## Air quality calculator

Project name: 2026, No ARL

Project notes: Projected traffic data for 2026 assuming 3% growth on 2017 levels

This calculation was made at 15:33 07/11/2019. The calculation can be reopened at this web page.

AADT: 17536vpd PM<sub>10</sub> 24hr average: 37.5µg/m³

Heavy vehicles: 9% NO<sub>2</sub> annual average: 13μg/m³

Vehicle speed: 80km/h Area unit name or ID: Warkworth

Distance to receptor: 20m

Assessment year: 2026

PM <sub>10</sub>	24hr average	NO <sub>2</sub>	Annual average
Assessment guideline (NES):	50.0μg/m³	Assessment guideline (WHO):	40.0μg/m³
Road contribution:	0.7μg/m³	Road contribution:	1.9μg/m³
Road contribution to guideline:	1%	Road contribution to guideline:	5%
Background air quality:	37.5μg/m³	Background air quality:	13.0μg/m³
Cumulative contributions:	38.2μg/m³	Cumulative contributions:	14.9µg/m³
Cumulative contribution to guideline:	76%	Cumulative contribution to guideline:	37%

This tool estimates air quality near roads by combining the contribution of the road with the background air quality to arrive at a cumulative concentration. The model is designed to provide a conservative assessment of air quality risk from a single road for two air pollutants. Reference should be made to the "Air quality screening model - Users' notes" for details of the methodology. In addition to the standard terms and conditions for use of this website, the NZ Transport Agency does not accept any responsibility or liability whatsoever, whether in contract, tort, equity or otherwise, for any action taken as a result of reliance placed on this tool, or for any error, inadequacy, deficiency, flaw in or omission in the tool.

## Air quality calculator

Project name: 2026, with ARL

Project notes: Projected traffic data for 2026 assuming 3% growth on 2017 levels and 740 additional vehicle movements attributable to ARL operations

This calculation was made at 15:42 07/11/2019. The calculation can be reopened at this web page.

AADT: 18276vpd PM<sub>10</sub> 24hr average: 37.5μg/m³

Heavy vehicles: 12% NO<sub>2</sub> annual average: 13µg/m³

Vehicle speed: 80km/h Area unit name or ID: Warkworth

Distance to receptor: 20m

Assessment year: 2026

PM <sub>10</sub>	24hr average	$NO_2$	Annual average
Assessment guideline (NES):	50.0μg/m³	Assessment guideline (WHO):	40.0μg/m³
Road contribution:	0.8μg/m³	Road contribution:	2.0μg/m³
Road contribution to guideline:	2%	Road contribution to guideline:	5%
Background air quality:	37.5μg/m³	Background air quality:	13.0μg/m³
Cumulative contributions:	38.3μg/m³	Cumulative contributions:	15.0μg/m³
Cumulative contribution to guideline:	77%	Cumulative contribution to guideline:	38%

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