 1 : Motor Cars and Taxis
- Class 2 : Small Vans and Utilities (Light 2-axles)
- Class 3 : Lorries and Large Vans (Heavy 2-axles)
- Class 4 : Lorries with 3-axles (Heavy 3-axles and above)
- Class 5 : Buses
- Class 6 : Motorcycles & Scooters

Graphical representation of Vehicle Classification is shown in Appendix “C”.

The composition of vehicle in 2012 can be illustrated as Figure 1.

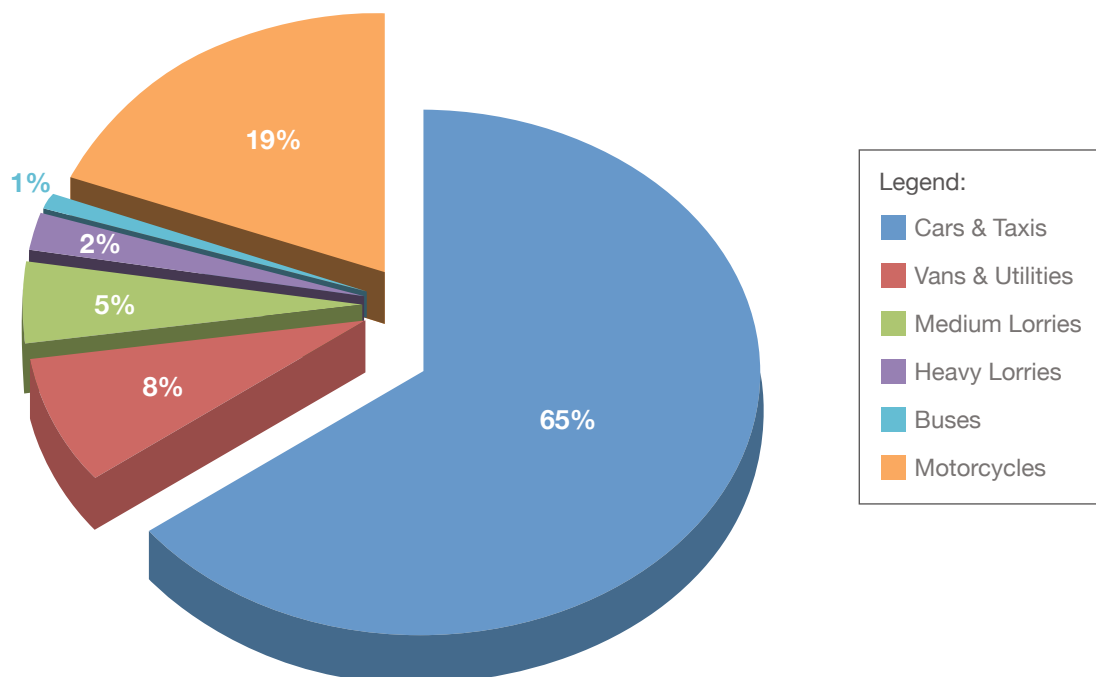


Figure 1 : Percentage of Vehicle Composition for the Year 2012

➤ Road Traffic Volume Malaysia (RTVM)

All the National Traffic Census data obtained from every state in Malaysia will be analysed and documented in the RTVM. The RTVM report of current year will be published in the month of June the following year.

The RTVM is published annually since 1999 in the form of compact discs and can be obtained at a retail price of RM50.00 from the Cawangan Pengurusan Perolehan dan Harta, Bahagian Kewangan, Kementerian Kerja Raya Malaysia.

The report of RTVM consists of:

- Location of Traffic Census Stations
- Daily Traffic Volume
- Traffic Growth Data
- Summary of Traffic Data on Highways in Malaysia
- Summary of Vehicle Registration Statistics in Malaysia
- Summary Statistics of Road Mileage in Malaysia

The benefits of RTVM are as follows:

It provides:

- Proper road network planning and roadside development
- Detail study on the traffic flow criteria
- Current traffic information for research and study
- Comprehensive overview about the current road capacity
- Guide to the calculation for the Level of Service (LOS) of respective roads – refer to Appendix “D” for types of LOS
- Information on the traffic growth and projection of traffic

In 1996, HPU has conducted the Malaysian Highway Capacity Study focusing on the urban and suburban facilities where the first volume of Malaysian Highway Capacity Manual (MHCM) was published in 2006. As an extension to the previous work, HPU has embarked upon a second study, the “Malaysian Highway Capacity Study” Stage 3 (Inter Urban) which commenced in 2007. The second volume of the manual was published in 2011.

MHCM is only used to measure the performance of existing roads based on Malaysian road condition and to predict the traffic performance and capacity of road. Desired level performance based on traffic flow and environment conditions of highways can be successfully determined with the input data of the road geometry and road inventory. Therefore, information gathering on road geometry and road inventory is on-going in order to input into MHCM for road capacity analysis.

In the RTVM the traffic growth rates are obtained based on the calculation of compound “normal” traffic growth in terms of percentage growth of total traffic per year by the Method of Least Square Regression Analysis of traffic flow data of immediate past ten years (2003-2012). Extrapolation based on this rate is used for the capacity year computation. The Malaysia Yearly 16-Hour Traffic Volume is shown in Figure 2.

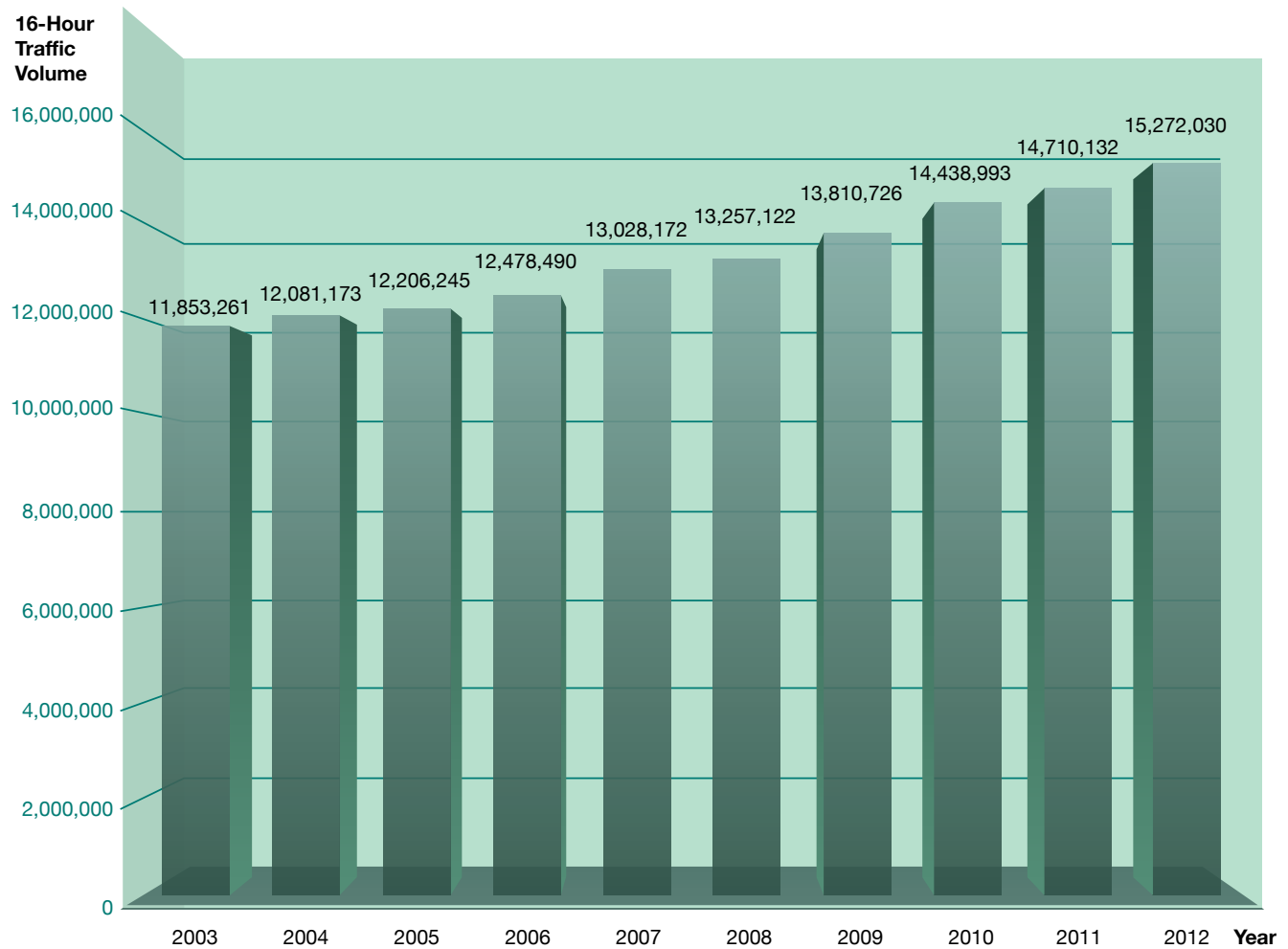


Figure 2 : Malaysia Yearly 16-Hour Traffic Volume

By referring to Figure 3, the 2012 normal growth rate (%/year) for Malaysia is 2.91%. This value was obtained from the equation of the exponential trendline. (Capacity Year means the year at which the forecast traffic volume equals the computed road capacity).

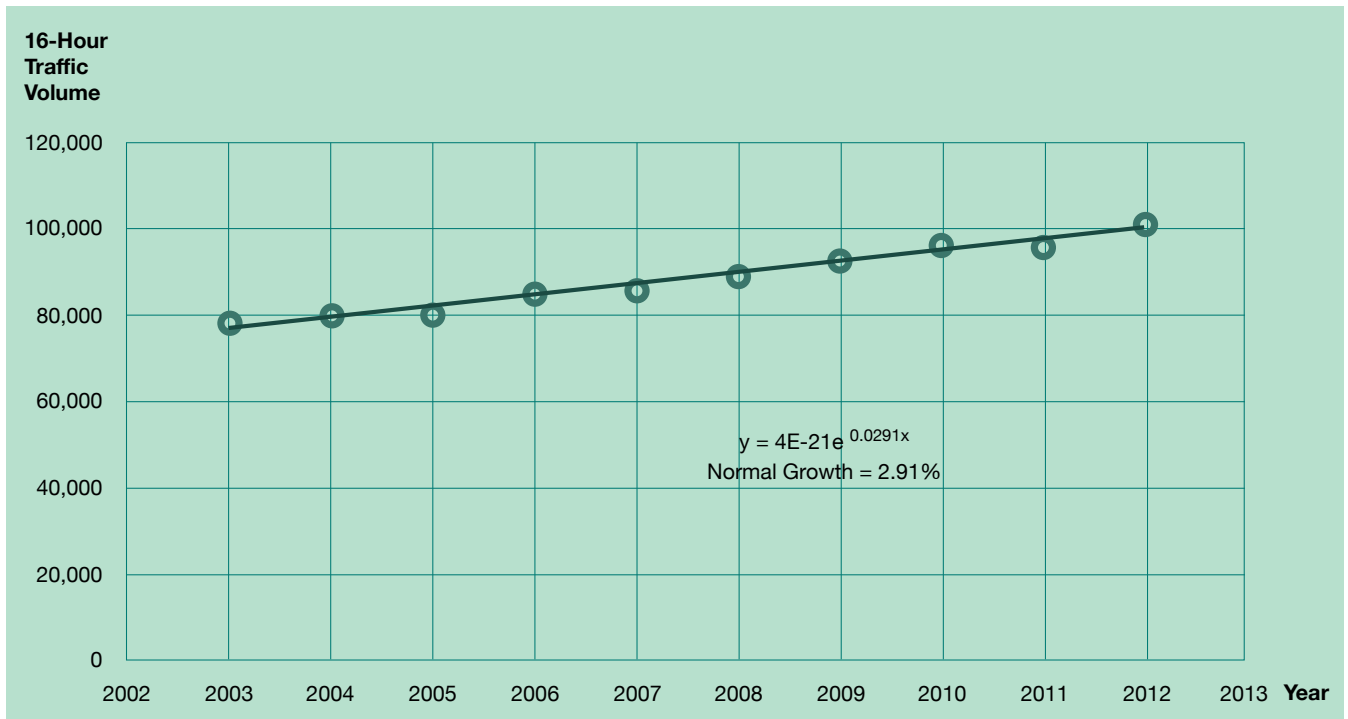
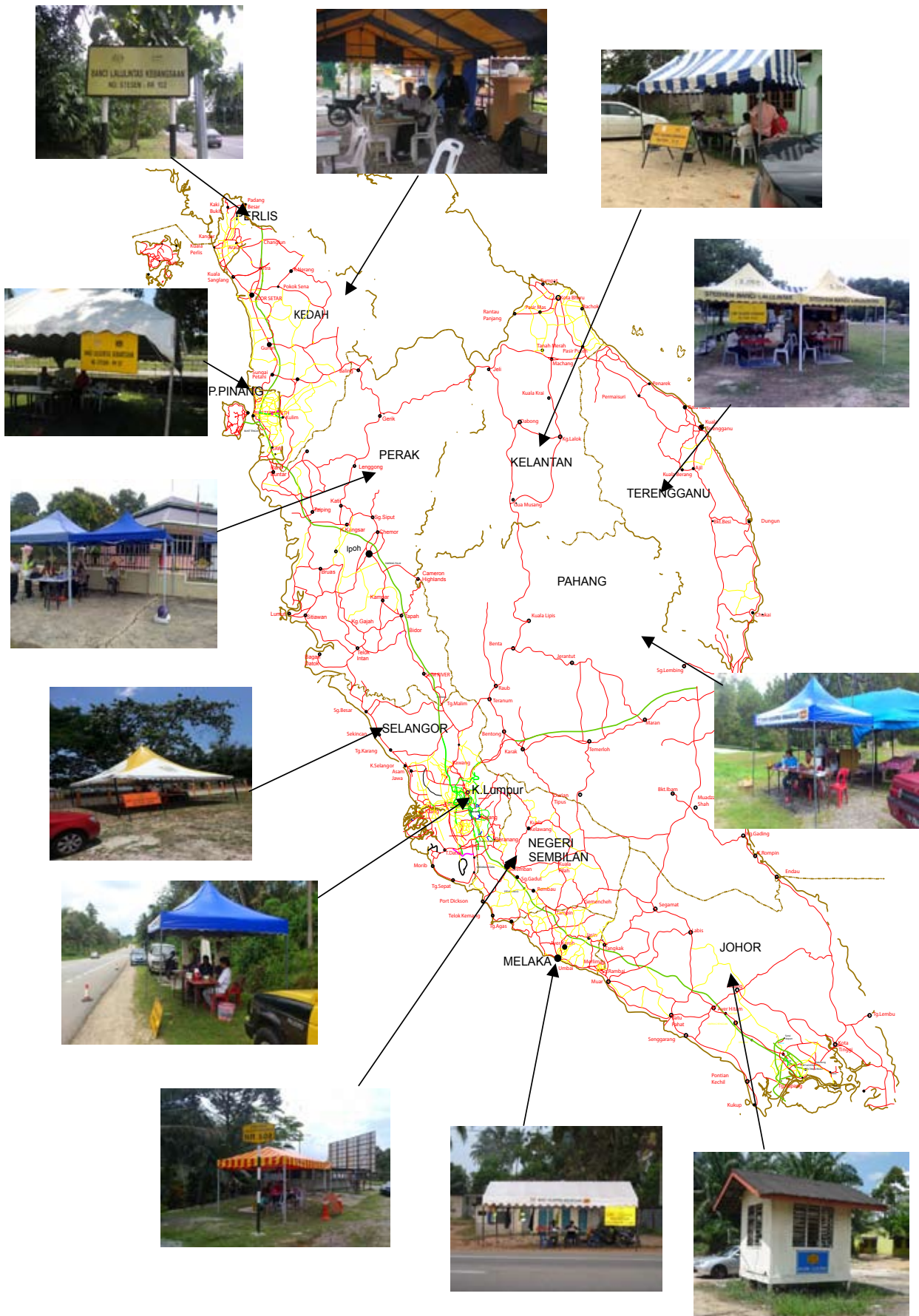


Figure 3 : Malaysia Normal Traffic Growth with Exponential Trendline for the Year 2012

Location of Traffic Census Stations in Peninsular Malaysia



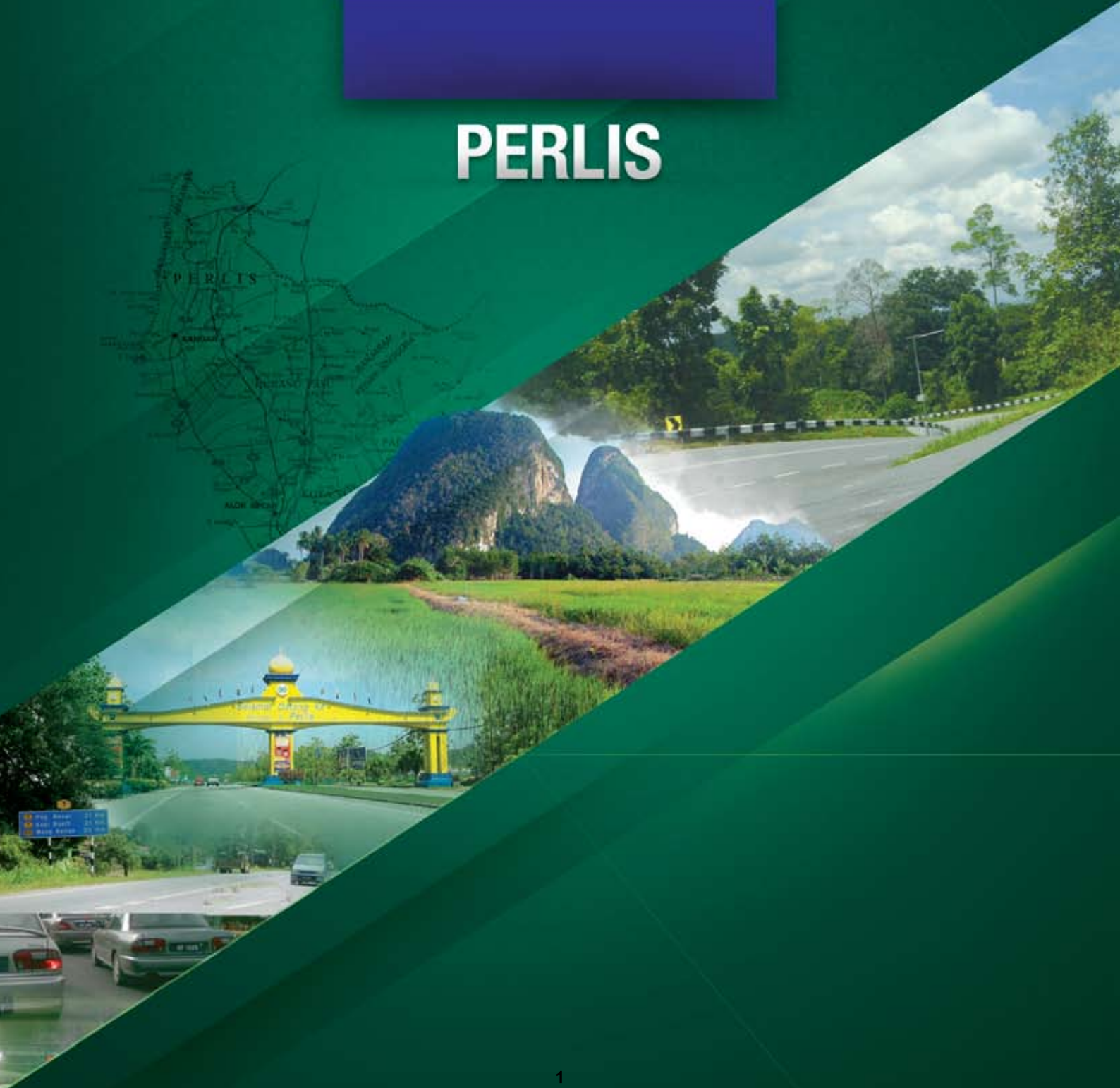
Location of Traffic Census Stations in Sabah and Sarawak







PERLIS



Distribution Of Survey Stations

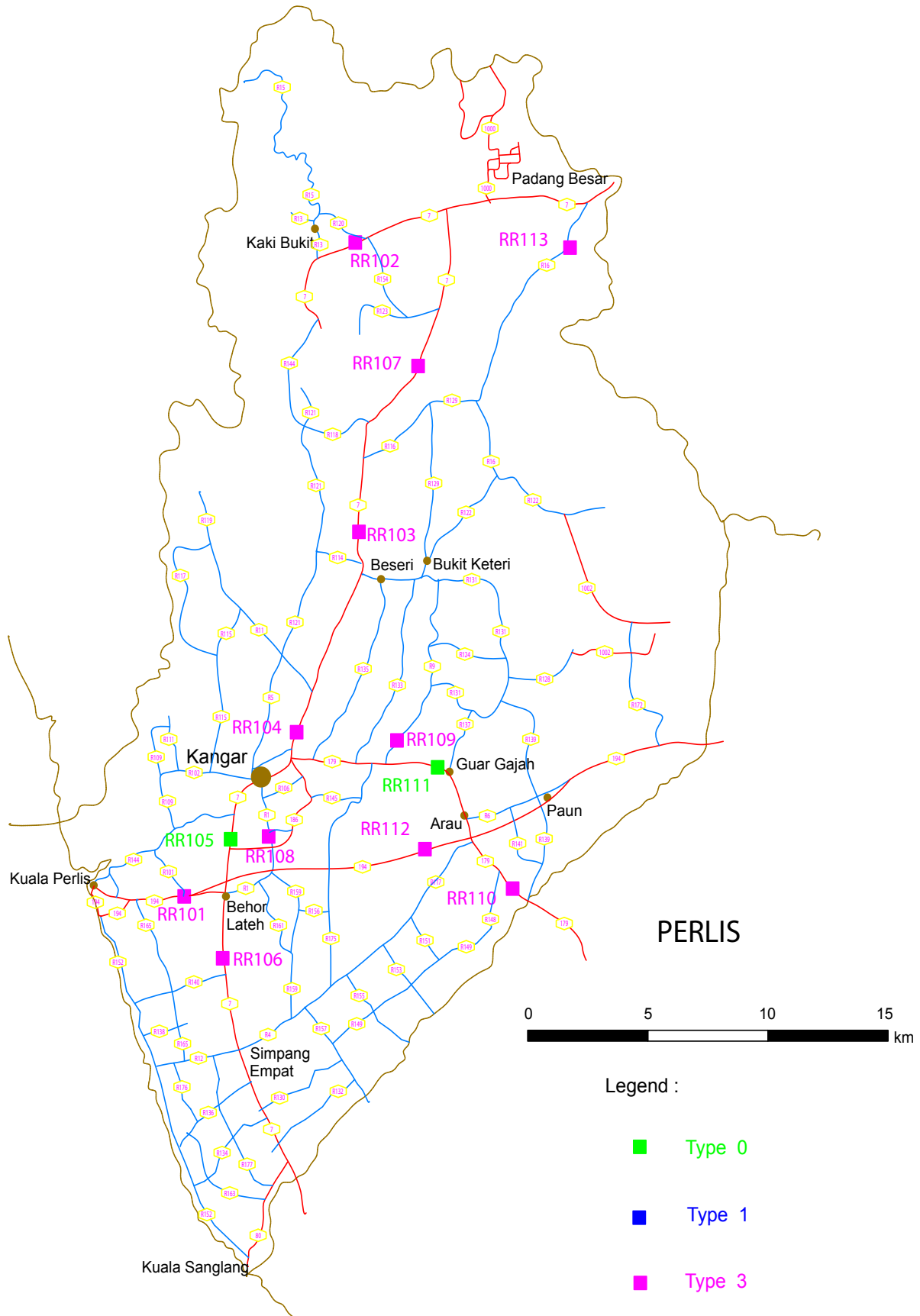
No.	State	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	PERLIS	2	0	11	13
	TOTAL	2	0	11	13

Location Description For Traffic Census Stations

STATE : PERLIS

Station Number	Survey Type	Route Number	KM	Description of Locations
RR101	3	81	6.1	Kangar-Kuala Perlis (100.0m from Kg.Benor Lateh junction)
RR102	3	7	25.8	Kangar-Padang Besar
RR103	3	7	11.3	Kangar-Kaki Bukit
RR104	3	7	1.3	Kangar-Padang Besar
RR105	0	7	3.2	Kangar-Alor Star (through Simpang Empat)
RR106	3	7	8.1	Kangar-Simpang Empat-Alor Star
RR107	3	R123	26.1	Jalan Titi Tinggi/Tasoh
RR108	3	R1	2.1	Jalan Raja Syed Alwi
RR109	3	R3	0.8	From junction Kangar-Arau
RR110	3	R3	14.5	Kangar-Kodiang
RR111	0	R3	3.2	From junction Arau-Simpang Empat
RR112	3	R194	16	Kangar-Jalan Changlun- K. Perlis
RR113	3	R16	22	Kangar-Jalan Kubang Tiga-Padang Besar

Figure R : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

STATE : PERLIS

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
RR101	-	18112	1700	1200-1300						25.8	100.0
RR102	-	12737	1270	0700-0800	65.4	3.6	3.4	0.3	1.4	25.8	100.0
RR103	-	11595	990	1700-1800	56	5.1	4.1	0.3	0.4	34.1	100.0
RR104	-	27348	3201	1700-1800	65.9	3.6	2.5	0.3	0.2	27.5	100.0
RR105	29825	26229	2355	1700-1800	66.2	5.6	4.1	0.3	1.6	22.1	100.0
RR106	-	14596	1413	0700-0800	59.6	5.4	5.4	1.1	1.5	27	100.0
RR107	-	5432	507	1700-1800	65.2	7.5	4.6	0.9	0.8	20.9	100.0
RR108	-	23153	2275	1700-1800	63.2	4	2.7	0.1	0.8	29.1	100.0
RR109	-	5318	439	1800-1900	59.7	3.9	3.1	0.6	0	32.7	100.0
RR110	-	11778	1024	1800-1900	65.6	5.3	5	0.4	0.4	23.2	100.0
RR111	31289	27949	2662	1700-1800	62.2	3.9	2.3	0.5	0.3	30.8	100.0
RR112	-	13822	1489	1700-1800	73	4.4	4.5	0.5	2	15.6	100.0
RR113	-	3714	399	1700-1800	61.5	5.9	3.2	0.6	0.1	28.7	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

STATE : PERLIS

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
RR101	-	15343	1360	1700-1800	73.1	2.7	3.5	0.5	2.2	17.9	100.0
RR102	-	5196	585	1200-1300	59.7	2.9	3.8	0.5	0.8	32.3	100.0
RR103	-	17865	1879	0700-0800	68.1	2.9	3.6	0.6	0.3	24.5	100.0
RR104	-	24426	2439	0700-0800	74.5	3	2.4	0.4	0.3	19.4	100.0
RR105	28485	24926	2213	1800-1900	71.1	5.7	3.2	0.4	1.7	17.9	100.0
RR106	-	14653	1558	1700-1800	69.4	5.8	5	1.1	1.7	16.9	100.0
RR107	-	5801	503	1500-1600	67.5	8.8	3.8	1.4	0.5	18	100.0
RR108	-	23707	2295	0700-0800	72.4	4.7	1.4	0.2	0.7	20.7	100.0
RR109	-	7941	1102	0700-0800	60.2	4.3	3.9	0.6	0.4	30.6	100.0
RR110	-	11143	1207	0700-0800	64.2	6.5	8.7	0.6	0.5	19.4	100.0
RR111	33202	29757	2865	1700-1800	69.3	3.5	2.8	0.5	0.5	23.4	100.0
RR112	-	13432	1380	0700-0800	75.5	5.8	2.4	0.5	1.8	14	100.0
RR113	-	3854	351	1000-1100	63.6	3.2	3.3	1.1	0.2	28.5	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

STATE : PERLIS

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
RR101	16728	64.7	7.5	3.2	1.4	1.2	21.9	1530
RR102	8967	62.6	3.2	3.6	0.4	1.1	29.1	928
RR103	14730	62.0	4.0	3.8	0.4	0.4	29.3	1435
RR104	25887	70.2	3.3	2.5	0.3	0.2	23.4	2820
RR105	25577	68.7	5.6	3.7	0.4	1.6	20.0	2284
RR106	14625	64.5	5.6	5.2	1.1	1.6	21.9	1486
RR107	5617	66.4	8.2	4.2	1.1	0.7	19.5	505
RR108	23430	67.8	4.4	2.0	0.1	0.8	24.9	2285
RR109	14513	66.0	4.3	2.2	0.4	0.4	26.7	1367
RR110	11461	64.9	5.9	6.9	0.5	0.5	21.3	1116
RR111	28853	65.7	3.7	2.6	0.5	0.4	27.1	2764
RR112	13627	74.3	5.1	3.5	0.5	1.9	14.8	1435
RR113	3784	62.6	4.5	3.3	0.9	0.1	28.6	375

Annual Growth Rate For Year 2012

STATE : PERLIS

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
RR101	11222	12478	12479	14289	13637	14558	14573	15198	15422	16728	3.75	0.91
RR102	4139	3703	3809	3937	4121	4450	3782	4418	8309	8967	8.07	0.56
RR103	11407	12902	12815	13611	13159	14689	14181	14855	19892	14730	3.82	0.62
RR104	20644	19438	19512	24966	25612	29308	27854	30944	19528	25887	2.93	0.24
RR105	16177	17317	17644	19859	21018	20769	21321	21758	23234	25577	4.5	0.94
RR106	11592	11387	12396	12255	12686	13281	13422	13316	14296	14625	2.64	0.94
RR107	3950	4425	4598	4939	4597	4678	4465	4739	4752	5617	2.14	0.53
RR108	24249	20983	21998	22936	24325	23159	22018	21992	20466	23430	-0.4	0.04
RR109	7887	7756	9019	6783	6706	6090	6294	14372	7384	14513	4.34	0.17
RR110	9415	10846	10376	11471	9071	8526	10264	11419	11627	11461	1.42	0.15
RR111	23094	24459	24400	24587	26017	26042	25847	27311	27300	28853	2.11	0.93
RR112	-	-	-	7188	6986	8409	8551	10798	13026	13627	12.2	0.94
RR113	-	-	-	4184	3188	2975	3032	4067	3400	3784	0.5	0.01

PERLIS

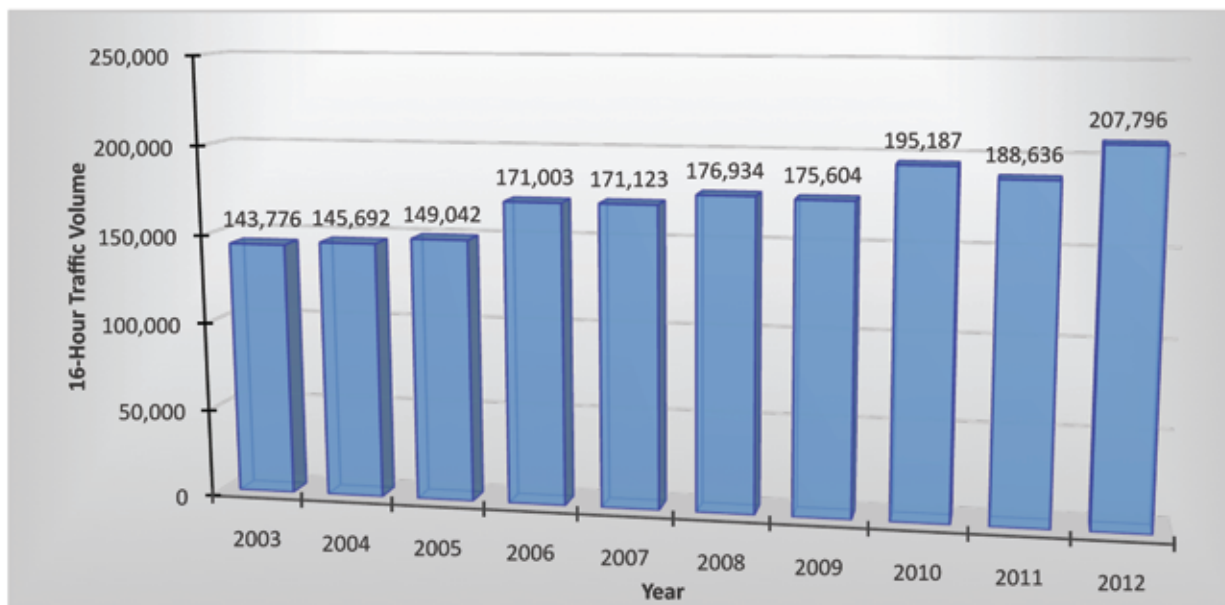


Figure 4 A : Perlis Yearly 16-hour Traffic Volume

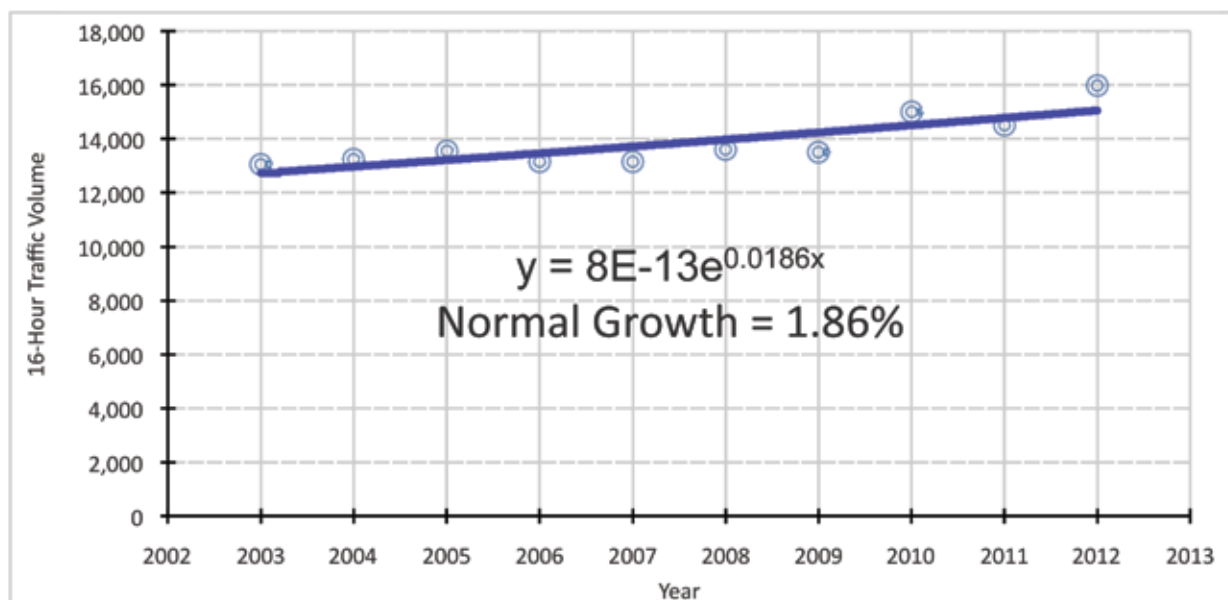
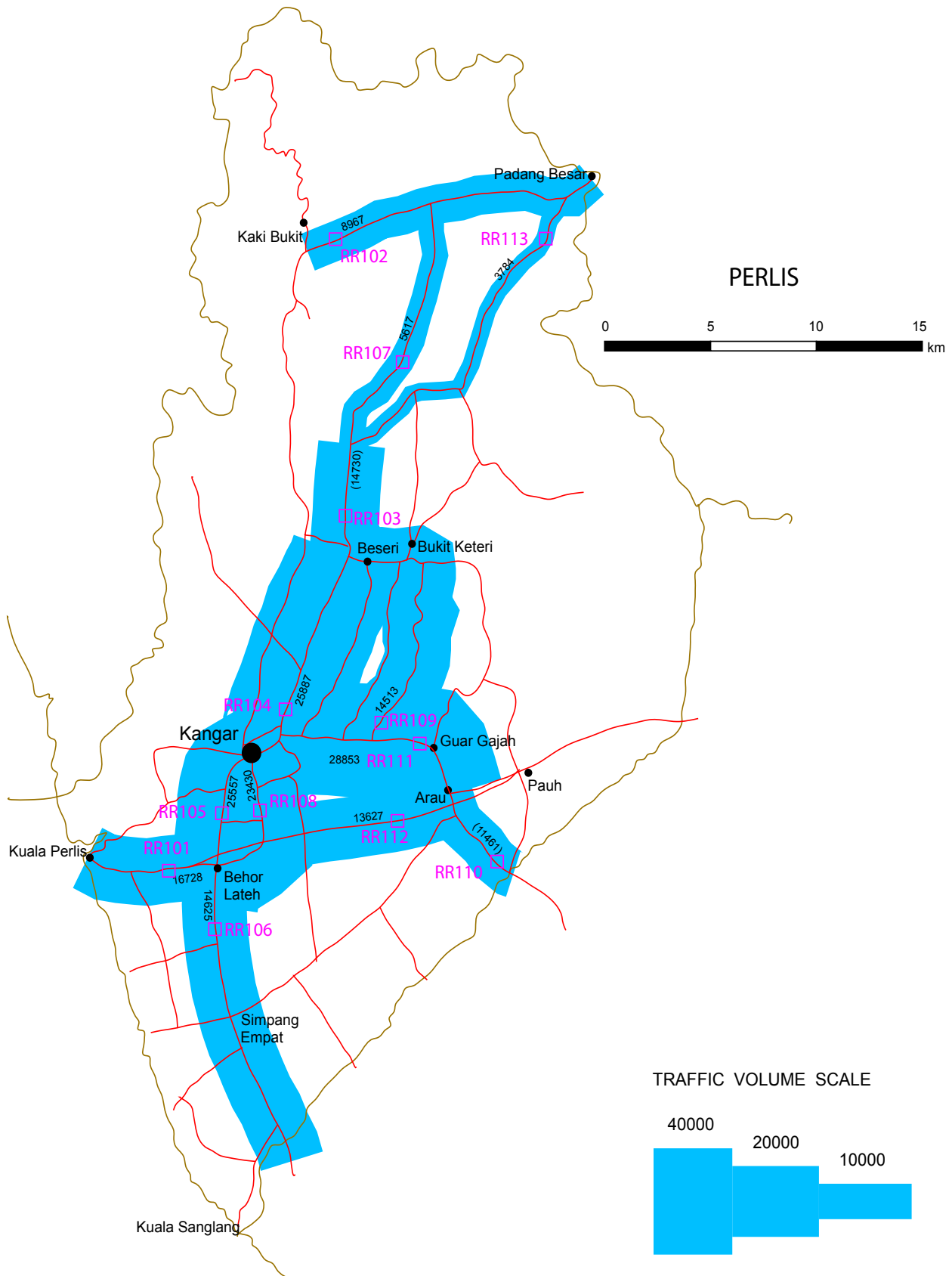


Figure 4 B : Perlis Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure R1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012







KEDAH



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	KOTA SETAR - PADANG TERAP	0	1	10	11
2	KUBANG PASU	0	1	5	6
3	KUALA MUDA - SIK	0	2	6	8
4	PENDANG - YAN	1	0	6	7
5	BALING	1	0	4	5
6	KULIM - BANDAR BAHARU	1	2	7	10
7	LANGKAWI	0	1	4	5
	TOTAL	3	7	42	52

Location Description For Traffic Census Stations

DISTRICT : KOTA SETAR - PADANG TERAP

Station Number	Survey Type	Route Number	KM	Description of Locations
KR101	3	K8	6.1	Alor Star-Kuala Nerang
KR102	3	K8	12.9	Alor Star-Langgar-Pokok Sena
KR103	3	K11	22.5	Alor Star-Pokok Sena-Kuala Nerang
KR104	3	K8	27.4	Alor Star-Kg. Bukit Payong-Naka
KR105	3	78	3.2	Alor Star-Kuala Kedah
KR106	3	78	6.4	Alor Star-Kuala Kedah
KR107	3	K139	4	West Alor Star Bypass
KR108	1	3	4.8	Package LLM Expressway
KR109	3	K135	3.2	Alor Star-Pendang (Jalan Titi Hj. Idris)
KR110	3	7	8.1	Alor Star-Simpang Empat-Kangar
KR111	3	1	16.6	Alor Star-Guar Chempedak

DISTRICT : KUBANG PASU

KR201	1	1	16.9	Alor Star-Jitra
KR202	3	1	20.6	Alor Star-Changlun
KR203	3	1	40.3	Jitra - Changlun
KR204	3	K3	20.6	Alor Star-Jitra-Kodiang
KR205	3	K3	27.4	Jitra-Kodiang
KR206	3	K4	1.6	Jitra-Ayer Hitam

DISTRICT : KUALA MUDA - SIK

KR401	1	1	70.8	Alor Star-Sungai Petani-Butterworth
KR402	1	1	53.1	Alor Star-Sungai Petani
KR403	3	67	67.6	Alor Star-Sungai Petani-Kuala Ketil
KR404	3	K1	1.6	Bedong-Tanjong Dawai
KR405	3	K10	36.2	Alor Star-Gurun-Jeniang
KR406	3	K17	64.4	Alor Star-Simpang Jeniang-Bukit Selambau
KR407	3	K15	4	From junction Batu Lima-Parit Panjang road
KR408	3	K8	66.8	Alor Star-Jeniang-Sik

Location Description For Traffic Census Stations

DISTRICT : PENDANG - YAN

Station Number	Survey Type	Route Number	KM	Description of Locations
KR501	0	1	29	Alor Star-Sungai Petani
KR502	3	K146	38.6	Alor Star-Guar Chempedak-Yan
KR503	3	K1	33.8	Alor Star-Kuala Kedah-Yan
KR504	3	K128	19.3	Alor Star-Kota Sarang Semut-Pendang
KR505	3	K11	33	Alor Star-Pendang-Kubor Panjang
KR506	3	K147	-	Pendang-Jenun/Pdg. Lembu (Lokasi : Tobiar)
KR507	3	K128	-	Pendang-KBR Panjang (Lokasi : Tobiar)

DISTRICT : BALING

KR601	0	67	41.9	Kulim-Kuala Ketil-Baling
KR602	3	67	69.2	Kulim-Kuala Ketil-Baling
KR603	3	76	75.7	Sungai Petani-Kroh
KR604	3	K154	3.2	From Parit Panjang-Assam Jawa-Baling road
KR605	3			Baling-Kulim

DISTRICT : KULIM - BANDAR BAHARU

KR701	3	K12	3.2	Kulim-Bukit Mertajam
KR702	3	K12	2.4	Kulim-Junjong
KR703	0	K115	4.8	Kulim-Mahang
KR704	3	K21	9.7	Kulim-Padang Serai-Merbau Pulas
KR705	1	K21	4	Kulim-Lunas
KR706	3	K21	3.7	Kulim-Serdang
KR707	3	K134	8.1	Kulim-Junjong
KR708	3	K7	33.8	Kulim-Serdang-Selama
KR709	1	K21	29	Kulim-Titi Karangan-Merbau Pulas
KR710	3	K710	12	Jalan Kulim-Lunas-Sg. Karangan-Baling

DISTRICT : LANGKAWI

KR801	1	112	4.5	Pekan Kuah - Padang Matsirat
KR802	3	112	1.5	Pekan Kuah - Tanjung Rhu
KR803	3	112	1	Padang Lalang - Ulu Melaka
KR804	3	113	1	Kampung Kok - Kampung Ewa
KR805	3	116	1	Simpang Kedawang - Lapangan Terbang

Figure K : TRAFFIC CENSUS STATIONS

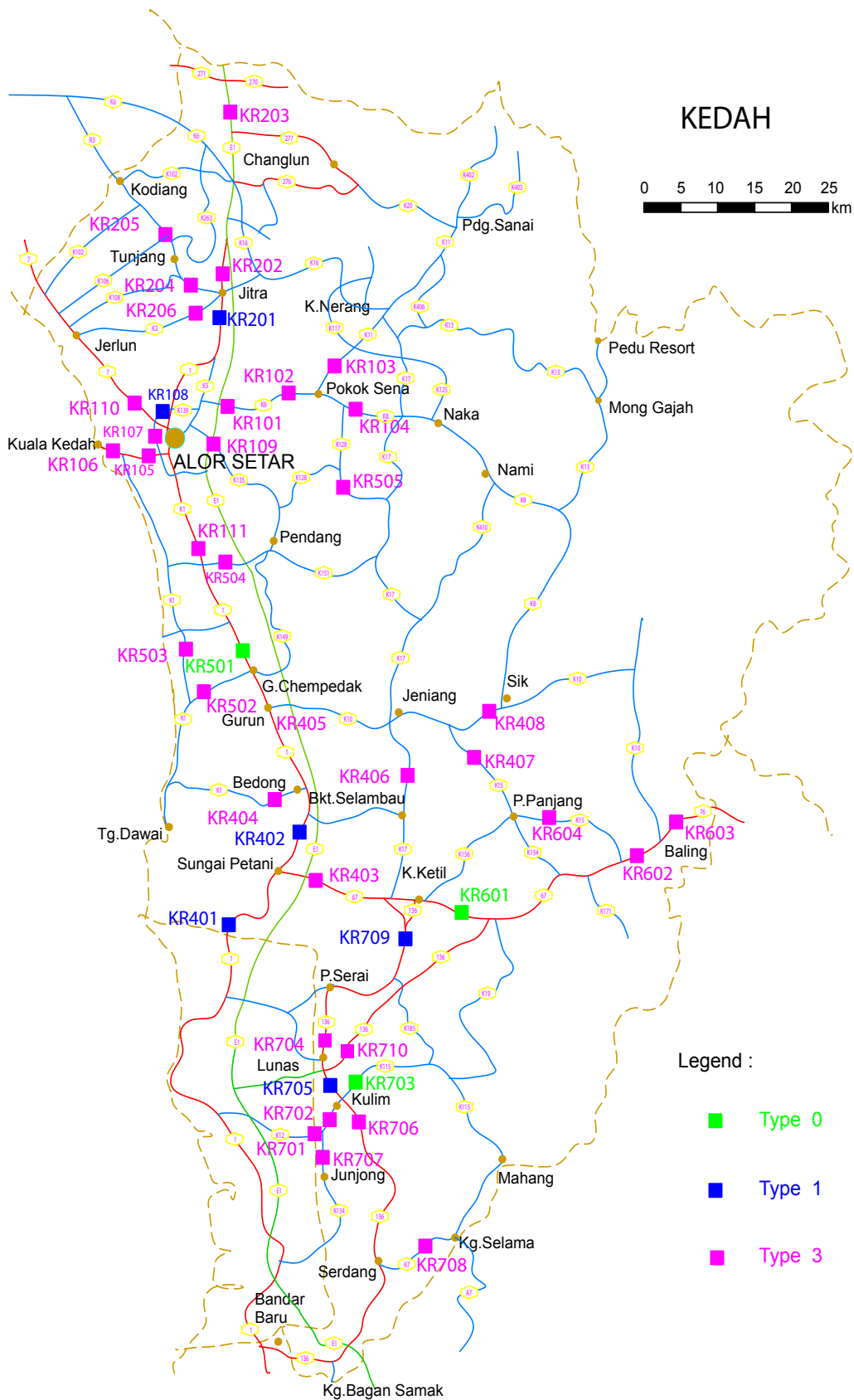
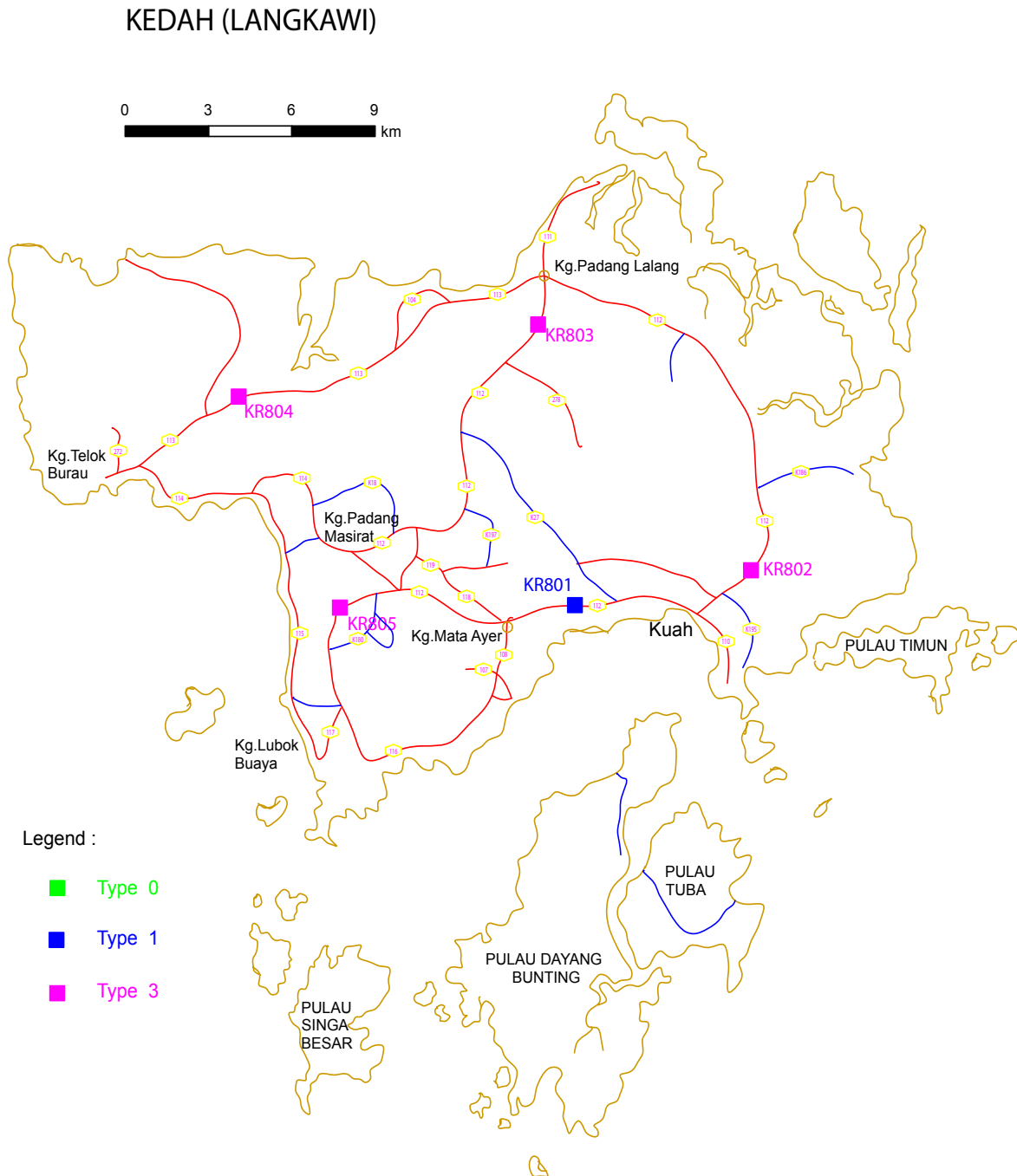


Figure K (1): TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KOTA SETAR - PADANG TERAP

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
KR101	-	48353	4215	0700-0800	62.4	6.8	2.7	2.2	0.3	25.6	100.0
KR102	-	23282	2157	1700-1800	44.2	3.6	2.4	0.8	0.4	48.6	100.0
KR103	-	17848	1677	1700-1800	45.3	3.9	3.4	1	0.5	45.9	100.0
KR104	-	6406	657	1600-1700	43.1	8.3	5.1	2.4	0.3	40.8	100.0
KR105	-	36824	3638	0700-0800	65.9	4.4	3.2	1	0.4	25.1	100.0
KR106	-	25326	2107	0700-0800	51.8	6.6	4	2.3	0.3	34.9	100.0
KR107	-	46814	3932	1900-2000	57.3	8.6	3.8	3.9	0.5	26	100.0
KR108	-	46884	3904	1700-1800	65.4	2.4	2.4	0.4	1.7	27.6	100.0
KR109	-	29888	3145	0700-0800	48.5	5	2.7	0.7	0.3	42.7	100.0
KR110	-	30348	7943	1800-1900	60.3	4.9	4.4	2.6	0.6	27.2	100.0
KR111	-	20822	1608	0700-0800	49.3	6.2	5.9	5.3	0.5	32.8	100.0

DISTRICT : KUBANG PASU

KR201	-	34933	3079	1800-1900	58.5	5.5	3.2	0.6	0.5	31.7	100.0
KR202	-	39490	3881	1700-1800	59.8	2.7	4.9	0.5	0.2	31.8	100.0
KR203	-	23875	2479	1800-1900	59.2	6.2	3.4	6.9	0.9	23.4	100.0
KR204	-	19314	1845	1700-1800	59.3	3.5	5.7	0.9	0.2	30.4	100.0
KR205	-	21862	1935	1700-1800	62.8	2.4	4.3	0.7	0.3	29.5	100.0
KR206	-	6303	631	1800-1900	43.1	6.6	4.7	4.5	0	41.1	100.0

DISTRICT : KUALA MUDA - SIK

KR401	-	22934	2240	1800-1900	62.2	6.1	6.6	1.9	0.4	22.8	100.0
KR402	-	42824	3437	1800-1900	56.9	7.4	6.5	2	0.5	26.8	100.0
KR403	-	25780	2354	1800-1900	64.5	6.3	6.1	2.1	0.5	20.5	100.0
KR404	-	14626	1599	0700-0800	42.9	6.3	4.5	3.6	0.5	42.1	100.0
KR405	-	20436	2390	0700-0800	52.3	8	4.3	4.2	0.4	30.7	100.0
KR406	-	5276	481	0700-0800	46.4	9.4	10.8	6.5	0.3	26.7	100.0
KR407	-	8113	726	1800-1900	45.9	9	5.3	2.5	0.9	36.5	100.0
KR408	-	9284	790	0800-0900	43.1	3.3	2.4	2.2	1.2	47.9	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : PENDANG - YAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
KR501	21996	19813	1738	1700-1800	57.2	5.4	6.8	3.9	0.5	26.1	100.0
KR502	-	7867	1042	0700-0800	54.9	6.9	2.9	1.1	0.2	34	100.0
KR503	-	6570	664	0700-0800	49.2	5.6	4.3	0.7	0.4	39.8	100.0
KR504	-	9961	873	0700-0800	47.7	5.1	8.3	2.5	0.1	36.3	100.0
KR505	-	7035	685	1700-1800	43.8	4.4	3.2	3.8	0.2	44.6	100.0
KR506	-	4274	565	1100-1200	43.5	4.1	3.7	1.9	0.1	46.7	100.0
KR507	-	6264	725	0700-0800	39.7	9.3	6.2	10.7	0.1	34.0	100.0

DISTRICT : BALING

KR601	11181	10196	840	1800-1900	54.2	8.9	5.4	1.8	1.2	28.4	100.0
KR602	-	21240	1845	1800-1900	58.4	9.1	2.3	0.9	0.8	28.6	100.0
KR603	-	9871	903	1800-1900	45.7	10.3	3.2	1.9	1.1	37.7	100.0
KR604	-	6285	621	0800-0900	41.9	7.9	4.9	2.5	0.5	42.4	100.0
KR605	-	9921	943	1800-1900	66.1	10.9	4.2	4	0.8	13.9	100.0

DISTRICT : KULIM - BANDAR BAHARU

KR701	-	32663	3491	0700-0800	58.5	4.7	5.4	0.9	0.3	30.1	100.0
KR702	-	43607	5313	0700-0800	63.9	3.8	2.7	0.7	0.5	28.3	100.0
KR703	33997	31655	2983	0700-0800	68.4	4.4	2.2	0.2	0.3	24.5	100.0
KR704	-	14731	1595	0700-0800	51.6	6.5	4.5	0.8	0.9	35.6	100.0
KR705	-	39264	3986	1500-1600	61.2	4.4	3.7	0.7	0.9	29.1	100.0
KR706	-	15945	2014	0700-0800	50.8	5.9	4.5	2	0.8	36	100.0
KR707	-	15247	1984	0700-0800	54.6	6.1	4.8	2.6	0.6	31.2	100.0
KR708	-	5773	484	0700-0800	40.3	9.9	11.3	4.3	2.5	31.7	100.0
KR709	-	10005	846	1800-1900	50.9	6.8	9.7	5.4	2.1	25	100.0
KR710	-	20783	2862	0700-0800	54	7.5	8	7.7	1.1	21.7	100.0

DISTRICT : LANGKAWI

KR801	-	25340	2109	1700-1800	60.5	8	6	1	0.6	24	100.0
KR802	-	14119	1125	1900-2000	51.8	8.2	3.6	1.2	0.5	34.6	100.0
KR803	-	10441	938	1900-2000	37.8	7	3.4	3.3	0.9	47.6	100.0
KR804	-	22528	1958	1800-1900	61	7.8	4.9	0.9	1.1	24.3	100.0
KR805	-	16216	1252	1800-1900	47.1	7.6	3.4	0.4	0.5	40.9	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KOTA SETAR - PADANG TERAP

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
KR101	-	36072	3702	0800-0900	56.7	10.5	6.2	2.1	0.9	23.6	100.0
KR102	-	23562	2181	0700-0800	59	4.4	5	1.7	0.7	29.2	100.0
KR103	-	11625	1155	0700-0800	51.5	3.7	2.7	1.6	0.6	39.9	100.0
KR104	-	5032	726	0700-0800	47.6	4.8	3.5	1.9	0.6	41.7	100.0
KR105	-	31085	2905	0700-0800	65.7	5.4	4.2	1	0.5	23.3	100.0
KR106	-	23108	2064	0700-0800	55.1	8	3.9	1.5	0.3	31.3	100.0
KR107	-	36807	2950	1800-1900	70.2	8.5	4.3	3.8	0.3	12.9	100.0
KR108	-	45005	3714	1700-1800	67.3	2.6	2.1	0.3	1.7	26.1	100.0
KR109	-	34622	3325	0700-0800	53.7	5.6	2.5	0.5	0.3	37.3	100.0
KR110	-	17941	1609	1700-1800	57.9	7.2	5.4	6	0.5	22.9	100.0
KR111	-	21912	1935	0900-1000	56.5	5.1	7.3	2.3	0.8	28.1	100.0

DISTRICT : KUBANG PASU

KR201	-	33526	2621	1700-1800	61.2	5.4	3.4	0.5	0.5	29.1	100.0
KR202	-	46153	4496	1700-1800	63.1	3.4	5.3	0.4	0.2	27.7	100.0
KR203	-	20310	1794	0700-0800	64	7.4	4	5.1	0.9	18.6	100.0
KR204	-	17770	1580	1700-1800	66.4	3.9	6.9	0.5	0.2	22.1	100.0
KR205	-	22683	2045	1800-1900	64.8	3	5.2	0.6	0.3	26.1	100.0
KR206	-	7290	644	1300-1400	53.5	5.5	4.8	2.9	0.2	33.2	100.0

DISTRICT : KUALA MUDA - SIK

KR401	-	23348	2870	1700-1800	66.5	8.1	6.7	1.4	0.4	16.9	100.0
KR402	-	41212	3244	1800-1900	62.6	5.7	5.7	2.6	0.6	23	100.0
KR403	-	23208	1946	0600-0700	64.7	9.6	6.9	3.2	0.7	15	100.0
KR404	-	11955	1165	0700-0800	45.7	6.7	6.1	5.9	0.7	35	100.0
KR405	-	20844	2382	0700-0800	57.7	12.6	5.8	2.8	0.3	20.7	100.0
KR406	-	3880	333	0800-0900	48.3	10.9	16.1	4.6	0.6	19.5	100.0
KR407	-	6535	593	0700-0800	54.6	8.5	6.7	3.2	1.3	25.6	100.0
KR408	-	10013	899	1600-1700	40	6.4	1.9	1.4	1	49.3	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : PENDANG - YAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
KR501	20846	18685	1695	0700-0800	58.2	5.9	5.9	4.7	0.6	24.7	100.0
KR502	-	7235	993	0700-0800	53.2	6	3.7	0.4	0.1	36.6	100.0
KR503	-	5393	559	0700-0800	60.1	6.5	4.7	0.9	0.5	27.4	100.0
KR504	-	8425	866	0700-0800	51.3	4.9	8.6	3.6	0.1	31.6	100.0
KR505	-	8320	742	0700-0800	47.6	6.1	7.4	3.7	0.4	34.9	100.0
KR506	-	3676	369	1700-1800	34.9	6.2	4.0	2.3	0.1	52.6	100.0
KR507	-	4998	478	0700-0800	35.4	9.1	7.4	6.6	0.2	41.4	100.0

DISTRICT : BALING

KR601	12217	11241	1006	1700-1800	55.9	8.7	7.4	1.7	1.2	25.1	100.0
KR602	-	56042	4700	1400-1500	23.1	3.1	1.1	0.2	6.2	66.4	100.0
KR603	-	8835	805	0800-0900	52.9	8.7	5.2	1.7	1	30.6	100.0
KR604	-	7116	648	1900-2000	42.2	5.6	4.2	1.3	0.3	46.4	100.0
KR605	-	10723	1042	1900-2000	54.8	7.6	4.8	4	7.3	21.5	100.0

DISTRICT : KULIM - BANDAR BAHARU

KR701	-	23989	2674	0700-0800	61.8	5	4.4	1	0.5	27.3	100.0
KR702	-	39323	4628	0700-0800	68.8	3.4	3.2	0.8	0.5	23.3	100.0
KR703	31174	28600	2719	1800-1900	66.4	8.1	2.1	0.3	0.4	22.8	100.0
KR704	-	13283	1270	1800-1900	62.7	5.2	5.6	1.7	1.3	23.4	100.0
KR705	-	37772	3313	1800-1900	62.6	5.5	3.9	0.6	1	26.4	100.0
KR706	-	15150	1632	1700-1800	56.7	5.4	5.6	2.1	1	29.3	100.0
KR707	-	13596	1743	0700-0800	64.4	3.7	4.7	2.7	0.6	23.9	100.0
KR708	-	3286	346	0700-0800	35.5	12.1	14.9	2.3	1.9	33.3	100.0
KR709	-	9787	858	1800-1900	49.9	8.7	12.4	3.9	2	23	100.0
KR710	-	15877	2409	0700-0800	61.5	7.2	7.7	5.3	1.5	16.9	100.0

DISTRICT : LANGKAWI

KR801	-	25942	2175	1700-1800	59	9.9	5.8	0.8	0.7	23.7	100.0
KR802	-	12633	1014	1700-1800	47.9	8.6	6.4	1.3	0.6	35.2	100.0
KR803	-	8275	780	0700-0800	42.1	6.4	4.9	5.6	0.4	40.6	100.0
KR804	-	2916	261	1700-1800	43.8	7.3	7.6	2.3	0.1	38.9	100.0
KR805	-	12053	1163	0700-0800	52.4	6.7	4.5	1.1	0.4	34.9	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : KOTA SETAR - PADANG TERAP

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
KR101	42213	59.5	8.7	4.4	2.2	0.6	24.6	3959
KR102	23422	51.6	4	3.7	1.2	0.5	38.9	2169
KR103	14737	48.4	3.8	3	1.3	0.6	42.9	1416
KR104	5719	45.3	6.6	4.3	2.2	0.4	41.2	692
KR105	33955	65.8	4.9	3.7	1	0.4	24.2	3272
KR106	24217	53.4	7.3	4	1.9	0.3	33.1	2086
KR107	41811	63.7	8.5	4	3.9	0.4	19.5	3441
KR108	45944	66.4	2.5	2.2	0.3	1.7	26.9	3809
KR109	32255	51.1	5.3	2.6	0.6	0.3	40	3235
KR110	24145	59.1	6.1	4.9	4.3	0.6	25	4776
KR111	21367	52.9	5.7	6.6	3.8	0.7	30.4	1772

DISTRICT : KUBANG PASU

KR201	34230	59.8	5.4	3.3	0.6	0.5	30.4	2850
KR202	42822	61.4	3.1	5.1	0.4	0.2	29.7	4189
KR203	22093	61.6	6.8	3.7	6	0.9	21	2137
KR204	18542	62.8	3.7	6.3	0.7	0.2	26.3	1713
KR205	22273	63.8	2.7	4.8	0.7	0.3	27.8	1990
KR206	6797	48.3	6.1	4.7	3.7	0.1	37.1	638

DISTRICT : KUALA MUDA - SIK

KR401	23141	64.4	7.1	6.7	1.7	0.4	19.8	2555
KR402	42018	59.7	6.5	6.1	2.3	0.5	24.9	3340
KR403	24494	64.6	7.9	6.5	2.6	0.6	17.8	2150
KR404	13291	44.3	6.5	5.3	4.8	0.6	38.6	1382
KR405	20640	55	10.3	5	3.5	0.4	25.7	2386
KR406	4578	47.3	10.1	13.4	5.5	0.5	23.1	407
KR407	7324	50.2	8.8	6	2.9	1.1	31.1	660
KR408	9649	41.5	4.9	2.1	1.8	1.1	48.6	845

16-Hour Traffic Composition By Vehicle Type (Average 2012)**DISTRICT : PENDANG - YAN**

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
KR501	19249	57.7	5.7	6.4	4.3	0.5	25.4	1717
KR502	7551	54	6.4	3.3	0.7	0.2	35.3	1018
KR503	5982	54.7	6	4.5	0.8	0.4	33.6	612
KR504	9193	49.5	5	8.4	3	0.1	33.9	870
KR505	7678	45.7	5.3	5.3	3.7	0.3	39.7	714
KR506	3975	39.2	5.2	3.8	2.1	0.1	49.7	467
KR507	5631	37.5	9.2	6.8	8.7	0.1	37.7	602

DISTRICT : BALING

KR601	10718	55.1	8.8	6.4	1.7	1.2	26.7	923
KR602	38641	40.7	6.1	1.7	0.6	3.5	47.5	3273
KR603	9353	49.3	9.5	4.2	1.8	1	34.1	854
KR604	6701	42	6.8	4.5	1.9	0.4	44.4	635
KR605	10322	60.5	9.3	4.5	4	4.1	17.7	993

DISTRICT : KULIM - BANDAR BAHARU

KR701	28326	60.2	4.9	4.9	1	0.4	28.7	3083
KR702	41465	66.4	3.6	2.9	0.7	0.5	25.8	4971
KR703	30128	67.4	6.2	2.1	0.2	0.4	23.7	2851
KR704	14007	57.1	5.9	5.1	1.3	1.1	29.5	1433
KR705	38518	61.9	4.9	3.8	0.7	0.9	27.8	3649
KR706	15548	53.7	5.6	5.1	2	0.9	32.6	1823
KR707	14422	59.5	4.9	4.8	2.7	0.6	27.5	1864
KR708	4530	37.9	11	13.1	3.3	2.2	32.5	415
KR709	9896	50.4	7.7	11.1	4.7	2.1	24	852
KR710	14529	48.0	7.0	6.5	6.7	0.7	31.2	1821

DISTRICT : LANGKAWI

KR801	25641	59.7	8.9	5.9	0.9	0.7	23.9	2142
KR802	13376	49.9	8.4	5.0	1.3	0.5	34.9	1070
KR803	9358	39.9	6.7	4.2	4.5	0.6	44.1	859
KR804	12722	52.4	7.5	6.3	1.6	0.6	31.6	1110
KR805	14135	49.8	7.1	4.0	0.8	0.5	37.9	1208

Annual Growth Rate For Year 2012

DISTRICT : KOTA SETAR - PADANG TERAP

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
KR101	30739	32325	32357	32031	39774	48051	47342	42729	46813	42213	4.97	0.69
KR102	19585	15379	11922	23373	22060	23222	22512	26056	22888	23422	5	0.4
KR103	12909	10598	10179	13087	17988	17076	13741	14362	19143	14737	4.33	0.39
KR104	6674	4995	5054	5862	4435	4879	4876	5785	7277	5719	0.89	0.03
KR105	27082	30093	32031	38771	31690	30227	31710	35308	27783	33955	0.8	0.05
KR106	20360	20351	20630	20383	21010	26310	24987	21887	21717	24217	1.91	0.37
KR107	26673	35240	37792	35747	36560	30201	33415	39139	38074	41811	2.65	0.37
KR108	38981	40040	40723	38604	40960	40252	41077	43602	45001	45944	1.7	0.76
KR109	29613	23368	25068	25707	26928	33926	28343	33589	26744	32255	2.24	0.28
KR110	23320	22663	25780	34121	31575	31067	28433	28137	23023	24145	0.18	0.00
KR111	21556	27165	26662	44706	29060	20024	23290	24572	24310	21367	-2.18	0.08

DISTRICT : KUBANG PASU

KR201	22842	22423	25767	28644	30704	29717	28501	30253	28098	34230	3.62	0.69
KR202	30168	33110	32409	37853	37093	51314	34715	30402	32311	42822	1.65	0.09
KR203	16630	22164	23121	17898	23135	25426	26608	21873	21549	22093	2.04	0.19
KR204	14132	9533	8847	12211	15071	13521	14204	12841	14174	18542	4.5	0.4
KR205	12083	10313	12106	15491	21550	16419	16949	18328	17803	22273	6.91	0.68
KR206	5430	5957	6235	7386	7557	8289	12630	5318	7708	6797	2.87	0.12

DISTRICT : KUALA MUDA - SIK

KR401	21967	21885	22259	21067	20596	16123	19052	24002	22195	23141	0.24	0.00
KR402	41807	47249	46493	44624	43928	43949	43741	42989	41858	42018	-0.76	0.3
KR403	18006	23670	24714	20386	23429	22722	26231	23337	22551	24494	1.74	0.24
KR404	9405	10068	9192	9316	10957	11624	12162	13942	13483	13291	4.91	0.85
KR405	12480	15742	16743	18254	17255	18631	19097	20697	21254	20640	4.79	0.82
KR406	3148	3123	3166	3145	2296	2834	3392	4295	4511	4578	4.79	0.44
KR407	4177	4591	5088	5070	5616	5257	5869	8082	8134	7324	7.12	0.86
KR408	8547	8267	8492	7861	8477	8088	8861	8631	10055	9649	1.73	0.48

Annual Growth Rate For Year 2012

DISTRICT : PENDANG - YAN

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
KR501	18535	18893	19452	20396	21206	17586	19169	19387	19618	19249	0.13	0.01
KR502	7700	7131	7082	7242	8419	7151	8979	9539	9261	7551	2.2	0.32
KR503	4637	3980	4162	4856	6529	5846	6338	6612	6229	5982	5.11	0.64
KR504	6840	6316	7239	6530	8523	7246	10173	9157	6569	9193	3.2	0.32
KR505	9448	9540	8837	9366	11388	10737	8429	8516	7201	7678	-2.66	0.33
KR506	-	-	-	-	-	-	-	-	-	3975	-	-
KR507	-	-	-	-	-	-	-	-	-	5631	-	-

DISTRICT : BALING

KR601	9853	8826	9006	10007	10470	10119	10675	10707	11404	10718	2.17	0.67
KR602	16644	18131	18768	20629	20412	21386	22286	22612	18731	38641	5.47	0.51
KR603	8266	9938	10111	9269	8622	8491	8287	9122	9245	9353	-0.16	0
KR604	5159	4962	5099	5063	4686	2876	5966	6265	6248	6701	3.03	0.15
KR605	-	-	-	4916	5452	5745	6717	7277	7926	10322	11.46	0.96

DISTRICT : KULIM - BANDAR BAHARU

KR701	26974	25575	26663	26075	23848	25051	31792	32514	28866	28326	1.77	0.29
KR702	30921	28778	30313	38973	37569	36922	37711	31213	34851	41465	2.43	0.35
KR703	22717	20799	22094	21580	21918	25013	28158	30188	27994	30128	4.31	0.79
KR704	11859	11446	11347	10950	11457	11409	13135	13728	14695	14007	2.87	0.67
KR705	47541	33180	33194	35126	36617	33132	36056	32223	35762	38518	-0.93	0.06
KR706	24866	8315	8796	11033	10175	11204	14030	16113	16446	15548	2.66	0.06
KR707	6990	10146	10244	13076	11274	12456	13810	13935	14510	14422	6.56	0.76
KR708	3712	3435	3402	3729	3778	6125	4289	4298	4295	4530	3.29	0.33
KR709	26045	8353	8392	8682	7904	8095	17090	8486	9479	9896	-3.46	0.07
KR710	-	-	-	13508	13552	14426	17644	15148	16853	14529	2.51	0.28

DISTRICT : LANGKAWI

KR801	16399	16599	16560	16323	20405	20936	22049	22918	24412	25641	5.62	0.92
KR802	17759	18010	12186	9072	10164	10561	11659	12051	11346	13376	-3.06	0.17
KR803	6392	6842	7663	7079	7044	7726	7873	9611	8454	9358	3.91	0.79
KR804	9853	2229	2353	2430	3003	2729	2890	3095	3148	12722	3.95	0.04
KR805	10180	11129	9596	10081	11593	12322	11901	12471	13837	14135	3.85	0.79

KEDAH

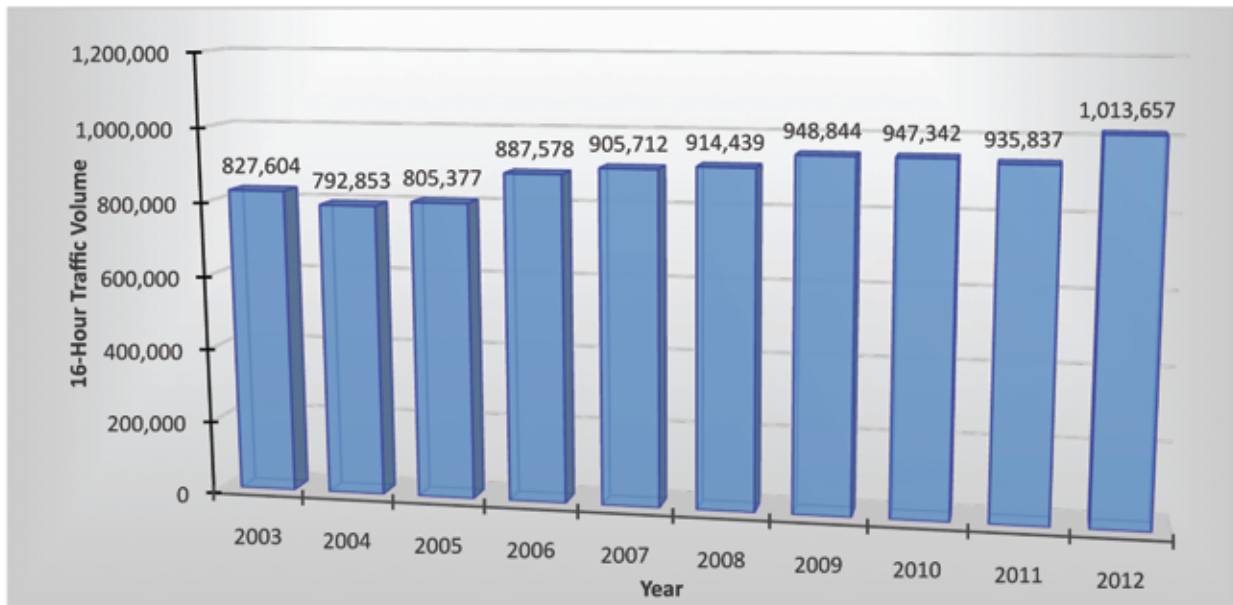


Figure 5 A : Kedah Yearly 16-hour Traffic Volume

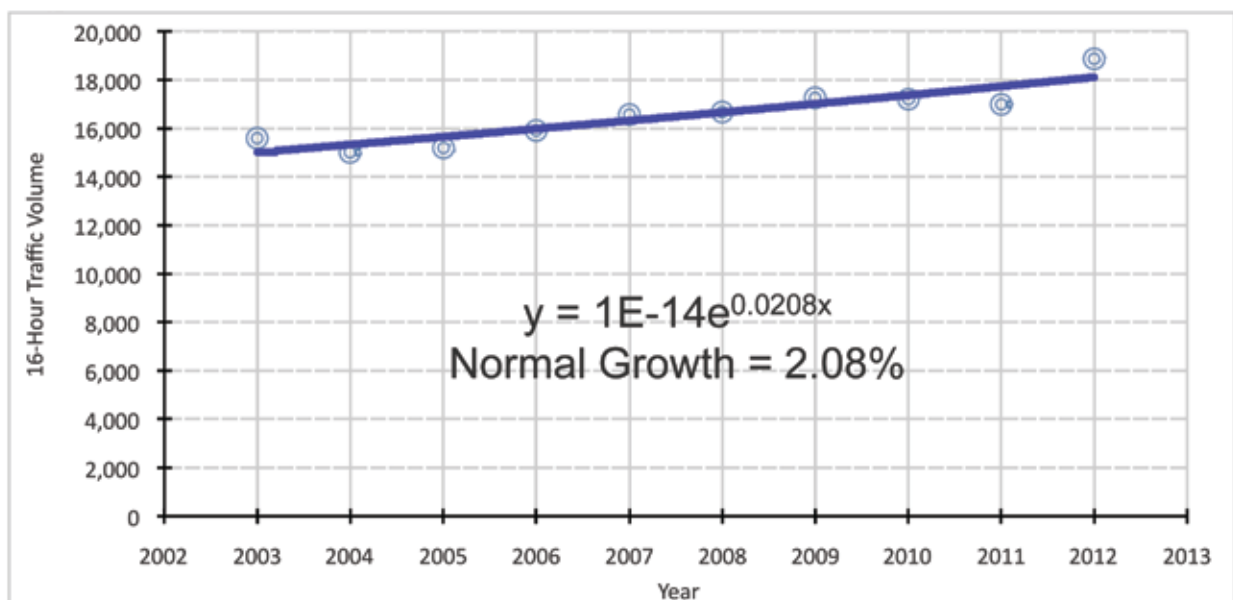


Figure 5 B : Kedah Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure K1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012

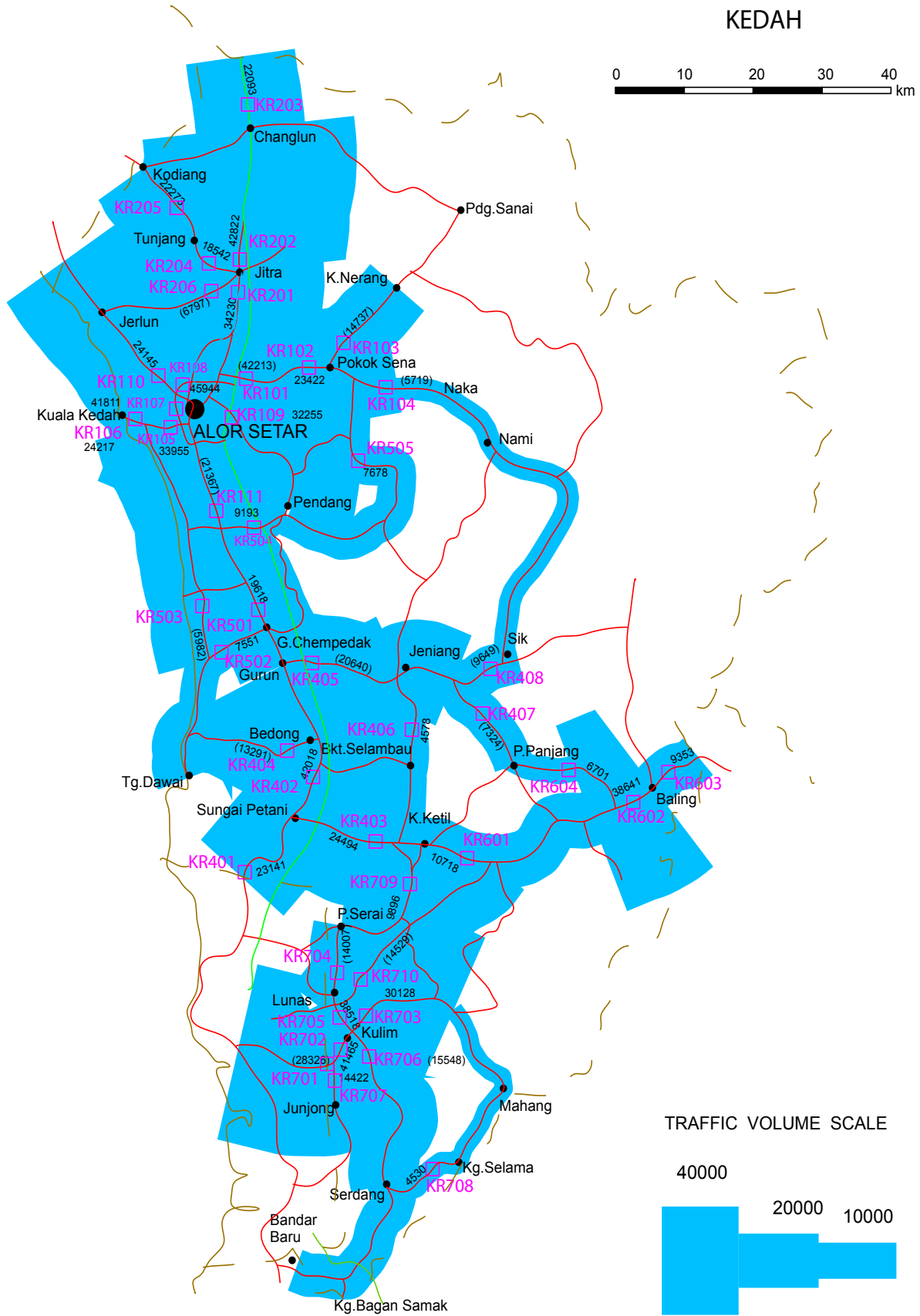
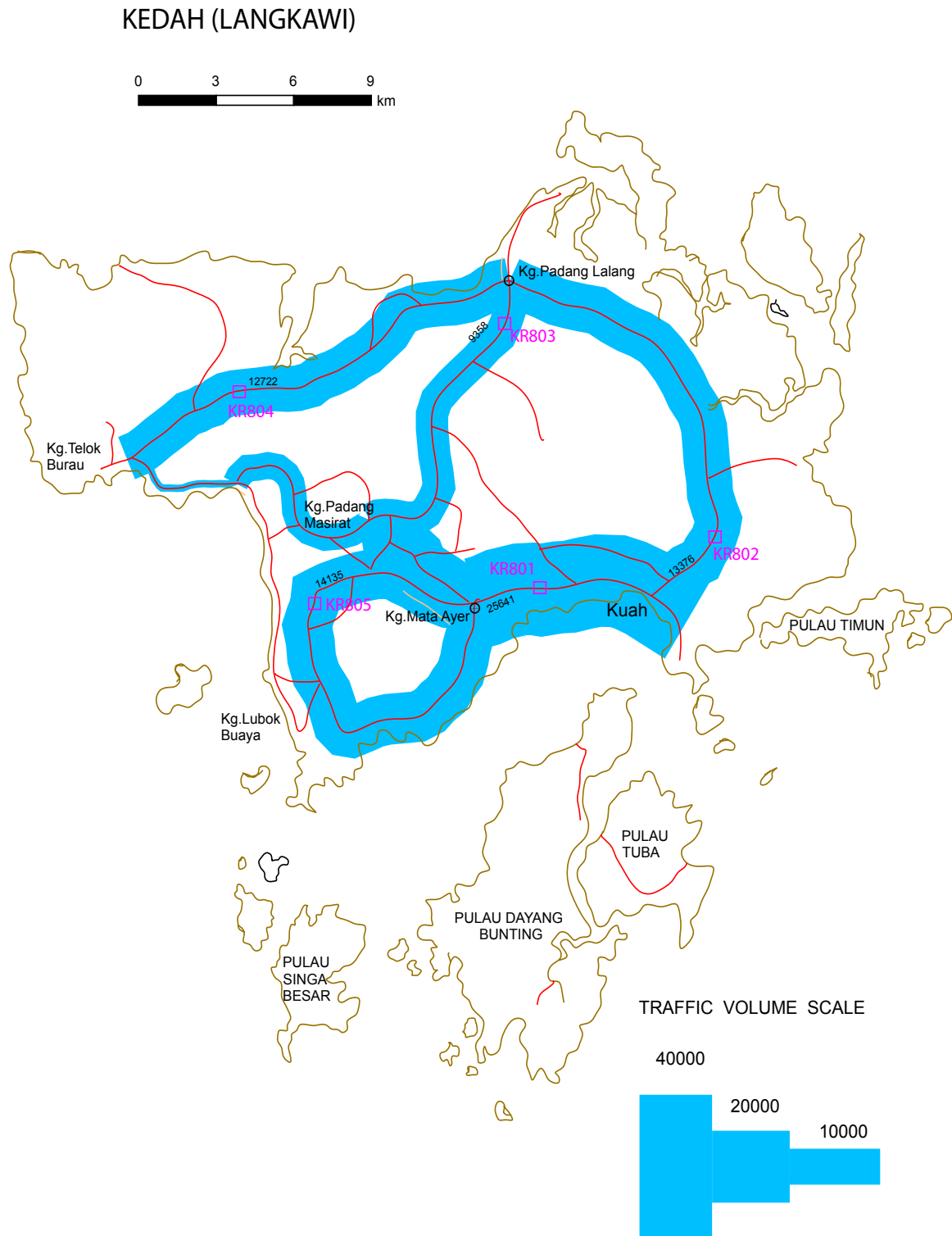
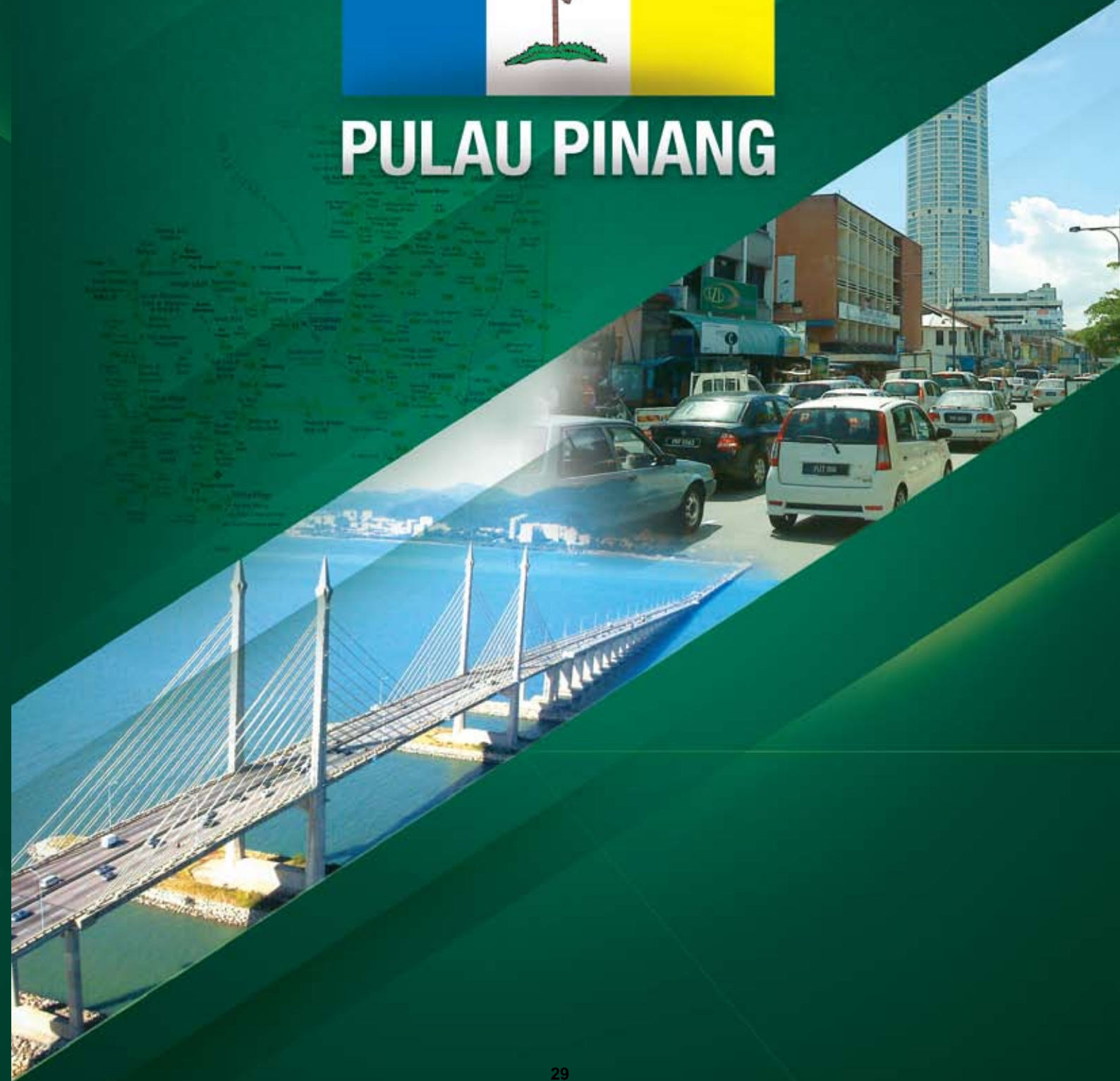


Figure K1(1) : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





PULAU PINANG



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	SEBERANG PERAI UTARA	0	2	3	5
2	SEBERANG PERAI TENGAH	1	2	6	9
3	SEBERANG PERAI SELATAN	0	1	2	3
4	PULAU PINANG TIMUR LAUT	2	0	2	4
5	PULAU PINANG BARAT DAYA	2	0	3	5
	TOTAL	5	5	16	26

Location Description For Traffic Census Stations

DISTRICT : SEBERANG PERAI UTARA

Station Number	Survey Type	Route Number	KM	Description of Locations
PR101	3	P1	12.9	Titi Mukim-Permatang Bendahari
PR102	1	1	19	Butterworth-Kepala Batas-Sungai Petani
PR103	1	1	8.1	Butterworth-Bagan Ajam-Telok Ayer Tawar
PR104	3	P198	12.1	Butterworth-Sungai Dua-Lahar Yoi
PR105	3	P118	25.4	100.0m from Ara Kuda-Lunas junction

DISTRICT : SEBERANG PERAI TENGAH

PR106	3	P119	21.7	Butterworth-Kubang Ulu-Ara Kuda
PR107	3	P188	8.1	Butterworth-Permatang Pauh-Kubang Semang
PR108	3	P12	20.9	Butterworth-Bukit Mertajam-Kulim
PR109	3	P12	15.8	Butterworth-Bukit Mertajam-Kulim
PR110	1	P12	9.7	Butterworth-Bukit Mertajam
PR111	3	P143	20.9	B'worth-Bukit Mertajam-Junjong (thro' Machang Bubok-Tasek)
PR112	3	P139	3.2	From junction to Route I (Jalan Rozhan)
PR116	1	1	16.9	Butterworth-Taiping
PR117	0	1	8.1	Butterworth-Taiping (through Prai)

DISTRICT : SEBERANG PERAI SELATAN

PR113	3	P124	24.2	Butterworth-Simpang Empat-Tasek
PR114	3	P145	30.6	Butterworth-Tasek-Val D'or
PR115	1	1	32.2	Butterworth-Taiping

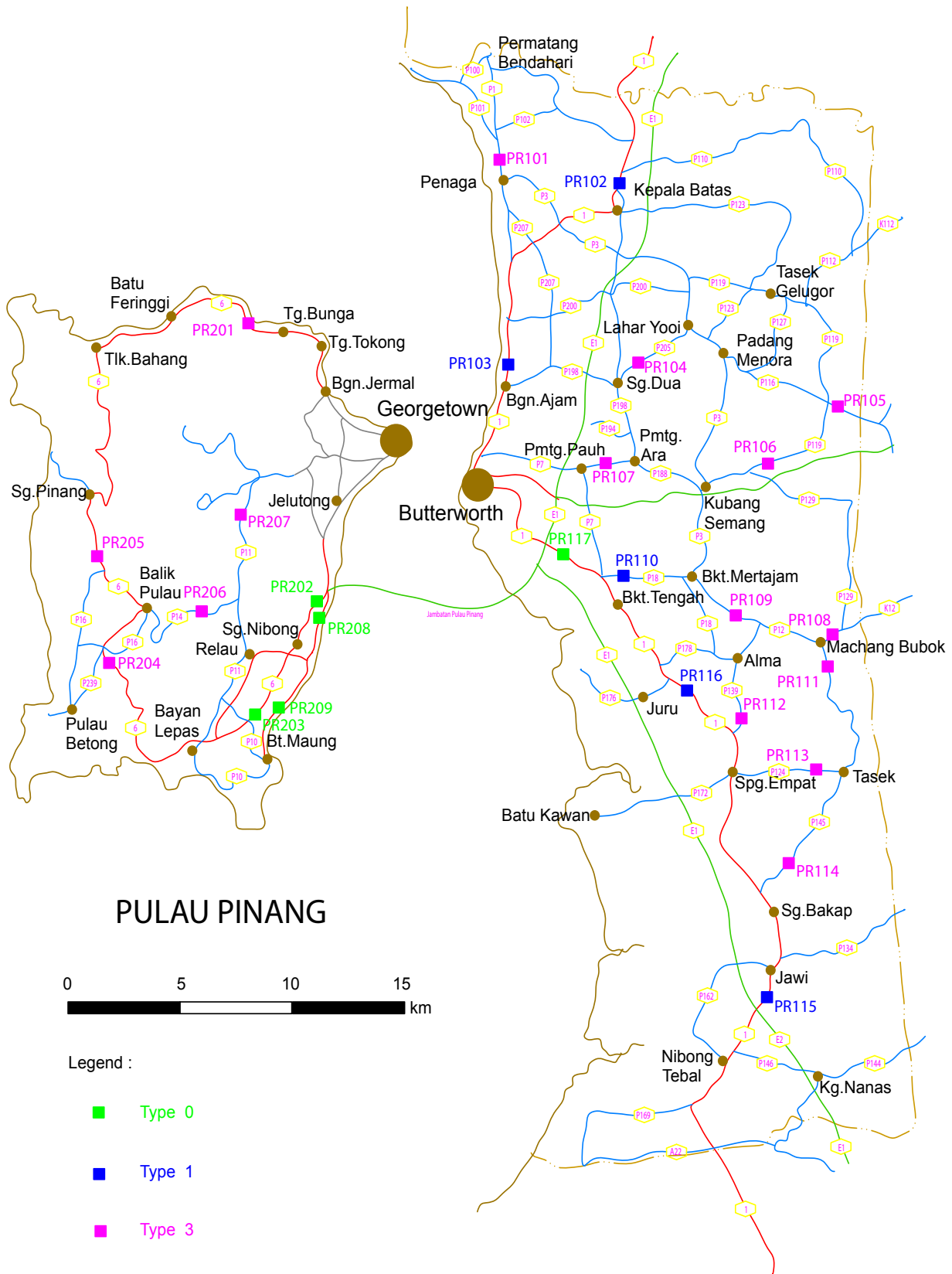
DISTRICT : PULAU PINANG TIMUR LAUT

PR201	3	6	11.1	George Town-Telok Bahang (Jalan Keliling Pulau)
PR202	0	6	65.5	George Town-Bayan Lepas-Gelugor (Jalan Keliling Pulau)
PR207	3	P11	9.7	Paya Terubong-Ayer Hitam
PR208	0	-	-	Lebuhraya Sungei Nibong

DISTRICT : PULAU PINANG BARAT DAYA

PR203	0	6	57.2	George Town-Bayan Lepas-Gelugor (Jalan Keliling Pulau)
PR204	3	6	45.1	George Town-Balik Pulau-Teluk Kumbar (Jalan Keliling Pulau)
PR205	3	6	38.6	George Town-Telok Bahang-Balik Pulau (Jalan Keliling Pulau)
PR206	3	P14	16.9	Jalan Tun Saadon
PR209	0	-	-	Lebuhraya Bayan Lepas

Figure P : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : SEBERANG PERAI UTARA

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
PR101	-	7532	909	0700-0800	40.1	5.2	2.9	0.8	1.3	49.8	100.0
PR102	-	20582	1752	1800-1900	52.3	3.4	3.2	0.9	0.6	39.4	100.0
PR103	-	31232	3058	0700-0800	57.8	2.6	2.2	0.7	0.8	36	100.0
PR104	-	27997	3222	0700-0800	49.3	4.3	5.4	2	1.1	37.9	100.0
PR105	-	11614	1266	0700-0800	52.7	7.3	6.2	1.8	0.6	31.4	100.0

DISTRICT : SEBERANG PERAI TENGAH

PR106	-	12642	1040	1800-1900	52.6	5.4	3.6	1.6	0.6	36.2	100.0
PR107	-	8975	1216	0700-0800	48.6	7.1	7.5	3.2	0.4	33.2	100.0
PR108	-	45462	5761	0700-0800	61.2	2.9	2.7	0.8	0.3	32.1	100.0
PR109	-	49315	5349	1100-1200	60.1	2.4	1.6	0.6	15.1	20.2	100.0
PR110	-	43160	3617	1800-1900	67.8	5.4	2.2	0.7	0.7	23.3	100.0
PR111	-	4942	644	0700-0800	49.1	6.9	4.3	1.8	0.4	37.5	100.0
PR112	-	35201	3144	0900-1000	62.3	3.8	2.5	1	0.4	30	100.0
PR116	-	56270	5612	0700-0800	46.9	8.3	8	2.2	1.3	33.4	100.0
PR117	139208	123858	10603	0700-0800	64.6	3.8	2	1.3	0.7	27.7	100.0

DISTRICT : SEBERANG PERAI SELATAN

PR113	-	24705	2542	1800-1900	40	8.2	8.3	3.3	0.4	39.8	100.0
PR114	-	10571	954	1300-1400	38.3	9.5	20.7	9.9	1.8	19.7	100.0
PR115	-	44957	3855	1100-1200	55.9	5.6	6.4	2.2	0.7	29.1	100.0

DISTRICT : PULAU PINANG TIMUR LAUT

PR201	-	25304	2224	2100-2200	62.5	3.3	3.1	0.1	1.2	29.8	100.0
PR202	92333	80545	7081	1800-1900	62.6	1.9	1.4	0.4	2.3	31.4	100.0
PR207	-	33112	2895	2000-2100	50.4	2.8	1.4	0.2	1.5	43.8	100.0
PR208	109784	99440	8687	0800-0900	71.5	3.2	3.2	1.3	0.9	19.8	100.0

DISTRICT : PULAU PINANG BARAT DAYA

PR203	70682	63247	6192	0700-0800	57.1	1.9	2.9	0.5	1	36.7	100.0
PR204	-	8087	935	0700-0800	36.3	4.7	8.6	2.5	4.7	43.2	100.0
PR205	-	12468	1210	0700-0800	38.3	3.5	3.3	0.1	0.8	54	100.0
PR206	-	9910	1695	0700-0800	53.4	3.9	1.5	0.2	0.9	40	100.0
PR209	70327	64713	6283	0700-0800	62.4	3.8	4.4	1	1.4	27.2	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : SEBERANG PERAI UTARA

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
PR101	-	7768	832	0700-0800	46	3.6	2.5	0.5	1	46.4	100.0
PR102	-	20894	1679	0700-0800	55.1	4.9	4.4	1.1	0.8	33.7	100.0
PR103	-	31374	3245	0700-0800	62.1	2.6	1.9	0.5	0.5	32.4	100.0
PR104	-	21343	2571	0700-0800	57.9	3.9	5.5	1.7	0.9	30.2	100.0
PR105	-	11064	1170	0700-0800	61.8	6	6.1	1.6	0.4	24.1	100.0

DISTRICT : SEBERANG PERAI TENGAH

PR106	-	14417	1362	0700-0800	48.4	5.9	3.8	1.8	0.3	39.9	100.0
PR107	-	10867	1757	0700-0800	60	5.6	5.4	2.8	0.5	25.6	100.0
PR108	-	45504	5045	0700-0800	65.5	3.9	1.9	0.5	0.5	27.8	100.0
PR109	-	40687	3838	0700-0800	69.6	5.3	2.5	1.1	0.4	21.1	100.0
PR110	-	40196	3423	1800-1900	65.8	3.3	2.3	0.6	0.7	27.4	100.0
PR111	-	3748	525	0700-0800	50.7	8.2	5	0.8	0.1	35.2	100.0
PR112	-	31219	2927	0700-0800	65.2	5.7	3	1.4	0.5	24.2	100.0
PR116	-	57593	5821	0700-0800	47.1	8.5	7.8	2.3	1.1	33.2	100.0
PR117	129305	110903	8835	1800-1900	68.8	4.5	3.7	1.4	0.5	21.1	100.0

DISTRICT : SEBERANG PERAI SELATAN

PR113	-	23475	2289	1800-1900	44.8	8.2	8.1	2.5	0.2	36.1	100.0
PR114	-	9275	909	1700-1800	44.4	7.3	19.2	10.1	0.6	18.4	100.0
PR115	-	41317	3562	1800-1900	58.3	5.7	6.8	2.3	0.7	26.3	100.0

DISTRICT : PULAU PINANG TIMUR LAUT

PR201	-	31579	3188	1100-1200	66.8	2.8	2.6	0.1	1	26.8	100.0
PR202	116346	102488	9598	0700-0800	70.2	1.5	1.3	0.1	0.7	26.2	100.0
PR207	-	32502	3322	1800-1900	56.5	2.6	2.7	0.1	1.2	36.9	100.0
PR208	111049	100.0970	9788	1800-1900	75.1	2.5	3.4	1.2	0.9	16.8	100.0

DISTRICT : PULAU PINANG BARAT DAYA

PR203	65289	56553	6301	1800-1900	59.6	1.3	2.7	0.8	1.1	34.5	100.0
PR204	-	13187	1627	1700-1800	46.7	6.4	2	0.9	5.1	38.9	100.0
PR205	-	7223	772	0700-0800	54	5.1	2.2	0.3	1	37.5	100.0
PR206	-	8548	1169	0800-0900	66.2	3.9	1.7	0.6	1.2	26.4	100.0
PR209	61592	56116	5953	1800-1900	61.9	3.9	5.5	1.1	1.7	26	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : SEBERANG PERAI UTARA

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
PR101	7650	43.1	4.4	2.7	0.7	1.1	48.1	871
PR102	20738	53.7	4.2	3.8	1	0.7	36.6	1716
PR103	31303	59.9	2.6	2	0.6	0.7	34.2	3151
PR104	24670	53.6	4.1	5.4	1.8	1	34.1	2897
PR105	11339	57.2	6.7	6.2	1.7	0.5	27.8	1218

DISTRICT : SEBERANG PERAI TENGAH

PR106	13530	50.5	5.7	3.7	1.7	0.4	38	1201
PR107	9921	54.3	6.4	6.4	3	0.4	29.4	1487
PR108	45483	63.3	3.4	2.3	0.6	0.4	29.9	5403
PR109	45001	64.9	3.9	2.1	0.9	7.7	20.6	4594
PR110	41678	66.8	4.3	2.2	0.6	0.7	25.3	3520
PR111	4345	49.9	7.6	4.6	1.3	0.3	36.3	585
PR112	33210	63.8	4.7	2.7	1.2	0.5	27.1	3036
PR116	56932	47	8.4	7.9	2.3	1.2	33.3	5717
PR117	117380	66.7	4.1	2.9	1.3	0.6	24.4	9719

DISTRICT : SEBERANG PERAI SELATAN

PR113	24090	42.4	8.2	8.2	2.9	0.3	38	2416
PR114	9923	41.3	8.4	19.9	10	1.2	19.1	932
PR115	43137	57.1	5.7	6.6	2.2	0.7	27.7	3709

DISTRICT : PULAU PINANG TIMUR LAUT

PR201	28442	64.6	3.1	2.9	0.1	1.1	28.3	2706
PR202	91517	66.4	1.7	1.3	0.2	1.5	28.8	8339
PR207	32807	53.4	2.7	2	0.2	1.3	40.3	3109
PR208	100205	73.3	2.9	3.3	1.3	0.9	18.3	9237

DISTRICT : PULAU PINANG BARAT DAYA

PR203	59900	58.3	1.6	2.8	0.7	1	35.6	6247
PR204	10637	41.5	5.5	5.3	1.7	4.9	41	1281
PR205	9846	46.2	4.3	2.7	0.2	0.9	45.7	991
PR206	9229	59.8	3.9	1.6	0.4	1.1	33.2	1432
PR209	60415	62.1	3.8	4.9	1	1.5	26.6	6118

Annual Growth Rate For Year 2012

DISTRICT : SEBERANG PERAI UTARA

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
PR101	5436	5660	5504	5709	6494	7616	7485	7187	6652	7650	3.95	0.72
PR102	19939	18412	18511	16858	18017	18037	18035	20746	20478	20738	1.13	0.22
PR103	34512	33674	35575	33911	27390	37454	37590	42788	33928	31303	0.44	0.01
PR104	21432	22748	21364	24376	23075	24703	23855	24469	25815	24670	1.72	0.68
PR105	10588	10202	10056	9823	11618	12446	11134	12205	12757	11339	2.18	0.5

DISTRICT : SEBERANG PERAI TENGAH

PR106	7827	8688	8142	11382	12981	13369	11998	10757	12293	13530	5.42	0.62
PR107	13015	10400	10878	9165	8256	8260	8666	10353	10553	9921	-1.67	0.13
PR108	29859	38828	40018	28012	30425	22605	31712	30706	46409	45483	2.3	0.09
PR109	36104	41380	39072	29975	41880	34363	37012	24609	45895	45001	0.5	0.01
PR110	41105	42556	49809	44871	48913	50214	48730	52129	49765	41678	1.04	0.13
PR111	2969	2563	3027	6557	4430	4560	5829	4943	3455	4345	4.63	0.21
PR112	34180	43485	39748	28969	36748	37081	29947	23488	36876	33210	-2.38	0.17
PR116	35534	34280	34076	50151	47787	53451	56601	56349	60230	56932	6.77	0.81
PR117	68856	87867	84633	76756	89591	78171	89263	95869	102391	117380	4.13	0.68

DISTRICT : SEBERANG PERAI SELATAN

PR113	9861	10860	12961	13019	15724	15302	20160	19887	21811	24090	9.91	0.97
PR114	13217	14555	13724	17107	15978	11713	11523	14544	13017	9923	-2.77	0.27
PR115	30883	33385	34144	35689	34400	35236	35062	37548	39617	43137	2.82	0.84

DISTRICT : PULAU PINANG TIMUR LAUT

PR201	19425	20717	20242	22884	23061	24392	24799	27334	26085	28442	4.15	0.95
PR202	59638	59887	66098	79922	77112	73316	75234	81717	82488	91517	4.2	0.81
PR207	24947	23113	24429	25549	25067	24982	15175	27213	29440	32807	1.9	0.08
PR208	96496	106214	98459	99248	96142	161094	106482	99652	107749	100205	0.74	0.02

DISTRICT : PULAU PINANG BARAT DAYA

PR203	36582	36122	36412	41843	40757	43232	47285	50776	50950	59900	5.41	0.93
PR204	10838	7729	6859	7543	7426	7191	8155	8281	8693	10637	1.09	0.04
PR205	10514	9395	9058	9070	9391	9714	12042	12283	9725	9846	1.25	0.12
PR206	12255	12110	13325	11668	12642	12751	13326	16634	12835	9229	-0.38	0.01
PR209	54770	60037	56236	53614	52437	62145	57620	60108	62253	60415	1.12	0.3

PULAU PINANG

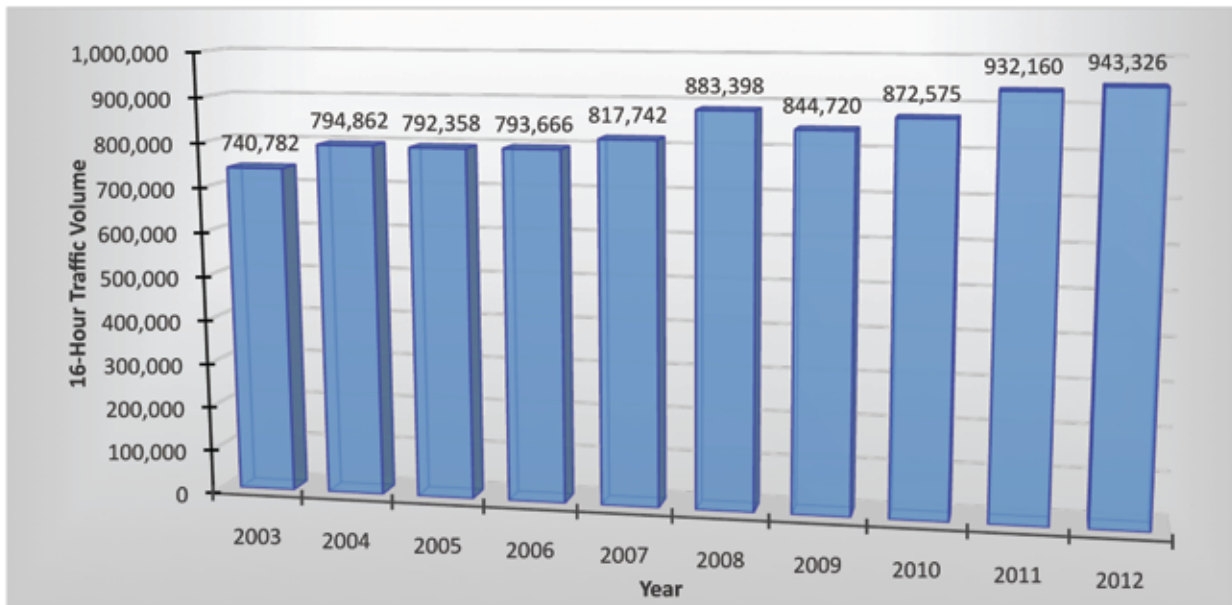


Figure 6 A : Pulau Pinang Yearly 16-hour Traffic Volume

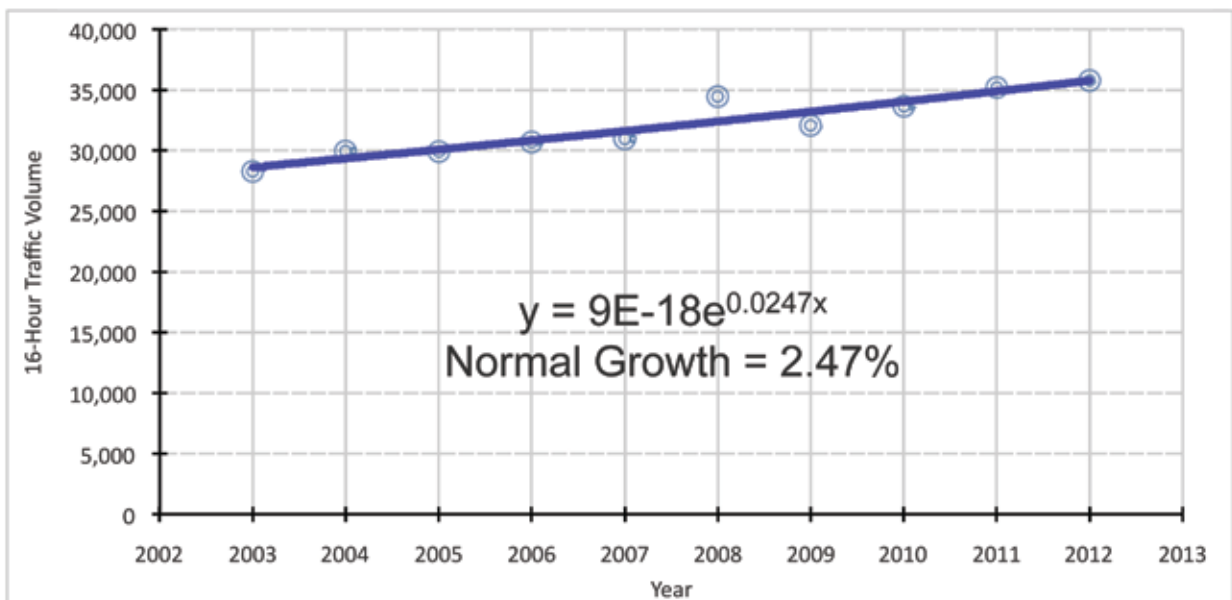
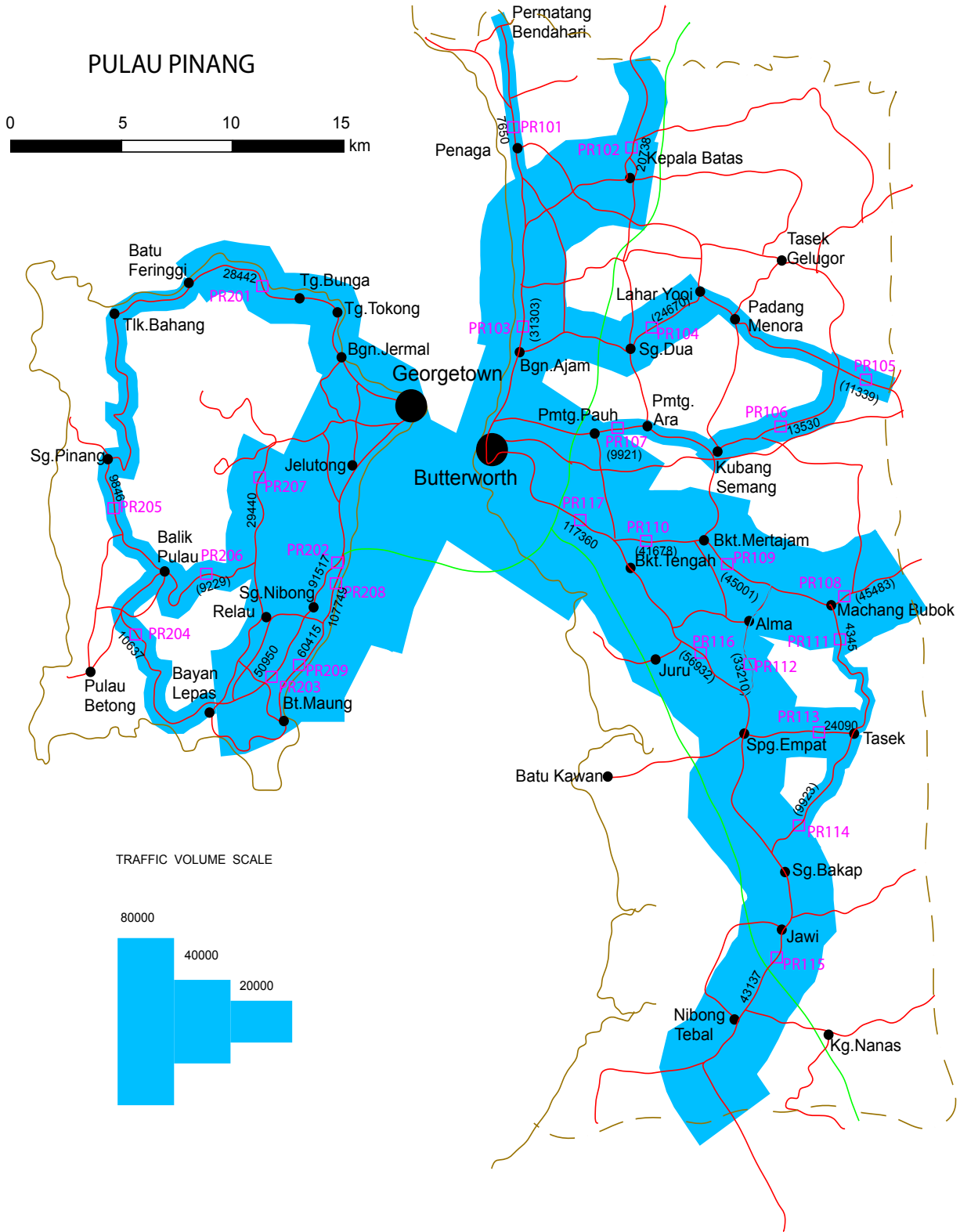


Figure 6 B : Pulau Pinang Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure P1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





PERAK



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BATANG PADANG	3	1	6	10
2	MANJONG	1	0	8	9
3	KINTA	1	3	10	12
4	KERIAN	1	1	5	7
5	KUALA KANGSAR	1	0	7	8
6	LARUT MATANG & SELAMA	0	1	6	7
7	HILIR PERAK	0	1	4	5
8	HULU PERAK	2	0	3	5
9	PERAK TENGAH	0	0	4	4
	TOTAL	9	7	53	69

Location Description For Traffic Census Stations

DISTRICT : BATANG PADANG

Station Number	Survey Type	Route Number	KM	Description of Locations
AR101	0	1	106.6	Ipoh-Tanjong Malim (Slim River toll house)
AR102	0	1	70.8	Ipoh-Tanjong Malim (south of Bidor)
AR103	3	1	62.8	Ipoh-Tapah-Bidor
AR104	1	1	54.7	Ipoh-Tapah
AR105	0	58	68.4	Ipoh-Bidor-Telok Anson
AR106	3	70	56.4	Ipoh-Kampar-Changkat Jering
AR107	3	59	4.8	Tapah-Cameron Highlands
AR108	3	A119	3.2	Tapah-Chendering
AR109	3	A10	1.6	Tapah-Kampong Changkat Pantai
AR110	3	A121	122.4	Ipoh-Selim-Behrang Ulu (Old road)

DISTRICT : MANJONG

AR201	3	5	103	Ipoh-Koh-Kampong Kayan
AR202	3	18	95.8	Ipoh-Simpang Ampat-Lumut
AR203	3	60	86.9	Ipoh-Batu Hampar-Damar Laut
AR204	0	5	78.9	Ipoh-Lumut
AR205	3	71	72.5	Ipoh-Bruas-Lumut
AR206	3	73	55.5	Ipoh-Tanjong Belanja-Bruas
AR207	3	ST100.0	3	Ipoh-Simpang Kg. Aceh-Lumut
AR208	3	60	29	Ipoh-Pantai Remis-Seri Manjung
AR209	3	A12	3	Ipoh-Air Tawar-Pantai Remis

DISTRICT : KINTA

AR301	3	1	35.9	Ipoh-Kampar
AR302	1	1	22.5	Ipoh-Kampar (100.0m south of Kota Bharu junction)
AR303	1	1	5.6	Ipoh-Gopeng
AR304	0	1	8.1	Ipoh-Chemor
AR305	3	1	18.7	Ipoh-Chemor-Kuala Kangsar
AR306	3	A13	9.7	Ipoh-Tanjong Rambutan
AR307	3	A1	3.4	Ipoh-Jelapang-Chemor
AR308	1	5	9.7	Ipoh-Lahat
AR309	3	73	22.5	Ipoh-Siputeh-Parit
AR310	3	5	22.5	Ipoh-Siputeh-Kampong Bota Kanan
AR311	3	A8	15.3	Batu Gajah Route I (100.0m from Route I junction)
AR312	3	A15	22.5	Ipoh-Batu Gajah-Tanjong Tualang
AR313	3	A114	1.6	Kuala Dipang-Tanjong Tualang
AR314	3	A119	32.2	Ipoh-Kuala Dipang-Kampong Sahum

Location Description For Traffic Census Stations

DISTRICT : KERIAN

Station Number	Survey Type	Route Number	KM	Description of Locations
AR401	0	1	98.2	Ipoh-Bagan Serai
AR402	1	1	111.1	Ipoh-Bagan Serai-Butterworth
AR403	3	75	1.9	Bagan Serai-Kuala Kurau
AR404	3	A6	111.1	Ipoh-Bagan Serai-Selama
AR405	3	A100.0	0.8	Simpang Empat Semanggol-Gula
AR406	3	A111	106.3	Ipoh-Jalan Gunong Semanggol-Bukit Merah
AR407	3	A4	104.7	Ipoh-Taiping-Simpang Empat Semanggol

DISTRICT : KUALA KANGSAR

AR501	3	1	30.4	Ipoh-Kuala Kangsar (500m north of Sungai Siput town)
AR502	0	1	56	Ipoh-Kuala Kangsar-Changkat Jering
AR503	3	76	56.4	Ipoh-Kuala Kangsar-Lenggong
AR504	3	76	68.1	Ipoh-Kuala Kangsar-Grik
AR505	3	A11	46.7	Ipoh-Kampong Tamuan-Kati
AR506	3	A3	53.9	Ipoh-Kuala Kangsar-Kenas
AR507	3	A159	5	Ipoh-Kuala Kangsar-Jambatan Sultan Abd. Jalil-Tg. Blanja
AR508	3	A159	6	Ipoh-Kuala Kangsar-Jambatan Sultan Abd. Jalil-Jambatan Iskandar

DISTRICT : LARUT MATANG DAN SELAMA

AR601	3	60	79.7	Ipoh-Batu Hampar-Changkat Jering
AR602	3	60	96.6	Ipoh-Batu Hampar-Changkat Jering
AR603	3	1	82.1	Ipoh-Changkat Jering-Semanggol
AR604	1	74	83.7	Ipoh-Simpang-Taiping
AR605	3	A7	101.4	Ipoh-Taiping-Pondok Tanjong
AR606	3	A5	101.4	Ipoh-Taiping-Batu Kurau
AR607	3	74	8.1	Taiping-Port Weld

DISTRICT : HILIR PERAK

AR701	3	5	112.7	Ipoh-Telok Intan-Sabak
AR702	3	69	117.5	Ipoh-Simpang Empat-Bagan Datoh
AR703	1	5	106.3	Ipoh-Telok Intan-Simpang Empat
AR704	3	58	78.9	Ipoh-Changkat Jong-Telok Intan
AR705	3	109	-	100.0m north of Sg. Manik/Kg.Gajah Road junction

Location Description For Traffic Census Stations

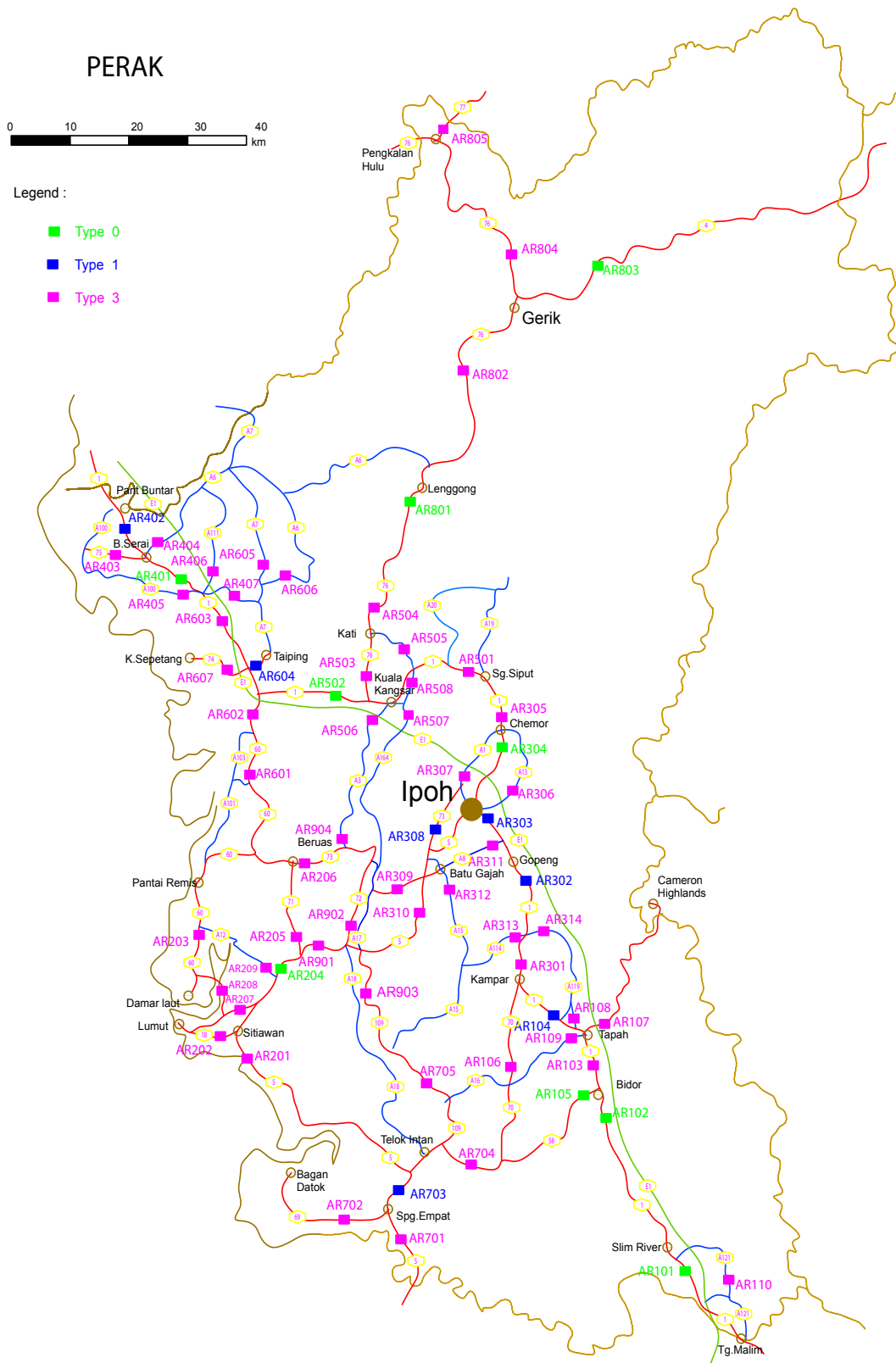
DISTRICT : HULU PERAK

Station Number	Survey Type	Route Number	KM	Description of Locations
AR801	0	76	96.6	Ipoh-Kuala Kangsar-Grik
AR802	3	76	133.6	Ipoh-Lenggong-Grik
AR803	0	4	2.4	Lebuh raya Timur-Barat
AR804	3	76	164.2	Ipoh-Grik-Kroh
AR805	3	77	1.5	Pengkalan Hulu - Bentong

DISTRICT : PERAK TENGAH

AR901	3	5	49.1	Ipoh-Pusing-Bota Kiri-Sitiawan
AR902	3	72	19.6	Tanjong Belanja-Kampong Bota Kiri
AR903	3	109	26.6	Parit-Kg. Gajah
AR904	3	A3	82.9	Ipoh-Kuala Kangsar-Kampong Buloh Akar

Figure A : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BATANG PADANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR101	16847	14139	1190	1800-1900	59.7	11.7	7.1	6.3	0.7	14.6	100.0
AR102	16092	14252	1237	1800-1900	51.7	13.5	8.9	5.8	0.8	19.3	100.0
AR103	-	14859	1266	0700-0800	55.9	7.4	11.5	6.7	1	17.5	100.0
AR104	-	16832	1349	1700-1800	60.6	4.6	7.6	7.8	0.9	18.4	100.0
AR105	7305	6697	541	1300-1400	53.6	9.8	8.7	2.8	1.3	23.9	100.0
AR106	-	7916	668	0700-0800	49.9	9.6	18.6	4.7	1.1	16.1	100.0
AR107	-	7191	758	0700-0800	49.7	7.1	5.3	1.6	0.9	35.4	100.0
AR108	-	2740	348	0700-0800	38.6	5.9	3.6	0.2	0.1	51.5	100.0
AR109	-	8708	887	0700-0800	56.3	10.7	5.7	1.3	0.8	25.2	100.0
AR110	-	999	94	0800-0900	44.1	10.6	5.1	0.3	1.9	37.9	100.0

DISTRICT : MANJONG

AR201	-	15379	1564	0700-0800	53.9	11.5	8.4	4.4	1.6	20.1	100.0
AR202	-	49264	3979	1700-1800	62.5	11	2.7	0.3	0.5	22.9	100.0
AR203	-	10170	831	0700-0800	46.6	12.8	12	8.1	1.1	19.3	100.0
AR204	27796	25440	2163	1700-1800	58.2	10.4	8.2	4.1	1	18.1	100.0
AR205	-	5922	472	0700-0800	42.1	10.2	9.3	4.6	1.1	32.6	100.0
AR206	-	7533	746	1800-1900	37.1	7	6.3	2.9	0.7	45.9	100.0
AR207	-	16146	1508	0700-0800	62.6	11.5	5.1	1.4	0.5	18.8	100.0
AR208	-	12572	1157	1700-1800	54.9	10.8	9	7.3	0.5	17.5	100.0
AR209	-	6013	573	0700-0800	48.3	13.1	13	4.6	1.6	19.4	100.0

DISTRICT : KINTA

AR301	-	29108	2279	1700-1800	64.9	6.1	9.5	4.5	1.3	13.8	100.0
AR302	-	24471	2097	1700-1800	64.9	6.1	9.5	4.5	1.3	13.8	100.0
AR303	-	84040	6883	0700-0800	69.2	7.6	3.6	0.5	0.9	18.3	100.0
AR304	84574	77142	7811	1700-1800	70.3	3.4	3.9	2	0.7	19.7	100.0
AR305	-	56885	16087	1800-1900	46.3	12.5	11.8	1.8	0.5	27.1	100.0
AR306	-	39858	4108	0700-0800	65.8	4.1	3.9	0.3	0.7	25.3	100.0
AR307	-	48932	5320	1700-1800	57.7	6.7	4.4	1	1	29.2	100.0
AR308	-	27569	2392	0700-0800	64.3	8.5	9.2	3.1	0.5	14.3	100.0
AR309	-	5552	543	1700-1800	45.5	11	6.6	1.4	1.3	34.1	100.0
AR310	-	16873	2385	0700-0800	55.6	8.8	8.1	6.1	1.4	20	100.0
AR311	-	9040	937	0700-0800	63.5	6.4	8.8	3.4	1.4	16.5	100.0
AR312	-	13307	1232	2000-2100	51.6	6.8	7.5	2.4	2.1	29.7	100.0
AR313	-	13433	574	0700-0800	48.4	7.9	7.2	4.8	1	30.8	100.0
AR314	-	2210	238	1200-1300	35.4	9	15.2	3.9	0.9	35.7	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KERIAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR401	18534	16435	1362	1700-1800	56.7	7.7	7.8	4.9	0.8	22.1	100.0
AR402	-	24471	2097	1800-1900	53.1	9.7	8.7	6.2	1	21.4	100.0
AR403	-	11539	983	1800-1900	47.6	5.4	2.8	0.6	0.8	42.7	100.0
AR404	-	6690	620	1700-1800	47.8	9	5.7	1.6	0.3	35.7	100.0
AR405	-	5779	741	0700-0800	52.1	7.1	3.3	1.1	0.6	35.8	100.0
AR406	-	4277	441	0700-0800	54.4	7.6	2.9	1.1	0.8	33.2	100.0
AR407	-	7002	583	0900-1000	55.5	6.5	4.2	1.1	1.3	31.5	100.0

DISTRICT : KUALA KANGSAR

AR501	-	19151	2033	0700-0800	50.2	9.3	6.8	5.6	1.7	26.5	100.0
AR502	14532	13255	1207	1700-1800	55.6	7.5	7.6	8.7	0.8	19.8	100.0
AR503	-	9172	926	1800-1900	72.2	5.9	3.4	1.4	1.5	15.6	100.0
AR504	-	6807	576	0700-0800	67.7	7.8	7.3	4.8	0.6	11.7	100.0
AR505	-	4349	476	0700-0800	48.4	6.5	5.8	4.5	0.8	34	100.0
AR506	-	8127	932	1300-1400	50.9	4.9	4.3	4.8	0.8	34.3	100.0
AR507	-	6104	678	0700-0800	49.4	4.2	5	3.9	0.5	36.9	100.0
AR508	-	8274	825	1200-1300	49.5	4.2	3.5	2.5	0.3	39.9	100.0

DISTRICT : LARUT MATANG DAN SELAMA

AR601	-	19117	1723	0700-0800	45.5	8.2	14.7	8.7	1.4	21.5	100.0
AR602	-	3320	363	0700-0800	30.2	8.3	20.5	8.9	0.6	31.5	100.0
AR603	-	13433	1229	1600-1700	47.9	9	14	8.5	0.9	19.7	100.0
AR604	-	43241	3163	1800-1900	64.4	3.4	4.6	1.2	0.8	25.7	100.0
AR605	-	3364	343	0700-0800	44.7	10.8	8.6	2.2	0.8	32.9	100.0
AR606	-	9908	1037	0700-0800	49.3	8.7	6.2	0.4	0.7	34.7	100.0
AR607	-	13880	1330	1800-1900	49.9	9.1	10.1	1.1	0.7	29.1	100.0

DISTRICT : HILIR PERAK

AR701	-	9552	866	1500-1600	44.9	15.4	15.2	13.7	1	9.9	100.0
AR702	-	10120	1158	0700-0800	52.1	8.6	8.1	1.5	0.8	28.8	100.0
AR703	-	30615	2653	1200-1300	63.7	8.3	7.1	3.8	0.7	16.4	100.0
AR704	-	10496	918	1400-1500	55.2	14.3	9.6	4.3	2.2	14.3	100.0
AR705	-	6167	546	1700-1800	50.7	14.9	9.1	6.3	0.9	18.1	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : HULU PERAK

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR801	7903	7125	591	1700-1800	64.1	13.9	9.1	3.6	1.3	7.8	100.0
AR802	-	7056	653	1400-1500	50.1	12.7	6.8	4.5	1.1	24.9	100.0
AR803	4957	4138	325	1300-1400	55.2	18.9	7	6.4	1.7	10.8	100.0
AR804	-	5914	715	0700-0800	48.1	9.9	3.5	1.2	0.8	36.4	100.0
AR805	-	6876	678	1400-1500	42	9.1	3.7	1.8	0.1	43.3	100.0

DISTRICT : PERAK TENGAH

AR901	-	22561	2073	1700-1800	67.8	4.8	9.3	5.3	0.9	11.9	100.0
AR902	-	4265	394	0700-0800	46.4	9.1	13.1	1.1	0.2	30.2	100.0
AR903	-	5436	468	1600-1700	52.2	8.1	7.4	2.3	0.5	29.5	100.0
AR904	-	1656	131	1800-1900	41.1	9.6	10	6.3	0.5	32.4	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BATANG PADANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR101	17569	14722	1242	0700-0800	61.4	8.7	6.4	7.9	0.7	14.8	100.0
AR102	16526	14197	1087	1200-1300	55.5	9.5	9.9	5.9	2.1	17.2	100.0
AR103	-	15128	1418	1700-1800	58	6.5	10.3	5.7	1.1	18.4	100.0
AR104		13674	1239	1700-1800	58.1	9.2	7.5	7.7	1.1	16.4	100.0
AR105	8225	7500	567	1700-1800	51.2	10	7.4	2.9	1.1	27.5	100.0
AR106	-	7213	620	1700-1800	56.8	10	14.8	4.4	1.2	12.8	100.0
AR107	-	7115	660	0700-0800	50.4	6.8	6.4	1.8	1.1	33.5	100.0
AR108	-	1945	254	0700-0800	41.4	6.2	4.2	0.3	0.1	47.8	100.0
AR109	-	7875	897	0700-0800	57.8	8.6	5.8	1.3	0.9	25.7	100.0
AR110	-	1262	127	1800-1900	46.8	10.4	2.5	0.3	1.3	38.7	100.0

DISTRICT : MANJONG

AR201	-	14571	1561	0700-0800	54.7	12.4	7.5	5.6	1.1	18.7	100.0
AR202	-	48249	4042	1700-1800	62.7	11.9	2.8	0.3	0.5	21.8	100.0
AR203	-	10376	857	1600-1700	54	15.1	10.8	7	0.7	12.4	100.0
AR204	27322	25126	2181	1700-1800	59.6	10.4	8.6	4.5	0.9	16	100.0
AR205	-	5433	493	0700-0800	44.1	9.8	9.4	5.7	1.1	29.9	100.0
AR206	-	6400	640	0700-0800	44.2	8.6	7.1	3.5	1.1	35.5	100.0
AR207	-	15148	1460	1700-1800	68.5	13.4	4.5	1.5	0.6	11.6	100.0
AR208	-	12318	1125	0700-0800	56.5	13.7	7.4	5.3	0.8	16.3	100.0
AR209	-	6415	583	0700-0800	49.2	15.5	11.7	3.9	1.6	18.1	100.0

DISTRICT : KINTA

AR301	-	25886	2131	1800-1900	67.1	8.1	8.2	4.5	1.4	10.6	100.0
AR302	-	27431	2434	1700-1800	69.3	5.3	7.4	3.8	1.2	13.1	100.0
AR303	-	87597	7143	0700-0800	70.7	8.7	4.8	0.5	0.8	14.5	100.0
AR304	97394	88704	8145	0700-0800	63.4	4.3	2.3	1.4	0.4	28.1	100.0
AR305	-	21649	2290	1700-1800	52	12	11.5	3.8	1.3	19.5	100.0
AR306	-	36530	3787	0700-0800	68.3	4.4	4.5	0.2	0.4	22.2	100.0
AR307	-	55059	5639	1700-1800	56.9	9.4	5.2	0.5	0.6	27.4	100.0
AR308	-	28371	2563	0700-0800	64.8	9.9	8.9	2.9	0.5	13	100.0
AR309	-	7054	650	1800-1900	43.8	14.5	10.9	2.2	1.2	27.4	100.0
AR310	-	14170	1274	0700-0800	62.1	9.6	7.4	5.4	0.7	14.8	100.0
AR311	-	8235	868	1700-1800	62.9	9.9	9	4.2	1.4	12.6	100.0
AR312	-	13404	1260	1000-1100	61.4	6.1	10	1.3	0.8	20.3	100.0
AR313	-	12120	1042	0700-0800	55.8	8	7.2	5	0.8	23.3	100.0
AR314	-	2310	238	1200-1300	36.8	7.1	17.7	6.7	0.9	30.7	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KERIAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR401	18051	15825	1368	1700-1800	58.9	9.2	7.2	4.5	0.8	19.3	100.0
AR402	-	17677	1476	1700-1800	56.5	10.1	8.1	6	1	18.2	100.0
AR403	-	11718	981	0700-0800	54.4	7.5	1.6	0.6	0.6	35.2	100.0
AR404	-	6475	584	0700-0800	54.3	10.9	3.9	1.8	0.4	28.8	100.0
AR405	-	5320	775	0700-0800	60	7.9	2.7	0.8	0.6	28	100.0
AR406	-	4214	379	0700-0800	51	7.5	3.8	3	0.9	33.8	100.0
AR407	-	5622	563	1200-1300	54.5	7.3	2.7	0.9	1.4	33.2	100.0

DISTRICT : KUALA KANGSAR

AR501	-	19350	2004	0700-0800	55.9	8.8	6	5.2	1.4	22.6	100.0
AR502	12175	10761	1028	1800-1900	65.3	6.9	4.2	3.3	1	19.2	100.0
AR503	-	8521	867	1700-1800	72.9	5.9	2.7	2.2	1.4	14.9	100.0
AR504	-	6443	578	0700-0800	64	10.4	7.9	5.3	0.9	11.5	100.0
AR505	-	3892	405	0700-0800	56.3	7.6	4.8	4.3	0.5	26.5	100.0
AR506	-	9167	1145	1700-1800	58.8	6.3	4.7	3.4	0.7	26.2	100.0
AR507	-	6648	664	1700-1800	48.8	4.7	4.2	2.7	0.4	39.2	100.0
AR508	-	8092	855	1200-1300	48.7	5.1	3	2.7	0.2	40.3	100.0

DISTRICT : LARUT MATANG DAN SELAMA

AR601	-	19703	1793	1700-1800	42.8	9.3	15.9	7.4	1.3	23.4	100.0
AR602	-	3041	310	0700-0800	33.6	8.5	17.6	12	0.4	27.9	100.0
AR603	-	11739	937	1700-1800	50.2	10.1	15.9	8.4	0.8	14.6	100.0
AR604	-	36649	3002	1700-1800	70.7	2.4	1.6	0.5	0.7	24.1	100.0
AR605	-	3233	281	1400-1500	51.1	10.4	9.8	3.2	0.6	24.8	100.0
AR606	-	9346	1184	0700-0800	54.5	9.1	5.7	0.7	0.5	29.5	100.0
AR607	-	12628	1093	1800-1900	51	8	6.8	1.3	1.1	31.8	100.0

DISTRICT : HILIR PERAK

AR701	-	10542	908	1700-1800	46.7	15.8	14.2	12.5	0.9	10	100.0
AR702	-	10361	1153	0700-0800	52.6	9.2	7.9	1.3	1	28.1	100.0
AR703	-	26315	2195	1800-1900	61.7	7.6	6.8	4.4	0.9	18.5	100.0
AR704	-	11631	945	1400-1500	56.6	15.5	8.8	6.1	4.3	8.7	100.0
AR705	-	6265	526	1700-1800	57.6	13.5	6.7	3	0.3	19	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : HULU PERAK

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
AR801	6661	5937	702	1600-1700	72	10.8	5.8	2.5	1.3	7.6	100.0
AR802	-	6804	623	1400-1500	48.3	13	7.2	4	1.2	26.3	100.0
AR803	4555	3750	311	1700-1800	57.3	16.2	8.1	7.4	1.8	9.2	100.0
AR804	-	5824	639	0700-0800	54	13	4.3	2	0.9	25.8	100.0
AR805	-	6227	616	0700-0800	42.5	8	1.9	1.4	0.6	45.7	100.0

DISTRICT : PERAK TENGAH

AR901	-	20532	1681	0700-0800	68.4	5.5	9.4	6.1	1	9.6	100.0
AR902	-	4334	479	0700-0800	46.4	8.5	14.6	2	0.3	28.3	100.0
AR903	-	6226	526	0900-1000	51	8.8	6.8	3.7	0.4	29.3	100.0
AR904	-	1617	126	0700-0800	42.8	9.4	9.9	9.9	1.7	26.3	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BATANG PADANG

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
AR101	14431	60.6	10.2	6.7	7.1	0.7	14.7	1216
AR102	14225	53.6	11.5	9.4	5.8	1.4	18.3	1162
AR103	14994	56.9	6.9	10.9	6.2	1.1	17.9	1342
AR104	15253	59.4	6.9	7.6	7.8	1	17.4	1294
AR105	7099	52.4	9.9	8	2.8	1.2	25.7	554
AR106	7565	53.4	9.8	16.7	4.6	1.1	14.5	644
AR107	7153	50	6.9	5.9	1.7	1	34.4	709
AR108	2343	40	6.1	3.9	0.3	0.1	49.6	301
AR109	8292	57.1	9.7	5.8	1.3	0.8	25.4	892
AR110	1131	45.4	10.5	3.8	0.3	1.6	38.3	496

DISTRICT : MANJONG

AR201	14975	54.3	11.9	8	5	1.3	19.4	1563
AR202	48757	62.6	11.5	2.8	0.3	0.5	22.3	4011
AR203	10273	50.3	14	11.4	7.6	0.9	15.9	844
AR204	25283	58.9	10.4	8.4	4.3	1	17	2172
AR205	5678	43.1	10	9.3	5.1	1.1	31.3	483
AR206	6967	40.6	7.8	6.7	3.2	0.9	40.7	693
AR207	15647	65.5	12.4	4.8	1.5	0.6	15.2	1484
AR208	12445	55.7	12.2	8.2	6.3	0.7	16.9	1141
AR209	6214	48.8	14.3	12.3	4.3	1.6	18.7	578

DISTRICT : KINTA

AR301	27497	66	7.1	8.8	4.5	1.4	12.2	2205
AR302	25951	67.1	5.7	8.4	4.2	1.2	13.5	2266
AR303	85819	69.9	8.1	4.2	0.5	0.8	16.4	7013
AR304	82923	66.8	3.9	3.1	1.7	0.6	23.9	7978
AR305	39267	49.1	12.3	11.6	2.8	0.9	23.3	9189
AR306	38194	67.1	4.2	4.2	0.2	0.5	23.7	3948
AR307	51996	57.3	8	4.8	0.8	0.8	28.3	5480
AR308	27970	64.6	9.2	9	3	0.5	13.7	2477
AR309	6303	44.7	12.8	8.8	1.8	1.3	30.7	597
AR310	15522	58.9	9.2	7.8	5.7	1	17.4	1830
AR311	8638	63.2	8.1	8.9	3.8	1.4	14.6	903
AR312	13356	56.5	6.5	8.8	1.9	1.4	25	1246
AR313	12777	52.1	7.9	7.2	4.9	0.9	27	808
AR314	2260	36.1	8.1	16.5	5.3	0.9	33.2	238

16-Hour Traffic Composition By Vehicle Type (Average 2012)**DISTRICT : KERIAN**

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
AR401	16130	57.8	8.5	7.5	4.7	0.8	20.7	1365
AR402	21074	54.8	9.9	8.4	6.1	1	19.8	1787
AR403	11629	51	6.5	2.2	0.6	0.7	39	982
AR404	6583	51	9.9	4.8	1.7	0.3	32.3	602
AR405	5550	56.1	7.5	3	1	0.6	31.9	758
AR406	4246	52.7	7.5	3.3	2.1	0.9	33.5	410
AR407	6312	55	6.9	3.5	1	1.3	32.3	573

DISTRICT : KUALA KANGSAR

AR501	19251	53.1	9.1	6.4	5.4	1.5	24.5	2019
AR502	12008	60.5	7.2	5.9	6	0.9	19.5	1117
AR503	8847	72.5	5.9	3	1.8	1.5	15.3	897
AR504	6625	65.9	9.1	7.6	5.1	0.7	11.6	577
AR505	4121	52.3	7.1	5.3	4.4	0.6	30.2	441
AR506	8647	54.8	5.6	4.5	4.1	0.7	30.2	1039
AR507	6376	49.1	4.4	4.6	3.3	0.5	38	671
AR508	8183	49.1	4.7	3.2	2.6	0.3	40.1	840

DISTRICT : LARUT MATANG DAN SELAMA

AR601	19410	44.1	8.8	15.3	8	1.3	22.4	1758
AR602	3181	31.9	8.4	19.1	10.5	0.5	29.7	337
AR603	12586	49.1	9.6	14.9	8.4	0.8	17.2	1083
AR604	39945	67.5	2.9	3.1	0.8	0.7	24.9	3083
AR605	3299	47.9	10.6	9.2	2.7	0.7	28.8	312
AR606	9627	51.9	8.9	5.9	0.6	0.6	32.1	1111
AR607	13254	50.5	8.5	8.4	1.2	0.9	30.4	1212

DISTRICT : HILIR PERAK

AR701	10047	45.8	15.6	14.7	13.1	0.9	9.9	887
AR702	10241	52.3	8.9	8	1.4	0.9	28.5	1156
AR703	28465	62.7	8	7	4.1	0.8	17.5	2424
AR704	11064	55.9	14.9	9.2	5.2	3.3	11.5	932
AR705	6216	54.1	14.2	7.9	4.6	0.6	18.5	536

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : HULU PERAK

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
AR801	0	68.1	12.4	7.5	3.1	1.3	7.7	647
AR802	6930	49.2	12.8	7	4.2	1.2	25.6	638
AR803	3944	56.2	17.6	7.6	6.9	1.8	10	318
AR804	5869	51.1	11.5	3.9	1.6	0.9	31.1	677
AR805	6552	42.2	8.5	2.8	1.6	0.3	44.5	647

DISTRICT : PERAK TENGAH

AR901	21547	68.1	5.1	9.4	5.7	0.9	10.7	1877
AR902	4300	46.4	8.8	13.8	1.6	0.2	29.2	437
AR903	5831	51.6	8.5	7.1	3	0.4	29.4	497
AR904	1637	42	9.5	9.9	8.1	1.1	29.4	129

Annual Growth Rate For Year 2012

DISTRICT : BATANG PADANG

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
AR101	10416	11246	11892	13555	15028	13854	15038	15323	14039	14431	3.63	0.67
AR102	11026	11574	11621	11503	12244	12041	11503	14454	13191	14225	2.6	0.69
AR103	13347	14264	13971	14585	14265	15054	14632	14966	15057	14994	1.11	0.74
AR104	12831	12675	12672	14860	14745	14984	15618	14944	15991	15253	2.53	0.74
AR105	10787	10014	9673	9123	9391	8970	8057	8923	7368	7099	-4.1	0.87
AR106	5948	6225	6135	6483	6659	7084	7852	7427	7841	7565	3.26	0.88
AR107	5131	5549	5570	5416	6054	6260	5853	6244	6473	7153	2.97	0.84
AR108	1156	1017	1407	1561	2046	2294	2410	2168	2080	2343	9.06	0.76
AR109	6321	5970	5487	6710	7054	7071	7582	7297	7644	8292	3.62	0.77
AR110	1143	1102	1160	1305	1298	1060	957	1203	1054	1131	-0.8	0.07

DISTRICT : MANJONG

AR201	10636	11356	11014	11832	12509	13375	13935	14342	14331	14975	3.99	0.96
AR202	33645	37374	37311	39890	42117	44049	46594	43896	47749	48757	3.87	0.93
AR203	8414	9340	9674	9331	9717	10162	10693	10767	11160	10273	2.44	0.77
AR204	19576	19594	19764	20907	20778	21138	23920	22389	23758	25283	2.85	0.88
AR205	4262	4425	4427	4418	4535	4730	4890	5171	5412	5678	3.1	0.92
AR206	3455	3441	3487	3459	3837	6161	6656	6552	6915	6967	10.18	0.84
AR207	10490	10961	11332	10530	11918	12776	13958	14620	15866	15647	5.08	0.92
AR208	-	-	-	9570	7659	10549	11400	11780	11663	12445	6.21	0.65
AR209	-	-	-	5323	5478	5193	6373	6254	6227	6214	3.24	0.63

DISTRICT : KINTA

AR301	23403	23243	22677	24314	23262	23050	23659	31022	30311	27497	2.9	0.54
AR302	21073	20088	20544	21741	23244	23180	23341	23518	19485	25951	1.54	0.28
AR303	56044	57852	58955	62597	64866	71205	79513	84135	73487	85819	4.91	0.89
AR304	58690	47295	49873	54778	41708	60968	71845	80595	70470	82923	5.75	0.57
AR305	25858	22680	24510	30029	25811	25699	25075	26251	29168	39267	3.22	0.41
AR306	26355	30198	31466	30935	36416	42284	38475	41786	38155	38194	4.36	0.71
AR307	28781	24461	26006	30794	25367	29434	23614	34204	46163	51996	6.36	0.52
AR308	21280	20534	20354	27880	24007	20742	23084	24336	22253	27970	1.94	0.25
AR309	7252	7588	6981	7214	6801	7109	5804	6207	7280	6303	-1.7	0.35
AR310	23789	25738	23367	24503	17680	17239	18561	15378	19306	15522	-5.3	0.7
AR311	8121	7562	6261	6537	6299	7208	6643	8087	8286	8638	1.61	0.16
AR312	13813	12872	11277	12208	9174	11683	11899	11750	11956	13356	-0.3	0.01
AR313	7398	6679	6254	7088	7801	8670	9230	8350	9994	12777	6.11	0.76
AR314	2136	2329	1996	1931	2100.0	1748	2266	1951	2124	2260	0.03	0

Annual Growth Rate For Year 2012

DISTRICT : KERIAN

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
AR401	14144	13915	13713	13461	13830	14112	14743	14777	15143	16130	1.48	0.67
AR402	17737	17921	17378	17767	17675	18207	17491	17972	16679	21074	0.73	0.13
AR403	10576	11340	10911	11386	12818	12325	12685	12287	11724	11629	1.19	0.32
AR404	5817	5882	5920	5361	6986	6488	6414	7315	6760	6583	2.19	0.48
AR405	3982	4785	4429	4784	4785	5353	5520	5932	5746	5550	3.8	0.82
AR406	2729	3312	3241	3537	3735	3843	4166	4698	4433	4246	5.09	0.86
AR407	4059	4410	4481	4713	5355	5447	5852	5670	5660	6312	4.59	0.92

DISTRICT : KUALA KANGSAR

AR501	14510	15298	15079	15399	17142	18036	19085	19426	22500	19251	4.37	0.86
AR502	10942	11696	11658	11816	12048	11687	14348	13309	12599	12008	1.56	0.37
AR503	6012	7149	7075	7245	9789	8135	10312	8739	8966	8847	4.24	0.59
AR504	5091	6036	6048	6875	6045	5886	7103	6891	6420	6625	2.14	0.43
AR505	3251	3550	4033	3610	3814	3588	3357	4335	4132	4121	1.99	0.39
AR506	7079	7186	7530	7440	7335	7824	8463	8406	8536	8647	2.43	0.9
AR507	-	-	-	4522	4671	5135	6791	5809	6537	6376	6.52	0.72
AR508	-	-	-	5759	5746	7164	7512	6741	7044	8183	5	0.67

DISTRICT : LARUT MATANG DAN SELAMA

AR601	5984	6136	9527	10208	11989	16091	16752	14128	3379	19410	6.16	0.11
AR602	6195	9503	9417	2667	2887	2705	7163	11385	11831	3181	-0.4	0
AR603	13374	15442	8817	15758	15574	100.034	7076	10270	18646	12586	-0.8	0.01
AR604	34618	33322	33700	39968	46533	44168	45713	36198	37714	39945	1.74	0.18
AR605	2408	2463	2374	2488	3068	3431	3293	3947	3594	3299	5.44	0.76
AR606	7034	7449	8021	7876	8110	8071	8832	8784	9351	9627	3.16	0.94
AR607	7243	9762	11066	10992	10554	10931	11066	13415	12599	13254	5	0.73

DISTRICT : HILIR PERAK

AR701	8885	9785	9777	10255	11291	10206	9643	10286	10192	100.047	0.82	0.17
AR702	7975	7592	8400	8321	9502	8612	9482	9629	10132	10241	3.18	0.86
AR703	20345	20976	21284	23258	14351	24244	25159	25365	25004	28465	3.57	0.33
AR704	8794	8345	8619	8453	8793	8806	9504	9758	10135	11064	2.67	0.78
AR705	4793	4719	4316	4936	5613	5033	5588	5668	5655	6216	3.17	0.74

Annual Growth Rate For Year 2012

DISTRICT : HULU PERAK

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
AR801	6563	6798	6931	4169	5319	2509	2715	1724	3110	3562	-12.1	0.59
AR802	5115	6179	6218	6726	9260	7498	8006	10831	6760	6930	3.91	0.3
AR803	1996	2309	2609	2906	2846	2946	3078	3337	3148	3944	5.9	0.88
AR804	5596	6585	6516	6945	6982	5953	5638	8234	5586	5869	-0.2	0
AR805	4718	5105	4926	5566	6192	6555	7812	5477	6167	6552	3.57	0.48

DISTRICT : PERAK TENGAH

AR901	17843	17721	16496	13550	14182	15405	13191	14543	16257	21547	0.28	0
AR902	2853	3246	3497	3317	1991	3110	3129	3426	3648	4300	2.84	0.19
AR903	5097	4420	4974	3941	3176	4249	4189	4575	4813	5831	1.13	0.04
AR904	1394	1479	1471	1176	1238	1454	1321	1363	1567	1637	1.2	0.13

PERAK

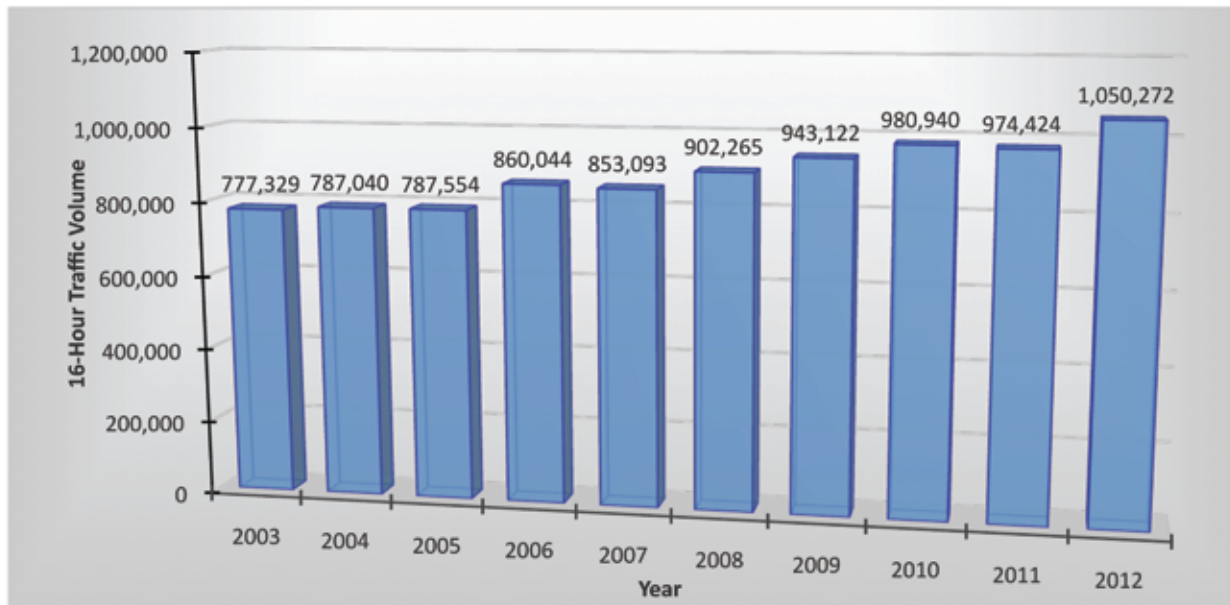


Figure 7 A : Perak Yearly 16-hour Traffic Volume

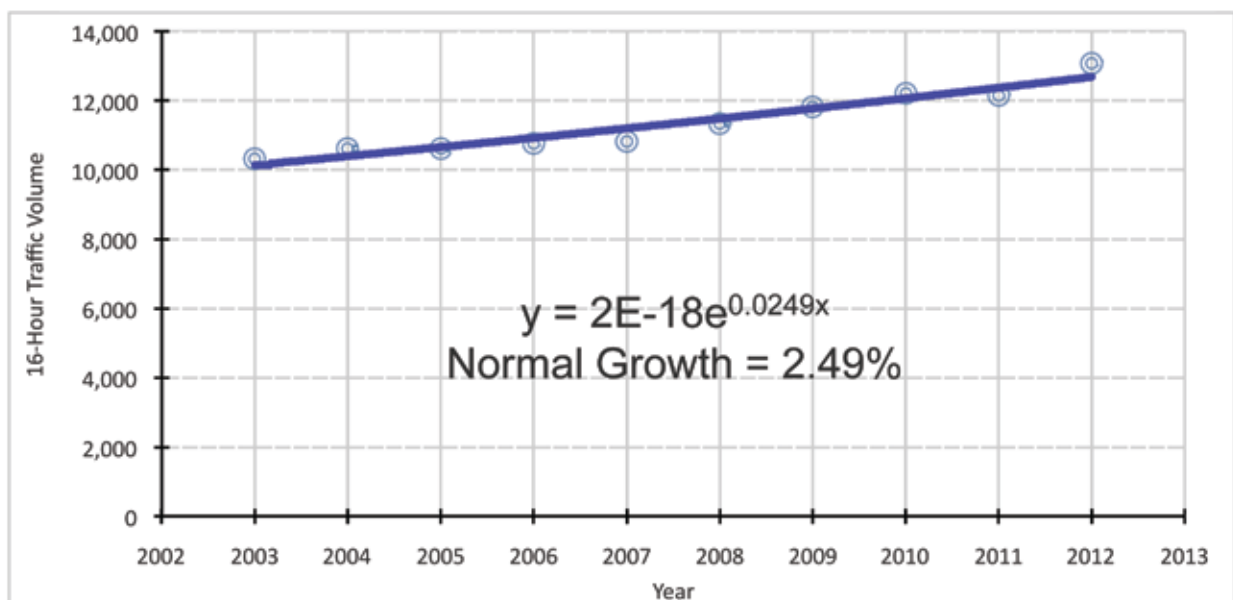
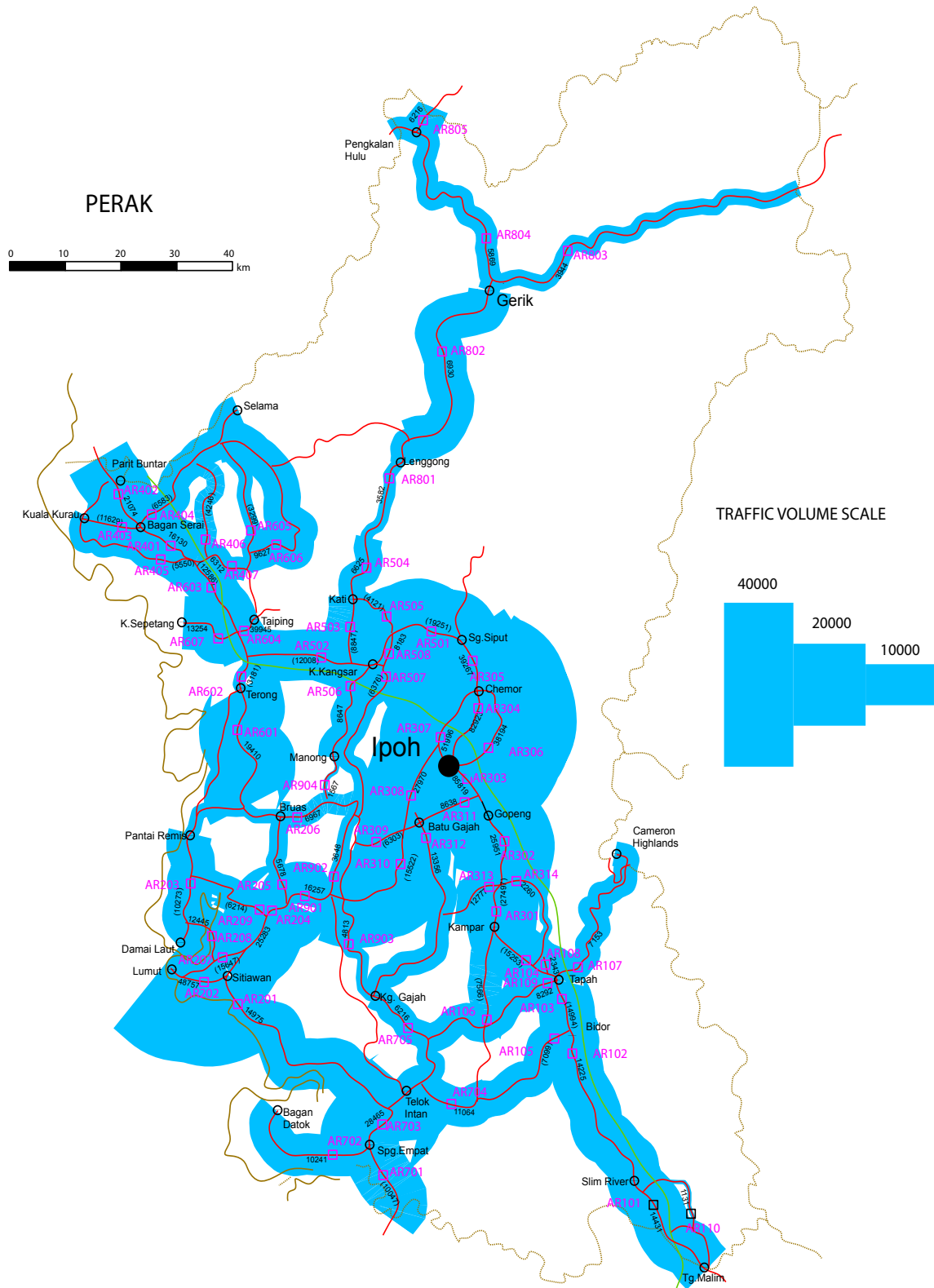


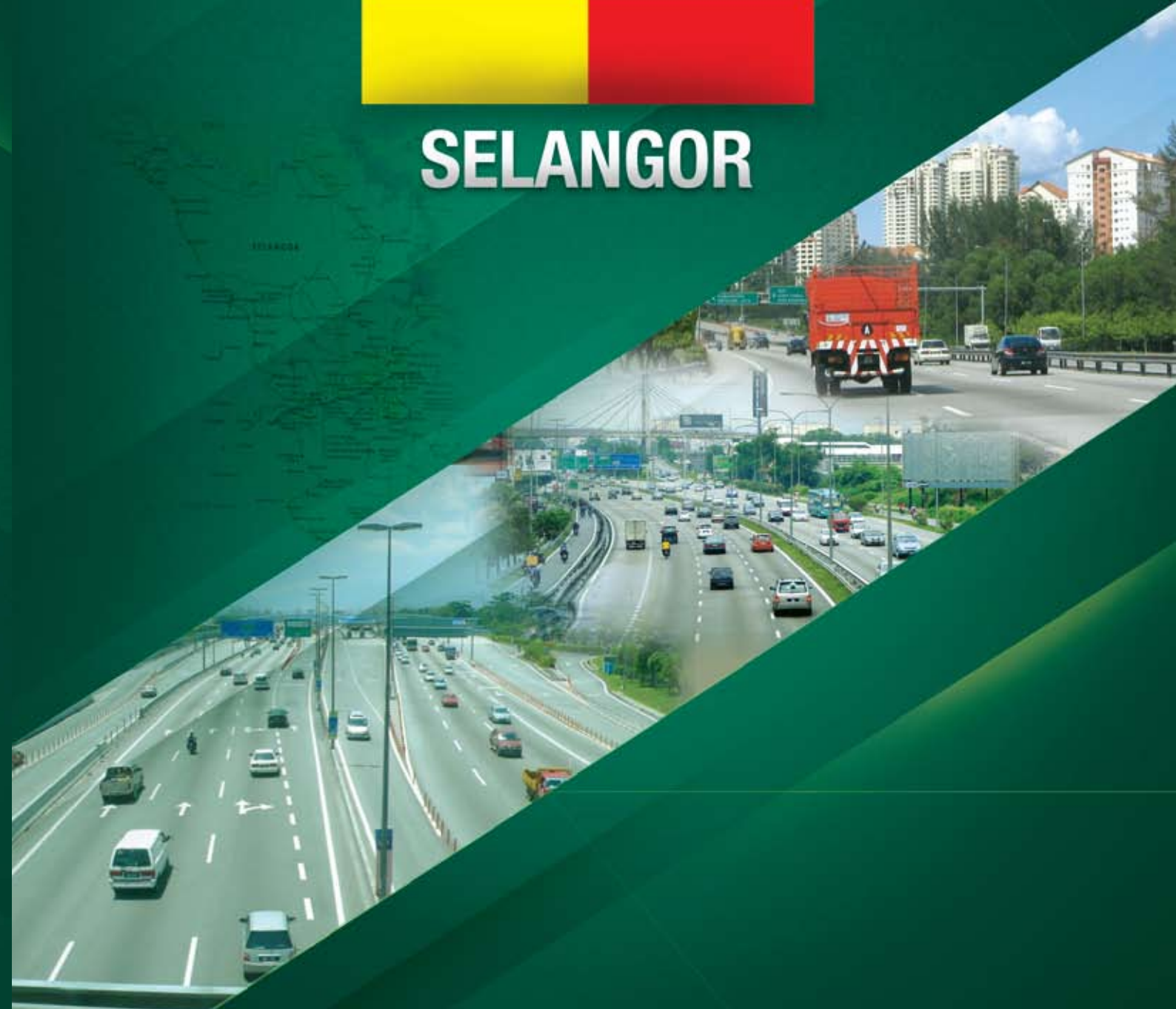
Figure 7 B : Perak Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure A1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





SELANGOR



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	SEPANG	0	1	5	6
2	KLANG	0	5	6	11
3	KUALA LANGAT	1	0	3	4
4	KUALA SELANGOR	0	0	5	5
5	SABAK BERNAM	1	0	3	4
6	HULU LANGAT	0	5	4	9
7	HULU SELANGOR	0	4	6	10
8	PETALING	1	3	8	12
9	GOMBAK	1	1	3	5
	TOTAL	4	19	43	66

Location Description For Traffic Census Stations

DISTRICT : SEPANG

Station Number	Survey Type	Route Number	KM	Description of Locations
BR004	3	B20	6.4	Salak Tinggi-Bukit Changgang-Banting
BR005	3	B48	58	Kuala Lumpur-Salak-Sepang
BR006	1	5	85.3	Klang-Sepang
BR007	3	B15	43.9	Jalan FT 29, KLIA - Putrajaya
BR008	3	31	4	Jln Dengkil - Banting (dgn. PUSPEN Dengkil)
BR009	3	B48	37	Jalan Sepang - Kajang

DISTRICT : KLANG

BR101	3	2	29.8	Kuala Lumpur-Klang
BR102	1	2	3.5	Klang-Port Klang (Jalan Watson)
BR103	3	2	2.4	Jalan Pelabohan-near North Port
BR104	3	5	12.9	Klang-Kuala Selangor
BR105	1	5	3.2	Klang-Kuala Selangor
BR106	1	5	6.4	Klang-Telok Datok
BR107	1	B1	4.8	Klang-Meru
BR108	1	20	-	300 meters fr junction Federal Highway-North Klang Straits Bypass
BR109	3	B3	37	Kuala Lumpur-Kampung Batu Enam-Klang Jalan Kebun
BR110	3	B10	2.4	Langat Road-Pandamaran (Pandamaran Road)
BR111	3	B12	29	Kuala Lumpur-Puchong-Kampung Batu Enam (Jln Bukit Kuning)

DISTRICT : KUALA LANGAT

BR201	3	5	28.7	Klang-Telok Datok
BR202	3	5	32.2	Klang-Telok Datok-Banting
BR203	3	5	48.3	Klang-Morib-Batu Laut
BR204	0	B18	61.2	Kelang-Telok Datok-Morib-Sepang

DISTRICT : KUALA SELANGOR

BR401	3	5	45.4	Klang-Kuala Selangor
BR402	3	5	29	Klang-Kuala Selangor
BR403	3	B42	16.1	Pasir Penambang-Batang Berjantai (Jalan Raja Musa)
BR404	3	B33	75.7	Kuala Lumpur-Rawang-Kuala Selangor
BR405	3	54	45.1	Kuala Lumpur-Kepong-Kuala Selangor

Location Description For Traffic Census Stations

DISTRICT : SABAK BERNAM

Station Number	Survey Type	Route Number	KM	Description of Locations
BR501	0	5	72.1	Klang-Sabak Bernam
BR502	3	5	106.3	Kuala Lumpur-Kuala Selangor-Sabak
BR503	3	B44	16.1	Jalan Sg. Panjang-Ulu Bernam-Tg. Malim
BR504	3	B55	9.7	Sabak Bernam-Sungai Ayer Tawar (Sungai Ayer Tawar Road)

DISTRICT : HULU LANGAT

BR604	1	1	21.7	Kuala Lumpur-Kajang
BR605	1	1	41.9	Kuala Lumpur-Seremban
BR608	1	B52	16.1	Kuala Lumpur-Cheras-Kampong Ulu Lui
BR609	1	B17	27.4	Kuala Lumpur-Kajang-Telok Datok
BR610	3	B19	35.4	Kuala Lumpur-Ulu Semenyih
BR611	3	B18	33.8	Kuala Lumpur-Semenyih-Bangi (1km from Semenyih)
BR612	3	B34	35.4	Kuala Lumpur-Semenyih-Broga
BR613	3	B32	33.5	Kajang-Genting Peras-Jelebu
BR614	1	1	28.5	Kajang-Mantin

DISTRICT : HULU SELANGOR

BR701	1	1	58.6	Kuala Lumpur-Kuala Kubu Bahru Junction (south of junction)
BR702	1	1	76.3	Kuala Lumpur-Tanjong Malim
BR703	3	55	61	Kuala Lumpur-Kuala Kubu Baru-Gap
BR704	3	B56	1	Simpang Sg. Choh - Sg. Buaya
BR705	1	B23	5.5	Hulu Gombak - Hulu Yam Baru
BR706	3	B113	2.5	Batang Kali - Hulu Yam
BR707	1	B66	6.4	Jalan Hulu Kali - Genting Highland
BR708	3	1	28.5	Jalan Ampang Pechah - Kg. Bukit Raja
BR709	3	B44	76.8	Jalan Hulu Berendam - Tanjong Malim
BR710	3	B44	5.9	Jalan Hulu Berenam - Sungai Besar

Location Description For Traffic Census Stations

DISTRICT : PETALING

Station Number	Survey Type	Route Number	KM	Description of Locations
BR801	3	54	22.5	Kuala Lumpur-Kuala Selangor
BR802	1	15	17.7	Kuala Lumpur-Subang Airport
BR803	3	B7	33	Kuala Lumpur-Batu Tiga-Puchong
BR804	3	B9	1.6	Batu Tiga-Damansara Road
BR806	1	2	12.1	Kuala Lumpur-Klang
BR807	0	2	8.1	Kuala Lumpur-Petaling Jaya (Fed. H'way-180m east of EPF blg)
BR809	3	B13	16.1	Kuala Lumpur-Sungai Besi (Sungai Besi Road)
BR811	3	3214	-	Jalan Bt. 3 (Opposite Balai Polis Bt. 3)
BR812	3	B16	22.5	K.L-Puchong (km 12 to Sri Kembangan/km 4 to Puchong)
BR813	3	B7	9.5	Kuala Lumpur-Puchong-Shah Alam
BR814	1	B7	11	Kuala Lumpur-Puchong-Shah Alam
BR815	3	207	10	Kuala Lumpur-Bukit Jalil-Puchong

DISTRICT : GOMBAK

BR901	1	1	25.4	Kuala Lumpur-Rawang-Tanjong Malim
BR902	0	2	19	Kuala Lumpur-Karak Highway
BR903	3	B22	12.9	Jalan Silang Batu Caves
BR904	3	B27	39.5	K.L-Rawang-Rantau Panjang (Kuala Selangor-Rawang Road)
BR905	3	B22	2	Jalan Batu Caves - Gombak

Figure B : TRAFFIC CENSUS STATIONS

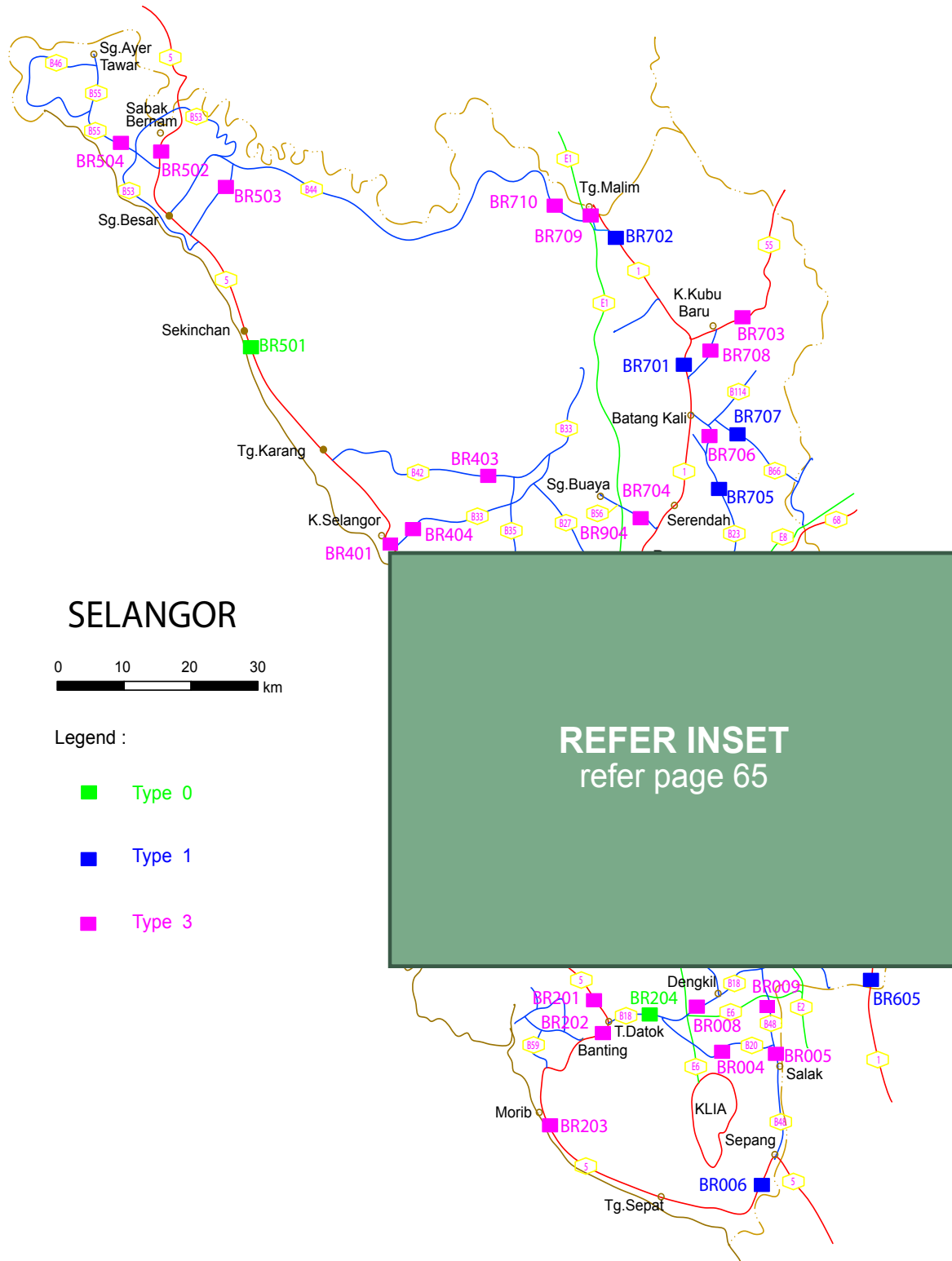
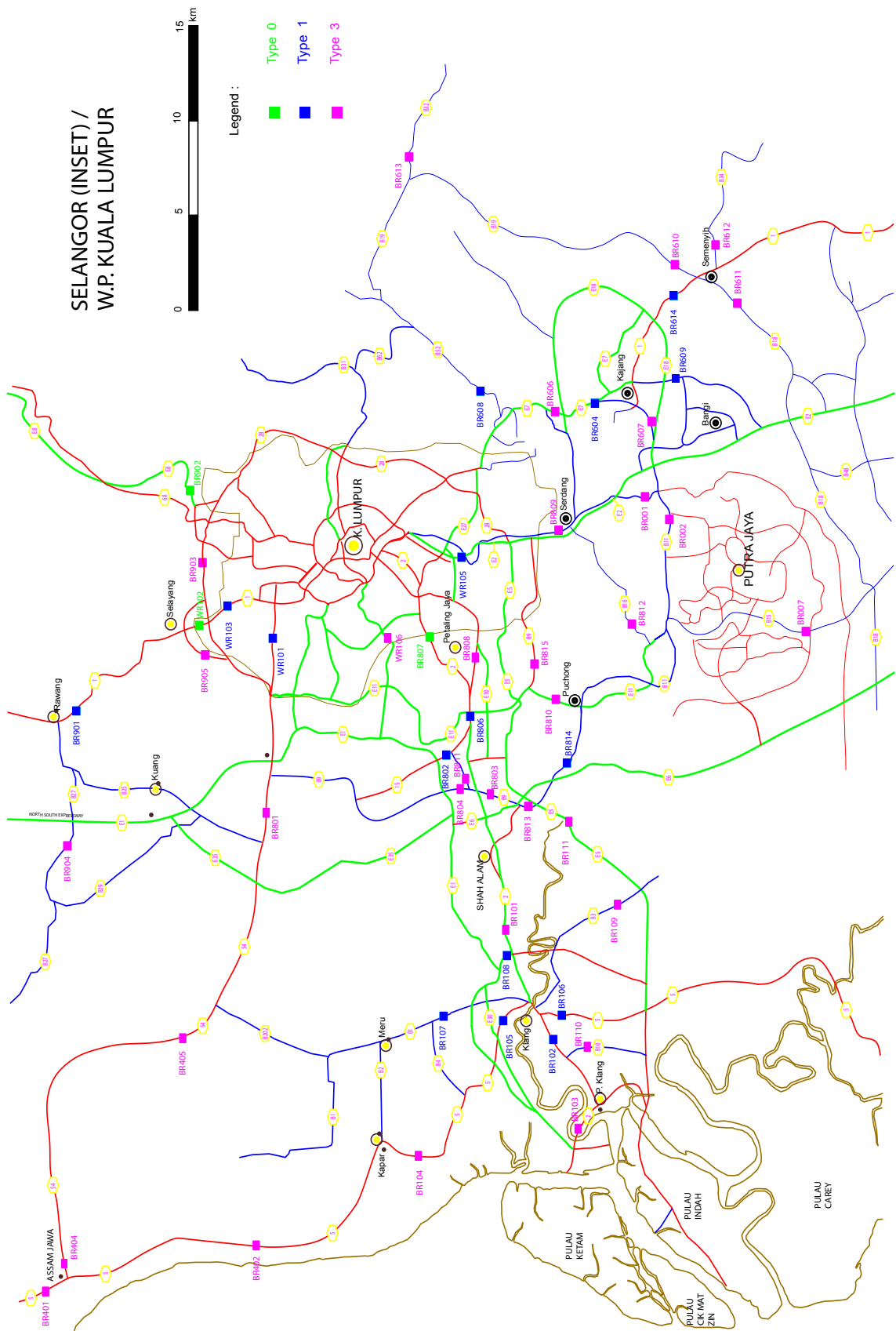


Figure B(S) : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : SEPANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR004	-	53545	6270	2100-2200	61.7	14.3	6.5	4.9	0.8	11.8	100.0
BR005	-	23616	3212	2100-2200	67.9	5	9	4.3	1	12.8	100.0
BR006	-	17587	1654	2000-2100	67.7	13.9	3	0.4	0.7	14.2	100.0
BR007	-	42940	4975	2100-2200	80.2	5.9	4.4	2.2	0.7	6.5	100.0
BR008	-	19306	1849	2100-2200	63.7	8.6	7	5.5	0.6	14.7	100.0
BR009	-	12520	1544	2100-2200	67.8	13.7	3.2	0.5	0.4	14.3	100.0

DISTRICT : KLANG

BR101	-	123039	11152	1700-1800	79.6	3.9	3.7	1.3	1	10.4	100.0
BR102	-	59067	4469	0700-0800	71.3	4.6	5	1.9	0.6	16.7	100.0
BR103	-	70658	6404	0700-0800	48.6	4.1	8.1	19.5	0.5	19.3	100.0
BR104	-	59788	7155	0700-0800	59.8	3.9	10.4	5.2	0.6	20.1	100.0
BR105	-	48386	4061	2000-2100	73.4	7	6.1	1	0.9	15	100.0
BR106	-	95354	9129	1800-1900	83.1	4.2	3.9	0.7	0.5	7.6	100.0
BR107	-	95024	8213	1800-1900	62.4	6.9	5.4	1.8	0.9	22.5	100.0
BR108	-	141456	12407	0700-0800	68.3	4.2	4.8	2.8	0.6	19.3	100.0
BR109	-	37190	3557	1800-1900	63.6	4.1	9.3	1.9	1.1	20	100.0
BR110	-	46684	4405	1800-1900	62.5	4.4	7.6	5.4	0.8	19.3	100.0
BR111	-	42326	3609	1200-1300	55.5	3.9	16.5	4.1	1.3	18.8	100.0

DISTRICT : KUALA LANGAT

BR201	-	35126	3738	1800-1900	62.9	8.6	7.8	7.2	1.3	12.1	100.0
BR202	-	47400	4626	1700-1800	65.3	8.4	4.4	3.6	1.3	17.1	100.0
BR203	-	7060	604	0700-0800	55.6	9.8	7.4	3.2	0.6	23.3	100.0
BR204	35239	31150	3256	1800-1900	57.1	9.7	7.4	9.1	0.6	16.1	100.0

DISTRICT : KUALA SELANGOR

BR401	-	30975	2803	1100-1200	56.8	10.3	8.4	7	3.2	14.3	100.0
BR402	-	20225	2109	1700-1800	54.8	10.5	8.7	7.9	1.2	16.9	100.0
BR403	-	2838	245	0800-0900	44.5	11.1	15.8	5.7	0.3	22.7	100.0
BR404	-	14345	1442	0700-0800	62.2	8.8	5.3	0.8	0.4	22.5	100.0
BR405	-	23340	2268	1900-2000	48.3	14.1	11.6	6.7	0.5	18.8	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : SABAK BERNAM

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR501	28764	24448	2293	1800-1900	68.4	5.7	8.1	5.7	0.4	11.6	100.0
BR502	-	16370	1505	1400-1500	48.3	13.2	11.4	12.9	0.3	13.9	100.0
BR503	-	2492	209	0800-0900	42.3	4.1	5.3	1.8	0	46.4	100.0
BR504	-	8314	673	1800-1900	61.8	7.1	6.8	1	0.1	23.2	100.0

DISTRICT : HULU LANGAT

BR604	-	50,467	3,961	1800-1900	66.2	12.7	3.4	0.4	0.9	16.4	100.0
BR605	-	11,915	1,186	0700-0800	53.7	12.8	7.9	4.7	1.2	19.8	100.0
BR608	-	27,986	2,713	0700-0800	45.3	15	7.4	1.4	1.1	29.9	100.0
BR609	-	64294	5040	1700-1800	66.6	8.8	2.3	0.7	1.1	20.5	100.0
BR610	-	11105	1028	1300-1400	44.1	16.1	9.7	4.4	0.6	25.1	100.0
BR611	-	18611	2853	1800-1900	61.7	10.1	6.7	2.9	1	17.5	100.0
BR612	-	13592	1129	0800-0900	61.7	12.7	5.7	1.4	0.7	17.8	100.0
BR613	-	708	74	0700-0800	40.7	19.5	11.2	7.3	0	21.3	100.0
BR614	-	65733	5644	1900-2000	62.4	10.2	5.5	1.3	0.6	20.1	100.0

DISTRICT : HULU SELANGOR

BR701	-	12482	985	0700-0800	61.8	12.8	9.4	3.8	1.2	11	100.0
BR702	-	11316	1071	1800-1900	63.7	8.4	8.2	3.5	1.4	14.8	100.0
BR703	-	1823	183	1200-1300	38	16.8	5	1.4	0.4	38.3	100.0
BR704	-	21415	1678	1800-1900	52.7	9.4	6.6	3.1	1.5	26.8	100.0
BR705	-	7608	704	1800-1900	57.1	10.5	8.3	1.7	0.2	22.2	100.0
BR 706	-	12384	1154	1700-1800	56.8	10.7	4.3	1.5	1.8	25	100.0
BR707	-	8060	760	1500-1600	53.3	16.8	5.1	1.5	2.3	21	100.0
BR708	-	7786	865	0700-0800	59.8	13	4	0.2	1.1	21.9	100.0
BR709	-	9446	863	1500-1600	59.8	8.3	5	1.7	1.9	23.3	100.0
BR710	-	1,425	139	1900-2000	36.7	18.2	9.3	1.4	2	32.4	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : PETALING

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR801	-	140595	12539	0800-0900	72.5	4.9	1.9	0.8	0.2	19.7	100.0
BR802	-	138763	11916	0800-0900	78.1	4.6	2.5	0.8	0.2	13.8	100.0
BR803	-	121049	10181	0700-0800	65.2	8.7	6.4	3.1	0.4	16.3	100.0
BR804	-	106072	8606	1300-1400	53.1	8.9	6.8	0.5	0.3	30.5	100.0
BR806	-	307730	24269	1800-1900	62.5	19.8	2.3	0.6	0.3	14.6	100.0
BR807	369961	311487	26998	1900-2000	78.7	5	2.8	0.3	0.5	12.8	100.0
BR809	-	197431	16157	0900-1000	89.8	3	2.8	0.3	0.3	3.8	100.0
BR811	-	13891	1446	1700-1800	66.8	7.9	6.5	0.1	0.1	18.6	100.0
BR812	-	88362	7933	1700-1800	68.2	8.5	8.4	3.5	0.5	10.8	100.0
BR813	-	289,198	21,431	0900-1000	42	7.4	6.2	2.2	0.2	42	100.0
BR814	-	122934	9,455	1000-1100	60.8	3.8	3.1	1.2	0.3	30.9	100.0
BR815	-	109699	9182	1000-1100	83.6	7	3.4	0.6	0.3	5.1	100.0

DISTRICT : GOMBAK

BR901	-	83022	6940	1800-1900	66.1	6.6	5.2	1.4	0.5	20.3	100.0
BR902	178174	147791	12598	1800-1900	77.1	8.5	3.5	2.5	1	7.4	100.0
BR903	-	124886	11380	1300-1400	80	11.5	0.8	0.1	0.1	7.5	100.0
BR904	-	15594	1517	0700-0800	46	17	13.8	4.5	1.1	17.7	100.0
BR905	-	250254	24711	1800-1900	77.7	10	1.2	0.4	0.3	10.5	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : SEPANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR004	-	49425	4899	1800-1900	65	15.4	5.8	3.9	0.6	9.1	100.0
BR005	-	35130	3051	1900-2000	76	5.5	5.1	4.1	1.5	7.7	100.0
BR006	-	16435	1452	1500-1600	63.5	16.9	3.9	0.8	1.1	13.9	100.0
BR007	-	86768	9942	1800-1900	82.9	6.9	2.9	1.2	0.8	5.3	100.0
BR008	-	14663	1533	0700-0800	68.9	6.8	5.5	4.3	0.5	13.9	100.0
BR009	-	10951	1249	1800-1900	71.6	10.9	3.2	0.5	0.3	13.5	100.0

DISTRICT : KLANG

BR101	-	134822	13221	1700-1800	83.7	2.8	3	0.6	0.9	9	100.0
BR102	-	56603	4256	1800-1900	73.6	4.3	4.3	1.8	0.7	15.3	100.0
BR103	-	67256	5963	0700-0800	45.3	3.2	10.4	17.4	0.6	23.1	100.0
BR104	-	52299	4770	0700-0800	64.7	4	9.8	4.9	0.7	16	100.0
BR105	-	43437	4079	1700-1800	78.9	4	3.5	1.1	0.7	11.9	100.0
BR106	-	106835	10021	1700-1800	86.8	3.3	2.3	0.4	0.4	6.8	100.0
BR107	-	94328	8666	0700-0800	68.1	6.4	5.7	1.7	0.8	17.5	100.0
BR108	-	140104	11723	0700-0800	71.6	3.5	4.8	2.7	0.6	16.9	100.0
BR109	-	32860	2938	0700-0800	61.5	4.6	9.8	1.7	1.1	21.4	100.0
BR110	-	41095	3430	1700-1800	62.9	5	9.2	2.5	0.8	19.6	100.0
BR111	-	34925	2996	0700-0800	57.4	5.4	12.3	3.4	1.3	20.3	100.0

DISTRICT : KUALA LANGAT

BR201	-	35126	3738	1800-1900	62.9	8.6	7.8	7.2	1.3	12.1	100.0
BR202	-	60217	5942	0700-0800	70.5	8.3	4.1	2.1	1.5	13.4	100.0
BR203	-	7195	577	1500-1600	59.3	10.3	8.3	3.8	0.4	18	100.0
BR204	36269	33084	3297	0700-0800	54.6	11.6	7.6	9.7	0.6	15.8	100.0

DISTRICT : KUALA SELANGOR

BR401	-	37501	3297	0700-0800	59.5	10.1	7.5	7.3	2.1	13.4	100.0
BR402	-	19518	2445	1700-1800	59.1	7.3	7.7	6.9	1.2	17.8	100.0
BR403	-	4038	415	1400-1500	43.1	12.6	15.4	7.4	0.3	21.2	100.0
BR404	-	13919	1339	0700-0800	60.4	9	5.6	1.2	0.6	23.1	100.0
BR405	-	23955	1902	0900-1000	52.6	10.9	9.9	7.1	0.6	18.9	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : SABAK BERNAM

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR501	27040	22291	2057	1700-1800	68.6	6.3	8.6	6	0.4	10.2	100.0
BR502	-	15414	1393	1700-1800	52	12.9	10.9	13.1	0.2	10.9	100.0
BR503	-	2414	229	0900-1000	40.3	4.9	8.7	2.9	0	43.2	100.0
BR504	-	6505	681	1700-1800	61.3	7.8	7	0.6	0.1	23.2	100.0

DISTRICT : HULU LANGAT

BR604	-	56911	4440	1800-1900	66.1	11.7	3.7	0.4	0.5	17.5	100.0
BR605	-	11979	1069	0700-0800	56.2	12.5	7.3	3.9	1	19.1	100.0
BR608	-	27248	2255	0700-0800	48.1	16	7.1	1.9	0.9	26	100.0
BR609	-	60333	4493	1700-1800	64.4	9.6	2.5	0.6	1.1	21.7	100.0
BR610	-	13339	1127	1400-1500	48.9	14.5	11.2	4	0.7	20.7	100.0
BR611	-	13802	1518	1800-1900	54.6	14.6	6.9	4.5	0.8	18.6	100.0
BR612	-	13715	1416	1700-1800	64.4	11.1	6.4	1.7	0.7	15.8	100.0
BR613	-	674	67	0800-0900	40.2	23.1	13.8	6.8	0.4	15.6	100.0
BR614	-	75266	6629	0700-0800	58.4	12.4	5.3	1.4	0.5	22	100.0

DISTRICT : HULU SELANGOR

BR701	-	14158	1175	1700-1800	60.7	13.6	9.2	3.5	1.1	11.9	100.0
BR702	-	10673	952	1800-1900	58.6	10.3	8.9	4.6	1.8	15.8	100.0
BR703	-	1582	159	1700-1800	40	10.8	9.4	0.9	0.1	38.8	100.0
BR704	-	25979	2121	1900-2000	52.8	5.3	5.8	4.1	1.5	30.4	100.0
BR705	-	8736	848	1800-1900	54	14.7	9	0.9	0.2	21.1	100.0
BR 706	-	13609	1201	0800-0900	52.9	9	5.8	2.3	1.7	28.3	100.0
BR707	-	6203	656	1800-1900	55.1	16.2	4.4	1.3	2.9	20.1	100.0
BR708	-	6636	623	1500-1600	62.6	12.1	5.3	0.4	1.3	18.3	100.0
BR709	-	9736	949	1000-1100	58.2	11	6.9	1.7	2.1	20.2	100.0
BR710	-	1395	135	1800-1900	36.1	16.3	8.8	1.7	1.6	35.4	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : PETALING

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
BR801	-	151885	14123	0800-0900	72.4	4.7	2.1	0.6	0.1	20.1	100.0
BR802	-	162913	15295	0800-0900	78.1	4.2	2.3	0.6	0.1	14.6	100.0
BR803	-	97651	10191	0800-0900	56.4	9	7.5	2.7	0.3	24	100.0
BR804	-	154799	11920	1100-1200	76.3	5.1	3.4	0.3	0.2	14.8	100.0
BR806	-	252964	20679	0800-0900	74	5.6	5.5	1	0.7	13.2	100.0
BR807	446956	388385	29270	0900-1000	80.5	3.7	3.4	0.2	0.3	12.1	100.0
BR809	-	210045	19798	0900-1000	91.1	2.6	2.6	0.2	0.2	3.2	100.0
BR811	-	18853	1977	0800-0900	62.3	9.3	10.4	0.4	0.1	17.5	100.0
BR812	-	116935	11004	1500-1600	62.8	8.5	6.3	5.8	0.3	16.4	100.0
BR813	-	153791	12617	0900-1000	52.7	5.4	5.3	1.8	0.2	34.6	100.0
BR814	-	102143	7506	0900-1000	70.2	7.9	3.7	1.5	0.2	16.5	100.0
BR815	-	156916	18402	1800-1900	80.7	7.8	3.9	0.6	0.3	6.6	100.0

DISTRICT : GOMBAK

BR901	-	84747	8243	0700-0800	62.3	7.2	6.5	1.5	0.4	22.1	100.0
BR902	184751	155180	13904	0900-1000	76.9	7.3	5.3	1.4	1	8	100.0
BR903	-	62133	5119	1800-1900	71	71	71	71	71	71	100.0
BR904	-	14614	1196	1600-1700	43.2	17.4	12.2	5	1.2	21.1	100.0
BR905	-	292323	30593	1800-1900	65.2	22.2	1.2	0.3	0.2	10.9	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : SEPANG

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
BR004	51485	63.4	14.9	6.2	4.4	0.7	10.5	5585
BR005	29373	72	5.3	7	4.2	1.3	10.2	3132
BR006	17011	65.6	15.4	3.5	0.6	0.9	14	1553
BR007	64854	81.5	6.4	3.7	1.7	0.7	5.9	7459
BR008	33969	66.3	7.7	6.3	4.9	0.6	14.3	1691
BR009	23471	69.7	12.3	3.2	0.5	0.4	13.9	1397

DISTRICT : KLANG

BR101	128931	81.7	3.4	3.4	0.9	0.9	9.7	12187
BR102	57835	72.4	4.4	4.6	1.8	0.6	16	4362
BR103	68957	46.9	3.6	9.2	18.4	0.6	21.2	6184
BR104	56044	62.2	4	10.1	5	0.6	18	5963
BR105	45911	76.2	5.5	4.8	1	0.8	13.5	4070
BR106	101095	84.9	3.8	3.1	0.6	0.4	7.2	9575
BR107	94676	65.3	6.6	5.5	1.7	0.8	20	8439
BR108	140780	70	3.8	4.8	2.7	0.6	18.1	12065
BR109	35025	62.6	4.3	9.5	1.8	1.1	20.7	3248
BR110	43890	62.7	4.7	8.4	3.9	0.8	19.5	3918
BR111	38626	56.4	4.6	14.4	3.7	1.3	19.5	3303

DISTRICT : KUALA LANGAT

BR201	35126	62.9	8.6	7.8	7.2	1.3	12.1	3738
BR202	53809	67.9	8.4	4.3	2.8	1.4	15.2	5284
BR203	7128	57.4	10	7.8	3.5	0.5	20.7	591
BR204	32117	55.8	10.7	7.5	9.4	0.6	16	3277

DISTRICT : KUALA SELANGOR

BR401	34238	58.1	10.2	8	7.1	2.7	13.9	3050
BR402	19872	56.9	8.9	8.2	7.4	1.2	17.4	2277
BR403	3438	43.8	11.9	15.6	6.5	0.3	22	330
BR404	14132	61.3	8.9	5.4	1	0.5	22.8	1391
BR405	23648	50.5	12.5	10.8	6.9	0.5	18.8	2085

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : SABAK BERNAM

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
BR501	23370	68.5	6	8.3	5.9	0.4	10.9	2175
BR502	15892	50.1	13.1	11.1	13	0.2	12.4	1449
BR503	2453	41.3	4.5	7	2.4	0	44.8	219
BR504	7410	61.5	7.5	6.9	0.8	0.1	23.2	677

DISTRICT : HULU LANGAT

BR604	53689	66.2	12.2	3.5	0.4	0.7	16.9	4201
BR605	11947	55	12.6	7.6	4.3	1.1	19.4	1127
BR608	27617	46.7	15.5	7.2	1.6	1	27.9	2484
BR609	62314	65.5	9.2	2.4	0.7	1.1	21.1	4766
BR610	12222	46.5	15.3	10.5	4.2	0.6	22.9	1078
BR611	16207	58.2	12.3	6.8	3.7	0.9	18	2186
BR612	13654	63.1	11.9	6	1.6	0.7	16.8	1273
BR613	691	40.4	21.3	12.5	7.1	0.2	18.5	71
BR614	70499	60.4	11.3	5.4	1.4	0.6	21	6137

DISTRICT : HULU SELANGOR

BR701	13320	61.3	13.2	9.3	3.6	1.2	11.5	1080
BR702	10994	61.2	9.3	8.6	4	1.6	15.3	1012
BR703	1703	39	13.8	7.2	1.2	0.3	38.6	171
BR704	23697	52.7	7.4	6.2	3.6	1.5	28.6	1900
BR705	8172	55.6	12.6	8.6	1.3	0.2	21.6	776
BR 706	12997	54.8	9.9	5.1	1.9	1.7	26.6	1178
BR707	7131	54.2	16.5	4.7	1.4	2.6	20.6	708
BR708	7211	61.2	12.5	4.7	0.3	1.2	20.1	744
BR709	9591	59	9.7	5.9	1.7	2	21.8	906
BR710	1410	36.4	17.3	9	1.6	1.8	33.9	137

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : PETALING

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
BR801	146240	72.4	4.8	2	0.7	0.2	19.9	13331
BR802	150838	78.1	4.4	2.4	0.7	0.1	14.2	13605
BR803	109350	60.8	8.9	7	2.9	0.3	20.1	10186
BR804	130436	64.7	7	5.1	0.4	0.3	22.6	10263
BR806	280347	68.2	12.7	3.9	0.8	0.5	13.9	22474
BR807	349936	79.6	4.3	3.1	0.2	0.4	12.4	28134
BR809	203738	90.5	2.8	2.7	0.3	0.2	3.5	17978
BR811	16372	64.5	8.6	8.4	0.2	0.1	18	1712
BR812	102649	65.5	8.5	7.4	4.6	0.4	13.6	9469
BR813	221495	47.4	6.4	5.7	2	0.2	38.3	17024
BR814	112538	65.5	5.8	3.4	1.4	0.2	23.7	8480
BR815	133308	82.2	7.4	3.7	0.6	0.3	5.9	13792

DISTRICT : GOMBAK

BR901	83885	64.2	6.9	5.9	1.4	0.5	21.2	7592
BR902	151486	77	7.9	4.4	2	1	7.7	13251
BR903	93510	75.5	41.2	35.9	35.5	35.5	39.2	8250
BR904	15104	44.6	17.2	13	4.7	1.1	19.4	1357
BR905	271289	71.4	16.1	1.2	0.4	0.2	10.7	27652

Annual Growth Rate For Year 2012

DISTRICT : SEPANG

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
BR004	17525	22400	27556	34125	35867	36575	44072	53252	53673	51485	12.06	0.92
BR005	18113	22144	20923	22052	27411	21878	32971	24946	28140	29373	4.78	0.62
BR006	11064	11255	11844	12174	13735	14621	15838	17256	19603	17011	6.36	0.92
BR007	-	-	-	-	-	-	-	68166	80875	64854	-2.5	0.05
BR008	-	-	-	-	-	-	-	17904	16655	33969	32.02	0.67
BR009	-	-	-	-	-	-	-	14750	13561	23471	23.23	0.62

DISTRICT : KLANG

BR101	113039	159396	149618	139732	123437	94591	104201	103515	91005	128931	-3.5	0.3
BR102	48319	47213	45006	35132	42452	47817	46690	52901	53983	57835	2.63	0.33
BR103	87339	85084	86646	100782	71212	55135	71532	66090	71297	68957	-3.6	0.4
BR104	35397	44050	40680	42422	35940	59230	52893	53429	56127	56044	5.06	0.63
BR105	40027	39148	36089	33878	32363	38562	41338	44030	46574	45911	2.56	0.4
BR106	50713	57259	59544	65782	63473	76439	79057	94404	118734	101095	8.7	0.92
BR107	50535	66458	66014	74325	73095	72095	91094	90918	89381	94676	6.01	0.86
BR108	107975	112600	111393	109893	115023	129408	122468	141121	135678	140780	3.22	0.85
BR109	28875	35698	37133	37916	39311	37321	36315	32174	34501	35025	0.36	0.02
BR110	31256	37874	36442	37946	37081	39130	40798	39588	42084	43890	2.71	0.78
BR111	31195	34900	37169	41899	37938	40515	47543	40677	44995	38626	2.79	0.48

DISTRICT : KUALA LANGAT

BR201	30560	34124	34379	38153	37772	38597	41048	41443	48678	35126	2.98	0.49
BR202	51081	55307	54375	61456	56532	52459	55814	52429	56444	53809	0.04	0.00
BR203	5913	6445	6311	6709	6324	6711	7023	7101	6852	7128	1.76	0.77
BR204	20442	22930	22930	24064	25319	26203	27159	29916	29299	32117	4.55	0.97

DISTRICT : KUALA SELANGOR

BR401	20926	29202	25126	30750	35745	39750	43210	34266	35376	34238	5.12	0.52
BR402	32161	31312	27400	15736	18657	16825	16866	16133	16686	19872	-6.80	0.53
BR403	3074	3248	2874	2339	2789	2554	2751	3379	3126	3438	1.18	0.08
BR404	6694	8886	9057	10521	9815	11377	13014	13263	12848	14132	7.27	0.89
BR405	19476	19427	20593	21287	20631	19332	20938	22822	23003	23648	2.02	0.69

Annual Growth Rate For Year 2012

DISTRICT : SABAK BERNAM

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
BR501	14115	13782	15230	17455	18224	17354	19773	20466	21743	23370	5.78	0.95
BR502	9475	10337	11518	12935	12118	12676	16100	15806	16081	15892	6.08	0.89
BR503	4420	5133	4833	3821	3614	3666	3101	2893	2849	2453	-7.60	0.91
BR504	5216	5341	5285	5385	4665	2516	4671	7330	7664	7410	3.81	0.13

DISTRICT : HULU LANGAT

BR604	58305	48722	53115	56808	42272	57286	58929	56609	57591	53689	0.70	0.04
BR605	13780	14365	13480	14513	14178	13538	13960	11834	11927	11947	-2.10	0.60
BR608	30577	37021	42582	40380	38656	37338	38264	33086	28098	27617	-2.60	0.27
BR609	38338	39574	40045	37839	30474	41555	40369	50648	54987	62314	5.06	0.54
BR610	8992	11940	11291	10688	12805	15335	6815	11424	12860	12222	1.32	0.03
BR611	7743	9915	9067	5784	6538	9051	10155	15392	14877	16207	8.57	0.53
BR612	5051	6353	6030	5699	5913	5858	7864	10737	11973	13654	10.44	0.79
BR613	1027	1002	837	1080	906	924	972	789	830	691	-3.30	0.54
BR614	40778	34289	34798	35666	36043	62612	63914	65123	66174	70499	9.07	0.75

DISTRICT : HULU SELANGOR

BR701	9741	8883	9396	9896	9723	12307	13209	18293	13430	13320	6.15	0.66
BR702	10976	10929	11853	11257	12476	13464	13308	14827	12429	10994	1.58	0.21
BR703	2620	1873	1687	1429	1383	986	1134	1123	1073	1703	-6.60	0.43
BR704	21248	24023	23371	19388	19665	17387	16508	10307	26689	23697	-1.80	0.04
BR705	6961	7453	9664	7203	8326	6041	7186	8785	8147	8172	0.77	0.03
BR706	10203	11313	6602	12195	11404	9985	10764	8297	10525	12997	1.40	0.05
BR707	3957	4541	4004	3836	4674	5336	4228	4504	5047	7131	4.27	0.50
BR708	7640	7525	7350	8788	7209	7599	7287	6928	7951	7211	-0.60	0.07
BR709	8270	8015	8046	10794	8215	8837	8433	7189	8276	9591	0.20	0.00
BR710	1842	1524	1591	2254	1010	909	946	807	1248	1410	-6.00	0.29

Annual Growth Rate For Year 2012

DISTRICT : PETALING

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
BR801	104121	159602	123195	83329	88809	131808	178059	206864	207643	146240	6.16	0.33
BR802	55285	103653	84909	72688	71927	89164	80427	95650	142062	150838	7.49	0.55
BR803	100642	90945	107904	34173	63989	72350	91091	94410	101892	109350	2.39	0.04
BR804	115837	75616	83671	60021	71940	100452	102542	142364	68660	130436	3.02	0.10
BR806	231919	234569	236222	265787	224828	250359	292856	274278	281803	280347	2.51	0.63
BR807	374428	364958	365570	353438	454874	394821	337370	369479	313431	349936	-1.20	0.13
BR809	130000	144545	227211	123962	238130	81330	172931	158945	157546	203738	1.69	0.03
BR811	19932	17403	15075	3609	9554	12368	15865	17487	18609	16372	2.51	0.02
BR812	176430	103727	101677	115106	194263	189045	108030	106137	129074	102649	-2.00	0.05
BR813	140243	129099	113199	85067	83556	107642	121609	91437	122191	221495	2.42	0.07
BR814	89492	130650	156924	68540	67472	68934	82000	78876	60675	112538	-3.70	0.13
BR815	-	-	-	128236	112122	112600	65762	133701	109705	133308	0.87	0.01

DISTRICT : GOMBAK

BR901	84191	94653	93476	74016	73100	69161	70271	85300	82766	83885	-1.00	0.07
BR902	137364	138783	146831	141362	159324	137870	150213	129345	144334	151486	0.34	0.03
BR903	59392	74505	70473	161988	50963	62931	62126	77375	139717	93510	3.81	0.09
BR904	6807	12805	12750	12604	15546	13038	15214	16004	13897	15104	5.62	0.48
BR905	222700	139965	143942	134311	148278	192982	150585	164292	276234	271289	4.73	0.27

SELANGOR

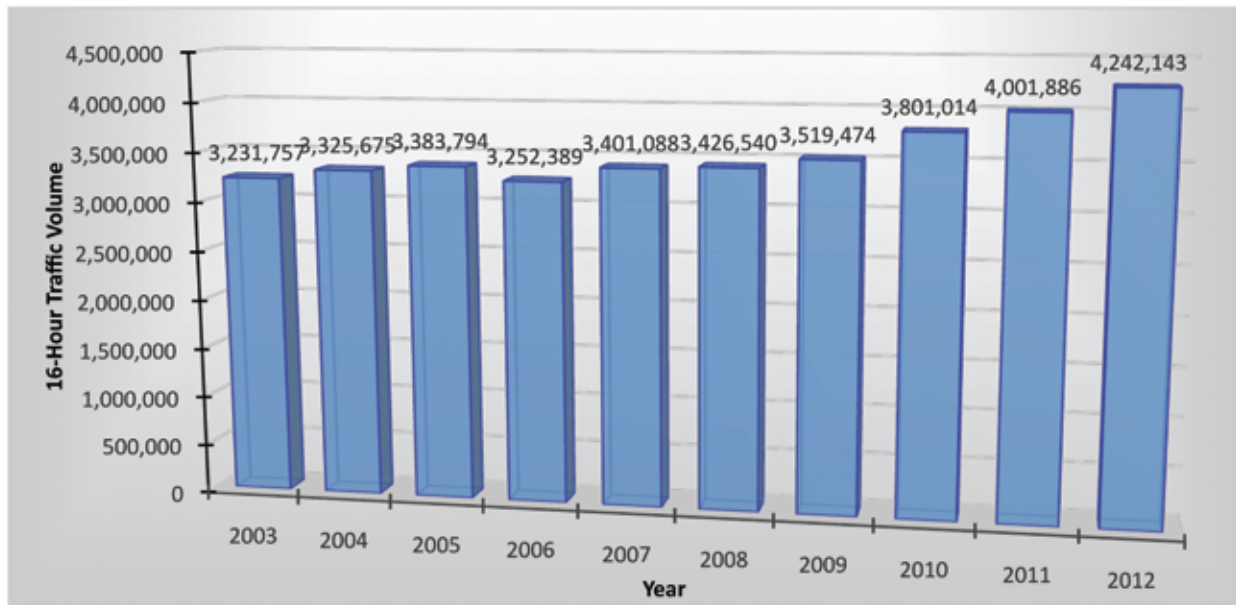


Figure 8 A : Selangor Yearly 16-hour Traffic Volume

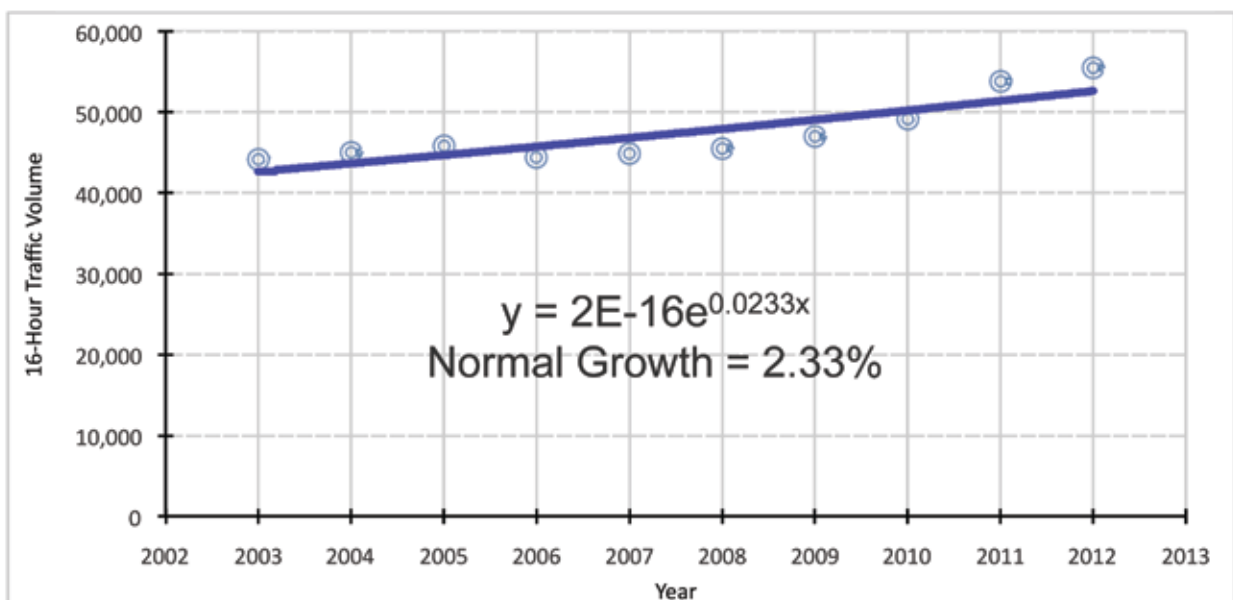
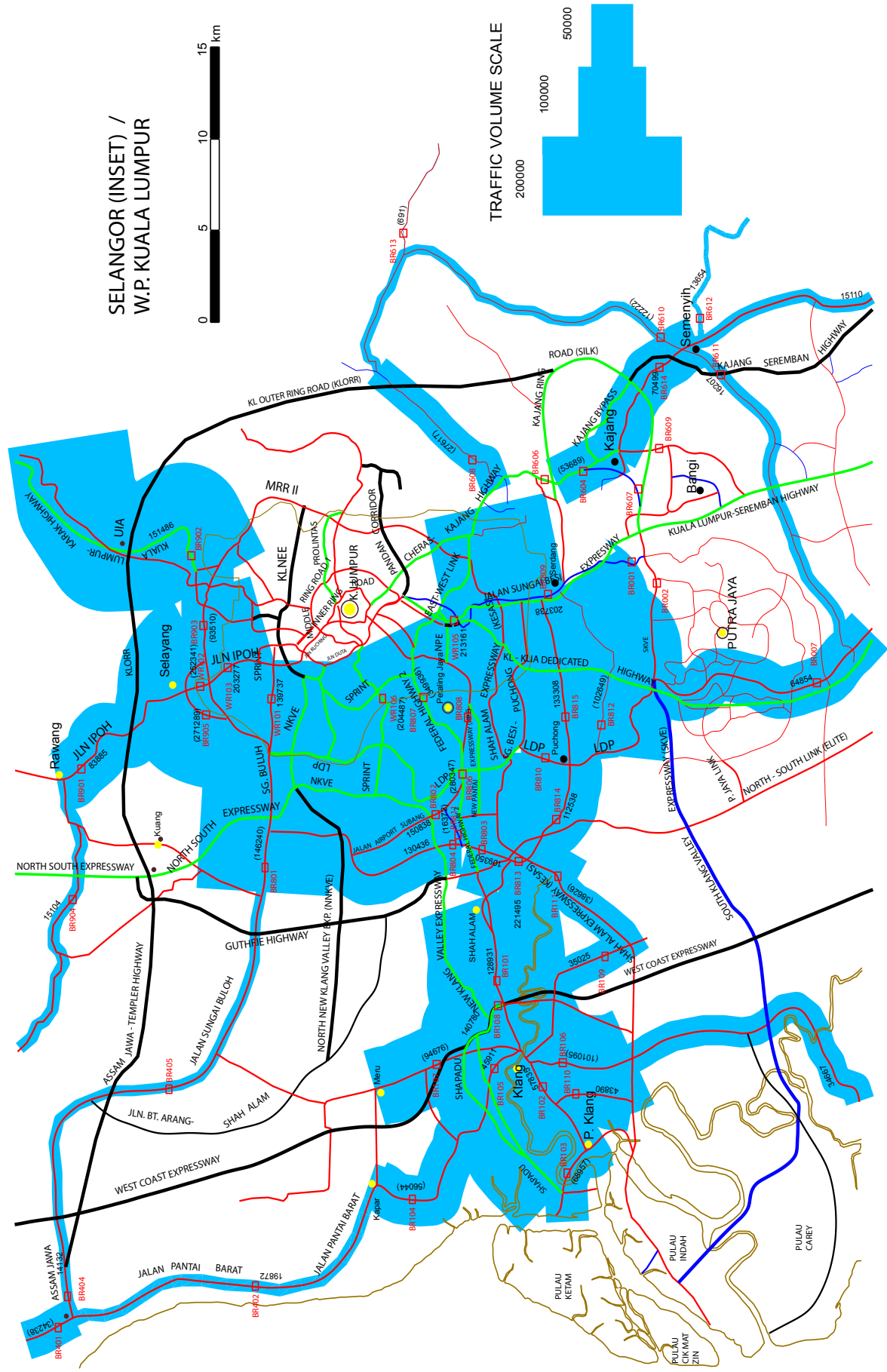


Figure 8 B : Selangor Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure B1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012

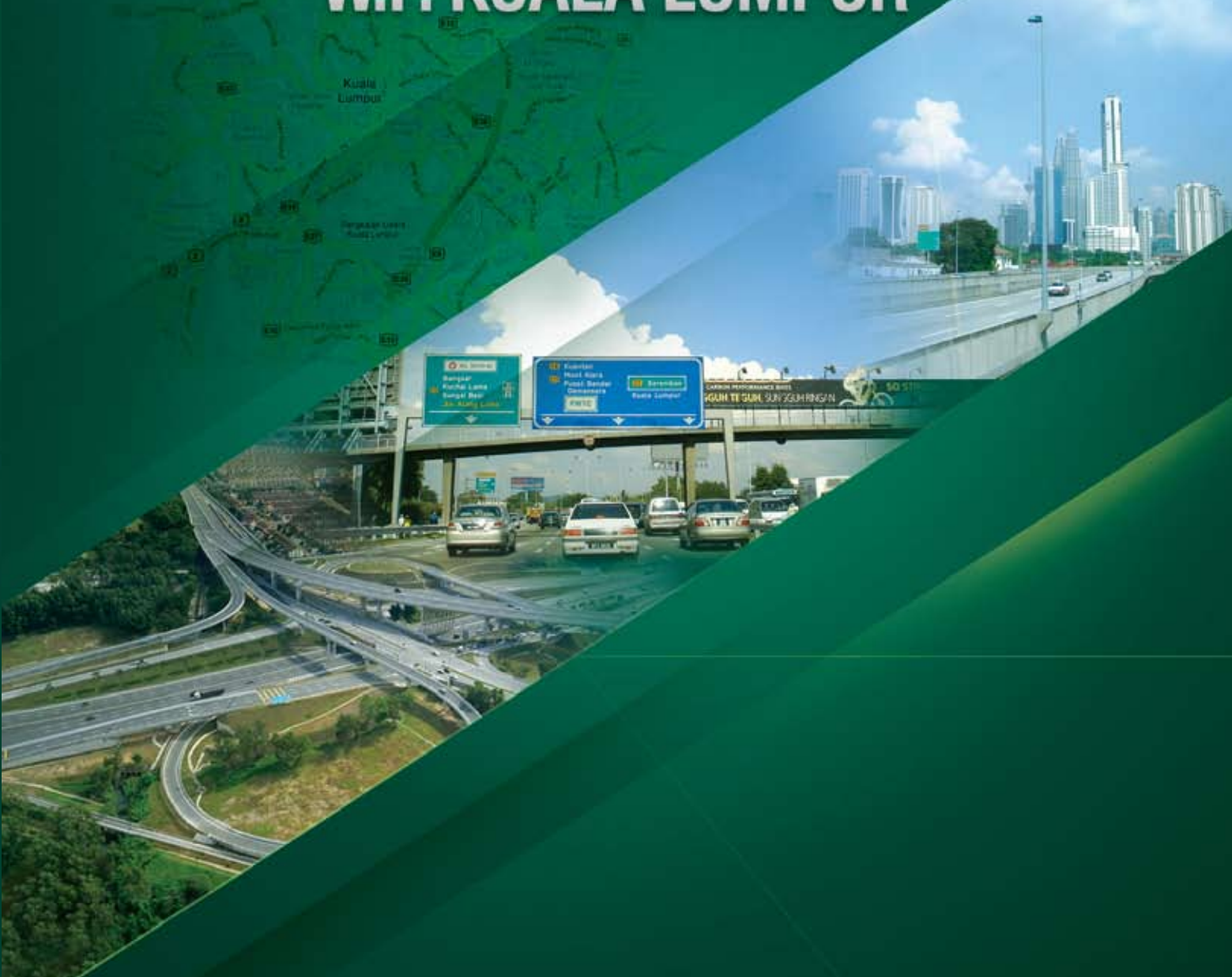


Figure B1(S) : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





W.P. KUALA LUMPUR



Distribution Of Survey Stations

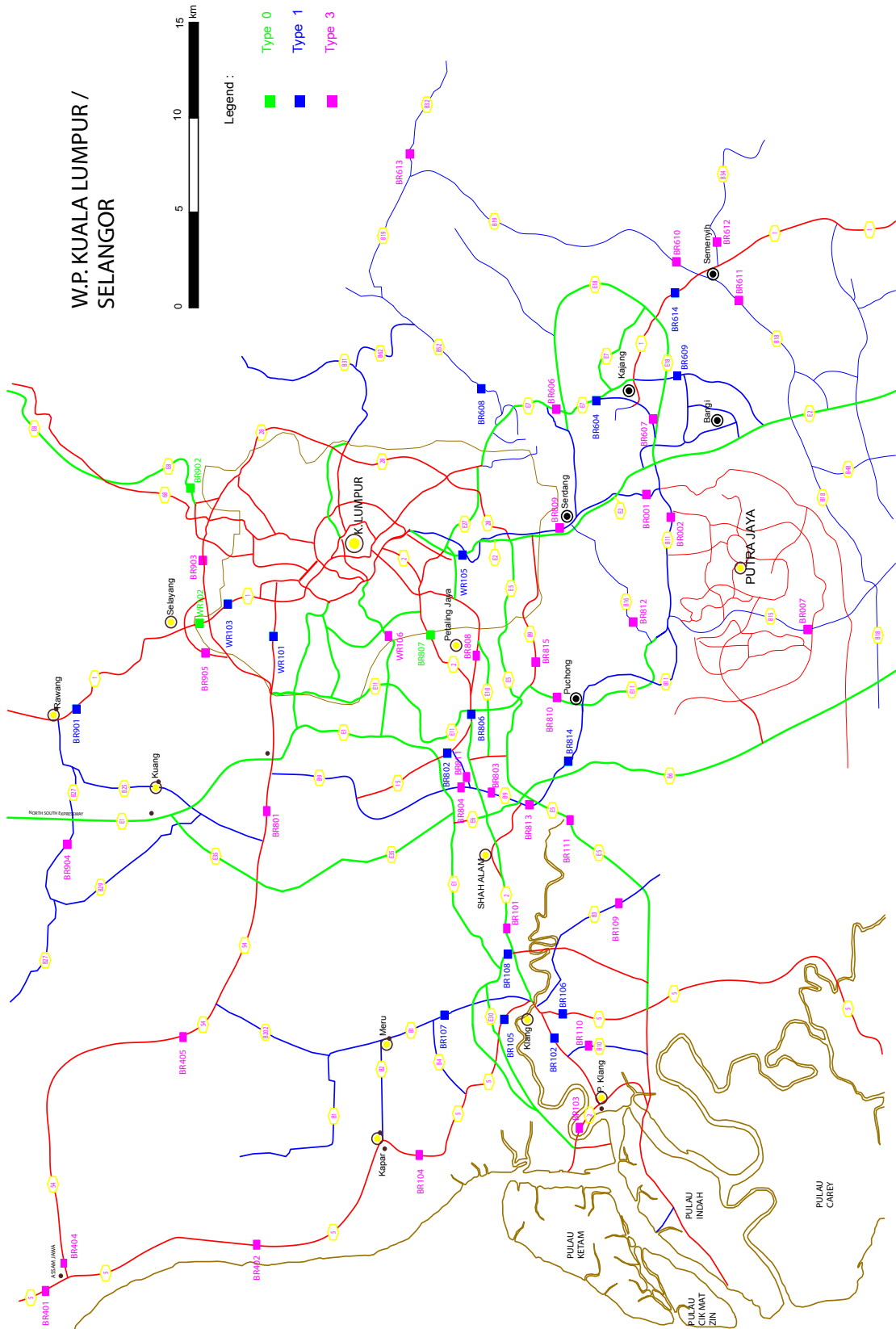
No.	State	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	W.P. KUALA LUMPUR	1	3	1	5
	TOTAL	1	3	1	5

Location Description For Traffic Census Stations

STATE : W.P. KUALA LUMPUR

Station Number	Survey Type	Route Number	KM	Description of Locations
WR101	1	54	8.9	Kuala Lumpur-Kuala Selangor (Jalan Kepong)
WR102	0	1	12.1	Kuala Lumpur-Ipoh
WR103	1	1	8.1	Kuala Lumpur-Ipoh
WR105	1	E2	8.1	Kuala Lumpur-Seremban Expressway
WR106	3	W106	8.1	Kuala Lumpur-Petaling Jaya (Old Damansara road)

Figure W : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

STATE : W.P. KUALA LUMPUR

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
WR101	-	145399	11237	1700-1800	71.4	6	2.7	0.6	0.7	18.6	100.0
WR102	288148	252214	18532	1300-1400	64.7	6.1	6.1	0.8	0.4	22.1	100.0
WR103	-	191969	14831	1700-1800	76.2	4.6	4.7	0.7	0.6	13.1	100.0
WR105	-	206930	17080	0800-0900	83.1	4.7	1.8	0.6	0.9	8.9	100.0
WR106	-	243218	21741	2100-2200	69.7	9.1	2.8	0.2	0.1	18.1	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

STATE : W.P. KUALA LUMPUR

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
WR101	-	134076	10379	1700-1800	74.7	6.9	2.2	0.3	0.7	15.3	100.0
WR102	300579	252467	17971	1000-1100	58.1	6.8	5.1	0.8	0.5	28.6	100.0
WR103	-	214585	16537	1800-1900	77.2	4.2	5	0.5	0.5	12.6	100.0
WR105	-	219391	19065	0800-0900	80.1	8.6	2	0.5	0.7	8.1	100.0
WR106	-	165755	13123	1700-1800	80.3	4	0.8	0.1	0.2	14.6	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

STATE : W.P. KUALA LUMPUR

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
WR101	139737	73.1	6.4	2.5	0.4	0.7	16.9	10808
WR102	252341	61.4	6.4	5.6	0.8	0.4	25.3	18252
WR103	203277	76.7	4.4	4.9	0.6	0.6	12.8	15684
WR105	213161	81.6	6.6	1.9	0.6	0.8	8.5	18072
WR106	204487	75	6.6	1.8	0.1	0.2	16.3	17432

Annual Growth Rate For Year 2012

STATE : W.P. KUALA LUMPUR

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
WR101	115,143	133,390	131161	129092	132245	138727	190272	153564	136860	139737	2.38	0.3
WR102	164,701	152,455	155016	150874	158754	161161	214746	277797	276092	252341	7.27	0.72
WR103	172,281	192,095	185828	206484	203986	205867	194287	196796	209224	203277	1.33	0.46
WR105	213,158	208,656	226019	244417	258867	229713	213522	201260	192649	213161	-1.01	0.12
WR106	239,620	290,341	274154	245799	290967	270123	239685	253903	225435	204487	-2.26	0.37

W.P. KUALA LUMPUR

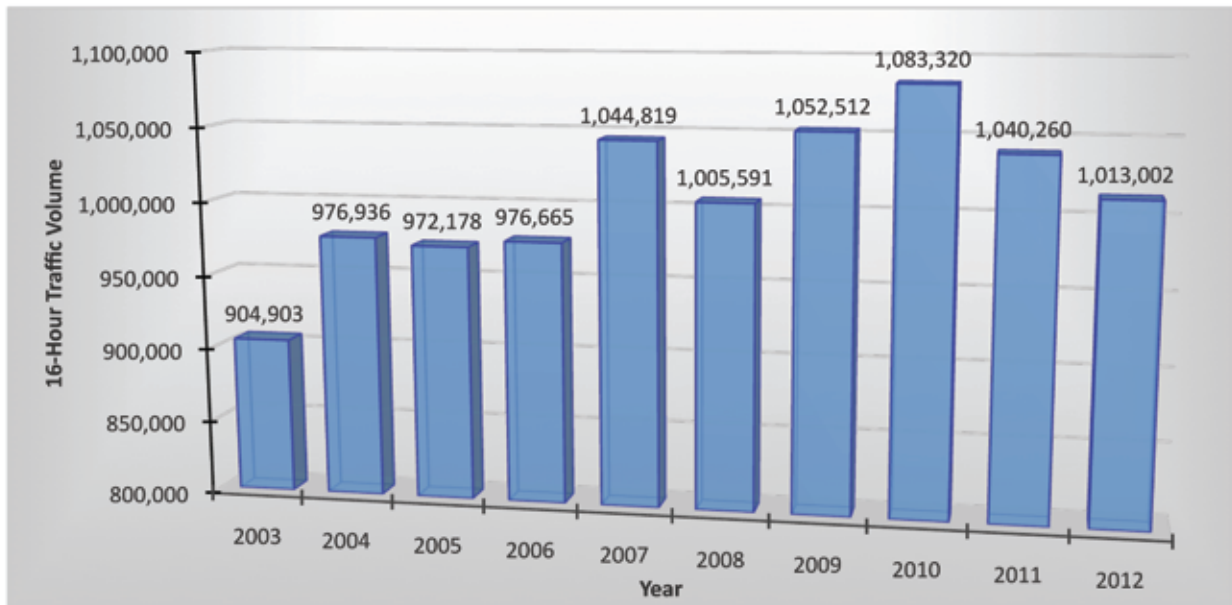


Figure 9 A : W.P. Kuala Lumpur Yearly 16-hour Traffic Volume

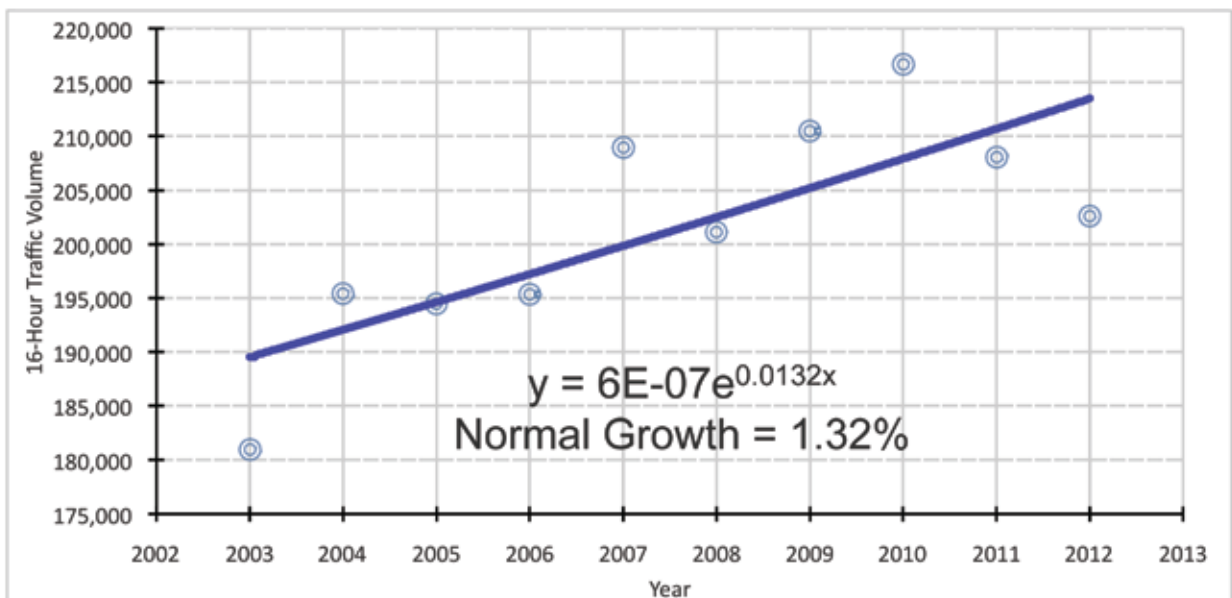
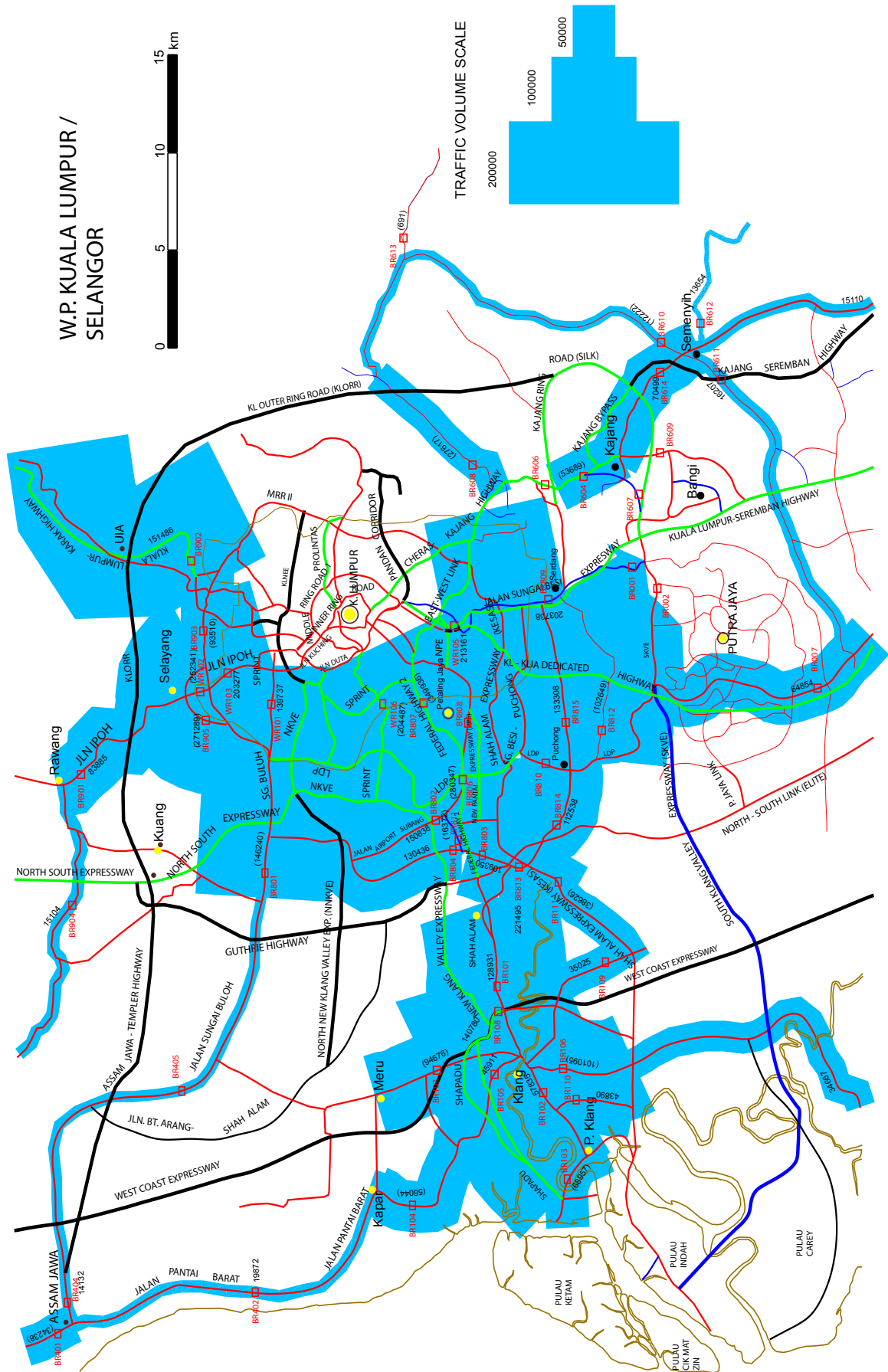


Figure 9 B : W.P. Kuala Lumpur Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure W1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





NEGERI SEMBILAN

NEGERI SEMBILAN



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	JELEBU	0	0	4	4
2	KUALA PILAH	0	1	4	5
3	PORT DICKSON	1	1	8	10
4	REMBAU	0	1	3	4
5	SEREMBAN	2	3	7	12
6	TAMPIN	0	2	4	6
7	JEMPOL	1	0	6	7
	TOTAL	4	8	36	48

Location Description For Traffic Census Stations

DISTRICT : JELEBU

Station Number	Survey Type	Route Number	KM	Description of Locations
NR101	3	N32	42.7	Seremban-Kuala Klawang-Kampung Titi
NR102	3	9	71.8	Seremban-Simpang Pertang-Durian Tipus
NR103	3	86	1.6	Kuala Klawang-Peradong
NR104	3	86	29	Seremban-Kuala Klawang

DISTRICT : KUALA PILAH

NR201	3	9	42.7	Seremban-Kuala Pilah-Batu Kikir
NR203	3	9	19.3	Tampin-Kuala Pilah
NR204	3	N17	25.8	Tampin-Bahau
NR205	1	51	33	Seremban-Kuala Pilah
NR206	3	N17	11.1	Kuala Pilah-Juasseh-Bahau

DISTRICT : PORT DICKSON

NR301	3	5	26.3	Port Dickson/Tanah Merah-Sepang
NR302	3	5	8.5	Port Dickson-Sepang
NR303	3	N6	4.8	Rantau-Siliau
NR304	3	53	10.2	Seremban-Port Dickson
NR305	3	5	4	Seremban-Port Dickson
NR306	3	5	41.6	Port Dickson-Jalan Pantai Barat
NR307	3	N7	28.7	Seremban-Rantau-Linggi
NR308	3	N8	16.1	Jalan Rantau/Linggi-camp Si Rusa-Port Dickson
NR309	0	5	6.4	Port Dickson-Jalan Pantai Barat
NR310	1	5	30.6	Seremban-Port Dickson (Port Dickson bypass)

DISTRICT : REMBAU

NR401	3	3	20.9	Seremban-Tampin
NR402	3	3	33	Seremban-Tampin
NR403	1	1	42.7	Seremban-Tampin
NR404	3	3	46.7	Seremban-Linggi-Lubok Cina

Location Description For Traffic Census Stations

DISTRICT : SEREMBAN

Station Number	Survey Type	Route Number	KM	Description of Locations
NR501	0	1	20	Seremban-Kuala Lumpur
NR502	1	1	8.5	Seremban-Kuala Lumpur (500m outside town area)
NR503	3	86	9.7	Seremban-Jelebu (1000m from Jalan Sikamat to Jelebu)
NR504	3	51	9.7	Seremban-Kuala Pilah
NR505	0	1	9.3	Seremban-Tampin (500m outside town area)
NR506	3	N7	1.6	Sungai Gadut-Ulu sawah
NR507	3	N5	11.3	Seremban-Kuala Sawah (at bridge 7/5)
NR508	1	53	11.4	Seremban-Port Dickson
NR509	3	N38	4.8	Seremban-Labu
NR510	1	1	0.5	Labu spur (just after junction to Labu from Seremban)
NR511	3	N97	2.5	Seremban-Paroi/Senawang
NR512	3			Bandar Baru Nilai-KLIA

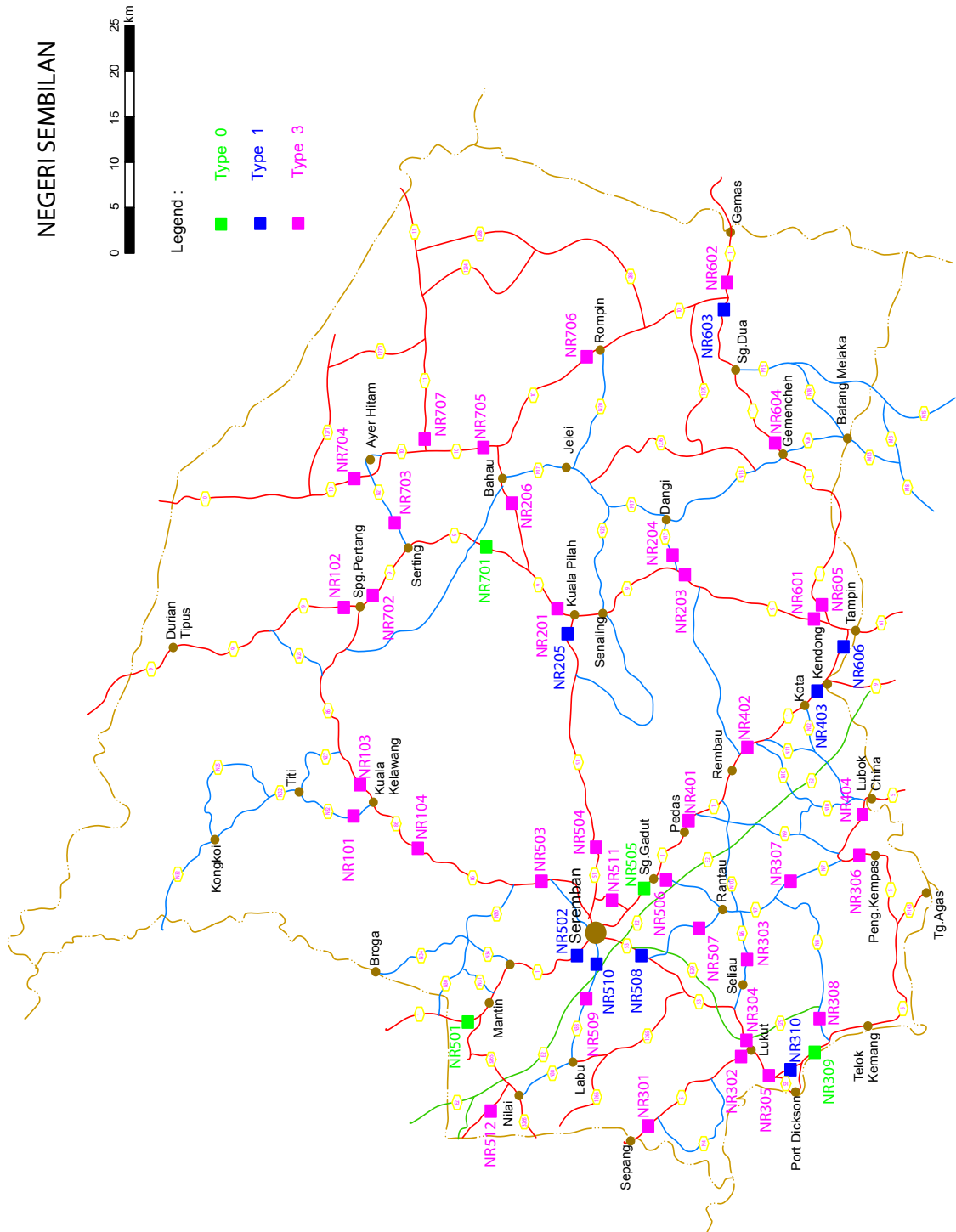
DISTRICT : TAMPIN

NR601	3	9	3.2	Route I-Kuala Pilah
NR602	3	1	96.8	Seremban-Gemas (140m east of Rompin junction)
NR603	1	1	95.8	Seremban-Gemas (60m east of Rompin junction)
NR604	3	1	77.3	Seremban-Gemas
NR605	3	1	52.8	Seremban-Gemas
NR606	1	1	46.5	Seremban-Tampin

DISTRICT : JEMPOL

NR701	0	9	55.5	Seremban-Batu Kikir-Bahau
NR702	3	9	70.8	Seremban-Kampong Serting-Kampong Klawang
NR703	3	N21	3.2	Kampong Serting-Kampong Ayer Hitam
NR704	3	10	16.9	Bahau-Ayer Hitam-Kemayan (north of Ayer Hitam)
NR705	3	10	4.8	Bahau-Kg. Ayer Hitam
NR706	3	10	82.1	Seremban-Bahau-Rompin
NR707	3	11	62.5	Seremban-Kuala Pilah-Bahau (Bahau-Keratong Highway)

Figure N : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : JELEBU

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
NR101	-	11883	1500	2100-2200	62.0	5.8	2.5	1.1	0.3	28.2	100.0
NR102	-	3942	432	2100-2200	50.6	11.5	7.7	8.0	0.8	21.3	100.0
NR103	-	9353	1461	2100-2200	54.8	10.1	4.4	1.8	0.8	28.0	100.0
NR104	-	5741	633	2100-2200	59.1	11.5	6.7	6.0	0.3	16.4	100.0

DISTRICT : KUALA PILAH

NR201	-	11761	952	1700-1800	74.3	5.7	3.4	2.0	1.8	12.9	100.0
NR203	-	4619	493	1500-1600	61.4	5.5	8.9	2.6	0.5	21.0	100.0
NR204	-	3297	285	1800-1900	61.3	4.7	3.9	0.8	0.7	28.6	100.0
NR205	-	24450	2047	1100-1200	72.9	7.7	4.8	2.5	0.8	11.3	100.0
NR206	-	9301	863	1700-1800	73.5	6.1	2.2	0.5	1.2	16.5	100.0

DISTRICT : PORT DICKSON

NR301	-	24931	4978	0800-0900	74.2	6.2	5.5	4.2	0.6	9.3	100.0
NR302	-	33721	3557	0700-0800	69.3	6.8	6.8	4.2	0.5	12.4	100.0
NR303	-	6533	552	1400-1500	45.1	11.0	5.6	2.5	1.1	34.7	100.0
NR304	-	53881	4854	1800-1900	76.1	4.8	4.0	3.3	0.8	11.0	100.0
NR305	-	98052	13004	0700-0800	82.5	3.9	2.7	3.0	0.6	7.3	100.0
NR306	-	4236	586	1800-1900	48.1	12.0	4.5	2.2	1.4	31.7	100.0
NR307	-	4664	535	0700-0800	52.6	12.4	5.2	2.5	1.2	26.1	100.0
NR308	-	8074	969	1700-1800	61.6	9.8	2.0	0.6	0.9	25.1	100.0
NR309	29914	26571	2335	1700-1800	65.4	9.3	2.3	0.5	0.5	22.0	100.0
NR310	-	17192	1607	0700-0800	65.7	9.5	2.3	3.2	0.7	18.6	100.0

DISTRICT : REMBAU

NR401	-	15592	1725	2100-2200	65.6	8.2	6.5	2.3	0.8	16.6	100.0
NR402	-	10113	1037	1700-1800	63.8	8.4	10.0	5.2	1.2	11.4	100.0
NR403	-	13096	1152	1700-1800	67.4	8.3	8.9	3.4	0.9	11.1	100.0
NR404	-	2565	218	2100-2200	48.1	9.2	14.1	9.0	2.3	17.3	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : SEREMBAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
NR501	12616	11383	1048	0700-0800	57.5	8.2	11.8	5.1	1.2	16.2	100.0
NR502	-	39215	3018	1800-1900	70.7	4.9	4.9	0.4	0.4	18.7	100.0
NR503	-	13237	1372	1200-1300	73.8	6.6	3.3	0.5	0.4	15.3	100.0
NR504	-	21947	2064	0700-0800	68.4	6.5	5.5	6.4	1.0	12.2	100.0
NR505	72520	68576	5898	1700-1800	73.1	6.8	6.7	3.6	0.4	9.5	100.0
NR506	-	24782	3561	1000-1100	62.5	7.6	7.1	1.2	0.5	21.2	100.0
NR507	-	17572	1618	0700-0800	56.6	7.6	8.7	3.6	0.7	22.7	100.0
NR508	-	16578	1429	1700-1800	65.9	5.0	5.8	1.3	0.9	21.2	100.0
NR509	-	26472	2416	0700-0800	65.8	7.8	7.0	2.8	0.4	16.1	100.0
NR510	-	57707	4456	0700-0800	80.2	3.3	2.4	0.4	1.5	12.2	100.0
NR511	-	19433	2111	0700-0800	70.9	6.2	5.0	1.4	0.3	16.2	100.0
NR512	-	26148	2386	1300-1400	74.2	6.0	4.0	1.6	0.5	13.6	100.0

DISTRICT : TAMPIN

NR601	-	4268	397	0700-0800	60.1	7.0	6.5	4.1	1.1	21.1	100.0
NR602	-	11458	1007	0700-0800	53.8	12.9	10.4	7.5	1.0	14.4	100.0
NR603	-	11438	920	1700-1800	57.4	12.5	9.5	6.1	0.9	13.5	100.0
NR604	-	11232	901	0700-0800	51.0	11.4	10.4	6.4	1.1	19.8	100.0
NR605	-	10306	904	0700-0800	65.6	7.1	6.3	3.3	0.7	16.9	100.0
NR606	-	14813	1254	1700-1800	72.7	4.5	6.3	2.7	0.9	12.8	100.0

DISTRICT : JEMPOL

NR701	22410	20364	1620	1200-1300	58.5	15.6	6.2	3.9	0.4	15.3	100.0
NR702	-	4343	393	2100-2200	45.2	16.8	10.3	9.5	0.7	17.5	100.0
NR703	-	3605	351	2100-2200	51.2	12.4	7.9	8.4	0.1	20.0	100.0
NR704	-	7773	734	1700-1800	54.4	11.8	8.2	8.1	1.1	16.4	100.0
NR705	-	23006	2133	2100-2200	51.9	16.6	9.0	4.8	0.4	17.3	100.0
NR706	-	9555	862	2100-2200	57.1	14.1	7.2	4.9	0.5	16.3	100.0
NR707	-	12673	1230	2100-2200	53.1	15.0	7.7	8.9	0.5	14.7	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : JELEBU

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
NR101	-	13222	1240	2100-2200	58.5	4.6	4.3	0.7	0.3	31.6	100.0
NR102	-	4945	452	2100-2200	46.8	8.9	9.9	9.3	0.8	24.3	100.0
NR103	-	9618	1262	2100-2200	50.2	9.0	4.9	4.0	0.5	31.3	100.0
NR104	-	6868	799	2100-2200	61.4	11.3	6.2	5.2	0.5	15.4	100.0

DISTRICT : KUALA PILAH

NR201	-	14347	1349	2100-2200	69.1	5.3	5.9	5.2	1.4	13.1	100.0
NR203	-	4857	490	1700-1800	60.2	5.8	8.6	4.3	0.6	20.4	100.0
NR204	-	4045	389	1700-1800	49.3	5.9	9.9	4.1	0.8	30.1	100.0
NR205	-	24708	2224	1700-1800	72.2	7.6	5.1	2.7	1.0	11.4	100.0
NR206	-	9103	761	2100-2200	71.1	7.8	4.8	2.3	1.4	12.6	100.0

DISTRICT : PORT DICKSON

NR301	-	29890	3253	2100-2200	74.5	6.8	4.6	2.7	0.7	10.7	100.0
NR302	-	44916	4720	2100-2200	72.9	8.7	5.5	3.9	0.7	8.3	100.0
NR303	-	4801	428	2100-2200	44.3	12.8	8.7	3.8	0.9	29.5	100.0
NR304	-	54906	6364	1300-1400	79.5	6.8	4.1	3.5	0.9	5.2	100.0
NR305	-	95317	8896	2100-2200	81.3	5.3	3.3	2.7	0.5	6.9	100.0
NR306	-	3525	438	2100-2200	42.9	9.8	13.8	1.7	1.4	30.4	100.0
NR307	-	3362	402	2100-2200	52.0	10.6	10.4	3.6	1.1	22.3	100.0
NR308	-	8831	881	1700-1800	50.1	6.8	2.9	0.3	0.3	39.6	100.0
NR309	31912	28163	2496	1700-1800	66.0	10.0	2.5	0.3	0.5	20.7	100.0
NR310	-	21315	2076	0700-0800	59.2	13.2	1.8	3.0	0.7	22.1	100.0

DISTRICT : REMBAU

NR401	-	18120	1887	2100-2200	62.8	8.3	7.2	2.6	0.7	18.3	100.0
NR402	-	13436	2495	1900-2000	66.5	8.6	9.2	3.8	0.8	11.0	100.0
NR403	-	12568	1072	1700-1800	68.2	8.6	8.0	3.6	1.0	10.7	100.0
NR404	-	2782	268	1700-1800	57.6	9.0	11.6	6.2	0.7	15.0	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : SEREMBAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
NR501	12676	11411	1121	0700-0800	60.2	7.4	8.5	6.6	0.8	16.5	100.0
NR502	-	40354	3205	1800-1900	71.1	5.0	5.0	0.3	0.3	18.3	100.0
NR503	-	10527	921	2100-2200	71.8	7.9	2.4	0.4	0.5	16.9	100.0
NR504	-	17899	1648	2100-2200	66.3	8.0	7.8	3.9	1.2	12.8	100.0
NR505	50764	46702	3835	0700-0800	66.7	7.6	8.2	3.7	0.6	13.2	100.0
NR506	-	19822	2095	2100-2200	59.3	13.2	7.9	1.7	0.5	17.3	100.0
NR507	-	18815	1961	2100-2200	54.0	10.8	8.7	3.4	0.6	22.4	100.0
NR508	-	16120	1449	1700-1800	66.3	4.9	5.7	1.6	0.9	20.6	100.0
NR509	-	24274	2186	2100-2200	62.6	11.2	7.0	3.2	0.4	15.7	100.0
NR510	-	63477	4507	1300-1400	81.2	2.1	2.4	0.5	1.3	12.6	100.0
NR511	-	18654	2222	2100-2200	67.5	10.0	4.6	1.6	0.2	16.0	100.0
NR512	-	23948	2027	1300-1400	68.3	8.9	4.7	2.6	0.5	15.0	100.0

DISTRICT : TAMPIN

NR601	-	4085	355	1700-1800	62.0	7.2	7.0	3.2	1.0	19.6	100.0
NR602	-	11770	1031	2100-2200	48.9	13.6	9.3	9.8	0.8	17.6	100.0
NR603	-	12193	1019	1700-1800	56.9	13.0	8.9	8.2	0.8	12.2	100.0
NR604	-	10782	967	1700-1800	56.1	14.7	7.8	7.5	0.8	13.1	100.0
NR605	-	9481	791	2100-2200	65.9	7.2	6.2	3.8	0.7	16.2	100.0
NR606	-	15117	1355	1700-1800	73.3	4.8	5.7	2.6	1.0	12.5	100.0

DISTRICT : JEMPOL

NR701	21059	18754	1493	0700-0800	62.9	10.5	5.4	4.7	0.7	15.9	100.0
NR702		6439	577	1700-1800	40.7	15.0	11.9	16.4	0.4	15.6	100.0
NR703		5039	432	2100-2200	42.3	11.7	8.8	17.3	0.1	19.9	100.0
NR704		8371	755	2100-2200	47.8	14.8	6.7	8.1	0.7	21.9	100.0
NR705		30890	2462	2100-2200	55.3	16.0	6.9	4.2	0.7	16.9	100.0
NR706		6765	654	2100-2200	64.4	9.4	5.6	7.6	0.6	12.4	100.0
NR707		9110	792	1700-1800	52.4	16.9	8.9	7.9	1.4	12.4	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : JELEBU

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
NR101	12553	60.3	5.2	3.4	0.9	0.3	29.9	1370
NR102	4444	48.7	10.2	8.8	8.7	0.8	22.8	442
NR103	9486	52.5	9.6	4.7	2.9	0.7	29.6	1362
NR104	6305	60.3	11.4	6.5	5.6	0.4	15.9	716

DISTRICT : KUALA PILAH

NR201	13054	71.7	5.5	4.6	3.6	1.6	13.0	1151
NR203	4738	60.8	5.7	8.8	3.5	0.6	20.7	492
NR204	3671	55.3	5.3	6.9	2.4	0.7	29.3	337
NR205	24579	72.6	7.6	5.0	2.6	0.9	11.3	2135
NR206	9202	72.3	7.0	3.5	1.4	1.3	14.5	812

DISTRICT : PORT DICKSON

NR301	27411	74.4	6.5	5.0	3.5	0.6	10.0	4116
NR302	39319	71.1	7.7	6.1	4.1	0.6	10.3	4139
NR303	5667	44.7	11.9	7.1	3.2	1.0	32.1	490
NR304	54394	77.8	5.8	4.1	3.4	0.8	8.1	5609
NR305	96685	81.9	4.6	3.0	2.8	0.5	7.1	10950
NR306	3881	45.5	10.9	9.1	2.0	1.4	31.1	512
NR307	4013	52.3	11.5	7.8	3.1	1.1	24.2	469
NR308	8453	55.8	8.3	2.4	0.5	0.6	32.4	925
NR309	27367	65.7	9.7	2.4	0.4	0.5	21.3	2415
NR310	19254	62.5	11.3	2.0	3.1	0.7	20.3	1841

DISTRICT : REMBAU

NR401	16856	64.2	8.2	6.8	2.4	0.8	17.5	1806
NR402	11775	65.2	8.5	9.6	4.5	1.0	11.2	1766
NR403	12832	67.8	8.4	8.4	3.5	1.0	10.9	1112
NR404	2674	52.9	9.1	12.8	7.6	1.5	16.2	243

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : SEREMBAN

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
NR501	11397	58.8	7.8	10.2	5.9	1.0	16.3	1084
NR502	39784	70.9	5.0	4.9	0.3	0.3	18.5	3112
NR503	11882	72.8	7.3	2.9	0.5	0.5	16.1	1147
NR504	19923	67.3	7.3	6.7	5.1	1.1	12.5	1856
NR505	57639	69.9	7.2	7.5	3.6	0.5	11.4	4867
NR506	22302	60.9	10.4	7.5	1.5	0.5	19.3	2828
NR507	18194	55.3	9.2	8.7	3.5	0.7	22.6	1790
NR508	16349	66.1	4.9	5.7	1.4	0.9	20.9	1439
NR509	25373	64.2	9.5	7.0	3.0	0.4	15.9	2301
NR510	60592	80.7	2.7	2.4	0.5	1.4	12.4	4482
NR511	19044	69.2	8.1	4.8	1.5	0.3	16.1	2167
NR512	25048	71.3	7.4	4.4	2.1	0.5	14.3	2207

DISTRICT : TAMPIN

NR601	4177	61.1	7.1	6.8	3.6	1.1	20.4	376
NR602	11614	51.3	13.2	9.8	8.7	0.9	16.0	1019
NR603	11816	57.1	12.8	9.2	7.1	0.9	12.9	969
NR604	11007	53.5	13.1	9.1	6.9	0.9	16.5	934
NR605	9894	65.8	7.1	6.3	3.6	0.7	16.6	848
NR606	14965	73.0	4.7	6.0	2.7	0.9	12.7	1304

DISTRICT : JEMPOL

NR701	19559	60.7	13.0	5.8	4.3	0.5	15.6	1557
NR702	5391	42.9	15.9	11.1	12.9	0.6	16.5	485
NR703	4322	46.7	12.1	8.3	12.9	0.1	19.9	392
NR704	8072	51.1	13.3	7.5	8.1	0.9	19.1	745
NR705	26948	53.6	16.3	7.9	4.5	0.6	17.1	2298
NR706	8160	60.7	11.7	6.4	6.2	0.5	14.4	758
NR707	10892	52.8	16.0	8.3	8.4	1.0	13.6	1011

Annual Growth Rate For Year 2012

DISTRICT : JELEBU

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
NR101	10323	8968	9441	11925	11955	13053	13221	15191	12810	12553	4.26	0.62
NR102	3511	3751	3947	4573	3836	3689	3636	3588	4135	4444	0.97	0.11
NR103	6211	4887	4590	7948	6338	7442	8312	9454	9899	9486	7.67	0.72
NR104	3538	3737	3648	4295	4574	5081	6795	6104	6527	6305	7.97	0.89

DISTRICT : KUALA PILAH

NR201	12854	13639	13206	13502	13311	15078	15159	18275	16325	13054	2.12	0.31
NR203	5019	4155	4145	4473	4927	4626	3847	3177	5212	4738	-0.47	0.01
NR204	3625	3599	3218	3487	2678	2858	2707	2823	3255	3671	-1.17	0.08
NR205	16573	18579	17736	18423	19251	19844	19809	21601	23422	24579	3.88	0.91
NR206	7906	9192	8262	8102	8909	8417	7219	8339	10185	9202	1.05	0.11

DISTRICT : PORT DICKSON

NR301	16758	16895	17076	20348	28788	28144	28268	35671	17207	27411	5.58	0.35
NR302	25153	26783	27663	35071	48624	38945	51177	46261	36334	39319	5.84	0.49
NR303	4715	5355	4662	5228	4643	4724	5802	5165	5574	5667	1.68	0.35
NR304	34421	41492	41562	47909	58328	68327	67092	65580	46201	54394	5.04	0.42
NR305	68909	84438	78375	86761	98122	106925	102377	106143	72372	96685	2.47	0.22
NR306	3958	3728	3530	3777	3823	3778	4248	4093	4871	3881	1.68	0.32
NR307	3662	3956	3547	3822	3488	3877	4352	4377	5105	4013	2.52	0.44
NR308	5808	4719	4244	5273	5017	5289	8097	6699	7353	8453	6.12	0.61
NR309	25664	26278	26462	23078	24011	27032	32047	26376	26645	27367	1.07	0.14
NR310	18167	19011	17555	16853	19246	17693	19613	17602	20705	19254	0.91	0.19

DISTRICT : REMBAU

NR401	18973	16227	17140	18424	21891	15867	18231	16353	17326	16856	-0.72	0.05
NR402	11328	11191	11701	11755	12051	11614	11621	11678	12620	11775	0.67	0.38
NR403	13733	13076	13191	13074	13456	12990	13073	12690	12565	12832	-0.68	0.61
NR404	2402	2458	2730	2612	2382	2631	2848	2694	2913	2674	1.48	0.44

Annual Growth Rate For Year 2012

DISTRICT : SEREMBAN

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
NR501	13495	13300	13410	14844	15418	14329	12530	12052	11964	11397	-2.05	0.39
NR502	40797	47013	48228	42087	41477	40839	44119	43126	42148	39784	-0.86	0.17
NR503	8115	8652	8320	6647	7009	24952	9793	10778	14080	11882	6.40	0.25
NR504	12934	19146	18195	12955	14104	18121	17048	17423	18817	19923	2.80	0.27
NR505	40978	42440	43096	39714	38284	38197	33697	35708	38378	57639	0.56	0.01
NR506	10047	13876	13634	17299	16542	16955	16879	20621	22052	22302	7.54	0.87
NR507	11144	12176	11587	12215	13261	14115	15974	17087	17825	18194	5.99	0.95
NR508	12191	12736	12687	12811	13023	13264	6218	14728	15310	16349	1.53	0.03
NR509	10205	13388	14045	14315	17259	18692	14456	21511	22881	25373	8.60	0.85
NR510	58822	57405	60078	61845	64193	65787	67554	58814	58337	60592	0.34	0.04
NR511	-	-	-	19515	19171	19362	20111	17400	17875	19044	-1.14	0.23
NR512	-	-	-	13856	15724	18200	18414	21625	25022	25048	10.28	0.97

DISTRICT : TAMPIN

NR601	3669	4560	3840	3782	3911	4218	4504	4040	4096	4177	0.77	0.11
NR602	8009	8553	4997	8477	9234	10161	10632	10726	10240	11614	5.58	0.49
NR603	8636	8547	8401	9625	9635	10331	10723	10231	10855	11816	3.56	0.89
NR604	9721	10741	5347	9206	10171	10580	11050	11312	10837	11007	3.34	0.21
NR605	9122	9599	8876	8590	9089	9349	9359	9721	10055	9894	1.09	0.44
NR606	13196	11614	12507	14052	13689	14890	14431	13993	15056	14965	2.23	0.64

DISTRICT : JEMPOL

NR701	14034	14785	15846	14803	14349	15388	15845	16407	16020	19559	2.42	0.61
NR702	4182	5800	4885	4326	5039	5645	5865	5739	6242	5391	2.81	0.40
NR703	2849	2944	3229	4635	2719	3203	5933	6629	4667	4322	6.96	0.44
NR704	9644	8448	8160	10333	9114	7098	7103	7304	8321	8072	-2.20	0.27
NR705	25381	20048	20832	24966	25634	24334	26119	21951	21282	26948	0.79	0.05
NR706	5936	5830	6566	8537	9132	10743	9510	7911	8456	8160	4.17	0.39
NR707	19155	16844	18974	15339	11943	9087	9094	12438	12944	10892	-6.59	0.53

NEGERI SEMBILAN

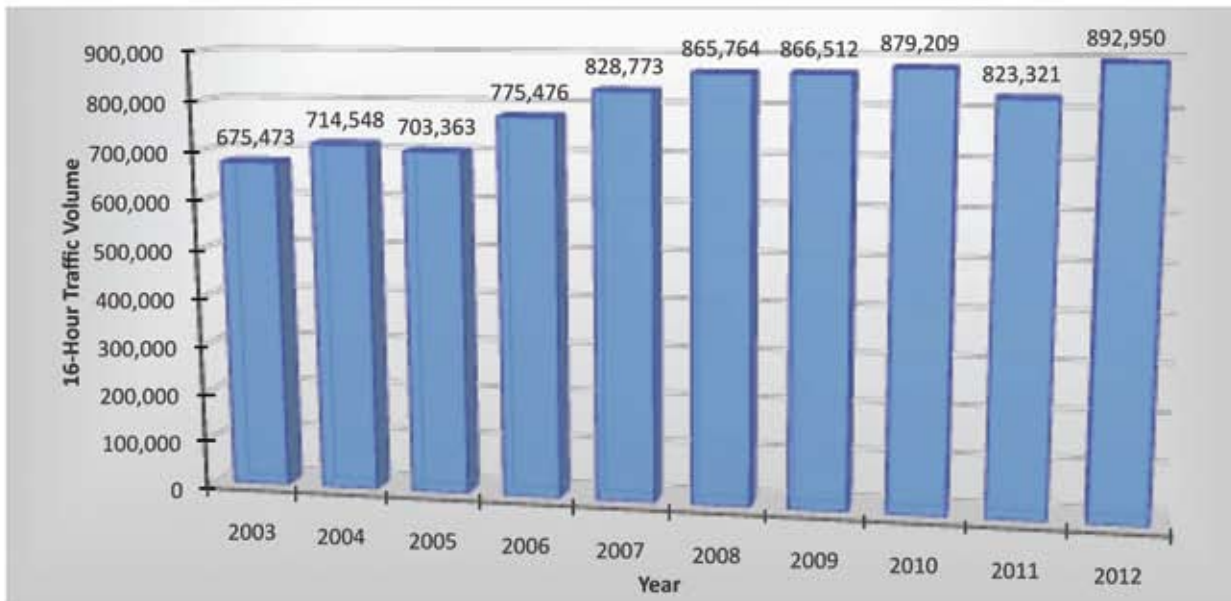


Figure 10 A : Negeri Sembilan Yearly 16-hour Traffic Volume

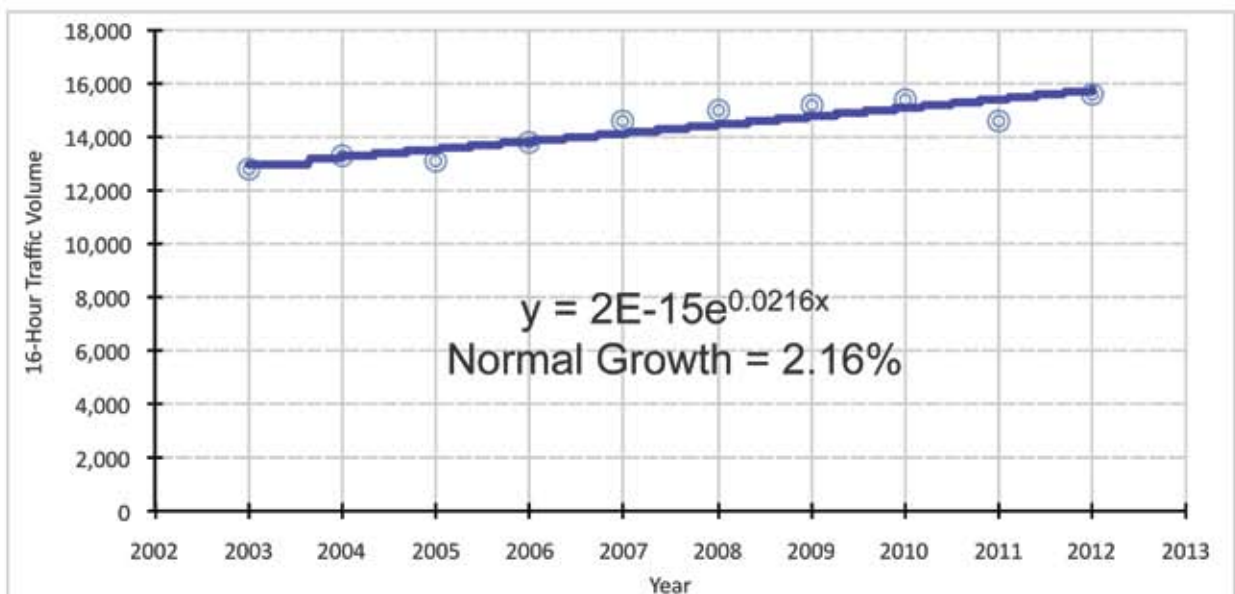
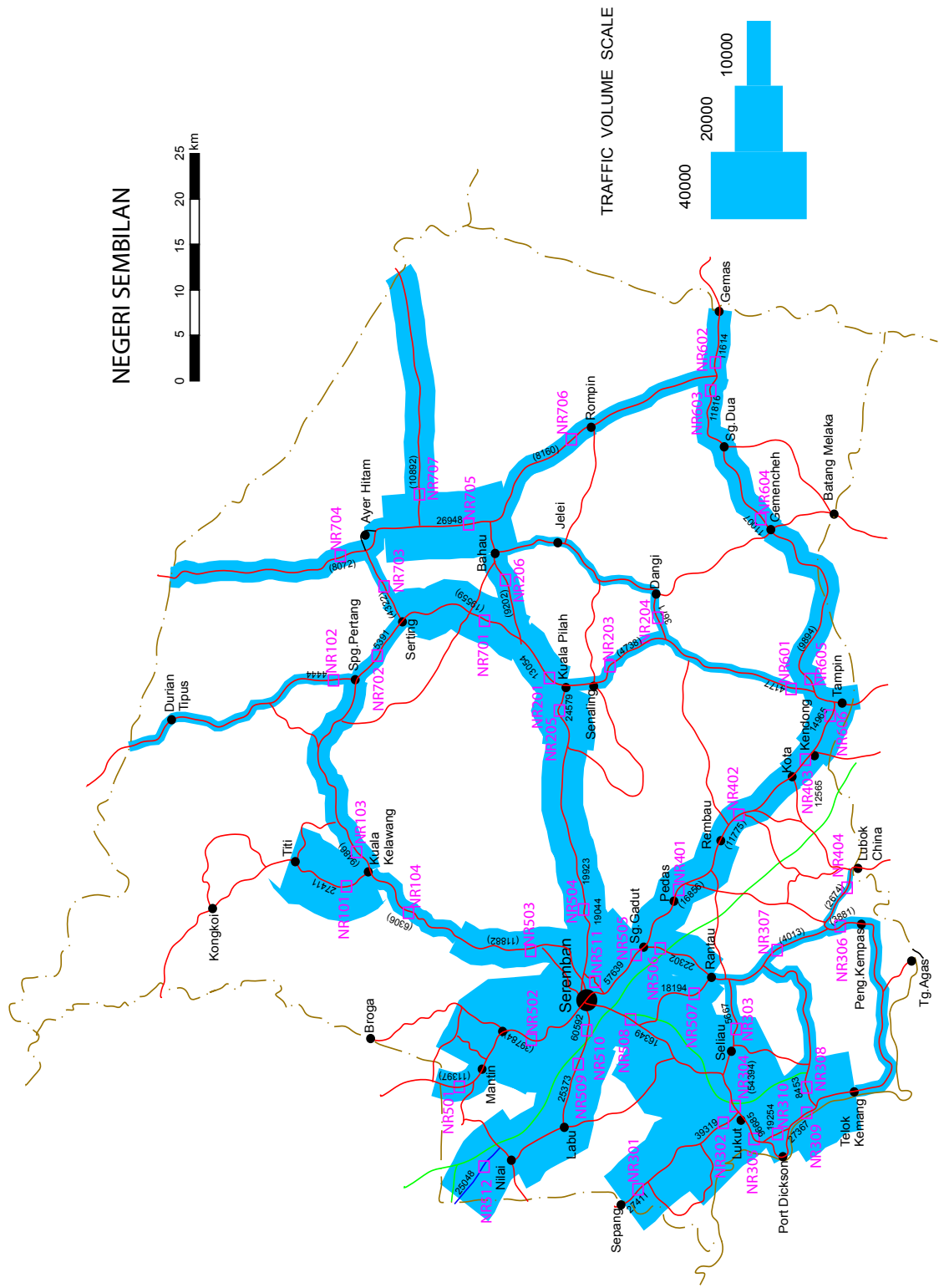


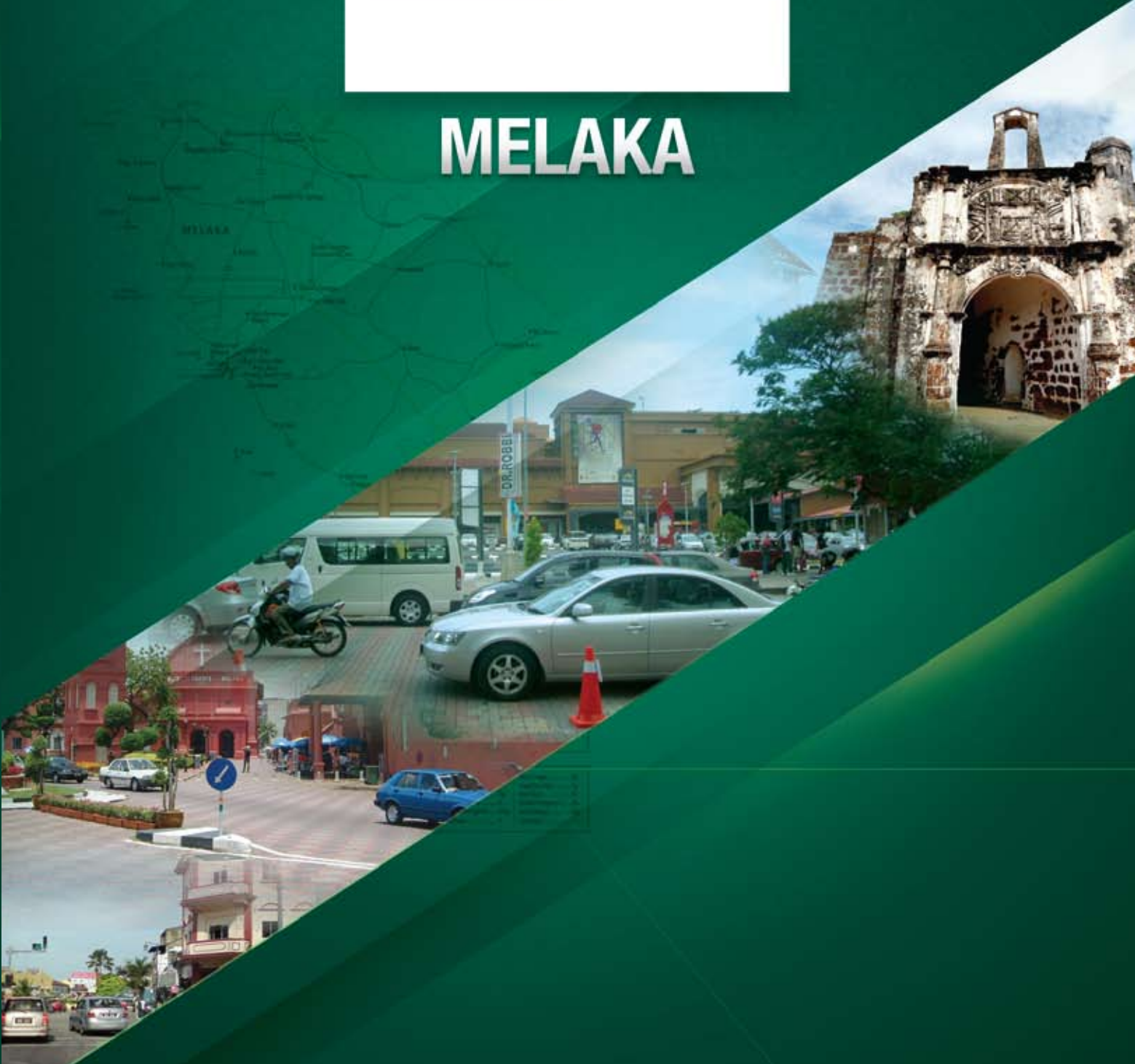
Figure 10 B : Negeri Sembilan Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure N1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





MELAKA



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	MELAKA TENGAH	0	3	7	10
2	JASIN	2	0	7	9
3	ALOR GAJAH	1	0	12	13
	TOTAL	3	3	26	32

Location Description For Traffic Census Stations

DISTRICT : MELAKA TENGAH

Station Number	Survey Type	Route Number	KM	Description of Locations
MR101	3	5	14.2	Melaka-Masjid Tanah
MR102	1	5	5.2	Melaka-Masjid Tanah
MR103	3	19	11.3	Melaka-Kendong
MR104	1	19	5	Melaka-Kendong
MR105	3	M2	9.7	Melaka-Durian Tunggal
MR106	3	M144	14	Jalan Bukit Katil (JPJ)
MR107	3	144	9.7	Kandang Jasin
MR108	3	5	12.1	Melaka-Muar
MR109	3	M100	4	Melaka-Padang Temu-Alai
MR110	1	19	3.2	Melaka-Muar

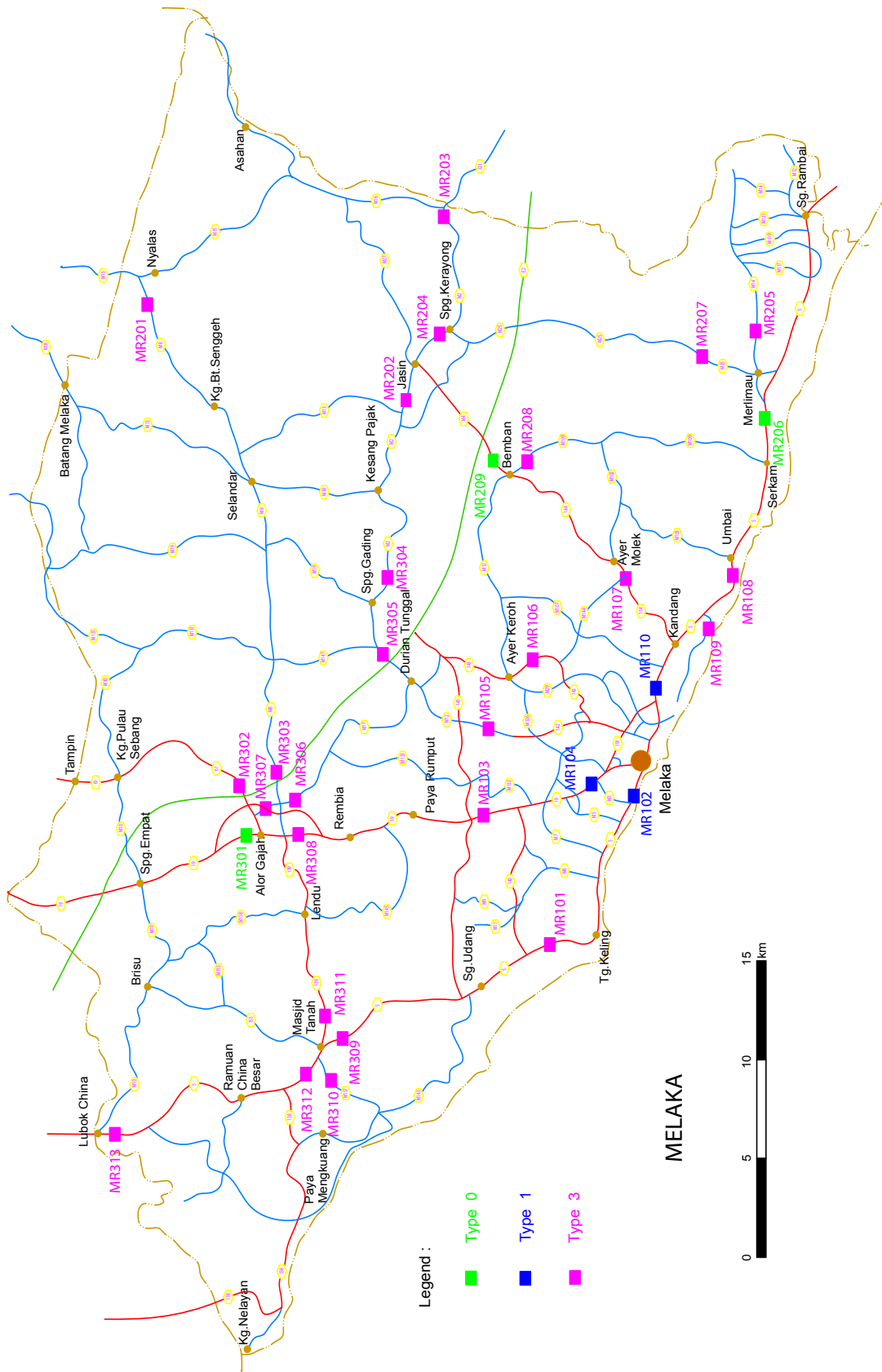
DISTRICT : JASIN

MR201	3	M8	38.6	Selandar-Nyalas
MR202	3	M2	35.4	Durian Tunggal-Jasin
MR203	3	M2	38.6	Jasin-Kampung Chohong
MR204	3	M2	32.2	Jasin-Simpang Kerayong
MR205	3	M14	24.2	Merlimau-Batu Gajah
MR206	0	5	22.9	Melaka-Muar
MR207	3	M25	24.2	Merlimau-Jasin
MR208	3	M109	32.2	Serkam-Bemban
MR209	0	144	2.1	Bemban-Jasin

DISTRICT : ALOR GAJAH

MR301	0	19	25	Melaka-Kendong
MR302	3	61	25.8	Melaka-Alor Gajah-Tampin
MR303	3	M8	34.3	Melaka-Macap-Alor Gajah
MR304	3	M2	20.9	Melaka-Simpang Gading-Kesang Pajak
MR305	3	M2	17.7	Melaka-Simpang Gading-Kesang Pajak
MR306	3	M17	25.8	Melaka-Durian Tunggal-Alor Gajah
MR307	3	M17	27.4	Melaka-Durian Tunggal-Alor Gajah
MR308	3	19	22.5	Melaka-Alor Gajah
MR309	3	5	27.4	Melaka-Masjid Tanah
MR310	3	157	30.6	Melaka-Masjid Tanah-Kuala Linggi
MR311	3	M8	33.8	Melaka-Simpang Kelemak-Masjid Tanah
MR312	3	5	30.6	Melaka-Masjid Tanah-Lubok China
MR313	3	5	43.5	Melaka-Lubok China

Figure M : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : MELAKA TENGAH

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
MR101	-	14984	1369	1800-1900	63.8	9.5	1	0.1	0.8	24.8	100.0
MR102	-	22662	1788	1800-1900	66.1	5.5	2.9	0.8	0.8	23.9	100.0
MR103	-	44727	4445	0700-0800	60	11.6	9.2	2.1	0.6	16.6	100.0
MR104	-	92919	7492	1800-1900	74.3	6.6	3.1	0.3	0.5	15.2	100.0
MR105	-	35373	3875	0700-0800	64	11.9	5.8	0.4	1.6	16.3	100.0
MR106	-	43179	6161	0700-0800	63.7	11.4	3.5	0.1	0.3	21	100.0
MR107	-	11133	1229	0700-0800	64.3	11.6	4.9	0.1	0.8	18.4	100.0
MR108	-	22432	2167	1700-1800	54.4	9.8	3.9	0.1	0.6	31.2	100.0
MR109	-	11916	1085	2100-2200	60.6	10	2.4	0.1	0.5	26.5	100.0
MR110	-	82390	8191	1800-1900	78.1	3.1	2.9	0.6	0.5	14.9	100.0

DISTRICT : JASIN

MR201	-	3155	361	0700-0800	52.2	3.1	12.8	4.9	0.4	26.6	100.0
MR202	-	5415	809	0700-0800	57.7	3.7	4.1	0.3	0.7	33.6	100.0
MR203	-	6816	633	1700-1800	65	3.4	10.6	2.1	0.7	18.2	100.0
MR204	-	8985	778	0700-0800	57.4	2.9	4.4	0.8	0.9	33.5	100.0
MR205	-	3181	280	1200-1300	49.5	8.4	3.6	0.4	1.6	36.4	100.0
MR206	20154	17304	1364	1800-1900	55.8	5.3	3.5	0.6	1.1	33.7	100.0
MR207	-	12031	1184	1700-1800	50.7	6.2	3.4	1.1	0.9	37.7	100.0
MR208	-	2938	334	1800-1900	48.1	8.5	5.7	1.4	1.2	35.1	100.0
MR209	22116	19871	1865	0700-0800	62.9	8.3	5.4	0.7	0.5	22.2	100.0

DISTRICT : ALOR GAJAH

MR301	11041	10095	941	0700-0800	56.3	4.4	4.5	1	1	32.7	100.0
MR302	-	11204	976	0700-0800	63.6	13.4	6	1.2	0.7	15.1	100.0
MR303	-	10008	789	1800-1900	50.8	11.6	5.5	1.5	0.6	30	100.0
MR304	-	1727	147	1700-1800	58.4	11.8	6.8	0.7	0.5	21.8	100.0
MR305	-	8342	957	0700-0800	44.2	10.6	13.1	4.1	0.9	27.1	100.0
MR306	-	10291	1413	0700-0800	50.2	12.1	9.1	2.7	1.1	24.8	100.0
MR307	-	13167	1560	0700-0800	48.1	10.2	7.3	1.5	1.2	31.8	100.0
MR308	-	15288	1382	1300-1400	53.2	9.3	5.7	0.7	1.2	29.9	100.0
MR309	-	19614	2055	0700-0800	56.2	10.1	4.3	1	0.8	27.6	100.0
MR310	-	13483	1453	0700-0800	55.5	7.2	3.4	0.3	0.5	33.1	100.0
MR311	-	13291	1341	0700-0800	57	6.8	5.3	1.1	0.9	28.9	100.0
MR312	-	13896	1544	0700-0800	57.4	6.4	5.3	0.9	0.9	29	100.0
MR313	-	8720	770	1800-1900	48.5	7.2	4.7	1.6	0.6	37.4	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : MELAKA TENGAH

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
MR101	-	16832	1871	0700-0800	58.1	9	3.3	0.5	0.9	28.2	100.0
MR102	-	23106	1958	1800-1900	68.5	5.4	2.7	0.6	0.5	22.2	100.0
MR103	-	44487	4170	0700-0800	62.4	10.8	8.1	1.9	0.6	16.2	100.0
MR104	-	100869	8356	1800-1900	74.2	6.7	3	0.4	0.4	15.2	100.0
MR105	-	33625	3180	0700-0800	68.2	10.3	5.4	0.5	1.6	13.8	100.0
MR106	-	40796	4628	0700-0800	64.2	9.9	3.4	0.1	0.4	22.1	100.0
MR107	-	11132	1096	0700-0800	61.2	12	4.9	0	0.7	21.2	100.0
MR108	-	21361	1853	1800-1900	59.6	9.6	3	0.1	0.4	27.4	100.0
MR109	-	10432	985	2000-2100	64.5	8.6	1.4	0	0.3	25.2	100.0
MR110	-	86817	8021	1800-1900	78.3	4	2.7	0.5	0.5	14	100.0

DISTRICT : JASIN

MR201	-	2341	341	0700-0800	58	3	13.5	3	0.6	21.9	100.0
MR202	-	4477	528	0700-0800	60.1	3.5	3.8	0.6	0.7	31.3	100.0
MR203	-	6703	639	1700-1800	61.3	3.6	10.9	2.4	0.8	21	100.0
MR204	-	8460	846	0700-0800	60.4	3.2	5.5	1.1	0.8	28.9	100.0
MR205	-	6455	776	0700-0800	52.2	4.4	3.6	0.1	0.7	39	100.0
MR206	18839	16784	1423	1800-1900	55.6	6.1	3.2	0.4	0.9	33.8	100.0
MR207	-	18376	1760	1700-1800	50.4	3.1	2.8	0.6	0.5	42.6	100.0
MR208	-	6444	674	1700-1800	56.3	4.9	3.8	0.5	0.6	34	100.0
MR209	22229	20286	1829	1700-1800	65.3	6.9	5.1	0.9	0.5	21.3	100.0

DISTRICT : ALOR GAJAH

MR301	13650	12246	1060	0700-0800	53.2	3.5	5.1	0.8	1.1	36.3	100.0
MR302	-	14694	1470	0700-0800	57	10.1	5.8	0.9	0.8	25.5	100.0
MR303	-	17123	1835	0700-0800	55.8	8.6	4.9	1.6	0.5	28.5	100.0
MR304	-	2392	624	1200-1300	59.2	9.4	4.7	1	0	25.8	100.0
MR305	-	9569	1067	0700-0800	48	10	12.5	3.2	0.4	25.9	100.0
MR306	-	12182	1634	0700-0800	53.6	9.1	8.8	2.5	0.7	25.5	100.0
MR307	-	13806	1424	0700-0800	61.5	8.2	6.1	1.4	0.9	21.8	100.0
MR308	-	16729	1530	1700-1800	54.4	9	4.8	0.6	0.9	30.3	100.0
MR309	-	20533	1985	1600-1700	67.3	10.1	3.6	0.7	0.6	17.7	100.0
MR310	-	15461	1466	1200-1300	55.9	6.3	3.6	0.5	0.5	33.3	100.0
MR311	-	12061	1411	0700-0800	60.7	6.9	4.6	0.9	0.7	26.3	100.0
MR312	-	18748	1930	0700-0800	58.9	7.9	4.1	1	0.8	27.3	100.0
MR313	-	8239	722	0700-0800	47.9	7.8	4.5	2.4	0.6	36.8	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : MELAKA TENGAH

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
MR101	15908	60.9	9.3	2.2	0.3	0.8	26.5	1620
MR102	22884	67.3	5.4	2.8	0.7	0.6	23	1873
MR103	44607	61.2	11.2	8.7	2	0.6	16.4	4308
MR104	96894	74.2	6.7	3.1	0.4	0.5	15.2	7924
MR105	34499	66.1	11.1	5.6	0.4	1.6	15.1	3528
MR106	41988	63.9	10.6	3.4	0.1	0.3	21.6	5395
MR107	11133	62.7	11.8	4.9	0.1	0.7	19.8	1163
MR108	21897	57	9.7	3.4	0.1	0.5	29.3	2010
MR109	11174	62.6	9.3	1.9	0.1	0.4	25.8	1035
MR110	84604	78.2	3.5	2.8	0.5	0.5	14.5	8106

DISTRICT : JASIN

MR201	2748	55.1	3.1	13.1	3.9	0.5	24.2	351
MR202	4946	58.9	3.6	3.9	0.4	0.7	32.5	669
MR203	6760	63.1	3.5	10.7	2.3	0.8	19.6	636
MR204	8723	58.9	3.1	5	1	0.9	31.2	812
MR205	4818	50.9	6.4	3.6	0.3	1.1	37.7	528
MR206	17044	55.7	5.7	3.3	0.5	1	33.7	1394
MR207	15204	50.6	4.6	3.1	0.9	0.7	40.1	1472
MR208	4691	52.2	6.7	4.7	0.9	0.9	34.6	504
MR209	20079	64.1	7.6	5.3	0.8	0.5	21.8	1847

DISTRICT : ALOR GAJAH

MR301	11170	54.8	4	4.8	0.9	1	34.5	1001
MR302	12949	60.3	11.7	5.9	1	0.8	20.3	1223
MR303	13566	53.3	10.1	5.2	1.6	0.6	29.2	1312
MR304	2060	58.8	10.6	5.8	0.8	0.2	23.8	386
MR305	8956	46.1	10.3	12.8	3.6	0.7	26.5	1012
MR306	11237	51.9	10.6	8.9	2.6	0.9	25.1	1524
MR307	13487	54.8	9.2	6.7	1.4	1	26.8	1492
MR308	16009	53.8	9.1	5.2	0.7	1.1	30.1	1456
MR309	20074	61.8	10.1	3.9	0.8	0.7	22.6	2020
MR310	14472	55.7	6.8	3.5	0.4	0.5	33.2	1460
MR311	12676	58.8	6.8	5	1	0.8	27.6	1376
MR312	16322	58.2	7.2	4.7	1	0.8	28.1	1737
MR313	8480	48.2	7.5	4.6	2	0.6	37.1	746

Annual Growth Rate For Year 2012

DISTRICT : MELAKA TENGAH

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
MR101	17814	14242	14842	11374	13747	12959	13324	13263	14820	15908	-0.54	0.02
MR102	24826	25213	25146	21793	21041	21348	25440	25536	25430	22884	-0.07	0.00
MR103	25328	21912	23784	30450	33637	36035	36079	39634	37335	44607	7.25	0.87
MR104	59442	59538	60225	61516	70873	79525	83893	93299	96793	96894	6.69	0.94
MR105	21684	13178	25237	27695	31197	27531	25053	31681	35593	34499	7.18	0.57
MR106	35842	30634	29737	35353	37557	36517	36020	35818	39464	41988	2.52	0.54
MR107	13487	7815	7712	8788	9083	9340	9130	7579	10199	11133	0.12	0.00
MR108	29437	25425	24650	29826	22917	18224	18925	19298	19723	21897	-4.40	0.55
MR109	10033	11713	10701	10701	9754	8880	8882	10415	11968	11174	0.20	0.00
MR110	58216	64058	68864	66757	68913	82706	87224	81156	45710	84604	1.70	0.07

DISTRICT : JASIN

MR201	2115	3307	3281	3371	3585	7681	3549	3260	3081	2748	1.66	0.02
MR202	4581	4403	4584	4709	5067	5499	5293	3933	5187	4946	0.91	0.08
MR203	6970	7105	7189	7638	7992	8304	8047	7672	8088	6760	0.70	0.09
MR204	9437	9246	10063	11855	12859	9206	10637	10139	9958	8723	-0.49	0.02
MR205	4697	5810	5367	5023	4360	3784	5674	3819	4922	4818	-1.46	0.09
MR206	24798	23144	23019	24404	19090	14057	15501	15679	16426	17044	-5.67	0.65
MR207	6638	7375	7848	10573	12057	11066	15120	12735	13703	15204	9.21	0.86
MR208	3788	4750	4226	4297	3502	3822	5385	4574	5511	4691	2.50	0.26
MR209	-	-	-	14953	15208	15928	16672	16113	18495	20079	4.60	0.86

DISTRICT : ALOR GAJAH

MR301	20678	19873	16414	9971	10761	11057	9986	11472	11465	11170	-6.76	0.54
MR302	10840	10658	10581	12276	11395	12779	13613	13817	12885	12949	2.84	0.72
MR303	8353	8517	8448	9828	11586	6622	11743	10734	13780	13566	5.40	0.48
MR304	2047	2182	3017	1836	2060	1894	1939	2421	1981	2060	-0.99	0.04
MR305	7899	7105	7820	9158	9463	7691	8339	8544	8123	8956	1.23	0.18
MR306	9095	10922	9226	8791	9773	9331	9620	10456	10387	11237	1.46	0.28
MR307	11723	12809	13071	11247	12160	12085	12514	13184	13117	13487	1.08	0.31
MR308	23907	25224	24118	16038	16299	15980	14565	14284	14184	16009	-6.40	0.70
MR309	15577	18057	18226	17625	17321	17782	18420	19111	18400	20074	1.70	0.60
MR310	11767	11328	9684	9902	10269	9436	12243	13868	13687	14472	3.35	0.41
MR311	7748	8852	8610	8209	8716	9204	9975	11708	11268	12676	5.03	0.86
MR312	12877	17791	14722	15586	15281	16569	15481	12140	14922	16322	0.00	0.00
MR313	6164	6246	6068	7255	8730	8179	7709	7858	8084	8480	3.69	0.66

MELAKA

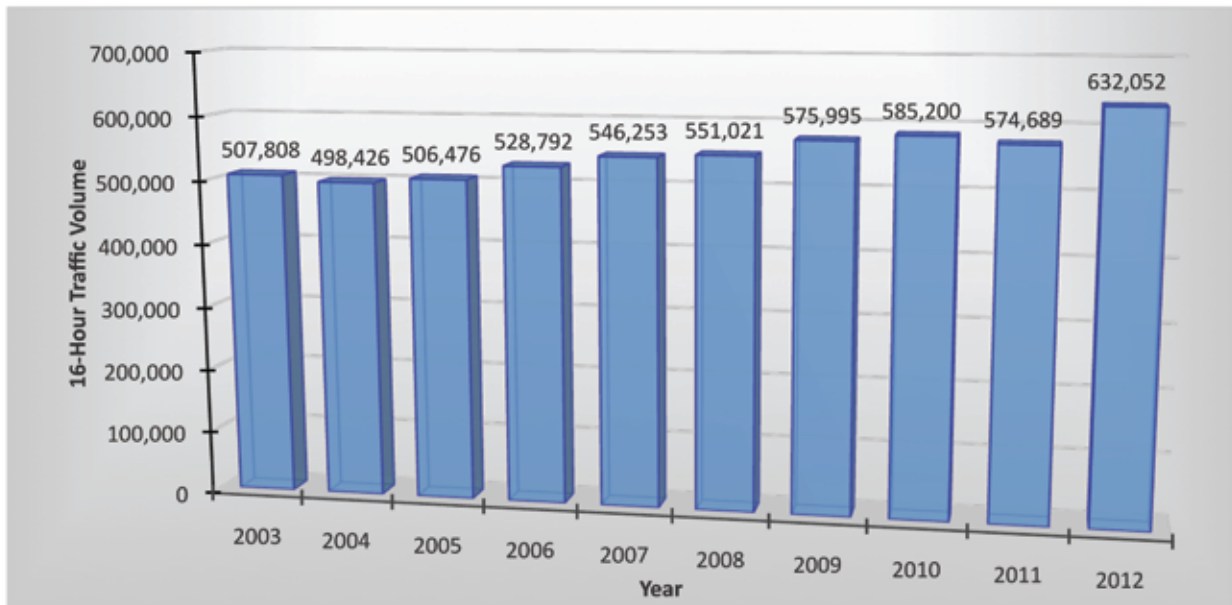


Figure 11 A : Melaka Yearly 16-hour Traffic Volume

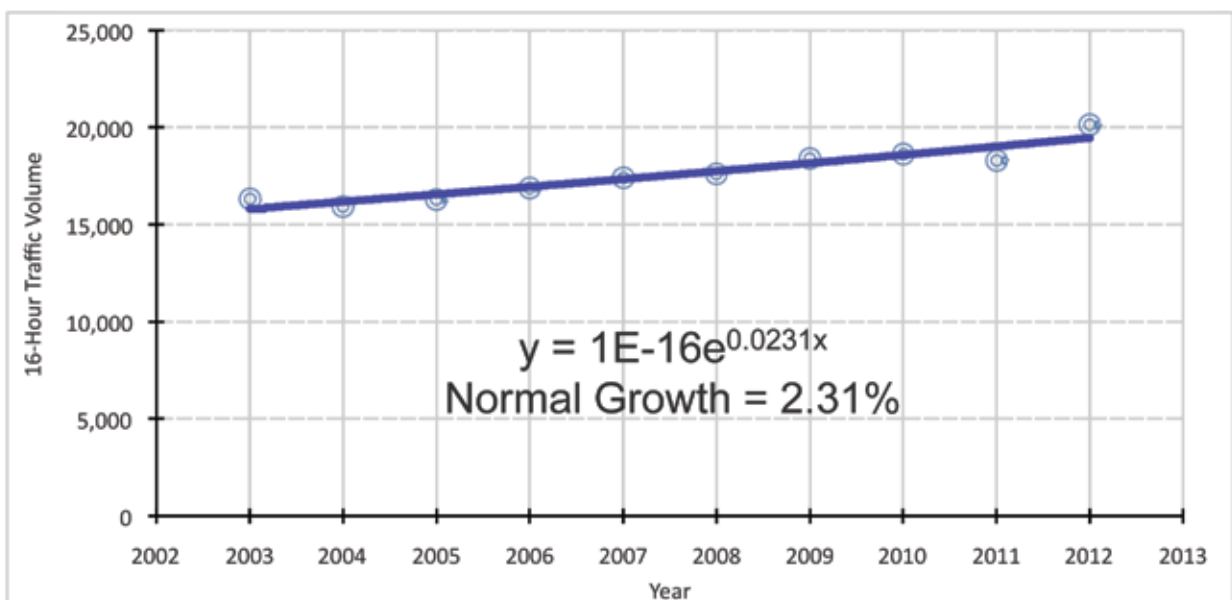
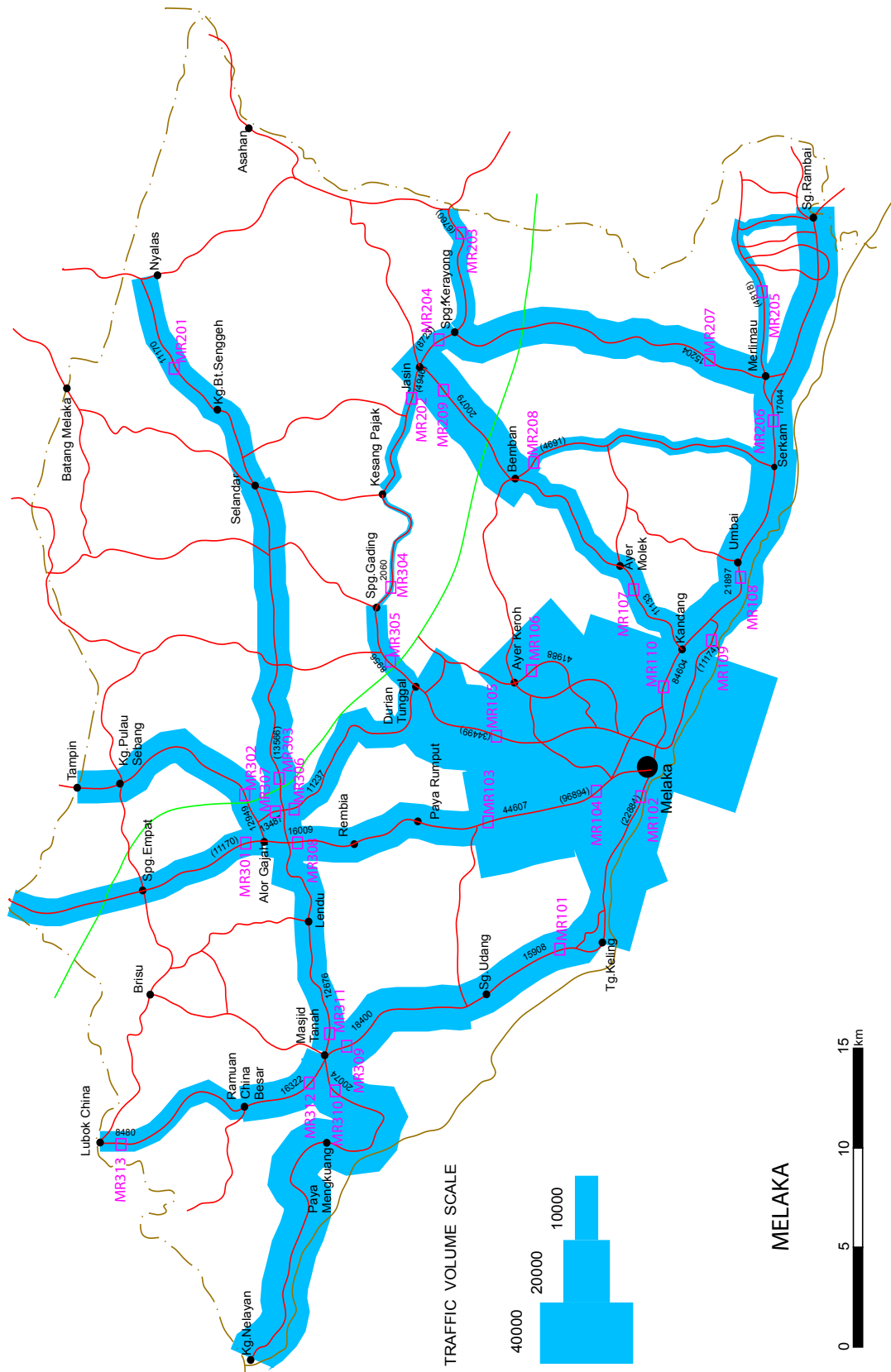


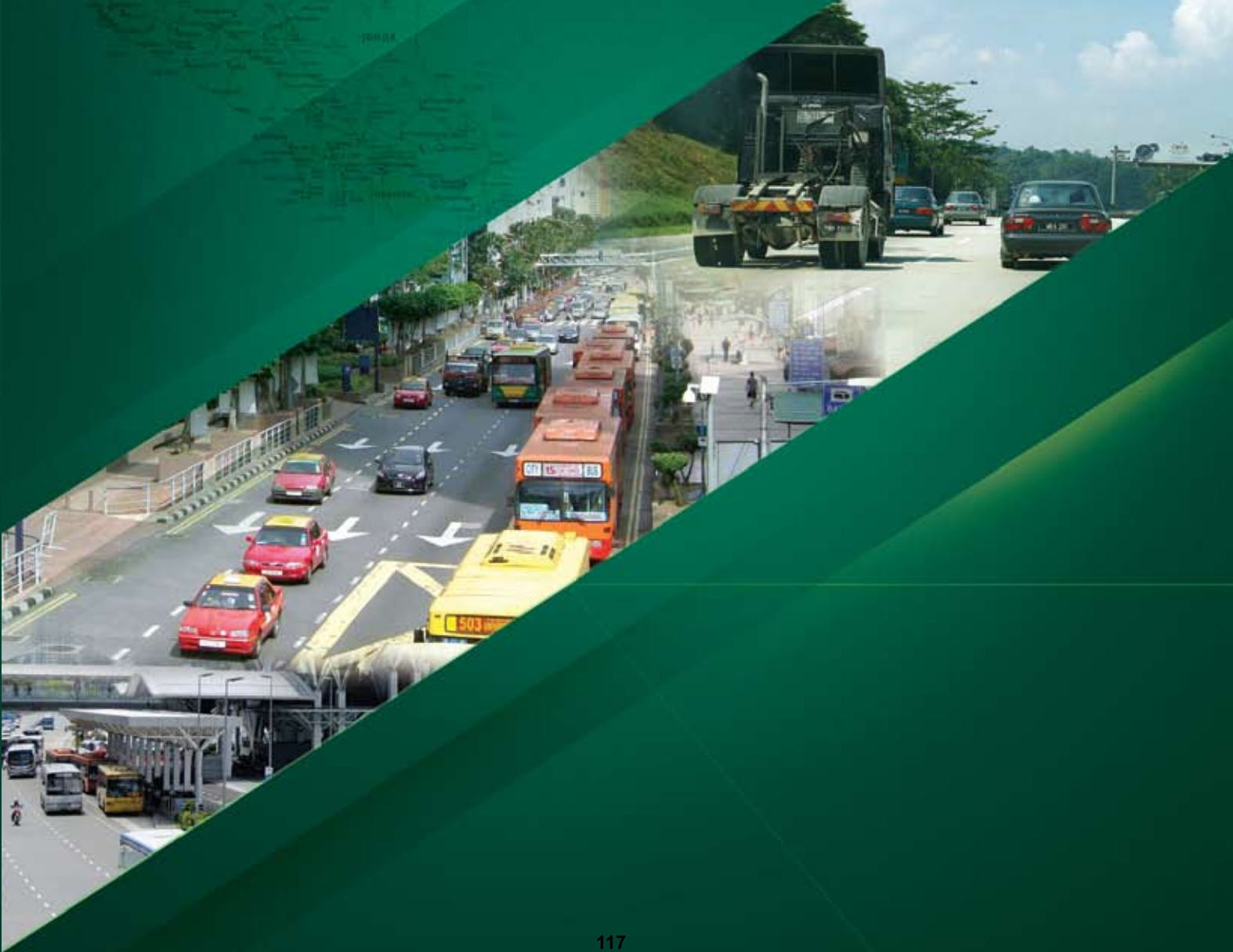
Figure 11 B : Melaka Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure M1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





JOHOR



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BATU PAHAT	2	5	6	13
2	JOHOR BAHRU	1	5	13	19
3	KULAI JAYA	0	0	1	1
4	KLUANG	1	3	3	7
5	KOTA TINGGI	3	0	6	9
6	MERSING	1	0	3	4
7	LEDANG	0	1	5	6
8	MUAR	0	2	5	7
9	PONTIAN	0	2	3	5
10	SEGAMAT	2	1	1	4
	TOTAL	10	19	46	75

Location Description For Traffic Census Stations

DISTRICT : BATU PAHAT

Station Number	Survey Type	Route Number	KM	Description of Locations
JR101	0	5	142	Johor Bahru-Batu Pahat-Muar
JR102	3	5	127.5	North of Batu Pahat toll house
JR103	3	J19	142.5	Johor Bahru-Yong Peng-Parit Sulong-Pagoh
JR104	0	24	127.2	Johor Bahru-Yong Peng-Muar
JR105	3	J19	115.9	Johor Bahru-Yong Peng-Muar
JR106	3	J16	122.4	Johor Bahru-Yong Peng-Kangkar Bharu
JR107	3	J13	7.2	Batu Pahat-Yong Peng
JR108	1	1	116	Johor Bahru-Segamat
JR109	1	1	95	Johor Bahru-Ayer Hitam-Yong Peng
JR110	3	50	29.5	Johor Bahru-Ayer Hitam-Batu Pahat
JR111	1	50	5	Batu Pahat - Ayer Hitam
JR112	1	5	111	Johor Bahru-Pontian-Batu Pahat
JR113	1	5	129	Johor Bahru-Pontian-Batu Pahat

DISTRICT : JOHOR BAHRU

JR201	3	J4	19.3	Johor Bahru-Gelang Patah
JR202	3	5	25	Johor Bahru-Pontian (140m west of JB/Air Hitam/Pontian junction)
JR204	1	1	20.9	Johor Bahru-Kulai (400m north of Pontian road junction)
JR205	1	1	12.7	Johor Bahru-Skudai
JR206	1	1	6.8	Johor Bahru-Skudai (100m north of Jln Larkin/Skudai junction)
JR207	3	1	6.4	Johor Bahru-Skudai
JR208	0	1	-	At the causeway 500m yards from Johor Bahru-Singapore
JR210	1	1	6.4	Jalan Larkin Bypass
JR211	3	17	-	1000m east of junction to Kempas
JR212	1	3	23.3	Johor Bahru-Kota Tinggi
JR213	3	3	16.1	Johor Bahru-Kota Tinggi
JR214	3	3	9.8	Johor Bahru-Kota Tinggi (100m east of Kangar Tebrau junction)
JR215	3	3	6.4	Johor Bahru-Kota Tinggi
JR216	3	J10	14.5	Johor Bahru-Masai
JR217	3	17	22	40m west of junction to Johor Bahru-Pelentong
JR218	3	17	-	1000m east junction to Masai
JR219	3		Seksyen 2	Taman Perling-2ND link
JR220	3	J7/FT5	Seksyen 18	Laluan Masuk J7/ Ulu Choh-Gelang Patah
JR223	3	J8/FT3	Seksyen 24	Johor Bahru- Kota Tinggi (200m Arah Barat- Simpang Ulu Tiram)

DISTRICT : KULAI JAYA

JR209	3	16	27.4	Johor Bahru-Senai-Senai Airport
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Location Description For Traffic Census Stations

DISTRICT : KLUANG

Station Number	Survey Type	Route Number	KM	Description of Locations
JR301	3	50	83.5	Batu Pahat-Kluang-Kahang
JR302	3	J25	103	Johor Bahru-Renggam-Kluang
JR303	3	J26	83.7	Johor Bahru-Simpang Renggam-Renggam
JR304	1	1	62.5	Johor Bahru-Ayer Hitam
JR305	0	1	76	Johor Bahru-Ayer Hitam
JR306	1	50	49.5	Batu Pahat-Ayer Hitam-Kluang
JR307	1	91	30.3	Batu Pahat-Kluang-Kota Tinggi

DISTRICT : KOTA TINGGI

JR401	3	99	57.6	Johor Bahru-Kota Tinggi-Kampung Tanjong Lembu
JR402	3	3	48.3	Johor Bahru-Kota Tinggi-Mawai
JR403	0	92	49.9	Johor Bahru-Pengerang
JR404	0	3	38.6	Johor Bahru-Kota Tinggi
JR405	3	94	54.7	Johor Bahru-Kulai-Kota Tinggi
JR406	3	93	4.6	Simpang Kota Tinggi/Kulai - Simpang Kota Tinggi/Kluang
JR407	3	91	7	Kota Tinggi - Kluang
JR408	3	89	16	Simpang Kota Tinggi /Sg.Rengit - Tg. Belungkor
JR409	0	3	36.8	Johor Bahru-Kota Tinggi

DISTRICT : MERSING

JR501	0	3	135.2	Johor Bahru-Endau (2.4km north of Mersing town)
JR502	3	3	114.3	Johor Bahru-Jemaluang-Mersing
JR503	3	3	111.1	Johor Bahru-Kota Tinggi-Jemaluang (500m south of Jemaluang)
JR504	3	50	132	Johor Bahru-Jemaluang (500m from Jemaluang)

DISTRICT : LEDANG

JR601	1	5	193	Johor Bahru-Muar-Melaka
JR602	3	J123	209.3	Johor Bahru-Muar-Bekoh
JR603	3	J21	28.2	Muar-Tangkak-Melaka
JR604	3	23	29	Muar-Tangkak-Sagil (east of Bekoh junction)
JR605	3	23	181.9	Johor Bahru-Muar-Segamat
JR606	3	J33	12.9	Muar-Serom

Location Description For Traffic Census Stations

DISTRICT : MUAR

Station Number	Survey Type	Route Number	KM	Description of Locations
JR607	3	J32	217.4	Johor Bahru-Muar-Labis
JR608	3	J32	186.4	Johor Bahru-Muar-Lenga
JR609	1	24	161.5	Johor Bahru-Parit Sulong-Muar (west of junction to Parit Jawa)
JR610	3	J131	4.8	Parit Jawa-Parit Sulong (Jalan Mohammed)
JR611	1	5	162.8	Johor Bahru-Batu Pahat-Muar
JR612	3	5	169.4	Johor Bahru-Muar (Jalan Temenggong Ahmad)
JR613	3	5	167	Johor Bahru-Batu Pahat-Muar (coastal road)

DISTRICT : PONTIAN

JR701	3	5	80	Johor Bahru-Pontian Kechil-Benut-Rengit
JR702	3	5	60	J.B.-Pontian Kechil-Pontian Besar (near Pontian Hospital)
JR703	3	96	16.1	Simpang Renggam-Benut
JR704	1	5	52.5	Johor Bahru-Pontian Kechil
JR705	1	95	56	Johor Bahru-Pontian Kechil-Kukop

DISTRICT : SEGAMAT

JR801	0	1	199.5	Johor Bahru-Segamat-Batu Enam
JR802	0	12	193.2	Lebuh raya Tun Abdul Razak (500m Segamat-Kuantan junction)
JR803	1	1	158	Johor Bahru-Labis-Segamat
JR804	3	23	202.9	Johor Bahru-Segamat-Jementah

Figure J : TRAFFIC CENSUS STATIONS

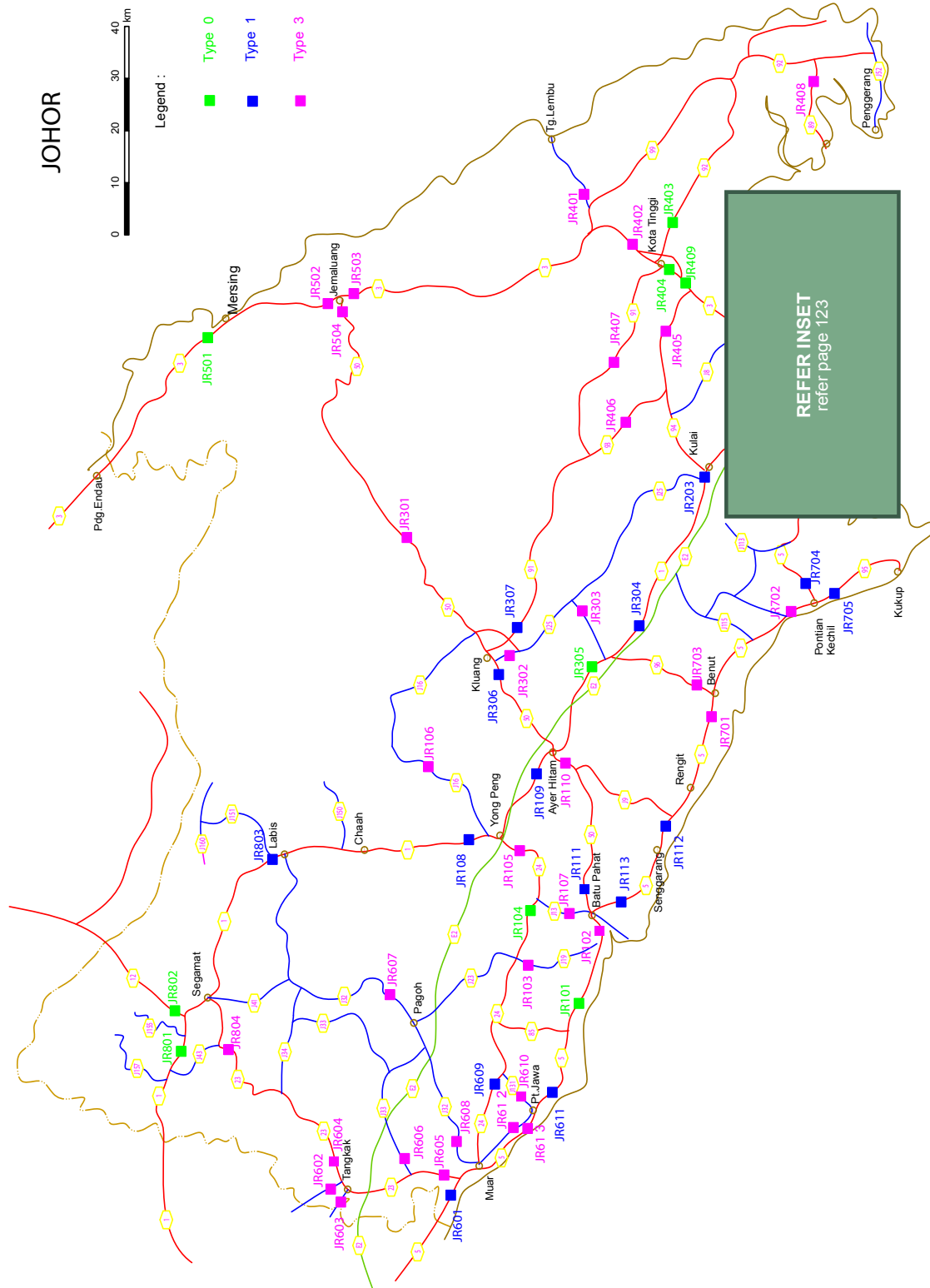
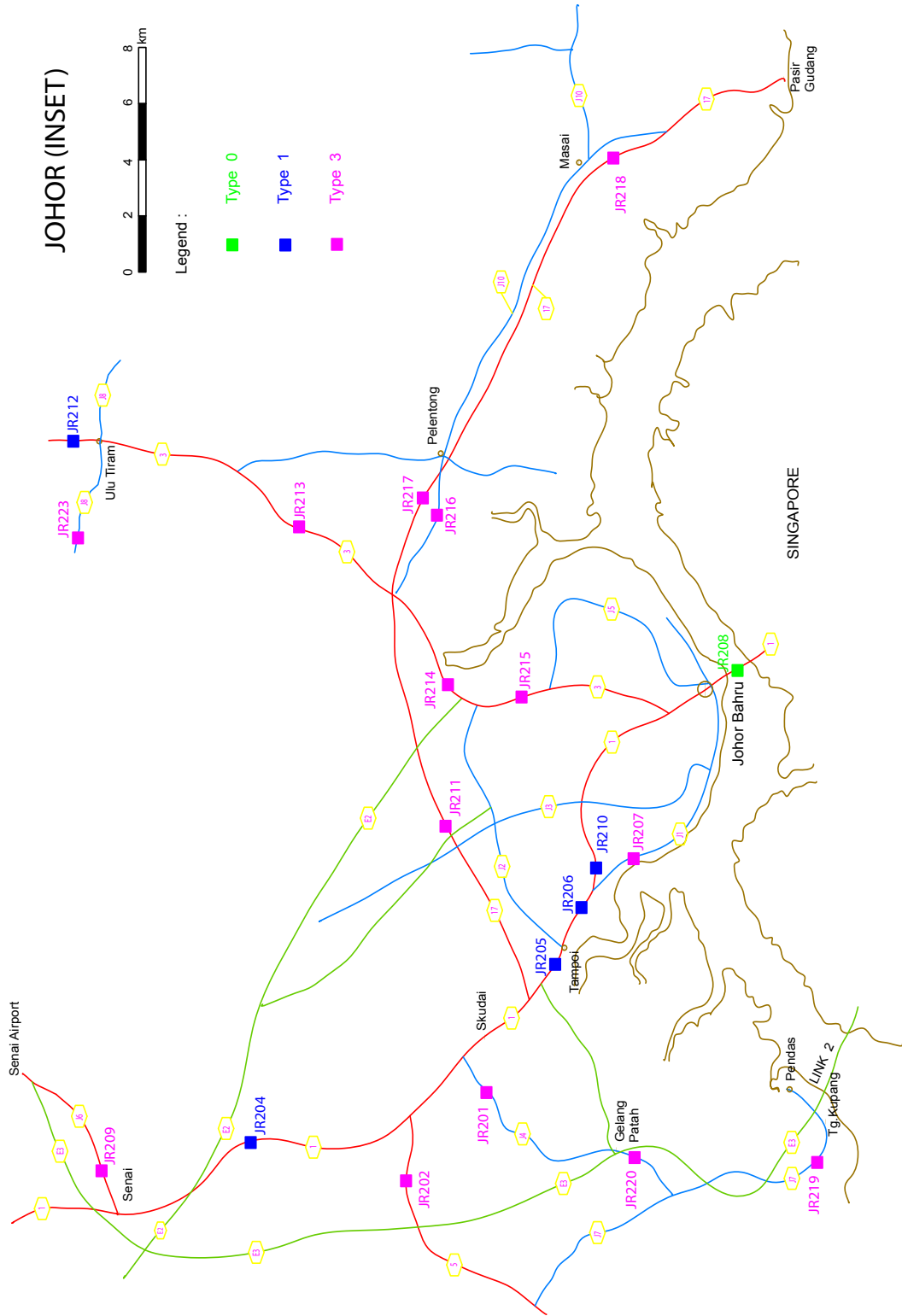


Figure J(S) : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BATU PAHAT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR101	18353	14619	1203	1800-1900	75	5.2	4.6	2.6	1.5	11.1	100.0
JR102	-	21497	2351	0700-0800	61.3	6.5	7.8	3.2	1.2	19.9	100.0
JR103	-	8302	943	0700-0800	38.4	6.3	18.8	8.6	0.8	27.2	100.0
JR104	20755	18130	1484	1500-1600	31.5	24.6	20.1	16.1	0.5	7.3	100.0
JR105	-	16491	1410	1700-1800	59.4	7.4	12.8	7.4	0.8	12.3	100.0
JR106	-	3826	384	1000-1100	47.2	6.1	5.8	3.4	0	37.5	100.0
JR107	-	29889	2740	0700-0800	61.9	6.1	7.5	2.8	0.6	21	100.0
JR108	-	11732	1097	1700-1800	54.9	12.7	11.4	7.2	1.1	12.7	100.0
JR109	-	10120	782	1700-1800	51	11.6	13	7.6	0.7	16.2	100.0
JR110	-	25764	2350	0700-0800	57.9	13	7.3	4.9	1.3	15.5	100.0
JR111	-	61399	5047	0800-0900	58.6	7.2	6	4.1	1	23	100.0
JR112	-	13360	958	1700-1800	53.8	8.4	8.3	1.5	1.1	26.8	100.0
JR113	-	32792	2654	1800-1900	72.6	6.4	5.5	0.9	0.6	14	100.0

DISTRICT : JOHOR BAHRU

JR201	-	35398	4169	0700-0800	57.4	5.4	4.9	1.4	1.1	29.8	100.0
JR202	-	126786	13324	0800-0900	74.1	5.1	4.3	1.4	1.1	14.1	100.0
JR204	-	104841	8400	0700-0800	73.5	4.3	5.9	3	2.3	11	100.0
JR205	-	135117	9677	1800-1900	72.7	3.3	1.8	1.2	2.1	18.9	100.0
JR206	-	175599	12591	1800-1900	72.5	2.3	1.7	0.9	1.9	20.8	100.0
JR207	-	78400	9138	0600-0700	74.3	10.5	1	0.4	1.6	12.3	100.0
JR208	222681	192965	22363	0600-0700	46.5	1.2	0.8	1.6	1.3	48.6	100.0
JR210	-	148542	11182	1700-1800	64.2	5	1.7	0.9	1.4	26.9	100.0
JR211	-	110548	9805	1000-1100	67.5	7.3	6.1	3.5	0.5	15.1	100.0
JR212	-	36431	3113	1800-1900	73.4	5.8	4.8	3.8	1.3	10.8	100.0
JR213	-	128277	13619	1400-1500	75	4.2	5.9	2.9	1.1	10.9	100.0
JR214	-	153301	12892	1300-1400	73	3.1	3	1.2	1.2	18.6	100.0
JR215	-	64379	5843	1800-1900	86.2	3.3	0.9	0.2	1.5	8	100.0
JR216	-	108663	9791	0700-0800	69.3	3.6	6.5	7.6	0.5	12.6	100.0
JR217	-	33527	2652	1800-1900	77.6	4.5	3.9	0.9	1.3	11.8	100.0
JR218	-	55906	9516	0700-0800	58	4.2	4	8.6	0.4	24.8	100.0
JR219	-	123232	10676	0800-0900	70	5.5	3.4	1.4	0.5	19.2	100.0
JR220	-	27101	2962	1800-1900	63.2	6.4	6.9	5.3	0.7	17.5	100.0
JR223	-	18124	1941	0700-0800	61.3	6.2	6.8	2.5	1.3	21.8	100.0

DISTRICT : KULAI JAYA

JR209	-	34392	5713	1800-1900	56.4	4.1	6.4	3.6	1.9	27.7	100.0
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16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KLUANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR301	-	5965	474	1600-1700	44.6	17.2	10.7	13.8	1.2	12.4	100.0
JR302	-	16369	2535	0700-0800	66.3	10.1	4.5	2	1.2	15.9	100.0
JR303	-	9379	795	1100-1200	59.2	11.9	8.6	5.4	1.3	13.6	100.0
JR304	-	9818	689	1000-1100	45.7	11	17.5	10.9	0.9	14	100.0
JR305	17126	15513	1259	1700-1800	52.1	9.9	12.1	7	0.7	18.2	100.0
JR306	-	37592	2899	1800-1900	64.2	9.5	6.5	3.4	1.3	15.2	100.0
JR307	-	8386	675	1700-1800	63.1	9.4	5.9	7.4	0.8	13.4	100.0

DISTRICT : KOTA TINGGI

JR401	-	7689	662	1700-1800	50.8	8.5	6.3	3.6	0.9	30	100.0
JR402	-	21475	2054	2100-2200	72.5	7.7	4.7	4.2	0.7	10.2	100.0
JR403	18153	16355	1232	1700-1800	74	6.1	4.8	1.7	1	12.4	100.0
JR404	26939	24084	1922	1800-1900	63.3	13.8	7.3	1.9	1.5	12.2	100.0
JR405	-	7154	761	2000-2100	66	9.5	5.6	5.9	0.8	12.1	100.0
JR406	-	6785	627	2100-2200	56.4	10.8	7.2	6	0.8	18.8	100.0
JR407	-	4836	393	2100-2200	59.2	10.7	8.5	3.5	0.7	17.4	100.0
JR408	-	4558	453	2100-2200	58.4	12.2	7.9	3.3	1.4	16.8	100.0
JR409	14721	13016	1038	1700-1800	67.7	7.2	8.5	7.4	1.4	7.8	100.0

DISTRICT : MERSING

JR501	17264	14510	1176	1300-1400	50.9	7.5	7.3	3.9	0.9	29.5	100.0
JR502	-	5859	581	1200-1300	64.2	8.4	10	6.4	1.5	9.5	100.0
JR503	-	4341	356	0700-0800	49.1	17.7	12.6	11.2	1.3	8	100.0
JR504	-	1026	105	1100-1200	35	24.4	14.5	14	1.1	11	100.0

DISTRICT : LEDANG

JR601	-	20089	1560	1800-1900	62.2	7.7	9	2.2	1.1	17.7	100.0
JR602	-	4645	406	1400-1500	43.6	5.5	18.6	2.1	0.4	29.8	100.0
JR603	-	9260	838	0700-0800	54.4	9.1	9.4	1	0.5	25.6	100.0
JR604	-	13223	1570	1600-1700	61	5.4	10.4	1.6	1.1	20.5	100.0
JR605	-	25559	2859	0700-0800	63	10.4	9.4	2.1	0.9	14.1	100.0
JR606	-	17203	1295	0700-0800	52.4	14.6	10.1	0.9	0.7	21.3	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : MUAR

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR607	-	4291	412	0700-0800	42.3	11.5	9.1	1.6	0.9	34.5	100.0
JR608	-	16625	1371	1300-1400	44.4	11.3	10.7	3.9	2.8	26.9	100.0
JR609	-	6593	585	1700-1800	54.1	11.0	16.9	6.2	0.6	11.2	100.0
JR610	-	5427	514	1500-1600	37.0	7.1	16.5	15.5	0.1	23.8	100.0
JR611	-	17316	1343	1800-1900	56.4	8.3	9.4	1.1	1.1	23.6	100.0
JR612	-	13349	1116	1800-1900	59.1	7.2	7.4	2.5	0.7	23.1	100.0
JR613	-	8100	688	1900-2000	54.4	8.5	6.2	2.9	0.7	27.3	100.0

DISTRICT : PONTIAN

JR701	-	10737	1076	0700-0800	53.8	10	7.8	5	0.8	22.6	100.0
JR702	-	18583	1552	1700-1800	56.9	13.7	10.4	1.4	1.2	16.4	100.0
JR703	-	6274	570	0700-0800	61.9	6	17.2	3.3	1	10.6	100.0
JR704	-	16165	1384	1800-1900	68.9	7	9.3	1.3	1.1	12.4	100.0
JR705	-	17319	1453	1800-1900	68.1	5.5	3.2	1.4	0.6	21.2	100.0

DISTRICT : SEGAMAT

JR801	17534	15794	1371	1700-1800	56.8	8.7	6.6	5.6	1	21.4	100.0
JR802	16993	15086	1300	1800-1900	68.4	9.5	5.6	5.7	0.8	10.1	100.0
JR803	-	12625	1038	1700-1800	66.2	8.2	8.4	7	1.1	9.1	100.0
JR804	-	10230	769	1500-1600	52.3	10.7	9.9	8.9	1.4	16.8	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BATU PAHAT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR101	19005	15076	1354	1800-1900	73	6.1	6.3	1.1	1.4	12	100.0
JR102	-	22265	2275	0700-0800	62.2	6.3	7.2	3.2	1.1	20	100.0
JR103	-	7430	800	0700-0800	41.8	9.6	13.9	8.3	0.8	25.7	100.0
JR104	31377	28592	2374	1300-1400	30.3	25.6	21.8	15	0.4	7	100.0
JR105	-	15494	1291	0700-0800	55.6	9.2	13	9.3	0.7	12.2	100.0
JR106	-	4244	397	0700-0800	36.4	11.2	13.4	6.1	0.7	32.2	100.0
JR107	-	28770	2442	0700-0800	62.2	8.2	7.5	3.4	0.5	18.2	100.0
JR108	-	13007	1210	1700-1800	56	12.7	10.4	7.1	1.1	12.6	100.0
JR109	-	10247	770	1700-1800	52.6	11.2	11.7	8.7	0.6	15.2	100.0
JR110	-	25751	2487	0700-0800	58.2	12.8	8.6	4.4	1.3	14.7	100.0
JR111	-	87809	7240	0700-0800	49.9	4	2.4	1.6	0.4	41.7	100.0
JR112	-	12631	909	1400-1500	53.7	8.2	8.2	1.3	1.2	27.4	100.0
JR113	-	33729	2521	1700-1800	73.4	5.9	5.2	1	0.6	13.9	100.0

DISTRICT : JOHOR BAHRU

JR201	-	35398	4169	0700-0800	57.4	5.4	4.9	1.4	1.1	29.8	100.0
JR202	-	126786	13324	0800-0900	74.1	5.1	4.3	1.4	1.1	14.1	100.0
JR204	-	104527	8085	0700-0800	73.5	4.3	5.9	3	2.3	11	100.0
JR205	-	189790	12964	1800-1900	72.6	3.3	1.9	1.2	2.2	18.8	100.0
JR206	-	166605	13397	1800-1900	72.5	2.9	1.9	1.1	1.8	19.9	100.0
JR207	-	78409	9138	0600-0700	74.3	10.5	1	0.4	1.6	12.3	100.0
JR208	148221	122145	13168	0700-0800	42.5	1.8	0.8	2.1	2.1	50.7	100.0
JR210	-	159103	13214	0700-0800	68.6	4.7	2.1	0.6	1.3	22.6	100.0
JR211	-	110548	9805	1000-1100	67.5	7.3	6.1	3.5	0.5	15.1	100.0
JR212	-	36987	2939	1800-1900	74.4	5.4	5	3.9	1.2	10	100.0
JR213	-	121417	10939	0700-0800	75.6	3.6	6.7	3.9	1	9.3	100.0
JR214	-	136052	10838	1300-1400	73.2	3.1	3.4	0.9	1	18.3	100.0
JR215	-	55342	4853	2000-2100	80.7	1.6	0.9	0.2	1.4	15.3	100.0
JR216	-	33187	3281	1800-1900	77.9	4.6	3.9	0.8	1.3	11.5	100.0
JR217	-	110942	8424	1800-1900	70.5	3.8	7.2	6.2	0.4	11.9	100.0
JR218	-	39220	5226	0700-0800	66.2	4.3	4.5	6.8	0.6	17.5	100.0
JR219	-	123232	10676	0800-0900	70	5.5	3.4	1.4	0.5	19.2	100.0
JR220	-	27101	2962	1800-1900	63.2	6.4	6.9	5.3	0.7	17.5	100.0
JR223	-	18642	1941	0700-0800	68	4.8	6.2	2.7	1.2	17	100.0

DISTRICT : KULAI JAYA

JR209	-	26363	2511	1800-1900	60.6	11.4	9.4	5.8	1.6	11.4	100.0
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16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KLUANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR301	-	4898	441	1400-1500	37.8	17.7	13.3	18.1	1.5	11.6	100.0
JR302	-	13929	1929	0700-0800	58.3	11.2	5.7	2.1	1.2	21.6	100.0
JR303	-	9159	842	1700-1800	67.6	6.7	5	6.7	1.1	13	100.0
JR304	-	5961	454	0700-0800	42.3	13.4	15.9	15.4	1.1	11.8	100.0
JR305	17169	15283	1340	1800-1900	50.2	11.9	13.2	6.6	0.7	17.4	100.0
JR306	-	41756	3522	1700-1800	67.6	10	5.6	2.9	1	13	100.0
JR307	-	8201	595	1700-1800	62	9.3	7	6.8	0.7	14.2	100.0

DISTRICT : KOTA TINGGI

JR401	-	7054	714	2100-2200	50.1	10.3	6.1	3.9	0.8	28.9	100.0
JR402	-	17760	1748	1700-1800	66.4	12	5.2	5.4	1	10	100.0
JR403	16498	14988	1377	1700-1800	72.9	6	5.2	1.6	1.1	13.2	100.0
JR404	24881	22461	1840	1700-1800	68	8.4	7.8	1.9	1.3	12.6	100.0
JR405	-	9509	942	2100-2200	58.6	12.2	8.4	6.8	1	12.9	100.0
JR406	-	6284	533	2100-2200	53.4	10.4	6.4	9.4	1	19.3	100.0
JR407	-	4372	394	2100-2200	60.4	11.8	9.4	3.3	0.4	14.7	100.0
JR408	-	4470	355	1700-1800	64.7	8.9	6.8	4.5	1.2	13.9	100.0
JR409	15298	13628	1166	1800-1900	64.1	8.8	9.2	8.4	1.6	8	100.0

DISTRICT : MERSING

JR501	15864	12313	966	1700-1800	48.9	7.7	7.9	4.2	0.9	30.5	100.0
JR502	-	8300	847	1200-1300	64.3	9.3	8.7	8.2	1.3	8.1	100.0
JR503	-	4639	431	1700-1800	50.5	12.9	12.6	13.4	1.8	8.8	100.0
JR504	-	1084	109	1200-1300	34.4	18.1	12.5	19.7	1.5	13.7	100.0

DISTRICT : LEDANG

JR601	-	18224	1649	1700-1800	71.5	3.9	8.4	1.5	0.7	14.1	100.0
JR602	-	4734	431	0700-0800	38.1	12.1	16.4	1.9	0.2	31.3	100.0
JR603	-	10573	966	1700-1800	55.1	5.1	9.3	1.1	0.5	29	100.0
JR604	-	15269	1318	1300-1400	58.9	4	7.7	3.1	1.2	25	100.0
JR605	-	24992	2238	0700-0800	58	10.9	9.3	3.1	1.2	17.4	100.0
JR606	-	20941	1956	1800-1900	49.2	11.7	10.7	1.2	0.5	26.6	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : MUAR

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
JR607	-	4163	348	0700-0800	39.2	11.1	11.1	1.7	0.9	36	100.0
JR608	-	15429	1255	1300-1400	47.6	8.7	9.4	3.9	2.3	28	100.0
JR609	-	7148	574	1700-1800	51.5	9.5	20.4	5.5	0.8	12.3	100.0
JR610	-	5582	523	1800-1900	38.4	6.8	20.9	10.8	0.2	22.9	100.0
JR611	-	13919	1082	1800-1900	62.5	6.7	6.7	1.9	0.9	21.3	100.0
JR612	-	12354	1031	1300-1400	59.6	6.7	7.6	2.7	0.8	22.6	100.0
JR613	-	8183	667	1000-1100	51.8	8.5	7.5	2.8	0.7	28.7	100.0

DISTRICT : PONTIAN

JR701	-	9422	888	0700-0800	64	9.9	9.7	3.3	1.1	12	100.0
JR702	-	14960	1644	0700-0800	56.2	13.8	10.8	1.6	1.3	16.3	100.0
JR703	-	6635	825	0600-0700	55.1	7.4	12.4	4	1.6	19.5	100.0
JR704	-	15770	1280	1800-1900	69.8	6.8	7.9	2.1	1.3	12.1	100.0
JR705	-	17585	1500	1800-1900	64.5	8.9	3.2	1.5	0.6	21.2	100.0

DISTRICT : SEGAMAT

JR801	19709	15956	1363	1800-1900	55.5	9.2	7.3	5.6	0.8	21.6	100.0
JR802	16540	14884	1295	1800-1900	67.4	9.1	6	6.2	0.7	10.5	100.0
JR803	-	12212	1099	1700-1800	66.2	7	9.6	7.6	1.1	8.5	100.0
JR804	-	10997	1213	1700-1800	54	12.5	12.8	6.6	2.4	11.7	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BATU PAHAT

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
JR101	14847	74	5.6	5.5	1.9	1.4	11.5	1278
JR102	21881	61.8	6.4	7.5	3.2	1.1	20	2313
JR103	7866	40.1	7.9	16.4	8.4	0.8	26.4	872
JR104	23361	30.9	25.1	20.9	15.5	0.4	7.1	1929
JR105	15993	57.5	8.3	12.9	8.3	0.8	12.2	1351
JR106	4035	41.8	8.7	9.6	4.8	0.3	34.9	391
JR107	29330	62.1	7.2	7.5	3.1	0.6	19.6	2591
JR108	12369	55.5	12.7	10.9	7.1	1.1	12.7	1153
JR109	10184	51.8	11.4	12.4	8.1	0.7	15.7	776
JR110	25758	58	12.9	8	4.6	1.3	15.1	2419
JR111	74604	54.3	5.6	4.2	2.9	0.7	32.4	6143
JR112	12996	53.7	8.3	8.2	1.4	1.2	27.1	934
JR113	33260	73	6.1	5.4	0.9	0.6	13.9	2587

DISTRICT : JOHOR BAHRU

JR201	35398	57.4	5.4	4.9	1.4	1.1	29.8	4169
JR202	126786	74.1	5.1	4.3	1.4	1.1	14.1	13324
JR204	104684	73.5	4.3	5.9	3	2.3	11	8243
JR205	162454	72.7	3.3	1.8	1.2	2.2	18.9	11321
JR206	171102	72.5	2.6	1.8	1	1.8	20.3	12994
JR207	78405	74.3	10.5	1	0.4	1.6	12.3	9138
JR208	157555	44.5	1.5	0.8	1.9	1.7	49.7	17766
JR210	153822	66.4	4.8	1.9	0.8	1.3	24.7	12198
JR211	110548	67.5	7.3	6.1	3.5	0.5	15.1	9805
JR212	36709	73.9	5.6	4.9	3.8	1.3	10.4	3026
JR213	124847	75.3	3.9	6.3	3.4	1	10.1	12279
JR214	144677	73.1	3.1	3.2	1	1.1	18.4	11865
JR215	59861	83.5	2.4	0.9	0.2	1.4	11.6	5348
JR216	70925	73.6	4.1	5.2	4.2	0.9	12.1	6536
JR217	72235	74	4.2	5.6	3.6	0.8	11.8	5538
JR218	47563	62.1	4.3	4.2	7.7	0.5	21.2	7371
JR219	123232	70	5.5	3.4	1.4	0.5	19.2	10676
JR220	27101	63.2	6.4	6.9	5.3	0.7	17.5	2962
JR223	18383	64.7	5.5	6.5	2.6	1.3	19.4	1941

DISTRICT : KULAI JAYA

JR209	30378	58.5	7.7	7.9	4.7	1.7	19.5	4112
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16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : KLUANG

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
JR301	5432	41.2	17.4	12	16	1.3	12	458
JR302	15149	62.3	10.6	5.1	2	1.2	18.7	2232
JR303	9269	63.4	9.3	6.8	6	1.2	13.3	819
JR304	7889	44	12.2	16.7	13.2	1	12.9	571
JR305	15398	51.1	10.9	12.7	6.8	0.7	17.8	1299
JR306	39674	65.9	9.7	6	3.1	1.2	14.1	3210
JR307	8293	62.5	9.4	6.5	7.1	0.8	13.8	635

DISTRICT : KOTA TINGGI

JR401	7372	58.7	8.3	6.5	2.5	0.7	23.4	1766
JR402	19618	69.4	9.8	4.9	4.8	0.9	10.1	1901
JR403	15672	73.4	6	5	1.7	1	12.8	1304
JR404	23273	65.6	11.1	7.6	1.9	1.4	12.4	1881
JR405	8332	62.3	10.9	7	6.4	0.9	12.5	852
JR406	6535	54.9	10.6	6.8	7.7	0.9	19	580
JR407	4604	59.8	11.2	8.9	3.4	0.5	16.1	394
JR408	4514	61.5	10.6	7.4	3.9	1.3	15.3	404
JR409	13322	65.9	8	8.8	7.9	1.5	7.9	1102

DISTRICT : MERSING

JR501	13411	49.9	7.6	7.6	4	0.9	30	1071
JR502	7080	64.2	8.9	9.3	7.3	1.4	8.8	714
JR503	4490	49.8	15.3	12.6	12.3	1.6	8.4	394
JR504	1055	34.7	21.2	13.5	16.9	1.3	12.4	107

DISTRICT : LEDANG

JR601	19157	66.8	5.8	8.7	1.9	0.9	15.9	1605
JR602	4690	40.9	8.8	17.5	2	0.3	30.5	419
JR603	9917	54.7	7.1	9.4	1.1	0.5	27.3	902
JR604	14246	60	4.7	9.1	2.3	1.2	22.8	1444
JR605	25276	60.5	10.6	9.4	2.6	1.1	15.8	2549
JR606	19072	50.8	13.1	10.4	1.1	0.6	24	1626

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : MUAR

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
JR607	4227	40.8	11.3	10.1	1.6	0.9	35.2	380
JR608	16027	46	10	10	3.9	2.6	27.5	1313
JR609	6871	52.8	10.2	18.7	5.9	0.7	11.7	580
JR610	5505	37.7	6.9	18.7	13.1	0.2	23.3	519
JR611	15618	59.5	7.5	8	1.5	1	22.5	1212
JR612	12852	59.4	6.9	7.5	2.6	0.8	22.9	1074
JR613	8142	53.1	8.5	6.9	2.8	0.7	28	678

DISTRICT : PONTIAN

JR701	10080	58.9	10	8.7	4.2	0.9	17.3	982
JR702	16772	56.5	13.8	10.6	1.5	1.2	16.4	1598
JR703	6455	58.5	6.7	14.8	3.6	1.3	15.1	698
JR704	15967	69.4	6.9	8.6	1.7	1.2	12.3	1332
JR705	17452	66.3	7.2	3.2	1.4	0.6	21.2	1477

DISTRICT : SEGAMAT

JR801	15875	56.2	8.9	6.9	5.6	0.9	21.5	1367
JR802	14985	67.9	9.3	5.8	5.9	0.8	10.3	1297
JR803	12418	66.2	7.6	9	7.3	1.1	8.8	1068
JR804	10614	53.1	11.6	11.3	7.8	1.9	14.3	991

Annual Growth Rate For Year 2012

DISTRICT : BATU PAHAT

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
JR101	12739	11956	11577	11086	11727	10736	12735	11162	11711	14847	0.84	0.07
JR102	17074	17838	28366	27305	21432	19665	21195	20237	15020	21881	-0.91	0.02
JR103	8507	6796	8856	9360	8239	5509	8649	6539	15428	7866	1.74	0.04
JR104	9775	8494	10052	17891	24014	32094	33381	25916	40092	23361	15.52	0.70
JR105	19858	15184	20722	20521	13494	14764	15369	14770	15230	15993	-2.66	0.27
JR106	4987	3863	3718	4105	3389	3266	3133	3144	3666	4035	-2.40	0.25
JR107	25493	18447	32294	24444	24457	27620	22105	24961	28189	29330	1.67	0.10
JR108	10050	10334	10030	11281	12263	12557	12869	12262	13025	12369	2.98	0.76
JR109	8059	7731	8414	9310	9112	9686	9646	9722	9418	10184	2.65	0.79
JR110	18991	21020	17911	21453	19864	22271	22282	22463	24236	25758	3.09	0.74
JR111	39031	40526	40343	47549	59993	40929	48391	68097	47852	74604	5.63	0.54
JR112	13782	13935	13039	13641	13768	13508	13803	34077	13505	12996	2.47	0.07
JR113	20203	22331	22941	24172	24219	24710	27870	30932	33455	33260	5.61	0.95

DISTRICT : JOHOR BAHRU

JR201	12061	12759	15212	17951	21682	21466	24684	36243	32527	35398	13.05	0.96
JR202	68728	51342	59976	69894	67190	78069	91544	100402	96248	126786	8.15	0.83
JR204	70745	69965	76418	77733	115506	97582	99254	101856	107591	104684	5.18	0.70
JR205	206699	199931	191864	199433	187687	154952	218035	221084	213390	162454	-0.56	0.02
JR206	178576	187546	200428	179792	183682	172548	189659	181637	167933	171102	-0.94	0.29
JR207	52176	52418	58078	56108	59563	42635	62177	59676	75358	78405	3.83	0.43
JR208	95039	99461	96135	111237	122851	128068	141198	161424	217277	157555	8.10	0.84
JR210	103524	112074	139270	109251	128573	116611	143369	153246	142980	153822	3.92	0.65
JR211	72010	57548	60223	67849	58382	80232	87976	95655	101081	110548	6.79	0.74
JR212	33564	34429	36537	37327	36118	39508	44448	36424	34111	36709	0.81	0.09
JR213	98579	98832	81894	85158	103560	90144	115202	124581	138535	124847	4.46	0.58
JR214	113211	95127	112118	123950	118402	136236	148047	146961	118971	144677	3.51	0.55
JR215	96014	92931	95744	70225	72980	83085	90853	95603	117179	59861	-1.05	0.03
JR216	32429	40107	35950	34810	64908	29348	33820	34422	32865	70925	2.76	0.08
JR217	93335	92504	84125	77748	69829	100249	131280	129556	116193	72235	2.05	0.07
JR218	26633	46128	51142	45330	42184	43457	46426	49309	40428	47563	2.55	0.18
JR219	-	-	-	18641	46015	87857	95096	116486	131153	123232	28.72	0.77
JR220	-	-	-	6118	6817	9095	11091	22276	26675	27101	28.89	0.94
JR223	-	-	-	15533	15698	17810	18708	16529	18747	18383	2.81	0.55

Annual Growth Rate For Year 2012

DISTRICT : KULAI JAYA

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
JR209	47860	45013	42877	27226	27118	29106	25673	26689	28084	30378	-5.98	0.56

DISTRICT : KLUANG

JR301	4390	4425	12521	4362	4796	5443	5177	5210	5208	5432	-0.42	0.00
JR302	8529	7317	10791	6350	10246	9616	12978	16412	15217	15149	8.77	0.67
JR303	16382	11794	10555	11126	14409	10514	7103	9322	7769	9269	-6.26	0.55
JR304	7888	7465	7638	7590	7846	7203	7585	7705	7469	7889	-0.02	0.00
JR305	12368	13434	13590	15248	15381	14708	15261	14810	14894	15398	1.87	0.59
JR306	32325	34299	30642	31429	30231	33897	33572	34964	36952	39674	2.02	0.53
JR307	5297	5597	5567	6045	6731	7550	8585	8479	8336	8293	6.12	0.89

DISTRICT : KOTA TINGGI

JR401	7326	6360	10297	5616	14513	14695	13494	6676	16043	7372	4.25	0.10
JR402	13378	14665	14897	16614	16595	19628	19890	17768	17026	19618	3.68	0.68
JR403	14675	14855	15397	14802	14913	15591	16450	15504	16044	15672	0.93	0.55
JR404	18761	20418	9799	19289	19506	19417	19182	20302	20106	23273	3.30	0.18
JR405	6750	9839	10189	6956	15443	9746	9796	10089	6992	8332	0.01	0.00
JR406	8548	9883	9499	9688	8298	8725	9643	6672	7703	6535	-3.57	0.51
JR407	4331	4701	4558	5270	6286	5231	5604	4856	4772	4604	0.59	0.03
JR408	3845	3856	3959	7071	4188	4212	4141	3784	4042	4514	-0.03	0.00
JR409	11963	12636	11713	12717	13807	16676	15424	15869	14588	13322	2.58	0.41

DISTRICT : MERSING

JR501	12157	13507	13986	17332	18563	17192	16688	15598	13445	13411	0.73	0.02
JR502	4167	4377	10002	4018	4840	5824	4671	4590	5073	7080	1.54	0.03
JR503	3917	4000	5970	4049	4247	4262	4477	4633	4481	4490	0.64	0.03
JR504	939	1004	959	758	794	841	1032	1062	1126	1055	2.03	0.21

DISTRICT : LEDANG

JR601	16469	16311	17884	14272	15766	20782	23513	20582	20376	19157	3.27	0.41
JR602	4338	4497	4161	4334	4390	4266	4616	5022	5230	4690	1.73	0.51
JR603	7796	9143	6808	9678	6793	7682	9293	12793	11166	9917	4.07	0.35
JR604	21597	16332	15557	11339	11587	13746	14292	12866	12493	14246	-3.46	0.31
JR605	21751	21847	23578	29638	33229	32018	33881	31746	26870	25276	2.82	0.24
JR606	13120	13460	12649	12030	12333	10509	12387	15519	15162	19072	3.12	0.32

Annual Growth Rate For Year 2012

DISTRICT : MUAR

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
JR607	17099	18884	20299	23690	17072	12223	4329	4231	4566	4227	-21.69	0.77
JR608	20674	25506	26527	29201	25207	23100	16391	17594	17384	16027	-5.36	0.54
JR609	7051	6177	7143	5752	6751	6536	7738	7121	6063	6871	0.29	0.01
JR610	3604	3490	3286	3206	3049	3055	3219	3686	4282	5505	3.53	0.34
JR611	10851	10411	10632	9859	9290	9163	11437	12798	12066	15618	3.44	0.42
JR612	8342	10676	10106	10144	10393	10232	11201	10031	9743	12852	2.12	0.35
JR613	4444	4562	4731	6112	6212	7920	5785	6283	6394	8142	5.64	0.66

DISTRICT : PONTIAN

JR701	9119	8974	9302	9692	8877	9193	9965	10068	12845	10080	2.38	0.45
JR702	43411	13534	14191	20095	13926	17789	14480	14406	12125	16772	-6.06	0.25
JR703	6901	5313	5237	5943	5643	5569	6578	6385	6436	6455	1.23	0.15
JR704	15434	15663	15816	19754	16478	18656	18950	18006	16482	15967	0.79	0.07
JR705	15231	13957	13590	16372	16891	17535	18470	20268	18103	17452	3.30	0.63

DISTRICT : SEGAMAT

JR801	10464	10932	10947	12282	13880	14145	14648	15237	15781	15875	5.17	0.94
JR802	10626	12239	12099	12375	12322	12367	12779	12968	13938	14985	2.70	0.81
JR803	9885	9998	9938	10240	11060	10875	11031	11067	12085	12418	2.50	0.90
JR804	6975	7135	7317	7526	8037	8074	8024	9900	9561	10614	4.57	0.89

JOHOR

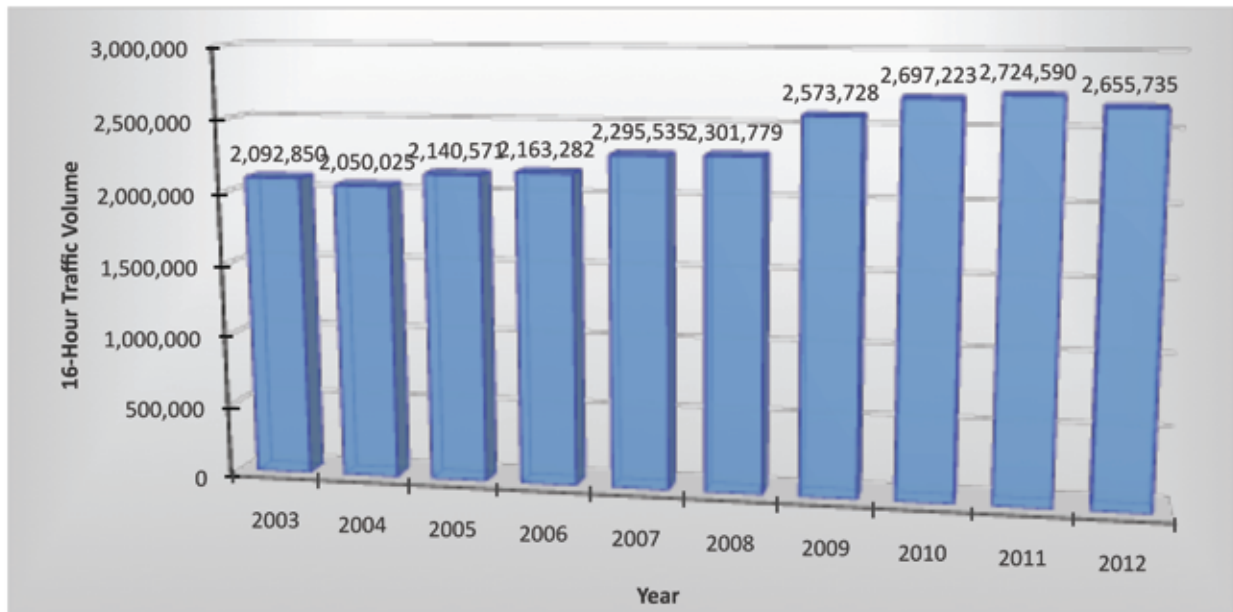


Figure 12 A : Johor Yearly 16-hour Traffic Volume

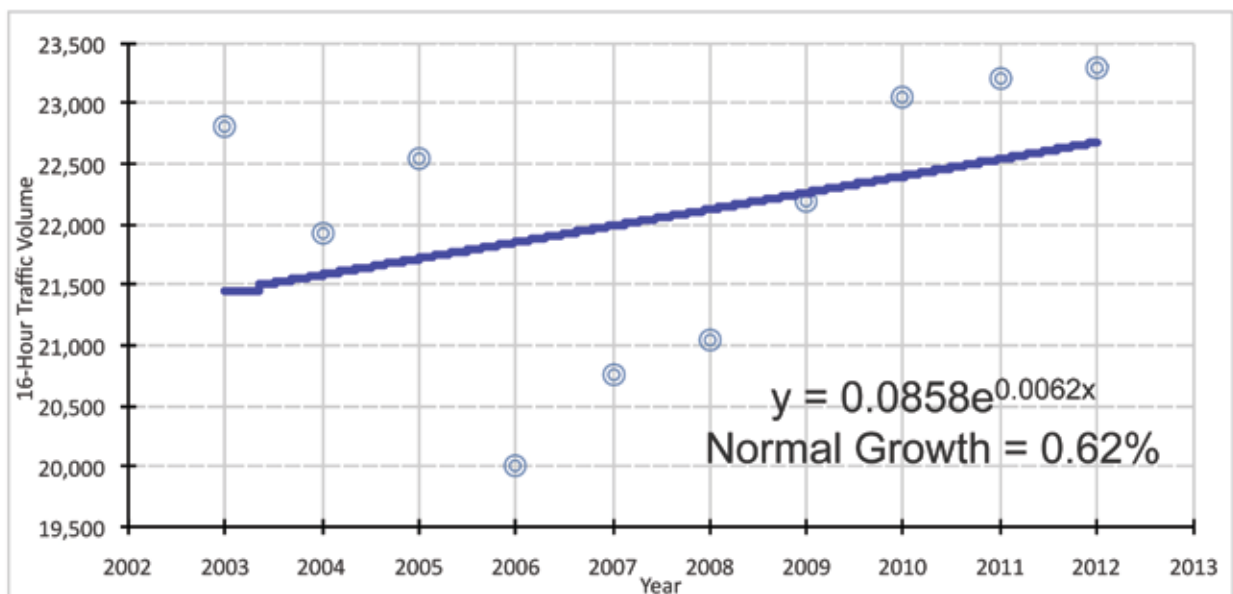


Figure 12 B : Johor Average Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure J1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012

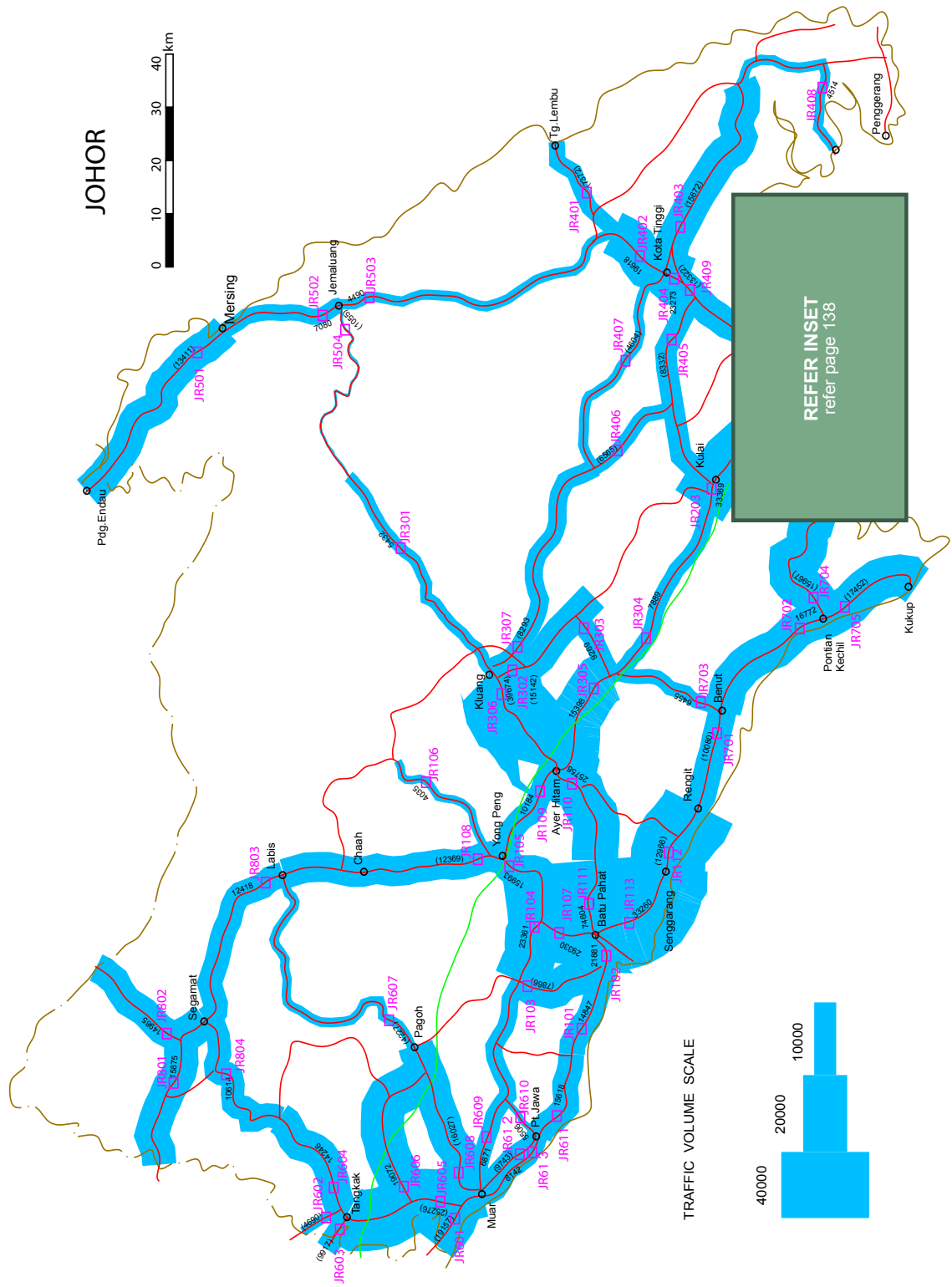
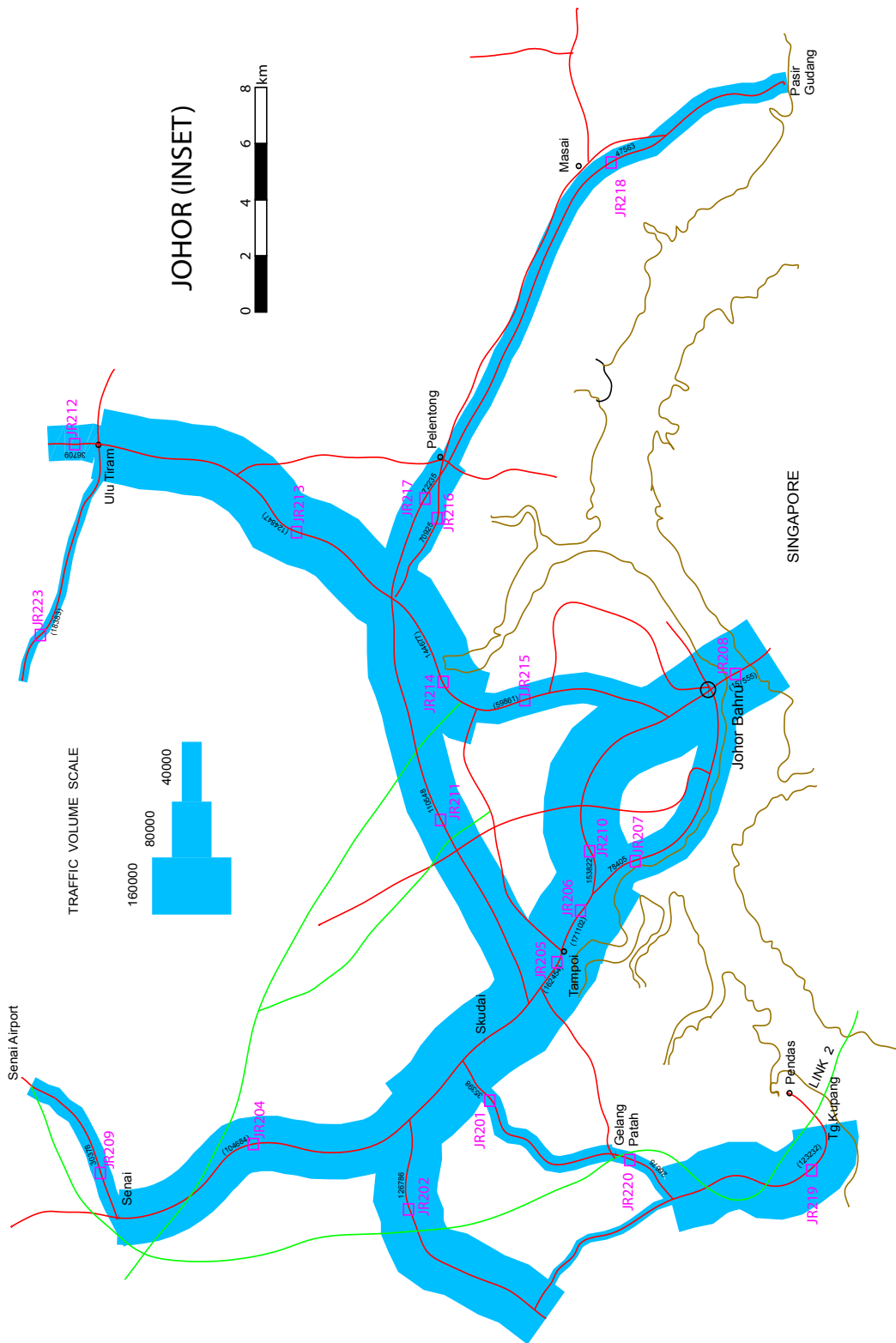
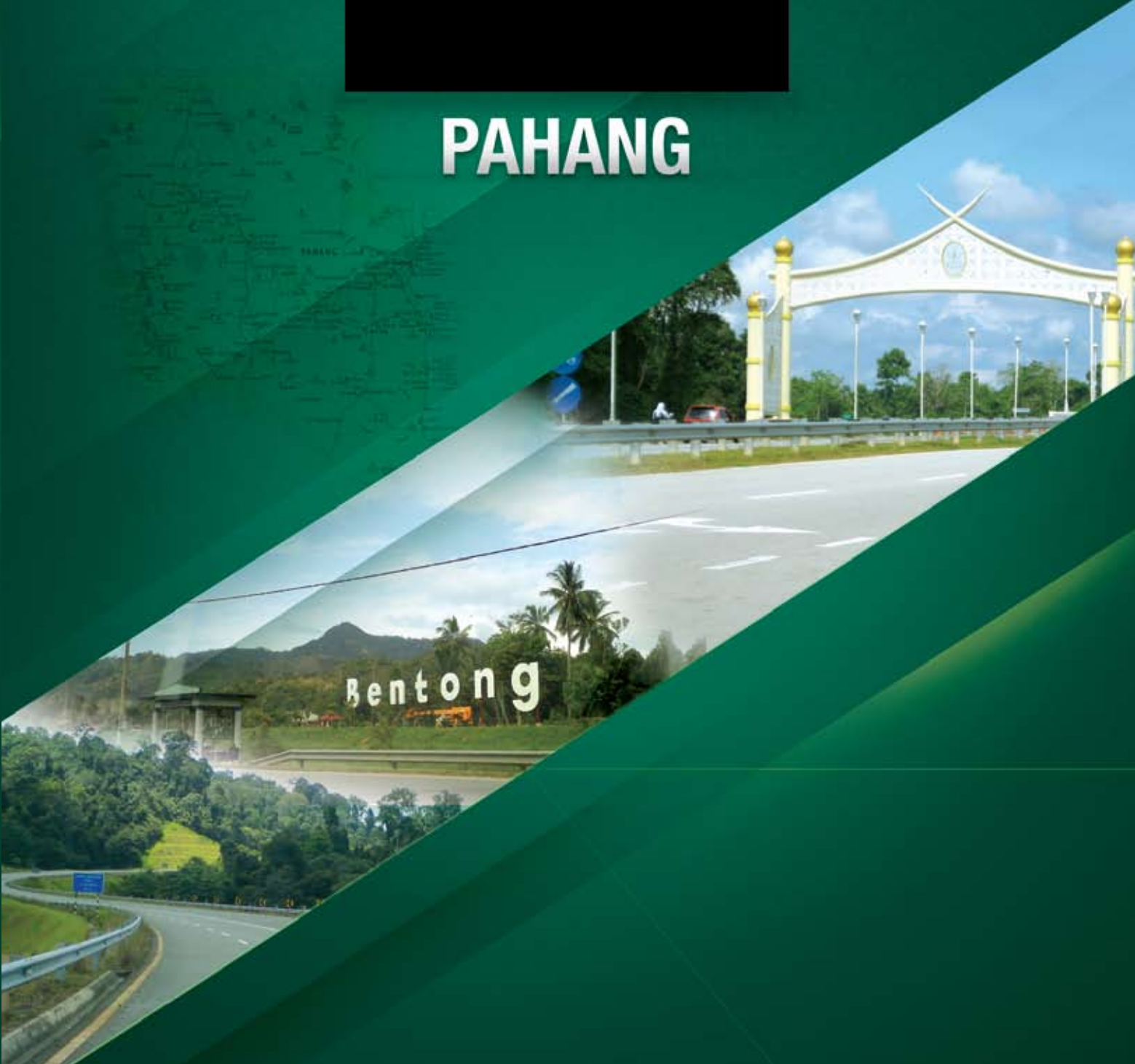


Figure J1(S): AVERAGE 16-HOUR TRAFFIC VOLUME 2012





PAHANG



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BENTONG	0	2	6	8
2	KUANTAN	1	5	5	11
3	KUALA LIPIS	1	1	1	3
4	PEKAN	1	0	2	3
5	RAUB	0	1	3	4
6	TEMERLOH	1	0	5	6
7	TRIANG	0	0	1	1
8	MARAN	1	1	2	4
9	JERANTUT	0	0	1	1
10	ROMPIN	0	0	4	4
	TOTAL	5	10	30	45

Location Description For Traffic Census Stations

DISTRICT : BENTONG

Station Number	Survey Type	Route Number	KM	Description of Locations
CR101	1	2	42.8	Kuantan-Kuala Lumpur (along KL-Karak H'way)
CR102	1	2	67	Kuala Lumpur - Kuantan (along KL-Karak H'way)
CR103	3	2	88.8	Kuantan-Karak
CR104	3	68	225.4	Kuantan-Kuala Lumpur (along old road)
CR105	3	8	204.5	Kuantan-Raub
CR106	3	68	195.5	Kuantan-Bentong (along old road)
CR107	3	9	1.6	Karak-Simpang Pertang
CR108	3	8	1	Bentong-Raub

DISTRICT : KUANTAN

CR401	3	12	8.1	Kuantan-Segamat
CR402	1	3	12.5	Kuantan-Pekan
CR403	0	2	233	Kuantan-Maran
CR404	3	2	8.1	Kuantan-Maran
CR405	3	3	1.5	1km. from clover leaf junction on Kuantan Bypass (southbound)
CR406	3	3	2	1km. from clover leaf junction on Kuantan Bypass (northbound)
CR407	1	C4	14.5	Kuantan-Sungai Lembing
CR408	1	C4	3	Kuantan-Sungai Lembing
CR409	1	2	4.8	Kuantan-Kemaman
CR410	1	3	32.5	Kuantan-Kemaman
CR411	3	183	8.5	Kuantan-Tanjung Lumpur-Penor

DISTRICT : KULA LIPIS

CR501	3	64	212.5	Kuantan-Jerantut-Benta (after Kampong Tanjung Besar)
CR502	1	8	227.8	Kuantan-Jerantut-Benta-Kuala Lipis (2.4km to Kuala Lipis road)
CR503	0	8	282	Kuala Lumpur-Kuala Lipis-Kampong Padang Tuanku-Kota Bahru

DISTRICT : PEKAN

CR601	3	82	85.3	Pekan-Batu Balik
CR602	3	82	1.6	Pekan-Batu Balik
CR603	0	3	3	Pekan-Nenasi

DISTRICT : RAUB

CR701	1	55	230.6	Kuantan-Tranum-Gap (50m east of the junction)
CR702	3	C5	4.8	Raub-Cheroh
CR703	3	8	239.9	Kuantan-Tranum-Raub
CR704	3	8	228.6	Kuantan-Benta-Raub

Location Description For Traffic Census Stations

DISTRICT : TEMERLOH

Station Number	Survey Type	Route Number	KM	Description of Locations
CR801	0	2	115	Kuantan-Karak
CR802	3	2	219.5	Mentakab Bypass (400m. fr. first junction towards Temerloh)
CR803	3	2	130.4	Kuantan-Temerloh (600 ft from Temerloh bridge towards Maran)
CR807	3	98	146.5	Kuantan-Temerloh-Jerantut
CR808	3	87	132	Kuantan-Mentakab
CR809	3	10	126.7	Kuantan-Temerloh-Triang

DISTRICT : TRIANG

CR810	3	10	161	Kuantan-Temerloh-Kemayan
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DISTRICT : MARAN

CR804	3	2	80.5	Kuantan-Maran-Temerloh
CR805	1	2	189	Kuantan-Maran
CR811	0	64	92	Kuantan-Maran-Jerantut
CR812	3	64	39	Kuantan-Maran-Jerantut

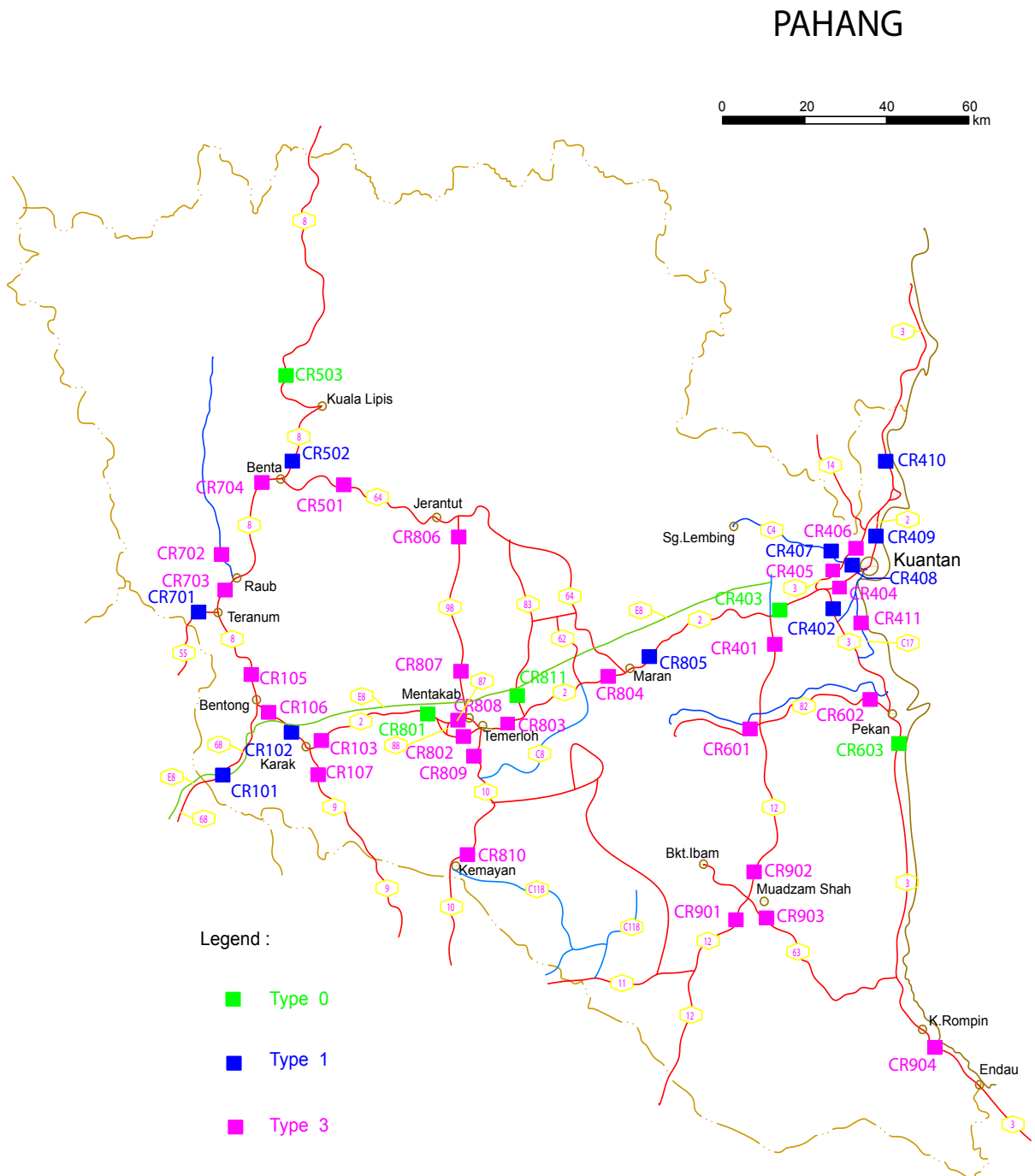
DISTRICT : JERANTUT

CR806	3	98	1.6	Jerantut-Kampung Kerdau
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DISTRICT : ROMPIN

CR901	3	12	104.4	Kuantan-Segamat (400m. Bkt.Ibam-Rompin junct. south bound)
CR902	3	12	102.5	Kuantan-Segamat (400m. Bkt Ibam-Rompin junct. north bound)
CR903	3	63	18.3	Bkt.Ibam-Rompin (400m fr. Kuantan-Segamat junct.east bound)
CR904	3	3	143.3	Kuantan-Rompin-Endau

Figure C : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BENTONG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
CR101	-	28182	2280	1700-1800	73.1	8.8	7	4.7	2.1	4.3	100.0
CR102	-	27753	2356	1700-1800	72	8.7	4.8	6.4	1.7	6.5	100.0
CR103	-	6320	651	2100-2200	61.7	13.2	5.9	3.7	1.2	14.4	100.0
CR104	-	205	21	1900-2000	39	8.8	23.4	5.9	1	22	100.0
CR105	-	12496	1110	2100-2200	61.7	16.3	7	3.8	1.6	9.6	100.0
CR106	-	14393	1243	1700-1800	57.3	12.6	7.1	2.8	0.7	19.5	100.0
CR107	-	4260	341	2100-2200	44.3	18.2	8.2	6.2	0.9	22.3	100.0
CR108	-	1472	127	2100-2200	39	18.3	7.1	2.9	2.1	30.6	100.0

DISTRICT : KUANTAN

CR401	-	9090	966	2100-2200	49.3	15.1	11.3	15	2.8	6.4	100.0
CR402	-	16273	1357	1700-1800	72.8	9.3	5.4	3.3	0.9	8.4	100.0
CR403	34866	30694	2681	1700-1800	65.8	12.2	6.3	7.4	1.2	7.2	100.0
CR404	-	78009	7843	2100-2200	77.6	5.6	2.5	1.1	0.4	12.9	100.0
CR405	-	46080	4785	1700-1800	52	21.3	7.8	7.7	0.3	10.9	100.0
CR406	-	76917	6322	2100-2200	37.6	21.4	11.9	0.9	0.3	27.9	100.0
CR407	-	29532	2452	1700-1800	66.1	6.9	3	1.8	0.7	21.4	100.0
CR408	-	40437	3440	1700-1800	68.6	11.6	2.7	0.3	0.8	16	100.0
CR409	-	40600	3717	1700-1800	66.7	10.9	2.2	1.3	0.2	18.6	100.0
CR410	-	23219	1993	0700-0800	65	9.3	5	4.6	0.9	15.2	100.0
CR411	-	21513	2736	1700-1800	70.8	7.8	3.3	1.2	0.4	16.5	100.0

DISTRICT : KUALA LIPIS

CR501	-	1387	134	2100-2200	46.6	13.1	9.1	4.5	1.2	25.5	100.0
CR502	-	8321	697	1700-1800	67.9	12.9	6.1	4.7	1.8	6.6	100.0
CR503	9514	7695	666	1700-1800	57.9	10	6.2	5.5	1	19.4	100.0

DISTRICT : PEKAN

CR601	-	1699	197	2100-2200	49.7	17.4	3.5	1.4	0.8	27.2	100.0
CR602	-	5689	513	2100-2200	54.5	11.7	3.4	13.4	0.4	16.7	100.0
CR603	10491	9520	777	1200-1300	56.9	13	4.4	4.7	1.1	19.9	100.0

DISTRICT : RAUB

CR701	-	945	96	1500-1600	47.3	9	5.3	2.7	0	35.7	100.0
CR702	-	19511	1611	2100-2200	28.7	20.5	15.3	10.6	1	23.9	100.0
CR703	-	25505	1883	1700-1800	30	19.4	15.2	13.1	1.8	20.6	100.0
CR704	-	12777	1225	2100-2200	33.5	18.9	12.5	10.6	2	22.5	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : TEMERLOH

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
CR801	14861	13335	1219	1400-1500	59.9	7.2	7.1	9.5	0.9	15.5	100.0
CR802	-	8243	728	2100-2200	49.8	15.3	11.8	12.7	0.4	10	100.0
CR803	-	31067	3198	1700-1800	63	11.9	5.9	3.5	0.4	15.4	100.0
CR807	-	10319	1038	2100-2200	61	11.8	5.5	4.4	1.1	16.2	100.0
CR808	-	26499	2231	2100-2200	65	11.6	4.6	2	0.5	16.2	100.0
CR809	-	14510	1300	1700-1800	65.6	10.2	4.5	4.3	0.4	15	100.0

DISTRICT : TRIANG

CR810	-	11949	1099	2100-2200	49.5	14.6	15	3.7	0.2	16.9	100.0
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DISTRICT : MARAN

CR804	-	7416	608	2100-2200	63.3	9.4	6	6.5	0.7	14	100.0
CR805	-	7057	554	1700-1800	60.2	10.2	8	7.2	1	13.5	100.0
CR811	12875	10593	960	1700-1800	64.1	8.9	5.8	1.3	0.7	19.3	100.0
CR812	-	10473	1088	1700-1800	68.1	9.7	5.2	2	0.6	14.5	100.0

DISTRICT : JERANTUT

CR806	-	25134	2280	2100-2200	42.1	21	10.3	4.6	0.4	21.6	100.0
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DISTRICT : ROMPIN

CR901	-	8901	673	2100-2200	55.2	17.2	7.7	8.5	0.6	10.8	100.0
CR902	-	8658	704	2100-2200	53.7	15.9	9.4	10.7	0.8	9.6	100.0
CR903	-	7870	707	2100-2200	62.8	14.5	5.4	3.2	0.8	13.2	100.0
CR904	-	7547	1057	2100-2200	54.3	13.4	10.1	5.9	0.7	15.6	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BENTONG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
CR101	-	31211	2831	1600-1700	74.2	9.6	6.1	4.3	1.9	4	100.0
CR102	-	29187	2443	1700-1800	69.5	11.1	6.1	4.9	1.5	6.9	100.0
CR103	-	6376	509	0700-0800	50.7	12.9	13.3	8.1	0.9	14.1	100.0
CR104	-	437	48	0800-0900	44.6	12.1	14.2	1.4	0.2	27.5	100.0
CR105	-	15618	1567	1600-1700	63.6	14.3	7.4	3.9	1.4	9.4	100.0
CR106	-	16587	1569	1700-1800	55.3	13.4	7.2	2.9	0.7	20.5	100.0
CR107	-	4195	351	1700-1800	38.7	18.6	7.6	8.8	0.7	25.6	100.0
CR108	-	1630	151	1000-1100	38.8	20.4	8.6	2.5	2.3	27.4	100.0

DISTRICT : KUANTAN

CR401	-	8543	779	1500-1600	51	19	10.4	11.9	1.3	6.3	100.0
CR402	-	13201	1217	0700-0800	68.3	12.7	5.3	3.8	0.9	9.1	100.0
CR403	33834	31582	2852	1800-1900	67.1	11.8	6	6.9	1.2	7	100.0
CR404	-	78670	8966	1800-1900	79.8	4.5	3.3	1.1	0.5	10.7	100.0
CR405	-	50130	5122	1700-1800	51.4	22.4	7.7	7.1	0.4	11.1	100.0
CR406	-	67874	8297	1700-1800	53.6	17.9	9.4	3.9	0.2	15	100.0
CR407	-	34455	3203	1700-1800	57.3	4.7	4.9	3.2	0.8	29.1	100.0
CR408	-	35034	2871	1900-2000	76.4	8	1.8	0.4	0.9	12.5	100.0
CR409	-	44476	3867	1700-1800	62.2	14.3	2.5	1.2	0.3	19.4	100.0
CR410	-	22602	2030	1700-1800	62.9	11	5.1	5.1	0.7	15.2	100.0
CR411	-	21444	2757	0700-0800	69.2	6.1	5.9	1.7	0.4	16.8	100.0

DISTRICT : KUALA LIPIS

CR501	-	1687	156	1400-1500	44.3	14	11.5	8.5	1.4	20.3	100.0
CR502	-	7895	697	1700-1800	64.5	12.4	7.4	5.9	1.7	8.1	100.0
CR503	8682	7330	602	1400-1500	53.1	10.6	7.6	6.7	0.9	21.1	100.0

DISTRICT : PEKAN

CR601	-	4014	479	0700-0800	53.8	16.5	4	2.2	0.6	22.9	100.0
CR602	-	5345	517	0700-0800	48.2	12.8	2.2	20.4	0.5	16	100.0
CR603	12264	11118	1032	0700-0800	53.2	14.2	5.3	6.1	1	20.1	100.0

DISTRICT : RAUB

CR701	-	875	81	1300-1400	48.2	9.1	5.4	3.7	0	33.5	100.0
CR702	-	24369	1830	1800-1900	25.5	20.7	16.9	14.4	0.7	21.7	100.0
CR703	-	33649	4728	1000-1100	24.1	17.8	15.7	14.3	2	26.1	100.0
CR704	-	24041	1791	1400-1500	26	20.5	17.1	14.1	1.5	20.7	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : TEMERLOH

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
CR801	14746	13227	1028	1100-1200	52.7	11.6	10.3	8.2	1.1	16	100.0
CR802	-	7992	849	1900-2000	42.5	14.9	13.6	14.1	0.3	14.4	100.0
CR803	-	31463	2980	1700-1800	64.5	10.4	6.4	3.7	0.4	14.6	100.0
CR807	-	10295	969	1600-1700	54.4	16.3	10.2	5.4	0.9	12.8	100.0
CR808	-	29859	2542	1800-1900	59.7	14	5.4	2.4	0.6	17.9	100.0
CR809	-	13976	1411	1800-1900	58.1	13.5	8.8	4.5	0.7	14.5	100.0

DISTRICT : TRIANG

CR810	-	12650	1251	1700-1800	41	15.5	13.6	9.1	0.2	20.6	100.0
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DISTRICT : MARAN

CR804	-	6354	578	1700-1800	60.4	9.5	8.1	6.7	1.1	14.2	100.0
CR805	-	7119	572	1500-1600	58.3	12.1	8.8	7.6	0.9	12.2	100.0
CR811	10701	9389	817	1700-1800	62.5	8.2	5.1	2.1	0.8	21.4	100.0
CR812	-	11201	1219	1800-1900	66.4	8.9	5.4	2.7	0.4	16.1	100.0

DISTRICT : JERANTUT

CR806	-	16624	1469	1300-1400	46.6	14.3	12.8	4.9	0.6	20.8	100.0
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DISTRICT : ROMPIN

CR901	-	9269	718	1100-1200	56	16.8	7.4	9.5	0.5	9.9	100.0
CR902	-	10431	1283	1700-1800	54.5	18.5	8.1	8.9	0.7	9.3	100.0
CR903	-	7476	625	1700-1800	57.5	18	6.4	4.3	0.7	13.1	100.0
CR904	-	7486	637	1800-1900	53.9	14.6	10	5.3	0.7	15.5	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BENTONG

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
CR101	29697	73.6	9.2	6.5	4.5	2	4.1	2555
CR102	28470	70.7	9.9	5.4	5.6	1.6	6.7	2400
CR103	6348	56.2	13	9.6	5.9	1.1	14.3	580
CR104	321	41.8	10.5	18.8	3.6	0.6	24.7	35
CR105	14057	62.7	15.3	7.2	3.9	1.5	9.5	1339
CR106	15490	56.3	13	7.2	2.9	0.7	20	1406
CR107	4228	41.5	18.4	7.9	7.5	0.8	24	346
CR108	1551	38.9	19.4	7.8	2.7	2.2	29	139

DISTRICT : KUANTAN

CR401	8817	50.2	17	10.9	13.5	2	6.4	873
CR402	14737	70.5	11	5.3	3.5	0.9	8.7	1287
CR403	31138	66.4	12	6.2	7.1	1.2	7.1	2766
CR404	78340	78.7	5.1	2.9	1.1	0.4	11.8	8405
CR405	48105	51.7	21.8	7.7	7.4	0.4	11	4954
CR406	72396	45.6	19.7	10.6	2.4	0.3	21.5	7310
CR407	31994	61.7	5.8	4	2.5	0.8	25.3	2828
CR408	37735	72.5	9.8	2.3	0.3	0.8	14.3	3156
CR409	42538	64.5	12.6	2.4	1.3	0.3	19	3792
CR410	22911	64	10.2	5.1	4.8	0.8	15.2	2011
CR411	21479	70	6.9	4.6	1.4	0.4	16.6	2747

DISTRICT : KUALA LIPIS

CR501	1537	45.4	13.6	10.3	6.5	1.3	22.9	145
CR502	8108	66.2	12.6	6.8	5.3	1.7	7.4	697
CR503	7513	55.5	10.3	6.9	6.1	1	20.3	634

DISTRICT : PEKAN

CR601	2857	51.7	17	3.8	1.8	0.7	25	338
CR602	5517	51.3	12.2	2.8	16.9	0.5	16.3	515
CR603	10319	55	13.6	4.9	5.4	1	20	905

DISTRICT : RAUB

CR701	910	47.8	9.1	5.3	3.2	0	34.6	88
CR702	21940	27.1	20.6	16.1	12.5	0.9	22.8	1721
CR703	29577	27	18.6	15.5	13.7	1.9	23.3	3306
CR704	18409	29.8	19.7	14.8	12.4	1.8	21.6	1508

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : TEMERLOH

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
CR801	13281	56.3	9.4	8.7	8.9	1	15.8	1124
CR802	8118	46.1	15.1	12.7	13.4	0.4	12.2	789
CR803	31265	63.8	11.2	6.1	3.6	0.4	15	3089
CR807	10307	57.7	14	7.9	4.9	1	14.5	1004
CR808	28179	62.4	12.8	5	2.2	0.6	17	2387
CR809	14243	61.8	11.8	6.7	4.4	0.5	14.7	1356

DISTRICT : TRIANG

CR810	12300	45.2	15.1	14.3	6.4	0.2	18.8	1175
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DISTRICT : MARAN

CR804	6885	61.9	9.4	7	6.6	0.9	14.1	593
CR805	7088	59.2	11.1	8.4	7.4	1	12.9	563
CR811	9991	63.3	8.5	5.5	1.7	0.7	20.3	888
CR812	10837	67.2	9.3	5.3	2.3	0.5	15.3	1154

DISTRICT : JERANTUT

CR806	20879	44.4	17.6	11.6	4.7	0.5	21.2	1875
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DISTRICT : ROMPIN

CR901	9085	55.6	17	7.5	9	0.5	10.3	696
CR902	9545	54.1	17.2	8.7	9.8	0.8	9.4	994
CR903	7673	60.1	16.3	5.9	3.8	0.8	13.2	666
CR904	7517	54.1	14	10	5.6	0.7	15.6	847

Annual Growth Rate For Year 2012

DISTRICT : BENTONG

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
CR101	19354	17493	18253	26661	25430	26758	27091	27039	31444	29697	6.07	0.78
CR102	16348	16350	17038	19707	21061	20703	22224	28109	27653	28470	6.98	0.94
CR103	12199	9407	8878	6379	7463	6517	7618	6286	7009	6348	-5.60	0.62
CR104	133	129	153	155	189	162	172	205	195	321	7.57	0.76
CR105	10911	7513	11050	9774	9293	10624	10992	11627	14439	14057	4.60	0.54
CR106	11364	14597	11909	14333	14002	14712	15237	16000	17574	15490	3.51	0.67
CR107	2615	3316	3030	3391	3212	3245	3688	4144	4152	4228	4.68	0.83
CR108	-	-	-	1264	1213	1204	1514	1510	1852	1551	6.02	0.67

DISTRICT : KUANTAN

CR401	5918	5217	5448	5700	5266	5712	7510	7298	7710	8817	5.27	0.72
CR402	10965	11615	11718	11656	12232	11212	11687	14589	13645	14737	2.91	0.66
CR403	20790	18783	20345	22293	24565	23395	26064	28248	29142	31138	5.32	0.92
CR404	43692	56383	60942	46938	54038	43855	53191	59580	66023	78340	3.89	0.41
CR405	20264	26695	26003	22590	23175	28877	35804	35325	37595	48105	8.07	0.81
CR406	17677	25035	24610	24364	24112	29194	31827	37703	36093	72396	11.14	0.78
CR407	14005	13485	13236	18890	18990	21231	25334	23845	28580	31994	10.08	0.93
CR408	35326	34311	37860	38869	39018	36189	41475	42503	39016	37735	1.33	0.36
CR409	28032	29247	31543	31179	33371	31550	33672	34986	35911	42538	3.57	0.85
CR410	16098	15316	16470	18840	21337	20260	22249	22079	23278	22911	4.86	0.87
CR411	10938	11247	11398	13005	11313	13854	18450	18150	21213	21479	8.54	0.88

DISTRICT : KUALA LIPIS

CR501	1120	1205	1246	1536	1573	1867	1806	1632	1646	1537	4.27	0.56
CR502	3802	2672	3083	5724	6399	6342	7103	7093	7617	8108	11.49	0.77
CR503	5051	5890	5726	6134	6427	6609	6159	6253	7053	7513	3.22	0.78

DISTRICT : PEKAN

CR601	2684	2864	2550	3097	2962	3711	3059	3660	3298	2857	2.15	0.28
CR602	2820	3059	3533	3520	3816	4359	3644	3843	4088	5517	5.29	0.74
CR603	6881	6651	6450	6513	6902	5746	7738	8650	9761	10319	4.93	0.60

DISTRICT : RAUB

CR701	672	597	579	549	601	1112	884	833	779	910	5.12	0.43
CR702	7795	7912	7999	8222	13267	14059	15871	17863	19414	21940	13.12	0.93
CR703	10172	10863	10204	13271	17187	24490	20522	25779	23229	29577	12.86	0.89
CR704	3357	6273	5739	6354	8862	11287	10409	18299	18922	18409	18.52	0.93

Annual Growth Rate For Year 2012

DISTRICT : TEMERLOH

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
CR801	16616	13474	13906	11003	12106	11567	11614	11771	11597	13281	-2.30	0.31
CR802	11151	11095	10149	6742	6861	6844	7177	7173	7776	8118	-4.20	0.39
CR803	28395	26028	26340	25201	26664	27191	32628	32933	33902	31265	2.80	0.58
CR807	6185	7599	7451	6973	7295	8310	8421	10740	10572	10307	5.72	0.83
CR808	22976	20144	24363	24907	25967	26310	28237	27610	27939	28179	3.12	0.76
CR809	10763	10451	10177	12105	11389	11332	11472	14260	14339	14243	3.79	0.76

DISTRICT : TRIANG

CR810	7615	7260	8064	8047	7674	7434	7109	9721	11348	12300	4.83	0.56
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DISTRICT : MARAN

CR804	11308	9596	9591	7936	7866	7647	7350	7516	7487	6885	-4.70	0.82
CR805	11845	8820	8871	6832	6855	6587	6761	6890	7317	7088	-4.40	0.51
CR811	8596	8004	7779	7358	7943	8253	8074	8599	9499	9991	2.04	0.45
CR812	-	-	-	9209	8486	8447	9950	7902	8761	10837	1.73	0.12

DISTRICT : JERANTUT

CR806	13612	14815	13706	13810	11780	14799	18831	26852	26461	20879	7.53	0.61
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DISTRICT : ROMPIN

CR901	5958	6439	6293	6291	7466	6761	14792	8916	8855	9085	6.20	0.46
CR902	6571	7159	6828	6634	6721	7316	11634	8102	8427	9545	4.32	0.49
CR903	4695	4944	4769	4587	4879	2857	5948	6303	6672	7673	4.94	0.30
CR904	5371	5560	5303	5364	5509	5760	6220	6886	7129	7517	3.98	0.84

PAHANG

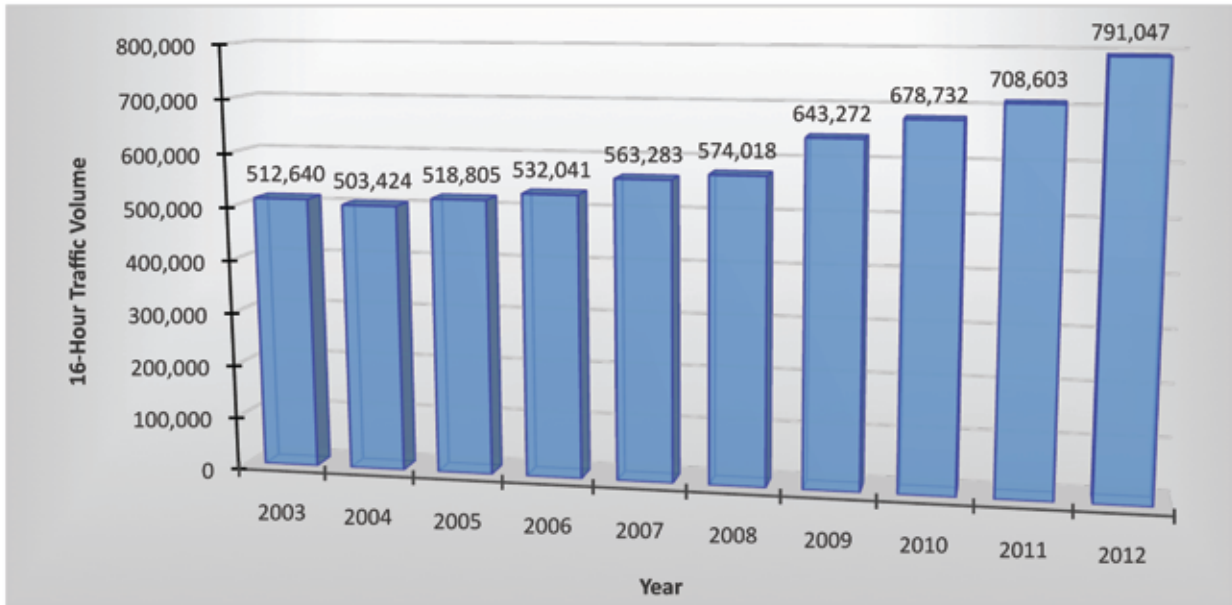


Figure 13 A : Pahang Yearly 16-hour Traffic Volume

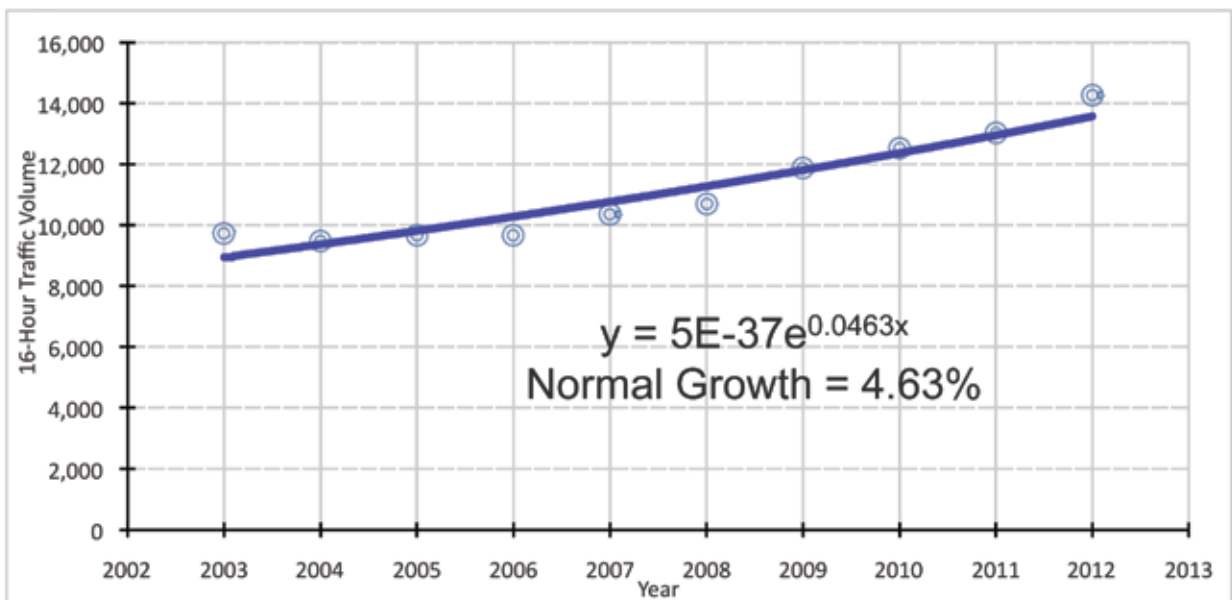
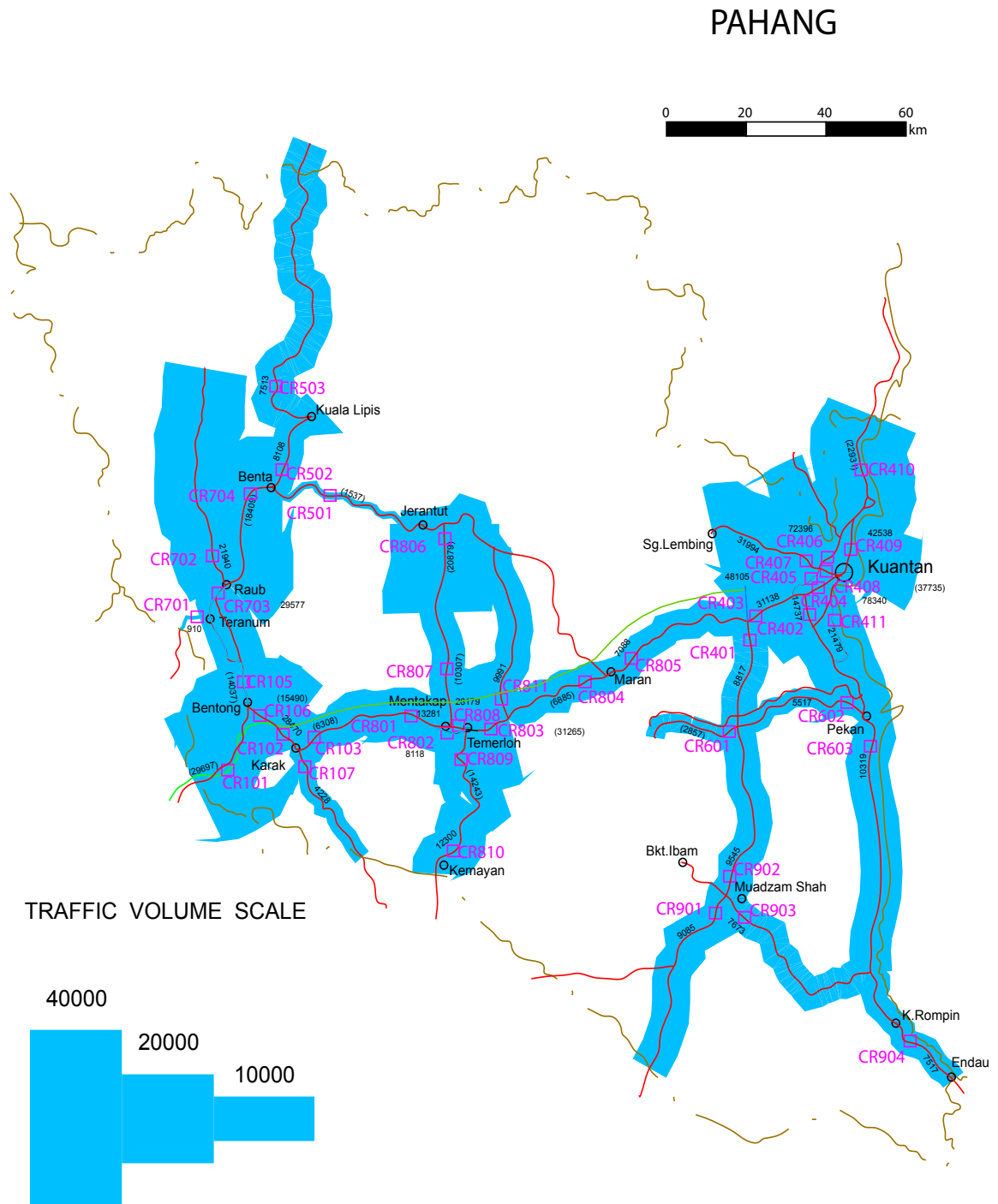


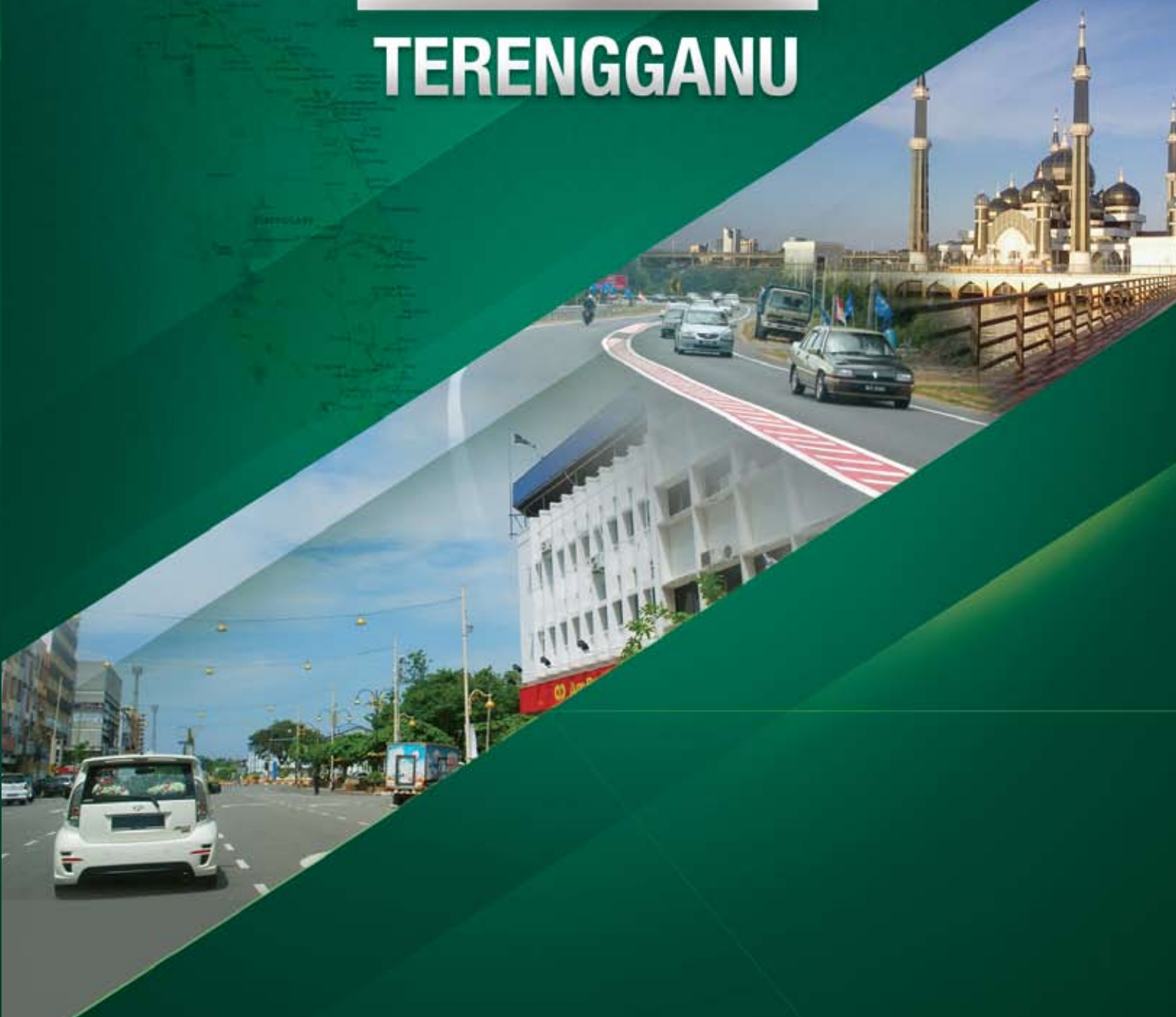
Figure 13 B : Pahang Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure C1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





TERENGGANU



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BESUT	1	1	2	4
2	SETIU	1	0	0	1
3	DUNGUN	0	0	7	7
4	KEMAMAN	2	0	3	5
5	KUALA TERENGGANU	0	0	4	4
6	MARANG	1	2	1	4
7	HULU TERENGGANU	1	0	3	4
	TOTAL	6	3	20	29

Location Description For Traffic Census Stations

DISTRICT : BESUT

Station Number	Survey Type	Route Number	KM	Description of Locations
TR101	3	T7	1.6	Jerteh-Bukit Petri-Kuala Besut
TR102	0	84	3	Jerteh-Kuala Besut
TR103	1	3	61.5	Kuala Terengganu-Jerteh-Kota Bahru
TR105	3	T5	1.6	Jerteh-Tenang

DISTRICT : SETIU

TR104	0	3	70.8	Kuala Terengganu-Kota Bharu
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DISTRICT : DUNGUN

TR201	3	3	65.7	Kuala Terengganu-Dungun
TR202	3	116	78.9	Kuala Terengganu-Dungun-Kemaman
TR203	3	122	5.6	Paka-Kerteh
TR204	3	132	1.6	Kuala Dungun-Jambatan Jerangau
TR205	3	3	5.6	Paka-Rasau
TR206	3	14	8.1	From Bukit Besi on Lebuhraya Jerangau-Jabor
TR207	3	14	116.7	Jalan Jerangau-Jabor

DISTRICT : KEMAMAN

TR301	3	124	-	Tebak-Kemasik (400m fr.junction Jerangau-Jabor)
TR302	0	3	122.5	Kuala Terengganu-Kemaman-Kuantan
TR303	3	T13	10.6	Chukai-Kampong Ibok (100m north of the junction to Ibok)
TR304	3	T8	11.3	Chukai-Kampong Ayer Puteh
TR305	0	14	48	Kuantan-Kuala Terengganu (Jalan Jabor-Jerangau)

Location Description For Traffic Census Stations

DISTRICT : KUALA TERENGGANU

Station Number	Survey Type	Route Number	KM	Description of Locations
TR401	3	3	18	Kuala Terengganu-Jerteh
TR404	3	T1	35.4	Kuala Terengganu-Kg. Merang
TR405	3	3685	15.1	Gong Badak-Kuala Terengganu
TR406	3	T100	15.6	Kuala Terengganu-Chedering (through Kuala T'ngganu/Kuala Brang)

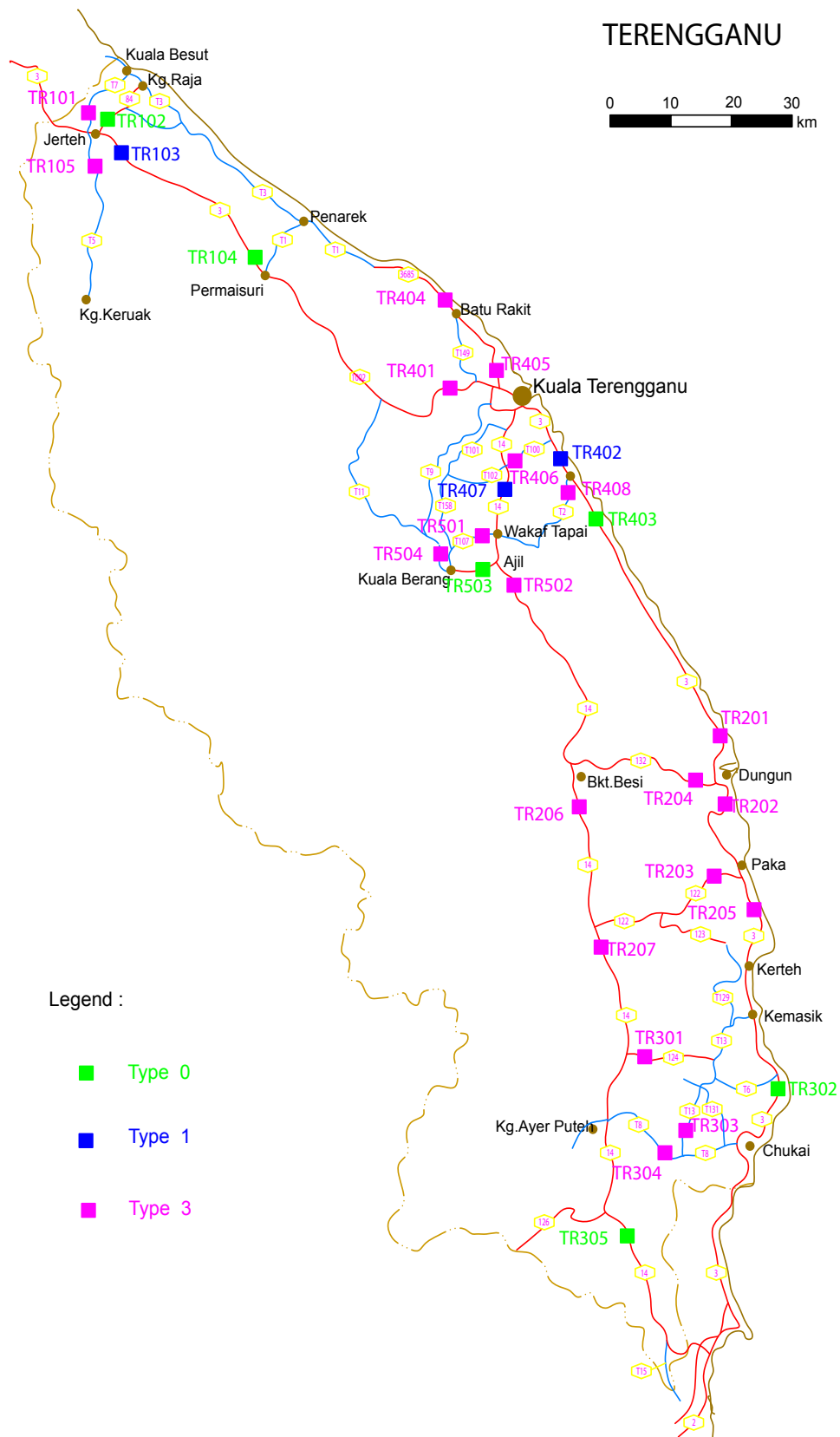
DISTRICT : MARANG

TR402	1	3	17	Kuala Terengganu-Kuantan
TR403	0	3	26	Kuala Terengganu-Kuantan
TR407	1	14	15.5	Kuala Terengganu-Kuala Berang
TR408	3	T2	1.6	Marang-Wakaf Tapai

DISTRICT : HULU TERENGGANU

TR501	3	T107	25.4	Kuala Terengganu-Wakaf Tapai-Kg. Tanggol
TR502	3	14	33	Kuala Terengganu-Kampung Ajil-Jerangau
TR503	0	106	33.5	Kuala Terengganu-Kampung Ajil-Kuala Berang
TR504	3	T11	41.9	Kuala Terengganu-Kuala Berang-Kg. Kuala Ping-Besut

Figure T : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BESUT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
TR101	-	14684	1598	0700-0800	50.5	17.7	7.9	2.7	0.4	20.7	100.0
TR102	21447	18579	1694	1800-1900	71.1	8.6	3.2	0.9	0.4	15.8	100.0
TR103	-	29510	2428	1200-1300	69.2	8.6	4.4	2.4	0.7	14.6	100.0
TR105	-	13792	1259	1500-1600	61.9	12	2.9	1.5	0.3	21.3	100.0

DISTRICT : SETIU

TR104	15455	13899	1199	0700-0800	66.8	8	4.8	3.2	1.2	16.2	100.0
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DISTRICT : DUNGUN

TR201	-	9422	826	1100-1200	58.6	10.8	7.1	4	1.9	17.6	100.0
TR202	-	27614	3497	0700-0800	57.2	10.9	6.3	2.7	1	21.9	100.0
TR203	-	14481	2380	0700-0800	38	13.3	7.8	5.3	0.3	35.3	100.0
TR204	-	7958	800	0700-0800	48.8	11.1	8.2	1.4	0.1	30.5	100.0
TR205	-	26932	5106	0700-0800	55.6	6.4	4.6	2	0.4	30.9	100.0
TR206	-	5665	452	1500-1600	50.5	16.1	10.5	17.1	0.5	5.3	100.0
TR207	-	28610	2310	0800-0900	30.1	22	21.3	21.3	0.4	4.9	100.0

DISTRICT : KEMAMAN

TR301	-	1960	224	1700-1800	47.1	11.2	9.8	7.1	0.7	24	100.0
TR302	22194	19055	2008	1700-1800	71.5	8.2	4	3.9	0.9	11.5	100.0
TR303	-	1120	116	0700-0800	33.5	8	19.5	0.6	0	38.4	100.0
TR304	-	4362	485	0700-0800	49.9	10.5	7.9	0.6	0.1	31.1	100.0
TR305	8409	7340	671	1700-1800	54.3	15.4	8.9	10	0.7	10.7	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KUALA TERENGGANU

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
TR401	-	21362	2382	0700-0800	50.2	10.5	15.1	2.2	0.8	21.1	100.0
TR404	-	12515	1085	1700-1800	48	18.8	11.2	2.9	0.7	18.4	100.0
TR405	-	47491	4962	1700-1800	62.7	7.7	5.9	0.6	0.4	22.7	100.0
TR406	-	18384	1898	0700-0800	52.7	4.6	7.9	0.5	0.2	34.1	100.0

DISTRICT : MARANG

TR402	-	27368	2423	1700-1800	66.2	7.8	4	1.3	1	19.7	100.0
TR403	17276	14370	1272	1700-1800	68.6	7.6	4.2	2.2	1.6	15.8	100.0
TR407	-	18222	1615	0700-0800	64.1	7.9	5.5	1.6	0.7	20.2	100.0
TR408	-	11401	1589	0700-0800	60.5	5.3	2	0.2	0.1	32	100.0

DISTRICT : HULU TERENGGANU

TR501	-	2795	226	1100-1200	42.9	7.6	9.5	2	1.9	36.2	100.0
TR502	-	10170	1082	0700-0800	52.9	11.8	9.4	2.6	0.6	22.7	100.0
TR503	21905	18081	1780	1700-1800	63.9	13	5.8	2.4	0.4	14.5	100.0
TR504	-	10597	928	1200-1300	64.6	6.6	4	3.9	0.9	20	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BESUT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
TR101	-	14538	1400	1300-1400	55.2	12.2	5.5	2.8	0.3	24	100.0
TR102	19388	16810	1447	1800-1900	71.6	8.7	3.8	1.2	0.4	14.3	100.0
TR103	-	25141	2192	1800-1900	70.9	8.3	4.7	2.7	0.6	12.7	100.0
TR105	-	11997	1242	1500-1600	65	10.7	3	1	0.3	20.2	100.0

DISTRICT : SETIU

TR104	17526	15864	1289	0700-0800	59.9	12.1	5.5	3.3	0.9	18.3	100.0
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DISTRICT : DUNGUN

TR201	-	8435	695	1500-1600	62.9	9.3	6.3	3.4	1.7	16.5	100.0
TR202	-	28098	3934	0700-0800	59.2	10.1	4.7	2	0.5	23.5	100.0
TR203	-	14424	2046	0700-0800	40.5	12.6	8	6	0.3	32.6	100.0
TR204	-	8828	664	0800-0900	51.5	10.9	7.6	1.9	0	28.1	100.0
TR205	-	26802	3677	0700-0800	52.9	10.3	5.1	2.5	0.6	28.6	100.0
TR206	-	6239	615	1500-1600	58.2	13.2	8.9	13.4	1.1	5.2	100.0
TR207	-	22912	1737	0700-0800	28.5	22.3	21.2	25	0.3	2.8	100.0

DISTRICT : KEMAMAN

TR301	-	2220	237	1800-1900	50.7	4.3	7.5	10	0.2	27.3	100.0
TR302	20649	17782	1746	1800-1900	71.1	7.9	4.7	3.7	1.6	11	100.0
TR303	-	856	98	0800-0900	45	8.3	4.6	1.1	0	41.1	100.0
TR304	-	2312	228	1800-1900	54	8.9	7.2	1.4	0.2	28.2	100.0
TR305	9245	7792	660	1800-1900	52.8	15.1	10.1	10.8	0.9	10.4	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KUALA TERENGGANU

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
TR401	-	23164	2554	0700-0800	43.2	13.5	12.7	2	9	19.6	100.0
TR404	-	12842	1146	1400-1500	48.1	16.6	11.3	3.8	1.4	18.8	100.0
TR405	-	46643	4996	1700-1800	65.8	7.7	5.2	0.7	0.5	20.1	100.0
TR406	-	18546	2092	0700-0800	52.5	4.1	9.2	0.7	0.2	33.3	100.0

DISTRICT : MARANG

TR402	-	31696	2803	0800-0900	65.3	9.4	3.8	0.9	0.8	19.8	100.0
TR403	16639	14500	1427	1400-1500	72.4	6.3	4.6	1.7	1.3	13.8	100.0
TR407	-	16499	1557	0700-0800	67.9	6.8	5.9	1.3	0.5	17.6	100.0
TR408	-	13020	1688	0700-0800	64.6	4.5	2.1	0.3	0.3	28.2	100.0

DISTRICT : HULU TERENGGANU

TR501	-	3117	296	1700-1800	49.1	6.5	7.3	2.4	1.7	33.1	100.0
TR502		10013	1089	0700-0800	53.6	11.7	9.1	2.6	0.6	22.4	100.0
TR503	18369	16199	1574	0700-0800	66.1	12	4.8	2	0.6	14.6	100.0
TR504	-	10255	899	1500-1600	66.4	7.7	4.9	3.1	0.7	17.3	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BESUT

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
TR101	14611	52.9	15.0	6.7	2.7	0.4	22.4	1499
TR102	17695	71.3	8.7	3.5	1.1	0.4	15.0	1571
TR103	27325	70.0	8.5	4.6	2.5	0.7	13.7	2310
TR105	12895	63.4	11.4	2.9	1.2	0.3	20.8	1251

DISTRICT : SETIU

TR104	14882	63.4	10.0	5.1	3.3	1.0	17.2	1244
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DISTRICT : DUNGUN

TR201	8929	60.7	10.1	6.7	3.7	1.8	17.0	761
TR202	27856	58.2	10.5	5.5	2.3	0.8	22.7	3716
TR203	14453	39.3	13.0	7.9	5.6	0.3	34.0	2213
TR204	8393	50.1	11.0	7.9	1.7	0.0	29.3	732
TR205	26867	54.3	8.3	4.9	2.3	0.5	29.8	4392
TR206	5952	54.3	14.7	9.7	15.2	0.8	5.3	534
TR207	25761	29.3	22.2	21.3	23.1	0.3	3.9	2024

DISTRICT : KEMAMAN

TR301	2090	48.9	7.8	8.7	8.6	0.4	25.6	231
TR302	18418	71.3	8.1	4.4	3.8	1.3	11.2	1877
TR303	988	39.2	8.2	12.0	0.8	0.0	39.8	107
TR304	3337	52.0	9.7	7.5	1.0	0.2	29.7	357
TR305	7566	53.5	15.2	9.5	10.4	0.8	10.6	665

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : KUALA TERENGGANU

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
TR401	22263	46.7	12.0	13.9	2.1	4.9	20.3	2468
TR404	12679	48.1	17.7	11.2	3.4	1.1	18.6	1116
TR405	47067	64.2	7.7	5.5	0.7	0.4	21.4	4979
TR406	18465	52.6	4.4	8.5	0.6	0.2	33.7	1995

DISTRICT : MARANG

TR402	29532	65.7	8.6	3.9	1.1	0.9	19.8	2613
TR403	14435	70.5	6.9	4.4	1.9	1.4	14.8	1350
TR407	17360	66.0	7.4	5.7	1.5	0.6	18.9	1586
TR408	12211	62.5	4.9	2.0	0.2	0.2	30.1	1639

DISTRICT : HULU TERENGGANU

TR501	2956	46.0	7.1	8.4	2.2	1.8	34.6	261
TR502	10092	53.3	11.8	9.3	2.6	0.6	22.5	1086
TR503	17140	65.0	12.5	5.3	2.2	0.5	14.5	1677
TR504	10426	65.5	7.1	4.4	3.5	0.8	18.6	914

Annual Growth Rate For Year 2012

DISTRICT : BESUT

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
TR101	6936	7056	6559	8080	8483	11724	13870	11217	12422	14611	9.27	0.85
TR102	14472	15013	16895	17300	15897	16395	17325	18550	16663	17695	1.84	0.55
TR103	14434	18382	18805	19007	18384	23357	21313	24196	25551	27325	6.00	0.88
TR105	8204	9836	8544	10392	10134	12420	9424	11199	12827	12895	4.36	0.67

DISTRICT : SETIU

TR104	10338	10269	10945	11491	11942	12572	12088	14188	14451	14882	4.35	0.95
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STATE : DUNGUN

TR201	18862	13460	19924	9105	8248	7813	10652	10440	13386	8929	-5.81	0.28
TR202	9604	13842	11688	20955	25215	23463	29051	28602	30035	27856	12.36	0.80
TR203	11569	13711	11383	11810	14803	13581	12412	11028	13605	14453	1.12	0.10
TR204	7044	7116	14070	8301	5986	6534	8017	8300	10791	8393	1.11	0.02
TR205	28217	23933	15923	24677	21107	20500	29995	29818	33471	26867	3.39	0.21
TR206	7286	11661	15565	12752	4884	5937	6623	6350	6945	5952	-7.09	0.31
TR207	21192	22089	11112	13439	24207	23204	25151	22096	22898	25761	4.41	0.22

DISTRICT : KEMAMAN

TR301	1212	1436	761	1552	1645	1744	1660	1649	1655	2090	6.08	0.45
TR302	13051	13759	13754	14475	14899	15228	15417	16831	17498	18418	3.64	0.97
TR303	947	827	863	810	923	901	1211	881	2156	988	5.08	0.28
TR304	2501	2606	2119	3471	2547	1353	2441	4400	2424	3337	2.46	0.06
TR305	3872	4112	4033	4079	5116	5363	5381	5590	6553	7566	7.15	0.92

Annual Growth Rate For Year 2012

DISTRICT : KUALA TERENGGANU

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
TR401	16202	19828	20016	22845	20791	21153	20282	23673	22183	22263	2.51	0.51
TR404	4244	6515	7424	8279	8654	9104	9474	14219	11812	12679	10.74	0.86
TR405	41604	22990	22990	42155	60257	63719	61587	51546	44675	47067	6.66	0.30
TR406	7774	11782	12101	14248	14061	14275	15256	16727	18504	18465	7.75	0.84

DISTRICT : MARANG

TR402	21602	11032	11594	24524	39230	24933	24852	25887	27451	29532	7.76	0.35
TR403	10612	10354	10756	11607	12429	13347	13288	14409	15103	14435	4.45	0.94
TR407	18222	20050	20304	17171	17217	18263	17214	17751	17384	17360	-1.24	0.36
TR408	6923	8135	7142	9121	11369	6022	11275	13517	12868	12211	6.97	0.53

DISTRICT : HULU TERENGGANU

TR501	3252	3482	3039	2508	2446	2750	2918	3050	2840	2956	-1.03	0.08
TR502	13725	10830	11149	12216	10838	13132	14701	14695	12649	10092	0.27	0.00
TR503	16813	17356	15346	13215	13235	14758	15301	18188	19064	17140	1.35	0.10
TR504	13345	10039	11073	9994	12209	11654	12765	12280	12314	10426	0.25	0.01

TERENGGANU

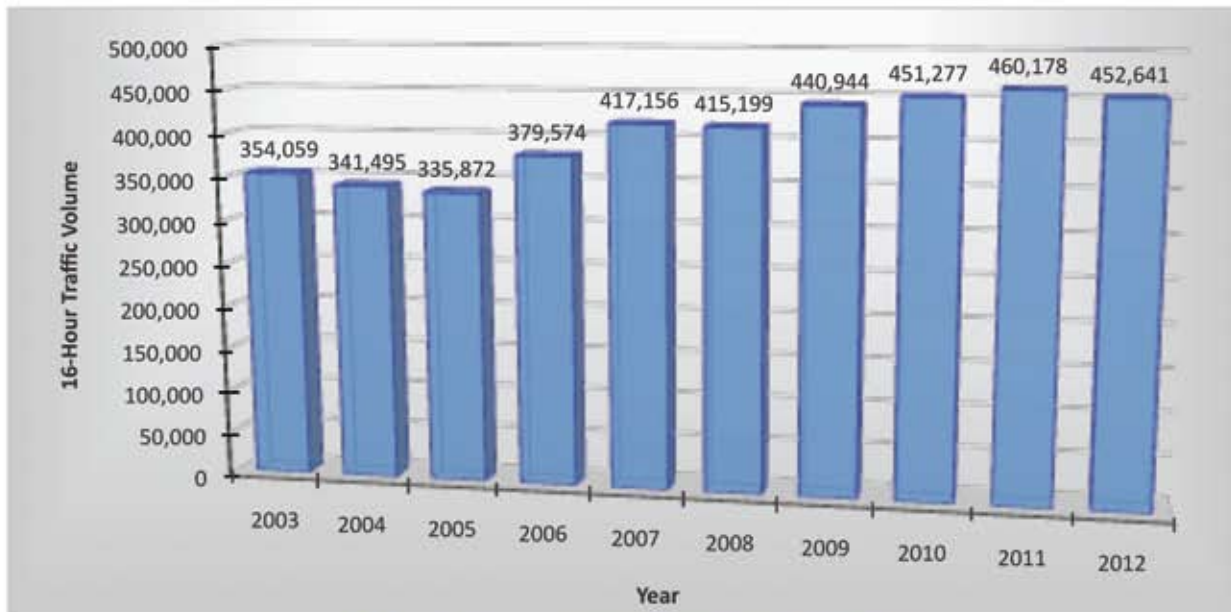


Figure 14 A : Terengganu Yearly 16-hour Traffic Volume

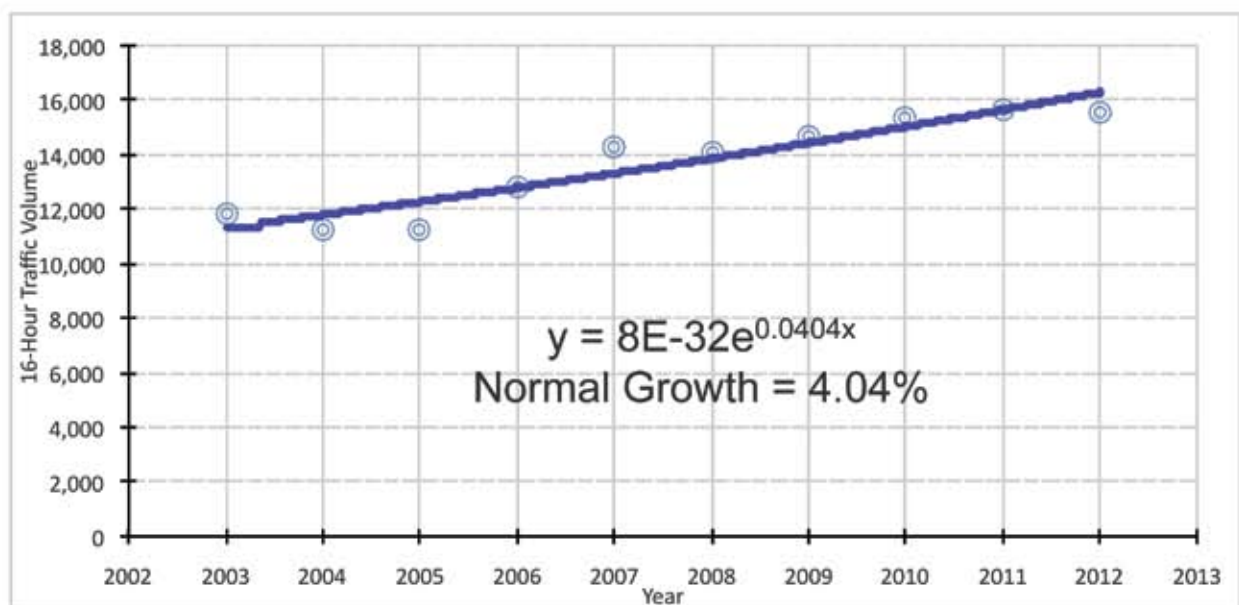
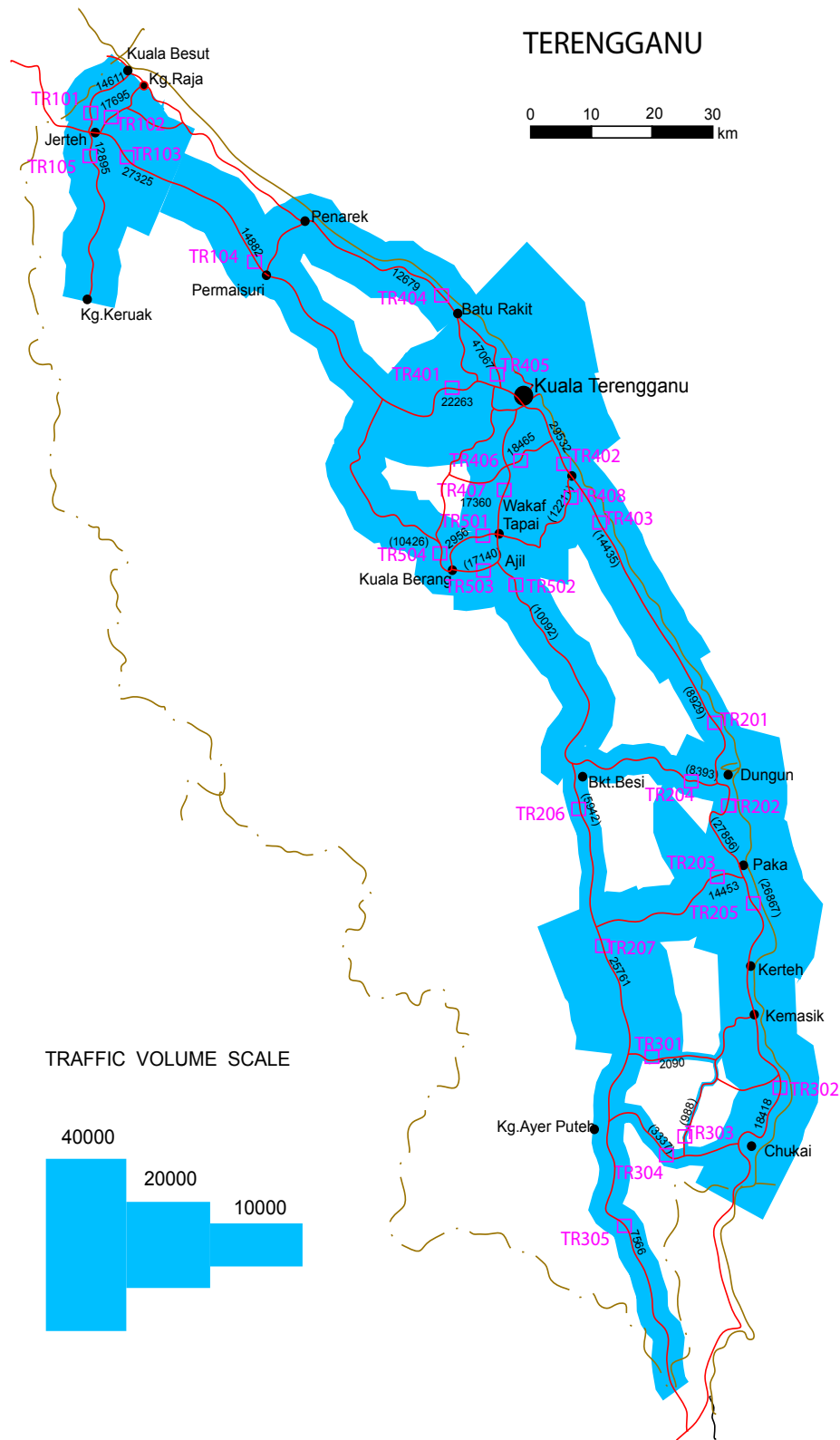


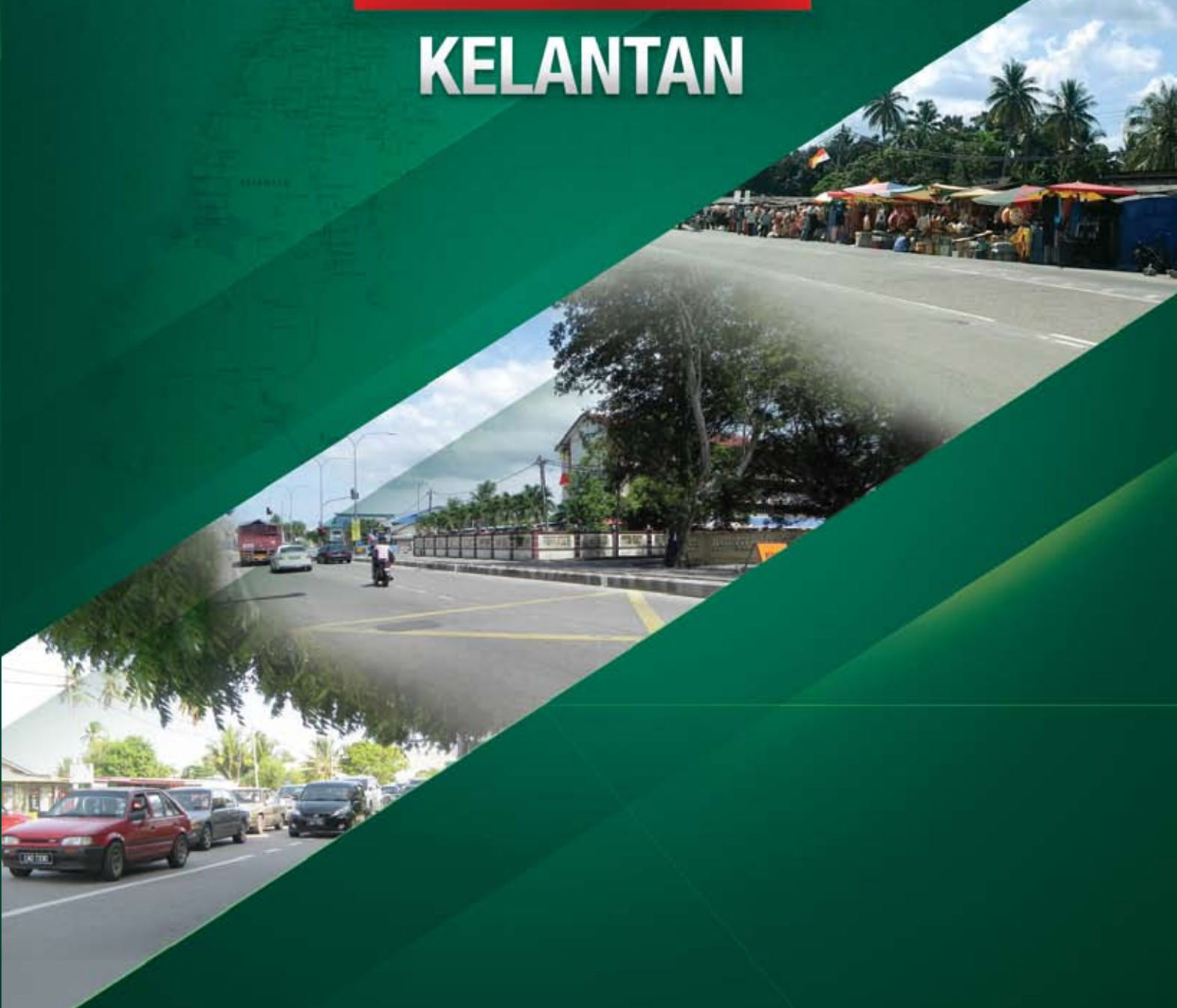
Figure 14 B : Terengganu Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure T1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





KELANTAN



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BACHOK	0	1	1	2
2	KOTA BHARU	0	1	6	7
3	MACHANG	0	2	0	2
4	PASIR MAS	1	1	3	5
5	PASIR PUTEH	2	0	2	4
6	TANAH MERAH	0	0	3	3
7	JELI	0	1	1	2
8	TUMPAT	0	0	3	3
9	KUALA KRAI	1	0	1	2
10	GUA MUSANG	0	0	2	2
	TOTAL	4	6	22	32

Location Description For Traffic Census Stations

DISTRICT : BACHOK

Station Number	Survey Type	Route Number	KM	Description of Locations
DR101	1	D10	28.2	Kota Bharu-Peringat-Gunong-Bachok
DR102	3	D5	18.7	Kota Bharu-Pengkalan Baru-Bachok

DISTRICT : KOTA BHARU

DR201	3	3	19.3	Kota Bharu-Melor
DR202	1	3	5	Kota Bharu-Pasir Putih
DR203	3	8	20.9	Kota Bharu-Machang
DR204	3	8	8.1	Kota Bharu-Machang
DR205	3	57	4	Kota Bharu-Pengkalan Chepa
DR206	3	130	9.5	Wakaf Che Yeh - Salor - Pasir Mas
DR207	3	131	4	Kubang Krian _ Sabak

DISTRICT : MACHANG

DR301	1	8	37	Kota Bharu-Kuala Krai
DR302	1	4	45.1	Kota Bharu-Machang-Tanah Merah

DISTRICT : PASIR MAS

DR401	1	3	7.2	Pasir Mas-Rantau Panjang
DR402	3	3	7.2	Pasir Mas-Kota Bahru (Kg. Tar Tujuh)
DR403	0	129	3.5	Pasir Mas-Tanah Merah (Kg. Lemal)
DR404	3	D25	1.6	Pasir Mas-Meranti
DR405	3	129	9.5	Tendong-Pendek (Jambatan Sultan Ismail)

DISTRICT : PASIR PUTEH

DR501	3	3	46.7	Kota Bharu-Pasir Putih-Kuala Trengganu
DR502	0	3	34	Kota Bharu-Kuala Trengganu
DR503	0	4	20	Machang-Pasir Putih
DR504	3	D7	45.9	Kota Bharu-Pasir Putih-Kuala Semerak

DISTRICT : TANAH MERAH

DR601	3	4	54.4	Kota Bharu-Tanah Merah-Batu Melintang
DR602	3	4	89.4	Kota Bharu-Machang-Tanah Merah
DR604	3	129	27	Pasir Mas-Tanah Merah

Location Description For Traffic Census Stations

DISTRICT : JELI

Station Number	Survey Type	Route Number	KM	Description of Locations
DR603	1	4	6.1	Km Lebuhraya Timur-Barat
DR605	3	66	6	Dabong - Jeli

DISTRICT : TUMPAT

DR701	3	D21	9.5	Kota Bharu-Tumpat/Palekbang
DR702	3	134	16.6	Kota Bharu-Pengkalan Kubor
DR703	3	D21	6.4	Chabang Tiga-Tumpat

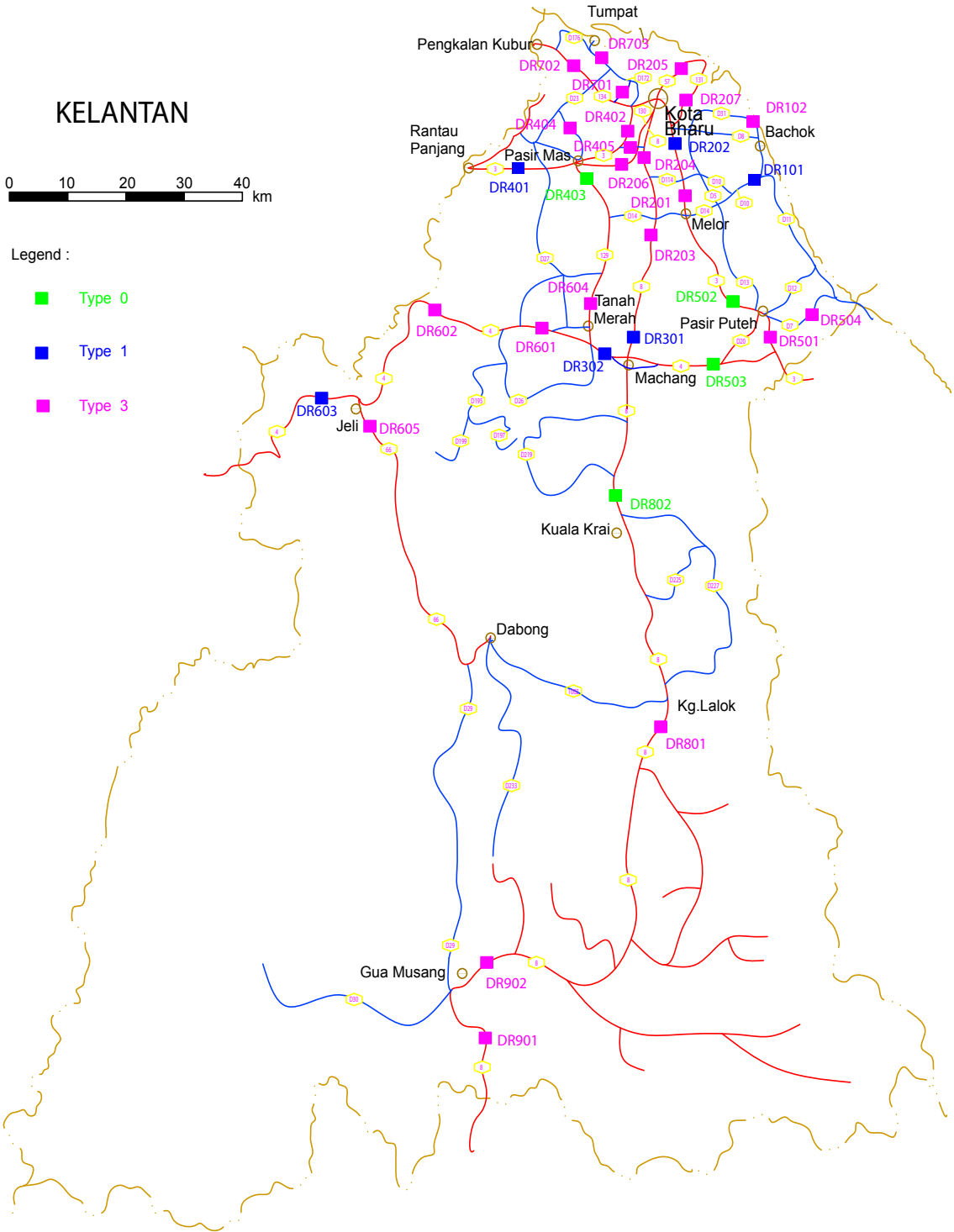
DISTRICT : KUALA KRAI

DR801	3	8	102.6	Kota Bharu-Gua Musang
DR802	0	8	61.5	Kota Bharu-Kuala Krai

DISTRICT : GUA MUSANG

DR901	3	8	10	Gua Musang - Merapoh
DR902	3	8	14	Gua Musang - Renok - Kuala Krai

Figure D : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BACHOK

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
DR101	-	20313	1623	1700-1800	48	13.6	5.8	0.7	0.7	31.3	100.0
DR102	-	17996	1500	1400-1500	41.8	7.4	4.9	2.4	0.6	42.9	100.0

DISTRICT : KOTA BHARU

DR201	-	35245	3643	0700-0800	68.8	5.3	3.6	0.7	0.7	20.9	100.0
DR202	-	47539	3795	1700-1800	70.4	3.2	2	0.4	0.4	23.5	100.0
DR203	-	31765	3767	0700-0800	68.6	6.4	2.4	0.5	0.4	21.6	100.0
DR204	-	40388	4346	1200-1300	62.1	5.2	5.3	0.5	0.9	25.9	100.0
DR205	-	46156	4378	1700-1800	64	6.4	0.7	0.2	0.4	28.3	100.0
DR206	-	9197	968	1800-1900	63.9	7.3	1.5	0.3	0.6	26.4	100.0
DR207	-	49318	4522	1700-1800	61	3.9	2.7	0.6	0.5	31.3	100.0

DISTRICT : MACHANG

DR301	-	24102	2104	0700-0800	73.7	8.1	4.1	1.5	0.8	11.8	100.0
DR302	-	19560	1723	1700-1800	74.1	7.5	4.6	2.9	0.6	10.3	100.0

DISTRICT : PASIR MAS

DR401	-	20125	1707	1700-1800	70.7	8.6	4.5	0.8	0.8	14.5	100.0
DR402	-	17628	1759	0700-0800	64	4.5	4.7	0.2	0.8	25.8	100.0
DR403	23239	20751	1716	0700-0800	66.5	8.3	6.7	0.9	0.8	16.8	100.0
DR404	-	12625	1350	1700-1800	55.6	3.7	3.5	0.1	0.1	36.9	100.0
DR405	-	20465	2228	0700-0800	65.3	6	12.4	0.7	0.4	15.2	100.0

DISTRICT : PASIR PUTEH

DR501	-	12835	1359	1500-1600	66.2	9.7	3.5	1.6	1.2	17.8	100.0
DR502	23529	21247	1745	1700-1800	68.3	10.3	3.5	1	0.7	16.2	100.0
DR503	11420	10103	919	1700-1800	74.5	6	5.5	3.1	1.2	9.7	100.0
DR504	-	13176	1299	0700-0800	66.4	8.2	2.8	0.3	0.4	21.9	100.0

DISTRICT : TANAH MERAH

DR601	-	16018	1295	1500-1600	72.7	8	4.3	2.9	0.5	11.6	100.0
DR602	-	10465	961	0700-0800	63.4	11.6	6.2	4.7	0.8	13.4	100.0
DR604	-	17057	1598	1700-1800	67	6.6	5.5	1.7	0.6	18.5	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : JELI

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
DR603	-	6325	504	1100-1200	63.8	10.1	5.2	5.3	1.2	14.5	100.0
DR605	-	7146	677	0700-0800	55.9	11.4	5	1.9	0.3	25.5	100.0

DISTRICT : TUMPAT

DR701	-	30194	2838	0700-0800	59.1	7.2	3.6	0.4	0.2	29.5	100.0
DR702	-	15163	1391	0700-0800	57.1	8.7	4.2	0.6	0.5	28.9	100.0
DR703	-	22866	2562	0700-0800	55.7	7	3.1	0.3	0.4	33.6	100.0

DISTRICT : KUALA KRAI

DR801	-	9829	864	1700-1800	57.8	20.7	6.5	5.2	1.1	8.7	100.0
DR802	26413	23301	1978	1700-1800	59.7	17.5	7.1	2.6	0.7	12.5	100.0

DISTRICT : GUA MUSANG

DR901	-	7483	694	1200-1300	48.2	20.1	7.8	5.7	0.8	17.3	100.0
DR902	-	8481	786	1700-1800	52.7	21.4	7.4	6.5	1	10.9	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BACHOK

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
DR101	-	23466	1805	1500-1600	47.9	11.2	4.6	1	0.4	35	100.0
DR102	-	20303	1510	0900-1000	42.2	8.4	4.5	2.4	0.5	42.1	100.0

DISTRICT : KOTA BHARU

DR201	-	49621	5081	0700-0800	69.6	4.5	3	0.5	0.4	21.9	100.0
DR202	-	45042	3765	1700-1800	70.2	2.9	1.9	0.5	0.5	24	100.0
DR203	-	38947	4948	0700-0800	67.4	4.4	3.1	0.5	0.6	24	100.0
DR204	-	36950	3793	0700-0800	67.4	4.4	3.1	0.8	0.7	23.6	100.0
DR205	-	57384	4684	1800-1900	70	4	1.4	0.2	0.3	24.2	100.0
DR206	-	10137	1469	0700-0800	66	5.7	1.8	0.2	0.5	25.8	100.0
DR207	-	39627	4016	1800-1900	54.5	4.2	3.5	0.9	0.8	36	100.0

DISTRICT : MACHANG

DR301	-	25736	2301	0700-0800	74.4	7.4	4.6	1.5	0.7	11.3	100.0
DR302	-	18642	1773	1700-1800	75.4	7.2	3.1	2.8	0.6	11	100.0

DISTRICT : PASIR MAS

DR401	-	18758	1389	1700-1800	71.4	7	5.2	0.8	1	14.7	100.0
DR402	-	17600	1722	0700-0800	66.1	5.5	4.1	0.3	0.7	23.3	100.0
DR403	21391	19439	1699	0700-0800	67.9	8.4	6.2	0.8	0.7	15.9	100.0
DR404	-	11354	1373	1400-1500	57.3	4.1	3.5	0.1	0.2	34.8	100.0
DR405	-	19379	2239	1700-1800	64.9	7.9	12	0.8	0.3	14.2	100.0

DISTRICT : PASIR PUTEH

DR501	-	18476	1505	1400-1500	65.3	4.9	6.2	2.5	1.7	19.4	100.0
DR502	23740	20939	1882	1700-1800	68.8	9	3.2	1	0.8	17.2	100.0
DR503	12304	10497	968	1700-1800	70.2	4.8	10.2	3.3	0.9	10.6	100.0
DR504	-	13469	1503	0700-0800	66.4	5.3	5.6	0.5	0.5	21.7	100.0

DISTRICT : TANAH MERAH

DR601	-	15407	1385	1700-1800	70.8	7.1	4.8	2.7	0.5	14.1	100.0
DR602	-	9888	1038	0700-0800	64.7	11.1	6.7	3.8	0.6	13.2	100.0
DR604	-	17780	1660	1700-1800	65.9	7	4.9	1.7	0.6	19.8	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : JELI

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
DR603	-	6224	471	1100-1200	63.9	10.2	5.2	5.1	1.1	14.4	100.0
DR605	-	6349	706	0700-0800	61.9	9	3.3	1.7	0.7	23.4	100.0

DISTRICT : TUMPAT

DR701	-	29718	2686	1500-1600	63.2	5.9	3.2	0.6	0.2	27	100.0
DR702	-	15122	1667	0700-0800	59.2	7.1	4.3	1	0.6	27.9	100.0
DR703	-	21620	2611	0700-0800	58.1	8	3.3	0.6	0.6	29.4	100.0

DISTRICT : KUALA KRAI

DR801	-	10160	1003	1700-1800	55.5	20.1	9.1	6	1	8.3	100.0
DR802	25905	23461	1980	1700-1800	59.7	17.2	7.2	2.7	0.6	12.6	100.0

DISTRICT : GUA MUSANG

DR901	-	6681	617	1700-1800	44.7	22.8	7.7	7.9	1.6	15.3	100.0
DR902	-	9214	854	1700-1800	52.5	22.2	7.5	6	0.9	10.8	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BACHOK

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
DR101	21889	48	12.4	5.2	0.8	0.5	33.1	1714
DR102	19150	42	7.9	4.7	2.4	0.5	42.5	1505

DISTRICT : KOTA BHARU

DR201	42433	69.2	4.9	3.3	0.6	0.5	21.4	4362
DR202	46291	70.3	3.1	1.9	0.5	0.5	23.8	3780
DR203	35356	68	5.4	2.8	0.5	0.5	22.8	4358
DR204	38669	64.7	4.8	4.2	0.7	0.8	24.7	4070
DR205	51770	67	5.2	1	0.2	0.4	26.2	4531
DR206	9667	65	6.5	1.6	0.2	0.6	26.1	1219
DR207	44473	57.8	4	3.1	0.8	0.6	33.7	4269

DISTRICT : MACHANG

DR301	24919	74	7.8	4.4	1.5	0.8	11.6	2203
DR302	19101	74.8	7.3	3.8	2.8	0.6	10.6	1748

DISTRICT : PASIR MAS

DR401	19442	71	7.8	4.9	0.8	0.9	14.6	1548
DR402	17614	65	5	4.4	0.3	0.8	24.5	1741
DR403	20095	67.2	8.4	6.4	0.9	0.8	16.3	1707
DR404	11990	56.5	3.9	3.5	0.1	0.2	35.8	1362
DR405	19922	65.1	6.9	12.2	0.8	0.3	14.7	2234

DISTRICT : PASIR PUTEH

DR501	15656	65.7	7.3	4.8	2.1	1.4	18.6	1432
DR502	21093	68.6	9.7	3.3	1	0.8	16.7	1813
DR503	10300	72.4	5.4	7.8	3.2	1.1	10.1	943
DR504	13323	66.4	6.8	4.2	0.4	0.4	21.8	1401

DISTRICT : TANAH MERAH

DR601	15713	71.8	7.5	4.6	2.8	0.5	12.8	1340
DR602	10177	64	11.3	6.4	4.2	0.7	13.3	1000
DR604	17419	66.5	6.8	5.2	1.7	0.6	19.2	1629

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : JELI

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
DR603	6275	63.8	10.1	5.2	5.2	1.2	14.5	487
DR605	6748	58.9	10.2	4.1	1.8	0.5	24.4	692

DISTRICT : TUMPAT

DR701	29956	61.1	6.5	3.4	0.5	0.2	28.2	2762
DR702	15143	58.1	7.9	4.3	0.8	0.6	28.4	1529
DR703	22243	56.9	7.5	3.2	0.5	0.5	31.5	2587

DISTRICT : KUALA KRAI

DR801	9995	56.7	20.4	7.8	5.6	1	8.5	934
DR802	23381	59.7	17.4	7.2	2.6	0.6	12.5	1979

DISTRICT : GUA MUSANG

DR901	7082	46.5	21.5	7.8	6.8	1.2	16.3	656
DR902	8848	52.6	21.8	7.5	6.2	1	10.9	820

Annual Growth Rate For Year 2012

DISTRICT : BACHOK

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
DR101	11551	12071	12971	17076	18013	19996	19231	20824	12711	21889	5.42	0.44
DR102	12009	14821	14185	16755	12873	13738	14485	17184	9386	19150	0.96	0.02

DISTRICT : KOTA BHARU

DR201	23218	25043	24934	22900	35931	30698	43222	31602	37939	42433	6.83	0.71
DR202	41801	50423	44043	58134	56676	43771	55608	48957	57936	46291	1.23	0.09
DR203	24234	23729	25065	30131	36869	40224	29167	33260	41274	35356	5.26	0.60
DR204	23634	25324	29915	23705	33397	36175	42681	31934	37301	38669	5.64	0.66
DR205	51198	53384	55976	56422	54808	61525	51299	52560	51363	51770	-0.40	0.04
DR206	8034	7199	7769	7142	7758	8195	6867	7246	8991	9667	1.70	0.23
DR207	17336	24710	25458	22899	27826	30799	31822	30154	29824	44473	7.11	0.77

DISTRICT : MACHANG

DR301	19941	20025	20675	21306	21624	22157	22312	23023	23725	24919	2.36	0.98
DR302	20493	16718	17455	14108	14942	15530	15731	17188	18756	19101	0.28	0.01

DISTRICT : PASIR MAS

DR401	12959	13535	13966	15893	17418	17128	17359	18193	19270	19442	4.66	0.93
DR402	13294	15328	15755	15208	15408	18138	17275	17028	16438	17614	2.40	0.63
DR403	15695	16170	16642	16894	17776	19197	20585	18873	18831	20095	2.78	0.81
DR404	8915	9909	9391	9941	9892	11793	14464	11604	11588	11990	3.71	0.59
DR405	-	-	-	13417	14117	14562	15377	18208	19876	19922	7.48	0.94

DISTRICT : PASIR PUTEH

DR501	10141	12581	10802	11029	16676	12742	19051	19240	16698	15656	6.15	0.60
DR502	15518	16979	15925	17468	18332	20388	19685	24831	23795	21093	4.73	0.80
DR503	7357	7814	8326	8341	9117	9066	9677	12369	13133	10300	5.50	0.78
DR504	10048	10686	9774	12976	12085	11069	14673	16304	14365	13323	4.51	0.63

DISTRICT : TANAH MERAH

DR601	10898	12256	12413	13748	12953	13799	13398	14380	14516	15713	3.15	0.86
DR602	7791	8067	8083	8117	8937	8614	8856	9260	9901	10177	2.87	0.92
DR604	15120	15084	14913	15607	16297	15459	18686	16643	17495	17419	2.03	0.65

Annual Growth Rate For Year 2012

DISTRICT : JELI

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
DR603	4287	4229	4509	4807	5090	5224	5296	5440	5863	6275	4.23	0.97
DR605	3515	4436	4379	4548	4978	5350	2659	5837	5375	6748	4.31	0.24

DISTRICT : TUMPAT

DR701	21664	22269	23674	28904	21888	23870	22099	25635	28666	29956	2.64	0.40
DR702	11374	13119	11918	18252	12637	12383	13194	12664	13051	15143	1.12	0.06
DR703	18079	17812	18776	20097	17129	17522	18706	19189	21622	22243	1.90	0.43

DISTRICT : KUALA KRAI

DR801	5445	3696	3681	7983	11345	9132	8974	10122	10565	9995	10.92	0.60
DR802	13464	14501	14502	16932	18828	18707	19521	20623	22308	23381	6.16	0.96

DISTRICT : GUA MUSANG

DR901	3514	3788	4189	6675	8471	5425	5596	7365	7356	7082	7.76	0.58
DR902	4954	6078	6413	5673	6567	7271	7955	8842	9219	8848	6.58	0.90

KELANTAN

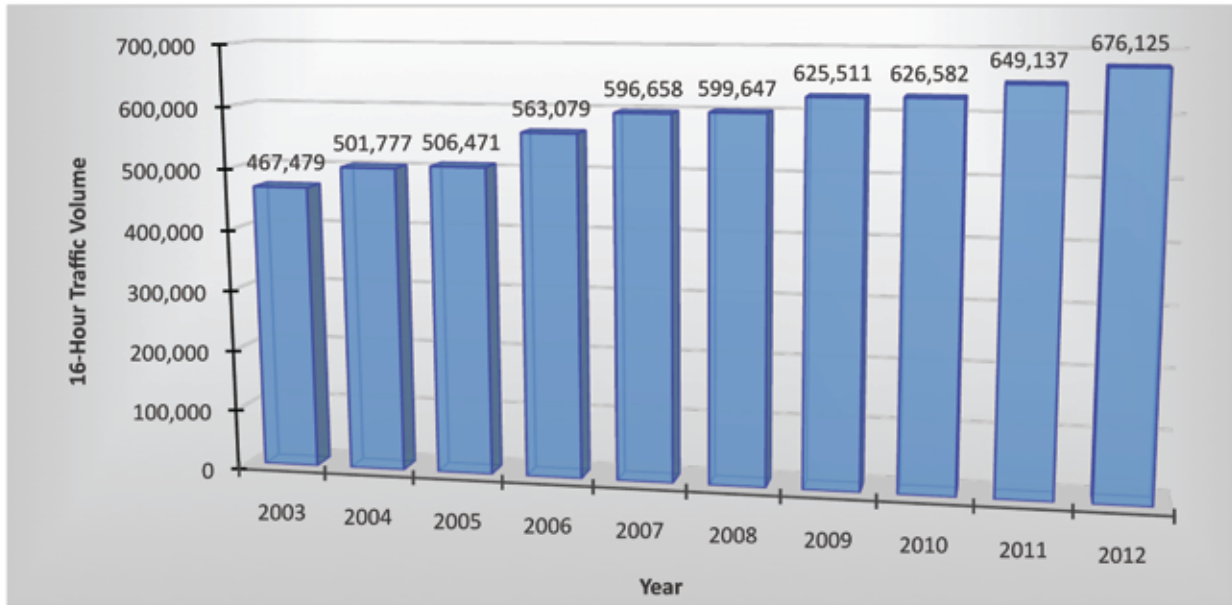


Figure 15 A : Kelantan Yearly 16-hour Traffic Volume

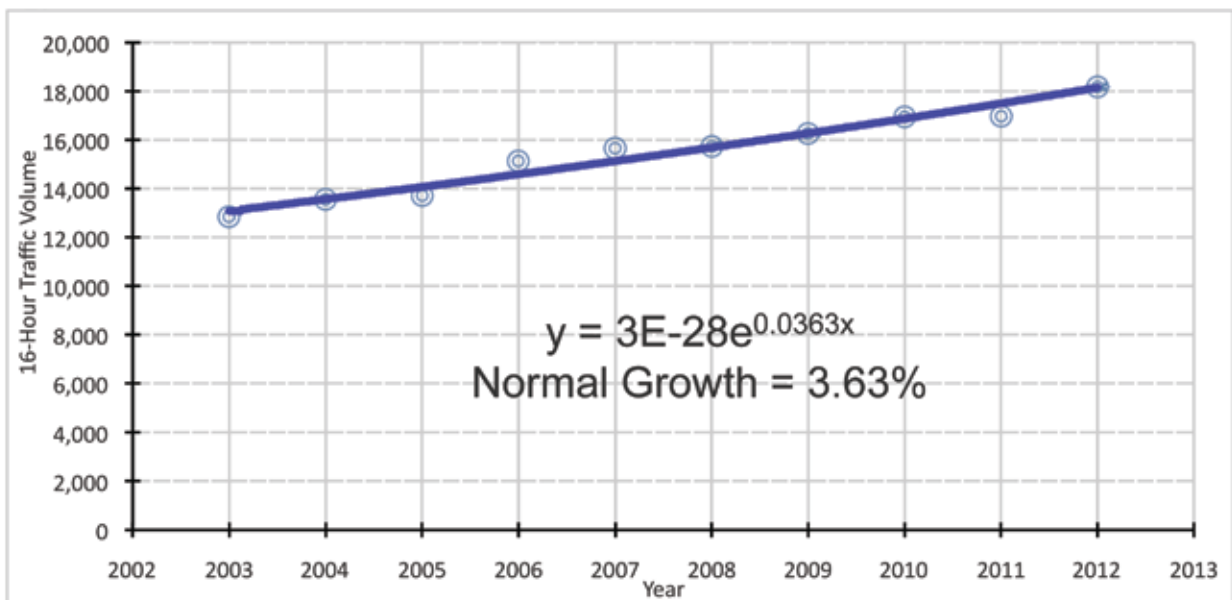
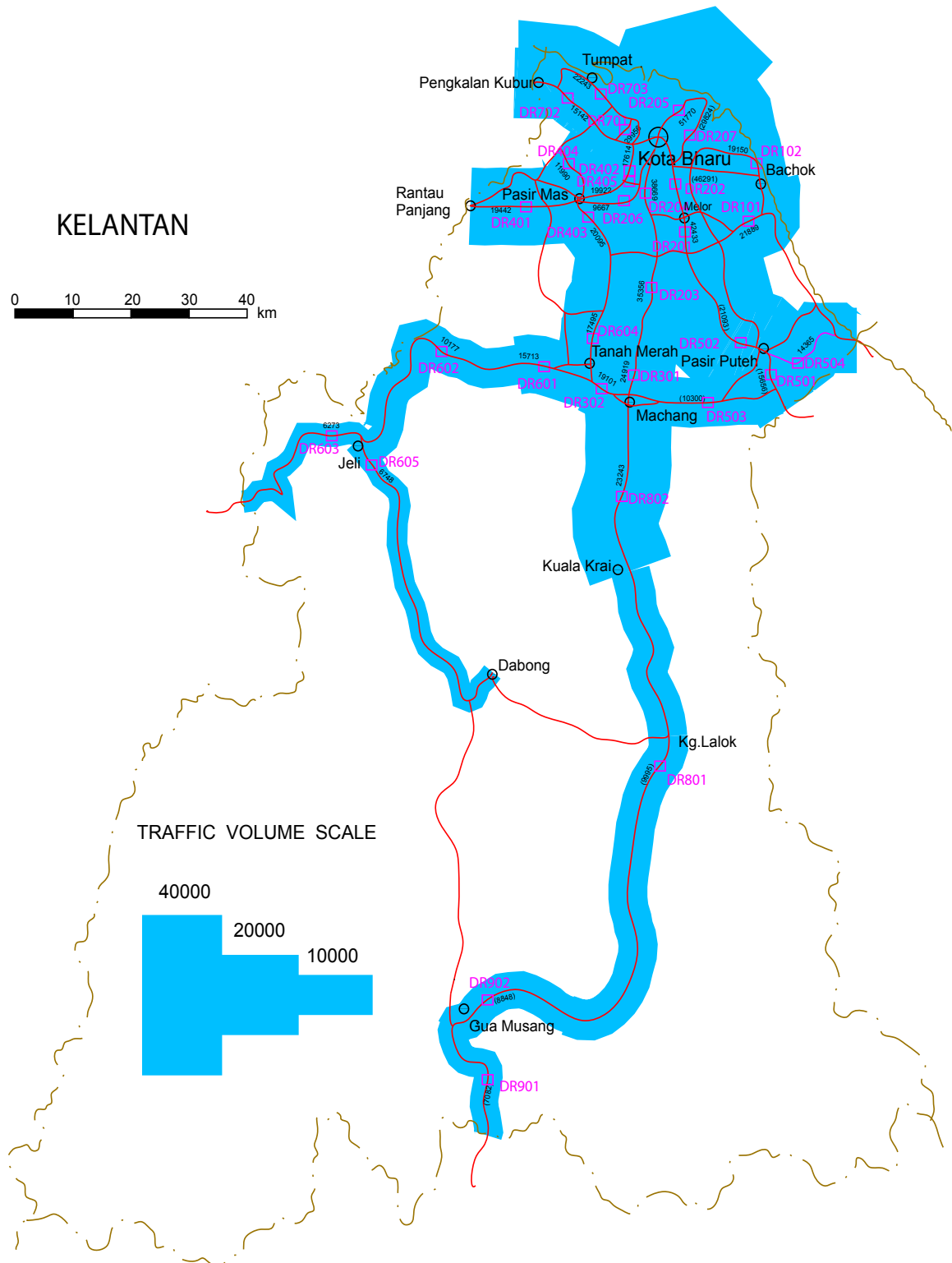


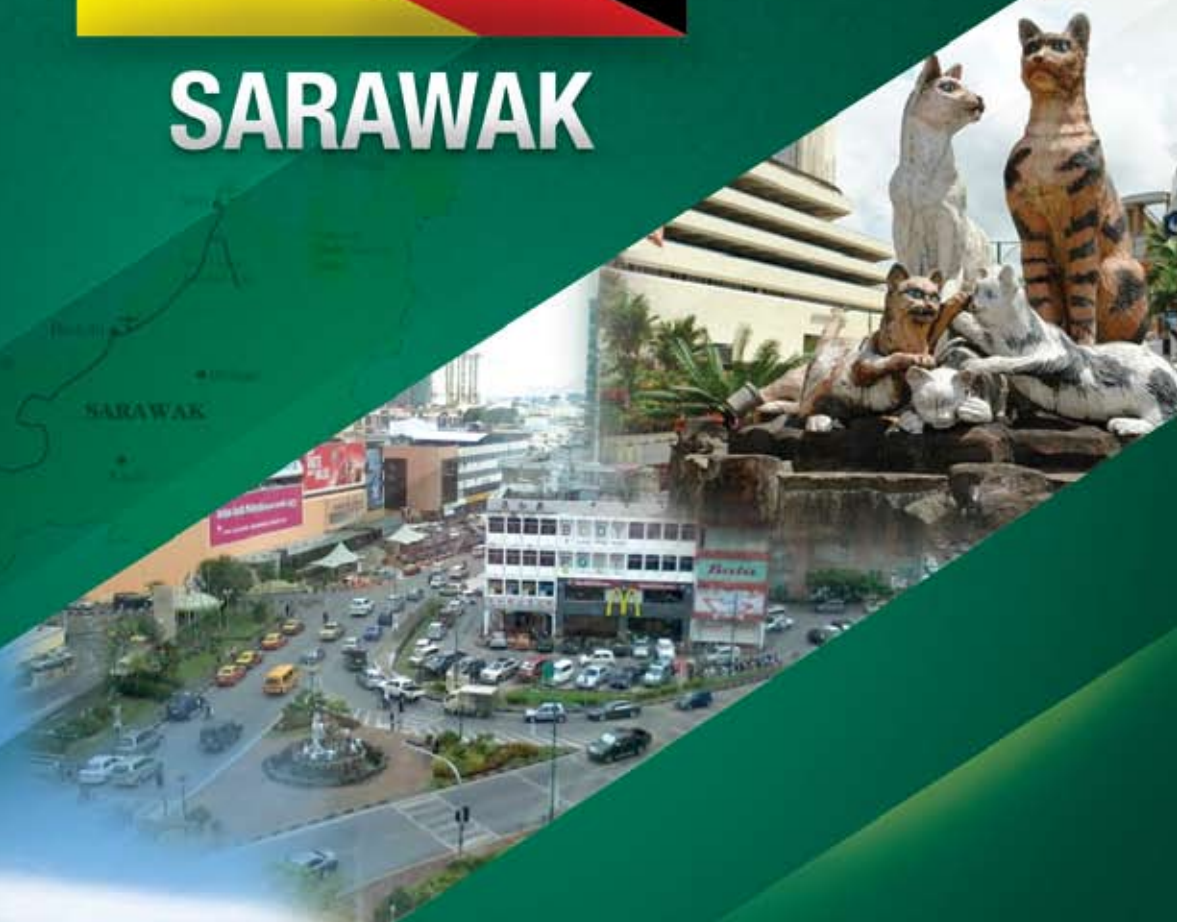
Figure 15 B : Kelantan Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure D1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





SARAWAK



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	KUCHING	0	0	7	7
2	SAMARAHAN	0	0	3	3
3	SRI AMAN	0	0	3	3
4	BETONG	0	0	1	1
5	SIBU	0	0	4	4
6	BINTULU	0	0	3	3
7	MIRI	0	0	4	4
8	LIMBANG	0	0	3	3
9	LAWAS	0	0	2	2
10	SARIKEI	0	0	3	3
	TOTAL	0	0	33	33

Location Description For Traffic Census Stations

DISTRICT : KUCHING

Station Number	Survey Type	Route Number	KM	Description of Locations
SR101	3	01	16.1	Bau-Semantan
SR102	3	Q6	8.1	Bau-Kuching
SR103	3	01	27.4	Kuching-Serian
SR105	3	01	18.8	Bau - Kuching
SR106	3	01	10.5	Kuching - Serian
SR107	3	31	4.5	Kuching By-Pass
SR110	3	900	-	Jalan Kuching (Airport Access-Antara bulatan B.D.C dan bulatan L.Terbang)

DISTRICT : SAMARAHAN

SR104	3	1	83.7	Kuching-Serian
SR108	3	1	10.8	Jalan Datuk Mohamad Musa
SR109	3	21	22	Serian - Tebedu

DISTRICT : SRI AMAN

SR201	3	01	41.9	Sri Aman-Sarikei
SR202	3	01	46.9	Sri Aman - Serian
SR203	3	03	18.5	Batang Ai Road

DISTRICT : BETONG

SR204	3	01	84.9	Betong - Sarikei (Simpang Jalan Paku)
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DISTRICT : SIBU

SR301	3	01	9	Durin Ferry - Junction to Sibu
SR302	3	01	50.8	Sibu - Junc. to Mukah
SR303	3	01	121.6	Sibu - Tatau
SR304	3	800-10A	10	Rejang Port access road

DISTRICT : BINTULU

SR401	3	01	20	Bintulu-Sibu
SR402	3	01	29	Bintulu-Miri
SR405	3	36	9.5	Bintulu - Tg. Kidurong

DISTRICT : MIRI

SR403	3	01	6.2	Miri-Bintulu (before junction to Airport)
SR404	3	22	11.3	Miri - Brunei Border
SR406	3	01	90.2	Miri - Sg. Suai
SR407	3	01	37.4	Miri - Junc. Beluru

Location Description For Traffic Census Stations

DISTRICT : LIMBANG

Station Number	Survey Type	Route Number	KM	Description of Locations
SR502	3	22	23.3	Limbang-Brunei Border (Tedungan)
SR503	3	22	1.6	Limbang- Brunei Border (Sg.Padaruan)
SR505	3	Q296	32.2	Limbang-Ukong

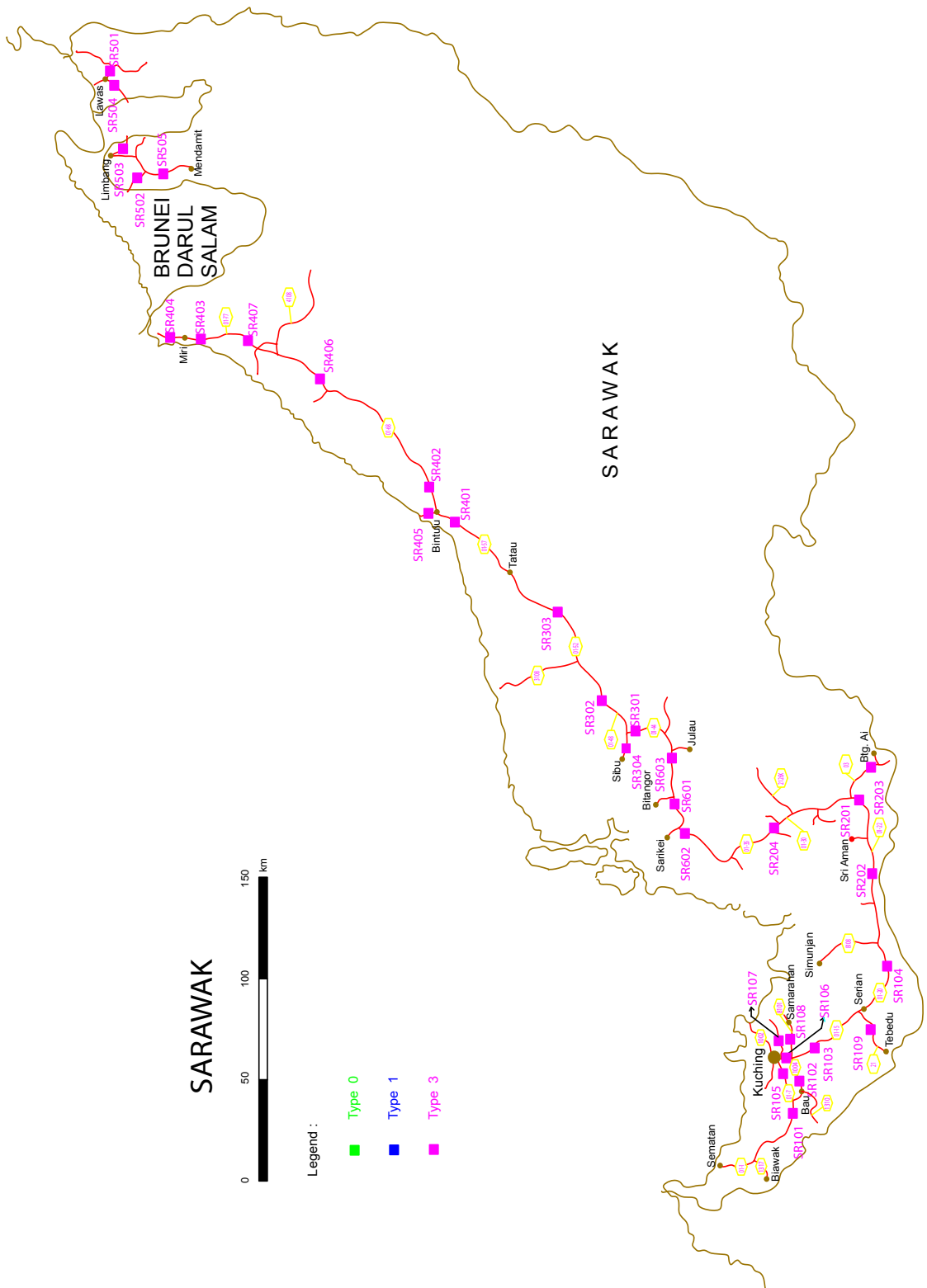
DISTRICT : LAWAS

SR501	3	23	5.6	Lawas-Merapok
SR504	3	23	1.6	Lawas-Trusan

DISTRICT : SARIKEI

SR601	3	01	29	Sarikei-Sibu
SR602	3	01	50.4	Sarikei - Junc. to Bintangor
SR603	3	01	40.3	Bintagor - Durin Ferry

Figure S : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KUCHING

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
SR101	-	7461	837	0700-0800	44.8	15.7	11.5	9.5	0.4	18.1	100.0
SR102	-	11017	1425	0700-0800	50.5	9.6	12.9	5.4	2.3	19.3	100.0
SR103	-	24886	2429	0700-0800	52.5	13.5	8.4	4.9	1.9	18.8	100.0
SR105	-	11033	1094	0600-0700	51.6	13.6	9.1	5.4	0.7	19.5	100.0
SR106	-	54304	5293	1700-1800	52.9	18.2	7.3	1.9	1	18.7	100.0
SR107	-	46958	4988	0700-0800	56	19.7	4	2.3	0.3	17.7	100.0
SR110	-	55387	4865	0800-0900	63.5	13.2	5.8	2.3	0.2	15	100.0

DISTRICT : SAMARAHAN

SR104	-	5449	488	1500-1600	47.5	18.6	12.1	10.6	2.2	8.9	100.0
SR108	-	21323	2062	1700-1800	61.7	7.5	5.6	1.6	0.5	23.1	100.0
SR109	-	1915	231	1400-1500	42.5	23.6	11.2	4.5	2.6	15.6	100.0

DISTRICT : SRI AMAN

SR201	-	4380	382	1300-1400	45.1	28.4	8.9	8.3	1.7	7.6	100.0
SR202	-	3171	320	1700-1800	40.8	28.0	8.3	14.5	2.1	6.3	100.0
SR203	-	2266	234	0600-0700	47.4	14.8	11.7	4.6	0.4	21.1	100.0

DISTRICT : BETONG

SR204	-	4327	440	1700-1800	41.8	31.2	8.3	8.0	1.6	9.2	100.0
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DISTRICT : SIBU

SR301	-	2060	225	1100-1200	40.6	20.7	12.5	10.3	0.2	15.7	100.0
SR302	-	3184	271	0800-0900	20.8	22	20.7	22.6	7.9	5.9	100.0
SR303	-	4563	359	1500-1600	21.1	27	24	23.4	3.1	1.4	100.0
SR304	-	26422	2031	1700-1800	35.6	23.8	12.3	8	2.6	17.7	100.0

DISTRICT : BINTULU

SR401	-	4292	338	1400-1500	36.1	29.3	8.5	20.5	2.8	2.9	100.0
SR402	-	3485	325	0800-0900	59.4	5	6.6	16.1	3	9.9	100.0
SR405	-	27345	2871	0700-0800	52.9	23.8	10.4	4.8	0.9	7.2	100.0

DISTRICT : MIRI

SR403	-	11819	1124	0600-0700	56.4	24.5	6.6	3.1	2.1	7.3	100.0
SR404	-	9465	1102	0700-0800	53.7	16.5	8.6	8	1.6	11.7	100.0
SR406	-	3652	307	1400-1500	32.9	38.8	10	9.2	3.2	5.9	100.0
SR407	-	4310	383	1300-1400	29.4	29.1	10	20.2	2.2	9.2	100.0

16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : LIMBANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
SR502	-	4050	404	1700-1800	72.6	13.2	3.7	4.4	0.2	6	100.0
SR503	-	10848	1370	0600-0700	53.9	16.6	1.7	1	0.5	26.3	100.0
SR505	-	805	91	0700-0800	40.9	15	18.5	9.4	0.6	15.5	100.0

DISTRICT : LAWAS

SR501	-	4468	444	1400-1500	42.6	33.5	8.4	4.1	0.1	11.3	100.0
SR504	-	6575	575	1700-1800	41.7	31.7	5.9	4.5	0.1	16.2	100.0

DISTRICT : SARIKEI

SR601	-	1642	144	0700-0800	49.1	10.7	14.4	13	1.5	11.3	100.0
SR602	-	1867	157	1500-1600	34.9	26.2	11.8	18.1	1.6	7.5	100.0
SR603	-	2073	243	0600-0700	36.3	24.8	6	8.1	1	23.8	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KUCHING

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
SR101	-	4099	388	2100-2200	49.7	16	10.2	5.1	1.1	17.9	100.0
SR102	-	20119	2291	2100-2200	43.3	13.5	10.7	15.4	0.7	16.4	100.0
SR103	-	40892	5085	2100-2200	45.8	11.2	8.8	11.8	1.2	21.2	100.0
SR105	-	9031	964	2100-2200	54.4	13.4	8.5	4	1	18.7	100.0
SR106	-	51842	5216	2100-2200	52.7	18.4	8.1	3.5	1.2	16	100.0
SR107	-	37705	4101	1700-1800	56.9	18.7	5.4	2.6	0.4	16.1	100.0
SR110	-	47788	4761	2100-2200	65.1	12.9	5.6	1.3	0.3	14.8	100.0

DISTRICT : SAMARAHAN

SR104	-	6734	528	1700-1800	47.8	20.6	12.3	7.5	2.3	9.5	100.0
SR108	-	20963	2233	1700-1800	56.9	7.1	5.6	3.3	1.2	25.9	100.0
SR109	-	2171	234	2100-2200	44.4	22	8.3	4.4	3.7	17.3	100.0

DISTRICT : SRI AMAN

SR201	-	4935	390	2100-2200	44.1	26.7	10.8	9.2	2.2	7.0	100.0
SR202	-	3356	332	2100-2200	38.3	30.9	11.9	12.0	2.5	4.5	100.0
SR203	-	2682	283	2100-2200	38.3	20.2	12.1	8.4	0.1	20.8	100.0

DISTRICT : BETONG

SR204	-	8135	823	1700-1800	46.0	21.4	10.3	8.5	1.5	12.3	100.0
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STATE : SIBU

SR301	-	15593	1280	1700-1800	22.1	16.6	22.2	20.7	2.4	16	100.0
SR302	-	8182	709	2100-2200	30.5	24.3	20.5	17.9	4.4	2.5	100.0
SR303	-	4324	391	2100-2200	27.7	30.7	15.4	19.4	4.5	2.2	100.0
SR304	-	24086	2293	2100-2200	25.1	17.6	20.2	13.8	2.1	21.2	100.0

DISTRICT : BINTULU

SR401	-	4392	357	1300-1400	31.4	33.5	5.8	23	3.2	3.1	100.0
SR402	-	7224	636	2100-2200	37.3	36.3	7.6	12.2	1.5	5.1	100.0
SR405	-	29861	3710	2100-2200	50.3	30.7	6.5	4.2	0.8	7.4	100.0

DISTRICT : MIRI

SR403	-	11791	1420	2100-2200	57.2	25.1	5.8	3.1	2	6.8	100.0
SR404	-	9030	1054	2100-2200	55.2	17.8	7.2	7.6	1.5	10.8	100.0
SR406	-	3425	280	2100-2200	31.5	39.4	8.2	13.9	3.1	3.8	100.0
SR407	-	3542	289	2100-2200	24.8	35.4	12.4	17.1	2.3	7.9	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : LIMBANG

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
SR502	-	4238	419	1700-1800	71.4	13	3.9	4.7	0.4	6.6	100.0
SR503	-	11179	1441	2100-2200	52.7	16.8	1.8	1.1	0.6	27	100.0
SR505	-	939	100	2100-2200	39.8	14.2	18	9.2	1.1	17.8	100.0

DISTRICT : LAWAS

SR501	-	4918	540	1700-1800	39.1	34.7	11.4	6.2	0.2	8.3	100.0
SR504	-	6320	639	2100-2200	46	24.3	10.8	5.9	0.1	12.8	100.0

DISTRICT : SARIKEI

SR601	-	2696	291	2100-2200	36.2	29.5	5.3	6.6	0.9	21.5	100.0
SR602	-	2198	194	2100-2200	28.5	26.1	16	17.5	0.8	11.1	100.0
SR603	-	1569	150	1300-1400	55.3	12.9	13.9	9.2	1	7.6	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : KUCHING

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
SR101	5780	47.3	15.8	10.9	7.3	0.8	18	613
SR102	15568	46.9	11.5	11.8	10.4	1.5	17.9	1858
SR103	32889	49.2	12.4	8.6	8.4	1.6	20	3757
SR105	10032	53	13.5	8.8	4.7	0.8	19.1	1029
SR106	53073	52.8	18.3	7.7	2.7	1.1	17.4	5255
SR107	42332	56.5	19.2	4.7	2.4	0.3	16.9	4545
SR110	38175	60.2	10.1	5.7	2.8	0.7	20.5	3549

DISTRICT : SAMARAHAN

SR104	6092	47.7	19.6	12.2	9.1	2.2	9.2	508
SR108	21143	59.3	7.3	5.6	2.5	0.8	24.5	2148
SR109	2043	43.4	22.8	9.8	4.4	3.1	16.5	233

DISTRICT : SRI AMAN

SR201	4658	44.6	27.6	9.8	8.7	2.0	7.3	386
SR202	3264	39.5	29.5	10.1	13.2	2.3	5.4	326
SR203	2474	42.8	17.5	11.9	6.5	0.3	21.0	259

DISTRICT : BETONG

SR204	6231	43.9	26.3	9.3	8.3	1.5	10.7	632
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DISTRICT : SIBU

SR301	8827	31.4	18.7	17.3	15.5	1.3	15.8	753
SR302	5683	25.6	23.1	20.6	20.3	6.1	4.2	490
SR303	4444	24.4	28.9	19.7	21.4	3.8	1.8	375
SR304	25254	30.4	20.7	16.2	10.9	2.4	19.4	2162

DISTRICT : BINTULU

SR401	4342	33.7	31.4	7.1	21.8	3.0	3.0	348
SR402	5355	48.3	20.7	7.1	14.1	2.3	7.5	481
SR405	28603	51.6	27.3	8.5	4.5	0.9	7.3	3291

DISTRICT : MIRI

SR403	11805	56.8	24.8	6.2	3.1	2.0	7.1	1272
SR404	9248	54.5	17.1	7.9	7.8	1.5	11.2	1078
SR406	3539	32.2	39.1	9.1	11.5	3.2	4.9	294
SR407	3926	27.1	32.2	11.2	18.6	2.3	8.6	336

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : LIMBANG

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
SR502	4144	72.0	13.1	3.8	4.5	0.3	6.3	412
SR503	11014	53.3	16.7	1.7	1.1	0.6	26.6	1406
SR505	872	40.3	14.6	18.3	9.3	0.8	16.7	96

DISTRICT : LAWAS

SR501	3582	39.4	31.5	6.8	5.4	0.5	16.4	368
SR504	6448	43.8	28.0	8.4	5.2	0.1	14.5	607

DISTRICT : SARIKEI

SR601	2169	42.6	20.1	9.8	9.8	1.2	16.4	218
SR602	2033	31.7	26.2	13.9	17.8	1.2	9.3	176
SR603	1821	45.8	18.9	10.0	8.6	1.0	15.7	197

Annual Growth Rate For Year 2012

DISTRICT : KUCHING

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
SR101	2337	3293	3466	2457	2779	3188	3143	3091	3504	5780	5.39	0.43
SR102	6148	8057	7698	10754	9655	14825	20595	18113	21718	15568	13.31	0.82
SR103	23100	27839	26599	22781	21071	22225	24564	30616	31112	32889	2.99	0.33
SR105	5391	4901	3623	5778	5780	5710	6496	6322	6893	10032	6.73	0.62
SR106	60326	50822	28355	35529	41044	35994	30385	40996	39562	53073	-1.01	0.02
SR107	61412	74886	75630	51971	50491	50441	37394	50352	46154	42332	-5.91	0.62
SR110	22300	25505	26540	30655	39194	44995	40554	28674	34868	38175	5.09	0.44

DISTRICT : SAMARAHAN

SR104	3604	2629	2823	4189	4380	4187	5047	5244	5608	6092	8.27	0.80
SR108	11487	19831	20075	16154	19177	19691	26053	17594	29842	21143	5.55	0.42
SR109	1419	1598	1512	1735	1449	1576	1618	1895	1909	2043	3.35	0.67

DISTRICT : SRI AMAN

SR201	2557	3234	2773	2720	3269	3374	4157	4216	4197	4658	6.44	0.84
SR202	1849	1920	2409	2331	2747	2587	2632	2426	2950	3264	5.13	0.78
SR203	1140	1338	1280	1164	1404	1613	1773	1716	1914	2474	7.48	0.86

DISTRICT : BETONG

SR204	1792	2201	1760	1841	3082	3039	2727	3747	4796	6231	13.10	0.84
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DISTRICT : SIBU

SR301	1064	3007	4380	3114	3799	1700	1353	4365	4698	8827	11.42	0.29
SR302	2306	3997	3791	9129	3143	8072	5396	3310	4471	5683	4.60	0.11
SR303	1266	1434	1915	2692	5883	1987	2090	2726	3269	4444	10.30	0.42
SR304	27952	28442	39588	34821	32924	34674	27969	24998	23730	25254	-3.08	0.30

DISTRICT : BINTULU

SR401	4923	7197	5952	6779	6240	7250	9808	10957	14520	4342	4.90	0.16
SR402	3426	4903	5702	4828	4771	5924	7880	8507	4178	5355	3.99	0.20
SR405	23809	22572	17554	17168	13129	15814	21873	19003	36245	28603	3.80	0.15

DISTRICT : MIRI

SR403	23612	24487	18046	10345	6882	9984	11060	10506	12211	11805	-8.03	0.36
SR404	45064	33360	21345	9297	7961	11992	7633	9489	10228	9248	-16.22	0.61
SR406	9242	2879	2751	2757	1961	3063	4159	4030	3567	3539	-2.15	0.03
SR407	11527	4798	3827	4897	6269	8858	6698	10990	4645	3926	-2.04	0.02

Annual Growth Rate For Year 2012

DISTRICT : LIMBANG

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
SR502	3291	3880	4534	4920	5038	3957	4065	4037	8335	4144	3.66	0.20
SR503	20944	21535	18016	16317	15830	16319	14141	19032	13519	11014	-5.56	0.66
SR505	1941	1931	2000	677	952	958	888	1052	1054	872	-8.38	0.43

DISTRICT : LAWAS

SR501	2932	3403	3240	3608	3298	3265	3584	3217	3911	3582	1.64	0.38
SR504	3898	4379	4399	3935	5235	4519	5139	3653	6683	6448	4.37	0.41

DISTRICT : SARIKEI

SR601	1442	1385	1502	1348	1375	1503	1581	1665	2088	2169	4.62	0.69
SR602	4355	3490	4307	5935	1176	1395	1536	1808	1866	2033	-11.80	0.41
SR603	1085	1889	1254	1263	1208	1164	1274	1446	1659	1821	2.70	0.18

SARAWAK

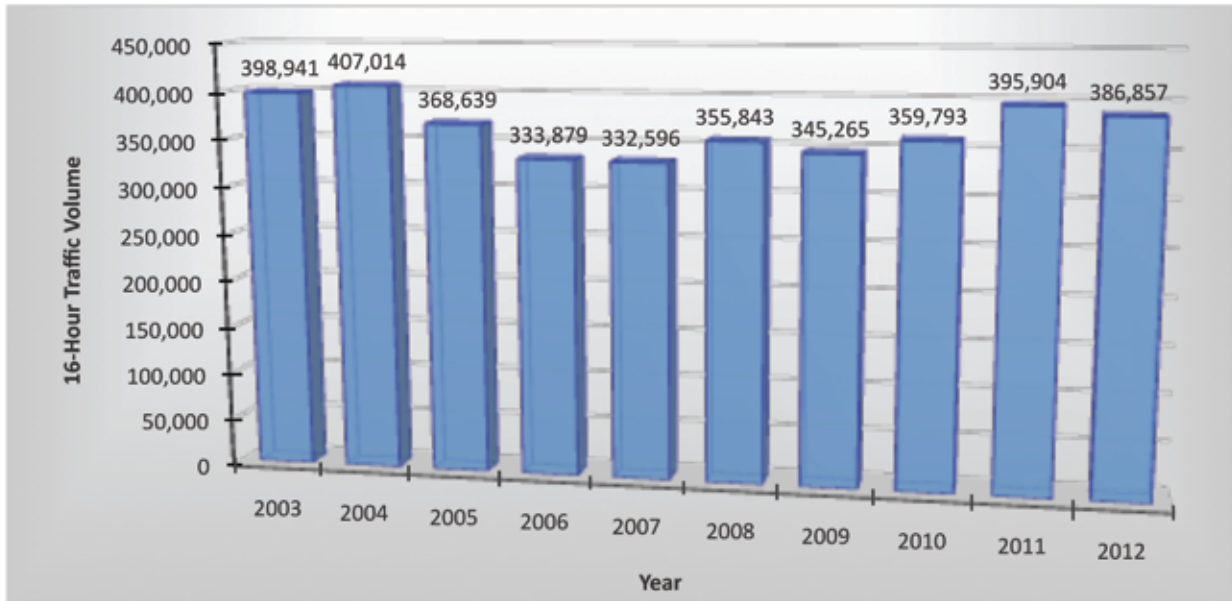


Figure 16 A : Sarawak Yearly 16-hour Traffic Volume

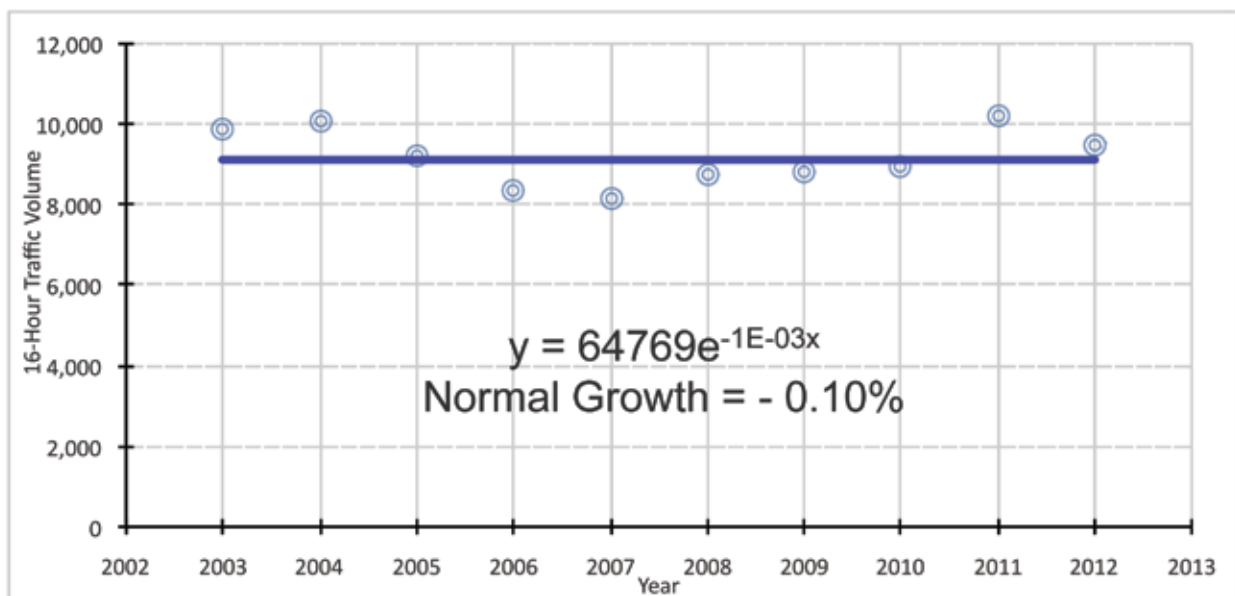
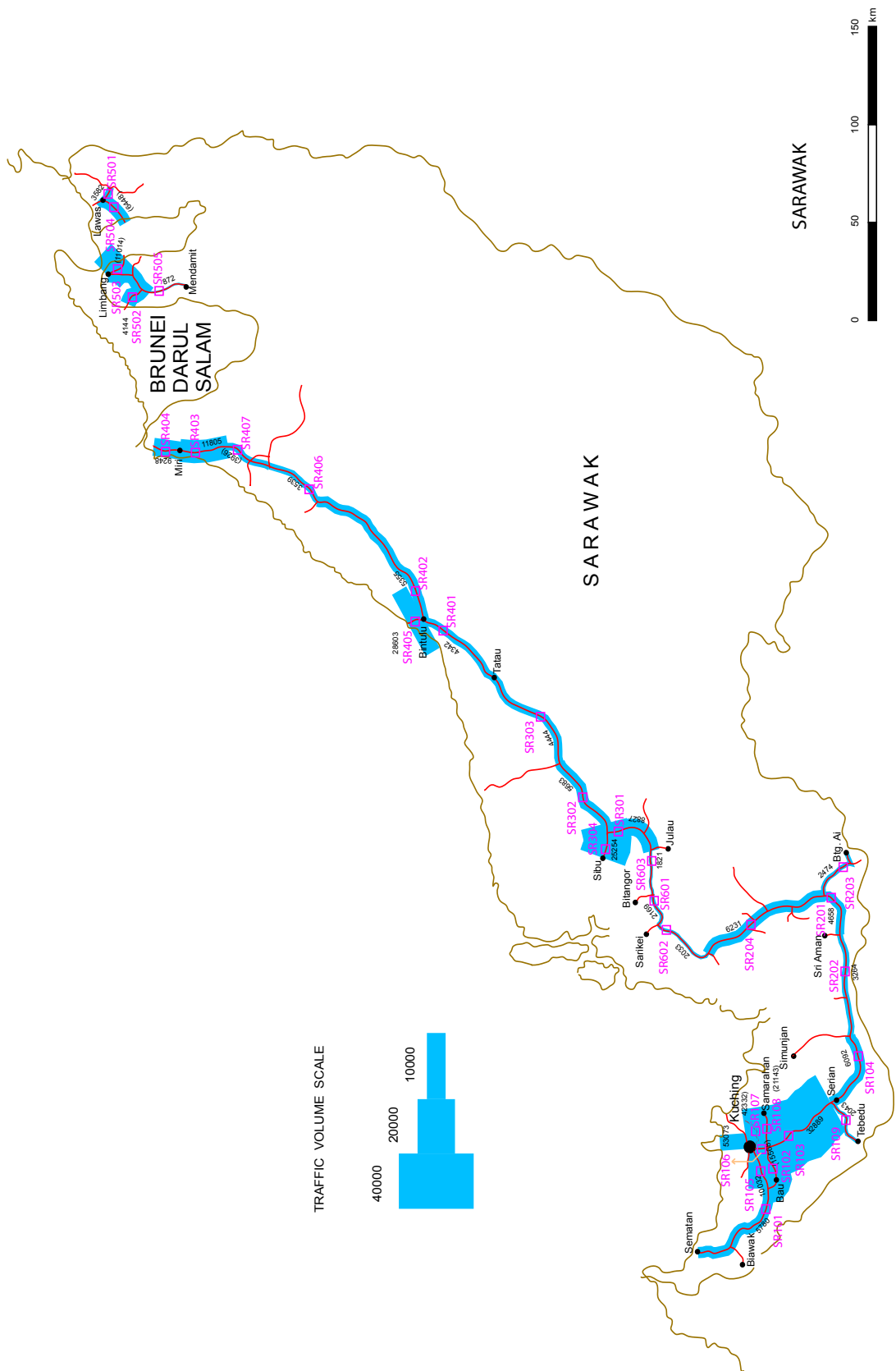


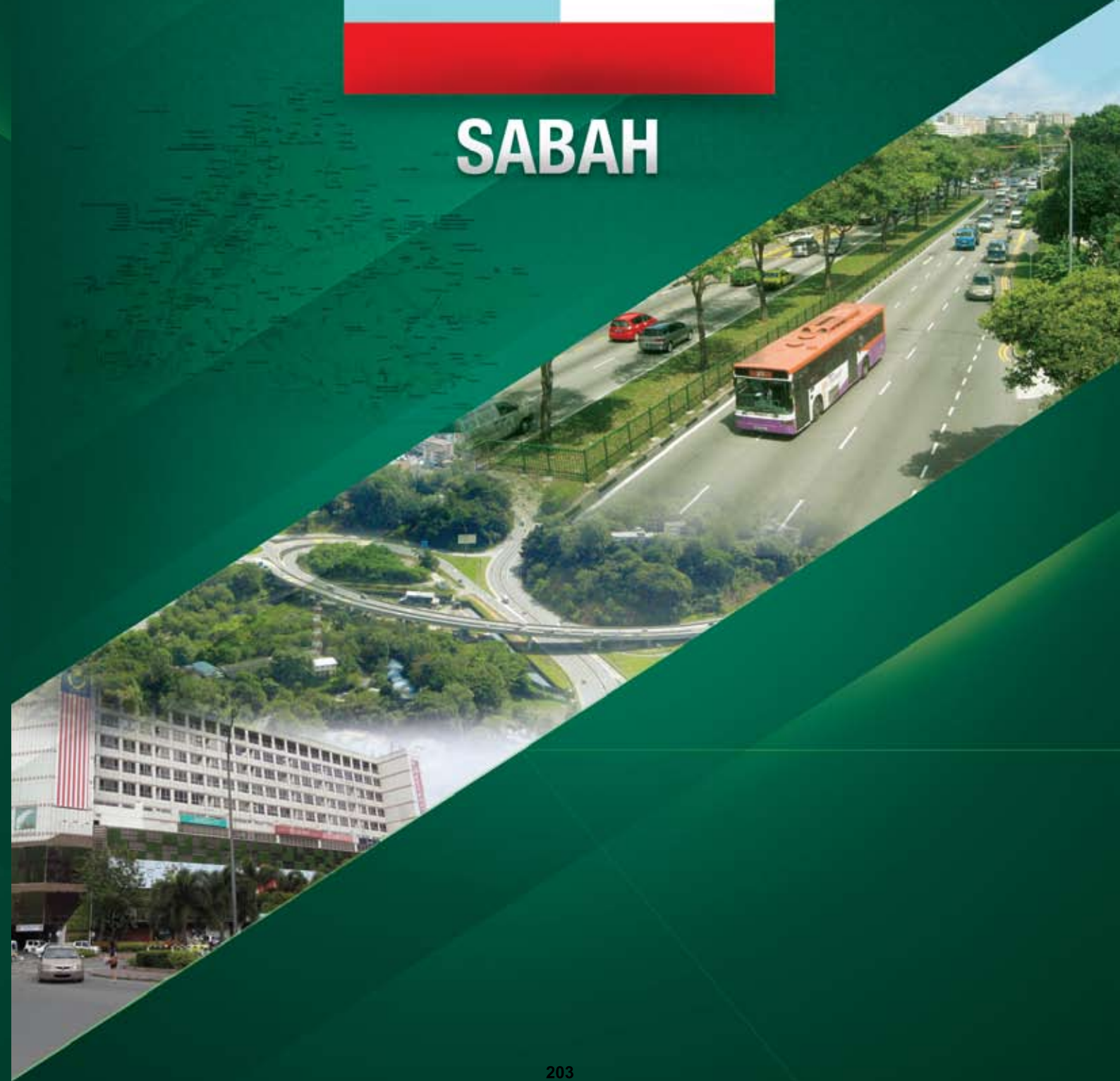
Figure 16 B : Sarawak Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure S1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





SABAH



Distribution Of Survey Stations According To Their Respective JKR District

No.	District	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	BEAUFORT	0	0	2	2
2	TAMBUNAN	0	0	1	1
3	TENOM	1	0	0	1
4	SIPITANG	0	0	1	1
5	PAPAR	1	0	1	2
6	PENAMPANG	0	0	1	1
7	KOTA KINABALU	1	0	0	1
8	KOTA BELUD	0	0	2	2
9	RANAU	0	0	2	2
10	KOTA MARUDU	0	0	2	2
11	SANDAKAN	0	0	1	1
12	KINABATANGAN	0	0	1	1
13	TAWAU	0	0	1	1
14	SEMPORNA	0	0	1	1
15	LAHAD DATU	1	0	1	2
	TOTAL	4	0	17	21

Location Description For Traffic Census Stations

DISTRICT : BEAUFORT

Station Number	Survey Type	Route Number	KM	Description of Locations
HR101	3	A2	4.8	Beaufort - Sindumin
HR105	3	A7	15	Beaufort - Menubuk

DISTRICT : TAMBUNAN

HR103	3	A3	90	KK - Sapulut
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DISTRICT : TENOM

HR104	0	A33	9	Tenom-Toman/Bekuku H'way
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DISTRICT : SIPITANG

HR106	3	A2	140	KK - Sindumin
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DISTRICT : PAPAR

HR201	0	A2	22.5	Kota Kinabalu - Papar
HR209	3	A2	57	K.K - Sindumin near Bongawan

DISTRICT : PENAMPANG

HR202	3	A3	18	Donggongan-Tambunan
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DISTRICT : KOTA KINABALU

HR203	0	A1	27.4	Kota Kinabalu-Telipok-Tuaran
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DISTRICT : KOTA BELUD

HR204	3	A1	69	KK-Kudat (100m from Longtigi junc.)
HR300	3	A1	106	KK-Kudat (Kg. Mantanau)

DISTRICT : RANAU

HR207	3	A4	81	KK - Sandakan (junc. towards Ranau)
HR208	3	A4	118	KK - Sandakan (after Poring junc.)

DISTRICT : KOTA MARUDU

HR301	3	A1	126	KK - Kudat (5km frm K.Marudu junc. towards Kudat)
HR302	3	A1	-	Langkon-Pitas(100m frm. Marasimsim Bridge) towards Tandek

DISTRICT : SANDAKAN

HR403	3	A4	25	K.K - Sandakan (25 km frm. Sandakan towards K.K)
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Location Description For Traffic Census Stations

DISTRICT : KINABATANGAN

Station Number	Survey Type	Route Number	KM	Description of Locations
HR404	3	A5	272	Tawau - Sandakan (1km frm mile 32)

DISTRICT : TAWAU

HR501	3	A5	31.4	Tawau-Semporna
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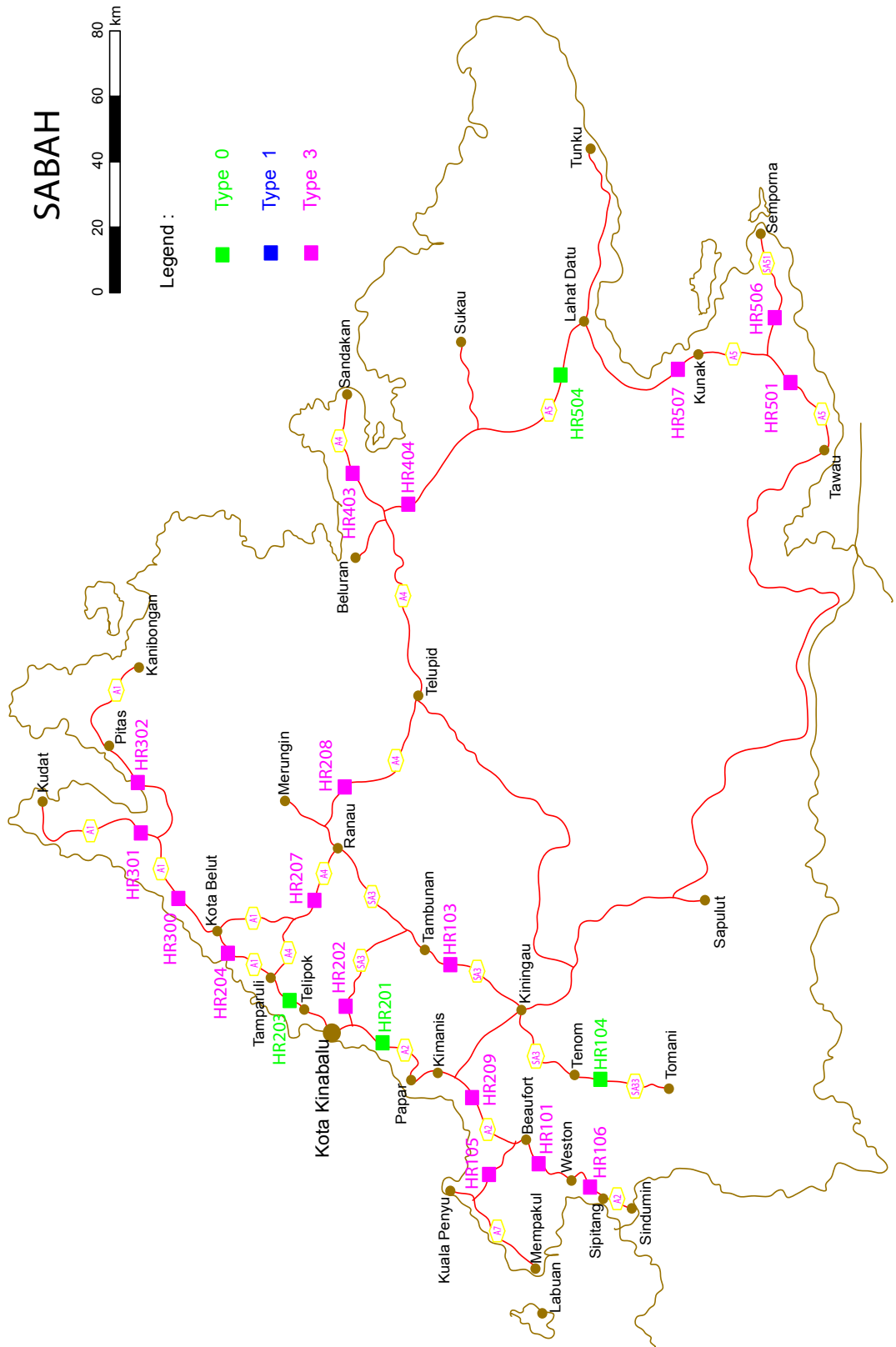
DISTRICT : SEMPORNA

HR506	3	SA51	-	20 km from Semporna towards Tawau
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DISTRICT : LAHAD DATU

HR504	0	A5	14.5	Sg.Segama Crossing
HR507	3	A5	82	Tawau - Sandakan (near Kunak Junc.)

Figure H : TRAFFIC CENSUS STATIONS



16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : BEAUFORT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
HR101	-	5279	489	1700-1800	52.2	26.2	10.3	3.7	0.4	7.3	100.0
HR105	-	4426	425	1400-1500	50.8	23.2	9.2	2.9	1.8	12	100.0

DISTRICT : TAMBUNAN

HR103	-	2787	231	0700-0800	39.5	27.7	14.2	11.3	0.1	7.1	100.0
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DISTRICT : TENOM

HR104	2381	2184	206	0800-0900	32	23	4.2	1	15.2	24.6	100.0
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DISTRICT : SIPITANG

HR106	-	7154	713	1700-1800	58.8	22.8	6.2	1.8	0.4	10	100.0
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DISTRICT : PAPAR

HR201	15731	14764	1261	1700-1800	60.3	21.1	9.2	3.3	1.1	5.1	100.0
HR209	-	10021	891	1800-1900	58.3	22.5	8.6	2.3	5.4	3	100.0

DISTRICT : PENAMPANG

HR202	-	3511	330	0900-1000	32.5	24.9	23.1	8.5	3.7	7.4	100.0
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DISTRICT : KOTA KINABALU

HR203	47968	39025	5319	0600-0700	56.8	23.1	8.4	5.4	1.6	4.8	100.0
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DISTRICT : KOTA BELUD

HR204	-	9623	857	1300-1400	55.6	25.7	9.2	2.8	0.8	5.8	100.0
HR300	-	4437	356	0600-0700	44	32.6	14.3	5.3	0.1	3.7	100.0

DISTRICT : RANAU

HR207	-	4398	393	1600-1700	38.4	36.2	11.9	10	2.2	1.3	100.0
HR208	-	3664	416	1400-1500	30.9	44.3	12.6	7.5	2.3	2.4	100.0

DISTRICT : KOTA MARUDU

HR301	-	6004	608	1700-1800	35.6	38.2	11.5	6.1	0.1	8.5	100.0
HR302	-	5625	1078	1500-1600	30.7	45.7	10.5	6.6	0	6.4	100.0

DISTRICT : SANDAKAN

HR403	-	13499	1245	1700-1800	35.6	31.8	13.9	12.3	2.7	3.8	100.0
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16-Hour Traffic Composition By Vehicle Type (April 2012)

DISTRICT : KINABATANGAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
HR404	-	5858	531	1500-1600	30.6	45.9	9.4	10.5	1.4	2.1	100.0

DISTRICT : TAWAU

HR501	-	10065	843	1700-1800	34.9	36.3	13.2	8.7	1.3	5.5	100.0
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DISTRICT : SEMPORNA

HR506	-	3520	271	0900-1000	47.1	33	11.2	3.1	1.3	4.4	100.0
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DISTRICT : LAHAD DATU

HR504	9063	8067	622	1200-1300	25.4	39.4	15.2	10.8	0.9	8.3	100.0
HR507	-	13030	1237	1500-1600	38.8	26.9	16.1	11.9	0.6	5.9	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : BEAUFORT

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
HR101	-	5565	544	1700-1800	46.1	30.6	8.5	5.2	0.8	8.7	100.0
HR105	-	4673	429	1700-1800	52.3	22.6	8	2.3	1.8	13.1	100.0

DISTRICT : TAMBUNAN

HR103	-	3554	403	1600-1700	38.4	29.2	11.2	11.5	0.2	9.5	100.0
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DISTRICT : TENOM

HR104	2248	2062	182	0800-0900	30.5	25.9	2	1.4	14.8	25.2	100.0
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DISTRICT : SIPITANG

HR106	-	4673	429	1700-1800	52.3	22.6	8	2.3	1.8	13.1	100.0
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DISTRICT : PAPAR

HR201	15465	14217	1202	0700-0800	63	20.1	7.4	3.4	0.9	5.1	100.0
HR209	-	11607	980	1800-1900	45.9	32.4	9.3	3.7	0.9	7.9	100.0

DISTRICT : PENAMPANG

HR202	-	3195	293	1300-1400	36	22.3	18.8	16.2	1.3	5.4	100.0
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DISTRICT : KOTA KINABALU

HR203	49695	39764	3140	1800-1900	56.9	21.5	8.6	6	1.4	5.7	100.0
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DISTRICT : KOTA BELUD

HR204	-	10282	898	1700-1800	51.3	27.1	11.3	3.3	0.9	6	100.0
HR300	-	5116	486	1000-1100	46	36.1	11.6	3.5	0.2	2.6	100.0

DISTRICT : RANAU

HR207	-	5644	512	1700-1800	38.2	38.8	11.8	7.1	2.2	2	100.0
HR208	-	4079	443	1500-1600	33.7	42.5	11.3	8	1.7	2.8	100.0

DISTRICT : KOTA MARUDU

HR301	-	6758	629	0700-0800	35.5	37.2	12.5	5.8	0.1	8.8	100.0
HR302	-	5440	472	0700-0800	35.4	37.2	13.1	6.6	0	7.7	100.0

DISTRICT : SANDAKAN

HR403	-	16190	1916	0700-0800	34.1	31.1	17.9	12.1	2.3	2.5	100.0
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16-Hour Traffic Composition By Vehicle Type (September 2012)

DISTRICT : KINABATANGAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
HR404	-	6240	574	1500-1600	30.5	38.2	17.1	11.2	1.1	1.9	100.0

DISTRICT : TAWAU

HR501	-	10844	883	1700-1800	35	35.5	13.8	8.5	1.2	5.9	100.0
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DISTRICT : SEMPORNA

HR506	-	1963	189	1700-1800	45.1	37.4	11.4	2.4	1	2.6	100.0
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DISTRICT : LAHAD DATU

HR504	8196	7215	579	1300-1400	24.8	41.1	13.9	12.5	0.9	6.8	100.0
HR507	-	6381	740	1600-1700	41.4	33.2	10.5	5.3	2.2	7.5	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : BEAUFORT

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
HR101	5422	49.1	28.4	9.4	4.4	0.6	8	517
HR105	4550	51.5	22.9	8.6	2.6	1.8	12.6	427

DISTRICT : TAMBUNAN

HR103	3171	39	28.4	12.7	11.4	0.2	8.3	317
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DISTRICT : TENOM

HR104	2123	31.2	24.5	3.1	1.2	15	24.9	194
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DISTRICT : SIPITANG

HR106	5914	55.5	22.7	7.1	2	1.1	11.5	571
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DISTRICT : PAPAR

HR201	14491	61.7	20.6	8.3	3.3	1	5.1	1232
HR209	6249	52.1	27.4	8.9	3	3.1	5.4	936

DISTRICT : PENAMPANG

HR202	3353	34.2	23.6	21	12.3	2.5	6.4	312
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DISTRICT : KOTA KINABALU

HR203	39394	56.8	22.3	8.5	5.7	1.5	5.2	4230
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DISTRICT : KOTA BELUD

HR204	9953	53.4	26.4	10.3	3.1	0.9	5.9	878
HR300	4777	45	34.3	13	4.4	0.2	3.2	421

DISTRICT : RANAU

HR207	5021	38.3	37.5	11.8	8.5	2.2	1.6	453
HR208	3872	32.3	43.4	12	7.8	2	2.6	430

DISTRICT : KOTA MARUDU

HR301	6381	35.6	37.7	12	5.9	0.1	8.7	619
HR302	5533	33.1	41.4	11.8	6.6	0	7.1	775

DISTRICT : SANDAKAN

HR403	14845	34.9	31.4	15.9	12.2	2.5	3.2	1581
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16-Hour Traffic Composition By Vehicle Type (Average 2012)

DISTRICT : KINABATANGAN

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
HR404	6049	30.5	42.1	13.3	10.9	1.2	2.0	553

DISTRICT : TAWAU

HR501	10455	35	35.9	13.5	8.6	1.3	5.7	863
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DISTRICT : SEMPORNA

HR506	2742	46.1	35.2	11.3	2.8	1.1	3.5	230
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DISTRICT : LAHAD DATU

HR504	7641	25.1	40.2	14.6	11.7	0.9	7.5	600
HR507	9706	40.1	30	13.3	8.6	1.4	6.7	989

Annual Growth Rate For Year 2012

DISTRICT : BEAUFORT

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
HR101	4077	4902	5805	7042	10773	7454	4811	4924	5965	5422	0.97	0.01
HR105	2872	2843	4334	4739	4551	5181	3818	3941	5457	4550	4.67	0.40

DISTRICT : TAMBUNAN

HR103	2360	2727	2839	3039	2282	3048	2454	2739	3000	3171	1.69	0.20
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DISTRICT : TENOM

HR104	2501	2796	2662	4196	3879	4566	4566	4294	4425	2123	2.75	0.08
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DISTRICT : SIPITANG

HR106	4320	4507	4412	4565	5240	5403	6112	6441	6626	5914	5.04	0.86
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DISTRICT : PAPAR

HR201	3029	3124	3416	3541	4932	6453	7968	9370	11791	14491	18.87	0.97
HR209	6368	6876	6609	8757	4639	3859	5932	5561	6992	6249	-1.37	0.03

DISTRICT : PENAMPANG

HR202	3836	4123	4326	4751	4685	3578	3701	3835	3881	3353	-1.97	0.28
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DISTRICT : KOTA KINABALU

HR203	18997	25030	26684	25734	22232	27288	25247	30288	35489	39394	5.93	0.72
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DISTRICT : KOTA BELUD

HR204	6038	4665	4738	7913	11695	9855	9450	11189	11138	9953	9.24	0.63
HR300	2588	5332	4736	17616	3569	4429	5449	6367	5029	4777	1.99	0.01

DISTRICT : RANAU

HR207	2416	2590	2702	3049	3482	3425	3488	3732	4745	5021	7.77	0.94
HR208	1709	1761	1688	1948	2279	2618	2396	2705	3498	3872	9.26	0.92

DISTRICT : KOTA MARUDU

HR301	6784	6926	7745	4316	4518	4184	5062	5023	6180	6381	-1.89	0.07
HR302	4036	5224	6274	3540	3630	6525	3830	4277	4578	5533	0.50	0.00

DISTRICT : SANDAKAN

HR403	7461	8540	8515	15156	9800	9207	12285	16610	14321	14845	7.55	0.61
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Annual Growth Rate For Year 2012

DISTRICT : KINABATANGAN

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
HR404	3713	4810	4525	4554	4376	12504	16088	16831	13029	6049	13.80	0.47

DISTRICT : TAWAU

HR501	16981	19330	12948	10938	17009	16860	9407	10074	10035	10455	-6.47	0.51
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DISTRICT : SEMPORNA

HR506	2771	3464	3339	1670	3231	2485	2663	2711	3074	2742	-0.51	0.01
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DISTRICT : LAHAD DATU

HR504	5472	6445	6795	7140	7423	6987	6781	8294	8691	7641	3.56	0.68
HR507	4640	4858	6831	7820	8170	7168	8600	11141	11633	9706	9.31	0.83

SABAH

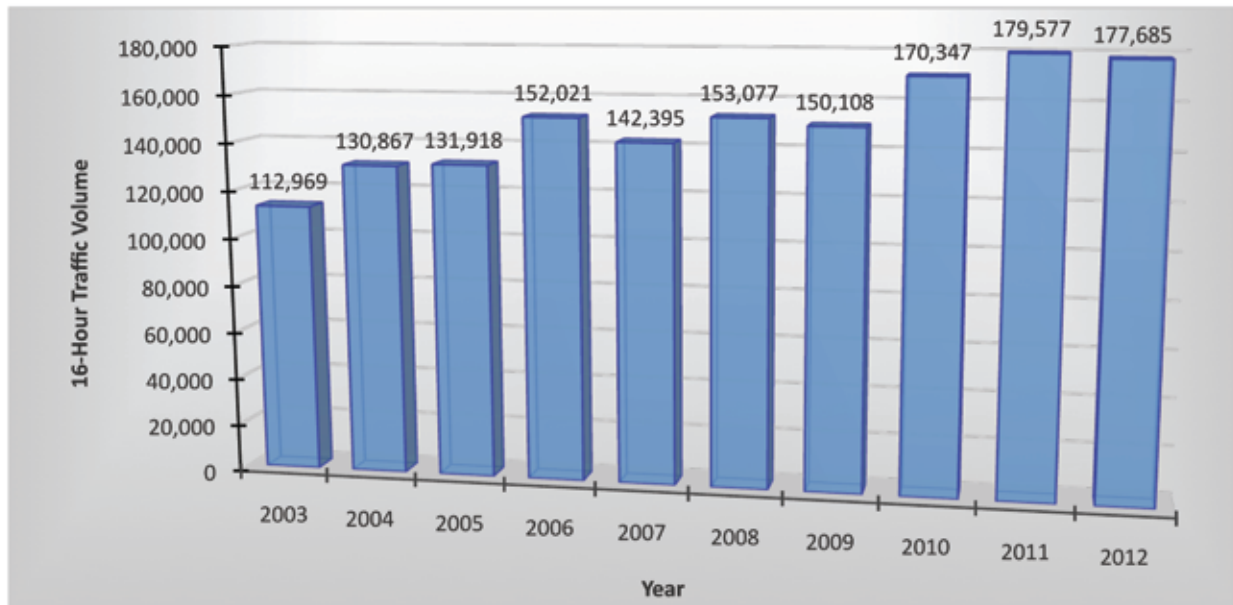


Figure 17 A : Sabah Yearly 16-hour Traffic Volume

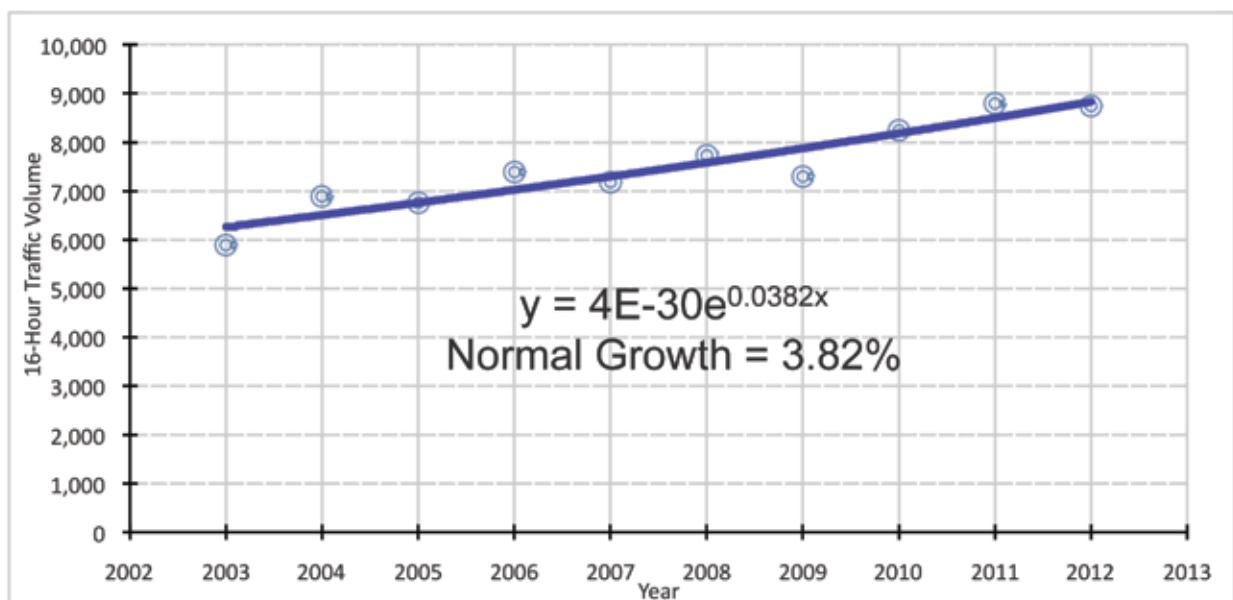
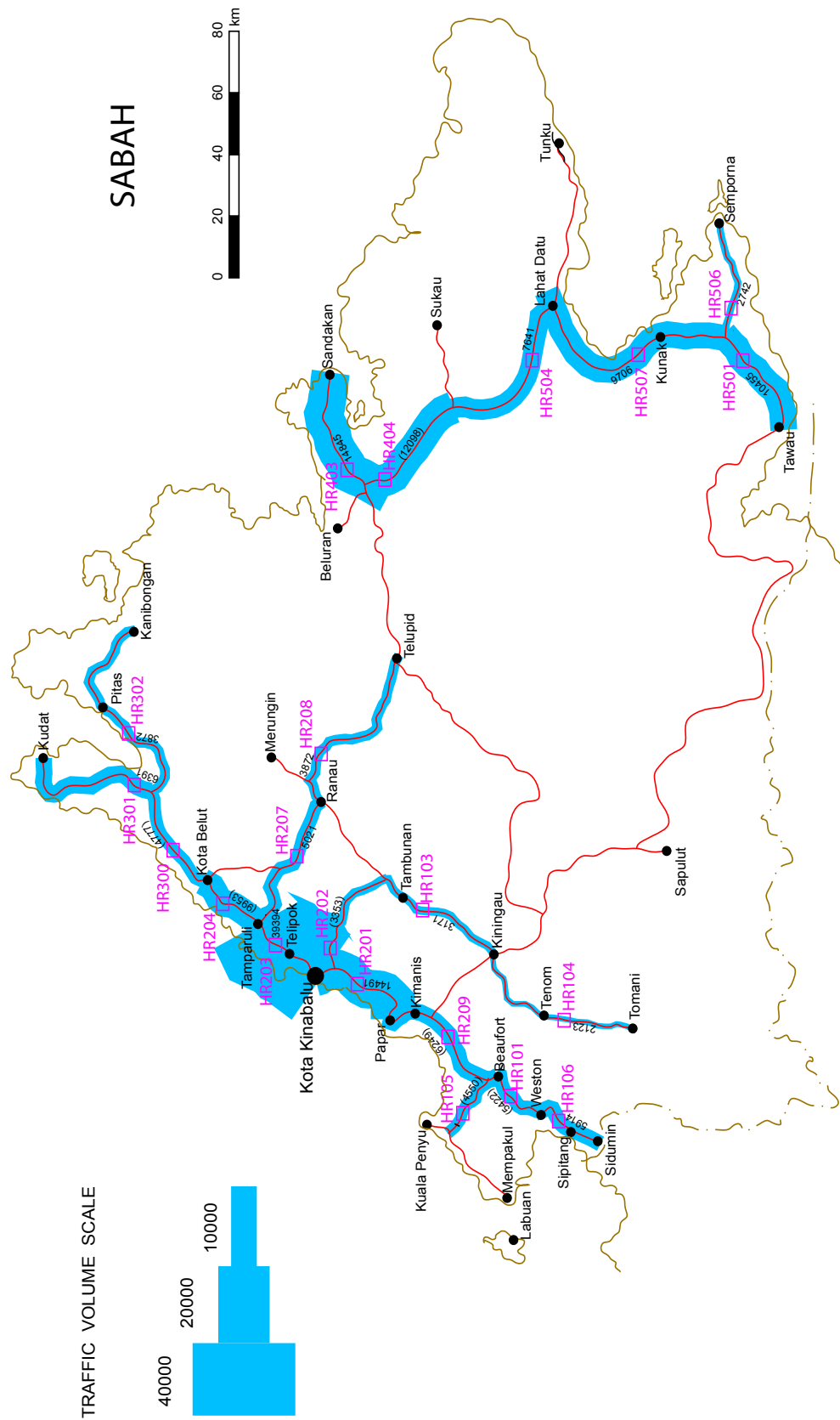


Figure 17 B : Sabah Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure H1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012





W.P. LABUAN



Distribution Of Survey Stations

No.	State	Number of census stations			
		Type 0	Type 1	Type 3	Total
1	W.P. LABUAN	0	1	7	8
	TOTAL	0	1	7	8

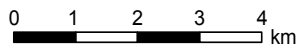
Location Description For Traffic Census Stations

STATE : W.P. LABUAN

Station Number	Survey Type	Route Number	KM	Description of Locations
LR101	1	L700	3	Bandar Simpang Jalan Mohd.Salleh/ Jalan Pohon Batu
LR102	3	L700	1	Bandar Patau Patau - Pulau Enoe
LR103	3	L731	2	Simpang Jalan Tun Mustafa / Jalan Ranca Ranca - Ranca Ranca
LR104	3	L707	1	Simpang Pulau Buah - Kerupang
LR105	3	L700	1	Simpang Jalan Mohd Salleh / Pohon Batu - Pohon Batu
LR106	3	L704	1	Simpang Jalan Pohon Batu / Jalan Mohd Salleh - Layang Layangan
LR107	3	L703	1	Simpang Jalan Pohon Batu / Jalan OKK Daud - Layang Layangan
LR108	3	L700	1	Simpang Jalan Pohon Batu/ OKK Daud - Batu Manikar

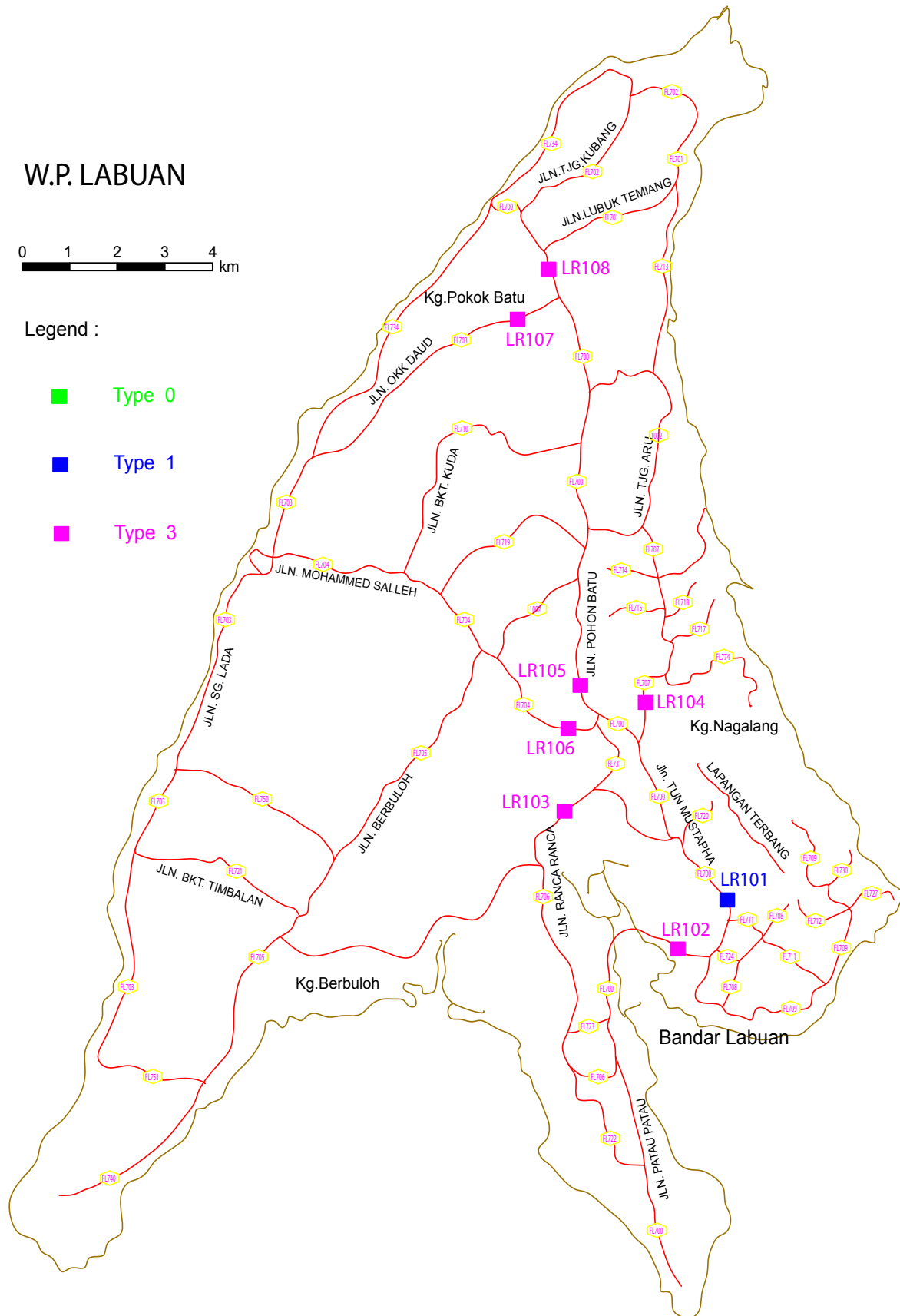
Figure L : TRAFFIC CENSUS STATIONS

W.P. LABUAN



Legend :

- Type 0
- Type 1
- Type 3



16-Hour Traffic Composition By Vehicle Type (April 2012)

STATE : W.P. LABUAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
LR101	-	45484	3815	1700-1800	58.5	20.6	6	0.9	2.1	11.9	100.0
LR102	-	16595	1533	0700-0800	57.2	32.5	4.1	1	0.8	4.4	100.0
LR103	-	12724	1366	1700-1800	52.2	29.9	6.5	1.6	1.7	8	100.0
LR104	-	10518	1006	1200-1300	56.9	26.5	4.6	1.3	1.5	9.2	100.0
LR105	-	15797	1867	0600-0700	52.2	27.9	6.6	1.9	1.9	9.5	100.0
LR106	-	14678	1498	0700-0800	52.4	27.3	4.7	2.5	3.1	10.1	100.0
LR107	-	4468	380	1400-1500	51.5	27.4	3.2	0.4	5.3	12.4	100.0
LR108	-	9808	820	1300-1400	52	25.6	5.3	1.2	2.8	13	100.0

16-Hour Traffic Composition By Vehicle Type (September 2012)

STATE : W.P. LABUAN

Station Number	24-hours Traffic	16-hours Traffic	Peak-hours Traffic	Time	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Total (%)
LR101	-	51173	4056	0700-0800	64.8	19.5	3.9	0.6	1.8	9.5	100.0
LR102	-	19835	1810	1800-1900	50.5	31.5	5.8	2.0	2.4	7.9	100.0
LR103	-	14756	1416	1700-1800	52.7	28.9	7.3	1.7	1.9	7.4	100.0
LR104	-	11308	1053	1700-1800	57.2	26.7	4.5	1.2	2.1	8.1	100.0
LR105	-	17514	1600	0600-0700	52.1	32.4	5.1	0.9	2.4	7	100.0
LR106	-	19189	1807	1600-1700	53.9	28.9	4.9	1.2	2.1	9	100.0
LR107	-	4078	498	0600-0700	37.3	24	8	1.6	11.7	17.3	100.0
LR108	-	7084	576	1100-1200	51.1	21.9	7.9	1	6.4	11.6	100.0

16-Hour Traffic Composition By Vehicle Type (Average 2012)

STATE : W.P. LABUAN

Station Number	16-hours Traffic	Cars & Taxis (%)	Vans & Utilities (%)	Medium Lorries (%)	Heavy Lorries (%)	Buses (%)	M'cycles (%)	Peak-hours Traffic
LR101	48329	61.6	20	4.9	0.7	1.9	10.7	3935
LR102	18215	53.8	32.0	5.0	1.5	1.6	6.1	1672
LR103	13740	52.5	29.4	6.9	1.6	1.8	7.7	1391
LR104	10913	57	26.6	4.6	1.3	1.8	8.7	1030
LR105	16656	52.2	30.2	5.8	1.4	2.1	8.3	1734
LR106	16934	53.1	28.1	4.8	1.9	2.6	9.6	1653
LR107	4273	44.4	25.7	5.6	1	8.5	14.9	439
LR108	8446	51.6	23.7	6.6	1.1	4.6	12.3	698

Annual Growth Rate For Year 2012

STATE : W.P. LABUAN

Station Number	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012 Normal Growth (%/yr)	Rsqr
LR101	38117	38448	36661	33651	39336	39218	37854	38889	37905	48329	1.63	0.30
LR102	16475	16373	14425	11562	14494	14489	11148	12162	18000	18215	0.37	0.00
LR103	7241	8697	9324	10234	9561	9183	9225	9045	13533	13740	5.06	0.62
LR104	8497	10838	6012	10079	10840	12080	10314	10562	10102	10913	2.88	0.20
LR105	14083	13027	10302	9648	10836	25713	12303	13991	16586	16656	3.83	0.16
LR106	14331	15921	19990	27777	19215	13143	17822	19046	16920	16934	-0.02	0.00
LR107	1718	1993	1761	1340	2508	2000	1958	2388	2031	4273	6.53	0.42
LR108	4429	5248	5354	4714	5156	15781	4491	4169	5853	8446	3.82	0.08

W.P. LABUAN

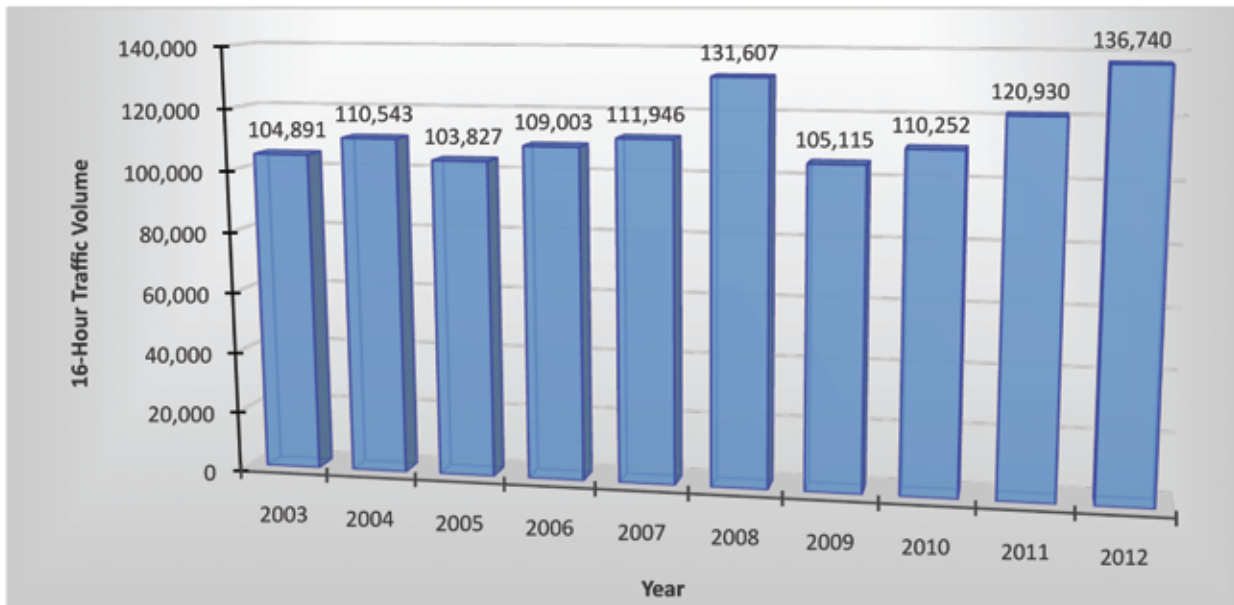


Figure 18 A : W.P. Labuan Yearly 16-hour Traffic Volume

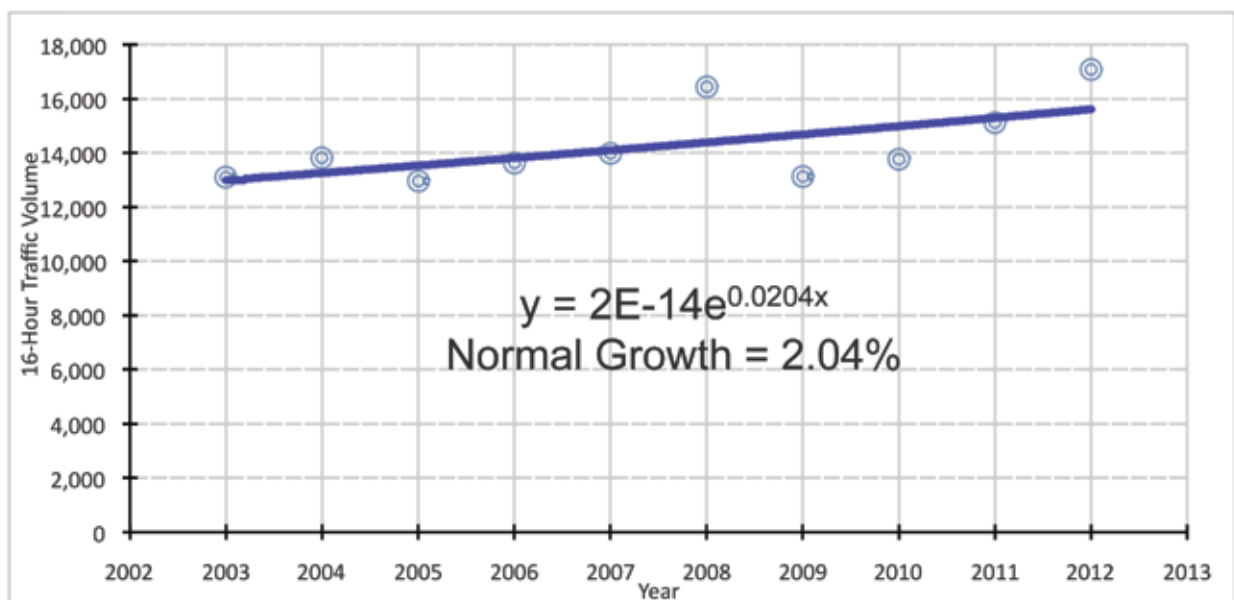
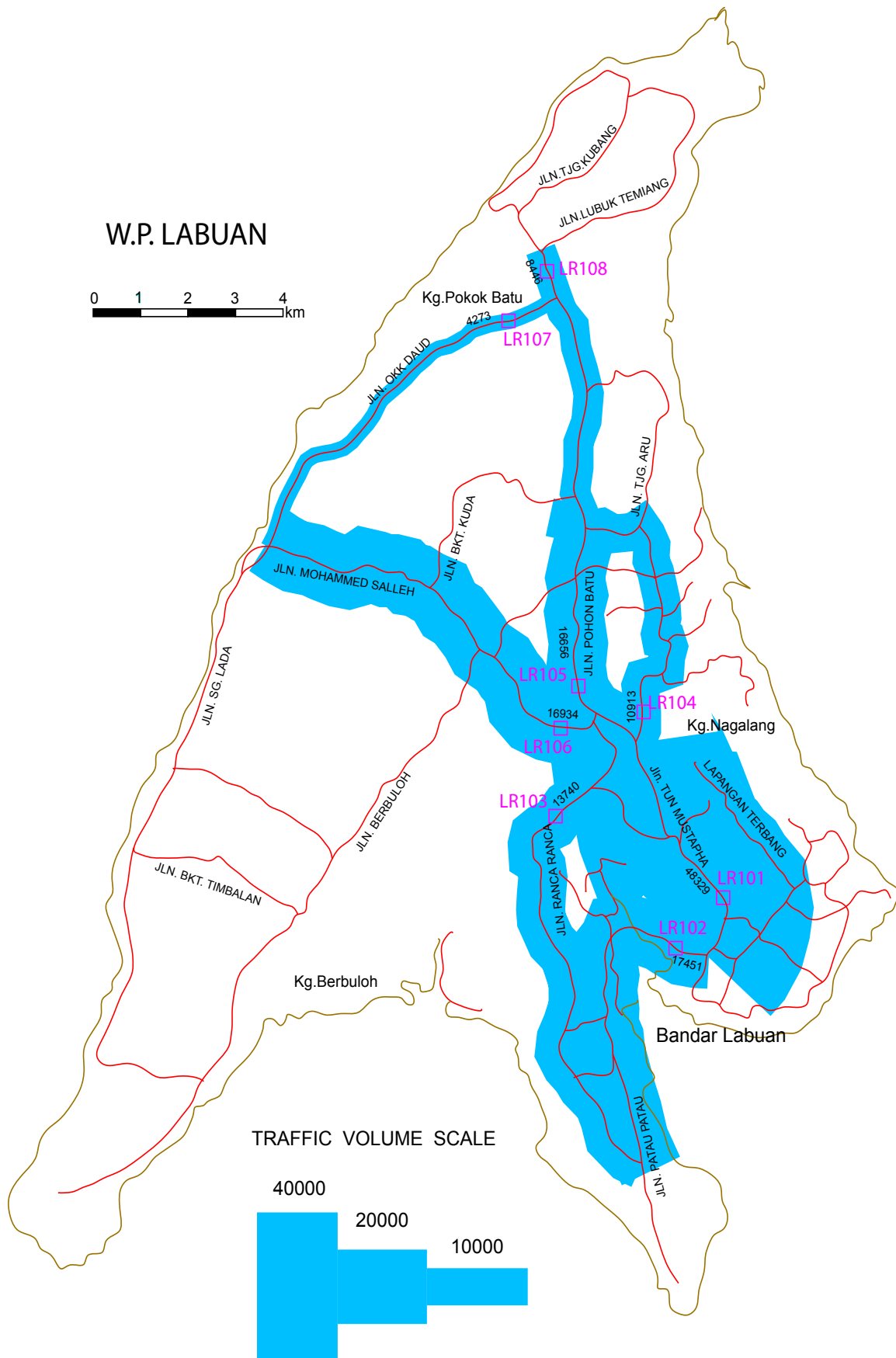
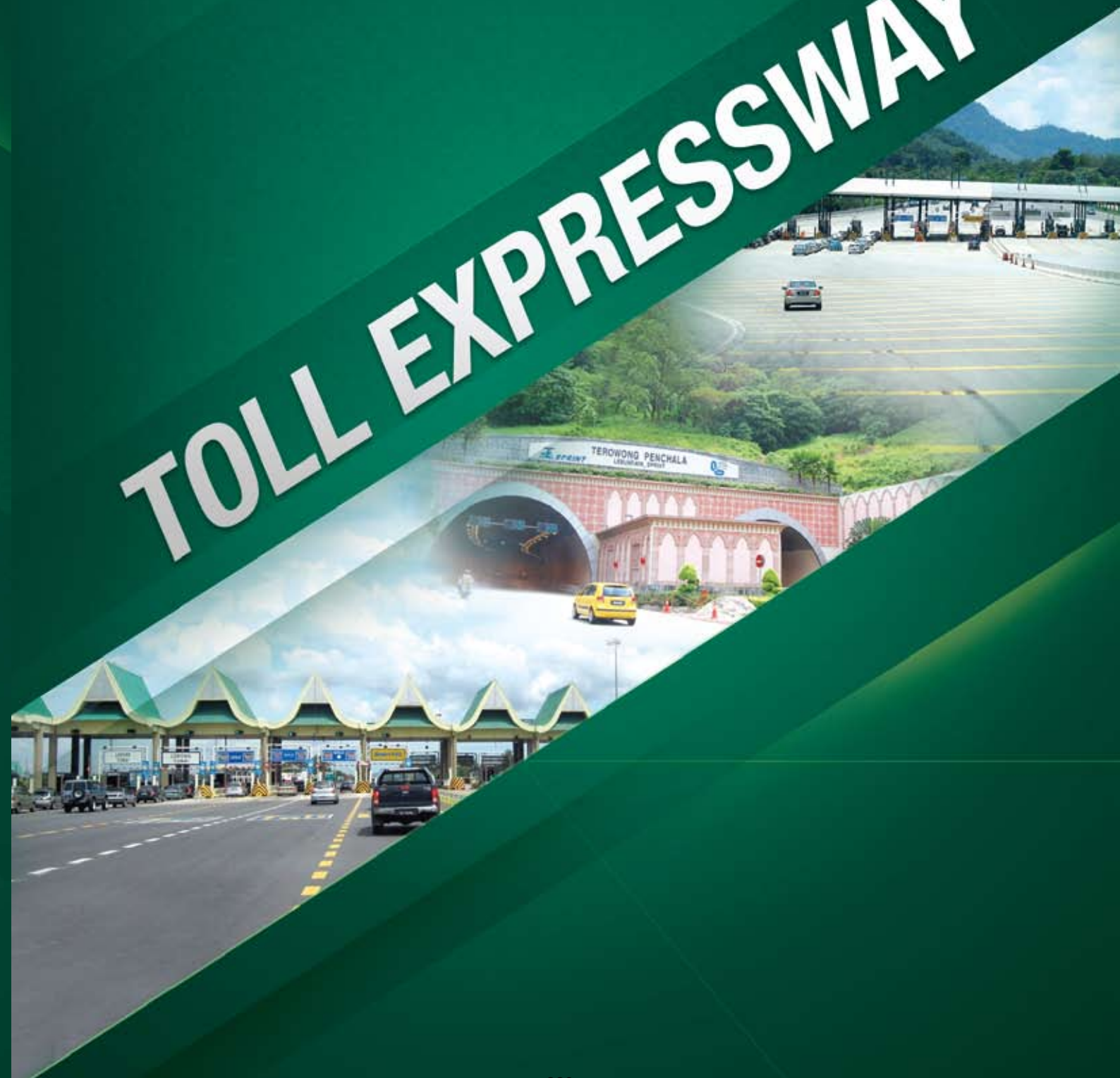


Figure 18 B : W.P. Labuan Normal Traffic Growth with Exponential Trendline For The Year 2012

Figure L1 : AVERAGE 16-HOUR TRAFFIC VOLUME 2012



TOLL EXPRESSWAY







Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF AMPANG - KL ELEVATED HIGHWAY (AKLEH) E12

Toll Plaza's	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Keramat	53233	131	12	3633	243	57252

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF CHERAS - KAJANG HIGHWAY (GRANDSAGA) E7

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Batu 9	76514	1605	963	2552	337	81971
Batu 11	63018	1488	676	1827	241	67250

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF DUTA - ULU KELANG HIGHWAY (DUKE) E33

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Ayer Panas	37012	417	139	1188	140	38897
Sentul Pasar	23531	373	513	1253	506	26177
Batu	44891	550	523	1336	419	47719

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF JALAN DAN JEJAMBAT KUALA LUMPUR HIGHWAY (METRAMAC) E37

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
KL - Seremban	117311	3559	1648	2762	2929	128209

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF SECOND LINK EXPRESSWAY (LINKEDUA) E3

TOLL PLAZA'S	Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Tanjung Kupang	24790	14356	570	847	43	1556	42162
Lima Kedai	-	9761	448	1015	119	809	12153
Perling	-	26530	868	1688	800	334	30220

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF DAMANSARA - PUCHONG EXPRESSWAY (LDP) E11

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Puchong Selatan	88420	3333	1357	3627	359	97096
Puchong Barat	75613	3508	1756	1618	309	82804
Petaling Jaya	135215	2326	1025	4780	414	143760
Penchala	127921	1773	804	3715	331	134543

Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF SPRINT EXPRESSWAY (E23)

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Damansara	56317	360	78	2602	92	59449
Pantai	78459	706	301	2631	172	82268
Kiara	59333	291	137	3194	168	63123

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF MAJU EXPRESSWAY (MEX) E20

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Putrajaya	43692	282	120	12173	1581	57849
Salak Selatan	34177	195	72	6016	592	41051

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF BUTTERWORTH OUTER RING ROAD (BORR) E17

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Perai	10628	152	485	623	630	12517
Bagan Ajam	12349	74	311	254	399	13386
Sg. Nyior	27175	395	977	231	181	28958

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF NEW PANTAI EXPRESSWAY (NPE) E10

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Pantai Dalam	79768	757	397	4032	269	85224
PJS 2	46855	572	181	2539	281	50427
PJS 5	27234	205	42	1328	75	28885

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF SEREMBAN PORT DICKSON HIGHWAY (SPDH) E29

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Mambau	17114	285	667	136	124	18325
Lukut	3529	134	111	59	18	3851

Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF KAJANG SEREMBAN HIGHWAY (LEKAS) E21						
Closed System						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Kajang Selatan	10466	347	156	178	34	11181
Semenyih	4076	202	136	79	16	4508
Pajam	4630	204	221	126	22	5202
Mantin	1265	49	49	23	4	1390
Setul	8327	235	192	126	30	8909
Total	28763	1035	754	532	105	31190
Open System						
Ampangan	11643	430	451	195	45	12763

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF KUALA LUMPUR KARAK EXPRESSWAY (KLK) E8						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Gombak	51805	1664	2030	2722	1841	60061
Bentong	36067	1717	2018	347	894	41043

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF GUTHRIE CORRIDOR EXPRESSWAY (GUTHRIE) E35						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Bukit Jelutong	34256	1081	1108	499	170	37114
Elmina	22814	980	1096	302	123	25316
Lagong	18415	900	936	200	118	20569

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STORMWATER MANAGEMENT AND ROAD TUNNEL (SMART) E38						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Plaza Tol	31039	-	-	789	-	31828

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
NORTH-SOUTH EXPRESSWAY CENTRAL LINK (ELITE) E6						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	210536	10527	11549	12499	2377	247488

Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF NORTH SOUTH EXPRESSWAY E1 & E2						
Closed System						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Juru - Skudai	750108	34252	31449	14890	11962	842661
Hutan Kampong - Sg. Dua	105216	3568	3818	680	1603	114885
Total	855324	37820	35266	15571	13566	957546
Open System						
Bukit Kayu Hitam	3173	27	470	231	66	3967
Jitra	17950	579	1328	312	382	20552
Sungai Rasau	100987	2520	1470	2122	1533	108632
Batu Tiga	145891	3147	980	3410	1471	154899
Kempas	36004	1974	3383	658	402	42420
Bangunan Sultan Iskandar	26483	765	1483	332	2117	31179
Total	330489	9011	9113	7065	5970	361648

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF KAJANG DISPERSAL EXPRESSWAY (SILK) E18						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Sg Balak	33144	866	377	746	94	35228
Sg Ramal	62655	1577	885	1683	501	67301
Bkt Kajang	36766	1247	881	802	233	39929
Sg. Long	16359	608	278	288	39	17572

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF EAST COAST HIGHWAY (LPT) PHASE 1 E8						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	31759	921	1093	194	673	34640

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF SHAH ALAM EXPRESSWAY (KESAS) E5						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Sunway	92115	4334	2146	2186	454	101235
Awan Besar (East)	49987	1544	799	1374	248	53952
Awan Besar (West)	46479	1428	819	1454	248	50427
Kemuning	69380	4548	6228	1439	496	82091

Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF JAMBATAN PULAU PINANG (JPP) E36

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Total Traffic
JPP	15585	55607	4922	2384	177	321	91	79088

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF BUTTERWORTH KULIM EXPRESSWAY (BKE) E15

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Kubang Semang	33938	842	959	348	470	36558
Lunas	30349	1020	812	309	497	32987

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF SUNGAI BESI EXPRESSWAY (BESRAYA) E9

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Mines	85024	2689	1066	1818	756	91354

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF KEMUNING - SHAH ALAM HIGHWAY (LKSA) E13

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Seri Muda	31423	818	467	591	158	33457
Alam Impian	18501	797	285	421	148	20153

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012

STRETCH OF SOUTH KLANG VALLEY EXPRESSWAY (SKVE) E26

Closed System

TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Ayer Hitam	6301	380	454	67	22	7224
Saujana Putra	8165	496	588	96	30	9375
Teluk Panglima Garang	1952	114	154	35	8	2263
Total	16418	990	1196	198	61	18862

Toll Expressway

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF SENAI DESARU EXPRESSWAY (SDE) E22						
Closed System						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Senai	3770	191	211	107	50	4329
Ulu Tiram	4215	191	190	95	48	4738
Cahaya Baru	2279	68	233	31	10	2620
Penawar	3242	74	126	36	25	3503
Total	13505	525	760	268	132	15191

DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2012						
STRETCH OF KL-KUALA SELANGOR EXPRESSWAY (LATAR) E25						
TOLL PLAZA'S	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Ijok	10525	307	115	138	79	11165
Kuang	12712	426	330	222	82	13772
Taman Rimba Templer	10509	490	218	185	37	11439

Soure : Malaysian Highway Authority






Note :

For Closed System :-

The traffic data collected are from all toll users exiting from the route.







Vehicle Classification

1. Expressway Vehicle Classification For Open and Closed Systems (Except for Penang Bridge and Malaysia - Singapore Second Link)

Class	Definition	
Class 1	Vehicles having two axles and three or four wheels (excluding taxi and bus)	
Class 2	Vehicles having two axles and five or six wheels (excluding bus)	
Class 3	Vehicles having three axles or more (excluding bus)	
Class 4	Taxi	
Class 5	Bus	








Vehicle Classification

2. Malaysia - Singapore Second Link

Class	Definition	
Class 0	Vehicles having two axles and two wheels	
Class 1	Vehicles having two axles and three or four wheels (excluding taxi and bus)	
Class 2	Vehicles having two axles and five or six wheels (excluding bus)	
Class 3	Vehicles having three axles or more (excluding bus)	
Class 4	Taxi	
Class 5	Bus	

Vehicle Classification

3. Penang Bridge

Class	Definition	
Class 1	Motorcycle	
Class 2	a) Motorcycles with sidecars b) Commercial vehicles in three wheels c) Cars including station wagons	
Class 3	a) Lorries and vans having two axles and four wheels b) Buses having two axles and four wheels	
Class 4	a) Lorries and vans having two axles and five or six wheels b) Buses having two axles and five or six wheels	
Class 5	a) Vehicles having three axles b) Buses having three axles	
Class 6	Vehicles having four axles	
Class 7	Vehicles having five axles or more	

Soure : Malaysian Highway Authority



ROAD MILEAGE



Summary of Road Mileage In Malaysia (km)

Year	FEDERAL ROAD			STATE ROAD			TOTAL OF ROAD MILEAGE		
	Paved	Unpaved	Total	Paved	Unpaved	Total	Paved	Unpaved	Total
1955	3334.34	382.86	3717.20	4706.46	1982.44	6688.90	8040.80	2365.30	10406.10
1956	3115.14	385.60	3500.74	5067.02	1879.96	6946.98	8182.16	2265.56	10447.72
1957	3379.82	218.35	3598.17	5044.76	1917.59	6962.35	8424.58	2135.94	10560.52
1958	3783.11	249.20	4032.31	4787.82	1903.63	6691.45	8570.93	2152.83	10723.76
1959	3820.42	180.82	4001.24	4980.15	1945.30	6925.45	8800.57	2126.12	10926.69
1960	3879.58	163.99	4043.57	5183.62	1930.68	7114.30	9063.20	2094.67	11157.87
1961	3844.02	192.73	4036.75	5324.59	1928.30	7252.89	9168.61	2121.03	11289.64
1962	3897.50	203.86	4101.36	5873.57	2375.97	8249.54	9771.07	2579.83	12350.90
1963	3967.75	148.93	4116.68	6283.31	2468.40	8751.71	10251.06	2617.33	12868.39
1964	4005.63	232.95	4238.58	6899.82	2590.23	9490.05	10905.45	2823.18	13728.63
1965	4262.67	325.74	4588.41	7391.01	2569.04	9960.05	11653.68	2894.78	14548.46
1966	4335.36	354.02	4689.38	7750.56	2535.23	10285.79	12085.92	2889.25	14975.17
1967	4417.52	438.69	4856.21	8182.25	2400.65	10582.90	12599.77	2839.34	15439.11
1968	4522.49	413.27	4935.76	8599.01	2417.16	11016.17	13121.50	2830.43	15951.93
1969	4559.12	393.29	4952.41	8900.10	2371.76	11271.86	13459.22	2765.05	16224.27
1970	4612.22	384.56	4996.78	9161.37	2264.67	11426.04	13773.59	2649.23	16422.82
1971	4689.19	356.33	5045.52	9438.03	2068.93	11506.96	14127.22	2425.26	16552.48
1972	4714.11	439.59	5153.70	9794.34	2083.42	11877.76	14508.45	2523.01	17031.46
1973	4717.90	424.85	5142.75	10102.72	2007.99	12110.71	14820.62	2432.84	17253.46
1974	4706.81	447.66	5154.47	10351.43	2130.75	12482.18	15058.24	2578.41	17636.65
1975	4716.82	535.41	5252.23	10576.38	2133.75	12710.13	15293.20	2669.16	17962.36
1976	4797.60	751.74	5549.34	10906.13	2508.06	13414.19	15703.73	3259.80	18963.53
1977	4845.47	810.88	5656.35	11332.67	2671.10	14003.77	16178.14	3481.98	19660.12
1978	4921.10	1005.37	5926.47	11455.15	2788.49	14243.64	16376.25	3793.86	20170.11
1979	4939.23	1087.57	6026.80	12036.23	2624.90	14661.13	16975.46	3712.47	20687.93
1980	5268.67	1107.90	6376.57	12586.87	2950.95	15537.82	17855.54	4058.85	21914.39
1981	5386.14	1264.22	6650.36	12816.61	3318.93	16135.54	18202.75	4583.15	22785.90
1982	6484.45	1621.50	8105.95	13634.77	3800.96	17435.73	20119.22	5422.46	25541.68
1983	6505.53	1894.76	8400.29	13928.52	4225.13	18153.65	20434.05	6119.89	26553.94
1984	7060.03	2117.33	9177.36	14059.36	3996.90	18056.26	21119.39	6114.23	27233.62
1985	7231.30	2299.45	9530.75	17867.06	11472.10	29339.16	25098.36	13771.55	38869.91
1986	8531.85	3632.26	12164.11	22763.82	4141.55	26905.37	31295.67	7773.81	39069.48
1987	9994.03	2331.08	12325.11	22972.72	4034.59	27007.31	32966.75	6365.67	39332.42
1988	9436.96	3729.04	13166.00	25624.24	13799.07	39423.31	35061.20	17528.11	52589.31
1989	10310.21	2749.96	13060.17	24293.96	13761.15	38055.11	34604.17	16511.11	51115.28
1990	10330.40	2730.50	13060.90	27448.30	13475.20	40923.50	37778.70	16205.70	53984.40
1991	12623.10	1639.70	14262.80	27448.20	14026.60	41474.80	40071.30	15666.30	55737.60
1992	12972.40	1368.90	14341.30	29162.67	13987.69	43150.36	42135.07	15356.59	57491.66
1993	13589.95	960.19	14550.14	30710.20	14497.26	45207.46	44300.15	15457.45	59757.60
1994	13759.77	990.50	14750.27	31743.31	14713.71	46457.02	45503.08	15704.21	61207.29
1995	13846.57	990.50	14837.07	31743.31	14713.71	46457.02	45589.88	15704.21	61294.09
1996	14423.75	961.42	15385.17	32731.64	15266.32	47997.96	47155.39	16227.74	63383.13
1997	14749.16	961.42	15710.58	33920.85	15349.20	49270.05	48670.01	16310.62	64980.63
1998	15141.98	938.91	16080.89	34187.41	15283.33	49470.74	49329.39	16222.24	65551.63
1999	15350.50	855.42	16205.92	34561.22	15110.21	49671.43	49911.72	15965.63	65877.35
2000	15920.50	855.42	16775.92	35845.39	14969.15	50814.54	51765.89	15824.57	67590.46
2001	16001.08	855.42	16856.50	41135.32	15025.76	56161.08	57136.40	15881.18	73017.58
2002	16128.53	855.42	16983.95	41457.35	14961.68	56419.03	57585.88	15817.10	73402.98
2003	16461.09	908.18	17369.27	44285.08	16778.99	61064.07	60746.17	17687.17	78433.34
2004	17737.86	356.99	18094.85	43337.47	18082.85	61420.32	61075.32	18439.84	79515.16
2005	17451.75	313.18	17764.93	51888.69	18860.87	70749.56	69340.44	19174.05	88514.49
2006	17508.80	256.18	17764.98	55272.55	18582.07	73854.62	72781.35	18838.25	91619.60
2007	17758.99	256.18	18015.17	55272.55	18582.07	73854.62	73031.54	18838.25	91869.79
2008	18146.37	10.40	18156.77	55272.58	18582.12	73854.70	73418.95	18592.52	92011.47
2009	18570.33	10.40	18580.73	81432.12	24642.99	106075.12	100.0002.45	24653.39	124655.85
2010	18920.07	0.00	18920.07	92457.46	25841.96	118299.42	111377.53	25841.96	137219.49
2011	19216.24	0.00	19216.24	108300.72	29650.26	137950.98	127516.96	29650.26	157167.22
2012	19427.52	0.00	19427.52	123584.16	39686.99	163271.15	143011.68	39686.99	182698.63

Total Road Mileage by State For Year 2012 (km)

STATE	FEDERAL ROAD				STATE ROAD				TOTAL			TOTAL
	Paved	Unpaved		Total	Paved	Unpaved		Total	Paved	Unpaved		
		Gravel	Earth			Gravel	Earth			Gravel	Earth	
Johor	2360.27	0.00	0.00	2360.27	18348.87	239.12	315.71	18903.70	20709.14	239.12	315.71	21263.97
Melaka	302.87	0.00	0.00	302.87	2262.74	353.60	214.02	2830.36	2565.61	353.60	214.02	3133.23
Negeri Sembilan	1382.58	0.00	0.00	1382.58	8867.95	311.32	499.37	9678.64	10250.53	311.32	499.37	11061.22
Selangor	968.57	0.00	0.00	968.57	15190.74	314.50	810.42	16315.66	16159.31	314.50	810.42	17284.23
Perak	1510.92	0.00	0.00	1510.92	10403.59	5329.38	142.52	15875.49	11914.51	5329.38	142.52	17386.41
Pulau Pinang	190.04	0.00	0.00	190.04	2664.46	30.74	55.29	2750.49	2854.50	30.74	55.29	2940.53
Kedah	1102.55	0.00	0.00	1102.55	7452.24	420.15	330.43	8202.82	8554.79	420.15	330.43	9305.37
Perlis	239.80	0.00	0.00	239.80	1210.89	208.67	213.80	1633.36	1450.69	208.67	213.80	1873.16
Pahang	3832.57	0.00	0.00	3832.57	9199.62	1269.36	660.25	11129.23	13032.19	1269.36	660.25	14961.80
Terengganu	1259.99	0.00	0.00	1259.99	5273.84	468.08	553.70	6295.62	6533.83	468.08	553.70	7555.61
Kelantan	1261.22	0.00	0.00	1261.22	14666.07	2115.49	1278.42	18059.98	15927.29	2115.49	1278.42	19321.20
W.P. Kuala Lumpur	22.45	0.00	0.00	22.45	1383.53	19.08	0.00	1402.61	1405.98	19.08	0.00	1425.06
W.P. Putrajaya	152.75	0.00	0.00	152.75	0.00	0.00	0.00	0.00	152.75	0.00	0.00	152.75
Sub Total	14586.58	0.00	0.00	14586.58	96924.54	11079.49	5073.93	113077.96	111511.12	11079.49	5073.93	127664.54
Sabah	1501.84	0.00	0.00	1501.84	8954.79	10535.68	1402.60	20893.07	10456.63	10535.68	1402.60	22394.91
Sarawak	1423.79	0.00	0.00	1423.79	17634.97	4187.36	7407.93	29230.26	19058.76	4187.36	7407.93	30654.05
W.P. Labuan	98.20	0.00	0.00	98.20	69.86	0.00	0.00	69.86	168.06	0.00	0.00	168.06
Sub Total	3023.83	0.00	0.00	3023.83	26659.62	14723.04	8810.53	50193.19	29683.45	14723.04	8810.53	53217.02
Lebuhraya Bertol	1817.11	0.00	0.00	1817.11	0.00	0.00	0.00	0.00	1817.11	0.00	0.00	1817.11
TOTAL	19427.52	0.00	0.00	19427.52	123584.16	25802.53	13884.46	163271.15	143011.68	25802.53	13884.46	182698.63

- Catatan : 1. Perangkaan Jalan Persekutuan mengikut Warta Jalan Persekutuan sehingga 31.12.2012
 2. Perangkaan Jalan Negeri mengikut daftar sehingga MARRIS 14.1.2013
 3. Jalan W.P. Putrajaya adalah di bawah kuasa Perbadanan Putrajaya

Soure : Road Facilities Maintenance Division, JKR Malaysia



VEHICLE REGISTRATION

daftaran Lain-Lain Kenderaan Mengikut
Tahun



Total Registration of Motor Vehicle In Malaysia By Type of Vehicle

Year	Motorcycle	Car	Taxi	Bus	Lorry & Van	Hire Car	Trailer	Other	Total
1986	2522173	1419542	23973	21222	306980	3947	26467	115645	4439949
1987	2611396	1479871	24628	21901	319114	3810	26625	113039	4600384
1988	2702932	1549600	25132	23346	328594	4154	26503	122655	4782916
1989	2848717	1658567	26078	24828	349737	4725	26807	132327	5071786
1990	3035930	1811160	28811	26803	380330	5666	27348	146730	5462778
1991	3251289	1970934	31842	28229	411149	6181	27998	159554	5887176
1992	3473643	2107005	34178	30013	442401	6791	28744	172733	6295508
1993	3703838	2255420	36458	33358	466871	7586	29077	179871	6712479
1994	3977047	2426546	40088	34771	495736	10279	28788	196834	7210089
1995	3564756	2532396	27276	35224	430716	28969	-	183038	6802375
1996	3951931	2886536	49485	38965	512165	9971	-	237631	7686684
1997	4328997	3271304	51293	43444	574622	10826	-	269983	8550469
1998	4692183	3452852	45643	54590	599149	10142	-	269983	9124542
1999	5082473	3787047	55626	47674	642976	10020	-	304135	9929951
2000	5356604	4145982	56152	48662	665284	10433	-	315687	10598804
2001	5592150	4528490	56464	49669	688367	10053	-	327369	11252562
2002	5825960	4974850	57920	51008	711738	10107	-	344058	11975641
2003	6164958	5428774	60723	52846	740482	10210	-	361275	12819268
2004	6572366	5911752	65008	54997	772218	10661	-	377835	13764837
2005	7021117	6370046	69645	57036	807895	13075	-	397536	14736350
2006	7458128	6941996	70409	59991	836579	11638	-	411991	15790732
2007	7943364	7419643	72374	62308	871234	12368	-	432652	16813943
2008	8486486	7956735	76307	63645	914967	16811	-	455595	17970546
2009	8929386	8470689	80417	65609	949698	18946	-	474517	18989262
2010	9427427	9055993	85443	67676	990585	22223	-	497987	20147334
2011	9969735	9650603	90390	70081	1030303	25791	-	522430	21359333
2012	10579331	10278842	94577	71521	1071045	27918	-	547848	22671082

Registration of Motor Vehicle In Malaysia By State And Type of Vehicle For Year 2012

Type of Vehicle	Private Vehicle		Public Vehicle			Lorry & Van	Other	Total
State	Motorcycle	Car	Bus	Taxi	Hire Car			
Perlis	3538	1852	1	3	0	37	44	5475
Kedah	46482	18331	28	42	7	704	544	66138
Pulau Pinang	54365	54788	111	98	26	3049	903	113340
Perak	53234	38306	70	15	0	2004	1323	94952
Selangor	59318	30828	154	692	66	6377	6246	103681
Wilayah Persekutuan	101633	236861	479	2721	1854	11073	4618	359239
Negeri Sembilan	19568	14476	22	30	0	1087	263	35446
Melaka	18458	16623	17	10	3	797	446	36354
Johor	86572	77698	208	315	1	5369	2445	172608
Pahang	27966	20169	22	21	1	1335	666	50180
Terengganu	21976	13075	5	6	0	376	225	35663
Kelantan	31685	18585	33	8	0	620	258	51189
Sabah	37374	40435	210	109	109	3447	3365	85049
Sarawak	47427	46212	80	117	60	4467	4072	102435
Total	609596	628239	1440	4187	2127	40742	25418	1311749

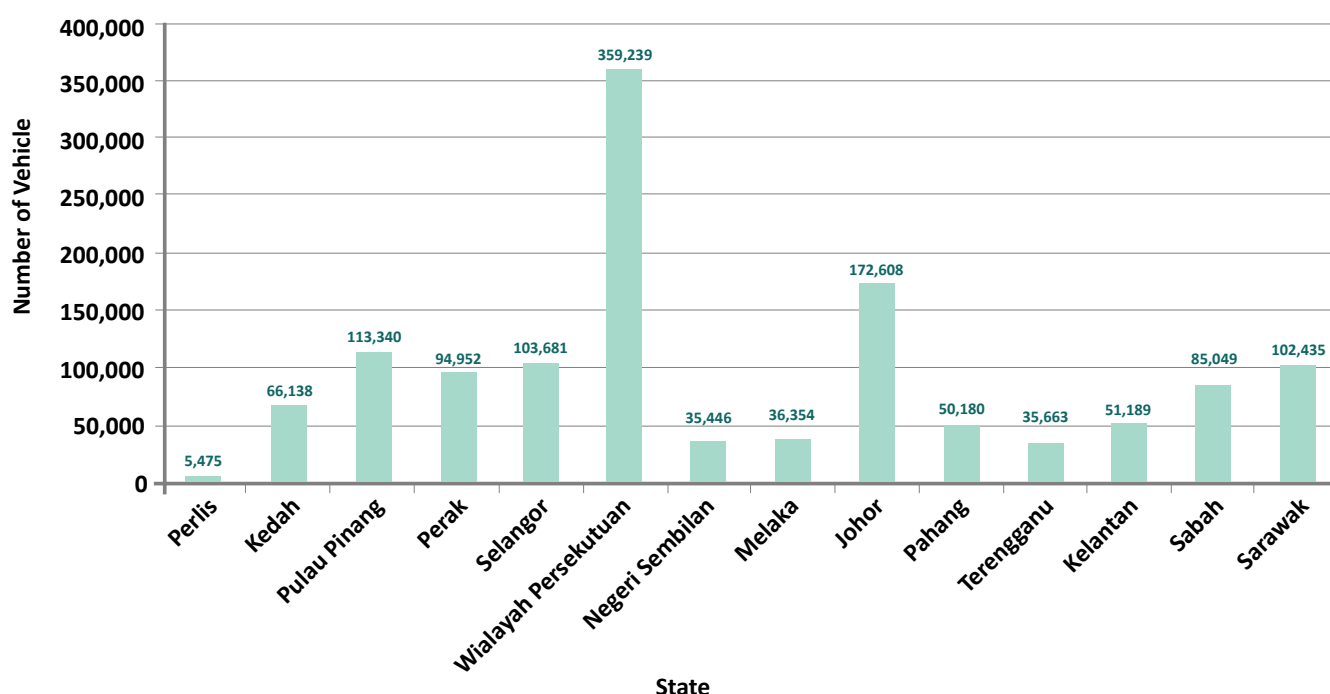
Total Accumulated Registration of Motor Vehicle In Malaysia By State And Type of Vehicle For Year 2012

Type of Vehicle	Private Vehicle		Public Vehicle			Lorry & Van	Other	Total
State	Motorcycle	Car	Bus	Taxi	Hire Car			
Perlis	66646	20962	208	204	3	1906	1496	91425
Kedah	772793	292398	3327	3459	394	36824	20236	1129431
Pulau Pinang	1224605	996438	5905	3934	656	69328	20942	2321808
Perak	1190071	684270	4914	4317	64	68732	39221	1991589
Selangor	1148908	1048214	7455	11422	427	164370	82561	2463357
Wilayah Persekutuan	1532487	3309725	19061	39305	22065	228056	157501	5308200
Negeri Sembilan	481360	308050	2822	2160	28	42520	8357	845297
Melaka	402559	302239	2035	1786	49	25848	6746	741262
Johor	1573161	1306461	10215	12644	114	133426	54585	3090606
Pahang	499737	343638	2043	2741	20	42203	15082	905464
Terengganu	320563	182881	1128	1145	18	20840	7761	534336
Kelantan	452260	265827	2036	2115	9	27782	8434	758463
Sabah	276208	556852	7465	5532	1832	118302	60151	1026342
Sarawak	637583	670677	3312	2534	874	85184	63338	1463502
Total	10578941	10288632	71926	93298	26553	1065321	546411	22671082

Total Registration of Motor Vehicle In Malaysia By State For Year 2004 - 2012

STATE	2004	2005	2006	2007	2008	2009	2010	2011	2012
Perlis	3655	3811	4109	4205	5602	4566	5434	4202	5475
Kedah	41308	45479	45312	45265	53638	48211	55835	62929	66138
Pulau Pinang	98281	100824	101515	101949	109033	92320	111882	106514	113340
Perak	72212	75923	74959	80369	88783	78040	84199	87577	94952
Selangor	98912	103718	96165	101439	109890	87465	105787	101439	103681
Wilayah Persekutuan	238302	268398	248158	258205	293064	272373	306513	328578	359239
Negeri Sembilan	33690	35728	35046	34309	36384	30931	34168	33736	35446
Melaka	31101	34108	31434	33591	36609	30919	33692	33530	36354
Johor	129079	139529	132133	141679	156013	130485	145040	155611	172608
Pahang	36130	39805	37766	41869	52410	41543	44646	48464	50180
Terengganu	19967	21644	23527	26354	32797	30170	33086	32165	35663
Kelantan	26439	29248	33374	38414	45840	40732	45686	44591	51189
Sabah	37085	46691	44593	49737	61338	58834	69301	79229	85049
Sarawak	66202	75202	63422	65826	75202	70772	82803	93434	102435
Total	932363	1020108	971513	1023211	1156603	1017361	1158072	1211999	1311749

Total Registration of Motor Vehicle In Malaysia By State For Year 2012



Source : Road Transport Department of Malaysia



APPENDIXES

Appendix "A"

AGIAN PERANCANG JALAN
KEMENTERIAN KERJA RAYA

NEGERI	
DAerah	
CHACA	

Appendix "B"

Borang : KKR-B42
No Keluaran : 3
No Pindaan : 1
Muka Surat : 1 / 1



Appendix "C"

CLASSIFICATION

Motor Cars and Taxis

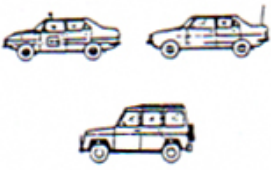





Appendix "D"



Appendix "A"

Borang JKR P.10(Pin.11/98)

BANCI LALULINTAS KEBANGSAAN BORANG KIRAAN KENDERAAN				BAHAGIAN PERANCANG JALAN KEMENTERIAN KERJA RAYA			
PENGHITUNG		DAERAH		NEGERI			
JAM BERMULA DARI		TARIKH		HARI	CUACA		
NOMBOR STESEN		ARAH DARI		KE			

	5	10	15	20	25	30	35	40	45	50	55	
KERETA & TEKSI 												
VAN KECIL & UTILITI 												
LORI SEDANG & VAN BESAR 												
LORI BESAR (> = 3 GANDAR) 												
BAS 												
MOTORSIKAL 												

Appendix "B"

[Borang (BPJ) J.K.R.335 Pin.5/93]

Borang : KKR-B42
 No Keluaran : 3
 No Pindaan : 1
 Muka Surat : 1 / 1



**Bahagian Perancang Jalan
 KEMENTERIAN KERJA RAYA MALAYSIA**

**LAPORAN BANCILALULINTAS KEBANGSAAN
 Ringkasan Harian
 Rekod Kiraan Manual**

Negeri : Daerah :

No Stesen : Jenis Kajian :

Lokasi Stesen :

Lalulintas dari : Ke Arah

Bilangan Lorong :


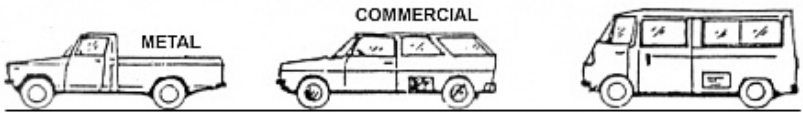

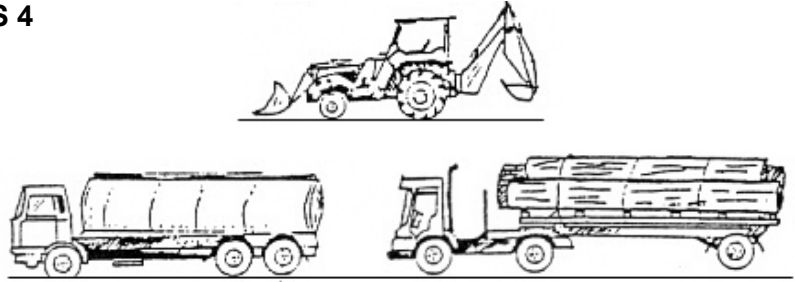


Hari : Tarikh : Disediakan oleh :

Jam Permulaaan	Motokar dan Teksi	Van kecil dan Utiliti (Ringan - 2 gandar)	Lori dan Van Besar (Berat - 2 gandar)	Lori dengan 3 Gandar atau Treler (Berat dan melebihi 2 gandar)	Bas	Motosikal	Jumlah
0 6							
0 7							
0 8							
0 9							
1 0							
1 1							
1 2							
1 3							
1 4							
1 5							
1 6							
1 7							
1 8							
1 9							
2 0							
2 1							
2 2							
2 3							
0 0							
0 1							
0 2							
0 3							
0 4							
0 5							

Catatan :

Appendix "C"

VEHICLE CLASSIFICATION

Motor Cars and Taxis	
CLASS 1	
Small Vans & Utilities (Light 2-axes)	
CLASS 2	
Lorries & Large Vans (Heavy 2-axes)	
CLASS 3	
Lorries with 3-axes (Heavy 3-axes and above)	
CLASS 4	
Buses	
CLASS 5	
Motorcycles & Scooters	
CLASS 6	

Appendix "D"

LEVEL OF SERVICE (LOS)**LOS - A**

No congestion.
Free flow with low traffic volumes
and high speeds.

**LOS - B**

No congestion.
Reasonably free flow, but speed
depends on traffic flow.

**LOS - C**

Minimum congestion.
Stable flow zone, but with drivers less
able to travel at their own chosen
speed.

**LOS - D**

Moderate congestion.
Unstable flow ;
Restricted drivers chosen speed.

**LOS - E**

Severe congestion.
Very unstable flow; possible short
stoppages.

**LOS - F**

Extreme congestion.
Unacceptable congestion;
stop-and-go traffic; forced flow.