



**A STUDY ON FREQUENT ROAD ON ACCIDENTS ON  
KILOMETER 384 HIGHWAY, EAST COAST 2, AJIL,  
TERENGGANU.**

**DCC 50194 FINAL YEAR PROJECT 2**

**SESI 1: 2022 / 2023**

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## **ABSTRACT**

Roads can generally connect people from one place with other places and add a great deal of goodness to economic, social, and political activities in a country. Next, it cannot be denied that the road also has a negative effect, with road accidents that cost lives and property. Knowing the cause of accidents by looking at the physical planning aspect of the road is the focus of this study, which chose the study area in Jalan Ajil, Terengganu. The objective of the study is to study the factors that cause road accidents and formulate and propose strategies to overcome the problem of accidents in selected locations.

Research methods are set to achieve the above objectives by means of conduct a case study that applies a quantitative approach and qualitative. We collect the data from relevant parties to make it easier for us to analyze the data. While to see the form of physical planning of the road and the physical characteristics of the road that exist in the study area, the researcher applies the method of observation, perform site audits, and photo recordings and conduct analysis according to a qualitative approach.

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# INTROCUCTION

## 1.1 INTODUCTION

This chapter describes the study as carried out and describes several subtopics, which are the background of the study, the problem statement, the research question, the research objective, the research hypothesis, the importance of the study, and the limitations of the study.

Today's transportation system is one of the important elements to a country in taking steps towards a country develop and then become a developed country. Land transportation is generally closely related to the fluency and accessibility of most of the the world's population to go to each destination for a specific purpose such as work, travel, and so on. Whether you realize it or not, impact on the development and growth of an individual cities as well as being a catalyst for socio-economic development country along with the formation of an independent country and competitive.

However, there is no denying the rapid development of the network roads within a country will contribute to the impact negative which is high traffic accidents. Directly and indirectly, this scenario causes loss of life and loss of property to the individuals involved and will subsequently cause loss to a country in terms of human resources.

The rapid growth of the road network in Malaysia is among them. The East Coast Highway at Kilometer 384, Ajil, Terengganu, which connects one district with another, has led to the growth of a town in Ajil, Terengganu. With the rapid growth of network roads, it will cause vehicles to pass in this area and contribute to road accidents in LPT Ajil, Terengganu.


## 1.2 PROBLEM STATEMENT

The speed of the road network in Malaysia has contributed to the country's progress in the socio-economic sector, but it also invites the problem of traffic accidents that result in loss of life and property. refers to traffic accident statistics by party. The Royal Malaysian Police (PDRM), was found in the period 10 years from 2000 to 2009, a total of 3,224,019 cases road accidents is reported throughout Malaysia by recording as many as 56,566 cases of fatal accidents.

Out of the total number of cases reported accidents, found an average of 322,402 cases road accidents occur every year while the average case road accidents in this country every day are 883 cases. This matter clearly shows that the number of road accidents in Malaysia is high and has experienced an increase every year that is in line with increases in the road network and vehicles.

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### Artikel Mengenai Topik Kemalangan Di Lpt2




MALAYSIA

**Pemain Melaka United cedera dalam kemalangan di LPT2**

Kemalangan itu dipercayai berlaku selepas Toyota Vellfire yang dipandu pemain bola berusia 30 tahun itu dikatakan hilang kawalan lalu merempuh bahagian belakang sebuah kereta Honda HRV.

Mei 26, 2019




MALAYSIA

**Kemalangan di LPT2, pekerja pelantar minyak maut**

Seorang pekerja pelantar minyak maut manakala anak dan isterinya cedera selepas kereta yang dinaiki mereka hilang kawalan lalu merempuh pembahagi jalan.

Oktober 01, 2018



MALAYSIA

**Tiga maut termasuk bayi dalam kemalangan di LPT2**

Tiga termasuk dua beradik perempuan berusia lapan bulan dan tiga tahun maut dalam kemalangan di LPT2.

Ogos 17, 2018

Figure 1.2.1



### **Bapa maut, anak parah dalam kemalangan di LPT2**

Kejadian berlaku kira-kira jam 2.30 pagi di laluan selepas susur keluar Kuala Dungun, Dungun.

April 28, 2017



### **Enam sekeluarga, termasuk tiga kanak-kanak maut dalam kemalangan di LPT2**

Kemalangan sekitar 5.30 petang tadi itu turut menyebabkan tiga ahli keluarga mangsa cedera parah.

Disember 11, 2016



### **Isteri maut, suami parah pikap terbalik di LPT2**

Nahas dipercayai berlaku selepas Toyota Hilux yang dipandu suami mangsa hilang kawalan hingga merempuh besi penghadang jalan sebelum berpusing dan terbalik.

Jun 22, 2016



### **Pelajar IPTA maut kemalangan di LPT2**

Seorang penuntut Institut Pengajian Tinggi Awam (IPTA) maut apabila kereta yang dipandunya merempuh pembahagi jalan di Kilometer 271. 7

**Figure 1.2.2**

Based on figures 1.2.1 and 1.2.2, there is a news article that came out about the accident that happened at LPT Ajil, Terengganu. This shows that this area often has unexpected accidents. There must be news of an accident at LPT Ajil, Terengganu.

Based on the statement of the problem, we will find the cause of this accident using several methods and how to reduce the occurrence of accidents at LPT Jalan Ajil, Terengganu.

### **1.3 OBJECTIVE OF STUDY**

As you know Semester Final Project is not only implemented in PSA but also other polytechnics in Malaysia that are based on TVET also need to implement the Final Project to meet the requirements and award Diploma in Mechanical Engineering. It is implemented with a purpose and objective useful as follows.

To achieve the main goal of this study, several objectives are defined for easy analysis, including traffic accidents that occur on Ajil Road:

- To study the factors that cause the occurrence of road accidents
- To formulate and propose strategies to overcome the problem of accidents in selected locations

### **1.4 SCOPE OF STUDY**

The main scope of this study is to examine the extent of the relationship between the road factor, which is the physical planning aspect of the road, and the traffic accidents that occur. The project produced has a specific scope so that it is more functionally focused and can be completed within the specified time. For this project's scope, the study only focuses on:

### 14.1.1 Research area

The area selected in this study is on Lebuhraya Ajil, Terengganu, which is about a 33 kilometre long. The diagram 1.4.1 is a map of the Ajil Highway, which is the study area we chose.

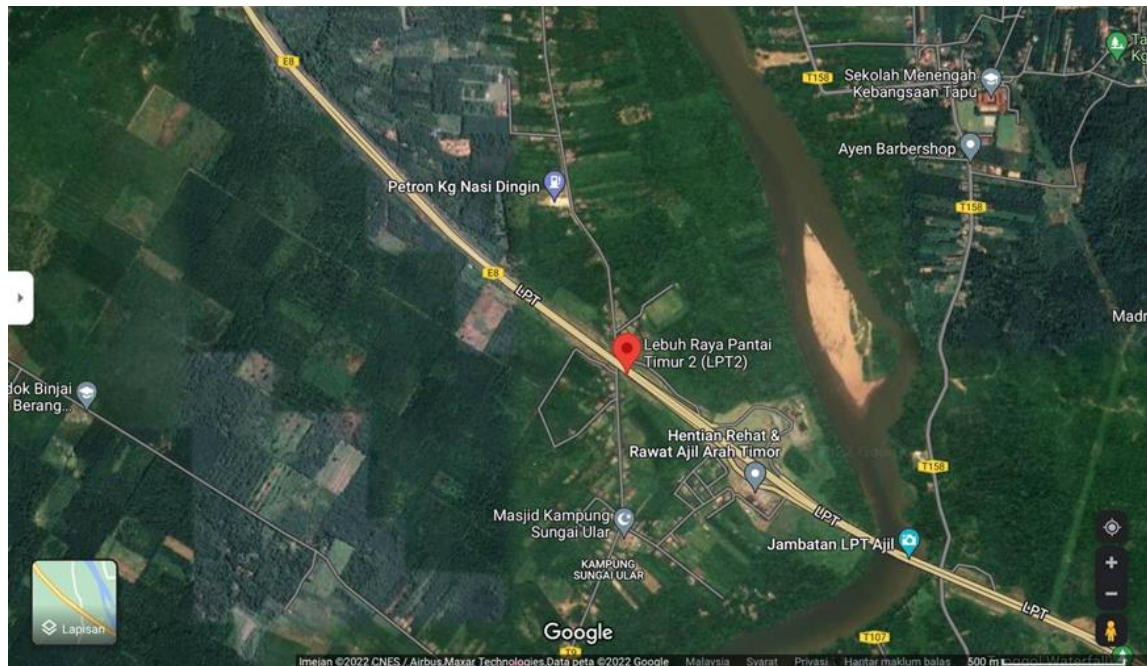


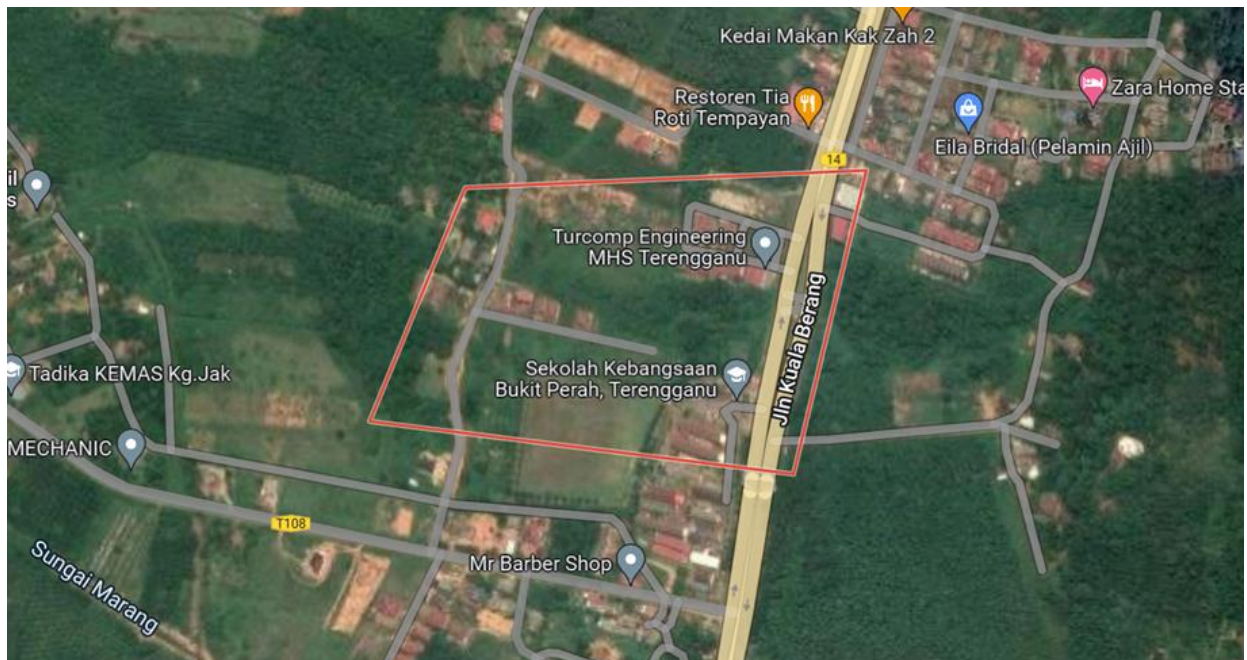
Figure 1.4.1



### 14.1.2 Information gathering area

Diagram 1.4.2 is our second research area, which is where we will collect information from respondents. Our respondents consist of:

- i. Residents of Batu 18 village, Ajil, Terengganu
- ii. PDRM Ajil
- iii. JKR Ajil
- iv. Ajil Traffic Police



**Figure 1.4.2**

## **14.2 IMPORTANCE OF STUDY**

At the end of this study, we will be able to find out the cause of accidents that often occur in the Ajil Road area of Terengganu. Many news reports and newspaper articles came out about accidents that happened in the area. With this, we will also suggest some solutions to the accidents that often occur in the area.

This research will allow for an explicit study on the accident rates on the trunk road, which may be useful to the Public Works Department (JKR) of the Ministry of Works Malaysia and the Local Authority to mitigate the problem in the road design and construction.

Othman Mohamed (2001), who stated the importance of the study, will be able to provide an explanation to the reader about the importance of the study carried out. The importance of conducting this study is to identify the cause of the accident and propose some road management solutions that are appropriate and can be implemented to overcome or reduce road accidents in the study area, especially on the Ajil Highway in Terengganu.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

According to national legislation in the Road Transport Act 1987 (Act 333) Amendment 2002, the definition of accident is "an accident or incidents where damage or injury is done to any person, property, vehicle, structure, or animal."

The road network of a particular country, state, or region grows rapidly over time, along with progress and user requests. In general, the increase in the road network in Raya is seen as increasing to meet the demand of its users. For example, the road network in Malaysia is increasing increased due to the better socio-economic status of its population and capable. The increased road network in the country has many positive effects, especially for the residents. However, there is no denying the negative effects, such as the fact that road accidents continue to increase, and there is no solution, though various preventive measures have been taken by the parties responsible.

This study examining the causes of accidents on Ajil Road, Terengganu, is an objective we need to achieve. The description of this study was made after identifying all the causes that we have obtained in our study. Methodology is important for carrying out the project because it can prevent us from making mistakes and displaying negligence that may make it difficult for the study to run smoothly.

This is because a good study can be produced through a good implementation and planning system with appropriate methods. The methods and implementation made must be in accordance with the needs of this study.

The scope of the study focuses on how a study should be conducted through reference sources to obtain relevant information.

## **2.2 Road geometric design**

Road geometry design is like construction aspects such as bends, intersection layouts, and roadside environments, including entrances. According to Meor (1989), the geometric design error factor for roads originates from engineers who design facilities at the top. Among them there are too sharp bends and vertical bends too short. There are also curves that do not meet the requirements of the standard, such as compound, breakback, and reverse curves. There are also intersections that are dangerous for vehicles, which will affect the driver's comfort and visibility. When this happens, driver performance is affected. The environment and the edge of the driver also affect the estimation of the magnitude of the vehicle's speed as it is being driven. Driving on a road with narrow lanes and flanked by two cutting walls creates a feeling that the vehicle moves faster than the same speed movement on a wide and flat lane.

## **2.3 Human factor**

S.O Donald Lim (2002) has a different opinion in The New Straits Times, where road accidents are caused by drivers' behaviours that fail to give a proper signal when turning. Some other bad behaviours among drivers include the use of a mobile phone while driving and smoking while driving. These are also factors that contributed to the accident.

Meanwhile, H.M. Heeza (2011) appears and claims in the Bernama newspaper to support the opinion expressed by the New Straits Times that the negligent driver and bad road conditions are the main cause of the increasing number of road accidents in the country. The Director of Kuala Lumpur Road Safety Department (JKJR) stressed that 70% of road accidents are caused by human negligence, 20% are due to road conditions, and 10% for vehicle problems.

## **2.4 Environment factor**

Weather conditions and lighting are environmental factors of the road that affect drivers. According to Meor (1989), situational factors like weather are beyond human control, yet so is their effect on behaviour. The driver's behaviour has indeed been informed. Driving atmosphere at that time rain or heat, day or night is different. The driver will have difficulty driving when it is raining heavily. On at that time the road surface became more slippery, in addition to being non-existent good drainage system the road surface will be flooded.

According to Meor (1989), again at night, the glare of the lights of other vehicles affects the performance of some drivers, especially elderly drivers. Rural roads that are not equipped with road lighting make the driver's activity more difficult. The situation worsens if there are animals roaming on the road.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 INTRODUCTION**

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. (Irny and Rose, 2005) A methodology does not set out to provide solutions - it is, therefore, not the same thing as a method. Instead, it offers the theoretical underpinning for understanding which method, set of methods or best practices which can be applied to specific case, for example, to calculate a specific result.

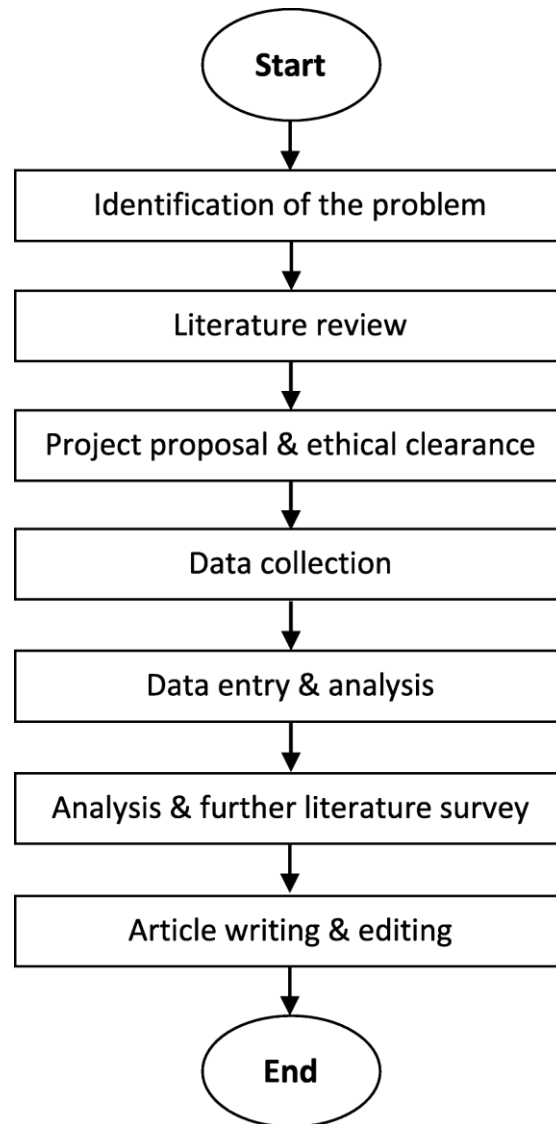
Organized planning is required in the implementation of a study. Each step is arranged and listed systematically to facilitate the implementation of the study. In order to obtain the work procedure of a study that starts from the generation of ideas to the stage of obtaining information, better known as methodology, a study to develop the implementation process must be done first. This includes a description of all the methods used to complete the research. All work procedures listed must be followed to facilitate the implementation of the study. This process starts from getting the title of the study up to the production of the study.

Methodology seems possible as a component where we bridge the gap between objectives and end results. This chapter will explain the journey taken to obtain data from the authorities and parties involved.

#### **3.2 METHODOLOGY OF STUDY**

In this chapter, the methods of conducting the study will be explained, starting with the planning phase, and continuing until the study is completed. A chart will be shown to explain the implementation method of this study more clearly. This chapter also shows the initial process of analysis carried out including the journey and process of ideas up to the collection of data directly in study implementation. In this chapter the aspects related to the implementation study the projects discussed and the flow chart of methodology is shown in Figure 3.1.

**Figure 3.1 : Flow Chart in Methodology of Study**



### **3.3 SAMPLING**

This study uses a sampling technique aimed at answering the objectives studied by the researcher. A total of 30 respondents were selected to answer this questionnaire; they are residents of Kampung Batu 18, Ajil, Terengganu. This sample size is said to be relevant according to Bailey (1994), where approximately 30 cases is the minimum size for a study requiring statistical data analysis. The selection of respondents is based on their willingness and availability to answer the questionnaire. We chose respondents in the area because it is close to our study site.

### **3.4 DATA COLLECTION**

Data collection methods used in this study include questionnaires, interviews, and references. A questionnaire has been created to obtain information about the causes of accidents that occur on Jalan Ajil in Terengganu. We obtained data from the JPJ in the LPT Ajil area and from the traffic police in the LPT Ajil area as well.

In addition, we also recorded the length of the LPT road to identify the cause of this accident.

### **3.5 DATA ANALYSIS**

At the final stage of this study, a descriptive analysis was conducted to analyze the data from the questionnaire in the evaluation and produce a research report. The data obtained from this analysis uses frequency, percentage, mean, graph, and chart.

With the data, we can analyse the cause of this accident and suggest some methods to overcome this accident on Ajil Road. From the data we got from the respondents, who are from Batu 18 village, we will extract and use a Gantt chart to analyse the data more easily.

In addition, we will also put the data from the police in the form of a Gantt chart to make it easier to analyse the data we have obtained.

Content analysis was used to analyse the data which was gathered from personal interviews. The type of research whereby data gathered is categorized in themes and subthemes, to be able to be comparable. A main advantage of content analysis is that it helps in data collected being reduced and simplified, while at the same time producing results that may then measure using quantitative techniques.

Moreover, content analysis gives the ability to researchers to structure the qualitative data collected in a way that satisfies the accomplishment of research objectives. However, human error is highly involved in content analysis, since there is the risk for researchers to misinterpret the data gathered, thereby generating false and unreliable conclusions.

### **3.5 CONCLUTION AND RECOMMENDATION**

In this chapter, various matters related to methodology and the study implementation plan have been explained in detail. The matter discussed is related to the implementation of the study and includes a Gantt Chart related to the implementation of the study. This Gantt chart show the plan that will be implemented and the actual situation carried out. Various methods of data collection are shown in this chapter in detail from the beginning to the end.



## **CHAPTER 4**

### **RESEARCH FINDING AND DISCUSSION**

#### **4.1 INTRODUCTION**

In this fourth chapter, the researcher presents the findings and analysis of the study in detail. Each objective is presented according to the following steps: analysis, data acquisition, formulation, and discussion. This study analyses the causes of accidents on Jalan Ajil, Terengganu, and their uses. The data obtained will be analysed to achieve the study's objectives.

This chapter explains in detail the findings and data analysis that have been carried out on 30 respondents. The data from this study has been analysed using a Gantt chart. This questionnaire has been divided into two (2) parts, Part A and Part B, which each have several questions.

The questions in Part A consist of questions regarding the age, gender, and race of the respondent. while the question in Part B consists of their opinion about the cause of the accident that happened on Jalan Ajil, Terengganu.

There is also data obtained from the PDRM in the Ajil area and the traffic police in the Ajil area that shows the answers to the questions asked.

The data obtained from the questionnaire responses are analysed and presented in this chapter. The data obtained from the questionnaire responses are analysed and presented in this chapter. A total of 30 respondents have given feedback on the questionnaire that has been distributed.

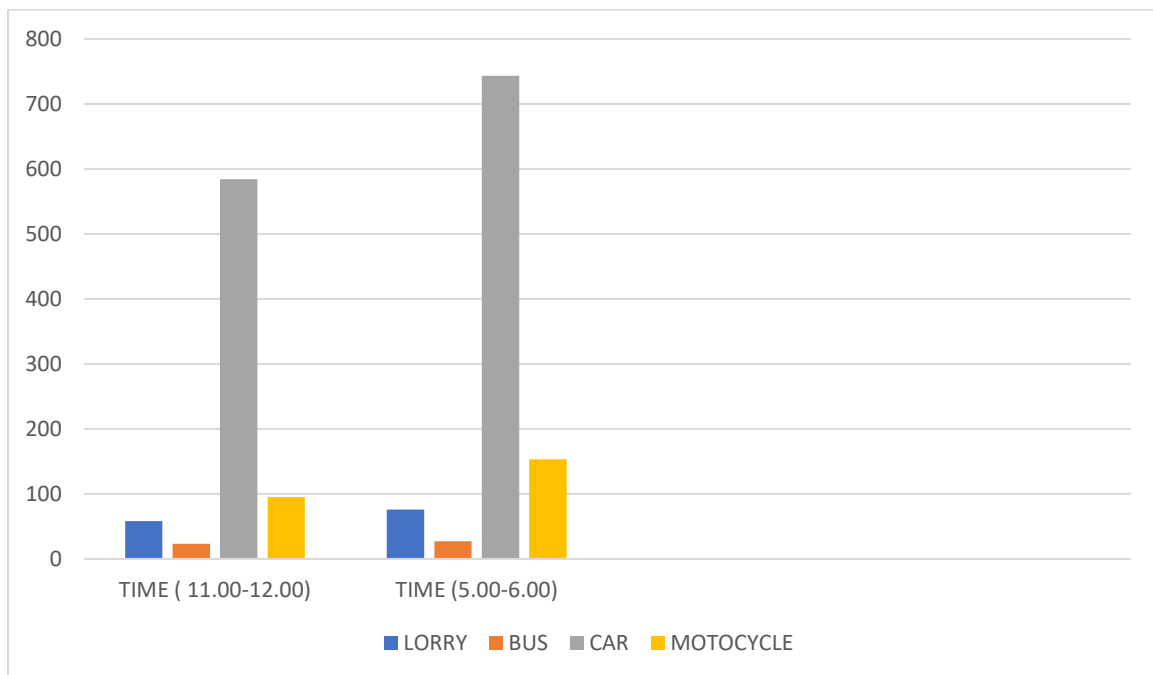
## 4.1 THE TRAFFIC VOLUME STUDY

Location: JALAN AJIL, TERENGGANU

Date: 18/10/2022 (THURSDAY)

Phase: Peak Hours

TIME	HEAVY VEHICLES (LORRY)	BUSES	CAR	MOTORCYCLE	TOTAL VEHICLE
10.30 a.m. -12. 00p.m	58	23	584	95	760
5.00 p.m. – 6.35 p.m.	76	27	743	153	999
TOTAL	134	50	1327	248	1759
PERCENTAGE (%)	7.62%	2.84%	75.44%	14.10%	100%

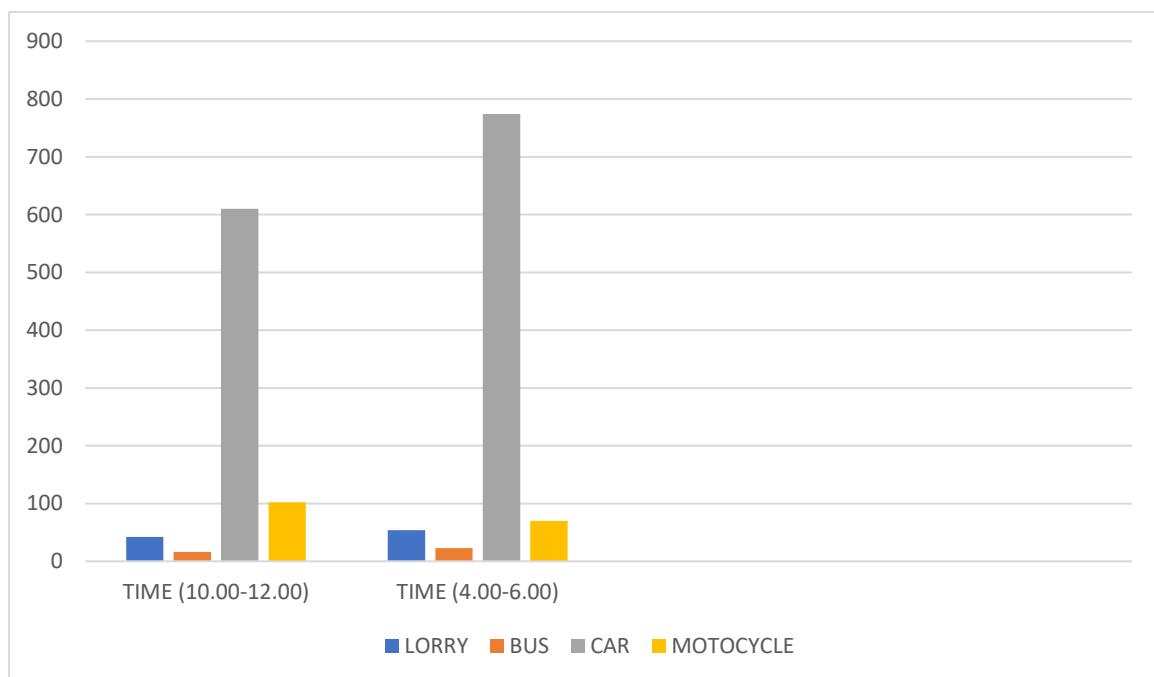


Location: JALAN AJIL, TERENGGANU

Date: 19/10/2022 (FRIDAY)

Phase: Peak Hours

TIME	HEAVY VEHICLES	BUSES	CAR	MOTORCYCLE	TOTAL VEHICLE
10.00 a.m. -12. 00p.m	42	16	610	102	770
4.00 p.m. – 6.00 p.m.	54	23	774	70	921
TOTAL	96	39	1384	172	1691
PERCENTAGE (%)	5.58%	2.37%	81.87%	10.18%	100%



Solution:

THURSDAY (Peak Hour):

$$= (0.0762 \times 2.00 + 0.0284 \times 3.00 + 0.7544 \times 1.00 + 0.1410 \times 0.75) \times 73$$

$$= 1.10 \times 73$$

$$= 80.3 \text{ pcu/h}$$

FRIDAY (Peak Hours):

$$= (0.0558 \times 2.00 + 0.0237 \times 3.00 + 0.8187 \times 1.00 + 0.1018 \times 0.75) \times 70$$

$$= 1.08 \times 70$$

$$= 75.6 \text{ pcu/h}$$

## 4.2 Questionnaire

### Section A: Background of Respondent

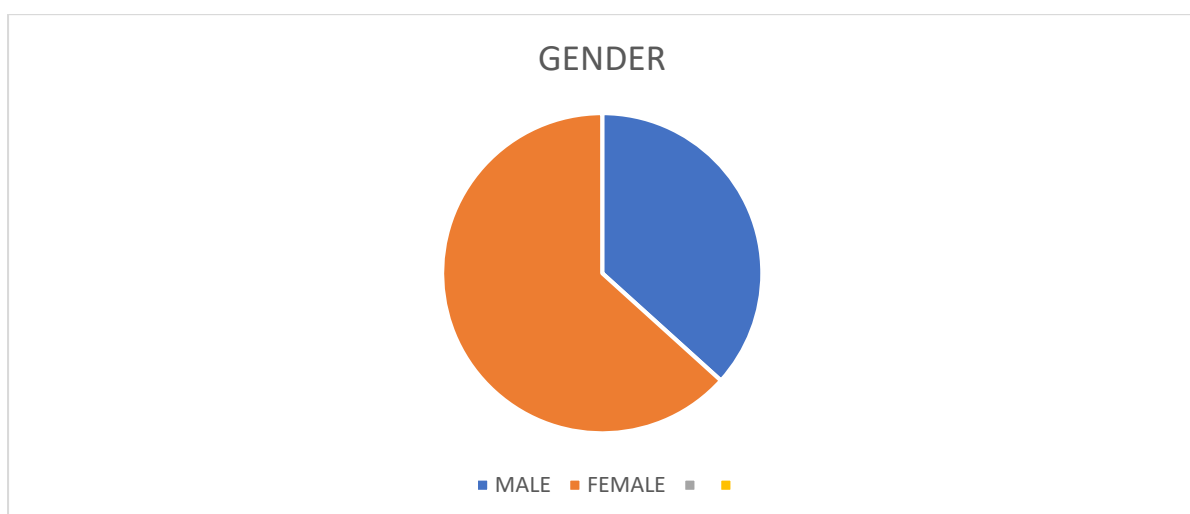
Things related to the background of the respondents in this study are gender, age, and race.

#### 4.2.1 Gender

Referring to Table 4.1, the findings of the study show the distribution of respondents according to the gender involved in this study. A total of 30 respondents participated in this study. The total number of male respondents was 11, or 36.7%, while the female respondents were 19, or 63.3%.

**TABLE 4.2.1: TOTAL OF RESPONDEN BY GENDER**

GENDER	AMOUNT OF RESPONDEN	PERCENTAGE
MALE	11	36.7%
FEMALE	19	63.3%
TOTAL	30	100%



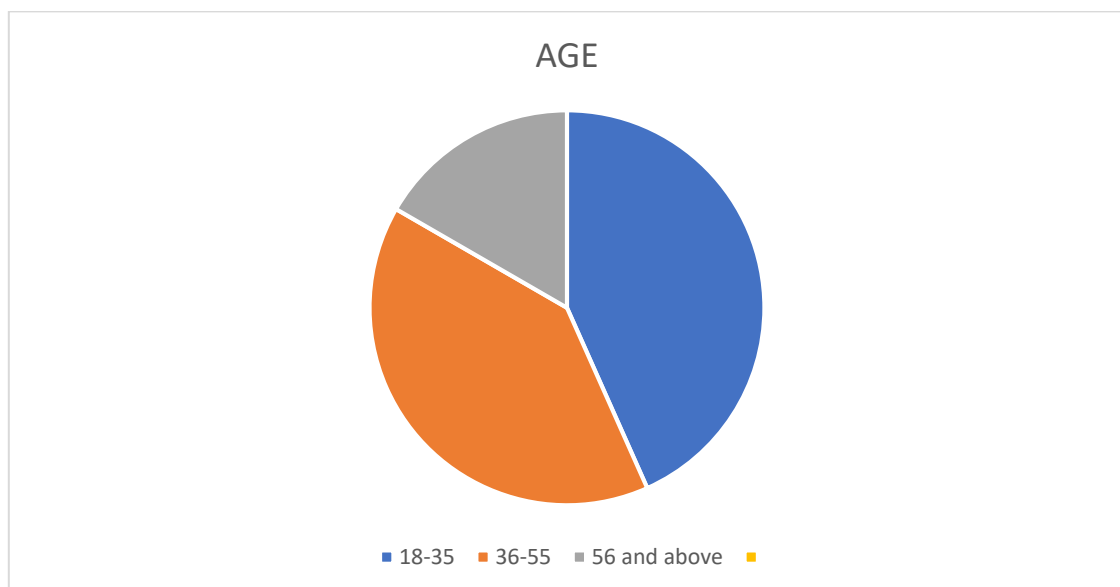
**Percentage of Respondents by gender**

#### 4.2.2 AGE

Figure 4.2.2 shows the percentage of respondents based on age. The results of the study show that respondents were aged 18 to 35 years old, which is 43.3%, or 13 residents. Respondents aged 36 to 55 years old which is 40% equal to 12 residents. Meanwhile, respondents aged 26 and over which is 16.7% equivalent to 5 residents. The total number of respondents is 30 people, with a percentage of 100%.

**TABLE 4.2.2: TABLE OF RESPONDENT BY AGE**

AGE	AMOUNT OF RESPONDEN	PERCENTAGE (%)
18-35	13	43.3%
36-55	12	40%
56 an above	5	16.7%
Total	30	100%



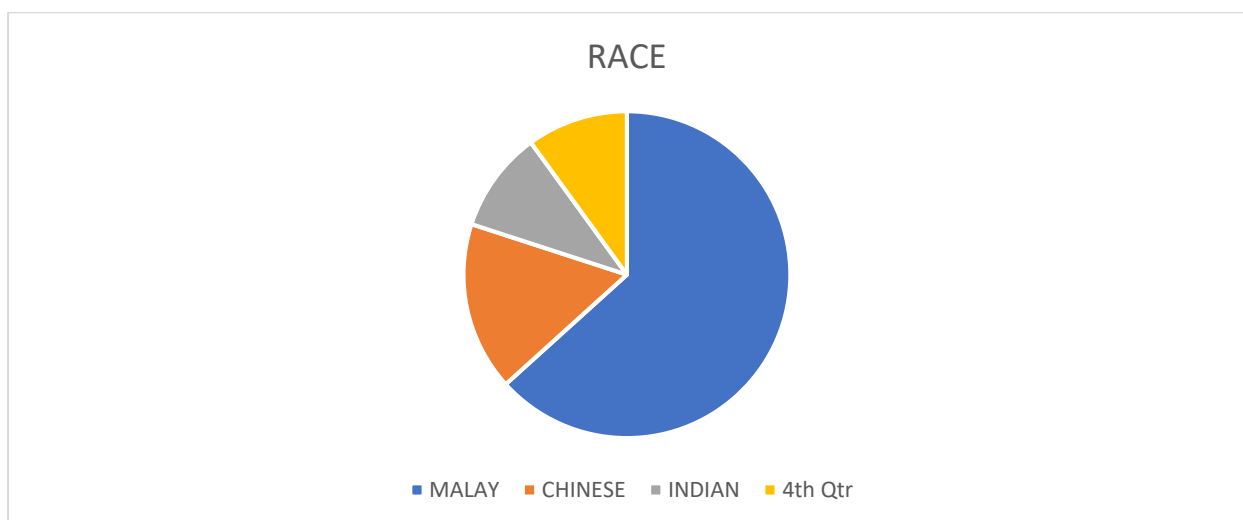
**Percentage of Respondents by age**

### 4.2.3 RACE

Table 4.2.3 shows the percentage based on the race of the respondents. The races involved are Malay, Chinese, Indian, and others. The results of the study show that 63.3% of respondents are Malay, which is equivalent to 19 residents, while 16.7% of respondents are Chinese, which is equivalent to 5 students, and 10% of respondents are Indian, which is equivalent to 3 residents. In addition, the percentage of other races is the same as the percentage of the Indian race, which is 10%, or 3 people.

**TABLE 4.2.3: TABLE OF RESPONDENT BY RACE**

RACE	AMOUNT OF RESPONDENT	PERCENTAGE (%)
MALAY	19	63.3%
CHINESE	5	16.7%
INDIAN	3	10%
OTHER	3	10%
TOTAL	30	100%



**Percentage of Respondents by race**

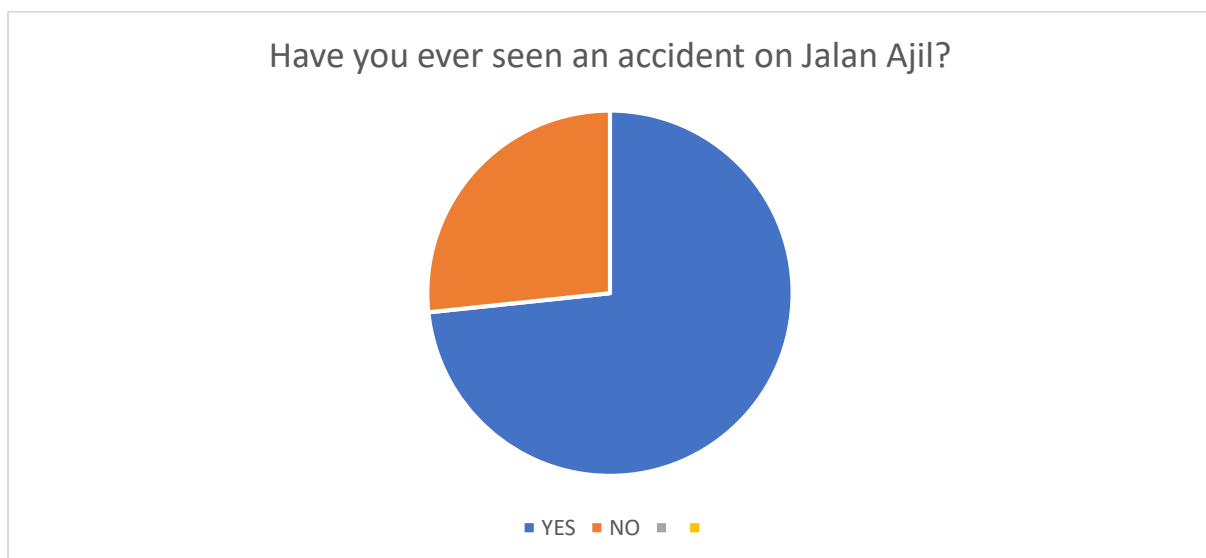
### 4.3 QUESTIONS REGARDING THE CAUSE OF THE ACCIDENT THAT OCCURED ON JALAN AJIL.

#### 4.3.1 Question: Have you ever seen an accident on Jalan Ajil?

Based on table 4.3.1, it shows that 73.33%, or 22 respondents, agree with the question asked. While 26.67%, or 8 respondents, did not agree with the question asked. The total number of respondents who answered this question was 30.

**TABLE 4.3.1: QUESTION OF ‘HAVE YOU EVER SEEN AN ACCIDENT ON JALAN AJIL’**

ACCEPTANCE	AMOUNT OF RESPONDEN	PERCENTAGE (%)
YES	22	73.33%
NO	8	26.67%
TOTAL	30	100%



**Percentage of Respondents by question of ‘have you ever seen an accident on Jalan Ajil?’**

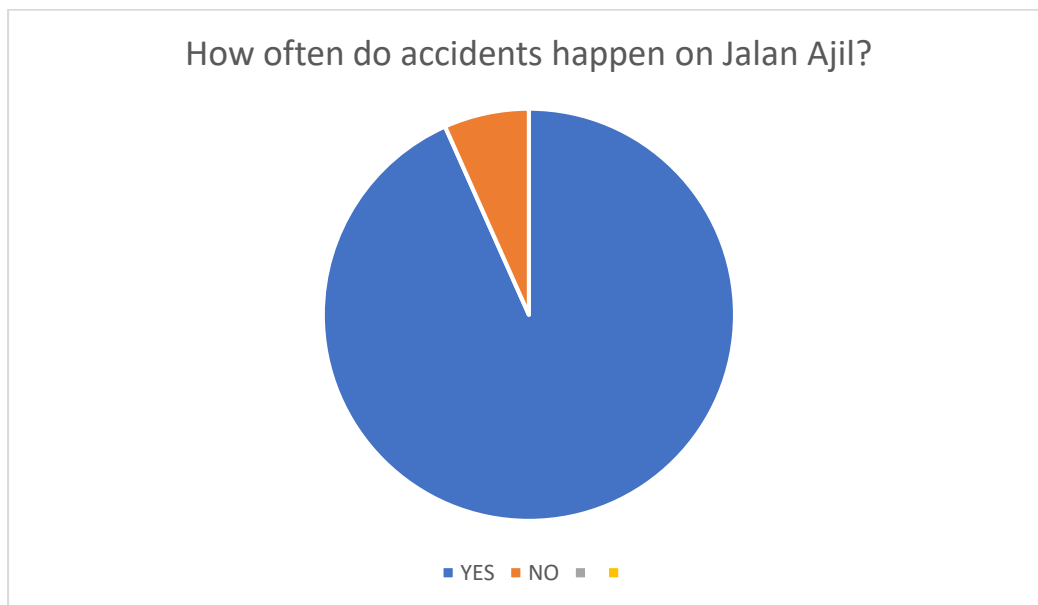


### 4.3.2 Question: How often do accidents happen on Jalan Ajil?

Based on table 4.3.2, it shows that 93.33%, or 28 respondents, agree with the question asked. While 6.67%, or 2 respondents, did not agree with the question asked. The total number of respondents who answered this question was 30.

**TABLE 4.3.2: QUESTIONS OF ‘HOW OFTEN DO ACCIDENTS HAPPEN ON JALAN AJIL?’**

ACCEPTANCE	AMOUNT OF RESPONDEN	PERCENTAGE (%)
YES	28	93.33%
NO	2	6.67%
TOTAL	30	100%



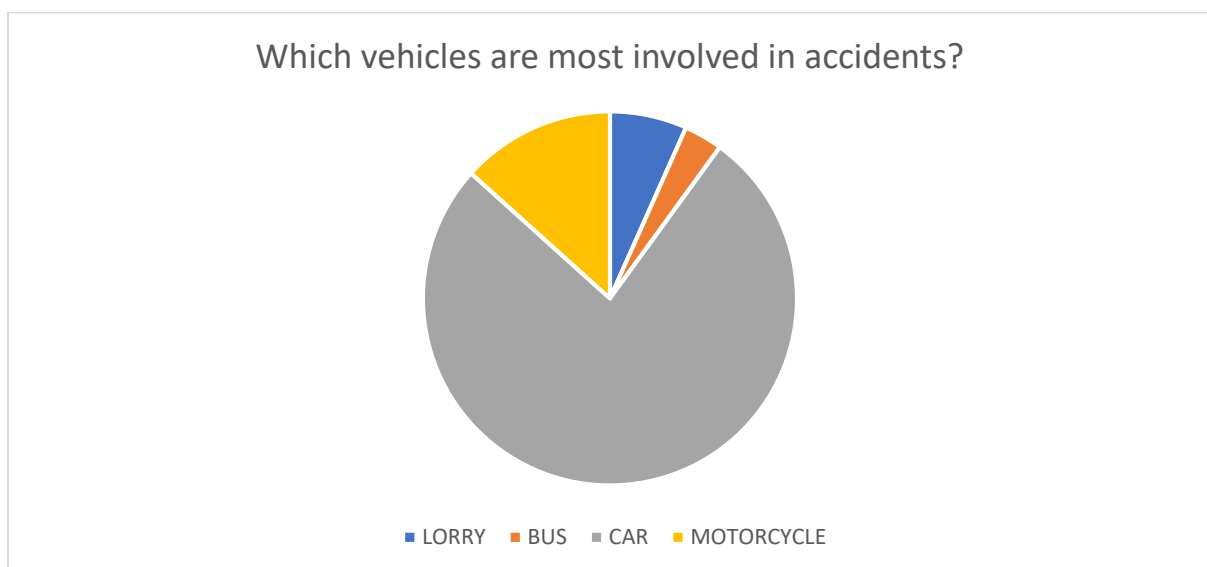
**Percentage of Respondents by question of ‘How often do accidents happen on Jalan Ajil?’**

### 4.3.3 Question: Which vehicles are most involved in accidents?

Based on the results of the research that has been done, the type of vehicle that most often occurs in accidents is a car, which is 76.67%. While the second most common type of vehicle is a motorcycle with 13.33%, followed by a truck with 6.67%, and the least common type of vehicle involved in an accident is a bus with 3.33%.

**TABLE 4.3.3: QUESTIONS OF ‘WHICH VEHICLES ARE MOST INVOLVED IN ACCIDENTS?’**

TYPE OF VEHICLES	AMOUNT OF RESPONDEN	PERCENTAGE (%)
LORRY	2	6.67
BUS	1	3.33
CAR	23	76.67
MOTORCYCLE	4	13.33
TOTAL	30	100%



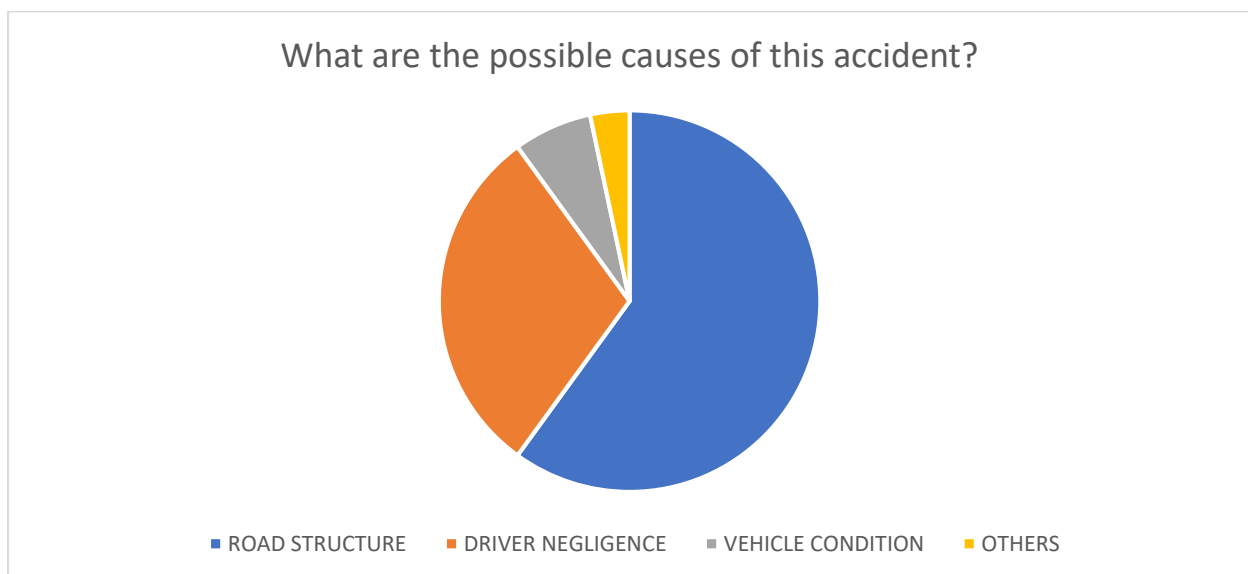
**Percentage of Respondents by question of ‘Which vehicles are most involved in accidents?’**

#### 4.3.4 Question: What are the possible causes of this accident?

Based on the research that has been done, it is likely that the cause of the accidents that occur is caused by the road structure to the tune of 60%. Next, the second cause is likely to be the negligence of the driver himself, with a total percentage of 30%, followed by the condition of the vehicle, with a total percentage of 6.67%, and other causes, with a total percentage of 3.33%.

**TABLE 4.3.3: QUESTIONS OF ‘WHAT ARE THE POSSIBLE CAUSES OF THIS ACCIDENTS?’**

THE CAUSE OF THE ACCIDENTS	AMOUNT OF RESPONDEN	PERCENTAGE (%)
ROAD STRUCTURE	18	60%
DRIVER NEGLIGENCE	9	30%
VEHICLE CONDITION	2	6.67%
OTHERS	1	3.33%
TOTAL	30	100%



**Percentage of Respondents by question of ‘What are the possible causes of this accident?’**

#### 4.4 FORMS AND PICTURES RELATED TO RESPONDENTS



**POLITEKNIK SULTAN SALAHUDDIN ABDUL AZIZ SHAH**  
**KEMENTERIAN PENGAJIAN TINGGI**  
 Persiaran Usahawan, Seksyen U1,  
 40150 Shah Alam  
 SELANGOR, MALAYSIA



Tel : 603-51634000  
 Faks : 603-55691903  
 Web : [www.psa.edu.my](http://www.psa.edu.my)  
 Facebook : pssbaas

Rujukan Kami : PSA.700-2/1/1 ( )  
 Tarikh :

**Ketua Balai Polis Ajil,  
 Balai Polis Ajil,  
 Polis Diraja Malaysia,  
 21800 Ajil,  
 Hulu Terengganu,  
 Terengganu.**



Tuan,

**PERMOHONAN MENDAPATKAN MAKLUMAT UNTUK TUJUAN PENYELIDIKAN  
 BAGI PROJEK PELAJAR SEMESTER 5 (KURSUS PROJEK TAHUN AKHIR 2,  
 PROGRAM KEJURUTERAAN AWAM)**

Dengan segala hormatnya perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pelajar – pelajar berkenaan adalah pelajar yang berdaftar di Jabatan Kejuruteraan Awam, Politeknik Sultan Salahuddin Abdul Aziz Shah.

Bil.	Nama	No. Pendaftaran	No. KP	No. Telefon	E-Mel
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3. Bagi memenuhi syarat penganugerahan Diploma Kejuruteraan Awam, pelajar hendaklah melaksanakan kajian dan menghasilkan projek selari dengan keperluan kursus Projek Tahun Akhir 2 bertajuk KEMALANGAN JALAN RAYA LEBUH RAYA KILOMETER 384, PANTAI TIMUR, AJIL, TERENGGANU. Sehubungan dengan itu, saya mewakili pihak politeknik ingin memohon jasa baik dan kerjasama daripada pihak tuan dalam membantu pelajar mendapatkan maklumat bagi menjayakan projek ini. Untuk sebarang pertanyaan, pihak tuan boleh menghubungi pelajar serta Penyelia Projek yang bertanggungjawab iaitu En Fawi Bin Samad di talian 019-2422323.

**Figure 4.4.1 form to get information from the authorities**



BORANG SOAL SELIDIK UNTUK KAJIAN KADAR KEMALANGAN DI  
KILOMETER 384, LEBUHRAYA PANTAI TIMUR 2 AJIL, TERENGGANU

NAMA: PATEEN SHAFIQAH BINTI MAHMUD  
UMUR: 30 TAHUN

- 1) PERNAHKAH TUAN/PUAN MELIHAT KEMALANGAN DIJALAN AJIL?  
 YA  
 TIDAK
- 2) KERAPKAH KEMALANGAN DIJALAN AJIL INI BERLAKU?  
 YA  
 TIDAK
- 3) KENDERAAN YANG MANAKAH PALING BANYAK TERUBAT DALAM KEMALANGAN DIAJIL?  
 LORI  
 BAS  
 KERETA  
 MOTOR
- 4) ADAKAH TUAN/PUAN PERNAH TERLIBAT DALAM KEMALANGAN DIAJIL?  
 YA  
 TIDAK  
JIKA YA, APAKAH PUNCA KEMALANGAN BERLAKU :  
 STRUKTUR JALAN RAYA  
 KECUAIAN PEMANDU  
 KEADAAN KENDERAAN  
 LAIN-LAIN



Figure 4.4.2 information form from the authorities



**BORANG SOAL SELIDIK UNTUK KAJIAN KADAR KEMALANGAN DI  
KILOMETER 384, LEBUHRAYA PANTAI TIMUR 2 AJIL, TERENGGANU**

NAMA: FAZELI BIN MUHAMAD SAARI

UMUR: 24 TAHUN

- 1) PERNAHKAH TUAN/PUAN MELIHAT KEMALANGAN DIJALAN AJIL?  
 YA  
 TIDAK
  
- 2) KERAPKAH KEMALANGAN DIJALAN AJIL INI BERLAKU?  
 YA  
 TIDAK
  
- 3) KENDERAAN YANG MANAKAH PALING BANYAK TERLIBAT DALAM KEMALANGAN DIAJIL?  
 LORI  
 BAS  
 KERETA  
 MOTOR
  
- 4) ADAKAH TUAN/PUAN PERNAH TERLIBAT DALAM KEMALANGAN DIAJIL?  
 YA  
 TIDAK  
JIKA YA, APAKAH PUNCA KEMALANGAN BERLAKU :  
 STRUKTUR JALAN RAYA  
 KECUAIAN PEMANDU  
 KEADAAN KENDERAAN  
 LAIN-LAIN



**Figure 4.4.3 information form from the authorities**

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

This chapter will discuss the entire study conducted by the researcher to achieve the study objectives based on the analysis of the study findings and the discussion carried out in chapters three and four. The discussion in this chapter includes the main findings of the study that will answer the two main objectives to be achieved. This study will also suggest some ways to reduce the occurrence of accidents in the Jalan Ajil area.

Overall, this section focuses on the discussion of the two specific objectives of the important study discussed, which are related to the backgrounds of the respondents, their knowledge of issues related to accidents that occur in Jalan Ajil, accident statistics based on the PDRM, and their opinions related to the reduction of accidents in Jalan Ajil, Terengganu.

As for the traffic volume study, it shows that during the peak hours, which are 11 a.m.–12 p.m. and 5.00 p.m.–6.00 p.m., many vehicles pass through this area, which is on Jalan Ajil, Terengganu. This is because noon is the lunch hour and the evening is home time. Therefore, there are many vehicles passing by on Jalan Ajil. The percentage of chances for road accidents is also high.

The results of the study's analysis found most of the respondents were of the Malay race, which totals 19 people. While the age range of respondent was 18 to 55 years. The findings of the study also found that the majority of those who agreed and had seen an accident happen in their area, which is Jalan Ajil, Terengganu, while the probable cause is due to the structure of the road itself and was stated by 19 respondents, total of 19 people.

While the age range of respondents is 18 to 55 years. The findings of the study also found that the majority of those who agreed and had seen an accident happen in their home area which is in Jalan Ajil, Terengganu. While the probable cause is due to the structure of the road itself and was stated by 18 respondents out of 30. Besides, the type of vehicle that has the most accidents is the car.

The discussion about the findings of the study is based on the research questions. In connection with that, the findings of this study will be discussed and used to answer research questions with the help of respondents and related authorities such as the PDRM, JKR, and Police Traffic Ajil, Terengganu.

## 5.2 RECOMMENDATION

Based on the research that has been done, there are some suggestions that we can make to reduce road accidents that occur in Jalan Ajil, Terengganu. With these suggestions and opinions, we hope to reduce the number of deaths caused by accidents in this area. These suggestions and opinions are made in order to improve the quality of safety for drivers who drive on Jalan Ajil.

Based on the research we have done, among the improvements that need to be made is to repair the LPT Ajil road because the undulating road is a major cause of accidents that occur frequently in the area. Next, the second improvement is that drivers should always follow the instructions of the signs placed by the authorities in order to reduce accidents.

### **i. Repair the road:**

- Because the Ajil-Terengganu Road is undulating, which is the cause of accidents in this area, JKR and PLT need to repair the road in order to reduce accidents in the Ajil area.

### **ii. Added speed cameras and speed signs:**

- The authorities should add speed cameras and speed signs around Ajil Road, where accidents often occur. This being so can reduce the rate of accidents that occur on Ajil Road, and thus drivers drive their vehicles carefully and slowly after seeing the cameras and posted speed limit signs.

### **iii. The authorities make a maintenance schedule.**

- It is important for the authorities to make a weekly maintenance schedule to ensure Ajil Road is safe for road users. thus, able to smooth the flow of traffic on Jalan Ajil Terengganu.



**iv. Driver's attitude:**

- There is no doubt that when drivers bring their own vehicles, many of them do not obey the road instructions that have been written around this Ajil road. Especially speed limits that cause their vehicles to skid and get involved in accidents. With this, every driver must obey the road instructions that have been set by Malaysian law.

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