



Western Cape
Government

ideas **42**



Offering Rewards to Safe Drivers

How behavioural insights can improve road safety

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Traveling by road is not always safe. Indeed, the prevalence of death and injury from traffic accidents has been called an epidemic by the World Health Organization. In the Western Cape, South Africa, a recent campaign to encourage safe driving took an innovative behavioural approach: all drivers were eligible for a cash-prize lottery—as long as they maintained clean records.

Summary

Road safety is a big problem in South Africa. According to the World Health Organization, the African Region has the highest rate of road fatalities at 26.6 per 100,000 populations. In 2012, the Western Cape Government (WCG) teamed up with ideas42 to develop a behavioural approach to improving road safety.

The goal of the collaboration was to complement enforcement with a campaign that fostered a culture of safety on the roads—not just by punishing misbehaviour, but by reinforcing good habits.

A pilot project was launched that would leverage Behavioural Insights into the power of incentives: all Western Cape residents who maintained clean driving records during the holiday period would be automatically participating in a lottery offering significant cash prizes.

The results were promising. **The number of fatal incidents per day during this time of the year dropped to 3.3 persons per day.** This is significantly lower than the 5.6 fatal incidents per day that happened during this time the previous year, and 4.3 the year before that.

- **The African Region has the highest rate of road fatalities at 26.6 per 100,000 populations**
- **During the time of the lottery, the number of fatal incidents per day dropped to 3.3 persons per day. This is significantly lower than the 5.6 fatal incidents per day during that same time the previous year.**

Road safety: A big problem in South Africa

Each year, traffic accidents cause 1.25 million deaths and tens of millions of injuries worldwide. According to the World Health Organization, the African Region has the highest rate of road fatalities at 26.6 per 100,000 populations. In South Africa, the rate of vehicle deaths is only slightly lower than the African average. In addition to causing human suffering, the country's high rate of traffic accidents has unfortunate economic effects. In one recent year nearly 8% of national GDP was lost to traffic accidents.

In South Africa, there is a specific time of the year when accidents tend to spike: the festive season of December and January. During this time of the year, the roads are especially busy because people tend to travel for holiday, or to visit family. These festive days also cause a peak in the number of drivers under influence of alcohol.

Attempting to reduce traffic fatalities: Traditional vs. behavioural approach

In 2012, the Western Cape Government (WCG) teamed up with ideas42 to develop a behavioural approach to improving road safety during the festive season.

One measure that was already introduced to improve safety of roads was an intensification of traffic enforcement activity, including the use of random roadblocks, during the December-January holiday period. Stepped-up enforcement and related publicity efforts succeeded in reducing road fatalities for the first two years. But as increased police presence on Western Cape roads became a normal part of life around the holidays, the transportation authorities were concerned that traffic enforcement might simply blend into everyday expectations and become less effective at keeping road safety and responsible driving behaviours at the top of drivers' minds.

It was agreed that most Western Cape drivers do obey the rules of the road and take safety seriously. An intervention was needed that would draw people's attention to their status as responsible drivers and increase their commitment to upholding it.

In our lottery strategy, anyone who had a clean driving record at the start of the festive season—and whose registration details were up to date in the National Traffic Information System—would automatically be entered in a draw with two cash prizes of R25,000 each. Drivers who subsequently committed new traffic violations during the lottery period would become ineligible to win.

The rationale for this approach rests on two key insights from behavioural economics.

Power of Lotteries

For most people, the slim chance of winning a large amount of money is more compelling than the certainty of receiving a smaller sum. Western Cape drivers, like many consumers who spend money on lottery tickets, may have understood rationally that the likelihood of winning was small. But the significant cash prize—equivalent to about three months' income for the average South African household at that time remained a meaningful incentive.

Loss Aversion

People's tendency to be especially troubled by the risk of losing things that already belong to them. We deliberately designed and promoted the lottery to emphasize that drivers were eligible by default, and that incurring a traffic violation would cause them to lose something they already possessed: their chance of winning the cash prize. The publicity campaign for the lottery tapped into this loss-aversion motive by promoting eligibility with the slogan, "The ticket you don't want to lose."

How the competition helped to reframe existing laws

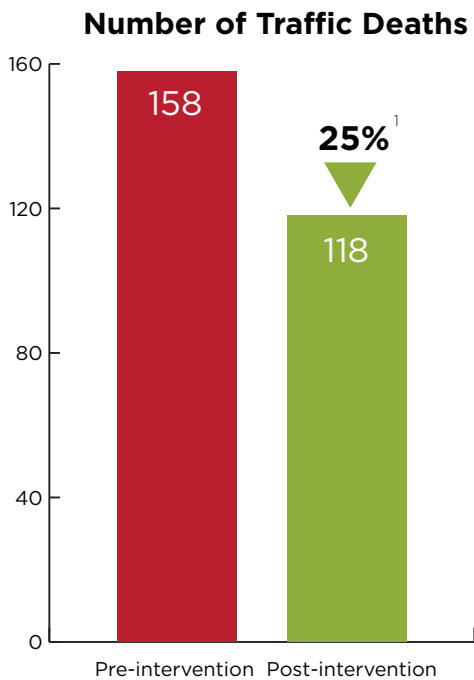
The lottery not only offered a new incentive to drive safely; it also created an opportunity for community leaders and residents to talk about responsible driving habits in a new way. After the Minister of Transport and Public Works announced the campaign in a radio broadcast in mid-December 2012, the Ministry began promoting it via social media. These efforts and subsequent media coverage created constant opportunities to remind people of safe driving practices, but with a new twist: the same rules of the road that the government had been stressing for years now doubled as eligibility criteria for the draw. In order to hold onto their lottery tickets, drivers had to obey speed limits, avoid using mobile phones behind the wheel, ensure everyone in their vehicles were buckled up, be mindful of pedestrians—and, of course, not drive while intoxicated.

By reframing compliance with existing laws as the key to winning an attractive prize, the campaign refreshed the laws' relevance and boosted their salience. It also tapped into Western Cape residents'

competitive spirit; when drivers tossed their mobile phones into the glove box or encouraged passengers to fasten their seat belts, they were not just obeying the law—they were keeping themselves in the game.

Promising preliminary results: reduced fatalities

The campaign concluded in late January 2013, when the second of the two prize winners was announced. Although this was a pilot project whose results must be interpreted with caution, there were promising indications that the lottery had contributed to improving road safety.



over the same 5-week period

When we compared road fatalities during the 2012-13 festive season to the same period in 2011-12, we found that in early December, before the lottery was announced, the Western Cape had seen more fatalities than the year before: 89 (5.6 per day), compared to 69 (4.3 per day). But after the lottery was announced, the picture shifted noticeably. Between mid-December, when the eligibility period began, to the closing prize draw in the third week of January, there were 118 traffic deaths, or 3.3 per day. In total, there were 40 fewer deaths than during the same period a year earlier. And **overall, we saw a 42% decrease in the number of fatalities compared to previous trends.**¹¹

It can therefore be concluded that the lottery provided an effective complement to heightened policing, possibly by drawing more drivers' attention to enforcement activity and thus enhancing its influence over their behaviour. (Additional research would be needed to fully disentangle the relative contributions of enforcement and lottery awareness to the decline in fatalities.)

The road ahead

Although the results of the pilot are preliminary, they're sufficiently promising to warrant further exploration. Moreover, the decrease in fatalities coincided with the rollout of the lottery strategy on a fairly modest scale. A more ambitious media campaign, combined with endorsements by prominent public figures, could spread awareness among a larger part of the Western Cape population. This in turn could influence the behaviour of many more drivers, making the province's roads even safer.

¹¹ The 42% reduction represents the change in trends compared to prior years, while the 25% reduction only represents the change in absolute number.