## **Budget Initiative Summary Template**

This template seeks a high-level summary of the Budget 2016 significant initiatives. Agencies are required to complete the blue fields – your Vote Analyst will complete their assessment in the grey fields. Please also refer to the Guidance document available on CFISnet, which provides detail on supporting information requirements for your initiatives. This supporting information must be provided to your Vote Analyst.

Work stream
Other

Vote Responsible Minister	Land Information  Minister for Land Information
Initiative title	Open Government Information and Data Programme
Initiative description	This initiative will continue and expand the Open Government Information and Data Programme. This will enable active support for agencies opening up data, driven by strong stakeholder engagement. The Programme will drive this change through a series of initiatives with a track record of success at increasing the value from open data internationally.
Ranking	[Must match CFISnet entry, see page 12 of the Guidance]
Responsible Vote Analyst	

Funding Sought (\$m)	2016/17	2017/18	2018/19	2019/20	2020/21 & outyears	TOTAL
Operating	2	1.9	1.7	1.6	-	7.2
Capital	0-	0-	0-	0-	-	0-

VA Recommendation	2016/17	2017/18	2018/19	2019/20	2020/21 & outyears	TOTAL
Operating	-	-	-	-	-	-
Capital	-	-	-	-	-	-

Vote Analyst	[Support/Do not support/Partial support/Defer]
Recommendation	[Please provide a short explanation of your recommended funding option]
Degree of government	[Pre commitment/manifesto commitment/discretionary]
commitment	

Supporting Information	
Please list the supporting documents provided to your Vote Analyst.	<ul> <li>Business Case</li> <li>Cost Benefit Analysis</li> <li>New Zealand Open Government Information and Data: 2015 Progress Report:</li> </ul>
	https://www.ict.govt.nz/assets/Uploads/Documents/2015- Report-on-adoption-of-the-Declaration.pdf

Has Cabinet previously considered this initiative? Please provide a Cabinet reference and any supporting material.

SEC-15-MIN0033

#### **Vote Analyst Comment**

[Please provide a comment on the quality of the supporting information provided. Have the costs and benefits of this proposal been adequately assessed? Has your agency met the Better Business Case or Regulatory Impact Analysis requirements where relevant? Do you have enough information to provide your assessment? If not, where possible, provide the agency's reason for not providing this information.]

#### **Strategic Alignment**

How does this initiative fit with your agency's strategic intentions and align with the Government's priorities?

In August 2011, Cabinet issued a Declaration on Open and Transparent Government, committing the Government to actively release high value public data. The Declaration states that "Building on New Zealand's democratic tradition, the [New Zealand] government commits to actively releasing high value public data." It requires core Government agencies to release all high value, non-personal, non-restricted data in usable formats to align with the New Zealand Data and Information Management Principles. The Open Government Information and Data Programme is a key enabler for agencies to meet these responsibilities.

Investment in data and information is key to progressing the 2015 Government ICT Strategy's goal to transform public services. Data and information not only provide insights for decision making – they are also essential for providing linked, customer-centric services and maximising the impact of investment.

The aims of the Open Government Information and Data Programme directly align with this Government's revised 2015 ICT Strategy focus area: Open data and sharing by default supported by privacy and security settings. The Programme provides support for agencies to do this by assisting in opening data and increasing agency capability to share by default.

The work of the Open Government Information and Data Programme also aligns with the Data Investment Framework. It contributes to focus area 4: Easy to find and safe access to open and protected data, focus area 5: Environment to actively support data sharing and focus area 6: Leadership coordination and support. The work will help to solve many of the critical system gaps relating to open data, identified as part of the Data Investment Framework, including:

- Data is not designed to meet system wide customer needs
- Data is not managed and maintained to enable sharing and reuse
- Insufficient information is shared to use data safely and appropriately
- Existing data is hard to find and capacity to respond to requests is limited
- Analytics and insights are not turned into action for the benefit of customers
- Lack of leadership and capability to take action and exploit the value of data
- Common understanding of the authorising environment and social

#### licence is limited

 There is no Government-wide prioritisation based on customer needs.

The impetus to share and use data to drive service delivery and innovation is recurrent across agency transformation programmes and Government priorities, including Better Public Services and the Business Growth Agenda.

### What is intended to be achieved, for whom?

Investment will enable the Open Government Information and Data Programme to provide a suite of tools and more direct support to agencies to increase the pace of data release to Government and other potential users. The Programme's objectives include:

- Understanding user demand and data user needs
- Prioritising investment in opening data according to user demand
- Improving capability to collect, manage and release data
- Making it easier to find data and improving responses to requests.

The Programme will contribute to new and better products and services being delivered by Government and private providers. This will enhance consumer and producer surpluses.

How does this initiative relate to current activity(s) undertaken by your agency and/or by others across the State Sector

The Open Government Information and Data Programme has focussed on the fundamentals of data release and supported New Zealand Open Access and Licensing (NZGOAL). The Programme was resourced to raise awareness about the value of releasing Government information and data and provide ad hoc advice to agencies. Work included:

- Surveys of agencies to investigate what datasets had been released
- Getting agencies to support the Declaration on Open and Transparent Government
- Clarifying and communicating the principles regarding the release of Government information and data
- Developing a framework to guide Government agencies in applying Creative Commons licences (to give permission to reuse public data)
- Establishing a data champions network every central Government agency and most local Government authorities now have appointed a data champion to support the cultural shift within their organisations
- Publishing case studies to illustrate the value of open data
- Establishing key relationships in the international open data network and with data users in the private sector
- Holding key events, such as the Open Data Showcase at Parliament, to highlight the kinds of innovative technologies and solutions that can be developed when Government information and data is accessible.

These activities established the foundations for progressing the transformational change that open by design principles require. However, they are not sufficient to create the step change necessary to accelerate the Programme further and realise increase benefits.

Funding for the Programme ended on 30 June 2016. The Programme is

being maintained through funding from Land Information New Zealand's (LINZ) baseline for the initial part of 2016/17. This has enabled further planning for an accelerated approach and the maintenance of awareness work and relationships. However, this will not be sufficient to deliver on Ministers' expectations and progress will be limited until further funding is secured.

Please list the agencies or nongovernment organisations that you have consulted in the process of developing this initiative. The only consultation on this specific bid has been with the Information Group and Statistics New Zealand.

However, we have consulted with several stakeholders on the shift in Programme direction and some of the specific initiatives this bid would make possible. Those groups include:

- Data users
- Statistics New Zealand
- Ministry for Primary Industries
- Department of Internal Affairs
- Ministry of Business, Innovation and Employment

#### **Vote Analyst Comment**

[Please rate this initiative's alignment with Government priorities on a scale from **0-5**. Please also provide a short comment on the answers provided by your agency – does this initiative align with the strategic intentions of the agency as outlined in their Four-year Plan? Is the strategic intent of this initiative clear? Has the agency clearly outlined who this initiative will target and what it is intended to achieve? Has your agency worked with other agencies where relevant in developing this initiative? Do they have a clear understanding of how this initiative will fit in with existing activity across the State Sector?]

#### **Impact Analysis**

## Provide a summary of the costs and benefits of this proposal.

#### Costs

The direct fiscal cost of the Open Government Information and Data Programme is \$7,217,000 over four years (outlined in more detail in the summary table above). The funding is being sought from the Data and Analytics Contingency provided for in Budget 16. The contingency provides funding for a maximum of four years for any initiative. Officials believe this limited period is appropriate. Towards the end of the four years, the Programme should be reviewed to see whether its continuation is necessary, and if so, on what scale. An objective of the Programme is to achieve systems momentum that automatically promotes the open release of Government data.

There may also be minor costs across Government agencies, reflected in slightly lower surpluses to Government at the end of each financial year, or some opportunity cost from reduced activities elsewhere.

There are minor but easily manageable risks in the form of opportunistic pressure from stakeholders using data inappropriately, or legal risk from the use of data leading to loss.

#### **Benefits**

The expected benefits from the Open Government Information and Data Programme are significant, but difficult to quantify.

The Programme contributes to positive outcomes by improving Government open data performance. This will be demonstrated by an increased rate of open datasets meeting specified quality standards. New Zealand experience suggests the Open Government Information and Data Programme has contributed to rates of release that are at least twice as high as what would have otherwise occurred. This will be further built upon.

Expected benefits include:-

Better public sector performance by:

- Improved system capability: Improving the quality of information available to public sector decision makers and therefore the quality of operational and policy decisions. This "supply" helps meet increasing demand for joined up evidence based policy making and accountability.
- More effective accountability and better performance:
   Increasing the information available to the public and stakeholder groups by which to judge the performance of Government agencies and programmes, thereby encouraging better performance going forward. Better performance data also aids control agencies and Ministers in holding Government agencies to account. An important foundation of good democracy is good information.
- Lower costs: The availability of a specialised central resource for agencies to draw upon will in some areas reduce the cost of opening up their data. Furthermore, proactively making data available may reduce the frequency and cost of responding to Official Information Act requests, and data sharing between agencies (an open by design approach will reduce future costs in some areas).

Better private sector performance by:

- Facilitating the development and evolution of new products and services: This occurs where those products and services are reliant on data held by Government agencies. In some cases this will lead to a contestable market for products and services previously provided by Government alone. This can lead to more efficient products and services meeting the needs of a wider range of stakeholders.
- Improving strategic and operational decision making: Through
  more and better quality data. Also, it will make more data available
  for research, thereby improving the rigour and validity of that
  research, and in turn the judgements and decisions based upon it.

Ultimately, private sector benefits will accrue to New Zealand businesses and workers through increased profits and wages, and to consumers/clients

through the availability of a wider variety and better value products and services. The benefits will be apparent by an increase in producer and consumer surpluses. These benefits accrue from both private and public sector providers and consumers.

To achieve the benefits listed above, there needs to be improved Government open data performance. This will be demonstrated by an increased rate of open datasets that meet specified standards of quality. New Zealand experience suggests the Open Government Information and Data Programme has contributed to rates of release that are at least twice as high as what would have otherwise occurred. Progress can be further demonstrated by the opening up of priority datasets. Priority datasets will be chosen through further engagement with potential users, including by surveys, roundtables involving potential users and assessment of information requests, complemented by overseas experience on where value has been realised.

#### Size of benefits

Ex ante, it is difficult to anticipate the size of benefits from the Open Government Information and Data Programme because we do not yet know:

- The precise data that will be released by the Open Government Information and Data Programme
- The uses to which Government data will be applied
- Its ultimate contribution to improved performance relative to other inputs.

Therefore, it is very difficult to provide a realistic estimate of the size impact from the Open Government Information and Data Programme. Nevertheless, there is reason to believe the benefits will be large. International literature shows a number of attempts to quantify the potential benefits from opening data:

- Estimates on the benefits to be created by opening up Government data in other jurisdictions' data range from 0.4%-1.5% of GDP
- A 2013 study by McKinsey estimated the total potential economic benefits (producer and consumer surplus) accruing in the United States from all open data (not only Government) to be US\$ 3 trillion
- A European Commission report on pubic open data estimated that in 2016 the number of jobs directly tied to open data was 75,000 and that this would increase to 100,000 by 2020. The size of the market relying on open data is expected to increase by 36.9% to EUR 75.7 billion. It also estimated the public sector cost savings

from open data to be EUR 1.7 billion by 2020

- Recent case studies in the United Kingdom have identified benefit to cost ratios of up to 5-10:1.<sup>1</sup>
- A 2014 report by the World Bank identified four companies worth US\$1 billion or more driven by open data that did not exist ten years prior.

While these results are not directly transferrable to New Zealand, they do provide an indication of the general magnitude of benefits from successfully opening Government data. As these benefits are largely delivered once data has been released and reused, New Zealand benefits will be demonstrated primarily through case studies.

# What alternative options did you consider? Why did you choose your preferred option?

The following options have been selected for further analysis:

**Option one: Status quo** – The current Programme will cease, with remaining funds being used to complete current guidance, advice and tools being worked on, and meet the costs of terminating the Programme.

**Option two: Medium** – The Programme will work with a small number of agencies to release data, conduct stocktakes and provide technical advice. These agencies will be those whose data release will provide economic benefit, who have the capability and capacity to engage and where there are fewer privacy issues. Online tools will also be provided for all agencies to use to open data.

The Programme will also work more closely with data users and create a strengthened mandate and monitoring.

**Option three: Maximum** – Under this option there would be more intensive support services provided to more agencies, and more engagement with potential data users. Funds would be set aside to help agencies to meet the costs of opening their data.

The critical determinant for deciding between the options is the expected net benefit of each option. To aid in making this judgement, the following criteria were considered:

- Will the option drive change?
- Will the option address key barriers?
- Will the option fit with other strategies, programmes and projects (i.e. not duplicate other work or programmes)?
- Will the option provide value for money?

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<sup>&</sup>lt;sup>1</sup> Open Data Challenge Series at opendatabarometer.org.

Can the option be delivered?

The costs, benefits and risks of the alternative options are discussed first, followed by a discussion of the preferred option.

Option 1 is the status quo. Under this option funding for the Open Government Information and Data Programme would cease in 2016/17 (\$0 funding over four years). This would see centralised efforts to support agencies release open data cease. This would slow the number of Government datasets becoming available for use by Government and non-Government users. This would be likely to include datasets deemed of high value to users. Among other things, the competitive market for innovation would produce new products for users in other countries before New Zealand, to the benefit of their customers. In some cases, business activity might relocate from New Zealand to those countries. Ongoing improvements in public and private sector performance would track at a lower rate, and New Zealand's comparative advantage over other countries would diminish as the return from those countries' relatively greater efforts accrued.

Ministers' expectations for an accelerated Open Government Information and Data Programme would not be met, and key gaps identified by the Data Investment Framework will not be targeted by the Programme.

Option 3 is the most ambitious option. It would cost \$14 million over four years. Benefits are likely to be realised more quickly than under option 1 (and option 2 – the preferred option), but this needs to be considered against the higher risks and costs. In particular, working closely with key datasets and motivated and capable stakeholders (option 2) will see valuable learnings with which to support a more efficient roll-out of the Open Government Information and Data Programme to more problematic datasets and issues. Also, the accompanying monitoring and policy development programme of option 2 should see timely and appropriate changes to policy settings to better support a considered evolution of the Programme, in preference to the big bang approach of option 3. Finally, option 3 presents the risk that it will violate the Government intervention principle that Governments "should intervene only to the point needed to achieve its policy objective, and no more." Under a worst case scenario, a poorly implemented option 3 could undermine the credibility of the Programme and its objectives.

Option 2 is the preferred option. The fiscal cost of the Programme is \$7.2 million over four years. It would realise significant and timely gain for New Zealand compared to option 1, and without the material risk to the efficient implementation of the Programme that would come with a more aggressive approach (option 3). Officials believe option 2, compared to the other options:

- Provides better value for money
- Addresses the key barriers and risks to the Open Government Information and Data Programme in a cost effective manner

 Better aligns and realises synergies with the other whole-of-Government information work streams, in particular with the work of Department of Internal Affairs (data.govt.nz) and Statistics New Zealand.

#### **Vote Analyst Comment**

[Please rate this initiative on a scale from **0-5** reflecting the benefits relative to the costs. Please explain your rating and provide a short comment on the quality of the cost-benefit analysis and the reliability of the inputs.]

#### Legislative and Regulatory Implications

Please detail any legislative implications and whether the RIA requirements apply.

None.

#### **Vote Analyst Comment**

[Please use this space to insert the QA statement if applicable. See page 21 of the guidance for information on QA - contact the RIA team if you have any questions.]

#### **Affordability**

What strategic trade-offs would be required to fund this initiative from baselines?

Funding this all-of-Government Programme from LINZ baselines will require significant reprioritisation of existing activities. This could be achieved through a reduction of existing programmes such as biosecurity programmes, deferring maintenance on Crown owned buildings held by LINZ, a reduction in hydrographic surveys, or slowing down tenure review activities. This would result in reducing investment in LINZ priorities.

Provide an option for scaling, phasing and/or deferring this initiative.

Refer discussion of options above.

Describe the implications on service delivery if this funding is not approved or deferred.

The Open Government Information and Data Programme will continue to operate through 30 June 2017, but at minimal levels. From that time, agencies and the wider state sector would no longer have access to any centralised open data resource. While some agencies may seek to in-house this service, we anticipate that this would be very limited.

#### **Vote Analyst Comment**

[Please provide a brief comment on the quality of the agency's Four-year Plan and discussion of strategic trade-offs. Do you agree with the agency's assessment of the impact of not approving this initiative?]

#### **Delivery and Risk Management**

What are the risks to delivering this initiative? How will these risks be mitigated?

There is no market of buyers and sellers for Government data. This means there is no data "supply price" to automatically encourage Government agency supply to meet user demand (where the marginal cost of supply equals the marginal benefit to users). Instead, non-market (administrative) mechanisms, such as Government statements of commitment, performance agreements and monitoring, are being used to incentivise Government agencies to meet user demand. The inherent weakness with this approach is that it can take a number of adjustments to the administrative levers before

data demand and supply are appropriately aligned.

In the event the work programme outlined above is not opening up data at a rate and in ways most valued by users, officials will give priority to looking at options to mitigate remaining barriers.

Further, at this point officials do not support funding beyond that being sought, instead preferring a more gradual increase in activity so that there is less risk of "overshooting" the target (to where the additional costs of the programme start to exceed the additional benefits).

Other risks identified by officials include the legal risk arising from the release of more Government data, and the inevitability of frivolous and vexatious uses to which some information might be put.

These are business as usual risks across the Government system that are managed by accurate disclosures around the information released and robust and efficient processes for managing public and stakeholder engagement. To the extent there is more interaction between Government and the public following data release, it is to be expected that over time the quality of that engagement will increase, generating benefits for Government agencies and their stakeholders.

# What capability is required to deliver this initiative? Does this capability exist or will it need to be built?

Key capabilities required to deliver the initiative are:

- General management
- Project management
- Open data standards and techniques
- Information systems
- Civic and industry engagement and collaborative working
- Digital communications
- Skills specific to the component initiatives (e.g. roundtables with stakeholders).

Some of these capabilities exist in the open data team now, although they fall short of meeting the current high demand. The team was complemented for a time by a secondee from the private sector, a practice that would continue under this initiative. For some of the component initiatives that require a specific skill set, tools and support to develop the required capability is included in the service being purchased.

Overall, provided there is adequate funding, building and developing the capability required off the existing base should not be a barrier to success of the initiative.

#### **Vote Analyst Comment**

[Please rate this initiative **red**, **amber or green** according to your assessment of risks associated with the delivery of this initiative. Consider the size of the proposal relative to the agency's activity, any cross agency impacts, and impacts to front-line service delivery.]

#### Implementation and Evaluation

## How will this initiative be managed and implemented?

The initiative would be managed under LINZ management processes.

## When will this initiative be evaluated and how will performance be assessed?

There will be two evaluations supported by real-time monitoring. One will be at two years and will focus on the impact of the Programme on open data performance. The second, at four years, will provide a further look at open data performance as well as the outcomes of that improved performance.

Open data performance and outcomes evaluation (two years)

To do this data will be collected on an ongoing basis on the resources being applied through the Programme to different organisations. Through this, LINZ will be able to classify agencies into different cohorts in terms of level of support received. This will be compared against changes in both quantitative and qualitative measures of open data performance (such as rate of quality datasets uploaded and implementation of best practice) within those agencies. By comparing otherwise similar organisations that have received different levels of support, we should be able to achieve casual inference as to the impact of the Open Government Information and Data Programme.

Open data performance and outcomes evaluation (four years)

This evaluation will provide an update of the same method applied in the first evaluation. This will be supplemented by in-depth case studies looking at impacts from open data. These case studies will seek to do three things:

- 1 Provide a description of the benefits as a result of the Programme (quantified where possible)
- 2 Assess the importance of open data to the outcomes (e.g. new products, research, policy changes)
- 3 Identify whether the availability of the required open data can be reasonably attributed to the work of the Open Government Information and Data Programme (drawing on the results of the first part of the evaluation).

Through these case studies, evaluators will be able to make meaningful conclusions on the Programme's impact on outcomes, value for money, and on where the benefits accrue. It will also allow us to inform the future focus of the Programme, including whether it should continue.

Real-time performance monitoring

This formal evaluation will be complemented and enabled by the real-time performance monitoring that is included in the initiative. The tools developed will support LINZ to make regular observations as to the performance of agencies, and where support appears to be having impact and the nature of those impacts. Additionally, the data collection systems will provide most of the information required for the quantitative aspects of the formal evaluations.