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17 April 2024

12

REF: OIA-14963

Dear

Request made under the Official Information Act 1982

Thank you for your email of 20 March 2024 requesting the following information under the Official Information Act 1982 (the Act). I will respond to each part of your request in turn as follows:

I'm doing an assignment and wonder if NZTA has a document/spreadsheet with bridges and the cost of building them.

The costs of most bridges in New Zealand are included in overall project costs and cannot be easily specified. However, costs for five construction projects – which includes the Whirokino Trestle and Manawatu River Bridges – are detailed in a spreadsheet which can be downloaded by visiting our website at https://www.nzta.govt.nz/assets/resources/cost-estimation-manual/docs/sm014-elemental-costing-database.xlsx.

The key thing I'm looking for is the cost per m2.

The standard cost rate of a bridge is currently \$5,600 per square metre. In addition, an on-cost factor of 56.4 percent and a brownfield uplift of 5 percent for rural areas, and 15 percent for urban areas, expressways and motorways, needs to be added to this figure as follows:

- On-cost: the on-cost factor allows for indirect costs such as site establishment, quality assurance and other works that are part of the overall construction project.
- Brownfield cost: the cost for building infrastructure in a rural (greenfield) location is less compared to in an urban environment. The brownfield uplift allows for how built-up the site location is and influences further costs such as temporary traffic management.

The rate for building a bridge varies and generally ranges from \$3,600 to \$17,000 per square metre, to which the on-cost and brownfield uplift need to be added. However, this excludes outlier bridges such as the Auckland Harbour Bridge and Newmarket Viaduct which are significantly more expensive. The variability of the bridge rates relates to the vertical dimension of the bridge (the volume of the bridge's construction) – for example, a bridge's rate is determined by the requirements for vertical clearance that a bridge needs to meet.

The costs quoted are based on the valuation of a bridge, rather than the cost of constructing a bridge.

You may also be interested in other information about bridge construction projects in New Zealand which is available under the "Achievements" heading on the following webpage at https://www.nzta.govt.nz/roads-and-rail/bridges-and-structures/.

In line with NZ Transport Agency Waka Kotahi (NZTA) policy, this response will soon be published on our website, with personal information removed.

If you would like to discuss this reply with NZTA, please contact us by email to official.correspondence@nzta.govt.nz.

Yours sincerely

VI Brome

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