

28 May 2018

Andrew Crow
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REF: OIA-3783

Dear Andrew

Request made under the Official Information Act 1982

Thank you for your email of 30 April 2018 requesting the following information under the Official Information Act 1982 (the Act):

...information about cost and benefits of the smart wellington motorway project done in about 2016.

What I am wanting is to show costs and if they gave benefits as given in business case.

- 1. Forecast of cost before project start.*
- 2. Total costs at end of project.*
- 3. Any benefits predicted as in business case.*
- 4. Any assessment of benefits seen after project.*
- 5. Any documents that might help us understand why no traffic improvements after project.*

Please find responses to each of your questions below:

1. The original approved cost for all phases of this projects was \$55.85 million
2. The final cost of phases 1 to 3 of the project (including the Ngauranga emergency on-ramp) was \$81.38 million

The project has been the subject of a number of scope changes and associated cost increases, hence the difference in cost between the original approved cost and the final cost. The significant changes include:

- Extension of the smart motorway (ATMS - Active Traffic Management System) along SH2 towards Petone,
 - Early delivery of the first section of the Petone to Ngauranga cycleway,
 - The use of premium long life, low maintenance surfacing (Epoxy Modified OGPA - Open Graded Porous Asphalt), and
 - Additional surfacing works for maintenance purposes.
3. The following BCRs (Benefit Cost Ratios) were confirmed in the SAR (Scheme Assessment Report - pre Business Case process). Benefits included:
 - Improved efficiency through journey time reliability.
 - Reduced congestion.
 - Safety improvements through reduced lane changing and smoother traffic flow.
 - Environmental improvements, including upgraded drainage and stormwater management.

- Best use of existing assets including; optimal use of road shoulders rather than road widening to facilitate four laning northbound from Aotea Quay to Ngauranga interchange, and reuse of the redundant Thorndon Stub Bridge (rather than demolition and re-build) to enable bridge widening for the four-laning.

Work Stage	Forecast Cost (\$M)	BCR
Early works: SH1/2 merge and diverge improvements	0.35	2.3
Stage 1: SH2 Ngauranga northbound on-ramp capacity improvements	2.7	1.6
Stage 2: ATMS (Active Traffic Management System)	14.8	1.9
Stage 3: Four laning northbound from Aotea Quay to Ngauranga interchange	22.1	2.5
Emergency on-ramp at Ngauranga	2.5	N/A
Stage 4: Four-laning southbound including Thorndon Overbridge widening	44.2	0.8
Full Scheme (excluding Early works)	86.3	1.1

4. BCRs have not been re-evaluated at this stage. However, performance assessments to date would suggest the following benefits:


- Journey times have generally reduced for motorists travelling north from the CBD to Johnsonville on State Highway 1.
- Overall variability in travel times through the smart motorway in 2017 is similar to 2014 despite the increase in traffic over this period.
- Southbound throughput of traffic on State Highways 1 and 2 has improved slightly due to improved operation of the SH1/2 merge.

5. I have identified one document that falls within this part of your request and is enclosed as attachment 1. The document, titled *Managed motorway (Smart Motorway) performance – July 2016 to June 2017*, provides comparisons of travel times, travel time variability and throughput for each month in the twelve month period since opening, with the corresponding month in 2014 (pre-construction). It also provides an assessment of compliance with posted speed limits from April to June 2017.

The Wellington managed motorway opened on 22 June 2016 for northbound traffic, and on 8 July 2016 for southbound traffic.

If you would like to discuss this reply with the NZ Transport Agency, please contact Glen Prince, Principal Project Manager, by email to glen.prince@nzta.govt.nz or by phone on 04 931 8918.

Yours sincerely



Chris Hunt
Senior Manager, Project Deliver