

94

Homer Tunnel Safety Improvements Project



The new avalanche and rockfall shelter entrance featuring unique artwork depicting the special cultural connection local iwi have with Milford Sound Piopiotahi.

The Homer Tunnel is a critical link on SH94 from Te Anau to Milford Sound Piopiotahi that provides the only road access for the thousands of people who visit this iconic tourist attraction every year.

It's also an economic lifeline for Milford Sound Piopiotahi based tourism and commercial fishing businesses. They need this highway to be as safe and resilient as possible, to continue being a significant contributor to the economic prosperity of both Fiordland and Southland.

Waka Kotahi NZ Transport Agency is working with its Crown infrastructure partners to deliver a \$29 million work programme that started in 2021 to improve safety for everyone using the Homer Tunnel.

A start is pending on the largest job in this programme in the form of a new avalanche and rockfall shelter at the Te Anau side of the Homer Tunnel entrance. The surrounding alpine terrain and often extreme weather, means the only window to safely build the shelter is between November and May. This is the period when conditions in the area are at their most settled.

New avalanche and rockfall shelter construction

November 2023 - May 2024

Delivering better avalanche and rockfall protection Te Anau side of Homer Tunnel, the new shelter is designed to blend in with its unique and breathtaking alpine surroundings.

The approximately 150 pre-cast concrete modules for the new shelter are being made off-site then transported to the tunnel for assembly.

A lot of thought, planning and discussions with the local community and key stakeholders is behind the various approaches being taken to minimise disruption for people using the tunnel. A range of measures will be used to achieve this. Among them, the careful staging of construction work and reducing on-site activity at peak travel times.



Some of the steel reinforcing rods for the precast concrete modules for the new rockfall shelter.

Construction timetable

What	When
Off-site pre-fabrication of new shelter units	Underway
Start work on site	Underway
Site shut down for the Christmas break	23 December 2023 to 7 January 2024
Construction resumes, with a targeted completion date of May 2024	8 January 2024 to May 2024
Typical working days: Two crews working split shifts	Monday to Saturday from 7am to 10pm. Some Sunday work (depending on weather). Some night work 8pm to 6am.

Minimising traffic delays

	Time	Delays	Timing
Typical day	7am to 10pm	No delays. Tunnel remains single lane.	November 2023 to May 2024
Evening closures (these will be kept to a minimum)	6pm to 10pm	The tunnel closes for 45 mins each hour during these times, then opens for 15 min to allow traffic through.	Ongoing but not every night. Closures publicised well in advance using a variety of channels such as the existing roadside electronic message boards and the Milford Road website milfordroad.co.nz

New home for tunnel plant and equipment

Located in an area protected from rockfalls and avalanches this plant room replaces an aging equipment room. The new plant room provides a secure place to house plant and equipment critical to the safe operation of the Homer Tunnel.

Made from prefabricated concrete modules, this facility has been deliberately designed to have minimal visual impact in the unique and sensitive surrounding alpine environment. Pictured below is the new plant room at the Te Anau side of the Homer Tunnel entrance.



Completed work: in-tunnel safety improvements

- 'Fire life' safety systems such as radar and incident detection cameras.
- Purpose built speakers and lighting allowing tunnel operations staff to give directions to people caught inside the tunnel in an emergency.
- Upgraded power supply.
- Securely concealed in-tunnel telecommunications cabling along the tunnel walls.
- Improved safety and vehicle capacity with an extra traffic lane up to the eastern tunnel entrance.
- In-tunnel safety barriers.
- Consolation Peak repeater/microwave site upgrades that are delivering quicker fibre optic speeds. This enables better management of tunnel systems from the Milford Road Alliance base in Te Anau.
- Sensors inserted into the road to detect in-tunnel vehicle stoppages.

More project information is available at:

nzta.govt.nz/projects/homer-tunnel-safety-improvements/
nzta.govt.nz/projects/sh94-milford-road/

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