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# Evaluation of Electronic Traffic Law Enforcement (E-TLE) Program in Medan City

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A B S T R A C T
The E-TLE program, or Electronic Traffic Law Enforcement, is an electronic-based traffic law enforcement system designed to increase efficiency in monitoring and enforcing traffic regulations. ETLE works by using various technological devices, such as surveillance cameras installed at various strategic points, including at road intersections, along highways, or in locations prone to violations. This research aims to analyze how the Electronic Traffic Law Enforcement (E-TLE) program is implemented in realizing traffic order for motorists in the city of Medan and to analyze what factors hinder of the program. This research uses qualitative methods. The results of this research show that the E-TLE program is not yet fully capable of realizing traffic order for motorbike drivers because there are still factors and obstacles in its implementation, such as a lack of awareness among motorbike drivers due to not fully understanding the performance of the E-TLE program. The lack of deterrent effect received by motorists and the lack of socialization information provided by the police regarding this program has caused motorists to assume that this program is just a formality.

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## INTRODUCTION

One of the problems that often occurs in urban areas is violation of traffic rules on the highway by motorized vehicles. The intensity of the volume of vehicles passing on the roads in big cities is quite dense, resulting in frequent violations of traffic rules on the road considering that motorized vehicles are the most needed means of transportation. According to (Rion, 2011), vehicles are divided into two types, namely public and private vehicles. Public vehicles are vehicles used for mass transportation, both for humans and goods. Private vehicles are vehicles used daily for personal interests. The vehicle is in the form of a car or motorbike as a means of personal transportation that is often used by the community.

The high number of motorized vehicle users is always related to the increasing number of traffic violations, these are two phenomena that are often interrelated and have a significant impact on order in traffic on the highway. The high number of motorized vehicle users has various negative impacts, one of which is the increasing number of traffic violations. The most common traffic violations can be in the form of various actions such as breaking the speed limit, running a red light, and not wearing a seat belt or not wearing a helmet. The use of motorized vehicles in a city is very high, it cannot be denied because the population in the city is greater than the population in the regions or villages. In 2023, North Sumatra was ranked 5th (five) in Indonesia as the province with the most motorized vehicle users, reaching 8 (eight) million motorized vehicles.

| No | Number of Vehicle Units | Province |
|---|---|---|
| 1 | 24.000.000 | Jawa Timur |
| 2 | 20.000.000 | Dki Jakarta |
| 3 | 16.000.000 | Jawa Tengah |
| 4 | 12.000.000 | Jawa Barat |
| 5 | 8.000.000 | Sumatera Utara |
| 6 | 4.000.000 | Sulawesi Selatan |

*Source: Central Bureau of Statistics, 2023*

Meanwhile, the city of Medan is one of the areas with a relatively high number of traffic violations. This is likely due to the high number of motorized vehicle users. Currently, the city of Medan is ranked first as the city with the largest number of motorized vehicle users in North Sumatra Province. This can be seen from the following table:

| NO | POLRES/TA | MP | BUS | MB | SPD MOTOR | RANSUS | TOTAL |
|---|---|---|---|---|---|---|---|
| 1 | MEDAN | 509.785 | 5.749 | 166.809 | 2.892.400 | 1.809 | 3.576.827 |
| 2 | DELI SERDANG | 39.458 | 196 | 17.050 | 468.099 | 169 | 524.979 |
| 3 | ASAHAN | 20.965 | 138 | 11.933 | 425.898 | 234 | 459.178 |
| 4 | LABUHANBATU | 21.457 | 205 | 13.994 | 378.808 | 129 | 414.601 |
| 5 | LANGKAT | 16.753 | 91 | 8.505 | 353.689 | 102 | 379.140 |

*Source: North Sumatra Police, 2023*

The most common problems that arise in the use of motorized vehicles, especially in urban areas, are traffic problems. Various problems that arise include congestion, traffic violations and traffic accidents. The large number of motorized vehicles is considered to be one of the factors causing traffic problems. As the number of motorized vehicles on the highway increases, it automatically causes traffic to tend to become denser, this often causes motorists to feel rushed. When traffic is dense, motorists are more likely to violate traffic regulations in an effort to reduce their travel time, thus committing traffic violations, including in the city of Medan.

Most of the violations committed by motorized vehicle users are violating traffic signs, road markings and many other types of traffic violations that are often committed by motorists. In regulating various traffic problems, the police implement a procedure called a ticket. A ticket is an action taken by the police as evidence of a traffic violation that occurs, usually a ticket is given by the police directly to people who violate traffic. The action taken is to carry out a traffic law raid which includes checking vehicles, document validity, and driver eligibility when driving by the police. This law enforcement is carried out by issuing tickets to violators who are caught in operations for violating traffic regulations.

In 2009, the police made changes to the procedures for handling traffic violations based on electronics or what is also known as E-ticketing. The legal source that is the basis for the development of the E-ticketing system in Indonesia is Law Number 22 of 2009 concerning traffic and road transportation, which is stated in article 272 which states that in supporting law enforcement activities against traffic and transportation violations, electronic devices can be utilized. The information system for every violation by drivers on the highway must be able to be the basis for handling violations in the next stage, meaning that information on violations that have been committed by each person must always be identified by all police officers who issue tickets.

Over time, and also bringing the flow of globalization to information and communication technology, many sectors have transformed to develop, such as public services. The progress of information technology that is currently developing is transformed by the police and aims to improve the quality of services to the community, in an effort to create a government that uses an electronic system that is expected to provide fair, transparent, efficient public services that can be felt by all levels of society without exception. Therefore, the Indonesian National Police is trying to improve public services by utilizing technology through an electronic-based law enforcement program which has been developed into Electronic Traffic Law Enforcement (E-TLE).

The legal basis for the implementation of the Electronic Traffic Law Enforcement (ETLE) program in Indonesia is based on various regulations that provide a legal basis for the implementation of electronic traffic law supervision and enforcement. The legal reference that encourages the birth of the electronic ticketing program or what can also be called E-TLE still refers to Law Number 22 of 2009 concerning traffic and road transportation, article 272 which states: "That to support the enforcement of violations in the field of traffic and road transportation, electronic equipment can be used". Then, the Regulation of the

Minister of Transportation Number 34 of 2014 concerning the Installation and Use of Traffic Control and Supervision Equipment on the Road.

This regulation regulates the "Installation and use of technological tools for traffic control and supervision", including ETLE technology, to assist law enforcement and traffic supervision. The Chief of Police also instructed his staff throughout Indonesia including the Regional Police, Resorts and Sectors through the Republic of Indonesia Police (headquarters) telegram letter number ST/2264/X/HUM.3.4.5./2022 dated October 18, 2022, which was signed by the Head of the Indonesian Police Traffic Corps, Inspector General of Police. Firman Shantyabudi, which in the Decree explained that traffic violations can be taken using E-TLE, both static and mobile, and also by issuing warnings to traffic violators.

In Law Number 22 of 2009, the explanation of Traffic and Road Transportation is not only limited to its meaning but also many components in the explanation of Traffic and Road Transportation. The objectives of Law Number 22 of 2009 also have the following objectives:

a. The realization of safe, secure, orderly, smooth, and integrated Traffic and Road Transportation services with other modes of transportation to encourage the national economy, advance public welfare, strengthen national unity, and be able to uphold the dignity of the nation.
b. The realization of traffic ethics and national culture.
c. The realization of law enforcement and legal certainty for the community.

Basically, the electronic ticketing program is an improvement on the previous program, where E-ticketing as the old program only focused on the process of paying fines carried out by traffic violators electronically, while in the E-TLE program the process of taking action against traffic violators uses a camera. Cameras installed in several locations will capture every type of traffic violation committed by drivers for 24 hours so that it is expected that drivers will be more obedient and comply with applicable traffic regulations. The mechanism in the process of taking action against traffic violators by recording all violation activities and detecting the vehicle's license plate if a violation is detected, then the violation letter is sent to the address of the vehicle owner who committed the violation.

In 2022, the Traffic Directorate of the North Sumatra Regional Police also realized the ETLE program phase 2 with a total of 10 electronic ticketing cameras to record traffic violations committed by motorists in the city of Medan. The following are details of the locations of electronic ticketing cameras in the city of Medan:

| No. | Road location | Camera location |
|---|---|---|
| 1. | Gatot Subroto Street | City boundary section. Direction from city. Sensor detection exit Medan. |
| 2. | Jamin Ginting Street | Pasar Induk section. Sensor detection enter Medan |

| | | |
|---|---|---|
| 3. | Karya Cilincing Street | Direction from Pulo Brayan. Sensor towards city |
| 4. | HM Yamin Street | Tugu Juang 45. Direction from Letda Sujuno street. Sensor towards city |
| 5. | SM Raja Street | Direction Jalan Pelangi. Sensor towards city. |
| 6. | Captain Muslim Street in front of Millennium Plaza | Direction from Amir Hamzah street. Sensor towards Sei Kambing |
| 7. | Amir Hamzah Street | Direction from Sei Sikambing Jalan Karya. Sensor towards Tugu Adipura. |
| 8. | Raden Saleh Street (DPRD Office) | Direction from Wisma Benteng, sensor towards Merdeka Walk |
| 9. | City Hall Street | Simpang Merdeka Wallk |
| 10. | Brigadier General Katamso Street | Simpang Juanda |

*Source: Medan Police, 2022*

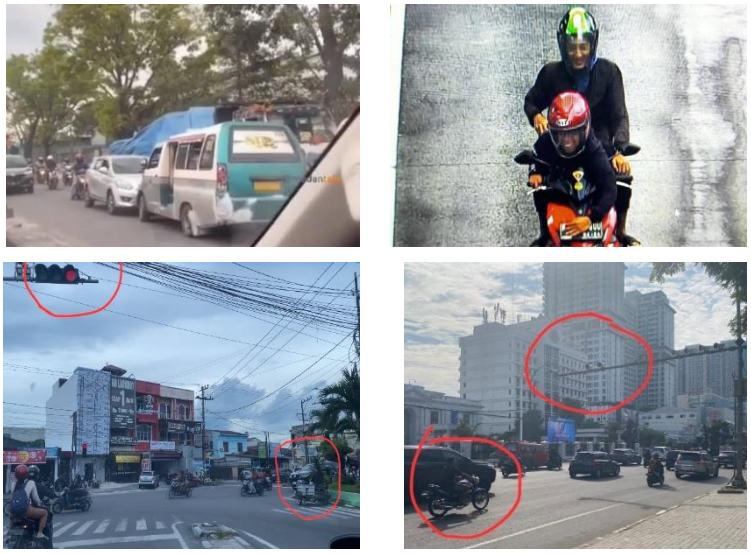
In the 2nd stage, the North Sumatra regional police and also the Medan city police have installed ETLE cameras with a total of 10 camera points. At the beginning of its implementation, there was only one camera installed in the city of Medan, namely on Jalan Balai Kota with a location at the Merdeka Walk intersection. This location was used as the first place to implement the ETLE camera because this road is the center of Medan and this road is also a strategic location considering the number of motorized vehicles passing through is quite dense and also has a fairly wide road section.

Medan city traffic is known as one of the chaotic traffic. On the Medan city highway, traffic violations are often encountered such as breaking through red lights, going against traffic, violating road markings, not wearing helmets and others. These various phenomena are also carried out by 2-wheeled or 4-wheeled motorized vehicles. It is not uncommon for us to find that quite often a city transportation car (Angkot) breaks through red lights, violates road markings and even goes against traffic. The following are the figures for traffic violations in the city of Medan.

| Traffic Violation Figures in Medan City | | |
|---|---|---|
| **NO** | **Year** | **Number Of Violations** |
| 1 | 2020 | 26.698 |
| 2 | 2021 | 14.233 |
| 3 | 2022 | 10.688 |
| 4 | 2023 | 12.024 |

*Source: Traffic Directorate of North Sumatra Regional Police, 2023*

Another phenomenon that has emerged is that motorcyclists are often found not installing license plates or motor vehicle registration plates (TNKB) so that it is difficult to identify the data of traffic violators. This is considered due to the lack of massive socialization carried out by the police so that the public assumes that ETLE is only a program and the public does not know in full how the process and stages of implementing traffic violations are implemented. Another weakness that is a loophole for violations from the implementation of electronic ticketing is the inability to check the completeness of vehicle documents. As a result, ticket sanctions for drivers who do not have or do not carry complete documents such as a driver's license and vehicle registration certificate (STNK) cannot be applied.



*Source: Processed by researchers*

| NO | VIOLATION | FINE |
|---|---|---|
| **1** | Violating traffic signs and road markings | Rp 500.000 |
| **2** | Not wearing a seat belt | Rp 250.000 |
| **3** | Driving while using a mobile phone | Rp 750.000 |
| **4** | Not obeying the speed limit | Rp 500.000 |
| **5** | Using a fake license plate | Rp 500.000 |
| **6** | Driving against the direction | Rp 500.000 |
| **7** | Driving against traffic | Rp 500.000 |

| | | |
|---|---|---|
| **8** | Ignoring red lights | Rp 250.000 |
| **9** | Carrying more than three passengers (motorcycle) | Rp 250.000 |
| **10** | Not turning on the lights during the day for motorbikes | Rp 100.000 |

*Source: North Sumatra Police Traffic Directorate, 2024*

As can be seen in the table above, it can be seen that the amount of fines for motorcyclists caught by E-Tle is the same as the fines given through manual ticketing. This is based on Law No. 22 of 2009 concerning Traffic and Road Transportation and Government Regulation No. 79 of 2013 concerning the LLAJ Network. However, from the various problems that arise regarding compliance in driving, motorcyclists actually seem to take lightly the amount of fines that will be received when committing violations.

From the various phenomena that occur, of course, it has an impact on the high number of traffic violations in the city of Medan. The high number of traffic violations and coupled with other problems caused by motorcyclists continues to be a dilemma, especially since the volume of vehicles continues to increase every time. The E-TLE program will be implemented in 2022, with the hope of being able to resolve various problems of traffic violations that occur on the highway. Basically, the E-TLE program is here to make it easier for police officers to supervise and take action against traffic violations, and also to make people who use motorized vehicles more obedient and orderly in traffic.

Public compliance with traffic regulations can be said to be still low. It is said to be low because it can be seen from the fairly high number of traffic violations committed by the public as motorcyclists. In Regulation No. 22 of 2009 concerning transportation and traffic, it is explained that all road users are required to know about the regulations set by the government through laws or other documents so that a balance can be established between vehicle drivers and existing traffic regulations. The goal is to ensure that everyone obeys traffic regulations so that there is no increase in the number of violations and accidents on public roads.

Compliance in driving is an attitude of respecting traffic regulations. These rules are designed to direct drivers to follow existing provisions, thus providing a positive impact on all traffic users and helping to reduce traffic accidents. (Milgram, 1963) States that compliance is an action from an individual who agrees to follow directions wherever they are. Compliance with traffic regulations is a form of interaction between humans as individuals and also as part of society. Baroon, Branscombes, and Byrne in (Sarwonno, 2012) State that compliance is a form of social influence in which a group of people or individuals follow and obey requests from the authorities to perform certain behaviors. Compliance also shows obedience, submission, and compliance with instructions or regulations. One form of compliance is the attitude of obedience shown by individuals or groups to authority. From the various phenomena and problems that arise in traffic, of course, it cannot only focus on the problem on the community as motorcyclists. In fact, the authorities have implemented an E-TLE program that aims to reduce the number of traffic violations committed by

motorists. The implementation of E-TLE has not drastically reduced the number of traffic violations, therefore it is necessary to know how the implementation of this program is running effectively or not in reducing the number of traffic violations.

The E-TLE program can basically provide convenience for traffic police in taking action against traffic violations that occur on the highway, considering the cameras that operate for 24 hours and added to the Razia activities carried out directly by the police. However, the number of traffic violations as seen in some of the data above raises a problem whether the electronic ticketing system can be said to be effective or not, then it must also be understood that this technology needs to be accompanied by a good monitoring system so that individual violators do not have a gap to violate.

The emergence of various problems and phenomena in traffic actually creates contradictions related to the implementation of ETLE in the city of Medan. According to (Usman, 2002), Implementation or program execution is the process of implementing or executing a plan, policy, idea, or system into real action. Basically, implementation is carried out after all planning is considered perfect. Program implementation culminates in activities, actions, actions or the existence of a system mechanism, implementation is not just an activity, but a planned activity and to achieve the objectives of the activity. Then, (Riant, 2003) argues that in principle, the implementation of a program has the aim of achieving the expected results and emphasizing the principles in every action or method taken by individuals or groups in order to achieve the goals that have been set.

The emergence of contradictions related to the implementation of the E-Tle program and the phenomena that occur on the highway cause problems in the implementation of the program, so an evaluation of the implementation of the E-Tle program in the city of Medan must be carried out. Evaluation of program implementation is needed to ensure that the goals and targets that have been set can be achieved effectively and efficiently. According to Suchmaan (1961) in (Arikunto, 2010), Evaluation is considered as a process to assess the results of various activities that have been planned and implemented to support the achievement of predetermined goals. Meanwhile, Woorthen and Sandeers (1973) in (Arrikunto, 2010), evaluation is an activity carried out to collect useful information in assessing a program and finding alternative strategies proposed to achieve predetermined goals. In general, evaluation is the act of collecting data on the performance of something, which is then used to choose the most appropriate choice for making decisions.

Evaluation of the program has a specific purpose to determine the achievement and also what is hindering the implementation of the program and to find out what components have been implemented and which have not. Evaluation is needed to understand the context, problems, and to find out what needs to be done by the program to achieve its goals. In the implementation of the electronic ticketing system implemented in Medan City since 2022, the level of traffic violations is still relatively high. Seeing the number of traffic violations

committed by the people of Medan City, it is still relatively low in reducing the number of traffic violations in Medan City.

## LITERATURE REVIEW

### *Electronic Traffic Law Enforcement (E-TLE)*

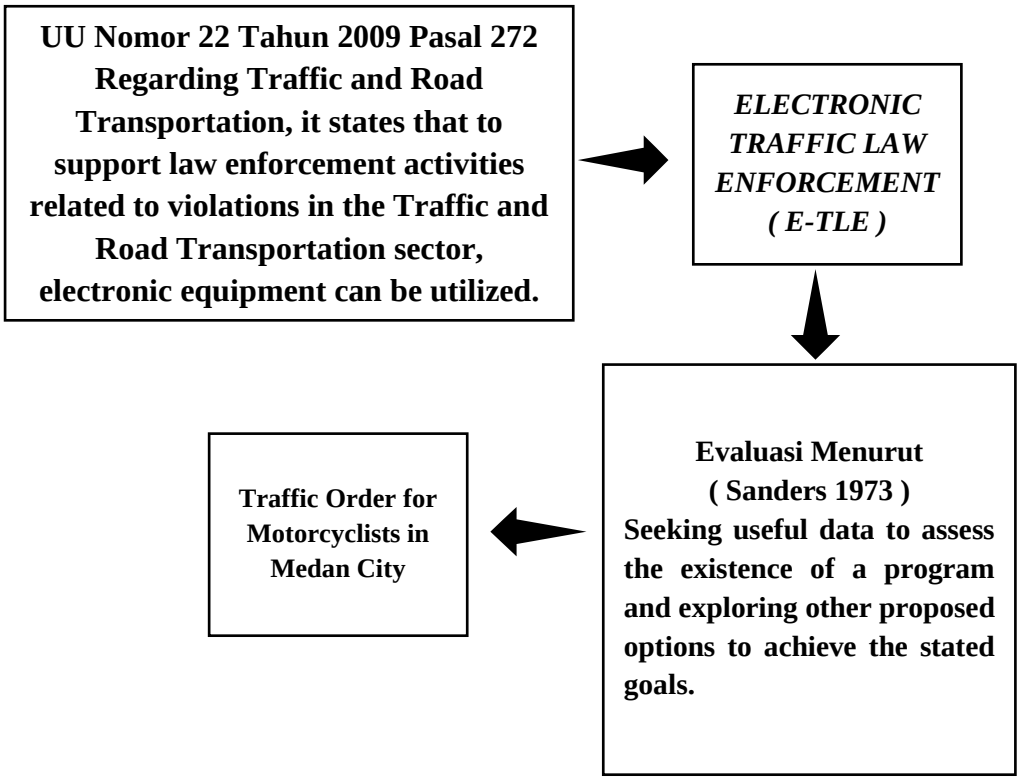
Electronic Traffic Law Enforcement is a traffic law enforcement system based on information technology using cameras and then directly recorded to prosecute traffic violators. This system is expected to be more efficient and effective in the entire ticketing process and assist the police in administrative management, as well as provide legal certainty regarding fines received by violators. The use of ETLE is believed to be able to reduce extortion and bribery practices. However, the application of sanctions with the ETLE system in resolving traffic violation cases in certain jurisdictions has not been very effective because its application has not met the expected objectives of the program itself. There are also obstacles in the application of ETLE in certain contexts. However, research has been conducted to develop an Android-based traffic violation reporting application as part of law enforcement.

Direct action is only carried out in areas that do not yet use ETLE and do not yet cover all of Indonesia. Regarding the punishment, ETLE is actually equivalent to the punishment stated in Law Number 22 of 2009 concerning Traffic and Road Transportation (LLAJ Law). When examined from the perspective of compliance with traffic regulations, E-TLE has basically been able to improve driver discipline. With the presence of surveillance cameras at various strategic points, drivers become more aware and careful in driving. In terms of law enforcement efficiency, E-Tilang has brought about major changes. Before this system, traffic law enforcement was highly dependent on the physical presence of officers in the field.

### *Conceptual Framework*

In the implementation of research, a framework of thought is made to facilitate the preparation of the thesis and make the assessment more systematic. (Sugiyono, 2013) explains that the framework of thought is a conceptual model used as a theory related to several factors then identified as important problems.

Based on the title of the study "Implementation of the Electronic Traffic Law Enforcement (E-Tle) Program in Realizing Traffic Order for Motorists in Medan City". This study uses the implementation model theory from Van meter & Van Horn, namely there are 6 criteria in the implementation of a program, namely Policy Size and Objectives, Resources, Characteristics of Implementing Agents, Attitudes or Tendencies (disposition), Inter-Organizational Communication and Implementation Activities, Economic, Social, and Political Environments. Researchers chose to use this theory as a framework of thought because it is in accordance with the phenomena in the field.




## METHODOLOGY

Qualitative methods are a collection of methods to analyze and understand more deeply about the meaning of several individuals or groups considered as a humanitarian problem or social problem (Creswell, 2015). In this study, the researcher describes, interprets and analyzes in a study entitled: Implementation of the Electronic Traffic Law Enforcement (E-Tle) Program in Realizing Traffic Order for Motorists in Medan City.

### *Data Analysis Method*

Data analysis is a process of systematically searching and compiling data. According to (Sugiyono, 2013) data obtained from interviews, field notes and documentation, must be summarized by organizing data into categories, describing them into units, synthesizing, compiling them into patterns, choosing what is important and what will be studied, and making conclusions so that they are easily understood by oneself and others.

Data Collection Method

Data collection method is an activity carried out to obtain information that is treated in order to achieve the objectives of a study. (Sugiyono, 2013) argues that data collection methods in research can be carried out by interview, observation, documentation, and a combination of the three. In this study, data collection methods were used to obtain the information needed through the following methods:

1. Interviews are conversations that take place systematically and measurably conducted by researchers as interviewers with a number of people as respondents or interviewees to obtain information related to the problem being studied. In this study, interviews were conducted with

stakeholders who handle or take action against traffic violations through Electronic Traffic Law Enforcement (ETLE) and also with motorcyclists as traffic violators detected through ETLE cameras

2. Observation is a way to collect information about certain signs that are carried out by observing, listening to, and documenting events that are the focus of the study. Observation is one method of collecting information if it is in line with the objectives of the study, organized, and recorded in a structured manner. In this study, the researcher applied a passive participatory observation method, where the researcher was present at the research location but did not actively participate in the activity. In this case, the researcher conducted observations on stakeholders who handle or take action against traffic violations through the Electronic Traffic Law Enforcement (ETLE) program and also on motorcyclists as traffic violators detected through the ETLE camera.
3. Documentation, namely the taking of documentation carried out by researchers which is done by taking pictures or photos to strengthen the data that has been collected. In this case, researchers will take documentation related to data and field findings obtained through stakeholders who handle or take action against traffic violations through the Electronic Traffic Law Enforcement (ETLE) program and also to motorists as traffic violators detected through the ETLE camera.

## RESEARCH RESULTS AND DISCUSSION

### *E-TLE Implementation*

The Electronic Traffic Law Enforcement (E-TLE) program is a technology-based traffic law enforcement program that uses cameras and sensor devices to automatically detect traffic violations. The implementation of the Electronic or Electronic Traffic Law Enforcement (E-TLE) program is basically a significant step in overcoming traffic problems and also functions to realize driver order regarding traffic rules.

This program utilizes sensor technology and cameras installed in strategic locations to detect violations. With the presence of surveillance cameras operating 24 hours a day, it is expected to be able to take action against traffic violators optimally. One of the main weaknesses is the limited infrastructure and technology.

The program needs to be evaluated to ensure that the expected goals and results are achieved effectively and efficiently. Evaluation helps identify the strengths and weaknesses of the ongoing program. Through evaluation, it is expected to be able to find out whether the resources used have been utilized optimally and whether there are obstacles that hinder the achievement of program goals. Evaluation provides an opportunity to make adjustments and improvements.

Evaluation of a program is closely related to planning, because a program which is a system or series of activities from implementing policies, will not run effectively without good planning. Based on the view of Suchman (1961) in (Arikunto, 2010), evaluation is considered as a process to assess the results of a series of activities that have been planned and achieved in order to support the

achievement of predetermined goals. According to Worthen and Sanders (1973) in (Arikunto, 2010), evaluation is the process of collecting data that is useful for assessing the existence of a program and finding alternative ways designed to achieve predetermined targets.

The purpose of program evaluation is to provide recommendations as a consideration in determining decisions to make improvements to the program being implemented and is expected to have a positive impact on the program being evaluated, but also on other programs in the future that can use the evaluation results as a reference. Therefore, (Subarsono, 2005).

Policy Basis

The E-TLE program in Medan City has been realized in 2022 based on the applicable Law, namely No. 22 of 2009 concerning traffic and transportation, in article 272 it states that in order to support law enforcement against traffic and transportation violations, electronic devices can be used and also instructions from the Chief of Police through the Republic of Indonesia Police Telegram (headquarters) number ST / 2264 / X / HUM.3.4.5. / 2022 dated October 18, 2022, which was signed by the Head of the Indonesian Police Traffic Corps, Inspector General of Police. Firman Shantyabudi, which in the Decree explains that traffic violations can be taken using E-TLE, both static and mobile.

This E-Tle program is present as an electronic-based law enforcement system that uses cameras and other sophisticated tools to monitor and document violations on the road automatically. With this initiative, it is hoped that it can reduce the level of traffic violations and accidents on the highway. This program is present because it is considered more realistic than manual ticketing where when there is a violation, motorcyclists cannot deny it because there is valid evidence of the violation recorded through the E-Tle camera. This program can also capture traffic violations for 24 hours because the camera is continuously operating. When a driver is caught on camera violating, a ticket will be sent directly to the address listed in the vehicle data based on the motor vehicle license plate.

***Policy Resources***

In this case, policy resources are aspects that involve the availability of resources that support policy implementation, for example funds, manpower, and technology. This program received grant funds for the procurement of cameras from the Medan city government, from ten (10) camera points in the city of Medan, the first time this program was realized in Medan there were eight camera points, then the North Sumatra Regional Police Directorate received two (2) camera points that were donated by the Medan city government.

This program relies on technology in its implementation and is operated by people who really understand IT. For the flow, when there is a recorded violator, the data goes directly to the E-Tle back office, this program has a special team to monitor and supervise the cameras that operate 24 hours, the team will later record and record data when there is a violation committed by the driver for the data to be adjusted through the license plate on the motor vehicle.

Currently, E-Tle cameras are not able to capture all types of violations, violations such as the use of brong exhausts and checking drivers who do not carry complete driving documents such as a Driving License (SIM) and Vehicle Registration Certificate. This E-Tle program also has obstacles such as cameras that are not operating on the road, works and for repairs have not been followed up until now. Then the obstacle is when there are violators who are detected but their license plates are not detected, the Etle camera is not yet able to perform Face recognition.

***Aspects of Realizing Traffic Compliance***

Traffic compliance for motorists is a crucial aspect in maintaining road safety. Realizing this compliance requires an approach that includes law enforcement, and active participation from the community. When someone complies with traffic regulations, such as obeying traffic signs and lights, this action can create an orderly traffic atmosphere. Likewise, order in traffic is a reflection of compliance with existing rules. Talking about motorist compliance in traffic is the result of the interaction of various aspects, including individual awareness, attitudes towards authority, infrastructure conditions, technology, and law enforcement. Understanding what makes someone want to obey traffic rules involves various factors related to psychology, social, and situational. One of the main factors is awareness of safety.

Lack of effective law enforcement also plays a large role in non-compliance with traffic rules. If drivers feel that they will not be caught or will not face severe penalties, they may be more likely to break the rules. Inconsistent law enforcement and a lack of police presence on the streets can create a feeling that breaking the rules does not have serious consequences. Another factor is apathy or indifference to the rules. Drivers who have this attitude may feel that traffic rules are not important or relevant to them. This attitude can arise from personal experience or the influence of a social environment where traffic violations are considered common and accepted. Loose social norms regarding traffic compliance can reinforce this negative behavior, making violations seem normal and harmless. Ambiguity in traffic rules can come in many forms. For example, inconsistent traffic enforcement programs, inadequate signs or information about new rules can leave drivers unsure whether they are breaking a rule or not. In this case, drivers may find it difficult to make the right decision and may be more likely to take shortcuts that are perceived as easier, even if they break the rules. In addition, ambiguity in traffic regulations can affect drivers' trust in the parties who set and enforce these rules.

***Discussion Regarding the Implementation of the E-Tle Program***

Currently, only 10 camera points have been installed in the city of Medan and based on the results of the study, it is known that one camera point is dead and is still waiting for confirmation to be repaired. The North Sumatra Police Traffic Directorate also said that the camera point that was not operating was the camera point located on the work road. In addition, dependence on technology also causes other problems such as technical problems or errors in detecting violations. Problems related to the infrastructure are a factor inhibiting the

implementation of the program, so this is considered to be a trigger that motorists assume that this camera is actually no longer functioning, coupled with the mechanism in this program where not all types of violations can be detected, for example, the use of brong exhausts that cannot be detected because the technology in this program cannot detect sound.

Likewise with the process of identifying the identity of the violator which only analyzes based on the data and the address listed according to the data on the license plate of the motorized vehicle that was detected to be violating. The process often experiences obstacles due to various factors such as data on the license plate not being found because it uses a fake or fraudulent plate, there are vehicles that do not use license plates, and there are even drivers who deliberately cover their vehicle license plates so as not to be detected. The stakeholders of the E-TLE program have designed a solution to overcome this problem, namely by updating it by implementing Face Recognition, this update is expected to be able to overcome the above problems because the driver's face will be detected according to the data on the KTP.

Another problem that often occurs is the failure to receive a ticket to the violator, causing a buildup of fines and drivers only find out when they are going to pay their taxes, plus there are still tickets that do not arrive at the violator's address. When interviewed with the North Sumatra Police Traffic Directorate for E-TLE, they said that they had carried out and also conveyed socialization to the public as motorcyclists since this program was implemented in 2022. However, the socialization delivered by the police was considered still not massive enough. This is based on the results of observations of motorcyclists who still do not know how the camera works. The lack of socialization and education delivered to the community is a trigger so that motorcyclists do not fully understand how E-TLE works and they also do not know that they are being monitored by this system. This can reduce the function of this program in the long term because drivers may not feel the presence of consistent law enforcement and the lack of deterrent effects.

It can be concluded from the results of this study that motorcyclists actually consider the existing E-TLE cameras to be merely a formality and only function as surveillance cameras. In 2022, the number of violations detected by E-TLE cameras was 10,688 cases and in 2023 it increased to 12,024. Compliance in traffic is also an important aspect in maintaining security and order on the highway. The discipline of drivers in complying with traffic regulations contributes directly to the realization of traffic compliance. The lack of strict sanctions received by motorcyclists who violate is also a factor that causes motorcyclists to still violate traffic when crossing the highway. Some motorcyclists still ignore the rules due to lack of information and consistent law enforcement and because they consider the rules irrelevant. It is understandable that compliance in traffic is the result of a combination of individual awareness, knowledge, law enforcement, and adequate infrastructure conditions. In the process of implementing the E-TLE camera, there are still various obstacles, based on the results of research conducted by the North Sumatra Police Traffic Directorate, the E-TLE section, it was concluded that this program has been running well, but based on the results

of observations in the field, it is different considering that traffic violations are still often committed by motorcyclists even though the drivers know and are aware of the existence of the camera. When drivers feel that the existing rules are the result of fair policies and legitimate authorities, they are more likely to comply. Conversely, if they feel that the existing rules are only a formality, they tend not to comply. Trust in the legal system and traffic authorities plays an important role in shaping the attitudes and behavior of drivers. Overall, although E-TLE has many potential benefits, its success depends largely on how well these weaknesses can be overcome.

## CONCLUSIONS AND RECOMMENDATIONS

Basically, the E-TLE program is useful and effective in enforcing traffic violations because it can be more optimal in terms of enforcement considering that the E-TLE camera continues to operate for 24 hours, but various obstacles are still found in realizing traffic compliance. Based on the results of observations of E-TLE in Medan City that have been carried out, it is concluded that:

1. The socialization carried out by the Traffic Directorate of the North Sumatra Regional Police (Dirlantas Polda Sumut) regarding the program is considered still not massive enough, this is evidenced by the fact that there are still motorcyclists who ignore the E-TLE camera and actually consider the camera only as a monitoring camera.
2. The technological limitations of the E-TLE camera are a loophole that is exploited by motorcyclists, because the camera cannot capture all types of violations such as drivers who use brong exhausts, and also violations due to not carrying complete driving documents.
3. Infrastructure limitations are also considered to be a trigger for motorcyclists' indifference to E-TLE cameras. Based on the results of the study, it is known that there are 10 camera points in the city of Medan and there is one camera point that is dead, namely the one on the work road, so that this actually creates a stigma that E-TLE cameras do not always function and only function as surveillance cameras. 4. Problems related to the identification of violators are also a crucial problem, because until now there are still errors in sending traffic tickets that are not delivered to the violators' addresses so that there is an accumulation of fines and will be known when drivers will pay their motor vehicle taxes.

## ADVANCED RESEARCH

The implementation of the E-TLE program in Medan City demonstrates significant potential in improving traffic law enforcement due to its 24-hour operational capability; however, several challenges hinder its optimal effectiveness. One key issue is the insufficient socialization of the program by the Traffic Directorate of the North Sumatra Regional Police, as many motorcyclists misinterpret E-TLE cameras as mere surveillance tools rather than enforcement mechanisms. Additionally, technological limitations of the cameras restrict their ability to detect specific violations, such as the use of brong exhausts or the absence of driving documents, creating opportunities for non-compliance. Infrastructure shortcomings further exacerbate the issue, with non-functioning

cameras, such as the one on Work Road, fostering a perception of unreliability and reducing public respect for the system. Compounding these challenges, errors in violator identification and delays in delivering traffic tickets result in accumulated fines, often only discovered during vehicle tax payments. Addressing these multifaceted obstacles is essential to enhance the program's efficacy and foster greater traffic compliance in Medan City.

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