Innovation in a time of crisis
The Australian Bureau of Statistics’ response to COVID-19

29 May 2020
The story in numbers

- **64 statistical products** delivered in April and May 2020, a 21% increase over 2019

- **19 new statistical products** in response to COVID-19 with 231 new web pages of statistical content

- **9.3 million page views** on the ABS website, a 34% increase over the same period last year

- **298 media enquiries** received, a 60% increase over the same period last year

- **2.7 billion daily observations** were extracted from 351 million Single Touch Payroll (STP) transactions provided by the Australian Tax Office, and used to publish new insights into the labour market

- **An additional 4,000 household and 5,000 business interviews** were used to draw COVID-19 survey insights

- **93% of ABS staff have worked at home** at least some of the time, and 73% of were working from home all of the time

- **92% of ABS staff reported they are doing more or the same level of work** than three months ago and 91% reported working the same or more hours

- **Almost 20% of managers reported staff productivity had increased** since new working arrangements were put in place, with only 2% reporting a significant drop
Situation
The rapid spread of Coronavirus (COVID-19) around the world, and the restrictions introduced by
governments in response, generated enormous disruption to our way of life and our economy.

The Australian Bureau of Statistics (ABS), Australia’s national statistical agency, produces over 500
statistical publications every year that are critical to understanding the Australian economy and society.
To produce this information, the ABS employs 2,800 office-based and 400 home-based staff across all
states and territories.

Like many organisations and businesses across the country, the spread of COVID-19 had immediate
impacts on ABS business operations and created a threat to business continuity.

Challenge
The emergence of COVID-19 accentuated the importance of the ABS’ ongoing indicators of the economy
and society and just as significantly, it created a demand for new, more up-to-date and specific data on
the impacts of the pandemic.

It was clear maintaining a business-as-usual approach was not going to be sufficient. The ABS was in a
unique position to provide enormous value by collecting and publishing near real-time information about
how individuals and businesses were responding to the rapidly changing circumstances. This meant
transforming ABS operations to give governments, businesses and the community the most up-to-date
statistics possible.

At the same time, the ABS needed to focus on protecting the health of its staff and respondents, while
continuing to deliver its business-as-usual statistics in a more challenging environment.
Solution
A flexible organisation
The ABS was well positioned to respond to social distancing and other restrictions introduced during the pandemic, including working from home.

As standard issue, and well before the outbreak of COVID-19, every ABS staff member was given a laptop, remote access to the ABS environment, access to video conferencing, their own virtual meeting room and a wide range of online collaboration tools.

ABS infrastructure supports broadcast video sessions to each desktop and the ability for remote question and answer sessions. These investments, over the past few years, meant the ABS had already embraced working from home and activity-based working arrangements — significantly reducing its national office footprint.

ABS staff are experienced in working as part of virtual teams with staff across 10 offices, and 90% of branches operating across three or more locations. Before COVID-19, one quarter of ABS staff already had a remote supervisor — more than double the average for other large APS agencies (24% compared to 11%, APSC State of the Service Census, May 2019). The State of the Service Census also showed that 93% of ABS staff indicated their supervisor actively supports the use of flexible work arrangements by all staff — 10% higher than the APS average.

As COVID-19 measures came into effect, ABS teams used their experience of working virtually to quickly adapt from hybrid office-home operations to predominantly home-based operations. Office attendance was reduced to around 15% of the total workforce. Nearly all ABS staff (93%) have worked at home at least some of the time, and around three quarters of staff have been working from home all of the time (73%).

ABS managers implemented changes to individual working arrangements to allow staff to balance work, caring and home-schooling responsibilities. A survey of ABS managers indicated little negative impact on productivity during the COVID period. A fifth of ABS managers (19%) indicated that productivity had increased during this period.
Early response
The Australian Statistician initiated the ABS response to COVID-19 in late February 2020. At that time, there were 23 known cases in Australia and 5,000 global cases outside of China.

The ABS quickly mobilised to support and protect its staff, ensure business continuity and rapidly meet new information needs.

As part of this response, the ABS:

- established two taskforces – a corporate team to coordinate business operations and lead staff support and communications; and a statistical team to lead the production of new and more timely statistical products to support the national response
- delayed lower priority work and redeployed 127 staff internally to support the new taskforces, deliver new statistical products, and provide additional contingency to more critical functions
- conducted a work from home trial in mid-March to test infrastructure and team processes before the direction that staff should work from home. This helped identify and resolve issues before more staff started working from home every day.

The ABS implemented a range of additional communication and coordination processes, including daily Executive stand ups, daily all staff written communication and weekly all staff town halls where staff could also ask questions, directly and remotely, of senior staff. A staff well-being survey was initiated, which showed that 91% of staff reported being satisfied or very satisfied with the COVID-19 related communication they were receiving from the ABS (2% dissatisfied).

Regular data collection operations faced the challenge of the suspension of face-to-face household interviewing and increased difficulties with achieving business survey response rates, due to business closures and changes in business operations. The ABS quickly adapted household surveys and field operations to focus on telephone and web data collection, updating communication materials using behavioural economic research to guide households to these available channels. The ABS also worked with the Australian Communication and Media Authority to quickly access a phone number database to reach households by phone instead of a household visit.

The ABS redeployed and trained 50 staff across three sites to provide additional capacity to phone businesses and conduct business survey interviews. Staff were also redeployed to bolster critical statistical functions, such as labour statistics and economic measurement. This ensured continuity of supply, met increased demand for more analysis and responded to the need to adapt methods and models in the face of a severe health and economic shock.

The spread of resources across multiple sites provides greater resilience against an outbreak, or enhanced restrictions due to the pandemic, in any one site. With these strategies in place, the ABS has been able to maintain higher response rates than its international peers during this period.
Online response rates for the Survey of Income and Housing

ABS adapted contact materials and field operations to maximise ‘COVID safe’ responses to ABS surveys – online response and telephone interviews.

Public and private partnerships
To understand and meet the emerging data needs of COVID-19, the ABS collaborated and partnered with a number of other organisations.

The ABS Chief Operating Officer (COO) engaged closely and regularly with the APS COO Committee and Treasury Portfolio COOs, to ensure the ABS responses were in step with other APS agencies and to share and learn from best practice and lessons.

The ABS regularly communicated to both the public and Government about our new statistical products to support Australia’s understanding of, and response to, the pandemic. The ABS’ existing network of outposted officers in key APS and central State Government agencies quickly connected with the right people to help gather information on statistical needs, bring together critical stakeholders, and share new insights.

The ABS also formed working groups to consult on statistical needs and used input from other agencies to shape survey questions and guide new analysis.

Collaboration also facilitated access to new datasets. The ABS partnered with the Australian Taxation Office (ATO) to get near real-time insights on the change in payroll jobs and hours worked from their Single Touch Payroll (STP) data. The ABS also reached out to supermarkets, banks and other private organisations to seek permission to extend the use of current data assets and to get access to further data.
In critical times, we expect our public institutions to step up. Inevitably, we are going to judge them, as we should, because it is important that they get decisions right …

… the ABS moved at high speed to provide extra real-time measures of the effect of COVID-19 on the Australian economy.

The near real-time results are providing valuable information on topics such as how businesses are adjusting hours worked by their employees …

At a time where the value of accurate and relevant information on economy activity is at a premium, we’re lucky to have the ABS.”

Professor Jeff Borland, Roger Wilkins, Bob Gregory, John Freebairn and Sue Richardson
(The Conversation, 23 April 2020)

New products and insights
The ABS’ response to the demands created by the COVID-19 pandemic has delivered 19 new statistical products. This has comprised 231 new web pages of statistical content, 47 additional detailed data files, and a series of 18 detailed interactive maps. These products are in addition to continuing to deliver normal releases, with the ABS publishing a total of 64 statistical products in April and May, a 21% increase over the same two months last year.

These new products drove 9.3 million page views of the ABS website in March and April, an increase of 34% from the previous year. In comparison with last year, there has been a 60% increase in media enquiries and a 16% increase in media releases distributed. On social media the number of posts has increased by 25% with a 14 percentage points increase in the rate of engagement.

The products created during this period have also been unprecedented in terms of their timeliness and their detail. The ABS received 351 million Single Touch Payroll (STP) transactions from the ATO, and used these transactions to generate 2.7 billion daily observations. Within three weeks, the ABS released the first Weekly Payroll Jobs and Wages in Australia publication based on STP data. In that period, the ABS developed the methodology, built a processing system, conducted analysis and published the results.

Statistical products published

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<tr>
<th></th>
<th>Total products</th>
<th>New COVID-19 products</th>
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<tbody>
<tr>
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<td>53</td>
<td>~</td>
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<tr>
<td>2020</td>
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<td>19</td>
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<tr>
<td>% Change</td>
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(Reference: April 1 – May 29 2020)
“Higher-frequency products released by the ABS, along with additional information from other agencies, market sources and the Reserve Bank of Australia’s liaison program have enabled more timely assessments of current economic conditions and have helped inform our view about the outlook for the Australian economy.”

Reserve Bank of Australia, (Statement on Monetary Policy May 2020)

The ABS also commissioned and conducted rapid surveys of households and businesses. The rapid household survey commenced collection within eight days of project commencement and the results were released within two weeks of the end of collection. The rapid business survey has published data on business impacts within the same week of data collection, with only three days to process, analyse and disseminate the statistics.

These rapid response surveys were effectively a new line business for the ABS. Specifically, lower statistical quality, much smaller sample sizes, with less depth of analysis and detailed information, but delivered much faster. The usual survey development process for the ‘gold standard’ ABS official statistics takes some months to allow for sample and questionnaire design, cognitive testing and engagement with stakeholders. With less in-depth analysis and a preparedness to release high level indicators only, the lead time for new statistics has been reduced by over one year.

The ABS has already conducted four rapid business surveys and four rapid household surveys, involving more than 4,000 interviews with Australian households and 5,000 interviews with Australian businesses, across all industries.
Working together, apart
ABS staff embraced new ways of working during the pandemic, with productivity and staff well-being remaining high.

Staff reported advantages of new work arrangements, including reduced commute times and feeling more connected because teams have changed how they are working. In a survey of employees, 92% of staff reported they are doing the same level or more work than three months ago. Consistent with this, 91% reported working the same or more hours.

Some staff reported the challenge of caring responsibilities, particularly with reduced access to schools and outside school care arrangements. However, staff have also indicated that they have used flexible work arrangements during this time. More than one third of staff (36%) changed start and stop times and 14% have increased their work outside standard hours. The availability of staff also increased, with 14% of staff reporting that they cancelled leave.

The ‘virtual by default’ approach across the world has also increased opportunities for staff to engage with other organisations, peers in other countries, and attend conferences where travel and budget restrictions would have been a barrier in the past.

Staff working remotely

“I have found my productivity, as well as work life balance, has improved while working at home. I have had the flexibility to work out each morning and this has given me more energy and focus while working throughout the day. This typically wasn’t possible due to my long commuting time. In addition, I have found the communication in my team has improved through regular virtual stand ups each morning.”

ABS staff member
Lessons learned
Throughout the response period the ABS has been actively monitoring lessons learned and capturing key decisions.

The ABS Pandemic Plan and Risk Register has been refreshed, informed by current experience, to ensure appropriate controls are in place.

Adjustments have been made to internal policies and controls to ensure the new arrangements did not introduce unintended risks.

Specific learnings from the COVID-19 response include:

- Understand and document essential business functions, including outlining critical staffing and ICT system requirements.
- Expect the unexpected. Ensure Business Continuity Plans (BCP) are up to date. Perform regular dress rehearsals of the Incident Management process to ensure that everyone know their roles.
- Clearly document existing system fragilities as part of BCP. Have a plan to work around these if required as part of a business continuity event.
- There is a surprising level of agility within the organisation. Staff are highly adaptable and willing to collaborate across internal and external organisational barriers in support of a common cause.
- Many limits are self-imposed – in terms of what can be done or tolerated. Long-delayed changes were deployed in weeks versus months or even years.
- Business-as-usual processes are not fit for all purposes and can be adapted at short notice once staff are empowered behind the common cause.
- Rapid behavioural change is possible when clearly articulated and with the right incentives. For example, adherence to social distancing and personal hygiene protocols became automatic within days.
- When confronted with a critical business continuity event teams and individuals will adapt to ensure business outcomes. Working practises and processes were quickly refined to support working from home. People learned from each other with best practises quickly shared between individuals and across teams.
- There are positive impacts on health and inclusion through widescale working from home. There was a reduced impact of seasonal cold and flu and many staff used the time saved from their daily commute to incorporate regular exercise into their work from home pattern.
- The move to virtual meetings required meeting chairs to adopt processes that better ensured that all meeting participants had an equal chance to contribute.
Future
The ABS is not expecting to return to the previous ‘normal’ as Australia emerges from COVID-19 and into the future. We will continue to evolve our new way of working as we:

• further embrace flexibility in how and where we work
• continue using digital collaboration to connect people inside and outside the organisation and reduce travel costs
• build on partnerships with data providers and users that have been strengthened during this time
• extend the value that can be delivered from existing data assets, from public and private organisations, to better inform Australia’s important decisions
• use our rapid response survey capabilities to provide timely insights from households and businesses for government and community use.

The road out of the COVID-19 crisis remains uncertain. What we do know is that it will require many complex decisions that draw heavily on data. The ABS will continue to provide data and insights across a range of economic and social dimensions to support these important decisions.
Impact of COVID-19 on businesses

**Business Impacts of COVID-19 Survey results**

13 to 22 May 2020

72% of businesses had less income as a result of COVID-19

- 7% Revenue increased
- 22% Revenue remained the same
- 72% Revenue decreased

73% of businesses accessed support measures

- Wage subsidies 55%
- Renegotiated rent or lease arrangements 18%
- Deferred loan repayments 16%

1 in 10 businesses sought additional funds

- 58% of those borrowed from banks or financial institutions
- 21% sourced funds from other businesses
- 26% sourced from a personal line of credit or savings

74% of actively trading businesses changed how they operate

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<thead>
<tr>
<th>Operating as normal</th>
<th>Operating with modifications</th>
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<tbody>
<tr>
<td>27%</td>
<td>73%</td>
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<td>0-19 employees</td>
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<tr>
<td>17%</td>
<td>83%</td>
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<td>20-199 employees</td>
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<tr>
<td>13%</td>
<td>87%</td>
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<td>200+ employees</td>
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Social distancing restrictions expected to impact most businesses over next 2 months

- 71% of businesses expect impact from social distancing restrictions
- 64% expect impact from trading restrictions
- 51% expect impact from travel restrictions

Detailed data on the impacts of COVID-19 can be found at [abs.gov.au/covid19](http://abs.gov.au/covid19)
**Household Impacts of COVID-19 Survey results**

12 to 15 May 2020

- **3 out of 4** Australians with children in their household **kept them home from school or childcare**
- **1 in 8** adults **provided unpaid care** to a vulnerable person living outside their household

As a result, 38% **worked from home**

- **22%** reduced or **changed their working hours**
- **13%** **took leave** from work

- **Women** were **three times as likely** to look after children full-time on their own
  - **46%** females
  - **17%** males

- **Poor internet connection** a problem for 1 in 7 school-age children learning from home

13% **took leave** from work

- **46%** reduced or **changed their working hours**
- **49%** **took leave** from work

- **Family members** the most common recipients
  - **80%**

- **Shopping** most common type of care provided to those outside the household
  - **80%**

- **...followed by provision of meals**
  - **49%**

- **Impact of COVID-19 on households**

Detailed data on the impacts of COVID-19 can be found at [abs.gov.au/covid19](http://abs.gov.au/covid19)