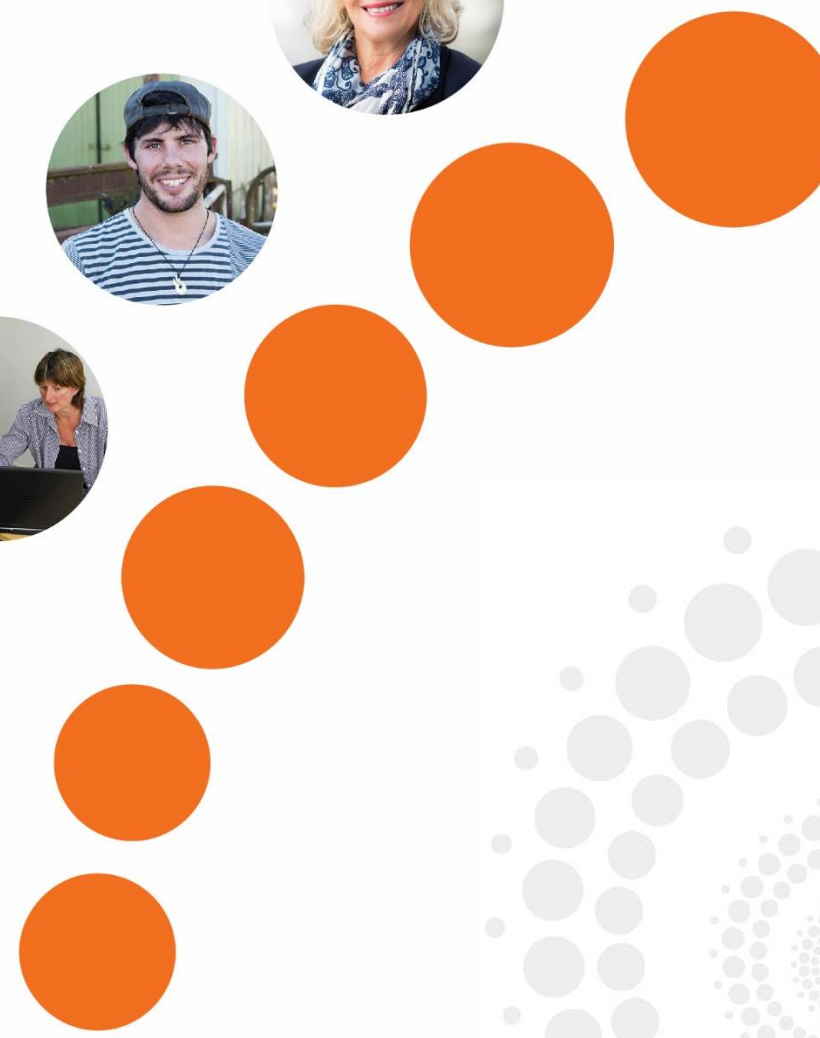


6th International Conference on Big Data - Session 4

Achieving the SDGs in a time of COVID-19

Richard Evans,
General Manager, Economic & Environmental Insights
Stats NZ



IANZ: Indicators Aotearoa New Zealand

A strong commitment to Wellbeing Statistics

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Wellbeing data for New Zealanders

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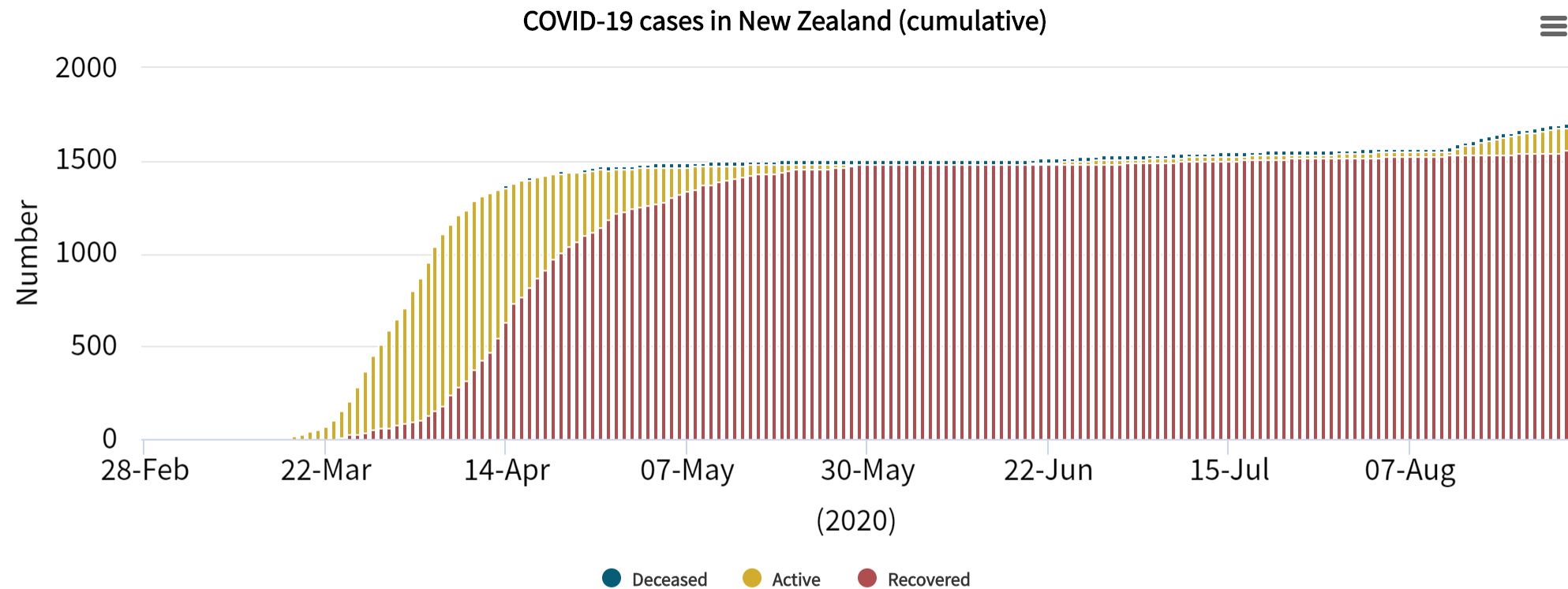
Social capability Culture, relationships, leisure	Empowerment and enablement Governance, equality, autonomy	Human resource potential Health, safety, education
Economic self-determination Work, income and wealth, housing	Environmental sustainability Land, water, air, waste	Te ao Māori Partnering with Māori to reflect values, beliefs, and customs
All context indicators	All wellbeing indicators	

COVID-19

- Challenge
- Opportunity
- Trade-offs



A new small set of statistics rose to prominence



Most Immediate area of Interest : Economic

Indicator	Frequency	Timeliness
CPI	Quarterly	16 days
LFS	Quarterly	35 days
Turnover	Quarterly	55-65 days
GDP	Quarterly	77 days

- Traditional Key economic indicators were:
 - Too infrequent
 - Too slow to be published
- **Not real-time!**

Other near-real-time Indicators

Most not by Stats NZ

Source/series (monthly)	Timeliness
ANZ activity outlook	~ -3 days
MSD jobseeker numbers (work ready)	~ 7 days
ANZ truckometer – light traffic	~ 11 days
ANZ truckometer – heavy traffic	~ 11 days
SNZ electronic card transactions (ECT)	~ 12 days
EA electricity generation (hydro + thermal)	~ 14 days
SEEK new job listings	~ 14 days
BNZ/BusinessNZ Performance of Manufacturing Index (PMI)	~ 14 days

Rethinking quality: *Most of our data products*

Accuracy

Coherence

Timeliness

Frequency

Accessibility

Detail

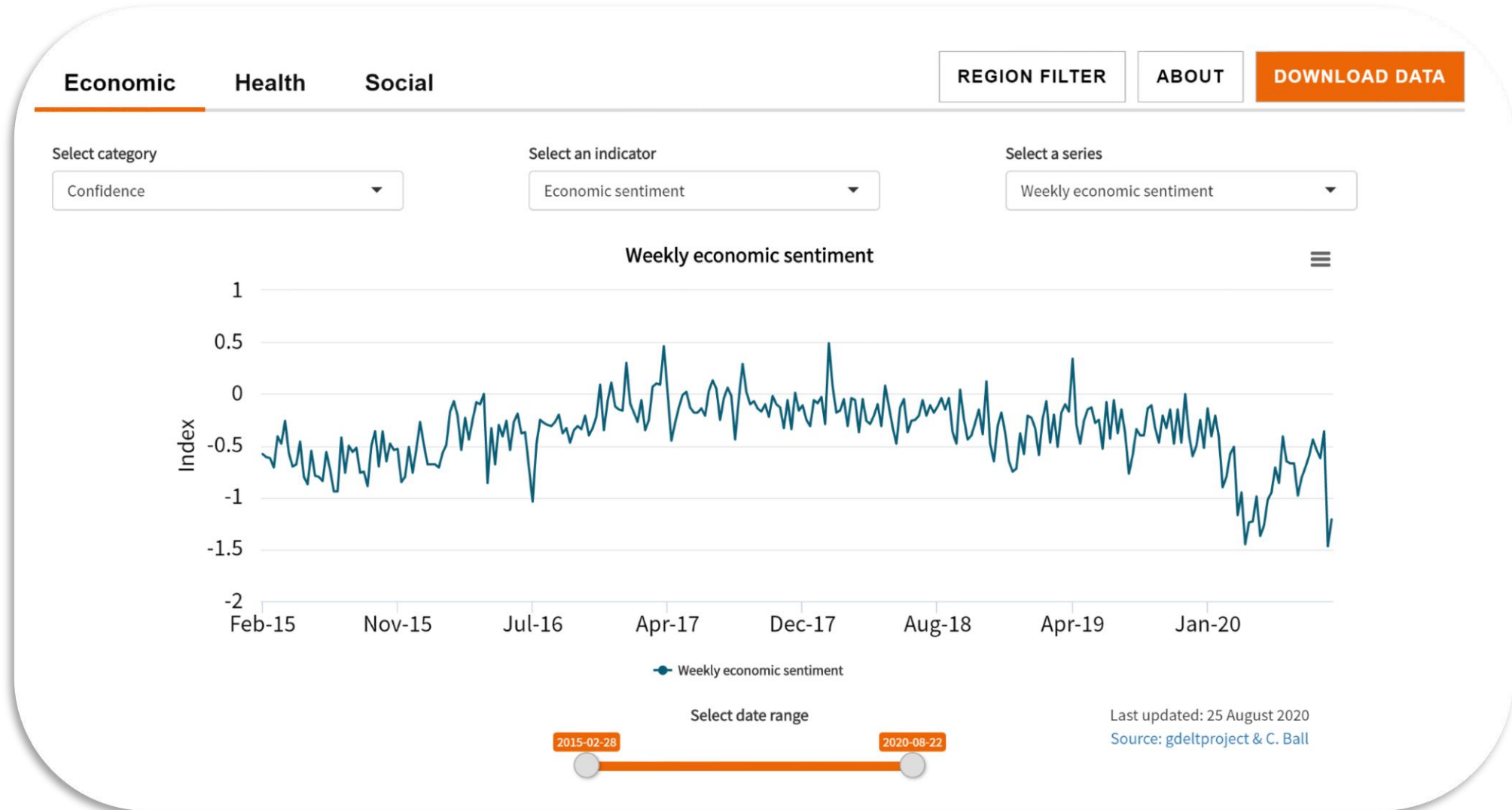
Accessibility: The COVID-19 Data Portal

Watching the crisis unfold in near-real-time

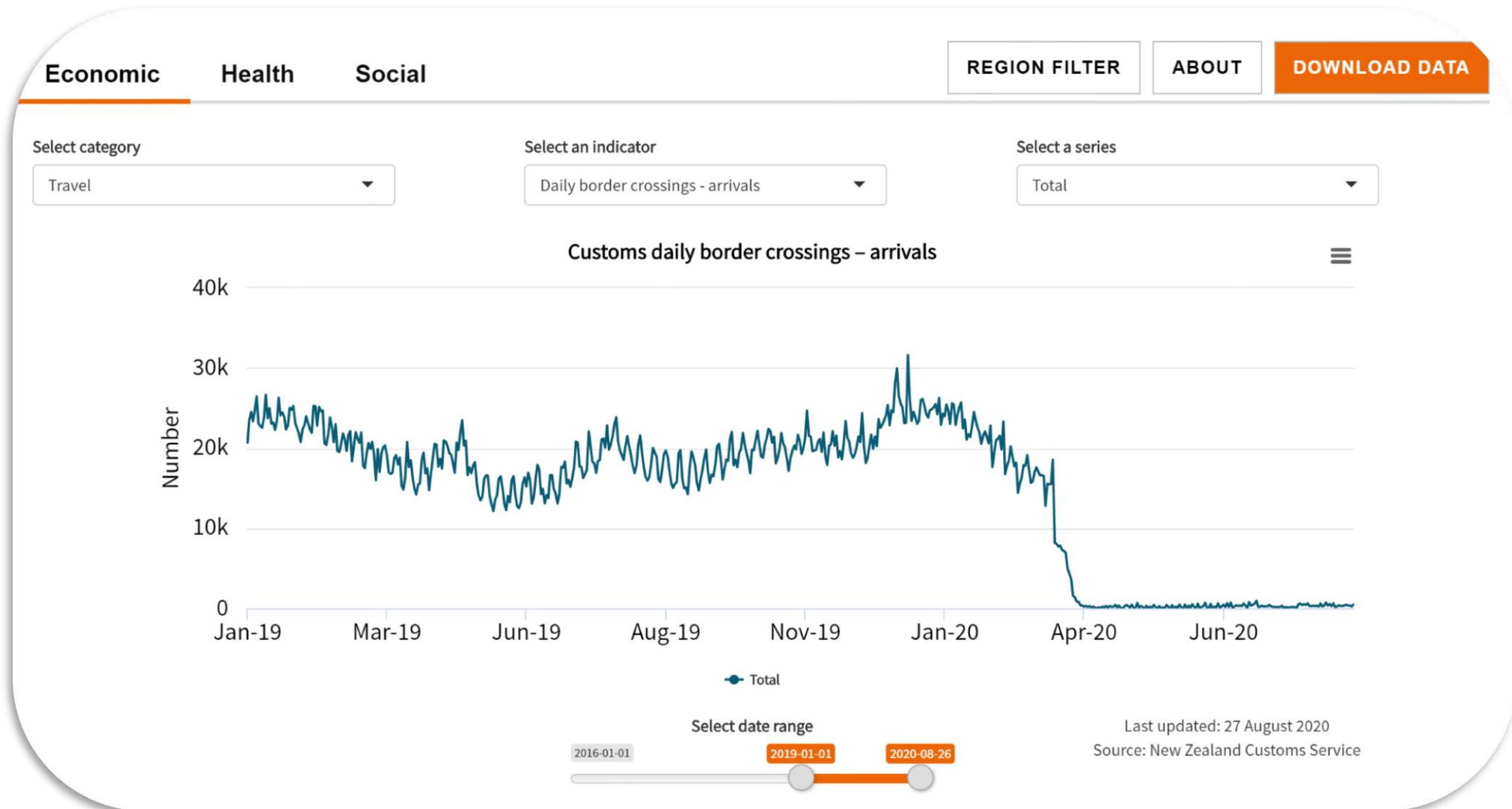
The screenshot shows a web browser window with the URL stats.govt.nz/experimental/covid-19-data-portal. The page features the Stats NZ logo and a navigation menu with items: STATISTICS, TOOLS, SERVICES AND SUPPORT, INTEGRATED DATA, CENSUS, WELLBEING INDICATORS, and ABOUT US. A search icon is located on the right side of the menu. Below the menu, a breadcrumb trail reads "Home > Experimental > COVID-19 data portal". The main heading is "COVID-19 data portal". The introductory text states: "This data portal has been developed and is maintained by Stats NZ. It reports on the changing state of aspects of New Zealand's economy since the COVID-19 outbreak. Some international data has been included for comparison." A second paragraph notes: "The data has been sourced from Stats NZ; other government organisations, including the Reserve Bank of New Zealand, The Treasury, Ministry of Social Development, banks, and international sources." A disclaimer follows: "Please note: We are not responsible for the quality of data from the external sources." At the bottom, there are three tabs: "Economic" (which is selected and underlined), "Health", and "Social". To the right of these tabs are three buttons: "REGION FILTER", "ABOUT", and "DOWNLOAD DATA".

www.stats.govt.nz/experimental/covid-19-data-portal

Example #1: Weekly Economic Sentiment

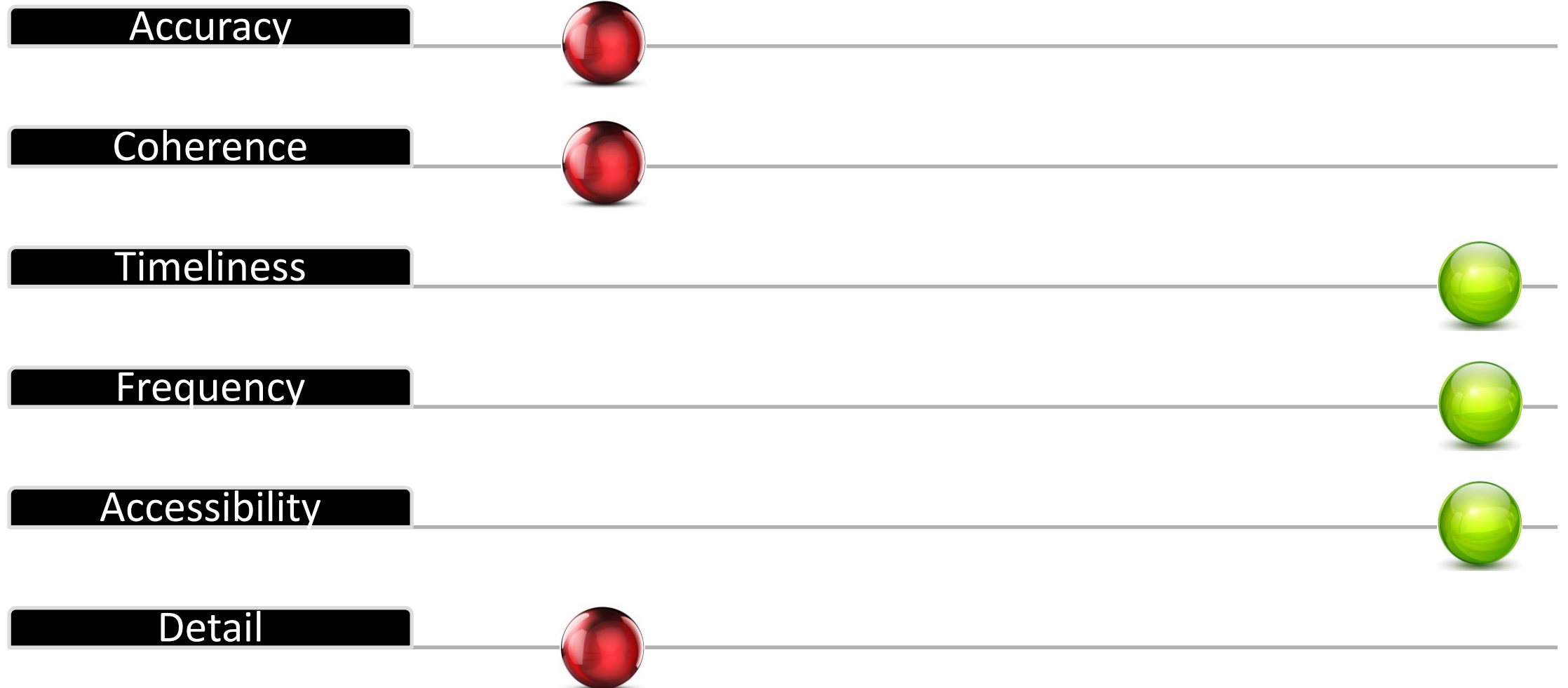


Example #2: Daily Border Crossings



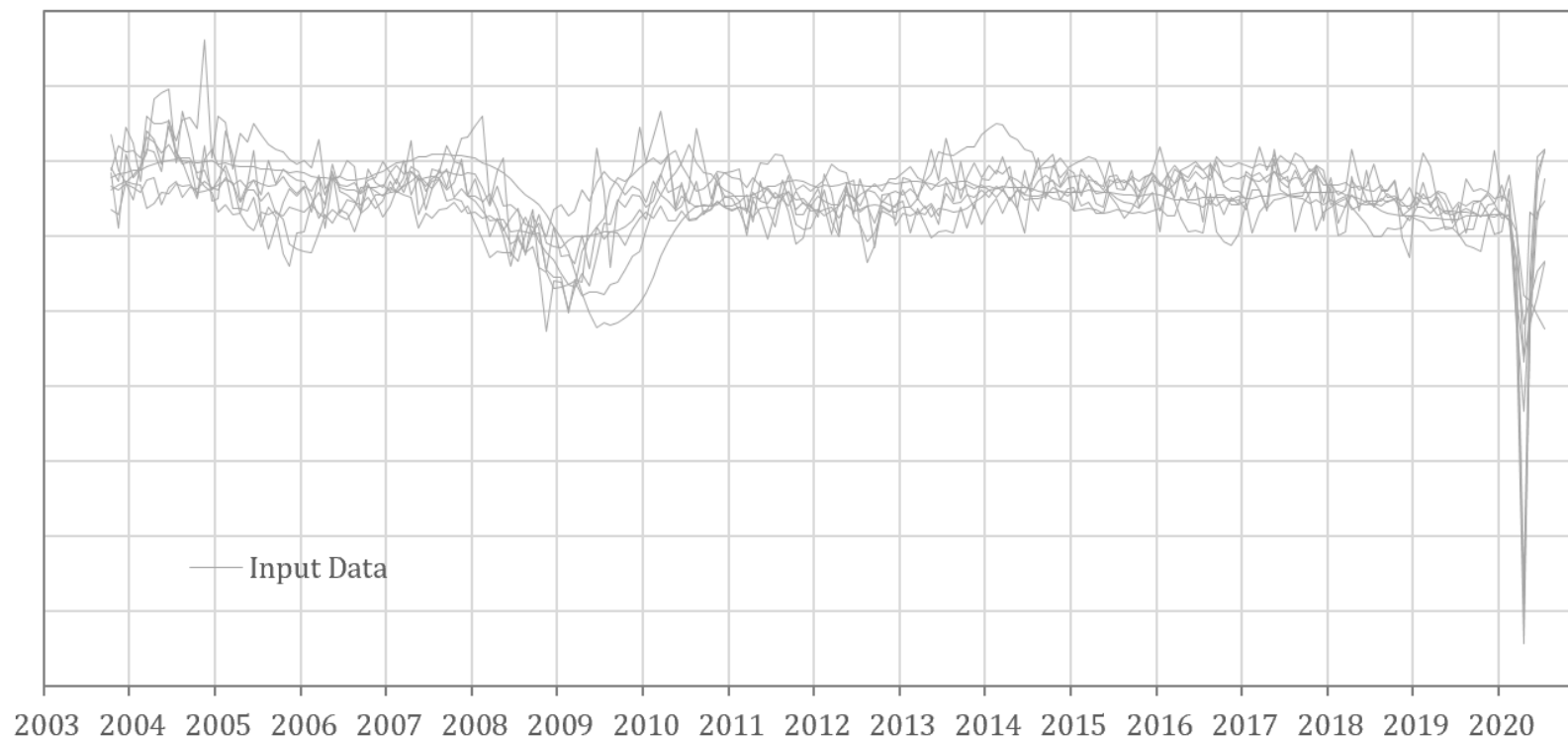
This was what we had achieved

What about coherence?



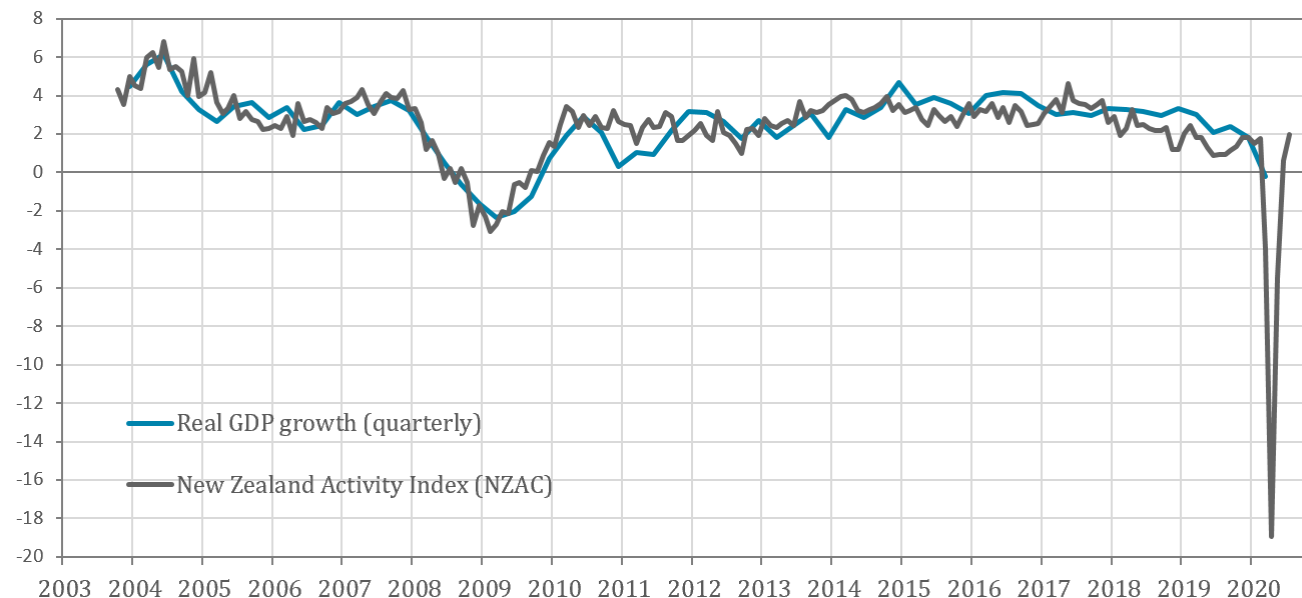
The race to near real-time created new complexity

Normalised (no units)



And what about that complexity?

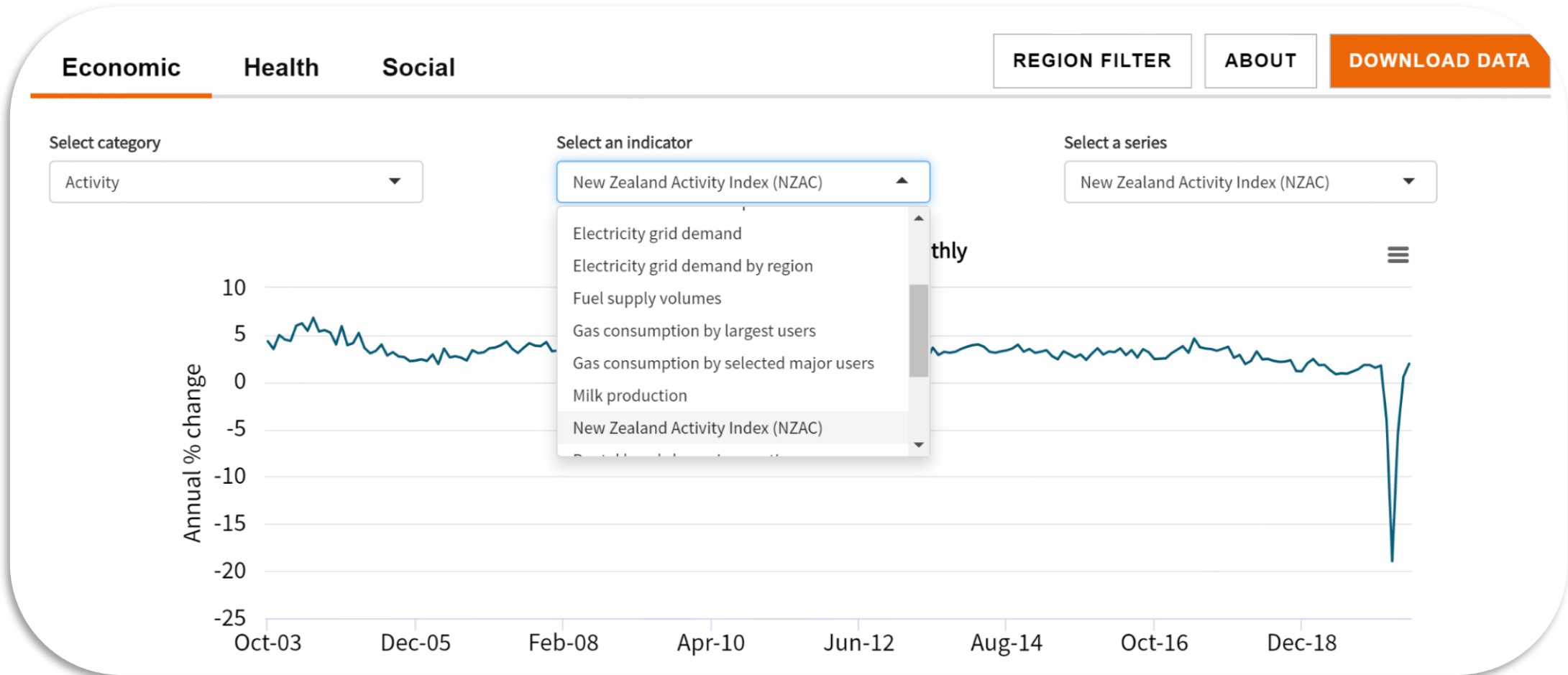
Annual % change



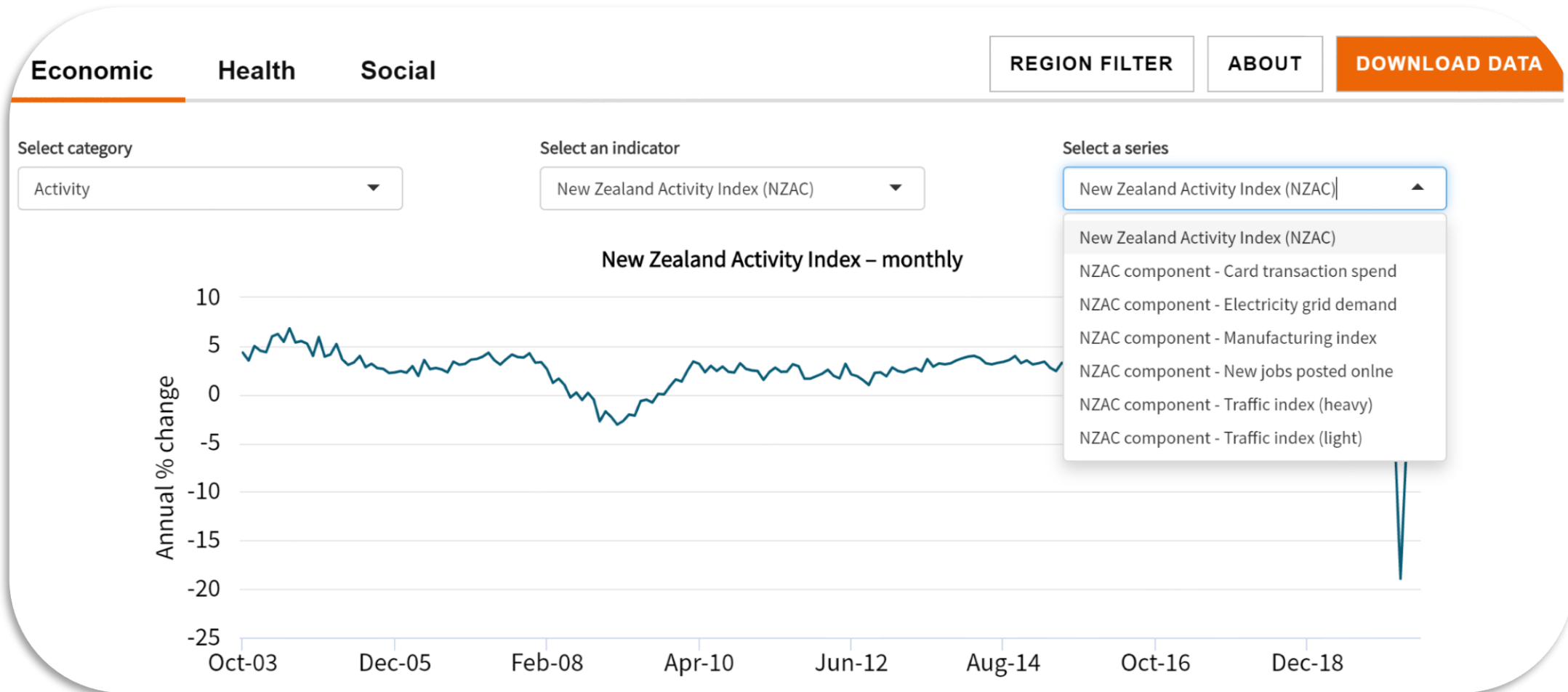
...Tracks GDP
reasonably
well

The New Zealand Activity Index...

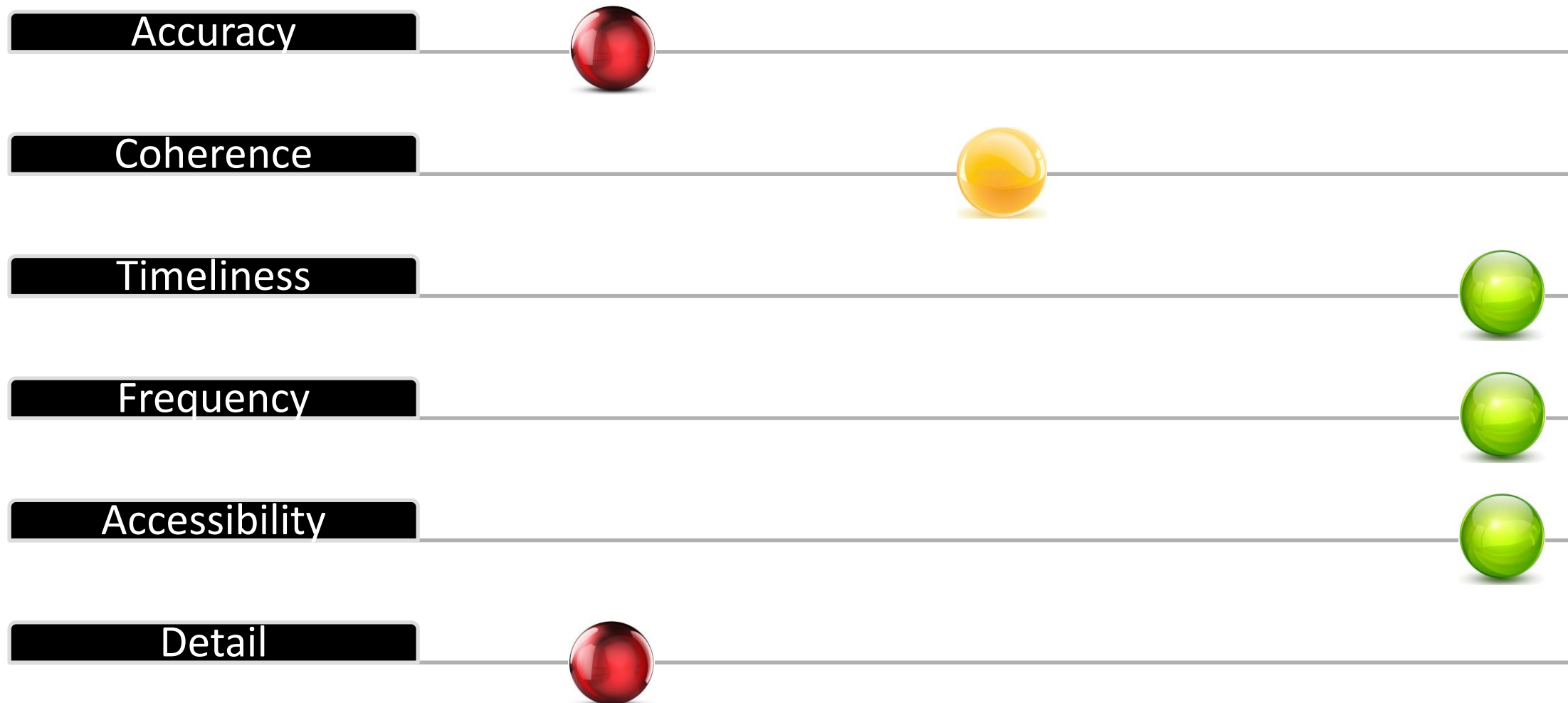
The COVID-19 Data Portal's latest addition...



... provides coherence through synthesis



The NZAC provides some coherence



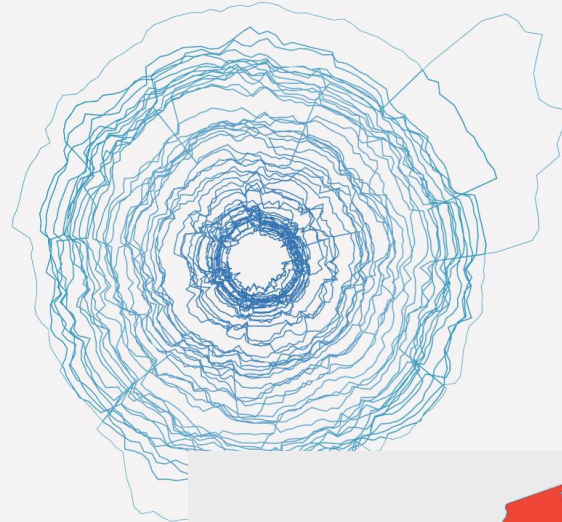
Data Ventures: New Potential to Measure Wellbeing

POPULATION DENSITY

Find out where people live, work and play.

Combining Stats NZ expertise with our partners at major telecommunication companies, we have developed [a new look](#) at population.

Understand the population of Aotearoa at suburb level, broken down by international/domestic/local population at an hourly estimate.



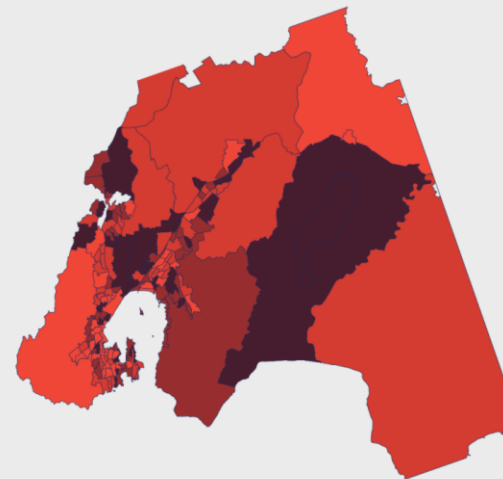
[EXPLORE POPULATION DENSITY](#) >

SPEND DENSITY

Find out how people live, spend and pay.

Combining Stats NZ expertise with our partners at major payment processing companies, we have developed a new look at electronic card spend.

Understand the spend of Aotearoa at council level, broken down by industry, international/domestic total spend and number of transactions at a daily frequency.



[EXPLORE SPEND DENSITY](#) >

These efforts have created more balance

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Social capability Culture, relationships, leisure	Empowerment and enablement Governance, equality, autonomy	Human resource potential Health, safety, education
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All context indicators	All wellbeing indicators	

Can the other pillars of wellbeing be expanded? *Why not?*

The screenshot shows the Stats NZ website interface for 'Wellbeing data for New Zealanders'. The page title is 'Ngā Tūtohu Aotearoa • Indicators Aotearoa New Zealand'. The main heading is 'Wellbeing data for New Zealanders'. The page includes a navigation menu with 'About', 'Indicators', and 'Search'. Below the navigation, there are several indicators listed, each with a sub-description. The indicators are: 'Social capability' (Culture, relationships, leisure), 'Empowerment and enablement' (Governance, equality, autonomy), 'Human resource potential' (Health, safety, education), 'Economic self-determination' (Work, income and wealth, housing), 'Environmental sustainability', and 'Te ao Māori' (Partnering with Māori to reflect values, beliefs, and customs). The page is divided into two sections: 'All context indicators' and 'All wellbeing indicators'. Red dashed ovals highlight the 'Social capability', 'Empowerment and enablement', 'Human resource potential', and 'Te ao Māori' indicators. A solid red oval highlights the 'Economic self-determination' indicator. Red arrows point from 'Economic self-determination' to 'Social capability', 'Empowerment and enablement', and 'Human resource potential'. Another red arrow points from 'Economic self-determination' to 'Te ao Māori'. A third red arrow points from 'Empowerment and enablement' to 'Human resource potential'. The word 'Health' in the 'Human resource potential' indicator is circled in red.

wellbeingindicators.stats.govt.nz

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Wellbeing data for New Zealanders

Stats NZ

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Social capability
Culture, relationships, leisure

Empowerment and enablement
Governance, equality, autonomy

Human resource potential
Health, safety, education

Economic self-determination
Work, income and wealth, housing

Environmental sustainability

Te ao Māori
Partnering with Māori to reflect values, beliefs, and customs

All context indicators

All wellbeing indicators

What's Next?

- Expand the NZAC (regional? Weekly?)
- NLP for topic analysis
- Making COVID Portal more “wellbeing like”
- Review Wellbeing frameworks?

Conclusion

- Trade-offs between COVID Health and other dimensions of wellbeing must be made visible if we are to properly support our colleagues in the policy departments
- Much exciting work ahead!

Thank you - Questions