

# POPULATION DENSITY

---

# Privacy Impact Assessment

(Summary)

**NOTE:** This is a plain English summary of the Privacy Impact Assessment. You can read the full legal document here: <https://www.stats.govt.nz/assets/Uploads/Privacy-impact-assessments/Privacy-Impact-Assessment-for-Population-Density/Population-density-Privacy-impact-assessment.pdf>  
This document is only an update to the language and structure of the full PIA to make it easier to read. It does not change the underlying meaning of the full PIA.

## SUMMARY

Data Ventures' proposed Population Density product follows all the principles in the Privacy Act. There are no identified privacy risks. Data Ventures is not collecting or using any personal information.

The product approach is also in line with the Office of the Privacy Commissioner's (OPC) data and analytics principles.

Thus, the Population Density product follows best practice for information management.

## INTRODUCTION AND PURPOSE

This Privacy Impact Assessment (PIA) covers the privacy impacts of Data Ventures' proposed Population Density product. The product will be based on data from mobile phone telecommunications companies (data providers).

In this document, we compare the product against each of the privacy principles in the Privacy Act 1993 (Privacy Act). We also consider the Office of the Privacy Commissioner's (OPC) 'Principles for the safe and effective use of data and analytics' (data and analytics principles). You can find these here: <https://privacy.org.nz/assets/Uploads/Principles-for-the-safe-and-effective-use-of-data-and-analytics-guidance.pdf>

This PIA covers Data Ventures' use of payment transaction datasets provided by third parties. It does not cover the privacy implications of the data providers' management of the data. It also does not cover any future products which may relate to the Population Density product.

We will produce new PIAs if there are any changes to the collection and use of data for other products.

## ABOUT DATA VENTURES

Data Ventures is the commercial arm of Statistics New Zealand (Stats NZ).

Stats NZ focuses on creating official government statistics to support critical decisions. Data Ventures creates ventures with other organisations that have commercial or social objectives. Data Ventures works using a partner model. This model negotiates each party's contributions, level of investment, and share of returned value from a venture.

Data Ventures does not sell Stats NZ data. Instead, it obtains datasets from businesses and organisations. It then turns these datasets into products to help customers make informed decisions.

## ABOUT POPULATION DENSITY

Population Density is a measure of how many people are in an area. This lets us see the amount of people in a country, broken down to the suburb level.

Data Ventures' stakeholders have said that the data they need about population density is not available. The Population Density product will give much more frequent information about population counts than what is currently available through census data.

Data Ventures will get aggregated mobile location estimate data from the data providers. It will then apply Stats NZ's processes for data quality, assurance, and modelling to build the product. The data will be modelled using supplementary data sets and Stats NZ expertise.

**The product will provide snapshots of population density at given places in New Zealand at different times. The data fields will be:**

- Hourly time range,
- Statistical area (suburb), and
- Count.

**This information will be sold to organisations such as:**

- Central and local government,
- Crown Entities,
- Local authorities,
- Council operated organisations, and
- Iwi.

**Customers could use this information for (for example):**

- Emergency response management, or
- Understanding tourism peaks and troughs.

## INFORMATION TYPE

The Privacy Act defines 'personal information' as information that can be used to identify an individual. Here, we compare the information for the Population Density product to this definition of 'personal information'.

Many processes will be in place to ensure Data Ventures cannot identify an individual in the data. For example:

- Data Ventures doesn't have access to the raw, individual data.
- Before data is received, it will already be anonymised by aggregating across time ranges and large geographic areas. Data Ventures will get data that contains a total count in a suburb within an hourly time range.
- Data Ventures is using statistical area geographies, which roughly correspond to suburbs. This is a larger geographic area than the industry standard (meshblocks). Using large geographic areas provides greater confidentiality to the data.
- Data Ventures will combine the data from several data providers to create an overall view of population density.

**Data Ventures will not receive any information that lets it identify an individual. So, the information in the Population Density product is not 'personal information' according to the Privacy Act.**

## PRIVACY IMPACTS

There are 12 information privacy principles in the Privacy Act. Here, we compare the proposed Population Density approach against each of these principles. We also consider the OPC's data and analytics principles.

**The information privacy principles refer to treatment of personal information. Data Ventures is not collecting personal information, but we can still make sure the proposed approach:**

- Is in the spirit of the privacy principles, and
- Follows best practice for information management.

## COLLECTION OF INFORMATION

**Principle 1** of the Privacy Act says that agencies should not collect personal information unless:

- They are collecting it for a lawful purpose connected with a function of the agency, and
- The collection is necessary for that purpose.

Data Ventures' role is to make products for organisations using non-Stats NZ datasets. These products help customers make data-informed decisions. The Population Density product will fulfil this role by providing customers with an indicator of population counts across New Zealand.

The information Data Ventures is collecting relates to its function and is necessary to create the Population Density product. The product could also follow the OPC's data and analytics principle of **providing public benefit**, by allowing for better planning by customers.

Customers will have to specify how they intend to use the information and Data Ventures will review all proposed use-cases. If any risks are identified, customers will need to complete a Privacy Impact Assessment and a Cultural Impact Assessment before they get access to the product.

**Principle 2** says that agencies must collect personal information directly from the person it is about, unless (among other things):

- The person authorises collection from a third party, or
- It is not reasonably practicable (achievable) to collect the information directly from the person in the circumstances.

Data Ventures will only be receiving aggregated datasets from the data providers. The data will not contain any information that identifies an individual. It is not practicable for Data Ventures to get this data directly from the individuals it is about.

Data Ventures has also confirmed that their collection of the data is authorised by the data providers' customers. The standard terms and conditions that the customers agree to informs them that aggregated user statistics that do not identify the customer may be shared with third parties.

Data Ventures will work with the Privacy and Legal teams of all potential data providers to ensure that the provision of data is in line with:

- The data providers' terms and conditions, and
- The OPC's data and analytics principles.

Data Ventures has considered the OPC's data and analytics principle of focusing on people and is protecting individual privacy by collecting information without individual identifiers.

**Principle 3** says that if an agency collects personal information directly from the person it is about, the agency must take reasonable steps to make sure that the person knows:

- The fact that the information is being collected,
- The purpose of the collection,
- Who will receive the information, and
- Whether the collection is required by law.
- Agencies do not need to do this if (among other reasons) they believe that:
- The individual authorises collection
- Communication is not reasonably practicable in the circumstances

Data Ventures is not collecting data for the Spend Density product directly from individuals. However, Data Ventures is transparent about the data collection, its purpose, and the fact that a range of potential customers may use the data. This information is available on Data Ventures' website, in line with the OPC's data and analytics principle of **maintaining transparency**.

**Principle 4** says that agencies must not collect information in a way that is unlawful, unfair, or unreasonably intrusive.

Data Ventures is collecting information in a way that follows the data providers' terms and conditions. Customers view and agree to these conditions before working with the data providers. This means the information is being collected in a lawful and fair way.

The information will not give away any information about individuals. So, Data Ventures is not collecting it in an unreasonably intrusive way.

## **STORAGE, SECURITY, AND RETENTION**

**Principle 5** of the Privacy Act says that agencies that hold personal information must take reasonable steps to protect that information against:

- Loss,
- Misuse, and
- Unauthorised access, use, modification, or disclosure.

Agencies must protect as much as possible against misuse or unauthorised disclosure as much as possible when they give data to another party.

Data Ventures will not be collecting or holding personal information. Even so, it has protected the data in several ways.

Data sourced from data providers will be stored in a secure, cloud-hosted environment. Access to this environment will be password-protected. Each data provider will only get a login for their own storage area.

After Data Ventures aggregates the data, it will be kept in a separate protected storage area. This area will only be accessible by Data Ventures and Stats NZ. They may use this data to validate the data and improve the methodology.

The final population estimates will be stored separately. These will only be available to authenticated, authorised customers.

An independent third-party security company will assess the security of the storage.

**Principle 9** says that agencies must not hold personal information for longer than necessary for the information's lawful purpose.

Data Ventures will keep the Population Density data in long-term archive storage. It will use the historic data to improve the methodology and to audit customer queries about the accuracy or validity of the data. Data Ventures needs access to the historic data to improve the accuracy of the population estimates over time.

The long-term storage of the Population Density data is not a problem because it does not include personal information. The data storage is necessary to improve the product.

## ACCESS AND CORRECTION

**Principle 6** of the Privacy Act says that people have the right to ask if an agency has their personal information. They also have the right to have access to that information.

**Principle 7** says that people have the right to request correction of their personal information.

Data Ventures will not be collecting any information that identifies an individual. Thus, it will not hold any personal information that people can access or correct. Principles 6 and 7 do not apply.

## ACCURACY

**Principle 8** of the Privacy Act says that agencies should make sure before they use or disclose personal information that the information is accurate, up to date, and relevant.

Data Ventures will regularly assess its methodology. It will also be transparent about its data use. A Questions and Answers document on the Data Ventures website will explain how the data is being used for the Population Density product.

Data Ventures will give customers a high-level description of the methodology. Customers will also be informed of the strengths and weaknesses of the data. This will let them inform themselves before using the data.

The data for the product will be as accurate, up-to-date, and relevant as possible, so the Population Density product follows Principle 8.

By doing the above, Data Ventures is also following the OPC's data and analytics principle of **understanding the limitations of data**. Data Ventures is also following the principle of ensuring the data is **fit for purpose**. It is using Stats NZ processes to make sure customers can extract meaningful information from the data.

## USE AND DISCLOSURE

**Principle 10** of the Privacy Act says that information must be used for the same purpose it was collected for (with some exceptions).

So long as the datasets collected for the Population Density product are only used for that product, this principle will be met.

**Principle 11** says that an agency must not disclose information to another agency, unless the disclosure is for one of the purposes for which the information was collected.

Data Ventures is getting information from outside of Stats NZ. It is applying Stats NZ processes to the data before providing it to other organisations.

The data will be collected to give customers a more frequent source of population estimates, so **Principle 11** is met.

## UNIQUE IDENTIFIERS

**Principle 12** of the Privacy Act says that agencies must not assign unique identifiers to individuals unless it is necessary. Agencies also must not require individuals to disclose any unique identifier unless necessary. Unique identifiers are things like ID numbers that are specific to each individual in the data.

Data Ventures will not receive any data that lets it identify individuals. Thus, Data Ventures cannot assign unique identifiers to individuals.

## CONCLUSION

No privacy risks have been identified to the proposed Population Density product. Data Ventures is following the information privacy principles in the Privacy Act. The product approach follows best practice information management.



[dataventures@stats.govt.nz](mailto:dataventures@stats.govt.nz)  
[dataventures.nz](https://dataventures.nz)

**DATA VENTURES**   
Unique trusted data

**Stats**   
Tatauranga Aotearoa