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First published in 1982

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## ROAD TRAFFIC VOLUME MALAYSIA ISSN : 2289-4330

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# FOREWORD



**SECRETARY GENERAL  
MINISTRY OF WORKS MALAYSIA**

Assalamu'alaikum Warahmatullahi Wabarakatuh,

The Road Traffic Volume Malaysia (RTVM) 2015 a part of the Ministry's effort to document traffic data and road conditions of Malaysia's road networks.

This annual publication aims to provide a comprehensive and updated view of the traffic conditions and road networks nationwide. The report is also a reference for whenever the need arises to plan for improvements, either to relief issues or to assist or catalyse the development of local areas. Additionally, RTVM is a source of reference for research and study.

It is my hope that the RTVM 2015 will continue to be beneficial to all parties involved in pursuit of the national agenda of development and growth, striving to move ahead, and driving the Government's aspirations for Malaysia to become a high-income nation by the year 2020.

**DATO' SRI ZOHARI BIN HAJI AKOB**  
Secretary General  
Ministry of Works Malaysia

October 2016

# INTRODUCTION



## UNDERSECRETARY HIGHWAY PLANNING DIVISION

Assalamu'alaikum Warahmatullahi Wabarakatuh,

I would like to begin my writing for this edition with a heartfelt thank you to all the participating parties. This annual report has been published since 1982 and has benefited many parties.

The National Traffic Census is a biennial programme conducted for the purpose of traffic data collection and updating current status of federal and states roads condition around Malaysia. To-date, there are 554 stations erected around the country. The data collected from these census stations are published annually in the Road Traffic Volume Malaysia (RTVM).

Through this publication, we hope to assist and fulfill the needs of all involved in planning and building of road networks with a shared vision to constantly improve the development of road infrastructures in terms of planning, managing and cost effectiveness for each project.

We appreciate any constructive reviews and suggestions regarding the publication, so we may improve the quality of its content for the benefit of all in the future.

Lastly, on behalf of Highway Planning Division, I would like to thank all involved quarters in the making of this report, especially the Public Works Department Malaysia, Malaysian Highway Authority, Road Transport Department Malaysia and other agencies' cooperation in providing us with their support to publish RTVM 2015.

Dr. JAMILAH BINTI MOHD MARJAN  
Undersecretary  
Highway Planning Division  
Ministry of Works Malaysia

October 2016

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# NOTE TO USER

## 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 form used for the manual data collections is as in Appendix "A".

The National Traffic Census is carried out twice a year during the month of March/ April and September/ October, conducted by the State Public Works Department (JKR Negeri) and coordinated by Highway Planning Division since 1967. The census data will be submitted to Highway Planning Division for further data analysing and processing.

Data collections are divided into three types as Figure 1-1:

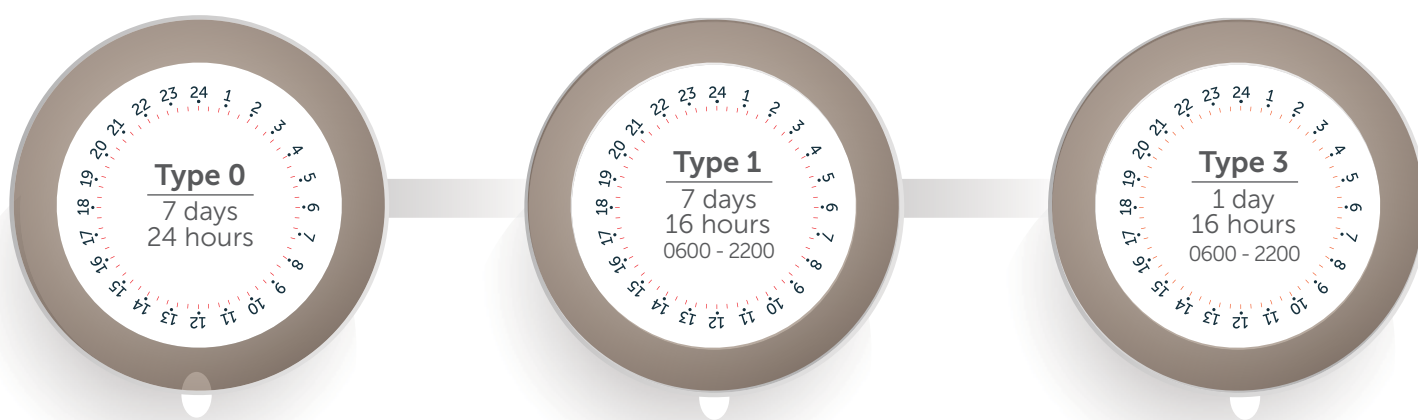


Figure 1-1: Types of Data Collection for National Traffic Census

In RTVM, the vehicles are classified into six classes as shown in Figure 1-2:

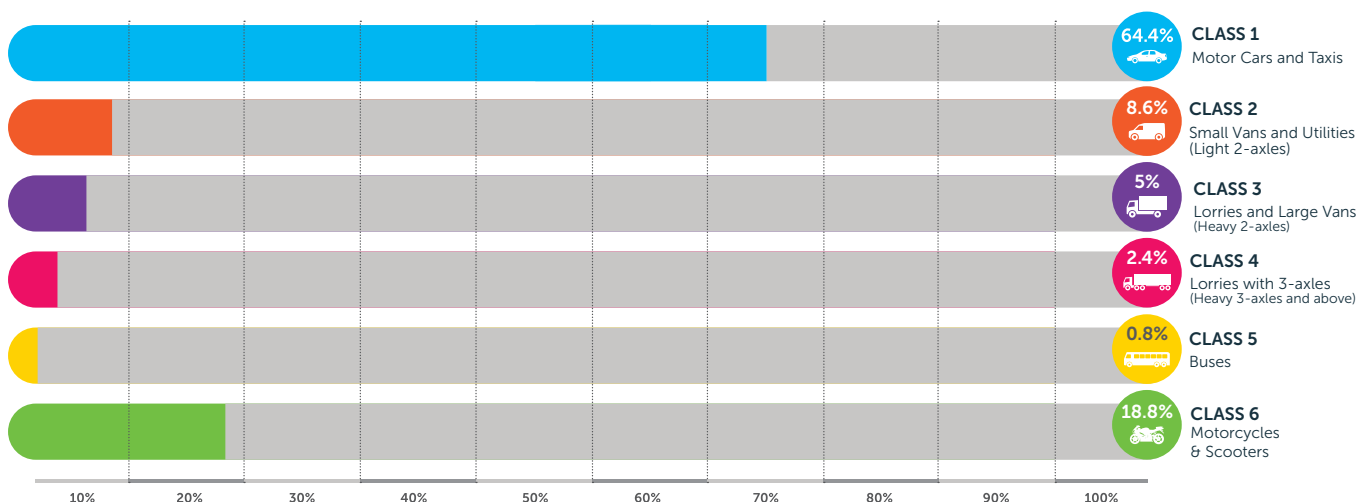


Figure 1-2: Vehicle Classification and Composition

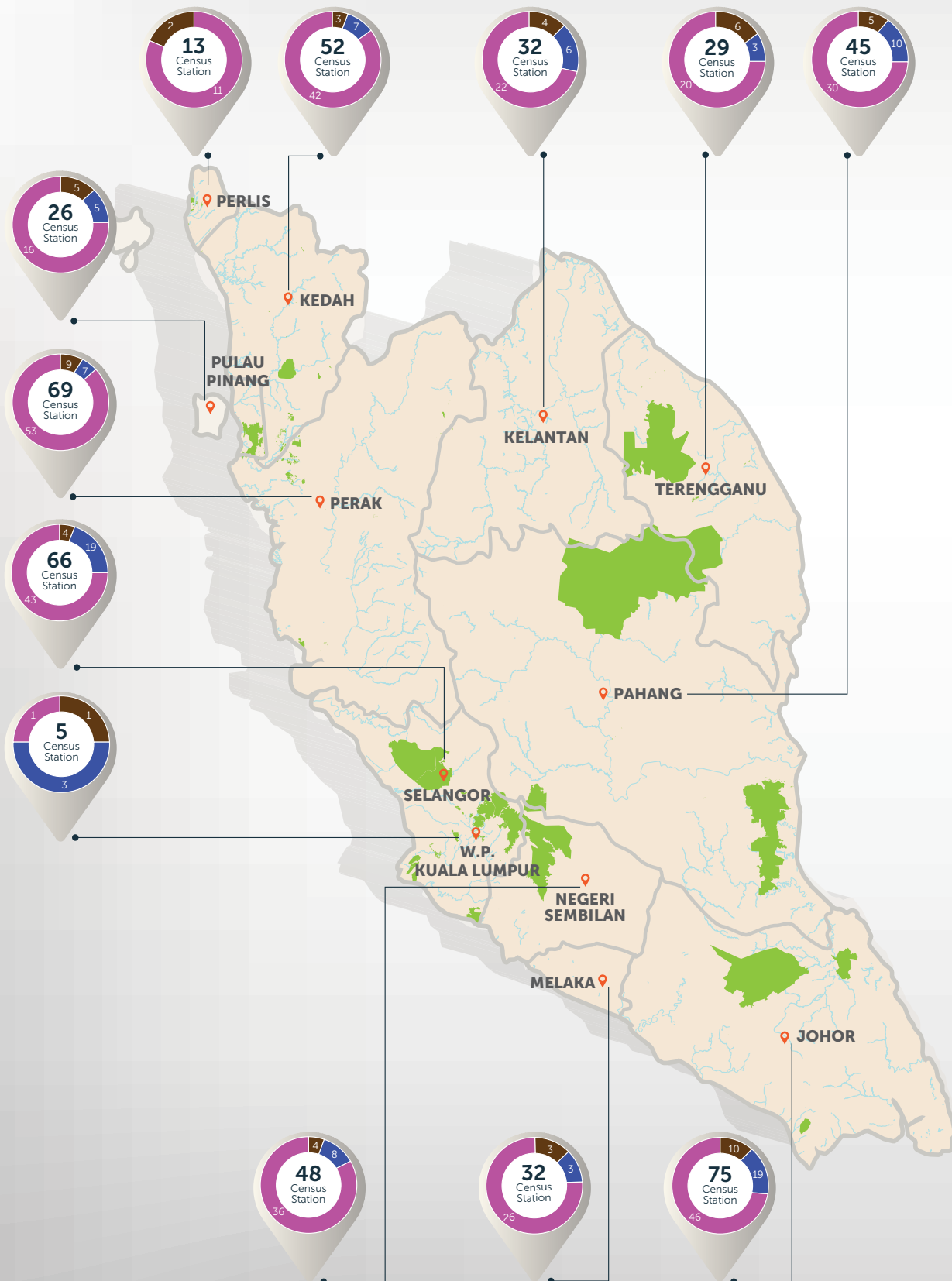
Figure 1-2 shows the overall composition according to the vehicle classification on Malaysian roads based on National Traffic Census at the 554 census stations for the year 2015.

The ratio of bus to cars and taxis is 1:65. The amount of small vans and utilities is almost the total amount of both Class 3 and Class 4 lorries combined. Motorcycles and scooters are the second largest amount of vehicles on the road, after cars and taxis.



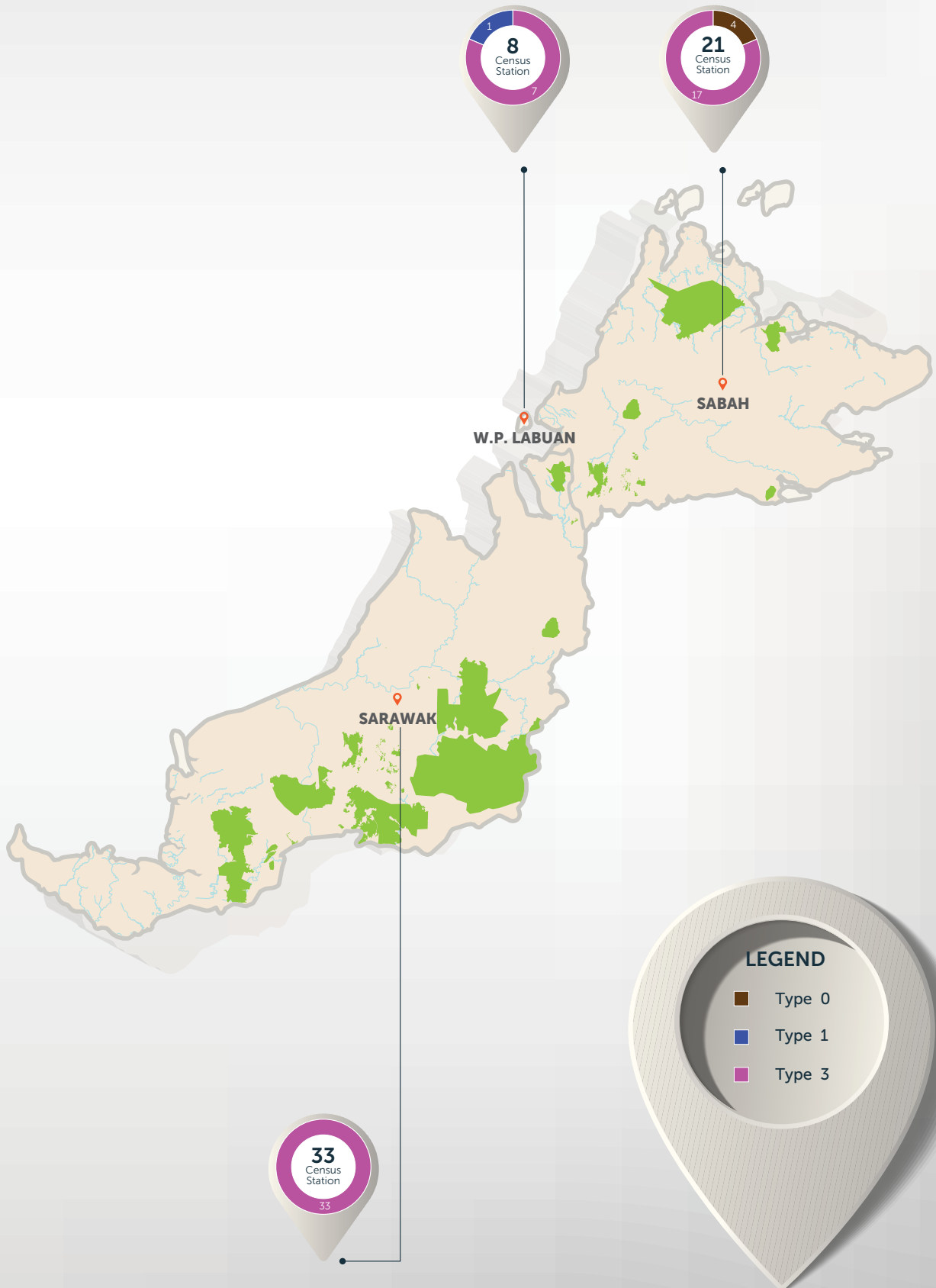
## PENINSULAR MALAYSIA

492 TRAFFIC CENSUS STATIONS



# SABAH, SARAWAK & W.P. LABUAN

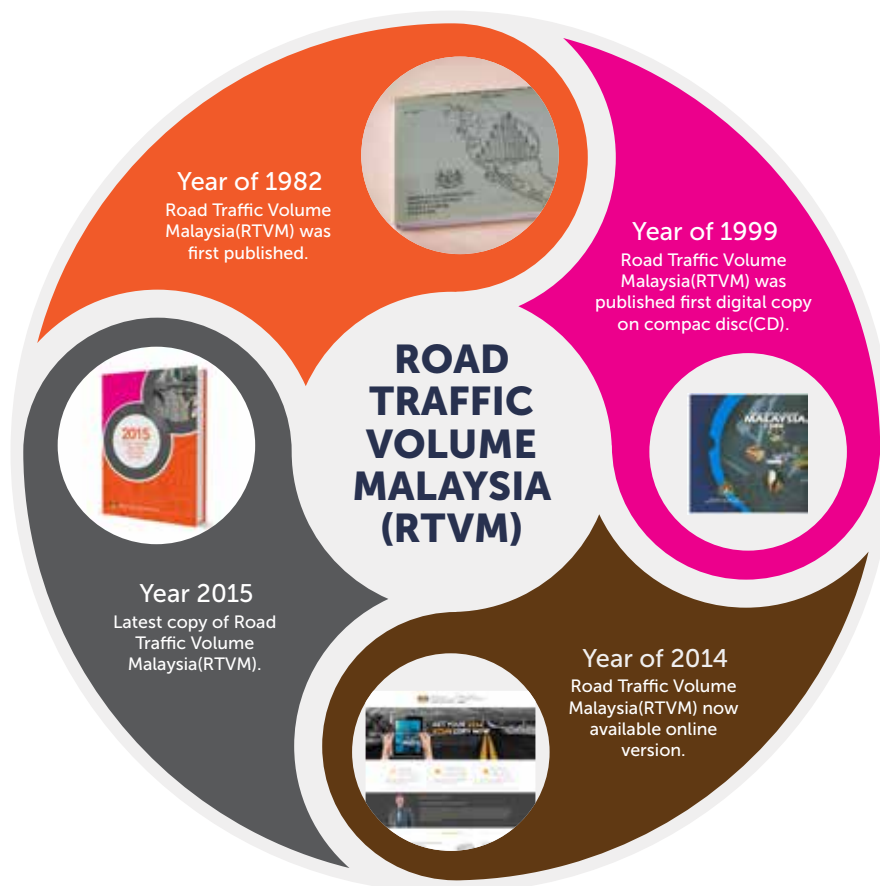
62 TRAFFIC CENSUS STATIONS



## ROAD TRAFFIC VOLUME MALAYSIA (RTVM)

Road Traffic Volume Malaysia (RTVM) was first published in 1982 in the form of printed copy and beginning in 1999 in the form of digital copy (Compact Disc). Starting from 2014, RTVM is available in the online version.

The National Traffic Census data collected from the State Public Works Department (JKR Negeri) are analysed and documented in the RTVM. The RTVM report of current year will be published in the month of June the following year.



RTVM is available to the public for online version at RM 100.00. The access code can be purchased at :-



Cawangan Pengurusan Perolehan dan Harta, Ground Floor, Block A,  
Ministry of Works, Jalan Sultan Salahuddin, 50580 Kuala Lumpur.



03 2771 4096



03 2711 1944



<http://rtvm.kkr.gov.my>

The content of RTVM consists of:

- Traffic Census Stations location description
- Road Traffic Volume information
- Level of Service
- Capacity Year
- Annual Traffic Growth Rates
- Toll Expresway
- Road Mileage
- Vehicle Registration

The benefits of RTVM are as follows:

- Provides proper road network planning and roadside development
- Provides detailed study on the traffic flow criteria
- Provides current traffic information for research and study
- Provides comprehensive overview about the current road capacity
- Provides current Level of Service (LOS) of the respective roads. Kindly refer to Appendix "C" for types of LOS
- Provides information on the traffic growth and projection of traffic

## TYPE OF CARRIAGEWAY

There are two types of carriageway. Based on NTJ 27/2012 Terminologi Jalan shows that the type of the carriageway divides into two categories which is single carriageway and dual carriageway. The detail of the description as figure below:

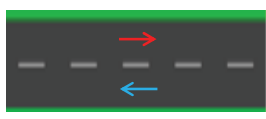
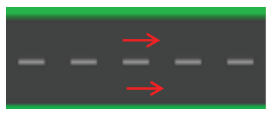

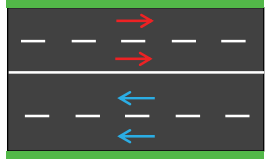

	2 - Lane Single Carriageway
Code	T1-1
	2 - Lane 1 - Way Single Carriageway
Code	T2
	3 - Lane Single Carriageway
Code	T1-2
	4 - Lane Single Carriageway
Code	T2-2
	3 - Lane 1 - Way Single Carriageway
Code	T3

Figure 1-3 : System Code For Single Carriageway

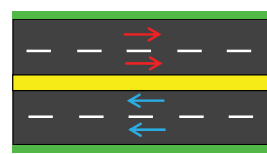
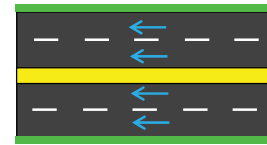
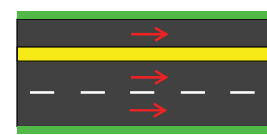
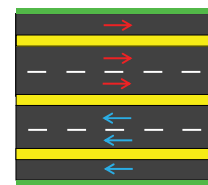
	4 - Lane Dual Carriageway
Code	K2-2
	4 - Lane 1 - Way Dual Carriageway
Code	K2+2
	3 - Lane 1 - Way Dual Carriageway
Code	K1+2
	6 - Lane Dual Carriageway
Code	K(1+2)-(1+2)

Figure 1-4 : System Code For Dual Carriageway

## LEVEL OF SERVICE (LOS)

Level of Services (LOS) is qualitative measures that describe traffic conditions in terms of speed, travel time, freedom to manoeuvre, comfort, convenience, traffic interruption and safety. LOS A represents the best condition, while LOS F represents heavily congested flow with traffic demands exceeding highway capacity.

By referring to the National Traffic Census 2015, Figure 1-5 shows that 27% of the roads in 2015 at the 554 census stations is already saturated (LOS F). The percentage decreased 4% compared to the previous year. The percentage of roads with LOS D also decreased compared to previous years.

However, the increasing percentage of roads with LOS A and B in 2015 shows the enhancement from 2014. While, the decreasing percentage of roads with LOS C and E in 2015 shows the reduction from 2014. This shows that the Level of Service (LOS) of these roads getting worse due to the increase of traffic volume on the particular roads.

Capacity is the maximum rate at which vehicles can traverse a point or short segment during a specified time period. Projected capacity year means the year at which the forecast traffic volume equals the computed road capacity. In this report, the R value is represented to the LOS is already F in that census year. However, there are some of census stations shows the reduction capacity year that is represented by symbols (-).

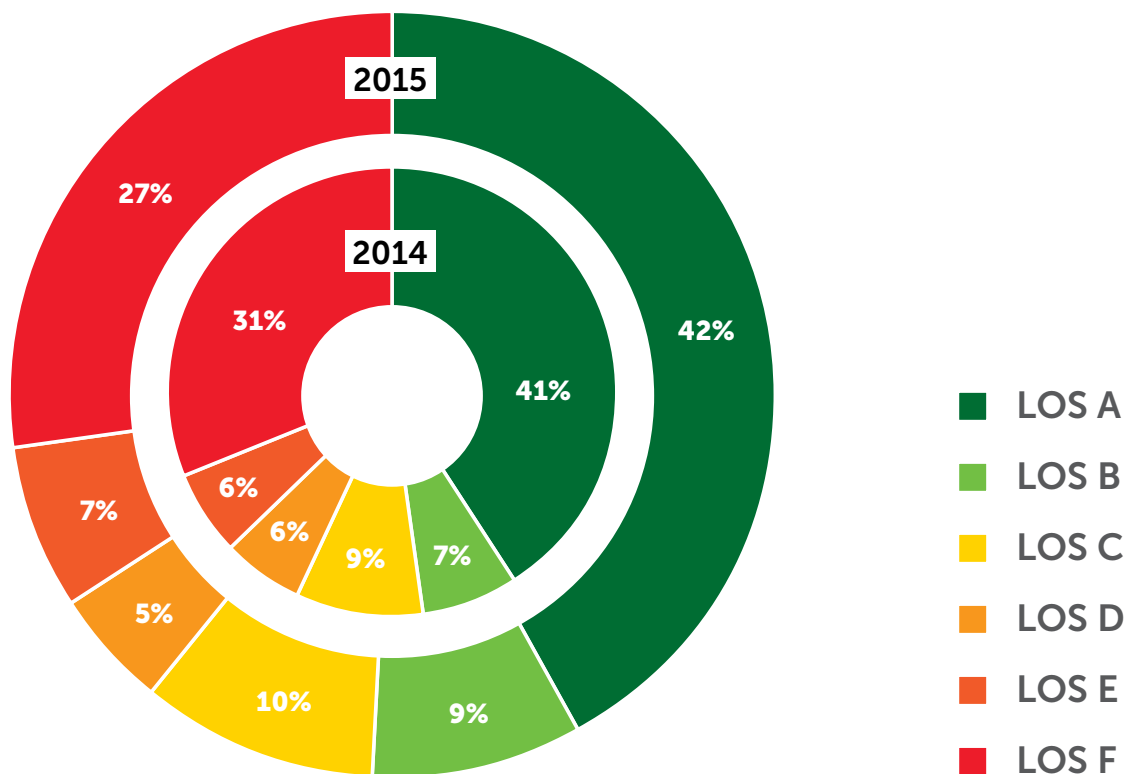


Figure 1-5: Distribution of Level of Service (LOS) of the Road at the 554 Census Stations in 2014 & 2015



## TRAFFIC SCENARIO IN MALAYSIA

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 (2006-2015) Extrapolation based on this rate is used for the capacity year computation. Capacity Year means the year at which the forecast traffic volume equals the computed road capacity.

The Malaysia Yearly 16-Hour Traffic Volume (2006-2015) based on National Traffic Census Stations as shown in Figure 1-6 shows that there's a 1.9% decrease in 2015 16-Hour traffic volume compared to the previous year. This represents a decrease in traffic volume for the first time in ten years. In case of referring to the traffic volume by state, only five states alone have an increase of the traffic volume over the previous year, which are Kedah, Negeri Sembilan, Melaka, Sabah and W.P. Labuan; while others experienced decrease.

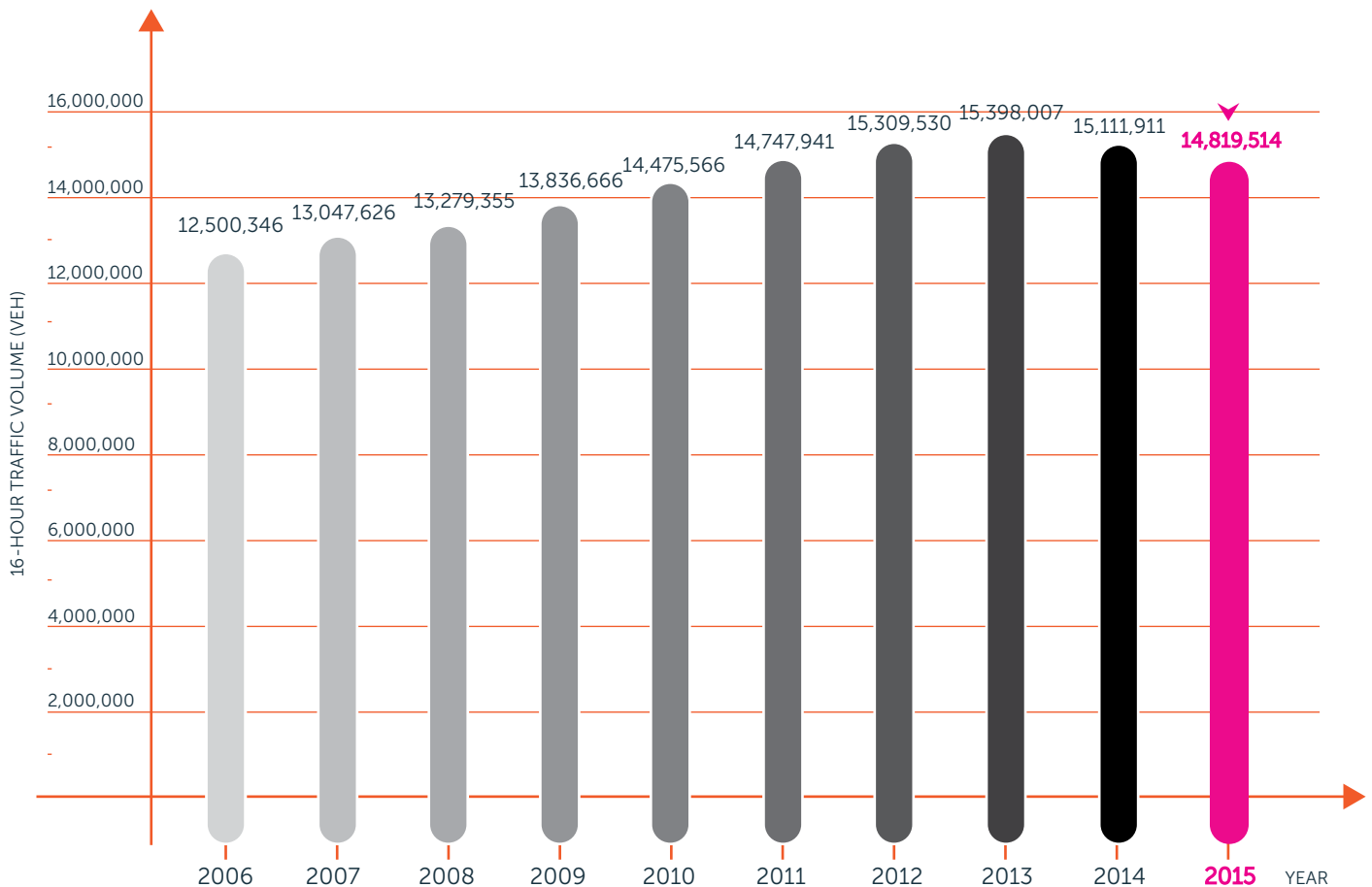


Figure 1-6 : Yearly 16-hour Traffic Volume (2006 - 2015) in Malaysia

By referring to the Figure 1-7, the 2015 Normal Traffic Growth Rate (%) based on National Traffic Census in Malaysia at the 554 census stations is 2.20%. This value was obtained from the equation of the exponential trendline for the 10 years 16-hour traffic volume.

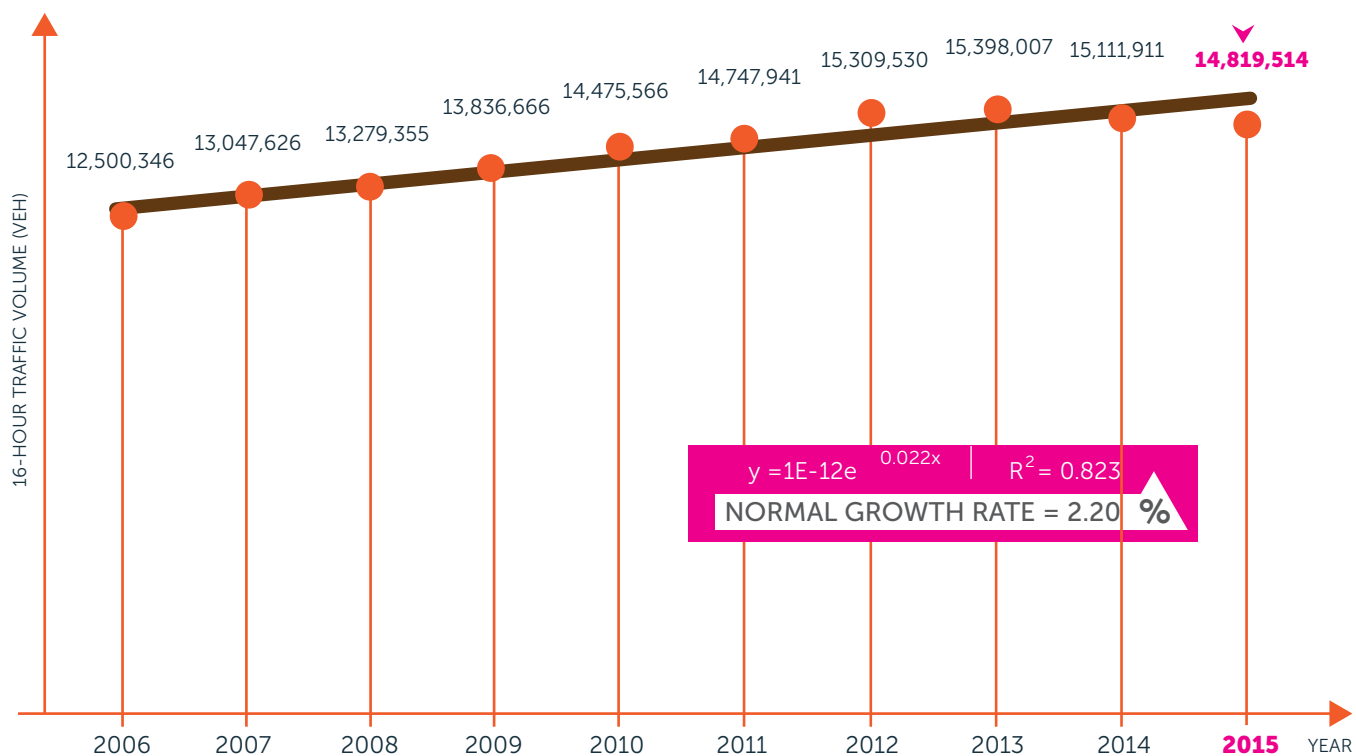
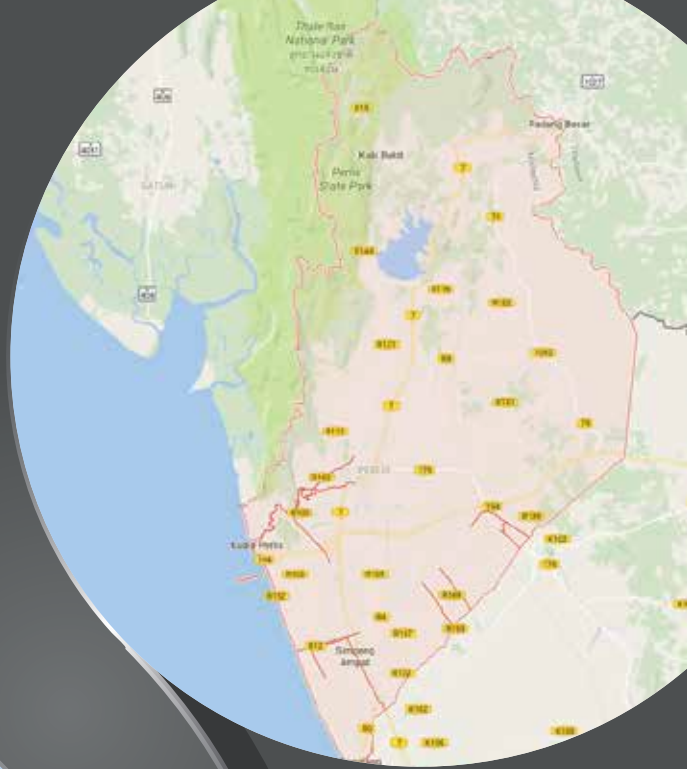


Figure 1-7: Normal Traffic Growth with Exponential Trendline for the year 2015 in Malaysia

# JUBLI EMAS ROUNDABOUT



• 1995 : Four Main Federal Roads Connector •



# PERLIS

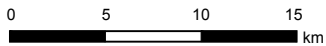
13 Census Stations  
Road Length : 2592.83 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION & LOS MAP

STATE : **PERLIS**

## LEGEND



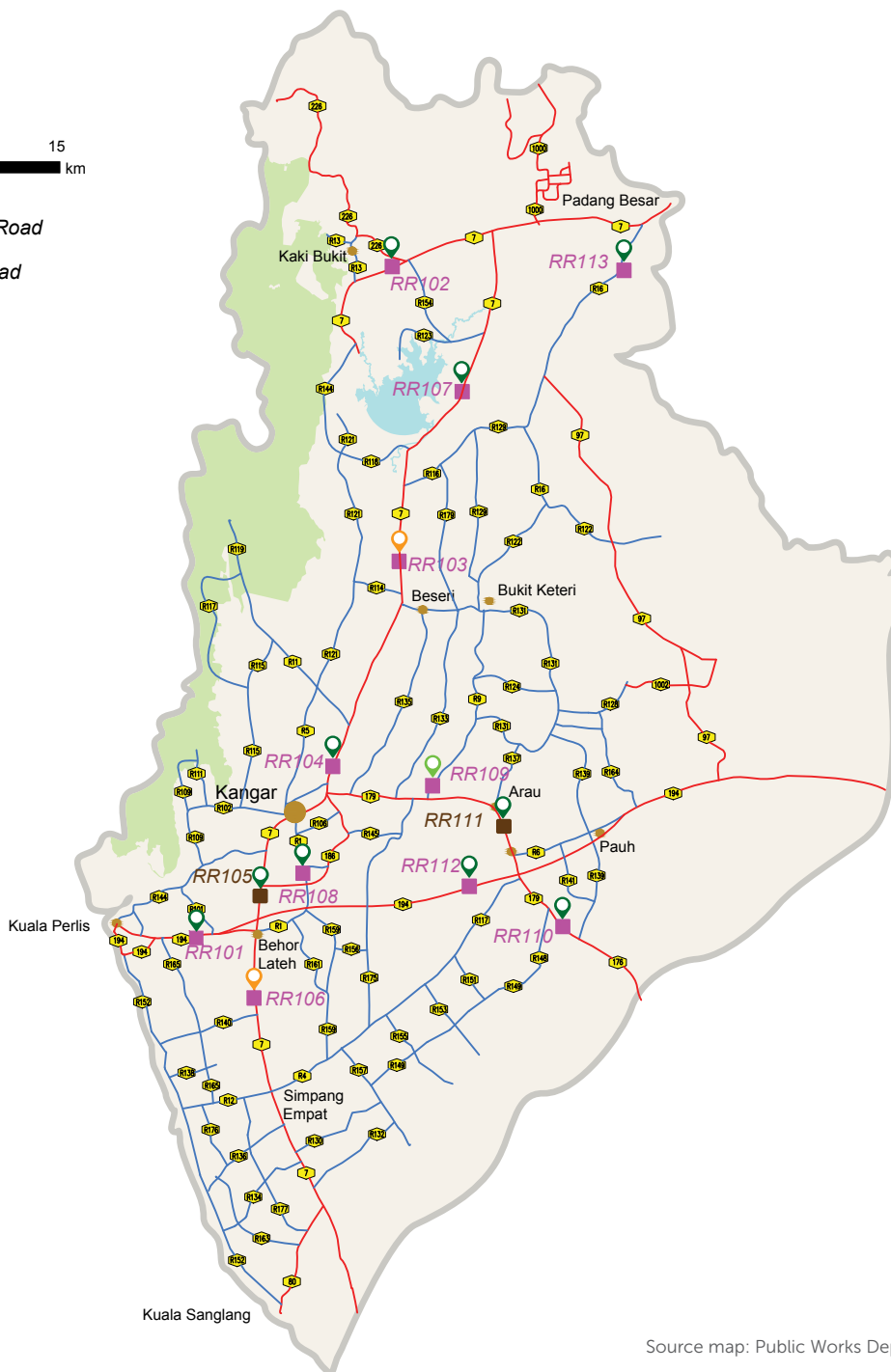
- Federal Road
- State Road

### CENSUS STATION TYPE

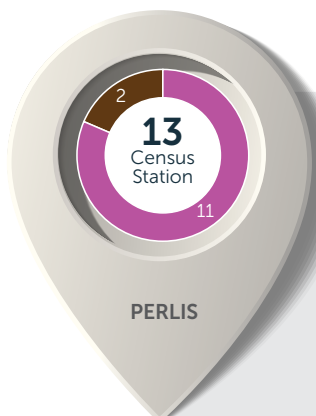
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

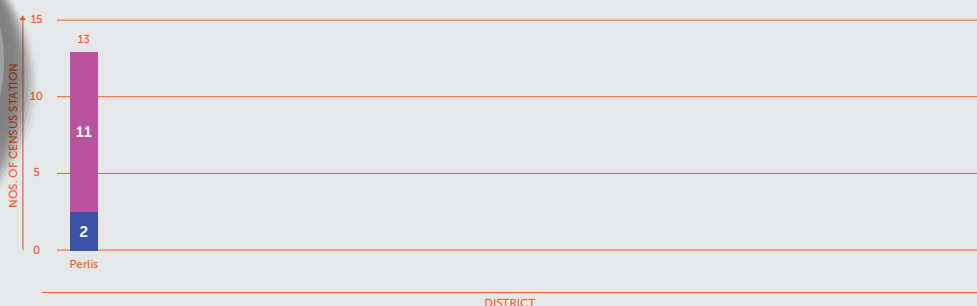
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



Source map: Public Works Department Malaysia, 2013



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PERLIS**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
RR101	3	194	5.0	Kuala Perlis - Changlun (100m from Kg.Behor Lateh junction)	6.3936111 100.1567222	K 2-2
RR102	3	265	30.5	Titi Tinggi - Tasoh	6.6373056 100.2206111	T 1-1
RR103	3	7	10.6	Kangar - Padang Besar	6.5231944 100.2295833	T 1-1
RR104	3	7	2.0	Kangar - Padang Besar	6.4523056 100.2064444	K 2-2
RR105	0	7	3.5	Kangar - Alor Star (Seriab)	6.4130000 100.1826944	K 2-2
RR106	3	7	8.1	Kangar - Alor Star (Behor Mali)	6.3713333 100.1832222	T 1-1
RR107	3	7	22.6	Kangar - Padang Besar (Titi Tinggi)	6.6179722 100.2569167	T 1-1
RR108	3	R1	2.2	Jalan Raja Syed Alwi	6.4157778 100.1991944	K 2-2
RR109	3	R9	5.5	Mata Ayer - Beseri (Persimpangan Arau)	6.4457778 100.2411389	T 1-1
RR110	3	179	14.0	Kangar - Koding (Arau)	6.4030000 100.2915278	K 2-2
RR111	0	179	9.9	Kangar - Koding (Arau)	6.4386389 100.2673611	K 2-2
RR112	3	194	16.0	Kuala Perlis - Changlun (2km from Arau - Kuala Perlis bridge)	6.4131111 100.2425556	K 2-2
RR113	3	R16	22.2	Jalan Kubang Tiga - Padang Besar Ke Chuping	6.5852778 100.2798889	T 1-1



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERLIS**

**MARCH 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
RR101	-	17,393	1,600	0700-0800	65.1	5.4	3.7	0.5	1.6	23.6	100.0
RR102	-	5,775	635	0700-0800	42.8	6.6	4.3	0.3	0.5	45.6	100.0
RR103	-	17,140	1,567	1800-1900	58.8	6.0	3.3	0.4	0.4	31.0	100.0
RR104	-	26,312	2,855	0700-0800	64.8	4.7	2.4	0.3	0.2	27.6	100.0
RR105	33,896	29,518	2,799	1700-1800	65.5	4.7	2.8	0.4	1.5	25.2	100.0
RR106	-	15,425	1,487	1700-1800	59.4	6.6	5.5	1.7	1.8	25.1	100.0
RR107	-	6,576	595	1800-1900	61.6	7.9	5.9	1.1	1.7	21.8	100.0
RR108	-	22,612	2,426	0700-0800	62.7	4.5	2.1	0.2	0.6	29.9	100.0
RR109	-	10,056	932	1700-1800	57.1	3.7	4.2	1.3	0.1	33.5	100.0
RR110	-	11,147	1,240	0700-0800	64.4	6.4	5.7	0.6	2.2	20.7	100.0
RR111	31,785	28,259	2,831	1700-1800	68.0	2.4	2.9	0.7	0.3	25.9	100.0
RR112	-	15,836	1,645	1700-1800	75.1	5.3	2.5	0.3	1.9	14.9	100.0
RR113	-	2,889	279	1700-1800	63.8	8.5	3.7	0.5	0.0	23.5	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERLIS**

**SEPTEMBER 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
RR101	-	16,979	1,856	0700-0800	67.6	5.4	3.3	0.6	2.0	21.2	100.0
RR102	-	6,520	773	0700-0800	41.5	5.7	4.8	0.2	0.6	47.2	100.0
RR103	-	17,264	1,668	1700-1800	67.0	5.9	2.4	0.3	1.1	23.3	100.0
RR104	-	28,261	3,212	0700-0800	65.3	4.8	2.0	0.2	0.3	27.4	100.0
RR105	28,765	24,996	2,194	1800-1900	67.9	6.4	3.3	0.4	1.6	20.3	100.0
RR106	-	13,989	1,470	0700-0800	65.5	5.0	4.5	1.2	1.6	22.2	100.0
RR107	-	5,272	524	1700-1800	69.8	8.6	3.4	1.3	1.5	15.5	100.0
RR108	-	21,360	2,124	0700-0800	66.4	4.5	1.8	0.1	0.6	26.6	100.0
RR109	-	11,054	1,296	0700-0800	54.8	5.1	4.2	1.0	0.4	34.5	100.0
RR110	-	10,847	1,483	1700-1800	64.6	6.4	6.5	0.4	0.4	21.6	100.0
RR111	32,118	28,903	2,735	1700-1800	70.5	2.6	2.6	0.3	0.7	23.3	100.0
RR112	-	16,002	1,681	1700-1800	75.4	4.0	2.4	0.4	1.7	16.0	100.0
RR113	-	2,768	248	1400-1500	63.1	9.5	3.6	0.9	0.1	22.8	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PERLIS**

**AVERAGE** 2015

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
RR101	17,186	1,728	66.4	5.4	3.5	0.5	1.8	22.4	100%	A	2061
RR102	6,148	704	42.1	6.2	4.6	0.2	0.6	46.4	100%	A	2034
RR103	17,202	1,618	62.9	6.0	2.9	0.4	0.7	27.1	100%	D	2023
RR104	27,287	3,034	65.0	4.8	2.2	0.3	0.3	27.5	100%	A	-
RR105	27,257	2,497	66.7	5.5	3.0	0.4	1.6	22.8	100%	A	2036
RR106	14,707	1,479	62.5	5.8	5.0	1.5	1.7	23.6	100%	D	2024
RR107	5,924	560	65.7	8.3	4.6	1.2	1.6	18.7	100%	A	2049
RR108	21,986	2,275	64.5	4.5	1.9	0.2	0.6	28.2	100%	A	-
RR109	10,555	1,114	56.0	4.4	4.2	1.2	0.2	34.0	100%	B	2019
RR110	10,997	1,362	64.5	6.4	6.1	0.5	1.3	21.2	100%	A	2124
RR111	28,581	2,783	69.2	2.5	2.7	0.5	0.5	24.6	100%	A	2063
RR112	15,919	1,663	75.3	4.7	2.4	0.3	1.8	15.5	100%	A	2028
RR113	2,829	264	63.4	9.0	3.7	0.7	0.1	23.1	100%	A	-

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **PERLIS**

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
RR101	14,289	13,637	14,558	14,573	15,198	15,422	16,728	17,063	15,925	17,186	2.4	0.83
RR102	3,937	4,121	4,450	3,782	4,418	8,309	8,967	5,430	4,381	6,148	5.2	0.26
RR103	13,611	13,159	14,689	14,181	14,855	19,892	14,730	13,216	15,889	17,202	2.0	0.22
RR104	24,966	25,612	29,308	27,854	30,944	19,528	25,887	25,886	23,572	27,287	-0.7	0.02
RR105	19,859	21,018	20,769	21,321	21,758	23,234	25,577	26,155	25,092	27,257	3.6	0.92
RR106	12,255	12,686	13,281	13,422	13,316	14,296	14,625	13,042	14,367	14,707	1.7	0.65
RR107	4,939	4,597	4,678	4,465	4,739	4,752	5,617	5,941	6,136	5,924	3.4	0.69
RR108	22,936	24,325	23,159	22,018	21,992	20,466	23,430	20,570	22,811	21,986	-0.8	0.19
RR109	6,783	6,706	6,090	6,294	14,372	7,384	14,513	20,570	22,811	10,555	12.4	0.55
RR110	11,471	9,071	8,526	10,264	11,419	11,627	11,461	10,183	10,864	10,997	1.3	0.13
RR111	24,587	26,017	26,042	25,847	27,311	27,300	28,853	28,269	28,776	28,581	1.7	0.87
RR112	7,188	6,986	8,409	8,551	10,798	13,026	13,627	14,422	16,450	15,919	10.6	0.95
RR113	4,184	3,188	2,975	3,032	4,067	3,400	3,784	3,240	3,071	2,829	-1.7	0.15

### YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

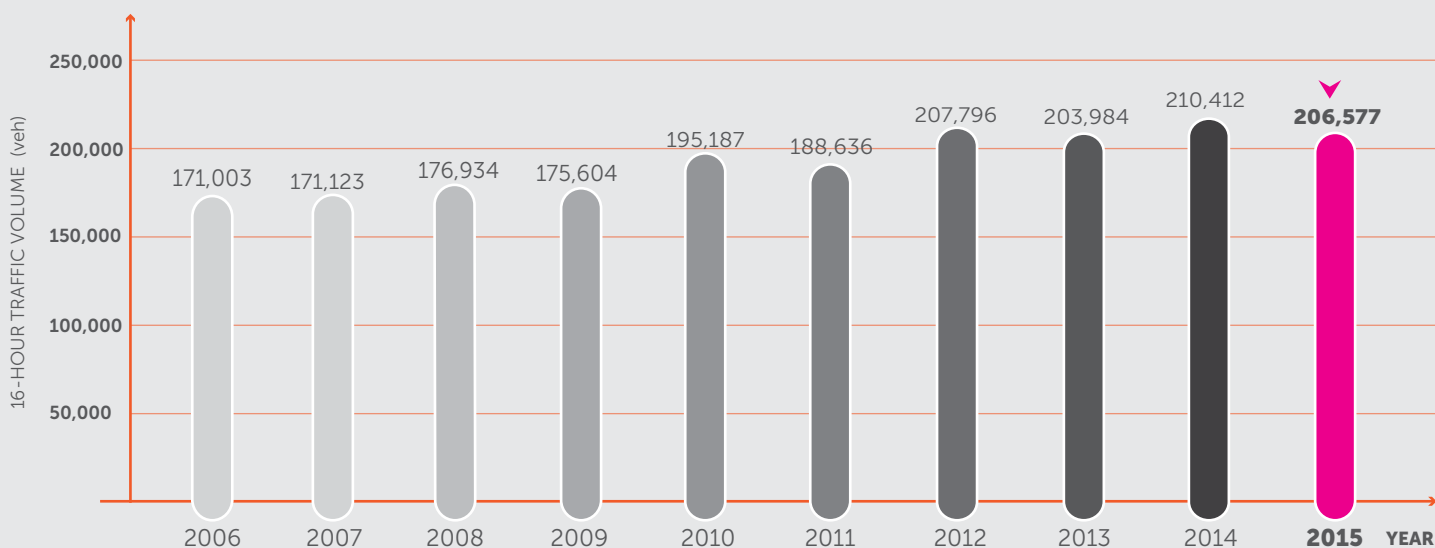


Figure 2.1-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Perlis



There are 13 census stations in Perlis. The 16-hour traffic volume documented since year 2006 to 2015 has seen an increase of 35,574 vehicles in Perlis. Pattern has seen a slight interval decrease of traffic volume in 2009, 2011, 2013 and 2015. The figure show a decreased of 1.82% from 2014.

**-1.82%**  
DECREASE FROM 2014

### NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

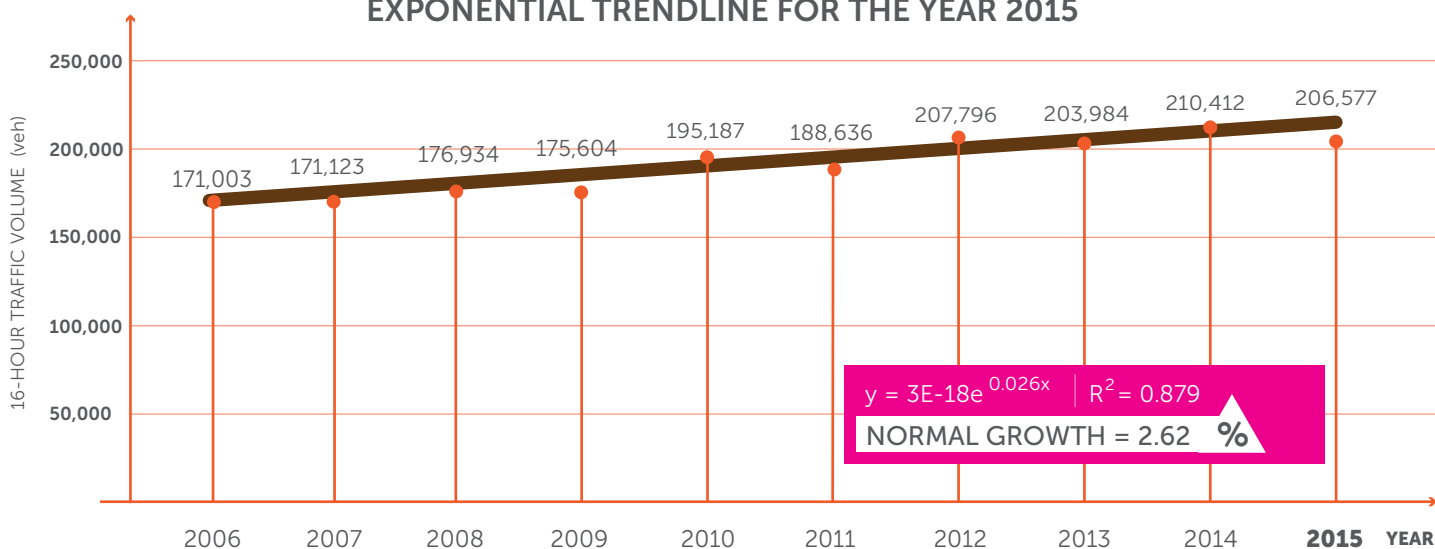


Figure 2.1-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Perlis

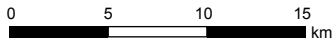
Traffic growth rate recorded for the state of Perlis is 2.62% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Perlis.



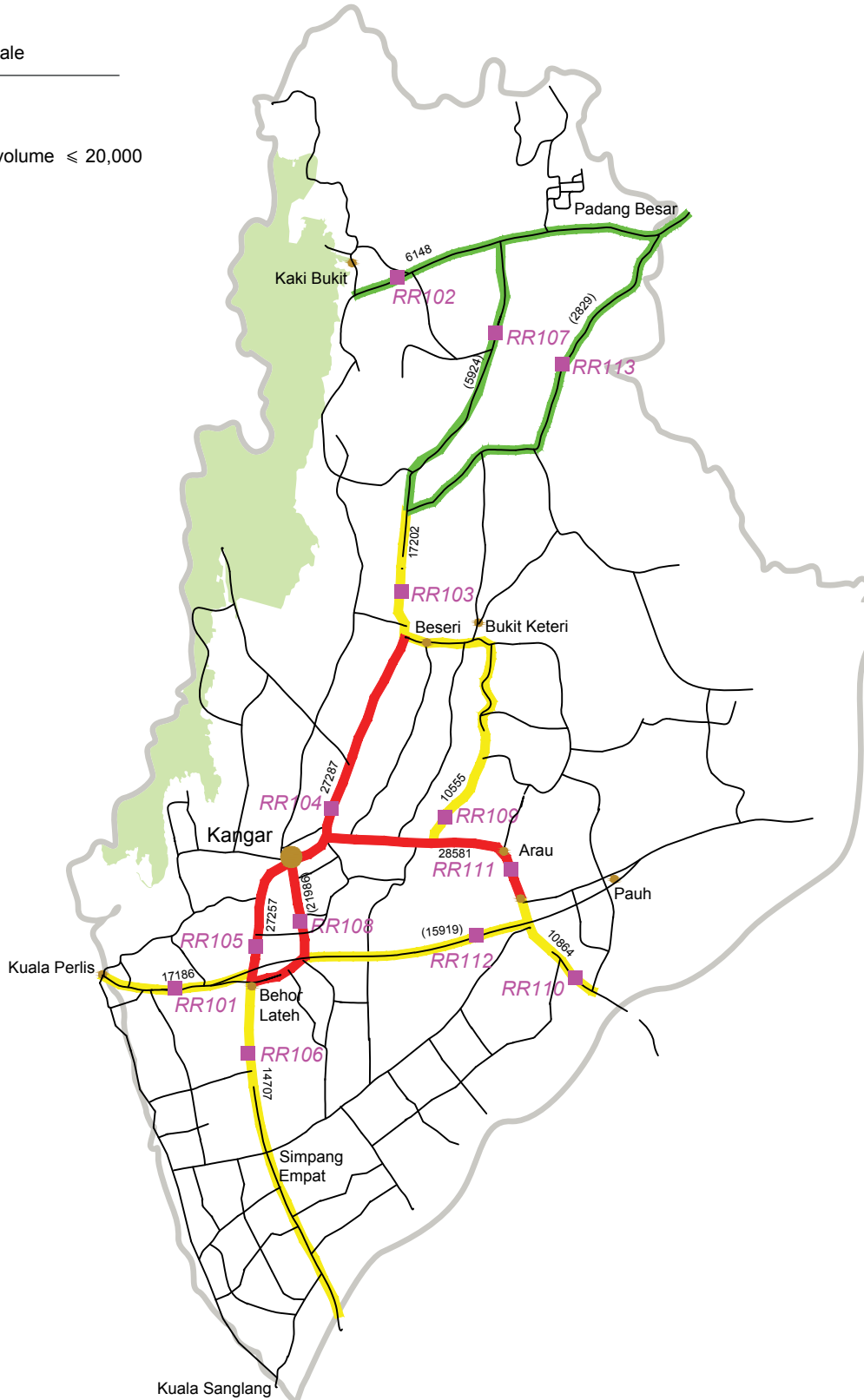
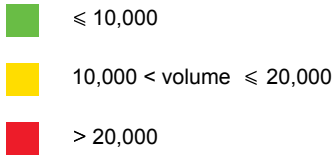
# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **PERLIS**

## LEGEND



### Traffic Volume Scale





• TANBANG BADAQ/SEBERANG TERUS BRIDGE, ALOR SETAR •



• 2006 : Aesthatic Bridge



# KEDAH

DARUL AMAN

52 Census Stations  
Road Length : 12,515.18 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION & LOS MAP

STATE : **KEDAH**

## LEGEND



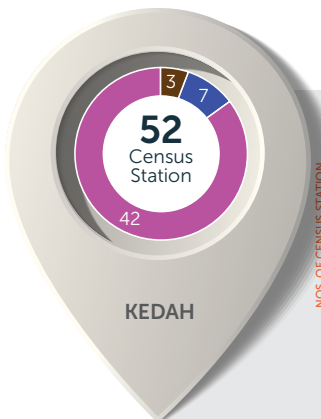
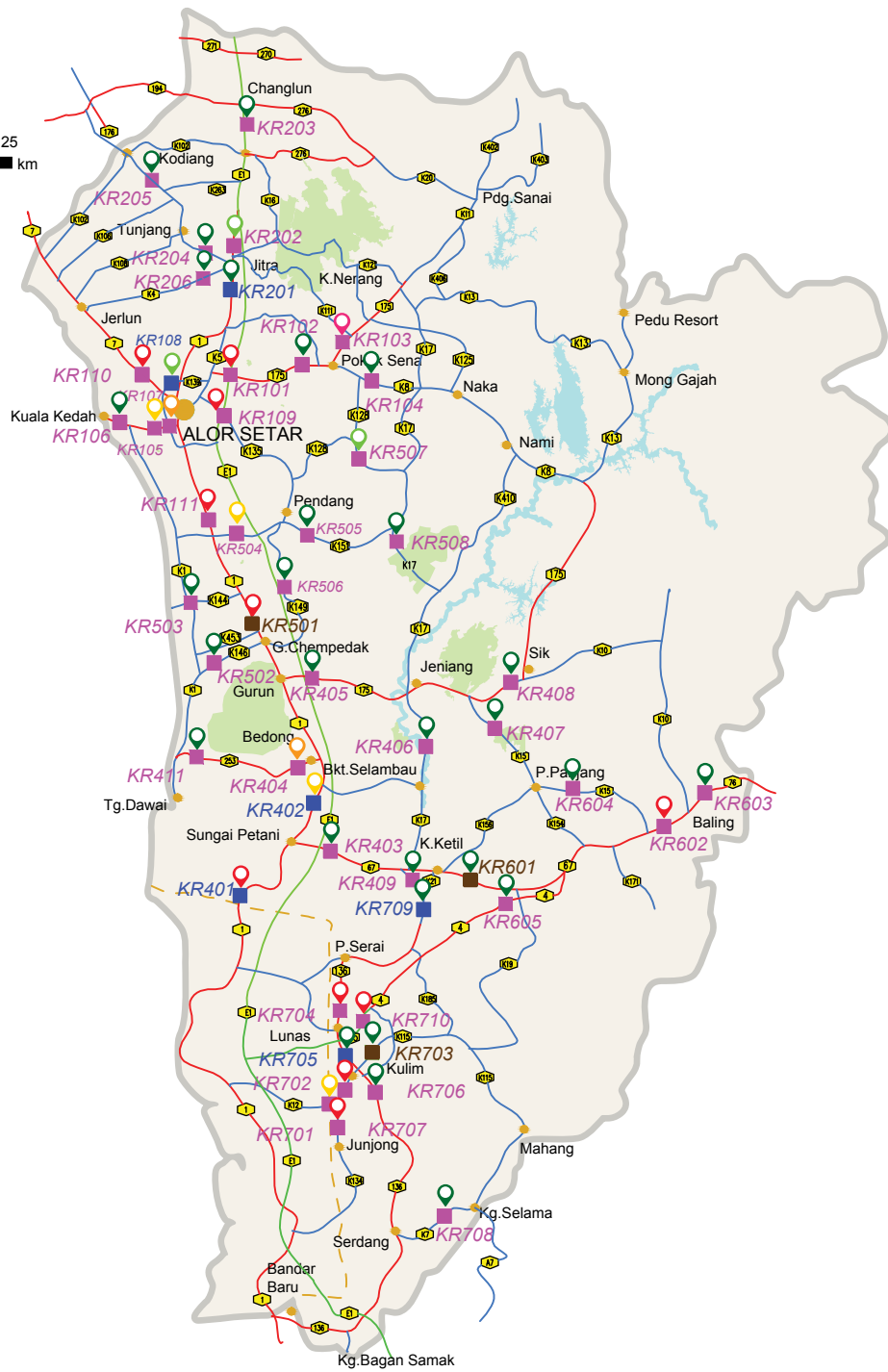
- Federal Road
- State Road
- Expressway

### CENSUS STATION TYPE

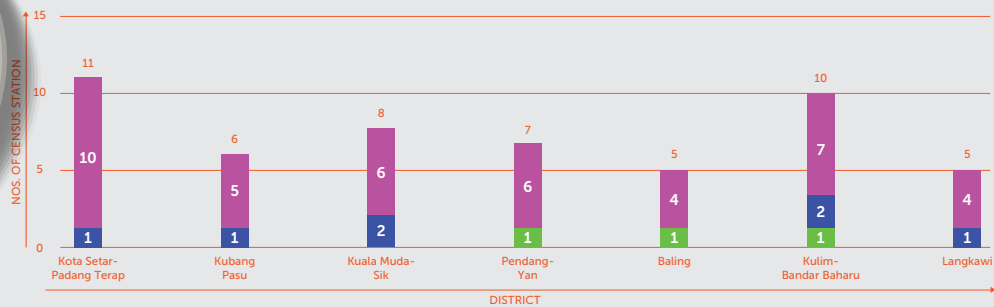
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

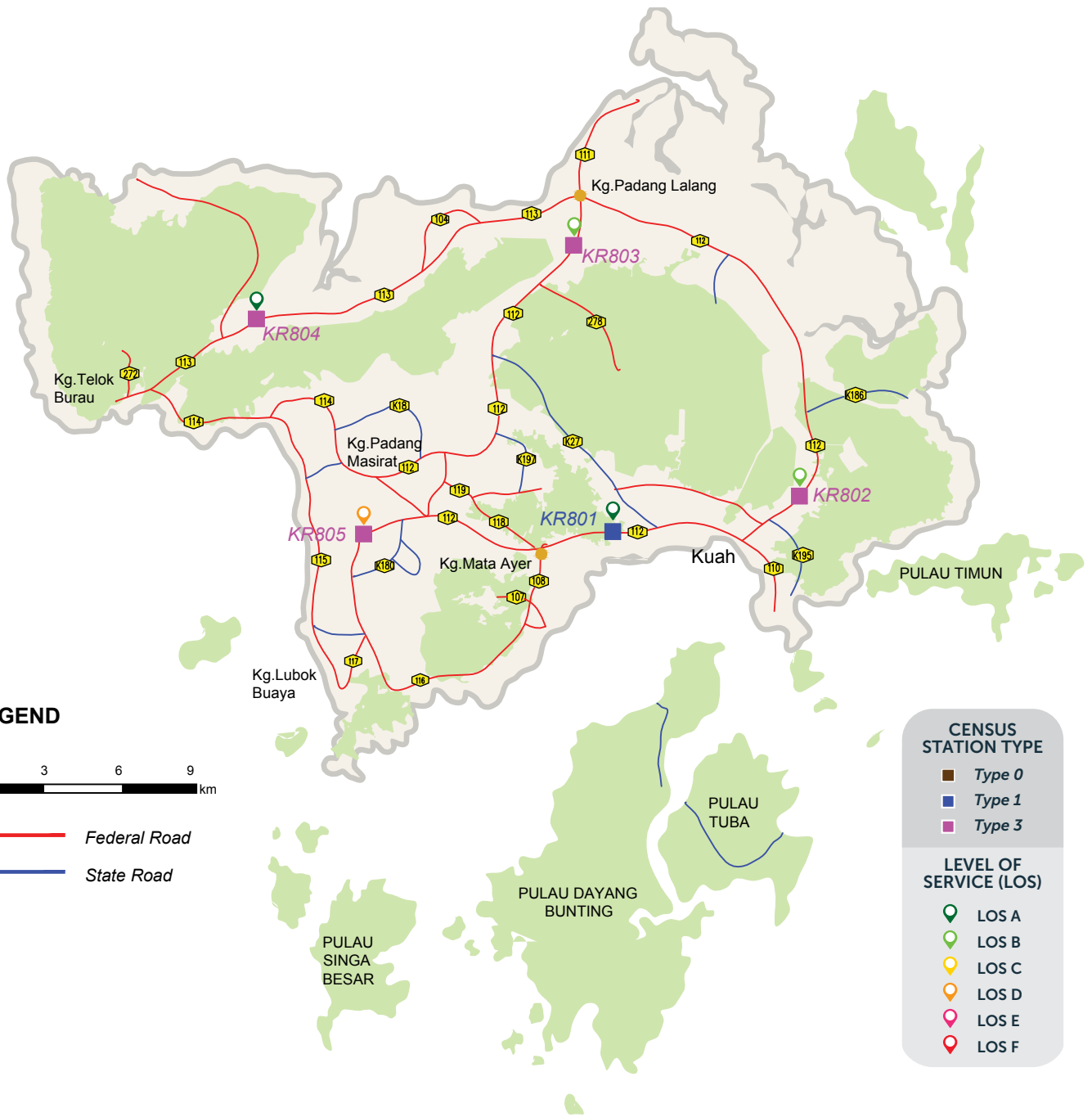


## DISTRIBUTION OF SURVEY STATIONS

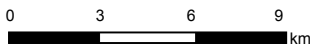


# TRAFFIC CENSUS STATION & LOS MAP

STATE : **KEDAH (LANGKAWI)**



## LEGEND



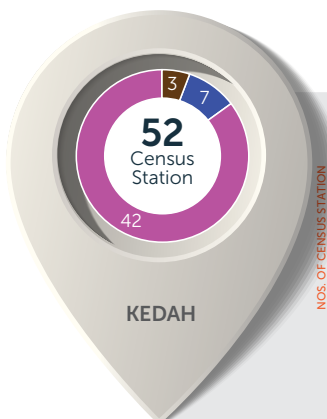
— Federal Road  
— State Road

**CENSUS STATION TYPE**

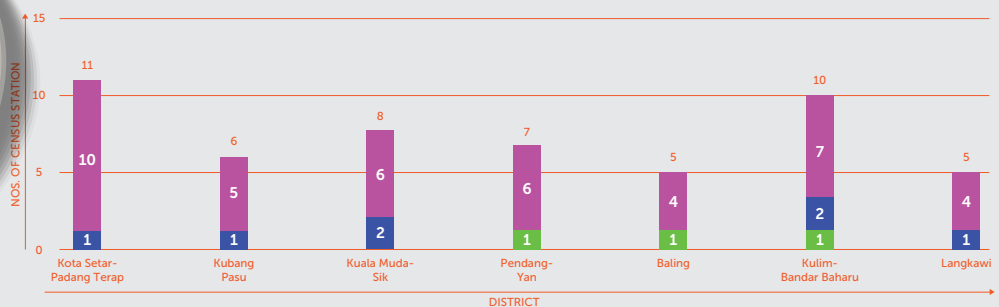
- Type 0
- Type 1
- Type 3

**LEVEL OF SERVICE (LOS)**

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **KEDAH**

## District : KOTA SETAR - PADANG TERAP

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
KR101	3	175	4.0	Langgar Road (Highway Bridge)	6.1506944	100.4030556	K 2-2
KR102	3	175	12.0	Alor Star - Langgar - Pokok Sena	6.1508333	100.4558333	K 2-2
KR103	3	K8	23.0	Alor Star - Pokok Sena - Kuala Nerang	6.1775000	100.5302778	T 1-1
KR104	3	175	27.0	Alor Star - Kg. Bukit Payong - Naka	6.1505556	100.5566667	T 1-1
KR105	3	78	4.0	Alor Star - Kuala Kedah	6.0961111	100.3472222	K 2-2
KR106	3	78	7.0	Alor Star - Kuala Kedah	6.0963889	100.3033333	K 2-2
KR107	3	255	5.0	West Alor Star Bypass	6.0938889	100.3552778	K 2-2
KR108	1	255	3.0	Package LLM Expressway	6.1425000	100.3561111	K 2-2
KR109	3	135	3.5	Alor Star - Pendang (Jalan Titi Hj. Idris)	6.1200000	100.3936111	T 1-1
KR110	3	7	8.0	Alor Star - Simpang Empat - Kangar	6.1641667	100.3097222	T 1-1
KR111	3	1	16.0	Alor Star - Guar Chempedak	5.9762500	100.3991667	T 1-1

## District : KUBANG PASU

KR201	1	1	16.9	Alor Star - Jitra	6.2308056	100.4195000	K 2-2
KR202	3	1	20.6	Alor Star - Changlun	6.2713889	100.4198889	K 2-2
KR203	3	1	40.3	Jitra - Changlun	6.4433056	100.4295000	K 2-2
KR204	3	176	20.6	Alor Star - Jitra - Koding	6.2666111	100.4178889	K 2-2
KR205	3	176	27.4	Jitra - Koding	6.3005000	100.3646111	K 2-2
KR206	3	K4	1.6	Jitra - Ayer Hitam	6.2616111	100.4093056	T 1-1

## District : KUALA MUDA - SIK

KR401	1	1	70.8	Alor Star - Sungai Petani - Butterworth (Bumbong Lima)	5.5674722	100.4281944	T 1-1
KR402	1	1	53.1	Alor Star - Sungai Petani (Sungai Lalang)	5.6847500	100.5096944	K 2-2
KR403	3	1	7.0	Alor Star - Sungai Petani - Kuala Ketil (Econsave)	5.6204440	100.5431110	K 2-2
KR404	3	253	1.0	Bedong - Tanjung Dawai (UiTM Merbok)	5.7150000	100.4497222	T 1-1
KR405	3	175	36.2	Alor Star - Gurun - Jeniang	5.8183889	100.4913889	K 2-2
KR406	3	K17	64.4	Jeniang - Bukit Selambau	5.7937220	100.6193890	T 1-1
KR407	3	K15	4.0	From Junction Batu Lima - Parit Panjang road	5.4618611	100.4218611	T 1-1
KR408	3	175	66.8	Alor Star - Jeniang - Sik	5.4755278	100.4231389	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **KEDAH**

## District : PENDANG - YAN

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
KR501	0	1	29.0	Alor Star - Sungai Petani (Bt. 18 Guar Chempedak)	5.8765833	100.4493056	T 1-1
KR502	3	K146	38.6	Alor Star - Guar Chempedak - Yan (in front of Sek. Men. Agama Yan)	5.8328056	100.3983611	T 1-1
KR503	3	K1	33.8	Alor Star - Kuala Kedah - Yan (Sedaka)	5.8703333	100.3816111	T 1-1
KR504	3	K133	5.0	Alor Star - Kota Sarang Semut - Pendang - Titi Hj. Idris	5.9727778	100.4435833	T 1-1
KR505	3	K151	4.0	Pendang - Sg. Tiang (Cegar)	5.9726111	100.5107778	T 1-1
KR506	3	K147	10.0	Pendang - Jenun - Pdg. Lembu (Sek. Keb. Jenun)	5.9064722	100.4768056	T 1-1
KR507	3	K128	9.0	Pendang - Tobiar - Kubur Panjang (in front of Maktab Mahmud)	6.0565278	100.5035000	T 1-1

## District : BALING

KR601	0	67	23.9	S. Petani - Baling (Before K722 Junction)	5.6014167	100.6843611	T 1-1
KR602	3	67	51.5	S. Petani - Baling (in front of Sek. Keb. Pulaui)	5.6569167	100.8859722	T 1-1
KR603	3	76	1.0	Gerik Road - Pkln. Hulu - Baling (0.3km from Baling Roundabout)	5.6744722	100.9220278	T 1-1
KR604	3	K15	1.3	Bt. 5 - Parit Panjang - Bt. 42 (0.3km from Parit Panjang Roundabout)	5.7047222	100.7474722	T 1-1
KR605	3	4	46.0	Kulim - Baling - Gerik	5.5657500	100.7207778	T 1-1

## District : KULIM - BANDAR BAHARU

KR701	3	254	5.5	Kulim - Bukit Mertajam	5.3540833	100.5355833	K 2-2
KR702	3	254	4.7	Kulim - Bukit Mertajam	5.3584444	100.5433333	K 2-2
KR703	0	169	30.5	Kulim - Junjong (Petronas)	5.3916111	100.5719444	K 2-2
KR704	3	136	56.0	Kulim - Mahang (Hospital)	5.4391944	100.5371944	T 1-1
KR705	1	136	49.0	Kulim - Lunas - Pdg. Serai - Merbau Pulas	5.4010278	100.5557778	K 2-2
KR706	3	136	45.5	Kulim - Lunas - Pdg. Serai - Merbau Pulas	5.3683056	100.5809167	K 2-2
KR707	3	K145	5.0	Kulim - Junjong	5.3377778	100.5376111	T 1-1
KR708	3	171	5.0	Serdang - Selama	5.2244722	100.6235833	T 1-1
KR709	1	136	74.6	Kulim - Lunas - Pdg. Serai - Merbau Pulas	5.5310000	100.6235833	T 1-1
KR710	3	4	24.2	Jalan Kulim - Lunas - Sg. Karang - Baling	5.4461111	100.5692778	T 1-1

## District : LANGKAWI

KR801	1	112	4.5	Pekan Kuah - Padang Matsirat	6.3252500	99.8080833	K 2-2
KR802	3	112	1.5	Pekan Kuah - Tanjung Rhu	6.3352500	99.8641944	T 1-1
KR803	3	112	1.0	Padang Lalang - Ulu Melaka	6.4210556	99.8034167	T 1-1
KR804	3	113	1.0	Kampung Kok - Kampung Ewa	6.3875556	99.7117222	T 1-1
KR805	3	116	1.0	Simpang Kedawang - Lapangan Terbang	6.3269167	99.7366944	T 1-1



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KEDAH**

**MARCH 2015**

## District : KOTA SETAR - PADANG TERAP

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
KR101	-	60,998	6,657	0700-0800	65.0	7.5	2.7	1.4	0.2	23.2	100.0
KR102	-	32,313	3,073	0800-0900	51.4	8.5	8.3	1.2	0.3	30.2	100.0
KR103	-	17,884	2,333	0700-0800	49.3	6.6	2.9	0.7	0.4	40.2	100.0
KR104	-	5,003	466	0700-0800	43.2	9.9	4.4	1.0	0.4	41.1	100.0
KR105	-	38,769	5,214	0700-0800	66.3	8.1	2.2	1.1	0.3	22.0	100.0
KR106	-	26,370	2,048	0700-0800	47.7	10.9	4.1	1.8	0.3	35.2	100.0
KR107	-	39,707	3,292	0700-0800	61.2	11.6	5.3	3.6	0.2	18.0	100.0
KR108	-	43,021	3,558	1700-1800	65.5	4.1	2.3	0.3	1.6	26.2	100.0
KR109	-	36,089	4,461	0700-0800	51.9	6.0	1.9	0.4	0.1	39.7	100.0
KR110	-	22,260	2,105	0700-0800	55.1	9.0	5.8	2.7	0.7	26.8	100.0
KR111	-	19,561	2,021	1700-1800	53.1	8.7	7.9	5.5	0.6	24.1	100.0

## District : KUBANG PASU

KR201	-	29,097	2,829	0700-0800	62.5	5.4	3.0	0.6	0.4	28.2	100.0
KR202	-	43,479	4,041	1700-1800	51.2	5.0	3.0	0.5	14.9	25.5	100.0
KR203	-	24,368	3,119	0700-0800	52.3	27.3	4.0	4.5	3.6	8.2	100.0
KR204	-	13,833	1,275	1700-1800	61.4	7.0	3.2	0.9	0.5	27.1	100.0
KR205	-	17,676	1,643	0800-0900	62.2	5.5	2.9	0.6	0.4	28.3	100.0
KR206	-	9,066	886	0700-0800	52.3	6.1	5.9	1.9	0.0	33.7	100.0

## District : KUALA MUDA - SIK

KR401	-	21,125	2,115	0700-0800	62.4	4.0	5.0	1.2	0.3	27.1	100.0
KR402	-	44,378	3,848	0700-0800	53.4	9.6	4.6	2.8	0.4	29.2	100.0
KR403	-	26,212	2,515	1800-1900	60.4	9.3	4.7	1.7	0.4	23.5	100.0
KR404	-	13,906	1,319	1700-1800	48.6	6.4	5.0	3.7	0.5	35.8	100.0
KR405	-	19,309	1,911	0700-0800	59.9	6.4	4.9	4.2	0.3	24.1	100.0
KR406	-	4,898	421	1800-1900	42.9	10.8	15.2	3.8	0.7	26.7	100.0
KR407	-	7,777	654	1300-1400	45.9	8.8	7.9	2.0	1.6	33.9	100.0
KR408	-	8,800	863	1500-1600	52.5	7.8	4.5	1.8	1.4	32.1	100.0



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KEDAH**

**MARCH 2015**

## District : PENDANG - YAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
KR501	21,519	19,466	1,797	0700-0800	55.3	6.1	6.1	5.2	0.6	26.7	100.0
KR502	-	10,747	977	1700-1800	55.1	6.6	4.4	0.9	0.1	32.9	100.0
KR503	-	6,578	669	1200-1300	46.5	9.5	7.6	4.0	0.3	32.1	100.0
KR504	-	9,243	939	0700-0800	43.1	6.0	6.9	7.5	0.6	35.9	100.0
KR505	-	7,729	688	0700-0800	47.3	4.3	6.1	3.0	0.2	39.1	100.0
KR506	-	5,654	835	0700-0800	39.1	5.3	3.0	1.0	0.1	51.6	100.0
KR507	-	6,218	904	0700-0800	38.6	10.8	5.8	8.9	0.0	36.0	100.0

## District : BALING

KR601	14,025	12,831	1,058	0700-0800	54.9	7.2	5.4	1.6	1.1	29.7	100.0
KR602	-	22,421	1,960	1800-1900	56.9	7.3	2.8	0.6	0.7	31.7	100.0
KR603	-	9,437	770	1400-1500	47.5	8.2	6.0	0.8	0.8	36.7	100.0
KR604	-	7,761	648	1800-1900	39.9	7.8	4.6	0.6	0.3	46.8	100.0
KR605	-	10,616	951	1700-1800	67.4	8.7	6.2	2.7	0.9	14.1	100.0

## District : KULIM - BANDAR BAHARU

KR701	-	33,472	3,912	1800-1900	61.8	6.4	2.7	0.8	0.4	27.9	100.0
KR702	-	48,711	8,336	0700-0800	66.6	2.6	2.7	1.1	0.4	26.6	100.0
KR703	31,098	28,628	3,019	0700-0800	69.6	4.4	1.4	0.3	0.4	23.8	100.0
KR704	-	17,102	2,041	0700-0800	52.9	5.4	3.9	1.2	0.8	35.8	100.0
KR705	-	35,234	3,176	0700-0800	61.1	3.9	2.5	0.6	0.6	31.3	100.0
KR706	-	19,327	1,991	0700-0800	49.4	8.2	3.8	1.5	0.6	36.5	100.0
KR707	-	16,973	1,820	1700-1800	57.8	3.9	5.2	3.3	0.9	28.8	100.0
KR708	-	4,700	479	0700-0800	44.1	10.0	10.0	3.6	1.7	30.6	100.0
KR709	-	10,498	1,095	0700-0800	50.3	5.3	8.9	5.1	1.9	28.5	100.0
KR710	-	21,338	2,200	1800-1900	54.8	6.3	8.4	7.8	1.8	21.0	100.0

## District : LANGKAWI

KR801	-	30,943	2,670	1700-1800	56.8	10.0	5.7	1.1	0.5	26.0	100.0
KR802	-	14,814	1,153	0700-0800	53.4	6.7	4.5	1.2	0.7	33.4	100.0
KR803	-	12,745	1,411	0700-0800	39.5	5.9	4.8	2.4	0.2	47.2	100.0
KR804	-	4,448	509	1900-2000	44.3	9.2	4.3	2.0	0.3	39.9	100.0
KR805	-	20,309	1,727	1700-1800	47.3	5.0	4.7	0.9	0.5	41.5	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KEDAH**

**SEPTEMBER 2015**

## District : KOTA SETAR - PADANG TERAP

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
KR101	-	50,820	5,426	0700-0800	70.9	6.1	2.6	0.8	0.2	19.5	100.0
KR102	-	27,436	2,532	1800-1900	55.8	6.0	5.5	1.7	0.3	30.7	100.0
KR103	-	13,996	1,248	1500-1600	48.7	9.1	3.1	1.4	0.8	36.9	100.0
KR104	-	5,862	618	1500-1600	50.5	8.8	5.8	1.9	0.2	32.9	100.0
KR105	-	36,064	3,916	0700-0800	67.7	5.1	2.9	0.5	0.2	23.5	100.0
KR106	-	27,263	2,629	1800-1900	51.0	9.1	3.5	1.8	0.3	34.3	100.0
KR107	-	39,601	3,542	1700-1800	61.3	11.7	6.2	3.7	0.2	16.9	100.0
KR108	-	37,649	3,161	1800-1900	67.2	3.6	2.3	0.3	1.6	25.0	100.0
KR109	-	29,174	2,982	0700-0800	58.5	6.7	1.6	0.4	0.2	32.5	100.0
KR110	-	20,488	2,070	0700-0800	63.7	7.3	5.7	2.0	0.7	20.6	100.0
KR111	-	17,160	1,689	1800-1900	61.7	8.2	5.6	4.2	0.6	19.6	100.0

## District : KUBANG PASU

KR201	-	30,571	2,518	1700-1800	64.4	4.1	2.3	0.5	2.6	26.0	100.0
KR202	-	35,840	3,588	1700-1800	60.0	5.6	2.9	0.7	0.2	30.5	100.0
KR203	-	18,378	2,171	0700-0800	58.7	9.6	3.3	8.4	0.9	19.1	100.0
KR204	-	13,626	1,619	0700-0800	66.4	6.4	3.7	0.9	0.1	22.5	100.0
KR205	-	15,341	1,767	1200-1300	68.3	6.2	2.4	0.5	0.2	22.5	100.0
KR206	-	7,317	639	1600-1700	63.9	6.6	3.3	1.2	0.1	24.8	100.0

## District : KUALA MUDA - SIK

KR401	-	28,433	3,021	0700-0800	56.0	6.6	5.3	1.2	0.3	30.7	100.0
KR402	-	41,269	3,333	1800-1900	57.9	7.4	5.8	2.3	0.4	26.2	100.0
KR403	-	28,314	2,980	0700-0800	60.0	10.0	4.2	2.5	0.6	22.8	100.0
KR404	-	12,812	1,338	0700-0800	49.8	8.1	4.8	2.3	0.6	34.4	100.0
KR405	-	19,831	2,262	1800-1900	56.4	10.8	4.2	3.9	0.8	23.9	100.0
KR406	-	4,247	376	1700-1800	48.5	9.9	11.5	5.6	0.7	23.9	100.0
KR407	-	8,310	812	0700-0800	46.4	9.3	5.9	1.9	1.3	35.2	100.0
KR408	-	10,531	1,195	1500-1600	52.4	6.5	3.8	1.8	1.1	34.5	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KEDAH**

**SEPTEMBER 2015**

## District : PENDANG - YAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
KR501	22,861	20,243	2,103	1800-1900	58.6	6.4	7.0	3.1	0.5	24.4	100.0
KR502	-	8,806	803	0800-0900	63.3	5.9	3.4	0.9	0.0	26.4	100.0
KR503	-	7,318	1,098	1200-1300	58.8	9.3	6.3	3.6	0.4	21.6	100.0
KR504	-	12,721	1,340	1900-2000	36.5	4.6	5.1	2.8	0.3	50.8	100.0
KR505	-	10,761	1,174	0700-0800	48.2	3.7	5.5	1.4	0.2	41.0	100.0
KR506	-	4,863	563	0700-0800	40.4	2.6	5.2	1.4	0.0	50.3	100.0
KR507	-	7,798	965	0700-0800	39.1	9.9	5.5	8.0	0.0	37.4	100.0

## District : BALING

KR601	13,368	12,174	1,086	1700-1800	53.0	8.4	4.9	1.4	1.3	31.0	100.0
KR602	-	22,869	2,018	1700-1800	57.7	6.1	3.3	0.6	0.7	31.6	100.0
KR603	-	9,024	915	1300-1400	52.1	7.7	3.2	1.4	0.7	34.8	100.0
KR604	-	8,588	1,007	1200-1300	42.4	7.0	4.3	0.5	0.1	45.7	100.0
KR605	-	9,236	914	1800-1900	67.2	8.3	7.3	2.8	1.1	13.5	100.0

## District : KULIM - BANDAR BAHARU

KR701	-	29,839	3,722	0700-0800	69.5	4.6	3.4	0.8	0.4	21.3	100.0
KR702	-	38,321	3,932	1700-1800	68.9	3.4	3.0	0.5	0.4	23.8	100.0
KR703	26,501	24,600	2,283	0700-0800	68.0	4.2	1.5	0.3	0.4	25.6	100.0
KR704	-	15,374	1,863	0700-0800	61.0	7.6	2.6	1.1	0.7	27.0	100.0
KR705	-	34,304	3,087	0700-0800	63.1	2.2	3.0	0.7	0.9	30.0	100.0
KR706	-	21,552	3,160	0700-0800	57.3	5.8	3.7	1.1	0.4	31.6	100.0
KR707	-	15,628	1,765	0700-0800	58.0	10.5	4.0	2.6	0.5	24.3	100.0
KR708	-	4,204	423	0700-0800	49.6	11.7	10.9	3.6	1.3	22.9	100.0
KR709	-	6,171	648	1700-1800	51.2	8.4	7.3	3.0	1.6	28.6	100.0
KR710	-	14,821	1,992	0700-0800	58.9	7.8	7.4	4.0	1.5	20.3	100.0

## District : LANGKAWI

KR801	-	34,807	2,784	1700-1800	66.9	7.1	3.3	1.3	1.0	20.4	100.0
KR802	-	12,854	1,052	1700-1800	56.5	9.6	3.7	0.8	0.5	28.8	100.0
KR803	-	10,174	979	1700-1800	40.1	6.4	4.3	2.0	0.4	46.8	100.0
KR804	-	3,752	338	1700-1800	44.6	6.5	3.5	1.1	0.1	44.2	100.0
KR805	-	14,700	1,360	1700-1800	56.1	7.9	3.8	0.4	0.5	31.3	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KEDAH**

**AVERAGE 2015**

## District : KOTA SETAR - PADANG TERAP

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
KR101	55,909	6,042	68.0	6.8	2.7	1.1	0.2	21.3	100%	F	R
KR102	29,875	2,803	53.6	7.2	6.9	1.4	0.3	30.5	100%	A	2035
KR103	15,940	1,791	49.0	7.8	3.0	1.0	0.6	38.6	100%	E	2016
KR104	5,433	542	46.8	9.4	5.1	1.5	0.3	37.0	100%	A	2102
KR105	37,417	4,565	67.0	6.6	2.6	0.8	0.3	22.7	100%	D	2028
KR106	26,817	2,339	49.4	10.0	3.8	1.8	0.3	34.7	100%	A	2050
KR107	39,654	3,417	61.3	11.6	5.8	3.7	0.2	17.4	100%	C	2024
KR108	40,335	3,360	66.4	3.9	2.3	0.3	1.6	25.6	100%	B	2055
KR109	32,632	3,722	55.2	6.3	1.8	0.4	0.2	36.1	100%	F	R
KR110	21,374	2,088	59.4	8.1	5.7	2.4	0.7	23.7	100%	F	R
KR111	18,361	1,855	57.4	8.5	6.8	4.9	0.6	21.8	100%	F	R

## District : KUBANG PASU

KR201	29,834	2,674	63.4	4.7	2.7	0.6	1.5	27.1	100%	A	2057
KR202	39,660	3,815	55.6	5.3	3.0	0.6	7.5	28.0	100%	C	2043
KR203	21,373	2,645	55.5	18.5	3.7	6.4	2.2	13.6	100%	A	2067
KR204	13,730	1,447	63.9	6.7	3.4	0.9	0.3	24.8	100%	A	2077
KR205	16,509	1,705	65.3	5.9	2.7	0.5	0.3	25.4	100%	A	-
KR206	8,192	763	58.1	6.4	4.6	1.6	0.1	29.2	100%	A	2060

## District : KUALA MUDA - SIK

KR401	24,779	2,568	59.2	5.3	5.2	1.2	0.3	28.9	100%	F	R
KR402	42,823	3,591	55.6	8.5	5.2	2.6	0.4	27.7	100%	C	-
KR403	27,263	2,748	60.2	9.6	4.4	2.1	0.5	23.1	100%	A	2038
KR404	13,359	1,329	49.2	7.2	4.9	3.0	0.6	35.1	100%	D	2022
KR405	19,570	2,087	58.2	8.6	4.6	4.1	0.6	24.0	100%	A	2051
KR406	4,573	399	45.7	10.3	13.4	4.7	0.7	25.3	100%	A	2032
KR407	8,044	733	46.1	9.1	6.9	1.9	1.4	34.5	100%	A	2029
KR408	9,666	1,029	52.4	7.1	4.1	1.8	1.2	33.3	100%	A	2038

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **KEDAH**

**AVERAGE 2015**

## District : PENDANG - YAN

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
KR501	19,854	1,950	57.0	6.2	6.5	4.2	0.5	25.6	100%	F	R
KR502	9,777	890	59.2	6.2	3.9	0.9	0.1	29.7	100%	A	2043
KR503	6,948	884	52.7	9.4	6.9	3.8	0.4	26.8	100%	A	2041
KR504	10,982	1,140	39.8	5.3	6.0	5.1	0.5	43.3	100%	C	2024
KR505	9,245	931	47.8	4.0	5.8	2.2	0.2	40.1	100%	A	-
KR506	5,259	699	39.8	3.9	4.1	1.2	0.0	51.0	100%	A	2023
KR507	7,008	935	38.9	10.4	5.6	8.4	0.0	36.7	100%	B	2021

## District : BALING

KR601	12,503	1,072	54.0	7.8	5.1	1.5	1.2	30.4	100%	A	2040
KR602	22,645	1,989	57.3	6.7	3.1	0.6	0.7	31.6	100%	F	R
KR603	9,231	843	49.8	8.0	4.6	1.1	0.8	35.8	100%	A	2068
KR604	8,175	828	41.1	7.4	4.4	0.5	0.2	46.3	100%	A	2025
KR605	9,926	933	67.3	8.5	6.7	2.7	1.0	13.8	100%	A	2022

## District : KULIM - BANDAR BAHARU

KR701	31,656	3,817	65.7	5.5	3.1	0.8	0.4	24.6	100%	C	2028
KR702	43,516	6,134	67.7	3.0	2.8	0.8	0.4	25.2	100%	F	R
KR703	26,614	2,651	68.8	4.3	1.4	0.3	0.4	24.7	100%	A	2044
KR704	16,238	1,952	56.9	6.5	3.2	1.1	0.8	31.4	100%	F	R
KR705	34,769	3,132	62.1	3.0	2.8	0.7	0.8	30.6	100%	A	2072
KR706	20,440	2,576	53.4	7.0	3.7	1.3	0.5	34.1	100%	A	2025
KR707	16,301	1,793	57.9	7.2	4.6	3.0	0.7	26.6	100%	F	R
KR708	4,452	451	46.8	10.8	10.5	3.6	1.5	26.8	100%	A	2100
KR709	8,334	872	50.7	6.8	8.1	4.1	1.7	28.5	100%	A	2069
KR710	15,756	1,590	47.4	6.4	6.3	4.9	1.1	33.9	100%	F	R

## District : LANGKAWI

KR801	32,875	2,727	61.8	8.5	4.5	1.2	0.7	23.2	100%	A	2024
KR802	13,834	1,103	55.0	8.2	4.1	1.0	0.6	31.1	100%	B	2025
KR803	11,460	1,195	39.8	6.1	4.6	2.2	0.3	47.0	100%	B	2022
KR804	4,100	424	44.5	7.9	3.9	1.5	0.2	42.0	100%	A	2030
KR805	17,505	1,544	51.7	6.5	4.2	0.6	0.5	36.4	100%	D	2018

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **KEDAH**

## District : KOTA SETAR - PADANG TERAP

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
KR101	32,031	39,774	48,051	47,342	42,729	46,813	42,213	46,801	54,634	55,909	4.2	0.61
KR102	23,373	22,060	23,222	22,512	26,056	22,888	23,422	29,246	25,587	29,875	2.7	0.55
KR103	13,087	17,988	17,076	13,741	14,362	19,143	14,737	21,353	17,789	15,940	2.0	0.15
KR104	5,862	4,435	4,879	4,876	5,785	7,277	5,719	6,416	4,979	5,433	1.3	0.08
KR105	38,771	31,690	30,227	31,710	35,308	27,783	33,955	37,715	38,710	37,417	1.3	0.12
KR106	20,383	21,010	26,310	24,987	21,887	21,717	24,217	25,894	25,197	26,817	2.2	0.42
KR107	35,747	36,560	30,201	33,415	39,139	38,074	41,811	46,195	45,140	39,654	3.1	0.53
KR108	38,604	40,960	40,252	41,077	43,602	45,001	45,944	44,954	45,114	40,335	1.2	0.35
KR109	25,707	26,928	33,926	28,343	33,589	26,744	32,255	28,764	27,154	32,632	0.9	0.07
KR110	34,121	31,575	31,067	28,433	28,137	23,023	24,145	23,108	21,379	21,374	-5.5	0.94
KR111	44,706	29,060	20,024	23,290	24,572	24,310	21,367	18,226	24,533	18,361	-6.0	0.48

## District : KUBANG PASU

KR201	28,644	30,704	29,717	28,501	30,253	28,098	34,230	36,690	36,720	29,834	1.9	0.32
KR202	37,853	37,093	51,314	34,715	30,402	32,311	42,822	47,474	34,003	39,660	0.1	0.00
KR203	17,898	23,135	25,426	26,608	21,873	21,549	22,093	25,439	20,458	21,373	0.1	0.00
KR204	12,211	15,071	13,521	14,204	12,841	14,174	18,542	18,806	15,486	13,730	2.3	0.24
KR205	15,491	21,550	16,419	16,949	18,328	17,803	22,273	15,186	12,432	16,509	-1.7	0.10
KR206	7,386	7,557	8,289	12,630	5,318	7,708	6,797	15,761	8,136	8,192	1.9	0.04

## District : KUALA MUDA - SIK

KR401	21,067	20,596	16,123	19,052	24,002	22,195	23,141	23,971	23,672	24,779	3.0	0.46
KR402	44,624	43,928	43,949	43,741	42,989	41,858	42,018	44,288	45,565	42,823	-0.1	0.02
KR403	20,386	23,429	22,722	26,231	23,337	22,551	24,494	27,266	26,565	27,263	2.5	0.62
KR404	9,316	10,957	11,624	12,162	13,942	13,483	13,291	13,715	13,623	13,359	3.5	0.68
KR405	18,254	17,255	18,631	19,097	20,697	21,254	20,640	21,416	23,458	19,570	2.3	0.57
KR406	3,145	2,296	2,834	3,392	4,295	4,511	4,578	4,820	4,542	4,573	7.1	0.71
KR407	5,070	5,616	5,257	5,869	8,082	8,134	7,324	7,862	8,217	8,044	5.8	0.75
KR408	7,861	8,477	8,088	8,861	8,631	10,055	9,649	9,458	9,374	9,666	2.3	0.69

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **KEDAH**

## District : PENDANG - YAN

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
KR501	20,396	21,206	17,586	19,169	19,387	19,618	19,249	18,853	17,797	19,854	-0.7	0.13
KR502	7,242	8,419	7,151	8,979	9,539	9,261	7,551	9,584	9,438	9,777	2.7	0.44
KR503	4,856	6,529	5,846	6,338	6,612	6,229	5,982	7,111	6,215	6,948	2.2	0.39
KR504	6,530	8,523	7,246	10,173	9,157	6,569	9,193	9,813	9,601	10,982	3.9	0.41
KR505	9,366	11,388	10,737	8,429	8,516	7,201	7,678	8,394	9,467	9,245	-1.9	0.16
KR506	-	-	-	-	-	-	3,975	3,554	6,158	5,259	13.9	0.51
KR507	-	-	-	-	-	-	5,631	5,552	6,377	7,008	8.0	0.87

## District : BALING

KR601	10,007	10,470	10,119	10,675	10,707	11,404	10,718	12,104	11,807	12,503	2.3	0.84
KR602	20,629	20,412	21,386	22,286	22,612	18,731	38,641	21,934	22,592	22,645	1.9	0.09
KR603	9,269	8,622	8,491	8,287	9,122	9,245	9,353	11,005	9,499	9,231	1.4	0.29
KR604	5,063	4,686	2,876	5,966	6,265	6,248	6,701	7,569	7,580	8,175	7.8	0.59
KR605	4,916	5,452	5,745	6,717	7,277	7,926	10,322	9,864	9,109	9,926	8.5	0.90

## District : KULIM - BANDAR BAHARU

KR701	26,075	23,848	25,051	31,792	32,514	28,866	28,326	31,797	32,196	31,656	2.8	0.53
KR702	38,973	37,569	36,922	37,711	31,213	34,851	41,465	40,665	46,061	43,516	2.0	0.29
KR703	21,580	21,918	25,013	28,158	30,188	27,994	30,128	30,948	26,691	26,614	2.7	0.42
KR704	10,950	11,457	11,409	13,135	13,728	14,695	14,007	14,474	15,091	16,238	4.2	0.91
KR705	35,126	36,617	33,132	36,056	32,223	35,762	38,518	38,560	38,995	34,769	0.9	0.16
KR706	11,033	10,175	11,204	14,030	16,113	16,446	15,548	17,987	18,556	20,440	7.6	0.90
KR707	13,076	11,274	12,456	13,810	13,935	14,510	14,422	16,186	14,664	16,301	3.2	0.75
KR708	3,729	3,778	6,125	4,289	4,298	4,295	4,530	4,851	4,759	4,452	1.3	0.08
KR709	8,682	7,904	8,095	17,090	8,486	9,479	9,896	10,458	10,493	8,334	0.8	0.01
KR710	13,508	13,552	14,426	17,644	15,148	16,853	14,529	15,544	14,020	15,756	0.9	0.10

## District : LANGKAWI

KR801	16,323	20,405	20,936	22,049	22,918	24,412	25,641	26,422	31,009	32,875	6.6	0.95
KR802	9,072	10,164	10,561	11,659	12,051	11,346	13,376	13,420	14,220	13,834	4.7	0.91
KR803	7,079	7,044	7,726	7,873	9,611	8,454	9,358	11,272	9,917	11,460	5.5	0.86
KR804	2,430	3,003	2,729	2,890	3,095	3,148	12,722	9,638	3,682	4,100	10.3	0.31
KR805	10,081	11,593	12,322	11,901	12,471	13,837	14,135	15,773	16,934	17,505	5.7	0.96

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

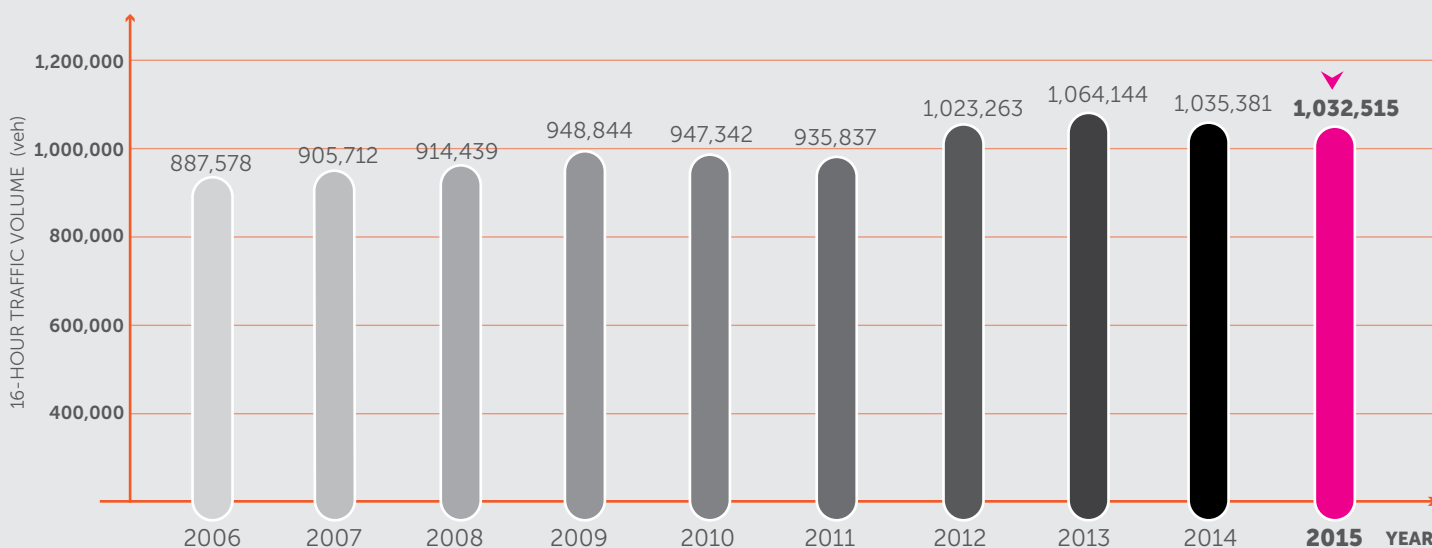


Figure 2.2-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Kedah



There are 52 census stations in Kedah. The 16-hour traffic volume documented since year 2006 to 2015 has seen the highest traffic volume in Kedah was in 2013 which is 1,064,144 vehicles. For 2015, there was a slightly drop of 0.28% from 2014.

**-0.28%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

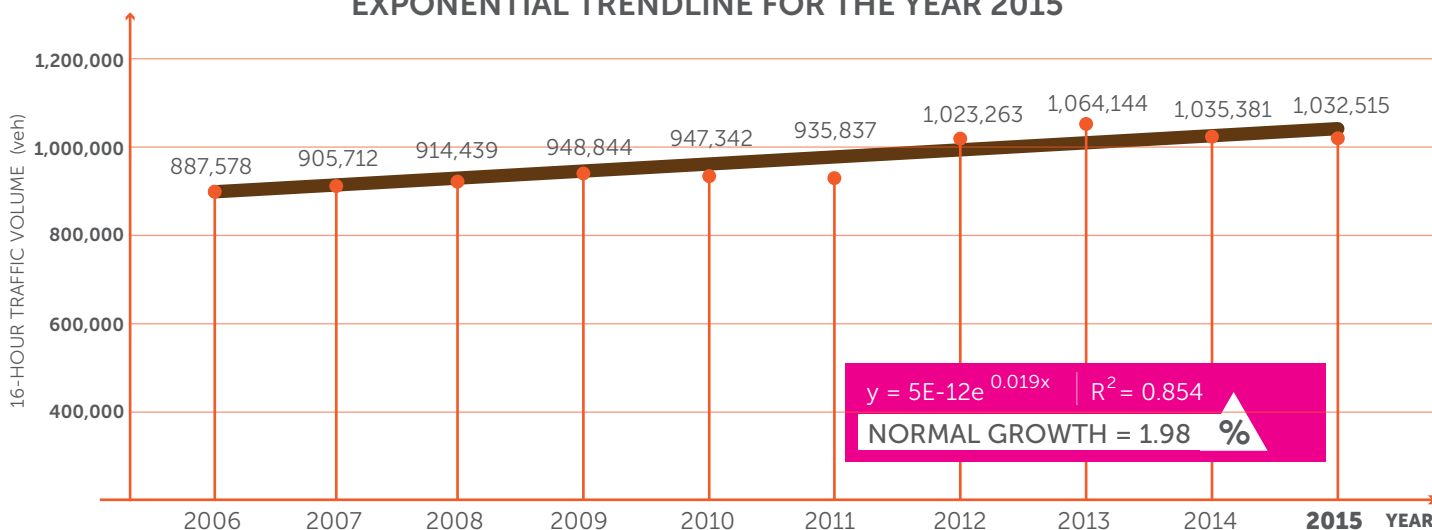


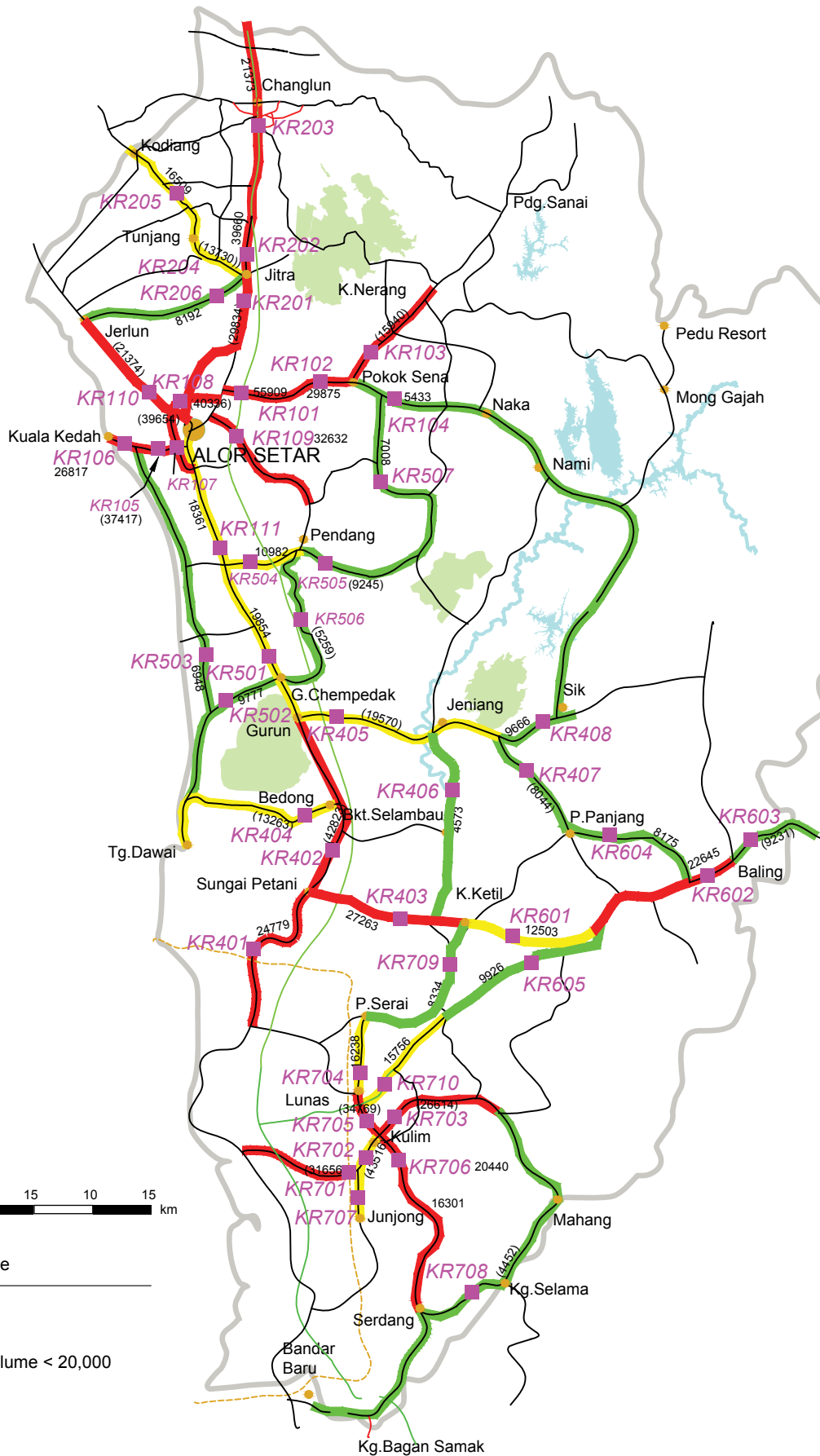
Figure 2.2-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Kedah

Traffic growth rate recorded for the state of Kedah is 1.98% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Kedah.

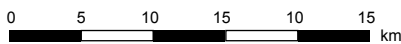


# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **KEDAH**



## LEGEND

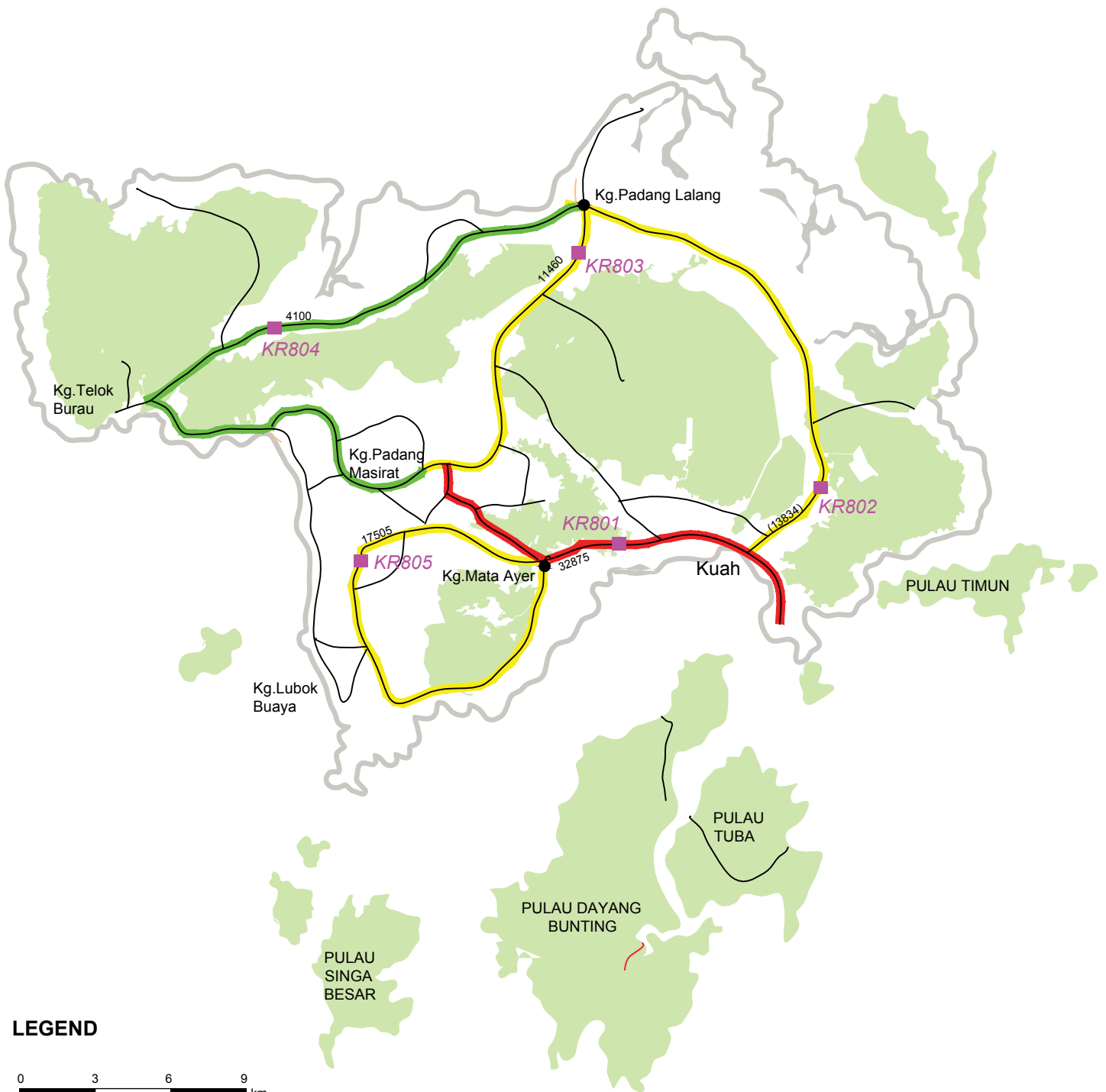


### Traffic Volume Scale

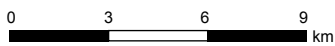
- ≤ 10,000
- 10,000 < volume < 20,000
- ≥ 40,000

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **KEDAH (LANGKAWI)**

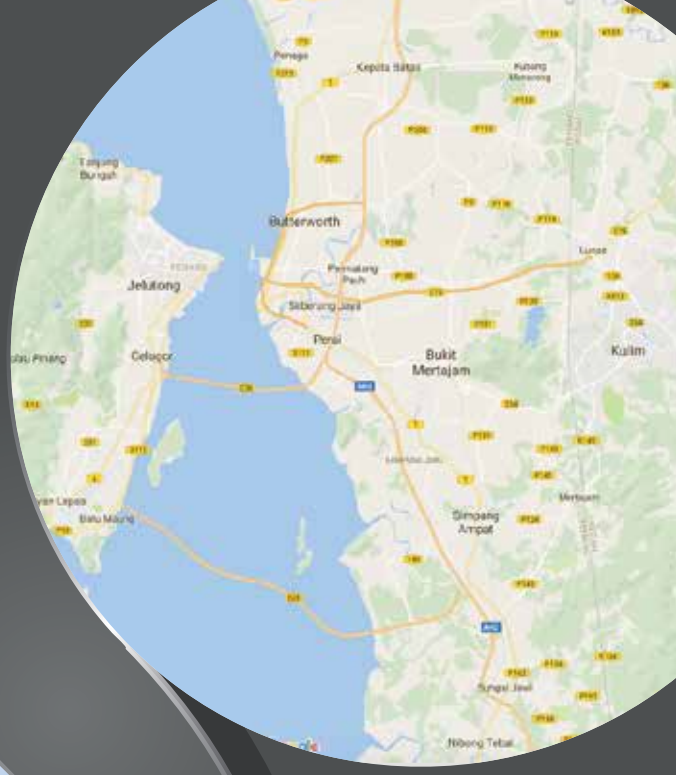


## LEGEND



### Traffic Volume Scale

- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000



• SULTAN ABDUL HALIM MUADZAM SHAH BRIDGE •



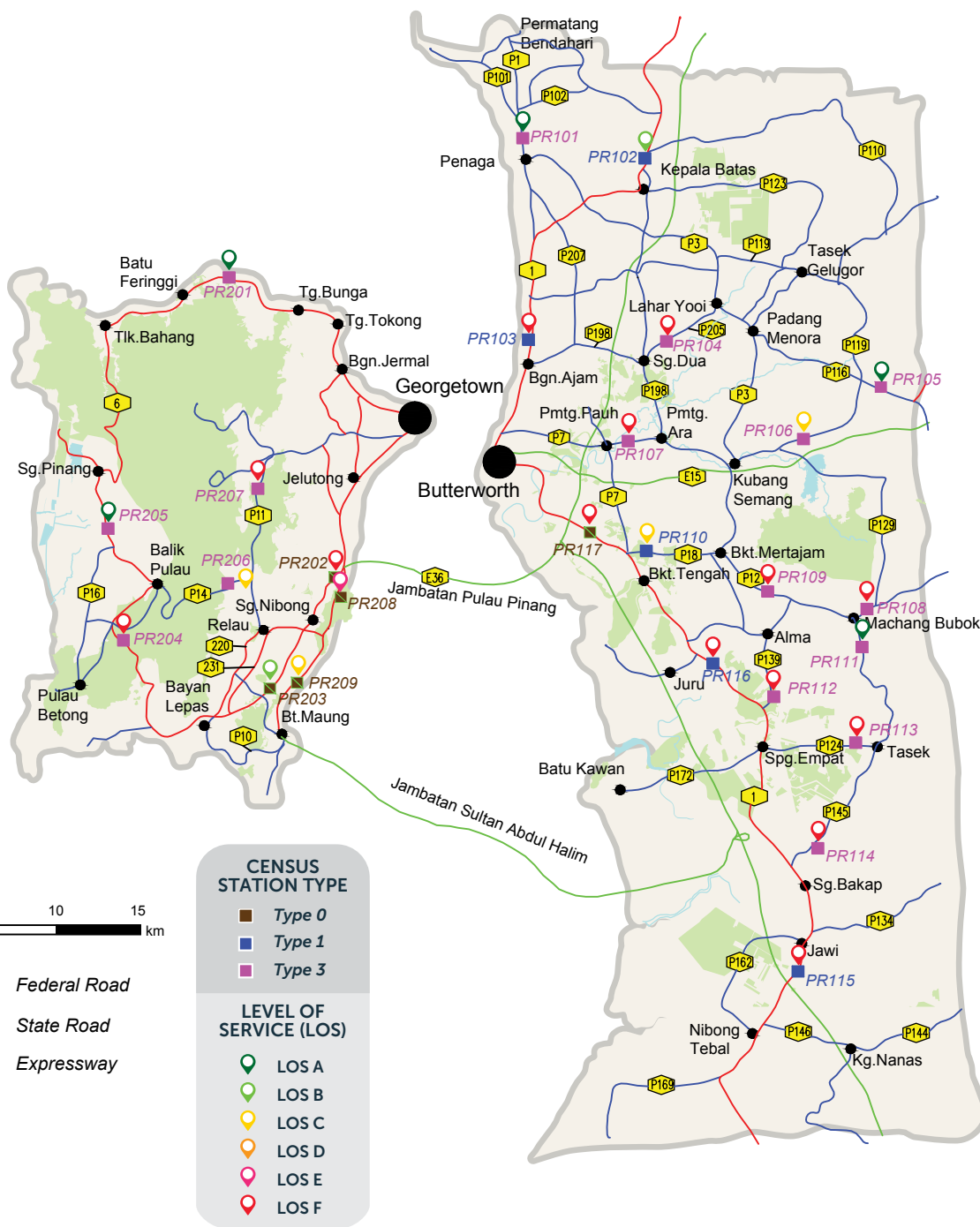
• 2014 : The longest bridge in South-East Asia •

# PULAU PINANG

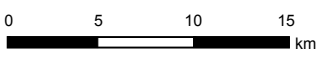
26 Census Stations  
Road Length : 4,248.62 km\*  
\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION & LOS MAP

STATE : **PULAU PINANG**



## LEGEND



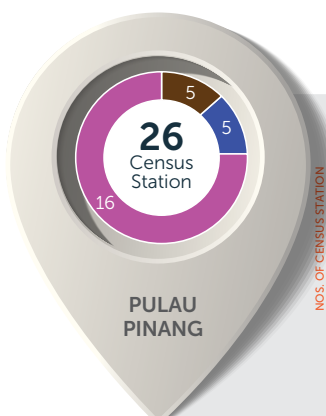
- Federal Road
- State Road
- Expressway

**CENSUS STATION TYPE**

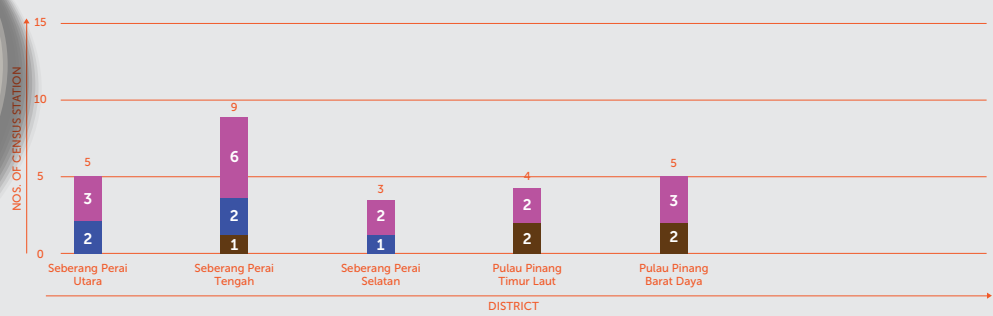
- Type 0
- Type 1
- Type 3

**LEVEL OF SERVICE (LOS)**

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

## STATE : PULAU PINANG

### District : SEBERANG PERAI UTARA

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
PR101	3	P1	12.9	Titi Mukim - Permatang Bendahari	5.5033720	100.3843400	T 1-1
PR102	1	1	19.0	Butterworth - Kepala Batas - Sungai Petani	5.5228330	100.4272500	T 1-1
PR103	1	1	8.1	Butterworth - Bagan Ajam - Telok Ayer Tawar	5.4620660	100.3828890	T 1-1
PR104	3	P198	12.1	Butterworth - Sungai Dua - Lahar Yoi	5.4548333	100.4405556	T 1-1
PR105	3	P118	25.4	100m from Ara Kuda - Lunas junction	5.4376389	100.5140833	T 1-1

### District : SEBERANG PERAI TENGAH

PR106	3	P119	21.7	Butterworth - Kubang Ulu - Ara Kuda	5.4681111	100.5140556	T 1-1
PR107	3	P188	8.1	Butterworth - Permatang Pauh - Kubang Semang	5.4106220	100.4141390	T 1-1
PR108	3	P12	20.9	Butterworth - Bukit Mertajam - Kulim	5.3558611	100.4680278	T 1-1
PR109	3	P12	15.8	Butterworth - Bukit Mertajam - Kulim	5.3436944	100.5180278	T 1-1
PR110	1	P12	9.7	Butterworth - Bukit Mertajam	5.3647330	100.4345280	T 2-2
PR111	3	P143	20.9	B'worth - Bukit Mertajam - Junjong (through Machang Bubok - Tasek)	5.3297500	100.5154830	T 1-1
PR112	3	P139	3.2	From junction to Route 1 (Jalan Rozhan)	5.3264000	100.4780830	T 2-2
PR116	1	1	16.9	Butterworth - Taiping	5.3188330	100.4585830	T 1-1
PR117	0	1	8.1	Butterworth - Taiping (through Prai)	5.3698230	100.4155110	K 2-2

### District : SEBERANG PERAI SELATAN

PR113	3	P124	24.2	Butterworth - Simpang Empat - Tasek	5.2851667	100.4961389	T 1-1
PR114	3	P145	30.6	Butterworth - Tasek - Val D'or	5.2427500	100.4962500	T 1-1
PR115	1	1	32.2	Butterworth - Taiping	5.1948890	100.4920830	T 1-1

### District : PULAU PINANG TIMUR LAUT

PR201	3	6	11.1	George Town - Telok Bahang (Jalan Keliling Pulau)	5.4655833	100.2807778	K 2-2
PR202	0	6	65.5	George Town - Bayan Lepas - Gelugor (Jalan Keliling Pulau)	5.3573240	100.3099360	K 2-2
PR207	3	P11	11.0	Paya Terubong - Ayer Hitam	5.3882500	100.2746944	T 1-1
PR208	0	3113	0.5	Lebuhraya Lim Cheong Eu	5.3449030	100.3081280	K 3-3

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PULAU PINANG**

District : **SEBERANG PERAI BARAT DAYA**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
PR203	0	6	57.2	George Town - Bayan Lepas - Gelugor	5.2981590	100.2697980	K 3-3
PR204	3	6	45.1	George Town - Balik Pulau - Teluk Kumbar (Jalan Keliling Pulau)	5.3327370	100.2170020	T 1-1
PR205	3	6	38.6	George Town - Telok Bahang - Balik Pulau (Jalan Keliling Pulau)	5.3654880	100.2167810	T 1-1
PR206	3	P14	16.9	Jalan Tun Saadon	5.3500440	100.2524000	T 1-1
PR209	0	3113	7.0	Lebuhraya Bayan Lepas (Georgetown - Batu Maung)	5.3176780	100.3009180	K 3-3

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : PULAU PINANG

MARCH 2015

## District : SEBERANG PERAI UTARA

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
PR101	-	6,620	1,071	0700-0800	44.0	2.8	2.1	0.4	0.9	49.8	100.0
PR102	-	19,064	1,833	0700-0800	56.4	2.8	3.5	0.6	0.5	36.3	100.0
PR103	-	35,671	3,812	1800-1900	61.1	2.1	1.9	0.3	0.5	33.9	100.0
PR104	-	26,461	3,089	0700-0800	49.1	3.4	5.0	2.5	0.7	39.3	100.0
PR105	-	12,638	1,186	0600-0700	44.2	7.4	5.4	1.3	0.5	41.2	100.0

## District : SEBERANG PERAI TENGAH

PR106	-	12,088	1,260	1800-1900	48.5	10.2	9.3	2.3	0.3	29.4	100.0
PR107	-	18,206	1,824	0700-0800	45.3	5.1	5.1	2.0	0.2	42.2	100.0
PR108	-	42,924	6,041	0700-0800	64.4	6.8	3.2	1.3	0.2	24.1	100.0
PR109	-	52,531	5,163	0800-0900	63.6	6.1	2.0	0.8	0.3	27.1	100.0
PR110	-	40,675	3,188	1700-1800	56.5	7.4	2.9	0.6	0.6	31.9	100.0
PR111	-	4,268	547	0700-0800	46.3	12.2	7.0	1.7	0.1	32.5	100.0
PR112	-	34,857	3,147	0700-0800	66.2	5.5	2.8	1.0	0.6	23.9	100.0
PR116	-	69,673	6,161	1800-1900	50.0	5.4	3.8	3.6	1.0	36.1	100.0
PR117	153,163	136,856	11,745	0700-0800	66.0	6.0	2.8	1.1	0.4	23.8	100.0

## District : SEBERANG PERAI SELATAN

PR113	-	19,097	1,704	1800-1900	42.2	7.7	9.4	5.4	0.5	34.7	100.0
PR114	-	11,070	1,048	1600-1700	38.9	10.0	19.2	8.7	0.6	22.6	100.0
PR115	-	43,984	3,643	1400-1500	55.8	6.8	6.6	2.6	0.7	27.7	100.0

## District : SEBERANG PERAI TIMUR LAUT

PR201	-	22,512	3,387	1900-2000	68.0	4.1	3.0	0.4	1.7	22.7	100.0
PR202	69,962	61,582	5,388	1800-1900	57.3	1.9	1.9	0.2	0.9	37.7	100.0
PR207	-	30,475	2,679	0900-1000	55.9	3.7	1.9	0.3	1.7	36.6	100.0
PR208	104,576	92,596	9,362	1800-1900	67.6	4.1	3.5	0.9	1.0	23.0	100.0

## District : SEBERANG PERAI BARAT DAYA

PR203	77,496	68,624	6,936	0700-0800	55.1	1.7	2.9	0.6	1.1	38.7	100.0
PR204	-	22,543	2,502	1000-1100	45.1	3.5	2.7	1.3	2.4	45.0	100.0
PR205	-	9,799	849	1800-1900	43.8	2.3	3.1	1.0	0.9	48.9	100.0
PR206	-	10,969	1,423	0700-0800	52.9	4.6	2.9	0.5	0.9	38.2	100.0
PR209	60,211	56,336	6,550	1800-1900	61.7	3.5	5.0	1.2	1.5	27.1	100.0



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PULAU PINANG**

**SEPTEMBER 2015**

## District : SEBERANG PERAI UTARA

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
PR101	-	6,756	912	1800-1900	45.5	4.6	2.5	0.4	1.4	45.6	100.0
PR102	-	17,396	1,494	1700-1800	57.0	3.3	3.5	0.8	0.7	34.8	100.0
PR103	-	33,554	3,285	0700-0800	59.8	2.3	1.9	0.4	0.6	34.9	100.0
PR104	-	29,499	3,154	1800-1900	54.3	3.3	3.6	1.1	0.6	37.1	100.0
PR105	-	8,781	1,309	0700-0800	53.2	4.9	5.4	1.6	0.5	34.3	100.0

## District : SEBERANG PERAI TENGAH

PR106	-	9,822	909	0700-0800	49.1	8.5	8.4	1.3	0.7	32.0	100.0
PR107	-	26,667	3,027	0700-0800	40.8	6.5	2.1	1.4	0.5	48.6	100.0
PR108	-	45,579	3,465	0800-0900	62.4	8.8	3.4	0.5	0.3	24.4	100.0
PR109	-	45,815	6,058	0700-0800	58.4	7.3	5.5	0.8	0.3	27.7	100.0
PR110	-	34,649	2,708	0700-0800	60.8	5.4	2.6	0.7	0.6	29.9	100.0
PR111	-	3,579	375	0700-0800	48.8	10.8	8.1	0.2	0.1	32.0	100.0
PR112	-	48,349	4,276	1100-1200	66.7	7.8	4.3	0.7	0.2	20.2	100.0
PR116	-	61,758	5,474	2000-2100	62.6	12.4	4.0	1.3	0.5	19.2	100.0
PR117	140,118	121,066	11,636	0700-0800	62.9	5.3	3.9	1.1	0.4	26.5	100.0

## District : SEBERANG PERAI SELATAN

PR113	-	22,405	2,040	1700-1800	41.7	8.8	6.8	4.7	0.3	37.7	100.0
PR114	-	14,959	1,416	0900-1000	36.8	10.9	16.3	6.7	0.6	28.7	100.0
PR115	-	40,310	3,240	0700-0800	57.2	5.9	6.3	2.4	0.7	27.5	100.0

## District : SEBERANG PERAI TIMUR LAUT

PR201	-	27,035	2,627	1100-1200	67.1	2.7	1.8	0.2	1.7	26.5	100.0
PR202	83,019	73,643	7,904	1800-1900	63.2	1.6	1.4	0.2	0.8	32.8	100.0
PR207	-	33,568	3,427	1800-1900	50.2	1.8	1.8	0.2	1.1	44.8	100.0
PR208	110,961	101,626	8,372	0700-0800	77.7	1.7	2.5	0.5	0.6	16.9	100.0

## District : SEBERANG PERAI BARAT DAYA

PR203	65,655	56,303	5,986	1800-1900	57.3	2.1	2.1	0.5	1.2	36.8	100.0
PR204	-	14,685	1,605	0700-0800	42.7	6.4	4.9	1.0	2.9	42.0	100.0
PR205	-	11,886	1,243	0700-0800	49.0	2.9	2.7	0.3	1.0	44.0	100.0
PR206	-	14,016	1,541	0700-0800	53.4	4.6	2.7	0.9	0.8	37.6	100.0
PR209	55,937	53,062	5,667	1900-2000	65.1	3.0	4.1	1.1	1.3	25.3	100.0



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : PULAU PINANG

AVERAGE 2015

## District : SEBERANG PERAI UTARA

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
PR101	6,688	992	44.8	3.7	2.3	0.4	1.2	47.7	100%	A	2044
PR102	18,230	1,663	56.7	3.0	3.5	0.7	0.6	35.5	100%	B	2040
PR103	34,613	3,549	60.5	2.2	1.9	0.4	0.6	34.4	100%	F	R
PR104	27,980	3,121	51.7	3.4	4.3	1.8	0.7	38.2	100%	F	R
PR105	10,709	1,247	48.7	6.2	5.4	1.5	0.5	37.7	100%	A	2057

## District : SEBERANG PERAI TENGAH

PR106	10,955	1,085	48.8	9.3	8.9	1.8	0.5	30.7	100%	C	-
PR107	22,437	2,426	43.1	5.8	3.6	1.7	0.4	45.4	100%	F	R
PR108	44,252	4,753	63.4	7.8	3.3	0.9	0.3	24.3	100%	F	R
PR109	49,173	5,611	61.0	6.7	3.7	0.8	0.3	27.4	100%	F	R
PR110	37,662	2,948	58.6	6.4	2.8	0.7	0.6	30.9	100%	C	-
PR111	3,924	461	47.6	11.5	7.6	0.9	0.1	32.3	100%	A	-
PR112	41,603	3,712	66.4	6.7	3.6	0.8	0.4	22.1	100%	F	R
PR116	65,716	5,818	56.3	8.9	3.9	2.4	0.7	27.7	100%	F	R
PR117	128,962	11,690	64.5	5.6	3.3	1.1	0.4	25.1	100%	F	R

## District : SEBERANG PERAI SELATAN

PR113	20,751	1,872	41.9	8.3	8.1	5.1	0.4	36.2	100%	F	R
PR114	13,014	1,232	37.9	10.5	17.7	7.7	0.6	25.7	100%	F	R
PR115	42,147	3,351	56.5	6.3	6.4	2.5	0.7	27.6	100%	F	R

## District : SEBERANG PERAI TIMUR LAUT

PR201	24,774	3,007	67.5	3.4	2.4	0.3	1.7	24.6	100%	A	2047
PR202	67,612	6,646	60.3	1.8	1.6	0.2	0.9	35.2	100%	F	R
PR207	32,022	3,053	53.0	2.8	1.8	0.3	1.4	40.7	100%	F	R
PR208	97,112	8,868	72.6	2.9	3.0	0.7	0.8	19.9	100%	E	-

## District : SEBERANG PERAI BARAT DAYA

PR203	62,464	6,461	56.2	1.9	2.5	0.6	1.1	37.7	100%	B	2024
PR204	18,614	2,054	43.9	5.0	3.8	1.1	2.7	43.5	100%	F	R
PR205	10,843	1,046	46.4	2.6	2.9	0.7	1.0	46.5	100%	A	2076
PR206	12,493	1,482	53.2	4.6	2.8	0.7	0.8	37.9	100%	C	-
PR209	54,699	6,109	63.4	3.2	4.5	1.1	1.4	26.2	100%	C	2051

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **PULAU PINANG**

## District : SEBERANG PERAI UTARA

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
PR101	5,708	6,494	7,616	7,485	7,187	6,652	7,650	7,432	8,681	6,688	2.0	0.28
PR102	16,858	18,017	18,037	18,035	20,746	20,478	20,738	21,200	19,453	18,230	1.5	0.32
PR103	33,910	27,390	37,454	37,590	42,788	33,928	31,303	31,130	34,966	34,613	0.1	0.00
PR104	24,376	23,075	24,703	23,855	24,469	25,815	24,670	26,257	27,494	27,980	1.8	0.75
PR105	9,823	11,618	12,446	11,134	12,205	12,757	11,339	12,690	13,996	10,710	1.4	0.17

## District : SEBERANG PERAI TENGAH

PR106	11,382	12,981	13,369	11,998	10,757	12,293	13,530	13,716	9,564	10,955	-1.1	0.08
PR107	9,165	8,256	8,260	8,666	10,353	10,553	9,921	12,142	13,952	22,436	8.5	0.71
PR108	28,012	30,425	22,605	31,712	30,706	46,409	45,483	43,724	49,980	44,252	7.5	0.71
PR109	29,974	41,880	34,363	37,012	24,609	45,895	45,001	52,655	52,986	49,173	5.7	0.47
PR110	44,871	48,913	50,214	48,730	52,129	49,765	41,678	44,632	43,738	37,662	-2.1	0.40
PR111	6,556	4,430	4,560	5,829	4,943	3,455	4,345	4,003	4,516	3,924	-3.9	0.39
PR112	28,969	36,748	37,081	29,947	23,488	36,876	33,210	39,050	39,358	41,603	2.9	0.24
PR116	50,151	47,787	53,451	56,601	56,349	60,230	56,932	64,993	48,588	65,716	2.2	0.35
PR117	76,756	89,591	78,171	89,263	95,869	102,391	117,380	132,813	161,699	128,962	7.5	0.85

## District : SEBERANG PERAI SELATAN

PR113	13,018	15,724	15,302	20,160	19,887	21,811	24,090	28,562	27,542	20,751	7.2	0.73
PR114	17,106	15,978	11,713	11,523	14,544	13,017	9,923	9,898	10,279	13,014	-4.2	0.43
PR115	35,689	34,400	35,236	35,062	37,548	39,617	43,137	44,684	44,249	42,148	3.1	0.81

## District : SEBERANG PERAI TIMUR LAUT

PR201	22,884	23,061	24,392	24,799	27,334	26,085	28,442	27,106	28,419	24,774	1.9	0.49
PR202	79,922	77,112	73,316	75,234	81,717	82,488	91,517	81,583	72,034	67,613	-0.5	0.03
PR207	25,549	25,067	24,982	15,175	27,213	29,440	32,807	31,036	27,676	32,022	3.8	0.27
PR208	99,248	96,142	161,094	106,482	99,652	107,749	100,205	100,571	92,251	97,112	-1.8	0.12

## District : SEBERANG PERAI BARAT DAYA

PR203	41,843	40,757	43,232	47,285	50,776	50,950	59,900	62,207	63,049	62,464	5.6	0.94
PR204	7,543	7,426	7,191	8,155	8,281	8,693	10,637	11,518	13,674	18,614	9.5	0.85
PR205	9,070	9,391	9,714	12,042	12,283	9,725	9,846	11,296	9,486	10,842	1.0	0.07
PR206	11,668	12,642	12,751	13,326	16,634	12,835	9,229	12,942	12,417	12,492	-0.5	0.01
PR209	53,614	52,437	62,145	57,620	60,108	62,253	60,415	63,543	60,502	54,699	0.9	0.16

# STATISTIC FOR YEAR 2015

STATE : **PULAU PINANG**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

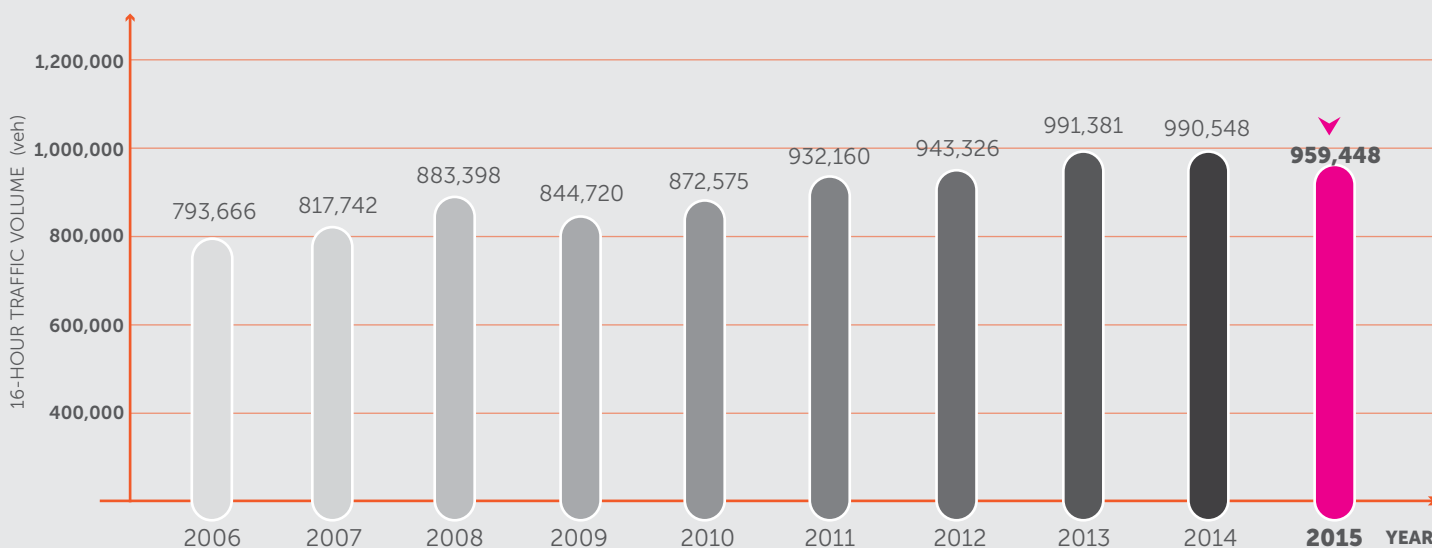


Figure 2.3-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Pulau Pinang



There are 26 census stations in Pulau Pinang. The 16-hour traffic volume documented for year 2015 has seen a decrease of 31,100 vehicles in Pulau Pinang. The pattern of traffic volume shows a gradual and steady growth throughout, increasing significantly in 2008 but dropping the following year and also for 2015 which drop 3.14% from 2014.

**-3.14%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

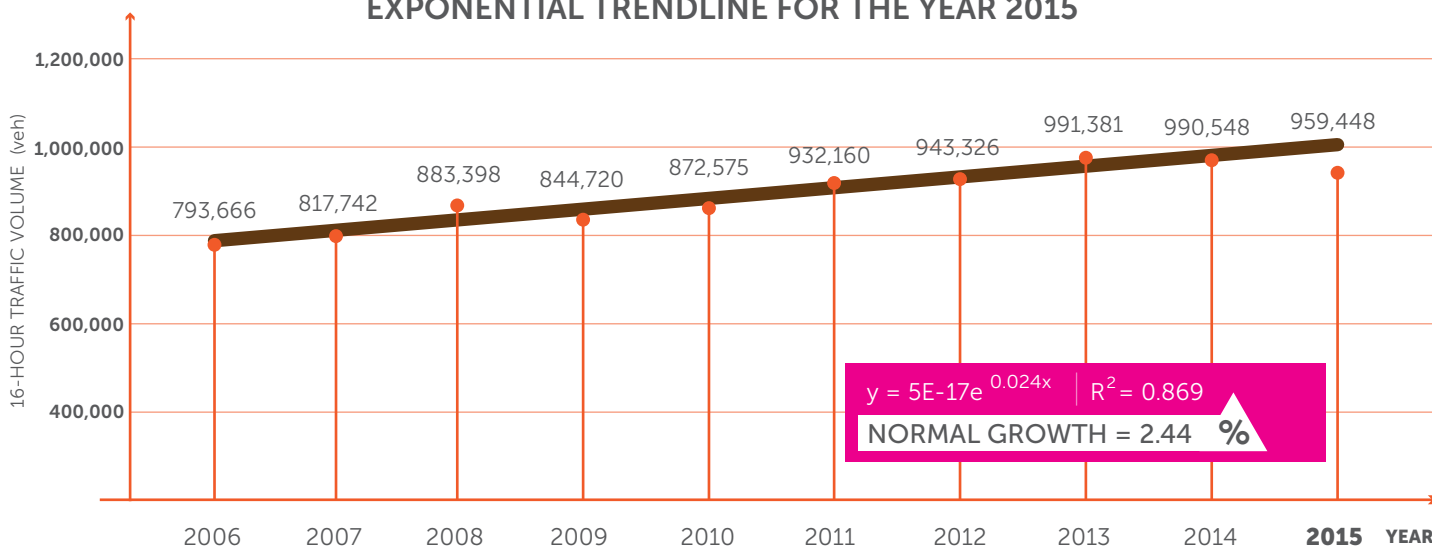


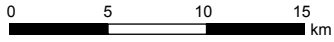
Figure 2.3-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Pulau Pinang

Traffic growth rate recorded for the state of Pulau Pinang is 2.44% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Pulau Pinang.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

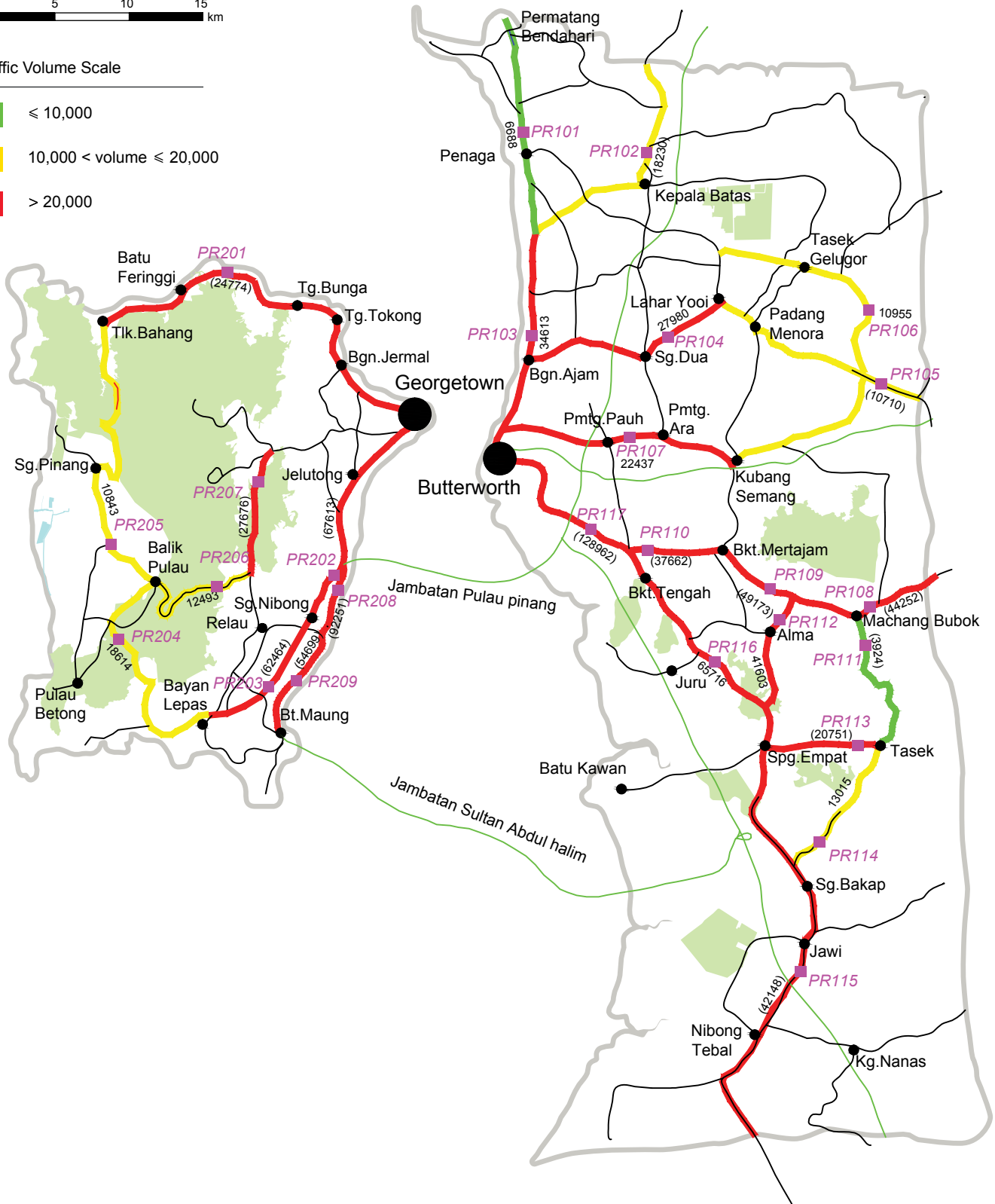
STATE : **PULAU PINANG**

## LEGEND



### Traffic Volume Scale

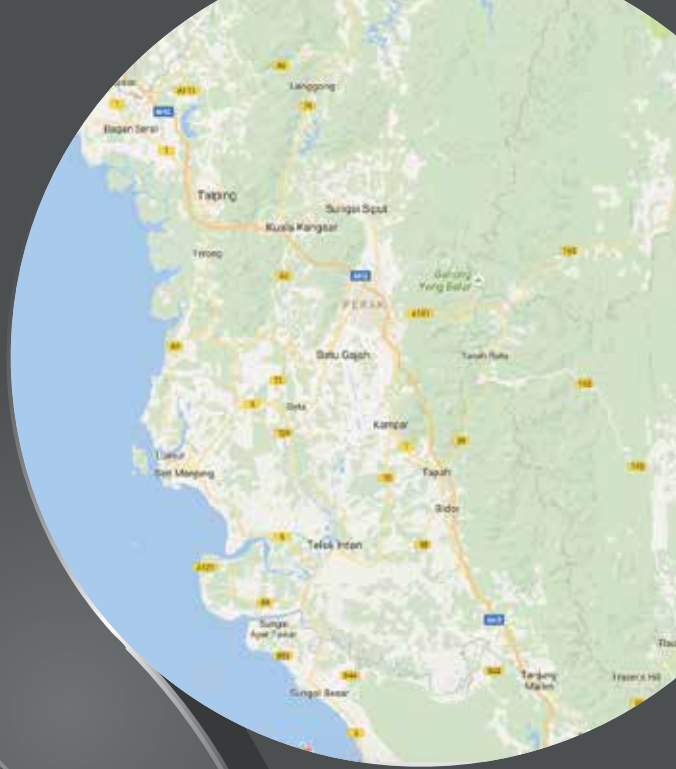
- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000



• BATU 6 BRIDGE •



• 2015 : The Longest Single Span Bridge In Malaysia (The Malaysia Book Of Records) •



# PERAK

## DARUL RIDZUAN

69 Census Stations

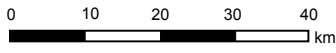
Road Length : 26,521.10 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **PERAK**

## LEGEND



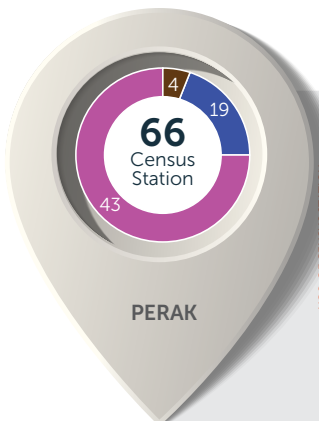
- Federal Road
- State Road
- Expressway

### CENSUS STATION TYPE

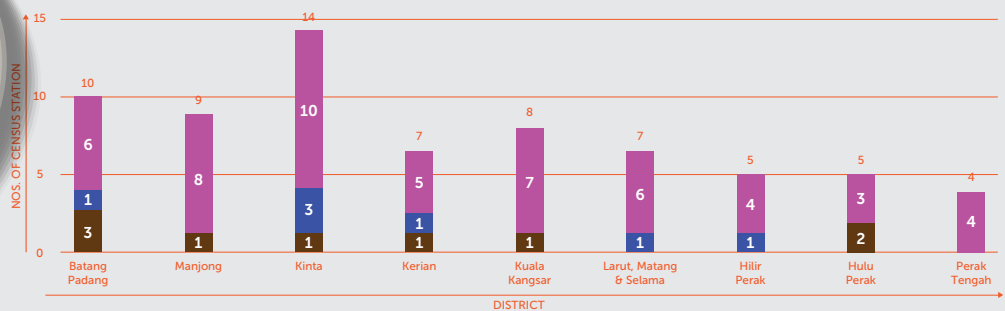
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PERAK**

## District : BATANG PADANG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
AR101	0	1	106.6	Ipoh - Tanjong Malim (Slim River toll house)	3.8205840 101.4149160	K 2-2
AR102	0	1	70.8	Ipoh - Tanjong Malim (south of Bidor)	4.0700930 101.2885130	T 2-2
AR103	3	1	62.8	Ipoh - Tapah-Bidor	4.1210480 101.2804260	K 2-2
AR104	1	1	54.7	Ipoh - Tapah	4.2125000 101.2546530	T 1-1
AR105	0	58	68.4	Ipoh - Bidor - Telok Anson	4.1053700 101.2751380	T 1-1
AR106	3	70	56.4	Ipoh - Kampar - Changkat Jering	4.1424720 101.1454440	T 1-1
AR107	3	59	4.8	Tapah - Cameron Highlands	4.2200560 101.2820830	T 1-1
AR108	3	A119	3.2	Tapah - Chendering	4.2058060 101.2594440	T 1-1
AR109	3	A10	1.6	Tapah - Kampong Changkat Pantai	4.1986390 101.2530560	T 1-1
AR110	3	A121	122.4	Ipoh - Slim River - Behrang Ulu	3.7409540 101.5029030	T 1-1

## District : MANJONG

AR201	3	5	103.0	Ipoh/Sitiawan - Kayan	4.1365260 100.7276150	T 1-1
AR202	3	18	95.8	Ipoh - Lumut	4.2110090 100.6797560	K 2-2
AR203	3	60	86.9	Damar Laut - Pantai Remis	4.3944170 100.6305830	T 1-1
AR204	0	5	78.9	Ipoh - Lumut	4.3248110 100.7760690	K 2-2
AR205	3	71	72.5	Ayer Tawar - Beruas	4.3716780 100.7941510	T 1-1
AR206	3	73	55.5	Tanjong Belanja - Beruas	4.4925280 100.7925000	T 1-1
AR207	3	100	5.0	Ipoh - Lumut	4.2272780 100.6766670	T 1-1
AR208	3	60	29.0	Pantai Remis - Kg Baru	4.2736110 100.6732500	T 1-1
AR209	3	A12	3.0	Air Tawar - Pantai Remis	4.3383490 100.7529670	T 1-1



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PERAK**

## District : KINTA

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
AR301	3	1	35.9	Ipoh - Kampar	4.3278330	101.1547500	K 2-2
AR302	1	1	22.5	Ipoh - Kampar	4.4491290	101.1662130	K 2-2
AR303	1	1	5.6	Ipoh - Gopeng	4.5619270	101.1123780	K 2-2
AR304	0	1	8.1	Ipoh - Kuala Kangsar	4.6565660	101.1088160	K 2-2
AR305	3	1	18.7	Ipoh - Kuala Kangsar	4.7463060	101.1176940	K 2-2
AR306	3	A13	9.7	Ipoh - Tanjong Rambutan	4.6218890	101.1487500	K 3-3
AR307	3	A1	3.4	Ipoh - Jelapang	4.6156110	101.0577220	K 3-3
AR308	1	5	9.7	Ipoh - Lumut	4.5168330	101.0270620	T 1-1
AR309	3	73	22.5	Ipoh - Siputeh	4.4569880	100.9658050	T 1-1
AR310	3	5	22.5	Ipoh - Lumut	4.4362780	101.9989720	K 2-2
AR311	3	A8	15.3	Ipoh - Batu Gajah	4.5021110	101.1458330	K 2-2
AR312	3	A15	22.5	Batu Gajah - Tanjong Tualang	4.4500830	101.0415830	T 1-1
AR313	3	A114	1.6	Kuala Dipang - Malim Nawar	4.3774440	101.1552220	T 1-1
AR314	3	A119	32.2	Kuala Dipang - Sahom	4.3739170	101.1655000	T 1-1

## District : KERIAN

AR401	0	1	98.2	Ipoh - Butterworth	4.9515260	100.6277310	T 1-1
AR402	1	1	111.1	Ipoh - Butterworth	5.0271700	100.5266180	K 2-2
AR403	3	75	11.0	Bagan Serai - Kuala Kurau	5.0161670	100.5229440	T 1-1
AR404	3	A6	31.0	Bagan Serai - Selama	5.0190030	100.5455010	T 1-1
AR405	3	A100	25.0	Semanggol - Kuala Kurau	4.9507220	100.6290280	T 1-1
AR406	3	A111	35.0	Semanggol - Changkat Lobak	4.9935280	100.6532220	T 1-1
AR407	3	A4	21.0	Gunung Semanggol - Taiping	4.9624440	100.6651940	T 1-1



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PERAK**

## District : KUALA KANGSAR

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
AR501	3	1	30.8	Ipoh - Kuala Kangsar	4.7139440 101.1418890	K 2-2
AR502	0	1	56.0	Ipoh - Kuala Kangsar - Changkat Jering (Kg. Kuala Dal)	4.7712290 100.8885300	T 1-1
AR503	3	A76	56.4	Ipoh - Kuala Kangsar - Lenggong (Lunuk Merbau)	4.8080280 100.8956390	T 1-1
AR504	3	A76	68.1	Ipoh - Kuala Kangsar - Grik (Kg. Chuar Hulu)	4.8971940 100.9028060	T 1-1
AR505	3	A11	46.7	Ipoh - Kampong Tamuan - Kati (Kg. Lubuk Chapin)	4.8526390 100.9479720	T 1-1
AR506	3	A3	53.9	Ipoh - Kuala Kangsar - Kenas RPA 4, Jerlun)	4.7461940 100.9202780	T 1-1
AR507	3	A164	5.0	Simpang Sayong - Jambatan Sultan Abdul Jalil	4.7809550 100.9526390	K 2-2
AR508	3	A164	6.0	Simpang Sayong - Tg. Belanja	4.7791450 100.9526500	K 2-2

## District : LARUT, MATANG DAN SELAMA

AR601	3	1	82.1	Ipoh - Butterworth	4.8479170 100.6941390	T 1-1
AR602	3	60	79.7	Sitiawan - Taiping	4.7535560 100.7202500	T 1-1
AR603	3	60	96.6	Sitiawan - Taiping	4.6140630 100.7172160	T 1-1
AR604	1	74	83.7	Kuala Sepetang - Taiping	4.8237530 100.7142100	K 2-2
AR605	3	A7	101.4	Taiping - Selama	4.9654550 100.7303230	T 1-1
AR606	3	A5	101.4	Kuala Sepetang - Taiping	4.9652410 4.9652410	T 1-1
AR607	3	74	8.1	Kuala Sepetang - Taiping	4.8137330 100.6947220	T 1-1

## District : HILIR PERAK

AR701	3	5	112.7	Ipoh - Telok Intan - Sabak	3.8554722 100.9651944	K 2-2
AR702	3	69	117.5	Ipoh - Simpang Empat - Bagan Datoh	3.8898056 100.8669167	T 1-1
AR703	1	5	106.3	Ipoh - Telok Intan - Simpang Empat	3.9126944 100.9459444	T 1-1
AR704	3	58	78.9	Ipoh - Changkat Jong - Telok Intan	3.9744722 101.1011389	T 1-1
AR705	3	109	-	100m north of Sg. Manik / Kg.Gajah Road junction	4.0085278 101.0381944	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PERAK**

## District : HULU PERAK

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
AR801	0	76	40.0	Kuala Kangsar - Baling	5.0741111	100.9561667	T 1-1
AR802	3	76	133.6	Ipoh - Lenggong - Grik	5.2951111	101.0584444	T 1-1
AR803	0	4	2.4	Lebuhraya Timur - Barat	5.4551111	101.2040000	T 1-1
AR804	3	76	164.2	Ipoh - Grik - Kroh	5.5061111	101.1317500	T 1-1
AR805	3	77	2.0	Pengkalan Hulu - Bentong	5.7170278	101.0053333	K 2-2

## District : PERAK TENGAH

AR901	3	5	49.1	Ipoh - Pusing - Bota Kiri - Sitiawan	4.3626667	100.8331667	K 2-2
AR902	3	72	0.9	Tanjong Belanja - Kampong Bota Kiri	4.3626310	100.8748160	T 1-1
AR903	3	109	26.6	Parit - Kg. Gajah	4.2792500	100.9016389	T 1-1
AR904	3	A3	82.9	Ipoh - Kuala Kangsar - Kampong Buloh Akar	4.5296180	100.8661880	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**MARCH 2015**

## District : BATANG PADANG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR101	19,561	17,519	1,564	0700-0800	61.1	9.3	6.0	7.4	0.6	15.6	100.0
AR102	13,444	11,207	914	1700-1800	60.0	8.7	9.8	6.7	0.7	14.0	100.0
AR103	-	12,760	1,266	1800-1900	57.0	8.2	9.1	8.0	1.0	16.7	100.0
AR104	-	15,648	1,281	1700-1800	60.4	8.1	8.0	8.2	0.7	14.6	100.0
AR105	8,796	7,638	595	0700-0800	57.5	6.4	7.7	2.0	2.7	23.7	100.0
AR106	-	8,983	775	1200-1300	52.8	10.9	12.9	7.0	0.7	15.6	100.0
AR107	-	7,640	697	1400-1500	54.3	9.9	5.4	2.4	0.9	27.2	100.0
AR108	-	1,802	306	0700-0800	46.7	7.2	2.7	0.3	0.2	42.8	100.0
AR109	-	10,650	1,040	0700-0800	60.5	7.2	6.3	1.8	0.7	23.5	100.0
AR110	-	1,842	232	0700-0800	40.1	7.7	4.1	0.7	0.8	46.7	100.0

## District : MANJONG

AR201	-	16,244	1,615	0700-0800	55.3	10.7	7.6	5.6	1.2	19.6	100.0
AR202	-	48,583	3,761	1700-1800	66.4	11.0	2.2	0.2	0.6	19.5	100.0
AR203	-	12,387	994	0700-0800	51.1	13.4	11.1	7.0	0.6	16.8	100.0
AR204	29,578	27,009	2,502	0700-0800	59.6	12.1	7.7	3.5	0.9	16.2	100.0
AR205	-	6,280	506	1000-1100	42.0	8.6	7.1	4.5	1.1	36.7	100.0
AR206	-	7,937	660	0800-0900	38.6	8.7	6.3	3.2	0.9	42.4	100.0
AR207	-	19,124	2,063	1700-1800	65.8	10.2	4.0	1.4	0.7	17.9	100.0
AR208	-	15,135	1,263	1700-1800	51.8	11.9	7.5	7.3	0.8	20.6	100.0
AR209	-	6,683	587	0700-0800	49.9	16.1	12.5	5.3	1.2	15.0	100.0

## District : KINTA

AR301	-	35,272	2,778	1700-1800	63.0	8.1	7.9	5.5	1.0	14.4	100.0
AR302	-	25,955	2,220	1700-1800	66.5	6.5	8.4	5.1	1.1	12.5	100.0
AR303	-	80,424	6,376	0700-0800	72.1	9.4	3.4	0.5	0.5	14.0	100.0
AR304	84,370	76,823	8,345	1700-1800	63.4	5.3	3.6	2.2	0.6	24.9	100.0
AR305	-	27,413	2,784	0700-0800	48.8	7.9	5.8	2.9	1.2	33.4	100.0
AR306	-	41,313	6,107	1700-1800	60.7	4.6	4.2	0.3	0.4	29.8	100.0
AR307	-	61,019	7,887	1700-1800	55.8	13.8	6.4	2.7	1.6	19.6	100.0
AR308	-	28,681	2,795	0700-0800	70.0	8.9	6.1	2.3	0.4	12.4	100.0
AR309	-	5,840	600	1600-1700	42.2	13.8	10.1	2.2	1.5	30.3	100.0
AR310	-	22,798	2,406	0800-0900	46.5	13.9	11.3	9.3	2.8	16.2	100.0
AR311	-	10,186	1,451	0800-0900	57.9	10.2	9.5	3.3	0.8	18.3	100.0
AR312	-	11,681	1,350	0700-0800	57.2	6.1	9.0	1.8	0.6	25.3	100.0
AR313	-	7,346	574	0600-0700	38.4	11.6	10.7	9.0	0.8	29.6	100.0
AR314	-	2,264	291	1200-1300	35.1	10.3	12.1	7.8	1.3	33.4	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**MARCH 2015**

## District : KERIAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR401	-	35,272	2,778	1700-1800	63.0	8.1	7.9	5.5	1.0	14.4	100.0
AR402	-	25,955	2,220	1700-1800	66.5	6.5	8.4	5.1	1.1	12.5	100.0
AR403	-	80,424	6,376	0700-0800	72.1	9.4	3.4	0.5	0.5	14.0	100.0
AR404	84,370	76,823	8,345	1700-1800	63.4	5.3	3.6	2.2	0.6	24.9	100.0
AR405	-	27,413	2,784	0700-0800	48.8	7.9	5.8	2.9	1.2	33.4	100.0
AR406	-	41,313	6,107	1700-1800	60.7	4.6	4.2	0.3	0.4	29.8	100.0
AR407	-	61,019	7,887	1700-1800	55.8	13.8	6.4	2.7	1.6	19.6	100.0

## District : KUALA KANGSAR

AR501	-	19,603	1,924	0700-0800	51.9	7.8	6.3	4.1	1.0	28.9	100.0
AR502	16,504	14,729	1,362	1700-1800	57.6	7.3	6.4	8.3	0.4	20.0	100.0
AR503	-	10,016	1,112	1600-1700	59.1	13.0	4.9	3.6	1.0	18.3	100.0
AR504	-	6,312	541	1800-1900	65.8	9.8	7.1	4.7	0.7	12.0	100.0
AR505	-	4,544	483	0700-0800	52.0	7.1	6.8	3.9	0.4	29.8	100.0
AR506	-	9,558	1,092	1800-1900	54.6	5.3	3.9	2.7	0.7	32.9	100.0
AR507	-	7,574	758	1200-1300	47.5	3.9	4.2	3.5	0.4	40.5	100.0
AR508	-	8,111	709	1700-1800	53.2	3.9	2.9	2.6	0.2	37.2	100.0

## District : LARUT, MATANG DAN SELAMA

AR601	-	22,283	1,986	0700-0800	46.8	8.8	13.3	6.3	1.1	23.7	100.0
AR602	-	3,020	315	0700-0800	32.4	9.1	17.8	11.4	0.7	28.5	100.0
AR603	-	13,601	1,174	1700-1800	49.1	9.8	12.3	8.0	0.6	20.3	100.0
AR604	-	43,644	4,005	1500-1600	73.5	5.6	1.0	0.4	0.5	18.9	100.0
AR605	-	3,179	322	1700-1800	45.3	13.1	10.3	3.1	0.6	27.7	100.0
AR606	-	10,958	1,299	0700-0800	49.7	8.1	6.4	0.9	0.6	34.3	100.0
AR607	-	15,306	1,359	1800-1900	55.4	8.1	6.0	0.8	0.6	29.1	100.0

## District : HILIR PERAK

AR701	-	10,843	992	1700-1800	44.1	16.6	13.5	14.6	0.9	10.4	100.0
AR702	-	10,437	1,138	0700-0800	53.5	7.5	7.8	2.3	0.7	28.2	100.0
AR703	-	28,230	2,250	1700-1800	61.7	6.0	6.3	5.6	1.0	19.5	100.0
AR704	-	9,665	855	1000-1100	57.8	12.4	8.5	7.2	2.0	12.1	100.0
AR705	-	6,187	712	0900-1000	55.7	9.9	6.5	5.0	0.3	22.7	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**MARCH 2015**

## District : HULU PERAK

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR801	7,095	6,277	523	1500-1600	64.5	15.4	8.1	4.3	0.9	6.7	100.0
AR802	-	6,772	618	0700-0800	47.2	10.7	8.8	3.9	0.7	28.7	100.0
AR803	4,222	3,457	301	1700-1800	59.5	14.7	6.8	8.2	1.3	9.4	100.0
AR804	-	6,578	696	0700-0800	47.8	9.2	3.7	1.0	0.5	37.8	100.0
AR805	-	8,138	773	1100-1200	43.4	11.0	2.4	0.7	0.2	42.4	100.0

## District : PERAK TENGAH

AR901	-	22,007	2,042	1600-1700	57.0	12.5	11.1	4.7	0.7	14.0	100.0
AR902	-	4,103	451	0700-0800	45.3	10.5	10.4	1.5	0.3	32.0	100.0
AR903	-	6,005	651	0700-0800	49.7	10.4	7.7	2.9	0.5	28.8	100.0
AR904	-	1,468	145	1400-1500	46.2	9.9	9.1	7.7	1.4	25.7	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**SEPTEMBER 2015**

## District : **BATANG PADANG**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR101	17,558	15,953	1,413	1700-1800	59.9	9.5	6.2	8.0	0.7	15.7	100.0
AR102	12,320	11,011	935	1800-1900	59.7	8.5	9.5	7.1	0.8	14.4	100.0
AR103	-	16,040	1,386	1700-1800	59.0	7.7	10.0	4.1	0.7	18.5	100.0
AR104	-	13,206	1,040	1700-1800	60.2	5.6	8.7	7.6	0.7	17.2	100.0
AR105	6,761	6,158	491	1600-1700	46.2	12.5	9.1	5.3	0.9	26.1	100.0
AR106	-	6,624	522	0700-0800	51.4	9.7	19.2	6.1	0.7	12.8	100.0
AR107	-	8,574	869	1700-1800	50.7	9.5	5.3	1.1	0.6	32.8	100.0
AR108	-	5,632	614	1700-1800	43.7	8.1	4.7	0.9	10.4	32.1	100.0
AR109	-	10,538	1,049	0700-0800	62.5	7.0	4.8	0.8	0.5	24.4	100.0
AR110	-	1,848	291	0700-0800	33.3	8.0	5.5	0.6	0.8	51.8	100.0

## District : **MANJONG**

AR201	-	16,669	1,477	1700-1800	53.8	10.3	8.4	6.4	1.0	20.0	100.0
AR202	-	45,268	3,603	1700-1800	62.9	13.9	3.1	0.2	0.5	19.3	100.0
AR203	-	11,496	941	1800-1900	56.2	13.2	10.2	6.4	0.8	13.1	100.0
AR204	28,229	25,978	2,225	1700-1800	58.7	12.2	7.6	3.8	0.8	16.9	100.0
AR205	-	5,396	446	0700-0800	38.7	13.7	9.5	5.3	1.3	31.6	100.0
AR206	-	7,171	724	0700-0800	34.7	9.8	7.7	3.8	15.5	28.4	100.0
AR207	-	18,830	1,954	1300-1400	63.8	10.9	5.3	1.0	0.6	18.5	100.0
AR208	-	14,487	1,381	1700-1800	50.1	12.5	9.7	5.7	0.9	21.0	100.0
AR209	-	6,470	568	1700-1800	37.7	12.5	8.4	2.7	9.3	29.5	100.0

## District : **KINTA**

AR301	-	25,911	2,064	1700-1800	67.2	6.8	8.3	3.5	1.2	13.0	100.0
AR302	-	26,251	2,367	1700-1800	67.3	5.9	8.4	5.1	1.1	12.3	100.0
AR303	-	75,848	6,364	0700-0800	70.1	10.1	3.6	0.6	0.5	15.1	100.0
AR304	84,659	76,965	8,629	1800-1900	61.7	6.9	4.7	2.3	0.7	23.6	100.0
AR305	-	24,395	3,022	1600-1700	46.4	12.6	9.5	3.3	1.1	27.1	100.0
AR306	-	43,418	4,015	0700-0800	64.2	7.8	5.4	0.5	0.6	21.6	100.0
AR307	-	64,163	6,544	1700-1800	72.9	5.7	3.1	0.7	0.6	16.9	100.0
AR308	-	30,869	3,664	0700-0800	70.6	8.8	5.7	1.8	0.4	12.7	100.0
AR309	-	4,765	497	1400-1500	40.5	15.9	11.2	3.8	1.3	27.3	100.0
AR310	-	14,450	1,390	1300-1400	49.3	16.1	8.4	5.2	1.1	20.0	100.0
AR311	-	10,763	1,028	0700-0800	53.8	14.9	8.7	4.6	0.9	16.9	100.0
AR312	-	11,612	1,277	1800-1900	58.6	5.9	8.4	2.9	0.7	23.5	100.0
AR313	-	6,679	702	0700-0800	52.2	8.4	8.4	5.5	1.0	24.4	100.0
AR314	-	1,601	166	0700-0800	29.1	13.1	12.0	13.9	1.1	30.8	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**SEPTEMBER 2015**

## District : KERIAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR401	18,036	16,178	1,313	1700-1800	59.2	7.0	8.2	3.8	0.7	21.0	100.0
AR402	-	16,936	1,532	1700-1800	54.1	9.2	9.3	5.3	0.9	21.2	100.0
AR403	-	14,898	1,356	0700-0800	44.6	5.0	5.1	2.4	0.6	42.3	100.0
AR404	-	7,193	726	1700-1800	49.4	7.4	5.9	2.1	0.1	35.0	100.0
AR405	-	6,890	838	0700-0800	45.1	3.6	3.8	0.6	0.5	46.4	100.0
AR406	-	4,367	575	0700-0800	51.6	4.6	6.1	2.0	0.3	35.4	100.0
AR407	-	6,011	607	0700-0800	53.4	4.2	5.5	0.8	0.9	35.2	100.0

## District : KUALA KANGSAR

AR501	-	20,187	2,350	0700-0800	51.1	7.6	6.6	4.6	1.9	28.2	100.0
AR502	14,946	13,413	1,269	1700-1800	57.8	7.4	6.7	8.1	0.5	19.5	100.0
AR503	-	14,508	1,631	0700-0800	53.7	8.5	6.4	4.4	2.3	24.7	100.0
AR504	-	6,221	511	0700-0800	65.4	9.6	8.1	4.0	0.8	12.1	100.0
AR505	-	4,326	446	0700-0800	56.4	7.1	5.4	3.3	0.2	27.6	100.0
AR506	-	9,305	985	1800-1900	50.0	4.5	4.6	4.6	0.9	35.4	100.0
AR507	-	7,692	790	1200-1300	46.9	4.2	4.9	3.5	0.3	40.2	100.0
AR508	-	7,280	599	0700-0800	47.9	4.4	4.1	2.0	0.3	41.3	100.0

## District : LARUT, MATANG DAN SELAMA

AR601	-	19,044	2,017	0700-0800	49.0	8.3	12.3	6.3	1.1	23.0	100.0
AR602	-	3,047	355	0700-0800	36.6	8.2	16.9	9.8	0.9	27.6	100.0
AR603	-	12,296	1,064	1700-1800	54.6	7.1	12.7	7.8	0.6	17.2	100.0
AR604	-	34,669	3,469	1800-1900	59.4	7.4	4.6	1.7	0.9	26.0	100.0
AR605	-	3,216	302	0700-0800	46.2	10.4	9.0	1.3	0.6	32.5	100.0
AR606	-	9,466	1,089	0700-0800	55.1	7.0	4.8	0.6	0.6	31.8	100.0
AR607	-	13,533	1,308	0700-0800	55.9	5.6	6.2	1.1	0.6	30.6	100.0

## District : HILIR PERAK

AR701	-	10,927	1,003	1600-1700	44.7	17.6	13.6	14.1	0.8	9.2	100.0
AR702	-	10,429	1,048	0700-0800	53.6	9.1	7.6	1.3	0.7	27.8	100.0
AR703	-	26,268	2,076	1800-1900	60.1	8.4	7.8	5.0	0.8	17.8	100.0
AR704	-	9,902	927	1500-1600	58.6	11.2	9.1	6.4	2.0	12.7	100.0
AR705	-	5,891	554	1700-1800	63.4	12.4	7.0	4.0	0.2	13.0	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PERAK**

**SEPTEMBER 2015**

## District : HULU PERAK

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
AR801	6,195	5,573	504	1700-1800	61.9	17.6	8.2	3.8	1.1	7.3	100.0
AR802	-	6,180	555	1500-1600	45.2	13.1	7.7	3.7	1.1	29.3	100.0
AR803	3,780	3,129	266	1700-1800	54.6	15.4	7.5	10.7	1.6	10.2	100.0
AR804	-	6,405	803	1000-1100	44.7	9.1	4.5	2.0	0.8	38.9	100.0
AR805	-	7,091	854	1800-1900	43.1	9.5	2.8	1.2	0.5	43.0	100.0

## District : PERAK TENGAH

AR901	-	17,898	1,813	0700-0800	59.7	11.2	8.3	7.0	0.9	12.8	100.0
AR902	-	5,891	656	0700-0800	52.4	10.2	6.8	3.3	0.2	27.2	100.0
AR903	-	4,186	444	0700-0800	48.2	7.4	8.9	4.7	0.2	30.6	100.0
AR904	-	1,572	157	1800-1900	43.4	9.1	9.5	6.2	1.7	30.2	100.0



# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PERAK**

**AVERAGE 2015**

## District : BATANG PADANG

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
AR101	16,736	1,488	60.5	9.4	6.1	7.7	0.7	15.6	100%	A	2074
AR102	11,109	924	59.9	8.6	9.6	6.9	0.8	14.2	100%	B	2054
AR103	14,400	1,326	58.0	8.0	9.6	6.0	0.8	17.6	100%	A	2126
AR104	14,427	1,161	60.3	6.8	8.3	7.9	0.7	15.9	100%	D	2033
AR105	6,898	543	51.9	9.5	8.4	3.6	1.8	24.9	100%	A	-
AR106	7,804	649	52.1	10.3	16.0	6.6	0.7	14.2	100%	A	2075
AR107	8,107	783	52.5	9.7	5.3	1.8	0.7	30.0	100%	A	2035
AR108	3,717	460	45.2	7.7	3.7	0.6	5.3	37.5	100%	A	2038
AR109	10,594	1,045	61.5	7.1	5.6	1.3	0.6	23.9	100%	B	2027
AR110	1,845	641	36.7	7.9	4.8	0.6	0.8	49.3	100%	A	2045

## District : MANJONG

AR201	16,457	1,546	54.6	10.5	8.0	6.0	1.1	19.8	100%	F	R
AR202	46,926	3,682	64.7	12.5	2.7	0.2	0.6	19.4	100%	A	2051
AR203	11,942	968	53.6	13.3	10.6	6.7	0.7	15.0	100%	C	2030
AR204	26,494	2,364	59.2	12.1	7.7	3.7	0.8	16.5	100%	A	2047
AR205	5,838	476	40.3	11.1	8.3	4.9	1.2	34.2	100%	A	2051
AR206	7,554	692	36.6	9.3	7.0	3.5	8.2	35.4	100%	A	2024
AR207	18,977	2,009	64.8	10.5	4.7	1.2	0.6	18.2	100%	E	2016
AR208	14,811	1,322	51.0	12.2	8.6	6.5	0.9	20.8	100%	C	2020
AR209	6,577	578	43.8	14.3	10.4	4.0	5.2	22.2	100%	A	2047

## District : KINTA

AR301	30,592	2,421	65.1	7.5	8.1	4.5	1.1	13.7	100%	A	2035
AR302	26,103	2,294	66.9	6.2	8.4	5.1	1.1	12.4	100%	A	2055
AR303	78,136	6,370	71.1	9.8	3.5	0.6	0.5	14.5	100%	F	R
AR304	76,894	8,487	62.5	6.1	4.2	2.2	0.7	24.3	100%	F	R
AR305	25,904	2,903	47.6	10.2	7.7	3.1	1.1	30.3	100%	B	2055
AR306	42,366	5,061	62.5	6.2	4.8	0.4	0.5	25.7	100%	A	2037
AR307	62,591	7,216	64.4	9.8	4.8	1.7	1.1	18.3	100%	D	2016
AR308	29,775	3,229	70.3	8.9	5.9	2.0	0.4	12.5	100%	F	R
AR309	5,303	549	41.3	14.8	10.7	3.0	1.4	28.8	100%	A	-
AR310	18,624	1,898	47.9	15.0	9.9	7.2	1.9	18.1	100%	A	-
AR311	10,475	1,240	55.9	12.6	9.1	4.0	0.8	17.6	100%	A	2040
AR312	11,647	1,314	57.9	6.0	8.7	2.3	0.7	24.4	100%	D	2025
AR313	7,013	638	45.3	10.0	9.5	7.2	0.9	27.0	100%	A	2051
AR314	1,933	229	32.1	11.7	12.1	10.8	1.2	32.1	100%	A	2088

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PERAK**

**AVERAGE 2015**

## District : KERIAN

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
AR401	16,248	1,346	60.1	7.5	7.6	4.0	0.7	20.2	100%	D	2025
AR402	17,641	1,548	53.8	9.7	9.1	5.4	0.9	21.0	100%	A	2080
AR403	15,748	1,438	43.4	5.1	5.3	1.8	0.5	43.8	100%	C	2043
AR404	7,089	677	48.2	8.6	6.3	1.5	0.1	35.2	100%	A	2079
AR405	7,198	859	41.4	4.4	3.7	0.8	0.5	49.1	100%	A	2034
AR406	4,295	481	50.6	6.2	6.0	1.8	0.3	35.1	100%	A	2083
AR407	6,159	627	52.5	5.0	5.7	0.8	0.9	35.1	100%	A	2072

## District : KUALA KANGSAR

AR501	19,895	51.5	7.7	6.5	4.3	1.5	28.5	28.5	100%	A	2047
AR502	14,071	57.7	7.3	6.6	8.2	0.5	19.7	19.7	100%	E	2023
AR503	12,262	56.4	10.8	5.6	4.0	1.7	21.5	21.5	100%	E	2019
AR504	6,267	65.6	9.7	7.6	4.3	0.7	12.0	12.0	100%	A	2120
AR505	4,435	54.2	7.1	6.1	3.6	0.3	28.7	28.7	100%	A	2065
AR506	9,432	52.3	4.9	4.3	3.6	0.8	34.1	34.1	100%	B	2029
AR507	7,633	47.2	4.1	4.5	3.5	0.3	40.3	40.3	100%	A	2052
AR508	7,696	50.6	4.1	3.5	2.3	0.2	39.3	39.3	100%	A	2084

## District : LARUT, MATANG DAN SELAMA

AR601	20,664	2,002	47.9	8.5	12.8	6.3	1.1	23.4	100%	F	R
AR602	3,034	335	34.5	8.7	17.4	10.6	0.8	28.1	100%	A	2134
AR603	12,949	1,119	51.8	8.4	12.5	7.9	0.6	18.7	100%	D	2028
AR604	39,156	3,737	66.5	6.5	2.8	1.0	0.7	22.4	100%	C	-
AR605	3,198	312	45.8	11.8	9.7	2.2	0.6	30.1	100%	A	2088
AR606	10,212	1,194	52.4	7.6	5.6	0.8	0.6	33.1	100%	B	2027
AR607	14,420	1,334	55.7	6.8	6.1	0.9	0.6	29.8	100%	C	2022

## District : HILIR PERAK

AR701	10,885	998	44.4	17.1	13.6	14.3	0.9	9.8	100%	A	2123
AR702	10,433	1,093	53.5	8.3	7.7	1.8	0.7	28.0	100%	B	2030
AR703	27,249	2,163	60.9	7.2	7.0	5.3	0.9	18.7	100%	F	R
AR704	9,784	891	58.2	11.8	8.8	6.8	2.0	12.4	100%	B	2038
AR705	6,039	633	59.6	11.1	6.8	4.5	0.3	17.8	100%	A	2069

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PERAK**

**AVERAGE 2015**

## District : HULU PERAK

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
AR801	3,139	514	63.2	16.5	8.2	4.1	1.0	7.0	100%	A	-
AR802	6,476	587	46.2	11.9	8.3	3.8	0.9	29.0	100%	A	-
AR803	3,293	284	57.0	15.1	7.2	9.4	1.5	9.8	100%	A	2067
AR804	6,492	750	46.3	9.1	4.1	1.5	0.6	38.4	100%	A	-
AR805	7,615	814	43.2	10.3	2.6	1.0	0.3	42.7	100%	A	2065

## District : PERAK TENGAH

AR901	19,953	1,928	58.4	11.9	9.7	5.8	0.8	13.4	100%	A	2027
AR902	4,997	554	48.8	10.3	8.6	2.4	0.2	29.6	100%	A	2030
AR903	5,096	548	48.9	8.9	8.3	3.8	0.4	29.7	100%	A	2036
AR904	1,520	151	44.8	9.5	9.3	6.9	1.5	28.0	100%	A	2073

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **PERAK**

## District : BATANG PADANG

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
AR101	13,555	15,028	13,854	15,038	15,323	14,039	14,430	15,328	16,500	16,736	1.7	0.55
AR102	11,503	12,244	12,041	11,503	14,454	13,191	14,225	13,812	11,147	11,109	0.2	0.00
AR103	14,585	14,265	15,054	14,632	14,966	15,057	14,994	15,340	14,832	14,400	0.2	0.07
AR104	14,860	14,745	14,984	15,618	14,944	15,991	15,253	15,199	15,320	14,427	0.0	0.00
AR105	9,123	9,391	8,970	8,057	8,923	7,368	7,099	6,687	6,232	6,898	-4.5	0.84
AR106	6,482	6,659	7,084	7,852	7,427	7,841	7,564	7,310	7,240	7,804	1.4	0.42
AR107	5,416	6,054	6,260	5,853	6,244	6,473	7,153	7,796	7,024	8,107	3.9	0.84
AR108	1,560	2,046	2,294	2,410	2,168	2,080	2,342	2,302	2,493	3,717	5.5	0.60
AR109	6,710	7,054	7,071	7,582	7,297	7,644	8,292	7,978	9,150	10,594	4.2	0.83
AR110	1,304	1,298	1,060	957	1,203	1,054	1,130	1,278	1,543	1,845	3.4	0.28

## District : MANJONG

AR201	11,832	12,509	13,375	13,935	14,342	14,331	14,975	15,077	15,254	16,456	3.1	0.94
AR202	39,890	42,117	44,049	46,594	43,896	47,749	48,756	46,346	46,749	46,926	1.6	0.62
AR203	9,330	9,717	10,162	10,693	10,767	11,160	10,273	11,052	10,788	11,942	2.0	0.72
AR204	20,907	20,778	21,138	23,920	22,389	23,758	25,283	25,942	23,834	26,494	2.6	0.79
AR205	4,418	4,535	4,730	4,890	5,171	5,412	5,678	5,812	5,300	5,838	3.1	0.86
AR206	3,458	3,837	6,161	6,656	6,552	6,915	6,966	6,786	6,823	7,554	7.1	0.64
AR207	10,530	11,918	12,776	13,958	14,620	15,866	15,647	17,178	17,027	18,977	5.9	0.96
AR208	9,570	7,659	10,549	11,400	11,780	11,663	12,445	13,048	12,920	14,811	5.4	0.78
AR209	5,323	5,478	5,193	6,373	6,254	6,227	6,214	6,764	6,201	6,576	2.4	0.65

## District : KINTA

AR301	24,314	23,262	23,050	23,659	31,022	30,311	27,497	28,520	27,126	30,592	2.8	0.51
AR302	21,741	23,244	23,180	23,341	23,518	19,485	25,951	25,176	24,263	26,103	1.5	0.28
AR303	62,597	64,866	71,205	79,513	84,135	73,487	85,819	77,194	78,210	78,136	2.3	0.46
AR304	54,778	41,708	60,968	71,845	80,595	70,470	82,923	73,024	64,750	76,894	4.4	0.42
AR305	30,029	25,811	25,699	25,075	26,251	29,168	39,267	29,117	25,116	25,904	0.3	0.01
AR306	30,935	36,416	42,284	38,475	41,786	38,155	38,194	48,878	41,248	42,366	2.6	0.44
AR307	30,794	25,367	29,434	23,614	34,204	46,163	51,996	49,227	60,124	62,591	10.7	0.81
AR308	27,880	24,007	20,742	23,084	24,336	22,253	27,970	28,020	25,433	29,775	1.8	0.22
AR309	7,214	6,801	7,109	5,804	6,207	7,280	6,303	6,208	5,734	5,302	-2.6	0.52
AR310	24,502	17,680	17,239	18,561	15,378	19,306	15,522	14,681	19,822	18,624	-1.7	0.12
AR311	6,537	6,299	7,208	6,643	8,087	8,286	8,638	10,312	8,614	10,474	5.5	0.84
AR312	12,208	9,174	11,683	11,899	11,750	11,956	13,356	13,361	12,964	11,646	1.8	0.27
AR313	7,088	7,801	8,670	9,230	8,350	9,994	12,776	14,818	7,422	7,012	2.0	0.06
AR314	1,931	2,100	1,748	2,266	1,951	2,124	2,260	1,956	3,248	1,932	2.2	0.16

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : PERAK

### District : KERIAN

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
AR401	13,460	13,830	14,112	14,743	14,777	15,143	16,130	16,268	15,728	16,248	2.2	0.91
AR402	17,767	17,675	18,207	17,491	17,972	16,679	21,074	21,116	21,245	17,640	1.5	0.25
AR403	11,386	12,818	12,325	12,685	12,287	11,724	11,628	11,234	10,735	15,748	0.6	0.02
AR404	5,361	6,986	6,488	6,414	7,315	6,760	6,582	7,028	6,692	7,088	1.6	0.31
AR405	4,784	4,785	5,353	5,520	5,932	5,746	5,550	6,522	6,552	7,198	4.2	0.89
AR406	3,536	3,735	3,843	4,166	4,698	4,433	4,246	4,084	4,347	4,294	1.9	0.44
AR407	4,712	5,355	5,447	5,852	5,670	5,660	6,312	5,501	5,678	6,159	1.9	0.50

### District : KUALA KANGSAR

AR501	15,398	17,142	18,036	19,085	19,426	22,500	19,250	20,478	18,578	19,895	2.2	0.43
AR502	11,816	12,048	11,687	14,348	13,309	12,599	12,008	11,485	11,729	14,071	0.4	0.03
AR503	7,244	9,789	8,135	10,312	8,739	8,966	8,846	8,352	9,061	12,262	2.4	0.25
AR504	6,875	6,045	5,886	7,103	6,891	6,420	6,625	7,927	6,470	6,266	0.5	0.03
AR505	3,610	3,814	3,588	3,357	4,335	4,132	4,120	4,202	4,376	4,435	2.5	0.62
AR506	7,440	7,335	7,824	8,463	8,406	8,536	8,647	10,216	10,052	9,432	3.5	0.85
AR507	4,522	4,671	5,135	6,791	5,809	6,537	6,376	6,670	6,662	7,633	5.1	0.79
AR508	5,758	5,746	7,164	7,512	6,741	7,044	8,183	7,594	7,463	7,696	3.0	0.60

### District : LARUT, MATANG DAN SELAMA

AR601	10,208	11,989	16,091	16,752	14,128	3,379	19,410	20,588	19,880	20,664	6.1	0.11
AR602	2,666	2,887	2,705	7,163	11,385	11,831	3,180	3,412	3,364	3,034	0.6	0.00
AR603	15,758	15,574	10,034	7,076	10,270	18,646	12,586	12,938	12,531	12,948	0.2	0.00
AR604	39,968	46,533	44,168	45,713	36,198	37,714	39,945	30,366	36,468	39,156	-2.5	0.35
AR605	2,488	3,068	3,431	3,293	3,947	3,594	3,298	3,778	3,514	3,198	2.2	0.27
AR606	7,876	8,110	8,071	8,832	8,784	9,351	9,627	10,208	10,144	10,212	3.3	0.95
AR607	10,992	10,554	10,931	11,066	13,415	12,599	13,254	13,071	14,503	14,420	3.7	0.85

### District : HILIR PERAK

AR701	10,254	11,291	10,206	9,643	10,286	10,192	10,047	10,554	10,962	10,885	0.4	0.06
AR702	8,320	9,502	8,612	9,482	9,629	10,132	10,240	10,872	10,580	10,433	2.6	0.79
AR703	23,258	14,351	24,244	25,159	25,365	25,004	28,465	25,489	25,865	27,249	3.7	0.35
AR704	8,453	8,793	8,806	9,504	9,758	10,135	11,064	9,248	9,776	9,784	1.7	0.42
AR705	4,936	5,613	5,033	5,588	5,668	5,655	6,216	5,516	5,704	6,039	1.6	0.50

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **PERAK**

## District : HULU PERAK

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
AR801	4,169	5,319	2,509	2,715	1,724	3,110	3,562	3,487	2,826	3,139	-2.4	0.06
AR802	6,726	9,260	7,498	8,006	10,831	6,760	6,930	7,627	6,975	6,476	-1.9	0.13
AR803	2,906	2,846	2,946	3,078	3,337	3,148	3,944	3,796	3,636	3,293	2.9	0.59
AR804	6,944	6,982	5,953	5,638	8,234	5,586	5,869	6,306	7,114	6,492	-0.3	0.00
AR805	5,566	6,192	6,555	7,812	5,477	6,167	6,552	6,862	6,253	7,614	1.6	0.18

## District : PERAK TENGAH

AR901	13,550	14,182	15,405	13,191	14,543	16,257	21,546	21,573	21,064	19,952	5.8	0.75
AR902	3,316	1,991	3,110	3,129	3,426	3,648	4,300	4,599	4,280	4,997	7.3	0.70
AR903	3,941	3,176	4,249	4,189	4,575	4,813	5,831	4,890	5,640	5,096	4.9	0.68
AR904	1,176	1,238	1,454	1,321	1,363	1,567	1,636	1,918	1,606	1,520	3.8	0.63

# STATISTIC FOR YEAR 2015

STATE : **PERAK**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

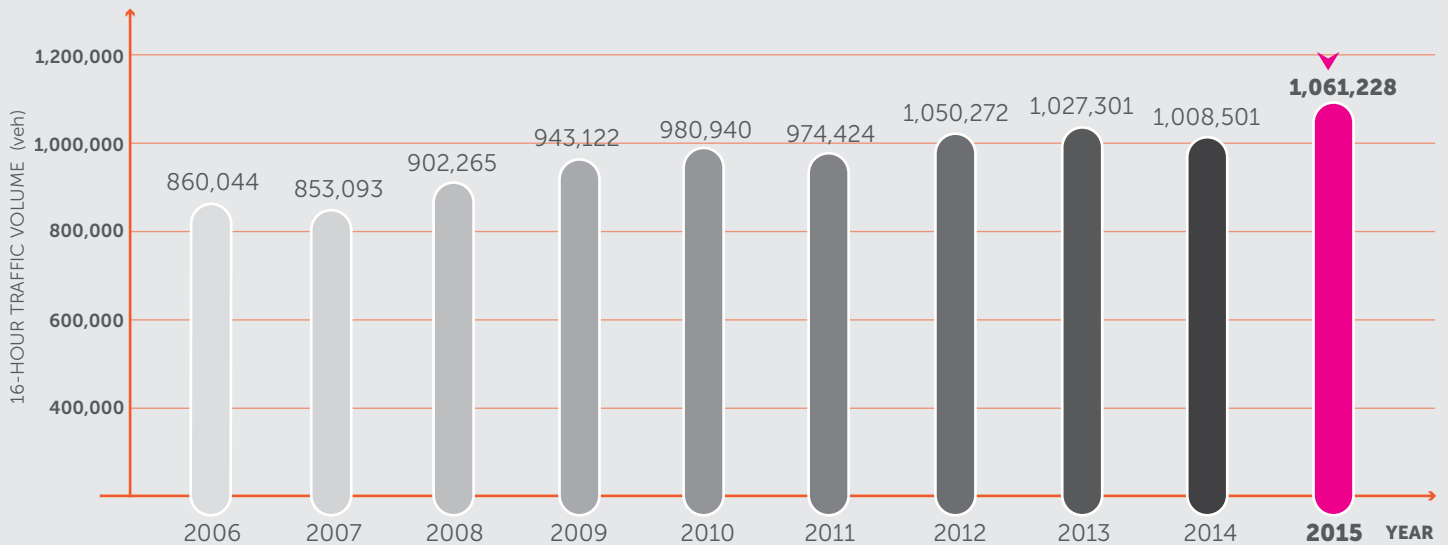


Figure 2.4-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Perak



There are 69 census stations in Perak. The pattern of 16-hour traffic volume shows a gradual increase since year 2006. However, there was slightly decrease in 2007, 2011, 2013 and 2014. In 2015, about 5.23% increase which is equivalent to 52,727 vehicles from 2014.

**5.23%**  
INCREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

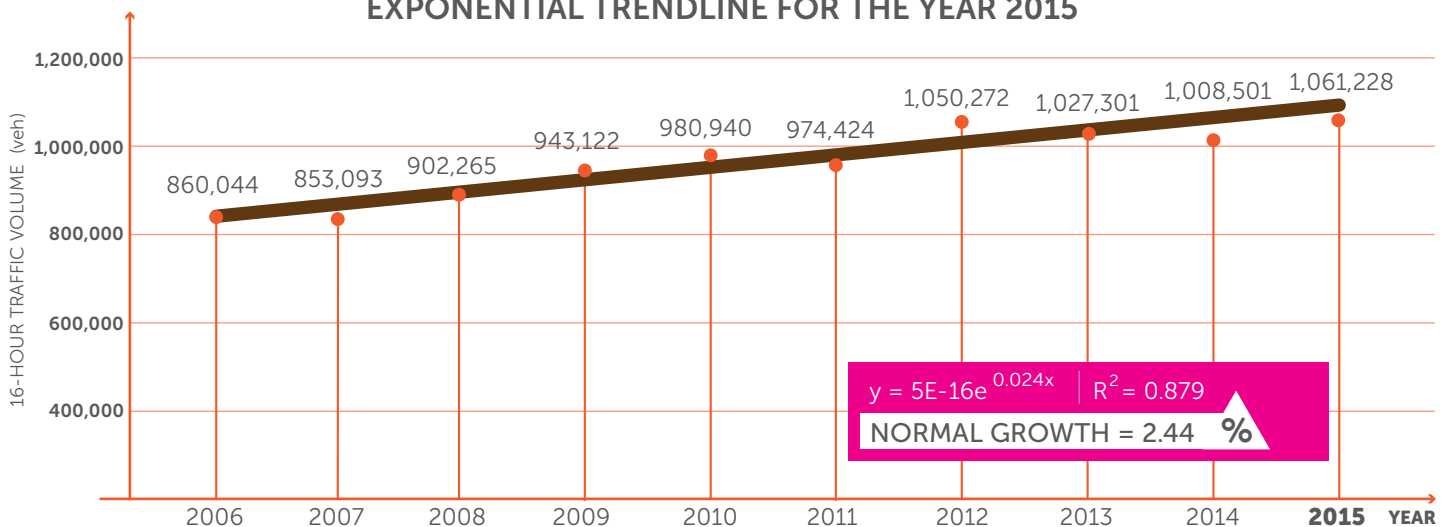


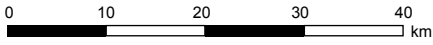
Figure 2.4-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Perak

Traffic growth rate recorded for the state of Perak is 2.44% for the year 2015 . The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Perak.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

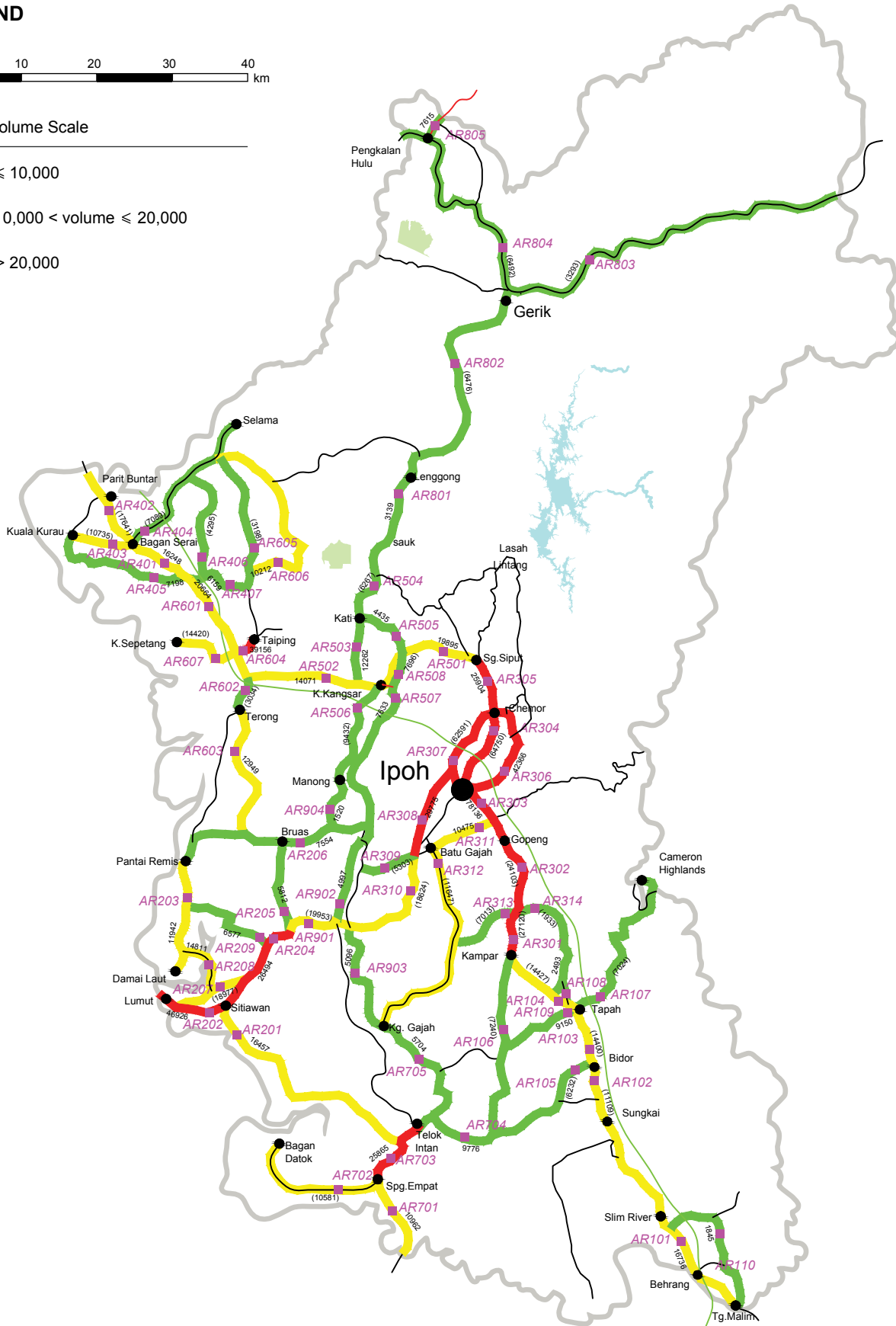
STATE : **PERAK**

## LEGEND



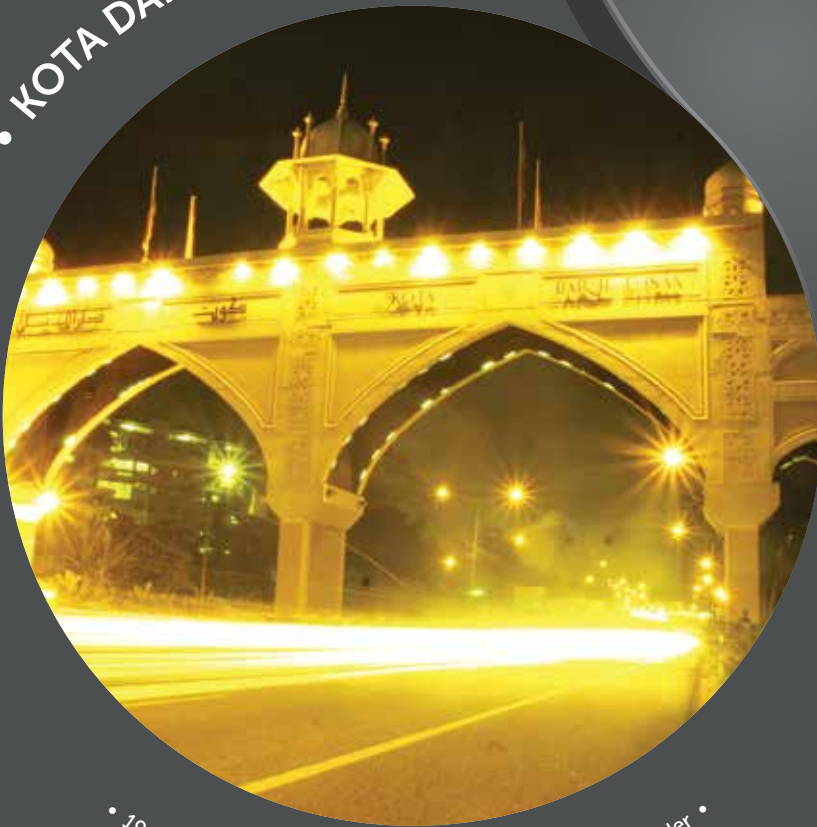
### Traffic Volume Scale

- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000

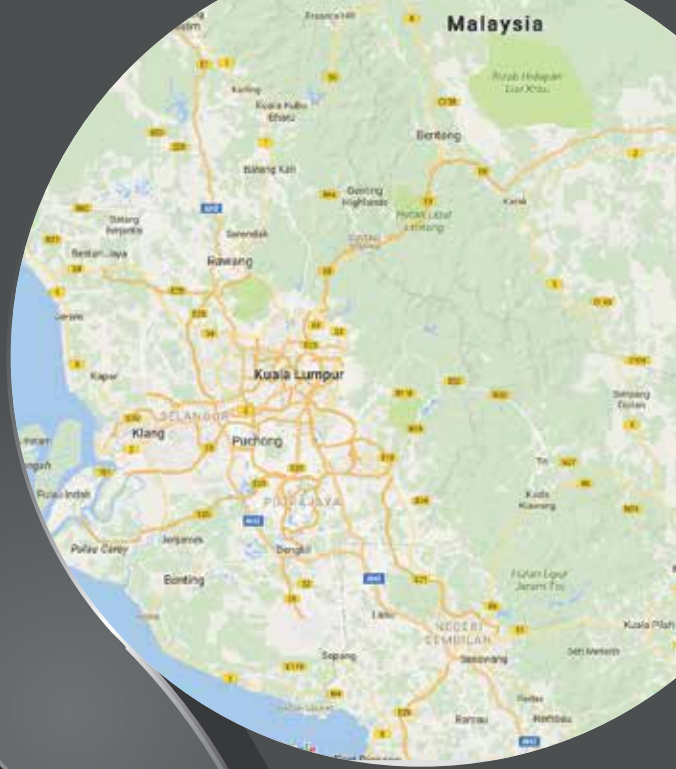




• KOTA DARUL EHSAN ARCH •



• 1981 : Selangor – Wilayah Persekutuan Kuala Lumpur Border •



# SELANGOR

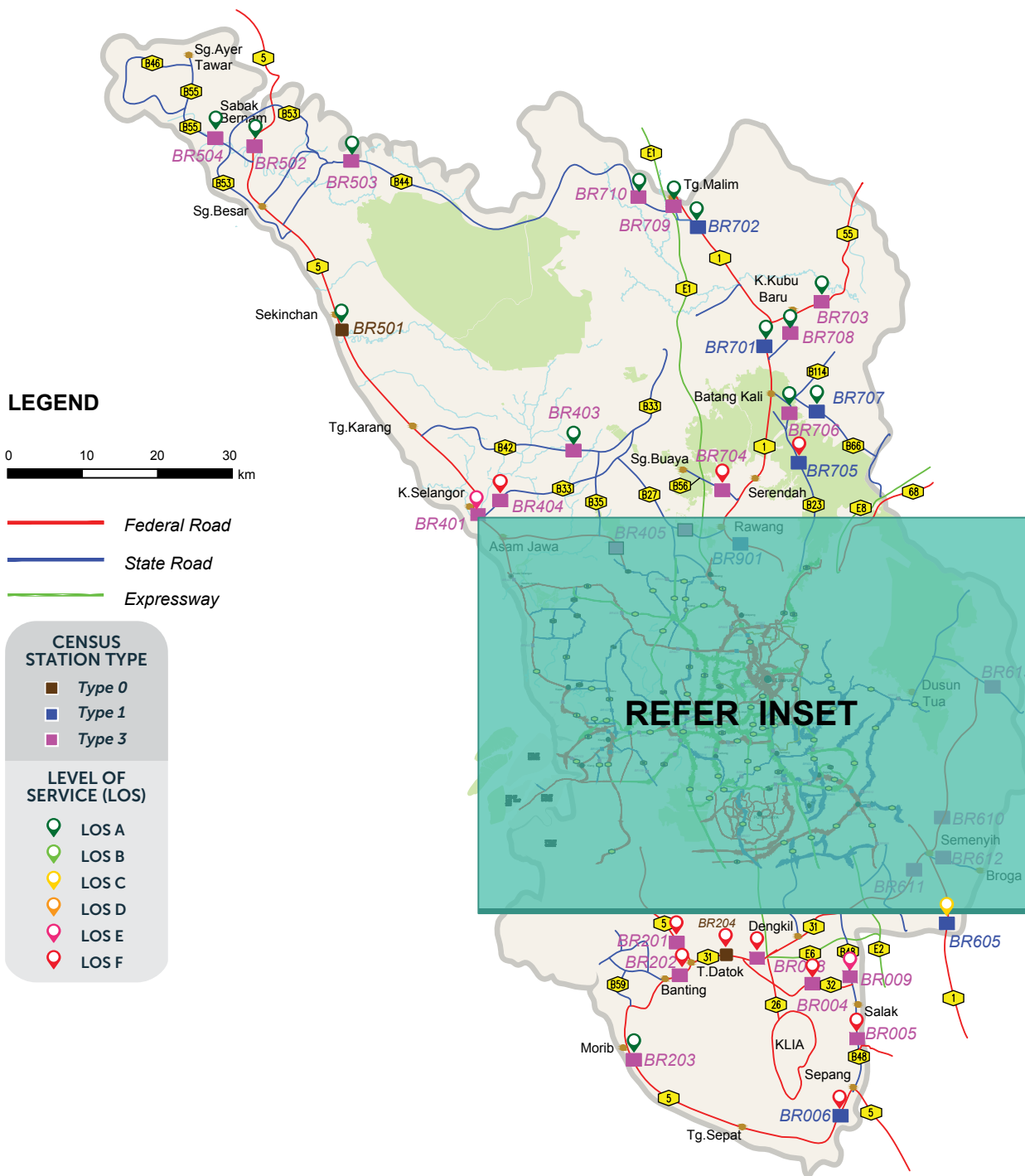
DARUL EHSAN

66 Census Stations  
Road Length : 16,154.28 km\*

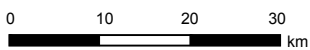
\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **SELANGOR**



## LEGEND



- Federal Road
- State Road
- Expressway

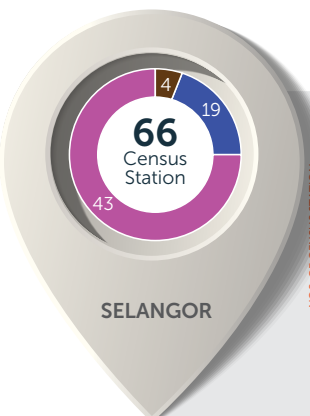
### CENSUS STATION TYPE

- Type 0
- Type 1
- Type 3

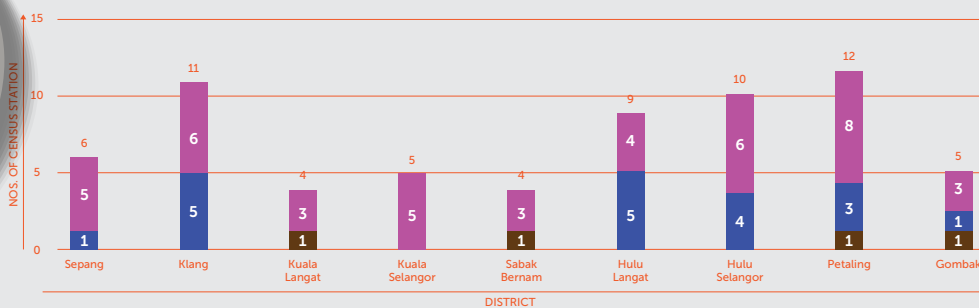
### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

**REFER INSET**

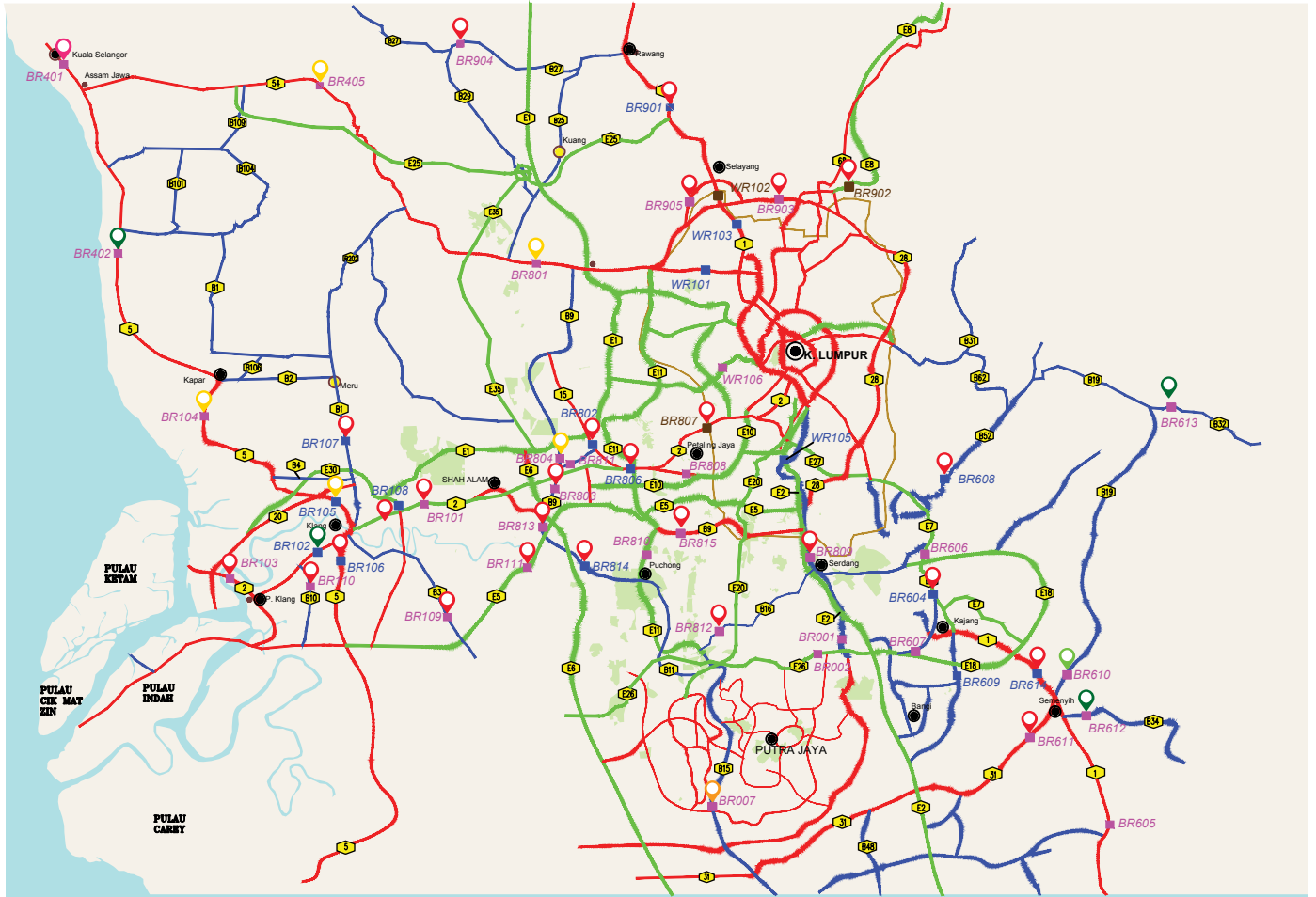


## DISTRIBUTION OF SURVEY STATIONS

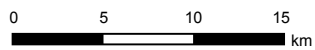


# TRAFFIC CENSUS STATION MAP

STATE : **SELANGOR**



## LEGEND



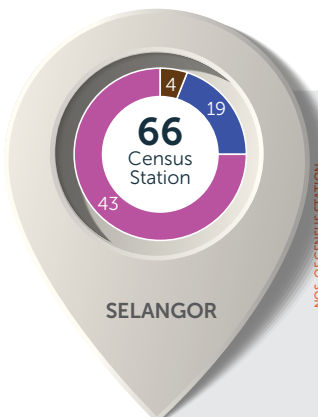
- Federal Road
- State Road
- Expressway

## CENSUS STATION TYPE

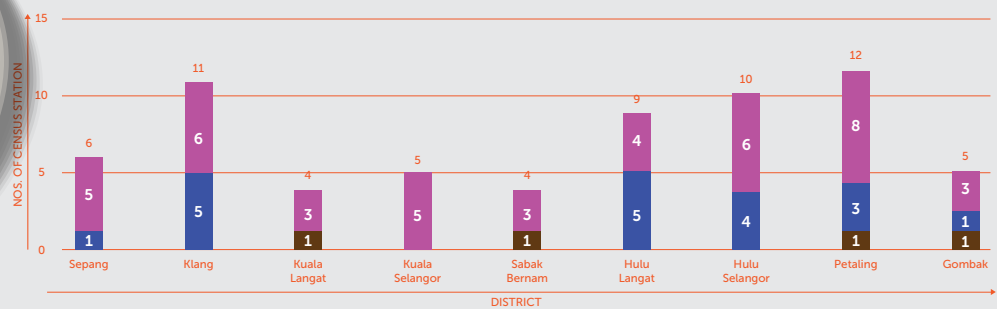
- Type 0
- Type 1
- Type 3

## LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SELANGOR**

## District : SEPANG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
BR004	3	32	4.0	Salak Tinggi - Bukit Changgang - Banting (IKTBN Sepang)	2.8058889	101.7185000	K 2-2
BR005	3	B48	5.0	Kuala Lumpur - Salak - Sepang (Labu Johnson)	2.7380000	101.7554167	T 1-1
BR006	1	5	50.0	Klang - Sepang (Batu Dua)	2.6642778	101.7313889	T 1-1
BR007	3	29	42.0	KLIA - Putrajaya (PICC)	2.8946389	101.6580000	K 3-3
BR008	3	31	16.0	Jln Dengkil - Banting (Plantation)	2.8507500	101.6503611	T 1-1
BR009	3	B48	14.0	Jalan Sepang - Kajang (Taman Rekreasi Pejabat Daerah Sepang)	2.8095556	101.7463333	T 1-1

## District : KLANG

BR101	3	2	12.0	Kuala Lumpur - Klang	3.0571667	101.4710000	K 2-2
BR102	1	2	6.0	Klang - Port Klang (Persiaran Raja Muda Musa)	3.0257778	101.4233056	K 3-3
BR103	3	2	6.0	Jalan Pelabuhan - near Northport	3.0071111	101.3939722	K 2-2
BR104	3	5	12.9	Klang - Kuala Selangor	3.0866667	101.3980278	K 3-3
BR105	1	5	3.2	Klang - Kuala Selangor	3.0611940	101.4732220	K 2-2
BR106	1	5	6.4	Klang - Telok Datok	3.0045278	101.4419444	K 2-2
BR107	1	3217	10.0	Klang - Meru	3.0832222	101.4463889	K 2-2
BR108	1	20	6.0	300m fr junction Federal Highway - North Klang Straits Bypass	3.0615000	101.4734444	K 3-3
BR109	3	190	10.0	Kuala Lumpur - Kg. Batu Enam - Klang Jalan Kebun	3.0228611	101.4816944	T 1-1
BR110	3	3218	3.5	Langat Road - Pandamaran (Pandamaran Road)	3.0056944	101.4099167	T 1-1
BR111	3	190	4.8	K. Lumpur - Puchong - Kg. Batu Enam (Jln Bukit Kemuning)	3.0243889	101.4807500	T 1-1

## District : KUALA LANGAT

BR201	3	5	28.7	Klang - Telok Datok	2.8377500	101.5265000	K 2-2
BR202	3	5	32.2	Klang - Telok Datok-Banting	2.8188611	101.5213611	K 2-2
BR203	3	5	48.3	Klang - Morib-Batu Laut	2.7295833	101.4553611	T 1-1
BR204	0	31	61.2	Kelang - Telok Datok - Morib - Sepang	2.8353611	101.5978056	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SELANGOR**

## District : KUALA SELANGOR

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
BR401	3	5	45.4	Klang - Kuala Selangor	3.3361940 101.2515000	K 2-2
BR402	3	5	29.0	Klang - Kuala Selangor	3.2053610 101.3150830	K 2-2
BR403	3	B42	16.0	Pasir Penambang - Batang Berjuntai (Jalan Raja Musa)	3.4050833 101.3582222	T 1-1
BR404	3	B33	75.0	Kuala Lumpur - Rawang-Kuala Selangor	3.3279722 101.2616944	T 1-1
BR405	3	54	45.0	Kuala Lumpur - Kepong - Kuala Selangor	3.3127778 101.4182500	K 2-2

## District : SABAK BERNAM

BR501	0	5	72.1	Klang - Sabak Bernam	3.4930000 101.1118330	K 2-2
BR502	3	5	106.0	Kuala Lumpur - Kuala Selangor - Sabak	3.7461667 100.9759722	K 2-2
BR503	3	B44	16.1	Jalan Sg. Panjang - Ulu Bernam - Tg. Malim	3.7309167 101.1036667	T 1-1
BR504	3	B55	9.7	Sabak Bernam - Sungai Ayer Tawar (Sungai Ayer Tawar Road)	3.7589720 100.9039720	T 1-1

## District : HULU LANGAT

BR604	1	1	21.7	Kuala Lumpur - Kajang - Telok Datok ( Bt 14 Jln Cheras)	2.9991944 101.7850833	T 1-1
BR605	1	1	41.9	Kuala Lumpur - Seremban	2.8685278 101.8698889	T 1-1
BR608	1	B52	3.0	Kuala Lumpur - Cheras-Kampung Ulu Lui (Sg.Serai)	3.0887500 101.7923056	T 1-1
BR609	1	B17	11.6	Kuala Lumpur - Kajang - Telok Datok (Jln. Reko)	2.9683056 101.7897500	T 1-1
BR610	3	B19	1.0	Kuala Lumpur - Ulu Semenyih	2.9534167 101.8460556	T 1-1
BR611	3	31	47.0	Kuala Lumpur - Semenyih - Bangi (1km from Semenyih)	2.9374722 101.8358611	T 1-1
BR612	3	B34	1.0	Kuala Lumpur - Semenyih - Broga	2.9455833 101.8520833	K 2-2
BR613	3	B32	34.0	Kajang - Genting Peras - Jelebu	3.1339722 101.9161389	T 1-1
BR614	1	1		Kajang - Mantin	2.9582778 101.8410278	K 2-2

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SELANGOR**

## District : HULU SELANGOR

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
BR701	1	1	58.6	Kuala Lumpur - Kuala Kubu Bahru Junction (south of junction)	3.5565830	101.6426670	K 2-2
BR702	1	1	76.3	Kuala Lumpur - Tanjong Malim	3.6592222	101.5406389	K 2-2
BR703	3	55	61.0	Kuala Lumpur - Kuala Kubu Baru - Gap	3.5622778	101.6676389	T 1-1
BR704	3	B56	1.0	Simpang Sg. Choh - Sg. Buaya	3.3565278	101.5763889	T 1-1
BR705	1	B23	26.5	Hulu Gombak - Hulu Yam Baru	3.4091944	101.6632778	T 1-1
BR706	3	B113	3.0	Batang Kali - Hulu Yam	3.4622500	101.6563611	K 2-2
BR707	1	B66	9.0	Jalan Hulu Kali - Genting Highland	3.4285833	101.7294722	T 1-1
BR708	3	1	56.0	Jalan Ampang Pechah - Kg. Bukit Raja	3.5370370	101.6551780	T 1-1
BR709	3	B44	5.0	Jalan Hulu Bernam - Tanjong Malim	3.6694160	101.5159520	T 1-1
BR710	3	B44	75.3	Jalan Hulu Bernam - Sungai Besar	3.6714444	101.5171667	T 1-1

## District : PETALING

BR801	3	54	39.2	Kuala Lumpur - Kuala Selangor	3.2066310	101.5620247	K 2-2
BR802	1	15	17.7	Kuala Lumpur - Subang Airport	3.1005030	101.5885100	T 1-1
BR803	3	3214	33.0	Kuala Lumpur - Batu Tiga - Puchong	3.0675880	101.5560910	K 2-2
BR804	3	B9	1.6	Batu Tiga - Damansara Road	3.0851210	101.5545700	K 3-3
BR806	1	2	12.1	Kuala Lumpur - Klang	3.0835180	101.6069030	K 3-3
BR807	0	2	8.1	Kuala Lumpur - Petaling Jaya (Fed. H'way-180m east of EPF bldg)	3.1119700	101.6561250	K 3-3
BR809	3	B13	16.1	Kuala Lumpur - Sungai Besi (Sungai Besi Road)	3.0485890	101.7069980	K 3-3
BR811	3	3213	0.8	Jalan Bt. 3 (Opposite Balai Polis Bt. 3)	3.0761900	101.5572320	T 1-1
BR812	3	B16	22.5	KL - Puchong (km 12 to Sri Kembangan/km 4 to Puchong)	2.9901880	101.6205920	K 3-3
BR813	3	B7	9.5	Kuala Lumpur - Puchong-Shah Alam	3.0302030	101.5749370	K 3-3
BR814	1	B7	11.0	Kuala Lumpur - Puchong-Shah Alam	3.0319380	101.5693160	K 2-2
BR815	3	207	10.0	Kuala Lumpur - Bukit Jalil - Puchong	3.0503060	101.6442150	K 2-2

## District : GOMBAK

BR901	1	1	415.5	Kuala Lumpur - Ipoh	3.3041667	101.5952778	T 1-1
BR902	0	28	14.1	Jalan Lingkaran Tengah 2 (MRR2)	3.2406944	101.7178056	K 3-3
BR903	3	28	60.0	Jalan Lingkaran Tengah 2 (MRR2)	3.2352778	101.6850000	K 2-2
BR904	3	B27	39.1	Rawang - Kuala Selangor	3.3191667	101.5161111	T 1-1
BR905	3	B22	9.9	Selayang - Kepong	3.2272222	101.6377778	K 3-3



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**MARCH 2015**

## District : SEPANG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR004	-	65,573	5,853	0700-0800	62.4	11.7	5.4	4.6	0.5	15.4	100.0
BR005	-	26,624	4,123	0800-0900	67.4	9.6	6.1	4.7	0.7	11.5	100.0
BR006	-	20,982	2,258	1700-1800	61.2	18.3	4.9	1.8	1.0	12.8	100.0
BR007	-	72,631	7,368	1700-1800	79.5	4.8	4.4	2.8	0.9	7.7	100.0
BR008	-	16,848	1,889	0700-0800	66.0	6.8	4.4	4.3	0.4	18.1	100.0
BR009	-	15,456	1,769	1800-1900	66.2	11.0	4.2	0.4	0.3	17.9	100.0

## District : KLANG

BR101	-	139	12,043	1900-2000	81.4	3.8	3.5	1.5	0.8	9.1	100.0
BR102	-	53,838	3,950	1700-1800	72.5	5.2	4.1	1.6	0.5	16.2	100.0
BR103	-	66,159	6,287	1800-1900	45.9	4.0	9.0	20.2	0.9	20.0	100.0
BR104	-	48,752	4,804	1700-1800	61.0	5.6	9.4	7.7	0.7	15.6	100.0
BR105	-	44,303	3,733	1700-1800	71.3	5.3	6.5	1.4	0.5	15.1	100.0
BR106	-	102,912	9,600	1800-1900	86.5	2.8	2.1	0.4	0.2	7.9	100.0
BR107	-	87,344	6,817	0800-0900	62.9	8.0	6.8	2.2	0.6	19.5	100.0
BR108	-	123,950	11,458	1800-1900	75.4	2.6	4.7	2.6	0.3	14.5	100.0
BR109	-	36,493	3,668	1700-1800	57.1	6.3	10.6	3.3	1.8	20.9	100.0
BR110	-	43,252	3,768	0700-0800	62.4	6.3	7.7	3.6	0.5	19.6	100.0
BR111	-	34,158	3,589	1900-2000	57.7	5.8	12.9	4.7	1.4	17.6	100.0

## District : KUALA LANGAT

BR201	-	52,990	7,180	1600-1700	62.5	6.1	4.2	5.1	0.6	21.4	100.0
BR202	-	68,045	6,915	1700-1800	74.4	7.0	2.2	1.5	0.7	14.3	100.0
BR203	-	7,119	687	1700-1800	59.9	7.9	8.0	2.4	0.8	21.2	100.0
BR204	32,575	28,563	3,325	1800-1900	61.1	9.6	4.9	8.3	0.5	15.6	100.0

## District : KUALA SELANGOR

BR401	-	44,592	4,612	0700-0800	51.4	13.2	9.5	8.1	1.3	16.5	100.0
BR402	-	19,138	1,740	0700-0800	58.8	7.7	8.4	8.1	0.7	16.2	100.0
BR403	-	2,762	248	0700-0800	35.0	11.9	21.5	8.7	0.1	22.8	100.0
BR404	-	22,589	1,935	1600-1700	66.2	5.9	4.2	0.7	0.7	22.4	100.0
BR405	-	23,682	3,322	0700-0800	44.5	15.3	12.8	9.2	0.7	17.6	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**MARCH 2015**

## District : SABAK BERNAM

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR501	26,890	22,054	1,649	1800-1900	66.0	8.7	8.1	5.2	0.3	11.7	100.0
BR502	-	17,488	1,495	0700-0800	47.5	13.6	8.5	12.8	0.3	17.4	100.0
BR503	-	3,784	387	1700-1800	48.9	4.1	6.3	5.3	0.0	35.4	100.0
BR504	-	7,709	815	1700-1800	65.5	6.7	5.7	0.5	0.1	21.6	100.0

## District : HULU LANGAT

BR604	-	49,231	3,752	1400-1500	70.0	7.4	3.1	0.6	0.5	18.4	100.0
BR605	-	12,902	1,237	0700-0800	55.1	11.7	5.9	4.7	0.5	22.0	100.0
BR608	-	30,355	2,568	0700-0800	50.1	14.7	7.5	2.8	0.7	24.3	100.0
BR609	-	53,376	4,138	0700-0800	64.2	6.5	3.2	0.7	1.1	24.3	100.0
BR610	-	7,486	716	0700-0800	41.6	15.6	14.9	6.5	0.8	20.5	100.0
BR611	-	20,840	2,284	0600-0700	55.1	10.2	6.3	5.8	0.5	22.1	100.0
BR612	-	17,463	1,560	1800-1900	63.7	11.5	5.9	1.2	0.6	17.2	100.0
BR613	-	607	67	0700-0800	33.6	18.1	15.5	10.7	0.2	21.9	100.0
BR614	-	90,795	8,554	1800-1900	57.3	12.2	7.4	1.5	0.4	21.2	100.0

## District : HULU SELANGOR

BR701	-	17,195	1,526	0700-0800	74.9	5.1	5.1	3.2	0.8	10.9	100.0
BR702	-	12,927	1,172	1700-1800	59.2	13.1	8.1	2.9	0.7	16.0	100.0
BR703	-	2,032	278	1200-1300	48.6	10.2	7.6	0.2	0.2	33.1	100.0
BR704	-	19,740	2,027	1800-1900	57.2	6.1	7.9	2.9	1.3	24.6	100.0
BR705	-	7,235	658	1800-1900	57.7	13.8	5.2	0.4	0.1	22.8	100.0
BR706	-	11,406	1,032	1000-1100	64.1	9.6	4.7	1.1	1.2	19.3	100.0
BR707	-	5,781	555	1700-1800	62.0	8.2	4.6	2.0	1.2	22.1	100.0
BR708	-	7,789	781	1800-1900	61.7	13.7	4.0	0.1	0.7	19.7	100.0
BR709	-	1,328	140	1700-1800	34.6	13.4	10.2	1.1	0.8	39.8	100.0
BR710	-	7,679	684	1400-1500	52.6	13.2	6.3	0.6	1.3	26.1	100.0



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**MARCH 2015**

## District : PETALING

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR801	-	54,348	4,298	1900-2000	52.3	2.9	1.7	1.5	0.1	41.5	100.0
BR802	-	177,751	14,088	0800-0900	87.2	4.1	0.7	0.4	0.1	7.5	100.0
BR803	-	127,877	11,290	1700-1800	76.0	8.0	4.7	1.1	0.3	9.9	100.0
BR804	-	53,454	5,239	1500-1600	63.0	1.4	0.5	0.3	0.6	34.2	100.0
BR806	-	219,507	18,021	1500-1600	71.1	8.2	6.2	0.8	0.4	13.1	100.0
BR807	428,555	374,948	46,030	1800-1900	83.1	2.8	2.4	0.3	0.3	11.0	100.0
BR809	-	185,225	17,125	0900-1000	88.8	3.3	3.2	0.3	0.3	4.1	100.0
BR811	-	22,014	4,278	0800-0900	74.0	4.7	4.9	0.3	0.1	15.9	100.0
BR812	-	173,457	16,991	1900-2000	42.1	25.4	9.2	1.7	0.2	21.4	100.0
BR813	-	106,812	7,957	1100-1200	60.6	6.8	5.5	4.7	0.3	22.1	100.0
BR814	-	155,816	14,398	0900-1000	51.1	23.2	4.3	0.3	0.1	21.0	100.0
BR815	-	81,041	7,920	1600-1700	68.8	11.0	5.7	0.7	0.3	13.4	100.0

## District : GOMBAK

BR901	-	77,834	9,339	0700-0800	58.9	8.0	10.0	2.1	0.4	20.7	100.0
BR902	147,559	115,747	10,047	1800-1900	78.2	7.7	4.4	1.0	0.7	8.1	100.0
BR903	-	86,247	11,490	0700-0800	69.0	12.3	3.7	0.4	0.2	14.4	100.0
BR904	-	14,603	1,409	0700-0800	37.4	16.7	8.8	8.9	1.1	27.1	100.0
BR905	-	101,617	14,373	1300-1400	65.7	6.6	3.3	1.9	0.5	21.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**SEPTEMBER 2015**

## District : SEPANG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR004	-	71,582	7,187	1700-1800	56.9	14.1	7.4	4.0	0.6	17.1	100.0
BR005	-	23,564	2,216	0800-0900	59.3	14.0	6.4	5.8	0.8	13.7	100.0
BR006	-	23,420	2,203	1900-2000	62.9	18.1	4.8	1.9	0.8	11.4	100.0
BR007	-	60,065	7,291	1800-1900	74.4	9.5	5.7	2.1	0.9	7.5	100.0
BR008	-	17,021	1,752	1800-1900	67.5	7.1	5.4	4.6	0.4	15.0	100.0
BR009	-	13,047	1,524	0700-0800	70.2	10.9	3.1	1.0	0.2	14.7	100.0

## District : KLANG

BR101	-	141,528	11,671	1300-1400	77.6	4.0	4.0	1.4	0.7	12.4	100.0
BR102	-	45,573	3,493	1700-1800	71.8	5.6	4.1	1.7	0.5	16.3	100.0
BR103	-	89,785	13,244	0700-0800	44.7	4.2	8.4	18.2	0.8	23.6	100.0
BR104	-	52,797	5,999	0700-0800	62.7	4.2	9.3	6.8	0.4	16.7	100.0
BR105	-	38,812	3,584	1800-1900	71.4	6.3	5.1	1.0	0.6	15.6	100.0
BR106	-	91,629	8,106	1800-1900	84.7	4.2	2.6	0.4	0.3	7.8	100.0
BR107	-	86,467	7,170	1800-1900	63.9	7.2	6.1	1.7	0.6	20.4	100.0
BR108	-	138,745	11,807	1800-1900	72.9	3.1	3.8	2.2	0.2	17.8	100.0
BR109	-	34,050	3,508	0700-0800	63.9	5.9	8.2	2.7	1.0	18.4	100.0
BR110	-	44,659	4,498	1300-1400	63.6	4.8	7.2	3.1	0.4	20.8	100.0
BR111	-	35,029	3,765	0700-0800	52.2	5.5	12.4	4.7	1.5	23.7	100.0

## District : KUALA LANGAT

BR201	-	47,012	4,485	0700-0800	64.1	8.9	6.0	5.6	0.5	14.9	100.0
BR202	-	62,947	6,033	0800-0900	60.7	6.9	4.3	1.9	0.7	25.5	100.0
BR203	-	8,661	689	1700-1800	58.0	8.8	8.4	3.7	0.4	20.8	100.0
BR204	37,432	33,834	3,470	0800-0900	55.7	15.8	5.9	6.3	0.4	15.8	100.0

## District : KUALA SELANGOR

BR401	-	30,800	2,728	0700-0800	63.4	9.1	6.3	3.1	0.8	17.3	100.0
BR402	-	18,108	1,533	1700-1800	56.7	7.9	9.1	8.5	0.8	16.9	100.0
BR403	-	3,556	402	1000-1100	46.2	9.1	13.2	7.5	0.0	24.0	100.0
BR404	-	24,833	2,650	1800-1900	64.7	6.7	4.4	0.6	0.4	23.1	100.0
BR405	-	19,540	2,065	0700-0800	47.5	14.7	11.1	5.4	0.6	20.6	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**SEPTEMBER 2015**

## District : SABAK BERNAM

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR501	22,735	19,621	1,596	1700-1800	65.1	8.0	8.7	5.5	0.4	12.3	100.0
BR502	-	16,788	1,621	0700-0800	53.5	9.9	10.0	11.5	0.3	14.9	100.0
BR503	-	2,794	276	0700-0800	46.9	8.3	6.5	1.3	0.0	36.9	100.0
BR504	-	6,870	663	0700-0800	67.7	5.4	6.4	1.1	0.1	19.3	100.0

## District : HULU LANGAT

BR604	-	48,242	3,484	1800-1900	69.5	7.0	3.0	0.7	0.5	19.4	100.0
BR605	-	12,027	1,040	0700-0800	54.7	11.9	6.2	5.3	0.6	21.5	100.0
BR608	-	30,392	2,294	0700-0800	45.8	13.8	6.1	2.6	0.6	31.0	100.0
BR609	-	52,663	6,071	1600-1700	63.3	5.5	2.9	0.6	1.2	26.5	100.0
BR610	-	10,693	899	1800-1900	43.3	13.6	12.3	7.2	0.5	23.1	100.0
BR611	-	17,326	2,085	1800-1900	54.1	13.9	6.8	4.2	0.7	20.4	100.0
BR612	-	15,265	1,487	1700-1800	59.8	12.5	6.3	2.1	0.8	18.6	100.0
BR613	-	672	57	1500-1600	33.3	18.8	9.1	16.2	0.0	22.6	100.0
BR614	-	77,754	7,560	1700-1800	55.8	12.5	6.9	1.6	0.5	22.7	100.0

## District : HULU SELANGOR

BR701	-	13,879	1,163	1700-1800	65.8	11.5	7.2	4.6	1.0	9.9	100.0
BR702	-	11,719	1,006	0700-0800	66.6	9.0	6.8	2.6	0.6	14.4	100.0
BR703	-	1,948	214	1300-1400	53.4	5.4	3.5	0.5	0.4	36.8	100.0
BR704	-	25,777	2,285	2000-2100	55.9	8.6	5.8	2.6	1.2	25.8	100.0
BR705	-	8,835	897	1800-1900	65.4	6.5	4.4	0.9	0.3	22.6	100.0
BR706	-	9,782	945	1900-2000	68.0	9.6	5.0	1.3	1.8	14.3	100.0
BR707	-	6,206	536	1700-1800	54.2	15.5	5.2	2.0	0.9	22.1	100.0
BR708	-	5,794	568	1200-1300	65.8	11.4	6.1	0.3	1.4	15.1	100.0
BR709	-	7,791	770	1800-1900	59.5	9.2	6.1	1.0	1.8	22.5	100.0
BR710	-	1,391	133	1300-1400	40.2	10.1	7.0	1.7	0.9	40.2	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SELANGOR**

**SEPTEMBER 2015**

## District : PETALING

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
BR801	-	51,742	3,760	1700-1800	66.9	7.4	2.5	1.7	0.2	21.3	100.0
BR802	-	173,931	12,716	1800-1900	88.5	1.8	0.6	0.4	0.1	8.6	100.0
BR803	-	113,981	13,640	0700-0800	62.3	5.8	4.1	2.4	0.3	25.0	100.0
BR804	-	97,347	8,853	1700-1800	60.4	11.4	7.1	1.2	0.8	19.1	100.0
BR806	-	219,760	16,337	0700-0800	70.7	5.1	4.4	1.7	0.6	17.6	100.0
BR807	473,521	391,210	47,779	0800-0900	67.3	13.4	2.5	0.4	0.3	16.0	100.0
BR809	-	216,860	18,092	1000-1100	85.8	3.3	3.1	0.2	0.3	7.4	100.0
BR811	-	31,195	4,066	1800-1900	76.2	4.4	4.8	0.1	0.0	14.5	100.0
BR812	-	95,874	9,920	1400-1500	69.2	8.0	5.8	5.7	0.2	11.1	100.0
BR813	-	196,452	15,551	1700-1800	83.9	6.3	3.7	0.5	0.2	5.4	100.0
BR814	-	62,126	5,488	1600-1700	62.9	11.2	2.1	1.1	0.2	22.5	100.0
BR815	-	262,217	20,520	1700-1800	59.1	30.8	3.7	0.3	0.3	5.9	100.0

## District : GOMBAK

BR901	-	72,895	6,044	1800-1900	61.1	14.2	7.0	1.1	0.5	16.1	100.0
BR902	173,371	143,411	11,481	1800-1900	77.3	7.5	4.7	1.5	0.5	8.6	100.0
BR903	-	218,991	17,328	1700-1800	68.4	10.5	5.4	1.6	0.3	13.9	100.0
BR904	-	16,784	1,410	0800-0900	49.7	19.7	10.6	3.8	1.2	15.1	100.0
BR905	-	76,463	6,078	1900-2000	56.6	17.3	10.6	0.3	0.1	15.1	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SELANGOR**

**AVERAGE 2015**

## District : SEPANG

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
BR004	68,578	6,520	59.7	12.9	6.4	4.3	0.6	16.2	100%	F	R
BR005	25,094	3,170	63.3	11.8	6.3	5.3	0.7	12.6	100%	F	R
BR006	22,201	2,230	62.1	18.2	4.9	1.8	0.9	12.1	100%	F	R
BR007	66,348	7,330	76.9	7.1	5.0	2.4	0.9	7.6	100%	D	2032
BR008	33,869	1,821	66.8	7.0	4.9	4.4	0.4	16.5	100%	F	R
BR009	28,503	1,647	68.2	11.0	3.6	0.7	0.2	16.3	100%	E	2016

## District : KLANG

BR101	140,640	11,857	79.5	3.9	3.7	1.4	0.8	10.7	100%	F	R
BR102	49,706	3,722	72.2	5.4	4.1	1.6	0.5	16.2	100%	A	2039
BR103	77,972	9,766	45.3	4.1	8.7	19.2	0.9	21.8	100%	F	R
BR104	50,775	5,402	61.8	4.9	9.3	7.2	0.6	16.1	100%	C	2029
BR105	41,557	3,659	71.3	5.8	5.8	1.2	0.6	15.3	100%	C	2026
BR106	97,270	8,853	85.6	3.5	2.3	0.4	0.2	7.9	100%	F	R
BR107	86,905	6,994	63.4	7.6	6.5	2.0	0.6	20.0	100%	F	R
BR108	131,348	11,632	74.1	2.9	4.2	2.4	0.2	16.1	100%	F	R
BR109	35,272	3,588	60.5	6.1	9.4	3.0	1.4	19.6	100%	F	R
BR110	43,956	4,133	63.0	5.5	7.5	3.4	0.5	20.2	100%	F	R
BR111	34,594	3,677	55.0	5.6	12.6	4.7	1.4	20.7	100%	F	R

## District : KUALA LANGAT

BR201	50,001	5,833	63.3	7.5	5.1	5.4	0.5	18.2	100%	F	R
BR202	65,496	6,474	67.5	7.0	3.2	1.7	0.7	19.9	100%	F	R
BR203	7,890	688	58.9	8.3	8.2	3.0	0.6	21.0	100%	A	2052
BR204	31,198	3,397	58.4	12.7	5.4	7.3	0.5	15.7	100%	F	R

## District : KUALA SELANGOR

BR401	37,696	3,670	57.4	11.1	7.9	5.6	1.0	16.9	100%	E	2022
BR402	18,623	1,637	57.7	7.8	8.8	8.3	0.8	16.5	100%	A	2043
BR403	3,159	325	40.6	10.5	17.4	8.1	0.1	23.4	100%	A	2056
BR404	23,711	2,293	65.4	6.3	4.3	0.6	0.6	22.7	100%	F	R
BR405	21,611	2,694	46.0	15.0	12.0	7.3	0.6	19.1	100%	C	2042

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SELANGOR**

**AVERAGE 2015**

## District : SABAK BERNAM

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
BR501	20,837	1,623	65.6	8.3	8.4	5.3	0.4	12.0	100%	A	2048
BR502	17,138	1,558	50.5	11.7	9.3	12.2	0.3	16.1	100%	A	2040
BR503	3,289	332	47.9	6.2	6.4	3.3	0.0	36.2	100%	A	-
BR504	7,290	739	66.6	6.0	6.0	0.8	0.1	20.4	100%	A	2027

## District : HULU LANGAT

BR604	48,736	3,618	69.7	7.2	3.1	0.6	0.5	18.9	100%	F	R
BR605	12,465	1,139	54.9	11.8	6.0	5.0	0.5	21.8	100%	C	-
BR608	30,374	2,432	48.0	14.2	6.8	2.7	0.7	27.7	100%	F	R
BR609	53,020	5,105	63.7	6.0	3.1	0.7	1.1	25.4	100%	F	R
BR610	9,089	808	42.5	14.6	13.6	6.8	0.7	21.8	100%	B	-
BR611	19,083	2,185	54.6	12.1	6.5	5.0	0.6	21.3	100%	F	R
BR612	16,364	1,524	61.7	12.0	6.1	1.7	0.7	17.9	100%	A	2025
BR613	640	62	33.5	18.4	12.3	13.5	0.1	22.3	100%	A	-
BR614	84,274	8,058	56.6	12.3	7.2	1.6	0.4	22.0	100%	F	R

## District : HULU SELANGOR

BR701	15,538	1,345	70.3	8.3	6.1	3.9	0.9	10.4	100%	A	2041
BR702	12,323	1,089	62.9	11.1	7.4	2.7	0.7	15.2	100%	A	2169
BR703	1,990	246	51.0	7.8	5.6	0.4	0.3	34.9	100%	A	2068
BR704	22,759	2,156	56.6	7.3	6.9	2.8	1.3	25.2	100%	F	R
BR705	8,035	778	61.5	10.1	4.8	0.6	0.2	22.7	100%	A	2057
BR706	10,594	989	66.1	9.6	4.8	1.2	1.5	16.8	100%	A	-
BR707	5,994	546	58.1	11.9	4.9	2.0	1.0	22.1	100%	A	2034
BR708	6,792	675	63.7	12.6	5.1	0.2	1.0	17.4	100%	A	2108
BR709	4,560	455	47.0	11.3	8.2	1.1	1.3	31.2	100%	A	-
BR710	4,535	409	46.4	11.6	6.6	1.2	1.1	33.1	100%	A	2028

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SELANGOR**

**AVERAGE 2015**

## District : PETALING

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
BR801	53,045	4,029	59.6	5.1	2.1	1.6	0.1	31.4	100%	C	-
BR802	175,841	13,403	87.9	3.0	0.6	0.4	0.1	8.0	100%	F	R
BR803	120,929	12,465	69.2	6.9	4.4	1.7	0.3	17.5	100%	F	R
BR804	75,401	7,046	61.7	6.4	3.8	0.7	0.7	26.7	100%	C	2021
BR806	219,634	17,180	70.9	6.7	5.3	1.2	0.5	15.3	100%	F	R
BR807	383,080	46,905	75.2	8.1	2.4	0.4	0.3	13.5	100%	F	R
BR809	201,043	17,609	87.3	3.3	3.1	0.3	0.3	5.8	100%	F	R
BR811	26,605	4,172	75.1	4.5	4.8	0.2	0.1	15.2	100%	F	R
BR812	134,666	13,456	55.6	16.7	7.5	3.7	0.2	16.3	100%	F	R
BR813	151,632	11,754	72.2	6.6	4.6	2.6	0.2	13.7	100%	F	R
BR814	108,972	9,943	57.0	17.2	3.2	0.7	0.1	21.8	100%	F	R
BR815	171,629	14,220	63.9	20.9	4.7	0.5	0.3	9.7	100%	F	R

## District : GOMBAK

BR901	75,365	7,692	60.0	11.1	8.5	1.6	0.4	18.4	100%	F	R
BR902	129,579	10,764	77.7	7.6	4.5	1.2	0.6	8.3	100%	F	R
BR903	152,619	14,409	68.7	11.4	4.5	1.0	0.3	14.2	100%	F	R
BR904	15,694	1,410	43.5	18.2	9.7	6.4	1.1	21.1	100%	F	R
BR905	89,040	10,226	61.2	12.0	7.0	1.1	0.3	18.5	100%	F	R

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **SELANGOR**

## District : SEPANG

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
BR004	34,124	35,867	36,575	44,072	53,252	53,673	51,485	57,682	63,597	68,578	7.9	0.94
BR005	22,052	27,411	21,878	32,971	24,946	28,140	29,373	32,280	36,159	25,094	2.9	0.27
BR006	12,174	13,735	14,621	15,838	17,256	19,603	17,011	26,642	20,846	22,201	7.1	0.81
BR007	-	-	-	-	68,166	80,875	64,854	91,522	87,554	66,348	1.3	0.03
BR008	-	-	-	-	17,904	16,655	33,969	33,908	31,675	33,869	14.6	0.64
BR009	-	-	-	-	14,750	13,561	23,471	30,621	27,566	28,503	16.2	0.74

## District : KLANG

BR101	139,732	123,437	94,591	104,201	103,515	91,005	128,930	142,038	124,226	140,640	1.6	0.08
BR102	35,132	42,452	47,817	46,690	52,901	53,983	57,835	56,513	52,563	49,706	3.7	0.56
BR103	100,782	71,212	55,135	71,532	66,090	71,297	68,957	65,872	55,881	77,972	-1.9	0.12
BR104	42,422	35,940	59,230	52,893	53,429	56,127	56,044	52,446	45,270	50,774	1.7	0.12
BR105	33,878	32,363	38,562	41,338	44,030	46,574	45,911	46,587	39,623	41,558	2.8	0.43
BR106	65,782	63,473	76,439	79,057	94,404	118,734	101,095	96,518	103,959	97,271	5.5	0.66
BR107	74,325	73,095	72,095	91,094	90,918	89,381	94,676	94,351	111,139	86,906	3.5	0.60
BR108	109,893	115,023	129,408	122,468	141,121	135,678	140,780	143,223	136,424	131,348	2.2	0.56
BR109	37,916	39,311	37,321	36,315	32,174	34,501	35,025	37,540	39,440	35,272	-0.4	0.03
BR110	37,946	37,081	39,130	40,798	39,588	42,084	43,890	44,564	49,584	43,956	2.6	0.80
BR111	41,899	37,938	40,515	47,543	40,677	44,995	38,626	41,693	38,891	34,594	-1.2	0.16

## District : KUALA LANGAT

BR201	38,152	37,772	38,597	41,048	41,443	48,678	35,126	37,352	44,922	50,001	1.9	0.24
BR202	61,456	56,532	52,459	55,814	52,429	56,444	53,808	64,218	55,501	65,496	0.9	0.11
BR203	6,709	6,324	6,711	7,023	7,101	6,852	7,128	7,777	7,740	7,890	2.2	0.83
BR204	24,064	25,319	26,203	27,159	29,916	29,299	32,117	31,669	29,535	31,199	2.9	0.79

## District : KUALA SELANGOR

BR401	30,750	35,745	39,750	43,210	34,266	35,376	34,238	35,484	46,516	37,696	1.5	0.14
BR402	15,736	18,657	16,825	16,866	16,133	16,686	19,872	22,195	23,604	18,623	3.1	0.46
BR403	2,338	2,789	2,554	2,751	3,379	3,126	3,438	3,110	3,154	3,159	3.1	0.57
BR404	10,520	9,815	11,377	13,014	13,263	12,848	14,132	12,750	19,426	23,711	7.8	0.77
BR405	21,286	20,631	19,332	20,938	22,822	23,003	23,648	21,278	22,618	21,611	1.0	0.24



# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : SELANGOR

### District : SABAK BERNAM

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
BR501	17,454	18,224	17,354	19,773	20,466	21,743	23,370	22,174	22,443	20,838	2.9	0.69
BR502	12,935	12,118	12,676	16,100	15,806	16,081	15,892	15,046	16,160	17,138	3.3	0.65
BR503	3,821	3,614	3,666	3,101	2,893	2,849	2,453	2,486	2,468	3,289	-4.0	0.52
BR504	5,385	4,665	2,516	4,671	7,330	7,664	7,410	6,649	7,421	7,290	7.4	0.41

### District : HULU LANGAT

BR604	56,808	42,272	57,286	58,929	56,609	57,591	53,689	59,023	54,222	48,737	0.2	0.00
BR605	14,513	14,178	13,538	13,960	11,834	11,927	11,947	11,341	11,999	12,465	-2.4	0.63
BR608	40,380	38,656	37,338	38,264	33,086	28,098	27,617	27,877	28,572	30,374	-4.4	0.75
BR609	37,839	30,474	41,555	40,369	50,648	54,987	62,314	56,205	53,977	53,020	6.0	0.67
BR610	10,688	12,805	15,335	6,815	11,424	12,860	12,222	11,524	11,120	9,090	-1.2	0.03
BR611	5,784	6,538	9,051	10,155	15,392	14,877	16,206	18,778	17,554	19,083	13.7	0.88
BR612	5,698	5,913	5,858	7,864	10,737	11,973	13,654	15,346	16,728	16,364	14.2	0.94
BR613	1,080	906	924	972	789	830	691	488	602	640	-7.1	0.76
BR614	35,666	36,043	62,612	63,914	65,123	66,174	70,499	79,801	83,329	84,275	9.2	0.80

### District : HULU SELANGOR

BR701	9,896	9,723	12,307	13,209	18,293	13,430	13,320	15,082	15,022	15,538	4.8	0.54
BR702	11,257	12,476	13,464	13,308	14,827	12,429	10,994	12,624	13,556	12,323	0.2	0.00
BR703	1,428	1,383	986	1,134	1,123	1,073	1,702	1,267	1,572	1,990	3.8	0.27
BR704	19,388	19,665	17,387	16,508	10,307	26,689	23,697	16,769	17,282	22,758	1.4	0.03
BR705	7,203	8,326	6,041	7,186	8,785	8,147	8,172	8,240	8,836	8,035	2.0	0.27
BR706	12,194	11,404	9,985	10,764	8,297	10,525	12,996	12,144	9,824	10,594	-0.3	0.01
BR707	3,836	4,674	5,336	4,228	4,504	5,047	7,131	6,677	7,405	5,994	6.1	0.65
BR708	8,788	7,209	7,599	7,287	6,928	7,951	7,211	8,414	9,286	6,792	0.0	0.00
BR709	10,794	8,215	8,837	8,433	7,189	8,276	9,591	6,126	7,308	4,560	-6.0	0.55
BR710	2,254	1,010	909	946	807	1,248	1,410	5,308	1,271	4,535	11.1	0.25

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **SELANGOR**

## District : PETALING

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
BR801	83,328	88,809	131,808	178,059	206,864	207,643	146,240	156,700	119,306	53,045	-1.0	0.01
BR802	72,688	71,927	89,164	80,427	95,650	142,062	150,838	176,171	228,163	175,841	13.2	0.89
BR803	34,172	63,989	72,350	91,091	94,410	101,892	109,350	140,230	114,847	120,929	11.8	0.76
BR804	60,021	71,940	100,452	102,542	142,364	68,660	130,436	128,947	113,280	75,400	3.9	0.15
BR806	265,787	224,828	250,359	292,856	274,278	281,803	280,347	242,844	249,898	219,634	-0.7	0.05
BR807	353,438	454,874	394,821	337,370	369,479	313,431	349,936	348,056	357,032	383,080	-1.0	0.09
BR809	123,962	238,130	81,330	172,931	158,945	157,546	203,738	163,442	190,774	201,042	4.1	0.17
BR811	3,608	9,554	12,368	15,865	17,487	18,609	16,372	20,524	19,036	26,604	15.4	0.70
BR812	115,106	194,263	189,045	108,030	106,137	129,074	102,648	149,788	100,944	134,666	-2.6	0.10
BR813	85,066	83,556	107,642	121,609	91,437	122,191	221,494	72,274	102,022	151,632	4.1	0.14
BR814	68,540	67,472	68,934	82,000	78,876	60,675	112,538	98,459	94,404	108,972	5.4	0.57
BR815	128,236	112,122	112,600	65,762	133,701	109,705	133,308	167,136	136,854	171,629	4.8	0.29

## District : GOMBAK

BR901	74,016	73,100	69,161	70,271	85,300	82,766	83,884	81,958	66,189	75,365	0.5	0.03
BR902	141,362	159,324	137,870	150,213	129,345	144,334	151,486	147,449	144,308	129,579	-0.6	0.08
BR903	161,988	50,963	62,931	62,126	77,375	139,717	93,510	78,087	84,126	152,619	3.6	0.07
BR904	12,604	15,546	13,038	15,214	16,004	13,897	15,104	14,794	30,382	15,694	4.3	0.29
BR905	134,310	148,278	192,982	150,585	164,292	276,234	271,288	242,876	263,360	89,040	2.3	0.03

# STATISTIC FOR YEAR 2015

STATE : **SELANGOR**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

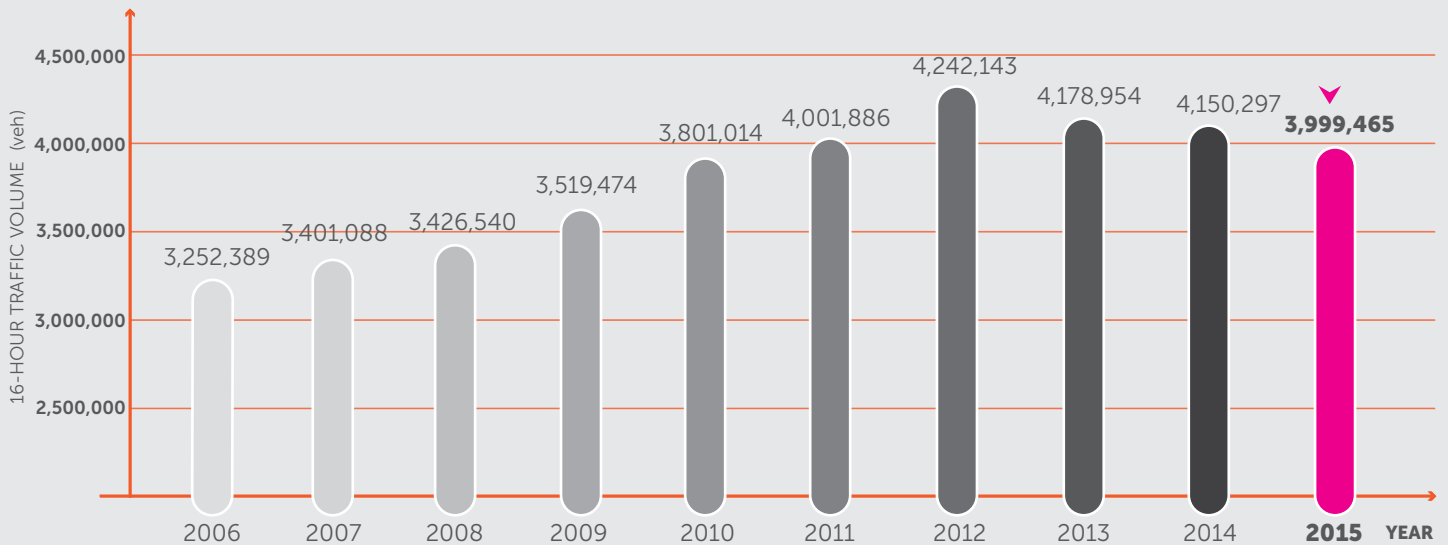


Figure 2.5-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Selangor



There are 66 census stations in Selangor. The 16-hour traffic volume documented in year 2015 has seen decrease of 150,832 vehicles which is 3.63% from 2014. The pattern of 16-hour traffic volume from 2006 to 2012 shows steady growth but the last three years the traffic volume was decrease.

**-3.63%**  
DECREASED FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

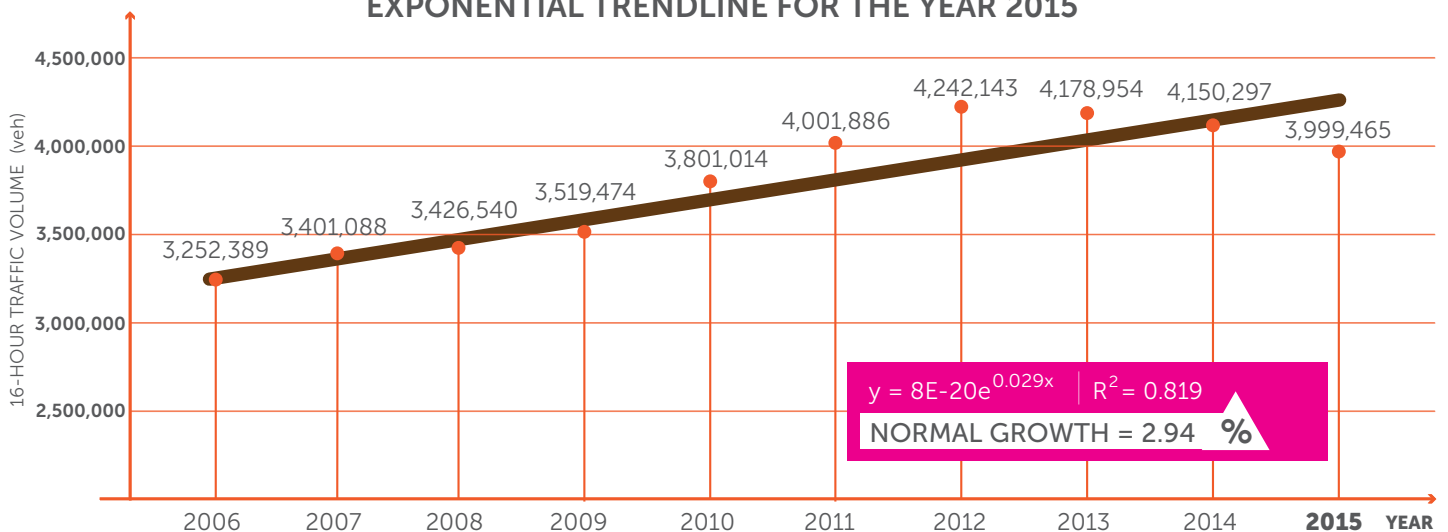
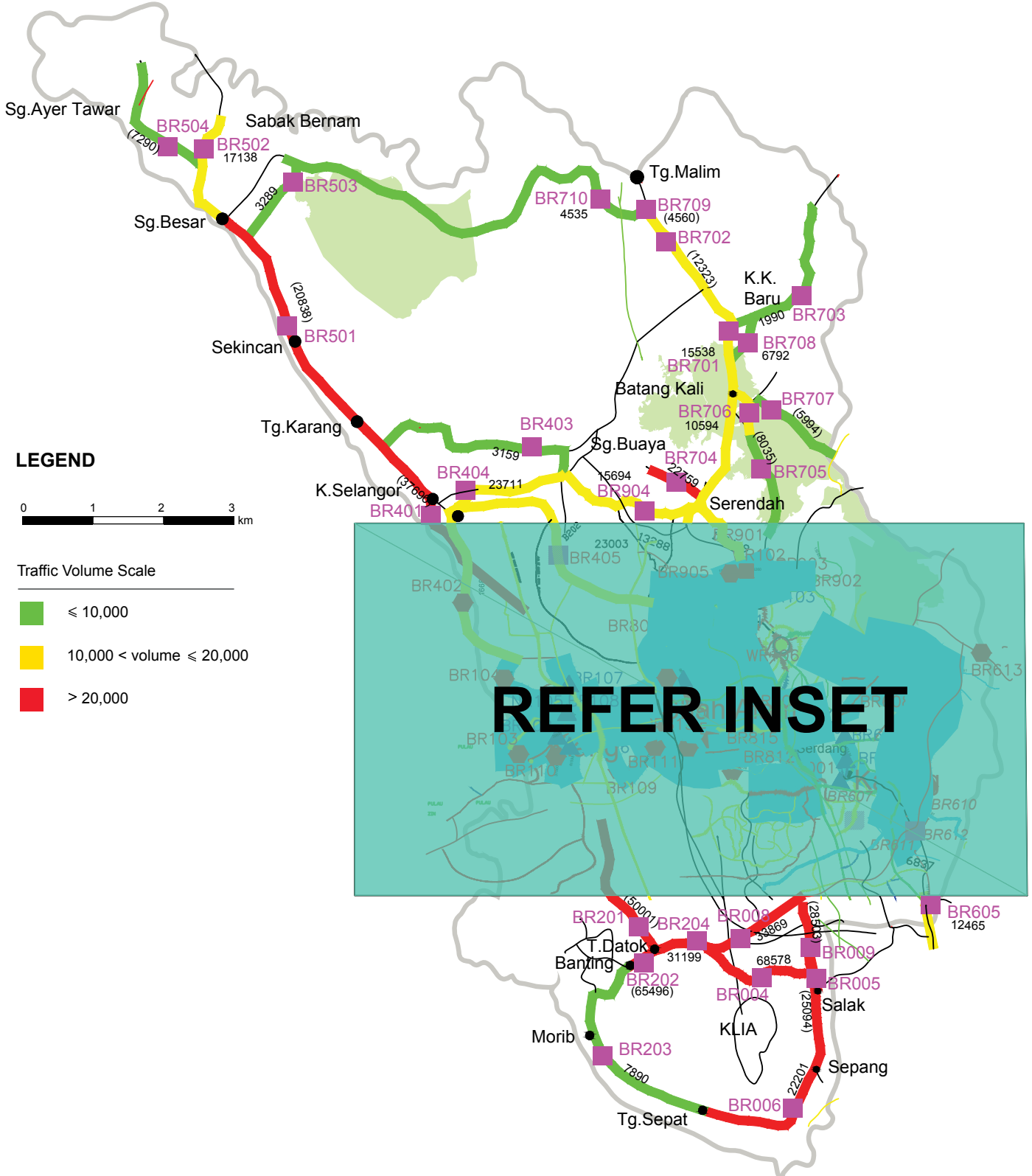


Figure 2.5-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Selangor

Traffic growth rate recorded for the state of Selangor is 2.94% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Selangor.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **SELANGOR**



**REFER INSET**

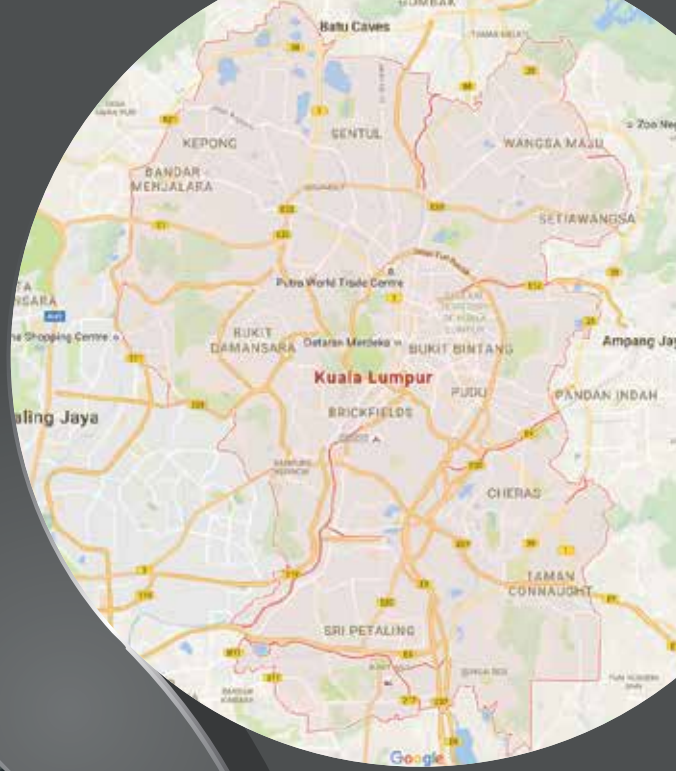




• AMPANG ROAD •



• 1857 : The oldest road in Klang Valley •



# W.P. KUALA LUMPUR

5 Census Stations

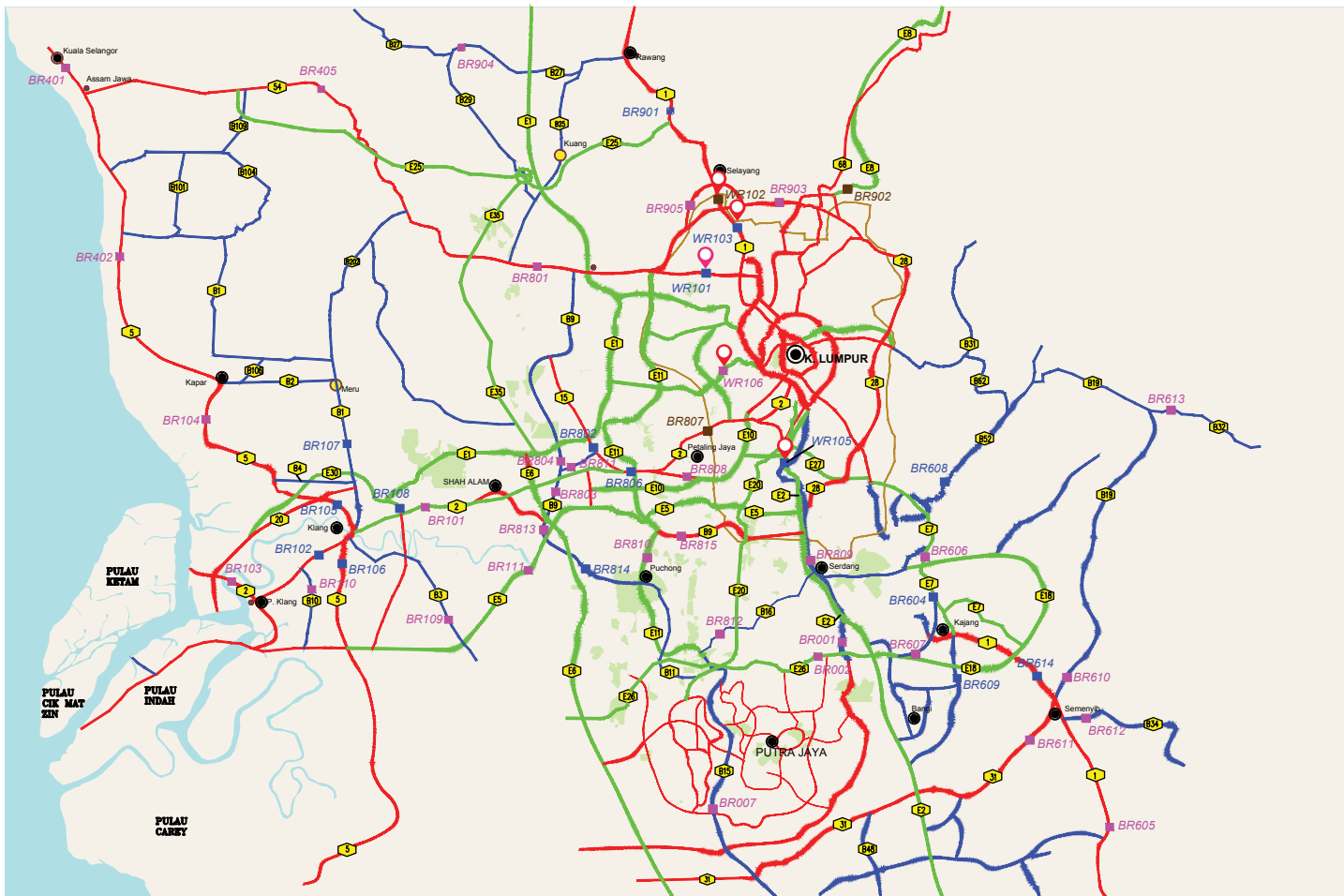
Road Length : 1,531.20 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

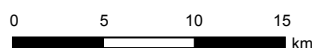


# TRAFFIC CENSUS STATION MAP

STATE : **W.P. KUALA LUMPUR**



## LEGEND



- Federal Road
- State Road
- Expressway

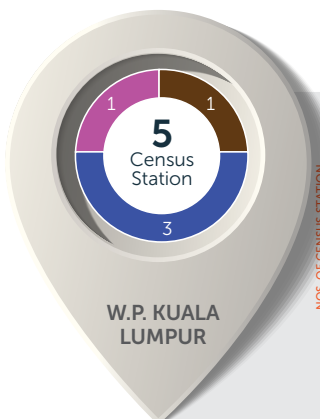
## CENSUS STATION TYPE

- Type 0
- Type 1
- Type 3

## LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

## DISTRIBUTION OF SURVEY STATIONS





## LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

 STATE : **W.P. KUALA LUMPUR**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
WR101	1	54	8.9	Kuala Lumpur - Kuala Selangor (Jalan Kepong)	3.2051944	101.6673611	K 3-3
WR102	0	1	12.1	Kuala Lumpur - Ipoh	3.2356667	101.6714722	K 3-3
WR103	1	1	8.1	Kuala Lumpur - Ipoh	3.2229444	101.6696944	K 3-3
WR105	1	E2	8.1	Kuala Lumpur - Seremban Expressway	3.0755556	101.7023333	K 3-3
WR106	3	W106	5.8	Kuala Lumpur - Damansara	3.1381389	101.6577778	K 3-3

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **W.P. KUALA LUMPUR**

**MARCH 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
WR101	-	119,921	9,750	1000-1100	66.1	8.8	2.9	0.4	0.8	21.0	100.0
WR102	262,317	215,931	16,213	1700-1800	68.2	8.1	5.9	0.9	0.5	16.4	100.0
WR103	-	150,764	11,192	1700-1800	63.0	11.0	4.0	0.7	0.6	20.7	100.0
WR105	-	216,521	15,806	1800-1900	78.7	5.5	4.2	1.0	0.9	9.7	100.0
WR106	-	152,629	13,647	0700-0800	81.9	3.5	0.7	0.1	0.1	13.6	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **W.P. KUALA LUMPUR**

**SEPTEMBER 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
WR101	-	102,273	8,031	0800-0900	69.3	7.2	3.6	0.5	0.8	18.6	100.0
WR102	264,407	206,444	14,833	1800-1900	70.8	6.1	5.8	0.6	0.5	16.2	100.0
WR103	-	174,427	13,077	1800-1900	59.2	9.8	5.6	1.1	0.5	23.7	100.0
WR105	-	225,610	21,371	1300-1400	80.0	5.2	3.5	0.9	0.8	9.6	100.0
WR106	-	137,586	12,083	1800-1900	79.6	4.3	1.4	0.1	0.2	14.5	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **W.P. KUALA LUMPUR**

**AVERAGE 2015**

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
WR101	111,097	8,890	67.7	8.0	3.3	0.4	0.8	19.8	100%	<b>E</b>	-
WR102	211,187	15,523	69.5	7.1	5.8	0.8	0.5	16.3	100%	<b>F</b>	R
WR103	162,595	12,135	61.1	10.4	4.8	0.9	0.6	22.2	100%	<b>F</b>	R
WR105	221,065	18,588	79.3	5.3	3.9	1.0	0.8	9.6	100%	<b>F</b>	R
WR106	145,107	12,865	80.8	3.9	1.0	0.1	0.1	14.0	100%	<b>F</b>	R

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

STATE : **W.P. KUALA LUMPUR**

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
WR101	129,092	132,245	138,727	190,272	153,564	136,860	139,737	160,694	132,401	111,097	-1.0	0.04
WR102	150,874	158,754	161,161	214,746	277,797	276,092	252,341	253,179	214,760	211,188	4.8	0.39
WR103	206,484	203,986	205,867	194,287	196,796	209,224	203,277	216,424	192,223	162,596	-1.3	0.24
WR105	244,416	258,867	229,713	213,522	201,260	192,649	213,161	206,140	219,336	221,066	-1.6	0.30
WR106	245,799	290,967	270,123	239,685	253,903	225,435	204,486	161,751	155,777	145,108	-7.4	0.84

### YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

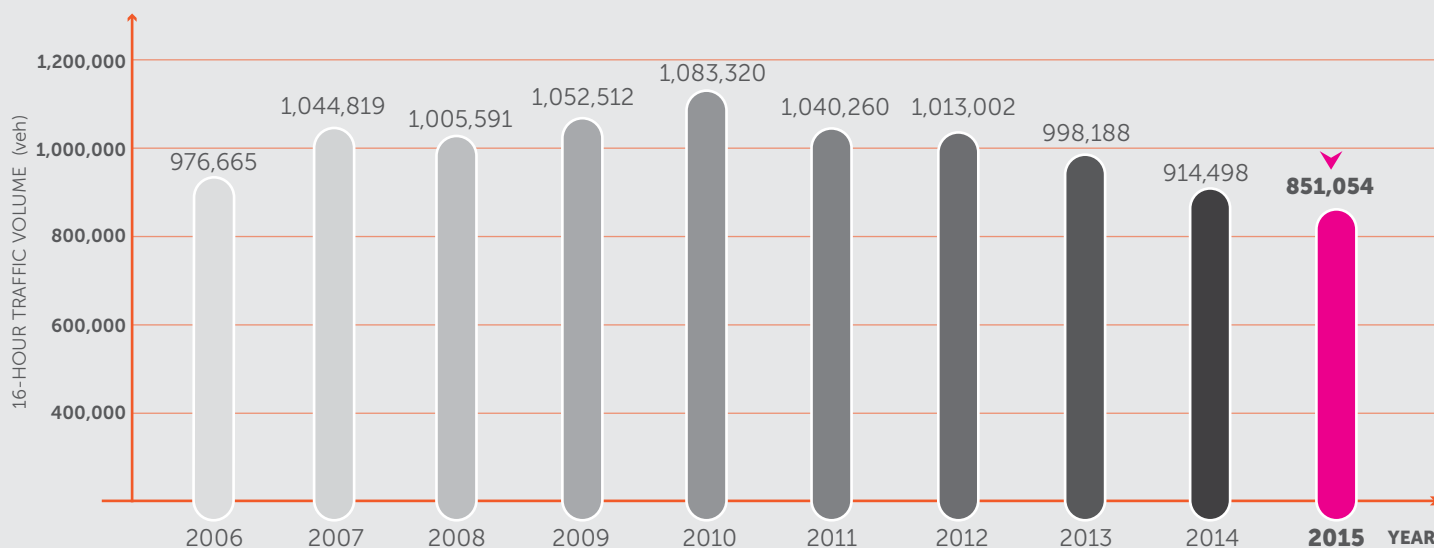


Figure 2.6-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in W.P. Kuala Lumpur



There are 5 census stations in Wilayah Persekutuan Kuala Lumpur. The pattern of 16-hour traffic volume shows a gradual increase since year 2006 to 2010 but drop every year until 2015. In 2015, about 232,266 vehicles decrease from 2014 which is equal to 6.94%.

**-6.94%**  
DECREASE FROM 2014

### NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

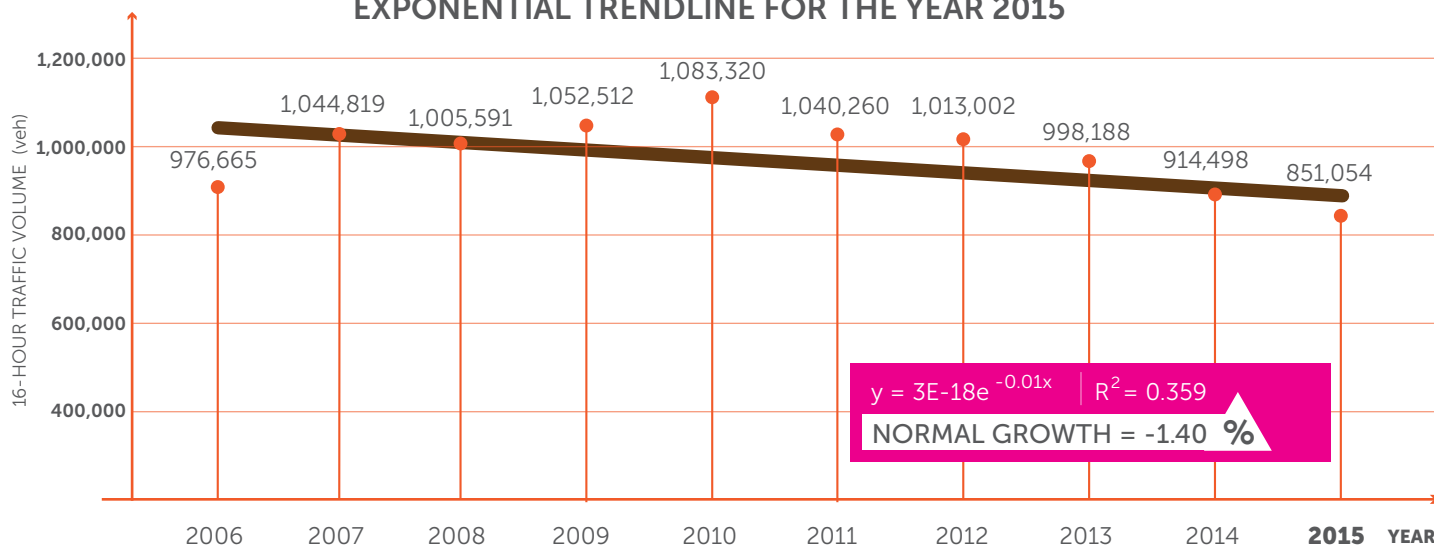
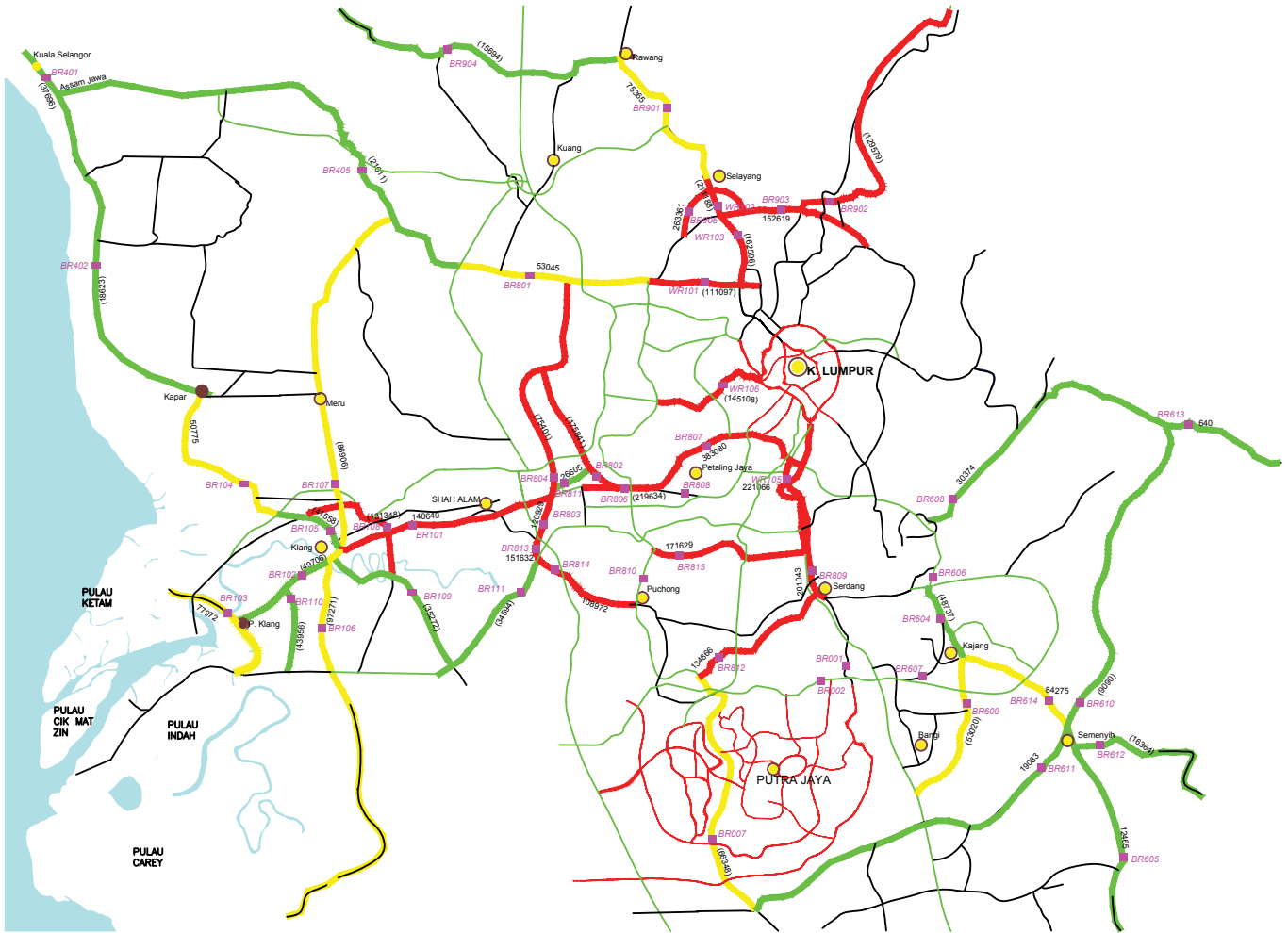


Figure 2.6-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in W.P. Kuala Lumpur

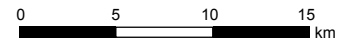
Traffic growth rate recorded for the state of W.P. Kuala Lumpur is 1.40% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in W.P. Kuala Lumpur.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **W.P. KUALA LUMPUR**



## LEGEND



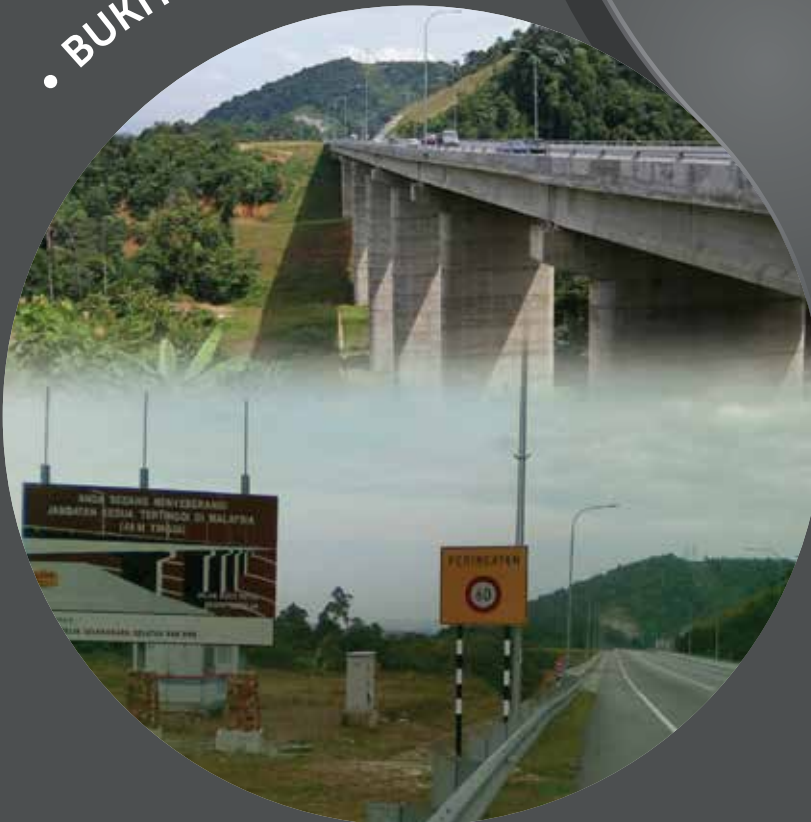
### Traffic Volume Scale

- ≤ 50,000
- 50,000 < volume ≤ 100,000
- > 100,000





## • BUKIT PUTUS VIADUCT •



• 2009 : The 2<sup>nd</sup> Highest Bridge In Malaysia (48m) •



# NEGERI SEMBILAN

## DARUL KHUSUS

48 Census Stations  
Road Length : 11,816.33 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **NEGERI SEMBILAN**

## LEGEND



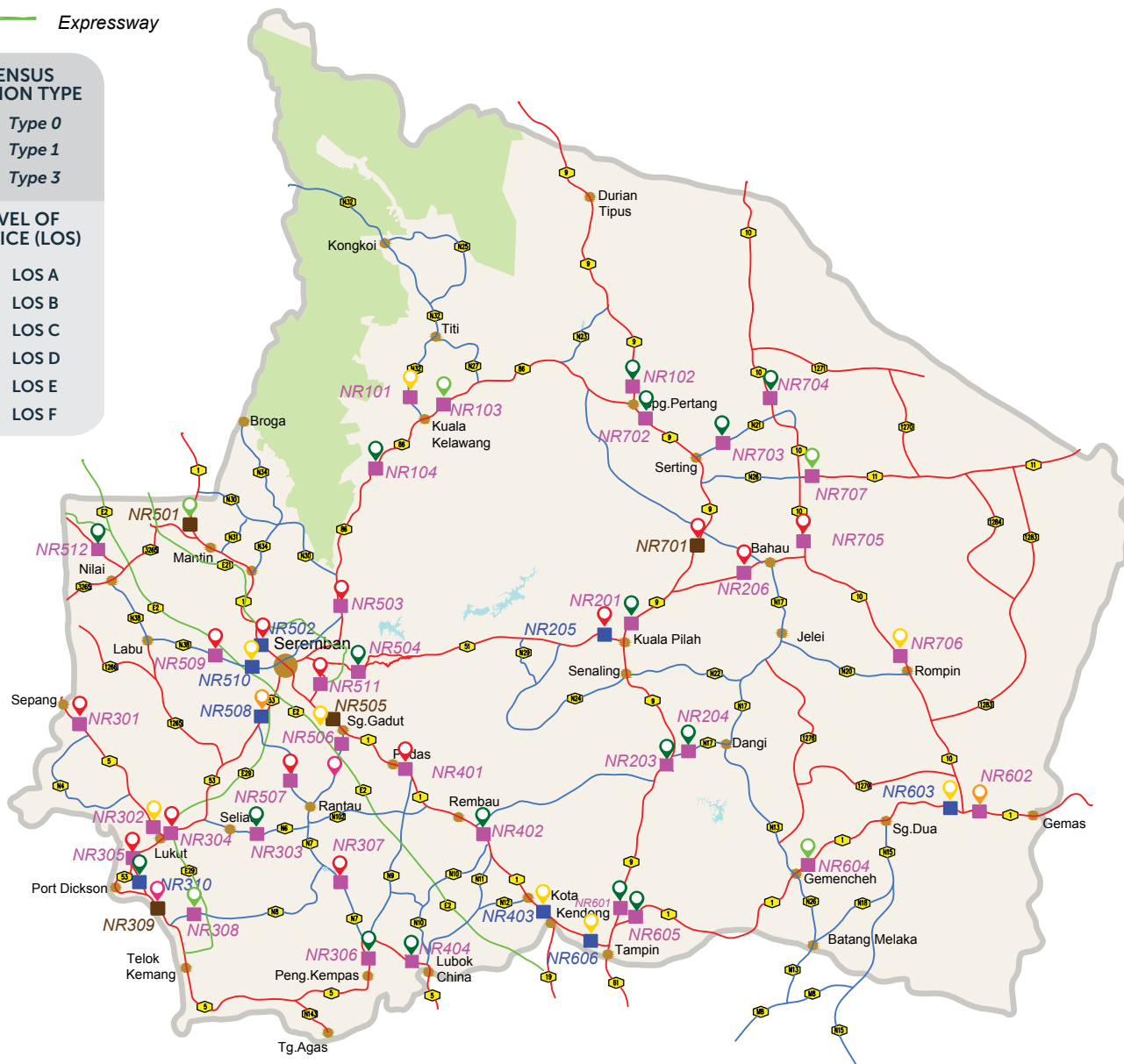
- Federal Road
- State Road
- Expressway

### CENSUS STATION TYPE

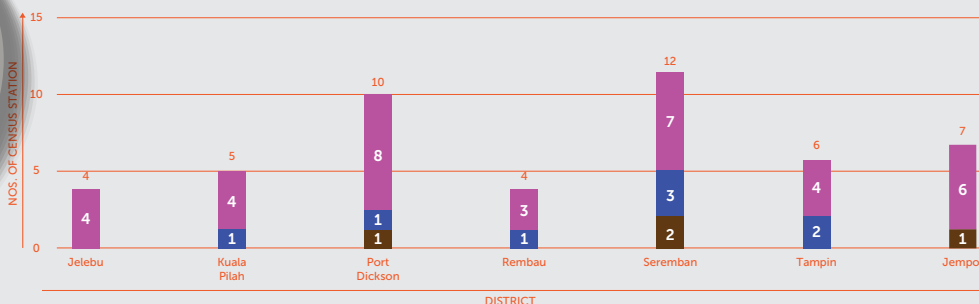
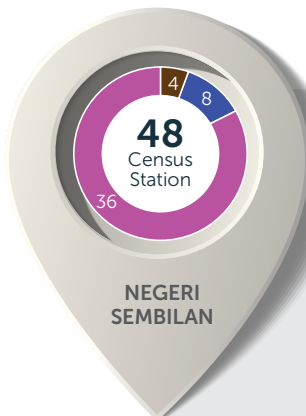
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

## STATE : NEGERI SEMBILAN

### District : JELEBU

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
NR101	3	N32	2.5	Kuala Klawang - Genting Peras	2.9522222	102.0597222	T 1-1
NR102	3	9	72.0	Kuala Pilah - Manchis (Simpang Pertang)	2.9469444	102.2594444	T 1-1
NR103	3	86	1.6	Kuala Klawang - Simpang Pertang (Peradong)	2.9466667	102.0844444	T 1-1
NR104	3	86	26.8	Seremban - Kuala Klawang	2.8791667	102.0200000	T 1-1

### District : KUALA PILAH

NR201	3	9	42.7	Tampin - Kuala Pilah - Batu Kikir	2.7595830	102.2553330	T 1-1
NR203	3	9	19.3	Tampin - Kuala Pilah	2.6398889	102.2917500	T 1-1
NR204	3	N17	3.8	Dangi - Kepis - Jelai	2.6466944	102.3298611	T 1-1
NR205	1	51	33.0	Seremban - Kuala Pilah	2.7379167	102.1999722	T 1-1
NR206	3	13	2.1	Juasseh - Bahau	2.7863889	102.3114444	T 1-1

### District : PORT DICKSON

NR301	3	5	26.3	Sepang - Port Dickson (Tanah Merah)	2.6900556	101.7537778	T 1-1
NR302	3	5	8.5	Sepang - Port Dickson (Lukut)	2.5740278	101.8323333	K 2-2
NR303	3	N6	4.8	Rantau - Siliau	2.5785833	101.9322500	T 1-1
NR304	3	53	10.2	Seremban - Port Dickson (Lukut)	2.5818889	101.8477222	K 2-2
NR305	3	5	4.0	Seremban - Port Dickson	2.5538056	101.8065278	K 2-2
NR306	3	5	41.6	Port Dickson - Lubok Cina (Linggi)	2.4832222	102.0120833	T 1-1
NR307	3	N7	28.7	Seremban - Rantau - Linggi	2.5130278	101.9989722	T 1-1
NR308	3	N8	16.1	Jalan Rantau/Linggi - camp Si Rusa - Port Dickson	2.5022778	101.8618889	T 1-1
NR309	0	5	6.4	Port Dickson - Lubok Cina (Jalan Pantai)	2.4964444	101.8395000	T 1-1
NR310	1	5	30.6	Seremban - Port Dickson (Port Dickson Bypass)	2.5296389	101.8032222	K 2-2

### District : REMBAU

NR401	3	1	20.9	Seremban - Tampin	2.6191944	102.0590833	T 1-1
NR402	3	1	33.0	Seremban - Tampin	2.5577500	102.1246667	T 1-1
NR403	1	1	41.7	Seremban - Tampin	2.4964722	102.1815556	T 1-1
NR404	3	5	46.7	Linggi - Lubok Cina	2.4666667	102.0520833	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **NEGERI SEMBILAN**

## District : SEREMBAN

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
NR501	0	1	20.0	Seremban - Kuala Lumpur (Old road)	2.8586110	101.8636110	T 1-1
NR502	1	1	2.5	Seremban - Kuala Lumpur (Old road)	2.7375000	101.9302500	T 1-1
NR503	3	86	9.7	Seremban - Kuala Klawang	2.7395830	101.9805280	T 1-1
NR504	3	51	9.7	Seremban - Kuala Pilah	2.7227778	101.9925000	K 2-2
NR505	0	1	9.3	Seremban - Gemas (Sri Senawang Industrial Area)	2.6782780	101.9796670	K 2-2
NR506	3	N5	9.7	Seremban - Sungai Gadut / Ulu Sawah	2.6595000	101.9935278	T 1-1
NR507	3	N7	11.3	Seremban - Kuala Sawah	2.6577220	101.9218060	T 1-1
NR508	1	53	11.4	Seremban - Port Dickson	2.6510830	101.9075830	T 1-1
NR509	3	362	1.3	Seremban - Labu	2.7216667	101.9116667	T 1-1
NR510	1	241	1.3	Sg. Ujong (in front of Shell)	2.7227778	101.9241944	K 2-2
NR511	3	97	9.0	Paroi - Senawang	2.7176940	101.9795830	T 1-1
NR512	3	32	2.5	Nilai - KLIA	2.8122222	101.7950000	K 2-2

## District : TAMPIN

NR601	3	9	3.2	Tampin - Kuala Pilah	2.5060556	102.2402778	T 1-1
NR602	3	1	96.8	Seremban - Gemas (140m east of Rompin junction)	2.5870556	102.5673611	T 1-1
NR603	1	1	95.8	Seremban - Gemas (60m west of Rompin junction)	2.5878890	102.5618060	T 1-1
NR604	3	1	77.3	Seremban - Gemas	2.5438611	102.4147222	T 1-1
NR605	3	1	52.8	Seremban - Gemas	2.4942222	102.2399167	T 1-1
NR606	1	1	46.5	Seremban - Tampin	2.4814722	102.2087778	T 1-1

## District : JEMPOL

NR701	0	9	55.5	Seremban - Batu Kikir - Bahau	2.8336940	102.3189440	T 1-1
NR702	3	9	70.8	Kuala Pilah - Manchis (Serting Ulu)	2.9251110	102.2769440	T 1-1
NR703	3	245	3.2	Serting Ulu - Ayer Hitam	2.8978611	102.3169722	T 1-1
NR704	3	10	16.9	Bahau - Ayer Hitam - Kemayan	2.9361944	102.3885556	T 1-1
NR705	3	10	4.8	Bahau - Kemayan	2.8208333	102.4129444	T 1-1
NR706	3	10	82.1	Bahau - Rompin	2.7091667	102.5037778	T 1-1
NR707	3	11	62.5	Lebuhraya Bahau - Keratong	2.8874167	102.4126111	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **NEGERI SEMBILAN**

**MARCH 2015**

## District : JELEBU

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
NR101	-	12,937	1,337	2100-2200	54.3	7.8	3.0	1.3	0.3	33.4	100.0
NR102	-	4,093	374	2100-2200	49.9	10.4	9.6	6.1	0.4	23.5	100.0
NR103	-	8,570	965	2100-2200	51.7	9.2	3.3	0.6	0.2	35.1	100.0
NR104	-	6,108	714	1700-1800	66.4	10.7	6.5	1.9	0.6	13.9	100.0

## District : KUALA PILAH

NR201	-	15,181	1,478	1700-1800	62.7	10.8	6.4	5.8	1.6	12.7	100.0
NR203	-	3,145	318	0700-0800	63.0	9.5	7.5	3.0	1.2	15.8	100.0
NR204	-	3,534	336	1800-1900	52.0	6.6	8.3	3.7	0.8	28.6	100.0
NR205	-	25,906	2,192	1700-1800	68.5	10.8	4.5	2.9	1.2	12.0	100.0
NR206	-	8,461	703	1200-1300	67.4	8.2	5.2	2.4	1.0	15.8	100.0

## District : PORT DICKSON

NR301	-	20,704	3,408	2100-2200	73.9	7.4	5.5	4.5	0.7	8.1	100.0
NR302	-	31,559	3,326	1700-1800	70.4	8.1	6.5	4.8	0.6	9.6	100.0
NR303	-	5,636	579	0700-0800	43.3	11.1	7.7	3.9	0.9	32.9	100.0
NR304	-	59,145	7,979	1700-1800	76.5	6.9	4.6	3.4	0.5	8.2	100.0
NR305	-	79,024	8,697	1700-1800	81.0	6.3	2.8	2.1	0.5	7.3	100.0
NR306	-	4,002	361	1000-1100	45.5	9.7	5.3	2.1	2.0	35.4	100.0
NR307	-	5,167	491	0700-0800	49.5	12.4	8.2	2.9	1.1	25.8	100.0
NR308	-	8,299	1,037	0700-0800	64.6	9.5	2.7	0.8	0.5	21.9	100.0
NR309	32,705	28,198	2,198	1700-1800	69.9	7.4	2.0	0.4	0.5	19.7	100.0
NR310	-	22,968	1,918	0700-0800	64.9	9.3	2.2	2.2	0.4	21.0	100.0

## District : REMBAU

NR401	-	17,624	2,173	2100-2200	64.3	8.7	5.6	2.3	0.5	18.6	100.0
NR402	-	10,552	1,063	2100-2200	59.5	10.4	11.2	3.6	0.7	14.6	100.0
NR403	-	13,167	1,162	1700-1800	69.2	7.6	6.9	3.3	0.7	12.3	100.0
NR404	-	2,752	297	2100-2200	51.5	11.2	13.5	6.5	0.6	16.7	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **NEGERI SEMBILAN**

**MARCH 2015**

## District : SEREMBAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
NR501	13,354	12,117	1,094	0700-0800	61.6	8.3	7.3	4.5	0.5	17.8	100.0
NR502	-	39,575	3,108	1800-1900	70.0	7.8	4.6	0.4	0.3	16.9	100.0
NR503	-	15,787	1,911	0700-0800	63.3	8.4	7.4	4.3	0.3	16.2	100.0
NR504	-	21,406	1,973	0700-0800	67.4	8.0	6.7	5.4	0.8	11.7	100.0
NR505	52,824	48,020	4,036	1700-1800	69.0	6.7	6.8	2.6	0.4	14.5	100.0
NR506	-	16,852	1,690	0700-0800	56.1	9.5	7.7	2.2	0.4	24.0	100.0
NR507	-	18,970	1,796	1700-1800	56.2	9.2	8.8	3.0	0.7	22.1	100.0
NR508	-	16,682	1,434	0700-0800	66.6	5.0	4.8	1.7	0.5	21.3	100.0
NR509	-	26,995	2,116	1700-1800	67.7	7.6	7.0	3.7	0.3	13.7	100.0
NR510	-	53,028	3,820	1300-1400	81.2	3.6	2.1	0.3	1.2	11.7	100.0
NR511	-	18,756	2,184	0700-0800	68.8	7.0	5.3	1.4	0.3	17.2	100.0
NR512	-	26,161	2,360	1700-1800	76.5	5.7	2.9	0.7	0.3	14.0	100.0

## District : TAMPIN

NR601	-	3,990	400	1700-1800	54.5	9.5	5.3	4.1	1.1	25.6	100.0
NR602	-	12,415	1,070	1700-1800	56.9	9.3	9.4	10.1	0.6	13.7	100.0
NR603	-	12,546	1,036	1700-1800	58.3	12.1	8.7	7.6	0.7	12.7	100.0
NR604	-	10,012	870	0700-0800	58.8	8.6	7.5	7.1	0.7	17.3	100.0
NR605	-	5,212	508	0700-0800	62.1	11.5	5.5	2.8	0.7	17.4	100.0
NR606	-	15,603	1,327	1700-1800	68.8	9.2	5.5	2.5	0.7	13.2	100.0

## District : JEMPOL

NR701	22,966	19,479	1,650	1700-1800	57.8	15.5	4.6	6.6	0.4	15.1	100.0
NR702	-	5,692	513	1700-1800	48.9	15.9	8.6	8.5	0.2	17.8	100.0
NR703	-	4,907	465	1300-1400	42.0	16.4	8.8	10.2	0.2	22.4	100.0
NR704	-	7,879	700	1300-1400	42.0	14.4	10.3	12.6	0.6	20.1	100.0
NR705	-	29,480	2,394	2100-2200	56.3	16.0	6.4	4.0	0.3	17.0	100.0
NR706	-	8,163	1,070	2100-2200	48.2	16.1	8.3	7.4	0.2	19.8	100.0
NR707	-	8,747	726	2100-2200	58.2	15.0	7.1	7.3	0.7	11.8	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **NEGERI SEMBILAN**

**SEPTEMBER 2015**

## District : JELEBU

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
NR101	-	12,850	1,391	0700-0800	54.6	8.3	3.0	1.7	0.2	32.3	100.0
NR102	-	3,959	343	1400-1500	48.0	12.0	9.1	5.5	0.3	25.0	100.0
NR103	-	10,279	1,415	0700-0800	54.2	12.4	4.1	1.9	0.2	27.2	100.0
NR104	-	6,276	725	0700-0800	61.4	11.1	6.2	6.5	0.4	14.6	100.0

## District : KUALA PILAH

NR201	2,271	2,271	196	1700-1800	64.0	9.9	6.1	4.4	1.2	14.5	100.0
NR203	420	420	47	1700-1800	59.2	12.3	8.0	2.8	1.2	16.5	100.0
NR204	375	375	35	1800-1900	48.7	12.4	7.9	5.4	0.9	24.7	100.0
NR205	23,237	23,237	2,009	1700-1800	70.9	8.9	4.2	2.9	1.0	12.2	100.0
NR206	1,475	1,475	145	1700-1800	63.7	11.3	6.4	2.0	1.4	15.2	100.0

## District : PORT DICKSON

NR301	-	25,207	2,295	1700-1800	76.8	6.2	5.2	5.0	0.5	6.3	100.0
NR302	-	38,835	3,255	1600-1700	76.7	7.1	5.3	3.7	0.4	6.7	100.0
NR303	-	4,971	457	0700-0800	44.0	10.5	9.4	2.7	0.9	32.4	100.0
NR304	-	56,081	4,899	1600-1700	76.1	7.2	5.4	3.8	0.6	7.0	100.0
NR305	-	69,779	7,327	1700-1800	81.2	6.0	3.0	2.5	0.5	6.8	100.0
NR306	-	3,594	360	1700-1800	47.8	11.2	6.8	1.6	1.1	31.4	100.0
NR307	-	4,157	418	0700-0800	51.5	11.2	9.7	3.2	0.9	23.4	100.0
NR308	-	8,902	1,256	0700-0800	65.5	8.7	3.4	0.7	0.4	21.3	100.0
NR309	33,443	29,048	2,362	1700-1800	68.2	8.7	2.3	0.4	0.5	19.9	100.0
NR310	-	21,579	2,094	0700-0800	60.1	12.9	2.8	2.7	0.4	21.1	100.0

## District : REMBAU

NR401	-	19,214	1,898	0700-0800	63.8	5.9	6.2	3.4	0.6	20.2	100.0
NR402	-	10,519	1,001	1700-1800	64.6	5.7	10.8	4.6	0.9	13.3	100.0
NR403	-	11,763	1,053	1700-1800	62.8	11.4	9.4	3.8	1.0	11.5	100.0
NR404	-	2,679	270	1700-1800	53.4	8.4	12.8	6.5	0.4	18.4	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **NEGERI SEMBILAN**

**SEPTEMBER 2015**

## District : SEREMBAN

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
NR501	12,830	11,622	922	0700-0800	58.1	9.6	7.6	4.9	0.5	19.3	100.0
NR502	-	38,129	2,877	0800-0900	69.5	8.1	4.4	0.3	0.2	17.4	100.0
NR503	-	15,511	2,134	0700-0800	65.8	7.1	6.9	3.7	0.2	16.4	100.0
NR504	-	19,633	1,652	1700-1800	63.0	11.0	7.9	4.8	0.9	12.4	100.0
NR505	52,943	47,930	4,123	0700-0800	67.5	7.0	7.3	2.6	0.4	15.3	100.0
NR506	-	10,849	1,219	0700-0800	53.8	11.2	9.0	1.4	0.6	24.0	100.0
NR507	-	17,494	1,602	1700-1800	54.3	10.0	9.8	2.8	0.5	22.5	100.0
NR508	-	14,979	1,295	0700-0800	61.1	7.0	5.6	2.3	0.7	23.3	100.0
NR509	-	24,471	2,132	1700-1800	68.8	7.4	7.3	2.8	0.3	13.3	100.0
NR510	-	51,155	3,751	1300-1400	75.4	8.7	2.2	0.3	1.4	11.9	100.0
NR511	-	18,787	1,873	0700-0800	65.2	8.7	6.6	1.7	0.2	17.7	100.0
NR512	-	23,080	1,906	1600-1700	77.1	5.2	3.2	0.4	0.3	13.8	100.0

## District : TAMPIN

NR601	-	3,461	361	0700-0800	58.7	7.8	6.8	4.4	1.1	21.2	100.0
NR602	-	11,917	1,011	1700-1800	54.6	13.2	8.5	8.6	0.7	14.4	100.0
NR603	-	11,893	979	1700-1800	58.1	12.1	7.5	7.5	0.7	14.1	100.0
NR604	-	9,465	953	1700-1800	55.7	10.2	7.8	6.0	0.9	19.3	100.0
NR605	-	9,976	887	1700-1800	63.1	8.8	6.7	2.9	0.6	17.8	100.0
NR606	-	14,318	1,237	1700-1800	66.8	9.3	5.6	2.6	0.8	14.9	100.0

## District : JEMPOL

NR701	23,839	21,280	2,044	1700-1800	53.8	17.4	7.9	7.1	0.3	13.6	100.0
NR702	-	5,380	495	0700-0800	47.6	14.2	9.1	8.0	0.4	20.7	100.0
NR703	-	4,482	424	1100-1200	42.1	16.1	9.3	8.1	0.1	24.3	100.0
NR704	-	7,504	655	0700-0800	48.5	9.6	7.7	15.3	0.3	18.6	100.0
NR705	-	26,766	2,412	1500-1600	54.3	18.6	6.5	3.5	0.2	16.8	100.0
NR706	-	8,821	971	0700-0800	44.5	20.3	8.8	7.4	0.4	18.6	100.0
NR707	-	9,959	886	1800-1900	48.4	17.1	9.6	8.4	0.5	16.0	100.0



# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **NEGERI SEMBILAN**

**AVERAGE 2015**

## District : JELEBU

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
NR101	12,894	1,364	54.4	8.0	3.0	1.5	0.2	32.8	100%	C	2044
NR102	4,026	359	49.0	11.2	9.4	5.8	0.3	24.3	100%	A	2151
NR103	9,425	1,190	52.9	10.8	3.7	1.3	0.2	31.1	100%	B	2025
NR104	6,192	720	63.9	10.9	6.3	4.2	0.5	14.2	100%	A	2036

## District : KUALA PILAH

NR201	8,726	837	63.3	10.3	6.2	5.1	1.4	13.6	100%	A	-
NR203	1,783	183	61.1	10.9	7.8	2.9	1.2	16.1	100%	A	-
NR204	1,955	186	50.3	9.5	8.1	4.6	0.8	26.6	100%	A	-
NR205	24,572	2,101	69.7	9.8	4.3	2.9	1.1	12.1	100%	F	R
NR206	4,968	424	65.5	9.7	5.8	2.2	1.2	15.5	100%	A	-

## District : PORT DICKSON

NR301	22,956	2,852	75.4	6.8	5.3	4.7	0.6	7.2	100%	F	R
NR302	35,197	3,291	73.6	7.6	5.9	4.2	0.5	8.1	100%	C	-
NR303	5,304	518	43.7	10.8	8.6	3.3	0.9	32.7	100%	A	2120
NR304	57,613	6,439	76.3	7.0	5.0	3.6	0.5	7.6	100%	F	R
NR305	74,402	8,012	81.1	6.2	2.9	2.3	0.5	7.1	100%	F	R
NR306	3,798	361	46.7	10.5	6.1	1.8	1.5	33.4	100%	A	-
NR307	4,662	455	50.5	11.8	9.0	3.1	1.0	24.6	100%	A	2078
NR308	8,601	1,147	65.0	9.1	3.1	0.7	0.5	21.6	100%	B	2024
NR309	28,624	2,280	69.1	8.1	2.2	0.4	0.5	19.8	100%	E	2018
NR310	22,274	2,007	62.5	11.1	2.5	2.5	0.4	21.1	100%	A	2061

## District : REMBAU

NR401	18,419	2,036	64.0	7.3	5.9	2.9	0.5	19.4	100%	F	R
NR402	10,536	1,032	62.1	8.1	11.0	4.1	0.8	14.0	100%	A	-
NR403	12,465	1,108	66.0	9.5	8.2	3.6	0.8	11.9	100%	C	-
NR404	2,716	284	52.4	9.8	13.1	6.5	0.5	17.6	100%	A	2167

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **NEGERI SEMBILAN**

**AVERAGE 2015**

## District : SEREMBAN

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
NR501	11,870	1,008	59.8	8.9	7.4	4.7	0.5	18.6	100%	B	-
NR502	38,853	2,993	69.8	8.0	4.5	0.4	0.3	17.1	100%	F	R
NR503	15,649	2,023	64.5	7.8	7.1	4.0	0.2	16.3	100%	F	R
NR504	20,520	1,813	65.2	9.5	7.3	5.1	0.9	12.1	100%	A	2035
NR505	47,976	4,080	68.2	6.8	7.0	2.6	0.4	14.9	100%	C	2021
NR506	13,851	1,455	55.0	10.3	8.4	1.8	0.5	24.0	100%	E	2020
NR507	18,232	1,699	55.3	9.6	9.3	2.9	0.6	22.3	100%	F	R
NR508	15,831	1,365	63.9	6.0	5.2	2.0	0.6	22.3	100%	D	2021
NR509	25,733	2,124	68.3	7.5	7.2	3.2	0.3	13.5	100%	F	R
NR510	52,092	3,786	78.3	6.1	2.1	0.3	1.3	11.8	100%	C	-
NR511	18,772	2,029	67.0	7.9	5.9	1.5	0.2	17.5	100%	F	R
NR512	24,621	2,133	76.8	5.4	3.0	0.5	0.3	13.9	100%	A	2029

## District : TAMPIN

NR601	3,726	381	56.6	8.7	6.1	4.2	1.1	23.4	100%	A	-
NR602	12,166	1,041	55.8	11.2	8.9	9.4	0.7	14.1	100%	D	2021
NR603	12,220	1,008	58.2	12.1	8.1	7.6	0.7	13.4	100%	C	2026
NR604	9,739	912	57.3	9.4	7.6	6.6	0.8	18.3	100%	B	2059
NR605	7,594	698	62.6	10.2	6.1	2.9	0.7	17.6	100%	A	-
NR606	14,961	1,282	67.8	9.3	5.6	2.5	0.8	14.1	100%	C	2040

## District : JEMPOL

NR701	20,380	1,847	55.8	16.4	6.3	6.8	0.3	14.3	100%	F	R
NR702	5,536	504	48.2	15.1	8.8	8.3	0.3	19.3	100%	A	2058
NR703	4,695	445	42.1	16.2	9.0	9.2	0.1	23.4	100%	A	2045
NR704	7,692	678	45.3	12.0	9.0	13.9	0.4	19.4	100%	A	-
NR705	28,123	2,403	55.3	17.3	6.4	3.8	0.3	16.9	100%	F	R
NR706	8,492	1,021	46.3	18.2	8.5	7.4	0.3	19.2	100%	C	-
NR707	9,353	806	53.3	16.0	8.3	7.9	0.6	13.9	100%	B	-

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : NEGERI SEMBILAN

### District : JELEBU

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
NR101	11,925	11,955	13,053	13,221	15,191	12,810	12,552	12,698	12,550	12,894	0.4	0.02
NR102	4,573	3,836	3,689	3,636	3,588	4,135	4,444	4,438	3,802	4,026	0.3	0.01
NR103	7,948	6,338	7,442	8,312	9,454	9,899	9,486	9,274	10,220	9,424	3.9	0.62
NR104	4,295	4,574	5,081	6,795	6,104	6,527	6,304	7,081	5,494	6,192	3.7	0.43

### District : KUALA PILAH

NR201	13,502	13,311	15,078	15,159	18,275	16,325	13,054	18,015	17,366	8,726	-1.1	0.02
NR203	4,473	4,927	4,626	3,847	3,177	5,212	4,738	3,616	3,568	1,783	-6.5	0.39
NR204	3,486	2,678	2,858	2,707	2,823	3,255	3,671	3,576	3,408	1,955	-0.8	0.02
NR205	18,423	19,251	19,844	19,809	21,601	23,422	24,579	24,141	23,984	24,572	3.5	0.90
NR206	8,102	8,909	8,417	7,219	8,339	10,185	9,202	8,926	8,884	4,968	-1.9	0.09

### District : PORT DICKSON

NR301	20,348	28,788	28,144	28,268	35,671	17,207	27,410	24,273	27,331	22,956	-0.5	0.01
NR302	35,070	48,624	38,945	51,177	46,261	36,334	39,318	41,120	46,479	35,197	-0.6	0.02
NR303	5,228	4,643	4,724	5,802	5,165	5,574	5,667	5,448	5,216	5,304	1.0	0.18
NR304	47,908	58,328	68,327	67,092	65,580	46,201	54,394	59,864	62,112	57,613	0.3	0.00
NR305	86,760	98,122	106,925	102,377	106,143	72,372	96,684	74,128	87,872	74,402	-2.8	0.30
NR306	3,776	3,823	3,778	4,248	4,093	4,871	3,880	3,608	3,848	3,798	-0.1	0.00
NR307	3,822	3,488	3,877	4,352	4,377	5,105	4,013	3,994	4,164	4,662	1.9	0.27
NR308	5,272	5,017	5,289	8,097	6,699	7,353	8,452	7,799	6,970	8,600	5.4	0.63
NR309	23,078	24,011	27,032	32,047	26,376	26,645	27,367	27,534	27,745	28,624	1.6	0.28
NR310	16,853	19,246	17,693	19,613	17,602	20,705	19,254	19,573	19,659	22,274	2.0	0.54

### District : REMBAU

NR401	18,424	21,891	15,867	18,231	16,353	17,326	16,856	17,426	16,004	18,419	-1.2	0.14
NR402	11,754	12,051	11,614	11,621	11,678	12,620	11,774	9,910	9,332	10,536	-2.1	0.45
NR403	13,074	13,456	12,990	13,073	12,690	12,565	12,832	12,645	11,459	12,465	-1.1	0.56
NR404	2,612	2,382	2,631	2,848	2,694	2,913	2,674	2,672	2,744	2,716	0.8	0.20

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : NEGERI SEMBILAN

### District : SEREMBAN

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
NR501	14,844	15,418	14,329	12,530	12,052	11,964	11,397	10,671	11,810	11,870	-3.4	0.72
NR502	42,087	41,477	40,839	44,119	43,126	42,148	39,784	39,538	34,353	38,853	-1.5	0.44
NR503	6,647	7,009	24,952	9,793	10,778	14,080	11,882	13,933	14,754	15,649	6.6	0.26
NR504	12,955	14,104	18,121	17,048	17,423	18,817	19,923	20,620	20,937	20,520	4.9	0.82
NR505	39,714	38,284	38,197	33,697	35,708	38,378	57,639	50,484	48,002	47,976	3.9	0.45
NR506	17,299	16,542	16,955	16,879	20,621	22,052	22,302	23,784	21,647	13,850	1.5	0.07
NR507	12,215	13,261	14,115	15,974	17,087	17,825	18,194	17,082	17,802	18,232	4.3	0.80
NR508	12,811	13,023	13,264	6,218	14,728	15,310	16,349	15,911	15,820	15,831	4.3	0.21
NR509	14,315	17,259	18,692	14,456	21,511	22,881	25,373	25,246	27,050	25,733	7.1	0.79
NR510	61,845	64,193	65,787	67,554	58,814	58,337	60,592	60,615	57,729	52,092	-1.8	0.56
NR511	19,515	19,171	19,362	20,111	17,400	17,875	19,044	17,951	18,800	18,772	-0.6	0.17
NR512	13,856	15,724	18,200	18,414	21,625	25,022	25,048	22,912	26,634	24,620	6.7	0.84

### District : TAMPIN

NR601	3,782	3,911	4,218	4,504	4,040	4,096	4,176	3,964	3,826	3,726	-0.5	0.07
NR602	8,476	9,234	10,161	10,632	10,726	10,240	11,614	11,234	11,638	12,166	3.4	0.85
NR603	9,625	9,635	10,331	10,723	10,231	10,855	11,816	11,791	11,582	12,220	2.7	0.89
NR604	9,206	10,171	10,580	11,050	11,312	10,837	11,007	10,976	11,142	9,738	0.8	0.12
NR605	8,590	9,089	9,349	9,359	9,721	10,055	9,894	9,476	7,220	7,594	-1.5	0.16
NR606	14,052	13,689	14,890	14,431	13,993	15,056	14,965	14,986	14,747	14,961	0.8	0.47

### District : JEMPOL

NR701	14,803	14,349	15,388	15,845	16,407	16,020	19,559	17,685	17,288	20,380	3.3	0.77
NR702	4,326	5,039	5,645	5,865	5,739	6,242	5,391	5,586	6,362	5,536	2.2	0.37
NR703	4,634	2,719	3,203	5,933	6,629	4,667	4,322	4,802	5,537	4,694	3.5	0.16
NR704	10,333	9,114	7,098	7,103	7,304	8,321	8,072	7,610	7,670	7,692	-1.8	0.22
NR705	24,966	25,634	24,334	26,119	21,951	21,282	26,948	31,858	30,974	28,123	2.3	0.28
NR706	8,536	9,132	10,743	9,510	7,911	8,456	8,160	7,920	7,466	8,492	-2.0	0.34
NR707	15,338	11,943	9,087	9,094	12,438	12,944	10,892	10,616	13,490	9,353	-1.4	0.05

# STATISTIC FOR YEAR 2015

STATE : **NEGERI SEMBILAN**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

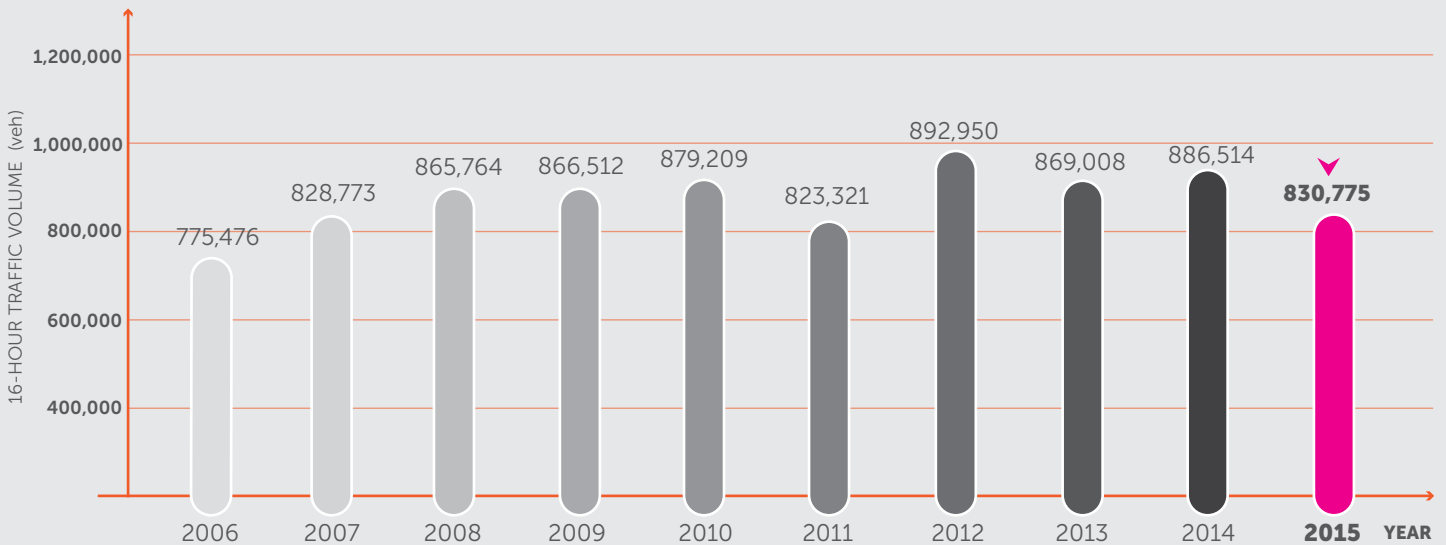


Figure 2.7-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Negeri Sembilan



There are 48 census stations in Negeri Sembilan. The 16-hour traffic volume documented since year 2006 to 2015 has seen the lowest traffic volume in Negeri Sembilan was in 2011 which is 823,321 vehicles. For 2015, there was a slightly drop of 6.29% from 2014.

**-6.29%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

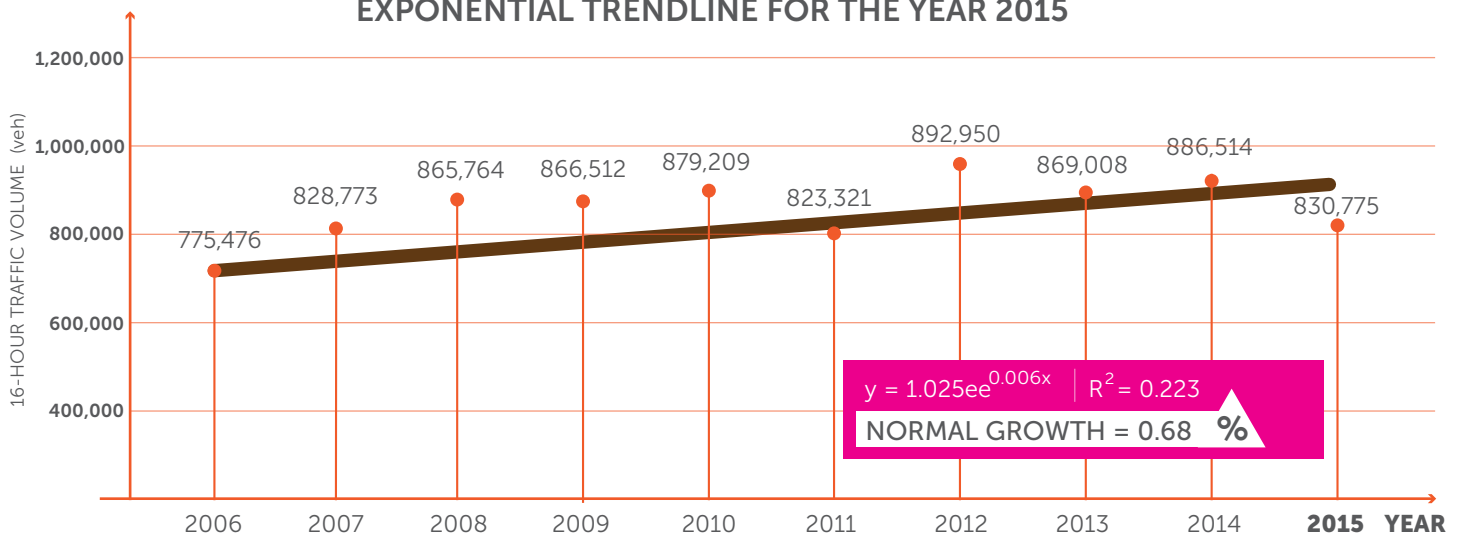


Figure 2.7-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Negeri Sembilan

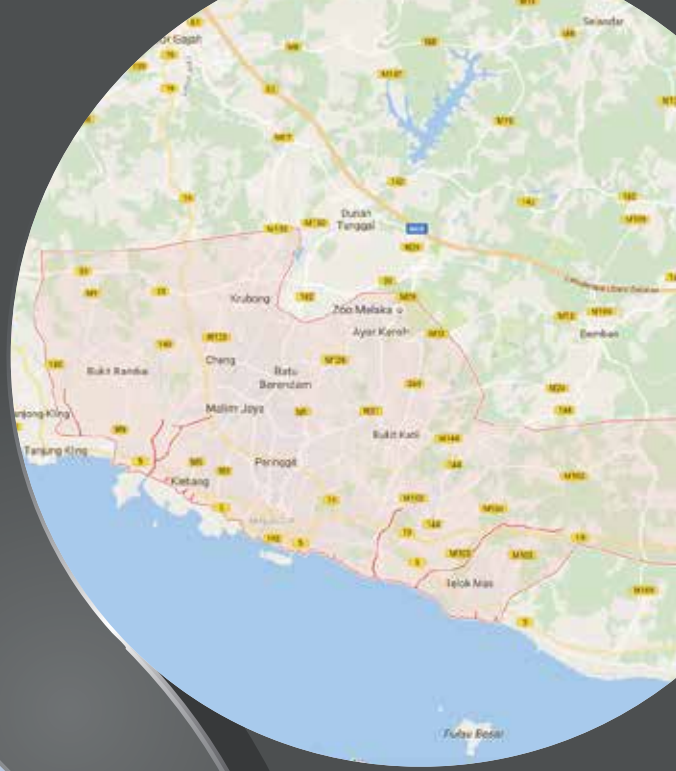
Traffic growth rate recorded for the state of Negeri Sembilan is 0.68% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Negeri Sembilan.



## • AYER KEROH HIGHWAY •



• 1993 : Malacca Gateway from North-South Expressway via Ayer Keroh •



# MELAKA

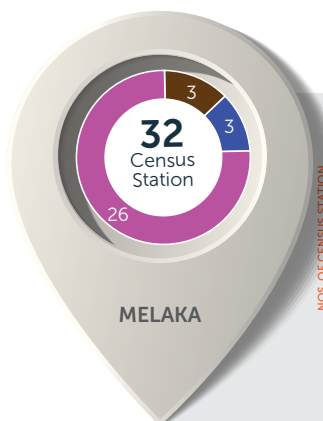
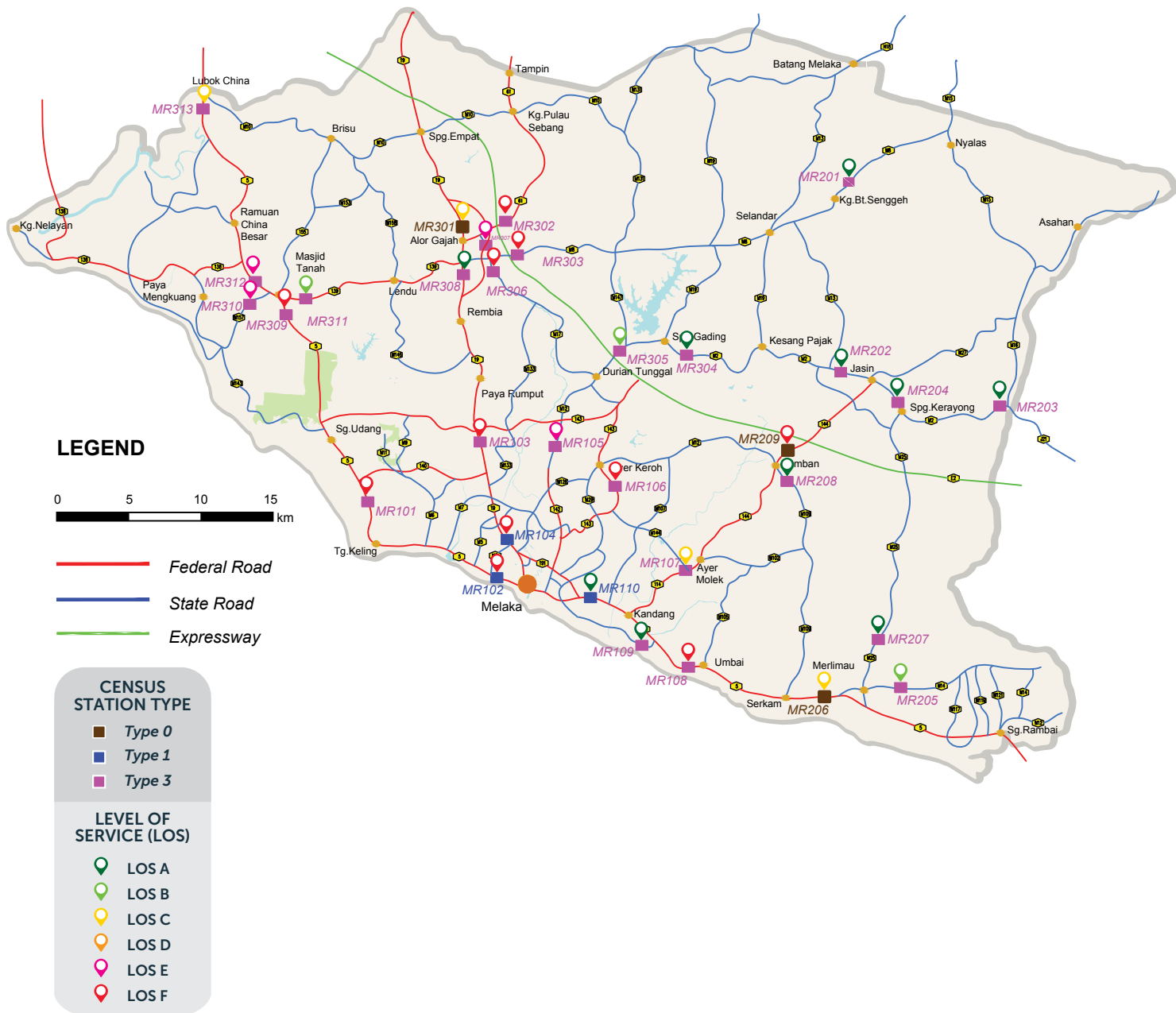
32 Census Stations  
Road Length : 3,310.27 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

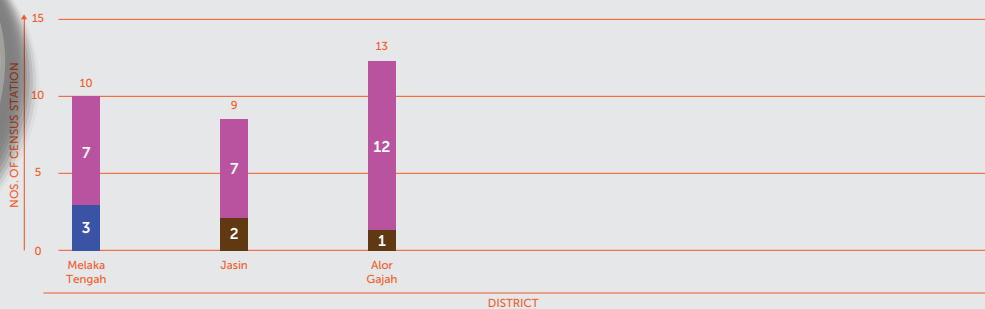


# TRAFFIC CENSUS STATION MAP

STATE : **MELAKA**



## DISTRIBUTION OF SURVEY STATIONS





# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **MELAKA**

## District : MELAKA TENGAH

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
MR101	3	5	14.2	Jalan Melaka - Masjid Tanah	2.2388611 102.1603056	T 1-1
MR102	1	5	5.2	Jalan Melaka - Sungai Udang	2.2069550 102.2181030	T 1-1
MR103	3	19	11.3	Lebuh AMJ (Melaka - Alor Gajah)	2.2852778 102.2143056	K 2-2
MR104	1	19	5.0	Lebuh AMJ (Melaka - Kendong)	2.2370400 102.2330310	K 2-2
MR105	3	M2	9.7	Melaka - Durian Tunggal	2.3071200 102.2729520	K 2-2
MR106	3	M31	14.0	Jalan Bukit Katil	2.2410410 102.2900260	K 2-2
MR107	3	M27	9.7	Melaka - Kampung Kandang - Bemban	2.1993200 102.3142900	T 1-1
MR108	3	5	12.1	Jalan Melaka - Muar	2.1612222 102.3344167	T 1-1
MR109	3	5	4.0	Jalan Melaka-Muar (Bandar Hilir - Kg. Kendong road)	2.1777090 102.3064210	T 1-1
MR110	1	5	3.2	Jalan Melaka - Muar	2.1953230 102.2790330	K 3-3

## District : JASIN

MR201	3	M8	38.6	Selandar - Nyalas	2.4000278 102.4056667	T 1-1
MR202	3	M2	35.4	Durian Tunggal - Jasin	2.3116389 102.4180278	T 1-1
MR203	3	M2	38.6	Jasin - Kampong Chohong	2.2953056 102.5021944	T 1-1
MR204	3	M2	32.2	Jasin - Simpang Kerayong	2.2950278 102.5021944	T 1-1
MR205	3	M14	24.2	Merlimau - Batu Gajah	2.1476944 102.4445556	T 1-1
MR206	0	5	22.9	Jalan Melaka - Muar	2.1460000 102.4189444	T 1-1
MR207	3	M25	24.2	Merlimau - Jasin	2.1635278 102.4299167	T 1-1
MR208	3	M109	32.2	Serkam - Bemban	2.1495000 102.3876667	T 1-1
MR209	0	144	2.1	Jasin - Bemban	2.2673889 102.3784444	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **MELAKA**

District : **ALOR GAJAH**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
MR301	0	19	25.0	Lebuah AMJ (Alor Gajah - Kendong)	2.3911111 102.2060000	T 1-1
MR302	3	61	25.8	Jalan Alor Gajah - Tampin	2.3890556 102.2193611	T 1-1
MR303	3	M8	34.3	Alor Gajah - Machap	2.3729167 102.2263611	T 1-1
MR304	3	M2	20.9	Durian Tunggal - Simpang Gading - Kesang Pajak	2.3253889 102.3360833	T 1-1
MR305	3	M2	17.7	Durian Tunggal - Simpang Gading	2.3181389 102.3606389	T 1-1
MR306	3	M17	25.8	Durian Tunggal - Alor Gajah	2.3617778 102.2281389	T 1-1
MR307	3	M17	27.4	Durian Tunggal - Alor Gajah	2.3776944 102.2211111	T 1-1
MR308	3	19	22.5	Lebuah AMJ (Melaka - Alor Gajah)	2.3656667 102.2077778	T 2-2
MR309	3	5	27.4	Melaka - Masjid Tanah	2.3396389 102.1167778	T 1-1
MR310	3	M157	30.6	Masjid Tanah - Pengkalan Balak	2.3486111 102.0946389	T 1-1
MR311	3	139	33.8	Jalan Masjid Tanah - Lendu - Alor Gajah	2.3519722 102.1225556	T 1-1
MR312	3	5	30.6	Jalan Melaka - Masjid Tanah - Lubok China	2.3625556 102.0961944	T 1-1
MR313	3	5	43.5	Jalan Melaka - Masjid Tanah - Lubok China	2.4534722 102.0699722	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **MELAKA**

**MARCH 2015**

## District : MELAKA TENGAH

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
MR101	-	17,641	2,010	1800-1900	59.1	8.5	2.5	0.5	0.7	28.7	100.0
MR102	-	42,453	3,976	1700-1800	71.9	4.5	2.0	0.3	0.3	21.0	100.0
MR103	-	60,533	8,420	0700-0800	63.3	14.2	5.7	1.9	0.4	14.5	100.0
MR104	-	109,426	8,786	1700-1800	76.0	5.2	2.8	0.4	0.4	15.2	100.0
MR105	-	37,160	4,115	0700-0800	61.8	12.8	4.4	1.0	1.6	18.4	100.0
MR106	-	42,909	5,290	0700-0800	64.0	11.6	2.3	0.2	0.3	21.6	100.0
MR107	-	12,651	1,391	1800-1900	61.4	11.9	3.6	0.5	0.5	22.1	100.0
MR108	-	23,199	2,648	1700-1800	62.4	11.9	2.2	0.1	0.4	22.9	100.0
MR109	-	10,726	1,111	1800-1900	65.7	9.5	0.8	0.2	0.3	23.4	100.0
MR110	-	45,639	3,935	0700-0800	72.4	3.6	3.1	0.7	0.8	19.4	100.0

## District : JASIN

MR201	-	2,715	301	0700-0800	43.4	2.9	19.0	8.2	0.8	25.8	100.0
MR202	-	3,171	317	0700-0800	51.8	3.6	11.4	4.2	0.9	28.1	100.0
MR203	-	5,239	483	1700-1800	61.1	3.3	7.0	1.6	0.6	26.4	100.0
MR204	-	8,739	740	0700-0800	62.3	2.1	3.7	0.6	0.7	30.6	100.0
MR205	-	17,527	1,871	0600-0700	58.9	5.5	2.3	1.1	0.4	31.8	100.0
MR206	21,791	18,691	1,604	1800-1900	57.5	4.6	3.1	0.5	0.9	33.5	100.0
MR207	-	6,095	700	0700-0800	54.6	6.7	3.0	0.9	0.3	34.5	100.0
MR208	-	8,218	902	0800-0900	59.5	6.2	3.5	1.5	0.4	28.9	100.0
MR209	24,991	22,732	2,043	0700-0800	65.4	8.8	5.0	0.7	0.3	19.9	100.0

## District : ALOR GAJAH

MR301	17,840	15,916	1,279	0700-0800	58.1	2.7	4.3	0.8	0.9	33.3	100.0
MR302	-	24,219	2,068	1700-1800	39.9	10.0	2.7	0.4	6.9	40.1	100.0
MR303	-	23,053	3,884	1600-1700	60.9	8.7	2.8	1.5	0.3	25.8	100.0
MR304	-	2,924	328	0700-0800	48.4	11.4	10.6	4.5	0.0	25.0	100.0
MR305	-	9,579	1,095	0700-0800	46.9	11.2	10.1	3.6	0.4	27.8	100.0
MR306	-	13,116	1,756	0700-0800	51.7	17.1	6.4	2.1	0.6	22.1	100.0
MR307	-	15,202	1,717	0700-0800	51.0	11.3	5.6	1.3	0.6	30.2	100.0
MR308	-	13,263	1,203	1200-1300	60.2	11.0	1.7	0.1	0.8	26.2	100.0
MR309	-	22,177	2,348	1800-1900	62.2	6.5	3.8	0.6	0.3	26.6	100.0
MR310	-	17,588	1,788	0700-0800	60.2	7.7	3.5	0.4	0.3	27.9	100.0
MR311	-	12,473	1,203	0700-0800	64.3	6.2	5.0	0.9	0.6	23.0	100.0
MR312	-	20,351	1,977	0700-0800	59.4	6.1	3.4	0.9	0.5	29.7	100.0
MR313	-	8,926	1,150	0700-0800	53.1	5.0	4.1	1.4	0.4	36.0	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **MELAKA**

**SEPTEMBER 2015**

## District : MELAKA TENGAH

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
MR101	-	18,210	1,937	0700-0800	55.0	9.6	2.2	0.4	0.6	32.3	100.0
MR102	-	31,581	2,690	1500-1600	70.7	4.1	2.4	0.2	0.4	22.2	100.0
MR103	-	58,264	7,710	0700-0800	59.7	16.4	6.1	2.1	0.8	14.9	100.0
MR104	-	105,807	9,503	1800-1900	72.2	6.2	2.9	0.4	0.4	17.8	100.0
MR105	-	41,326	4,287	1800-1900	61.4	14.6	5.2	0.9	1.5	16.4	100.0
MR106	-	44,494	5,394	0700-0800	62.1	12.0	1.8	0.1	0.2	23.6	100.0
MR107	-	12,694	1,280	0700-0800	58.6	15.0	3.6	0.5	0.4	22.0	100.0
MR108	-	21,660	2,397	1700-1800	54.2	14.1	2.7	0.1	0.3	28.6	100.0
MR109	-	9,946	869	2000-2100	55.0	10.3	1.2	0.0	0.4	33.0	100.0
MR110	-	51,888	4,537	0700-0800	79.7	2.8	2.2	0.6	0.6	14.1	100.0

## District : JASIN

MR201	-	2,871	350	0700-0800	45.3	4.7	13.9	8.8	0.1	27.1	100.0
MR202	-	4,656	543	0700-0800	57.5	4.0	3.7	0.9	0.7	33.2	100.0
MR203	-	5,198	445	1700-1800	60.4	5.0	9.0	2.5	0.5	22.7	100.0
MR204	-	8,257	803	0700-0800	57.1	3.6	5.1	1.3	0.8	32.2	100.0
MR205	-	2,844	311	1300-1400	49.4	8.6	6.0	0.5	1.6	33.9	100.0
MR206	18,142	15,673	1,337	1700-1800	56.0	6.6	3.1	0.7	0.7	33.0	100.0
MR207	-	16,467	1,531	0700-0800	64.1	3.9	1.9	0.6	0.5	29.1	100.0
MR208	-	5,294	550	0600-0700	56.4	6.0	2.3	0.7	0.7	33.9	100.0
MR209	23,853	21,623	1,999	1700-1800	64.4	8.8	5.4	0.9	0.3	20.3	100.0

## District : ALOR GAJAH

MR301	19,374	17,852	1,419	1200-1300	58.9	3.6	4.5	0.9	0.8	31.3	100.0
MR302	-	14,479	1,735	0700-0800	53.7	10.2	5.2	0.9	0.7	29.3	100.0
MR303	-	17,521	1,970	0700-0800	56.2	8.9	3.6	1.3	0.5	29.7	100.0
MR304	-	2,455	244	0800-0900	49.3	10.9	13.1	3.1	0.3	23.3	100.0
MR305	-	7,731	752	1800-1900	49.7	9.7	15.0	1.3	0.7	23.5	100.0
MR306	-	12,824	1,680	0700-0800	53.4	10.9	9.1	2.3	0.5	23.7	100.0
MR307	-	14,589	1,605	0700-0800	55.6	8.1	5.1	1.2	0.6	29.4	100.0
MR308	-	18,108	2,236	0700-0800	51.2	8.3	4.1	1.0	0.9	34.5	100.0
MR309	-	20,157	2,040	0700-0800	67.2	4.7	4.2	0.7	0.5	22.7	100.0
MR310	-	15,640	1,717	0700-0800	62.8	4.8	3.2	0.7	0.5	27.9	100.0
MR311	-	10,685	1,250	0700-0800	67.6	5.0	5.3	1.1	0.7	20.4	100.0
MR312	-	13,481	1,414	1800-1900	59.8	4.5	4.4	1.1	0.6	29.6	100.0
MR313	-	13,477	1,374	0700-0800	59.4	3.6	4.0	1.5	0.7	30.8	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **MELAKA**

**AVERAGE 2015**

## District : MELAKA TENGAH

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
MR101	17,926	1,974	57.0	9.0	2.3	0.4	0.6	30.5	100%	F	R
MR102	37,017	3,333	71.3	4.3	2.2	0.3	0.3	21.6	100%	F	R
MR103	59,399	8,065	61.5	15.3	5.9	2.0	0.6	14.7	100%	F	R
MR104	107,617	9,145	74.1	5.7	2.9	0.4	0.4	16.5	100%	F	R
MR105	39,243	4,201	61.6	13.7	4.8	0.9	1.5	17.4	100%	E	2017
MR106	43,702	5,342	63.1	11.8	2.1	0.1	0.3	22.6	100%	F	R
MR107	12,673	1,336	60.0	13.4	3.6	0.5	0.4	22.1	100%	C	2021
MR108	22,430	2,523	58.3	13.0	2.4	0.1	0.3	25.7	100%	F	R
MR109	10,336	990	60.3	9.9	1.0	0.1	0.4	28.2	100%	A	2065
MR110	48,764	4,237	76.0	3.2	2.7	0.7	0.7	16.8	100%	A	-

## District : JASIN

MR201	2,793	326	44.3	3.8	16.5	8.5	0.5	26.4	100%	A	-
MR202	3,914	430	54.6	3.8	7.5	2.6	0.8	30.6	100%	A	-
MR203	5,219	464	60.8	4.1	8.0	2.1	0.5	24.5	100%	A	-
MR204	8,498	772	59.7	2.8	4.4	0.9	0.7	31.4	100%	A	-
MR205	10,186	1,091	54.1	7.1	4.1	0.8	1.0	32.9	100%	B	2024
MR206	17,182	1,471	56.7	5.6	3.1	0.6	0.8	33.2	100%	C	-
MR207	11,281	1,116	59.4	5.3	2.5	0.7	0.4	31.8	100%	A	2070
MR208	6,756	726	57.9	6.1	2.9	1.1	0.5	31.4	100%	A	2029
MR209	22,178	2,022	64.9	8.8	5.2	0.8	0.3	20.1	100%	F	R

## District : ALOR GAJAH

MR301	16,885	1,350	58.5	3.1	4.4	0.8	0.8	32.3	100%	C	2021
MR302	19,349	1,902	46.8	10.1	4.0	0.7	3.8	34.7	100%	F	R
MR303	20,287	2,927	58.6	8.8	3.2	1.4	0.4	27.7	100%	F	R
MR304	2,690	286	48.9	11.1	11.9	3.8	0.2	24.1	100%	A	2063
MR305	8,655	924	48.3	10.5	12.6	2.5	0.5	25.6	100%	B	2058
MR306	12,970	1,718	52.6	14.0	7.7	2.2	0.5	22.9	100%	F	R
MR307	14,896	1,661	53.3	9.7	5.3	1.2	0.6	29.8	100%	E	2016
MR308	15,686	1,720	55.7	9.7	2.9	0.6	0.9	30.3	100%	A	-
MR309	21,167	2,194	64.7	5.6	4.0	0.7	0.4	24.6	100%	F	R
MR310	16,614	1,753	61.5	6.3	3.4	0.6	0.4	27.9	100%	E	2016
MR311	11,579	1,227	66.0	5.6	5.1	1.0	0.6	21.7	100%	B	2023
MR312	16,916	1,696	59.6	5.3	3.9	1.0	0.6	29.7	100%	E	-
MR313	11,202	1,262	56.2	4.3	4.0	1.5	0.5	33.4	100%	C	2027

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **MELAKA**

## District : MELAKA TENGAH

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
MR101	11,374	13,747	12,959	13,324	13,263	14,820	15,908	16,436	14,480	17,926	3.8	0.76
MR102	21,793	21,041	21,348	25,440	25,536	25,430	22,884	30,915	36,495	37,017	6.2	0.78
MR103	30,450	33,637	36,035	36,079	39,634	37,335	44,607	43,876	51,396	59,398	6.4	0.91
MR104	61,516	70,873	79,525	83,893	93,299	96,793	96,894	92,695	98,086	107,617	5.2	0.84
MR105	27,695	31,197	27,531	25,053	31,681	35,593	34,499	36,848	40,502	39,243	4.5	0.73
MR106	35,352	37,557	36,517	36,020	35,818	39,464	41,988	42,982	47,660	43,702	3.0	0.78
MR107	8,788	9,083	9,340	9,130	7,579	10,199	11,132	10,888	13,136	12,672	4.6	0.65
MR108	29,826	22,917	18,224	18,925	19,298	19,723	21,896	19,908	24,130	22,430	-0.8	0.03
MR109	10,700	9,754	8,880	8,882	10,415	11,968	11,174	10,110	11,316	10,336	1.3	0.17
MR110	66,757	68,913	82,706	87,224	81,156	45,710	84,604	87,011	69,786	48,764	-1.9	0.06

## District : JASIN

MR201	3,370	3,585	7,681	3,549	3,260	3,081	2,748	3,091	3,242	2,793	-4.7	0.24
MR202	4,709	5,067	5,499	5,293	3,933	5,187	4,946	5,268	5,701	3,914	-0.6	0.02
MR203	7,638	7,992	8,304	8,047	7,672	8,088	6,760	8,257	7,822	5,218	-2.5	0.28
MR204	11,855	12,859	9,206	10,637	10,139	9,958	8,722	9,836	10,337	8,498	-2.9	0.47
MR205	5,022	4,360	3,784	5,674	3,819	4,922	4,818	4,832	5,477	10,186	5.4	0.35
MR206	24,404	19,090	14,057	15,501	15,679	16,426	17,044	16,779	17,112	17,182	-1.6	0.11
MR207	10,572	12,057	11,066	15,120	12,735	13,703	15,204	10,376	12,578	11,281	0.4	0.01
MR208	4,297	3,502	3,822	5,385	4,574	5,511	4,691	6,538	7,386	6,756	7.1	0.75
MR209	14,953	15,208	15,928	16,672	16,113	18,495	20,078	20,578	21,005	22,178	4.7	0.95

## District : ALOR GAJAH

MR301	9,971	10,761	11,057	9,986	11,472	11,465	11,170	15,715	15,665	16,885	5.7	0.77
MR302	12,276	11,395	12,779	13,613	13,817	12,885	12,949	14,712	14,800	19,349	3.9	0.66
MR303	9,828	11,586	6,622	11,743	10,734	13,780	13,566	18,594	18,688	20,287	9.5	0.71
MR304	1,836	2,060	1,894	1,939	2,421	1,981	2,060	2,158	2,540	2,690	3.4	0.60
MR305	9,158	9,463	7,691	8,339	8,544	8,123	8,956	9,394	9,216	8,655	0.3	0.02
MR306	8,790	9,773	9,331	9,620	10,456	10,387	11,236	12,432	11,790	12,970	4.1	0.92
MR307	11,246	12,160	12,085	12,514	13,184	13,117	13,486	14,868	14,932	14,896	3.2	0.94
MR308	16,038	16,299	15,980	14,565	14,284	14,184	16,008	14,974	14,140	15,686	-0.8	0.16
MR309	17,624	17,321	17,782	18,420	19,111	18,400	20,074	19,802	18,986	21,167	1.8	0.78
MR310	9,902	10,269	9,436	12,243	13,868	13,687	14,472	14,115	14,820	16,614	5.9	0.86
MR311	8,209	8,716	9,204	9,975	11,708	11,268	12,676	11,182	13,522	11,579	4.7	0.77
MR312	15,586	15,281	16,569	15,481	12,140	14,922	16,322	16,602	10,867	16,916	-0.8	0.03
MR313	7,255	8,730	8,179	7,709	7,858	8,084	8,480	9,097	9,012	11,202	3.0	0.58

# STATISTIC FOR YEAR 2015

STATE : **MELAKA**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

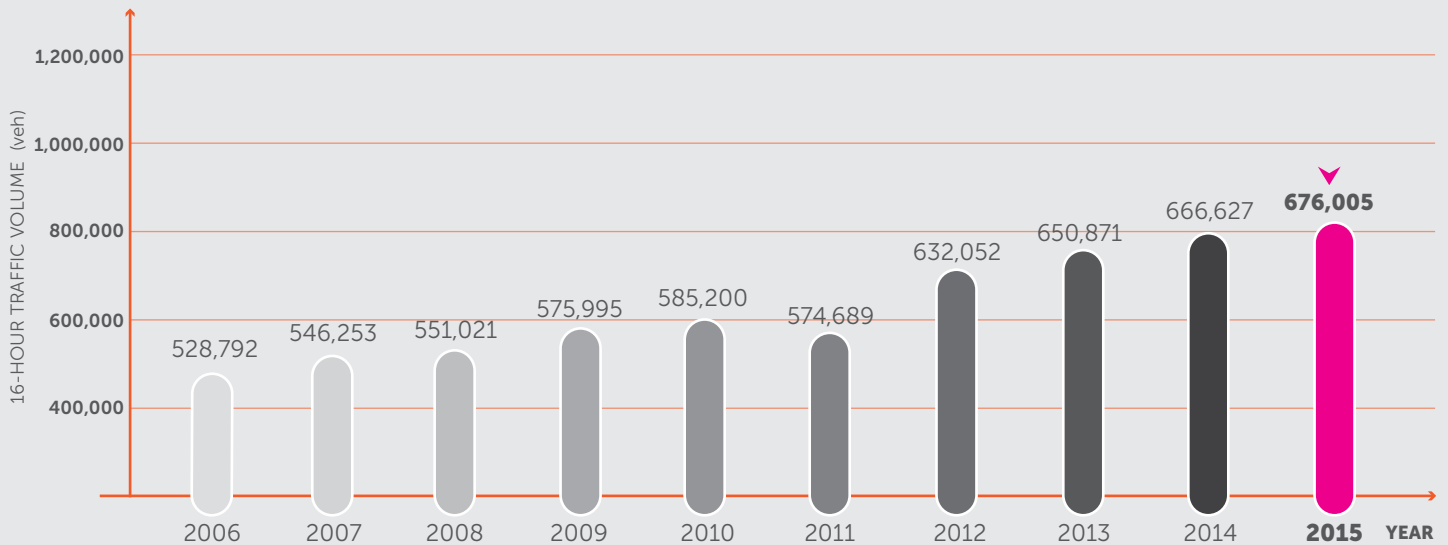


Figure 2.8-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Melaka



There are 32 census stations in Melaka. The pattern of 16-hour traffic volume shows a gradual increase since year 2006 to 2015 except for a slight drop in 2011. In 2015 shows an increasing of 1.39% which is 9,378 vehicles compared to a year 2014.

**1.39%**  
INCREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

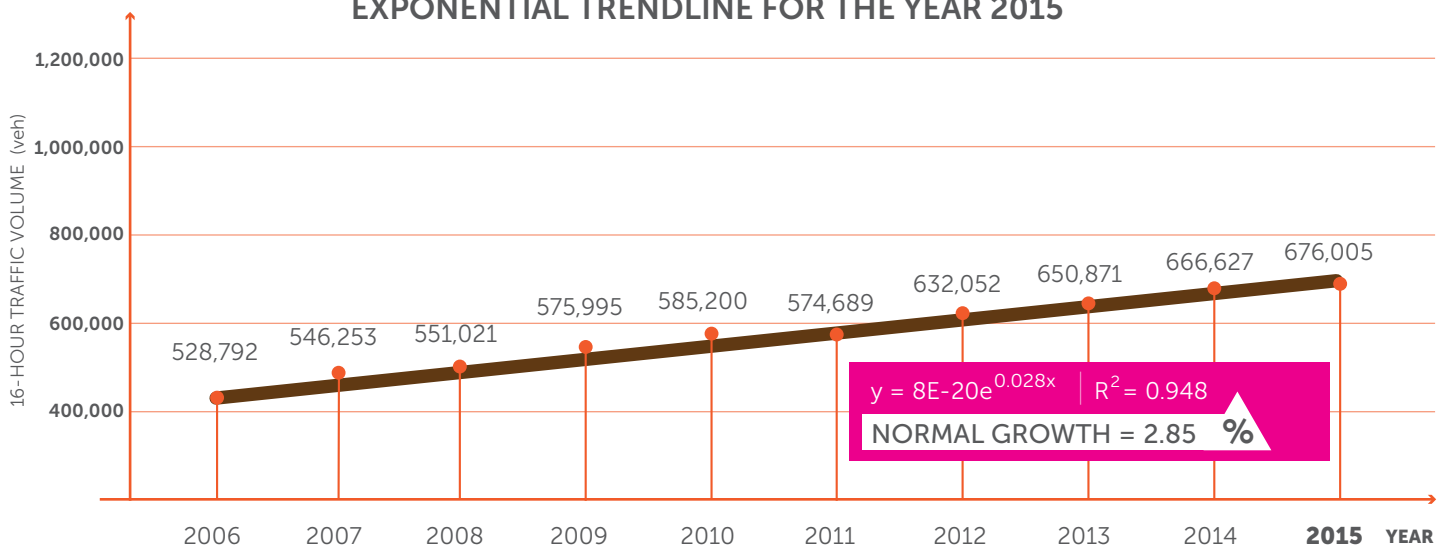
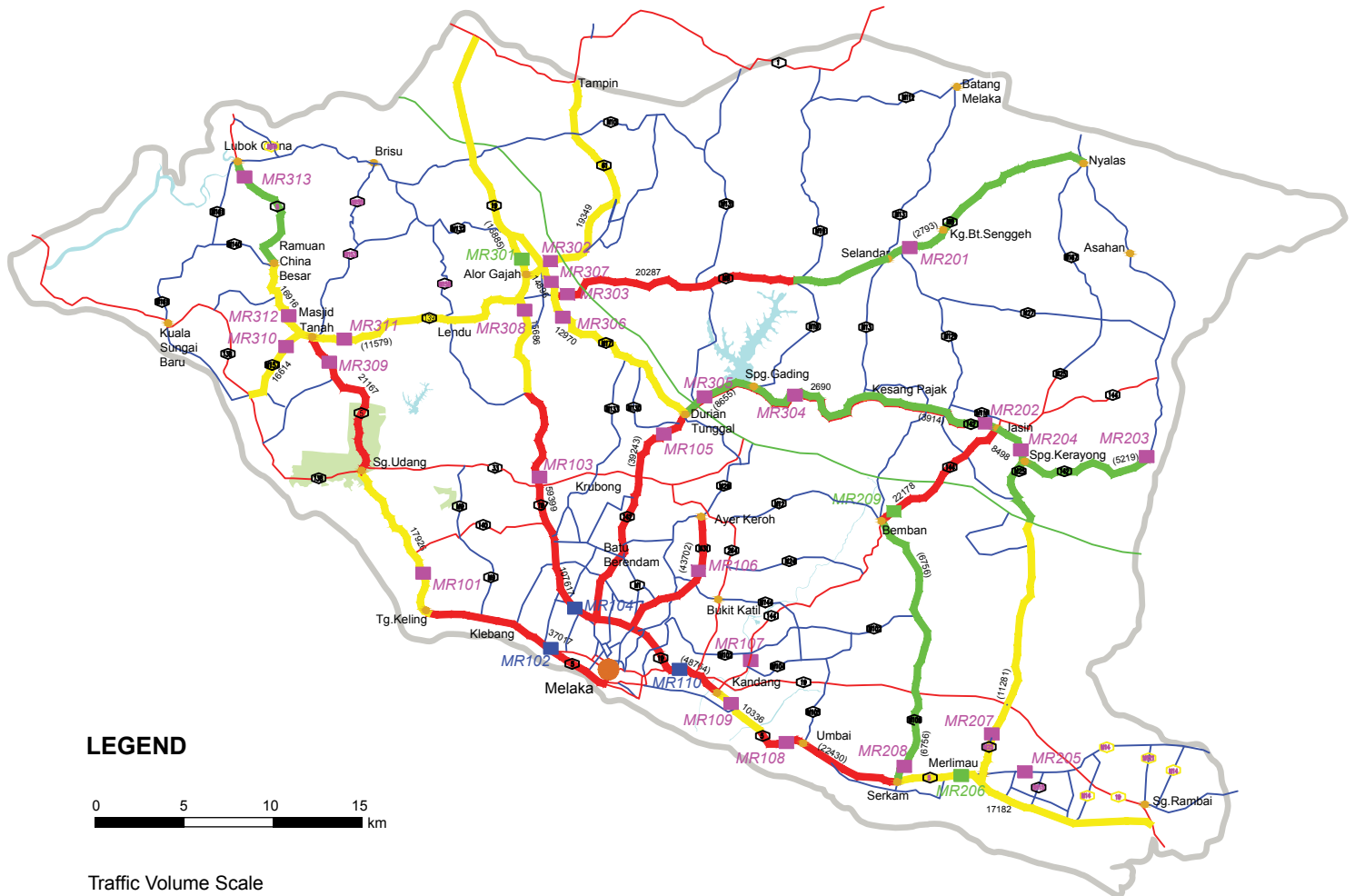


Figure 2.8-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Melaka

Traffic growth rate recorded for the state of Melaka is 2.85% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Melaka.

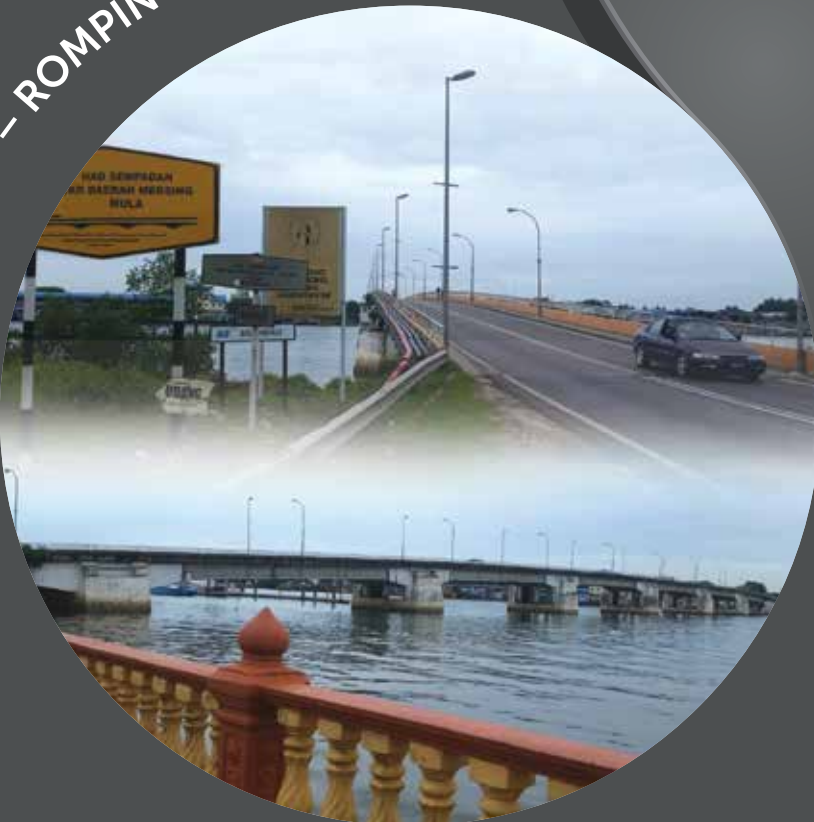
# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **MELAKA**





• ENDAU – ROMPIN BRIDGE, ROMPIN •



• 1980 : East Coast - Johor Connecting Bridge •



# JOHOR

DARUL TAKZIM

75 Census Stations

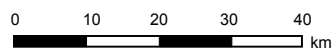
Road Length : 21,588.01 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **JOHOR**

## LEGEND



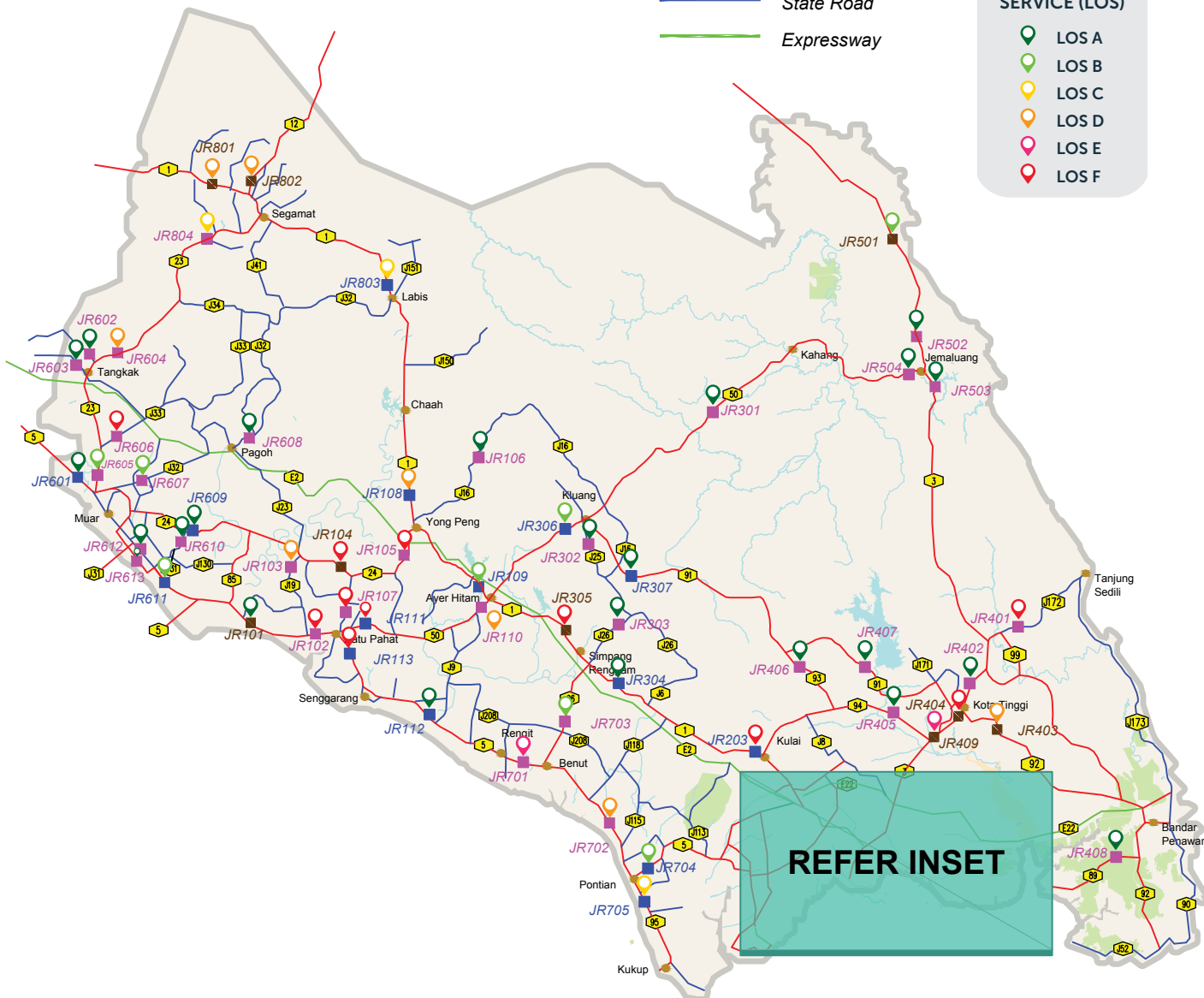
- Federal Road
- State Road
- Expressway

## CENSUS STATION TYPE

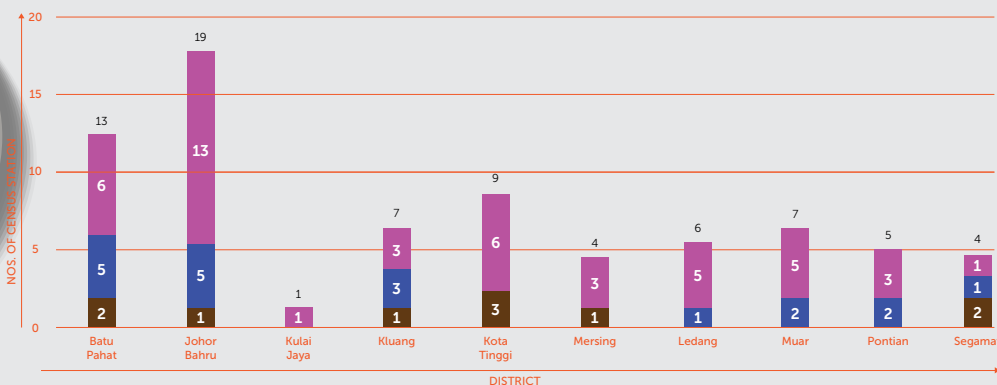
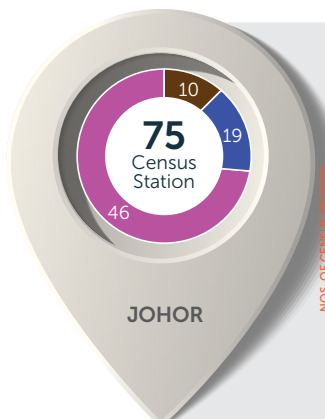
- Type 0
- Type 1
- Type 3

## LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

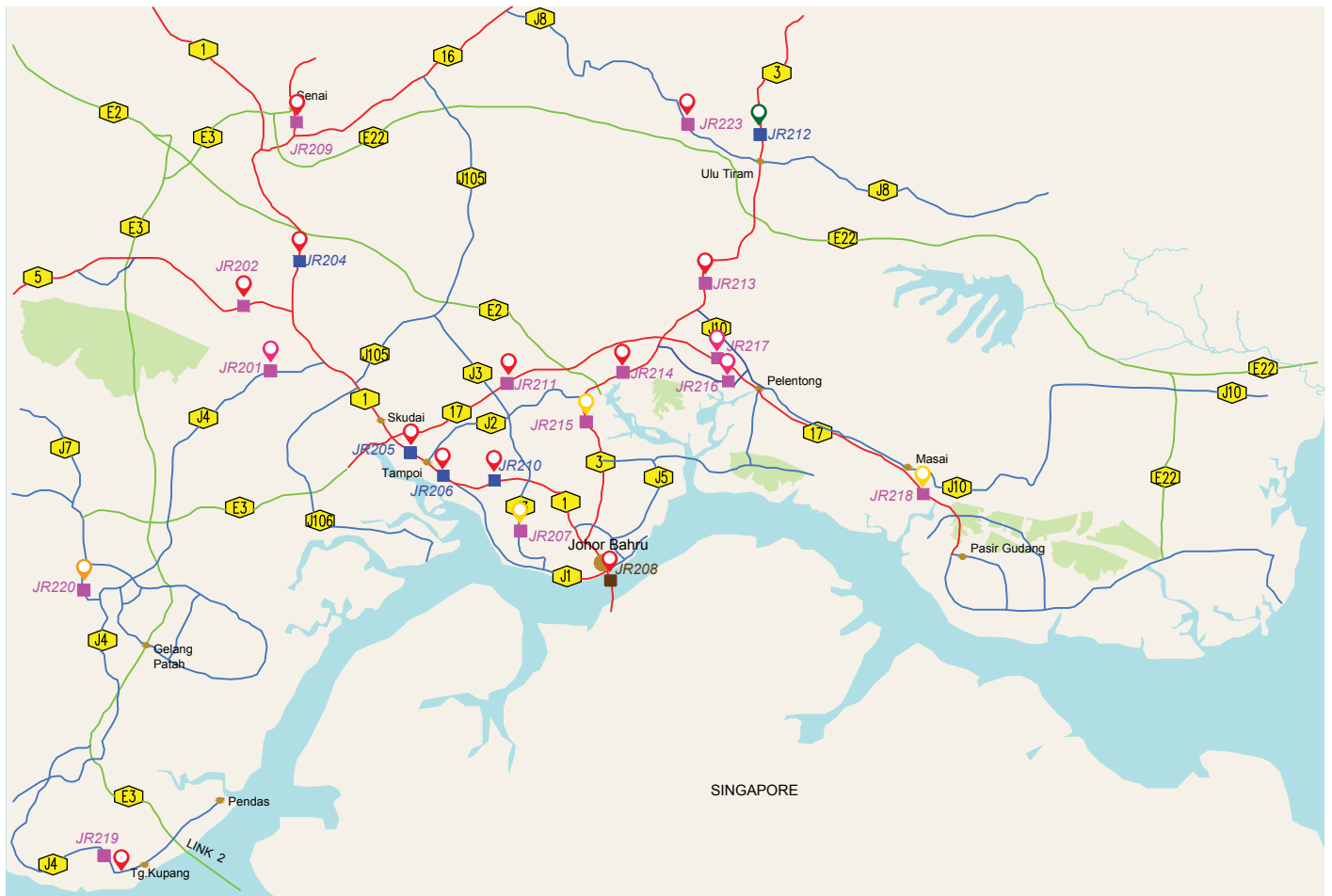


## DISTRIBUTION OF SURVEY STATIONS



# TRAFFIC CENSUS STATION MAP

STATE : **JOHOR (INSET)**



**CENSUS STATION TYPE**

- Type 0
- Type 1
- Type 3

**LEVEL OF SERVICE (LOS)**

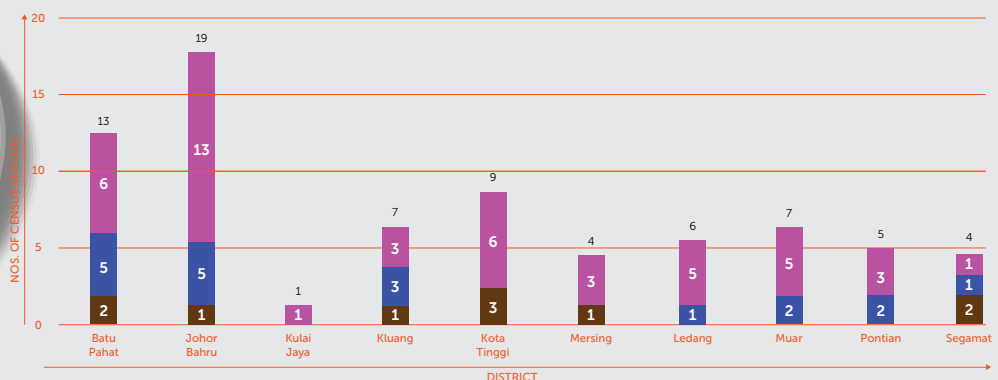
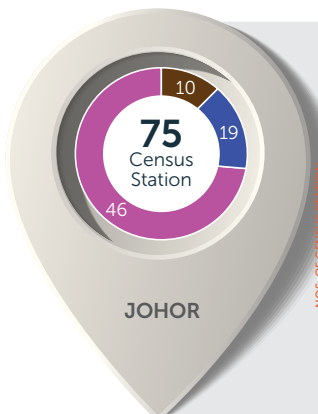
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

**LEGEND**

0 2 4 6 8 km

- Federal Road
- State Road
- Expressway

## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **JOHOR**

District : **BATU PAHAT**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
JR101	0	5	142.0	Batu Pahat - Muar (Seri Pengkalan)	1.8638500 102.8153500	T 1-1
JR102	3	5	127.5	Batu Pahat - Muar (Peserai)	1.8492220 102.9049170	T 1-1
JR103	3	J128	68.0	Jalan Kangkar Senangar	1.9913330 102.8726390	T 1-1
JR104	0	24	127.2	Muar - Yong Peng (Southeast of J13 junction)	1.9489167 102.9605833	T 1-1
JR105	3	24	115.6	Muar - Yong Peng (3.8km South of Yong Peng (U) Interchange)	1.9725833 103.0333611	T 1-1
JR106	3	J16	122.4	Yong Peng - Kangkar Baru	2.0625833 103.1209167	T 1-1
JR107	3	J13	7.2	Jalan Tongkang Pechah	1.8995000 102.9487500	T 1-1
JR108	1	1	115.0	Yong Peng - Segamat (North of Route 184 junction)	2.0363120 103.0546030	T 1-1
JR109	1	1	96.0	Ayer Hitam - Yong Peng (1km Northwest of Route 50 junction)	1.9265390 103.1766670	T 1-1
JR110	3	50	29.5	Batu Pahat - Ayer Hitam (Parit Sonto)	1.8964722 103.1613889	T 2-2
JR111	1	50	5.0	Batu Pahat - Ayer Hitam (near Batu Pahat Mall)	1.8637222 102.9645556	K 2-2
JR112	1	5	111.0	Pontian - Batu Pahat (Senggarang)	1.7272778 103.0742778	T 1-1
JR113	1	5	129.0	Pontian - Batu Pahat	1.8153889 102.9551389	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **JOHOR**

## District : JOHOR BAHRU

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
JR201	3	J4	22.0	Johor Bahru - Gelang Patah/ Pendas (Lima Kedai)	1.5115556	103.6300278	K 2-2
JR202	3	5	19.0	Johor Bahru - Pontian (140m West of Route 1 junction)	1.5488056	103.6543889	K 2-2
JR204	1	1	20.8	Tambak Johor - Senai (400m North of Route 5 junction)	1.5504444	103.6575000	K 3-3
JR205	1	1	11.0	Tambak Johor - Senai (near Pekan Rabu)	1.5003333	103.6966944	K 3-3
JR206	1	1	6.0	Tambak Johor - Senai (Skudai Kiri)	1.4879167	103.7136111	K 3-3
JR207	3	J1	6.4	Johor Bahru - Skudai (Danga Bay)	1.4828056	103.7208889	K 3-3
JR208	0	1	-	Malaysia/ Singapore Border - Tambak Johor (Causeway)	1.4628611	103.7666944	K 3-3
JR210	1	1	7.0	Tambak Johor - Senai (Jalan Tun Abdul Razak)	1.4876667	103.7258889	K 2-2
JR211	3	17	13.0	Jalan Pelabuhan Pasir Gudang (1km West of Route 1)	1.5095000	103.7113056	K 2-2
JR212	1	3	23.0	Johor Bahru - Endau (Bandar Tiram)	1.6194520	103.8202530	K 2-2
JR213	3	3	16.0	Johor Bahru - Endau (1.8km South of E22 Interchange)	1.5673889	103.8121944	K 3-3
JR214	3	3	10.0	Johor Bahru - Endau (100m East of Kangkar Tebrau junction)	1.5261450	103.7739010	K 3-3
JR215	3	3	8.0	Johor Bahru - Endau (near Maybank Tebrau)	1.5060000	103.7628889	K 3-3
JR216	3	J10	13.1	Johor Bahru - Masai (Jalan Masai Lama)	1.5252840	103.8046950	K 2-2
JR217	3	17	25.0	Jalan Pelabuhan Pasir Gudang (Johor Jaya)	1.5334740	103.8011620	K 2-2
JR218	3	17	35.1	Jalan Pelabuhan Pasir Gudang (Taman Mawar)	1.4685840	103.8902590	K 2-2
JR219	3	17	2.0	Jalan Pelabuhan Pasir Gudang (Johor Bahru - Link Kedua)	1.4955000	103.6783056	K 3-3
JR220	3	J7	3.0	Ulu Choh - Gelang Patah	1.4818889	103.5825000	K 2-2
JR223	3	1375	24.0	Jalan Felda Ulu Tebrau	1.6049480	103.8058530	T 1-1

## District : KULAI JAYA

JR209	3	16	2.1	Jalan Lapangan Terbang Sultan Ismail	1.6112490	103.6577780	K 2-2
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# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **JOHOR**

## District : KLUANG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
JR301	3	50	86.8	Kluang - Jemaluang (Kahang)	2.2267930 103.5548350	T 1-1
JR302	3	J25	102.9	Kluang - Renggam	2.0037050 103.3230560	T 2-2
JR303	3	J26	9.7	Renggam - Simpang Renggam	1.8796389 103.3882500	T 1-1
JR304	1	1	71.4	Johor Bahru - Ayer Hitam (1km Southeast of Route 96 junction)	1.7963333 103.3352500	T 1-1
JR305	0	1	77.3	Johor Bahru - Ayer Hitam (5.6km Northwest of Route 96 junction)	1.8445620 103.3036910	T 1-1
JR306	1	50	49.1	Ayer Hitam - Kluang	2.0124510 103.2851730	K 2-2
JR307	1	91	76.0	Kota Tinggi - Kluang	1.9483120 103.3853100	T 1-1

## District : KOTA TINGGI

JR401	3	99	57.6	Jalan Lok Heng	1.8521944 103.9802222	T 1-1
JR402	3	3	48.3	Kota Tinggi - Mersing	1.7610000 103.9260000	T 2-2
JR403	0	92	49.9	Kota Tinggi - Sungai Rengit	1.7166940 103.9608330	T 1-1
JR404	0	3	38.6	Johor Bahru - Kota Tinggi	1.7102780 103.8804170	T 1-1
JR405	3	94	54.7	Kota Tinggi - Kulai	1.7142950 103.8257450	T 1-1
JR406	3	93	4.6	Jalan Sungai Sayong	1.7676070 103.6956380	T 1-1
JR407	3	91	7.0	Kota Tinggi - Kluang	1.7794170 103.8691940	T 1-1
JR408	3	89	16.0	Jalan Tanjung Belungkor	1.5002778 104.1975833	T 1-1
JR409	0	3	36.8	Johor Bahru - Kota Tinggi (Bypass)	1.7340560 103.9137500	T 1-1

## District : MERSING

JR501	0	3	135.0	Johor Bahru - Endau (2.4km North of Mersing town)	2.4504440 103.8299720	T 1-1
JR502	3	3	114.0	Johor Bahru - Endau (Northeast of Jemaluang)	2.2844722 103.8570556	T 1-1
JR503	3	3	111.0	Johor Bahru - Endau (Southwest of Jemaluang)	2.2680833 103.8543611	T 1-1
JR504	3	50	137.0	Kluang - Jemaluang (0.1km West of Route 3 junction)	2.2686111 103.8529167	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **JOHOR**

## District : LEDANG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
JR601	1	5	189.0	Muar - Melaka	2.0815278 102.5433056	K 2-2
JR602	3	J123	1.0	Tangkak - Bekoh	2.2891290 102.5496090	T 1-1
JR603	3	J21	2.0	Tangkak - Melaka (Jalan Sialang)	2.2796389 102.5204167	T 1-1
JR604	3	23	26.0	Muar - Segamat (Tangkak)	2.2710833 102.5420000	T 1-1
JR605	3	23	3.0	Muar - Segamat (Parit Bunga)	2.0800880 102.5497390	K 2-2
JR606	3	J33	3.0	Sungai Mati - Bukit Gambir	2.1539900 102.5689660	T 1-1

## District : MUAR

JR607	3	J32	45.5	Muar - Labis (Lenga)	2.2522680 102.8361520	T 1-1
JR608	3	J32	186.4	Muar - Labis (Bukit Pasir)	2.0901950 102.6173340	T 1-1
JR609	1	24	161.5	Muar - Yong Peng (East of Route J131 junction)	2.0147500 102.6961080	T 1-1
JR610	3	J131	2.8	Parit Jawa - Air Manis	1.9774510 102.6674770	T 1-1
JR611	1	5	170.5	Batu Pahat - Muar (Parit Jamil)	1.9426420 102.6577800	T 1-1
JR612	3	J31	9.2	Jalan Temenggong Ahmad	1.9850833 102.6201389	T 1-1
JR613	3	5	178.5	Batu Pahat - Muar (Parit Haji Ali)	1.9841830 102.6081970	T 1-1

## District : PONTIAN

JR701	3	5	87.0	Pontian - Batu Pahat (Tampok)	1.6580833 103.2000000	T 1-1
JR702	3	5	66.5	Pontian - Batu Pahat (near Hospital Pontian)	1.4981389 103.3853333	T 1-1
JR703	3	96	6.0	Simpang Renggam - Benut	1.6961389 103.2850556	T 1-1
JR704	1	5	54.5	Johor Bahru - Pontian Kechil	1.5003611 103.4420556	T 1-1
JR705	1	95	1.0	Johor Bahru - Pontian Kechil - Kukup	1.4749167 103.3944444	T 1-1

## District : SEGAMAT

R801	0	1	200.0	Johor Bahru - Segamat - Batu Enam	2.5742500 102.7090278	T 1-1
JR802	0	12	50.0	Lebuhraya Tun Abdul Razak (500m Segamat - Kuantan junction)	2.5487780 102.7935000	T 1-1
JR803	1	1	158.0	Johor Bahru - Segamat(Labis)	2.4114530 103.0146150	T 1-1
JR804	3	23	60.0	Johor Bahru - Segamat (Jementah)	2.4764722 102.7181667	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**MARCH 2015**

## District : BATU PAHAT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR101	16,093.5	12,523.8	1,027.8	2100-2200	61.5	7.1	8.1	1.2	1.2	20.9	100.0
JR102	-	14,101	1,324	1800-1900	61.2	9.2	7.5	4.0	1.7	16.5	100.0
JR103	-	9,360	920	0700-0800	28.7	17.9	17.2	16.8	2.1	17.5	100.0
JR104	27,714.8	22,966	1,855	1800-1900	41.0	29.0	12.6	8.0	0.5	8.8	100.0
JR105	-	13,570	1,108	0700-0800	45.2	8.1	13.6	11.1	1.6	20.4	100.0
JR106	-	1,767	172	1200-1300	34.7	10.9	8.3	6.2	1.1	38.8	100.0
JR107	-	26,290	2,484	1800-1900	64.1	7.4	7.8	5.3	1.0	14.5	100.0
JR108	-	12,601.2	1,101.7	1700-1800	52.4	15.1	11.5	7.0	1.1	12.8	100.0
JR109	-	10,796.2	777.8	1100-1200	46.2	15.0	13.8	8.4	0.5	16.1	100.0
JR110	-	26,481	2,267	0700-0800	57.8	13.0	7.5	5.1	1.2	15.5	100.0
JR111	-	65,018	4,995.7	0700-0800	64.1	7.4	4.5	1.7	0.6	21.7	100.0
JR112	-	11,884.5	873.1	1200-1300	58.2	10.0	10.5	1.6	1.1	18.7	100.0
JR113	-	42,774	3,621.2	1300-1400	75.5	6.8	5.0	0.4	0.5	11.8	100.0

## District : JOHOR BAHRU

JR201	-	30,500	3,211	0700-0800	65.3	6.5	5.6	1.3	0.9	20.3	100.0
JR202	-	115,961	9,178	1800-1900	74.6	4.9	4.5	1.2	0.8	14.0	100.0
JR204	-	111,538.4	7,564.2	1700-1800	77.6	3.6	3.8	2.9	2.4	9.7	100.0
JR205	-	184,516	13,157.714	1200-1300	75.0	4.0	2.3	1.0	1.6	16.1	100.0
JR206	-	142,359.8	10,439.2	1800-1900	76.8	2.1	1.6	0.7	1.7	17.1	100.0
JR207	-	94,391	8,272	1800-1900	81.5	4.1	0.8	0.5	1.1	12.0	100.0
JR208	138,276.7	109,149.8	11,450.2	0600-0700	35.6	1.4	1.0	1.7	1.9	58.5	100.0
JR210	-	142,465.2	10,749.7	0800-0900	71.7	3.7	1.7	0.6	1.3	21.1	100.0
JR211	-	104,818	11,330	0700-0800	69.5	6.1	5.8	2.7	0.7	15.2	100.0
JR212	-	30,162.7	2,279.5	0700-0800	71.9	6.1	5.6	4.7	1.3	10.4	100.0
JR213	-	122,733	11,001	1800-1900	73.9	4.4	5.0	4.5	1.1	11.1	100.0
JR214	-	138,329	11,769	0800-0900	71.6	4.4	2.3	1.2	1.0	19.6	100.0
JR215	-	80,092	6,504	1800-1900	67.9	8.0	4.5	3.1	0.9	15.7	100.0
JR216	-	74,797	6,023	1400-1500	78.6	6.0	2.1	3.0	0.4	9.9	100.0
JR217	-	31,022	2,442	1200-1300	78.9	5.0	3.1	0.6	1.1	11.3	100.0
JR218	-	35,023	4,232	1700-1800	62.3	5.3	5.5	9.3	0.6	16.9	100.0
JR219	-	124,588	9,860	1800-1900	72.0	5.3	3.3	1.6	0.6	17.3	100.0
JR220	-	45,164	3,879	1000-1100	70.5	5.6	3.9	3.3	0.4	16.2	100.0
JR223	-	16,712	1,581	0800-0900	70.3	5.2	6.2	1.9	0.4	16.0	100.0



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**MARCH 2015**

## District : KULAI JAYA

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR209	-	58,385	6,315	0700-0800	59.3	5.7	4.5	2.9	1.4	26.1	100.0

## District : KLUANG

JR301	-	6,149	660	1200-1300	41.3	14.2	11.8	17.4	0.8	14.5	100.0
JR302	-	14,338	1,717	0700-0800	61.8	10.0	4.9	1.8	1.0	20.6	100.0
JR303	-	5,385	496	1800-1900	58.0	9.8	8.2	6.4	1.6	16.0	100.0
JR304	-	11,061.8	819.5	1200-1300	36.8	14.1	18.4	15.3	0.5	14.8	100.0
JR305	20,082.4	17,585.7	1,548.1	1700-1800	52.3	6.0	14.7	6.9	0.6	19.5	100.0
JR306	-	41,040.5	3,525.7	0700-0800	70.0	8.8	5.4	2.6	1.0	12.3	100.0
JR307	-	9,987	749.8	1000-1100	57.9	9.6	7.6	6.2	1.4	17.2	100.0

## District : KOTA TINGGI

JR401	-	6,588	585	0700-0800	60.9	6.6	7.2	4.3	0.4	20.6	100.0
JR402	-	11,228	950	0800-0900	56.3	10.7	11.4	11.6	0.9	9.2	100.0
JR403	22,362.1	20,165.5	1,760	1800-1900	74.5	6.9	4.0	3.2	0.8	10.7	100.0
JR404	23,367	20,745.5	1,687.7	1700-1800	67.9	9.9	6.4	1.9	1.3	12.6	100.0
JR405	-	11,238	1,033	0900-1000	63.6	5.9	5.9	8.1	0.7	15.9	100.0
JR406	-	4,315	380	0900-1000	62.2	10.2	7.0	8.5	0.2	11.8	100.0
JR407	-	2,841	263	0900-1000	59.6	9.5	9.6	5.5	0.2	15.5	100.0
JR408	-	6,787	587	0800-0900	66.4	9.1	7.4	4.4	0.6	12.0	100.0
JR409	18,293.4	16,008.4	1,363	0700-0800	65.1	8.7	7.6	9.1	1.4	8.0	100.0

## District : MERSING

JR501	17,531.7	15,010.4	1,314.1	1700-1800	54.0	7.0	5.7	2.9	0.7	29.8	100.0
JR502	-	6,498	550	1900-2000	60.7	11.5	9.8	8.0	1.4	8.7	100.0
JR503	-	4,408	386	0800-0900	46.6	14.2	11.9	16.7	1.1	9.6	100.0
JR504	-	1,120	124	1000-1100	24.6	19.9	15.0	20.7	0.9	18.9	100.0

## District : LEDANG

R601	-	23,237.2	1,798.1	0700-0800	72.9	4.4	8.5	1.6	0.7	11.9	100.0
JR602	-	4,729	402	0800-0900	49.7	9.4	16.7	2.5	0.4	21.4	100.0
JR603	-	11,184	984	1800-1900	56.5	4.7	8.9	1.9	0.7	27.3	100.0
JR604	-	18,374	1,609	0700-0800	60.2	5.5	7.2	2.5	1.4	23.3	100.0
JR605	-	35,383	2,992	1800-1900	76.0	5.8	6.3	1.5	0.7	9.8	100.0
JR606	-	18,967	1,790	0700-0800	78.3	6.2	3.2	0.1	0.5	11.7	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**MARCH 2015**

## District : MUAR

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR607	-	21,645	1,824	1800-1900	41.0	5.7	7.6	4.5	0.8	40.3	100.0
JR608	-	2,850	376	1700-1800	50.9	11.3	11.4	2.9	0.6	22.8	100.0
JR609	-	8,098.4	580.7	1700-1800	55.2	13.6	16.9	4.9	0.4	9.0	100.0
JR610	-	5,535	726	0900-1000	71.3	2.6	3.5	0.5	0.2	21.8	100.0
JR611	-	12,830.7	1,046	1600-1700	58.8	11.5	9.6	2.0	1.1	17.0	100.0
JR612	-	13,061	1,022	1900-2000	67.6	4.5	7.2	1.5	0.7	18.5	100.0
JR613	-	7,709	644	1800-1900	65.8	5.5	4.3	1.1	0.7	22.7	100.0

## District : PONTIAN

JR701	-	12,930	1,487	0600-0700	64.3	9.3	11.5	2.1	1.5	11.3	100.0
JR702	-	17,641	1,351	1600-1700	60.0	10.1	7.1	2.2	1.6	19.0	100.0
JR703	-	8,028	942	0600-0700	49.5	11.2	12.7	5.4	1.4	19.9	100.0
JR704	-	14,515.5	1,108.7	1700-1800	65.8	9.2	7.8	2.9	1.0	13.2	100.0
JR705	-	14,776.7	1,279.8	1800-1900	69.6	10.0	3.9	1.3	0.7	14.5	100.0

## District : SEGAMAT

JR801	20,461.8	18,488.8	1,435.7	1700-1800	56.8	9.4	6.2	5.2	0.7	21.6	100.0
JR802	17,194.5	15,449.5	1,266.4	1700-1800	62.6	14.7	7.1	5.4	0.6	9.6	100.0
JR803	-	13,839.1	1,134	1700-1800	67.6	9.0	8.3	6.2	1.0	7.8	100.0
JR804	-	8,777	861	1600-1700	53.0	12.6	9.7	7.2	2.5	15.0	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**SEPTEMBER 2015**

## District : BATU PAHAT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR101	14,100.4	12,118.7	982.7	1800-1900	58.4	7.8	9.2	1.2	1.1	22.3	100.0
JR102	-	20,251	1,903	1800-1900	56.7	8.8	8.8	7.0	1.4	17.2	100.0
JR103	-	6,704	640	1600-1700	37.2	11.8	15.7	12.9	1.0	21.4	100.0
JR104	31,991.8	27,654.7	2,159.4	1800-1900	34.1	28.6	21.7	7.7	0.5	7.5	100.0
JR105	-	18,993	1,664	1400-1500	45.9	13.8	13.8	11.8	0.7	14.0	100.0
JR106	-	3,223	315	1300-1400	28.0	13.1	13.1	16.0	0.4	29.4	100.0
JR107	-	22,530	1,841	0900-1000	46.7	14.7	13.0	9.0	0.9	15.7	100.0
JR108	-	11,368.7	1,026.4	1700-1800	51.0	14.8	11.2	7.3	1.3	14.4	100.0
JR109	-	10,440.4	737.2	1500-1600	52.8	13.0	11.9	7.4	0.5	14.3	100.0
JR110	-	29,044	2,249	1200-1300	52.9	13.5	11.8	3.9	1.3	16.6	100.0
JR111	-	67,228.1	6,293	0700-0800	66.9	5.4	3.3	2.0	0.5	21.8	100.0
JR112	-	10,894.4	807	1700-1800	53.5	10.6	11.1	1.9	1.2	21.6	100.0
JR113	-	39,753.5	3,225.4	1800-1900	73.5	6.5	5.1	0.9	0.5	13.5	100.0

## District : JOHOR BAHRU

JR201	-	38,046	6,090	1900-2000	63.1	4.5	3.6	0.6	0.8	27.3	100.0
JR202	-	115,098	9,366	1600-1700	75.2	5.0	4.2	1.5	0.8	13.4	100.0
JR204	-	106,177.2	8,585.7	0700-0800	68.2	10.7	4.2	3.5	2.2	11.1	100.0
JR205	-	171,508.4	13,760.4	1200-1300	72.7	3.2	2.5	0.9	1.6	19.1	100.0
JR206	-	101,647.2	8,839.8	0700-0800	58.8	3.3	1.5	1.5	13.0	21.9	100.0
JR207	-	73,737	6,595	1900-2000	78.7	4.0	1.9	0.8	1.5	13.1	100.0
JR208	146,987.5	116,494.1	11,513	0600-0700	34.2	1.0	0.7	1.9	1.9	60.3	100.0
JR210	-	138,776.4	11,055.7	1700-1800	70.0	3.6	2.0	0.7	1.3	22.4	100.0
JR211	-	92,384	7,894	1700-1800	70.3	6.1	4.9	3.3	0.7	14.7	100.0
JR212	-	29,165.1	2,531	1700-1800	71.4	7.3	5.3	4.3	1.3	10.4	100.0
JR213	-	117,560	10,720	1800-1900	72.8	5.3	5.7	4.2	0.8	11.1	100.0
JR214	-	127,223	10,125	1700-1800	71.6	3.8	2.9	1.3	1.0	19.4	100.0
JR215	-	74,899	6,333	1800-1900	74.6	4.1	2.4	1.2	1.1	16.8	100.0
JR216	-	34,862	4,165	0800-0900	77.7	7.5	2.8	0.8	0.9	10.3	100.0
JR217	-	91,715	8,037	1400-1500	73.5	5.4	4.9	5.5	0.4	10.3	100.0
JR218	-	23,067	2,965	0700-0800	67.0	4.8	1.9	3.4	0.8	22.1	100.0
JR219	-	90,819	8,170	1900-2000	75.0	5.8	1.6	0.7	0.6	16.2	100.0
JR220	-	46,150	4,376	0700-0800	65.4	6.3	5.4	3.4	0.5	19.0	100.0
JR223	-	18,124	1,968	1800-1900	64.1	5.8	5.7	3.4	0.8	20.2	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**SEPTEMBER 2015**

## District : KULAI JAYA

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR209	-	62,079	9,234	0700-0800	50.0	5.4	4.1	2.1	1.2	37.2	100.0

## District : KLUANG

JR301	-	5,335	476	1400-1500	41.5	19.7	10.3	14.8	1.1	12.4	100.0
JR302	-	13,306	1,788	0700-0800	63.3	8.1	4.1	1.9	0.9	21.6	100.0
JR303	-	10,218	843	1600-1700	60.6	10.8	6.9	7.4	0.8	13.5	100.0
JR304	-	7,316.5	553.2	1200-1300	46.9	13.7	11.7	9.9	0.6	17.2	100.0
JR305	19,947.2	17,131.8	1,319.5	1700-1800	51.4	7.9	13.0	8.4	0.6	18.8	100.0
JR306	-	42,223	3,520.2	1700-1800	72.7	6.5	4.2	2.4	1.0	13.2	100.0
JR307	-	9,808.2	707.7	1100-1200	58.6	11.3	8.1	7.7	0.5	13.8	100.0

## District : KOTA TINGGI

JR401	-	5,030	456	1400-1500	55.8	8.3	6.5	6.2	1.2	21.9	100.0
JR402	-	15,620	1,450	1600-1700	71.8	8.2	4.1	4.9	0.9	10.2	100.0
JR403	18,000	16,064.1	1,323.5	1800-1900	75.3	6.1	3.8	2.5	0.8	11.5	100.0
JR404	21,417.5	18,744.1	1,766.2	1800-1900	67.9	8.7	5.7	2.4	2.2	13.0	100.0
JR405	-	5,703	443	0600-0700	50.0	12.4	11.1	17.7	0.9	7.9	100.0
JR406	-	7,688	669	0900-1000	51.5	9.8	10.4	13.9	0.5	13.9	100.0
JR407	-	4,201	449	1800-1900	61.0	8.7	7.4	5.4	0.5	17.1	100.0
JR408	-	3,911	324	1500-1600	62.1	8.6	9.1	6.4	0.5	13.4	100.0
JR409	17,481	15,644.8	1,240	0700-0800	65.0	10.6	7.9	7.0	1.1	8.4	100.0

## District : MERSING

JR501	16,706.1	14,333.2	1,105.1	1700-1800	53.7	6.1	5.4	3.4	1.0	30.3	100.0
JR502	-	4,518	420	1700-1800	61.5	8.8	12.1	8.7	1.6	7.2	100.0
JR503	-	90,442.9	76	1200-1300	46.5	17.6	13.6	12.2	1.3	8.7	100.0
JR504	-	2,559	229	1300-1400	53.8	12.9	11.8	11.4	1.4	8.6	100.0

## District : LEDANG

JR601	-	25,478	2,199.1	1800-1900	69.0	5.8	7.6	1.0	0.5	16.1	100.0
JR602	-	4,028	370	1300-1400	40.8	8.8	18.6	2.9	0.3	28.6	100.0
JR603	-	6,692	812	0700-0800	60.7	2.9	8.3	2.2	0.3	25.6	100.0
JR604	-	13,317	1,008	1200-1300	57.8	7.1	8.4	2.1	1.3	23.3	100.0
JR605	-	26,392	2,668	1800-1900	62.5	7.7	7.9	2.2	0.8	18.9	100.0
JR606	-	20,865	2,942	0700-0800	61.4	11.2	6.9	1.0	0.6	18.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **JOHOR**

**SEPTEMBER 2015**

## District : MUAR

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
JR607	-	9,730	883	1600-1700	48.0	13.9	5.1	0.3	0.3	32.4	100.0
JR608	-	15,537	1,201	1300-1400	51.0	14.9	10.2	2.5	1.2	20.2	100.0
JR609	-	6,256.5	561	1700-1800	52.6	10.0	17.7	6.4	0.4	12.8	100.0
JR610	-	5,365	602	1200-1300	39.3	12.1	22.5	3.5	0.1	22.5	100.0
JR611	-	13,552.5	1,154.5	1700-1800	65.0	5.5	8.5	1.1	0.7	19.2	100.0
JR612	-	9,719	883	1600-1700	48.0	13.9	5.1	0.3	0.3	32.4	100.0
JR613	-	14,052	1,027	1300-1400	62.0	13.1	2.8	0.2	0.9	21.0	100.0

## District : PONTIAN

JR701	-	12,280	1,135	0700-0800	41.0	15.7	11.1	3.5	1.4	27.2	100.0
JR702	-	14,248	1,228	1700-1800	53.3	14.9	9.2	2.9	0.9	18.8	100.0
JR703	-	10,002	829	1000-1100	39.5	14.3	11.5	5.0	1.0	28.8	100.0
JR704	-	13,688.7	1,017.1	1700-1800	66.6	6.8	7.9	2.3	1.2	15.1	100.0
JR705	-	17,302.1	1,392.5	1700-1800	69.8	7.8	3.5	0.8	0.5	17.6	100.0

## District : SEGAMAT

JR801	18,795.7	17,012.1	1,395.8	1700-1800	55.6	8.7	6.4	5.2	0.7	23.3	100.0
JR802	15,931	14,218.5	1,144.7	1100-1200	61.8	13.7	6.5	6.4	0.6	10.8	100.0
JR803	-	12,189.7	1,028	1700-1800	65.8	8.3	9.3	6.6	1.2	8.8	100.0
JR804	-	8,496	918	1200-1300	52.4	17.9	11.3	7.2	2.0	9.2	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **JOHOR**

**AVERAGE 2015**

## District : BATU PAHAT

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
JR101	12,321	1,005	60.0	7.5	8.6	1.2	1.2	21.6	100%	B	2028
JR102	17,176	1,614	59.0	9.0	8.1	5.5	1.5	16.9	100%	F	R
JR103	8,032	780	32.9	14.8	16.5	14.8	1.5	19.4	100%	D	2037
JR104	25,310	2,007	37.6	28.8	17.1	7.8	0.5	8.2	100%	F	R
JR105	16,282	1,386	45.6	10.9	13.7	11.5	1.2	17.2	100%	F	R
JR106	2,495	244	31.4	12.0	10.7	11.1	0.8	34.1	100%	A	-
JR107	24,410	2,163	55.4	11.1	10.4	7.1	0.9	15.1	100%	F	R
JR108	11,985	1,064	51.7	15.0	11.4	7.1	1.2	13.6	100%	D	-
JR109	10,618	758	49.5	14.0	12.9	7.9	0.5	15.2	100%	B	2045
JR110	27,763	2,258	55.3	13.2	9.7	4.5	1.2	16.0	100%	D	2022
JR111	66,123	5,644	65.5	6.4	3.9	1.9	0.6	21.7	100%	F	R
JR112	11,390	840	55.9	10.3	10.8	1.7	1.2	20.1	100%	A	-
JR113	41,264	3,423	74.5	6.6	5.1	0.7	0.5	12.6	100%	F	R

## District : JOHOR BAHRU

JR201	34,273	4,651	64.2	5.5	4.6	1.0	0.8	23.8	100%	E	2016
JR202	115,530	9,272	74.9	5.0	4.3	1.3	0.8	13.7	100%	F	R
JR204	108,858	8,075	72.9	7.2	4.0	3.2	2.3	10.4	100%	F	R
JR205	178,012	13,459	73.9	3.6	2.4	1.0	1.6	17.6	100%	F	R
JR206	122,004	9,640	67.8	2.7	1.5	1.1	7.3	19.5	100%	F	R
JR207	84,064	7,434	80.1	4.1	1.4	0.6	1.3	12.6	100%	C	2019
JR208	112,822	11,482	34.9	1.2	0.9	1.8	1.9	59.4	100%	F	R
JR210	140,621	10,903	70.9	3.6	1.8	0.6	1.3	21.8	100%	F	R
JR211	98,601	9,612	69.9	6.1	5.3	3.0	0.7	15.0	100%	F	R
JR212	29,664	2,405	71.6	6.7	5.4	4.5	1.3	10.4	100%	A	-
JR213	120,147	10,861	73.4	4.8	5.4	4.3	0.9	11.1	100%	F	R
JR214	132,776	10,947	71.6	4.1	2.6	1.3	1.0	19.5	100%	F	R
JR215	77,496	6,419	71.2	6.0	3.4	2.1	1.0	16.2	100%	C	-
JR216	54,830	5,094	78.2	6.7	2.4	1.9	0.6	10.1	100%	E	2017
JR217	61,369	5,240	76.2	5.2	4.0	3.1	0.7	10.8	100%	E	-
JR218	29,045	3,599	64.6	5.1	3.7	6.3	0.7	19.5	100%	C	-
JR219	107,704	9,015	73.5	5.6	2.4	1.2	0.6	16.8	100%	F	R
JR220	45,657	4,128	68.0	6.0	4.6	3.4	0.5	17.6	100%	D	2016
JR223	17,418	1,775	67.2	5.5	6.0	2.7	0.6	18.1	100%	F	R

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **JOHOR**

**AVERAGE 2015**

## District : KULAI JAYA

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
JR209	60,232	7,775	54.7	5.5	4.3	2.5	1.3	31.7	100%	<b>F</b>	R

## District : KLUANG

JR301	5,742	568	41.4	17.0	11.1	16.1	0.9	13.5	100%	<b>A</b>	2033
JR302	13,822	1,753	62.5	9.1	4.5	1.8	1.0	21.1	100%	<b>A</b>	2023
JR303	7,802	670	59.3	10.3	7.6	6.9	1.2	14.7	100%	<b>A</b>	-
JR304	9,189	686	41.9	13.9	15.1	12.6	0.6	16.0	100%	<b>A</b>	2045
JR305	17,359	1,434	51.8	6.9	13.9	7.6	0.6	19.1	100%	<b>F</b>	R
JR306	41,632	3,523	71.4	7.6	4.8	2.5	1.0	12.8	100%	<b>B</b>	2027
JR307	9,898	729	58.3	10.5	7.8	7.0	1.0	15.5	100%	<b>A</b>	2026

## District : KOTA TINGGI

JR401	5,809	1,803	58.4	6.6	6.2	2.8	0.3	25.6	100%	<b>F</b>	R
JR402	13,424	1,200	64.0	9.5	7.7	8.2	0.9	9.7	100%	<b>A</b>	-
JR403	18,115	1,542	74.9	6.5	3.9	2.8	0.8	11.1	100%	<b>D</b>	2027
JR404	19,745	1,727	67.9	9.3	6.0	2.1	1.8	12.8	100%	<b>F</b>	R
JR405	8,471	738	56.8	9.1	8.5	12.9	0.8	11.9	100%	<b>A</b>	-
JR406	6,002	525	56.8	10.0	8.7	11.2	0.4	12.9	100%	<b>A</b>	-
JR407	3,521	356	60.3	9.1	8.5	5.4	0.3	16.3	100%	<b>A</b>	-
JR408	5,349	456	64.2	8.9	8.3	5.4	0.5	12.7	100%	<b>A</b>	-
JR409	15,827	1,302	65.1	9.7	7.8	8.0	1.3	8.2	100%	<b>E</b>	2019

## District : MERSING

JR501	14,672	1,210	53.9	6.5	5.6	3.2	0.8	30.1	100%	<b>B</b>	-
JR502	5,508	485	61.1	10.1	11.0	8.4	1.5	8.0	100%	<b>A</b>	2046
JR503	2,656	231	46.6	15.9	12.8	14.5	1.2	9.1	100%	<b>A</b>	-
JR504	1,840	177	39.2	16.4	13.4	16.1	1.1	13.8	100%	<b>A</b>	2038

## District : LEDANG

JR601	24,358	1,999	71.0	5.1	8.0	1.3	0.6	14.0	100%	<b>A</b>	2050
JR602	4,379	386	45.2	9.1	17.7	2.7	0.4	25.0	100%	<b>A</b>	2129
JR603	8,938	898	58.6	3.8	8.6	2.0	0.5	26.4	100%	<b>A</b>	2037
JR604	15,846	1,309	59.0	6.3	7.8	2.3	1.4	23.3	100%	<b>D</b>	2020
JR605	30,888	2,830	69.3	6.7	7.1	1.8	0.7	14.3	100%	<b>B</b>	-
JR606	19,916	2,366	69.8	8.7	5.1	0.5	0.5	15.3	100%	<b>F</b>	R

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **JOHOR**

**AVERAGE 2015**

## District : MUAR

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
JR607	15,688	1,354	44.5	9.8	6.3	2.4	0.6	36.3	100%	C	-
JR608	9,194	789	51.0	13.1	10.8	2.7	0.9	21.5	100%	A	-
JR609	7,178	571	53.9	11.8	17.3	5.7	0.4	10.9	100%	A	2062
JR610	5,450	664	55.3	7.3	13.0	2.0	0.2	22.2	100%	A	2028
JR611	13,192	1,100	61.9	8.5	9.1	1.6	0.9	18.1	100%	B	2023
JR612	11,390	953	57.8	9.2	6.2	0.9	0.5	25.5	100%	A	2048
JR613	10,881	836	63.9	9.3	3.5	0.7	0.8	21.9	100%	A	2032

## District : PONTIAN

JR701	12,605	1,311	52.6	12.5	11.3	2.8	1.5	19.2	100%	E	2017
JR702	15,945	1,290	56.6	12.5	8.2	2.6	1.2	18.9	100%	D	-
JR703	9,015	886	44.5	12.7	12.1	5.2	1.2	24.3	100%	B	2026
JR704	14,102	1,063	66.2	8.0	7.9	2.6	1.1	14.2	100%	B	-
JR705	16,039	1,336	69.7	8.9	3.7	1.0	0.6	16.0	100%	C	2044

## District : SEGAMAT

JR801	17,751	1,416	56.2	9.1	6.3	5.2	0.7	22.5	100%	D	2020
JR802	14,834	1,206	62.2	14.2	6.8	5.9	0.6	10.2	100%	D	2022
JR803	13,014	1,081	66.7	8.7	8.8	6.4	1.1	8.3	100%	C	2031
JR804	8,637	890	52.7	15.2	10.5	7.2	2.3	12.1	100%	C	2025



# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

STATE : **JOHOR**

## District : BATU PAHAT

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
JR101	11,086	11,727	10,736	12,735	11,162	11,711	14,847	18,659	15,491	12,321	3.7	0.40
JR102	27,305	21,432	19,665	21,195	20,237	15,020	21,881	25,304	21,428	17,176	-1.9	0.11
JR103	9,360	8,239	5,509	8,649	6,539	15,428	7,866	8,531	7,182	8,032	0.3	0.00
JR104	17,891	24,014	32,094	33,381	25,916	40,092	23,361	34,672	32,757	25,310	3.1	0.15
JR105	20,521	13,494	14,764	15,369	14,770	15,230	15,992	16,189	14,695	16,282	-0.5	0.02
JR106	4,104	3,389	3,266	3,133	3,144	3,666	4,035	4,419	3,560	2,495	-1.0	0.04
JR107	24,444	24,457	27,620	22,105	24,961	28,189	29,330	30,117	27,118	24,410	1.3	0.16
JR108	11,281	12,263	12,557	12,869	12,262	13,025	12,369	11,628	11,521	11,985	-0.2	0.02
JR109	9,310	9,112	9,686	9,646	9,722	9,418	10,184	10,507	10,339	10,618	1.6	0.81
JR110	21,452	19,864	22,271	22,282	22,463	24,236	25,758	25,816	23,090	27,762	2.8	0.72
JR111	47,548	59,993	40,929	48,391	68,097	47,852	74,604	71,408	62,409	66,123	4.2	0.38
JR112	13,641	13,768	13,508	13,803	34,077	13,505	12,996	12,921	12,866	11,390	-2.1	0.04
JR113	24,172	24,219	24,710	27,870	30,932	33,455	33,260	34,935	42,064	41,264	6.7	0.95

## District : JOHOR BAHRU

JR201	17,950	21,682	21,466	24,684	36,243	32,527	35,398	40,122	37,859	34,273	8.4	0.78
JR202	69,894	67,190	78,069	91,544	100,402	96,248	126,786	126,934	126,242	115,530	7.5	0.85
JR204	77,733	115,506	97,582	99,254	101,856	107,591	104,684	114,704	105,441	108,858	2.1	0.31
JR205	199,433	187,687	154,952	218,035	221,084	213,390	162,454	189,292	191,427	178,012	-0.5	0.02
JR206	179,792	183,682	172,548	189,659	181,637	167,933	171,102	168,344	159,157	122,004	-3.0	0.54
JR207	56,108	59,563	42,635	62,177	59,676	75,358	78,404	98,298	81,724	84,064	6.6	0.67
JR208	111,236	122,851	128,068	141,198	161,424	217,277	157,555	137,107	115,133	112,822	0.4	0.00
JR210	109,251	128,573	116,611	143,369	153,246	142,980	153,822	134,361	145,134	140,621	2.4	0.42
JR211	67,849	58,382	80,232	87,976	95,655	101,081	110,548	112,580	94,216	98,601	5.5	0.63
JR212	37,327	36,118	39,508	44,448	36,424	34,111	36,709	36,170	34,325	29,664	-2.1	0.38
JR213	85,158	103,560	90,144	115,202	124,581	138,535	124,847	116,207	138,276	120,146	4.1	0.56
JR214	123,950	118,402	136,236	148,047	146,961	118,971	144,676	145,556	144,552	132,776	1.2	0.18
JR215	70,224	72,980	83,085	90,853	95,603	117,179	59,860	60,912	66,720	77,496	-1.4	0.04
JR216	34,810	64,908	29,348	33,820	34,422	32,865	70,925	34,264	31,640	54,830	1.2	0.01
JR217	77,748	69,829	100,249	131,280	129,556	116,193	72,234	102,406	109,088	61,368	-0.5	0.00
JR218	45,330	42,184	43,457	46,426	49,309	40,428	47,563	26,552	26,502	29,045	-6.0	0.53
JR219	18,641	46,015	87,857	95,096	116,486	131,153	123,232	117,250	102,914	107,704	14.4	0.52
JR220	6,118	6,817	9,095	11,091	22,276	26,675	27,101	40,304	43,880	45,657	25.1	0.95
JR223	15,532	15,698	17,810	18,708	16,529	18,747	18,383	18,370	15,701	17,418	0.8	0.09

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

STATE : **JOHOR**

## District : KULAI JAYA

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
JR209	27,226	27,118	29,106	25,673	26,689	28,084	30,378	43,167	40,454	60,232	7.6	0.67

## District : KLUANG

JR301	4,362	4,796	5,443	5,177	5,210	5,208	5,432	6,222	5,913	5,742	2.9	0.73
JR302	6,350	10,246	9,616	12,978	16,412	15,217	15,149	13,923	15,070	13,822	7.2	0.56
JR303	11,126	14,409	10,514	7,103	9,322	7,769	9,269	8,100	7,941	7,802	-4.9	0.47
JR304	7,590	7,846	7,203	7,585	7,705	7,469	7,889	8,496	8,481	9,189	1.9	0.63
JR305	15,248	15,381	14,708	15,261	14,810	14,894	15,398	13,911	15,847	17,359	0.7	0.13
JR306	31,429	30,231	33,897	33,572	34,964	36,952	39,674	38,053	38,366	41,632	3.2	0.90
JR307	6,045	6,731	7,550	8,585	8,479	8,336	8,293	8,960	11,589	9,898	5.4	0.81

## District : KOTA TINGGI

JR401	5,616	14,513	14,695	13,494	6,676	16,043	7,372	7,858	6,704	5,809	-5.6	0.16
JR402	16,614	16,595	19,628	19,890	17,768	17,026	19,618	15,404	18,095	13,424	-1.6	0.15
JR403	14,802	14,913	15,591	16,450	15,504	16,044	15,672	15,644	17,770	18,115	1.8	0.65
JR404	19,289	19,506	19,417	19,182	20,302	20,106	23,272	22,103	19,750	19,745	0.9	0.19
JR405	6,956	15,443	9,746	9,796	10,089	6,992	8,332	6,556	5,293	8,470	-5.2	0.28
JR406	9,688	8,298	8,725	9,643	6,672	7,703	6,534	5,908	6,272	6,002	-5.6	0.78
JR407	5,270	6,286	5,231	5,604	4,856	4,772	4,604	4,535	4,888	3,521	-4.1	0.65
JR408	7,070	4,188	4,212	4,141	3,784	4,042	4,514	4,926	4,038	5,349	-1.0	0.03
JR409	12,717	13,807	16,676	15,424	15,869	14,588	13,322	15,017	13,993	15,827	0.6	0.05

## District : MERSING

JR501	17,332	18,563	17,192	16,688	15,598	13,445	13,411	14,412	14,391	14,672	-3.0	0.64
JR502	4,018	4,840	5,824	4,671	4,590	5,073	7,080	7,544	5,532	5,508	3.9	0.36
JR503	4,049	4,247	4,262	4,477	4,633	4,481	4,490	4,720	4,143	2,656	-2.1	0.15
JR504	758	794	841	1,032	1,062	1,126	1,055	1,178	1,098	1,840	7.3	0.78

## District : LEDANG

JR601	14,272	15,766	20,782	23,513	20,582	20,376	19,157	16,513	18,558	24,358	2.5	0.20
JR602	4,334	4,390	4,266	4,616	5,022	5,230	4,690	4,578	4,823	4,378	0.7	0.11
JR603	9,678	6,793	7,682	9,293	12,793	11,166	9,916	11,016	10,960	8,938	2.7	0.19
JR604	11,338	11,587	13,746	14,292	12,866	12,493	14,246	14,989	17,714	15,846	3.9	0.71
JR605	29,638	33,229	32,018	33,881	31,746	26,870	25,276	26,588	22,196	30,888	-2.7	0.35
JR606	12,030	12,333	10,509	12,387	15,519	15,162	19,072	19,434	16,346	19,916	6.6	0.77

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

## STATE : JOHOR

### District : MUAR

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
JR607	23,690	17,072	12,223	4,329	4,231	4,566	4,227	3,835	11,938	15,688	-7.3	0.10
JR608	29,201	25,207	23,100	16,391	17,594	17,384	16,027	16,327	11,024	9,194	-10.9	0.88
JR609	5,752	6,751	6,536	7,738	7,121	6,063	6,871	7,753	7,046	7,178	1.6	0.25
JR610	3,206	3,049	3,055	3,219	3,686	4,282	5,504	3,064	4,570	5,450	5.7	0.52
JR611	9,858	9,290	9,163	11,437	12,798	12,066	15,618	15,756	13,869	13,192	5.5	0.69
JR612	10,144	10,393	10,232	11,201	10,031	9,743	12,852	10,728	13,120	11,390	2.0	0.35
JR613	6,112	6,212	7,920	5,785	6,283	6,394	8,142	7,617	8,866	10,880	5.2	0.60

### District : PONTIAN

JR701	9,692	8,877	9,193	9,965	10,068	12,845	10,080	11,176	10,357	12,605	2.8	0.49
JR702	20,094	13,926	17,789	14,480	14,406	12,125	16,772	15,061	14,678	15,944	-1.4	0.09
JR703	5,942	5,643	5,569	6,578	6,385	6,436	6,454	6,680	6,669	9,015	3.5	0.63
JR704	19,754	16,478	18,656	18,950	18,006	16,482	15,967	15,658	14,920	14,102	-3.2	0.75
JR705	16,372	16,891	17,535	18,470	20,268	18,103	17,452	18,948	17,533	16,039	0.1	0.00
JR306	31,429	30,231	33,897	33,572	34,964	36,952	39,674	38,053	38,366	41,632	3.2	0.90
JR307	6,045	6,731	7,550	8,585	8,479	8,336	8,293	8,960	11,589	9,898	5.4	0.81

### District : SEGAMAT

JR801	12,282	13,880	14,145	14,648	15,237	15,781	15,875	16,826	16,800	17,750	3.5	0.94
JR802	12,375	12,322	12,367	12,779	12,968	13,938	14,985	14,283	14,595	14,834	2.5	0.87
JR803	10,240	11,060	10,875	11,031	11,067	12,085	12,418	12,342	11,718	13,014	2.2	0.80
JR804	7,526	8,037	8,074	8,024	9,900	9,561	10,614	12,257	9,462	8,636	3.2	0.41

YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

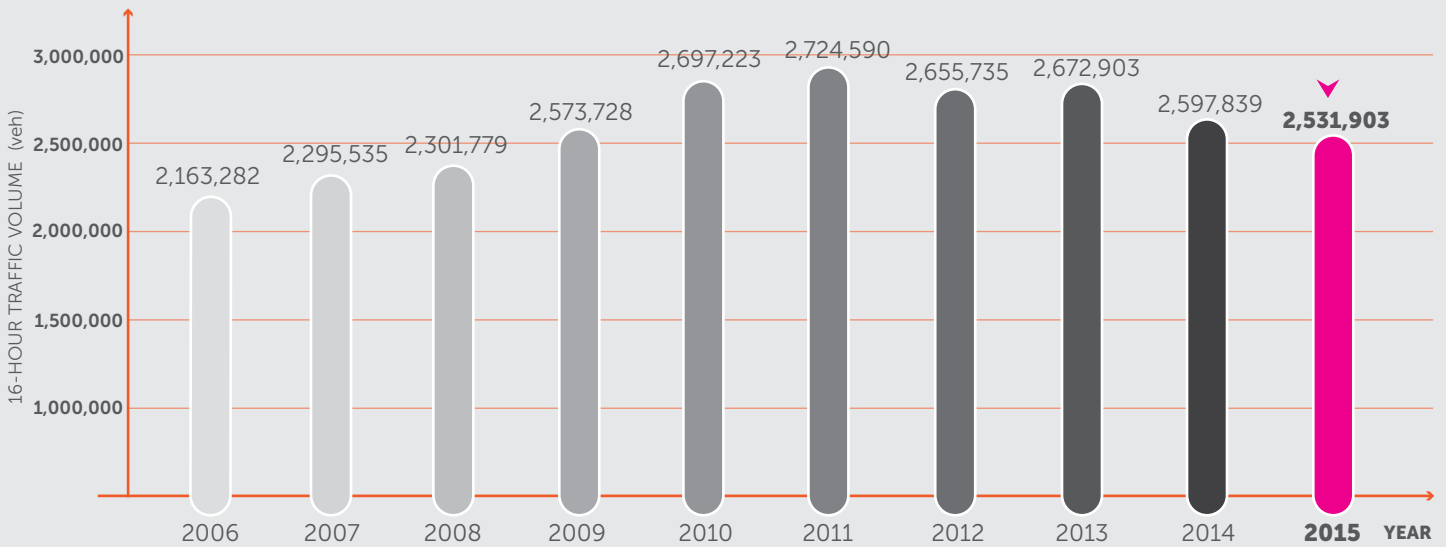


Figure 2.9-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Johor



There are 75 census stations in Johor. The 16-hour traffic volume documented for year 2015 has seen a decrease of 65,936 vehicles which is 2.54% in Johor. The pattern of traffic volume shows a gradual and steady growth throughout, increasing significantly in 2011 but dropping the following year.

**-2.54%**  
DECREASE FROM 2014

NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

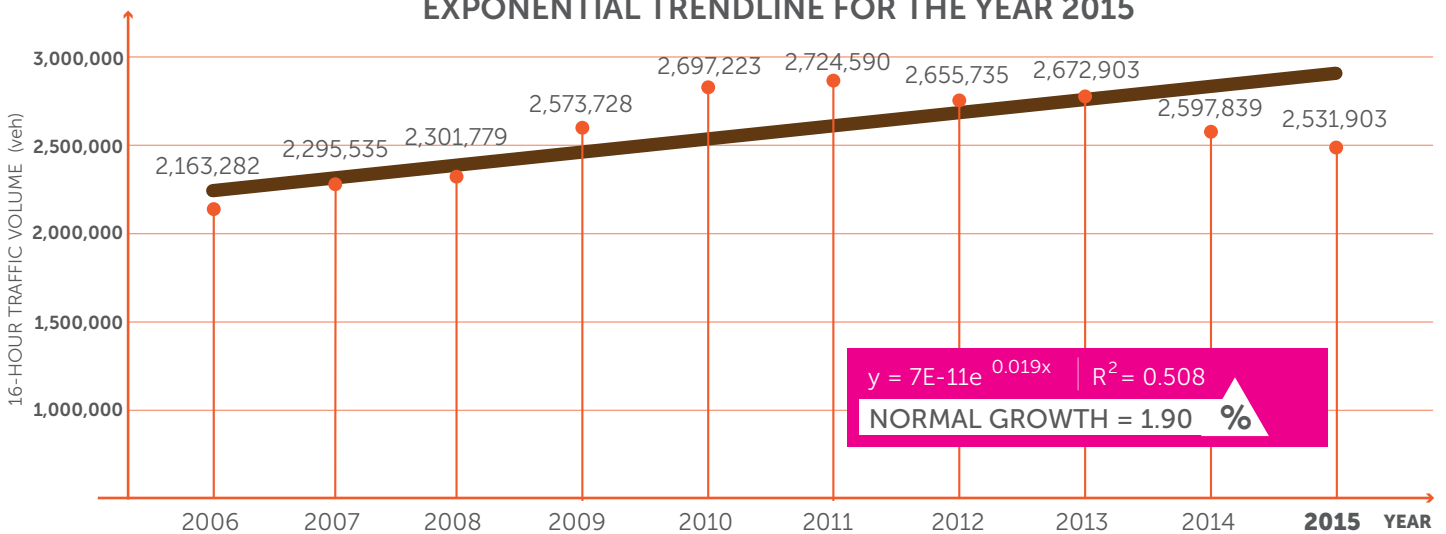
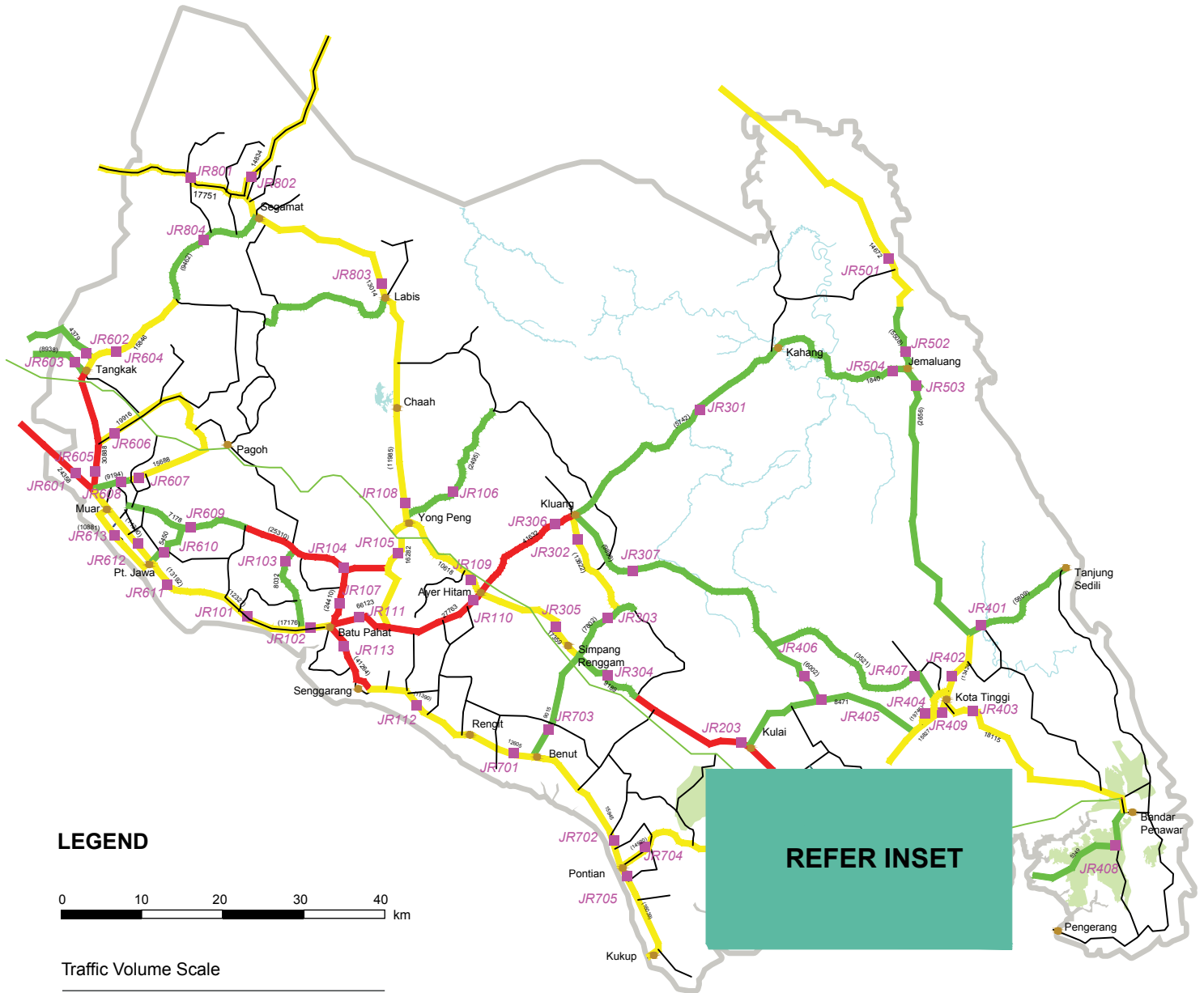


Figure 2.9-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Johor

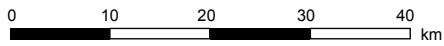
Traffic growth rate recorded for the state of Johor is 1.90% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Johor.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **JOHOR**



## LEGEND

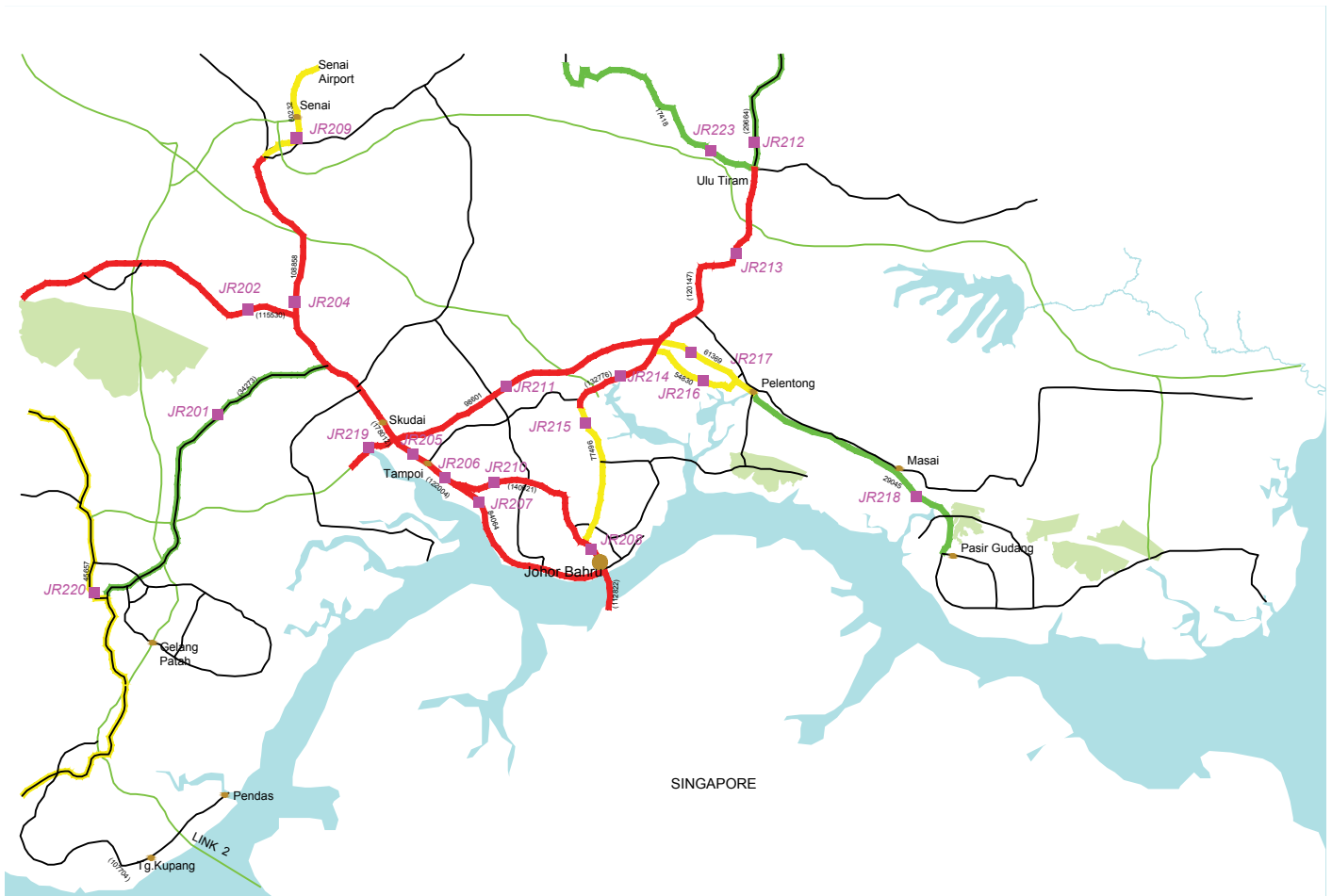


### Traffic Volume Scale

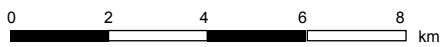
- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **JOHOR**



## LEGEND



### Traffic Volume Scale

- ≤ 40,000
- 40,000 < volume ≤ 80,000
- > 80,000



• TANJUNG LUMPUR - KUANTAN BRIDGE •



• 1993 : South – Kuantan Connecting Bridge •

# PAHANG

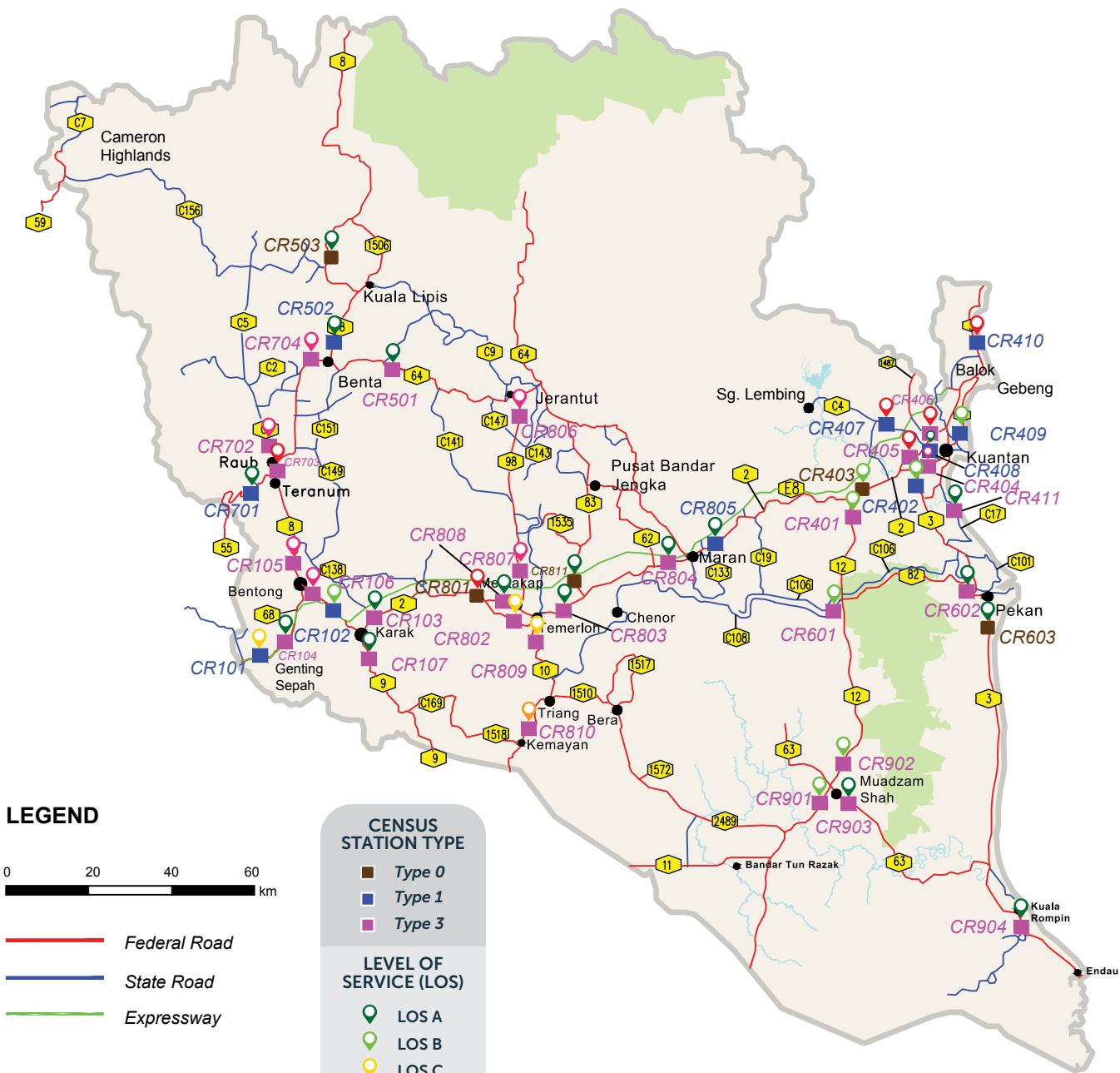
DARUL MAKMUR

45 Census Stations  
Road Length : 19,112.79 km\*  
\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

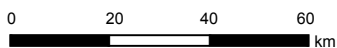


# TRAFFIC CENSUS STATION MAP

STATE : **PAHANG**



## LEGEND



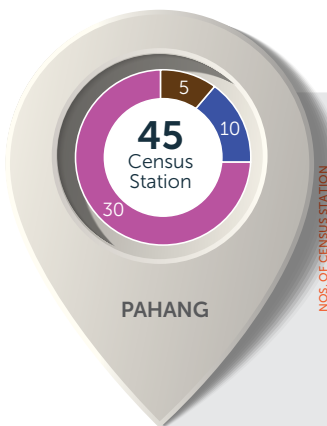
- Federal Road
- State Road
- Expressway

### CENSUS STATION TYPE

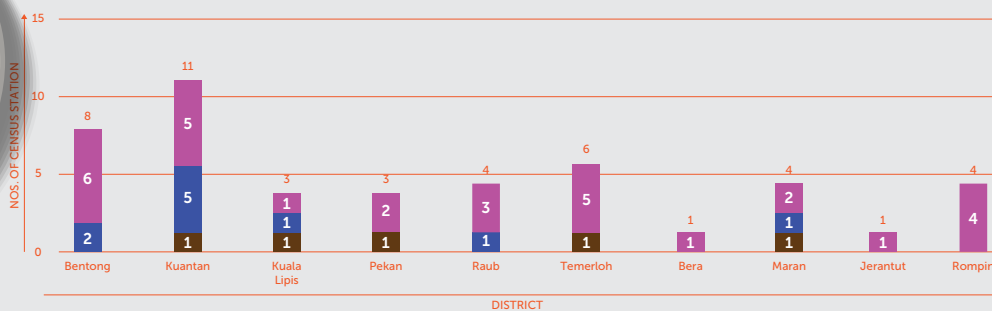
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS





# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PAHANG**

## District : BENTONG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
CR101	1	2	42.8	Kuantan-Kuala Lumpur (KL-Karak H'way)	3.3531389	101.8263056	K 2-2
CR102	1	2	68.1	Kuala Lumpur - Kuantan (KL-Karak H'way)	3.4798056	101.9546389	K 2-2
CR103	3	2	88.8	Jalon Karak - Sempadan Temerloh	3.4797500	101.9545278	T 1-1
CR104	3	68	225.4	Kuantan-Kuala Lumpur (Old Road)	3.3445556	101.8206389	T 1-1
CR105	3	8	204.5	Jalan Kuala Lumpur - Sempadan Kota Bharu	3.5813056	101.8935000	T 1-1
CR106	3	68	195.5	Jalan Kuala Lumpur - Sempadan Kota Bharu	3.4962500	101.9256667	T 1-1
CR107	3	9	1.6	Jalan Karak- Sempadan Negeri Sembilan	3.4096667	102.0410278	T 1-1
CR108	3	8	1.0	Bentong-Raub (Old Road)	3.5811111	101.8915278	T 1-1

## District : KUANTAN

CR401	3	12	34.0	Kuantan-Segamat	3.6478333	103.1192222	T 1-1
CR402	1	3	16.0	Pekan-Kuantan	3.7315556	103.2690833	K 2-2
CR403	0	2	27.0	Kuantan-Maran	3.7081111	103.1215278	K 2-2
CR404	3	2	8.1	Kuantan-Maran	3.7742780	103.2647500	K 2-2
CR405	3	3	7.0	Kuantan Bypass (East Bound) (1km. from clover leaf junction)	3.8470556	103.3020833	K 2-2
CR406	3	3	7.5	Kuantan Bypass (West Bound) (1km. from clover leaf junction)	3.8160556	103.2748056	K 2-2
CR407	1	231	13.0	Kuantan-Sungai Lembing	3.8627500	103.2498611	T 1-1
CR408	1	231	2.0	Kuantan-Sungai Lembing	3.8187780	103.3124170	K 2-2
CR409	1	2	4.8	Kuantan-Kemaman	3.8374170	103.3526940	K 2-2
CR410	1	3	30.5	Kuantan - Kemaman (Sg. Ular)	4.0336940	103.3965280	T 1-1
CR411	3	183	8.5	Kuantan-Tanjung Lumpur-Penor	3.7486111	103.3144722	K 2-2

## District : KUALA LIPIS

CR501	3	64	212.5	Kuantan-Jerantut-Benta (after Kampong Tanjong Besar)	4.0184444	102.0435278	T 1-1
CR502	1	8	227.8	Kuantan-Jerantut-Benta-Kuala Lipis (2.4km to Kuala Lipis road)	4.1738611	102.0160833	T 1-1
CR503	0	8	282.0	Kuala Lumpur-Kuala Lipis-Kampong Padang Tuanku-Kota Bahru	4.2413611	101.9825833	T 1-1
CR410	1	3	30.5	Kuantan - Kemaman (Sg. Ular)	4.0336940	103.3965280	T 1-1
CR411	3	183	8.5	Kuantan-Tanjung Lumpur-Penor	3.7486111	103.3144722	K 2-2

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PAHANG**

## District : PEKAN

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
CR601	3	12	40.0	Pekan-Batu Balik (Simpang Paloh Hinai)	3.4865278	103.0956944	T 1-1
CR602	3	82	5.0	Pekan-Batu Balik (Kg. Pulau Keladi)	3.5179720	103.3762220	T 1-1
CR603	0	3	48.0	Pekan-Nenasi (In front of JKR Pekan)	3.4901110	103.4172780	T 1-1

## District : RAUB

CR701	1	55	230.6	Kuantan-Tranum-Gap (50m east of the junction)	3.7284722	101.8116389	T 1-1
CR702	3	C5	4.8	Raub-Cheroh	3.8238611	101.8412500	T 1-1
CR703	3	8	239.9	Kuantan-Tranum-Raub	3.7726111	101.8532222	T 1-1
CR704	3	8	228.6	Kuantan-Benta-Raub	4.0123611	101.9424722	T 1-1

## District : TEMERLOH

CR801	0	2	115.0	Kuantan-Karak	3.5005556	102.2926667	T 1-1
CR802	3	2	219.5	Mentakab Bypass (400m. fr. first junction towards Temerloh)	3.4701944	102.3226389	T 1-1
CR803	3	2	130.4	Kuantan-Temerloh (500 ft from Temerloh bridge towards Maran)	3.4458056	102.4333611	K 2-2
CR807	3	98	146.5	Kuantan-Temerloh-Jerantut	3.5754444	102.3824444	T 1-1
CR808	3	87	132.0	Kuantan-Mentakab	3.4736940	102.3710280	K 2-2
CR809	3	10	126.7	Kuantan-Temerloh-Triang	3.4360278	102.4309722	T 1-1

## District : BERA

CR810	3	10	93.0	Kuantan-Temerloh-Kemayan	3.2293611	102.4234167	T 1-1
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## District : MARAN

CR804	3	2	80.5	Kuantan - Maran (Kg. Kemap)	3.5730000	102.7620000	T 1-1
CR805	1	2	70.9	Kuantan - Maran (Kg. Luit)	3.6007500	102.8162500	T 1-1
CR811	0	83	32.7	Kuantan - Maran - Jerantut (Kg. Awah)	3.4927222	102.5308889	T 1-1
CR812	3	83	39.0	Jerantut - Maran	3.7720000	102.5416944	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **PAHANG**

## District : JERANTUT

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
CR806	3	98	1.6	Jerantut - Kampong Kerdau	3.9208889 102.3841944	T 1-1

## District : ROMPIN

CR901	3	12	104.4	Kuantan - Segamat (400m Bkt. Ibam - Rompin junction south bound)	3.0594722 103.0620556	T 1-1
CR902	3	12	102.2	Kuantan - Segamat (400m Bkt. Ibam - Rompin junction north bound)	3.0740830 103.0708610	T 1-1
CR903	3	63	18.1	Bkt. Ibam - Rompin (400m from Kuantan - Segamat junction east bound)	3.0638611 103.0753333	T 1-1
CR904	3	3	146.6	Kuantan - Rompin - Endau	2.7343890 103.5446390	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PAHANG**

**MARCH 2015**

## District : BENTONG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
CR101	-	37,091	3,242.8	1600-1700	71.5	12.7	6.1	4.5	1.4	3.8	100.0
CR102	-	31,198.4	2,730.7	1700-1800	70.3	9.1	6.9	6.4	1.2	6.2	100.0
CR103	-	6,287	575	1700-1800	52.0	10.0	10.4	13.2	0.9	13.4	100.0
CR104	-	436	62	1400-1500	59.2	5.0	7.3	11.7	1.1	15.6	100.0
CR105	-	14,416	1,291	1700-1800	68.9	11.6	5.3	4.5	1.4	8.3	100.0
CR106	-	15,665	1,513	1700-1800	57.0	11.6	5.0	3.3	0.6	22.5	100.0
CR107	-	3,057	332	1700-1800	43.1	17.4	8.0	6.8	1.3	23.3	100.0
CR108	-	1,439	130	1700-1800	45.2	15.2	9.9	3.9	0.7	25.0	100.0

## District : KUANTAN

CR401	-	9,195	871	1700-1800	49.6	20.8	8.4	13.4	0.6	7.2	100.0
CR402	-	23,295.8	2,406.2	1800-1900	72.2	10.8	4.3	3.8	0.8	8.1	100.0
CR403	33,745.8	29,745.7	2,739.2	1700-1800	70.4	10.7	5.2	6.0	1.1	6.5	100.0
CR404	-	56,342	5,338	1700-1800	65.2	12.4	5.4	1.3	0.7	15.0	100.0
CR405	-	57,552	9,163	0700-0800	58.0	22.4	6.2	5.7	0.5	7.3	100.0
CR406	-	53,896	5,409	1700-1800	58.7	15.4	6.9	5.3	0.6	13.1	100.0
CR407	-	44,087	4,165.7	0700-0800	51.9	12.3	4.6	3.0	0.6	27.7	100.0
CR408	-	44,891	3,398.5	0700-0800	70.6	10.7	2.5	0.4	0.5	15.2	100.0
CR409	-	41,035.4	3,649.8	1600-1700	74.3	8.6	2.2	0.5	0.3	14.1	100.0
CR410	-	21,321	2,163.8	0700-0800	59.1	12.5	5.5	5.2	0.5	17.1	100.0
CR411	-	22,311	2,430	1700-1800	66.9	11.0	3.5	0.7	0.3	17.5	100.0

## District : KUALA LIPIS

CR501	-	1,766	147	1600-1700	43.2	14.4	10.9	4.8	0.9	25.8	100.0
CR502	-	8,371.8	734.4	1700-1800	67.6	12.3	7.3	4.5	1.4	6.9	100.0
CR503	8,360.7	6,876.2	524	1400-1500	56.0	9.7	6.9	6.6	0.9	19.8	100.0

## District : PEKAN

CR601	-	8,538	749	1700-1800	54.5	20.1	6.6	10.5	0.8	7.5	100.0
CR602	-	4,690	485	0700-0800	67.9	3.2	5.9	5.8	0.2	17.0	100.0
CR603	11,947	10,846.2	885.571	1700-1800	59.0	10.1	5.5	3.0	0.6	21.7	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PAHANG**

**MARCH 2015**

## District : RAUB

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
CR701	-	726.5	59,429	1700-1800	45.5	13.2	5.6	2.8	0.0	32.8	100.0
CR702	-	18,444	1,387	2100-2200	30.8	20.3	16.0	9.3	0.7	22.9	100.0
CR703	-	26,348	2,000	1500-1600	36.0	19.4	14.9	10.7	1.0	18.0	100.0
CR704	-	18,070	1,276	2000-2100	30.5	20.4	16.3	12.1	1.1	19.6	100.0

## District : TEMERLOH

CR801	15,809	14,441.8	1,292.5	1200-1300	57.8	8.2	11.4	7.4	0.6	14.7	100.0
CR802	-	7,224	622	0700-0800	56.7	5.1	12.0	14.9	0.2	11.2	100.0
CR803	-	28,296	2,863	0900-1000	74.0	3.9	4.2	3.5	0.4	14.1	100.0
CR807	-	16,627	1,607	1700-1800	73.4	5.8	5.7	3.1	1.1	11.0	100.0
CR808	-	20,043	1,728	1700-1800	71.2	3.6	4.8	2.3	0.5	17.6	100.0
CR809	-	11,844	1,240	1700-1800	68.1	5.5	5.5	5.9	0.7	14.2	100.0

## District : BERA

CR810	-	9,708	769	1400-1500	51.3	14.3	12.9	4.4	0.3	17.0	100.0
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## District : MARAN

CR804	-	7,430	616	0700-0800	57.7	11.3	9.4	6.1	0.5	14.9	100.0
CR805	-	6,508.7	5,434	1500-1600	60.3	12.2	8.0	6.4	0.5	12.5	100.0
CR811	10,643.8	8,819.1	688.7	1700-1800	66.7	11.4	7.2	2.8	0.4	11.6	100.0
CR812	-	10,947	1,181	1700-1800	67.4	9.5	7.1	3.8	0.2	12.0	100.0

## District : JERANTUT

CR806	-	15,851	1,426	1400-1500	60.4	13.1	5.7	4.1	0.5	16.1	100.0
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## District : ROMPIN

CR901	-	10,187	792	1800-1900	65.9	10.8	6.4	6.7	1.0	9.2	100.0
CR902	-	10,443	911	1700-1800	54.7	19.3	6.9	7.7	0.5	11.0	100.0
CR903	-	11,020	923	1700-1800	57.6	18.8	3.9	3.1	0.6	16.1	100.0
CR904	-	8,000	753	1700-1800	52.3	17.3	9.8	6.0	0.7	13.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PAHANG**

**SEPTEMBER 2015**

## District : BENTONG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
CR101	-	29,452.4	2,512	1600-1700	68.5	13.2	6.9	5.2	1.5	4.7	100.0
CR102	-	29,673.8	2,597.8	1800-1900	64.8	15.7	6.1	5.4	1.3	6.8	100.0
CR103	-	6,992	716	0900-1000	49.8	11.9	10.7	13.2	0.6	13.8	100.0
CR104	-	543	68	1600-1700	53.0	13.1	9.4	4.1	0.7	19.7	100.0
CR105	-	15,272	1,335	1700-1800	60.0	17.6	7.9	4.2	1.3	9.0	100.0
CR106	-	15,739	1,384	1700-1800	52.7	15.3	6.2	3.3	0.5	22.0	100.0
CR107	-	3,666	338	1400-1500	42.2	16.7	7.7	7.4	0.9	25.0	100.0
CR108	-	1,927	207	1700-1800	39.9	18.3	6.2	3.3	1.1	31.2	100.0

## District : KUANTAN

CR401	-	9,380	745	1500-1600	52.3	22.0	8.2	9.7	0.8	7.0	100.0
CR402	-	26,782.1	4,377.8	0800-0900	73.8	11.4	3.6	3.2	0.7	7.2	100.0
CR403	34,106.4	29,965.4	3,113	1800-1900	70.0	10.9	5.9	5.1	1.1	7.0	100.0
CR404	-	56,050	4,979	1800-1900	68.4	11.3	4.0	1.4	0.6	14.2	100.0
CR405	-	45,845	4,654	0700-0800	63.5	15.8	6.7	5.6	0.4	8.0	100.0
CR406	-	52,235	4,033	1400-1500	56.2	16.4	8.0	6.2	0.7	12.6	100.0
CR407	-	42,866.2	3,985.7	0700-0800	55.7	4.7	4.9	3.4	0.6	30.8	100.0
CR408	-	36,426.8	2,800.1	1800-1900	76.1	7.7	1.1	0.2	0.5	14.4	100.0
CR409	-	39,755.1	3,704.1	1800-1900	72.9	6.2	2.5	0.8	0.4	17.2	100.0
CR410	-	20,333.1	2,058.8	0700-0800	55.8	14.1	6.1	5.9	0.6	17.6	100.0
CR411	-	27,541	3,426	0700-0800	69.0	14.2	2.5	1.1	0.4	12.8	100.0

## District : KUALA LIPIS

CR501	-	1,748	172	1400-1500	43.5	14.3	10.2	4.8	0.5	26.7	100.0
CR502	-	9,548.2	818	1400-1500	70.6	11.5	6.2	3.8	1.4	6.4	100.0
CR503	11,177.4	9,249.2	807.571	1200-1300	65.1	9.2	6.0	4.5	1.1	14.1	100.0

## District : PEKAN

CR601	-	9,012	777	1700-1800	53.1	20.3	7.1	10.9	0.8	7.7	100.0
CR602	-	4,304	427	0700-0800	59.4	12.3	4.4	5.4	0.3	18.1	100.0
CR603	11,883.2	10,636.1	834.429	1700-1800	53.7	12.4	6.1	3.7	0.7	23.4	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **PAHANG**

**SEPTEMBER 2015**

## District : RAUB

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
CR701	-	743.5	71,714	1400-1500	44.6	10.6	5.2	2.2	2.2	35.1	100.0
CR702	-	10,733	1,066	0700-0800	49.4	12.9	5.8	3.4	2.2	26.4	100.0
CR703	-	15,823	1,249	0700-0800	53.7	13.5	10.5	6.2	1.1	15.0	100.0
CR704	-	9,366	834	1800-1900	56.9	12.7	10.5	7.1	1.1	11.7	100.0

## District : TEMERLOH

CR801	16,749.7	15,306.8	14,344	1700-1800	56.9	10.3	8.8	8.8	0.6	14.7	100.0
CR802	-	7,988	893	1800-1900	44.3	5.3	9.4	15.6	10.6	14.7	100.0
CR803	-	24,662	2,281	0900-1000	69.4	5.1	4.9	4.3	0.4	15.9	100.0
CR807	-	9,812	1,299	1500-1600	61.8	8.2	8.1	6.3	0.8	14.7	100.0
CR808	-	21,981	1,751	0900-1000	68.9	4.8	4.3	2.5	0.5	18.9	100.0
CR809	-	13,200	1,158	1700-1800	69.3	4.9	5.3	7.0	0.4	13.1	100.0

## District : BERA

CR810	-	15,271	1,343	1800-1900	45.2	16.8	14.5	5.8	0.3	17.4	100.0
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## District : MARAN

CR804	-	6,677	541	0900-1000	54.7	14.8	10.3	5.2	0.7	14.4	100.0
CR805	-	6,230.1	475,429	1500-1600	58.6	11.4	9.6	6.8	0.7	13.1	100.0
CR811	9,913.2	8,546.8	664	1400-1500	68.0	9.6	6.9	3.2	0.5	11.7	100.0
CR812	-	11,552	1,239	1700-1800	63.9	12.9	7.5	4.3	0.3	11.1	100.0

## District : JERANTUT

CR806	-	19,487	1,630	1400-1500	38.7	17.7	10.6	6.2	0.4	26.4	100.0
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## District : ROMPIN

CR901	-	10,454	911	1600-1700	60.3	18.3	5.5	7.2	0.8	8.0	100.0
CR902	-	9,526	832	1700-1800	55.1	19.2	7.1	7.4	0.5	10.8	100.0
CR903	-	9,531	822	1700-1800	58.2	18.5	4.0	2.8	0.6	15.8	100.0
CR904	-	8,001	673	1500-1600	52.3	18.8	8.8	5.4	0.6	14.0	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PAHANG**

**AVERAGE 2015**

## District : BENTONG

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
CR101	33,272	33,272	70.0	13.0	6.5	4.9	1.4	4.3	100%	C	2027
CR102	30,436	30,436	67.5	12.4	6.5	5.9	1.2	6.5	100%	B	2024
CR103	6,640	6,640	50.9	11.0	10.5	13.2	0.8	13.6	100%	A	-
CR104	490	490	56.1	9.1	8.4	7.9	0.9	17.7	100%	A	2042
CR105	14,844	14,844	64.4	14.6	6.6	4.4	1.3	8.7	100%	E	2017
CR106	15,702	15,702	54.9	13.4	5.6	3.3	0.6	22.3	100%	E	2020
CR107	3,362	3,362	42.7	17.1	7.9	7.1	1.1	24.2	100%	A	2098
CR108	1,683	1,683	42.6	16.8	8.1	3.6	0.9	28.1	100%	A	2056

## District : KUANTAN

CR401	9,288	808	51.0	21.4	8.3	11.5	0.7	7.1	100%	B	2024
CR402	25,039	3,392	73.0	11.1	4.0	3.5	0.8	7.6	100%	B	2021
CR403	29,856	2,926	70.2	10.8	5.5	5.6	1.1	6.8	100%	B	2027
CR404	56,196	5,159	66.8	11.9	4.7	1.4	0.7	14.6	100%	E	2016
CR405	51,699	6,909	60.8	19.1	6.4	5.7	0.4	7.6	100%	F	R
CR406	53,066	4,721	57.4	15.9	7.4	5.7	0.7	12.8	100%	F	R
CR407	43,477	4,076	53.8	8.5	4.7	3.2	0.6	29.2	100%	F	R
CR408	40,659	3,099	73.4	9.2	1.8	0.3	0.5	14.8	100%	A	-
CR409	40,395	3,677	73.6	7.4	2.3	0.7	0.3	15.6	100%	B	2027
CR410	20,827	2,111	57.4	13.3	5.8	5.6	0.5	17.3	100%	F	R
CR411	24,926	2,928	68.0	12.6	3.0	0.9	0.4	15.2	100%	A	2023

## District : KUALA LIPIS

CR501	1,757	160	43.3	14.3	10.5	4.8	0.7	26.3	100%	A	2230
CR502	8,960	776	69.1	11.9	6.8	4.1	1.4	6.6	100%	A	2033
CR503	8,063	666	60.5	9.5	6.5	5.5	1.0	17.0	100%	A	2046

## District : PEKAN

CR601	8,775	763	53.8	20.2	6.8	10.7	0.8	7.6	100%	B	2023
CR602	4,497	456	63.6	7.8	5.2	5.6	0.3	17.5	100%	A	2053
CR603	10,741	860	56.4	11.3	5.8	3.4	0.6	22.6	100%	A	2024



# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **PAHANG**

**AVERAGE 2015**

## District : RAUB

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
CR701	735	66	45.1	11.9	5.4	2.5	1.1	34.0	100%	A	2243
CR702	14,589	1,227	40.1	16.6	10.9	6.4	1.4	24.7	100%	E	2015
CR703	21,086	1,625	44.8	16.4	12.7	8.4	1.1	16.5	100%	F	R
CR704	13,718	1,055	43.7	16.6	13.4	9.6	1.1	15.6	100%	E	2016

## District : TEMERLOH

CR801	14,874	1,364	57.3	9.2	10.1	8.1	0.6	14.7	100%	F	R
CR802	7,606	758	50.5	5.2	10.7	15.2	5.4	13.0	100%	C	2030
CR803	26,479	2,572	71.7	4.5	4.5	3.9	0.4	15.0	100%	A	2079
CR807	13,220	1,453	67.6	7.0	6.9	4.7	1.0	12.8	100%	E	2016
CR808	21,012	1,740	70.0	4.2	4.6	2.4	0.5	18.3	100%	A	-
CR809	12,522	1,199	68.7	5.2	5.4	6.5	0.6	13.7	100%	C	2029

## District : BERA

CR810	12,490	1,056	48.2	15.5	13.7	5.1	0.3	17.2	100%	D	2017
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## District : MARAN

CR804	7,054	579	56.2	13.0	9.8	5.6	0.6	14.7	100%	A	-
CR805	6,369	509	59.5	11.8	8.8	6.6	0.6	12.8	100%	A	-
CR811	8,683	676	67.3	10.5	7.0	3.0	0.5	11.7	100%	A	2044
CR812	11,250	1,210	65.7	11.2	7.3	4.1	0.3	11.5	100%	D	2022

## District : JERANTUT

CR806	17,669	1,528	49.6	15.4	8.1	5.2	0.5	21.2	100%	E	2016
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## District : ROMPIN

CR901	10,321	852	63.1	14.5	5.9	7.0	0.9	8.6	100%	B	2028
CR902	9,985	872	54.9	19.2	7.0	7.5	0.5	10.9	100%	B	2026
CR903	10,276	873	57.9	18.7	3.9	3.0	0.6	15.9	100%	A	2021
CR904	8,001	713	52.3	18.1	9.3	5.7	0.7	13.9	100%	A	2028

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **PAHANG**

## District : BENTONG

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
CR101	26,661	25,430	26,758	27,091	27,039	31,444	29,697	32,903	31,920	33,272	3.1	0.84
CR102	19,707	21,061	20,703	22,224	28,109	27,653	28,470	26,509	28,300	30,436	4.8	0.82
CR103	6,378	7,463	6,517	7,618	6,286	7,009	6,348	6,258	6,204	6,640	-1.0	0.15
CR104	154	189	162	172	205	195	321	299	347	490	11.8	0.85
CR105	9,774	9,293	10,624	10,992	11,627	14,439	14,057	14,380	15,168	14,844	5.8	0.90
CR106	14,333	14,002	14,712	15,237	16,000	17,574	15,490	13,768	18,488	15,702	1.6	0.25
CR107	3,390	3,212	3,245	3,688	4,144	4,152	4,228	4,439	3,616	3,362	1.6	0.17
CR108	1,264	1,213	1,204	1,514	1,510	1,852	1,551	1,776	2,139	1,683	5.3	0.71

## District : KUANTAN

CR401	5,700	5,266	5,712	7,510	7,298	7,710	8,816	8,152	7,157	9,288	5.4	0.71
CR402	11,656	12,232	11,212	11,687	14,589	13,645	14,737	14,961	21,024	25,039	7.7	0.78
CR403	22,293	24,565	23,395	26,064	28,248	29,142	31,138	31,416	31,876	29,856	3.9	0.84
CR404	46,938	54,038	43,855	53,191	59,580	66,023	78,340	81,363	67,420	56,196	4.6	0.46
CR405	22,590	23,175	28,877	35,804	35,325	37,595	48,105	58,126	61,322	51,698	11.3	0.91
CR406	24,364	24,112	29,194	31,827	37,703	36,093	72,396	59,122	56,172	53,066	11.4	0.79
CR407	18,890	18,990	21,231	25,334	23,845	28,580	31,994	36,043	36,464	43,477	9.4	0.97
CR408	38,869	39,018	36,189	41,475	42,503	39,016	37,735	38,351	37,162	40,659	-0.0	0.00
CR409	31,179	33,371	31,550	33,672	34,986	35,911	42,538	44,054	45,060	40,395	4.1	0.81
CR410	18,840	21,337	20,260	22,249	22,079	23,278	22,911	21,601	22,995	20,827	1.1	0.28
CR411	13,004	11,313	13,854	18,450	18,150	21,213	21,478	22,434	22,180	24,926	8.2	0.87

## District : KUALA LIPIS

CR501	1,536	1,573	1,867	1,806	1,632	1,646	1,537	1,760	1,766	1,757	0.8	0.11
CR502	5,724	6,399	6,342	7,103	7,093	7,617	8,108	7,608	7,918	8,960	4.2	0.90
CR503	6,134	6,427	6,609	6,159	6,253	7,053	7,513	6,985	7,319	8,063	2.6	0.74

## District : PEKAN

CR601	3,096	2,962	3,711	3,059	3,660	3,298	2,856	3,403	3,428	8,775	5.8	0.30
CR602	3,520	3,816	4,359	3,644	3,843	4,088	5,517	4,608	4,846	4,497	3.3	0.51
CR603	6,513	6,902	5,746	7,738	8,650	9,761	10,319	11,563	11,534	10,741	7.6	0.84

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : PAHANG

### District : RAUB

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
CR701	549	601	1,112	884	833	779	910	822	713	735	1.4	0.04
CR702	8,222	13,267	14,059	15,871	17,863	19,414	21,940	24,418	25,040	14,588	8.1	0.54
CR703	13,270	17,187	24,490	20,522	25,779	23,229	29,577	29,976	21,153	21,086	4.6	0.32
CR704	6,354	8,862	11,287	10,409	18,299	18,922	18,409	16,792	12,188	13,718	7.8	0.43

### District : TEMERLOH

CR801	11,003	12,106	11,567	11,614	11,771	11,597	13,281	13,328	15,673	14,874	3.4	0.76
CR802	6,742	6,861	6,844	7,177	7,173	7,776	8,118	8,101	7,992	7,606	2.1	0.75
CR803	25,201	26,664	27,191	32,628	32,933	33,902	31,265	31,256	27,535	26,479	0.8	0.05
CR807	6,972	7,295	8,310	8,421	10,740	10,572	10,307	18,428	17,616	13,220	10.0	0.79
CR808	24,907	25,967	26,310	28,237	27,610	27,939	28,179	23,899	24,660	21,012	-1.4	0.22
CR809	12,104	11,389	11,332	11,472	14,260	14,339	14,243	13,806	13,244	12,522	1.8	0.31

### District : BERA

CR810	8,046	7,674	7,434	7,109	9,721	11,348	12,300	14,428	13,256	12,490	7.8	0.78
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### District : TEMERLOH

CR804	7,936	7,866	7,647	7,350	7,516	7,487	6,885	4,837	5,937	7,054	-3.3	0.43
CR805	6,832	6,855	6,587	6,761	6,890	7,317	7,088	6,952	6,714	6,369	-0.2	0.02
CR811	7,358	7,943	8,253	8,074	8,599	9,499	9,991	10,290	9,820	8,683	2.9	0.62
CR812	9,208	8,486	8,447	9,950	7,902	8,761	10,837	11,550	10,293	11,250	3.1	0.49

### District : JERANTUT

CR806	13,810	11,780	14,799	18,831	26,852	26,461	20,879	20,530	15,715	17,669	3.7	0.18
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### District : ROMPIN

CR901	6,290	7,466	6,761	14,792	8,916	8,855	9,085	9,641	9,576	10,320	3.9	0.25
CR902	6,634	6,721	7,316	11,634	8,102	8,427	9,544	8,762	9,314	9,984	3.8	0.42
CR903	4,586	4,879	2,857	5,948	6,303	6,672	7,673	7,088	7,901	10,276	9.7	0.69
CR904	5,364	5,509	5,760	6,220	6,886	7,129	7,516	7,241	7,808	8,000	4.7	0.94

# STATISTIC FOR YEAR 2015

STATE : **PAHANG**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

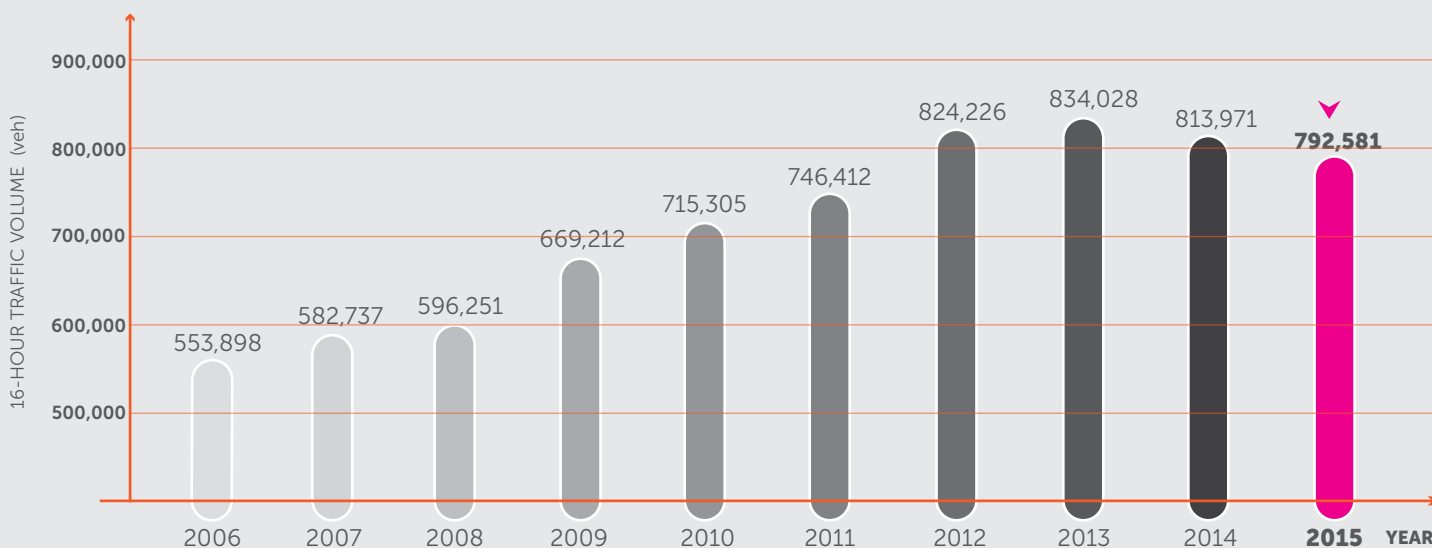


Figure 2.10-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Pahang



There are 45 census stations in Pahang. The pattern of 16-hour traffic volume shows a gradual increase since year 2006. However, there was a slightly drop from 2014 until 2015. In 2015, the numbers of decreasing is about 21,390 vehicles which is 2.63% from 2014.

**-2.63%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

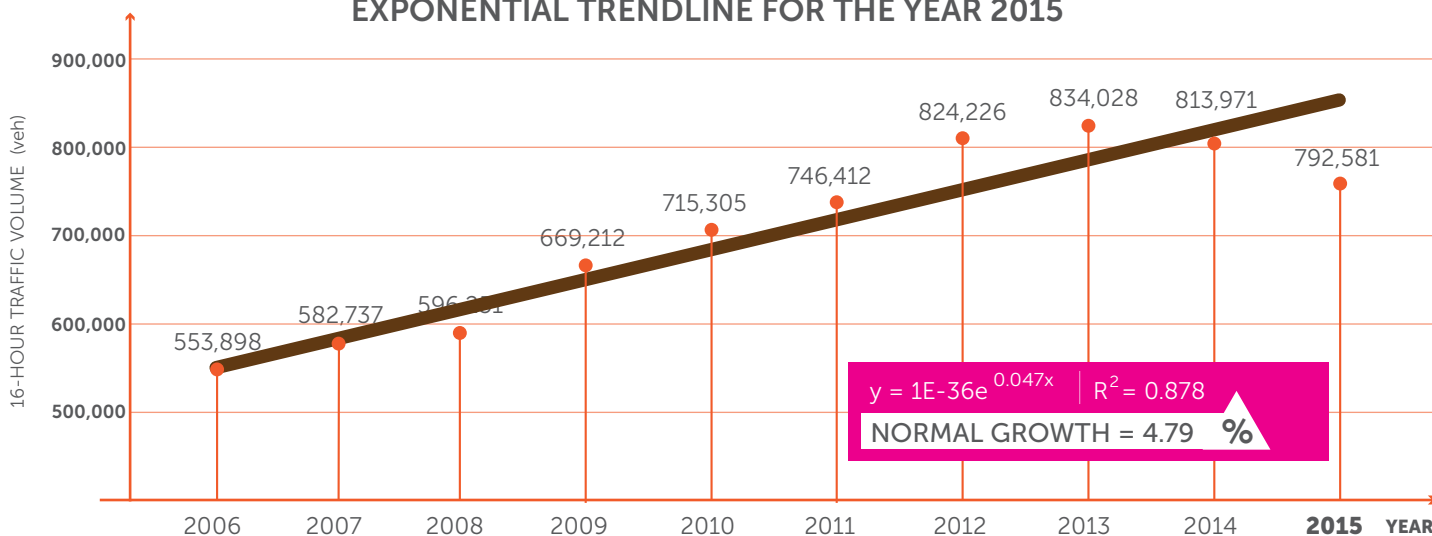
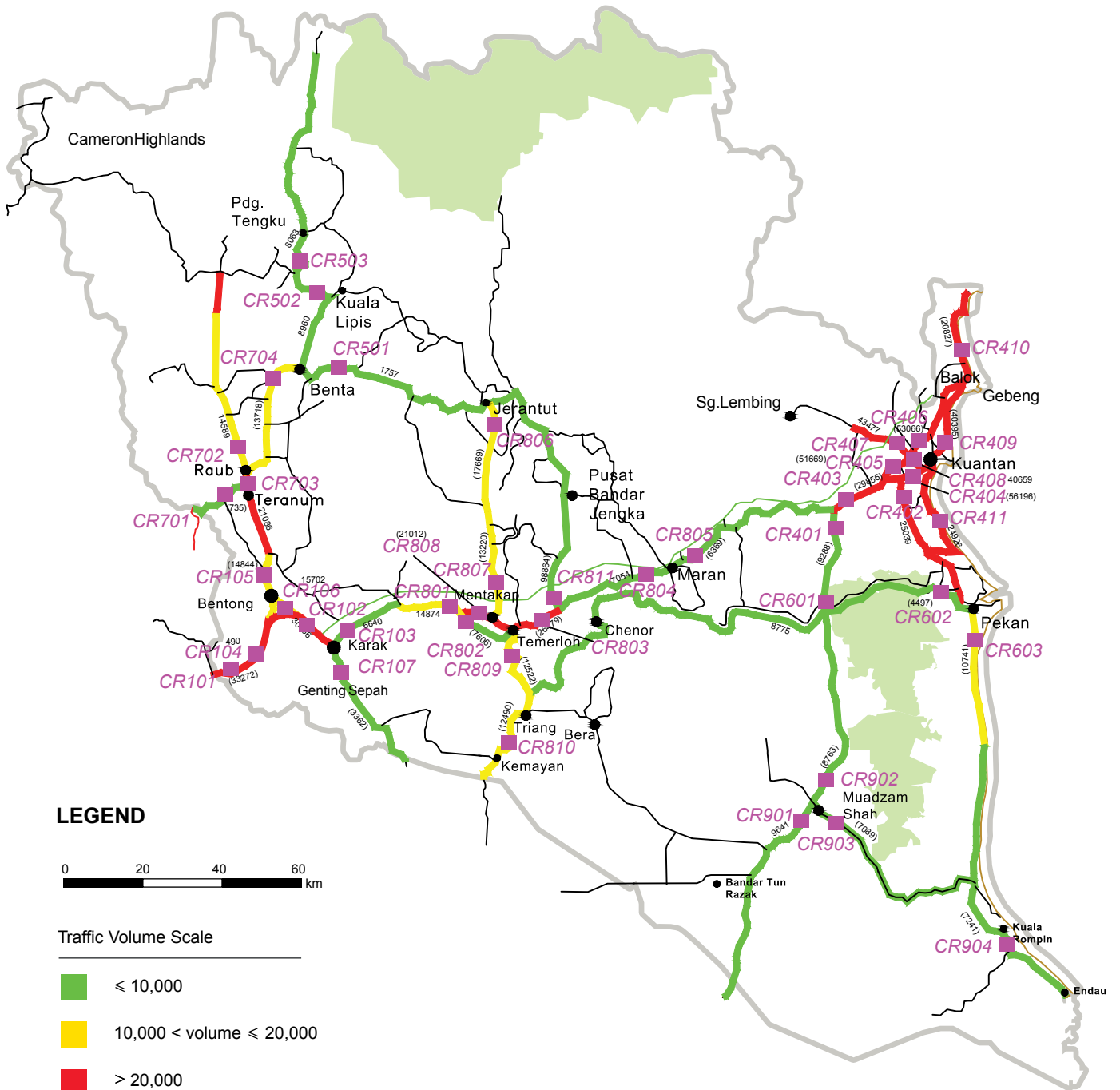


Figure 2.10-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Pahang

Traffic growth rate recorded for the state of Pahang is 4.79% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Pahang.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

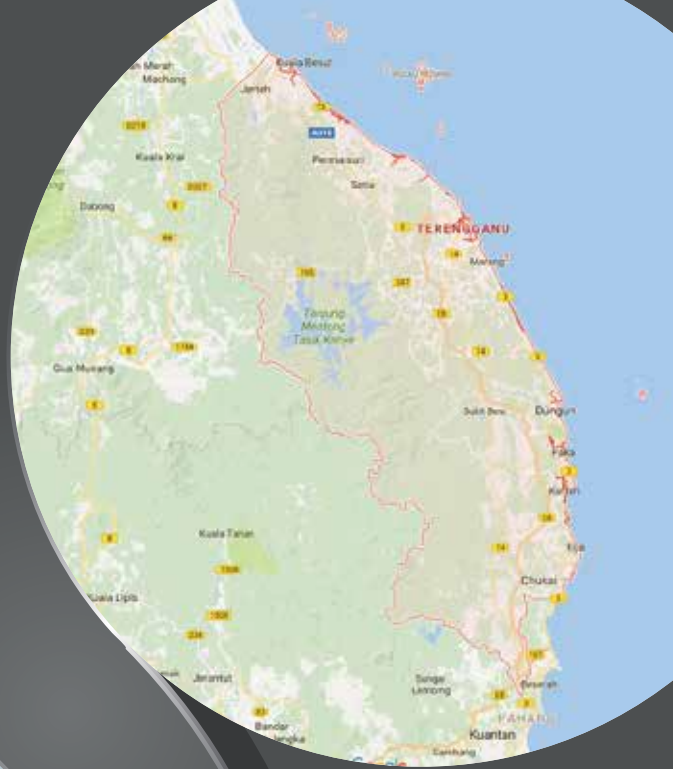




• LADANG ROUNDABOUT •



• 1999 : Also known as Batu Bersurat Roundabout •



# TERENGGANU

DARUL IMAN

29 Census Stations

Road Length : 8,950.99 km\*

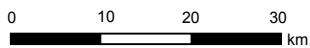
\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **TERENGGANU**



## LEGEND



- Federal Road
- State Road
- Expressway

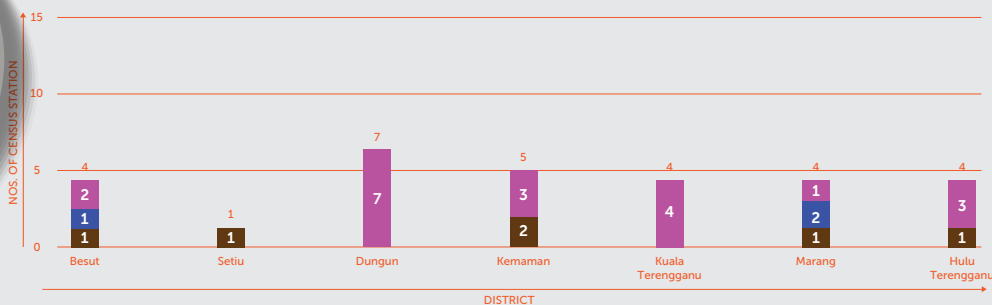
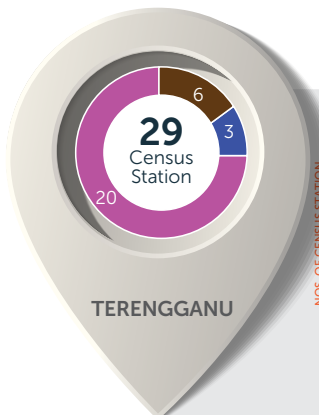
### CENSUS STATION TYPE

- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

## DISTRIBUTION OF SURVEY STATIONS





# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

## STATE : TERENGGANU

### District : BESUT

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
TR101	3	189	3.0	Jerteh - Kuala Besut	5.7672500	102.4892500	T 1-1
TR102	0	84	4.0	Jerteh - Kuala Besut (Kg. Raja)	5.7580833	102.5315556	T 1-1
TR103	1	3	62.0	Kuala Terengganu - Jerteh - Kota Bharu	5.7258056	102.5239722	T 1-1
TR105	3	T5	1.6	Jerteh - Keruak	5.7263889	102.4915278	T 1-1

### District : SETIU

TR104	0	3	70.8	Kuala Terengganu - Kota Bharu (Bandar Permaisuri)	5.5289444	102.7395278	T 1-1
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### District : DUNGUN

TR201	3	3	67.2	Kuala Terengganu - Dungun (Kg. Kuala Abang)	4.8277778	103.4163333	T 1-1
TR202	3	3	80.2	Kuala Terengganu - Dungun - Kemaman (Kuala Dungun - Paka)	4.7122778	103.4097778	K 2-2
TR203	3	122	5.6	Paka - Rasau	4.6238611	103.4282500	K 2-2
TR204	3	132	4.1	Kuala Dungun - Jambatan Jerangau (Kg. Che Lijah)	4.7607778	103.3856944	T 1-1
TR205	3	3	102.2	Paka - Kerteh (Hadapan YTL)	4.6027778	103.4433333	K 2-2
TR206	3	14	79.3	Lebuhraya Jerangau - Jabor (Bukit Besi (Besol))	4.7464167	103.1971944	T 1-1
TR207	3	14	111.2	Jalan Jerangau - Jabor (Kuari Pondok Limau)	4.4975833	103.2342778	T 1-1

### District : KEMAMAN

TR301	3	124	1.0	Kemasik - Sri Bandi (Jerangau - Jabor Junction)	4.3709170	103.3011670	T 1-1
TR302	0	3	124.2	Kuala Terengganu - Kemaman - Kuantan	4.3958056	103.4483056	T 1-1
TR303	3	T13	7.0	Chukai - Paman	4.2239720	103.3395280	T 1-1
TR304	3	237	7.0	Air Putih - Paman	4.2233060	103.3392500	T 1-1
TR305	0	14	48.0	Cheneh - Kuala Terengganu (Jalan Jabor - Jerangau)	4.1322500	103.2547778	T 1-1

### District : KUALA TERENGGANU

TR401	3	3	16.8	Kuala Terengganu - Jerteh (Tepoh)	5.3555833	103.0613611	K 2-2
TR404	3	3685	33.1	Kuala Terengganu - Kg. Merang (Meng. Panjang - Bt. Rakit)	5.4826944	103.0089722	T 1-1
TR405	3	3685	15.2	Gong Badak - Kuala Terengganu	5.3650278	103.0899444	K 2-2
TR406	3	T100	15.5	Kuala Terengganu - Chedering (Surau Panjang)	5.2533611	103.1499167	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **TERENGGANU**

## District : MARANG

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
TR402	1	3	17.0	Kuala Terengganu - Marang	5.2106389 103.2032778	K 2-2
TR403	0	3	26.0	Kuala Terengganu - Marang	5.1407500 103.2417500	T 1-1
TR407	1	14	17.0	Kuala Terengganu - Kuala Berang	5.1979167 103.1015556	K 2-2
TR408	3	T2	1.6	Marang - Wakaf Tapai	5.1973889 103.1935000	T 1-1

## District : HULU TERENGGANU

TR501	3	T107	11.0	Kuala Berang - Tanggol - Wakaf Tapai	5.1251667 103.0616667	T 1-1
TR502	3	14	146.0	Kuala Terengganu - Ajil - Jerangau	5.0397778 103.1105556	T 1-1
TR503	0	106	5.0	Kuala Terengganu - Ajil - Kuala Berang	5.0726110 103.0473060	K 2-2
TR504	3	247	1.0	Kuala Terengganu - Kuala Berang - Kg. Kuala Peng (Sg. Tong Setiu)	5.0853610 102.9979170	K 2-2

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **TERENGGANU**

**MARCH 2015**

## District : BESUT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
TR101	-	14,494	1,133	0900-1000	58.9	10.7	3.5	1.1	0.3	25.5	100.0
TR102	17,850.7	16,079.7	1,308.7	1700-1800	75.2	5.8	2.4	1.4	0.4	14.9	100.0
TR103	-	23,919	2,008.2	1200-1300	66.2	12.0	3.3	2.3	0.6	15.7	100.0
TR105	-	12,068	1,082	1300-1400	61.3	9.2	4.2	1.2	0.2	23.9	100.0

## District : SETIU

TR104	18,681.4	16,211.5	1,380.8	0700-0800	62.6	15.2	5.8	3.1	0.8	12.7	100.0
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## District : DUNGUN

TR201	-	8,330	657	1600-1700	60.9	10.0	6.9	2.8	2.2	17.3	100.0
TR202	-	28,062	2,935	0700-0800	52.5	13.1	6.3	2.5	0.6	25.0	100.0
TR203	-	13,480	1,374	0900-1000	44.4	10.4	7.5	3.8	0.3	33.6	100.0
TR204	-	10,651	1,014	0700-0800	50.2	14.5	9.0	1.3	0.3	24.7	100.0
TR205	-	37,615	4,997	1700-1800	56.1	9.6	4.6	1.8	0.4	27.5	100.0
TR206	-	6,331	500	0700-0800	44.9	13.3	11.9	17.5	0.4	11.9	100.0
TR207	-	5,704	476	1800-1900	53.9	16.8	11.5	15.5	0.8	1.6	100.0

## District : KEMAMAN

TR301	-	1,952	160	1700-1800	48.1	11.6	6.8	5.0	0.3	28.2	100.0
TR302	8,930.2	17,018.7	1,787.7	1700-1800	74.4	7.5	3.5	3.7	0.7	10.3	100.0
TR303	-	982	144	0700-0800	40.3	9.8	4.1	0.9	0.0	44.9	100.0
TR304	-	5,802	621	0700-0800	58.3	14.8	4.2	1.6	0.1	21.0	100.0
TR305	4,840	4,308.5	392.2	0700-0800	54.2	12.7	8.2	7.3	0.3	17.1	100.0

## District : KEMAMAN

TR401	-	22,841	2,462	0700-0800	56.5	9.0	10.0	3.3	0.6	20.5	100.0
TR404	-	10,092	1,054	0700-0800	55.4	20.8	7.8	1.6	0.8	13.6	100.0
TR405	-	52,598	6,414	0700-0800	66.9	6.1	4.4	0.7	0.4	21.5	100.0
TR406	-	20,023	2,076	1700-1800	63.9	7.5	9.9	1.3	0.1	17.2	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **TERENGGANU**

**MARCH 2015**

## District : MARANG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
TR402	-	31,698	2,780.7	1700-1800	69.5	6.1	3.0	0.7	0.7	19.9	100.0
TR403	14,862	13,083	1,157.2	1700-1800	72.7	7.3	4.0	1.4	1.3	13.3	100.0
TR407	-	21,219.8	1,911.1	1700-1800	67.9	7.3	4.5	1.1	0.4	18.7	100.0
TR408	-	4,978	949	0700-0800	60.2	3.0	2.7	0.2	0.2	33.7	100.0

## District : HULU TERENGGANU

TR501	-	2,843	278	1800-1900	45.9	11.7	6.3	3.5	0.0	32.6	100.0
TR502	-	9,777	989	0700-0800	57.9	10.3	4.6	4.0	0.6	22.6	100.0
TR503	9,354.8	17,920	1,792.2	0700-0800	69.0	12.8	2.8	1.9	0.5	13.1	100.0
TR504	-	7,586	826	0700-0800	62.7	11.3	4.3	2.0	0.2	19.5	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **TERENGGANU**

**SEPTEMBER 2015**

## District : BESUT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
TR101	-	15,914	1,850	1300-1400	64.0	7.5	3.6	0.9	0.3	23.7	100.0
TR102	16,744	15,116	1,302.5	1500-1600	76.2	5.2	2.3	1.3	0.4	14.6	100.0
TR103	-	23,248	1,930.5	1300-1400	67.8	10.2	3.1	2.2	0.7	16.0	100.0
TR105	-	11,812	1,188	1700-1800	62.6	11.6	4.1	1.4	0.2	20.0	100.0

## District : SETIU

TR104	16,425	14,927.1	1,306.7	0700-0800	63.7	14.8	4.5	2.6	0.8	13.6	100.0
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## District : DUNGUN

TR201	-	7,806	598	1600-1700	61.7	11.3	7.0	2.0	1.6	16.4	100.0
TR202	-	28,279	4,866	0700-0800	49.3	14.6	10.3	2.8	1.3	21.8	100.0
TR203	-	15,572	2,172	0700-0800	52.9	14.5	6.3	1.7	0.3	24.4	100.0
TR204	-	9,680	1,312	1800-1900	51.1	13.2	7.5	1.8	0.3	26.2	100.0
TR205	-	32,402	5,469	0700-0800	57.3	10.3	3.8	1.5	0.4	26.6	100.0
TR206	-	3,184	302	1700-1800	64.6	12.3	6.0	7.4	0.4	9.2	100.0
TR207	-	1,142	125	1700-1800	39.3	21.0	13.8	20.7	0.4	4.7	100.0

## District : KEMAMAN

TR301	-	1,768	145	0700-0800	38.6	17.0	8.5	4.3	0.3	31.4	100.0
TR302	17,093	15,498	1,510.5	1700-1800	72.0	8.6	3.8	3.4	0.7	11.4	100.0
TR303	-	528	66	1300-1400	43.2	9.7	4.9	2.3	0.2	39.8	100.0
TR304	-	1,954	313	1700-1800	56.7	9.0	5.8	1.2	0.4	27.0	100.0
TR305	4,398	3,900	342.2	1800-1900	55.9	12.0	8.1	7.0	0.3	16.7	100.0

## District : KEMAMAN

TR401	-	28,330	3,549	0700-0800	52.5	13.7	10.5	3.4	0.6	19.4	100.0
TR404	-	12,818	1,318	1200-1300	49.0	19.0	12.2	2.6	1.1	16.0	100.0
TR405	-	70,598	8,472	1300-1400	67.7	5.6	3.5	0.7	0.2	22.3	100.0
TR406	-	21,452	2,070	1700-1800	49.5	10.2	7.6	1.0	0.3	31.4	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **TERENGGANU**

**SEPTEMBER 2015**

## District : MARANG

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
TR402	-	18,076	1,607.4	1700-1800	66.8	7.6	3.0	0.6	0.7	21.4	100.0
TR403	14,295	12,768	1,044.7	1800-1900	68.9	9.3	4.4	1.0	1.3	15.1	100.0
TR407	-	17,827	1,684.7	0700-0800	65.8	10.8	3.9	1.1	0.3	18.1	100.0
TR408	-	6,743	1,251	0700-0800	55.9	6.5	2.7	0.9	0.2	33.8	100.0

## District : HULU TERENGGANU

TR501	-	2,924	318	1700-1800	45.8	9.3	6.6	3.8	0.3	34.2	100.0
TR502	-	9,344	983	0700-0800	57.1	9.5	6.5	3.8	0.4	22.7	100.0
TR503	19,405	17,283	1,533	0700-0800	69.1	12.5	3.1	1.3	0.4	13.6	100.0
TR504	-	8,597	1,047	0700-0800	57.2	14.1	5.7	1.9	0.2	20.9	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **TERENGGANU**

**AVERAGE 2015**

## District : BESUT

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
TR101	15,204	1,492	61.5	9.1	3.5	1.0	0.3	24.6	100%	D	2018
TR102	15,598	1,306	75.7	5.5	2.4	1.3	0.4	14.7	100%	C	-
TR103	23,584	1,969	67.0	11.1	3.2	2.2	0.7	15.8	100%	F	R
TR105	11,940	1,135	61.9	10.4	4.1	1.3	0.2	22.0	100%	B	2029

## District : SETIU

TR104	15,569	1,344	63.1	15.0	5.1	2.8	0.8	13.1	100%	D	2020
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## District : DUNGUN

TR201	8,068	628	61.3	10.6	6.9	2.4	1.9	16.8	100%	A	2107
TR202	28,171	3,901	50.9	13.9	8.3	2.6	0.9	23.4	100%	D	2022
TR203	14,526	1,773	48.7	12.5	6.9	2.7	0.3	29.0	100%	A	2116
TR204	10,166	1,163	50.6	13.9	8.3	1.5	0.3	25.4	100%	B	2024
TR205	35,009	5,233	56.7	9.9	4.2	1.7	0.4	27.1	100%	E	2016
TR206	4,758	401	54.7	12.8	9.0	12.5	0.4	10.6	100%	A	-
TR207	3,423	301	46.6	18.9	12.7	18.1	0.6	3.2	100%	A	-

## District : KEMAMAN

TR301	1,860	153	43.3	14.3	7.6	4.6	0.3	29.8	100%	A	2091
TR302	16,258	1,649	73.2	8.0	3.7	3.5	0.7	10.8	100%	D	2020
TR303	755	105	41.8	9.7	4.5	1.6	0.1	42.3	100%	A	2092
TR304	3,878	467	57.5	11.9	5.0	1.4	0.2	24.0	100%	A	2044
TR305	4,105	367	55.1	12.3	8.2	7.2	0.3	16.9	100%	A	2054

## District : KUALA TERENGGANU

TR401	25,586	3,006	54.5	11.4	10.2	3.4	0.6	19.9	100%	C	2039
TR404	11,455	1,186	52.2	19.9	10.0	2.1	0.9	14.8	100%	D	2018
TR405	61,598	7,443	67.3	5.8	4.0	0.7	0.3	21.9	100%	F	R
TR406	20,738	2,073	56.7	8.9	8.8	1.1	0.2	24.3	100%	F	R

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **TERENGGANU**

**AVERAGE 2015**

## District : MARANG

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
TR402	3,006	2,194	68.1	6.8	3.0	0.7	0.7	20.7	100%	A	2104
TR403	1,186	1,101	70.8	8.3	4.2	1.2	1.3	14.2	100%	B	2042
TR407	7,443	1,798	66.9	9.1	4.2	1.1	0.4	18.4	100%	A	2095
TR408	2,073	1,100	58.1	4.7	2.7	0.5	0.2	33.8	100%	A	-

## District : HULU TERENGGANU

TR501	2,884	298	45.8	10.5	6.4	3.6	0.2	33.4	100%	A	2136
TR502	9,561	986	57.5	9.9	5.5	3.9	0.5	22.7	100%	B	-
TR503	17,601	1,663	69.1	12.6	3.0	1.6	0.4	13.3	100%	A	2061
TR504	8,092	937	60.0	12.7	5.0	1.9	0.2	20.2	100%	A	-



# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : TERENGGANU

### District : BESUT

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
TR101	8,080	8,483	11,724	13,870	11,217	12,422	14,611	18,010	16,147	15,204	7.6	0.77
TR102	17,300	15,897	16,395	17,325	18,550	16,663	17,694	16,086	14,740	15,598	-1.0	0.19
TR103	19,007	18,384	23,357	21,313	24,196	25,551	27,325	27,066	19,490	23,584	2.4	0.24
TR105	10,392	10,134	12,420	9,424	11,199	12,827	12,894	13,896	14,343	11,940	3.2	0.49

### District : SETIU

TR104	11,491	11,942	12,572	12,088	14,188	14,451	14,882	14,693	15,806	15,569	3.7	0.90
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### District : DUNGUN

TR201	9,105	8,248	7,813	10,652	10,440	13,386	8,928	9,820	9,007	8,068	0.2	0.00
TR202	20,954	25,215	23,463	29,051	28,602	30,035	27,856	29,864	28,124	28,170	2.8	0.51
TR203	11,810	14,803	13,581	12,412	11,028	13,605	14,452	13,818	12,820	14,526	1.0	0.09
TR204	8,300	5,986	6,534	8,017	8,300	10,791	8,393	9,284	10,027	10,166	4.6	0.54
TR205	24,677	21,107	20,500	29,995	29,818	33,471	26,867	37,896	34,450	35,008	5.7	0.65
TR206	12,752	4,884	5,937	6,623	6,350	6,945	5,952	5,896	5,513	4,758	-5.0	0.31
TR207	13,439	24,207	23,204	25,151	22,096	22,898	25,761	24,011	9,565	3,423	-11.2	0.28

### District : KEMAMAN

TR301	1,552	1,645	1,744	1,660	1,649	1,655	2,090	2,091	2,173	1,860	3.1	0.61
TR302	14,475	14,899	15,228	15,417	16,831	17,498	18,418	19,086	19,298	16,258	2.8	0.63
TR303	810	923	901	1,211	881	2,156	988	1,452	1,712	755	3.8	0.11
TR304	3,470	2,547	1,353	2,441	4,400	2,424	3,337	3,434	3,424	3,878	4.9	0.19
TR305	4,079	5,116	5,363	5,381	5,590	6,553	7,566	8,036	7,667	4,104	3.7	0.21

### District : KUALA TERENGGANU

TR401	22,844	20,791	21,153	20,282	23,673	22,183	22,263	22,722	22,556	25,586	1.3	0.35
TR404	8,278	8,654	9,104	9,474	14,219	11,812	12,678	15,597	13,667	11,455	5.8	0.60
TR405	42,155	60,257	63,719	61,587	51,546	44,675	47,067	56,821	50,950	61,598	0.4	0.01
TR406	14,248	14,061	14,275	15,256	16,727	18,504	18,465	20,190	21,619	20,738	5.3	0.94

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **TERENGGANU**

## District : MARANG

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
TR402	24,524	39,230	24,933	24,852	25,887	27,451	29,532	31,227	31,686	24,887	0.2	0.00
TR403	11,607	12,429	13,347	13,288	14,409	15,103	14,435	13,712	15,221	12,925	1.7	0.36
TR407	17,171	17,217	18,263	17,214	17,751	17,384	17,360	19,041	19,224	19,524	1.3	0.60
TR408	9,120	11,369	6,022	11,275	13,517	12,868	12,210	11,737	8,878	5,860	-1.3	0.02

## District : HULU TERENGGANU

TR501	2,508	2,446	2,750	2,918	3,050	2,840	2,956	2,894	2,702	2,884	1.3	0.31
TR502	12,216	10,838	13,132	14,701	14,695	12,649	10,092	8,714	8,739	9,560	-4.3	0.42
TR503	13,215	13,235	14,758	15,301	18,188	19,064	17,140	15,461	15,446	17,601	2.6	0.39
TR504	9,994	12,209	11,654	12,765	12,280	12,314	10,426	8,722	7,271	8,092	-4.6	0.48

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

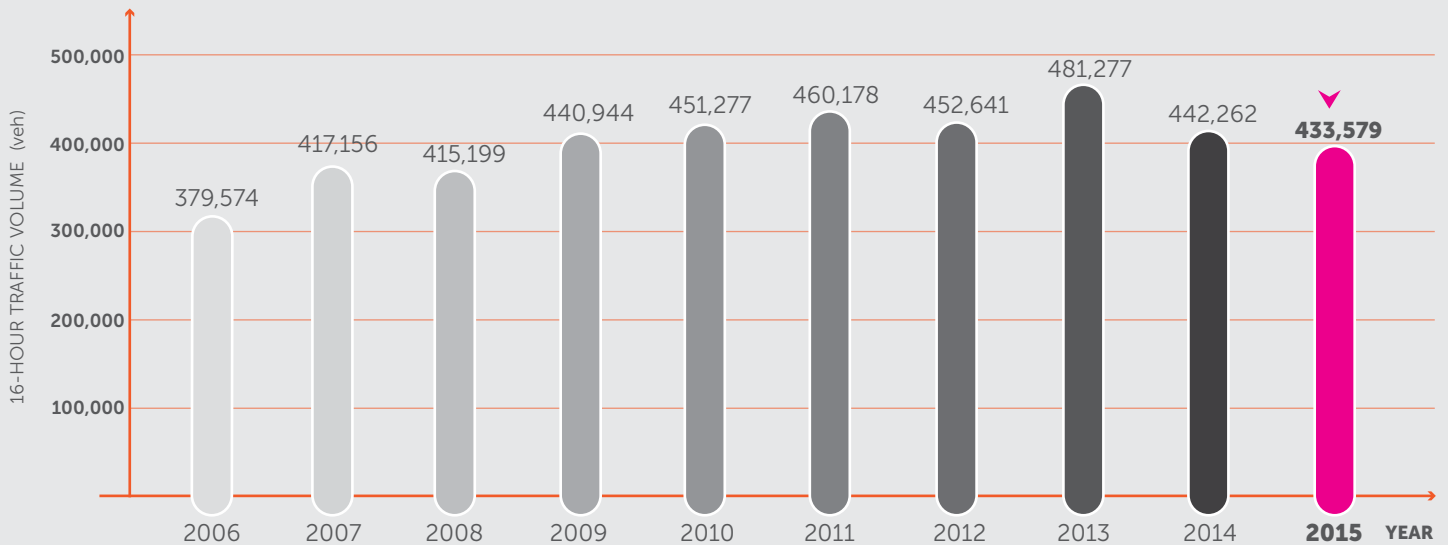


Figure 2.11-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Terengganu



There are 29 census stations in Terengganu. The 16-hour traffic volume documented in year 2015 has seen decrease of 8,683 vehicles which is 1.96% from 2014. The pattern of 16-hour traffic volume shows fluctuation number of vehicles from 2006 to 2015.

**-1.96%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

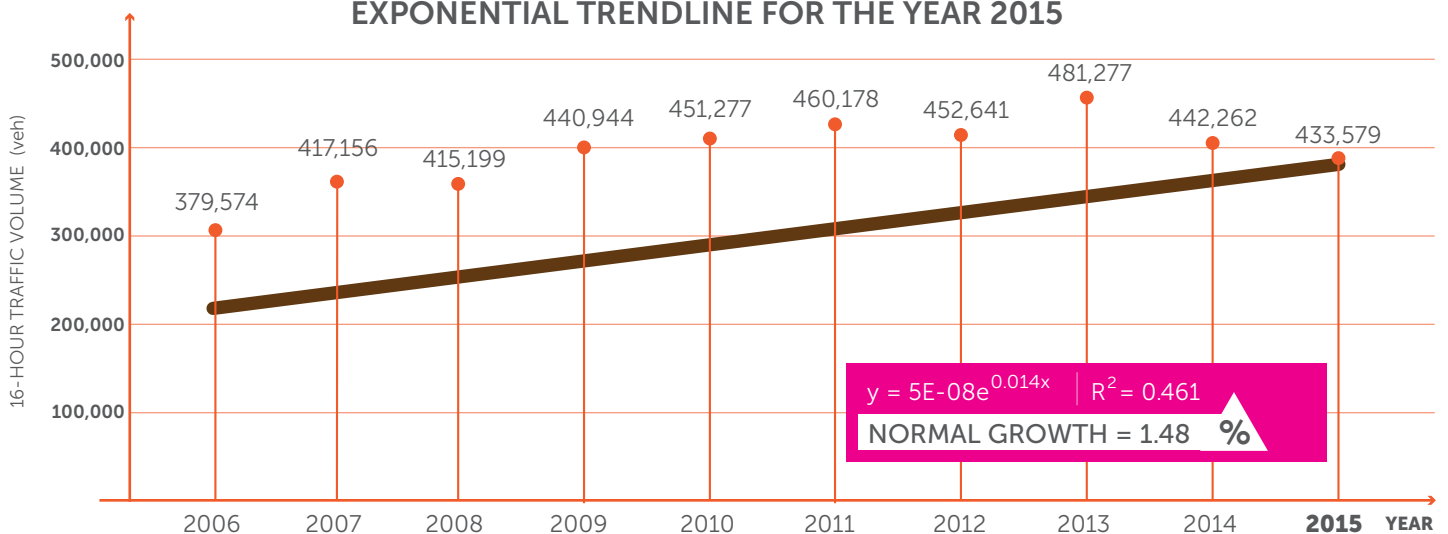
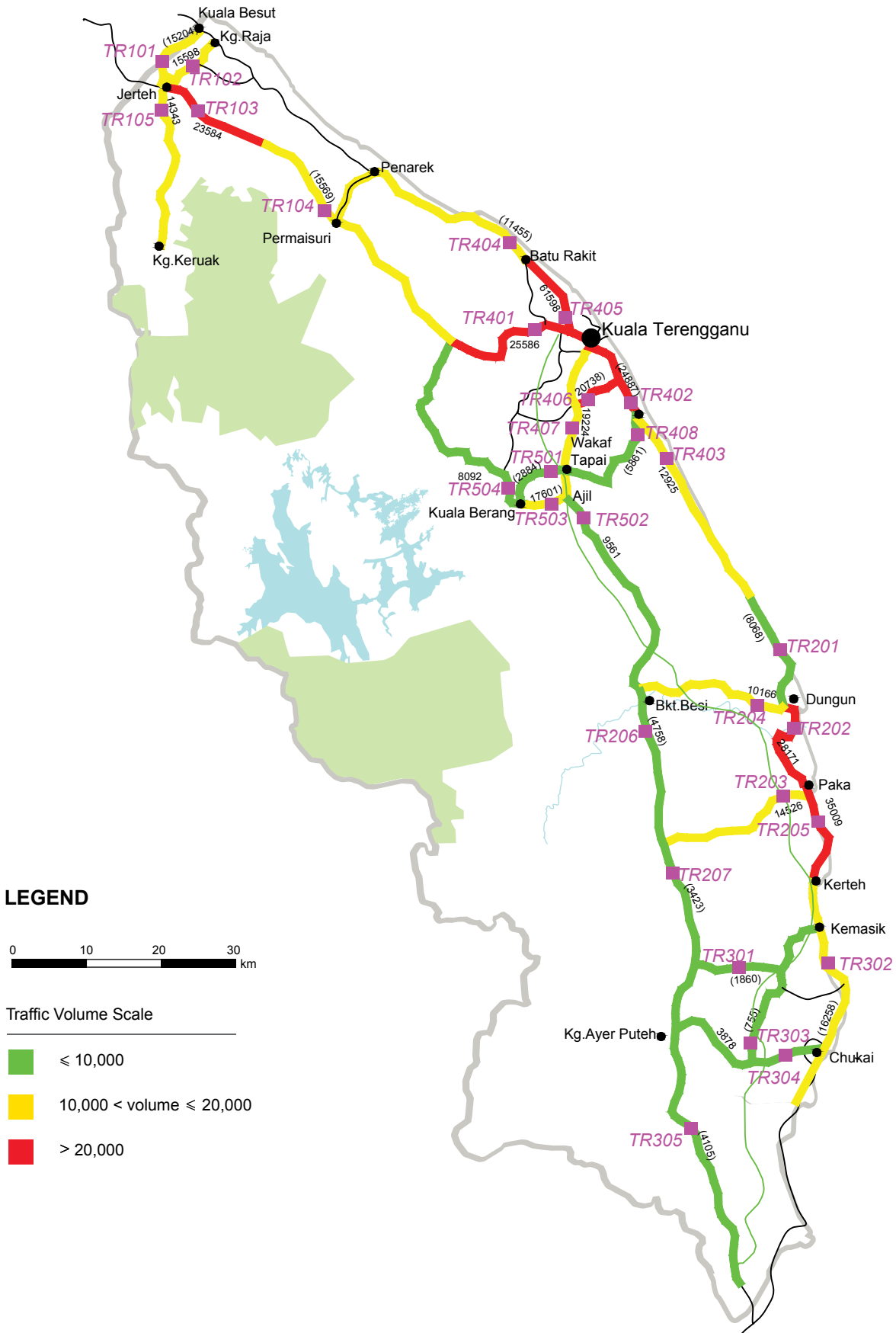


Figure 2.11-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Terengganu

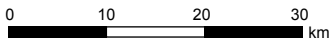
Traffic growth rate recorded for the state of Terengganu is 1.48% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Terengganu.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **TERENGGANU**



## LEGEND



### Traffic Volume Scale

- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000

• SULTAN YAHYA PETRA 2<sup>ND</sup> BRIDGE, KOTA BHARU •



• 2013 : The Longest Bridge In Kelantan •



# KELANTAN

DARUL NAIM

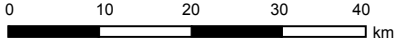
32 Census Stations  
Road Length : 20,617.29 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **KELANTAN**

## LEGEND



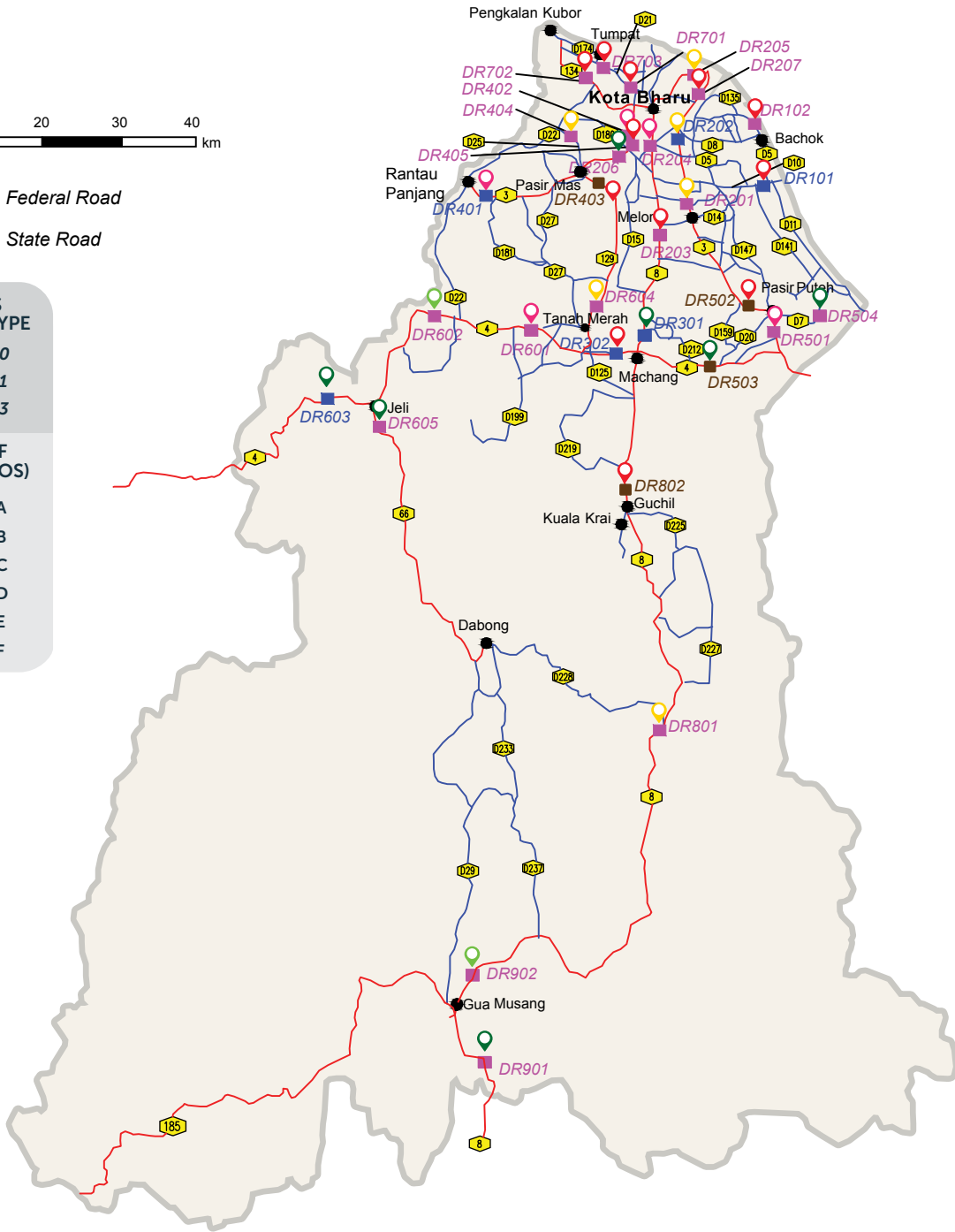
- Federal Road
- State Road

### CENSUS STATION TYPE

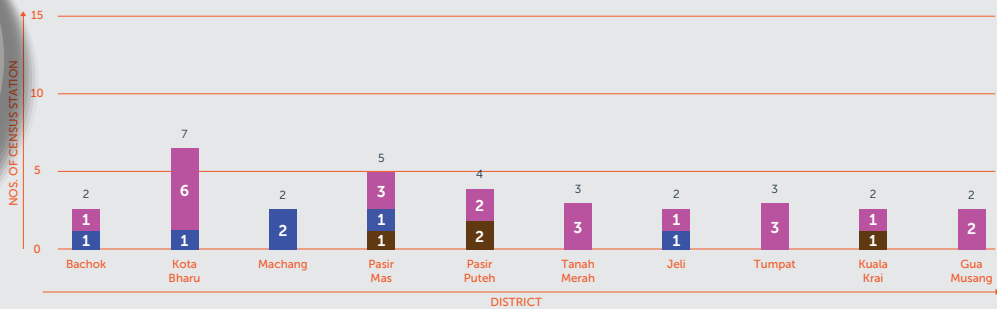
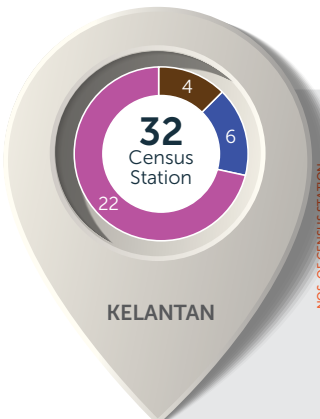
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **KELANTAN**

## District : BACHOK

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
DR101	1	211	18.7	Kota Bharu - Pengkalan Baru - Bachok	6.0122778	102.3805556	T 1-1
DR102	3	D10	28.2	Kota Bharu - Peringat - Gunong - Bachok	6.0724444	102.3620833	T 1-1

## District : KOTA BHARU

DR201	3	3	19.3	Kota Bharu - Pasir Puteh	5.9673056	102.2953333	K 2-2
DR202	1	3	6.4	Kota Bharu - Pasir Puteh	6.0857222	102.2770000	K 2-2
DR203	3	8	20.9	Kota Bharu - Machang	5.9560580	102.2493030	T 1-1
DR204	3	8	8.1	Kota Bharu - Machang	6.0501667	102.2381389	T 1-1
DR205	3	57	4.0	Kota Bharu - Pengkalan Chepa	6.1349444	102.2629444	K 2-2
DR206	3	130	9.5	Wakaf Che Yeh - Salor - Pasir Mas	6.0481389	102.2137222	T 1-1
DR207	3	131	4.0	Kubang Krian - Sabak	6.1220556	102.2951389	T 1-1

## District : MACHANG

DR301	1	8	35.5	Kota Bharu - Machang	5.8126389	102.2249722	K 2-2
DR302	1	4	47.2	Machang - Tanah Merah - Jeli	5.7726944	102.1631944	T 1-1

## District : PASIR MAS

DR401	1	3	6.5	Pasir Mas - Rantau Panjang	6.0175278	102.1065000	T 1-1
DR402	3	3	6.5	Pasir Mas - Kota Bahru (Kg. Tar Tujuh)	6.0567500	102.1977222	T 1-1
DR403	0	129	1.0	Pasir Mas - Tanah Merah (Kg. Lemal)	6.0233889	102.1480278	T 1-1
DR404	3	D25	1.3	Pasir Mas - Meranti	6.0559444	102.1386389	T 1-1
DR405	3	208	7.2	Tendong - Pendek (Jambatan Sultan Ismail)	6.0636667	102.2054444	T 1-1

## District : PASIR PUTEH

DR501	3	3	44.0	Kota Bharu - Pasir Puteh - Batu Melintang	5.8121111	102.4126389	T 1-1
DR502	0	3	34.1	Kota Bharu - Kuala Terengganu	5.8518889	102.3572222	T 1-1
DR503	0	4	19.5	Pasir Puteh - Machang	5.7586667	102.3281944	T 1-1
DR504	3	D7	41.0	Kota Bharu - Pasir Puteh - Kuala Semerak	5.8324444	102.4131389	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **KELANTAN**

## District : TANAH MERAH

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
DR601	3	4	56.2	Kota Bharu - Tanah Merah - Batu Melintang	5.8083333	102.0820000	T 1-1
DR602	3	4	76.4	Kota Bharu - Tanah Merah	5.8295556	101.9317500	T 1-1
DR604	3	129	27.0	Kota Bharu - Pasir Mas - Tanah Merah	5.8348056	102.1563056	T 1-1

## District : JELI

DR603	1	4	6.1	Lebuh raya Timur - Barat	5.7140278	101.7901111	T 1-1
DR605	3	66	6.0	Jeli - Dabong	5.6796667	101.8510278	T 1-1

## District : TUMPAT

DR701	3	D21	9.5	Kota Bharu - Tumpat / Palekbang	6.1347222	102.2162778	T 1-1
DR702	3	134	16.6	Kota Bharu - Pengkalan Kubor	6.1732778	102.1284167	T 1-1
DR703	3	D21	6.4	Chabang Tiga - Tumpat	6.1743889	102.2259444	T 1-1

## District : KUALA KRAI

DR801	3	8	102.6	Kota Bharu - Gua Musang	5.3180833	102.2796389	T 1-1
DR802	0	8	61.5	Kota Bharu - Kuala Krai	5.6012778	102.1921944	T 1-1

## District : GUA MUSANG

DR901	3	8	10.0	Gua Musang - Merapoh	4.8144444	101.9648611	T 1-1
DR902	3	8	5.0	Gua Musang - Renok - Kuala Krai	4.9129444	101.9932778	T 1-1



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KELANTAN**

**MARCH 2015**

## District : BACHOK

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
DR101	-	25,980	2,147	1700-1800	52.1	9.7	5.6	0.5	0.4	31.7	100.0
DR102	-	25,590	2,059	1300-1400	48.7	12.8	9.2	0.8	0.8	27.8	100.0

## District : KOTA BHARU

DR201	-	44,032	4,074	1700-1800	69.1	3.0	3.9	0.6	0.8	22.6	100.0
DR202	-	50,007	4,172	0700-0800	74.5	2.3	1.5	0.5	0.4	20.8	100.0
DR203	-	35,296	3,903	1700-1800	81.7	1.5	0.8	0.2	0.5	15.3	100.0
DR204	-	26,569	2,326	1800-1900	77.4	2.4	1.0	0.3	0.6	18.3	100.0
DR205	-	67,388	5,775	1600-1700	74.6	1.8	1.1	0.1	0.2	22.2	100.0
DR206	-	9,362	854	1700-1800	71.0	2.7	3.1	0.2	0.8	22.2	100.0
DR207	-	31,934	3,334	1600-1700	64.6	2.4	1.3	1.2	0.3	30.1	100.0

## District : MACHANG

DR301	-	27,515	2,602	0700-0800	73.9	9.7	3.3	1.8	0.7	10.6	100.0
DR302	-	20,119,714	1,784,571	1700-1800	68.6	10.5	5.9	2.7	0.4	11.9	100.0

## District : PASIR MAS

DR401	-	19,603	1,564	1700-1800	71.7	6.6	4.0	1.4	0.9	15.4	100.0
DR402	-	19,063	1,916	1700-1800	67.7	5.2	3.3	0.3	0.7	22.9	100.0
DR403	22,458	20,579	1,754	0700-0800	67.1	6.8	7.6	0.8	0.7	17.0	100.0
DR404	-	13,279	1,288	0700-0800	55.7	4.8	2.2	0.3	0.3	36.7	100.0
DR405	-	18,844	1,650	1600-1700	68.2	7.4	7.6	1.2	0.2	15.5	100.0

## District : PASIR PUTEH

DR501	-	18,615	1,473	1500-1600	70.3	7.1	4.1	1.0	0.7	16.8	100.0
DR502	26,790	24,327	2,169	0700-0800	75.7	5.0	2.9	0.7	0.6	15.0	100.0
DR503	12,129	10,764	918	1700-1800	72.8	7.9	5.2	2.5	0.8	10.8	100.0
DR504	-	11,336	1,145	0700-0800	65.6	9.5	3.5	0.2	0.3	20.9	100.0

## District : TANAH MERAH

DR601	-	16,608	1,589	1700-1800	62.3	11.1	6.6	4.5	0.5	15.0	100.0
DR602	-	10,557	1,032	0700-0800	63.0	11.4	8.3	5.0	0.6	11.8	100.0
DR604	-	15,936	1,335	0700-0800	65.5	7.9	4.4	1.4	0.6	20.3	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KELANTAN**

**MARCH 2015**

## District : JELI

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
DR603	-	4,211	381	1200-1300	62.8	13.1	6.1	2.7	0.8	14.5	100.0
DR605	-	4,666	551	1400-1500	57.4	12.7	5.4	2.5	0.3	21.8	100.0

## District : TUMPAT

DR701	-	27,832	3,024	1800-1900	59.3	9.6	2.5	0.3	0.1	28.2	100.0
DR702	-	13,689	1,451	1700-1800	56.9	11.9	3.6	0.4	0.6	26.6	100.0
DR703	-	23,616	2,353	0700-0800	57.4	9.5	2.8	0.2	0.2	29.9	100.0

## District : KUALA KRAI

DR801	-	10,185	967	1000-1100	56.3	20.5	6.7	4.1	1.0	11.4	100.0
DR802	28,116	24,634	2,122	1700-1800	53.8	21.1	7.7	2.6	0.6	14.1	100.0

## District : GUA MUSANG

DR901	-	4,516	452	1800-1900	55.1	12.7	8.4	3.0	0.9	19.8	100.0
DR902	-	9,401	879	1700-1800	54.1	23.7	6.9	6.3	0.8	8.1	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KELANTAN**

**SEPTEMBER 2015**

## District : BACHOK

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
DR101	-	20,317	1,841	1800-1900	54.5	9.0	3.1	0.3	0.3	32.8	100.0
DR102	-	26,320	2,521	1400-1500	50.9	12.9	6.8	0.8	0.8	27.8	100.0

## District : KOTA BHARU

DR201	-	34,481	3,813	0700-0800	58.4	9.1	7.0	1.4	0.5	23.6	100.0
DR202	-	49,075	4,733	0700-0800	70.0	3.7	1.9	0.4	0.4	23.6	100.0
DR203	-	24,724	2,328	1800-1900	67.1	9.1	1.4	0.3	0.7	21.4	100.0
DR204	-	27,305	2,778	1800-1900	73.6	5.0	1.0	0.2	0.6	19.5	100.0
DR205	-	44,820	3,977	1800-1900	69.8	4.1	1.7	0.2	0.3	23.9	100.0
DR206	-	11,417	1,108	1300-1400	67.4	6.5	3.4	0.2	0.7	21.9	100.0
DR207	-	32,485	2,963	1700-1800	60.1	4.7	2.9	1.3	0.5	30.6	100.0

## District : MACHANG

DR301	-	23,754	2,564	0700-0800	73.2	8.5	3.6	1.6	0.8	12.4	100.0
DR302	-	18,453	1,720	1700-1800	66.8	11.1	6.3	2.8	0.4	12.6	100.0

## District : PASIR MAS

DR401	-	19,448	1,625	1700-1800	70.6	7.6	3.6	1.2	0.7	16.3	100.0
DR402	-	18,867	1,709	1700-1800	67.9	4.1	2.8	0.4	0.7	24.2	100.0
DR403	22,242	20,465	1,900	0700-0800	67.6	5.9	7.6	0.7	0.6	17.6	100.0
DR404	-	14,541	1,732	0700-0800	55.6	4.0	2.8	0.2	0.1	37.3	100.0
DR405	-	16,983	1,808	1700-1800	68.7	3.8	7.9	1.4	0.1	18.0	100.0

## District : PASIR PUTEH

DR501	-	15,468	1,435	1600-1700	71.7	7.9	3.9	1.1	0.6	14.7	100.0
DR502	23,044	20,889	1,651	1700-1800	69.0	8.4	3.4	1.2	0.7	17.3	100.0
DR503	11,665	10,390	927	1700-1800	68.3	10.2	5.2	2.7	0.7	12.7	100.0
DR504	-	8,968	985	0700-0800	61.5	9.5	2.8	0.6	0.3	25.3	100.0

## District : TANAH MERAH

DR601	-	16,608	1,589	1700-1800	62.3	11.1	6.6	4.5	0.5	15.0	100.0
DR602	-	10,557	1,032	0700-0800	63.0	11.4	8.3	5.0	0.6	11.8	100.0
DR604	-	15,936	1,335	0700-0800	65.5	7.9	4.4	1.4	0.6	20.3	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **KELANTAN**

**SEPTEMBER 2015**

## District : JELI

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
DR603	-	5,223	392	0700-0800	59.6	12.1	7.1	5.9	0.7	14.5	100.0
DR605	-	4,804	524	1300-1400	54.2	12.5	5.8	2.6	0.6	24.2	100.0

## District : TUMPAT

DR701	-	35,447	3,400	1800-1900	54.8	14.1	3.3	0.4	0.1	27.4	100.0
DR702	-	17,505	2,116	1700-1800	52.0	12.4	4.3	0.5	0.5	30.3	100.0
DR703	-	25,227	2,904	0700-0800	56.6	10.5	2.7	0.8	0.2	29.1	100.0

## District : KUALA KRAI

DR801	-	9,185	808	1700-1800	50.1	22.6	9.7	5.4	1.1	11.2	100.0
DR802	24,718	22,055	1,914	1600-1700	55.7	17.3	7.2	3.1	0.7	16.0	100.0

## District : GUA MUSANG

DR901	-	5,280	639	1300-1400	47.7	23.0	7.9	5.5	0.9	15.1	100.0
DR902	-	8,933	786	1800-1900	55.7	21.3	7.3	5.1	0.7	9.9	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **KELANTAN**

**AVERAGE 2015**

## District : BACHOK

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
DR101	23,149	1,995	53.3	9.3	4.4	0.4	0.3	32.2	<b>F</b>	R	
DR102	25,955	2,290	49.8	12.9	8.0	0.8	0.8	27.8	<b>F</b>	R	

## District : KOTA BHARU

DR201	39,257	3,944	63.8	6.1	5.4	1.0	0.7	23.1	<b>C</b>	2035
DR202	49,541	4,453	72.2	3.0	1.7	0.4	0.4	22.2	<b>C</b>	-
DR203	30,010	3,116	74.4	5.3	1.1	0.2	0.6	18.4	<b>F</b>	R
DR204	26,937	2,552	75.5	3.7	1.0	0.2	0.6	18.9	<b>E</b>	2016
DR205	56,104	4,876	72.2	2.9	1.4	0.2	0.3	23.0	<b>C</b>	-
DR206	10,390	981	69.2	4.6	3.2	0.2	0.7	22.0	<b>A</b>	2038
DR207	32,210	3,149	62.4	3.5	2.1	1.2	0.4	30.3	<b>F</b>	R

## District : MACHANG

DR301	25,635	2,583	73.5	9.1	3.5	1.7	0.7	11.5	<b>A</b>	2046
DR302	19,286	1,752	67.7	10.8	6.1	2.8	0.4	12.3	<b>F</b>	R

## District : PASIR MAS

DR401	19,526	1,595	71.2	7.1	3.8	1.3	0.8	15.8	<b>E</b>	2020
DR402	18,965	1,813	67.8	4.6	3.0	0.3	0.7	23.5	<b>E</b>	2018
DR403	20,522	1,828	67.4	6.4	7.6	0.8	0.6	17.3	<b>F</b>	R
DR404	13,910	1,510	55.7	4.4	2.5	0.2	0.2	37.0	<b>C</b>	2024
DR405	17,914	1,729	68.4	5.6	7.7	1.3	0.2	16.7	<b>F</b>	R

## District : PASIR PUTEH

DR501	17,042	1,454	71.0	7.5	4.0	1.1	0.7	15.8	<b>D</b>	2025
DR502	22,608	1,910	72.3	6.7	3.2	1.0	0.7	16.1	<b>F</b>	R
DR503	10,577	923	70.5	9.1	5.2	2.6	0.8	11.8	<b>A</b>	2037
DR504	10,152	1,065	63.6	9.5	3.1	0.4	0.3	23.1	<b>A</b>	-

## District : TANAH MERAH

DR601	15,789	1,544	64.0	11.6	6.2	4.5	0.5	13.2	<b>E</b>	2019
DR602	10,474	1,033	61.8	13.0	7.4	4.8	0.6	12.4	<b>B</b>	2031
DR604	15,111	1,471	67.6	7.1	4.5	1.4	0.6	18.8	<b>C</b>	2044

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **KELANTAN**

**AVERAGE 2015**

## District : JELI

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
DR603	4,718	387	61.2	12.6	6.6	4.3	0.8	14.5	<b>A</b>	2107	
DR605	4,735	538	55.8	12.6	5.6	2.5	0.5	23.0	<b>A</b>	2050	

## District : TUMPAT

DR701	31,640	3,212	57.0	11.8	2.9	0.3	0.1	27.8	<b>F</b>	R
DR702	15,597	1,784	54.4	12.1	3.9	0.4	0.6	28.5	<b>F</b>	R
DR703	24,422	2,629	57.0	10.0	2.8	0.5	0.2	29.5	<b>F</b>	R

## District : KUALA KRAI

DR801	9,685	888	53.2	21.6	8.2	4.7	1.0	11.3	<b>C</b>	2034
DR802	23,345	2,018	54.7	19.2	7.5	2.8	0.7	15.1	<b>F</b>	R

## District : GUA MUSANG

DR901	4,898	546	51.4	17.8	8.2	4.3	0.9	17.4	<b>A</b>	-
DR902	9,167	833	54.9	22.5	7.1	5.7	0.8	9.0	<b>B</b>	2024

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

## STATE : KELANTAN

### District : BACHOK

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
DR101	17,076	18,013	19,996	19,231	20,824	12,711	21,889	24,537	22,613	23,149	3.2	0.25
DR102	16,754	12,873	13,738	14,485	17,184	9,386	19,150	21,368	21,284	25,955	6.0	0.38

### District : KOTA BHARU

DR201	22,900	35,931	30,698	43,222	31,602	37,939	42,433	32,263	26,042	39,256	1.8	0.07
DR202	58,134	56,676	43,771	55,608	48,957	57,936	46,291	47,187	46,128	49,541	-1.7	0.24
DR203	30,130	36,869	40,224	29,167	33,260	41,274	35,356	35,118	27,702	30,010	-1.2	0.07
DR204	23,704	33,397	36,175	42,681	31,934	37,301	38,669	34,110	32,932	26,937	0.4	0.00
DR205	56,422	54,808	61,525	51,299	52,560	51,363	51,770	43,734	47,240	56,104	-1.7	0.29
DR206	7,142	7,758	8,195	6,867	7,246	8,991	9,667	7,232	8,640	10,390	2.9	0.38
DR207	22,898	27,826	30,799	31,822	30,154	29,824	44,472	39,092	33,762	32,210	4.0	0.45

### District : MACHANG

DR301	21,306	21,624	22,157	22,312	23,023	23,725	24,919	25,688	24,350	25,635	2.2	0.91
DR302	14,108	14,942	15,530	15,731	17,188	18,756	19,101	18,465	19,002	19,286	3.7	0.89

### District : PASIR MAS

DR401	15,893	17,418	17,128	17,359	18,193	19,270	19,442	19,632	19,418	19,526	2.2	0.85
DR402	15,208	15,408	18,138	17,275	17,028	16,438	17,614	16,310	19,292	18,965	1.8	0.49
DR403	16,894	17,776	19,197	20,585	18,873	18,831	20,095	20,824	19,831	20,522	1.7	0.59
DR404	9,940	9,892	11,793	14,464	11,604	11,588	11,990	12,011	13,894	13,910	3.0	0.48
DR405	13,417	14,117	14,562	15,377	18,208	19,876	19,922	17,442	17,896	17,914	3.6	0.60

### District : PASIR PUTEH

DR501	11,028	16,676	12,742	19,051	19,240	16,698	15,656	13,970	16,096	17,042	2.1	0.13
DR502	17,468	18,332	20,388	19,685	24,831	23,795	21,093	23,781	22,035	22,608	2.8	0.51
DR503	8,341	9,117	9,066	9,677	12,369	13,133	10,300	11,331	10,430	10,577	2.7	0.33
DR504	12,976	12,085	11,069	14,673	16,304	14,365	13,322	14,814	12,432	10,152	-0.6	0.02

### District : TANAH MERAH

DR601	13,748	12,953	13,799	13,398	14,380	14,516	15,712	14,768	15,124	15,788	1.9	0.76
DR602	8,117	8,937	8,614	8,856	9,260	9,901	10,176	9,870	10,216	10,474	2.7	0.89
DR604	15,607	16,297	15,459	18,686	16,643	17,495	17,418	17,313	18,955	15,110	0.7	0.08

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **KELANTAN**

## District : JELI

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
DR603	4,807	5,090	5,224	5,296	5,440	5,863	6,275	6,029	6,141	4,718	1.5	0.19
DR605	4,548	4,978	5,350	2,659	5,837	5,375	6,748	5,940	6,342	4,735	3.2	0.14

## District : TUMPAT

DR701	28,904	21,888	23,870	22,099	25,635	28,666	29,956	27,868	29,532	31,640	2.8	0.43
DR702	18,252	12,637	12,383	13,194	12,664	13,051	15,142	13,922	17,340	15,597	1.1	0.06
DR703	20,097	17,129	17,522	18,706	19,189	21,622	22,243	26,286	22,655	24,422	3.9	0.69

## District : KUALA KRAI

DR801	7,983	11,345	9,132	8,974	10,122	10,565	9,994	10,783	11,860	9,685	2.0	0.25
DR802	16,932	18,828	18,707	19,521	20,623	22,308	23,381	21,200	22,523	23,345	3.3	0.83

## District : GUA MUSANG

DR901	6,674	8,471	5,425	5,596	7,365	7,356	7,082	7,858	7,292	4,898	-0.8	0.02
DR902	5,672	6,567	7,271	7,955	8,842	9,219	8,848	8,688	10,086	9,167	5.2	0.79



# STATISTIC FOR YEAR 2015

STATE : **KELANTAN**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

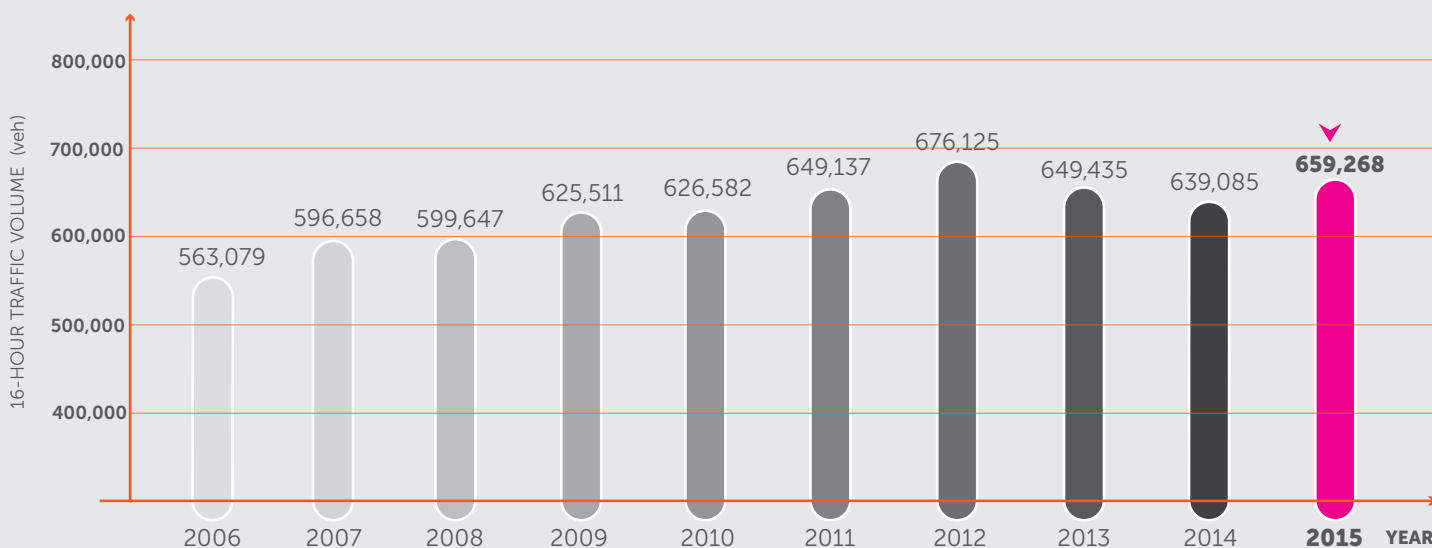


Figure 2.12-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Kelantan



There are 32 census stations in Kelantan. The 16-hour traffic volume documented since year 2006 to 2015 has seen the highest traffic volume in Kelantan was in 2012 which is 676,125 vehicles. For 2015, there was a slightly increase of 3.16% from 2014.

**3.16%**

INCREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

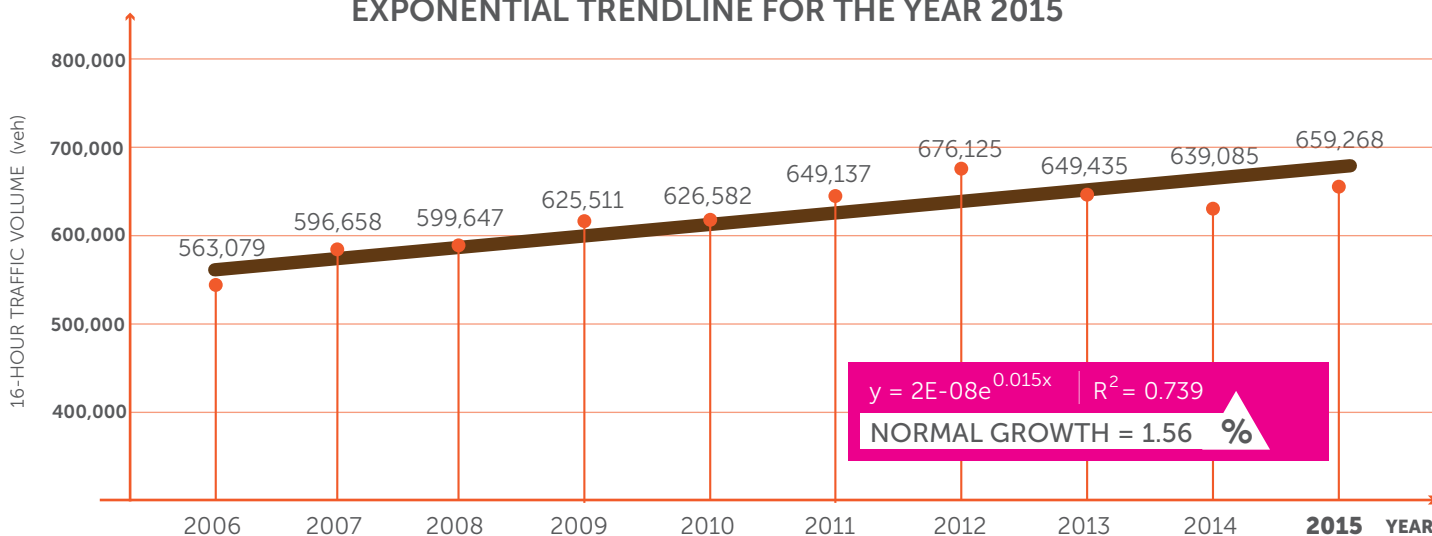


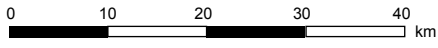
Figure 2.12-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Kelantan

Traffic growth rate recorded for the state of Kelantan is 1.56% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Kelantan.

# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

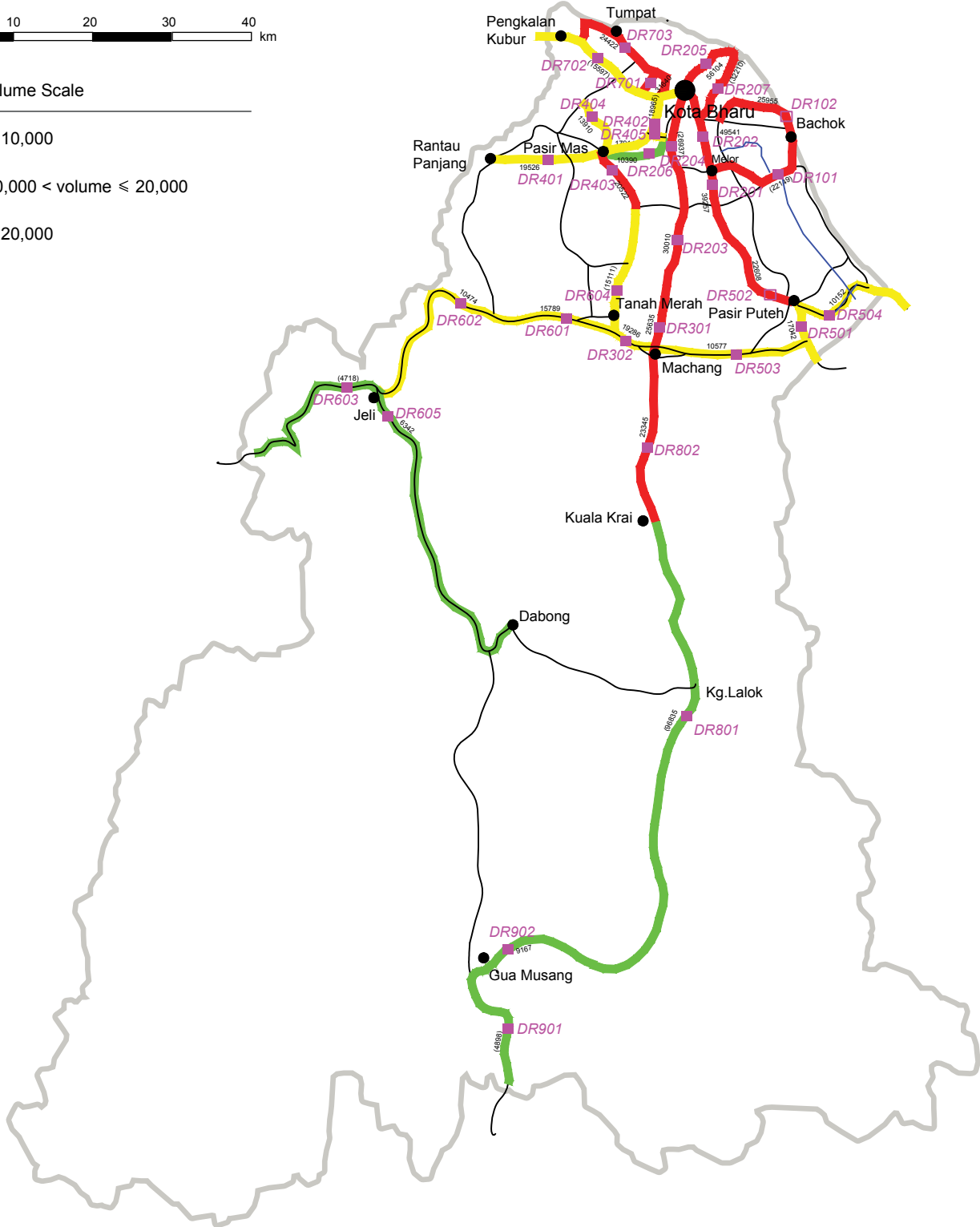
STATE : **KELANTAN**

## LEGEND



### Traffic Volume Scale

- ≤ 10,000
- 10,000 < volume ≤ 20,000
- > 20,000





• BRUNEI-MALAYSIA FRIENDSHIP BRIDGE, LIMBANG •



• 2013 : Brunei – Malaysia Border •

# SARAWAK

33 Census Stations

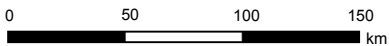
Road Length : 30,841.02 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **SARAWAK**

## LEGEND



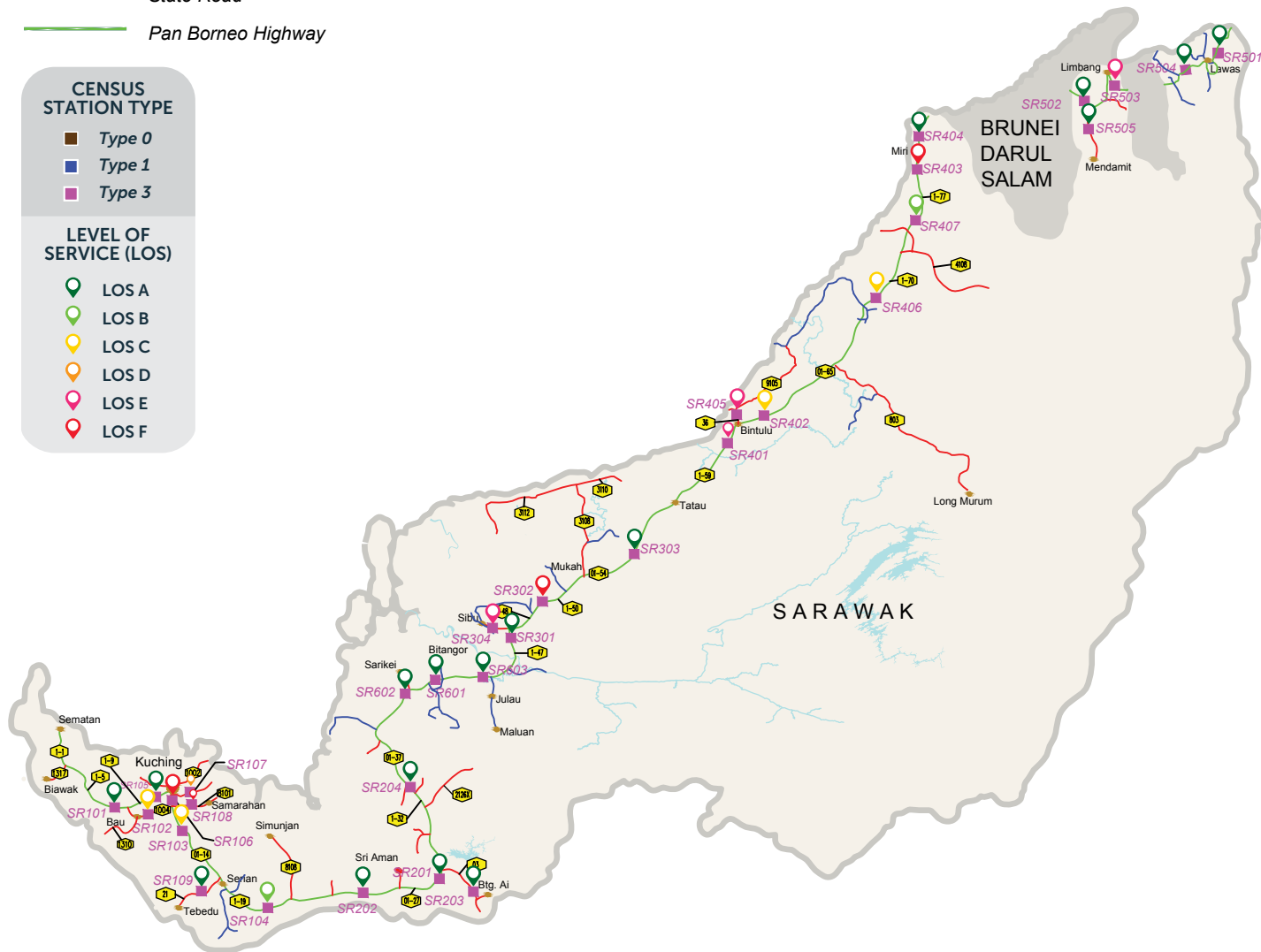
- Federal Road
- State Road
- Pan Borneo Highway

### CENSUS STATION TYPE

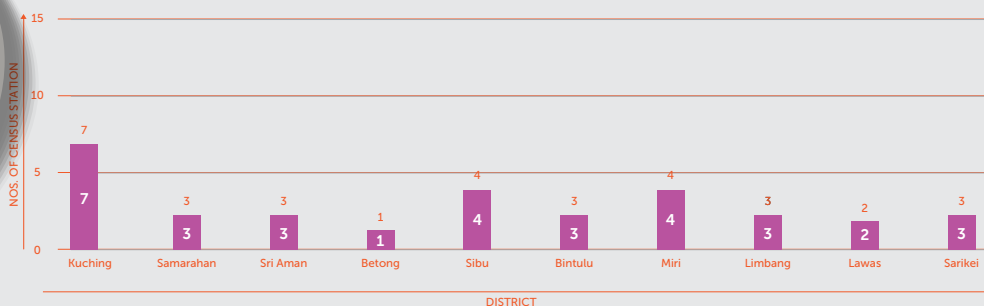
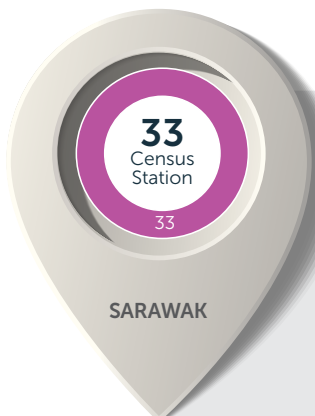
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SARAWAK**

## District : KUCHING

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)	Type of Carriageway
SR101	3	1	16.1	Bau - Semantan	1.4882778 110.0408611	T 1-1
SR102	3	Q6	8.1	Bau - Kuching	1.4419167 110.2277500	T 1-1
SR103	3	1	27.4	Kuching - Serian	1.3638889 110.4038889	K 2-2
SR105	3	1	18.8	Bau - Kuching	1.4566389 110.1603333	T 1-1
SR106	3	1	10.5	Kuching - Serian	1.4856389 110.3310556	K 2-2
SR107	3	31	4.5	Kuching Bypass	1.5106111 110.3512500	K 3-3
SR110	3	900	-	Jalan Kuching (Airport Access - between BDC roundabout and airport roundabout)	1.4993056 110.3486111	K 3-3

## District : SAMARAHAN

SR104	3	1	83.7	Kuching - Serian	1.1152778 110.6237500	T 1-1
SR108	3	1	10.0	Jalan Datuk Mohamad Musa	1.4541110 110.4096110	T 1-1
SR109	3	21	22.0	Serian - Tebedu	1.1231667 110.4181111	T 1-1

## District : SRI AMAN

SR201	3	1	41.9	Sri Aman - Sarikei	1.1722220 111.6596670	T 1-1
SR202	3	1	46.9	Sri Aman - Serian	1.0854167 111.1916111	T 1-1
SR203	3	3	18.5	Batang Ai Road	1.2193056 111.6545833	T 1-1

## District : BETONG

SR204	3	1	84.9	Betong - Sarikei (Simpang Jalan Paku)	1.4624444 111.5665556	T 1-1
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## District : SIBU

SR301	3	1	9.0	Durin Ferry - Junction to Sibu	2.2081389 112.0151667	K 2-2
SR302	3	1	50.8	Sibu - Junc. to Mukah	2.4331389 112.1672222	T 1-1
SR303	3	1	121.6	Sibu - Tatau	2.7347778 112.6676389	T 1-1
SR304	3	800-10A	10.0	Rejang Port access road	2.2916050 111.8957960	K 2-2

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SARAWAK**

## District : BINTULU

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
SR401	3	1	20.0	Bintulu - Sibul	3.0988333	113.0226667	T 1-1
SR402	3	1	29.0	Bintulu - Miri	3.2264722	113.1610000	T 1-1
SR405	3	36	9.5	Bintulu - Tg. Kidurong	3.2333060	113.0891110	K 2-2

## District : MIRI

SR403	3	1	6.2	Miri - Bintulu (before junction to Airport)	4.3380278	114.0000278	T 1-1
SR404	3	22	11.3	Miri - Brunei Border	4.4855556	114.0073611	K 2-2
SR406	3	1	90.2	Miri - Sg. Suai	3.7344444	113.7766389	T 1-1
SR407	3	1	37.4	Miri - Junc. Beluru	4.1448889	114.0043611	T 1-1

## District : LIMBANG

SR502	3	22	23.3	Limbang - Brunei Border (Tedungan)	4.6440278	114.8923333	T 1-1
SR503	3	22	1.6	Limbang - Brunei Border ( Sg.Padaruau)	4.7624722	115.0217222	T 1-1
SR505	3	Q296	32.2	Limbang - Ukong	4.5586111	114.8873611	T 1-1

## District : LAWAS

SR501	3	23	5.6	Lawas - Merapok	4.8090556	115.4097222	T 1-1
SR504	3	23	1.6	Lawas - Trusan	4.8560833	115.3944722	T 1-1

## District : SARIKEI

SR601	3	1	29.0	Sarikei - Sibul	2.0597778	111.6934444	T 1-1
SR602	3	1	50.4	Sarikei - Junc. to Bintangor	2.0618611	111.5137500	T 1-1
SR603	3	1	40.3	Bintangor - Durin Ferry	2.0586667	111.9108889	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SARAWAK**

**MARCH 2015**

## District : KUCHING

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
SR101	-	3,669	366	0700-0800	46.9	19.1	11.1	6.4	1.4	15.1	100.0
SR102	-	7,497	741	0700-0800	58.5	15.1	6.6	3.1	0.6	16.1	100.0
SR103	-	35,177	3,365	0700-0800	51.1	14.3	9.7	6.7	0.8	17.3	100.0
SR105	-	7,500	741	0700-0800	58.5	15.1	6.6	3.1	0.7	16.1	100.0
SR106	-	51,520	4,342	1400-1500	55.5	15.4	8.3	4.5	0.7	15.6	100.0
SR107	-	61,232	6,051	0800-0900	64.0	15.2	7.2	5.5	0.3	7.7	100.0
SR110	-	54,555	4,503	0700-0800	71.5	14.2	4.2	1.3	0.2	8.6	100.0

## District : SAMARAHAN

SR104	-	7,772	799	1400-1500	44.8	25.1	9.9	7.5	2.3	10.4	100.0
SR108	-	25,163	2,367	0700-0800	58.3	8.7	4.0	5.7	0.6	22.8	100.0
SR109	-	2,492	348	1200-1300	42.5	24.5	8.9	2.7	3.2	18.3	100.0

## District : SRI AMAN

SR201	-	5,046	394	1300-1400	47.0	27.6	8.7	8.4	1.7	6.5	100.0
SR202	-	3,455	297	1400-1500	37.2	20.6	11.7	18.9	2.2	9.3	100.0
SR203	-	2,511	228	1300-1400	40.7	31.0	10.4	5.6	0.3	11.9	100.0

## District : BETONG

SR204	-	4,959	470	0600-0700	42.9	30.6	7.2	9.7	1.9	7.7	100.0
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## District : SIBU

SR301	-	12,100	1,590	0600-0700	39.1	28.3	10.8	5.2	0.5	16.0	100.0
SR302	-	28,869	4,637	1800-1900	29.4	22.0	13.5	10.9	6.0	18.2	100.0
SR303	-	4,294	362	1200-1300	27.9	31.2	15.6	19.6	3.6	2.2	100.0
SR304	-	24,086	2,293	1500-1600	25.1	17.6	20.2	13.8	2.1	21.2	100.0

## District : BINTULU

SR401	-	5,546	459	1100-1200	29.6	35.2	7.4	21.7	2.3	3.9	100.0
SR402	-	6,744	705	1700-1800	35.7	35.8	6.8	14.8	1.3	5.6	100.0
SR405	-	33,532	5,578	1700-1800	61.0	23.4	6.8	1.4	0.9	6.4	100.0
DR504	-	11,336	1,145	0700-0800	65.6	9.5	3.5	0.2	0.3	20.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SARAWAK**

**MARCH 2015**

## District : MIRI

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
SR403	-	11,173	1,158	0700-0800	49.6	29.9	7.7	3.8	1.5	7.4	100.0
SR404	-	11,079	1,183	1700-1800	48.3	22.5	6.0	10.4	1.2	11.4	100.0
SR406	-	3,888	340	1600-1700	26.4	44.5	7.8	12.1	3.0	6.2	100.0
SR407	-	7,711	697	0900-1000	21.4	25.1	18.6	28.4	0.9	5.7	100.0

## District : LIMBANG

SR502	-	4,844	437	1700-1800	67.2	14.7	5.2	4.9	0.7	7.2	100.0
SR503	-	13,129	1,715	0600-0700	52.8	15.7	2.3	1.1	0.7	27.5	100.0
SR505	-	1,469	168	0700-0800	32.1	16.2	15.7	10.8	1.8	23.5	100.0

## District : LAWAS

SR501	-	5,206	487	1700-1800	40.6	37.6	8.1	3.7	0.1	9.9	100.0
SR504	-	7,257	747	1400-1500	59.3	18.8	4.5	2.0	0.1	15.5	100.0

## District : SARIKEI

SR601	-	3,624	385	0600-0700	43.0	23.6	5.4	3.4	0.2	24.3	100.0
SR602	-	2,337	194	1400-1500	23.5	25.5	18.7	19.8	1.5	11.0	100.0
SR603	-	2,063	214	0600-0700	39.2	24.9	10.5	7.3	0.3	17.8	100.0
SR304	-	24,086	2,293	1500-1600	25.1	17.6	20.2	13.8	2.1	21.2	100.0



# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SARAWAK**

**SEPTEMBER 2015**

## District : KUCHING

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
SR101	-	4,510	454	1700-1800	50.9	18.3	9.8	4.7	1.0	15.3	100.0
SR102	-	11,424	1,429	0700-0800	53.3	14.6	8.0	6.2	0.8	17.2	100.0
SR103	-	34,571	3,093	0700-0800	48.9	16.4	8.9	8.1	1.1	16.7	100.0
SR105	-	7,741	866	1700-1800	56.0	17.3	6.0	2.1	0.7	17.9	100.0
SR106	-	53,674	4,951	0800-0900	55.7	18.4	7.7	4.2	0.7	13.3	100.0
SR107	-	60,427	6,096	0800-0900	61.7	18.7	7.7	4.2	0.2	7.5	100.0
SR110	-	51,251	4,798	0700-0800	72.5	12.9	4.0	1.2	0.1	9.3	100.0

## District : SAMARAHAN

SR104	-	7,377	739	1200-1300	45.0	21.9	10.6	11.0	2.3	9.2	100.0
SR108	-	23,477	2,349	0700-0800	58.6	7.1	3.8	5.2	0.7	24.6	100.0
SR109	-	3,716	552	1100-1200	32.3	17.0	6.9	3.3	2.1	38.5	100.0

## District : SRI AMAN

SR201	-	4,657	439	1400-1500	46.2	26.9	8.0	10.1	1.5	7.2	100.0
SR202	-	3,634	320	1000-1100	37.5	24.7	10.5	16.5	2.3	8.4	100.0
SR203	-	2,396	229	0700-0800	38.3	27.5	10.7	9.2	0.2	14.1	100.0

## District : BETONG

SR204	-	4,472	552	0600-0700	39.8	31.1	7.8	11.9	2.1	7.3	100.0
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## District : SIBU

SR301	-	20,945	1,669	0800-0900	33.4	20.7	14.7	10.0	1.9	19.4	100.0
SR302	-	3,619	314	0600-0700	32.2	23.3	18.2	17.5	2.9	5.9	100.0
SR303	-	5,841	591	0600-0700	44.4	19.5	13.7	11.6	4.4	6.3	100.0
SR304	-	23,633	2,600	0600-0700	31.1	17.6	14.8	12.6	4.2	19.7	100.0

## District : BINTULU

SR401	-	6,135	1,172	0900-1000	24.8	42.7	5.3	21.7	1.9	3.6	100.0
SR402	-	8,160	786	1700-1800	34.7	38.3	7.3	11.3	1.4	6.9	100.0
SR405	-	23,171	2,143	1700-1800	55.6	26.7	6.3	2.9	1.3	7.1	100.0
DR504	-	11,336	1,145	0700-0800	65.6	9.5	3.5	0.2	0.3	20.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SARAWAK**

**SEPTEMBER 2015**

## District : MIRI

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
SR403	-	13,484	1,661	0700-0800	51.0	21.0	6.5	6.5	0.8	14.2	100.0
SR404	-	13,578	1,287	1700-1800	47.8	32.5	6.0	3.8	1.6	8.2	100.0
SR406	-	9,168	899	1200-1300	21.4	25.3	19.4	29.5	1.1	3.3	100.0
SR407	-	4,638	384	1500-1600	30.6	43.8	6.1	8.2	2.5	8.7	100.0

## District : LIMBANG

SR502	-	5,007	419	0600-0700	65.7	16.0	4.9	4.5	0.9	8.0	100.0
SR503	-	12,485	1,828	0600-0700	56.8	13.2	1.9	1.3	1.1	25.8	100.0
SR505	-	1,683	175	1300-1400	33.4	17.6	13.7	12.6	1.4	21.2	100.0

## District : LAWAS

SR501	-	4,724	383	1400-1500	40.0	41.3	7.1	4.1	0.1	7.4	100.0
SR504	-	8,566	741	1400-1500	47.9	32.7	3.8	2.0	0.1	13.5	100.0

## District : SARIKEI

SR601	-	4,017	500	0600-0700	42.7	26.1	5.1	3.3	0.6	22.2	100.0
SR602	-	4,262	633	1000-1100	25.9	22.9	22.9	15.9	1.7	10.7	100.0
SR603	-	2,250	243	1500-1600	43.3	25.9	6.3	8.9	0.6	15.0	100.0
SR304	-	24,086	2,293	1500-1600	25.1	17.6	20.2	13.8	2.1	21.2	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SARAWAK**

**AVERAGE 2015**

## District : KUCHING

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
SR101	4,090	410	48.9	18.7	10.5	5.5	1.2	15.2	A	2037	
SR102	9,461	1,085	55.9	14.8	7.3	4.6	0.7	16.6	C	2024	
SR103	34,874	3,229	50.0	15.3	9.3	7.4	0.9	17.0	C	2020	
SR105	7,621	804	57.3	16.2	6.3	2.6	0.7	17.0	A	2033	
SR106	52,597	4,647	55.6	16.9	8.0	4.3	0.7	14.4	F	R	
SR107	60,830	6,074	62.9	17.0	7.5	4.8	0.2	7.6	D	2022	
SR110	39,016	3,426	65.1	10.7	4.0	3.2	0.5	16.6	A	-	

## District : SAMARAHAN

SR104	7,575	769	44.9	23.5	10.3	9.2	2.3	9.8	B	2020
SR108	24,320	2,358	58.5	7.9	3.9	5.4	0.7	23.7	F	R
SR109	3,104	450	37.4	20.7	7.9	3.0	2.7	28.4	A	2025

## District : SRI AMAN

SR201	4,852	417	46.6	27.3	8.3	9.2	1.6	6.9	A	2032
SR202	3,545	309	37.4	22.6	11.1	17.7	2.3	8.9	A	2039
SR203	2,454	229	39.5	29.3	10.5	7.4	0.2	13.0	A	2036

## District : BETONG

SR204	4,716	511	41.4	30.9	7.5	10.8	2.0	7.5	A	2025
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## District : SIBU

SR301	16,523	1,630	36.3	24.5	12.7	7.6	1.2	17.7	A	2018
SR302	16,244	2,476	30.8	22.6	15.8	14.2	4.4	12.0	F	R
SR303	5,068	477	36.1	25.3	14.7	15.6	4.0	4.3	A	2024
SR304	23,860	2,447	28.1	17.6	17.5	13.2	3.2	20.4	E	-

## District : BINTULU

SR401	5,841	816	27.2	39.0	6.3	21.7	2.1	3.7	E	-
SR402	7,452	746	35.2	37.1	7.0	13.1	1.3	6.3	C	2022
SR405	28,352	3,861	58.3	25.0	6.6	2.2	1.1	6.8	E	2016

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SARAWAK**

**AVERAGE 2015**

## District : MIRI

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
SR403	12,329	1,410	50.3	25.5	7.1	5.1	1.2	10.8		F	R
SR404	12,329	1,235	48.1	27.5	6.0	7.1	1.4	9.8		A	2051
SR406	6,528	620	23.9	34.9	13.6	20.8	2.1	4.8		C	2019
SR407	6,175	541	26.0	34.4	12.3	18.3	1.7	7.2		B	-

## District : LIMBANG

SR502	4,926	428	66.5	15.3	5.1	4.7	0.8	7.6		A	2151
SR503	12,807	1,772	54.8	14.4	2.1	1.2	0.9	26.6		E	-
SR505	1,576	172	32.7	16.9	14.7	11.7	1.6	22.3		A	2044

## District : LAWAS

SR501	4,612	494	41.7	31.8	6.6	3.5	0.3	16.0		A	2050
SR504	7,912	744	53.6	25.7	4.2	2.0	0.1	14.5		A	2027

## District : SARIKEI

SR601	3,821	443	42.9	24.8	5.3	3.4	0.4	23.3		A	2026
SR602	3,300	414	24.7	24.2	20.8	17.8	1.6	10.8		A	2054
SR603	2,157	229	41.3	25.4	8.4	8.1	0.5	16.4		A	2036

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **SARAWAK**

## District : KUCHING

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
SR101	2,456	2,779	3,188	3,143	3,091	3,504	5,780	3,512	3,582	4,090	5.3	0.48
SR102	10,754	9,655	14,825	20,595	18,113	21,718	15,568	22,340	19,354	9,460	3.1	0.08
SR103	22,780	21,071	22,225	24,564	30,616	31,112	32,889	27,986	32,808	34,874	5.4	0.79
SR105	5,778	5,780	5,710	6,496	6,322	6,893	10,032	7,430	7,351	7,620	4.2	0.53
SR106	35,529	41,044	35,994	30,385	40,996	39,562	53,073	68,840	50,640	52,597	6.0	0.56
SR107	51,971	50,491	50,441	37,394	50,352	46,154	42,332	54,474	57,770	60,830	1.8	0.15
SR110	30,655	39,194	44,995	40,554	28,674	34,868	38,175	28,102	31,940	39,016	-1.0	0.03

## District : SAMARAHAN

SR104	4,188	4,380	4,187	5,047	5,244	5,608	6,092	11,200	6,440	7,574	8.2	0.67
SR108	16,154	19,177	19,691	26,053	17,594	29,842	21,143	32,729	14,831	24,320	2.6	0.09
SR109	1,734	1,449	1,576	1,618	1,895	1,909	2,043	11,346	2,443	3,104	11.8	0.35

## District : SRI AMAN

SR201	2,720	3,269	3,374	4,157	4,216	4,197	4,658	3,776	5,642	4,852	6.0	0.73
SR202	2,330	2,747	2,587	2,632	2,426	2,950	3,264	3,063	3,867	3,544	4.8	0.76
SR203	1,164	1,404	1,613	1,773	1,716	1,914	2,474	2,495	2,302	2,454	8.2	0.89

## District : BETONG

SR204	1,840	3,082	3,039	2,727	3,747	4,796	6,231	5,992	4,742	4,716	10.7	0.71
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## District : SIBU

SR301	3,114	3,799	1,700	1,353	4,365	4,698	8,826	8,836	14,386	16,522	23.2	0.70
SR302	9,129	3,143	8,072	5,396	3,310	4,471	5,683	7,778	7,280	16,244	6.9	0.18
SR303	2,692	5,883	1,987	2,090	2,726	3,269	4,444	6,556	4,518	5,068	7.4	0.28
SR304	34,821	32,924	34,674	27,969	24,998	23,730	25,254	28,252	28,728	23,860	-3.5	0.51

## District : BINTULU

SR401	6,778	6,240	7,250	9,808	10,957	14,520	4,342	4,476	5,124	5,840	-4.4	0.11
SR402	4,828	4,771	5,924	7,880	8,507	4,178	5,354	9,139	8,677	7,452	5.1	0.28
SR405	17,168	13,129	15,814	21,873	19,003	36,245	28,603	28,131	28,995	28,352	8.7	0.65

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2015

STATE : **SARAWAK**

## District : MIRI

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
SR403	10,345	6,882	9,984	11,060	10,506	12,211	11,805	10,864	10,887	12,328	3.4	0.38
SR404	9,297	7,961	11,992	7,633	9,489	10,228	9,248	10,771	10,981	12,328	3.0	0.32
SR406	2,756	1,961	3,063	4,159	4,030	3,567	3,538	3,586	3,670	6,528	7.5	0.54
SR407	4,897	6,269	8,858	6,698	10,990	4,645	3,926	3,521	4,384	6,174	-4.5	0.15

## District : LIMBANG

SR502	4,920	5,038	3,957	4,065	4,037	8,335	4,144	4,660	4,638	4,926	0.6	0.01
SR503	16,316	15,830	16,319	14,141	19,032	13,519	11,014	12,742	11,150	12,807	-4.2	0.52
SR505	676	952	958	888	1,052	1,054	872	1,312	1,300	1,576	6.9	0.73

## District : LAWAS

SR501	3,608	3,298	3,265	3,584	3,217	3,911	3,582	3,512	4,742	4,612	3.2	0.51
SR504	3,934	5,235	4,519	5,139	3,653	6,683	6,448	7,242	7,200	7,912	7.4	0.67

## District : SARIKEI

SR601	1,348	1,375	1,503	1,581	1,665	2,088	2,169	2,321	3,176	3,820	11.3	0.93
SR602	5,935	1,176	1,395	1,536	1,808	1,866	2,032	2,144	2,448	3,300	1.7	0.01
SR603	1,263	1,208	1,164	1,274	1,446	1,659	1,821	1,922	2,440	2,156	8.2	0.89

STATE : **SARAWAK**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

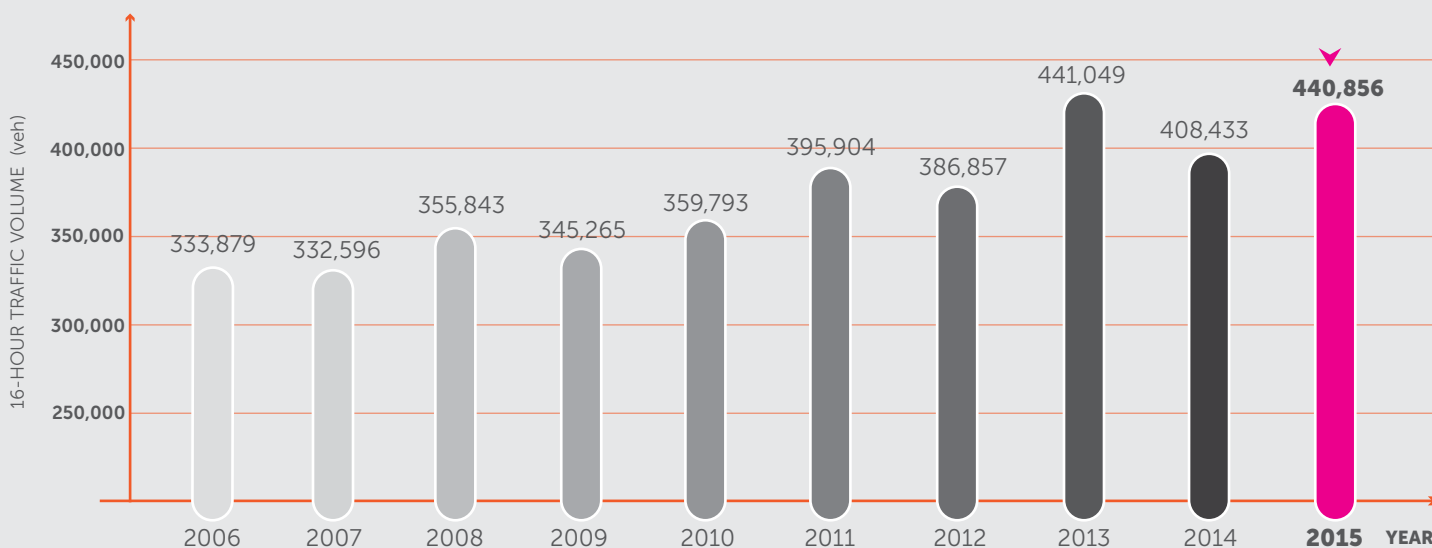


Figure 2.13-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Sarawak



There are 33 census stations in Sarawak. The 16-hour traffic volume documented in year 2015 has seen increase of 32,423 vehicles which is 7.94% from 2014. The pattern of 16-hour traffic volume shows fluctuation number of vehicles from 2006 to 2015.

**7.94%**

INCREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

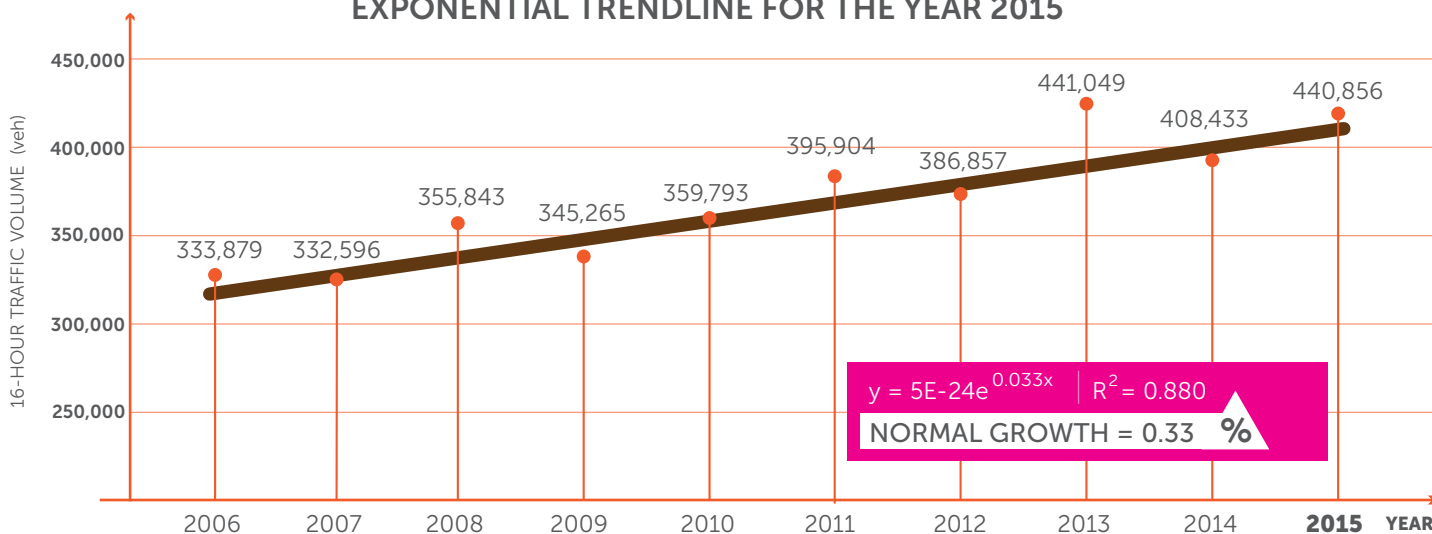


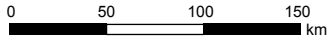
Figure 2.13-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Sarawak

Traffic growth rate recorded for the state of Sarawak is 0.33% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Sarawak.

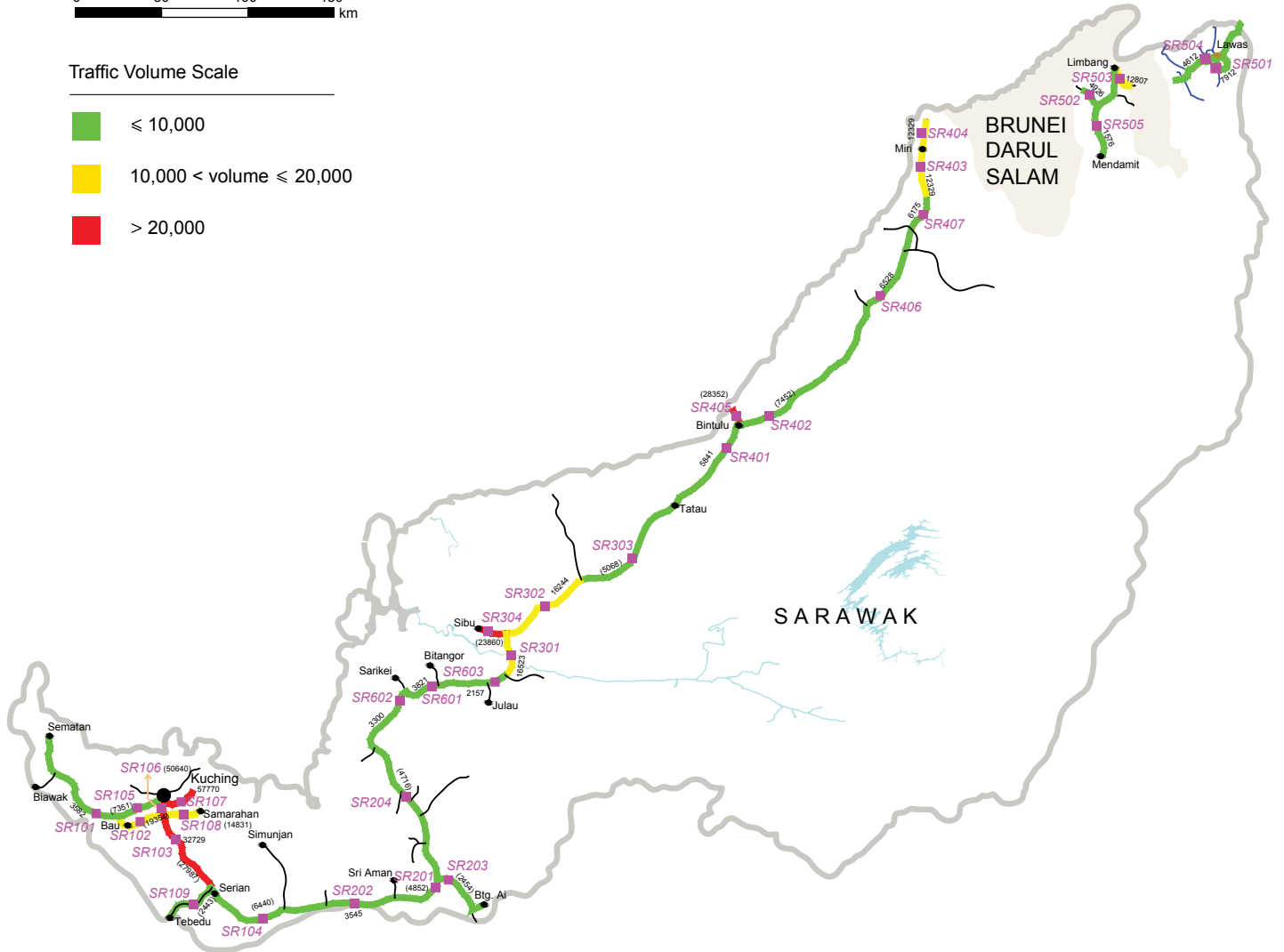
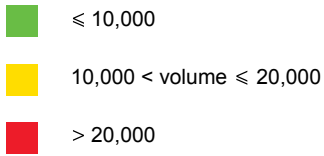
# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **SARAWAK**

## LEGEND



### Traffic Volume Scale





• CAPITOL ROUNDABOUT •



• 1974 : Kota Kinabalu City Centre Gateway •



# SABAH

21 Census Stations

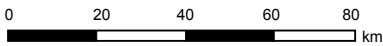
Road Length : 22,290.67 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **SABAH**

## LEGEND



- Federal Road
- State Road
- Pan Borneo Highway

### CENSUS STATION TYPE

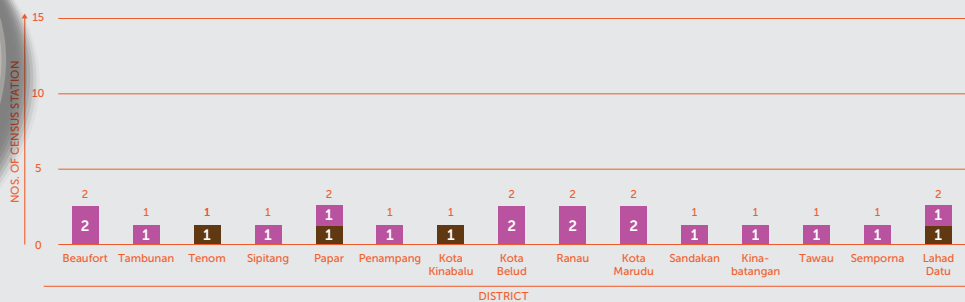
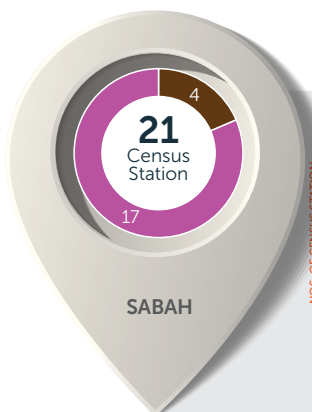
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS



# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SABAH**

## District : BEAUFORT

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
HR101	3	1	4.8	Beaufort / Sipitang - Sindumin Road	5.2863889	115.6830556	T 1-1
HR105	3	502	15.0	Klias Kecil - Beaufort Menubuk Highway	5.4322222	115.6463889	T 1-1

## District : TAMBUNAN

HR103	3	500	9.0	KK - Sepulut Highway	5.6138889	116.3109444	T 1-1
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## District : TENOM

HR104	0	A33	9.0	Tenom - Tomani / Bekuku H'way	5.0631944	115.9507500	T 1-1
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## District : SIPITANG

HR106	3	1	133.5	A2, KK / Sindumin (0.5km Mesapol - Sipitang)	5.1095278	115.5865000	T 1-1
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## District : PAPAR

HR201	0	1	22.0	Kota Kinabalu - Sindumin (Kg Mook)	5.8148889	116.0442778	T 1-1
HR209	3	1	57.0	Kota Kinabalu - Sindumin (Mandahan)	5.5823333	115.8794444	T 1-1

## District : PENAMPANG

HR202	3	500	18.0	A3, KK - Tambunan (8km from A / A31 Intersection)	5.9212778	116.1612500	T 1-1
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## District : KOTA KINABALU

HR203	0	1	25.0	Telipok Town	6.0934167	116.1988889	K 2-2
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## District : KOTA BELUD

HR204	3	1	69.0	KK - Kudat (Kg Mantanau)	6.3363889	116.4001944	T 1-1
HR300	3	1	105.0	KK - Kudat (Kg. Lentigi)	6.5041389	116.5684167	T 1-1

## District : RANAU

HR207	3	22	81.0	KK - Sandakan (junction towards Ranau)	5.9812778	116.5621111	T 1-1
HR208	3	22	114.0	KK - Sandakan (after Poring junction)	5.9871111	116.6914444	T 1-1

# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **SABAH**

## District : KOTA MARUDU

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
HR301	3	1		Kudat - Kota Kinabalu (Batutai)	6.5902778	116.7218889	T 1-1
HR302	3	A12		Kota Marudu - Pitas (Marasinsim)	6.6139444	116.8713611	T 1-1

## District : SANDAKAN

HR403	3	22	25.0	KK - Sandakan (25 km from Sandakan towards KK - (Gum-Gum))	5.8915556	117.9246944	T 1-1
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## District : KINABATANGAN

HR404	3	13	54.0	Sandakan - Lahad Datu	5.7631389	117.7717500	T 1-1
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## District : TAWAU

R501	3	13	35.0	Tawau - Sandakan Highway (Near Balung Junction)	4.3666667	118.1055556	T 1-1
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## District : SEMPORNA

HR506	3	A51	0.2	Jalan Sing - Sing (18km from Bandar Semporna)	4.4229444	118.4759722	T 1-1
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## District : LAHAD DATU

HR504	0	13	14.5	Sg. Segama Crossing	5.1017222	118.2326388	T 1-1
HR507	3	13	81.0	Kunak - Lahad Datu	4.6903611	118.2119444	T 1-1

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SABAH**

**MARCH 2015**

## District : BEAUFORT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
HR101	-	6,288	518	1700-1800	42.4	36.3	7.7	4.4	0.4	8.8	100.0
HR105	-	4,707	413	1400-1500	48.7	28.0	7.9	1.4	1.1	12.8	100.0

## District : TAMBUNAN

HR103	-	2,617	217	0700-0800	41.7	28.5	10.3	9.9	0.1	9.6	100.0
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## District : TENOM

HR104	2,758	2,416	207	1000-1100	29.4	24.5	1.9	1.7	15.7	26.8	100.0
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## District : SIPITANG

HR106	-	9,799	1,233	0600-0700	56.5	22.8	6.1	2.8	0.3	11.4	100.0
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## District : PAPAR

HR201	17,128.429	15,774	1,447	1800-1900	55.8	26.9	5.8	3.8	0.8	6.8	100.0
HR209	-	15,991	1,512	1900-2000	43.2	24.7	12.4	8.5	3.1	8.1	100.0

## District : PENAMPANG

HR202	-	4,712	552	0600-0700	45.1	20.1	12.5	9.4	0.8	12.1	100.0
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## District : KOTA KINABALU

HR203	60,839	45,774	4,367	1800-1900	53.1	22.6	11.2	4.6	0.9	7.6	100.0
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## District : KOTA BELUD

HR204	-	12,493	1,498	1400-1500	43.6	29.0	10.7	6.7	3.4	6.6	100.0
HR300	-	5,855	723	0700-0800	41.0	38.0	11.7	3.3	0.1	5.9	100.0

## District : RANAU

HR207	-	4,141	377	1500-1600	39.7	35.6	13.4	7.9	1.8	1.6	100.0
HR208	-	3,786	313	1200-1300	36.9	42.5	9.7	6.3	2.0	2.6	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SABAH**

**MARCH 2015**

## District : KOTA MARUDU

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
HR301	-	4,741	380	1400-1500	35.5	36.7	10.2	5.6	0.3	11.7	100.0
HR302	-	3,930	311	0700-0800	37.8	38.4	8.6	7.4	0.1	7.7	100.0

## District : SANDAKAN

HR403	-	18,143	1,613	1000-1100	36.8	27.5	16.2	13.9	2.1	3.5	100.0
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## District : KINABATANGAN

HR404	-	4,516	439	1400-1500	28.5	41.0	11.7	15.0	1.6	2.2	100.0
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## District : TAWAU

HR501	-	12,418	1,216	1600-1700	34.1	38.7	9.4	6.9	1.7	9.2	100.0
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## District : SEMPORNA

HR506	-	1,354	140	0700-0800	50.3	29.8	10.0	2.8	1.5	5.6	100.0
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## District : LAHAD DATU

HR504	6,268	5,608	470	1100-1200	22.3	46.5	12.0	12.9	1.3	5.0	100.0
HR507	-	6,894	721	1000-1100	49.7	22.8	10.6	8.2	5.0	3.8	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SABAH**

**SEPTEMBER 2015**

## District : BEAUFORT

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
HR101	-	7,132	613	1700-1800	44.5	34.2	9.3	2.9	0.5	8.5	100.0
HR105	-	4,811	461	1400-1500	49.6	27.0	8.5	2.0	0.8	12.1	100.0

## District : TAMBUNAN

HR103	-	2,967	263	1300-1400	37.2	26.3	12.8	12.3	0.0	11.4	100.0
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## District : TENOM

HR104	2,426	2,180	204	0700-0800	30.0	25.0	2.0	1.1	12.5	29.3	100.0
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## District : SIPITANG

HR106	-	10,387	895	1300-1400	51.0	31.2	5.6	2.7	0.3	9.2	100.0
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## District : PAPAR

HR201	17,641	15,797	1,569	1800-1900	56.8	26.2	6.8	3.4	0.8	6.0	100.0
HR209	-	13,303	1,097	1700-1800	52.3	26.7	8.5	4.0	1.7	6.8	100.0

## District : PENAMPANG

HR202	-	3,497	336	0600-0700	41.8	24.9	10.6	7.6	3.1	12.0	100.0
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## District : KOTA KINABALU

HR203	65,130	49,918	5,177	1700-1800	54.4	25.8	10.0	3.1	0.7	6.0	100.0
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## District : KOTA BELUD

HR204	-	12,283	1,013	1800-1900	49.8	33.0	7.3	3.0	0.7	6.3	100.0
HR300	-	5,462	459	0700-0800	45.3	35.2	11.4	3.3	0.1	4.6	100.0

## District : RANAU

HR207	-	3,752	329	1600-1700	40.1	37.5	12.8	4.8	1.8	3.0	100.0
HR208	-	9,879	1,539	1700-1800	33.6	32.1	10.1	16.9	2.5	4.9	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **SABAH**

**SEPTEMBER 2015**

## District : KOTA MARUDU

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
HR301	-	4,720	405	1700-1800	36.7	40.0	10.0	4.0	0.2	9.2	100.0
HR302	-	3,464	293	0700-0800	35.8	41.0	9.1	5.5	0.1	8.5	100.0

## District : SANDAKAN

HR403	-	18,320	1,837	0800-0900	35.9	27.8	15.6	14.4	2.6	3.7	100.0
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## District : KINABATANGAN

HR404	-	6,155	568	1500-1600	26.3	41.7	13.4	14.6	0.8	3.2	100.0
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## District : TAWAU

HR501	-	10,597	868	1700-1800	31.1	35.7	16.5	7.9	0.7	8.2	100.0
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## District : SEMPORNA

HR506	-	3,265	267	1500-1600	43.6	30.1	19.7	2.1	0.3	4.2	100.0
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## District : LAHAD DATU

HR504	7,911	7,062	582	1300-1400	28.2	40.7	12.9	10.7	0.9	6.6	100.0
HR507	-	6,505	642	0800-0900	40.9	27.7	11.6	9.6	5.1	5.3	100.0



# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SABAH**

**AVERAGE 2015**

## District : BEAUFORT

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
HR101	6,710	566	43.5	35.3	8.5	3.7	0.5	8.6	A	-	
HR105	4,759	437	49.1	27.5	8.2	1.7	1.0	12.4	A	-	

## District : TAMBUNAN

HR103	2,792	240	39.4	27.4	11.5	11.1	0.1	10.5	A	2149
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## District : TENOM

HR104	2,299	206	29.7	24.7	2.0	1.4	14.1	28.0	A	-
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## District : SIPITANG

HR106	10,093	1,064	53.7	27.0	5.9	2.7	0.3	10.3	C	2019
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## District : PAPAR

HR201	15,786	1,508	56.3	26.6	6.3	3.6	0.8	6.4	F	R
HR209	7,408	1,305	47.7	25.7	10.5	6.2	2.4	7.4	F	R

## District : PENAMPANG

HR202	4,105	444	43.5	22.5	11.5	8.5	2.0	12.0	A	-
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## District : KOTA KINABALU

HR203	47,846	4,772	53.7	24.2	10.6	3.8	0.8	6.8	F	R
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## District : KOTA BELUD

HR204	12,388	1,256	46.7	31.0	9.0	4.8	2.0	6.5	F	R
HR300	5,659	591	43.2	36.6	11.6	3.3	0.1	5.3	A	-

## District : RANAU

HR207	3,947	353	39.9	36.6	13.1	6.4	1.8	2.3	A	2049
HR208	6,833	926	35.2	37.3	9.9	11.6	2.2	3.7	E	2016

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **SABAH**

**AVERAGE 2015**

## District : KOTA MARUDU

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
HR301	4,731	393	36.1	38.3	10.1	4.8	0.2	10.5	<b>A</b>	2040	
HR302	3,697	302	36.8	39.7	8.8	6.4	0.1	8.1	<b>A</b>	2058	

## District : SANDAKAN

HR403	18,232	1,725	36.3	27.6	15.9	14.2	2.4	3.6	<b>F</b>	R
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## District : KINABATANGAN

HR404	5,336	504	27.4	41.3	12.5	14.8	1.2	2.7	<b>A</b>	-
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## District : TAWAU

HR501	11,508	1,042	32.6	37.2	12.9	7.4	1.2	8.7	<b>E</b>	-
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## District : SEMPORNA

HR506	2,310	204	47.0	30.0	14.8	2.5	0.9	4.9	<b>A</b>	2105
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## District : LAHAD DATU

HR504	6,335	526	25.2	43.6	12.5	11.8	1.1	5.8	<b>A</b>	2064
HR507	6,700	682	45.3	25.2	11.1	8.9	5.0	4.5	<b>B</b>	-

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

## STATE : **SABAH**

### District : **BEAUFORT**

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
HR101	7,042	10,773	7,454	4,811	4,924	5,965	5,422	5,694	6,508	6,710	-2.9	0.14
HR105	4,738	4,551	5,181	3,818	3,941	5,457	4,550	4,254	4,566	4,759	-0.0	0.00

### District : **TAMBUNAN**

HR103	3,038	2,282	3,048	2,454	2,739	3,000	3,170	2,938	3,018	2,792	1.1	0.11
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### District : **TENOM**

HR104	4,196	3,879	4,566	4,566	4,294	4,425	2,123	2,450	2,378	2,298	-8.6	0.63
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### District : **SIPITANG**

HR106	4,564	5,240	5,403	6,112	6,441	6,626	5,914	7,584	11,392	10,093	8.6	0.82
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### District : **PAPAR**

HR201	3,541	4,932	6,453	7,968	9,370	11,791	14,491	14,406	15,329	15,786	16.6	0.92
HR209	8,757	4,639	3,859	5,932	5,561	6,992	6,249	5,778	8,301	7,408	3.0	0.13

### District : **PENAMPANG**

HR202	4,751	4,685	3,578	3,701	3,835	3,881	3,353	3,839	4,478	4,104	-0.9	0.06
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### District : **KOTA KINABALU**

HR203	25,734	22,232	27,288	25,247	30,288	35,489	39,394	42,886	43,647	47,846	8.5	0.91
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### District : **KOTA BELUD**

HR204	7,913	11,695	9,855	9,450	11,189	11,138	9,952	13,909	11,923	12,388	3.7	0.48
HR300	17,616	3,569	4,429	5,449	6,367	5,029	4,776	6,368	5,084	5,658	-4.0	0.08

### District : **RANAU**

HR207	3,048	3,482	3,425	3,488	3,732	4,745	5,021	3,813	4,103	3,946	3.2	0.42
HR208	1,948	2,279	2,618	2,396	2,705	3,498	3,872	2,924	3,413	6,832	9.9	0.72

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

STATE : **SABAH**

## District : KOTA MARUDU

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
HR301	4,316	4,518	4,184	5,062	5,023	6,180	6,381	7,838	8,258	4,730	5.5	0.47
HR302	3,540	3,630	6,525	3,830	4,277	4,578	5,532	6,481	6,586	3,697	3.4	0.16

## District : SANDAKAN

HR403	15,156	9,800	9,207	12,285	16,610	14,321	14,844	15,096	14,974	18,232	4.6	0.39
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## District : KINABATANGAN

HR404	4,554	4,376	12,504	16,088	16,831	13,029	6,049	8,022	6,746	5,336	-0.6	0.00
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## District : TAWAU

HR501	10,938	17,009	16,860	9,407	10,074	10,035	10,454	10,327	10,229	11,508	-3.2	0.20
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## District : SEMPORNA

HR506	1,670	3,231	2,485	2,663	2,711	3,074	2,742	2,704	3,087	2,310	2.0	0.10
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## District : LAHAD DATU

HR504	7,140	7,423	6,987	6,781	8,294	8,691	7,641	9,407	8,739	6,335	1.2	0.08
HR507	7,820	8,170	7,168	8,600	11,141	11,633	9,706	7,831	7,698	6,700	-0.6	0.01

# STATISTIC FOR YEAR 2015

STATE : **SABAH**

## YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

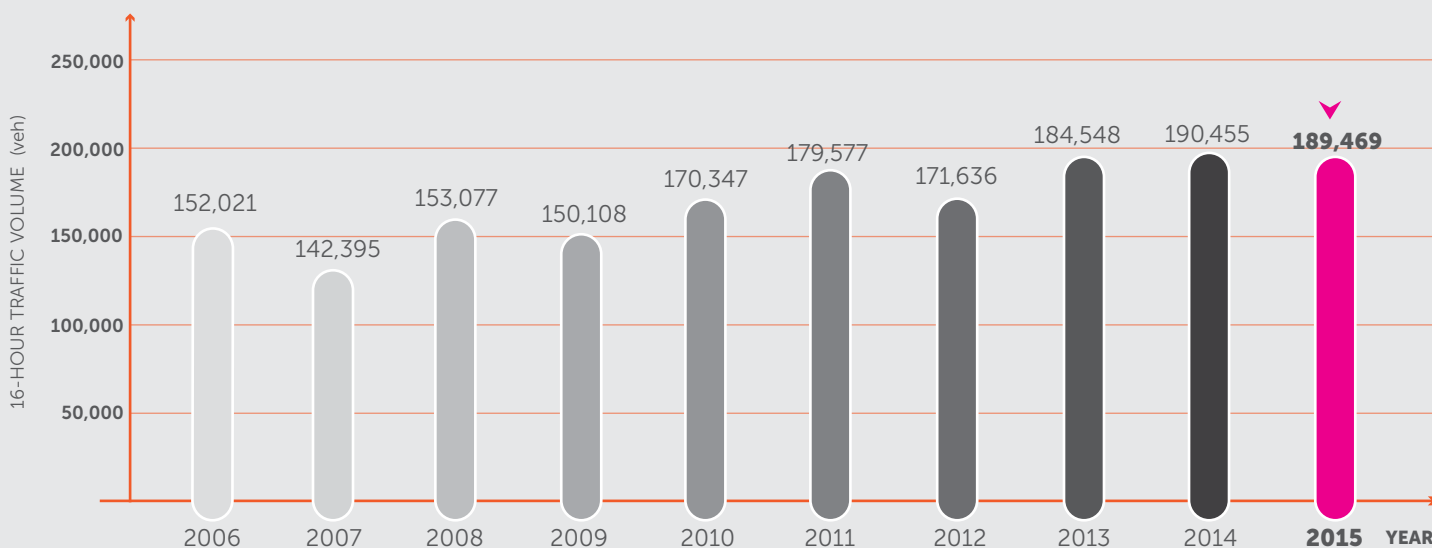


Figure 2.14-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in Sabah



There are 21 census stations in Sabah. The 16-hour traffic volume documented in year 2015 has seen slightly decrease of 986 vehicles which is 0.52% from 2014. The pattern of 16-hour traffic volume shows fluctuation number of vehicles from 2006 to 2015 and the highest number of traffic volume was in 2014.

**-0.52%**  
DECREASE FROM 2014

## NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

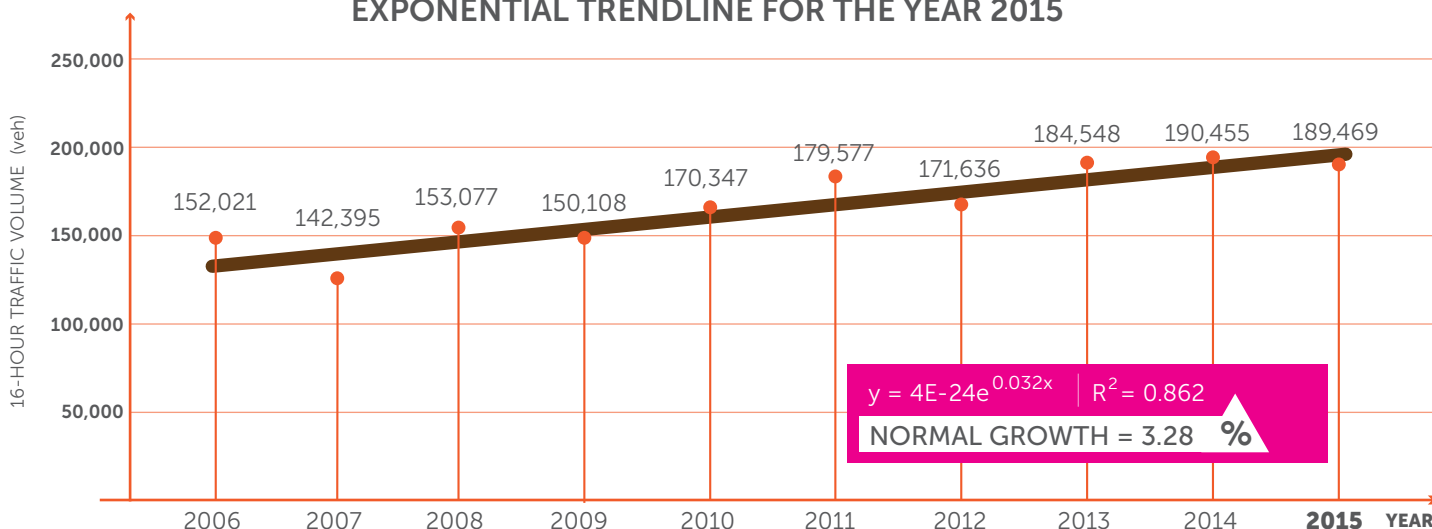


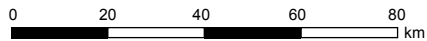
Figure 2.14-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in Sabah

Traffic growth rate recorded for the state of Sabah is 3.28% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in Sabah.

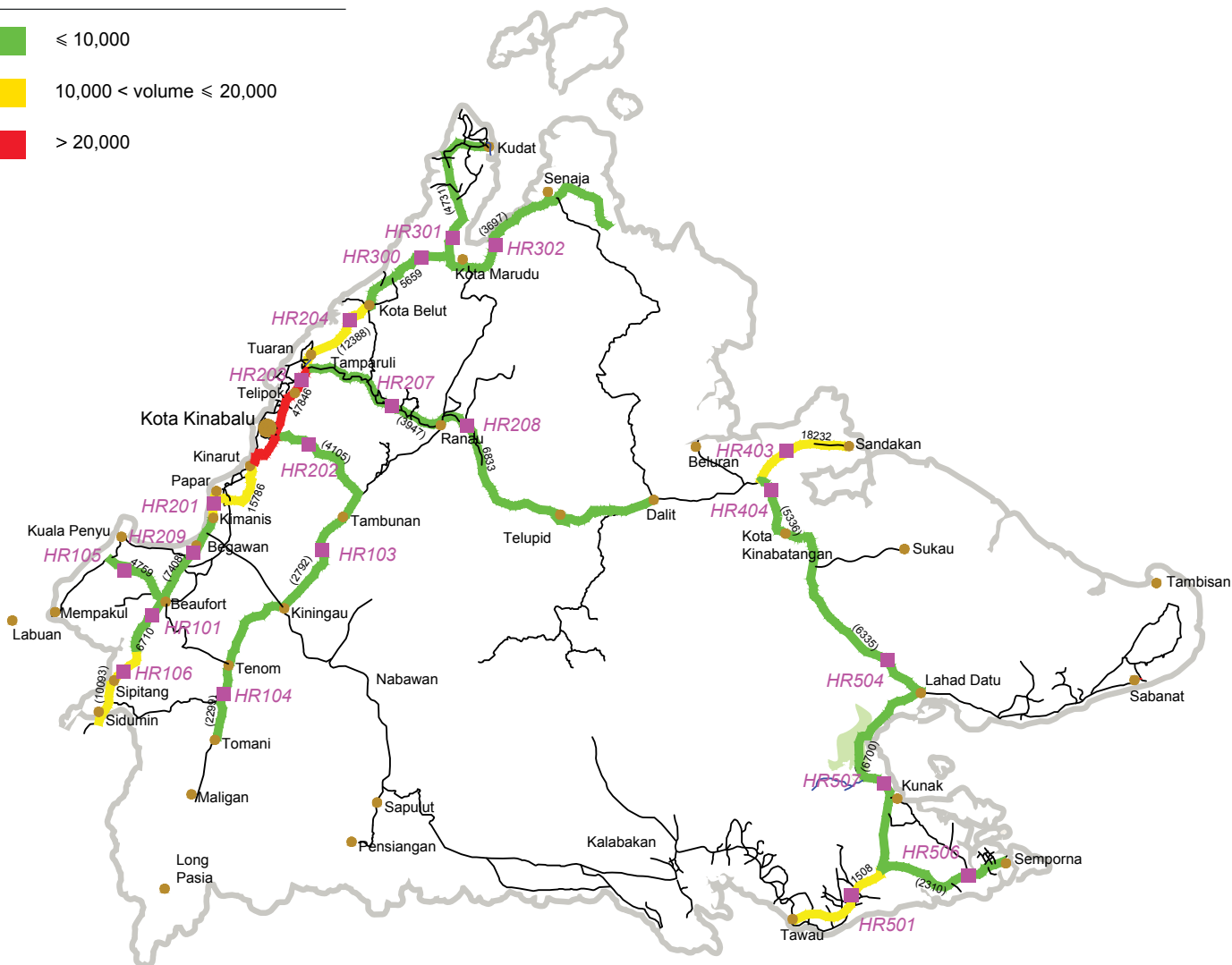
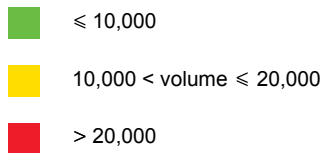
# AVERAGE 16-HOUR TRAFFIC VOLUME MAP

STATE : **SABAH**

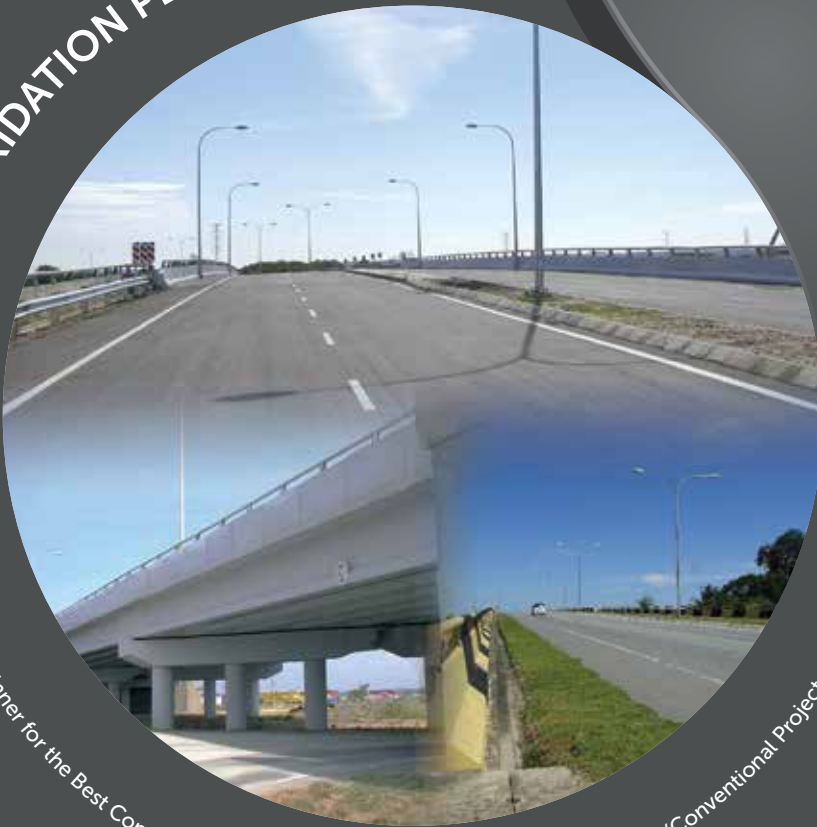
## LEGEND



### Traffic Volume Scale



• THERMAL OXIDATION PLANT (TOP) ROAD •



• 2012 : Award Winner for the Best Construction Management Year 2012 at JKR Malaysia Level (Conventional Project (Infrastructure)) •



# W.P. LABUAN

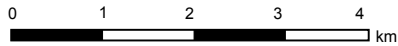
8 Census Stations  
Road Length : 168.06 km\*

\*Source : Road Facilities Maintenance Division, JKR Malaysia, 2015

# TRAFFIC CENSUS STATION MAP

STATE : **W.P. LABUAN**

## LEGEND



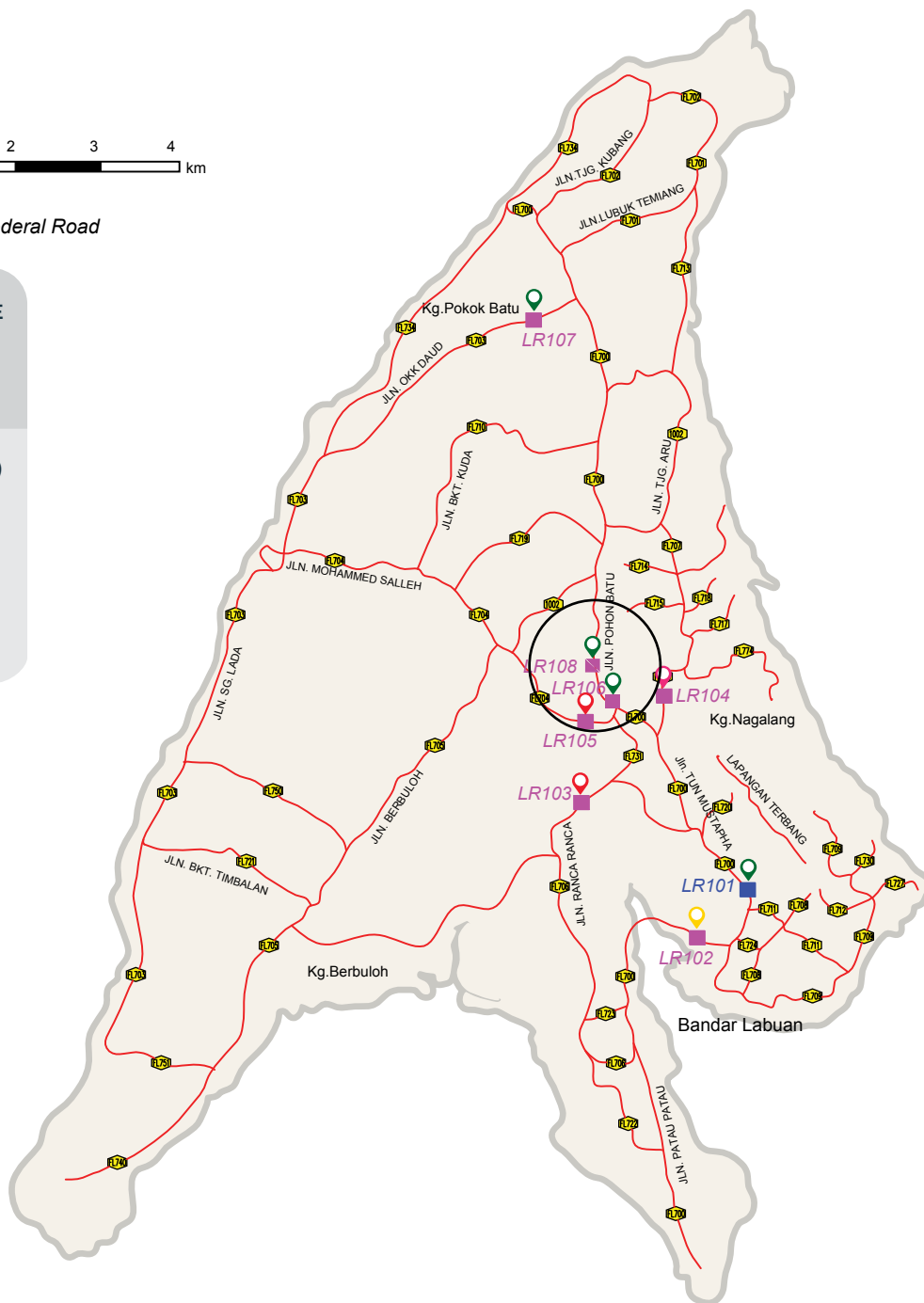
Federal Road

### CENSUS STATION TYPE

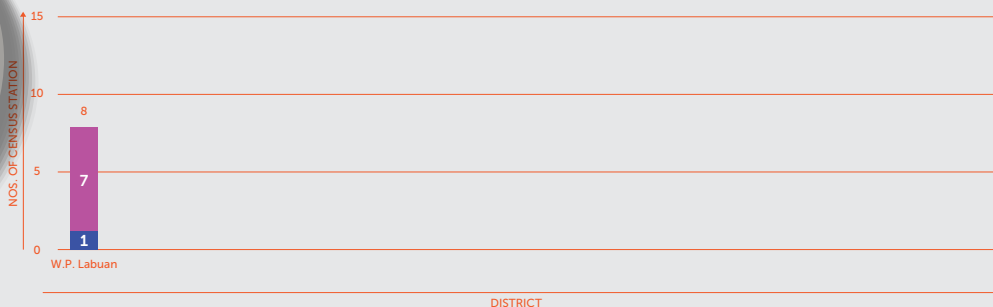
- Type 0
- Type 1
- Type 3

### LEVEL OF SERVICE (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F



## DISTRIBUTION OF SURVEY STATIONS





# LOCATION DESCRIPTION FOR TRAFFIC CENSUS STATION

STATE : **W.P. LABUAN**

Census Station Number	Survey Type	Route Number	KM	Description Of Location	GPS Coordinate (WGS84) (Latitude, Longitude)		Type of Carriageway
LR101	1	L700	1.5	Jalan Tun Mustapha (1.5km from town)	5.2898889	115.2475556	K 3-3
LR102	3	L700	1.4	Jalan Patau – Patau (1.4km from Jalan Tun Mustapha / Jalan Ranza – Ranza junction)	5.2865000	115.2345278	K 2-2
LR103	3	L706	0.3	Jalan Ranza – Ranza (0.3km from Tun Mustapha / Jalan Ranza – Ranza junction)	5.2970833	115.2377222	T 1-1
LR104	3	L707	0.9	Jalan Pulau Buah ( 0.9km from Jalan Pulau Buah / Jalan Tun Mustapha signalized junction)	5.3160556	115.2420556	T 1-1
LR105	3	L704	0.3	Jalan Mohamad Salleh ( 0.3km from Jalan Pohon Batu / Jalan Mohamad Salleh / Jalan Tun Mustapha junction)	5.3097222	115.2313611	T 1-1
LR106	3	L700	0.3	Jalan Pohon Batu (0.3km from Pohon Batu / Jalan Mohamad Salleh / Jalan Tun Mustapha junction)	5.3117500	115.2324167	K 2-2
LR107	3	L703	0.3	Jalan OKK Daud ( 0.3km from Jalan OKK Daud / Jalan Pohon Batu junction)	5.3579722	115.2279444	T 1-1
LR108	3	L700	6.0	KM 6 Jalan Pohon Batu (in front of Masjid Kg Gang-garak WP Labuan)	5.3129444	115.2314444	K 2-2

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **W.P. LABUAN**

**MARCH 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
LR101	-	49,763	4,253	1700-1800	67.3	15.4	3.2	0.9	1.5	11.6	100.0
LR102	-	26,845	2,748	0700-0800	51.2	19.2	9.1	4.0	1.1	15.5	100.0
LR103	-	15,779	2,167	1700-1800	55.3	21.3	7.4	3.5	0.9	11.6	100.0
LR104	-	12,878	1,579	0700-0800	64.5	19.0	2.9	0.9	1.2	11.4	100.0
LR105	-	20,061	2,108	1800-1900	57.3	17.5	5.4	2.3	1.6	15.9	100.0
LR106	-	24,907	2,782	1700-1800	54.7	19.0	6.3	3.2	0.9	16.0	100.0
LR107	-	3,384	392	0700-0800	57.8	10.6	5.0	8.4	2.5	15.7	100.0
LR108	-	5,679	867	1800-1900	56.3	11.0	2.9	2.2	3.1	24.5	100.0

# TRAFFIC VOLUME AND 16-HOUR TRAFFIC COMPOSITION

STATE : **W.P. LABUAN**

**SEPTEMBER 2015**

Census Station Number	24-hour Traffic	16-hour Traffic	Peak Hour		Traffic Composition (%)						
			Traffic	Time	Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total
LR101	-	45,979	4,052	1700-1800	69.8	12.7	2.9	1.0	1.6	12.0	100.0
LR102	-	32,505	3,170	1700-1800	54.1	21.4	6.3	2.3	1.2	14.6	100.0
LR103	-	14,224	1,434	0700-0800	56.5	20.0	3.9	2.0	1.3	16.4	100.0
LR104	-	13,111	1,411	0600-0700	57.3	26.1	3.6	1.0	1.1	10.9	100.0
LR105	-	20,795	2,167	1700-1800	57.3	16.4	4.3	2.3	1.6	18.1	100.0
LR106	-	22,603	2,258	1700-1800	57.9	16.9	4.8	2.7	1.4	16.2	100.0
LR107	-	3,873	466	0600-0700	47.6	18.0	5.8	9.4	3.2	16.0	100.0
LR108	-	7,199	876	1700-1800	50.6	18.7	4.8	1.6	3.0	21.3	100.0

# TRAFFIC VOLUME, 16-HOUR TRAFFIC COMPOSITION AND LOS

STATE : **W.P. LABUAN**

**AVERAGE 2015**

Census Station Number	16-hour Traffic	Peak Hour Traffic	Traffic Composition (%)							Level of Service (LOS)	Capacity Year
			Cars & Taxis	Vans & Utilities	Medium Lorries	Heavy Lorries	Busses	Motorcycles	Total		
LR101	47,872	4,153	68.5	14.1	3.0	1.0	1.6	11.8	<b>A</b>	2032	
LR102	29,675	2,959	52.7	20.3	7.7	3.1	1.1	15.1	<b>C</b>	2018	
LR103	15,002	1,801	55.9	20.6	5.6	2.8	1.1	14.0	<b>F</b>	R	
LR104	12,995	1,495	60.9	22.6	3.3	0.9	1.2	11.1	<b>E</b>	2017	
LR105	20,428	2,138	57.3	17.0	4.9	2.3	1.6	17.0	<b>F</b>	R	
LR106	23,755	2,520	56.3	18.0	5.6	2.9	1.2	16.1	<b>A</b>	2068	
LR107	3,629	429	52.7	14.3	5.4	8.9	2.8	15.8	<b>A</b>	2025	
LR108	6,439	872	53.5	14.8	3.9	1.9	3.1	22.9	<b>A</b>	2057	

# ANNUAL TRAFFIC GROWTH RATE FOR YEAR 2014

STATE : **W.P. LABUAN**

Census Station Number	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Normal Growth (%/yr)	R <sup>2</sup>
LR101	33,651	39,336	39,218	37,854	38,889	37,905	48,328	45,086	45,523	47,872	3.4	0.74
LR102	11,562	14,494	14,489	11,148	12,162	18,000	18,215	27,586	29,543	29,675	11.2	0.78
LR103	10,234	9,561	9,183	9,225	9,045	13,533	13,740	13,764	14,396	15,002	6.0	0.72
LR104	10,078	10,840	12,080	10,314	10,562	10,102	10,913	13,462	13,687	12,994	2.8	0.48
LR105	9,648	10,836	25,713	12,303	13,991	16,586	16,656	18,451	20,522	20,428	6.4	0.40
LR106	27,776	19,215	13,143	17,822	19,046	16,920	16,934	19,011	21,458	23,755	0.6	0.01
LR107	1,340	2,508	2,000	1,958	2,388	2,031	4,273	3,682	5,433	3,628	11.9	0.70
LR108	4,714	5,156	15,781	4,491	4,169	5,853	8,446	9,897	8,824	6,439	3.9	0.08

### YEARLY 16-HOUR TRAFFIC VOLUME (2006 - 2015)

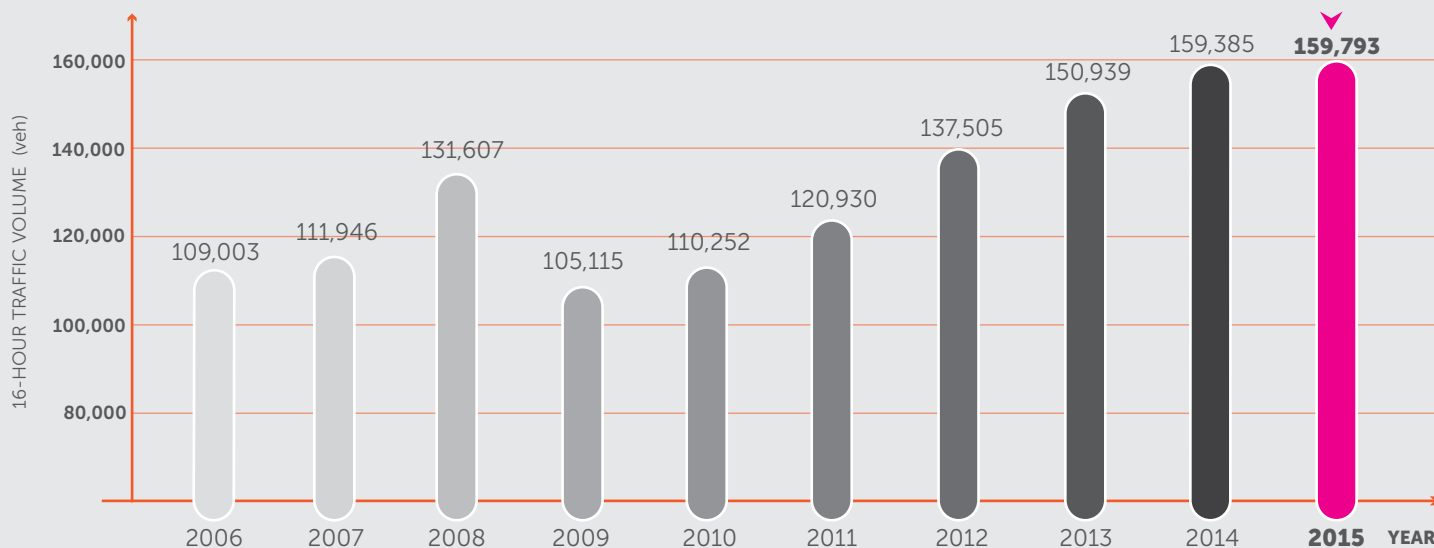


Figure 2.15-1 : Yearly 16-hour Traffic Volume (2006 - 2015) in W.P. Labuan



There are 8 census stations in Wilayah Persekutuan Labuan. The 16-hour traffic volume documented since year 2006 to 2015 has seen the lowest traffic volume in Wilayah Persekutuan Labuan was in 2009 which is 105,115 vehicles. For 2015, there was a slightly increase of 0.25% from 2014.

**0.25%**

INCREASE FROM 2014

### NORMAL TRAFFIC GROWTH WITH EXPONENTIAL TRENDLINE FOR THE YEAR 2015

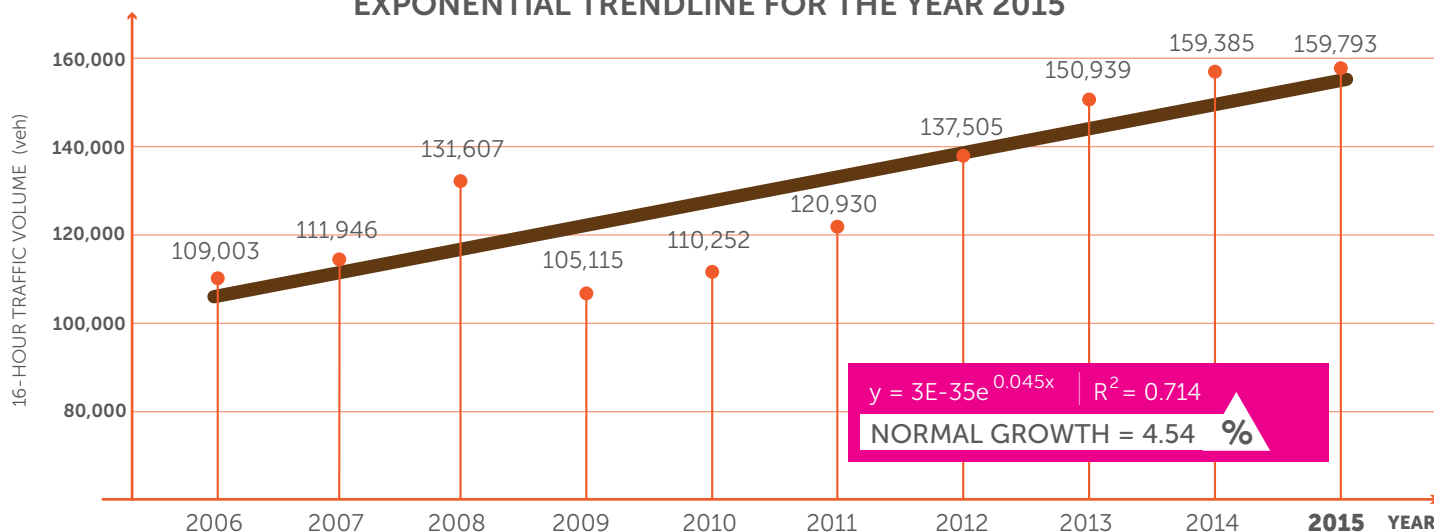


Figure 2.15-2 : Normal Traffic Growth with Exponential Trendline for the Year 2015 in W.P. Labuan

Traffic growth rate recorded for the state of W.P. Labuan is 4.54% for the year 2015. The traffic growth rate recorded is used to gauge projection of future traffic growth rate for the purpose of road planning and development of current and new roads in W.P. Labuan.









# TOLL EXPRESSWAY

# TOLL EXPRESSWAY MAP

## PENINSULAR MALAYSIA



# TOLL EXPRESSWAY MAP

## KLANG VALLEY



# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E1 & E2 : NORTH - SOUTH EXPRESSWAY

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	975,118	41,992	38,100	15,912	13,089	1,084,211

### E3 : STRETCH OF SECOND LINK EXPRESSWAY (LINKEDUA)

Toll Plaza	Daily Traffic						
	Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Tanjung Kupang	32,720	17,664	678	1,099	85	1,681	53,927
Lima Kedai	-	14,102	652	1,466	309	734	17,263
Perling	-	33,468	1,001	1,618	755	375	37,217

### E5 : STRETCH OF SHAH ALAM EXPRESSWAY (KESAS)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Sunway	107,145	4,964	2,490	2,352	514	117,465
Awan Besar Timur	61,122	1,941	1,140	1,497	288	65,988
Awan Besar Barat	55,830	1,855	1,117	1,549	287	60,637
Kemuning	81,020	5,070	6,506	1,443	445	94,485

### E6 : NORTH-SOUTH EXPRESSWAY CENTRAL LINK (ELITE)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	257,772	12,292	12,891	14,314	2,889	300,158

### E7 : STRETCH OF CHERAS - KAJANG HIGHWAY (GRANDSAGA)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Batu 9	67,330	1,463	991	1,729	223	71,736
Batu 11	59,865	1,325	692	1,313	204	63,400

# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E8 : STRETCH OF KUALA LUMPUR KARAK EXPRESSWAY (KLK)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Gombak	53,215	1,799	2,374	2,447	1,399	61,234
Bentong	38,209	1,813	2,427	300	785	43,534

### E8 : STRETCH OF EAST COAST HIGHWAY (LPT) PHASE 1

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Closed System	36,988	1,164	1,791	190	634	40,767

### E9 : STRETCH OF SUNGAI BESI EXPRESSWAY (BESRAYA)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Mines	90,530	2,947	1,249	1,333	866	96,923
Loke Yew	47,543	484	275	1,335	135	49,772

### E10 : STRETCH OF NEW PANTAI EXPRESSWAY (NPE)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Pantai Dalam	99,305	1,010	546	4,026	310	105,197
PJS 2	57,601	652	174	2,263	337	61,026
PJS 5	30,025	240	37	1,137	92	31,531

### E11 : STRETCH OF DAMANSARA - PUCHONG EXPRESSWAY (LDP)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Puchong Selatan	98,762	3,558	1,394	3,315	392	107,421
Puchong Barat	81,559	3,526	1,508	1,558	275	88,426
Petaling Jaya	136,618	2,310	1,182	3,885	364	144,358
Penchala	126,603	1,882	819	3,306	299	132,909

### E12 : STRETCH OF AMPANG-KUALA LUMPUR ELEVATED HIGHWAY (AKLEH)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Keramat	53,781	139	20	2,736	207	56,884

# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E13 : STRETCH OF KEMUNING - SHAH ALAM HIGHWAY (LKSA)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Seri Muda	41,212	1,062	566	635	152	43,627
Alam Impian	24,771	914	218	405	111	26,419

### E14 : STRETCH OF JOHOR BAHRU EASTERN DISPERSAL LINK EXPRESSWAY (EDL)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Bangunan Sultan Iskandar	35,311	1,385	2,329	463	3,801	43,290

### E15 : STRETCH OF BUTTERWORTH KULIM EXPRESSWAY (BKE)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Kubang Semang	36,899	961	1,091	328	390	39,668
Lunas	31,835	1,096	915	321	427	34,594

### E17 : STRETCH OF BUTTERWORTH OUTER RING ROAD (BORR)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Perai	14,105	212	716	593	621	16,247
Bagan Ajam	15,110	105	473	229	403	16,320
Sg. Nyior	25,281	366	998	198	183	27,026

### E18 : STRETCH OF KAJANG DISPERSAL EXPRESSWAY (SILK)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
Sg. Balak	44,353	1,092	525	916	124	47,011
Sg. Ramal	82,077	2,015	1,069	1,855	556	87,573
Bukit Kajang	48,258	1,605	1,069	972	244	52,147
Sg. Long	24,716	842	609	353	58	26,577

# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E20 : STRETCH OF MAJU EXPRESSWAY (MEX)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Putrajaya	54,196	445	168	11,973	1,478	68,261
Salak Selatan	37,538	257	184	5,522	483	43,985

### E21 : STRETCH OF KAJANG SEREMBAN HIGHWAY (LEKAS)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	41,287	1,510	1,259	667	127	44,849

### E22 : STRETCH OF SENAI DESARU EXPRESSWAY (SDE)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	8,354	310	466	95	46	9,272

### E23 : STRETCH OF SPRINT EXPRESSWAY (SPRINT)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Damansara	52,950	395	103	1,916	93	55,457
Pantai	91,231	896	384	2,417	188	95,116
Kiara	75,839	382	144	3,301	147	79,813

### E25 : STRETCH OF KUALA LUMPUR-KUALA SELANGOR EXPRESSWAY (LATAR)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Ijok	14,831	432	180	167	95	15,704
Kuang	23,008	711	606	371	105	24,801
Taman Rimba Templer	17,572	717	358	296	48	18,992
Kundang	6,141	147	140	133	6	6,568

# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E26 : STRETCH OF SOUTH KLANG VALLEY EXPRESSWAY (SKVE)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Closed System	33,348	1,977	3,124	374	111	38,934

### E28 : STRETCH OF JAMBATAN PULAU PINANG (JPP2)

Toll Plaza	Daily Traffic						
	Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Jambatan Sultan Abdul Halim Mu'adzam Shah	660	7,969	337	163	54	209	8,731

### E29 : STRETCH OF SEREMBAN PORT DICKSON HIGHWAY (SPDH)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Mambau	20,268	312	610	129	130	21,449
Lukut	4,444	130	106	48	15	4,743

### E30 : STRETCH OF NEW NORTH KLANG STRAITS BYPASS (NNKSB)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Bukit Raja	58,214	3,122	1,307	723	358	63,725
Kapar	6,508	959	4,162	127	40	11,797
Kapar Moc (A)	1,753	284	1,370	27	69	3,503
Kapar Moc (B)	7,693	503	356	102	65	8,719

### E33 : STRETCH OF DUTA - ULU KELANG HIGHWAY (DUKE)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Ayer Panas	42,499	447	199	932	132	44,211
Sentul Pasar	28,782	428	602	952	357	31,120
Batu	53,084	593	580	1,038	313	55,608

### E35 : STRETCH OF GUTHRIE CORRIDOR EXPRESSWAY (GUTHRIE)

Toll Plaza	Daily Traffic					
	Class 1	Class 2	Class 3	Class 4	Class 5	Total Traffic
Bukit Jelutong	47,551	1,537	1,335	572	206	51,202
Elmina	32,082	1,399	1,265	383	152	35,281
Lagong	25,826	1,215	974	274	142	28,431



# DAILY AVERAGE TRAFFIC ON THE MAINLINE FOR THE YEAR 2015

## TOLL EXPRESSWAY

### E36 : JAMBATAN PULAU PINANG (JPP)

Toll Plaza	Daily Traffic								
	Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Total Traffic
Jambatan Pulau Pinang	-	15,794	60,320	3,203	2,143	205	252	94	81,665

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

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
KL - Seremban	125,919	3,683	1,830	2,570	2,535	136,537

### E38 : STORMWATER MANAGEMENT AND ROAD TUNNEL (SMART)

Toll Plaza	Daily Traffic					Total Traffic
	Class 1	Class 2	Class 3	Class 4	Class 5	
SMART	30,253	-	-	434	-	30,686

Source : Malaysian Highway Authority

Note :

For Closed System :-

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

## EXPRESSWAY VEHICLE CLASSIFICATION

### OPEN AND CLOSED SYSTEMS

(except for Penang Bridge)



#### 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



### CLASS 1

- Motorcycle



### CLASS 2

- Motorcycle with sidecars
- Commercial vehicles in three wheels
- Cars including station wagons



### CLASS 3

- Lorries and vans having two axles and four wheels
- Buses having two axles and four wheels



### CLASS 4

- Lorries and vans having two axles and five or six wheels
- Buses having two axles and five or six wheels



### CLASS 5

- Vehicles having three axles
- Buses having three axles



### CLASS 6

- Vehicles having four axles



### CLASS 7

- Vehicles having five axles or more





# ROAD MILEAGE

# TOTAL MALAYSIA ROAD MILEAGE BY YEAR (KM) - FROM YEAR 1955 UNTIL 2015

Year	FEDERAL ROAD			STATE ROAD			TOTAL OF ROAD MILEAGE		
	Paved	Unpaved	Total	Paved	Unpaved	Total	Paved	Unpaved	Total
1955	3,334.34	382.86	3,717.20	4,706.46	1,982.44	6,688.90	8,040.80	2,365.30	10,406.10
1956	3,115.14	385.60	3,500.74	5,067.02	1,879.96	6,946.98	8,182.16	2,265.56	10,447.72
1957	3,379.82	218.35	3,598.17	5,044.76	1,917.59	6,962.35	8,424.58	2,135.94	10,560.52
1958	3,783.11	249.20	4,032.31	4,787.82	1,903.63	6,691.45	8,570.93	2,152.83	10,723.76
1959	3,820.42	180.82	4,001.24	4,980.15	1,945.30	6,925.45	8,800.57	2,126.12	10,926.69
1960	3,879.58	163.99	4,043.57	5,183.62	1,930.68	7,114.30	9,063.20	2,094.67	11,157.87
1961	3,844.02	192.73	4,036.75	5,324.59	1,928.30	7,252.89	9,168.61	2,121.03	11,289.64
1962	3,897.50	203.86	4,101.36	5,873.57	2,375.97	8,249.54	9,771.07	2,579.83	12,350.90
1963	3,967.75	148.93	4,116.68	6,283.31	2,468.40	8,751.71	10,251.06	2,617.33	12,868.39
1964	4,005.63	232.95	4,238.58	6,899.82	2,590.23	9,490.05	10,905.45	2,823.18	13,728.63
1965	4,262.67	325.74	4,588.41	7,391.01	2,569.04	9,960.05	11,653.68	2,894.78	14,548.46
1966	4,335.36	354.02	4,689.38	7,750.56	2,535.23	10,285.79	12,085.92	2,889.25	14,975.17
1967	4,417.52	438.69	4,856.21	8,182.25	2,400.65	10,582.90	12,599.77	2,839.34	15,439.11
1968	4,522.49	413.27	4,935.76	8,599.01	2,417.16	11,016.17	13,121.50	2,830.43	15,951.93
1969	4,559.12	393.29	4,952.41	8,900.10	2,371.76	11,271.86	13,459.22	2,765.05	16,224.27
1970	4,612.22	384.56	4,996.78	9,161.37	2,264.67	11,426.04	13,773.59	2,649.23	16,422.82
1971	4,689.19	356.33	5,045.52	9,438.03	2,068.93	11,506.96	14,127.22	2,425.26	16,552.48
1972	4,714.11	439.59	5,153.70	9,794.34	2,083.42	11,877.76	14,508.45	2,523.01	17,031.46
1973	4,717.90	424.85	5,142.75	10,102.72	2,007.99	12,110.71	14,820.62	2,432.84	17,253.46
1974	4,706.81	447.66	5,154.47	10,351.43	2,130.75	12,482.18	15,058.24	2,578.41	17,636.65
1975	4,716.82	535.41	5,252.23	10,576.38	2,133.75	12,710.13	15,293.20	2,669.16	17,962.36
1976	4,797.60	751.74	5,549.34	10,906.13	2,508.06	13,414.19	15,703.73	3,259.80	18,963.53
1977	4,845.47	810.88	5,656.35	11,332.67	2,671.10	14,003.77	16,178.14	3,481.98	19,660.12
1978	4,921.10	1,005.37	5,926.47	11,455.15	2,788.49	14,243.64	16,376.25	3,793.86	20,170.11
1979	4,939.23	1,087.57	6,026.80	12,036.23	2,624.90	14,661.13	16,975.46	3,712.47	20,687.93
1980	5,268.67	1,107.90	6,376.57	12,586.87	2,950.95	15,537.82	17,855.54	4,058.85	21,914.39
1981	5,386.14	1,264.22	6,650.36	12,816.61	3,318.93	16,135.54	18,202.75	4,583.15	22,785.90
1982	6,484.45	1,621.50	8,105.95	13,634.77	3,800.96	17,435.73	20,119.22	5,422.46	25,541.68
1983	6,505.53	1,894.76	8,400.29	13,928.52	4,225.13	18,153.65	20,434.05	6,119.89	26,553.94
1984	7,060.03	2,117.33	9,177.36	14,059.36	3,996.90	18,056.26	21,119.39	6,114.23	27,233.62
1985	7,231.30	2,299.45	9,530.75	17,867.06	11,472.10	29,339.16	25,098.36	13,771.55	38,869.91
1986	8,531.85	3,632.26	12,164.11	22,763.82	4,141.55	26,905.37	31,295.67	7,773.81	39,069.48
1987	9,994.03	2,331.08	12,325.11	22,972.72	4,034.59	27,007.31	32,966.75	6,365.67	39,332.42
1988	9,436.96	3,729.04	13,166.00	25,624.24	13,799.07	39,423.31	35,061.20	17,528.11	52,589.31
1989	10,310.21	2,749.96	13,060.17	24,293.96	13,761.15	38,055.11	34,604.17	16,511.11	51,115.28
1990	10,330.40	2,730.50	13,060.90	27,448.30	13,475.20	40,923.50	37,778.70	16,205.70	53,984.40
1991	12,623.10	1,639.70	14,262.80	27,448.20	14,026.60	41,474.80	40,071.30	15,666.30	55,737.60
1992	12,972.40	1,368.90	14,341.30	29,162.67	13,987.69	43,150.36	42,135.07	15,356.59	57,491.66
1993	13,589.95	960.19	14,550.14	30,710.20	14,497.26	45,207.46	44,300.15	15,457.45	59,757.60
1994	13,759.77	990.50	14,750.27	31,743.31	14,713.71	46,457.02	45,503.08	15,704.21	61,207.29
1995	13,846.57	990.50	14,837.07	31,743.31	14,713.71	46,457.02	45,589.88	15,704.21	61,294.09
1996	14,423.75	961.42	15,385.17	32,731.64	15,266.32	47,997.96	47,155.39	16,227.74	63,383.13
1997	14,749.16	961.42	15,710.58	33,920.85	15,349.20	49,270.05	48,670.01	16,310.62	64,980.63
1998	15,141.98	938.91	16,080.89	34,187.41	15,283.33	49,470.74	49,329.39	16,222.24	65,551.63
1999	15,350.50	855.42	16,205.92	34,561.22	15,110.21	49,671.43	49,911.72	15,965.63	65,877.35
2000	15,920.50	855.42	16,775.92	35,845.39	14,969.15	50,814.54	51,765.89	15,824.57	67,590.46
2001	16,001.08	855.42	16,856.50	41,135.32	15,025.76	56,161.08	57,136.40	15,881.18	73,017.58
2002	16,128.53	855.42	16,983.95	41,457.35	14,961.68	56,419.03	57,585.88	15,817.10	73,402.98
2003	16,461.09	908.18	17,369.27	44,285.08	16,778.99	61,064.07	60,746.17	17,687.17	78,433.34
2004	17,737.86	356.99	18,094.85	43,337.47	18,082.85	61,420.32	61,075.32	18,439.84	79,515.16
2005	17,451.75	313.18	17,764.93	51,888.69	18,860.87	70,749.56	69,340.44	19,174.05	88,514.49
2006	17,508.80	256.18	17,764.98	55,272.55	18,582.07	73,854.62	72,781.35	18,838.25	91,619.60
2007	17,758.99	256.18	18,015.17	55,272.55	18,582.07	73,854.62	73,031.54	18,838.25	91,869.79
2008	18,146.37	10.40	18,156.77	55,272.58	18,582.12	73,854.70	73,418.95	18,592.52	92,011.47
2009	18,570.33	10.40	18,580.73	81,432.12	24,642.99	106,075.12	100,002.45	24,653.39	124,655.85
2010	18,920.07	0.00	18,920.07	92,457.46	25,841.96	118,299.42	111,377.53	25,841.96	137,219.49
2011	19,216.24	0.00	19,216.24	108,300.72	29,650.26	137,950.98	127,516.96	29,650.26	157,167.22
2012	19,427.51	0.00	19,427.51	123,584.82	39,686.97	163,271.79	143,012.33	39,686.97	182,699.30
2013	19,461.79	0.00	19,461.79	138,543.39	46,164.95	184,708.34	158,005.18	46,164.95	204,170.13
2014	19,714.22	0.00	19,714.22	134,979.44	49,094.36	184,073.80	154,693.66	49,094.36	203,788.02
2015	19,819.31	0.00	19,819.31	144,213.60	52,801.45	197,015.05	164,032.91	52,801.45	216,834.36

Source : Road Facilities Maintenance Division, JKR Malaysia

# TOTAL MALAYSIA ROAD MILEAGE BY YEAR (KM) - FROM YEAR 1955 UNTIL 2015

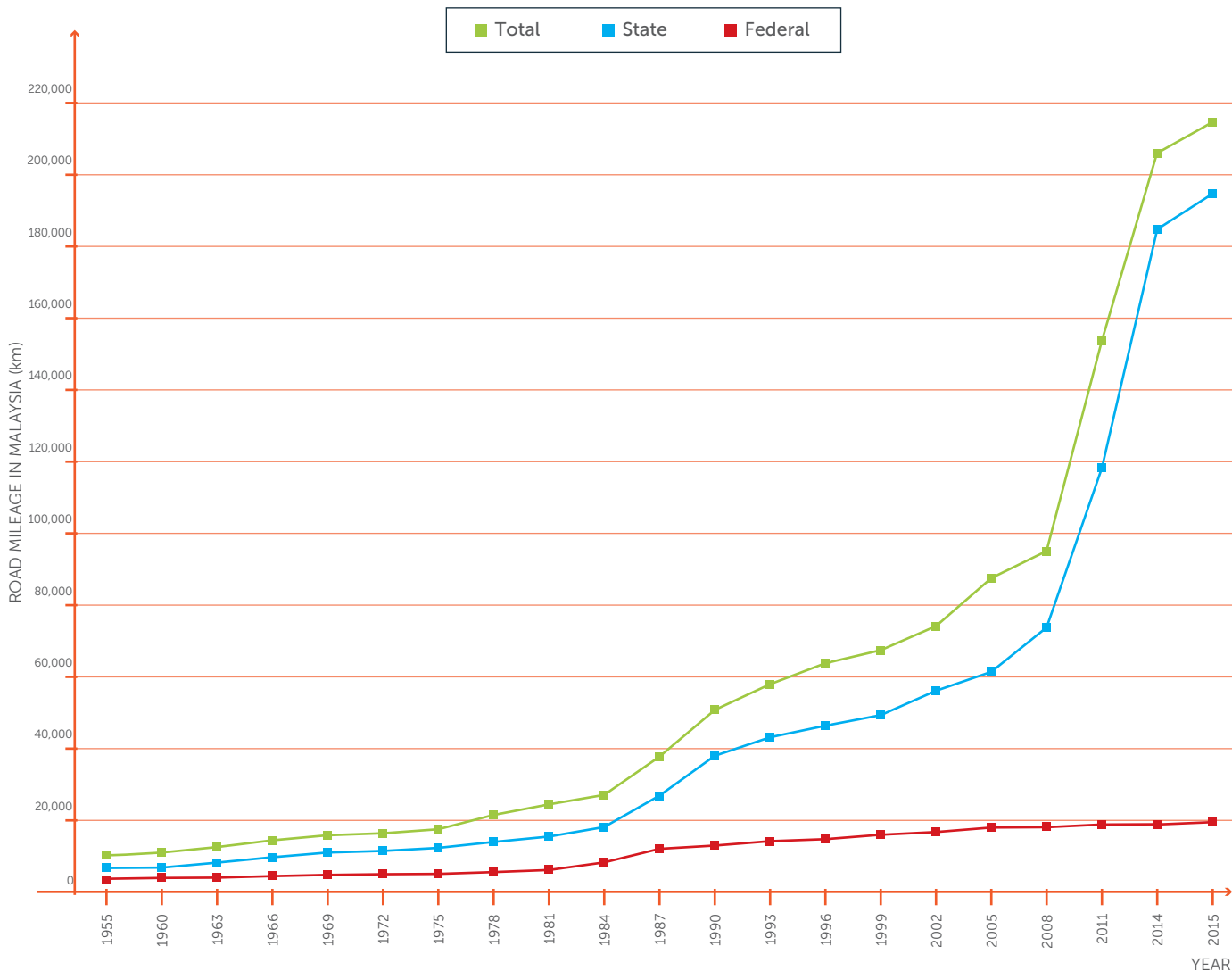


Figure 5-1: Road Mileage in Malaysia by Year (1955 - 2015)

Figure 5-1 shows the summary of road mileage for both State and Federal Roads in Malaysia, from year 1955 to 2015. For both State and Federal Roads, road mileage recorded a slow growth from the year 1955 to 1984. However, rapid growth started to show the year after, with 87% increase between year 1987 to 2015. Meanwhile, road mileage for federal roads maintained below 20,000 km until 2015.

# TOTAL MALAYSIA ROAD MILEAGE BY YEAR (KM) - FROM YEAR 1955 UNTIL 2015

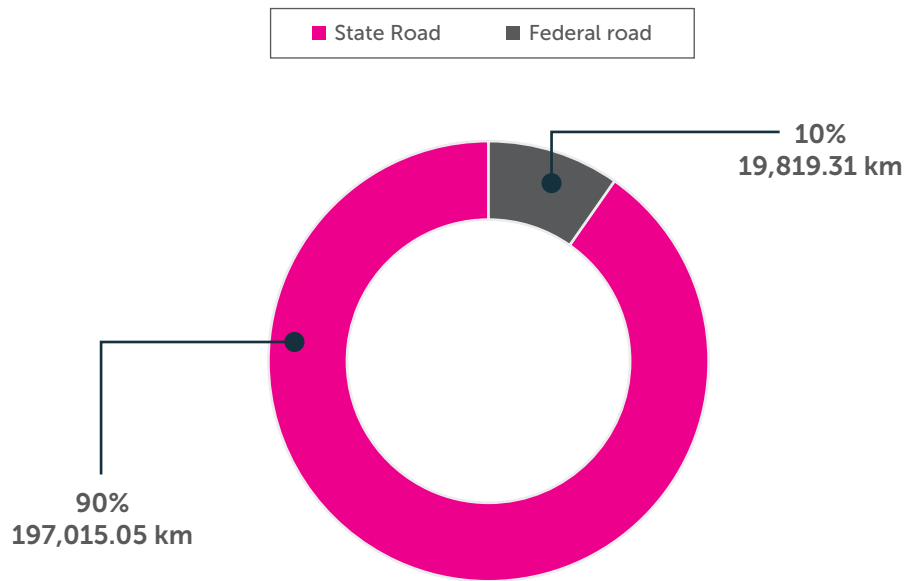


Figure 5-2: Distribution of Federal and State Road in Malaysia

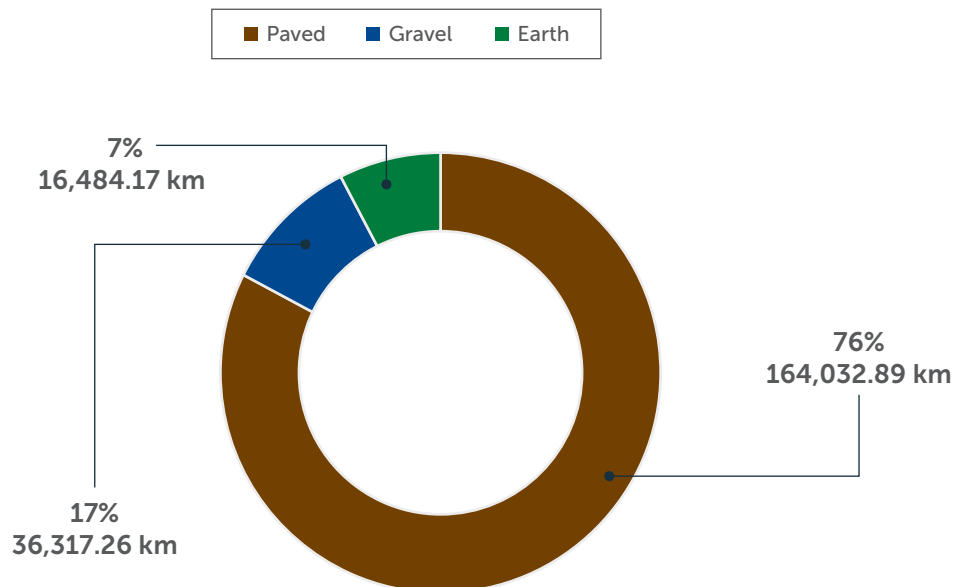


Figure 5-3: Distribution of Pavement Types in Federal and State Road in Malaysia



# TOTAL MALAYSIA ROAD MILEAGE BY YEAR (KM) - FROM YEAR 1955 UNTIL 2015

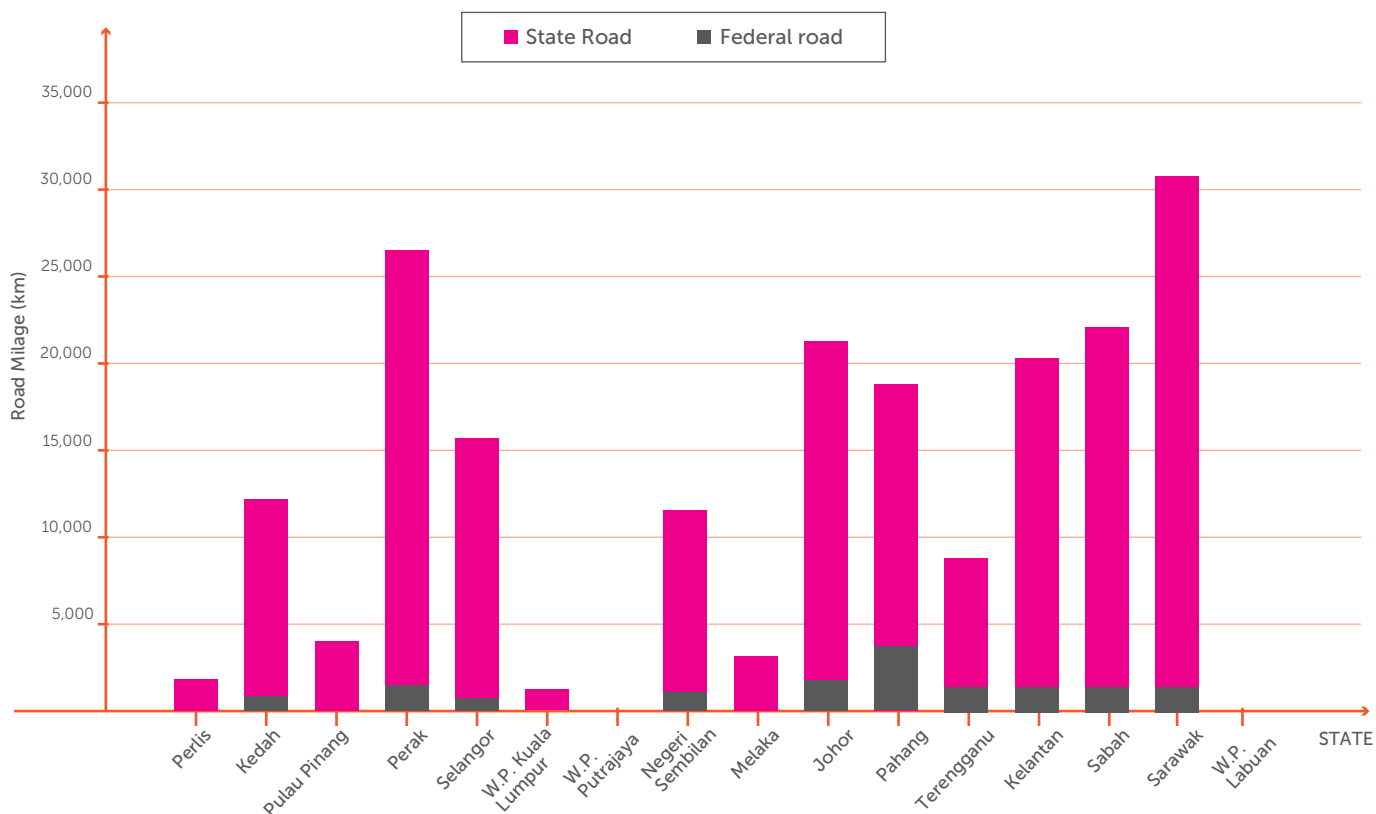


Figure 5-4 : Distribution of Federal and State Road Network by State in Malaysia

Federal Road can be categorized as Main Federal Roads, FELDA/ FELCRA Federal Roads, Road to Main Federal Institutions, Road to Industrial Area, Road to the Regional Development, Main Federal Roads in Sabah, Sarawak & WP Labuan and Toll Expressways & Toll Highways.

State Road can be categorized as Main State Road, Municipal Roads, Low-Cost Housing Area Roads, Back Alley, Agricultural Road, Rural Roads and Tourist Island Roads. The total mileage ratio of the Federal Road to the State Road is 1:9; which is not much different with the previous year.

As shown in Figure 5-2., Sarawak have the highest total road mileage in Malaysia which include 1,423.79km of Federal Road and 30,359.12km of State Road which is also the highest of State Road mileage in Malaysia. Meanwhile, Perak have the highest total road mileage in Peninsular Malaysia which include 1,515.51km of Federal Road and 28,766.81km of State Road. The highest of Federal Road mileage is in Pahang which is 3,870.07km. Most of the road is asphalt and concrete pavement (76%), follows by gravel (17%) and earth (7%).

## TOTAL ROAD MILEAGE BY STATE (KM)

STATE	FEDERAL ROAD				STATE ROAD				TOTAL			TOTAL
	Paved	Unpaved		Total	Paved	Unpaved		Total	Paved	Unpaved		
		Gravel	Earth			Gravel	Earth			Gravel	Earth	
Johor	2,368.68	0.00	0.00	2,368.68	18,424.22	563.33	341.02	19,328.57	20,792.90	563.33	341.02	21,697.25
Melaka	312.77	0.00	0.00	312.77	3,840.23	385.83	108.37	4,334.43	4,153.00	385.83	108.37	4,647.20
N. Sembilan	1,382.58	0.00	0.00	1,382.58	10,269.15	297.74	403.80	10,970.69	11,651.73	297.74	403.80	12,353.27
Selangor	970.89	0.00	0.00	970.89	14,975.73	916.85	860.67	16,753.25	15,946.62	916.85	860.67	17,724.14
Perak	1,515.51	0.00	0.00	1,515.51	16,141.27	10,684.35	1,941.19	28,766.81	17,656.78	10,684.35	1,941.19	30,282.32
P. Pinang	190.25	0.00	0.00	190.25	3,251.67	916.56	46.86	4,215.09	3,441.92	916.56	46.86	4,405.34
Kedah	1,105.55	0.00	0.00	1,105.55	10,501.04	1,094.76	197.02	11,792.82	11,606.59	1,094.76	197.02	12,898.37
Perlis	247.25	0.00	0.00	247.25	1,660.20	471.58	213.80	2,345.58	1,907.45	471.58	213.80	2,592.83
Pahang	3,870.07	0.00	0.00	3,870.07	12,794.54	2,408.93	466.71	15,670.18	16,664.61	2,408.93	466.71	19,540.25
Terengganu	1,275.71	0.00	0.00	1,275.71	7,163.37	1,362.95	761.86	9,288.18	8,439.08	1,362.95	761.86	10,563.89
Kelantan	1,323.73	0.00	0.00	1,323.73	15,917.42	2,702.34	1,421.55	20,041.31	17,241.15	2,702.34	1,421.55	21,365.04
W.P. Kuala Lumpur	22.45	0.00	0.00	22.45	1,497.92	19.08	0.00	1,517.00	1,520.37	19.08	0.00	1,539.46
W.P. Putrajaya	149.59	0.00	0.00	149.59	0.00	0.00	0.00	0.00	149.59	0.00	0.00	149.59
Sabah	1,501.84	0.00	0.00	1,501.84	9,895.73	10,292.64	1,376.54	21,564.91	11,397.57	10,292.64	1,376.54	23,066.75
Sarawak	1,423.79	0.00	0.00	1,423.79	17,814.02	4,200.32	8,344.78	30,359.12	19,237.81	4,200.32	8,344.78	31,782.91
W.P. Labuan	137.26	0.00	0.00	137.26	670.6	0.00	0.00	670.6	204.32	0.00	0.00	204.32
Lebuh raya Bertol	2,021.41	0.00	0.00	2,021.41	0.00	0.00	0.00	0.00	2,021.41	0.00	0.00	2,021.41
<b>TOTAL</b>	<b>19,819.32</b>	<b>0.00</b>	<b>0.00</b>	<b>19,819.32</b>	<b>144,213.57</b>	<b>36,317.26</b>	<b>16,484.17</b>	<b>197,015.00</b>	<b>164,032.89</b>	<b>36,317.26</b>	<b>16,484.17</b>	<b>216,834.32</b>

- Note : 1. Perangkaan Jalan Persekutuan mengikut Warta Jalan Persekutuan sehingga 31.12.2015  
 2. Perangkaan Jalan Negeri mengikut daftar MARRIS sehingga 6.1.2016  
 3. Jalan W.P Putrajaya adalah di bawah kuasa Perbadanan Putrajaya

Source : Road Facilities Maintenance Division, JKR Malaysia



# VEHICLE REGISTRATION

# TOTAL CUMULATIVE OF NEW REGISTRATION OF MOTOR VEHICLES

## By Type of Vehicle

Year	Motorcycle	Car	Taxi	Bus	Lorry & Van	Hire Car	Trailer	Other	Total
1986	2,522,173	1,419,542	23,973	21,222	306,980	3,947	26,467	115,645	4,439,949
1987	2,611,396	1,479,871	24,628	21,901	319,114	3,810	26,625	113,039	4,600,384
1988	2,702,932	1,549,600	25,132	23,346	328,594	4,154	26,503	122,655	4,782,916
1989	2,848,717	1,658,567	26,078	24,828	349,737	4,725	26,807	132,327	5,071,786
1990	3,035,930	1,811,160	28,811	26,803	380,330	5,666	27,348	146,730	5,462,778
1991	3,251,289	1,970,934	31,842	28,229	411,149	6,181	27,998	159,554	5,887,176
1992	3,473,643	2,107,005	34,178	30,013	442,401	6,791	28,744	172,733	6,295,508
1993	3,703,838	2,255,420	36,458	33,358	466,871	7,586	29,077	179,871	6,712,479
1994	3,977,047	2,426,546	40,088	34,771	495,736	10,279	28,788	196,834	7,210,089
1995	3,564,756	2,532,396	27,276	35,224	430,716	28,969	-	183,038	6,802,375
1996	3,951,931	2,886,536	49,485	38,965	512,165	9,971	-	237,631	7,686,684
1997	4,328,997	3,271,304	51,293	43,444	574,622	10,826	-	269,983	8,550,469
1998	4,692,183	3,452,852	45,643	54,590	599,149	10,142	-	269,983	9,124,542
1999	5,082,473	3,787,047	55,626	47,674	642,976	10,020	-	304,135	9,929,951
2000	5,356,604	4,145,982	56,152	48,662	665,284	10,433	-	315,687	10,598,804
2001	5,592,150	4,528,490	56,464	49,669	688,367	10,053	-	327,369	11,252,562
2002	5,825,960	4,974,850	57,920	51,008	711,738	10,107	-	344,058	11,975,641
2003	6,164,958	5,428,774	60,723	52,846	740,482	10,210	-	361,275	12,819,268
2004	6,572,366	5,911,752	65,008	54,997	772,218	10,661	-	377,835	13,764,837
2005	7,021,117	6,370,046	69,645	57,036	807,895	13,075	-	397,536	14,736,350
2006	7,458,128	6,941,996	70,409	59,991	836,579	11,638	-	411,991	15,790,732
2007	7,943,364	7,419,643	72,374	62,308	871,234	12,368	-	432,652	16,813,943
2008	8,486,486	7,956,735	76,307	63,645	914,967	16,811	-	455,595	17,970,546
2009	8,929,386	8,470,689	80,417	65,609	949,698	18,946	-	474,517	18,989,262
2010	9,427,427	9,055,993	85,443	67,676	990,585	22,223	-	497,987	20,147,334
2011	9,969,735	9,650,603	90,390	70,081	1,030,303	25,791	-	522,430	21,359,333
2012	10,511,122	10,314,938	96,158	72,341	1,074,008	30,782	-	541,920	22,641,269
2013	11,087,878	10,534,575	99,921	62,784	1,116,167	53,954	-	863,516	23,818,795
2014	11,629,265	11,199,910	105,689	65,044	1,159,872	58,945	-	882,467	25,101,192
2015	12,094,790	11,871,696	108,149	66,999	1,197,987	63,885	-	898,446	26,301,952

Source : Road Transport Department of Malaysia

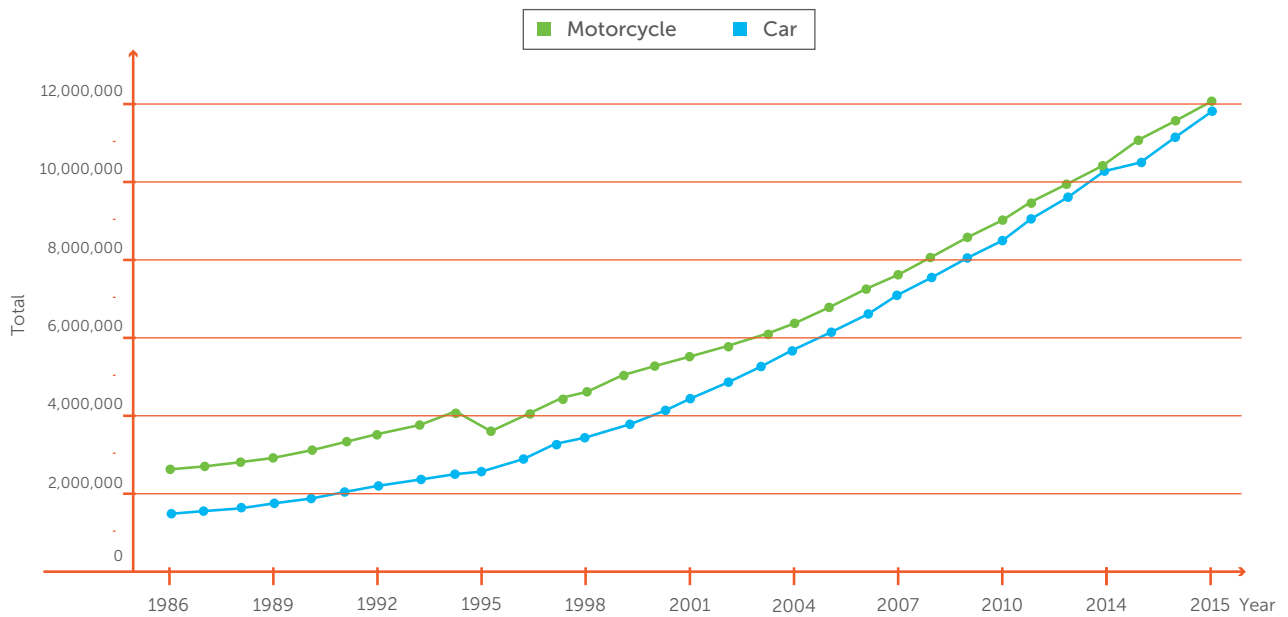


Figure 6-1: Total Cumulative of New Registration of Motor Vehicles for Motorcycle and Car in Malaysia until 2015

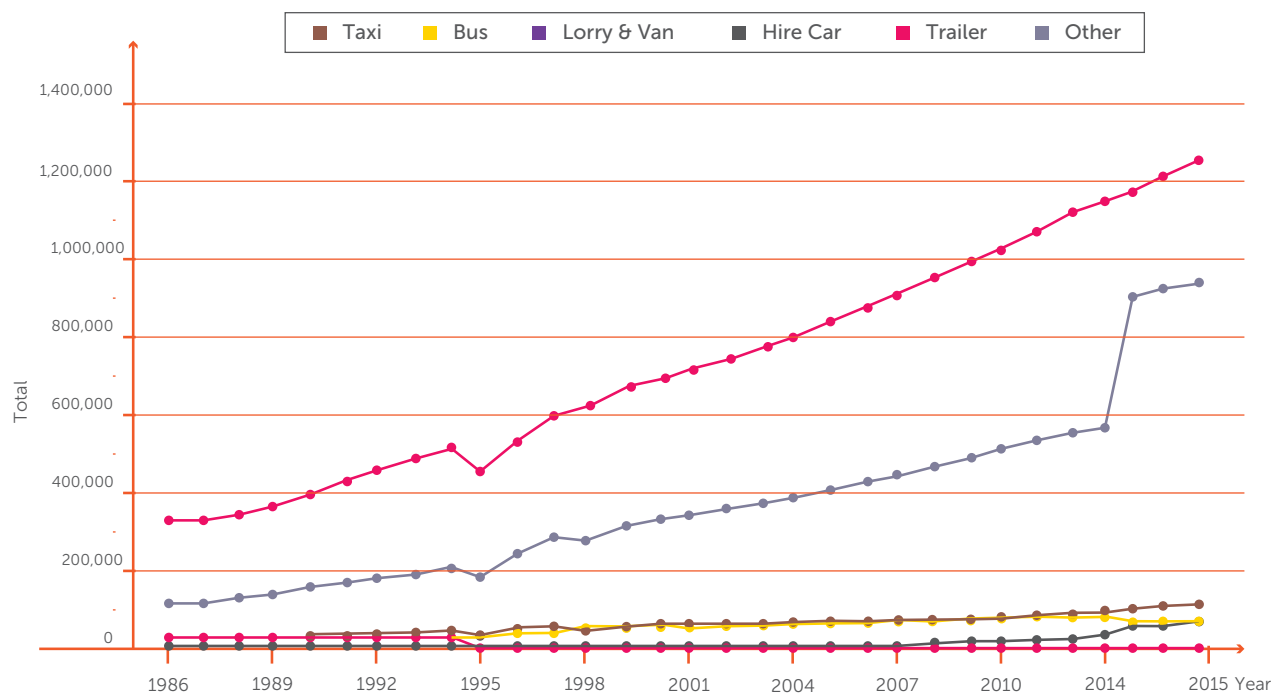


Figure 6-2: Total Cumulative of New Registration of Motor Vehicles for Taxi, Bus, Lorry & Van, Hire Car, Trailer and Other Vehicle in Malaysia until 2015

Figure 6-1 and 6-2 show the total cumulative of new registration of motor vehicles for cars, taxis, buses, lorries and vans, hire cars, trailers and others for the years between 1986 to 2015. The highest increase are motorcycles, whereas the lowest are trailers. Three types of vehicles - hire car, taxi and bus - although continued to increase, did not exceed 200, 000 units from the year 1986 until year 2015. Meanwhile, cars and motorcycles registered until 2014 almost reached 12,000,000 units.

# TOTAL CUMULATIVE OF MOTOR VEHICLES

## By State And Type of Vehicle

Type of Vehicle	Private Vehicle		Public Vehicle			Lorry & Van	Other	Total
	Motorcycle	Car	Bus	Taxi	Hire Car			
Perlis	78,263	23,868	176	126	79	1,998	2,281	106,791
Kedah	895,435	320,739	2,956	2,331	1,384	40,025	30,947	1,293,817
Pulau Pinang	1,346,531	1,081,715	5,164	3,784	1,735	78,180	39,626	2,556,735
Perak	1,308,482	736,210	4,699	3,665	878	76,011	60,190	2,190,135
Selangor	1,342,398	1,085,737	6,773	15,322	2,202	188,492	138,808	2,779,732
Wilayah Persekutuan	1,770,360	3,720,213	19,002	55,371	46,331	268,007	238,654	6,117,938
Negeri Sembilan	531,677	329,952	2,483	1,933	564	48,687	16,471	931,767
Melaka	449,980	328,242	1,692	1,558	434	28,352	14,092	824,350
Johor	1,786,021	1,420,665	8,712	12,624	2,758	150,258	97,921	3,478,959
Pahang	569,530	365,682	1,967	1,892	982	46,415	28,945	1,015,413
Terengganu	369,304	199,191	1,069	927	328	22,230	13,451	606,500
Kelantan	524,619	291,052	2,020	1,522	587	29,885	16,657	866,342
Sabah	362,369	614,021	7,169	4,629	3,908	123,376	99,434	1,214,906
Sarawak	754,778	747,282	3,117	2,436	1,700	94,912	100,888	1,705,113
Portal Rakan Niaga	5,043	607,127	0	29	15	1,159	81	613,454
<b>Total</b>	<b>12,094,790</b>	<b>11,871,696</b>	<b>66,999</b>	<b>108,149</b>	<b>63,885</b>	<b>1,197,987</b>	<b>898,446</b>	<b>26,301,952</b>

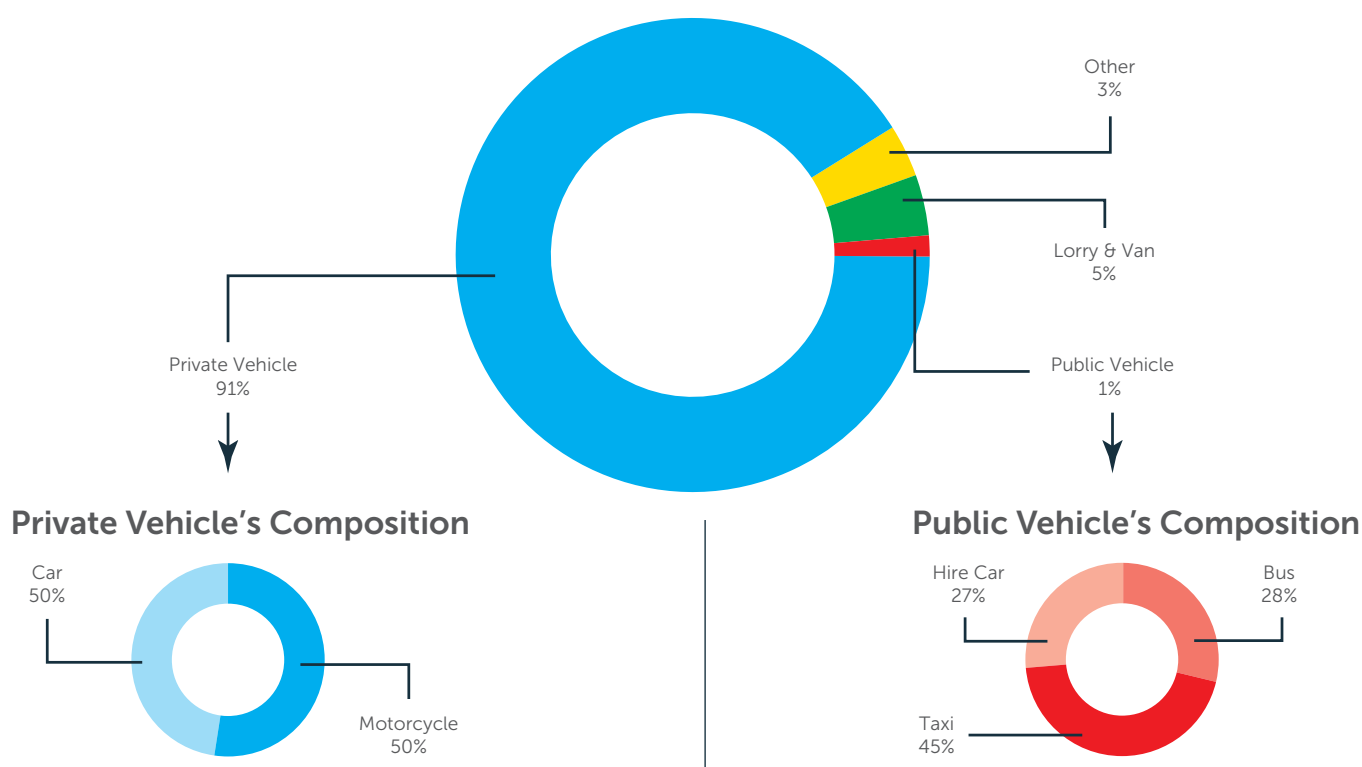


Figure 6-3 : Accumulated Motor Vehicles In Malaysia Until 31 Disember 2015

## NEW REGISTRATION OF MOTOR VEHICLES

As recorded until 31 December 2015, the total accumulated motor vehicles in Malaysia are 26,301,952 vehicles. The total accumulated motor vehicles increased 4.6% in the year 2015. The motor vehicles can be categorized as Private Vehicle, Public Vehicle, Lorry & Van and Others. As shown in Figure 6-3, the composition of the 2014 accumulated motor vehicles are Private Vehicle 91%, Public Vehicle 1%, Lorry & Van 5% and Other 4%. The Private Vehicle includes 12,094,790 motorcycles and 11,871,696 cars. While the Public Vehicle includes 65,044 busses, 105,689 taxis and 58,945 hire cars. Part of the Road Transport Department Malaysia's mission is to regulate all these motor vehicles safely and efficiently through efficient, reputable and high technology enforcement and service deliveries to meet the nation and customer needs.

### By State And Type of Vehicle

Type of Vehicle State	Private Vehicle		Public Vehicle			Lorry & Van	Other	Total
	Motorcycle	Car	Bus	Taxi	Hire Car			
Perlis		1,035	1	0	0	16	15	1,067
Kedah	42,157	6,415	16	12	14	1,068	448	50,130
Pulau Pinang	35,282	17,465	158	71	50	2,816	673	56,515
Perak	34,463	9,860	98	1	0	2,288	786	47,496
Selangor	69,112	17,317	313	675	212	7,058	5,090	99,777
Wilayah Persekutuan	63,036	86,882	858	1,314	4,426	9,393	2,544	168,453
Negeri Sembilan	16,902	7,669	23	0	0	1,788	161	26,543
Melaka	16,376	5,904	19	4	3	909	383	23,598
Johor	63,077	23,083	230	254	4	4,854	1,733	93,235
Pahang	21,317	6,434	14	4	0	1,195	409	29,373
Terengganu	14,568	2,965	27	2	1	236	37	17,836
Kelantan	21,702	5,510	40	1	0	542	85	27,880
Sabah	23,467	22,153	127	63	129	2,355	1,311	49,605
Sarawak	34,383	23,581	31	31	94	2,793	2,249	63,162
Portal Rakan Niaga	5,041	435,513	0	28	7	804	55	441,448
<b>Total</b>	<b>460,883</b>	<b>671,786</b>	<b>1,955</b>	<b>2,460</b>	<b>4,940</b>	<b>38,115</b>	<b>15,979</b>	<b>1,196,118</b>
<b>Total</b>	<b>1,132,669</b>		<b>9,355</b>			<b>38,115</b>	<b>15,979</b>	

## NEW REGISTRATION OF MOTOR VEHICLES BY STATE

### Total New Registration Of Motor Vehicles In Malaysia By State For The Year 2006 - 2015

STATE	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Perlis	4,109	4,205	5,602	4,566	5,434	4,202	5,475	3,627	6,266	5,709
Kedah	45,312	45,265	53,638	48,211	55,835	62,929	66,138	60,915	55,969	50,130
Pulau Pinang	101,515	101,949	109,033	92,320	111,882	106,514	113,340	92,863	91,505	56,515
Perak	74,959	80,369	88,783	78,040	84,199	87,577	94,952	82,438	71,812	47,496
Selangor	96,165	101,439	109,890	87,465	105,787	101,439	103,681	101,757	118,698	99,777
W.P. Kuala Lumpur	248,158	258,205	293,064	272,373	306,513	328,578	359,239	356,897	293,622	168,453
Negeri Sembilan	35,046	34,309	36,384	30,931	34,168	33,736	35,446	30,384	31,260	26,543
Melaka	31,434	33,591	36,609	30,919	33,692	33,530	36,354	29,761	30,267	23,598
Johor	132,133	141,679	156,013	130,485	145,040	155,611	172,608	161,963	143,029	93,235
Pahang	37,766	41,869	52,410	41,543	44,646	48,464	50,180	44,904	37,411	29,373
Terengganu	23,527	26,354	32,797	30,170	33,086	32,165	35,663	30,252	25,272	17,836
Kelantan	33,374	38,414	45,840	40,732	45,686	44,591	51,189	41,951	40,436	27,880
Sabah	44,593	49,737	61,338	58,834	69,301	79,229	85,049	74,124	73,355	49,605
Sarawak	63,422	65,826	75,202	70,772	82,803	93,434	102,435	90,838	91,028	63,162
Portal Rakan Niaga	0	0	0	0	0	0	0	0	172,006	441,488
Total	971,513	1,023,211	1,156,603	1,017,361	1,158,072	1,211,999	1,311,749	1,202,674	1,281,936	1,200,760

As shown in Figure 6-3, in 2015, most of the new motor vehicles were registered online through JPJ's Business Partner Portal (Portal Transaksi Rakan Niaga) which is 36.8%. The portal just started in 2014. With this portal, JPJ's business partners can access several services that are provided like Vehicle Information (VIN), vehicle information regarding vehicle type approval (VTA), PUSPAKOM vehicle inspection report, vehicle status information (Claim/Cancel) for financial institutions, owner's information, customs payment and tax information (Royal Malaysian Customs), AP permit approval information by the Ministry of International Trade and Industry, and vehicle insurance information from insurance companies.

In the previous year 2014, most states had a reduction in the new motor vehicles registrations over the previous year in each state except Perlis, Selangor, Negeri Sembilan, Melaka and Sarawak. But, in 2015, all the states had a reduction in the new motor vehicles registration. This is likely due to the increment in awareness of consumers to register motor vehicles through the portal.

14.0% of the new motor vehicles in 2015 were registered in Wilayah Persekutuan Kuala Lumpur which is remain as the state with the highest new motor vehicles registration but decreased 42.6% compared to the previous year which is the highest decrease compared to others. Perlis still maintain as the state that have the lowest new registration of motor vehicles in Malaysia throughout the years. Furthermore, Perlis has decreased 8.9% compared to the year 2014. Overall, the new registrations of motor vehicles for the year 2015 decreased by 6.3% over the previous year. There was an impairment development in the field of motor vehicles compared to the previous year as in the previous year, there was an increase in new motor vehicle registrations in 2015 compared to 2014.



# NEW REGISTRATION OF MOTOR VEHICLES BY STATE

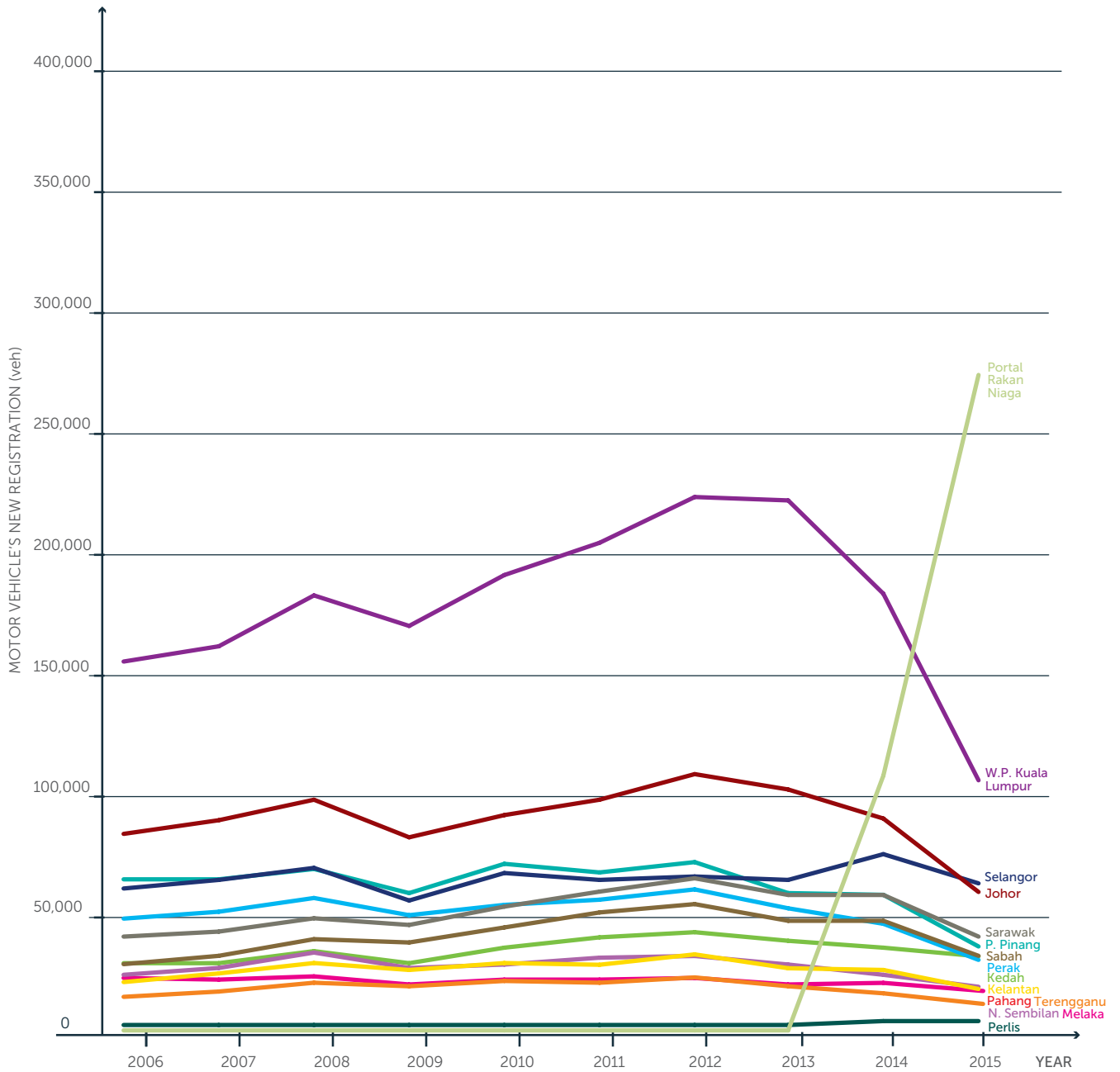


Figure 6-4 : New Registration Of Motor Vehicles In Malaysia By State For The Year 2006 - 2015







Bahagian Perancang Jalan  
 KEMENTERIAN KERJA RAYA MALAYSIA

LAPORAN BANCI LALU LINTAS KEBANGSAAN

Rekod Kiraan Manual

Negeri : \_\_\_\_\_ Daerah : \_\_\_\_\_ Tarikh : \_\_\_\_\_  
 Hari : \_\_\_\_\_  
 No. Stesen : \_\_\_\_\_ \*Jenis Kajian : 0 / 1 / 3 Hari ke : \_\_\_\_\_

**Maklumat Lokasi**  
 Lokasi : KM \_\_\_\_\_ Seksyen \_\_\_\_\_ Koordinat:  
 No. Laluan \_\_\_\_\_ Jalan \_\_\_\_\_ N : .....° .....'  
 Deskripsi lokasi / Landmark berhampiran \_\_\_\_\_ E : .....° .....'  
 Lalulintas dari \_\_\_\_\_ ke \_\_\_\_\_ \*Arah : 1 / 2

**Maklumat Lorong**  
 \*Jenis Lorong : Tunggal / Berkembar Jumlah Bilangan lorong : \_\_\_\_\_ Lebar selorong : \_\_\_\_\_ m

**Maklumat Bahu Jalan**  
 \*Bahu Jalan : Ada / Tiada Jenis bahu jalan: berturap / tanah / kerikil Lebar bahu jalan berturap (sebelah) : \_\_\_\_\_ m

**Maklumat Keseragaman Jalan (lingkungan 1km dari stesen banci)**  
 \*Bil. lorong : seragam / tidak seragam \*Keadaan jalan : berbukit / rata \*Lebar lorong : seragam / tidak seragam









Masa	Motokar dan Teksi	Van kecil & Utiliti (Ringan - 2 gandar)	Lori & Van Besar (Berat - 2 gandar)	Lori dengan 3 Gandar atau Treler (Berat - dan melebihi 2 gandar)	Bas	Motosikal	Jumlah
0600-0700							
0700-0800							
0800-0900							
0900-1000							
1000-1100							
1100-1200							
1200-1300							
1300-1400							
1400-1500							
1500-1600							
1600-1700							
1700-1800							
1800-1900							
1900-2000							
2000-2100							
2100-2200							
2200-2300							
2300-2400							
0000-0100							
0100-0200							
0200-0300							
0300-0400							
0400-0500							
0500-0600							
Jumlah							

Catatan : \*potong yang tidak berkenaan \*\*Tandatangan, Cop Nama & Jawatan dan No. Tel. Untuk Dihubungi

\*\*Disediakan oleh (Ketua Stesen Banci):

Disahkan oleh:

# VEHICLE CLASSIFICATION

CLASS	VEHICLE TYPE
Motorcars , Taxis & Small MPV's  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">1</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Small MPV's :- Proton Ixora, Proton Alza, Honda Stream, Toyota Wish, Naza Ria, etc.</p>
Small Vans, Big MPV's & Utilities  (Light 2 axles)  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">2</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Big MPV's :- Toyota Alphard/Vellfire, etc.</p>
Lorries & Large Vans  (Heavy 2 axles)  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">3</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Large Vans :- 12 Seater and Above</p>
Lorries with 3 axles (Heavy 3 axles and above)  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">4</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div>
Buses  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">5</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div>
Motorcycles & Scooters  <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">6</div>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Including 3 Wheel Motorcycle</p>



**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.