

**DEVELOP A SUSTAINABLE MODEL FOR  
IMPLEMENTING DRIVER IMPROVEMENT POINTS  
(DIPs) IN SRI LANKA**

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Degree of Master of Science in Transportation

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May 2017

## **DECLARATION OF THE CANDIDATE AND SUPERVISOR**

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A.L.K.M.M.P.Bandara

May, 2017

## **ABSTRACT**

### **DEVELOP A SUSTAINABLE MODEL FOR IMPLEMENTING DRIVER IMPROVEMENT POINTS (DIPs) IN SRI LANKA**

This research mainly focuses to come up with a suitable model which will support the sustainable implementation of "Driver Improvement Points System (DIPS)" for Sri Lankans- as per the regulations published under the Motor Traffic Act from the extraordinary gazette numbered 1726/12 and dated 05.10.2011. It has declared 22 offences that could be counted for DIPs. The design of DIPs was done with the main objective of identifying high risk motorists and habitual offenders and to suspend them from driving for a specified period of time. Correcting the attitude and improving the discipline of drivers in order to ensure that they will be more responsible and courteous on the roads and reducing the high number of road accidents which has brought great loss to the country over the years are the two main objectives of a DIPS.

DIPs are a mechanism already adopted in limited number of countries, mainly by the developed countries such as USA, Canada and Australia, and as well as by some developing countries such as Malaysia, Singapore and South Africa.

The implementation of DIPs within Sri Lanka is still doubtful due to some practical issues, though the legal mechanism is already available. A fully integrated and well-equipped monitoring system will be required in order to ensure the effectiveness and the transparency of the system. The infrastructure facility requirement of the system is very high and eventually it requires a fairly large initial capital investment. On the other hand, the high possibility of corruptions in the current Sri Lankan system is one of the major issues to be addressed in the implementation process as it will drastically affect the credibility of the system.

In developing a sustainable model, a comprehensive literature review was carried out on the DIPs systems implemented worldwide including the factors affecting the driver behavior. Further an opinion survey was carried out to get the public opinion and ideas of the proposed system. The sample group comprising of Private Vehicle Users, Professional Drivers and Passengers/Road users were addressed. Two different ways;

Google forms and the printed version of survey form. The online questionnaire using Google forms mainly targeted the private vehicle users. The printed version of the form was used to get the opinion of the people who do driving as a profession and the other road users.

The results clearly show ensuring the effectiveness and transparency is a must for a credible system. Provision of valid evidence of the offence before giving any points is expected by almost all the parties involved. This report carries out a comparison between the existing model and the new model proposed. Further, the new model points out the draw backs of the existing system and focuses on low cost methods such as body worn cameras, in capturing reasonable evidence of the offence.

**Key Words:** Offence, Driver Improvement Points System (DIPS), Accidents

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## **ABBREVIATIONS**

DIPS	Driver Improvement Points System
DIPs	Driver Improvement Points
DL	Driving License
DLH	Driving License Holder

## **CHAPTER 01 – INTRODUCTION**

### **1.1 Overview of the Thesis**

The design of Driver Improvement points systems was done with the main objective of identifying high risk motorists and habitual offenders and to suspend them from driving for a specified period of time. While correcting the attitude and improve the discipline of drivers in order to ensure that they will be more responsible and courteous while on the roads and reducing the high number of road accidents which has brought great loss to a country in each year are two other aims / objectives of a DIPs system.

DIPs are a mechanism already adopted in limited number of countries around the world mainly in developed countries. But countries like Malaysia, Singapore and South Africa have also adopted the DIPs along with the well-developed countries like USA, Canada and Australia. (Zhang, 2010)

Sri Lanka has also made their first attempts for a DIPs system with the regulations published under the Motor Traffic Act from the extra ordinary gazette numbered 1726/12 and dated 05.10.2011, where it has declared 22 offences that could be counted for DIPs.

The implementation of DIPs within Sri Lanka is still doubtful though the legal enforcement is already available, due to some practical issues. In the first place for a proper DIPs system and fully integrated and well-equipped monitoring system will be required in order to ensure the effectiveness and the transparency of the system. For such systems where used in other developed countries the infrastructure facilities requirement is very high and eventually it requires a fairly large initial capital investment where it is very hard to bare by a country like Sri Lanka. On the other hand, the high possibility of corruptions in the current Sri Lankan system is one of the major issues to be addressed in the implementation process as it will drastically affect the credibility of the system.

Hence the requirement of coming up a suitable Sri Lankan model which could address the above issues has become very vital in the sustainable implementation of DIPs in Sri Lanka.

## 1.2 Background Information

According to the statistics available there are extremely high number of road accidents reported in Sri Lanka causing high numbers of fatalities and loss of property. The following table shows the number of road accidents with respect to their seriousness on years 2013/2014 and 2014/2015.

**Table 1 Road Accidents with respect to their Seriousness 2013/14 and 2014/15**

Year	Fatal	Critical	Minor	Damages	Total	Fatalities
July 2013 to June 2014	1145	3580	6317	6847	17889	1232
July 2014 to June 2015	1336	3611	6974	6706	18612	1424

*Source: Ministry of Transport and Civil Aviation's web site*

Further it has recorded that the total number of deaths due to road accidents at the end of year 2015 had reached 2801. This gives a clear indication that how serious the problem is.

Main reasons behind the road accidents are,

- **External Factors**  
These are the factors that are not within the control of drivers. Road conditions, climate and condition of the vehicle are some examples for external factors. Even though the factors such as road conditions, condition of the vehicle could be controlled up to some extent by other means some other factors are not within the control of humans.
- **Accidents due to High Risk Motorists and Habitual offenders**  
These are the types of accidents that are caused solely due to the behavior of the drivers. As per the statistics 92% of the road accidents are caused due to the human behavior (Guruge, 2012). These accidents could be controlled and mitigated by correcting and controlling the behavior of the drivers.

Implementation of DIPs is one of the measures that could be taken for correcting and controlling the wrongful behavior of drivers.

### **1.3 Problem Identification**

Though Sri Lanka has taken initial steps to implement DIPs by publishing a regulation as described in section 1.1, it is still doubtful whether it will be possible to successfully implement the proposed system in a transparent and effective manner by winning the public trust while using the mostly manual offence detection and law enforcement practices with the minimal usage of technology. Hence this study focuses to discuss this issue "Implementation of the DIPS is not practically possible within the current circumstances" and try to identify possible measures that could be taken in order to make this a practical implementation.

### **1.4 Objectives**

The main objective of the study is to develop a model that suits the Sri Lankan context to implement DIPS that is practically viable with the required transparency, efficiency and accuracy. Eventually it is expected to reduce the number of high risk motorists and habitual offenders on roads as an outcome of the successful system implementation.

Another objective of this study is to limit the high capital requirement as in similar systems implemented around the world to an affordable limit. The most systems of this caliber are equipped with well-established infrastructure facilities and are integrated with all the relevant authorities while most of the processes are automated. In order to implement a similar system Sri Lanka will also require a huge capital investment which could be a big burden for country like Sri Lanka. Therefore, it is required to identify most economical ways of offence capturing and maintaining DIPs.

On other hand there is a concern that implementation of this system will lead to increase the corruption and malpractices already available in this sector. This concern is raised mainly due to the less transparent offence detection currently being used and the additional risk added with the possibility of DL being suspended with the implementation of the new system. Hence the last objective of this study is to mitigate



the space for possible corruptions in the operational level of the system to a minimum level.

### **1.5 Significance of the Study**

Driver Improvement Points or Demerit points systems are a successfully used mechanism for controlling the behavior of high risk motorists and habitual offenders throughout the world. Hence it is inevitable that decision to introduce DIPs to Sri Lanka is a good move. But as the problem statement says the issue here is whether it is practically possible to implement a successful DIPs system in Sri Lanka. But due to the high accident rates increasing year by year and the coarse behaviors of drivers experienced on roads, the need of implementing such a system is emphasized.

However, as mentioned in the problem statement, implementing the system under the present circumstances has become doubtful due to some possible draw backs in the current mechanism. At present the means of detection for most of the offences (Which are also subjected for DIPs) is merely based on the observations of police officers by sight only. There are few instances that blowing balloons or speed guns are used for some detection such as drunken driving and speeding. There were not many challenges over the system as there is no continuing effect over a road rule violation incident after the relevant fines have been imposed. Hence people rarely challenged even the wrongful convictions. Further the risk of being suspended was there over a court decision only. But with the inclusion of the points system saving points has become critical in order to save Driving licenses. People will tend to challenge the convictions in order to save their points. Hence more transparency over the detections with verifiable evidences has become requisite. On the other hand, these situations will eventually create a window for corruption. All these factors will cause to lose the public trust over the system and eventually the system could become a failure. Implementation of a fully-fledged evidence-based points system would be the answer for that. But the initial high capital requirement for such a system will become an obstacle in that case.

When consider all these factors the need for an economical, accurate and transparent model for implementing DIPs has become a requirement. Hence this study becomes very significant as the objectives of it will fulfill that requirement.

## **1.6 Theoretical Framework**

In definition Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists (Abend, 2008) (Swanson, 2013)

This is a practical type of research which tries to explore for ways of implementing a sustainable model for DIPs. The exploration mainly based on the observations, surveys and evaluations. The literature review was based on the details of similar systems implemented around the world and the present Sri Lankan scenario. Further a survey was used as a tool to get the public opinions on the proposed system and finally the data collected from various source were evaluated to come up with the desired model.

## **1.7 Research Rationale**

When considering the objectives of this study, the success and the existence of a public system will be determined by the public trust that it will create through its way of operation. Even for the DIPs to be successful it shall earn the public trust on the system. The approach for the study was with the basic assumption that the present proposed system as per the current regulation will fail to win the public trust due to the lack of transparency and accuracy and eventually will be unable to deliver the desired outcomes. Hence the study focuses study to look for the possible ways of implementing a system for DIPs which could eventually win the trust of the general public.

## **1.8 Thesis Outline**

The thesis consists of five chapters. The first chapter gives an introduction to the study and it covers the Overview of the thesis, Background Information, Problem identification, Thesis Objectives, Significance of the Study, Thesis Framework and Thesis Rationale.

Chapter two is Literature Review and it focus on the details of similar point systems implemented worldwide and the Sri Lankan approach towards implementation of a points system. Further it discusses the present Sri Lankan situation and possible factors that could affect the success of the system, if implemented as guided by the present regulation.

Chapter three discusses on the methodology and techniques used for the development of the thesis. It further discusses on concepts used for the development, data collection methods, measurement indicators used, target populations and samples etc. Chapter four on the data analysis on the data collected through the questionnaire prepared. It analyses the data responses gathered for every question in the questionnaire separately and identify the trends and data patterns that could be used as a guide to come up with the conclusions and recommendations in the next chapter.

Finally, chapter five is dedicated for the Conclusions and Recommendations. Here, results of the data analysis in chapter four and the findings of the Literature Review are used to develop a suitable model implementing DIPs in Sri Lankan scenario.

## **CHAPTER 02 - LITERATURE REVIEW**

### **2.1 Introduction**

This chapter outlines how different countries in the world have adopted the Driver Improvement/Demerit Points Systems and key features of those systems. Further it discusses the Sri Lankan approach for a Driver Improvement Points and the actions taken to the date. Moreover, the discussion takes in to account the present traffic situation of the country and some vital points that shall be taken in to account when developing a viable and efficient Driver Improvement points system for Sri Lanka.

### **2.2 Points Systems World Wide**

There are many countries in the world who have adopted Driver Improvement / Demerit Points Systems successfully. Most of them are well developed countries. But there are some developing countries as well among the practitioners of these points systems. Developed countries such as USA, United Kingdom, Australia, most countries in the European Union, New Zealand and Canada have already implemented the points system for the Driver's License Holders. Moreover, some countries in Asia such as Singapore, Japan, Malaysia and Hong Kong also have implemented Driver Improvement / Demerit Points Systems successfully. Some of those systems are described as follows.

### **2.3 Driver Improvement Points System of Singapore**

#### **2.3.1 Introduction**

Singapore introduced the Driver Improvement Points System (DIPS) was on 1 March 1983 to its citizens (Singapore Police Force, 2015). The main design objectives of the system were to identify and rehabilitate errant drivers through a system of rewards and punishments. Further it aimed to encourage the errant motorists to improve their driving behaviors on the roads with incentives to expunge their demerit points and previous suspension record as well as remission of suspension period.

## **2.3.2 Key Features of the DIP System: Suspension of Driving License**

### **2.3.2.1 New or Probationary Motorists**

For a new motorist who is under one-year probation from the date of grant of his driving license, his/her new driving license will be revoked and become invalid when he/she accumulates 13 or more demerit points during his/her probationary period. The license holder will have to retake all the necessary driving tests (theory and practical) to obtain a license to drive again.

### **2.3.2.2 Non-Probationary Motorists**

For a motorist who has no previous suspension record and if he/she has accumulated 24 or more demerit points within 24 consecutive months, his/her driving license will become liable for the 1st suspension of 12 weeks. And in contrast for a motorist who has previous suspension records with Traffic Police, if he/she accumulated 12 or more demerit points within 12 consecutive months, his/her driving license will become liable for the subsequent suspension.

The suspension period will differ for subsequent suspensions after 1st suspension and they are as follows:

2nd suspension: 24 weeks

3rd suspension: 1 year

4th suspension: 2 years and

5th suspension (onwards): 3 years.

In situations where the suspension period lasts for a more than one year's period, the driving license will be revoked and become invalid. The license holder will have to retake all the necessary driving tests (theory and practical) to obtain a license to drive/ride again.

Motorists who are under the 1st and 2nd suspensions will be offered a retraining course to correct their driving behaviors. If they take and pass the retraining course, their suspension period will be given a remission. There is no offer of retraining course and remission for 3rd and subsequent suspensions.

During the suspension period, the driving licenses must be surrendered to Traffic Police. For 1st and 2nd suspensions, the driving licenses will be returned to the motorists upon the expiry of the suspension period.

### **2.3.3 Multiple Notices of Accumulated Points**

Motorists will be notified and updated of their demerit point status after he/she has obtained demerit points for a road rule violation through a letter. The intention of this letter is to pre-warn the license holder for improving his/her driving behavior and encourage him/her to remain offence-free for 12 months for his/her demerit points to be expunged. Otherwise he/she may face the consequences of becoming liable for suspension.

### **2.3.4 Incentives for Good Driving Behavior**

Apart from the demerits for bad driving behaviors there are incentives for the good driving behaviors as well. A license holder who maintains a 12-month period free of scheduled offences from the date of last scheduled offence committed will have all his/her previous demerit points removed from his/her record. And a license holder who maintains a 24-month period free of scheduled offences from the date of expiry of last suspension will also have all his/her previous suspension(s) removed from his/her record, i.e. he will be treated similar to a driver with no previous suspension record. Further, motorists with a clean driving record for a continuous period of three years will enjoy a discount over and above the usual No-Claim Bonus when they renew their insurance policy with participating insurance companies. They must also not have made any claims on their vehicles' insurance for the past three years.

### **2.3.5 Electronics Driver Data Information & Enquiry System (EDDIES)**

Facilities have been made available for the public to check on the driving license status and demerit points accumulated for a driver with the Electronic Driver Data Information & Enquiry System (EDDIES).

### **2.3.6 List of Scheduled Offences under DIPS**

Under the DIPS, demerit points are given from a list of scheduled offences under the Road Traffic (DIPs) Rules. There are 52 offences, which are subjected for demerit points when committed, declared in the Singaporean Driver Improvement Points

System. Points offered for an offence varies from 3 to 24. Further the number offered points for some offences will be decided upon the severity of the offence. For example, for speeding number of points offered could vary from 4 to 24 depending on the level of exceeding.

## **2.4 Demerit Points System in North West Territories**

### **2.4.1 Introduction**

In North West Territories, Canada, the Driver's Demerit Point Regulation under the Motor Vehicles Act came into effect on September 1, 1993. The main design objective of the Demerit Point System (Northwest Territories Transportation, 2007) was to identify persistent traffic violators and protect pedestrians and careful motorists from drivers who abuse the privilege of operating motor vehicles. The Demerit Point System aimed at driver improvement rather than penalization. Drivers who consistently accumulate points can have their driving privileges suspended. Further, there are different demerit points systems introduced in different territories and provinces in Canada. When a motorist transfers in or out of any North American jurisdiction his/her driver's record is transferred with them. In this system also, Demerit points will be recorded on the driver's record upon conviction of a driving related offence and will remain on the driver's record for 24 months.

### **2.4.2 Key Features of the DIP System**

The Registrar of Motor Vehicles is the responsible authority to mark demerit points to one's driving record as the Registrar becomes aware of the offences.

### **2.4.3 Multiple Notices of Accumulated Points**

There will be multiple notices for the driving license holder from Registrar of Motor Vehicles before the suspension of the Driver's License.

- At the accumulation of eight (8) demerit points ó The Registrar will notify the driving license holder by registered mail of the points accumulated.
- At the accumulation of 12 or more demerit points - The driving license holder will be notified by registered mail of the number of points accumulated on his/her driver's record. Through this letter the driving license holder is advised to arrange a telephone or personal interview with a Driver Examiner or a

driver review officer. The license holder must attend this interview. If he/she fails to attend the interview when required to do so, the driver's license will immediately be suspended until such time as the interview is held.

- At the accumulation of 15 demerit points ó At this point the driver's license is suspended for a period of 30 days and will remain suspended until a reinstatement fee has been paid. Further the Registrar may demand to surrender the license for the period of the suspension. At the end of the suspension period, the number of points on the driver's record is reduced.
- Demerit points may be reduced once in a two-year period, if a driver successfully completes an approved driver improvement course.

The Driver Improvement course will not affect the points remaining after serving a demerit point suspension. If the driver reaches a level of 15 points a second time, the driver's license will be cancelled for a minimum period of 30 days to a maximum period of two years.

#### **2.4.4 Enquiries on the Driver's License Status**

A driver record could be obtained from any issuing agency in the Northwest Territories. It will list all violations, suspensions or prohibitions issued within a three-year period and demerit point accumulations. The points accumulated will be expired after a 24 months period.

#### **2.4.5 List of Scheduled Offences under Demerit Points System**

Under the demerits system, demerit points are given from a list of scheduled offences under the motor traffic rules. There are 65 offences, which are subjected for demerit points when committed, declared in the North West Territory Demerits Points System. Points offered for an offence varies from minimum 1 to maximum of 6.

#### **2.5 Australian Demerit Points System**

Australia is another country who has adopted the demerit points system (Department of Transport, 2016). However, different Australian states have incorporated point schemes different to each other by some of the features. But this does not affect the system integrity at all. Demerit points accumulated interstate will still be recorded



against a driver's record. Hence a driver who is driving interstate will not be free to break all the road rules without penalty.

### **2.5.1 Accumulating Points**

Australian system is a point accumulating system. Hence a driver who has not committed any offences will not have any points. Points will be accumulated based on the number of road rule violations.

There are different threshold numbers of Demerit points for different driver categories such as,

- Unrestricted license ó 13 points
- Professional drivers ó 14 points
- Learner license ó 4 points

These thresholds could vary from state to state.

### **2.5.2 Suspension and Refusal**

If a driver accumulates or exceeds the threshold points within three years period results in license suspension or refusal. This will be informed to the license holder through a Notice of Suspension or Refusal. For unrestricted license holders, the period of suspension depends on the number of points accumulated:

- 13 to 15 points - three months
- 16 to 19 points - four months
- 20 or more points - five months

Further drivers could be suspended or disqualified for serious speeding offences.

- Driving more than 45 km/h above the speed limit ó six months
- Driving more than 30 km/h but not more than 45 km/h above the speed limit ó three months

### **2.5.3 Refusal of a License**

Authorities could refuse to renew one's license if he/she has exceeded the demerit points threshold or have committed a serious speeding offence. The periods that a license may be refused are the same as those that apply for suspensions.

#### **2.5.4 Good Behavior Period**

Unrestricted license holders who receive a Notice of Suspension due to the accumulation of demerit points can apply for a 12-month good behavior period instead of serving the suspension.

A driver who chooses a good behavior period must make it before the suspension begins. If the election is not made before the required date, then the suspension will be enforced.

#### **2.5.5 Appeals**

There is a right of appeal against the suspension or refusal of a learner or provisional license on the grounds of demerit points. There is no right of appeal for unrestricted license holders.

#### **2.5.6 Double Demerit Points**

There is a concept of double demerit points which apply for speeding, seatbelt, motorcycle helmet and mobile phone offences during all holiday periods such as long weekends, Christmas, New Year and Easter.

#### **2.5.7 School Zones**

Certain driving and parking offences attract an additional demerit point if committed in an operating school zone. Double demerit points can also apply when school zones are in operation during holiday periods. If a driver commits a speed, seatbelt or helmet offence during this combined period, the demerit point value applying for the school zone will be doubled.

#### **2.5.8 Demerit Point Offences that are Heard in Court**

If the court rules that a person is not guilty of a demerit point offence, it is the end of the matter. There are no fines to pay or demerit points to be recorded.

#### **2.5.9 Demerit Points Age with Time**

Any demerit points accumulated will not be deleted. They will remain on driver's driving record along with the offences they relate to. However, any demerit points that are more than 40 months old will not be counted for demerit point suspension.

## **2.6 Malaysian Demerit Points System**

Malaysia also has introduced Demerit Points System (JPJlink.com, 2016) under the Motor Vehicles (Demerit Points) Rules 1997. The System is known as KEJARA (Sistem Merit Kesalahan Jalan Raya).

### **2.6.1 Objectives of KEJARA**

KEJARA has following main objectives.

- To reduce road accidents rate
- To increase driver's awareness on road safety
- To ensure that all drivers obey the road regulations
- To create drivers who are well disciplined, responsible and tolerant while on roads
- To take actions against drivers who have misconducts on roads.

There are 18 offences identified under KEJARA subjected to demerits.

### **2.6.2 Penalties Given under KEJARA**

The penalties under KEJARA are as follows. As in most of the systems in KEJARA also accumulation of points over a threshold limit will cause for suspension of the Driving License. However, there are some differences. The penalties are,

1. Accumulation of 15 or more points for the First time ó suspension of driver's license for no longer than 6 months
2. Accumulation of 15 or more points for the Second time ó suspension of driver's license for no longer than 12 months
3. Accumulation of 15 or more points for the third time within 05 years ó suspension of driver's license for no longer than 6 months, and revocation of driver's license

For Provisional Driving Licenses the license is revoked after accumulation of 10 demerit points. When a driver's DL license is suspended, he/she will not be allowed to drive or attempt to acquire any kind of driver's license, such as a learner's permit, within the duration of the suspension. Whereas for the holder of a P license who has

the license suspended, he or she will not be allowed to drive or attempt to acquire any kind of driver's license for a duration of twelve months beginning from the date the initial license is surrendered. Doing so will result in a heavy fine.

### **2.6.3 Waving Off Demerits**

For DL holders who acquire less than 15 demerit points and do not commit any of the listed offences for a period of 24 consecutive months, 7 demerit points will be deducted from them.

## **2.7 Japanese Demerit Points System**

Japan has a strict demerit points system. In Japan (Driver's License Division, 2016) also points are awarded for road rule violations and upon accumulating certain thresholds the license is revoked or suspended. There are two types of offence categories identified in Japan.

- Specific Traffic Offences.
- Common/General Traffic Offences.

First kind, Specific Traffic Offences is more serious and carries a larger number of points. Demerit points remain on an individual's license for three years. Revoking or suspending will be carried out as follows:

- Upon Accumulation of 6 points the driving license is suspended for 30 days. The period of suspension can be reduced if the offender attends a lecture by the public safety commission
- Upon Accumulation of 15 points a driving license is revoked for 1 year. After the ban is lifted an individual may apply for a new license from scratch

There will be additional demerit points awarded if there are injuries or loss of property due to the road rule violation. Further the points will vary depending on the severity of the violation and the responsibility of the driver.

### **2.7.1 Period of Demerit Points**

The demerit points are awarded on the day a driver committed the offense or caused the traffic accident, and these will accumulate over a 03 years period.

If a driver doesn't commit a road rule violation or accident for a period of one year all the accumulated points will be removed.

### **2.7.2 Suspension or Revocation**

Depending on the drivers past record, period of revocation will be decided. If the driver has experienced number of suspensions during past 03 the period of revocation will also increase accordingly.

### **2.7.3 Opportunity to Defend**

If a driver is subjected for a license suspension for more than 90 days or a revocation due to accumulated demerit points, a hearing will be arranged by the Public Safety Committee or the Chief of Prefectural Police. The driver is given the chance to explain or provide any evidence in his /her favor.

### **2.7.4 Shortening the Period of Suspension**

Drivers are given the opportunity to attend a lecture course provided by the Public Safety Committee and shorten their suspension period.

## **2.8 South African Demerit Points System**

Demerit Points were initially signed into law in September 1998 as part of the Administrative Adjudication of Road Traffic Offences (Aarto) Act, Act 46 of 1998. This system was based on those used in Australia and the United Kingdom, with necessary changes to reach local requirements (Automobile Association, South Africa, 2016).

However, the implementation of the system delayed for several years. One of the main reasons is the need for a feasibility study and an assessment of technological requirements, law enforcement criteria and an analysis of human resources needed to ensure the successful implementation of the system.

The Administrative Adjudication of Road Traffic Offences (Aarto) system will be implemented and managed by the Road Traffic Infringement Agency (RTIA).

### **2.8.1 Key Features of the DIPs System**

The key features of the South African Demerit system are,

- Points will be allocated on the accumulation basis and each driver will start out with zero points (irrespective of the number of classes of vehicle licenses held)
- Points are allocated according to infringements or offences committed (there are different values for different infringements and offences)
- Points are incurred (allocated) on the date a penalty (fine) is paid or when the person is convicted of the offence (as the case may be)
- Operators receive points separately from their drivers (i.e. a transport company receives points allocated to the operators permit)
- When a license holder reaches 13 points and more, the license (and / or operator card) is suspended with effect from 32 days after the maximum points (12) have been reached
- The suspension period is calculated in months equal to the number of points exceeding 12, multiplied by three (or such number as may be prescribed by the Minister of Transport)
- The number of points (demerits) added will depend on the severity of the offence
- The driver / operator may apply for the return of the license on expiry of the suspension (disqualification) period
- A driver / operator who is disqualified for the third time will permanently lose the license / operator card and will have to reapply for testing and issue (as if a first-time license / operator applicant) after expiry of the disqualification period
- Demerit points will be reduced (for all persons / operators) at a flat rate of one point per every three months (or as otherwise prescribed), except in the case where evidence points to the fact that the process has been deliberately delayed to obtain a reduction in points.

## **2.9 Key Features of Other Jurisdictions Which Have Implemented Points Systems Successfully**

Almost all the Driver Improvement / Demerit Points systems discussed above and many other successful systems have some features in common. These common features are discussed as follows.

### **2.9.1 High Quality Road Networks**

The condition of the road network available has a high impact on the driving patterns. A high-quality road network will help the drivers to maintain a healthy and error free driving pattern. High Quality Road Networks are one of one of the key feature in common in most of the countries who have adopted the points system successfully.

### **2.9.2 Descriptive and Adequate Road Traffic Signs**

Road signs and road side information does a vital part in guiding and instructing drivers to obey the road rules and maintain a healthy driving pattern. The availability and the clarity of road signs and information is an essential requirement to achieve the desired objectives of having road signs.

### **2.9.3 Modern Vehicle Detection Systems**

Transparency, reliability and accuracy are one of the most important aspects in capturing road rule violations. Hence use of technology is a must for a fare detection of a violation. The use of fixed cameras, GPS systems and mobile cameras are few examples for the modern methods of vehicle detection used by most of the countries (Singh & Goel, 2016).

### **2.9.4 Fair Chance to Challenge the Traffic Detections with Their Own Evidences**

The law enforcing authorities has the responsibility to prove that the person has committed road rule violation and is guilty. In addition, most systems implemented has created the opportunity for accuse to challenge the conviction if he/she is innocent with their own evidences. It is the basic assumption of lawsuits that, a person is actually innocent until proven guilty and the authority must produce enough evidence to prove he/she is guilty.

## **2.10 Detection Methods are Being Used by Developed Countries**

There are many number of road rule violation detection methods used by the modern world. Few of them are discussed as follows.

### **2.10.1 Fixed Cameras**

These cameras are mounted beside or over a road to detect road rule violations, including speeding and red-light violations. A still image or a small video clip of the violation is captured and stored in a Traffic Violations Recorder (TVR). These captures may be connected in to automated ticketing system or will be processed centrally and will be punished for any proven road rule violation with the evidence available.

### **2.10.2 Mobile Cameras**

Fixed cameras have a limited monitoring area, which is one of their drawbacks. Mobile cameras could be used as one of the options to come up with a solution. These cameras could be installed in an enforcement vehicle where they can follow the moving targets and, in this way, greatly extend the monitoring areas. However, for mobile cameras, many detection methods do not perform well because the background is rapidly changing and the target is moving fast as well.

### **2.10.3 In-Car Cameras**

These cameras could also be referred as mobile cameras. But In car cameras are most often mounted on a dash board or a windscreen of a car/ vehicle. These cameras are also great for providing evidence in case of an accident or insurance dispute. They are commonly used as personal cameras but evidence captured is accepted by the law in most of the countries.

### **2.10.4 Wearable Cameras**

This is a type of camera that could be worn as a part of the uniform of a law enforcing officer and could be considered as a low-cost detection method as fixed cameras and mobile cameras need well-equipped systems behind them in the law enforcement process.



### **2.10.5 Global Positioning System (GPS) Systems**

GPS reveals information about the location, speed, and direction of a targeted object. Hence it has becoming a widely used method for detecting road rule violations related to speeding, violating tolls and parking rules etc. by most advanced systems for road rule violation detection. (Singh & Goel, 2016)

### **2.10.6 Police Patrols, Associated with above Technological Equipment**

This is the most traditional method used and still in use for road rule violation detection. Even in Sri Lanka law enforcement authorities use this method for detecting road rule violations. However, over the years police patrols has incorporated with many supportive devices with the technical advancements resulting the improved accuracy and transparency of the detections. GPS devices, in car cameras, speed detectors and electronic breathalyzers are some of the advanced technical equipment used in those improved patrols. (Al-Shabibi, Jayaraman, & Vrindavanam, 2014)

## **2.11 DIPs in Sri Lanka**

Sri Lanka's attempts in implementing Driver Improvement Points were initialized with the regulations published under the Motor Traffic Act from the extra ordinary gazette numbered 1726/12 and dated 05.10.2011. As per the gazette 22 offences have been declared as subjected for DIPs. However, road rule violations related to Drunken Driving and Fatal Accidents has excluded from these offences.

### **2.11.1 Key Features of the System Proposed**

- The Commissioner General of Motor Traffic has the authority to mark driver improvement points against a Driving License of a License holder (Ministry of Transport, 2011).
- When a Police officer finds a Driving License Holder is guilty for an offence declared in the table 2.1 he/she shall inform it to the Commissioner General of Motor Traffic through the format described in the regulation (Schedule II) by the 10<sup>th</sup> date of every month.
- When a Magistrate Court finds a Driving License Holder is guilty for an offence declared in the table 2.1 the Registrar of Courts shall inform it to the

Commissioner General of Motor Traffic through the format described in the regulation (Schedule III) by the 10<sup>th</sup> date of every month.

- Upon the receipt of a notice either through schedule II or III the Commissioner General of Motor Traffic shall inform the relevant Driving License holder/s to be present on a given day at his office in order to mark DIPs against the said Driving License.
- If a holder of a regular DL accumulates more than 18 DI points and less than 24 points within a period of 24 months, the Commissioner General of Motor Traffic shall send the DL holder a warning in writing.
- If a holder of a regular DL accumulates more than 24 DI points within a period of 24 months the DL will be suspended for a period of one year and the Commissioner General of Motor Traffic shall inform the DL holder to surrender the immediately.
- If the holder of a Driving License exceeds every additional four driver improvement points after accumulating twenty-four driver improvement points, such holder of a Driving License shall be liable to the suspension of one month in addition to the twelve months suspension.
- The Driving License Holders whose DL is under suspension could request for a remission of the suspension period after successfully completing a training program conducted by an authorized entity. This request shall be made to the entity where the suspension order has been issued.

**Table 2 Offences subjected to DIPs as per the Regulation**

		Points
<b>Reckless Driving and Accidents</b>		
<b>1</b>	Failing to take such action on a highway to avoid an accident	6
<b>2</b>	Driving a motor vehicle on a highway recklessly or in a dangerous manner or at a dangerous speed	8
<b>3</b>	Driving a motor vehicle on a highway negligently or without reasonable consideration for other persons using the highway	8
<b>4</b>	Failing to stop after an accident on a highway and to furnish relevant information	10
<b>5</b>	Failing to report an accident forthwith to the nearest police station	10
<b>Speeding</b>		
<b>6</b>	Exceeding the prescribed speed limits on a highway	6

<b>Road Rules</b>		
7	Failing to keep left or nearside of the road	2
8	Driving so as to overtake other traffic without a clear view of the road ahead	6
9	Failing to overtake other traffic on the right off side of such other traffic	4
10	Failing to give way at intersections to vehicles coming from the right off side	4
11	Reversing or permitting the vehicle to travel backwards on a highway for a longer distance or without reasonable purpose	4
12	Failing to comply with prohibitory, restrictive, mandatory or Traffic (Signs) Regulations, priority signs	6
<b>Signaling</b>		
13	Failing to comply with oral directions or hand signals given by a police officer or a traffic warden	6
<b>Pollution</b>		
14	Driving a motor vehicle which has emissions above the prescribed standards	6
15	Using or permitting to use amplifying equipment in a vehicle with a volume of sound above the prescribed standards	6
16	Using a vehicle, the noise of the engine and the horn of which exceed the prescribed standards	6
<b>Construction and Use of Vehicles</b>		
17	Driving a vehicle, the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road	10
<b>Safety</b>		
18	Driver failing to wear a seat belt or failing to ensure the front seat passenger wear a seat belt	3
19	Overtaking at, or approaching a corner or bend, hill, bridge, Traffic (Highway Code) junction, pedestrian crossing, no overtaking area township Regulations, 1987 (Gazette with heavy pedestrian traffic, narrow section of a road or Extraordinary, No. 486/8 of crossing single or double white lines	4
20	Failing to stop before the give way line of a zebra crossing Traffic (Highway Code) while a pedestrian is at a pedestrian crossing	6
21	Rider of a motor cycle carrying more than one person and failing to wear a safety helmet or carrying a person without a safety helmet	4
22	Using hand held communication equipment while driving	4

### 2.11.2 Sri Lanka's Present Position

Before the implementation of the DIPs the present position of the Sri Lanka's road network, vehicle fleet, regulatory mechanism and the driver behaviors shall be taken in to consideration. This could be discussed under following categories.

- Heavy traffic volume with numerous number of small vehicles

All the main cities experience heavy traffic volumes due to the higher number of private vehicles in use and on roads. The vehicle fleet largely comprise with the various types of small vehicles such as Motorcycles, Three Wheelers, Mini Cars and Mini Trucks which eventually accounts for more than 70% (Department of Motor Traffic, 2015) of the total vehicle population. Further average ages of the vehicles are normally at higher numbers and there is no proper deregistration process for the vehicles at the moment.

- Inadequate road network, especially in urban and suburban areas

The present road network of the island is observed to be inadequate with the existing vehicle fleet. Almost all the main cities are congested with heavy traffic volumes. Even though the most roads connecting Colombo and suburbs have developed as four lane or six lane roads during the recent years, still higher congestion rates could be observed. All other A or B class roads through the country side are two lane roads. Especially the road networks in hill country are comparatively less in width and also with the shoulder size. As a whole the road network in Sri Lanka is not adequate to its existing vehicle fleet.

- Inadequate traffic sign boards

Sri Lanka has been following Road signs and traffic signals in line with the international standards. However, the availability of the road signs and roadside information is somewhat lacking, when compared to the situation in developed countries. Even though there are road signs and traffic signals in A and B class roads they could be rarely seen in C and D class roads.

- Weak detection system for traffic offences

Traffic offence detection in Sri Lanka is mainly based on manual observation of police officers by roads. Even though there are some instances of utilizing modern technology in traffic offence detection, such as CCTV network within the Colombo city limits majority of the detections are based on the naked eye

observations. Hence the transparency and the accuracy of the detection are on cause.

- Poor ethics of the drivers (Certain categories)

Driving ethics are on question with the existing highly congested situations especially on urban environments. Mostly, some driver categories such as Motorcyclists, Three-Wheeler Drivers and drivers in Public transportation tend to display unethical behaviors casing unlawful driving patterns and road rule violations in overcoming these situations.

- Old/Low quality majority of the vehicle fleet

The majority of the vehicle fleet comprise of vehicles manufactured in India where most of those models comply with the required safety standards. Not only for the Motor Cycles and Three Wheelers, many Motor Car models are not complying with those standards. On the other hand those vehicles which are from Japanese and European origins are comparatively older against the rest.

- Cumbersome courts procedures

Apart from those inaccurate and traditional detection techniques used for traffic offences, the prosecutes have to go through a lengthy and cumbersome court procedures before the conviction.





**Figure 1 Some Examples for Present Sri Lankan Situation**

### **2.11.3 Traditional Detection Methods that will be Used for DIPS in Sri Lanka**

Traffic offence detection in Sri Lanka is mainly based on some traditional methods. Even if the DIPS are implemented a Driving License Holder will be judged on the detections made through these methods. The most common traditional methods used in Sri Lanka could be discussed as follows.

- Manual (Blowing Balloons) breathalyzers for Alcohol offences

This is a most common method in use for detecting alcohol related traffic offences. In this test it is required to blow up a balloon in one continuous breath until it is full, then the air in the balloon is released into a glass tube. The tube is filled with bands of yellow crystals. The bands in the tube change colors (from yellow to green), depending on the alcohol content in the air.

- Handheld speed detectors

These are normally known as speed guns using radar and are used to measure the speed of a moving vehicle. In the Sri Lankan scenario mostly, the handheld detectors are used. One possible inaccuracy even with the speed guns is accuracy of aiming correctly at the object will have a direct impact on the accuracy of results.

- Unrecorded detections, performed by sight

Apart from the speeding and drink & drive offences all other traffic offences are detected mostly by sight. For those traffic incidents, it will be a sight in a moment unrecorded which need not to be proven in the courts with supporting evidences. Instead the suspect has to prove that he is not guilty.

#### **2.11.4 Some Concerns on the Offences Identified for Driver Improvement Points**

As discussed earlier there are 22 offences that have been identified as offences which are subjected for the DIPs. However, when closely look at these offences there are some offences that are omitted from this selection while there are some others that the inclusion of those in this selection is questionable. Here it is going to discuss on each with the supporting literature available.

There are 04 offences identified under the Pollution and Construction & use of vehicles subjected to DIPs. Out of those, inclusion of the offences "Driving a motor vehicle which has emissions above the prescribed standards" and "Driving a vehicle the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road" looks to be bit confusing.

When it comes to the offence "Driving a motor vehicle which has emissions above the prescribed standards", Sri Lanka maintains comparatively high emission standards and fuel quality is one of the main deciding factors of the emission levels apart from some other factors. But at the same time when comparing the fuel quality Sri Lanka maintains a fairly low fuel quality compared to most of the developed countries in the world.

**Table 3 Emission Standards in different countries in South East Asia**

Country	Effective From	Vehicle Type	CO	HC	Smoke Density (K)
<b>India</b>	2000	2- and 4-stroke	2.0 g/km	-	-
	2005	2- and 4-stroke	1.5 g/km	-	-
	2005	3-wheel gas	2.25 g/km	-	-
	2005	3-wheel diesel	1.0 g/km	-	-
<b>Sri Lanka</b>	2016	Motor Bikes/ Three wheelers	4.0 % v/v	6000ppm	-
		Other Petrol Vehicles	3.0 % v/v	1000ppm	-
		Diesel Vehicles	-	-	4
<b>China</b>		2- and 4-stroke	4.00%	6,000 ppm	-
	2004, January	2- and 4-stroke	3.00%	2,000 ppm	-
<b>Thailand</b>	2000	2- and 4-stroke	4.5 g/km	3.0 g/km	-
	2003, July	2- and 4-stroke	3.5 g/km	-	-
	2004, July	2- and 4-stroke	3.5 g/km	-	-
<b>Vietnam</b>	2004	2- and 4-stroke	4.5 g/km	-	-
	2007	2- and 4-stroke	3.5 g/km	-	-
	2007	2-wheel Moped	1.0 g/km	-	-
	2007	3- and 4-wheel	3.5 g/km	-	-

Source: Cleanco Lanka Limited's web site

As per the following table (Table 4) it could be clearly observed that most of the developed countries maintain their Sulfur levels in diesel and petrol between 10-50 parts per million eventually resulting high quality fuel.



**Table 4 Sulphur levels in Petrol and Diesel in countries worldwide**

Nationwide Diesel Sulfur Limits (parts per million)

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brazil*	3500	2000				1800-500 transition				500						
China*	2000						350			50				10		
EU-27	50			10												
India*	500				350											
Japan	50		10													
Russia	500							350		50	10					
Thailand	150						50									
USA	500	15														
South Africa	3000	500 (50 in some markets)												10		

Nationwide Gasoline Sulfur Limits (parts per million)

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brazil	1000									50						
China*	500					150				50				10		
EU-27	50			10												
India*	500				150											
Japan	50			10												
Russia	500							150		50	10					
Thailand	150						50									
USA	30/90/300	30 (avg) / 80 (cap)												10		
South Africa	1000	500												10		

Source: <http://transportpolicy.net>

On the other hand, when it is compared with the Sri Lankan specifications (Table 5) of fuel the Sulphur levels could go up to 3000 parts per million for diesel and 1000 parts per million for petrol. This is comparatively a low-quality level.

**Table 5 Sulphur levels in Sri Lankan fuel**

Product	Colour (Visual)	Density (@ 15 <sup>0</sup> c Kg/M <sup>3</sup> )	Sulphur Content (%Mass)	Lead Content (Ppm)	Research Octane Number
<b>Aviation Gasolene</b>	Blue	Report	Max 0.05	Max 560	
<b>Gasolene 90</b>	Colourless	725 - 785	Max 0.1	Max 13	Min 90
<b>Gasolene 95</b>	Colourless	725 - 785	Max 0.05	Max 13	Min 95
<b>Jet A-1</b>	Colourless	775 - 840	Max 0.3		
<b>Lanka Super Diesel</b>	Amber	Max 860	Max 0.05		
<b>Lanka Auto Diesel</b>	Amber	820 - 860	Max 0.3		

Source: Ceylon Petroleum Storage Terminals Limited's website

Therefore in Sri Lanka, emission level of a vehicle could have a direct impact from the quality of fuel use. Hence it is doubtful whether the marking of DIPs against a driver is reasonable or not for an emission related violation.

Further, when considering the offence 'Driving a vehicle the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road' marking DIPs against that is again questionable. The concern is when it comes to the professional drivers; the driver who drove their own vehicle or a vehicle owned by another person or an organization as their profession. Hence in a case of the driver does not own the vehicle will it be justifiable to mark points against him/her? or will the driver be in a position to refuse driving a vehicle in a condition that is described in the offence description, without affecting his/her livelihood? Furthermore, there are some other ways of handling a vehicle in that condition such as roadworthiness tests etc. Hence inclusion of this offence under DIPs is also doubtful.

On the other hand, the offences such as drunken driving and traffic light offences are not included under the offences identified for DIPs. For drunken driving incidents if proven, a magistrate of courts has powers either to suspend or even to cancel the driving license of that driving license holder depending on the seriousness of the offence, under the clause 216 of the Motor Traffic Act. However, the period of suspension which will be not exceeding more than 12 months will be decided upon the magistrate's discretion. This creates a possibility for unfair suspension periods. A person may be suspended for few months period for a serious offence like drunken driving, while another one who has committed a minor offence and accumulated 24 DIPs may get suspended for a 12 months period. On the other hand, drunken driving is one of the main reasons for road accidents in Sri Lanka. (Guruge, 2012)

Furthermore, traffic light offences are also excluded from the list. Though the availability of traffic lights in Sri Lanka is limited for few main cities, traffic light related offences comprise a significant portion of the total road rule violations. Moreover, due to the availability of Police CCTV system in the cities like Colombo the possibility of detecting these offences with evidence is fairly high.

Therefore, considering all these facts the not inclusion of these two offences under DIPs is questionable.

### **2.11.5 Institutional Set Up Arranged for the Implementation of the Present System**

Department of Motor Traffic (DMT) and Department of Police (DOP) are the two institutions mainly responsible for the implementation of DIPs. Each department has different roles in implementing the system.

#### **2.11.5.1 Role of the Department of Police (DOP)**

The main roles of the Department of Police under the present system are,

- Detect offences  
Detecting the road rule violations and make necessary arrangements for law enforcement through imposing fines or referring to courts
- Reporting  
Report offences that are subjected for DIPs to the DMT to mark points through a monthly report as required by the regulation.

#### **2.11.5.2 Role of the Department of Motor Traffic**

Department of Motor Traffic has following roles under the implementation of the present system.

- Imposing points on DLs under the provisions of Motor Traffic Act and keeping updated records of the points.
- Sending time to time notifications to the DLHs on their status of DIPs as required by the regulation.
- Recalling DLs which are under suspension as per the requirements in the regulation.

However, DMT could be answerable to the drivers for marking points on their DLs and will have to explain on what grounds points have been marked. The department won't be in a strong position in such a situation as the present gazette procedure does not provide any information on the officer who performed the detection at the site, record on witnesses or available evidences.

## 2.12 New Developing Trends

Public awareness on road rule violations, bad road ethics and also wrongful behaviors of officers from law enforcing entities is observed to be increasing. Social media is widely used as a medium for discussing these matters. This is a new trend developing in Sri Lanka. Videos or photographs of the incident are frequently uploaded to social media people used to publish their opinions or criticisms of the incidents. This could be identified as good trend that is developing within the country as it helps to build a public criticism on the road rule violations and unlawful & unethical behaviors on roads. Eventually it conveys the message that "you are being watched" to the habitual offenders and officers with wrongful behaviors and this will help to gain some control over these incidents as the risk of being exposed is sensed to them.

The face book page named "Sri Lanka Traffic Violations" is a one good example for this trend. Everyday number of videos and photos on road rule violations and wrongful behaviors are uploaded to this page there are around 115000 followers from different social layers, which create a good forum for discuss on these types of issues. On the other hand, it automatically creates an evidence base on certain road rule violations.



Figure 2 Sri Lanka Traffic Violations Face Book Page

## **CHAPTER 03 – METHODOLOGY**

### **3.1 Overview**

The process of Research Methodology comprises of three stages. They are a comprehensive literature review on similar systems implemented worldwide, data collection to get the public opinion through a questionnaire namely: Data Collection, Sampling and Data Analysis Under this chapter the methodology used for collecting relevant data and information, the population, sample selection and size, questionnaire and the other data collection methods used for the study is discussed.

### **3.2 Data Collection**

The data collection methods used for the collection of necessary data and information are listed as follows.

#### **3.2.1 Questionnaire**

This is a widely used method in collecting information and considered as a better method of collecting factual data for a study. The well-designed questionnaires are highly structured to allow same type of information to be collected from a large number of people in the same way and the data to be analyzed quantitatively and systematically. A carefully planned questionnaire should maximize the answering proportion/response rate and should help to obtain accurate and relevant information. There are two types of questionnaires, forced - choice and open format. In this study a mixed format was used where the target group has the freedom to express their views on the proposed points system and the rest should be answered using some sort of limited choices.

The questionnaire prepared comprised with 12 questions with multiple choices of answers was used. Apart from those questions the participants were given the opportunity to express their own views on the proposed system as a comment. Further, the questionnaire was prepared in two formats, an online version using Google Forms and a printed version of the same.

### **3.2.2 Statistical Data Available/ Secondary Data**

Statistical data available at Department of motor Traffic on Vehicle Population and the statistical data available at Department of Police on road accidents and road rule violations were used.

### **3.3 Target Population**

The target population for the opinion survey was the road users as passengers/Road Users and as well as vehicle drivers. Among the target population 03 significant groups were identified. They are Private Vehicle Users, Professional Drivers and Passengers/ Road Users

### **3.4 Sample**

From the target population a sample of 185 participants was selected and the sample consisted of 77 Private Vehicle Users, 87 Professional Drivers and 21 Passengers/ Road Users.

### **3.5 Data Analysis Methodology**

The collected data were analyzed on individual basis where each question used in the questionnaire was given a separate attention and analyzed separately. Since each question targets a different aspect of the points system the responses were analyzed question by question. Mainly a comparison was carried out on the basis of percentages. The data presentation was done in the form of graphs and charts.

### **3.6 Develop the Model**

The findings of the literature review as well as the analytical results of the questionnaire used were combined to mitigate impacts of the identified shortcomings in the existing model and the proposed model was developed. The model mainly takes in to account the practical aspects on implementing a successful and accurate Driver Improvement Points system within the Sri Lankan context without any huge investments for infrastructure development.

## **CHAPTER 04 - DATA ANALYSIS & DISCUSSION**

Introducing and implementing a completely new system will have either positive or negative impacts on the society. Hence there required to be some assessment on the possible impacts and their outcomes in order to carry out a successful implementation. In this analysis the main idea was to look in to the public opinions on the proposed system and incorporate them in to the proposed model for the successful implementation of Driver Improvement Points System.

The summary of the survey results from the responses of 185 participants could be tabulated as follows.

**Table 6 Summary of Reponses for Questions 1,2,3,4,5,9,10,11 and 12**

	User Category	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Q1	Private Vehicle User	45	26	5	1	0
	Professional Driver	28	30	27	0	2
	Passenger/Road User	15	5	1	0	0
Q2	Private Vehicle User	10	37	18	10	2
	Professional Driver	14	29	36	8	0
	Passenger/Road User	1	10	8	2	0
Q3	Private Vehicle User	5	10	21	30	11
	Professional Driver	0	7	29	34	17
	Passenger/Road User	1	3	6	6	5
Q4	Private Vehicle User	16	21	28	11	1
	Professional Driver	24	27	21	11	4
	Passenger/Road User	5	5	9	2	0
Q5	Private Vehicle User	43	31	1	1	1
	Professional Driver	72	9	2	0	4
	Passenger/Road User	8	9	0	4	0
Q9	Private Vehicle User	11	27	15	28	24
	Professional Driver	1	2	13	37	34
	Passenger/Road User	2	6	6	5	2
Q10	Private Vehicle User	11	31	12	18	3
	Professional Driver	16	31	30	6	4
	Passenger/Road User	1	3	8	9	0
Q11	Private Vehicle User	19	32	7	14	3
	Professional Driver	6	5	6	37	33
	Passenger/Road User	5	10	1	2	3
Q12	Private Vehicle User	44	21	10	2	0
	Professional Driver	38	18	29	2	0
	Passenger/Road User	2	12	7	0	0



**Table 7 Summary of Responses for Question 6**

	User Category	Yes, I will accept the points	No, I will not
Q6	Private Vehicle User	76	1
	Professional Driver	83	4
	Passenger/Road User	18	3

**Table 8 Summary of Responses for Question 7**

	User Category	Yes, only the court decision is sufficient	Those three offences should also be included under DIPs	DIPs + Court Decision is necessary	Only DIPs will be sufficient
Q7	Private Vehicle User	15	16	44	2
	Professional Driver	24	9	54	0
	Passenger/Road User	1	3	13	4

**Table 9 Summary of Responses for Question 8**

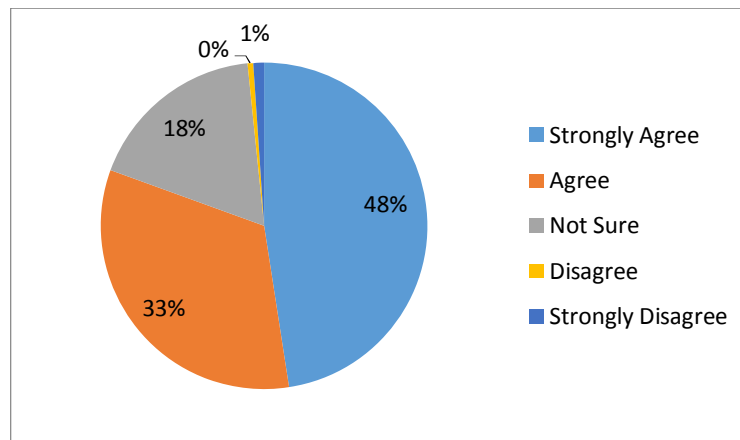
	User Category	Highly Recommended	Less Significant	Not sure	Not Recommended
Q8	Private Vehicle User	56	13	6	2
	Professional Driver	58	2	7	20
	Passenger/Road User	13	5	1	2

Responses for the each of the question in the questionnaire is then analyzed as follows.

**Question 1: Introducing Driver Improvement points at this moment is a very good move.**

The first question of the questionnaire was aimed at the participants' awareness on the system proposed for the implementation. Since this is a new topic for Sri Lanka, a proper discussion on the proposed system has not taken place yet many participants were not much aware on the topic. Therefore, the questionnaire was equipped with a brief description of the proposed system by the regulation published already.

However, the responses (See Figure 3) clearly showed that the participants accepted the requirement for implementing such a system in Sri Lanka. 81% of the participants believe that implementation of Driver Improvement points at this moment is a good move. A significant number that is 18% of participants has chosen the 'not sure' option. This might mostly be due to the lack of awareness of such systems and their impact. But most importantly there are only 1% of participants who disapprove the implementation of the system or believe that the implementation is not necessary.

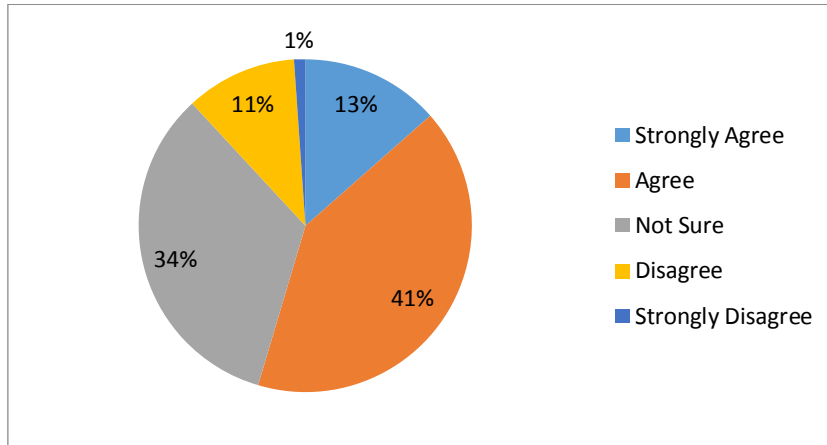


**Figure 3 Responses for the Question 1**

**Question 2: The number of points offered for an offence is reasonable.**

The current regulation published for the implementation of DIPs, the extra ordinary gazette numbered 1726/12 and dated 05.10.2011, proposes points that vary from 2 to 10 for the different offences subjected for DIPs. Moreover, due to the wide range of points proposed there is a possibility for a driver who has committed a road rule violation, being suspended in one or two instances. The reason behind the question was to check whether the participants are in acceptance of this situation.

The survey results (See Figure 4) showed that there is a mixed response. Only 54% of the participants believed that the points proposed by the current regulation are reasonable. 12% of them were in the opinion that the number of points proposed per offence is not reasonable. But, a large proportion of the participants are undecided on this matter and it represents 34% of the total participants.

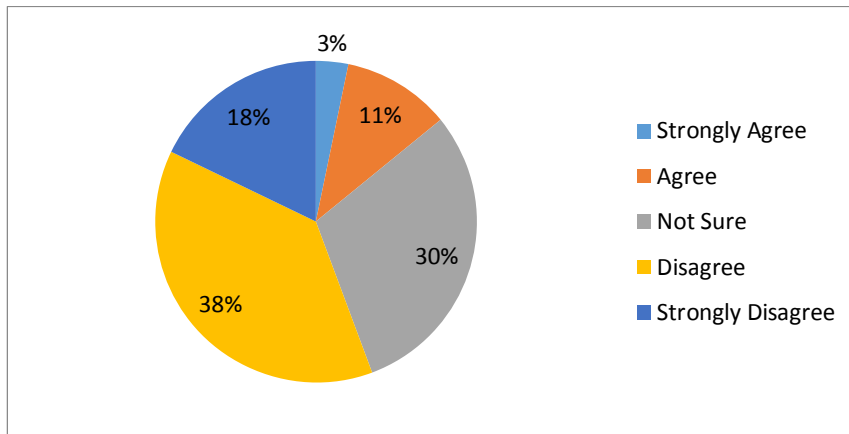


**Figure 4 Responses for the Question 2**

**Question 3: In the present circumstances the points will be charged merely on the observations of the police officers at roadsides. It is sufficient to decide that you have committed a road rule violation and accept the points.**

In the current circumstances road rule violations are captured based on the observations of police officers. The usage of technology is minimal except for cases like speeding. There is a high possibility for erroneous judgments on a road rule violation and there also manipulations and misinterpretations. The focus of the question is to check whether the drivers/road users are willing to accept the points for detection based on the present method of capturing road rule violations.

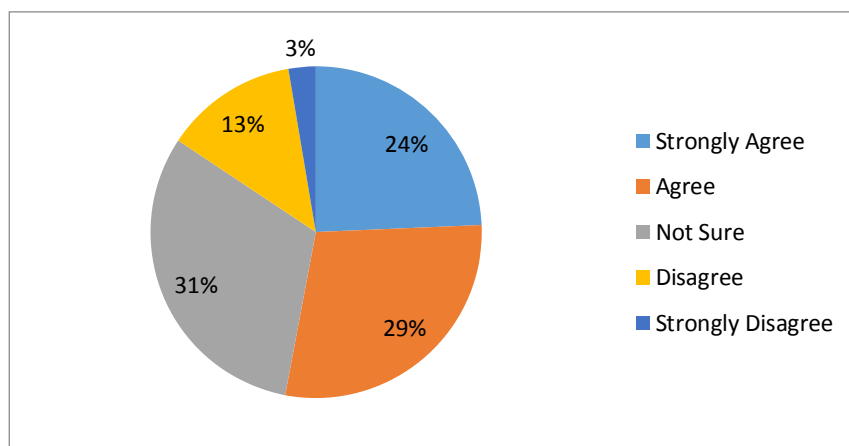
As expected 56% of the participants (See Figure 5) are not willing to accept the points and there are another 30% in the undecided state. Only 14% of participants are willing to accept points for a violation of road rules even in such a situation.



**Figure 5 Responses for the Question 3**

**Question 4: Implementing DIPs system in the present circumstances will lead to a higher rate of corruption and mal practices**

Eventually with the weaknesses of the current mechanism for detection of road rule violations, it could create an opening for corruption and malpractices. This possibility might even get higher if the points are imposed without taking mitigating actions for the said weaknesses. The question was raised based on this assumption. As expected 53% of the participants (See Figure 6) are in agreement with the assumption made. Though this is the opinion of the simple majority 47% of the participants are either disagreeing or not with the clear opinion of the assumption. The participants in the not sure stage are as high as 31% while only 16% disagreeing with the assumption made.

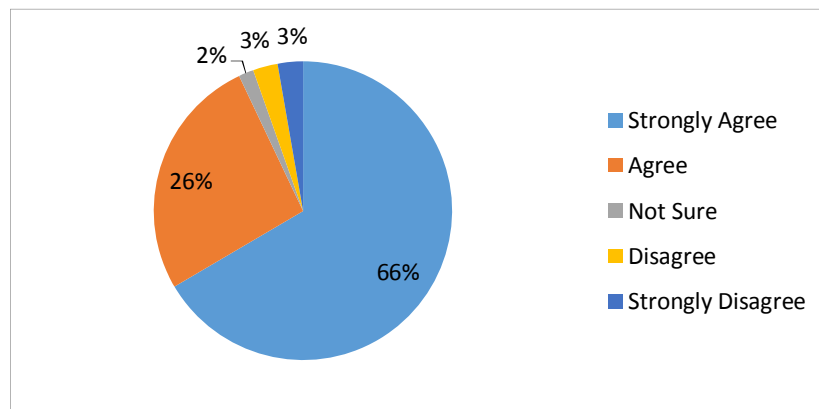


**Figure 6 Responses for the Question 4**

**Question 5: Do you think it is necessary to provide a proof of your road rule violation before recording any points under your Driving license?**

This question was raised as a possible answer that could be given to the arguments developed through the questions 3 and 4. The requirement was to check whether the people are expecting the provision of proofs of the committed road rule violation before recording any points.

Results showed that 92% of the participants (See Figure 7) believe that to accept points, a proof of the violation shall be provided. There are only 6% of the participants, who are opposing it while another 2% are at the Not Sure stage. The results give the impression of the requirement to guarantee the transparency of the system that is going to be implemented.

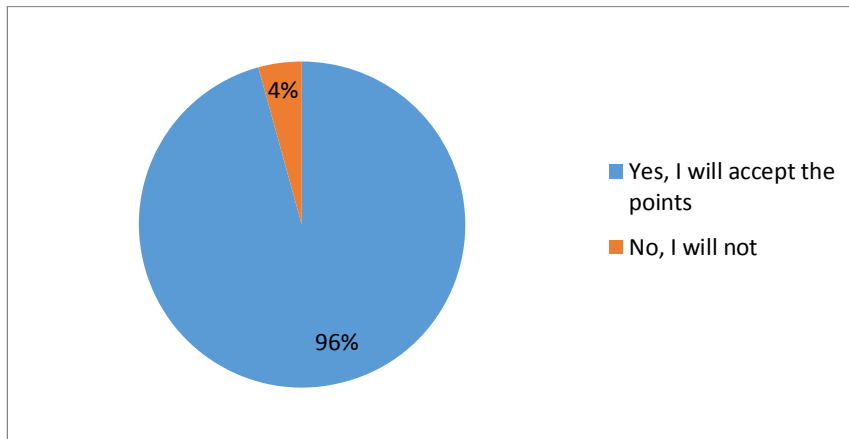


**Figure 7 Responses for the Question 5**

**Question 6: If sufficient evidence of the road rule violation is provided, will you be ready to accept the DIPs offered?**

Purpose of this question was to check whether the people are willing to accept points assigned for a road rule violation provided that a valid proof of violation is produced.

Results (See Figure 8) showed that 96% of the participants are willing to accept a point if a proof of the violation is produced. There are only 4% of the participants, who are opposing it. The results give a clear indication that the system will be accepted among the general public if the transparency of the system is guaranteed.

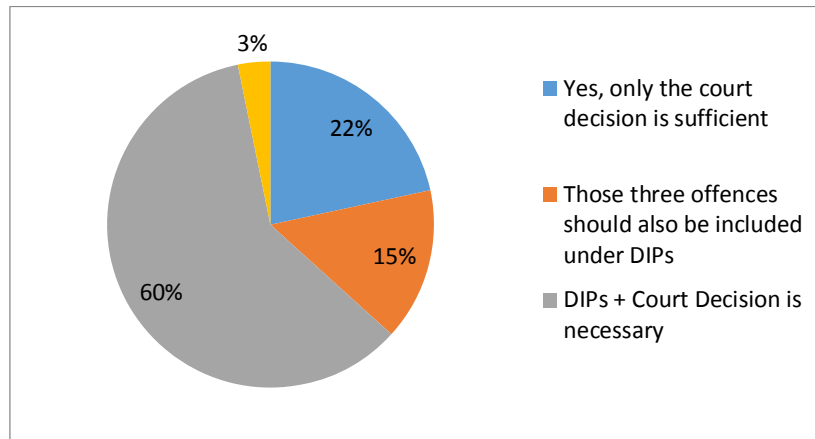


**Figure 8 Responses for the Question 6**

**Question 7: Drunken Driving, Drunken and Committing a Fatal Accident and Committing a Fatal Accident without Drinking are not considered under the DIPS as these are considered as severe offences and will be presented to the courts for the Judgment**

Under the present regulation offences like Drunken Driving, Drunken and Committing a Fatal Accident and Committing a Fatal Accident without Drinking are not for DIPS. As per the Motor Traffic Act one who commits one or more of these offences shall be presented to the courts and charged accordingly. Since these are some road rule violations that occur in a frequent manner, omitting them from the DIPS system might create some imbalance. Hence it was decided to check the public opinion on this matter.

As per the survey results (See Figure 9) only 22% of the participants believe that a court decision only is sufficient for these types of offences. Majority of participants that is 60% believe that there should be both the court decision and DIPS for such offences. Only 3% believe that there shall only DIPS for such offences.

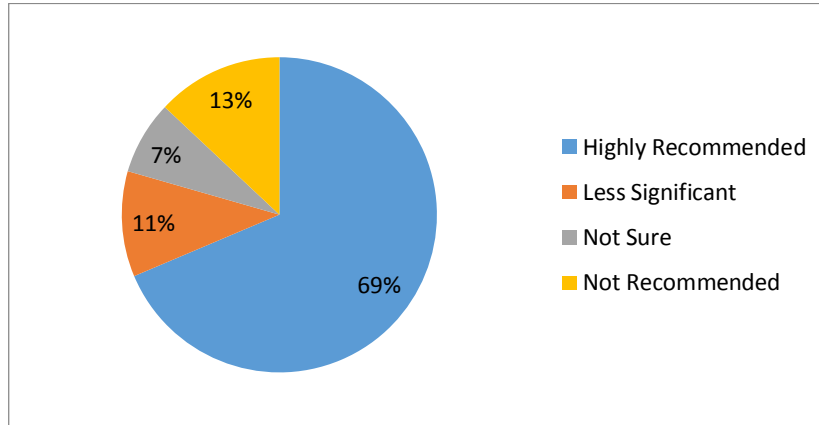


**Figure 9 Responses for the Question 7**

**Question 8: Traffic light offences are not included in the identified offence list. Including them as well is**

Under the current regulation that has been published, violations related to traffic light offences are also not considered for DIPs. Even though traffic lights are being utilized only in Colombo and few other cities it is a frequent source of traffic offences. Hence the requirement of incorporating or not incorporating these offences for DIPs is analyzed through this question.

According to the survey results (See Figure 10) majority of the participants highly recommend the incorporation of traffic light offences as well. Percentage wise it is 69%. Only a few numbers of participants that is 13% of the total have opposed to it. Among the participants who have opposed the incorporation majority are professional drivers. But at the same time, they represent nearly 50% of the participants who highly recommended the incorporation.

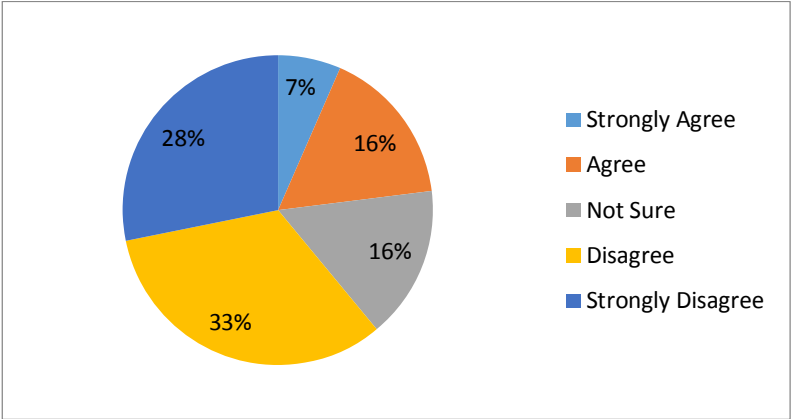


**Figure 10 Responses for the Question 8**

**Question 9: Sri Lanka Still maintains fairly low-quality standards for fuel. But the emission standards are fairly at a higher level. Considering both these situations, it is fair to mark DIPs for emissions related violation.**

There is an emission related violation subjected for DIPs declared with the current regulation. Emission level of a vehicle will mainly depend on the condition of the vehicle and the level of quality of the fuels used. In Sri Lanka fuel quality is fairly at a low level when compared with developed countries as well as some countries in the region. Further, there is the question whether it is fair to charge points for the driver for such a violation. As expected almost 61% of the participants (See Figure 11) disagree to mark DIPs for such violation while another 16% are not sure about it. And there are another 23% of participants who believe that DIPs shall be marked for emission related violations.

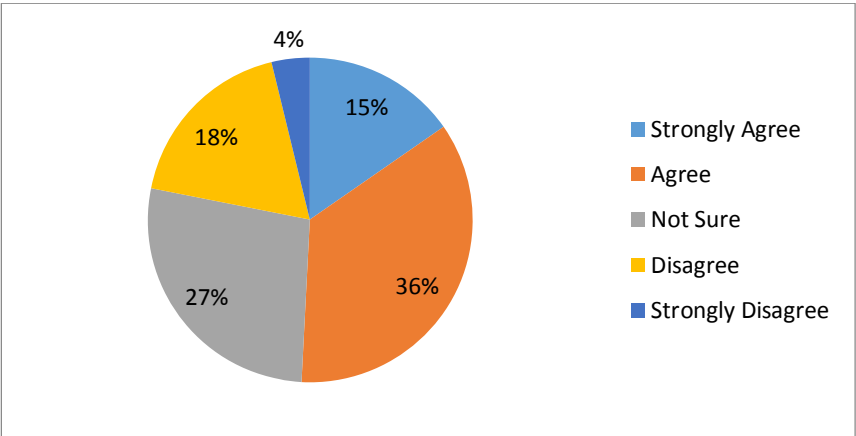




**Figure 11 Responses for the Question 9**

**Question 10: Introducing DIPS will reduce the number of road rule violations and accidents on roads.**

The idea of this question is to check what people expect/believe as the impacts of introducing DIPS. The responses (See Figure 12) for the question are positive. There are 51% of the participants who believe that the introduction of DIPS will positively impact for reducing road rule violations and accidents on road. But there are 27% of the participants who do not have an idea on the possible impacts of the introduction. However, there are only 22% of the participants who have a negative opinion on the impacts of the Introduction of DIPS.

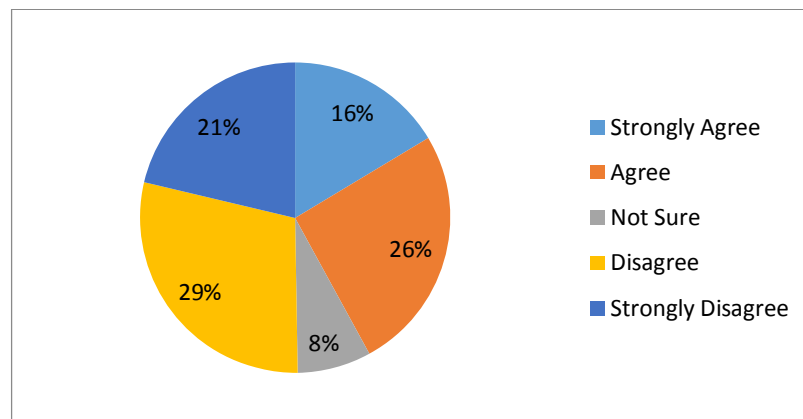


**Figure 12 Responses for the Question 10**

**Question 11: The road conditions, the availability of road signs and road side information in Sri Lanka encourage the drivers to not to commit any road rule violations.**

In order to reduce the number of road rule violations there shall be adequate information and guidance for drivers at the road sides. Road side information and road signs are there for that purpose. Moreover, the conditions of the roads also have some impact on error free driving. Hence the aim of this question was to check whether the people are satisfied with the road conditions and availability of road side information and road sign in Sri Lanka.

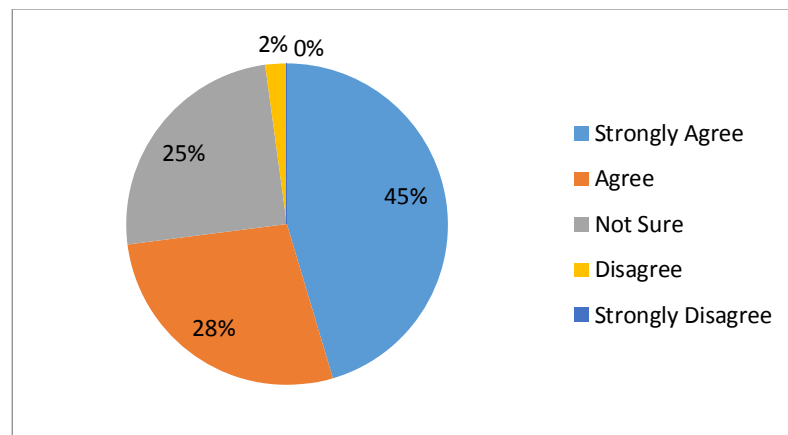
As per the results (See Figure 13) 42% of the participants believe that the availability of road side information / road signs and existing road conditions are sufficient to encourage the drivers to not to commit any road rule violation. The majority that is 50% are in the opinion that the availability of road side information / road signs and existing road conditions are not sufficient. What is interesting here is majority of the private vehicle owners, that is 68% of them believe that the availability of road side information / road signs and existing road conditions are sufficient to encourage the drivers to not to commit any road rule violation. But in contrast 80% of the professional drivers think in a different manner and believe that they are not sufficient.



**Figure 13 Responses for the Question 11**

**Question 12: Condition of the vehicle is also a factor to be considered for DIPs under the current regulation. It is fair to mark DIPs against drivers who drove such vehicles, especially in a case where the vehicle is not owned by the driver.**

Driving a vehicle, the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road is also an offence a driver is entitled for DIPs when breached. The idea of the question is to check whether the people believe or not that it is fair to mark DIPs for drivers even in a situation where the Vehicle is owned by somebody else. Surprisingly almost 73% of the participants (See Figure 14) believe that it is fair to mark DIPs for the driver in such a situation. Only 2% are against it while others are in the not sure position.



**Figure 14 Responses for the Question 12**

The findings of the opinion survey/questionnaire could be summarized and compared as follows.

As per the responses for the questionnaire 81% participants believe that introducing DIPs is a Good Move at this moment and only 51% of them believe that it will have positive impact to reduce the accidents on road and 27% of them are indecisive on the possible impact. However comparatively very few participants believe that this will not have an impact on reducing number of road accidents.

There were some questions to check the participants opinion on current detection mechanism used for road rule violations. In that case 56% of the participants believe that judging Road rule violations merely on police officer's observation is not

sufficient while only 14% are in the belief that it is sufficient. Further, 93% of the participants believe that a proof of their road rule violation shall be provided before any conviction. Importantly 96% of the participants are willing to accept points if proofs are provided. Hence it is inevitable that transparency and the accuracy are some key features in implementing a viable system. Further people are expecting those features.

On the other hand, 54% of the participants think implementing DIPs under present circumstances will lead to corruption and malpractices while 32% are not sure about it. Only few numbers of participants believe that it will not lead to corruption and malpractices. Further it was observed that there is no significant deviation of the opinions by the target group on the above factors. However, there were different opinions from target groups on questions aimed at factors such as road conditions, availability of road signs and condition of the vehicle.

## **CHAPTER 05 - CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Observations and Overview of the Results**

In this chapter the findings from the comprehensive literature review and the analytical results of the questionnaire are discussed in detail. The outcomes of the discussion are then used in developing the proposed model. Some of the observations on the existing circumstances could be discussed as follows.

#### **5.1.1 Facts to be Re-Considered in the Proposed System**

Depending on the current circumstances there are several things to be reconsidered that will have a direct impact on the desired outcomes and the smooth implementation of the system. Some of those are discussed as follows.

- Due to the poor conditions of most of the roads, sign boards and overcrowded road network with heavy traffic volume there is a high possibility for the frequent road rule violations. This is in contrast with the mostly developed countries with well-developed road network, integrated traffic control systems and modern detection systems who have successfully implemented these kinds of points schemes.
- In Sri Lanka a single person driving a vehicle may not have an evidence to produce to the courts in an unclear situation. Most of the time he/she will have to accept the conviction of the police officers that he/she has committed a road rule violation based merely on their observations by the naked eye. Further, unlike in the offences of driving under the influence of liquor and fatal accidents, police would not provide (would not be obliged to provide) supporting evidence to prove the other offences.
- Under these circumstances accepting the ticket to avoid cumbersome court procedures due to the non-availability of proper evidences would result for the points on Driving Licenses.
- Reluctant behavior of the available witnesses to be present at the courts voluntarily, due to the various reasons, unless they are forced by the courts to do so.

- The right of the Driver to know/see the offence with evidence that he/she is said to be committed before the conviction. Moreover, almost all tickets issued on the traffic offences and the lawsuits filed against the traffic offences are not challenged due to the non-availability of evidences.

### **5.1.2 Possible Impacts of the Currently Proposed Dips System**

The shortcomings identified in the law enforcement mechanism and the lack of proper systems for road rule violations detection could have following impacts on the Driving License Holders.

- Increased stress on the drivers

If the DIPs are going to be implemented with the existing traffic rule enforcement mechanism, where there is a no other way of obtaining concrete evidence other than the Police Officers' observations by sight that the subjected DL holder has committed a road rule violation, there is always a possibility of marking DIPs for an innocent DLH who has not committed any road rule violation. This could result in increased stress on drivers as they are always in a threat of marking DIPs against their DLs and eventually getting suspended even for situations where they are not guilty and not in a position to prove or challenge against the conviction.

- Possible corruptions - save points to save livelihood

As discussed in the first point this stressful situation might open a window for corruptions as well. In a situation where a road rule violation is not properly detected with sufficient evidence and not recorded an opportunity is created for both the parties the DLH and the enforcing entity to demand either to not record the violation or to threat to mark DIPs for a situation where the DLH has not committed any road rule violation. These possibilities will be even high with the professional drivers as there is a need of saving points in order to save their livelihoods.

- More proactive responses from the drivers, Tendency of the drivers for challenging police detections to save their licenses

Moreover, some other DLH holders may challenge the Police officer's detections on road rule violations, where they could not agree upon the conviction in order to save their DLs. If the law enforcement authorities are not in a position to prove their stand with sufficient evidences related to the violation a conflict situation would occur.

- Increased number of lawsuits with regard to the points disputes

A conflict situation on a road rule violation where the two parties the law enforcement authority and the DLH are not in a position to come in to a resolution, then the problem shall be taken up in to the courts. There will be an increase in such situations with regard to the DIPs disputes if the system is implemented without giving necessary attention to the issues related to the efficiency, accuracy and the transparency of the system.

### **5.1.3 Possible Evidences Could Be Used to Challenge the System**

There are some possible ways of challenging the existing system, mainly the road side detections. With the development of the technology these possibilities have further improved. Some of them are discussed below.

- Affidavits obtained from the fellow travelers

Though this is a primitive method in use for so many decades, affidavits could still be very accurate as a basic legal document. Hence affidavits from fellow travelers could be used as an evidence for challenging a wrong conviction given through a detection by sight.

- Street recorder evidences / Dash mounted video recorder evidences

These dash or windscreen mounted digital video recorders could record and store the whole journey in video format. Hence in a problematic situation these could be used as effective visual evidences for what has actually happened. These recorders are widely available in the open market and could be purchased at very reasonable rates. On the other hand, some new vehicle models are equipped with these recorders. Hence this could be a widely and

effectively used method of challenging a wrong conviction by the law enforcement authorities.

- GPS movement records

These are another type of technological advancements that could be easily utilized at low cost or free of charge if you have a GPS supportive device such as smart mobile phones. They can extract the details of speed of the vehicle, location, and date and time of the incident. Hence this could also be a challenge for the law enforcing authorities.

Both the Department of Motor Traffic DMT and Department of Police will be in a weak position to handle such situations with the present regulatory mechanisms.

#### **5.1.4 Requirement of Verifiable Evidence before Moving for DIPs**

Before moving in to the DIP system there shall be a proper mechanism for obtaining verifiable evidence. This is mainly because,

- Imposing points being away from the courts

As per the proposed system the DIPs will be imposed mainly by Department of police and the Department of Motor traffic for the offences where court's intervention is not required. Hence, they should have firm evidence to avoid future implications as there is a possibility for challenging their convictions as discussed in section 5.1.3

- In the present provisions as the authorizing entity for DIPs, DMT will not have any evidence to produce for the lawsuits and no verifiable data available in hand for authorizing points on the DLs

## **5.2 Conclusions**

The above observations and the opinion survey results could be combined and come up with the following conclusions.

- The transparency and accuracy of the proposed system are among the key expectations of the target groups.



- If those features are assured and a proof of the offence committed is provided almost all the target groups are willing to accept the DIPs.
- Majority expect that a properly implemented system will have a positive impact on reducing the accidents on roads in Sri Lanka.
- It is required to reconsider the inclusion of emission related violations and violations related to the condition of the vehicle under DIPs.
- Further, it shall consider the possibilities of incorporating violations related to drunken driving, fatal accidents and traffic lights under DIPs.

Accordingly, the new model could be developed as follows.

### **5.2.1 The New Model**

In designing a new model for the implementation of DIPs the factors discussed in above discussions need to be incorporated and also need to keep eye on the required investment as Sri Lanka is still not in a position to make huge investments for projects in this caliber. Further, it is very unlikely that, in a lifetime, a road user will never break a traffic rule. Therefore, the main purpose of the existence of these kinds of Points Systems shall be targeting the 'frequent offenders' who make dangerous situations on the roads and exposing others for risks or fears on their lives and properties. In doing so fulfilling the following requirements would be a prerequisite as the other jurisdictions followed the point systems have strictly been adhered.

- Winning public trust on the system
- Honest, Fair and Transparent Implementation

In achieving above requirements, it is needed to focus on the following areas and there are some challenges as well to fight with.

Moreover, based on the literature review and the findings through the survey, existence of the offences identified in the extra ordinary gazette numbered 1726/12 and dated 05.10.2011, could be discussed as follows.

**Table 10 Conclusion on the 22 offences identified in extra ordinary gazette numbered 1726/12 and dated 05.10.2011 for the new model proposed.**

	Description	Points	Whether to be included in the new System? / Suggestions
<b>Reckless Driving and Accidents</b>			
1	Failing to take such action on a highway to avoid an accident	6	Shall be included. Need to revise the points allocated.
2	Driving a motor vehicle on a highway recklessly or in a dangerous manner or at a dangerous speed	8	Shall be included. Need to revise the points allocated.
3	Driving a motor vehicle on a highway negligently or without reasonable consideration for other persons using the highway	8	Shall be included. Need to revise the points allocated.
4	Failing to stop after an accident on a highway and to furnish relevant information	10	Shall be included. Need to revise the points allocated.
5	Failing to report an accident forthwith to the nearest police station	10	Shall be included. Need to revise the points allocated.
<b>Speeding</b>			
6	Exceeding the prescribed speed limits on a highway	6	Shall be included with verifiable evidences such as speed detectors. Further shall be introduced with different number of points with the severity of the offence. i.e. different points for the level of exceeding
<b>Road Rules</b>			
7	Failing to keep left or nearside of the road	2	Shall be included with verifiable evidences.
8	Driving so as to overtake other traffic without a clear view of the road ahead	6	Shall be included with verifiable evidences
9	Failing to overtake other traffic on the right off side of such other traffic	4	Shall be included with verifiable evidences
10	Failing to give way at intersections to vehicles coming from the right off side	4	Shall be included with verifiable evidences
11	Reversing or permitting the vehicle to travel backwards on a highway for a longer distance or without reasonable purpose	4	Shall be included. Need to revise the points allocated.
12	Failing to comply with prohibitory, restrictive, mandatory or Traffic	6	Shall be included with verifiable evidences

	(Signs) Regulations, priority signs		
<b>Signaling</b>			
<b>13</b>	Failing to comply with oral directions or hand signals given by a police officer or a traffic warden	6	Shall ensure fair detection of evidences before including this offence. However, considering the current conditions this shall not be considered in this stage.
<b>Pollution</b>			
<b>14</b>	Driving a motor vehicle which has emissions above the prescribed standards	6	Shouldn't be included. This is evident as per the survey results; Further the owner of the vehicle might be different from the subjected driver. Shall also consider the fuel quality levels with in Sri Lanka
<b>15</b>	Using or permitting to use amplifying equipment in a vehicle with a volume of sound above the prescribed standards	6	Shall be included with verifiable evidences. However allocated numbers of points need to be revised.
<b>16</b>	Using a vehicle, the noise of the engine and the horn of which exceed the prescribed standards	6	Shouldn't be included. This is evident as per the survey results; This might be out of control of the driver where the owner could be a different person / Organization
<b>Construction and Use of Vehicles</b>			
<b>17</b>	Driving a vehicle, the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road	10	Shouldn't be included. This is evident as per the survey results; This might be out of control of the driver where the owner could be a different person / Organization
<b>Safety</b>			
<b>18</b>	Driver failing to wear a seat belt or failing to ensure the front seat passenger wear a seat belt	3	Shall be included with verifiable evidences.
<b>19</b>	Overtaking at, or approaching a corner or bend, hill, bridge, Traffic (Highway Code) junction, pedestrian crossing, no overtaking area township Regulations, 1987 (Gazette with heavy pedestrian traffic, narrow section of a road or Extraordinary, No. 486/8 of crossing single or double white lines	4	Shall be included with verifiable evidences.

20	Failing to stop before the give way line of a zebra crossing Traffic (Highway Code) while a pedestrian is at a pedestrian crossing	6	Shall be included with verifiable evidences.
21	Rider of a motor cycle carrying more than one person and failing to wear a safety helmet or carrying a person without a safety helmet	4	Shall be included with verifiable evidences.
22	Using hand held communication equipment while driving	4	Shall be included with verifiable evidences.

In addition to the offences discussed in the above table it is also proposed to introduce traffic light offences and offences related to drunken driving and fatal accidents into the DIPs system based on the survey results and the facts learned through literature review by comparing the systems implemented worldwide. However, availability of verifiable evidences shall be ensured with the incorporation.

### **5.2.2 The Areas to be Focused on Our Roads**

The main focus areas are mainly related to the behaviors of drivers and vehicle owners.

#### **5.2.2.1 Coarse Behaviors of the Drivers**

Most Sri Lankan drivers are not adhered to the accepted driving standards and practices. Instead they display very coarse behaviors in following situations.

- Passing vehicles in dangerous manner
- Obstructing other vehicles with horn and head light warnings
- Neglecting pedestrians and small vehicles by dangerous driving.
- Behaviors such as Tailgating, Undertaking, Poor lane discipline and Misuse of indicators.

#### **5.2.2.2 Bad Practices**

Though these practices are illegal as per the law book, they are commonly observed on Sri Lankan roads.

- Passengers get on board in an unsafe manner is a very common behavior that can be observed in all the parts of the island.

- Dangerous loading of goods is also observed in road sides without adhering to proper security measures

### **5.2.2.3 Negligence which could be Resulted to Fatal Situations**

Negligence is one of the main reasons for accidents while driving. But these types of negligence related to the vehicle maintenance and make of the vehicle could result in fatal situations.

- Changing original configurations of vehicles

Changing the original configuration of the vehicle is allowed to some extent with the approval of the regulating entity. However, it is limited to changes such as change of engine, change of fuel type, change of body type etc. But people tend to change the other configurations to use those vehicles for the tasks other than it was originally intended to without the proper approvals from the regulating entities (e.g.: Special Purpose Vehicles are converted as Motor Lorries with Tipping or boom)

- Blown indicating lights and head lights
- Poor technical conditions of the vehicles

Majority of the vehicle fleet of Sri Lanka comprise of vehicles with Indian origin where most of these vehicle models are not complied with the European safety standards. Further another significant percentage comprise of older vehicles. Both these types of vehicles could create dangerous situations on roads.

### **5.2.3 Types of Detection could be used for the New Model**

Within the present circumstances and availability of the infrastructure following detection methods could be effectively utilized for detecting road rule violations. The main criteria followed here is, every detection done through these methods could be backed by an acceptable reasoning.

- Photographic/video evidence

These are the evidences that could be gathered on site at the time of offence is committed. Moreover, these evidences are very vital for the offences that are not referred to courts for the final judgment.

- Court decisions

Court decisions could also be incorporated with the new model as they are the final decisions that could be obtained for any type of violation. Further a court decision will be issued after going through number of evidences obtainable. However, these decisions shall also be supported with basic evidences in order to ensure that unnecessary delays are avoided.

- Analytical evidences

These are evidences gathered by officials for the technical failures of vehicles, alcohol and drug usage incidents

#### **5.2.4 Proposed Mechanism for the New Model**

Following mechanisms are proposed for evidence-based detections of the proposed new model.

- In an event of serious offence with traditional detection there shall be a trial with further evidences, before the points
- Fixed cameras for the red light and speed offences

Here it is proposed to improve and upgrade the existing CCTV system of Sri Lanka Police in order to use as a road rule violations detection mechanism as well. This will require comparatively a lesser investment compared to building new infrastructure for detection of road rule violations.

- Mobile cameras for the various range of other offences

For this purpose, it is proposed to use a type of mobile camera which could be used as a part of the uniform by law enforcement officers (body worn cameras) and also cameras fixed in side police vehicles are proposed to be

used. This would be a much more economical option compared to going for a fully integrated points system as used.

- Digital breathalyzers for the alcohol related offences

Traditional blowing balloon test is proposed to be replaced by Digital breathalyzers for alcohol related offences. Hence it will allow for an onsite instant test which could generate required evidence for necessary verifications.

Therefore, necessary investments should be rolled out at least to fulfill these requirements before the full implementation of proposed points system. The next steps of the mechanism shall be as follows.

- Detect the offence by police officers
- Record the offence with additional evidence which could be verified and produce to the trials
- Analyze the evidence and record the points

#### 5.2.5 New Model Proposed

**Table 11 Comparison of the Current Model Vs. New Model Proposed**

Current Model Available	New Model Proposed
<p>“ Police officer at road side detects a road rule violation by sight, and reports to the relevant Police Station</p>	<p>“ A road rule violation is detected by a Police officer at road side and captures a video or a photograph of the violation through his body worn camera or by a police vehicle in patrol equipped with In Car cameras or by Police CCTV system and submit it to the relevant police station with supporting evidence.</p>
<p>“ Depending on the violation either escalate to the courts or charge the driver with relevant fine.</p>	<p>“ Depending on the violation either escalate to the courts or charge the driver with relevant fine.</p>

<p>“ If a fine only and subjected to DIPs, police records the violation as per the format (appendix II) in the gazette and send it to DMT once a month.</p>	<p>“ If a fine only and subjected to DIPs, police upload the Driver details and supporting evidence to the DIPs system through the connection provided to the police station.</p>
<p>“ If escalated to courts, after the court decision and subjected to DIPs the registrar at courts record the violation as per appendix III and send it to the DMT once a Month</p>	<p>“ If escalated to courts, after the court decision and if subjected to DIPs the registrar at courts update the Driver and offence Details with supporting evidence in the DIPs system</p>
<p>“ DMT receive both appendix II and III once a month and record the relevant DIPs in the computer system for DIPs against the Driving License Holder (DLH)</p>	<p>“ Officer at DMT validate the details and Authorize the relevant DIPs against the DLH</p>
<p>“ Manual records of the appendix II and III are stored securely</p>	<p>“ Evidences are stored in the electronic format for the validity period of DIPs</p>
<p>“ DMT sends notifications to the DLH time to time as per the accumulation of DIPs.</p>	<p>“ System will automatically generate the notifications on the DIPs and send to the DLH time to time.</p>
<p>“ Once a DLH accumulates 24 points, DMT suspends the Driving License (DL) and send a notification to DLH asking for handing over the DL.</p>	<p>“ Once a DLH accumulates 24 points, DMT suspends the DL and send a notification to DLH on that.</p>



	<p>“ Services will be available either as e services or mobile services to validate the validity of DL in case of a Police officer or courts need to verify it.</p>
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### 5.3 Recommendations for Further Development

#### 5.3.1 Recommendations In the short Run

For the successful implementation of DIP system there shall be measures to be taken in the short run as well as in the long run. Here the measures that should be taken in the short run are discussed and it is required to make sure that these measures have been met before the implementation of the points system.

- Amendments to the existing regulations requiring evidence based DIPs capturing.
- The offences related to Vehicle condition and make of the vehicle shall be not considered for DIPs while offences related to traffic light violations and drunken driving shall be included.
- Introduce fairly economical and reliable options such as Body worn cameras, in car cameras and Digital Breathalyzers for capturing evidence. This will be a much cost effective option rather than moving towards a centralized system as used in many developed countries who have implemented points systems successfully.
- Encourage the Drivers to use Dash mounted digital video recorders which could be used as an alternative source of evidence. If the government could intervene and encourage the use of these devices in all the vehicles by means of a subsidy, there would a movement record stored in the video format for every vehicle which could eventually be used as evidence.
- Encourage public to upload evidences related to road rule violations through means such as social media. Government shall introduce some regulatory measures to ensure the validity and effectiveness of the information provided.

### **5.3.2 Recommendations In the Long Run**

The measures that shall be taken in the short run were proposed in order to ensure the minimum transparency and accuracy required by the system to gain the public trust. However in order to make sure that the system will be viable in the long run the following measures are need to be incorporated gradually to move towards a fully-fledged automated traffic offence capturing system.

- Incorporate CCTV based road rule violations detection systems, and Traffic Management systems in highways with the DIPs System

These are systems already under development and in use at the same time established for different purposes. Incorporating these systems with the DIPs with necessary enhancements will be a vital source for detecting road rule violations with verifiable evidences. On the other it will save the investments that to be made in developing new systems for DIPs.

- Integrate and inter-connect Sri Lanka Police and Judicial system with the DIPs system

Currently the key three institutions responsible for the implementation of DIPs are operating under separate systems. Out of them Department of Police and Courts have mostly traditional manual system setups and use of information systems is minimal. But to ensure successful and smooth operation of the DIP system it is required improve the inter-connectivity and interoperability of these entities at least for DIP related matters. Hence developing a common platform to work with will be a must.

- Upgrade the road signs and road side information

Sri Lanka is in the process of adapting international traffic signs. Hence it is required to complete this speed up this process. On the other hand necessary forward actions shall be taken to improve the availability of road signs and road side information in order to give drivers a fair chance to not to violate a road rule.

- Gradually develop the necessary infrastructure such as fixed cameras on road side, for automated offence capturing

It is required to minimize the human interaction to the system in order to ensure the transparent and accurate operation, especially in the detecting/capturing road rule violations stage. Hence infrastructures which are required to facilitate automated offence capturing shall be gradually incorporated with the system.

The new model proposed focused on the minimum requirements to be fulfilled in order to ensure a transparent, fair and accurate points system. However existence of a viable system will be only ensured if the necessary actions were taken to transform the proposed system to a fully-fledged and automated traffic offence capturing system along with the new technological developments in the long run.

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EXTRAORDINARY

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No. 1726/12 - WEDNESDAY, OCTOBER 05, 2011

(Published by Authority)

**PART I : SECTION (I) — GENERAL**

**Government Notifications**

L.D. B 24/51

**THE MOTOR TRAFFIC ACT (CHAPTER 203)**

**REGULATIONS** made by the Minister of Transport under section 237 of the Motor Traffic Act (Chapter 203) read with sections 123, 133A and 139E of the aforesaid Act.

KUMARA WELGAMA,  
Minister of Transport.

Colombo,  
03rd October, 2011.

**Regulations**

1. These Regulations may be cited as the Motor Traffic (Driver Improvement Points) Regulations, No. 3 of 2011.
2. The holder of a Regular Driving Licence or Instructor's Licence who commits an offence specified in Column II of Schedule I hereto in contravention of the provisions specified in the corresponding entry in Column I thereof, shall be liable to the driver improvement points specified in the corresponding entry in Column III thereof.
3. (1) Where a police officer finds that a holder of a Regular Driving Licence or Instructor's Licence is guilty of an offence specified in Column II of Schedule I, it shall be the duty of such police officer to report such matter to a police officer not below the rank of police sergeant.  
(2) Upon the receipt of the report under paragraph (1), such police officer shall enter the details in the Form set out in Schedule II and forward a copy of such Form to the Commissioner – General of Motor Traffic by the tenth day of every month.
4. Where a Magistrate's Court finds that the holder of a Regular Driving Licence or Instructor's Licence is guilty of an offence specified in Column II of Schedule I hereto in contravention of the provisions specified in the corresponding entry in Column I thereof, the Registrar of such Court shall enter the details in the Form set out in Schedule III and forward a copy of such Form to the Commissioner–General of Motor Traffic by the tenth day of every month.
5. Upon the receipt of details under paragraph (2) of regulation 3 or regulation 4, the Commissioner–General of Motor Traffic shall send a notice to the holder of a Regular Driving Licence or Instructor's Licence to be present on a given day at the office of the Commissioner–General of Motor Traffic so that the driver improvement points earned may be recorded thereon.

1A

6. (1) If a holder of a Regular Driving Licence accumulates more than eighteen and less than twenty three driver improvement points within a period of twenty four months, the Commissioner-General of Motor Traffic shall serve a warning notice on the holder of a Regular Driving Licence, stating that if such holder of a Regular Driving Licence exceeds twenty three driver improvement points, the Regular Driving Licence will be suspended.

(2) (a) Where a holder of a Regular Driving Licence accumulates twenty four or more driver improvement points within a period of twenty four months, the Regular Driving Licence shall be suspended automatically and the Commissioner-General of Motor Traffic shall communicate to such holder of a Regular Driving Licence to surrender the Regular Driving Licence forthwith.

(b) The Commissioner-General of Motor Traffic shall suspend the Regular Driving Licence for a period of twelve months if the holder of a Regular Driving Licence accumulates twenty four driver improvement points. If the holder of a Regular Driving Licence exceeds every additional four driver improvement points after accumulating twenty four driver improvement points, such holder of a regular licence shall be liable to the suspension of one month in addition to the twelve months suspension.

(3) Where a Regular Driving Licence is suspended, the holder thereof shall surrender his licence forthwith to the Commissioner-General of Motor Traffic.

(4) The period of suspension shall commence from the day on which such licence is surrendered.

7. (a) Where a holder of a Regular Driving Licence has within the probationary period accumulated six driver improvement points within a period of twelve months, he shall be liable to the extension of the probationary period for a further period of one year.

(b) Where a holder of a Regular Driving Licence has within the probationary period accumulated more than six driver improvement points within a period of twelve months, he shall be liable to the cancellation of such licence.

8. (1) If a holder of an Instructor's Licence accumulates twelve driver improvement points within a period of twenty four months, the Instructor's Licence shall be suspended automatically for a period of twelve months and Commissioner-General of Motor Traffic shall communicate to such holder of Instructor's Licence to surrender the Instructor's Licence forthwith.

(2) Where an Instructor's Licence is suspended, the holder thereof shall surrender his Instructor's Licence forthwith to the Commissioner-General of Motor Traffic.

(3) The period of suspension shall commence from the day on which such licence is surrendered.

(4) If a holder of an Instructor's Licence is subject to two consecutive suspensions within a period of four years, he shall be liable to the cancellation of the Instructor's Licence.

9. (1) Any holder of a Regular Driving Licence may be required to participate at any training programme for the purpose of earning remission from the period of suspension. Any holder of a Regular Driving Licence, who is under suspension for a period specified in Column II of Schedule IV hereto, depending on the number of previous suspensions specified in the corresponding entry in Column I thereof, shall be entitled for a remission specified in the corresponding entry in the Column III thereof.

(2) Upon the completion of a training programme, the holder of a Regular Driving Licence whose licence has been suspended may apply to the Commissioner-General of Motor Traffic for the remission of the period of suspension with a copy of the Certificate awarded by a specified institution. Where the suspension has been due to an Order of a Magistrate's Court, the holder of a Regular Driving Licence who is under suspension shall apply to the relevant Magistrate's Court for the remission of a period of suspension.

10.(1) The holder of a Regular Driving Licence who has not committed any offence specified in Column II of Schedule I hereto for a period of one year from the last day on which he had committed any offence, shall be entitled to a deduction of six driver improvement points.

(2) The holder of a Regular Driving Licence shall if he has not committed any offences specified in Column II of Schedule I hereto for a period of two years from the last day on which he had committed any offence, be entitled to expunge all the driver improvement points appearing in his record.

SCHEDULE I

(Regulation 2)

Column I		Column II	Column III
	Section / Regulation of the Act/ Gazette Notification	Offence	Driver Improvement Points
		<b>Reckless Driving and Accidents</b>	
1	149(1)	Failing to take such action on a highway to avoid an accident.	6
2	151(2)	Driving a motor vehicle on a highway recklessly or in a dangerous manner or at a dangerous speed.	8
3	151(3)	Driving a motor vehicle on a highway negligently or without reasonable consideration for other persons using the highway.	8
4	161(1) a (i) and (ii)	Failing to stop after an accident on a highway and to furnish relevant information.	10
5	161 (1) a (v)	Failing to report an accident forthwith to the nearest police station.	10
		<b>Speeding</b>	
6	141(2)	Exceeding the prescribed speed limits on a highway.	6
		<b>Road Rules</b>	
7	148(1)	Failing to keep left or nearside of the road.	2
8	148(3)	Driving so as to overtake other traffic without a clear view of the road ahead.	6
9	148(4)	Failing to overtake other traffic on the right off side of such other traffic.	4
10	148(10)	Failing to give way at intersections to vehicles coming from the right off side.	4
11	154	Reversing or permitting the vehicle to travel backwards on a highway for a longer distance or without reasonable purpose	4
12	Regulation 7 of the Motor Traffic (Signs) Regulations, 1984 (Gazette Extraordinary, No. 444/18 of March 13, 1987)	Failing to comply with prohibitory, restrictive, mandatory or priority signs.	6



SCHEDULE I (Contd.)

<i>Column I</i>		<i>Column II</i>	<i>Column III</i>
	<i>Section / Regulation of the Act/ Gazette Notification</i>	<i>Offence</i>	<i>Driver Improvement Points.</i>
		<b>Signalling</b>	
13	162	Failing to comply with oral directions or hand signals given by a police officer or a traffic warden.	6
		<b>Pollution</b>	
14	155A	Driving a motor vehicle which has emissions above the prescribed standards.	6
15	160 (1)	Using or permitting to use amplifying equipment in a vehicle with a volume of sound above the prescribed standards.	6
16	160 (2) and (3)	Using a vehicle the noise of the engine and the horn of which exceed the prescribed standards.	6
		<b>Construction and Use of Vehicles</b>	
17	145 (1) and (2)	Driving a vehicle the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road.	10
		<b>Safety</b>	
18	157 (A) (1)	Driver failing to wear a seat belt or failing to ensure the front seat passenger wear a seat belt.	3
19	Regulation 70 of the Motor Traffic (Highway Code) Regulations, 1987 ( <i>Gazette Extraordinary</i> , No. 486/8 of December 29th 1987)	Overtaking at, or approaching a corner or bend, hill, bridge, junction, pedestrian crossing, 'no overtaking area' township with heavy pedestrian traffic, narrow section of a road or crossing single or double white lines.	4
20	Regulation 49 of the Motor Traffic (Highway Code) Regulations, 1987 ( <i>Gazette Extraordinary</i> , No. 486/8 of December 29th 1987)	Failing to stop before the give way line of a zebra crossing while a pedestrian is at a pedestrian crossing.	6
21	158(1) and (2)	Rider of a motor cycle carrying more than one person and failing to wear a safety helmet or carrying a person without a safety helmet.	4
22	Regulation 35A of the Motor Traffic (Use of Vehicles) Regulations, of 1983 ( <i>Gazette Extraordinary</i> , No. 245 of May 13, 1983 as amended by Regulation published in the <i>Gazette Extraordinary</i> No. 916/1 of March 25, 1996)	Using hand held communication equipment while driving.	4

SCHEDULE II

(Regulation 3)

Reporting Form  
 (Police)

Year :  
 Month :  
 Police station :

Serial No.	Traffic Minor Offence Reg. No.	Name of the Offender	Driving Licence No.	Date of Offence	Section	Offence	Punishment	Remarks

.....  
 Signature of the Officer in Charge.  
 Name :  
 Seal :  
 Date :



## APPENDIX 2 – QUESTIONNAIRE; INTRODUCING DRIVER

### IMPROVEMENT POINTS TO SRI LANKA

The main objective of introducing Driver Improvement Points (DIPs) to Sri Lanka is identifying high risk motorists and habitual offenders and to suspend them from driving for a specified period of time. Correcting the attitude and improve the discipline of drivers in order to ensure that they will be more responsible and courteous while on the roads and reducing the high number of road accidents which has brought great loss to a country in each year are two other aims / objectives of a DIPs system.

DIPs are a mechanism already adopted in limited number of countries around the world mainly in developed countries. But countries like Malaysia, Singapore and South Africa have also adopted the DIPs along with the well-developed countries like USA, Canada and Australia.

Sri Lanka has also made their first attempts for a DIPs system with the regulations published under the Motor Traffic Act from the extra ordinary gazette numbered 1726/12 and dated 05.10.2011, where it has declared 22 offences that could be counted for DIPs.

According to the proposed system

- A regular driving license holder who accumulates a total of 24 points with in a period of 24 months will be suspended from driving for a period of one year.
- Two sets of forms will be used one by the police and the other by the courts (In a situation where the offender shall produce to courts) for reporting the road rule violations to the Department of Motor Traffic in order to mark DIPs under the respective driving license holders.
- The judgment of offence committed will merely decide upon the observations of Police officers.

The 22 offences identified are as follows

		Points
<b>Reckless Driving and Accidents</b>		
1	Failing to take such action on a highway to avoid an accident	6
2	Driving a motor vehicle on a highway recklessly or in a dangerous manner or at a dangerous speed	8
3	Driving a motor vehicle on a highway negligently or without reasonable consideration for other persons using the highway	8
4	Failing to stop after an accident on a highway and to furnish relevant information	10
5	Failing to report an accident forthwith to the nearest police station	10
<b>Speeding</b>		
6	Exceeding the prescribed speed limits on a highway	6

Road Rules		
7	Failing to keep left or nearside of the road	2
8	Driving so as to overtake other traffic without a clear view of the road ahead	6
9	Failing to overtake other traffic on the right off side of such other traffic	4
10	Failing to give way at intersections to vehicles coming from the right off side	4
11	Reversing or permitting the vehicle to travel backwards on a highway for a longer distance or without reasonable purpose	4
12	Failing to comply with prohibitory, restrictive, mandatory or Traffic (Signs) Regulations, priority signs	6
Signaling		
13	Failing to comply with oral directions or hand signals given by a police officer or a traffic warden	6
Pollution		
14	Driving a motor vehicle which has emissions above the prescribed standards	6
15	Using or permitting to use amplifying equipment in a vehicle with a volume of sound above the prescribed standards	6
16	Using a vehicle the noise of the engine and the horn of which exceed the prescribed standards	6
Construction and Use of Vehicles		
17	Driving a vehicle the condition of which causes or is likely to cause danger or harm to any person, property or vehicle on or adjoining the road	10
Safety		
18	Driver failing to wear a seat belt or failing to ensure the front seat passenger wear a seat belt	3
19	Overtaking at, or approaching a corner or bend, hill, bridge, Traffic (Highway Code) junction, pedestrian crossing, no overtaking area township Regulations, 1987 (Gazette with heavy pedestrian traffic, narrow section of a road or Extraordinary, No. 486/8 of crossing single or double white lines	4
20	Failing to stop before the give way line of a zebra crossing Traffic (Highway Code) while a pedestrian is at a pedestrian crossing	6
21	Rider of a motor cycle carrying more than one person and failing to wear a safety helmet or carrying a person without a safety helmet	4
22	Using hand held communication equipment while driving	4

The following questionnaire has prepared with the objective of getting the opinion of Motor vehicle users and road users on the possible impacts/outcomes of the proposed system. You are kindly requested to take some time to answer the following questions as per your thinking. Further any possible positives/ negatives that you point out and

that are not covered with this questionnaire of the proposed system is also welcomed as comments

#### Questions

1. Introducing Driver Improvement points at this moment is a very good move.  
Strongly Agree  
Agree  
Not Sure  
Disagree  
Strongly Disagree
  
2. The number of points offered for an offence is reasonable.  
Strongly Agree  
Agree  
Not Sure  
Disagree  
Strongly Disagree
  
3. In the present circumstances the points will be charged merely on the observations of the police officers at roadsides. It is sufficient to decide that you have committed a road rule violation and accept the points.  
Strongly Agree  
Agree  
Not Sure  
Disagree  
Strongly Disagree
  
4. Implementing DIPs system in the present circumstances will lead to a higher rate of corruption and mal practices  
Strongly Agree  
Agree  
Not Sure  
Disagree  
Strongly Disagree
  
5. Do you think it is necessary to provide a proof of your road rule violation before recording any points under your Driving license?  
Strongly Agree  
Agree  
Not Sure  
Disagree  
Strongly Disagree

6. If sufficient evidence of the road rule violation is provided, will you be ready to accept the DIPs offered?  
 Yes, I will accept the points  
 No, I will not
7. Drunken Driving, Drunken and Committing a Fatal Accident and Committing a Fatal Accident without Drinking are not considered under the DIPS as these are considered as severe offences and will be presented to the courts for the Judgment.  
 Yes, only the court decision is sufficient  
 Those three offences should also be included under DIPs  
 DIPs + Court Decision is necessary  
 Only DIPs will be sufficient
8. Traffic light offences are not included in the identified offence list. Including them as well is  
 Highly Recommended  
 Less Significant  
 Not sure  
 Not Recommended
9. Sri Lanka Still maintains fairly low quality standards for fuel. But the emission standards are fairly at a higher level. Considering both these situations, it is fair to mark DIPs for emissions related violation.  
 Strongly Agree  
 Agree  
 Not Sure  
 Disagree  
 Strongly Disagree
10. Introducing DIPS will reduce the number of road rule violations and accidents on roads.  
 Strongly Agree  
 Agree  
 Not Sure  
 Disagree  
 Strongly Disagree

11. The road conditions, the availability of road signs and road side information in Sri Lanka encourage the drivers to not to commit any road rule violations.

Strongly Agree

Agree

Not Sure

Disagree

Strongly Disagree

12. Condition of the vehicle is also a factor to be considered for DIPs under the current regulation. It is fair to mark DIPs against drivers who drove such vehicles, especially in a case where the vehicle is not owned by the driver.

Strongly Agree

Agree

Not Sure

Disagree

Strongly Disagree

**Comments**

--



**APPENDIX 3 ó Sample Questionnaire filled by a Participant of the survey**

**ශ්‍රී ලංකාවට රියදුරු අභිවාද්ධි ලකුණු ක්‍රමයක් හඳුන්වා දීම පිළිබඳ ප්‍රශ්නාවලිය**

ශ්‍රී ලංකාවට රියදුරු අභිවාද්ධි ලකුණු ක්‍රමයක් හඳුන්වා දීමේ මූලික අරමුණ වන්නේ ඉතා අවදානම් සහගත රියදුරන් සහ නිරන්තරයෙන් මාර්ග නීති කඩකරන රියදුරන් හඳුනාගැනීම සහ එමගින් නිශ්චිත කාලයක් සඳහා සිවුන් රිය ධාවනයෙන් ඈත් කර තැබීමයි. එමගින් ඔවුන්ගේ ආකල්ප සහ චිතයගැන්වූවය වර්ධනය කර ගැනීම සඳහා පෙළඹවීමෙන් වඩා වගකීම් සහගත සහ ආචාරශීලී රියදුරන් පිරිසක් ඇති කරගැනීම සහ වාර්ෂිකව ඉතා විශාල ජීවිත හා දේපල හානි රැසකට හේතු වන මාර්ග අනතුරු අවම කරගැනීමට කටයුතු කිරීම මෙහි තවත් අරමුණ වෙයි.

රියදුරු අභිවාද්ධි ලකුණු ක්‍රමය වැනි ක්‍රමවේදයන් මේ වන විටත් ලෝකයේ සීමිත රටවල් ප්‍රමාණයක ක්‍රියාත්මක වේ. මේ අතරින් ඉතා වැඩි කොටස සංවර්ධිත රටවල් වේ. නමුත් මැලේසියාව, සිංගප්පූරුව හා දකුණු අප්‍රිකාව වැනි රටවල් සහ ඕස්ට්‍රේලියාව, ඇමෙරිකා එක්සත් ජනපදය හා කැනඩාව වැනි සංවර්ධිත රටවල්ද රියදුරන් සඳහා මෙවැනි ලකුණු ක්‍රම ක්‍රියාත්මක කරනු ලබයි.

මෝටර් වාහන පනත යටතේ අංක 1726/12 සහ 2011.10.05 දිනැති අති විශේෂ ගැසට් පත්‍රය මගින් ශ්‍රී ලංකාවටද මෙවැනි ලකුණු ක්‍රමයක් හඳුන්වා දීම සඳහා පළමු පියවර තබා ඇති අතර ඒ යටතේ රියදුරු අභිවාද්ධි ලකුණු සඳහා යටත් වන වැරදි 22ක් හඳුනා ගෙන ඇත.

එසේ යෝජිත ක්‍රමවේදයට අනුව,

- මාස 24ක කාලයක් තුළ රියදුරු අභිවාද්ධි ලකුණු 24ක් රැස් කර ගන්නා සාමාන්‍ය රියදුරු බලපත්‍ර හිමියෙක් ගේ රියදුරු බලපත්‍රය වසරක කාලයක් සඳහා අත්හිටවනු ලැබේ
- මාර්ග නීති කඩ කිරීමකදී ඊට අනුරූපව රියදුරු අභිවාද්ධි ලකුණු ලබා දීම සඳහා මෝටර් රථ ප්‍රවාහන දෙපාර්තමේන්තුව වෙත දැනුම් දීම ශ්‍රී ලන්කා පොලීසිය සහ අධිකරණය එකිනෙකට ආකෘති පත්‍ර 02 ක් භාවිතයෙන් සිදු කරනු ලබයි.
- අදාළ මාර්ග නීති කඩ කිරීම ඒ වන විට මාර්ගයේ සේවයේ නියුතුව සිටින පොලිස් නිලධාරීන්ගේ නිරීක්ෂණ මත පදනම්ව තීරණය කරනු ලැබේ.

මෙම ලකුණු ක්‍රමය සඳහා හඳුනාගෙන ඇති වරදවල් 22 පහත පරිදි වේ.

	ලකුණු	
<b>අපරික්ෂාකාරීව රිය පැදවීම සහ අනතුරු</b>		
1	මහා මාර්ගයකදී රිය අනතුරක් වලක්වා ගැනීමට පියවර ගැනීමට අපොහොසත් වීම	6
2	මහා මාර්ගයක අපරික්ෂාකාරීව හෝ අන්තරාදායක වේගයෙන් මෝටර් වාහනයක් ධාවනය කිරීම	8
3	මහා මාර්ගය භාවිතා කරන වෙනත් කැනැන්තන් කෙරෙහි නොසැලකිලිමත් ලෙස හෝ යුක්ති සහගත සැලකිල්ලක් නොමැතිව මහා මාර්ගයට මෝටර් වාහනයක් ධාවනය කිරීම	8
4	මහා මාර්ගයක රිය අනතුරකින් පසුව වාහනය නතර කිරීම පැහැර හැරීම සහ අදාළ තොරතුරු සැපයීම පැහැර හැරීම	10
5	අනතුරක් පිළිබඳව වහාම ලහම පිහිටි පොලිස් ස්ථානයට දැනුම් දීම පැහැර හැරීම	10
<b>අධික වේගය</b>		
6	මහා මාර්ගයක නියමිත වේග සීමා ඉක්මවා රිය පැදවීම	6
<b>මාර්ග නීති</b>		
7	මාර්ගයේ වම් පසට හෝ ආසන්න පැත්තට ගෙන රිය පැදවීමට අපොහොසත් වීම	2
8	මාර්ගයේ ඉදිරිය පැහැදිලිව දර්ශනය කර ගැනීමෙන් තොරව වෙනත් වාහන පසු කර රිය පැදවීම	6
9	වෙනත් වාහන පසුකර යන විට ඒ වෙනත් වාහනවල දකුණු පැත්තෙන්, දකුණට නැඹුරුව රිය පැදවීම පැහැර හැරීම	4

10	දකුණු දෙසින් හෝ එම පැත්තට ඉවතින් පැමිණෙන වාහන සඳහා මං සන්ධියකදී මාර්ගයේ ඉඩ ලබා නොදීම	4
11	දීර්ඝ දුරක් මහා මාර්ගයක පිටුපසට ධාවනය කිරීම හෝ පිටුපසට ධාවනය කිරීම සඳහා සාධාරණ හේතුවක් නොමැතිව අවසර දීම	4
12	තහනම් සීමිත , අනිවාර්ය හෝ ප්‍රමුඛතා සංඥා වලට අනුකූලව ක්‍රියා කිරීම පැහැර හැරීම	6
සංඥා කිරීම		
13	පොලිස් නිලධාරියෙකු හෝ වාහන නිරීක්ෂකයෙකු විසින් දෙන ලද වාචික විධාන හෝ හඬක සංඥාවලට අනුකූලව ක්‍රියා කිරීම පැහැර හැරීම	6
දූෂණය		
14	නියමිත ප්‍රමිතීන්ට වැඩි වීමෙන් හේතු වන සහිත මෝටර් වාහනයක් පැදවීම	6
15	නියමිත ප්‍රමිතීන් ඉක්මවන බෙදා මට්ටම් සහිතව වාහනයක බෙදා විකාශන උපකරණ භාවිතා කිරීම හෝ ඊට අවසර දීම	6
16	නියමිත ප්‍රමිතිය ඉක්මවා එංජිම හා තලාව බෙදා නිකුත් කරනු ලබන වාහනයක් පාවිච්චි කිරීම	6
වාහන තැනීම හා පාවිච්චිය		
17	මාර්ගයේ හෝ මාර්ගයට යාබද යම් තැනැත්තෙකුට, දේපලකට හෝ වාහනයකට අනතුරක් හෝ හානියක් ඇති කරන හෝ ඇති කිරීමට ඉඩ ඇති තත්වයකින් යුතු වාහනයක් පැදවීම	10
ආරක්ෂාව		
18	වියදුරු විසින් ආසන පටියක් පැළඳීම පැහැර හැරීම හෝ ඉදිරි ආසනයේ සිටින මගියා විසින් ආසන පටියක් පැළඳ ඇති බවට වග බලා ගැනීම පැහැර හැරීම	3
19	කෙළවරකදී, වංඟුවකදී, කන්දකදී, පාලමක් මතදී, මං සන්ධියකදී, පදික මාරුවකදී, වාහන පසුකර යාම තහනම් ප්‍රදේශයකදී, අධික පදික තදබදයක් ඇති නගරයකදී, මාර්ගයක පටු කොටසක් වූ ස්ථානයකදී, වාහන පසු කර යාම හෝ එම ස්ථාන වලට ප්‍රවේශවීම හෝ තනි හෝ ද්විත්ව යුග්‍ය ඉරි කැපී යන ලෙස ධාවනය කිරීම	4
20	පදිකයෙකු පදික මාරුව තුළ සිටියදී, මාර්ගය ඉඩ දෙනු රේඛාව ඉදිරිපිට වාහනය නැවැත්වීමට අපොහොසත් වීම	6
21	මෝටර් බයිසිකලයක වියදුරු විසින් එක් තැනැත්තකුට වැඩි සංඛ්‍යාවක් රැගෙන යාම සහ අනාරක්ෂිත හිස් පැසුමක් පැළඳීම පැහැර හැරීම හෝ ආරක්ෂිත හිස් වැසුමක් නොමැති තැනැත්තෙකු රැගෙන යාම	4
22	විය පදවන අතරතුරදී අනෙහි දරා සිටින සන්නිවේදන උපකරණයක් භාවිතා කිරීම	4

පහත ප්‍රශ්නාවලිය මෙම යෝජිත ලකුණු ක්‍රමය හා ඉන් ඇතිවිය හැකි ප්‍රතිඵල පිලිබදව මෝටර් වාහන භාවිතා කරන්නන්ගේ සහ මාර්ග භාවිතා කරන්නන්ගේ අදහස් ලබා ගැනීමේ අරමුණින් සකස් කරන ලද්දකි. ඔබගේ අදහස් අනුව පහත ප්‍රශ්නවලට පිලිතුරු සපයන මෙන් කාරුණිකව ඉල්ලා සිටින අතර මේ පිලිබදව මෙම ප්‍රශ්නාවලිය මගින් ආවරණය නොකෙරෙන වෙනත් කරුණු පිලිබදවද ඔබගේ අදහස් ඇත්නම් ඒවා ප්‍රශ්න වලට පසුව ඇති අදහස් තීරයේ සටහන් කරන ලෙසද ඉල්ලා සිටිමි.

ප්‍රශ්න:

ඔබ...?

- පුද්ගලික වාහනයක් පරිහරනය කරන්නෙක්
- වෘත්තීයමය වියදුරෙක්
- මගියෙක් / පදිකයෙක්

1. රියදුරු අභිවාද්ධි ලකුණු ක්‍රමය හඳුන්වාදීම මේ මොහොතේදී ඉතා සුදුසු ක්‍රියාවකි.

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

2. එක් එක් වරද සඳහා යෝජිත ලකුණු ප්‍රමාණය සාධාරණ හා ප්‍රමාණවත් වේ.

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

3. වර්තමාන තත්ව යටතේදී පොලිස් නිලධාරීන්ගේ නිරීක්ෂණ මත පදනම්ව මාර්ග නීති කඩ කල බව තීරණය කරනු ලබයි. ඒ අනුවම අභිවාද්ධි ලකුණු ලබාදීමද සිදු කරනු ඇත. ඔබ වරදක් සිදු කල බවට තීරණය කර ඊට ලකුණුද ලබා දීම සඳහා මෙම ක්‍රියාවලිය පමණක් ප්‍රමාණවත් වන බව ඔබ සිතන්නේද?

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

4. වර්තමාන තත්ව යටතේදී රියදුරු අභිවාද්ධි ලකුණු ක්‍රමය හඳුන්වාදීම විවිධ දූෂණයන්ට සහ අවහාලිතයන් සඳහා හේතුපාදක විය හැක.

- සම්පූර්ණයෙන්ම එකඟ වෙමි

- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

5. මාර්ග නීති කඩකිරීමක් සිදු කල අවස්තාවකදී, එය සිදු කල බවට තහවුරුවක් (ජායාරූප, වීඩියෝ සාක්ෂි හෝ වෙන මාපක කියවීම වැනි) රියදුරන් වෙත ඉදිරිපත් කිරීමට කටයුතු කිරීම, ඒ සඳහා අභිච්ඡාදීම් ලකුණු ලබාදීමට පෙර සිදු කිරීම අවශ්‍ය යැයි ඔබ සිතනවාද?

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

6. මාර්ග නීති කඩකිරීමක් සිදු කල බව විශ්වාසනීය ලෙස තහවුරු කරන්නේ නම්, ඒ සඳහා නියමිත රියදුරු අභිච්ඡාදීම් ලකුණු ප්‍රමාණය ලබා ගැනීම සඳහා ඔබ සූදානම්ද?

- ඔව්, මම සූදානම්
- නැහැ

7. බීමනින් රියපදවීම, මාරාන්තික රිය අනතුරක් සිදු කිරීම හා බීමනින් රියපදවා මාරාන්තික රිය අනතුරක් සිදු කිරීම යන වැරදි අධිකරණය මගින් දඬුවම් ලබා දෙන වැරදි වන බැවින් රියදුරු අභිච්ඡාදීම් ලකුණු සඳහා සලකා බලනු නොලැබේ. ඒ අනුව එම වැරදි සඳහා,

- ඔව්, අධිකරණ තීන්දුව පමණක් ප්‍රමාණවත්
- එම වරදවල් ද අභිච්ඡාදීම් ලකුණු සඳහා එකතු කල යුතුය
- අභිච්ඡාදීම් ලකුණු මෙන්ම අධිකරණ තීන්දුව අනුවද ක්‍රියා කල යුතුය
- අභිච්ඡාදීම් ලකුණු පමණක් ලබා දීම ප්‍රමාණවත් වේ

8. මාර්ග ආලෝක සංඥා ආශ්‍රිත නීති උල්ලංඝනයන් දැනට හඳුන්වා දී ඇති වැරදි ලැයිස්තුවේ අන්තර්ගත නොවේ. එම වැරදිද හඳුන්වා දීම,

- අත්‍යවශ්‍යයි
- එතරම් වැදගත් නොවේ
- මධ්‍යස්ථයි
- අනවශ්‍යයි

9. ශ්‍රී ලංකාවේ දැනට බාවිතා වන ඉන්ධන වල ප්‍රමිතිය/තත්වය සාපේක්ෂ ලෙස අඩු මට්ටමක පවතී. නමුත් ඊට සාපේක්ෂව පවත්වාගෙන යනු ලබන විමෝචන ප්‍රමිතීන් සාපේක්ෂව ඉහල මට්ටමක වේ. මෙම තත්වයට හේතු වුවද වායු විමෝචනය සම්බන්ධයෙන් වන වැරදි සඳහාද අභිවෘද්ධි ලකුණු ලබාදීම උචිත වේ.

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

10. ශ්‍රී ලංකාවේ මහා මාර්ග වල ප්‍රමිතිය/තත්වය, මාර්ග සංඥා සහ මාර්ග බදුව ප්‍රදර්ශනය කර ඇති විවිධ උපදෙස් සහ තොරතුරු මඟින් මාර්ග නීති උල්ලංඝනය නොකිරීම සඳහා රියදුරන් වෙත ප්‍රමාණවත් පෙළඹවීමක් ඇති කරයි

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

11. මෝටර් වාහනයේ කාර්මික හා ධාවන තත්වයද වර්තමාන තත්ව යටතේදී රියදුරු අභිවාද්ධි ලකුණු සඳහා සලකා බලනු ලබන සාධකයක් වේ. ධාවනය කරනු ලබන රථයේ හිමිකරු රථයේ රියදුරු නොවන අවස්ථාවකදීද, රියදුරු වෙත රියදුරු අභිවාද්ධි ලකුණු ප්‍රදානය කිරීම සුදුසුය.

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

12. රියදුරු අභිවාද්ධි ලකුණු ක්‍රමය හඳුන්වාදීම මාර්ග නීති උල්ලංඝනය කිරීම සහ මාර්ග අනතුරු ප්‍රමාණය සංඛ්‍යාත්මකව අඩු කිරීමට හේතු වනු ඇත.

- සම්පූර්ණයෙන්ම එකඟ වෙමි
- එකඟ වෙමි
- මධ්‍යස්ථයි
- එකඟ නොවෙමි
- සම්පූර්ණයෙන්ම එකඟ නොවෙමි

අදහස්

ඔබ ඉන්ජිනේරු වෛ ක්‍රමෝපාය රථ ගමන් වාහන  
 ගත කළ විටදීද ඉන්ජිනේරු ඉන්ජිනේරු වෙත ගමන්  
 ප්‍රමාණය සංඛ්‍යාත්මකව අඩු කිරීමට හේතු වනු ඇත.  
 මධ්‍යස්ථයි