
Safety On Victoria's Roads — Regional Road Barriers

Tabled 18 June 2020



Objective

This audit looked at whether Victoria's regional road barriers program has met its intended safety outcomes. To do this, we focused on the flexible barriers installed by VicRoads on 20 high-risk rural roads, which is known as the Top 20 Program.

We assessed the Transport Accident Commission (TAC) and VicRoads' roles in planning, installing, maintaining and evaluating flexible barriers installed under the Top 20 Program.

Conclusion

While flexible barriers save lives and reduce serious injuries, they are not as cost-effective as VicRoads and TAC intended.

Their installation is likely to cost at least 22 per cent more than what was originally budgeted, and the barriers may not be as effective as VicRoads and TAC expected.

Additionally, VicRoads has failed to properly maintain and monitor the barriers it installed, which increases the risk that they will not perform as intended.

Context

In 2016, the government launched the *2016–2020 Towards Zero Strategy and Action Plan*. This strategy aims to reduce the number of fatalities on Victoria's roads to fewer than 200 by the end of 2020. This involves a \$340 million program of road safety initiatives on 20 high risk rural roads, known as the Top 20 Program. The strategy states that flexible barriers can reduce fatalities and serious injuries from run-off-road and head crashes by up to 85 per cent.

Context



Planning

We found that VicRoads did not sufficiently plan its flexible barrier installation projects for the Top 20 Program. VicRoads and TAC also did not prepare a business case to support why the investment in flexible barriers was the most cost-effective solution. This meant there was no consolidated picture of the program's costs, timelines and risks before it was approved. While not required by the Department of Treasury and Finance, it is better practice to prepare a business case for significant infrastructure projects.

VicRoads selected 20 rural roads as the most dangerous but did not document how it chose them. It also did not state why it selected high volume roads when low volume roads have higher numbers of serious casualty crashes.

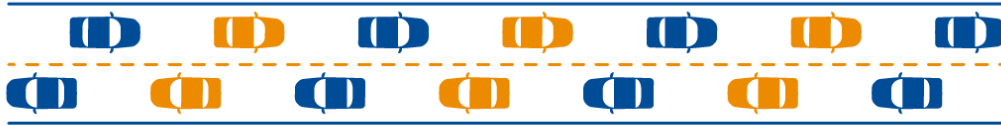
VicRoads uses crash reduction factors to indicate the expected effectiveness of road safety infrastructure projects. Crash reduction factors show how much, in percentage terms, the new infrastructure is likely to reduce the number of fatalities and serious injuries by. VicRoads was not able to tell us how it calculated the crash reduction factors for its Top 20 Program projects, which are most likely overstated.

Through our own analysis, we found that for the projects completed so far, the safety infrastructure installed has most likely decreased fatalities and serious injuries caused by run-off-road and head-on crashes by 46.5 per cent. This is below the result that VicRoads expected.

Implementation

Of the 21 completed projects, VicRoads has delivered 12 over budget and nine late. VicRoads is likely to spend at least \$99.9 million, or 22 per cent, more on the Top 20 Program than it originally budgeted. VicRoads has a comprehensive suite of quality assurance mechanisms and sign-offs to ensure that new road safety infrastructure is installed to the right standards.

However, VicRoads has limited oversight of how maintenance contractors inspect flexible barriers and does not know which barriers require maintenance at specific points in time.



Evaluation

VicRoads did not establish an evaluation framework when it was planning the Top 20 Program. It has now made plans to begin an evaluation, but does not expect to complete it until 2026.

Data quality issues will hinder VicRoads' ability to evaluate the program because it does not separately record where it has installed different types of barriers. It also could not provide us with accurate project construction start and end dates.

Recommendations

We made 10 recommendations. Eight to VicRoads to improve its planning for major infrastructure projects and ongoing flexible barrier maintenance, and two to TAC to strengthen its accountability over the road safety projects it funds.

For further information, please view the full report on our website www.audit.vic.gov.au