Land Transport Benefits Framework measures forecasting methodologies

Freight mode share and throughput measures (5.2.2–5.2.5)

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> We provide these methodologies and tools to help you in forecasting benefits measures from the Land Transport Benefits Framework. We are developing and refining them over time, and you can provide feedback by emailing us at investment.benefits@nzta.govt.nz.
>
> Before using this forecasting methodology, read the information about these benefit measures in the Land Transport Benefits Framework measures manual.

This forecasting methodology covers:

- 5.2.2 Freight – mode share value
- 5.2.3 Freight – mode share weight
- 5.2.4 Freight – throughput value
- 5.2.5 Freight – throughput weight.

The measures 5.2.2–5.2.5 are all inter-related, with the estimation of throughput by weight (5.2.5) providing the foundation for all four measures.

Measure 5.2.4 simply applies a value/tonne to the measure 5.2.2 weight value. Therefore, these two measures can be calculated in tandem for each mode (road, rail and costal shipping).

Measures 5.2.2 and 5.2.3 simply express the 5.2.3 and 5.2.5 results for each mode of as a percentage of the combined total for all three modes.

Forecasting methods and assumptions

This centralised method will evolve over time as better information becomes available. At this stage we advise developing local (regional) growth factors to apply to directly to the baseline values.

Potential inputs that could be used (ideally in combination) to derive the growth factors are:

- regional gross domestic product (GDP) forecasts
- port forecasted freight/commodity movements (publicly available annual plans/forecasts)
- traffic count data (heavy commercial vehicle (HCV)) trends
- regional population and employment projections (for example Stats NZ population projections and MBIE forecast employment by industry and region).

Assumptions may have to be made on:

- how vehicle capacity or load sizes might change over time (affecting tonne-kilometres)
- how commodities and goods being transported by each mode might change over time (affecting the average value)
- how the value of individual commodities might change over time (affecting the average value).