

## Wes-Kaapse Provinsiale Parlement Western Cape Provincial Parliament IPalamente yePhondo leNtshona Koloni

Ref Number: WCPP 11/6/9

Report of the Standing Committee on Mobility on its engagement at the Gene Louw Traffic College with the Minister of Mobility and the Western Cape Mobility Department on its Road Safety Plan for the 2024/25 festive season, and the digital demonstration on the technology used to monitor road safety, on 28 May 2025, as follows:

### **Delegation**

#### **Members**

Mbombo, N (DA)(Chairperson) Bryant, D (DA) Johnson, P (DA) Masipa, N (DA) Ngqentsu, B (ANC)

#### **Apologies**

Constable, N (PA) Herron, B (GOOD)

### **Staff Members**

Adams, Z (Procedural Officer) Mrubata, M (Committee Assistant) Barends, A (Logistics Official)

#### 1. Introduction

The Standing Committee on Mobility met with the Minister of Mobility, Mr I Sileku, and the Western Cape Mobility Department (the Department) 15 November 2024 to receive a briefing on the road safety plans for the upcoming 2024/25 festive season. The meeting took place at the Gene Louw Traffic College in Brackenfell. The Committee also received a briefing, and a digital demonstration of the tools and technology used to monitor road safety in the Western Cape.

In terms of the Strategic Objectives of the Western Cape Provincial Parliament, linked to the Speaker's Priorities, the outcome of this report is linked to the following priorities:

- Priority 2: Expanding citizen service
- Priority 3: Strengthening the core business

This report highlights the Committee's observations stemming from the briefing and demonstration.

# 2. Briefing by the Western Cape Mobility Department on the Road Safety Plan for the 2024/25 festive season

The day commenced with a briefing from the Western Cape Mobility Department (the Department). The Committee noted the following:

- 2.1 Half of the number of fatalities on the Western Cape roads were pedestrians. Of those pedestrian-related fatalities, 70% were male pedestrians between the ages of 18 and 45, in urban areas. The Department's aim was to reduce the number of fatalities in targeted areas by 50% by 2030. This would be done by using data-driven analysis and technology to support traffic law enforcement and road safety management. There were also discussions around the plan to install trackers in public transport vehicles.
- 2.2 In terms of the transporting of goods, the Department was making a concerted effort to improve the efficient movement of goods. There were also coordination efforts to improve port efficiency and to facilitate rail revitalisation. The Department noted that passenger rail was the backbone of urban public transport. The aim was to increase public transport access, and to ensure affordable public transport services, to reduce congestion on the roads.
- 2.3 Delivery for road safety and traffic management was a "24/7, 365 days of the year" effort for the Department. The Western Cape was the only province that took this approach. Other provinces were exploring ways to implement a similar integrated approach to road safety.
- According to the statistics provided on festive season road accidents, most of the fatalities were due to accidents with pedestrians, single vehicles being overturned, and hit-and-run cases. There was a large increase in hit-and-run cases in 2023, compared with 2022, which had a large increase in pedestrian-related accidents. This was concerning for the Department. Most of the fatalities occurred in urban areas in the City of Cape Town. The Department's plan was to collaborate with local law enforcement on road safety awareness campaigns, to reduce the number of fatalities in targeted areas. Once crucial areas were identified, the Department would step in with an intervention strategy aimed at pedestrian fatality prevention.
- 2.5 Although the Department registered an increase in overall road fatalities during the 2023/24 festive season, there was actually a decrease in the number of fatalities on provincial routes, which fell within the Department's jurisdiction. However, there was a large increase in road fatalities on municipal routes, which raised the number of overall fatalities during the 2023/24 festive season. There was a concerted effort by the Department to engage its municipal counterparts to address this challenge. There were also intensified efforts from the Department in targeted areas to reduce the risk of fatalities.
- 2.6 The 2025/26 festive season road safety campaign launched on 22 November 2024 at the Moorreesburg Weighbridge. The Department road safety management plan included conducting road safety education and awareness and using road safety ambassadors to target hot spot areas such Khayelitsha, Eerste River, Strand, Siyanzela and Zwelihle. The Department also focused on road safety communication through its Safely Home Programme. This would include road safety awareness adverts on billboards, mobile digital screens, digital screens in

- liquor stores and malls, murals, display adverts on busses, taxi wraps, radio promotion across the province, and on social media.
- 2.7 The 2024/25 road safety campaign also included a joint operation with traffic law enforcement to oversee and manage public transport operations, driver and vehicle fitness operations, alcohol testing enforcement, fatigue management operations, moving violation operations, passenger overloading, pedestrian awareness, freight awareness, integrated SAPS operations, and speed operations and awareness etc. The idea was to increase traffic law enforcement presence and awareness.
- 2.8 In terms of festive season deployment there were only 594 Provincial Traffic Officials deployed across the province, utilising 296 patrol vehicles and six motor-cycles. With daily 24/7 operations planned across the province in all districts across the 13 Traffic Centres, this meant that there were approximately only 10 officers, maximum, that could patrol per area. This was just on national roads, so if one dangerous accident occurred, or if there was a goods spillage, the lack of capacity could become problematic.

# 3. Briefing and digital demonstration on the technology and tools used to monitor road safety in the Western Cape

- 3.1 The Department indicated that they were very technology-driven, using technology to enable the 594 traffic officers to reach the areas they needed to. The Department used a complex, integrated, multifaceted transport monitoring approach that focused on road safety and enforcement. In the past, the Department did not have the technology to record trends and patterns in certain areas; however, this changed for planning purposes. The technology used focused on historical data and other tools to produce analytical insights and predictive modelling capabilities by identifying hotspots to efficiently deploy resources and reduce fatal events.
- 3.2 The Department's Hotspot Prediction Model looked at historical events, the road network and weather data to predict the probability of events in every area. This could be further filtered down to identify hotspots with the highest probability of fatal events. This technology was especially important for the identification of pedestrian-related accidents. This, in turn, allowed the Department to allocate its resources to these hot spot areas.
- 3.3 In the past, when traffic officers stopped motorists, the interaction would be quite prolonged; however, since the introduction of new technology and handheld devices, the interaction between the traffic officers and motorists has been reduced significantly since the officer has all the information digitally already, on hand. The Department would also be focusing on using technology to make administrative duties more efficient, to align with its operational duties.
- 3.4 In terms of the camera network implemented and monitored by the Department, information is sent from the cameras to the Department's Common Logic Engine (CLE), which is considered the "big brain" that takes all the information, does the relevant calculations, and provides the traffic officers with the data that is needed. The cameras can calculate Average Speed Over Distance (ASOD) to calculate if a vehicle has been speeding. If a motorist is found to be speeding, this information is sent to a traffic officer via his handheld device, and an alert is attached to that vehicle. The traffic officer is then able to take any action that is required by law.

- 3.5 All the information recorded by the camera network and the traffic officers has been automated. In terms of In-Vehicle Technology (IVT), all provincial traffic vehicles were fitted with a panic button to be pressed in cases of distress that sends an alert to the control room, a camera that can access any vehicle, and an Automatic Number Plate Recognition (ANPR) camera that can feed sightings into the CLE for enrichment and for sending alerts. All Golden Arrow buses have also been fitted with cameras for reading number plates. There are also cameras fitted inside the buses for safety purposes, especially when there are cases of assault.
- 3.6 The Department has continued to enhance the traffic management ecosystem since the introduction of the ASOD camera network in 2012, the CLE development in 2016, and the issuing of handheld devices in early 2018. Since the implementation of this technology, 34 193 939 alerts have been routed to traffic officers, 8 482 539 vehicles have been stopped using handheld devices, 1 294 095 notices to appear in court have been issued from the handheld devices, and 12 083 vehicles have been impounded.
- 3.7 In the past, when it came to the deployment of traffic officers, it was a very reactive process that relied heavily on the experience of senior traffic officers. The modern approach made use of several sources of traffic information such as alerts, vehicle types, compliance and high-risk areas. This information was then published on a digital dashboard, which allowed the traffic centre to plan operations more intelligently. Previously, traffic officers would leave home at the start of their shift and make their way to the traffic centre to receive the deployment plan. Presently, the traffic officer activates their duties from a device immediately upon logging in, which allows them to view their roster and shift deployment activities.
- 3.8 Previously, vehicle selection for inspection was predominantly a random exercise, and more often than not vehicles were selected without infringements. Currently, due to more modern data feeds and various static and in-vehicle cameras, traffic officers can receive alerts of oncoming vehicles with potential infringements, resulting in a more effective way of addressing true infringements and driver and vehicle compliance, which also brings forth a much higher success rate.
- 3.9 With the new technology, traffic officers were also deployed more efficiently to priority incidents due to the ability to live-track and deploy. The new technology also allowed traffic officers to scan license disks to reveal if the vehicle operator had a valid operating license, and if a vehicle was on a legal operating route.
- 3.10 When conducting alcohol screening in the past, traffic officers would ask drivers to blow into a device; however, this device did not record the result. If the person failed the test, the traffic officer would have to take them to a different site to conduct a blood-alcohol test. This was both costly and time-consuming. The new technology enabled the officer to capture the test reading immediately, and if the driver was found to be above the legal limit, the driver would be arrested and taken to a mobile unit for immediate evidentiary testing and processing. The unit is a fully equipped vehicle stationed at the screening site. The process is also recorded with audible video. The traffic completes the inspection on the handheld device, and fines may be printed immediately. The device also allows the traffic officer to highlight if there were alerts or any other issues in respect of the offender or driver of the vehicle. The system allows the traffic officer to build a profile, which shows the drivers' behavioural pattern over time. The control document is then automatically sent to the office.

3.11 In terms of operational reporting for the transportation hub, the control room was able to check the dashboard for an officer's location and was even able to check their performance during their shift. In the near future, this dashboard will also allow the control room to see the deployment activities that took place. The new dashboard will also record targets and actual achievements, critical outcomes and fines issued, allowing traffic officers to become more effective and efficient law enforcers, resulting in safer roads to the benefit of all law-abiding road users.

3.12 In respect of fatigue management, especially during the festive season, Traffic Law Enforcement stopped vehicles and used the handheld device to perform driver verification and vehicle identification. The Department's dashboard allows the traffic officers to track vehicles using the camera network. This allows traffic officers to perform "fatigue calculations", where they can track when a vehicle has left an area and reach its destination. This includes a calculation of the probability of whether a vehicle has stopped, and the driver has rested. When a driver has been marked as fatigued, he/she would be instructed to rest for a period of time. The operational commander would then release the vehicle once the person has rested. Emergency Medical Services would also be on board to engage with the driver and perform medical checks if necessary.

3.13 The Department's Traffic Fatality Model was able to predict the probability of a fatal event taking place within a specific period of time. The methodology was in line with current academic-based standards of similar problems. The Department has used this model and the data of fatal events between the period of 2019 and 2022 to effectively demonstrate where fatal events have taken place in the Western Cape. The methodology showed that most fatal events were clustered in the metro and surrounding urban areas in the City, spread across routes such as the N1 and other provincial and national roads. In order to combat this, the traffic control service has implemented numerous interventions, such as drunken driving and speeding interventions. The data produced from the Traffic Fatality Model allowed the Department to identify the probability of a fatal accident taking place. Effectively, if the probability of a fatal event was approximately 10%, then this area would be considered a fatality hotspot where interventions were necessary.

### 4. Acknowledgements

The Committee expressed its gratitude to the Minister and the Western Cape Mobility Department for their willingness to meet with the Committee and to share critical information pertaining to the monitoring of road safety in the Western Cape, particularly over the 2024/25 festive season.

PROF N MBOMBO, MPP

20000000

**CHAIRPERSON: STANDING COMMITTEE ON MOBILITY** 

**DATE: 28 May 2025**