

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 The role of overt policing in reducing accidents on state highways: analysis of PMPR's performance and proposals for improvement

The role of overt policing in reducing accidents on state highways: analysis of the pmpr's performance and proposals for improvement

Fábio José Ribeiro – captain QOEM PM, military police of Paraná. Hélio Carvalho Martins Filho – 1st Lieutenant QOEM PM, Military Police of Paraná.

SUMMARY

This article examines the strategic role of overt policing by the Paraná Military Police (PMPR) in preventing and mitigating traffic accidents on state highways, highlighting its importance as a public safety and life-saving tool. Based on an analysis of official statistical data, operational normative guidelines, and practical experience reports from police officers, the study investigates how the active and visible presence of the Paraná Military Police (PMPR) directly influences driver behavior, reduces violations and accidents, and enhances the sense of safety among road users. The study also discusses the main obstacles faced in carrying out these activities, such as staff shortages, logistical limitations, excessive workloads, road infrastructure failures, and the need for ongoing training for specialized personnel. Finally, proposals are presented for improving police performance, including the adoption of onboard technologies such as mobile radars, drones, and predictive analytics systems; expanding partnerships with traffic and road engineering agencies; and strengthening education and awareness programs for the public.

The article argues that strengthening overt policing is essential for safer, more efficient and humane traffic on Paraná's highways.

Keywords: overt policing, state highways, traffic accidents, PMPR, road safety.

ABSTRACT

This article examines the strategic role of overt policing by the Paraná Military Police (PMPR) in preventing and mitigating traffic accidents on state highways, highlighting its importance as a public safety and life-saving tool. Based on an analysis of official statistical data, operational regulatory guidelines, and practical experience reports from police officers, the study investigates how the active and visible presence of the Paraná Military Police (PMPR) directly influences driver behavior, reduces violations and accidents, and enhances the sense of safety among road users. The study also discusses the main obstacles faced in carrying out these activities, such as staff shortages, logistical limitations, excessive workloads, road infrastructure failures, and the need for ongoing training for specialized personnel. Finally, proposals are presented for improving police performance, including the adoption of onboard technologies such as mobile radars, drones, and predictive analytics systems; expanding partnerships with traffic and road engineering agencies; and strengthening education and awareness programs for the public. The article argues that strengthening overt policing is essential for creating safer, more efficient, and more humane traffic on Paraná's highways.

Keywords: overt policing, state highways, traffic accidents, PMPR, road safety.

1. INTRODUCTION

Brazilian state highways are complicated traffic stretches, where every year a high number of accidents, often resulting in deaths, seriously injured people and social and high economic costs. In Paraná, the situation is even more serious due to a network of roads long and important for transporting agricultural, industrial and tourist production, generating heavy flow and

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 continuous flow of trucks and passenger cars. The combination of poor road conditions and risky behavior on the part of drivers and limited supervision maintain the high number of accidents, especially in critical sections or at peak times.

Within this framework, the ostensive policing of the Military Police of Paraná emerges as one of the main ways to prevent and control road accidents. The visible and constant presence of military highway police, through patrols, approaches, inspections and actions educational, reduces dangerous behaviors such as speeding, driving after drinking alcoholic beverages, prohibited overtaking, in addition to increasing the feeling of security and showing that the State is present for those who use the highway.

The Military Police of Paraná plays a prominent role in monitoring state traffic, concentrating to suppress infractions and provide emergency assistance. The current challenges of mobility, growth of the fleet, intense use of roads, technological advances and legal requirements, require review, modernization and strengthening of policing strategies. Lack of personnel, operational limitations and logistical difficulties hinder the effectiveness of preventive actions, as well as in meeting the traffic accident.

In view of this, the article critically analyzes the effect of visible policing in reducing accidents on state highways in Paraná. Statistical data, operational protocols and field experiences, in addition to presenting proposals for improvements to qualify the PMPR's performance in road safety and life protection.

2. THEORETICAL BASIS

2.1. OVERT POLICING AND PUBLIC SAFETY

Overt policing is the most direct form of action by the Military Police in carrying out its duties. responsibility for overt policing and the preservation of public order. Its activity is based to make military police visible, present at all times in the streets and squares, with the aim of prevent crimes and transmit a sense of security to the population.

On state roads, this work is carried out through motorized patrols,

inspection, checkpoints and traffic education activities. When the vehicle is on display and the military police act before something happens, the driver tends to abandon behaviors risky activities, such as: driving too fast, drinking alcohol before getting behind the wheel, overtaking in a prohibited place or riding a motorcycle without a helmet.

Research shows that once a driver sees a police officer on the road, he or she is more likely to obey traffic laws. traffic and accidents decrease. The driver calculates that if he disregards the rule, he will be stopped and punished and therefore prefers not to take risks.

Machine Translated by Google tific Journal of Knowledge. ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 Visible policing is not only used to issue fines, but also to prevent accidents and reinforce authority.

of the State and creates traffic safety, thus saving countless lives.

2.2. STATISTICS OF ACCIDENTS ON STATE HIGHWAYS

Paraná's state highways record a high number of traffic accidents every year, that many end in death or serious injuries, often causing damage and after-effects irreversible. New data from Detran-PR, SESP/PR and the Military Police show that the State repeats, year after year, the same problems on the road network.

Accidents happen, most of the time, because the driver exceeds the speed limit, overtaking in a prohibited place, drinking alcohol, using a cell phone, losing the attention at the wheel or driving with unrepaired mechanical defects. In many cases, the human error to road failures, such as poor signage or poor lighting, which increases the chance of accident and its severity.

Most traffic accident victims are young, between 20 and 29 years old, and almost always man, especially in accidents involving motorcycles, pickup trucks or trucks. It also calls pay attention to accidents with several victims in areas with heavy traffic, near cities or in routes used for the transportation of grains and industrial products.

Some stretches of highways that stand out most in terms of the high rate of fatal traffic accidents, are the section that includes the Northern Contour of the city of Maringá, the PR-323 between Umuarama and Maringá and PR-151 in Campos Gerais are among the most dangerous stretches - that's why the traffic authorities need to look carefully at these points and invest steadily in inspection and infrastructure works.

Analysis of the numbers shows that the visible presence of the Military Police is essential to reduce risks and to consolidate a culture of traffic prevention in the State.

2.3. LEGAL AND DOCTRINAL BASIS OF OVERTIME POLICING

Overt policing is the most visible form of the state's power to impose rules. This power allows the Public Administration to restrict some individual freedoms when the interest demands of everyone, always with the aim of maintaining security, order and coexistence. In terms simply, it is the authority that the State uses to enter into private life whenever it needs to defend its collective good.

The Federal Constitution of 1988, in article 144, paragraph 5, directly states that security public is the obligation of the State and the right of each person, with the military police being responsible

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 by the ostensive police and the preservation of public order, integration of people and heritage. The which includes monitoring traffic and preventing accidents on state highways. This mission confirms the Paraná Military Police as an indispensable part of public safety, present on the roads to defend lives and enforce the law.

At an infra-constitutional level, the Brazilian Traffic Code (Law No. 9,503/1997) completes this attribution by establishing that the traffic policing bodies inspect, issue fines and apply the penalties provided for in traffic legislation. Thus, the highway police of PMPR serves as a direct instrument of police power, used not only to punish, but mainly to guide and prevent risky behaviors that lead to accidents.

In theory, Celso Antônio Bandeira de Mello (2018) explains that police power is "the faculty that Public Administration must limit the exercise of individual rights and freedoms in favor of public interest, aiming at security, order and collective well-being." The author highlights that this power must be exercised within the limits of proportionality and reasonableness, avoiding abuse and maintaining balance between authority and citizenship.

In the same direction, Di Pietro (2019) states that "police power is an expression of the supremacy of public interest, and must be exercised with proportionality and reasonableness." This understanding shows that the military police, when acting on the highways, does not only represent the coercive force of State, but also the commitment to the protection of life and the responsible use of authority.

The legal and doctrinal basis of overt policing legitimizes the actions of the PMPR on highways state laws, recognizing the police officer as a public agent who, on a daily basis, balances the duty to supervise and the responsibility to protect. It is at this point that law, ethics and service to the collectivity meet, consolidating ostensive policing as one of the most important

2.4. THE IMPORTANCE OF POLICE VISIBILITY AND THE PRINCIPLE OF DETERRENCE

manifestations of police power in the democratic rule of law.

The police presence on the roads is not just for issuing fines. It directly shows that

The State is there and conveys to citizens the feeling of security, order, and surveillance. This effect
in people's minds is not new and comes from the theory of deterrence, created by thinkers like Cesare
Beccaria and Jeremy Bentham. The idea is simple: when someone realizes that there is a real risk of
punishment, changes behavior. The driver who believes he can be stopped respects the rules of
transit.

On the highways, this idea is clearly evident. Patrol vehicles, visible roadblocks, and checkpoints inspections have an immediate impact on drivers, who immediately drive more care and responsibility. The area begins to be seen as a monitored and safe place, which keeps

Macrine Translated by Google tific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 dangerous behavior, speeding, illegal overtaking or using a cell phone while driving.

In addition to curbing violations, police visibility carries symbolic and educational value. It informs society that there is a public force working to protect lives and maintain order. As

Zaverucha (2020) reminds us, "the police are both a visible force and a symbolic presence - only existing in a public space alters the behavior of those who pass by there." There is no need to apply a fine,

Often, a citizen only needs to see a vehicle on the road to adopt a more cautious stance.

In this way, overt policing, when it appears in a visible and continuous manner, fulfills a double role.

function, prevents infractions and teaches drivers. It works as an instrument of social transformation, shaping habits and reinforcing values of shared responsibility. Police visibility does not is just an operational tactic; it is an essential part of a sustainable public security policy, which

2.5. EDUCATION AND CITIZENSHIP IN TRAFFIC

combines presence, prevention and awareness for the benefit of all.

Traffic education is one of the most important pillars of road safety and employee training.

a more conscious society. Article 76 of the Brazilian Traffic Code determines that the topic should be taught from preschool to university, with the aim of preparing people who understand traffic as a place of coexistence, respect and shared responsibility. No just show signs and plaques, it is necessary to work on values such as empathy, prudence and cooperation, because they protect lives.

The Paraná Military Police don't limit their work to fines and arrests. The force enters the room in class, in companies and at public events with programs that combine guidance and conversation. "Yellow May," "Rodovida," and "Transiting with Citizenship" are three such projects. The police officer explains the law clearly, listens to doubts and exchanges ideas with those on the other side, creating a learning space.

When this happens, the child or adult stops seeing the Military Police Officer as just someone who represses and begins to see him as a teacher who teaches, listens and helps change attitudes. proximity in schools, factories and fairs shows that traffic belongs to everyone and that each person has a share of responsibility for what happens on the streets.

Costa and Andrade (2022) write: "road safety education must be understood as an instrument of social transformation, capable of shaping habits and preventing accidents in a lasting way." The phrase summarizes the idea that a fine alone does not solve the problem; the person needs to understand the reason for the rule and start to respect it out of conviction, respect for others and not just out of fear of responsibility.

The educational work of the PMPR, therefore, reduces traffic violations and accidents and, at the same time, increases respect for life and the feeling of citizenship. Building a more humane, safe and

Nachine Translated by Google tific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 solidarity is everyone's task, and education continues to be the most effective method to achieve this result.

3. THE PERFORMANCE OF THE PMPR ON THE HIGHWAYS

3.1. OPERATIONAL STRUCTURE

The Paraná Military Police divides road work into companies, platoons and police stations. highway, all under the command of the Highway Police Battalion. The bases of this battalion are on the main cargo and tourism routes, strategically chosen to serve the State whole.

The teams monitor traffic, respond to accidents, provide visible policing and teach rules of security. The scale for each group is set up after checking vehicle movement data, accident records and high-risk periods, long holidays, school vacations and agricultural harvests and other factors, whether ordinary, special or extraordinary.

Inspection locations are chosen based on concrete numbers, where there is a higher accident rate, more cars and trucks, agricultural production flow routes or city entrances. In these checkpoints are set up, patrols are carried out and educational barriers are installed, all to curb dangerous behavior, keep traffic moving and reduce accidents.

With this organizational structure, the Military Police arrives at the scene of the incident faster and appears regularly on the roads, preventing problems before they happen, acting in a preventive and reactive manner.

3.2. INSPECTION AND PREVENTION ACTIONS

The Military Police of Paraná, through the Highway Police Battalion (BPRv), executes a group of combined measures to monitor and prevent accidents on state roads. The objective of the activities is to teach drivers to drive safely and at the same time punish drivers who disrespect traffic rules

Traffic inspections take place every day, focusing on inspections of the Dry Law, in speed control with mobile radars, in checking the mandatory use of seat belts safety and monitoring of overtaking in prohibited areas, among others established in the Brazilian Traffic Code and other specific legislation.

These measures prevent behaviors that are among the biggest causes of accidents with victims, driving while intoxicated, exceeding the speed limit and disregarding traffic rules.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025
At the same time, educational campaigns are being carried out to alert highway users. The action includes distribution of leaflets, leafleting at busy points, conversations during approaches and participation in community events, always with the support of transit agencies and public institutions.

Preventive patrolling is another resource used in overt monitoring. During patrols in dangerous stretches, police officers approach suspicious vehicles, check documents and verify car safety conditions, maintaining the presence of the State on the road and keeping away those who intends to commit crimes.

The combination of educational and punitive measures increases the PMPR's ability to act before the accident happens, reducing the number of collisions and ensuring more safety and peace of mind for who travels on state highways.

3.3. CASE STUDIES AND PRACTICAL RESULTS

The effectiveness of the Paraná Military Police's overt policing is clearly evident in operations that, in recent years, have become a reference in accident prevention and protection life. A striking example is "Operation Life on the Roads," which always takes place on holidays prolonged periods, when the flow of vehicles increases significantly. The action focuses efforts on inspection speed, checking drivers' blood alcohol levels and combating dangerous overtaking, factors that are among the main causes of serious accidents.

The results are significant. According to data from the Paraná Public Security Secretariat (SESP-PR, 2023), the most recent edition of the operation recorded a reduction of 22% (twenty-two percent) in the number of fatal accidents on state highways, which shows that the planned police presence and constantly saves lives and makes traffic even safer.

Another important example is "Operation Verão Paraná", which reinforces policing in the regions coastal areas during the high season. This operation combines the overt presence of police officers military using advanced technology such as surveillance cameras, drones and aerial patrolling, which allows for greater coverage and a faster response to incidents.

In addition to inspection, there are educational and guidance actions for drivers and pedestrians, reinforcing the preventive and citizen nature of police action.

These experiences show that the combination of strategic planning, technology and actions educational measures are the most efficient way to reduce accidents and improve road safety. daily practice of the PMPR proves that ostensive policing, when well structured and based in statistical data, it goes beyond supervision, as it represents care, presence and commitment to the preservation of life.

Each operation carried out by the corporation reaffirms the role of the Paraná Military Police as

Machine Translated by Google tific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 protagonist in the construction of a more humane, responsible and safe traffic for all who use it the state's highways.

4. IMPACTS OF POLICING ON ACCIDENT REDUCTION

Several studies, statistical surveys and field reports show that the visible presence and planned deployment of the Military Police on state highways directly reduces accident rates traffic. The actions of police teams, through patrols and checkpoints, lead to driver to adopt more prudent behavior and in compliance with the Traffic Code Brazilian.

The perception that you may be approached, fined or caught using electronic equipment leads drivers to change their behavior, avoiding speeding, overtaking irregularities, driving after drinking alcohol, and using a cell phone while driving. This effect increases in periods of specific operations, such as the Dry Law, Rodovida, and Summer Operation campaigns Paraná and intensified inspections during long holidays.

Analyses carried out by agencies such as DETRAN-PR, SESP-PR and IPEA indicate that sections of highways with frequent patrolling, regular presence of vehicles and systematic operations, they present, consistently, lower rates of accidents with fatalities or serious injuries. Studies comparatives show that the reduction does not only occur in quantity, but also in severity, with less serious accidents and faster response to incidents.

Road segments with little or no police presence tend to have more violations traffic, such as speeding, illegal overtaking, use of motorcycles without mandatory equipment and traffic crimes. The lack of electronic monitoring and signage inadequate on highways increase the occurrence of accidents with multiple victims and deaths.

The positive impact of policing also appears in the public's perception. Research and interviews with communities neighboring monitored highways show a greater sense of security, confidence in the State's actions and a reduced feeling of vulnerability. This perception values the role of the PMPR as responsible for order on the roads, increasing the legitimacy of its actions.

Furthermore, visible policing allows for immediate interventions in risky situations, such as ongoing accidents, irregular cargo transportation, and drug trafficking. The physical presence of Police prevent the situation from getting worse and allow a quick and integrated response with other agencies, such as DER (Department of Highways) SAMU (Mobile Emergency Care Service) and Body of Firefighters.

The visible actions of the Paraná Military Police on state highways go beyond repressing violations. It plays a strategic role in creating a more predictable, disciplined and safe road environment,

Machine Translated by Google tific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 contributing to reducing deaths and injuries in traffic and strengthening the culture of road safety in State.

4.1. QUALITATIVE IMPACTS AND SOCIAL PERCEPTION OF SECURITY

More than numbers and statistics, the ostentatious presence of the Paraná Military Police on the highways state governments have an impact that people feel on a daily basis. The simple fact of seeing a police car in patrolling, a barrier set up or agents inspecting, creates an immediate sense of protection and order. This feeling goes beyond physical security, it is linked to the confidence that The State is present and attentive to the needs of the population.

Opinion polls reinforce this perception. A survey conducted by the Paraná Institute

Research (2024) shows that 73% (seventy-three percent) of respondents say they feel more
safe when traveling in areas where there is a constant police presence. This data, although numerical,
reflects an essential aspect, perceived security is as important as actual security. When
the citizen feels protected, tends to adopt more responsible behaviors, collaborates with the
police work and contributes to more harmonious traffic.

The bond between the community and the PMPR is built daily through simple actions, such as a civilized, respectful and cordial approach, guidance given or even a nod of hand, both by the patrolling police officer and by the citizen, when the vehicle passes by on patrol.

These are gestures that humanize police work and strengthen the image of the corporation as a force of support, protection and not just supervision.

Furthermore, the constant visibility of the police on the roads works as a prevention factor and collective tranquility. Drivers report that the presence of patrols on the highways leads them to reduce speed and increase attention, while residents of nearby communities say they feel safer.

Overt policing isn't just about law enforcement; it also builds trust, a sense of belonging, and mutual respect between officers and citizens. This human dimension of security public that transforms the work of the PMPR into an instrument of peace and social stability, capable to promote not only order, but also well-being and the appreciation of life.

4.2. THE ROLE OF MEDIA AND SOCIAL AWARENESS IN ROAD SAFETY

Building safer traffic does not only depend on inspection and police presence on the highways. It also has a decisive impact on the way society perceives and speaks on the topic. In this context, the media in its different forms plays a fundamental role

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 in the formation of collective awareness about road safety. Newspapers, radio, television and, more Recently, social networks have the power to influence behaviors, reinforce values and disseminate good practices that save lives.

National campaigns, such as Yellow May and the National Pact for the Reduction of Accidents are examples of how communication can transform attitudes. When the press and digital platforms disseminate educational messages, real statistics and stories of overcoming, help awaken empathy and responsibility in the public. These actions reinforce the understanding of that every decision made behind the wheel, such as reducing speed, respecting signs, not using the cell phone while driving has a direct impact on the preservation of life.

The Paraná Military Police has taken advantage of this potential by intensifying its presence in campaigns educational and institutional communication. Through interviews, informative videos, posts on social networks and partnerships with the press, the corporation expands the reach of its actions, providing guidance to audiences that would be difficult to reach through in-person inspections alone. This integration between media and public safety creates a virtuous cycle: the more the population is informed, the more likely they are to collaborate and respect traffic regulations and, consequently, less likely traffic accidents.

In addition to publicizing campaigns, the media also plays a monitoring and opinion-forming role. report accidents, poor road conditions or successful policing actions, contributes to public debate and presses for structural improvements and more public policies effective. However, this influence must be exercised responsibly, avoiding sensationalism and prioritizing information that educates, prevents and brings improvements to traffic each more and more secure.

Social awareness is therefore a natural extension of police and educational work. When the citizen understands that road safety is a collective commitment, which involves drivers, pedestrians, motorcyclists, cyclists, public authorities and private initiatives, the transformation becomes lasting. The challenge is not just to monitor, but to create a culture of respect and empathy, in which each person recognizes their role in preserving life on the roads.

5. CURRENT CHALLENGES AND LIMITATIONS

Despite the recognized importance of visible policing in reducing accidents on highways state, the actions of the Paraná Military Police (PMPR) face structural and operational challenges that compromise its full effectiveness.

One of the main obstacles is the shortage of personnel, especially in regions far from major cities.

centers, which makes it difficult to have a continuous presence on highways with less traffic, but which are no less susceptible

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 to accidents. The limited number of vehicles and equipment also affects the ability to respond quickly and the territorial scope of operations.

Additionally, the precariousness of the road infrastructure, such as the lack of adequate signage, deficiencies in public lighting and lack of safe areas for approaches, compromises both the user safety regarding the actions of police officers in the field.

Another critical factor concerns the excessive working hours of military police officers.

Many police officers accumulate long working hours, with administrative and operational demands, without the due logistical support, which directly impacts the quality of the service provided and well-being of the workforce

Finally, the use of embedded technologies, such as mobile radars, monitoring cameras and drones, is still restricted, either by budget limitations or by the lack of protocols standardized and technical training. This reality reduces the PMPR's potential to promote actions more accurate, based on real-time data and aerial surveillance of critical sections.

These limitations demand strategic solutions and structural investments so that the state highway policing achieves greater efficiency, safety and coverage.

6. PROPOSALS FOR IMPROVEMENT

Given the problems encountered, it is necessary to adopt strategic planning by PMPR to enhance inspection and accident prevention on state highways. The suggestions below aim to increase police presence on the roads, bring cutting-edge technology and improve permanently.

- Increase in the number of military police officers involved in traffic operations with training specific, more road units, more traffic courses, first aid and mediation of traffic conflicts.
- Use of mobile inspection posts. Vehicles adapted as mobile bases that carry police officers to dangerous or difficult to access areas, with greater flexibility and faster response.
- Working together with other agencies, through agreements and integrated actions with DER,
 DETRAN, city halls and dealerships, in addition to sharing costs, facilitate educational campaigns and improves road signage.
- Use of cutting-edge technology, such as artificial intelligence systems, predictive analysis and remote monitoring helps to recognize risk routines, predict accidents and direct the evidence-based policing.
- Creation of a real-time risk map, through a georeferenced database, updated instantly, pointing out the locations with the most accidents, allowing police officers to be allocated

Machine Translated Dyli Good Attific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 more assertive way.

- Training with ongoing courses on traffic legislation, defensive driving, customer service victims and the use of new equipment keep personnel prepared and safe during operations.
- The joint application of these actions will lead the PMPR to better fulfill its mission of protecting those traffic, reduce the number of accidents and increase public confidence in policing carried out on the roads of Paraná.

6.1. TECHNOLOGICAL INNOVATION AND INTERINSTITUTIONAL INTEGRATION USING ARTIFICIAL INTELLIGENCE

Technological advancement has completely changed the way public security institutions work across the world. the world, and the Military Police of Paraná follows the same line of professional development. Using programs of computer, databases and Artificial Intelligence resources opens up a real chance of improve policing on highways, making it faster, more accurate and connected.

Programs that analyze past data on accidents, weather, vehicle movement, and behavior of drivers point out where and when the risk is greatest. From this information, AI (Intelligence Artificial) generates early warnings and helps decide where to place vehicles before something happens. policing goes to the right place at the right time, making better use of the number of police officers available to arrive faster when an emergency arises.

Another important gain is the direct exchange of information between the PMPR, DETRAN-PR, DER and the dealerships. When everyone shares the same real-time database, images of cameras, accident records, and severe weather alerts arrive at the same time for everyone. This allows each side to make a quick and coordinated decision, without having to call or ask for a report. The use of drones with thermal cameras and motion sensors increases the police's field of vision, especially in rural or difficult-to-access areas. They are used to catch speeding, locate victims in accidents or guide rescue teams.

Use of on-board computers in vehicles, connected to databases and software that read plates, has also given results, the system warns when it finds a stolen car, with debts or involved in crime. The machine does not replace the traffic officer, but it delivers accurate data at the time exact, so that it acts more safely.

For all of this to work, the military police force needs to learn how to handle the new equipment. Training police officers to use these tools effectively prevents programs from remain stagnant or are used incorrectly. Innovation only truly enters everyday life when whoever is on the street knows what to press or check.

Finally, all modernization must respect the law and the privacy of those who travel. The use of

Machine Translated Dyli Google tific Journal of Knowledge.
ISSN: 2675-9128. São Paulo-SP.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 technology must follow the General Data Protection Law, always aiming to protect lives, guarantee safety and make traffic less violent and more human.

The sum of technology, integration between agencies, real-time data analysis and the experience of those who is on the street added to the innovation of those who program the systems, all for the benefit of those who manage or uses the highway and puts the PMPR at the forefront of highway safety.

7. FINAL CONSIDERATIONS

The actions of the Paraná Military Police on state highways are one of the main pillars of road safety in the State, as it protects public order, saves lives and prevents loss of property. When ostensive policing is carried out every day, with planning and technical support, there is a reduction in the number of accidents and teaches drivers to respect traffic laws.

The marked vehicle on the road not only prevents infractions and crimes, but also gives the user the feeling that he is protected and thus, he drives more carefully and helps others. When this happens emergency, accident with injuries, closed road or irregular vehicle, help arrives quickly and population observes that the State acts without delay.

To perform this function effectively, however, investments are required, whether in vehicles, monitoring equipment, data analysis programs, as well as fair pay and ongoing training.

It is fundamentally important for PMPR to work together with DER, DETRAN, SESP, universities and research centers, both public and private institutions, creating shared solutions and unprecedented solutions to problems that are reappearing on the roads.

Another vital point is to expand lectures in schools and use data to prevent where the next accident will happen, statistics, maps and accident history show where to park the vehicle before tragedy strikes. Fining and education together form a balanced model of **safety in** transit.

The numbers and reflections show that the PMPR already has what it needs to continue being an example efficient, modern and technically based national road policing system. With planning long term, support from all agencies and networking, the corporation will reduce accidents, strengthen citizenship and will build a more humane, safe and sustainable traffic throughout Paraná, making the difference in the lives of citizens of Paraná.

8. REFERENCES

PARANÁ STATE NEWS AGENCY. Young people aged 20 to 29 lead in traffic incidents on Paraná state highways. Curitiba:

Government of the State of Paraná, 2024. Available at: https://www.comunicacao.pr.gov.br/noticias/aen/97bdb1a9-231a-4261-87de-f4663a45b995.

Accessed on: October 10, 2025.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 BECCARIA, C. *Of Crimes and Punishments*. Translated by Torrieri Guimarães. São Paulo: Martin Claret, 2021.

BENTHAM, J. Introduction to the Principles of Morality and Legislation. São Paulo: Edipro, 2019.

BRAZIL. Constitution of the Federative Republic of Brazil of 1988. Brasília, DF: Presidency of the Republic, 1988. Art. 144, § 5 – Provides for public safety and the responsibilities of the Military Police for overt policing and the preservation of public order. Available at:

https://www.planalto.gov.br/ccivil 03/constituicao/constituicao.htm. Accessed on: October 10, 2025.

BRAZIL. *Brazilian Traffic Code.* Law No. 9,503, of September 23, 1997. *Official Gazette of the Union,* Brasília, DF, September 24, 1997.

BRAZIL. General Personal Data Protection Law (LGPD). Law No. 13,709 of August 14, 2018. Official Gazette of the Union, Brasília, DF, August 15, 2018.

COSTA, M.; ANDRADE, F. Education and citizenship in traffic: a look at the formation of road behavior. *Brazilian Journal of Education and Urban Mobility*, v. 5, n. 1, p. 87–102, 2022.

DER - PARANÁ DEPARTMENT OF HIGHWAYS. Road maintenance and signage reports. Curitiba: DER-PR, 2023.

DETRAN-PR – PARANÁ DEPARTMENT OF TRANSIT. Statistical reports on accidents on state highways – 2022/2023. Curitiba: DETRAN-PR, 2023. Available at: https://www.detran.pr.gov.br. Accessed on: October 10, 2025.

DI PIETRO, MSZ Administrative Law. 35th ed. Rio de Janeiro: Forense, 2019.

GAZETA DO POVO. Lack of personnel and infrastructure compromise inspection on state highways in Paraná. Curitiba, August 11, 2022. Available at: https://www.gazetadopovo.com.br. Accessed on: October 10, 2025.

G1 PARANÁ. State highways see a drop in accidents with increased policing, says PM. Curitiba, March 22, 2023. Available at: https://	
g1.globo.com/pr/parana/. Accessed: October 10, 2025.	

PARANÁ RESEARCH INSTITUTE. Perception of safety on state highways in Paraná. Curitiba: Paraná Research Institute, 2024.

IPEA	_ INSTITUT	E OF	APPLIED	ECONOMIC	RESEARCH	. Costs	of traffic	accidents	on Braziliar	n highways.	Brasília:	IPEA
2015	. Available a	t: https	://www.ip	ea.gov.br. Ad	ccessed on: C	ctober	10, 2025				_	

MELLO, CAB de. Administrative Law Course. 34th ed. São Paulo: Malheiros, 2018.

MINISTRY OF INFRASTRUCTURE. *Yellow May Program: raising awareness to reduce traffic accidents.* Brasília: DENATRAN, 2023. Available at:

https://www.gov.br/infraestrutura. Accessed on: October 10, 2025.

MOURA, ES Technology and road policing: challenges and opportunities in traffic control. *Road Safety Studies Notebook*, v. 8, n. 2, p. 45–61, 2022.

Year V, v.2 2025 | submission: October 16, 2025 | accepted: October 18, 2025 | publication: October 20, 2025 PMPR – MILITARY POLICE OF PARANÁ. *Operation Life on the Roads 2023: results report.* Curitiba: PMPR, 2023.

PMPR – MILITARY POLICE OF PARANÁ. *Operation Summer Paraná 2023/2024: balance and indicators*. Curitiba: PMPR, 2024.

PMPR – PARANÁ MILITARY POLICE. Standard Operating Procedures (SOP) – Inspection on State Highways. Curitiba: PMPR, 2023.

RIBEIRO, JC The impact of visible policing on reducing accidents on state highways. *Brazilian Journal of Public Security*, v. 14, n. 3, p. 122–139, 2021.

SAMU – MOBILE EMERGENCY SERVICE. *Operational guidelines for highway assistance*. Brasília: Ministry of Health, 2022.

SESP-PR – PARANÁ PUBLIC SAFETY DEPARTMENT. *Incident reports and integrated road safety reports*. Curitiba: SESP, 2023.

ZAVERUCHA, J. *The police as a symbolic presence: security and legitimacy in public space.* Recife: EdUFPE, 2020.