



# **GUIDELINES FOR SELECTION OF SPEED LIMIT (JKR MALAYSIA)**

**CAWANGAN SENGARA FASILITI JALAN  
IBU PEJABAT JKR  
JALAN SULTAN SALAHUDDIN  
50582 KUALA LUMPUR**

# **GUIDELINES FOR SELECTION OF SPEED LIMIT (JKR MALAYSIA)**

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## **1. INTRODUCTION**

**The setting of speed limits is a contentious matter that leads to endless debates. Ironically, still very little is known with regard to the effect of speed on road safety. This is mainly because very few research has been carried out to the study effect of speed on road casualties; and more so due to the intractable nature of the problem what we have known as “accident prevention”.**

**By and large, the introduction of speed limits was essentially a precautionary measure to ensure road safety. This is because there is evidence to suggest that a significant percentage of road accident was ‘speed related’. No traffic safety expert would exclude speed as one of the variables in establishing a formula to improve road safety.**

## **2. PURPOSE OF GUIDELINES**

**Most countries, including Malaysia have imposed a national speed limit and much lower urban speed limits. This further indicates that there is general consensus that speed limits can be an effective traffic safety measure. However, urban speed limits vary from locations to locations, with variations sometimes exist even in situations with closely similar characteristic. To eliminate any rule of thumb or arbitrary approach to the selection of local speed limits, the guidelines as given in Appendix A is hence developed. The guidelines have as far as possible included all aspects of road characteristic, such as geometric, pedestrians and vehicle compositions together with accident history in order to incorporate all independent variables in the criteria set up for speed limit selection.**

### **3. APPLICATION OF GUIDELINES**

- 3.1 These guidelines are not applicable to roads classified as Tolloed Motorways.**
- 3.2 The guidelines are to be used for the selection of a local speed limit where its imposition is judged necessary for road safety reason.**
- 3.3 There are seven criteria included in the guidelines for the selection of speed limit. To apply the guidelines, the following procedure shall be followed.**
  - (a) The Engineer should first identify the section(s) of road where local speed limit is required. This may be due to advice from National Road Safety Council or local traffic advisory committee, Police or request from member of the public.**
  - (b) The minimum distance of a speed limit zone shall be 1 km and not normally exceeding 3 km maximum.**
  - (c) Evaluation of speed limit shall follow the procedures as given in the “Explanatory Notes” of Table 1. The selected speed limit shall be the lowest on based on the criteria as given in Table 1.**
  - (d) Speed limit to be imposed is to be reduced by 10km/h if the selected speed limit exceeds 70km/h for roads with average shoulder width of less than 2 m.**
  - (e) Zones with varying local speed limits shall only be imposed if separated by a distance not less than 2 km where only the national speed limit applies.**
  - (f) Where a school, hospital or mosque fronting the road exists within the intended speed limit zone, ADVISORY sign indicating 50km/h shall be installed before the site in accordance with current JKR Standard. However, this only applies to zones with selected speed limit exceeding 50km/h.**

- (g) If there are complains received after the speed limit is imposed, Cawangan Jalan, Ibu Pejabat JKR should be contacted to carry out spot speed study on site. Appropriate adjustment, if found appropriate, (positive or otherwise) would then be done based on 85<sup>th</sup> percentile speed determined.

3.4 The selected speed limit shall be increased by 10km/h for a DIVIDED ROAD, subject to 90km/h maximum (National Speed Limit).

#### 4. ENQUIRIES

All technical enquiries about this Guidelines should be sent in writing to:

Pengarah,  
Cawangan Senggara Fasiliti Jalan  
Blok D (Lama)  
Ibu Pejabat JKR  
Jalan Sultan Salahuddin  
50582 Kuala Lumpur

## **GUIDELINES FOR SELECTION OF SPEED LIMIT (JKR MALAYSIA)**

ITEM	EXPLANATORY NOTES
A	ROAD CURVATURE, R, should normally be obtained from design or as-built drawing. Otherwise, it should be obtained from survey done on site.
B	LANE WIDTH, W, should be accurately measured on site.
C	a). PEDESTRIAN TRAFFIC, P, should include those crossing or walking along road. b). Pedestrian count should be for the peak hour on the worst location. c). Where pedestrian traffic composed mainly of school children, the number of pedestrians should be <u>halved</u> .
D	AT GRADE JUNCTION etc. PER km., J, should be counted as follow :  a). Public road junction = 1.0 b). Access to public institution (school, hospital, etc). = 0.5 c). Access to a petrol kiosk = 0.3 d). Access to a shop = 0.2 e). Access to a house = 0.1  Where houses/shops are linked with a service road, regard service road junction as in (a).
E	VEHICLE COMPOSITION, C, should be obtained from 18hr. classified volumetric counts done on site for a period from 0600 to 2200.
F	AVERAGE ANNUAL WEIGHTED POINTS OF ACCIDENT OCCURANCE, A, is obtained as follow :  a). Fatal accident = 6.0 points b). Seriously injured accident = 3.0 points c). Lightly injured accident = 0.8 points d). No injury accident = 0.2 points  Accident record should be for section of road concerned only. Record should normally be obtained from local police station.

# JABATAN KERJA RAYA

LOCATION : .....

DATE : .....

ITEM	FACTOR AND CRITERIA	SPEED LIMIT. km/hr				
		90	80	70	60	50
A	ROAD CURVATURE <b>R</b> (m)					
	R exceeding 300					
	R between 230 and 300					
	R between 175 and 230					
	R between 125 and 175					
	R less than 125					
B	LANE WIDTH, <b>W</b> (m)					
	$W \geq 3.5$					
	$3.0 \leq W < 3.5$					
	$2.5 \leq W < 3.0$					
	W less than 2.5					
C	PEDESTRIAN TRAFFIC, <b>P</b>					
	P less than 50 or walkway seggregated					
	P between 50 and 100					
	P between 100 and 200					
	P between 200 and 300					
	P exceeding 300					
D	AT GRADE JUNCTION / ACCESS / RAIL CROSSING / BUS LAY-BY PER km... <b>J</b>					
	J =1 or Nil					
	$2 \leq J < 5$					
	$5 \leq J < 8$					
	$8 \leq J < 12$					
	J exceeds 12					
E	VEHICLE COMPOSITION, <b>C</b> (ratio of vehicle, motoycle etc for (0600 – 2200)					
	$C < 0.15$ or seggregated					
	$0.15 < C < 0.3$					
	$C > 0.3$					
F	AVERAGE ANNUAL WEIGHTED POINTS OF ACCIDENT OCCURANCE, <b>A</b> (over 3 year period)					
	A less than 3					
	$3 < A < 6$					
	$6 < A < 12$					
	$12 < A < 18$					
G	LEGAL ON STREET PARKING					
	Nil					
	With Parking Provision					

