Statistics New Zealand’s Collections Strategy for 2010–20

Transform Collections
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1 Summary

Statistics New Zealand’s Collection Strategy for 2010–20: Transform Collections describes what we mean by ‘collection’ and why it is important. It also provides a vision of the future state we are aiming to achieve. This vision is strongly influenced by the current and likely future environment we will face, the impacts of which resulted in the development of the following five key strategic themes.

‘Collection’ and ‘collections’ in this document refer to the system of collection, not the Statistics NZ Collections and Dissemination group, the job title field collections, or a specific collection of statistics.

‘Transform collections’ means that we in Statistics NZ need to change many things, including how we think about collections (ie a systems perspective is needed), how we interact with our respondents, and how we standardise our systems and processes. We must also acknowledge the inherent tension between quality, cost, and respondent load and collaboratively work to find acceptable options and trade-offs.

The Collections Strategy is framed around the aim to easily and efficiently provide multiple modes of collection within surveys. A common platform will cover all direct and administrative data collections and will be based on standardised processes.

Internal collection operational services will continue to be provided for, and in partnership with subject matter areas (SMAs), by a single specialist functional area – the Integrated Data Collection (IDC) team. The latter deliver an organisation-wide collection service.
2 Introduction from the Government Statistician

Government has an overall goal to grow the New Zealand economy so that we can all enjoy greater prosperity, security, and opportunity. Official statistics play a key role in achieving this goal. People, government, local authorities, and businesses make better decisions if official statistics are used to inform decision-making processes.

As the national statistics office, Statistics New Zealand produces the majority of the country’s most important official statistics providing New Zealanders with relevant, up-to-date, and affordable statistics needed for their informed decision-making. To do this Statistics NZ must first collect the data and ensure that it meets the quality and timeliness needs of our customers.

We need to recognise there are significant drivers for change as our current operating models are not sustainable. We face challenges from ongoing operational cost constraints, from sustaining high levels of cooperation from people who supply data and from increasing expectations that citizens can interact with government online, on their terms, and in ways that offer them convenience and ease of use.

The collection environment is becoming more complex. New Zealanders are less willing to respond to Statistics NZ surveys these days. A variety of reasons are detailed in the Audience Model Enhancement Study for Statistics New Zealand (Saunders, 2010): respondents are increasingly busy, difficult to contact, disengaged, and reluctant. This raises collection costs and affects data quality.

Businesses would prefer to provide the data once to one government agency, who can then share it with other agencies, rather than provide similar information to many agencies. There is also a perception that the government’s regulatory burden is increasing, and that existing government-wide practices and systems have not been able to respond effectively to this perception.

Yet the demand for statistical information continues to increase. There is an expectation that Statistics NZ can deliver data collection more effectively for less, and that our customers are looking for an increase in quality, volume, and current rather than historical statistics.

This means we must transform our collection activity. This strategy details how we will do this as part of Statistics 2020 Te Kāpehu Whetū (Stats 2020), our organisation-wide programme of change to implement our strategic plan for 2010–20.

Statistics NZ currently collects data using a loose suite of dissimilar systems: there are more than 60 individual stand-alone collection systems. These are silo-based (meaning they don’t connect with other systems), ageing, and fragile. As a set of processes they are non-standard, fragmented, inefficient, and do not meet today’s collection needs.

Currently we face three significant challenges to our collection sustainability:

1. The supply of survey data will be more difficult to achieve.
2. The current set of legacy collection systems is a risk to the business operations of collections – creating extra cost and risk, while stifling innovation and efficiency.
3. The cost of collection continues to rise in a period of tight fiscal constraint and increasing demand for statistical information.

Long-term sustainability relies on us having better processes, tools, and respondent relationships so that we can operate in an increasingly complex world. We need to rethink our basic collection methods and structures.
‘Transform collections’ means that we in Statistics NZ need to change many things, including how we think about collections (ie a systems perspective is needed), how we interact with our respondents, and how we standardise our systems and processes. We must also acknowledge the inherent tension between quality, cost, and respondent load and collaboratively work to find acceptable options and trade-offs.

This strategy describes what we mean by ‘collection’ and why it is important. It also provides a vision of the future state we are aiming to achieve. To achieve our vision, we have identified five general themes that guide our initiatives, see table 1.

Table 1

<table>
<thead>
<tr>
<th>Themes to guide our collections strategy</th>
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<tbody>
<tr>
<td>Improving the respondent experience</td>
</tr>
<tr>
<td>Transform how we interact with people. Make it easy for people to do business</td>
</tr>
<tr>
<td>with us.</td>
</tr>
<tr>
<td>Standardising the collections processes</td>
</tr>
<tr>
<td>Transform the current silo collections (which don’t connect with each other)</td>
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<tr>
<td>into standardised or common processes, tools, and methodologies with a</td>
</tr>
<tr>
<td>centralised common platform.</td>
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<tr>
<td>Administrative data first</td>
</tr>
<tr>
<td>Transform from a survey-based collections approach to an administrative-based</td>
</tr>
<tr>
<td>approach.</td>
</tr>
<tr>
<td>Improving the design and development of collection processes</td>
</tr>
<tr>
<td>Transform how the collection design process creates efficient and fit-for-</td>
</tr>
<tr>
<td>purpose collections.</td>
</tr>
<tr>
<td>Future operating model</td>
</tr>
<tr>
<td>Transform how we conduct the business of collections across all data</td>
</tr>
<tr>
<td>sources. Ensure we have the processes, accountabilities, structures,</td>
</tr>
<tr>
<td>information, skills, and culture needed to support the transformed</td>
</tr>
<tr>
<td>collection process and to ensure continuous improvement.</td>
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</tbody>
</table>

The Collections Strategy outlines the high-level direction that Statistics NZ will take in its collection activity over the next 10 years, as we work towards the Official Statistics System (OSS) outcome of ‘an informed society using official statistics’.

The Collections Strategy is framed around the aim to ‘easily and efficiently provide multiple modes of collection within surveys’. A common collection platform will cover all direct and administrative data collections and will be based on standardised processes. Future collection designs will deliberately lower cost while maintaining the long-term sustainable supply of fit-for-purpose data. I expect to see a new generation of collection designs characterised by:

- the depth of options analysis available
- the willingness to challenge and change existing business models
- a strong total system perspective
- strong collaborative and partnership approach across Statistics NZ.

Internal collection operational services will continue to be provided for, and in partnership with subject matter areas (SMAs), by a single specialist functional area – the Integrated Data Collection (IDC) team. The latter deliver an organisation-wide collection service.

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1 Multiple modes in this context include, but are not restricted to, face-to-face interviewing, paper-based self-complete forms, telephone interviews, personal computing devices, and Internet-based self-complete forms.
Functionally based collection services are international best practice and offer competitive advantages in terms of operational efficiency, collections expert advice, standardisation of process, mode assessment and delivery, and sustainable consistent respondent advocacy.

Standardisation together with the future collection designs will result in a collection delivery service that is:

- less expensive to run
- quicker to introduce new collections
- strong on respondent management and customer focus
- able to make changes that apply across collections, quickly, and cheaply
- able to provide effective decision-making in terms of costs and benefits, particularly at the margin
- able to deliver productivity benefits.

The development of this strategy and its consultation process has highlighted the need to manage some tensions in organisational responsibilities. Collection activity continually balances cost and quality considerations – yet responsibilities for resolving this tension are often disputed between IDC and SMAs. There is no single solution to this never-ending trade off and decisions must continually be made – every day in some small way, for example, around non-response follow-up.

Whilst the Deputy Government Statistician of a particular SMA is ultimately accountable for the final cost-quality decision, both parties are responsible for generating good decisions and practices. IDC must promote efficient collection, and hence standardisation, and they need a certain degree of freedom to operate efficiently and quickly.

SMAs instinctively champion quality and their unique client requirements, but their concern to protect these goals can cause them to keep the status quo, preventing innovation, and thus add cost on IDC and other outputs. There is an inherent – and, when well-managed – productive tension between these two positions. Appropriate decision-making processes are crucial, with each party’s (and additional experts, for example Standards and Methods (S&M) advice being brought to the table. Decision-making processes and operational parameters need to be determined jointly and there must be a true partnership between IDC and SMA’s so that the tensions are constructive and yield better outcomes.

This strategy seeks to empower IDC in their role. I expect more from them than just operations and execution – from now on they will be an integral part of the collection design process and their professional advice on the collection end-to-end process will be sought.

The outcome I am seeking is that collections will be transformed so that it is sustainable, responsive, and enables us to produce New Zealand’s most important statistics in an efficient, cost-effective, and engaging way.

I am pleased to present Statistics New Zealand’s Collections Strategy for 2010–20: Transform Collections. I look forward to implementing the plan to transform collections, and making a difference for New Zealand.

Geoff Bascand
Government Statistician
3 What is ‘collection’ and why is it important?

Broadly speaking, collection is a system of functions, processes, and activities focused on gathering administrative and survey data from a range of institutions and people. Data collection is fundamental to the production and dissemination of official statistics and the achievement of the Official Statistics System’s outcome of ‘An informed society using official statistics’.

Collection’ and ‘collections’ in this document refer to the system of collection, not the Statistics NZ Collections and Dissemination group, the job title field collections, or a specific collection of statistics.

Collection activity is all about getting required data to measure and report on the progress of New Zealand.

It is important to collect data:
- to specific quality standards, as without good data there won’t be reliable and robust official statistics and they won’t be trusted and/or used
- in a cost-effective manner, so that the burden on respondents and the financial cost to New Zealand taxpayers is justifiable.

Data may come from the administrative systems of other organisations or from direct surveying of businesses, households, and people by Statistics NZ and others. Examples of administrative data include tax data collected by Inland Revenue and used in our business, financial, and national account statistics and migration data from the Department of Labour, which is used in our population, balance of payments, and gross domestic product (GDP) statistics.

Data can be collected directly from respondents in many ways, such as: face-to-face interviews; direct interviewing over the phone; or getting people to self-complete a questionnaire. Each mode has a different cost structure. The most expensive is that of face-to-face interviewing as field staff travel and visit respondents; the cheapest (least expensive) option is that of self-completion. Each mode has different quality implications. As a general rule, the more complex and personal the subject matter is, the more likely it is to be collected face-to-face to get a more comprehensive and accurate response.

At the heart of collection is an inherent tension between cost and quality. Both dimensions need to be considered with options that include transparent trade-offs. This will require the involvement of a number of participants from different areas across Statistics NZ.

Collection should be viewed as an inter-related system with strong connections between the various parts. Collection is in all seven processes in the statistical business process model given in figure 1 and the feedback and business intelligence gained from them. Here are two examples of how the collections processes touch different business processes:

- An analyst (ie working in process 6) needs to understand how the data has been collected and if there are any biases in the collection method, to help them check the quality of the statistics and whether they meet the customer’s information needs.
- Field interviewers may notice specific characteristics of survey non-respondents and give this information to methodologists and subject matter areas (SMAs). The latter can then evaluate if the non-respondents significantly affect data quality and if not, decisions may be made to reduce the amount of non-response follow-up work and/or to estimate the data.
The two major components of our collection system are:

- collection design, which establishes the balance between data quality and cost
- collection operations, which deliver services to the design parameters of quality and cost, established in the collection design phase.

The term ‘collection design’ in this document covers all seven business processes outlined in our statistical business process model (see figure 1), and is undertaken by more than one business unit.

Collection design includes: determining the need for the information; considering the available data sources particularly the administrative data possibilities; evaluating the collection and methodological options and their respective impacts on data quality, cost, and respondent load; developing the collection systems and processes; undertaking the collection activity; analysing its results and seeing if they meet the actual need for the information and the expected quality standards.

The term ‘collection operations’ covers the process 4 ‘collect’ in figure 1. It involves delivering the services required by the collection design. These services are centralised and undertaken by the Integrated Development Collections (IDC) team within Statistics NZ.
4 Strategic framework

The strategic framework used for the collections strategy is drawn from *Statistics New Zealand Strategic Plan 2010–20* (Statistics NZ, 2010c), see figure 2. It shows how our department’s operations contribute to achieving our impact, the Official Statistics System (OSS) outcome, the Government’s goal, and recognise the uniqueness accorded to Māori as tangata whenua. The outcome sought from collection activity, its impact, and the interventions or changes we will need to make are provided in the brown boxes.

**Figure 2**

<table>
<thead>
<tr>
<th>Collections outcome</th>
<th>Sustainable, responsive data collection that enables the production of New Zealand’s most important statistics in an efficient, cost-effective and engaging way.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collections intervention</td>
<td>Transform collections so that it is: agile and responsive; using standardised systems and processes; efficient and cost effective; and undertaken in a professional, integrated and collaborative way throughout Statistics New Zealand.</td>
</tr>
</tbody>
</table>
5 Statistics 2020 Te Kāpehu Whetū

Statistics New Zealand’s Strategic Plan 2010–20 (Statistics NZ, 2010c) sets out the strategic direction for Statistics NZ for the next 10 years. To deliver on this, an organisation-wide programme of change has been established called Statistics 2020 Te Kāpehu Whetū (Stats 2020). Note that the actual plan for delivering Stats 2020, and thus achieving the desired statistics system of the future, is contained in Statistics NZ Business Development Plan, December 2010 (Statistics NZ, 2010b).

Stats 2020 is about addressing risks, realising opportunities, and creating a dynamic, responsive, and sustainable organisation. The programme of change is extensive. It involves changes to the way we work; who we work with and how; to the systems, tools, and processes we use; and to the skills, attitudes, and behaviours needed for success.

Stats 2020 is also about changing perspective. It requires us to look out – firstly from our individual business units to take an organisation-wide perspective, and then wider still to consider the perspectives of the OSS and the public sector. It will require us to work together, sharing our knowledge and experience to ensure the best result, and deliver the maximum benefit.

Stats 2020 builds on the four strategic priorities articulated in the strategic plan and in the strategic framework in section 3. These priorities and their associated areas of focus are given in figure 3.

Figure 3

Statistics NZ’s strategic priorities and areas of focus

As shown in figure 4, the Collections Strategy is a key contributor to the achievement of strategic priority 3, Transform delivery, along with the statistical architecture and the quality and fit-for-purpose framework.
Below is an extract from *Statistics New Zealand’s Strategic Plan 2010–20* on the rationale for strategic priority 3, Transform delivery, and why we need to transform how we deliver our statistics. It can also be directly related to our need to transform the whole process of collections, from collecting data, through analysis, to the dissemination of information about the data.

Statistics NZ must meet the growing demands from users and maintain the relevance of its portfolio of statistics. To meet these demands, and be sustainable over the long-term, the department must transform the way it delivers its statistics.

There are opportunities to standardise the way that statistics are produced, maximising the use of existing administrative data (producing statistics that are derived from administrative records of central and local government agencies), and common tools and infrastructure. This approach will reduce costs, and increase the department’s flexibility and speed of response to changing priorities (Statistics NZ 2010c).
The desired future

Statistics NZ is looking for a collections process that offers sustainable, responsive data collection that enables the production of New Zealand’s most important statistics in an efficient, cost-effective, and engaging way.

Our vision for the collections process is that it will be:

- **at the heart of data quality and accuracy.** Statistics NZ obtains the data needed to measure and report on New Zealand. Collecting data that is fit-for-purpose allows Statistics NZ to inform New Zealand. Our collections process will provide data that is both cost-effective and available at sustainable quality levels. As both quality and accuracy can be affected by changes to design, process, and practice, we seek managed changes that offer transparent, open and explicit choices.

- **at the heart of efficiency and sustainability.** Collections design process will establish the balance between quality and cost. Trade-offs will be clear. Standardised systems that respond quickly to changing technologies and new modes of communication will be used. Administrative data will be employed as the first source, supplemented by direct collection where necessary. We will consider how multiple needs can be met in one collection and work to maximise the efficiency of our processes. Efficiencies will be made in IDC and operational collection costs will be lower. Respective roles and accountabilities in the collections process will be clear.

- **agile, responsive, and adaptive.** Collecting fit-for-purpose data in cost-effective ways that respond and adapt quickly to our changing world. All staff will be open to new ways of working – they will challenge the status quo and thinking system first. New statistical outputs will be ‘quick to market’ due to the agility and expertise of all those involved.

- **easy to do business with.** We will understand the respondent experience and use their feedback to design better respondent contact and supply experiences. Our aim is to improve their perceptions of doing business with Statistics NZ. We will offer new modes and supply options, such as Internet self-complete forms, to make it easier to do business with us and sustain high levels of willing response.

- **led by our values** – connecting, communicating, leading, statistical excellence, integrity, and confidentiality and data security. These seven values drive our organisational behaviour. Our aim is that collections activity will involve a variety of people from across Statistics NZ and the OSS, all of whom will work collaboratively and be valued for their collections knowledge, experience, and contribution.
Benefits of achieving our vision

Achieving our desired future for the collections process will provide a range of benefits to Statistics NZ and its stakeholders and customers.

Here is a summary of the expected benefits, grouped by four main topics.

**Sustainable data supply**
- The strategy will ensure continued supply of fit-for-purpose data from business, Māori, households, individuals, and administrative data providers.
- Reduced costs to, and burden on, respondents due to the replacement of direct surveying activity with administrative data.
- New modes and/or a choice of collection modes will provide more user-friendly ways for respondents to provide information. This should result in an improved respondent experience with a positive impact on data supply and quality.

**Statistics NZ’s risk of production failure lessens**
- Replacing the many collections legacy systems and software with new infrastructure will reduce the risk of production failure and the consequential impact on Statistics NZ’s reputation.

**Efficiency**
- Standardised systems and processes – to enable faster design and development of new statistics. This will result in new statistics being delivered more quickly and cost effectively.
- Data re-use – increasing the use of administrative data and reusing government held data will create efficiency across the public sector.
- Reduced time to up-skill and train staff – standardisation will reduce the number of collections systems and processes, resulting in a smaller number of unique systems to learn, operate, and maintain.
- Increased staff capability to respond to customer needs – increased customer satisfaction and increased staff satisfaction enabling better staff retention and higher productivity.
- Clear ownership of, and accountability for, key elements of the collection process. Clarifying the roles and accountabilities (and the relationships between them) of subject matter areas and the business units, Standards and Methods, Integrated Data Collection, and Organisation Development in the collection process will result in more timely and effective decision making.
- Greater agility will enable collections activity to be scaled up and down more easily and allow staff to undertake more varied work.

**Financial savings**

Significant financial savings are expected from the efficiency gains from new collection designs as well as the transformed processes and modes being applied to all surveys and administrative data collections. By 2021, savings are expected to offset general cost inflation such that in real terms, operating costs will be lower than they are now.

Under Statistics 2020 Te Kāpehu Whetū business case, the Integrated Data Collection business unit is committed to a minimum cumulative savings of $2.3 million over the 10-year-period. This is an annual productivity savings of 3–4 percent and covers both
savings in personnel and in non-staff operational costs. The forecasts are dependent on the volume and frequency of surveys and are a conservative estimate of what we will save from both process improvement and transformational change.

In terms of funding and full time equivalent employees (FTEs), Integrated Data Collection is committed to reducing their personnel budget of $1.4m or 32 FTE equivalents and a reduction in operational budgets of $900,000 or 21 FTEs.

The nature of the change

Achieving our collections vision will mean transforming the way we think about, and undertake, collections. Table 2 below summarises some of the changes.

Table 2

<table>
<thead>
<tr>
<th>Transforming how we think about, and undertake, collections</th>
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<tbody>
<tr>
<td><strong>Current collections activity, 2010</strong></td>
</tr>
<tr>
<td>Survey orientated</td>
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<tr>
<td>Paper contact dominated - business</td>
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<tr>
<td>Personal contact dominates - social</td>
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<tr>
<td>Semi-manual data feeds</td>
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<tr>
<td>Single data source per response case</td>
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<td>Repetitive information gathering</td>
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<tr>
<td>Single mode per case</td>
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<tr>
<td>Prescribed contact mode</td>
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<td>Single communication channel per mode</td>
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<tr>
<td>Outbound contact dominates</td>
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<tr>
<td>Individual data collection systems with fragmented ownership</td>
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<tr>
<td>Slow to adapt to changes in user needs or real world events</td>
</tr>
<tr>
<td>Not responsive to new data collect requests – ‘time to market’ slow</td>
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<tr>
<td>Stand-alone administrative data systems which are difficult to integrate into existing environment</td>
</tr>
<tr>
<td>Decision-makers are not given choices about the quality, cost, or time trade-offs because there is no choice available</td>
</tr>
<tr>
<td>Lack of systematic realisation of benefits</td>
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<tr>
<td>IDC provides an operational service</td>
</tr>
<tr>
<td>IDC staff are specialised, work across many different processes, and cannot move between surveys easily</td>
</tr>
<tr>
<td>Respondents increasingly reluctant to comply with requests for data; and are increasingly difficult to access</td>
</tr>
</tbody>
</table>
Collections is guided by the *Official Statistics System Principles and Protocols for the Producers of Tier 1 Statistics* (Statistics NZ, 2007).

In particular, this includes the following four principles and one of the protocols:

- Principle 6: Efficiency and value for money
- Principle 7: Protecting respondent information
- Principle 8: Minimising respondent load
- Principle 9: Maximising existing data sources
- Protocol 3: Respondent management.

Protocol 3: Respondent management, states that the costs of compliance should be kept to an acceptable level and data is collected only when the expected benefits of collection exceed the cost to providers.

This means the Tier 1 statistics producers seek to minimise respondent load by actively managing respondent burden and rigorously establishing the need for data.

They do this by using existing data, collecting from the best supplier, collecting less or simpler data, and by making it easier to provide data, while developing cooperative relationships with respondents and engaging with Māori.

In detail, this means:

- Tier 1 statistics producers actively manage respondent burden across the OSS.
- The need to collect data is assessed to balance its value to inform decision making against the costs of production and the load placed on respondents.
- Wherever possible, administrative data or other existing survey data is used.
- The best-supplier principle is applied. Data is always collected from the most appropriate source after considering respondent load and cost.
- A continuous effort is made to develop statistical techniques that reduce the burden on providers, while maintaining desired quality levels.
- Data collection instruments are respondent-friendly.
- Tier 1 statistics producers recognise the impact of effective communication on response rates and hence quality, and actively involve respondents during the collection process. This includes demonstrating the value of the information.
- Tier 1 statistics producers engage with Māori to ensure that they participate actively in all aspects of official statistics.

In considering the protocol 3, Respondent management, it is important to note:

- By 2020, administrative data is to be the first source of data for Statistics NZ’s outputs, as stated in *Statistics New Zealand’s Strategic Plan 2010–20* (Statistics NZ, 2010c). This is a stronger position than that given in the above protocol 3. It represents a significant change for Statistics NZ as we will be using administrative data first with surveys filling the gaps rather than our current practice, which is to use surveys first and then fill the gaps with administrative data.
- The economic and social statistical architectures and the quality framework also use the OSS principles and protocols.
The collections environment is characterised by rapid change, increasing complexity, technological opportunities and challenges, and significant cost pressures.

### Data supply challenges

The main data supply challenge is that New Zealanders are increasingly unwilling to respond to surveys and/or are difficult to contact. This increases the cost of collecting data and affects data quality.

Access to respondents, in particular householders, is getting more difficult due to changed living and working arrangements, reduced contact times, higher levels of security, and limited physical access to homes. We are not consistently achieving target rates of participation for some communities or sub-groups, for example young males, Māori, and to a lesser extent within Pacific and Asian communities.

The *Audience Model Enhancement Study for Statistics New Zealand*² (Saunders, 2010) found that about two-thirds of the population are unwilling or reluctant to respond to Statistics NZ surveys. This finding is not related to age, gender, or household income. The reasons people gave for being unwilling or reluctant to respond to our surveys included:

- not liking the response mode
- not believing in the collection method
- fearing the negative use of data
- not having time
- a bad previous experience
- not seeing the relevance of the questions
- confidentiality fears, including not wanting Government to have the information.

Businesses and people are burdened by a variety of agencies seeking information, only some of which relates to surveys for official statistics. Respondent load is an issue for the respondents themselves and ultimately for New Zealand. The effort (in terms of time and cost) required for respondents to provide satisfactory answers to a survey may, for example, be better put toward more productive business activity which directly benefits New Zealand’s economic growth.

In terms of administrative data supply, the challenges include:

- finding out what is available and understanding how it can be used and/or adjusted for statistical purposes
- gaining the confidence of the administrative data providers so that they not only provide the data to Statistics NZ but are also willing to engage with us to improve aspects of its quality and collection
- meeting the needs of the data providers for data transfer and management
- an inherent risk that the need for the administrative data may go (eg due to a Government policy change) and its supply may cease.

The main implications of these data supply challenges are we need to:

- make it easy for respondents to do business with us
- Improve the way we manage administrative data supply.

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² This study, commissioned by Statistics NZ, involved 12 in-depth focus groups involving 62 people across a range of demographic variables and an online survey of 301 people to validate the information from the focus groups and fill in any gaps of information.
Increasing demand and expectations from users

The demand for Statistics NZ to produce more economic and social statistics is growing and includes high expectations from users for:

- more statistical information to support decision-making and evaluation
- statistics based on more complex concepts, at greater levels of detail
- improvements in data quality (e.g., timeliness, coherence, and accuracy)
- greater volumes of data with flexibility to reuse data and link across datasets
- statistics needed at short notice and low cost.

Māori participation rates and information needs

In the next 10 years, there will be changes in the size of population, role, and contribution of Māori across all spheres of New Zealand society. This will mean information we provide must be based upon increased participation rates by Māori and we need to gather different information of more relevance for Māori.

To achieve this will challenge some of our current processes. To improve the participation of Māori in surveys (particularly certain sub-groups) and to be able to collect data of relevancy to Māori (including descent-based information), we need innovative processes and connections to Māori respondents.

Technology

Technology will continue to change rapidly, which will provide both challenges and opportunities for Statistics NZ. Respondents are becoming more technically capable and are using the Internet and mobile devices for both business and social networking. They will expect us to collect data from them in ways that meet their needs and lifestyles.

A major internal operating issue is our reliance on the current suite of more than 60 IT legacy systems used in collections processes. This results in:

- inefficient and increasingly risky business processes and practices
- fragmented and incoherent respondent contact and management
- small-scale specialisation and silos (i.e., independent systems that cannot transfer information from one to another)
- inflexibility
- an inability to innovate and improve
- high operating costs
- inadequate management information systems and control
- low productivity.

These issues undermine our ability to:

- meet or exceed expectations of professional and up-to-date collections services
- respond quickly and efficiently to new information needs
- lower the cost of data collection.

The problems we face with legacy systems are not unique to the collections systems. It is an organisation-wide problem that is being addressed as part of strategic priority 3, Transform delivery.

The main implications of these technology-based challenges and opportunities are that:

- we need to offer people choices in how they would like to be contacted by us and how we select them.
- collections system legacy issues must be resolved via standardised and common platforms, tools, and processes.
Tight fiscal environment

The external fiscal environment for New Zealand is extremely tight. The effects of the Christchurch earthquakes of 2010 and 2011 and the global recession will have major implications for the New Zealand economy for some years. The public sector will be operating in a fiscal environment of generally smaller budgets, decreasing revenue from the Crown in real terms, and increased expectations for delivering more and better services.

Our operating model

Statistics NZ itself is not sustainable at its current level of funding, given its current outputs. Managing this situation in the last few years has meant the organisation has deferred system maintenance, reduced outputs, and realised operational efficiencies.

The main implications of this are that our entire organisation needs to change how we operate so that we can live within our funding.

Our collections strategy for 2010–20 will be a key part of changing Statistics NZ’s operating model. It is vital that we get this right as it is Statistics NZ’s most expensive activity (30 percent), see figure 5.

Figure 5

<table>
<thead>
<tr>
<th>Indicative costs(^{(1)}) of a survey</th>
<th>By generic business process activity(^{(2)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect 30%</td>
<td></td>
</tr>
<tr>
<td>Process 18%</td>
<td></td>
</tr>
<tr>
<td>Develop and design 14%</td>
<td></td>
</tr>
<tr>
<td>Analyse 12%</td>
<td></td>
</tr>
<tr>
<td>Disseminate 7%</td>
<td></td>
</tr>
<tr>
<td>Need 7%</td>
<td></td>
</tr>
</tbody>
</table>

1. These are direct costs only. The Collect process accounted for 30 percent or $12 million in direct costs in 2009/10. If overheads are added this would then be $18 million in costs (45 percent).
2. Collections is more than just process 4 ‘Collect’ of the generalised business process model shown in figure 1. For instance, collections related activity occurs in all seven of the model’s components and so its impact on Statistics NZ’s operational funding is even greater than that given in figure 5.
Other

Other factors that will affect and support collections relate to initiatives across government departments (such as shared services and data re-use) plus international advances and collaborative activity.

Many of our challenges are not unique to Statistics NZ. Business survey respondents in many countries are expecting to provide data to government once for subsequent re-use amongst government agencies. This was the driver behind the Standard Business Reporting initiative (SBR) of which Statistics NZ was a key participant until the programme was put on hold. However, SBR is continuing internationally and if the Australian work to implement it proves successful it may well be re-considered for New Zealand.

An inter-agency project lead by Statistics Canada has been initiated to progress the development of a standard e-collection tool. Statistics NZ is an active member of this group.

Such national and international cooperation activities provide Statistics NZ with the opportunity to learn from the experience and best practice of others and extending out to the reuse by us of other agencies systems and methodologies.
9 Collection strategy key themes

This section outlines the five key themes that will guide our work in transforming collections over the next 10 years:

- improving the respondent experience
- delivering standardisation
- administrative data first
- improving the collection design
- future operating model.

Note that these themes are closely aligned with focus areas of strategic priority 3, Transform delivery, that is, relevance and integrity; standardisation; administrative data, and continuous Improvement.

Some of the initiatives used to implement these themes may be carried out as part of other Stats 2020 portfolios, not necessarily under the transforming collections work.

Improving the respondent experience

What we are seeking to achieve

Statistics NZ is focusing on being responsive and customer focused. We need to make it easy for respondents to do business with us. In the ‘desired future state’ we want respondents to receive excellent customer service which has been built around their needs and for them to be able to choose where-ever practical and cost-effective, their collection response mode, and means of communication.

Respondent load will continue to be actively managed and Integrated Data Collections will continue to advocate on behalf of respondents and actively support the internal respondent advocate.

The Respondent Advocate will continue to audit the effectiveness of this response and actively represent the perspective of business and the public in decision making.

Our aim is that by 2015 a mixed-mode collection approach will have been developed, tested, and implemented. This will include clarity on which modes/mix of modes are most effective for which purposes, and which are used for primary, as opposed to supplementary, modes of collection.

Under this approach, and within affordability constraints, business respondents will have greater choice in how they respond to our requests for information. Choices might include Internet self-complete, paper, telephone, or bulk electronic feeds.

Non-business respondents will also have options for responding. Face-to-face will be supplemented by Internet and phone depending on ease of contact and complexity of the topic being collected. For some social surveys the prime source of data collection will continue to be face-to-face interviewing.

When we make decisions about which new modes of data collection to introduce, we will need to balance quality and cost with increasing respondent choice. With all other things being equal, our strategy will be to encourage take up of the most cost effective mode first while allowing for alternative choices for respondents where the value of their specific response warrants the additional marginal cost of other modes of contact or supply.
In the future, mixed mode response will enable a wide range of strategies and solutions to be implemented, allowing choice around strategies that maximise response with total cost constraints and offer flexibility around meeting specific individual respondent needs in order to ensure their cooperation.

Table 3

<table>
<thead>
<tr>
<th>Survey type</th>
<th>Current mode of collection</th>
<th>Anticipated mode mix by 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Primary mode: Paper self-complete</td>
<td>Internet self-complete (CAWI) Bulk electronic data feeds – either administrative data or data supplied by individual businesses directly to Statistics NZ</td>
</tr>
<tr>
<td></td>
<td>Supplementary mode: Telephone (CATI)</td>
<td>Paper Telephone (CATI)</td>
</tr>
<tr>
<td>Social</td>
<td>Primary mode: Face-to-face, Telephone (CATI)</td>
<td>Face-to-face (CAPI), Telephone (CATI), Internet (CAWI)</td>
</tr>
<tr>
<td></td>
<td>Supplementary mode: Paper (components only - eg diaries), Self-complete questionnaire (SCQs)</td>
<td>Paper (CAPI), Internet (CAWI), Telephone (CATI), Face-to-face (CAPI)</td>
</tr>
<tr>
<td>Census</td>
<td>Primary mode: Paper</td>
<td>Internet (CAWI)</td>
</tr>
<tr>
<td></td>
<td>Supplementary mode: Internet (CAWI)</td>
<td>Paper</td>
</tr>
</tbody>
</table>

1. It is assumed that interviewer-administered face-to-face collection will remain as a primary mode for some social surveys

By introducing new modes of collection and new methods of contact, and by responding to feedback, we should be able to maintain or possibly increase the current level of cooperation by people. This cooperation is needed to collect and produce timely, accurate, and cost-effective official statistics.

Where we are now

- Respondents are increasingly reluctant to comply with requests for data and are increasingly difficult to contact, which is having an impact on the quality of statistics that are being produced.
- Some sub-populations are becoming increasingly difficult to engage.
- Data is collected under the compulsory provisions of the Statistics Act 1975 but in practice Statistics NZ relies on public cooperation and prosecutions for non-compliance are rare.
- The Government Statistician does not have the authority to authorise voluntary collections for issues that may be perceived as deeply personal or sensitive, or qualitative in nature such as voluntary panels. This limits our ability to examine alternative ways of meeting information needs.
- Respondents don’t have a choice about how they can be contacted or about the mode in which data will be collected from them. (The only Internet option provided has been for the Census of Dwellings and Population.)
- Respondent contact and management is fragmented and it is hard to get ‘one view’ of a respondent due to the numerous legacy collections systems involved. (This means that IDC staff can contact respondents being unaware of recent contacts and issues with that respondent and indeed other contacts already made on the same day.)
• We don’t fully understand our respondents’ expectations, and therefore do not know what causes some to not respond or how to encourage to do so.
• Management information about respondents is dispersed and difficult to integrate.
• Statistics NZ is seen internationally as a leader in compliance load management and measurement. (A significant contributor to this has been Statistics NZ’s 2008 Respondent Load Strategy.)
• We are guided by the OSS Principles and Protocols for the Producers of Tier 1 Statistics (Statistics NZ, 2007)

How we will progress this initiative

To achieve an improved experience for respondents, we will:

• transform how we interact with respondents by developing systems and services that are personalised, can record and show all our transactions with a respondent, are responsive, cost effective, and designed for respondent ease of use
• invest in research and market intelligence initiatives to improve our understanding of peoples’ collection experiences
• analyse the feasibility and effectiveness of new modes to contact and collect information from respondents (for example the Internet, smart phones, and hand-held devices)
• determine how to introduce new modes across collections, taking into consideration the collection design parameters, likely uptake, and cost
• develop supporting operational methods to facilitate the uptake of new, more cost effective modes
• increase the use of administrative data as a means of reducing direct surveying
• investigate the potential policy need for an amendment to the Statistics Act 1975 for provision to be made to allow the voluntary collection of data at the Government Statistician’s discretion
• continue to focus on reducing respondent load, and training and supporting staff to effectively engage with the people we contact.

Measuring our progress

We will know we are advancing to our desired future state of an improved experience for respondents when we see:

• survey response rates being maintained or improved cost effectively
• respondent load measures show a declining trend
• new modes being provided to respondents, particularly an Internet data collection mode by 2017 as per our Strategic Plan expectation
• survey response rates that have been achieved using new modes of collection, remain within design parameters
• evidence that respondent suggestions and/or concerns have been effectively addressed positive feedback from our respondents about Statistics NZ’s service an increase in the usage of administrative data and the replacement of direct surveying activity with it.
Standardising the collections processes

What we are seeking to achieve

Statistics NZ is seeking to achieve standardisation of its collections processes, methods, tools, and systems. This will lower collections costs; reduce risk of system failure; increase efficiency and staff satisfaction; and enable better respondent management.

Configuration, rather than customisation, will be the norm in our desired future. There will be standardised collections processes, methods, and tools; and a common platform with the following components:

- an agreed standardised set of collection processes available within the collection platform that offer a complete collection service across all surveys
- respondent management – a central view of the people and businesses we contact
- collection management – a central view of a collection or survey
- modes – the modes for collection responses will include: paper self-complete, personal interview (CAPI), telephony (CATI), Internet self-complete (CAWI), administrative data feed, and corporate accounts data feed
- sample management – a single interaction point with the sample information held in the various frame solutions within Statistics NZ
- geospatial management – this will enable our planners to optimise interviewer workload and allow Interviewer to carry out their functions efficiently.

The Integrated Data Collection business unit will integrate its processes and systems for collections with those used by other business units. For instance, develop integrated:

- methodologies for frame datasets, geospatial systems, sampling, and enumeration systems
- administration data systems
- metadata, workforce management, payroll, quality assurance, processing, and analytical systems for managing data collection.

Standardisation is also a key area of focus for strategic priority 3, Transform delivery, in Statistics NZ’s Strategic Plan. The new collection platform will be an essential part of the end-to-end statistical infrastructure. As noted in Statistics NZ’s Business Development Plan (Statistics NZ, nd):

Standardisation will facilitate the linking and integration of data, enabling data to be re-used and re-packaged to create new information which was previously not possible. By using existing data more effectively, and by using combinations of data in different ways, Statistics NZ can potentially reduce collection costs, as well as provide significantly more meaningful information. Re-using data already collected across government will also increase efficiency and remove duplication across the OSS.

Where we are now

The 2008 Efficiency and Cost Effectiveness Review (Tse, 2008) report noted “the lack of common survey implementation frameworks and the resulting fragmented IT systems also drive cost and inefficiency. These features reinforce a silo mentality and specialisation and also make the delivery of common/consolidated processes and practices very challenging”.

Currently, Statistics NZ collects data using more than 60 individual stand-alone collection systems. These are silo-based, ageing, and fragile. As a set of processes they are non-standard, fragmented, inefficient, and do not meet today’s collection needs
These legacy collection systems mean that Statistics NZ faces significant risks to the business operations of collections, including that of business continuity, extra cost, and a stifling of innovation and efficiency.

Standardisation is a key part of Statistics 2020 Te Kāpehu Whetū – it will transform the way we deliver our statistics. Our approach is that of clustering our statistics and adopting a standardised statistical architecture for producing and disseminating statistical outputs. Clustering involves grouping statistics that are produced using, for example, similar methodologies, classifications, and infrastructure, on a single technological platform.

Figure 6 shows Statistics NZ’s statistical architectural model for delivering statistical outputs.

It includes the collection platform, which will provide shared systems, services, and processes to perform data collection for the macro-economic, micro-economic, and the social and population clusters.

We are currently improving our understanding of collections processes and developing the design of the collection platform. The IT architectural design team are taking the lead in assessing the technical feasibility of the platform and its ability to meet the new set of common collection business requirements.
At the March 2011 Collections Workshop the Government Statistician noted:

- We need to find ways to define the common themes in our data collections – to standardise the way we collect data according to the similarities across Statistics NZ.
- We need to be able to understand, define, and manage the differences across Statistics NZ in a systematic and process driven way – to develop standardised business rules from which collection differences are managed.

**How we will progress this key theme**

To achieve standardisation of our collections processes, we need to work on the following initiatives:

1. Develop a standardised set of collection processes available within the collection platform that offer a complete collection service across all surveys.
2. Develop the conceptual framework for the collections ‘building blocks’ to be combined into a functional solution, or platform.
3. Develop a common collection platform that organises the system components of collections into an integrated collections system including integrating administrative data from various sources.
4. Develop standardised processes for the collection and interfacing with the systems that process data for business, social, and administrative collections.
5. Investigate how to make standardised self-completion modes a realistic addition to the modes that are effective within the context of significant household social surveys.
6. Modernise the existing legacy administrative data systems so that administrative data collection and registration systems are integrated with future collection and processing systems.
7. Investigate the potential of the new platform to provide the collection services needed for the Census of Population and Dwellings.
8. Commission the new platform and its new modes, processes and integrated systems.
9. Transform collections by moving new and existing collections, with their new collection designs, into the new platform.
10. Work with the Household Labour Force Survey (HLFS) redevelopment team and provide the platform and services needed to design and create a new collection process for HLFS.

Initiative 5 (self-complete modes) recognises that while standardising self-complete modes is a start to standardising the whole process, it won’t solve everything. We will need to measure the impact of our process on respondents; and find ways to reduce financial and time costs without lowering quality, particularly in regard to our interview process and running pilot surveys. For instance, we could look at paying interviewers by how many interviews they conduct, rather than by how long they spend conducting interviews.

Our previous experience with centralising respondent calling within the HLFS survey demonstrates the need to take these factors into account.

Achieving initiative 7 (a new collections platform) would mean a significant change, as the census has always operated under its own collection processes. However, if a new collection platform could support collecting census data, then Statistics NZ would gain by having access to some of the technologies and capability used by the census collection, and in return provide a common platform available to census marginal cost.

While there may be significant financial benefits of creating a platform that will service the census collection, there are also potentially significant risks in terms of scale, performance, and business process. We recommend that this proposal be investigated as part of Stats 2020 early (in 2011–12) and the scope to include census either be confirmed or rejected.
Measuring our progress

We will know we are advancing to our desired future state of standardised collections processes when we see:

- a quality collections service being provided based on standardised processes built on the agreed common features of all collections, but with the ability to manage/incorporate the differences
- all staff working online with a new collection platform that is efficient, engaging, and effective
- a collection platform that is easy to configure for both new and existing modes, campaigns, and strategies; and is able to operate for collection through both direct and administrative source data
- survey collections are transformed with new collection designs and they are operating effectively on the new collection platform
- the total cost of collection activity is reducing, by a target of 3 percent per year.
Administrative data first

What we are seeking to achieve

Statistics NZ is seeking to achieve an organisational wide collection strategy that acknowledges the drive towards using administrative data as the first source of information and has systems, processes, and skills to effectively manage the collection and use of administrative data. By 2020, administrative data will be the first source of information, supplemented where necessary by direct collection.

Statistics NZ will have shifted its balance from primarily a survey-based agency to one with a stronger administrative-based statistical model. The aim will be that data is collected only when the expected benefits of a statistical survey exceed the cost to providers. Data will not be collected if suitable data already exists.

Benefits of this approach include a reduction in Statistics NZ’s costs, greater efficiency across the public sector, a reduction in respondent load, and the compliance cost of government. It is also likely to mean the creation of new statistics (without increasing respondent load) and greater data integration and re-use.

Statistics NZ will have a plan for identifying what administrative data is available, and assessing its quality and suitability to replace survey data. New methodologies will be in place to ensure the effective use of administrative data and there will be a plan and timeline for its utilisation. Administrative data will be integrated into the collection platform and new business processes will be in place to integrate and use administrative data. Staff will have the skills needed to manage the receipt, processing and analysis of administrative data and its integration with survey data where appropriate.

Geospatial data sources and potentially the Census of Population and Dwellings offer opportunities to enable postal, phone, or email contact without in-field enumeration. The development of a dwellings register could provide the foundation for developing self-complete modes for social surveys. Benefits should include reduced field interviewer costs while the increased contact with respondents should improve data quality.

Statistics NZ will have excellent working relationships with administrative data suppliers and will be working closely with them to improve the scope and quality of the data captured and available.

Many areas of Statistics NZ have a role in achieving the administrative data vision. Where the data comes from, and where it is to be used, is the domain of subject matter areas, and is not in the scope of the collection strategy. The role the Integrated Data Collections business unit is to make operational decisions about the best ways of receiving administrative data, to make it possible to use. This includes ensuring that collection design includes administrative data as a primary source; that the collection infrastructure (systems and processes) is in place to enable its collection and integration; and that staff across the organisation have the necessary skills to collect, manage, process, and analyse administrative data.

In the future, IDC’s role will expand to include collecting detailed data from significant business organisations through our business-to-governments (B2G) data supply process. We expect an increase in these types of collection arrangements as the economic statistical architecture vision becomes a reality with less direct collection from small and medium-sized business and a richer more detailed collection from significant selected business organisations.
Where we are now

Over the years, the use of other agencies’ administrative data by Statistics NZ has been increasing, particularly in relation to the business sector. For example, we use a considerable amount of administrative data provided by businesses to Inland Revenue to supplement information gathered directly through business surveys. Our understanding and expertise with administrative data has been significantly improved and the Economic and Tomorrow’s Official Social and Population Statistics (TOPSS) architectures are key drivers of this.

Statistics NZ intends to use more administrative data, and so change the balance between the use of administrative data and data collected through direct survey to produce its statistical outputs. This will involve a number of challenges and will significantly affect our collections activity.

The business frame database with names and characteristics of businesses in New Zealand can be used to support direct collection from business and the use of administrative data. It also provides a central integration framework for business data from any source. We may use more list-based supplements to support contact and identification of sub-populations of interest, for instance biosciences, innovation, and Māori business. These units will be added to the business frame to maintain the integrity of the process as they are developed.

There is no population-based register of individuals and the Census of Population and Dwellings list of dwellings has been considered ‘out of bounds’. The absence of this register information makes it expensive to conduct social surveys because field interviewers are required to travel around and enumerate physical houses.

How we will progress this key theme

To achieve the goal of using more administrative data we will:

- replace the existing range of legacy administrative data systems and processes (such as Statistics NZ’ database known as ‘IRD prod’ and our process of customs receipting ) with integrated collection and processing platform services
- provide a secure and reliable facility for the submission and lodgement of administrative and similar data files
- implement (and regularly maintain) real time data lodgement services, including business-to-business feeds, contact details of providers of administrative data, and timely delivery services
- adapt the common collection platform and collections field enumeration activities to accommodate any suggestions from the Geospatial Strategy’s initiatives to develop an address point-based register.

Measuring our progress

We will know we are advancing toward the desired future state of using more administrative data when we see the following interim states from Statistics NZ’s Strategic Plan achieved:

- by 2014, there is an integrated approach for implementing the acquisition of administrative data within the new platform
- by 2017, the collection of information is characterised by the use of administrative data to address demands for information and the use of an address register or frame
- by 2020, administrative data is the first source of data for statistical output
Improving collection design

What we are seeking to achieve

Collection design, as defined in section 3, will be an organisation-wide process that is characterised by a range of options being available, willingness to challenge and change existing business models, and a strong total system perspective. For new collections, and existing collections as they move to the new collection platform, the governance body will be provided with robust and transparent options that will allow them to make confident choices for specific collection activities.

Statistics New Zealand’s Strategic Plan 2010–20 (Statistics NZ, 2010c) notes an expectation that by 2014 there will be a common approach to developing the content and design of surveys.

In our desired future, Statistics NZ will have multi-modal collection capability that is standardised across all surveys. This will ensure the future quality and supply of data (see table 3). A key part of the collections design process will be advising on the appropriate mode mix for each collection activity and the content/quality/cost/respondent load trade-offs.

The design and development of collection processes is a key determinant of data quality and operational costs, so any improvements in the processes will have direct and positive benefits for Statistics NZ’s sustainability.

Where we are now

According Tse:

One of the most significant cost drivers in the collections area is survey design and collection methods. Factors such as the required response rate, sample size and distribution, collection method, timing and scheduling of collection all impact on the cost of collection. IDC do not have any control over any of these factors and Subject Matter Areas who “own” the surveys, have few incentives to review/revise these factors from a cost and efficiency perspective. There also does not appear to be any established cycle for reviewing surveys to ensure that they remain fit for purpose (Tse, 2008).

At the March 2011 Transform Collections workshop the Government Statistician, Geoff Bascand, noted:

The Board’s view is that we have had some excellent collections design work … but we haven’t always had the depth of options analysis that we think is necessary; nor the willingness to challenge business models; nor the total systems perspectives required …. It appears to us that at times we have designed and operated in silos or without sufficient collaboration between SMAs, IDC and S & M. We can and need to do better.

Currently our collection design process involves a number of different business units within Statistics NZ all with different interests and perspectives. These include:

- subject matter areas (SMA) in various groups
- Integrated Data Collection, part of the Collections and Dissemination group
- Social Statistics Development, part of the Social and Population Statistics group
- Collections Methods, part of the Standards and Methods group
- IT Solutions
- Finance.
There is no standardised process for ensuring that all relevant perspectives are involved in collection design; and it is not clear who has ownership of, and accountability for, the various aspects of the process.

At the March 2011 Transform Collections Workshop, the Government Statistician particularly noted the need to use a collaborative approach to collection design. Some key extracts from his speech are:

- I expect to see a new generation of collections design that seeks to move to lower cost models, explicitly taking the quality cost trade-offs needed, and the governance and processes are clear and transparent and options debated professionally.
- While the responsibility lies with the SMA areas as the final decision takers, I expect Standards and Methods and Collections and Dissemination staff all to be part of the process of developing and designing a collection.
- I expect more from Collections and Dissemination than just operations and execution – from now they will be an integral part of the design process and creation of advice and the assessment of options.
- Our Connecting, Communicating, and Leading values need to be integral within the new approach to content and design (Bascand, 2011).

**How we will progress this key theme**

The following initiatives will help us improve collection design:

1. Develop a white paper on Statistics NZ’s collection design as the basis for discussion and decision making. The white paper will include:
   - problem definition – what are the current problems with collection design
   - vision and objectives for the future
   - criteria for assessing options – including - quality, cost, timeliness
   - options for addressing problem and achieving future vision, where each proposed option will include:
     - scope of function
     - roles, relationships, ownership, accountability
     - skills/behaviours needed
   - assessment of options against criteria.

2. Implement the Board-approved option during 2011–12.

**Measuring our progress**

We will know we are advancing to our desired future state of improved collection activity and processes when we see:

- clear roles and accountabilities
- a common and collaborative approach to developing the content and design of surveys
- the design process is characterised by detailed analysis of different options, willingness to change business models, and a total system perspective
- the Board is confident that the collection design and development process is providing them with robust and transparent options that clearly outline the content/cost/respondent load/quality trade-off choices
- that the impact of collection design on Statistics NZ’s operational costs is understood
- collection design choices around cost, quality and timeliness trade-offs are realised in the operational phase of collections, that is, the overall cost of data collection is reduced.
Future operating model

**What we are seeking to achieve**

There will be a new collections operating model in place. Business processes and work design will be revised to support standardisation, the increased use of administrative data and a strengthened collection design process.

There will be clear roles, accountabilities, and relationships across the whole collection process. There will be a culture of collaboration and trust across the organisation. Staff will have the skills and behaviours to successfully transform collections and support the new collection process.

The collection process will be efficient and there will be continuous improvement processes in place. Quality management information will be routinely captured and analysed and used to inform decision making.

The people working on collections activity will be supported by:

- standardised and effective tools, processes, and systems for collections operations
- integrated business, household, and administrative processes
- robust and user-friendly collections management information
- strong, effective leadership and management
- governance across the organisation, and standardised processes for making collection design decisions
- a work environment that is agile, flexible, and customer and delivery focused as well as being committed to continuous improvement, efficiency, and effectiveness
- an environment for staff that is empowering, engaging, and supportive of learning and personal development
- a values-led culture that enables people to effect change, perform well, and take personal accountability.

**Where we are now**

Statistics NZ’s collections activity involves a number of different business units within the organisation and significant resources.

Roles and accountabilities in certain aspects of the collections process (eg collection design) are not clear. Maintaining ongoing capability is a recognised problem given fluctuating workloads, as is the difficulty in recruiting design expertise in such a specialised and limited field.

Collections operations is provided by the Integrated Data Collections business unit. The relationship between this unit and the subject matter areas is always not understood; and accountability for key decisions impacting on collection operations is not always clear.

Although many efficiencies and operational improvements have been made within Integrated Data Collection there is scope for more to be made, both within the unit and the other subject matter areas involved in collection activity.

Our business processes, work design, and skills reflect the fact our surveys and collection processes have been developed separately from each other. Staff have specialised knowledge of their own processes, making it difficult to transfer their skills to other areas.
A variety of information is required to effectively manage Statistics NZ’s various collections activity. It includes information on respondents, field interviewer location, costs of different response modes and design work. Although some of this information is available it is fragmented and has to be sourced from a number of systems. This is inefficient and it means that it is hard to fully understand the nature and cost of collections which has an adverse affect on our organisational sustainability.

According to Tse’s 2008 review:

IDC does not have good operational management information. In some cases the information is simply not collected or available, and in other cases the base information is available but is not analysed. Improved management information and analysis would enable IDC to more effectively understand the dynamics of their business, analyse their performance and demonstrate the pressure points and costs associated with their operation. This will enable IDC to present information to the Board and other parts of Stats NZ which would assist in broader value for money decision-making.

How we will progress this initiative

To achieve the future operating model as part of this collections strategy, we will:

- develop and implement a continuous improvement programme for current collection activity with an emphasis on efficiency, effectiveness, and engagement.
- develop revised business processes to support standardisation, increased use of administrative data, and collection design
- confirm roles, relationships, ownership, accountability, and governance mechanisms within the new business process
- develop and implement a plan (which is aligned with the Statistics NZ People Strategy) to ensure that staff have specific skills and behaviours needed for successful collections
- develop IDC’s advisory, influencing, and strategic thinking capability for the end-to-end collections process
- develop a management information tool in IDC to enable the capture and analysis of key performance information
- build a culture of cooperating and working collaboratively across the collections process as part of implementing the Statistics NZ People Strategy Culture and Change Leadership programme
- participate in international cooperation networks, for example the International Collaboration Effort “Industrialisation of collections: Starting with E-Forms”.

Measuring our progress

We will know we are advancing to our desired future state when we see:

- Statistics NZ partners and respondents are positive about customer interactions
- excellent cross-organisational collection designs that create lower cost collections that are fit-for-purpose
- excellent collection operation services, achieved with the help of the knowledge, experience, collaboration, and professionalism of all our staff
- internal partnerships between the different business units involved in collections are collaborative and support our vision of connecting, communication, and leading; a willingness to seek feedback between partners encouraging positive and professional working relationships
- roles, accountabilities, and relationships across the collections process are clear
- good business decisions are routinely made on well measured and thoroughly analysed evidence\(^3\)
- collections activity being scaled ‘up and/or down’ with relative ease
- increasing Statistics NZ’s influence in the international collaborate initiative.

\(^3\) For example, the marginal costs for collection activity is known and used in decisions on non-response follow-up campaigns, balancing affordability with required response rates.
Table 4 summaries the risks associated with this collections strategy, and how to minimise them.

Table 4

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk level</th>
<th>Treatment / mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of clear collection design decision making in areas that impact quality, cost, and timeliness</td>
<td>Low</td>
<td>Decisions about collections design should cover a range of options that include formal assessments of quality, time, and cost. Governance and related processes will require decisions to be taken at the appropriate level. Strong acknowledgement in strategy that efficiencies are made at design rather than implementation.</td>
</tr>
<tr>
<td>Lack of leadership, accountability, and commitment.</td>
<td>Low</td>
<td>Strong portfolio and steering committee leadership. Formal programme and project management with performance agreement commitments. Active external review and assessment of delivery and benefit realisation.</td>
</tr>
<tr>
<td>The technical challenges for the new collection platform prove too expensive to implement. This would mean it would not be possible to scale up to 70+ surveys; cope with the volume of collections from the census; to easily configure access to modes at low or no marginal development cost; or allow future upgrades and future mode expansion.</td>
<td>High</td>
<td>Start testing the collection platform architecture in 2011, to give confidence over the design of the new platform. Maintain a role in the International Statistical Network collaboration (collections), working with Stats Canada and ABS to learn from their platform development projects. Divide required work into manageable chunks, and set decision points about whether to proceed or not. External peer review, commercial and national statistical agencies.</td>
</tr>
<tr>
<td>Standardisation resulting in inflexibility of process rather than the required increasing flexibility needed to provide both SMAs and respondents with a better collection service.</td>
<td>Medium</td>
<td>Careful design of new processes lead by a partnership between subject matter areas, Integrated Data Collections, and IT business unit. The programme to transform collections will explore will explore the best level of standardisation at a low building block level to allow flexible and fit for purpose solutions.</td>
</tr>
<tr>
<td>The collection strategy has several significant interdependencies that need to be managed.</td>
<td>Medium</td>
<td>Partnering with subject matter area involved with the Household Labour Force Survey with clear agreed scopes, roles, and inter-connected output deliveries, and integrated timetables and plans. Same approach with administrative data project, standardisation, geospatial, Building Economic Statistics (BEST), Programme of Official Social Statistics (POSS), and statistical maintenance.</td>
</tr>
</tbody>
</table>
**Glossary**

**CAPI**: Computer assisted personal interview

**CATI**: Computer assisted telephone interview

**CAWI**: Computer assisted web interview

**Collection design**: broad term used to define the full process of collecting statistical for dissemination. It includes the processes of: determining the need for the information; considering the available data sources particularly the administrative data possibilities; evaluating the collection and methodological options and their respective impacts on data quality, cost, and respondent load; developing the collection systems and processes; undertaking the collection activity; analysing its results and seeing if they meet the actual need for the information and the expected quality standards.

**IDC**: Integrated Data Collections, business unit in Statistics New Zealand, part of the Collections and Dissemination group.
References


