

Gap analysis:   
A process review

Statistics New Zealand

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## Purpose

This document is to inform the Disability Data and Evidence Working Group (DDEWG) of previous processes used to perform gap analyses and provide general information on the process. A gap analysis maps the enduring questions against available data sources and evaluates how well each question is informed by available data sources. Gaps in data needs can be prioritised and recommendations made to address these gaps.

## Key documents

* Enduring Questions in the Disability Domain
* A stocktake of government data on disabled people
* A stocktake of non-government data on disabled people.

## Previous gap analyses

The Environment Domain plan 2013, available [here](http://www.stats.govt.nz/browse_for_stats/environment/environmental-economic-accounts/environment-domain-plan.aspx)

The Transport Domain plan 2016, available [here](http://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Domain-Plan-FINAL.pdf)

## Lessons learnt from two previous gap analyses

* The level of organisation and coordination of stakeholders and data source experts is a sizeable task and should not be underestimated. The transport domain plan used a project coordinator, facilitator and analysts.
* The environment gap analysis took approximately three months for three analysts to complete. The environment domain plan has ten topics and a total of 74 questions. The transport domain plan took approximately five months and an unknown number of analysts. The transport domain plan has eleven topics and 46 enduring questions.
* Topic experts were found from the process of drafting the enduring questions and the drafting of the stocktake. They also had a willingness to participate and were often stakeholders in the data sources.
* Experts who evaluate the usefulness of data-sources must be given sufficient guidance on “value.” Experts in previous gap analyses often rated a data source high in value if they personally felt the data source was useful, regardless as to whether it fit particular enduing questions. This may have been due to concern that if a data source was not highly valued it could have funding discontinued.
* There are no standard tools for performing a gap analysis. The tool design is important as it sets the criteria for the assessment and the values for evaluation. The gap analysis process is more qualitative than quantitative.
* Data sources must not only inform an enduring questions but be accessible and of a certain standard of quality. Some enduring questions inform international conventions and reporting initiatives and should therefore be robust. A source may have data on a particular topic, but if its access is constrained or prohibited for privacy, technological or lawful reasons then it will not be able to answer any enduring questions.
* It should be noted that the enduring questions for the transport and environment domain plan did not have cross-cutting topics. The disability gap analysis will not only need to evaluate if the data source informs the question, but if it also provides information on personal characteristics, disability and impairment, autonomy, accessibility, and attitudes and awareness. For example a data source must be evaluated if it answers the question on differences of labour force patterns between disabled people and others. But this question also intersects with sex, ethnicity, age, location, familial circumstances, type of impairments, and details of impairments.
* Written feedback provides large amounts of information, but focus groups were the most productive method for adding value in the transport gap analysis. It married the different perspectives on the data and allowed stakeholders to come to a collective sector-wide consensus.
* A summary of the gap analysis is all that was published for both transport and environment’s domain plan. This is because stakeholders were heavily involved in the process and therefore little need to detail why they had come to their findings.
* Enduring questions are complex and often made up of multiple questions. This made it very difficult to receive high overall scores for a question, but data sources often well informed parts of the questions. The most useful indicator for the environment domain plan was the ‘overall’ score of low, medium and high.
* Advice from a member of the environment team suggested workshop of experts completing a physical copy of the spreadsheet would have been faster than emailing out the spreadsheets to complete. Significant time was spent chasing up experts for their responses. This face-to-face would also allow better guidance on the value of data sources.

## Process for gap analysis – Environment

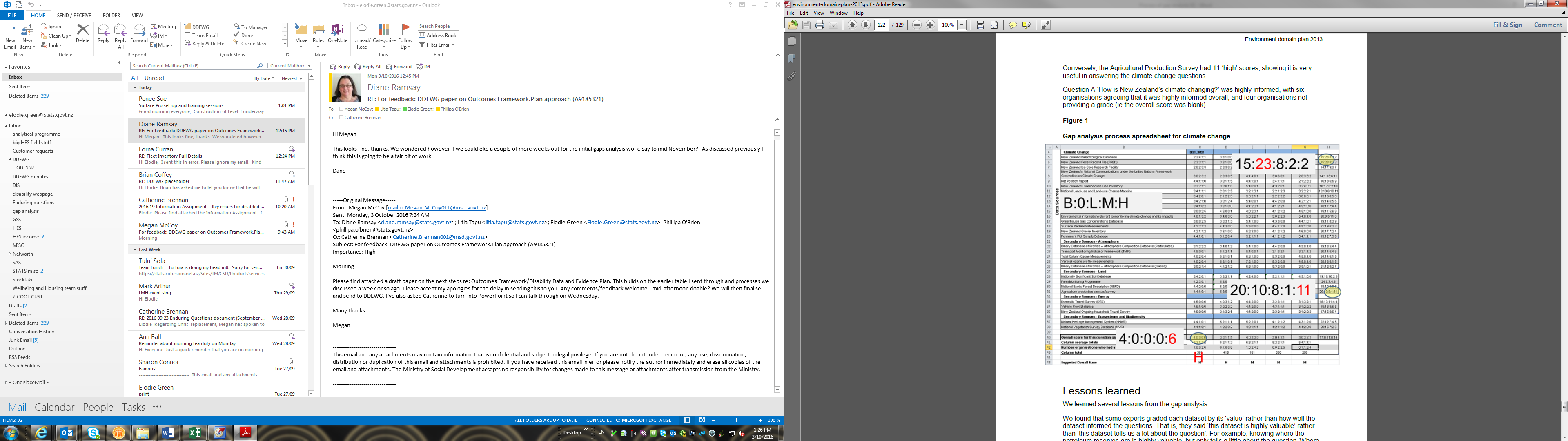
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| 1. Develop excel based tool for gap analysis. (figure I) 2. Identify subject matter and end-user experts to assess data-sources and for each question ask: - How well does this dataset inform us about that question? - Given all the datasets, how well informed was that question overall? 3. Experts were given a spreadsheet with the questions along the top and the datasets listed down the side. They were asked to put a grade for each dataset with either a zero, low, medium or high to indicate how well they thought that dataset informed that questions. Where a ranking could not be assigned the square was left blank. 4. Spreadsheets from the experts were then combined to indicate the cumulative grading. Using the experts’ scores the following factors were used to assess how well the questions were informed: - the number of organisations assigning each grade in the overall scoring row for this question. - the average scores across all datasets, for all organisations and each grading category.  - the maximum grade given for each question by each organisation - the weighted sum of the number of organisations scoring low (weight=1), medium (weight=3), and high (weight= 5) across all the questions and datasets.   These indexes were used to suggest an overall classification of the level at which each question was informed (low, medium, or high.) (figure II.) 5. The spreadsheet was also used to assess how useful each dataset was in informing all of the questions. The various grades were counted across a row, and then the highest number of high and mediums were found. Datasets with mostly lows or zeros were evaluated as not informing the enduring questions well. |

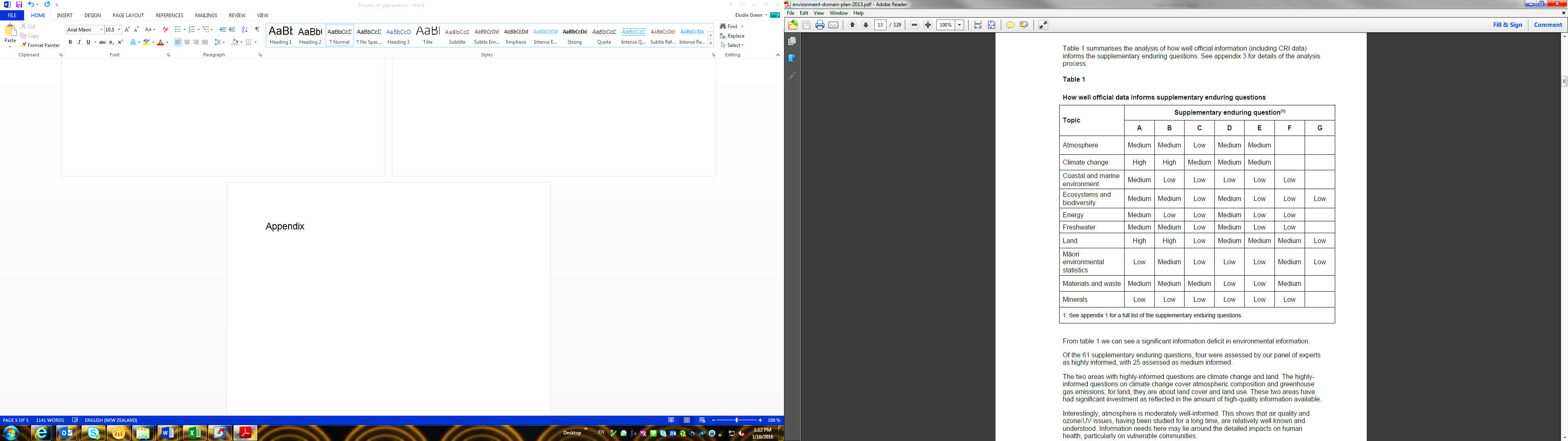
## Process for gap analysis – Transport

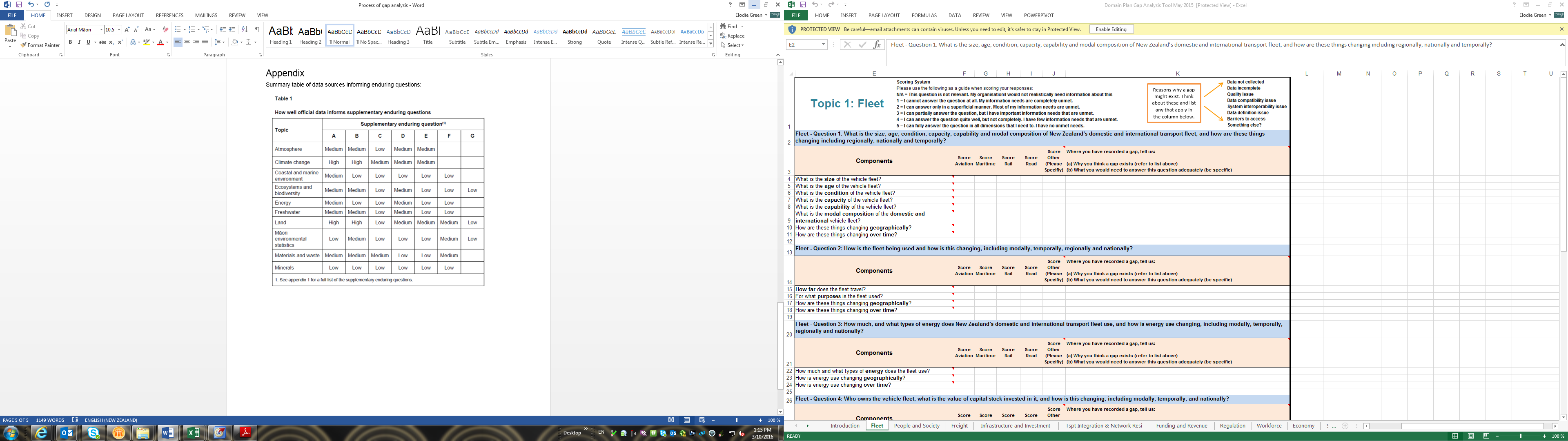
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| 1. Develop and test an evaluative tool. A spreadsheet based tool was developed that broke down enduring questions into their component parts and was user tested with MoT policy teams (figure III.) 2. Book meetings with stakeholders and prepare communication material while tool was being developed. These meetings were with 28 individual groups and took approximately three weeks. 3. Stakeholders were sent the tool with written instructions and deadlines for their responses. Stakeholders were given three to seven weeks depending on the size of their topic. 4. Responses were collated and summarised. Discrepancies, outliers and contradicting results were identified for focus groups. 5. Focus groups were held for all topics that had interest. Twelve focus groups were held within four weeks (three per week.) Additional support was contracted for this step. 6. Findings were analysed and recorded in bullet-point summaries on large posters per topic. These posters were used in a workshop to confirm, amend or delete findings. These workshops also brainstormed broad solutions to fill gaps. 7. The workshops provided a strong basis for identifying gaps and moving towards solutions and recommendations. |

## Appendix

**Figure I:** gap analysis spread sheet for climate change topic:



**Figure II:** Summary table of data sources informing enduring questions: 

**Figure III:** Image of Transport’s gap analysis excel based tool: