Nelson City Council

Nelson City Council
Te Kaunihera o Whakatū

5 March 2026

Report Title:	**R26-22 Traffic Calming Trial - Bisley Avenue, Moana Avenue and Princes Drive**
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Purpose of Report

1. To provide feedback on the traffic calming trial installed early 2024 on Bisley Avenue, Moana Avenue and Princes Drive.

2. To decide if these devices should remain in place, be altered or be removed.

Summary

3. Early 2024, speed cushions were installed at nine sites on Bisley and Moana Avenues and four speed humps installed on Princes Drive as a trial looking to lower vehicle speeds and discourage traffic from using Bisley and Moana Avenues as a through route.

4. Monitoring has shown the traffic calming is delivering on the trial objectives, however public feedback is mixed with vocal support for removing the speed cushions from Moana and Bisley Avenues.

5. Council must now decide whether to make the changes permanent, make changes or return the streets to their previous layout.

Recommendation

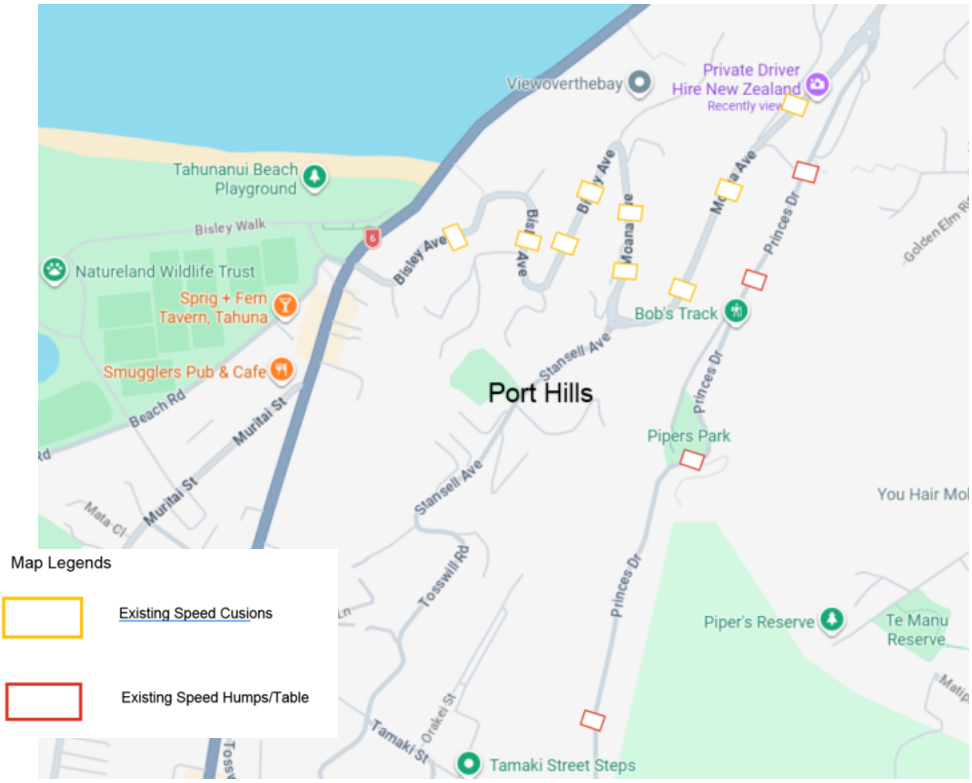
That the Nelson City Council

1. Approves making the speed humps on Princes Drive and speed cushions on Moana and Bisley Avenues permanent.

Background

6. Traffic calming devices (speed humps and speed cushions) were installed on Princes Drive, Bisley Avenue and Moana Avenue in early 2024 under Land Transport Rule: Street Layouts 2023 (the Rule) which, among other things, enables street layout changes to be installed, and feedback from the public received and considered, before deciding whether to make those changes permanent.

7. Twenty speed cushions were installed at nine sites on Bisley and Moana Avenues and four speed humps installed on Princes Drive to lower vehicle speeds and discourage traffic from using Bisley and Moana as a through route.



8. As required by the Rule, Council has monitored the operation of the traffic calming and provided the public with an opportunity to provide feedback. A detailed report on the Port Hills Traffic Calming Trial (Attachment 1) has been prepared providing the monitoring data, an assessment of that data and the feedback received.

9. Council must now decide whether to make the street layout changes permanent (in whole or in part) or return the road to its street layout before the pilot was installed.

Discussion

10. As Bisley and Moana Avenues were on the e-bus route, speed cushions were selected instead of speed humps as they allow larger vehicles to straddle the hump with less vertical displacement.

11. Speed, crash and traffic volume data was collected before and during the trial period. Feedback was sought from residents in the trial area before the traffic calming was installed and towards the end of the trial when wider feedback was also sought through the Council Shape Nelson pages. Feedback was also received during the trial in a number of forms, and this has also been considered. A trial report (Port Hills Traffic Calming – Impact

Assessment) has been completed presenting the data and feedback from consultation, providing an assessment and conclusions.

Data Analysis

12. In summary, the data analysis shows that the traffic calming is delivering on the objectives – speeds and traffic volumes have reduced. The 85th Percentile Speed has reduced by around 10km/h or 20% for parts of Moana and Bisley Avenues and at least 12% on Princes Drive bringing it down to 50km/h. Overall crash numbers and crash severity are also lower noting that the after period has only been two years. The key component of this is Bisley Avenue where there were 10 crashes over five years but only two crashes in the past two years with the traffic calming present.

Feedback

13. Over the two-year period feedback was received in a number of forms:

- an initial survey prior to installation
- in person meetings
- various service requests since the traffic calming was installed
- a petition from Moana and Bisley Avenue ratepayers; and
- a final survey of residents and the wider community through Shape Nelson.

Moana and Bisley Avenues

14. The most vocal feedback has been with respect to the speed cushions installed on Moana and Bisley Avenues. In addition to the surveys that formed part of the trial there were also in person meetings, various service requests and a petition requesting their removal. This feedback has been summarised in the following paragraphs.

15. In December 2024, the Deputy Mayor arranged to meet Moana and Bisley Avenue residents in response to noise, and vibration concerns associated with the speed cushions. Around 20 local residents attended and provided a range of views with the main concern being the eBus interaction with the speed cushions - those living close concerned about noise and vibrations and those who lived further away concerned about the impact the vibrations may be having on the Tahunanui Slump zone.

16. Following the site meeting, attendees were provided with a geological assessment that concluded that the vibrations caused by NCC's buses are not of a magnitude or duration that are likely to materially affect the stability of the deep-seated Tahunanui Slump. Council also worked with the bus operator to stress the need for the drivers to slow for the humps and this was monitored through their fleet management system.

17. In May 2025, the Mayor received a petition supported by 56 local ratepayers concerned about noise and vibration, seeking the removal of the speed cushions on Moana and Bisley Avenues.

18. For all forms of feedback, the key concern from those who live adjacent to the speed cushions was noise and vibration. Additional wider concerns included their design and layout (number, variation in shape, build quality etc) safety (vehicles swerving to avoid the humps, the size of the buses on the route), environmental aspects (increased emissions caused by vehicles having to slow down and then speed up) and extra vehicle damage, wear and tear from going over the humps.

19. Several respondents noted that vehicles 'swerving' to avoid having both wheels cross the speed cushion was limiting their effectiveness and was a safety issue. Officers note that these streets are narrow, and vehicles need to cross the centreline on a number of occasions - such as passing a parked car. In this environment moving into the other lane is an expected manoeuvre that drivers are already doing with due care and consideration and is a manoeuvre that is made safer by the lower vehicle speeds. Crossing the centreline of narrow roads when there is reduced lane width happens as a matter of necessity right across New Zealand.

20. Many of those wanting the cushions removed have suggested they be replaced by lower speed limits policed by speed cameras. Officers have accessed this option and determined that it could not be implemented. The Land Transport Rule: Setting of Speed Limits does not enable us to install a 40km/h speed limit on Bisley and/or Moana Avenues, Council is unable to operate speed cameras and New Zealand Transport Agency would not prioritise locating a speed camera in this area.

21. Other options involving horizontal deflection of vehicles (chicanes or kerb extensions) instead of the current vertical deflection were also suggested. However, officers note that these are not recommended where heavy vehicle / buses operate as a design that accommodates larger vehicles would have little or no effect on the speed of other vehicles. There is limited space for this type of treatment on these Routes and no additional cost allocated to do this.

22. Officers do not consider there to be an alternative method of traffic calming that could be applied in this situation, nor does Council have budget for installation of an alternative.

23. Council could consider removal of some of the speed cushions, but this would have an impact on their efficiency and not address the noise and vibration issue for all those concerned. Some feedback noted the form and layout of the humps was inconsistent and officers reviewed these

aspects to ensure they are consistent and to specification, allowing for specific site constraints.

24. Removal of the speed cushions on Moana and Bisley would cost around $70,000 and would need to be found within existing budgets. Although this would be less if specific speed humps were removed but not reinstated during pavement renewals. Pavement renewal costs are more expensive with the speed cushions present but this expense is spread over a longer timeframe.

25. Those who supported the traffic calming noted that the 'boy racer' activity had declined, it was easier to exit driveways, pedestrian and cyclist safety had improved and traffic volumes and speeds had decreased.

Princes Drive

26. There have been less issues and more support for the Princes Drive traffic calming.

Wider Network Changes

27. Recent changes to the wider roading network, in particular the opening of Clarence Drive in April 2025, could have also impacted on through traffic in the trial area with Clarence Drive providing alternative access to the ongoing development at the southern end of Princes Drive. This may result in fewer construction vehicles (concrete trucks, tradie utes and trailers) using Moana and Bisley Avenues. These vehicle types and buses were those most mentioned regarding disturbance from noise and vibration.

Options

28. Given the delivery of the trial outcomes on Princes Drive and the nature of feedback, officers recommend supporting retention of the traffic calming on Princes Drive.

29. For Moana and Bisley Avenues officers see two viable options for Council, either retention of or removal of all the devices. Officers support retaining all the traffic claiming measures.

Option 1: Retain the traffic calming devices on Bisley and Moana Avenues and Princes Drive	
Advantages	• Safety and amenity benefits of lower speeds and less traffic retained. • Cost for removal avoided.

Risks and Disadvantages	• Those living adjacent to the speed cushions on Moana and Bisley Avenues continue to be impacted.
Option 2: Remove the traffic calming devices on Bisley and Moana Avenues and Retain the traffic calming devices on Princes Drive	
Advantages	• Reduced noise and vibration for those living adjacent to the speed cushions on Moana and Bisley Avenues. • Faster and smoother travel for those living in the areas (if additional traffic does not eventuate).
Risks and Disadvantages	• Traffic speeds increase on the Bisley and Moana Avenues decreasing road safety – increasing crashes and crash severity with officers unable to respond to these. • Traffic volumes increase leading to localised congestion, traffic delays and difficulty for vehicles exiting driveways. • Increased 'boy racer' activity leading to safety and disruption issue – particularly at night.

Conclusion

30. While it has only been two years, the trial is delivering against the objectives with overall crash frequency and severity reduced, 85th percentile speeds and mean operating speed down and traffic volumes lower along the trial corridors. Supporters of the traffic calming note the 'boy racer' issue at night has gone and access out of driveways is easier.

31. There has been very vocal support for the removal of the speed cushions from Bisley and Moana Avenues with noise and vibration being a key issue along with safety, design and layout concerns. However, officers consider that none of the alternative options put forward are appropriate to address the key objectives.

32. Budget would need to be allocated for the removal of the speed cushions and installation of an alternative solution if one were to be identified.

33. There have been less issues and there is more support for the Princes Drive traffic calming.

Next Steps

34. Implementation of the decision.

35. Notification of the decision as required by the Rule.

Attachments

1. Draft_Port Hills Speed Reduction Evaluation Report

Important considerations for decision making
Fit with Purpose of Local Government Safe management of traffic on the Nelson Roading Network fits with the Purpose of Local Government.
Consistency with Community Outcomes and Council Policy The works in this report cover the following Community Outcomes - "Our infrastructure is efficient, cost effective and meets current and future needs" and "Our communities are healthy, safe, inclusive and resilient"**.**
Risk Poor management of a known safety problem leads to a risk to Council.
Financial impact No budget is set aside for changes to the current traffic calming. Any change or alterations will require budget to be found.
Degree of significance and level of engagement This matter is of medium significance because of the level of community feedback and engagement. Under the Land Transport Rule: Street Layouts 2023 (the Rule) specific feedback requirements are identified. Council has met and exceeded these requirements. The Rule also includes requirements for notifying decisions and these requirements will be met once the decision is made.
Climate Impact Traffic calming, as installed in this trial, should have a positive climate impact through lowering traffic speeds and ensuring traffic travels on the most appropriate route.
Inclusion of Māori in the decision-making process No engagement with Māori has been undertaken in preparing this report.
Delegations This is a decision for Council.