



Australian Government

# APS Data, Digital and Cyber Workforce Plan 2025-30



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# Acknowledgement of First Nations peoples

The Australian Public Service Commission proudly acknowledges the Traditional Custodians of Country throughout Australia and their continuing connection to land, sea, waterways, skies and songlines woven throughout.

We recognise and value the ongoing leadership, contributions and work of Aboriginal and Torres Strait Islander peoples and communities.

We celebrate the rich cultures of all Aboriginal and Torres Strait Islander Nations and pay our respects to their Elders past and present, for they are the holders of knowledge and wisdom.

# Foreword

The Australian Public Service has a key role to play in supporting the Australian Government's visions for the future to deliver simple, secure, and connected public services for all people and business, and to establish Australia as a world leader in cyber security by 2030. These goals for our future can only become reality when supported by a capable and adaptable APS workforce with data, digital and cyber expertise.

This APS Data, Digital and Cyber Workforce Plan 2025-30 aligns with broader government strategies and provides a coordinated approach to attract, develop and retain people with skills in these areas of growing need.

It ensures our collective efforts are aligned, while retaining flexibility for agencies to address their individual workforce requirements. It addresses shared challenges across the APS, including skill shortages, the growing demand for specialised expertise and the need for cultural change to support collective effort, innovation, and the inclusion of diverse cohorts.

The delivery of this plan requires whole-of-APS collaboration and leadership. This will allow us to share knowledge, make the most of available resources and to create opportunities to benefit the entire APS.

In addition, this plan recognises the importance of fostering partnerships with industry and academia to build talent pipelines and maintain our competitive edge.

Together, we aspire to create a workforce that meets today's demands and anticipates tomorrow's opportunities. Putting this plan into action will enable the APS to remain an exemplar of public sector excellence, delivering meaningful outcomes for the Australian community.



**Dr Gordon de Brouwer, PSM**  
Australian Public Service Commissioner



**Chris Fechner**  
CEO, Digital Transformation Agency



**Stephanie Foster, PSM**  
Secretary, Department of Home Affairs



**Dr David Gruen, AO**  
Australian Statistician, Australian Bureau of Statistics



# Introduction

In 2023, the Australian Government launched the [Data and Digital Government Strategy](#) (DDGS) and the [2023-30 Australian Cyber Security Strategy](#). These strategies set bold visions to deliver simple, secure and connected public services for all people and business, and to be a world leader in cyber security by 2030, respectively.

Realising these visions will not be possible without uplifting the capability of the Australian Public Service (APS) workforce. This Data, Digital and Cyber Workforce Plan has been produced as a call to action to attract, develop and retain data, digital and cyber talent in a unified and strategic way across the APS.

In recent years, workforce plans that focus on specific industries and sectors have become essential for aligning workforce strategies with national and global trends. These plans encourage collaboration between businesses, professional associations and educational institutions. This leads to improvements in

talent acquisition, retention and development, ultimately boosting productivity and competitiveness by taking an economy-wide approach.

This Data, Digital and Cyber Workforce Plan:

- identifies the complexities in the external environment that affect government operations, policy making and digital transformation
- explains the crucial role of the APS data, digital and cyber security workforce in achieving the government's aims
- outlines the common workforce challenges faced by agencies
- provides a coordinated approach to tackle these challenges, using the benefits of scale and collaboration.

This plan outlines **four key action areas** that will support agencies to build and strengthen their data, digital and cyber workforce and enhance future skills planning now and into the future.

**Table 1. Action areas and outcomes**

Action area	Desired outcome
<b>Attract, recruit and retain a data, digital and cyber workforce</b>	We will attract top data, digital and cyber talent, streamline recruitment processes and position ourselves as a modern employer in a challenging labour market.
<b>Uplift technical capabilities</b>	We will ensure long term data, digital and cyber workforce capability by providing career pathways and mobility opportunities, investing in continuous skill development and strengthening in-house expertise.
<b>Grow and deploy a specialist cohort</b>	We will address the immediate need for critical data, digital and cyber specialists, recognising these capabilities are difficult to source and take time to grow.
<b>Enhance capability planning maturity</b>	We will enhance capability planning maturity by using data-driven insights and ensuring access to high-quality data, empowering agencies to make informed workforce decisions.

Many of the challenges identified in this plan are not new. This plan builds on important work underway across the system including [APS Reform](#), [Delivering for Tomorrow: APS Workforce Strategy 2025](#), the [Commonwealth Aboriginal and Torres Strait Islander Workforce Strategy 2020-2024](#), the [APS Gender Equality Strategy 2021-2026](#), the [APS Academy](#), and the [Data and Digital Professions](#).

Download a [summary of the workforce plan](#)





# 1. Strategic context

**This plan is primarily designed for leaders, Human Resources (HR) and workforce planning practitioners responsible for managing the data, digital and cyber workforce in APS agencies.**

It is not intended to replace individual agency workforce plans, but instead provide a clear action plan that gives agencies the tools to support internal workforce planning and development efforts.

This plan has been developed through extensive consultation with APS agencies, industry and academia to ensure that the initiatives align with and complement those across the APS, Australian economy and the Pacific.

In particular, agencies with specific whole-of-APS workforce responsibilities under the DDGS and the Cyber Security Strategy have played a key role in the development of this plan, including the

Australian Public Service Commission (APSC), Digital Transformation Agency (DTA), Australian Bureau of Statistics (ABS), Department of Home Affairs, Department of Finance and the Department of Defence. Together, these agencies have specific responsibilities to foster consistent workforce strategies, establish APS-wide rule-setting, and implement a system-wide approach to data, digital and cyber capability uplift across the APS.

Uplifting capability across the data, digital and cyber domains will require effort and cultural change across the whole of the APS in order to create and leverage APS-wide workforce strategies and frameworks, rather than those unique to individual agencies. The objective of the plan is to establish system-wide settings and actions which support individual agencies to build their capability in a manner that is aligned to, and strengthens, overall APS workforce development.

Agencies face unique workforce challenges, shaped by their size, structure and operating environment.



No single solution will work for all and agencies should adopt this plan's initiatives based on their needs.

The APS closely collaborates with [jobs and skills councils](#) (JSCs). Their vital role in our talent development pipeline includes working with the Future Skills Organisation to proactively address skill shortages and co-designing tailored university and vocational programs to engage potential talent.

Engagement will continue to occur on a whole-of-APS basis during implementation to ensure that it continues to support a coordinated approach. Several APS agencies have chosen to sponsor and contribute to specific initiatives in this plan. Their contribution ensures this plan reflects the diversity of the APS and addresses workforce needs across different contexts and functions.

Together, the APS and its partners will meet its capability needs, engage a more diverse talent pool and inspire people to build their careers working in the APS.

## Data sources

The data supporting this plan's analyses can be viewed in **Appendix 1** (Workforce profiles) and **Appendix 2** (Data tables), unless otherwise noted.

Data has primarily been drawn from the APS Employment Database (APSED), the [State of the Service Report 2023-24](#) and the APS Employee Census. It is complemented by 'best fit' job family analysis, using the 'ICT and Digital Solutions' job family as a proxy for the APS digital workforce and the 'Data and Research' job family for the APS data workforce. A similar comparison cannot be made for the APS cyber workforce at the job family level, however the trends and themes outlined in this plan remain applicable.

The data in this plan may not reflect different agencies' unique experience, but it reveals general, APS-wide trends and directional changes. At the same time, this plan includes specific actions to improve the ongoing collection, analysis and reporting of workforce data in order to enhance APS capability planning maturity over time.

## What success looks like

An engaged, skilled, future ready and sustainable APS data, digital and cyber workforce has the potential to deliver great benefits for Australia.

### What success looks like for Australians



Australians and businesses can use digital products and services from government that are secure, fit for purpose and supported by a capable workforce.

They have confidence that government can appropriately use and safeguard their data.

### What success looks like for government



Australia has a digital government that is world class, trusted and supported by a highly capable APS workforce.

Government improves its capability to use its data holdings and harness analytical tools and techniques, improving service delivery, evidence-based decision making and policy and program evaluation.

### What success looks like for the Australian Public Service



The APS' workforce is skilled, capable and achieves government's objectives.

The APS improves how it attracts, recruits and retains specialist talent, reducing digital project delivery risks.

### What success looks like for the APS' data, digital and cyber workforce



The APS is a great place to work and offers a quality employee experience in dynamic workplaces.

Data, digital and cyber employees enjoy a diverse and rewarding career, with opportunities to pursue life-long learning that keeps pace with industry developments.



## 2. Current state analysis

### Macro influences shaping the operating environment

The APS is experiencing a significant transformation as it grapples with the challenges and opportunities presented by the evolving policy landscape, complex technological transformation and modern ways of working.

Many government services, such as signing up for assistance or checking vaccination status, are now conducted online using digital technology. This enables government agencies to collaborate more effectively, leverage data to enhance services and improve the quality of life for Australians.

The use of digital technology, in turn, generates increasingly large amounts of data that assists in the planning and evaluation of programs. Tools such as automation, artificial intelligence and data analytics are therefore becoming more integrated in public sector operations.

Public debate and media attention in respect to public and commercial cyber threats and high-profile failures in public administration test public trust. Global events, like the COVID-19 pandemic and changes in world politics, have increased the need for governments to be flexible, skilled in using data and ready to handle new challenges.

The rapid expansion of digital technologies and digital innovation means that competition for specialist capabilities across data, digital and cyber domains has intensified nationally, while opportunities for strategic partnerships are growing.

We will continue to invest in building world-class data, digital and cyber capabilities in the APS workforce to realise the government's visions *to deliver simple, secure and connected public services for all people and business, and to be a world leader in cyber security by 2030.*

**Figure 1. Macro influences shaping government administration**

	<h3>Political</h3> <p>Building trust and reinforcing democracy, geopolitical power and shifting security environments.</p>
	<h3>Economic and climate</h3> <p>Digital economy, unstable global growth, acceleration in business model innovation, green economy, climate change, high costs of living.</p>
	<h3>Demographic</h3> <p>The changing size, distribution, age profile and needs of the world's population and workforce.</p>
	<h3>Technological</h3> <p>Emerging technology, Internet of Things, AI, machine learning, quantum computing, robotics, increasing automation, increasing uptake of no-code and low-code systems, digital-enabled delivery, availability, value of data, zero-trust culture.</p>
	<h3>Continuity</h3> <p>Readiness for the future, stewarding an APS that is trusted and relevant.</p>
	<h3>Capability</h3> <p>The changing nature of work, emerging roles, broadening of the skills base, competition for specialist capabilities, attracting and retaining a diverse workforce.</p>
	<h3>Agility</h3> <p>Public-private partnerships, managing uncertainty, complexity and the pace of change.</p>

## Digital transformation within the APS

The APS is on an ambitious digital transformation journey. The DDGS outlines the five key missions guiding the APS' digital transformation. Australia's commitment has been recognised globally, with Australia ranking fifth in the [2023 OECD Digital Government Index](#).

But there is still so much more to do.

In 2024, the Australian Government released the [Digital Experience Policy](#), which supports a whole-of-government focus on improving the experience for people and business interacting digitally with government information and services. The policy mandates four standards for how government designs and delivers its digital services, meets user expectations and needs, and measures performance for continuous improvement.

The government also released in 2024 the [Policy for the responsible use of AI in government](#), designed to complement and strengthen existing APS frameworks.

It includes mandatory actions requiring agencies to:

- identify an accountable official for the policy's implementation
- publish a transparency statement about how it uses AI.

Agencies are strongly encouraged to implement training on the fundamentals of AI for all employees and additional training where needed for a role. The DTA developed an AI fundamentals training module for any agency to implement under this recommendation.

The government continues to invest significantly in digital and ICT projects, with a growing number of these projects active and underway. More than 60% of agencies are investigating new technologies as indicated by the digital investment pipeline ([DTA 2024a](#)).

As the Government is committed to meeting the needs of the Australian community and looking to the future, the next step in digital transformation will be even more challenging. The availability of the skills needed to bring this digital transformation to life is critical.

## The APS data, digital and cyber workforce

### Labour market insights

As highlighted in the DDGS, the 2023-30 Australian Cyber Security Strategy and the APS Workforce Strategy 2025, the demand for data, digital and cyber talent remains strong.

Agencies continue to report difficulties in attracting experienced and mid-level employees in these domains, citing low labour market supply, broader competition and affordability as key factors inhibiting their success.

Globally, forecasts predict a 30-35% increase in demand for critical roles such as data analysts and scientists, equating to 1.4 million new positions over coming years. Australian employment growth for digital workers is projected to increase up to 13.9% by 2030 ([JSA 2024](#)).

While there are limitations in current Australian labour market data statistics for cyber security workers, AustCyber has projected an estimated Australian cyber security workforce shortage of 3000 by the year 2026, while the [World Economic Forum](#) has highlighted a global skills shortage of nearly 4 million cyber security experts.

### Attraction, recruitment, and retention

The APS data, digital and cyber workforce has steadily grown over recent years. This is particularly so for the 'Data and Research' job family, with new ongoing engagements during 2024 up by over 80% on the previous year.

Despite the growth in ongoing engagements across each domain, many agencies continue to report critical skill shortages, which put digital projects at risk.

APS New Starter Survey data shows lengthy recruitment processes are a critical challenge when attracting and recruiting the APS workforce. Around 70% of respondents who weren't satisfied with their recruitment processes indicated recruitment timeframes could be improved ([APSC 2024a](#)).

Notwithstanding recruitment challenges, data from the 2024 APS Employee Census shows that employees across all three domains are generally happy with their work and working conditions. There are however differing levels of satisfaction across these groups in respect to salary and the technology in their agencies.

High levels of overall job satisfaction are reflected by these cohort's intention to stay in the APS, high average length of service and low separation rate of ongoing employees (with each domain showing a resignation rate of under 5% during 2023-24, and an average mobility rate across the APS of around 4%).

While this shows that the APS is successful at keeping these skilled workers, it can be expected that some will leave in the future to advance their careers or learn new skills. Offering programs for career growth, especially in cyber security, could help retain these important workers.

## Geographic distribution

The geographic distribution of the APS data, digital and cyber workforce does not reflect the broader national labour market distribution for these professionals, creating significant barriers to accessing diverse and in-demand talent.

Currently, the APS workforce across these three domains is disproportionately concentrated in Canberra, with representation in some professions up to 14 times higher than the national average. Conversely, New South Wales, Victoria and Queensland together account for 80% of the national talent pool in data, digital and cyber.

This imbalance is compounded by a surplus of graduates in some streams (such as data) in regions outside of Canberra, while the demand for talent based in Canberra far exceeds the available supply.

To bridge this gap, the APS continues to shift its focus beyond Canberra and consider its recruitment strategies to target professionals across the country. This involves upskilling people leaders to effectively manage and support a geographically dispersed workforce and adjusting existing approaches to attract and engage talent in other regions, incorporating flexibility provisions and leveraging location-based strategies such as those outlined in the [APS Location Framework](#). By doing so, the APS can tap into a wider, more diverse talent pool to meet the growing demands of the digital, data and cyber sectors.

## Diversity

As highlighted in the DDGS, there is significant opportunity to improve the representation of diversity cohorts in the APS data, digital and cyber workforce.

The APS is performing well in terms of representation of individuals from a culturally and linguistically diverse background and neurodivergent employees in the 'Data and Research' and 'ICT and Digital Solutions' job families. Representation of ongoing employees who identify as LGBTIQ+ or with disability are on par with the broader APS workforce.

First Nations and female employees are the two most under-represented groups across all three domains, when compared to APS averages. This is affirmed in the 2023-2030 Australian Cyber Security Strategy, which envisages a future where the Australian cyber workforce is inclusive with strong career opportunities for diverse cohorts and underrepresented groups. This is particularly critical for women, who, according to the report 'Attracting a diverse cyber security workforce' (Department of the Prime Minister and Cabinet, 2023), represent only 17% of the national cyber security workforce.

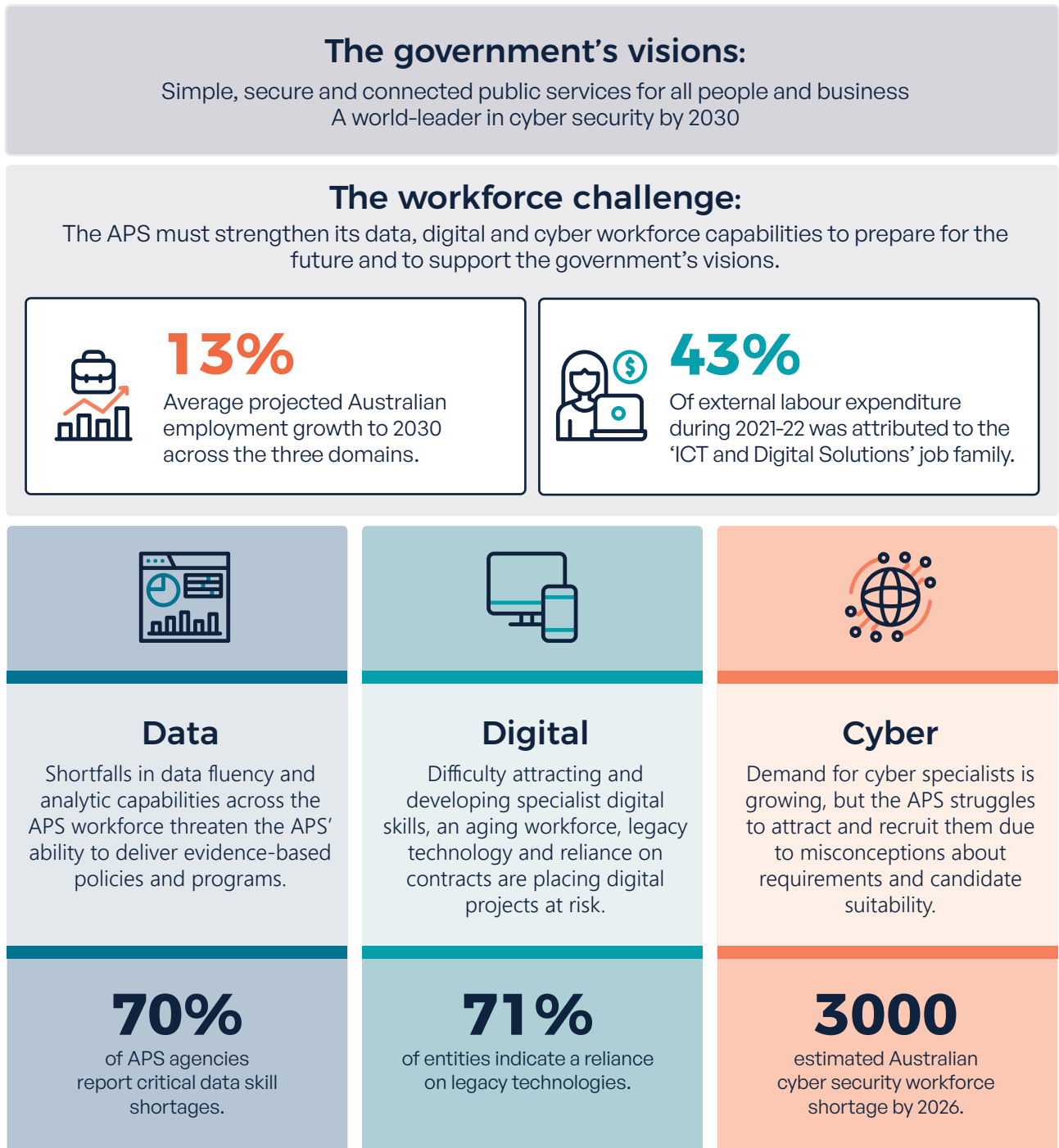
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**Attracting and retaining diverse talent will have a number of positive impacts on the APS and the community. It will enable the APS to take advantage of a much wider spectrum of data, digital and cyber skillsets, experience, cultural knowledge and capabilities.**

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There is considerable work underway across the APS to improve diversity outcomes for a range of cohorts, for example [APS Reform](#), the [Commonwealth Aboriginal and Torres Strait Islander Workforce Strategy 2020-2024](#), the [APS Disability Employment Strategy 2020-2025](#), the [APS Gender Equality Strategy 2021-2026](#), the [APS Culturally and Linguistically Diverse \(CALD\) Employment Strategy](#) and [Building the Pathway to Diversity in STEM](#). This plan will align with these efforts, whilst continuing to prioritise targeted attraction, recruitment and retention of diverse cohorts.

**Figure 2. Visions and challenges for the APS data, digital and cyber workforce**



**Notes:** Data has been sourced from the [Jobs and Skills Australia Atlas](#), the Australian Government’s report on the [Audit of Employment](#) for the 2021-22 financial year, the [State of the Service Report 2023-24](#), the [Commonwealth Cyber Security Posture 2024](#) and AustCyber 2022. Critical data skills shortages are calculated based on the number of agencies specifying the critical shortage, as a proportion of the total number of responding agencies. Agencies may select more than one critical skills shortage.



## The external workforce

The use of external labour to undertake digital, data and cyber functions across the APS has become increasingly necessary due to the ‘peak and trough’ nature of New Policy Proposals, challenges in attracting and recruiting new employees to these functions and mobilising sufficient talent internally. In some instances, procuring external labour can be more cost-effective on a temporary basis than recruiting and training ongoing employees, and can deliver immediate capability particularly when required for the duration of a specific project.

However, a dependency on consultants and contractors, while addressing immediate needs for specialised skills, can undermine the development of long-term capability of the APS, particularly where no knowledge capture and transfer provisions are in place.

[The Australian Government’s report on the 2021-22 Audit of Employment](#), released in May 2023, found that around one in every four dollars spent by APS agencies for departmental purposes was on external labour services, including consultants, contractors, labour hire and outsourced service providers. Of this, the Audit attributed more than 40% of all external labour expenditure to the ‘ICT and Digital Solutions’ job family, equivalent to over 6,000 full time equivalent employees (excluding expenditure data from the Department of Defence). A 2023-24 Audit of Employment is underway, and will provide more recent insights into the use of external labour by job family in the APS.

The [APS Strategic Commissioning Framework](#) requires agencies to identify the core work that should not be outsourced and take steps to bring it back in-house. When supported by recruitment, skilling, re-skilling and mobility, the framework’s approach will, over time, deepen system-wide capability and reduce the risks to integrity, expertise and public trust.

Insights from the first round of framework reporting shows appetite among APS agencies to bring key ICT and digital solutions work in-house, but they expect this to be challenging. In 2024, nearly two thirds of agencies identified some work in this job family as core, with more than half outsourcing it. In addition, APS agencies anticipated difficulty filling in-demand roles and managing peaks and troughs. These difficulties may affect how quickly this work can be brought in-house.

While APS agencies need to work within their Average Staffing Levels (ASL) estimate as they bring core work in-house, requests for additional ASL can be made in line with the Budget Process Operational Rules where required. Broader processes to support agencies to build and deploy capability, both internally and across the system, will further go towards addressing this challenge.

## Domain-specific considerations

In addition to general workforce availability, capability and composition, there are a range of specific workforce challenges faced by each professional domain that are important to consider for workforce planning.

### Data domain

Data is fundamental to many roles in the APS, not only those who may be considered data professionals or specialists. The need to build data capabilities across the APS is recognised in the [APS Data Capability Framework](#) and is a commitment made in the DDGS, which requires all government entities to educate their employees on the importance and appropriate use of data. This extends to embedding data capabilities, such as data ethics, in all roles including leadership positions.

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**Upskilling individuals in non-technical roles or developing their data fluency can be particularly challenging because their interaction with data is often less visible or informal compared to that of dedicated data professionals.**

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This can make it harder to identify skill gaps, provide targeted training, and ensure they have the necessary support to work effectively with data.

A new initiative developed by the Department of Finance under the DDGS is the [Data Maturity Assessment Tool](#) (DMAT). The DMAT provides agencies with a consistent approach to measuring and understanding their

organisation's data maturity. Findings from the 2024 assessments show that 43% of agencies have either nominal investment in data upskilling or no investment at all. From agency comments in the DMAT survey, competing priorities and resource constraints were highlighted as affecting some agencies' ability to invest in data activities.

The APS Data Profession aims to lift the data capability of the APS workforce through defining data capabilities, increasing diversity and mobility of people in data roles, and creating career pathways and development opportunities. Key initiatives in the Data Professional Stream Strategy include:

- the Data Capability Framework
- the development of Data Job Role Personas
- structured learning opportunities
- collaboration with the education sector to uplift entry level capabilities.

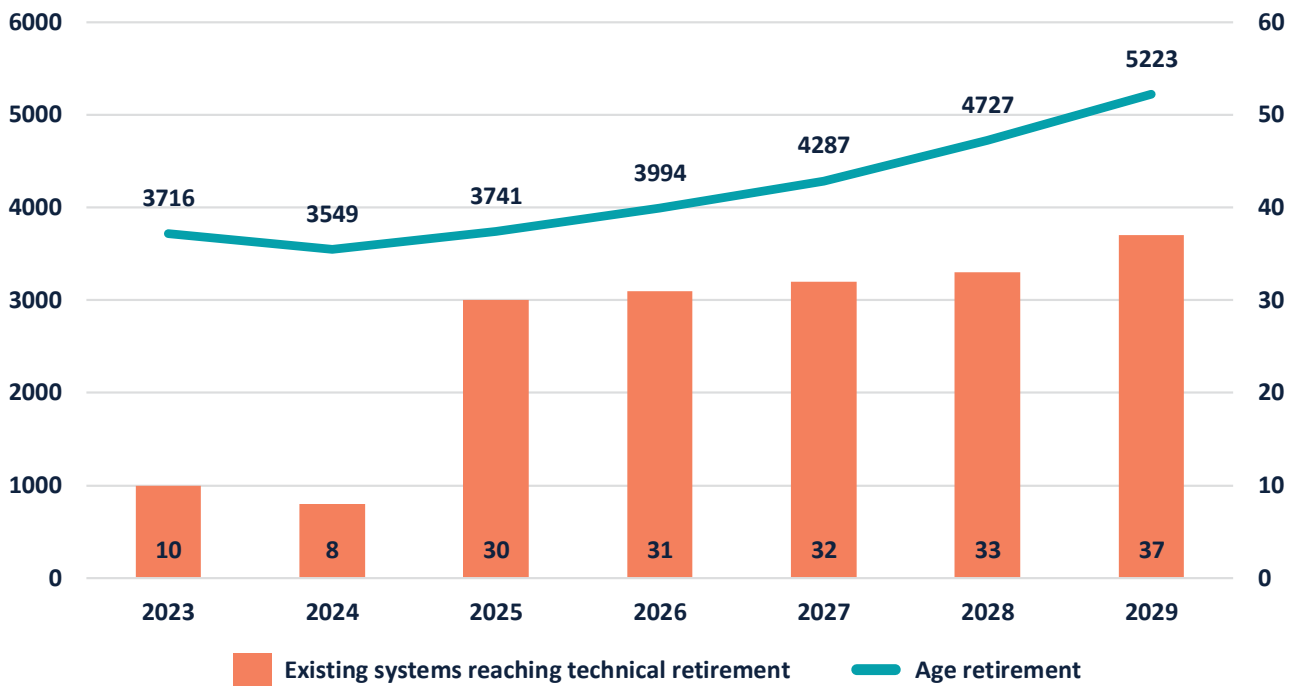
### Digital domain

Over the next 10 years, the Commonwealth will need to make substantial investments in digital initiatives. According to the DTA, significant numbers of existing legacy systems require reinvestment, and numerous major new projects are in the pipeline. Legacy systems alone require over 800 APS ASL to support their operation, and the skills to maintain these outdated systems, such as Common Business Oriented Language (COBOL) programming, are going to be harder to find.

More than 20% of the ongoing APS 'ICT and Digital Solutions' job family is nearing retirement age (55+), and retirement-related separations have been increasing over the past five years. APS agencies highlighted during consultation that age-related retirements pose a significant challenge to delivering digital projects, as many of those retiring are responsible for supporting critical systems. Ensuring appropriate knowledge transfer practices are in place will be important.



**Figure 3. Workforce and technical system retirement projections**



**Note:** Historical and projected retirement figures for the ‘ICT and Digital Solutions’ job family, charted against number of APS systems reaching technical retirement. Age-related retirement forecasts have been calculated using Excel based forecasting formula and previous 2 years of APSED data.

In addition to retirement-related separation, the APS’ ability to attract and retain specialist digital skills is having tangible impacts on its execution of digital projects. Currently agencies are unable to keep up with the demand generated by new and existing digital projects and one quarter of early digital proposals coming forward have listed workforce risk as a major delivery concern.

As APS agencies continue to refresh their APS workforce, there will be a continued need to take into account technical skills in addition to the program and project management skills necessary to oversee and execute digital initiatives.

While competition for talented digital professionals has been a persistent historical challenge, the very nature of rapid technological transformation also presents opportunities for government and for Australia. A key example of this is the Memorandum of Understanding on Cooperation on Artificial Intelligence between the Australian Government and the Government of the Republic of Singapore.

Among other things, the Memorandum of Understanding recognises opportunities for practical collaboration between the two governments on matters such as AI development and deployment, workforce and talent, ethics and governance, and safety and standards. This collaboration highlights the potential of AI as a powerful tool for government, but realising its full benefits requires targeted investment in AI skills and capability across the APS workforce.

### Cyber domain

Cyber security is a critical challenge that demands attention across the APS. As cyber adversaries employ increasingly sophisticated techniques such as phishing, malware and exploitation of software vulnerabilities, the APS must take proactive measures to safeguard its ICT systems. Addressing this evolving threat landscape requires a collective focus on building awareness, strengthening skills and embedding cyber resilience into the fabric of government operations.

The entire APS workforce must not only be aware of, but must understand their responsibilities in relation to cyber security. This will help to mitigate risk and to build future talent pipelines for cyber roles.

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## **Comprehensive training programs are key to raising cyber literacy across all roles.**

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Internal awareness campaigns can further promote vigilance and best practices, while initiatives such as setting up Cyber Security Champions in APS departments and agencies can foster a culture of shared responsibility for cyber security.

Like the data and digital domains, cyber security faces a significant skills shortage. The rapid pace of technological advancements has outstripped the current skill sets of the workforce, with traditional recruitment processes struggling to keep up with demand. An aging workforce worsens these challenges, limiting the APS' ability to adapt to the digital environment.

The lack of a national standard for cyber skills, coupled with a lack of articulated career paths for digital professionals wishing to move into cyber roles, present strategic opportunities for the APS to take a long-term view to building the future APS cyber workforce. This includes the identification of core skills, adjacent roles and partnerships across sectors, with academia and with industry to foster development pathways that grow the Australian cyber profession across all levels.

## **Insights from APS agencies**

APS agencies have shared concerns about attraction, retention and a lack of options for rapid capability uplift.

While they noted the strategic benefit of building pipelines of entry-level talent, most reported they needed more mid- to senior-level employees. Additionally, agencies identified opportunities to leverage existing mid-career talent programs.

Agencies expressed the desire for a digital employee value proposition with supporting resources to help attract specialist talent to the APS. Further, they reported that they

reach a greater number of (and more diverse) prospective candidates on paid recruitment platforms and social media channels. This observation is consistent with market research completed by the APSC during 2023 that confirmed non-APS job seekers knew little about the APS, perceived barriers to entry and looked to other online platforms to discover job opportunities. Encouragingly, these same job seekers showed a strong interest in working in the APS and were likely to apply for APS roles in the future.

Agencies highlighted that 'headline' pay disparity between the APS and other sectors is a significant challenge in attracting technical specialists. Within the APS, the application of Individual Flexibility Arrangements is worsening competition and inflating the cost of digital talent across the system. The APS has been on a journey to address pay fragmentation and this will continue to be considered through usual approaches to bargaining.

The retention of skills and an ageing workforce is of concern to agencies, particularly the cohort of workers who maintain legacy systems. Coupled with a lack of succession planning and pipelines in place, projected retirement of these 'legacy skills' presents a great risk to business continuity.

Agencies revealed a gap in rapid upskilling, re-skilling and micro-credentialing opportunities in the APS, which compromises time to competency and presents barriers to those who may wish to transition into these careers. To build the capability of its data, digital and cyber workforce, the APS is expanding upskilling and reskilling pathways and exploring industry-recognised programs that could be rapidly piloted and implemented.

Systems barriers in relation to financial, contractor and workforce data present difficulties in forming a single view of supply and demand, hampering agencies' ability to strategically plan their workforce. Barriers include difficulty in creating linkages between data sets and data consistency challenges across the APS particularly in respect to job roles and contractor skills.

Many agencies asked for more data and insights to help them better understand the nuances of their digital, ICT and cyber cohort, and that an 'ecosystem of tools' would be valuable in supporting their future workforce planning efforts.



### 3. In-demand skills

**Traditional definitions of work and employment are dissolving. Work is no longer confined to specific job roles or fixed locations, and employment models are shifting away from traditional structures.**

An employee's capability consists of general and technical skills, knowledge, experience, behaviours and qualifications applied in context, as depicted in Figure 4.

Figure 4. Elements of capability



## Professional skills and behaviours

[APS Craft](#) is comprised of the foundational capabilities required of all APS employees. They include integrity, working in government, engagement and partnership, and leadership and management.

All areas of APS Craft are guided by the APS Values, which articulate the standard of behaviour expected of all APS employees.

APS Craft capabilities are strengthened through the APS Academy, which is available to all employees.

## Technical and specialist skill requirements

There is currently no common approach to forecasting skill requirements across agencies.

A Digital Workforce Data Pilot was conducted by the DTA in 2024. The pilot uncovered a number of complexities experienced by APS agencies in creating accurate skills forecasts and in understanding their future data, digital and cyber workforce needs. These included agency workforce planning maturity, short forecasting horizons, data standardisation challenges, gaps and inconsistencies in agency workforce data collection, and the inconsistent application of the APS Job Family and capability frameworks such as Skills for the Information Age (SFIA). In addition, the pilot found that the limited granularity of contractor data exacerbates this problem.

The annual [State of the Service Report](#) provides rich insights into the shared skills shortages across the APS. These skill shortages may be experienced across both the generalist and technical workforce and could be an indicator of unmet demand. Percentages are calculated based on the number of agencies specifying the critical shortage as a proportion of the total number of responding agencies, and agencies may select more than one critical skills shortage.

### Data skill shortages

The [State of the Service Report 2023-24](#) highlights that 70% of agencies continue to identify critical data skill shortages particularly in relation to data analysis, general data literacy, communication of data and data governance.

Agency stakeholders consulted during the development of this plan further added that data management, data integration and data use/re-use were important capability gaps.

## Digital and ICT skill shortages

According to the [State of the Service Report 2023-24](#), Digital and ICT, and Portfolio, Program and Project Management represent two of the top three critical skills shortages across agencies. Particular pressure points are being experienced in relation to systems design, programming and specialist advice.

Establishing clear pathways for acquiring or enhancing these skills will support agencies transition over time to new technology investments.

## Cyber skill shortages

More than 50% of agencies are experiencing critical cyber security skills shortages in their workforce, according to the [State of the Service Report 2023-24](#). In particular, agency stakeholders consulted during the development of this plan highlighted that information security, legal and regulatory environment and compliance, and specialist advisory skills are most in demand.

Several key factors impacting the cyber skills deficit have been highlighted in the Cyber Strategy and the Executive Cyber Council's Australian Cyber Workforce Program Phase 1 Final Report (2024). These include AI and other emerging technologies that are transforming roles and reshaping skill requirements, a lack of job-ready experience and the absence of a national standard for cyber skills.

## Foundational skill shortages

In addition to specialist skill shortages across the data, digital and cyber domains, there is a continuing demand for critical foundational skills such as web development, data governance and database administration. Weak foundations can lead to overly complex and expensive delivery, failed technology modernisation and cyber security risks.

## In-demand roles

Agency investment data shows that enterprise architects, cyber security analysts, IT and data architects, DevOps engineers and business and systems analysis are currently among the top 10 in-demand roles ([DTA 2024b](#)).

Between September 2016 and October 2024, 40% of request for quotations (RFQs) for ICT labour hire under the Digital Marketplace were for roles in the 'ICT and Digital Solutions' job family. Following this, a significant portion was for Portfolio, Program, and Project Management, as well as for Data and Research roles ([DTA 2024c](#)).

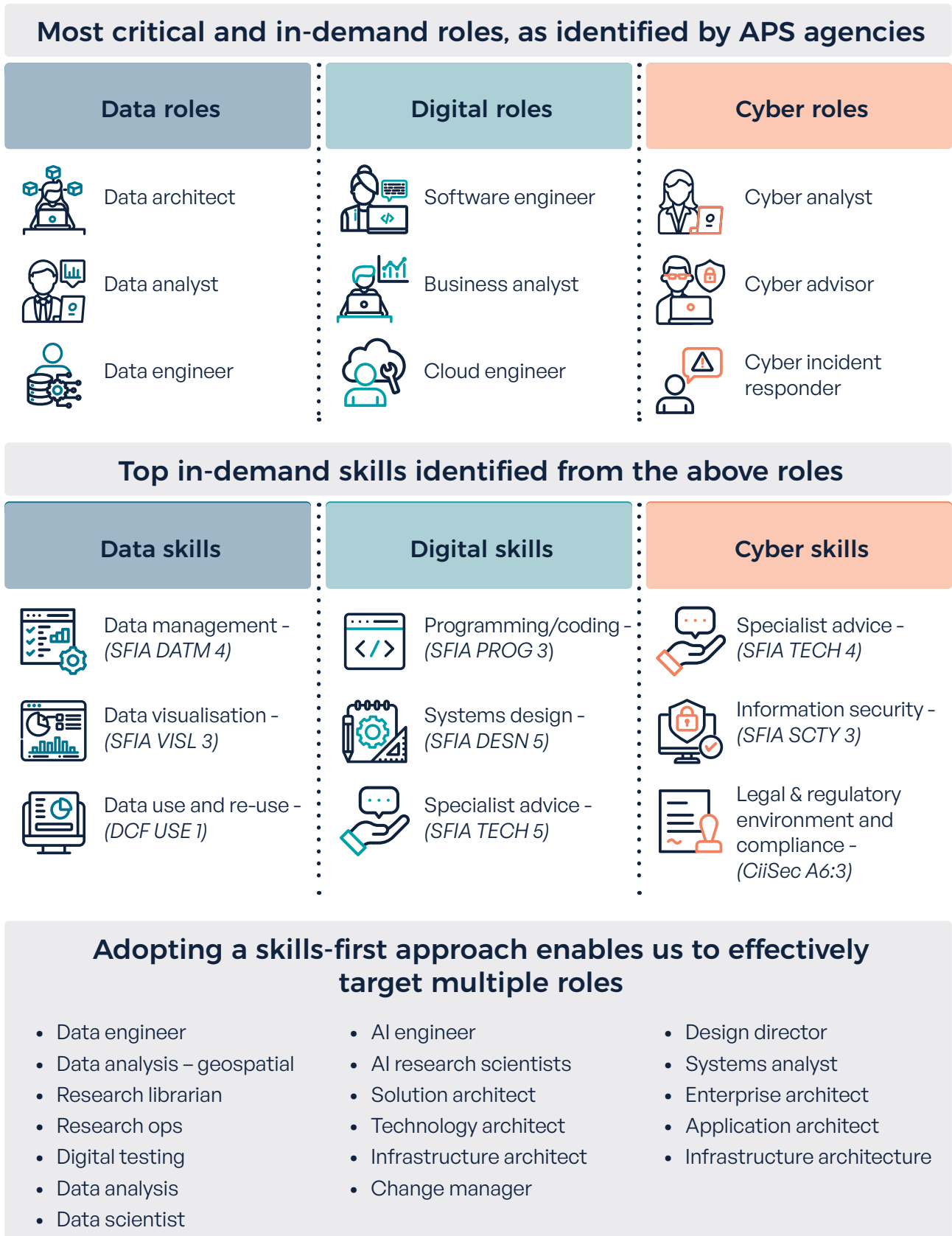
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**The job roles in highest demand by far have been software engineers, solution architects, business analysts and project managers, while test analysts, data analysts, infrastructure engineers and delivery managers round out the top job roles.**

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To complement this analysis, several agencies identified gaps in critical roles. These roles were mapped to skills using the [APS Career Pathfinder Tool](#) and results collected during this plan's development, are highlighted below in Figure 5.

Figure 5. A skills-first approach targeting multiple roles.



## Skills-first approach

The APS has a significant opportunity to transition from traditional role-based forecasting to a skills-first approach. This shift enables the APS to conduct comprehensive skill mapping exercises to identify the underlying skills required across APS and SES roles.

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**By using frameworks such as SFIA, the APS can better address current and emerging skill shortages, tap into a larger and more diverse talent pool and enhance workforce agility and resilience.**

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This approach improves workforce mobility, maximises the return on training investments and mitigates workforce-related risks in digital project delivery.

In addition, adopting a skills-first approach unlocks opportunities for leveraging stackable skills to address skills shortages. This approach identifies adjacent roles and capabilities, such as those of 'near-tech' workers, and upskills them to meet emerging demands ([ACS 2024](#)). For example, there is a unique opportunity to harness the growing number of data graduates entering the APS and cultivate the skills that make them suitable for digital and cyber roles.

## The future modern workforce

The increasing uptake of no-code and low-code systems may be a game-changer for the APS in terms of demand for specialists and specialist skills in the digital domain.

Where low-code development platforms require some basic coding skills for users to develop and integrate complex applications, no-code development platforms do not require specialist programming knowledge at all. A move to low or no-code development brings with it the rise of 'citizen developers' and access to a pool of possibly untapped potential among non-technical workers within the APS. This can potentially help to ease skill and talent shortages and set the stage for the future modern digital workforce. In addition, it has the potential to mitigate privacy and cyber security risks by the very nature of reducing reliance on third party specialists to develop code.





## 4. Action areas

**This plan outlines four key action areas that will support agencies to build and strengthen their data, digital and cyber workforce and enhance future skills planning now and into the future.**

The four action areas within this plan provide an integrated and coordinated approach to address shared challenges across the APS using the benefit of scale. The plan acknowledges that agencies vary in size and resourcing, and aims to ensure mutual benefits across the APS workforce by:

- providing adequate support from the core agencies
- connecting agencies to share learning and collaborate on implementation.

### The four action areas

- 1** Attract, recruit and retain a data, digital and cyber workforce
- 2** Uplift technical capabilities
- 3** Grow and deploy a specialist cohort
- 4** Enhance capability planning maturity

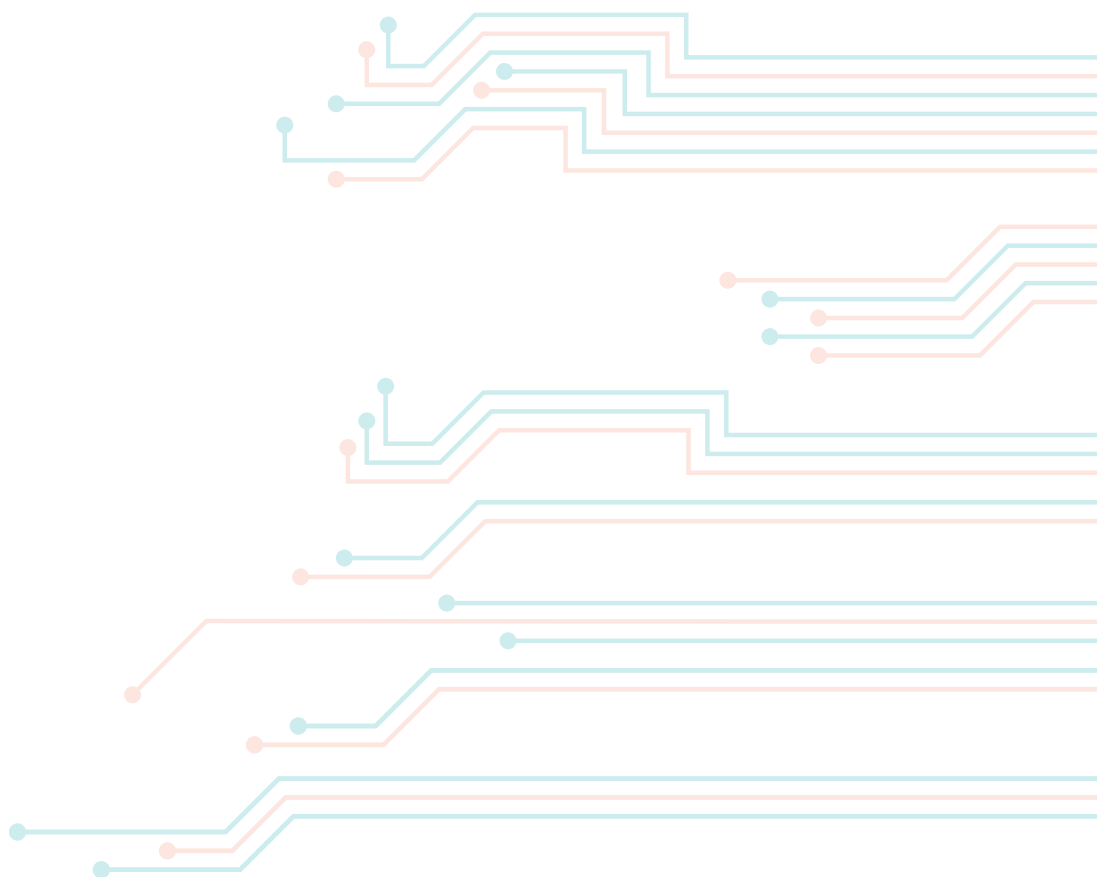
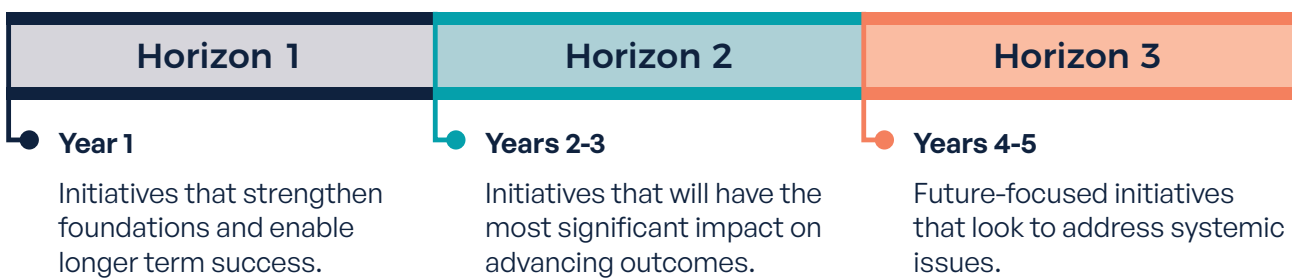


Each action area builds on important work underway across the system, which includes [APS Reform](#), [Delivering for Tomorrow: APS Workforce Strategy 2025](#), the [Commonwealth Aboriginal and Torres Strait Islander Workforce Strategy 2020-2024](#), the [APS Gender Equality Strategy 2021-2026](#), the [APS Academy](#), and the [Data and Digital Professions](#).

The action areas include key enablers or levers outside of the initiatives in this plan, which support agency-level recruitment, development and deployment of their data, digital and cyber workforce. Enablers present an opportunity for agencies to implement low-cost initiatives by leveraging in-flight work.

## Implementation horizons

Three implementation horizons ensure the appropriate sequencing of initiatives, from strengthening foundations to embracing future-focused initiatives that address systemic issues. In some cases, Horizon 3 initiatives may require longer lead time, policy or legislative change, or additional investment.



## ACTION AREA 1:

# Attract, recruit and retain a data, digital and cyber workforce



**We will attract top data, digital and cyber talent, streamline recruitment processes and position ourselves as a modern employer in a challenging labour market.**

## New initiatives

### Horizon 1 (year 1)

#### **APS digital and cyber employee value proposition**

Extend the APS Employee Value Proposition (EVP) for digital and cyber workers to attract the professional and technical capability needed in agencies.\*

The digital and cyber EVP will be based on research and co-design to identify attraction and retention drivers for digital and cyber employees, including targeted diversity cohorts (First Nations and women) and those seeking a career change.

This EVP will be supported by an awareness campaign to drive interest in joining the APS through content, employee stories and digital thought leadership.

\*A data-specific EVP is currently being developed by the APS Data Profession.

#### **Enhance APS-wide recruitment programs and pathways**

Leverage and improve existing recruitment programs and practices to further build awareness and affiliation with the APS employment brand amongst target candidates, including school leavers and career changers.

Review existing programs including program efficiencies, agency adoption and additional career development methods such as secondments across the APS and into the private sector.

Re-position the Digital Traineeship Program as a mid-career or career transition program to support mid-career professionals seeking a career change, given that this program has shown high potential with a growing number of diverse applicants with significant work experience.

Raise awareness across the APS of the benefits of engaging mid-career employees, educate people leaders on the experiences of candidates in the APS Digital Traineeship Program and develop a range of materials to support agencies.

#### **APS Career Pathfinder and APSJobs enhancements**

Enhance Career Pathfinder and APSJobs to help the APS to find and manage the future APS workforce, support proactive talent engagement, improve job-ready skill acquisition and assist APS agencies with ongoing workforce and skills planning.

## Horizon 2 (years 2-3)

### **Data, digital and cyber workforce recruitment pilot**

Building off the digital and cyber EVP (Horizon 1) and the Innovative Hiring Practices initiative to be delivered by the APSC, design and pilot a modernised hiring process for mid-career data, digital and cyber workers that balances time-to-hire with quality-of-hire considerations.

### **Digital Role Description Library extension**

Extend the Digital Role Description Library in the Career Pathfinder to encompass emerging roles and encourage its broader adoption. Role description templates will be written by domain professionals for domain professionals that reduce jargon and foster inclusive work practices.

In addition, certain roles (such as Chief Information Security Officer) would benefit from consistency in definition and accountability standards based on the approach taken by the DTA in developing a standard for officials who are accountable for their agency's implementation of the Policy for the responsible use of AI in government.

### **Data and Digital Cadet Program extension**

Engage with academia to attract graduates straight from VET/TAFE and universities, and extend the Data and Digital Cadet Program to include those interested in pursuing cyber security careers in the APS.

Develop targeted attraction campaigns for engaging First Nations graduates and female graduates. Incorporate targets into the Data and Digital Cadet Program for hiring of First Nations employees and women.

### **AI skills suggester**

Scope the development of, or investment in, an AI skills suggester integrated in the Career Pathfinder Tool to match jobs with skills and to connect non-APS job seekers with relevant APS employment opportunities.

## Horizon 3 (years 4-5)

### **Reduce barriers to re-entry**

Work across the APS to:

- reduce inefficient practices and hurdles that typically deter former employees from re-joining the APS
- enable the APS to rapidly recapture essential talent
- strengthen cross-sector collaboration
- increase the likelihood of top talent viewing the APS as a flexible and long-term career option.

## Supporting activities and enablers

Key activities underway that support this plan

### APS Employee Value Proposition

The APS Employee Value Proposition (EVP) was developed during 2023 and is now available on APSJobs, alongside stories featuring APS employees.

A strong, authentic and well-communicated EVP is critical to positioning the APS as a model employer so it can attract and retain the workforce it needs now and into the future.

The EVP is supported by periodic paid social media placement to raise awareness of and affiliation with the APS employment brand. The EVP will be reviewed regularly to ensure it continues to reflect the strengths of the APS offer and remains relevant in the employment market over time.

### APS data employee value proposition

The Data Profession is developing a whole-of-APS data EVP.

### Supported career pathways

Several whole-of-government programs provide supported career pathways for new and experienced workers to join the APS, for example:

- Data cadets
- APS Digital Traineeship Program
- Australian Government Graduate Program (in particular, the STEM, Digital, Intelligence and Data streams).

### APS Location Framework

Employing a workforce in a range of locations can help agencies fill critical skill gaps, support connection to country and community, strengthen diversity and support stakeholder relationships.

The APS Location Framework equips agencies to use workforce location as a tool to attract and retain people who have the skills the APS needs, now and into the future. It connects agency heads and their corporate teams to tools that can support their decisions on appropriate workforce locations in Australia and shows what it looks like to manage and support a dispersed workforce well.

### Innovative hiring practices, including the sharing of merit lists

The APSC is supporting agencies to attract the workforces they need through the piloting of innovative attraction, assessment and recruitment options and the provision of better practice APS recruitment guidance.

### SES100

The SES100 initiative supports the government's commitment to boost First Nations employment across the APS by increasing representation at the Senior Executive Service (SES) levels to 100 by 2024-25. Round 2 of the SES100 initiative includes professional streams for both digital and data professionals.

### Job Family Framework review

The APSC routinely reviews and updates the APS Job Family Framework to ensure it remains relevant and fit for purpose. The framework is currently being updated to align with Australian Bureau of Statistics and Occupation Standard Classification for Australia (OSCA) data.

This foundational tool supports consistent workforce planning and reporting across the APS, enabling agencies to gain a deeper understanding of their workforce and anticipate future workforce challenges.

### APS Gender Equality Strategy 2021-2026

The APS Gender Equality Strategy 2021-26 seeks to drive practical and impactful action for lasting change.

### Affirmative measures (Aboriginal and Torres Strait Islander Australians and those with disability)

Affirmative measures provisions within the *Public Service Act* allows particular jobs in the APS to be open to certain cohorts. This applies to people with disability and Aboriginal or Torres Strait Islander Australians. The measures are designed to address the under-representation of each cohort in the APS.

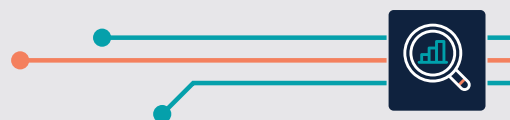
### NSW Digital Skills and Workforce Compact

The compact is a partnership between the NSW Government, the digital industry and education and training sectors seeking to leverage a collective approach to effectively address projected digital workforce shortages in NSW.

## Case study

### Streamlining the tech hiring process

*Services Australia: enterprise architect recruitment pilot*



The enterprise architect recruitment pilot was initiated in response to Services Australia's growing need for architectural expertise to support its expanding technological offerings. With the rapid pace of technological innovation, it became clear that attracting and retaining top-tier enterprise architects was crucial for maintaining competitive advantage and driving strategic initiatives. The pilot aimed to refine the recruitment process and attract the best talent available.

To achieve this, the pilot established a multi-disciplinary team and embraced agile project methodologies, promoting a collaborative and adaptive working environment. A comprehensive labour market analysis was conducted to pinpoint talent trends and fine-tune recruitment strategies. Employee experiences were meticulously captured to gain insights into candidate expectations and Services Australia's cultural dynamics. Furthermore, strategic communication tactics were deployed and social media platforms leveraged to build excitement, interest and engagement throughout the recruitment process.

Candidate statistics reflected the project's success, with a notable increase in the quality and quantity of applicants. The recruitment process attracted a diverse pool of over 200 highly qualified candidates, with an interview-to-hire ratio of 5:1.

This influx of talent significantly strengthened the architectural expertise, driving innovation and strategic growth. Moreover, the positive feedback from candidates highlighted the effectiveness of the new recruitment strategies, further validating the project's approach and outcomes.

## ACTION AREA 2:

# Uplift technical capabilities

Master  
your Craft

apsacademy.gov.au

**We will ensure long term data, digital and cyber workforce capability by providing career pathways and mobility opportunities, investing in continuous skill development and strengthening in-house expertise.**

### New initiatives

#### Horizon 1 (year 1)

##### **EL2 and SES data capability uplift**

Improve and expand on existing SES and EL2 Data Leadership modules (APS Academy) and promote their broader adoption to build baseline capability across the APS leadership cohort.

##### **SES Accountabilities for Data**

Promote the SES Accountabilities for Data to assist agencies to empower their data leaders, treat data as an asset, make data-driven decisions and build appropriate data fluency and capability, including as it relates to privacy principles and ethics.

Implementing the SES Accountabilities for Data will give agencies greater oversight of their data holdings, enabling more effective, efficient, economical and ethical management of data, and leading to better policy, programs, and services for Australians.

##### **APS digital skills program (pilot)**

Take a collective approach to upskilling APS employees in critical technology, digital, cyber and adjacent roles through mobility into expert 'host' agencies where there are deep pockets of expertise. Mobility amongst First Nations employees and people with disability will be encouraged.

Host agencies will provide on-the-job training and mentoring, access to technology, learning courses and on-demand platforms, support with accessibility and cultural safety. In addition, there is the opportunity to learn alongside technical experts while working on projects that enable employees to implement their skills as they learn before returning to their home agency.

##### **SRO digital governance program**

Empower EL and SES leaders with the capability to lead and govern digital projects, driving a culture of continuous improvement and transparency through a unified approach to capability development that supports the success of digital transformation initiatives.

## **Support legacy technology transition**

Partner with industry to develop and fund critical skill development programs for current and potential APS employees to maintain legacy systems while supporting the transition to modern systems.

### **Horizon 2 (years 2-3)**

#### **Technical fast track (digital skills uplift program extension)**

Extend the APS digital skills program (Horizon 1), to accelerate the development of deep technical expertise at pace and scale through experiential and formal learning, linked to career pathways.

The initial focus of the fast-track pilot will be on highly specialised, high-demand roles and projects, informed by the Digital Project Pipeline.

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#### **Data capability uplift (academic extension)**

Partner with academia and with industry bodies to foster development pathways that grow the general workforce data capability of the APS including targeted attraction campaigns for engaging First Nations and female graduates.

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#### **Transition to retirement guidance**

Improve the retention of critical knowledge by developing better practice guidance and/or a toolkit for agencies to support conversations about retirement intentions, workplace flexibility options, knowledge transfer practices (including how to build this into contracts) and succession planning.

### **Horizon 3 (years 4-5)**

#### **APS digital micro-credentialing bootcamps**

Partner with leading academia, industry and private sector technology leaders, and leverage Volume Sourcing Agreements to fund and co-design targeted micro-credentialing and capability development programs for employees.

## Supporting activities and enablers

Key activities underway that support this plan

### APS Digital and Data Professions

The APS Professions model is a capability building initiative for APS employees working in critical disciplines where there is a shortage of specialists. Members of the Digital and Data Professions are provided with online communities, peer-based learning opportunities and career development.

### APS Academy

The APS Academy fosters an APS-wide culture of learning. It works in collaboration with APS agencies and industry to build core public sector capabilities that drive high performance, including leadership capability and APS Craft.

The APS Academy will continue to reach into its broader academy network model across the APS to support APS-wide capability uplift.

### APS Academy Campuses

APS Academy Campuses enable Australians looking for a career change and students in regional areas the opportunity to build their skills in data and digital roles in the APS, without having to leave their communities.

It is a pilot program established by the APSC in partnership with the University of Newcastle and James Cook University in Townsville.

### APS Data Capability Framework

The APS Data Capability Framework provides the foundation to building APS data capability and supporting data career paths. It is relevant to all people in the APS who work with and use data in some way. The framework is supported by a self-assessment tool.

## Policy for the responsible use of AI in government and AI fundamentals training

To support agencies in the use of AI, the Australian Government developed and published the Policy for the responsible use of AI in government. The policy sets out how the APS will:

- embrace the benefits of AI by engaging with it confidently, safely and responsibly
- strengthen public trust through enhanced transparency, governance and risk assurance
- adapt over time by embedding a forward-learning approach to changes in both technology and policy environments.

The policy outlines mandatory agency actions, including identifying an accountable official for implementing the policy and publishing a transparency statement about the agency's use of AI.

Under the policy, agencies are strongly encouraged to implement AI fundamentals training for all employees, and additional training where required for a role. The DTA has developed an AI in government fundamentals training module to support agencies with implementing this recommendation. The module provides foundational knowledge of AI, the principles of safe and responsible use, and how to put these to work in the APS.

### SES and EL2 Data Leadership modules (APS Academy)

These courses are designed to enhance data leadership knowledge and capability, focusing on the role data plays in the work of the APS and critical issues that impact on the availability, integrity and use of data. The aim of the course is to build a data driven culture and to maximise the value of public sector data through greater use and re-use.

Learning content has been created by the Australian National University (ANU) in partnership with the ABS and the APS Data Profession. The courses are pitched at SES and EL2 officers working in policy, regulatory, corporate, service delivery and other roles where employees may not regard themselves as data professionals.



## Curated 'data' learning offerings

A key focus of the APS Data Profession is building data capability across the APS through providing access to learning offerings.

The expanded list of approximately 150 courses mapped to multiple data job roles is accessible via the APSC's Career Pathfinder tool.

In addition, APS employees will soon have access to a range of modules to develop deep contextual understanding of data in government. Topics such as the importance of trust in data and government, evidence-based decision-making, and data storytelling and visualisation are currently delivered by a range of APS agencies to data graduates.

Modules will be available to all APS employees from 2025 (via APS Learn) as a refreshed data fluency course offering.

## APS Leadership Edge

APS Leadership Edge is a cohort-based social learning program which enables EL2 leaders to develop their leadership and management skills through a range of courses and activities. Four learning sprints are delivered in the program based on current APS needs and areas of interest.

## Data and Digital Communities of Practice

Several Data Communities of Practice are hosted on the APS Data Profession's Member Community Platform (MCP), some of which are shared between the APS Data and Digital Professions.

Communities of practice bring peers together to share knowledge. Since launching in 2002, the MCP has grown significantly to over 11,000 members in 2025.

## Regional collaboration (AI)

The Memorandum of Understanding on Cooperation on Artificial Intelligence between the Australian Government and the Government of the Republic of Singapore recognises opportunities for practical collaboration between the two governments on matters such as: the sharing of best practice; policies and research; data sharing; workforce competency development (including through training and certification programs); ethics and governance; and safety and standards.

## Case study

### Data capability uplift

*The APS Data Profession: a multi-agency approach to developing capability*

The APS Data Profession was established in 2020 and aims to uplift data capability across the APS. A signature initiative of the [Data Professional Stream Strategy](#) was streamlining data graduate recruitment through innovative recruitment practices to attract entry-level data professionals. The ABS has led the data graduate recruitment initiative since 2021 and has placed over 850 data graduates, with a further 300 vacancies expected to be filled through the 2025 intake. The number of participating agencies has increased over the last five years from 11 to 43.

To develop sophisticated data capabilities from the outset, the 'Introduction to Data in Government' modules were created through a multi-agency project team spanning the ABS, Department of Education, and Department of Social Services. These modules were delivered virtually in 2023 and 2024 to over 500 data graduates from 39 agencies by data experts across various APS agencies. The APS Academy's Graduate Development Program and some facilitating agencies delivered the modules or a subset thereof to non-data graduates, demonstrating the modules' value for general data capability uplift. The Data Profession is exploring e-learning options to help transform these modules into an accessible whole-of-APS data capability offering in APS Learn.

The APS Data Profession's capability uplift initiatives extend to a Members' Community Platform hosting 11,000 members, foundational products including the Data Capability Framework, Data Job Role Personas and data leadership courses for SES and EL2s.



## Case study

### Building internal capability to reduce contractor reliance

*The Department of Home Affairs: from vision to reality - building APS teams*



In September 2023, the Digital Workflow Platforms and System Support (DWPSS) section was established in the Department of Home Affairs to deliver and maintain the ServiceNow platform for both internal and external clients. The team faced a significant reliance on specialist external labour to support critical technical functions, including application enhancements and upgrades. This reliance resulted in knowledge retention challenges, high delivery costs and limited continuity of service.

Recognising the unsustainability of long-term contractor dependence, the department initiated a strategic effort to build internal APS specialist capabilities, foster a skilled in-house workforce and create a high-performance culture aligned with the department's growth objectives.

Several milestones were achieved in seven months, including:

- conducting a comprehensive skills assessment, identifying Java development skill gaps and pinpointing roles with the highest contractor reliance
- developing a detailed training roadmap to upskill employees and ensure they attain necessary certifications
- leveraging the cadets program and non-ongoing recruitment to address workforce gaps
- providing cross-functional training to broaden employees' expertise and foster collaboration
- drafting a succession plan to enhance employee retention and ensure critical roles are filled.

This initiative demonstrates that investment in internal talent can reduce contractor dependency while boosting operational efficiency, employee engagement and retention, ultimately creating a more sustainable specialist workforce for the future.



## ACTION AREA 3:

# Grow and deploy a specialist cohort



**We will address the immediate need for critical data, digital and cyber specialists, recognising these capabilities are difficult to source and take time to grow.**

## New initiatives

### Horizon 1 (year 1)

#### Specialist deployment framework

Develop a framework to encourage the temporary deployment of specialist expertise across the APS, including:

- improving the visibility across the APS of which agencies hold particular specialist expertise
- principles to support agency decision making regarding the release/deployment of specialist capability to critical projects.

### Horizon 2 (years 2-3)

#### Specialist work level standards

Explore the potential for specialist work level standards or extended specialist classifications to support the career advancement of specialist/technical employees based on the experience of medical officers and the Defence Science and Technology Group. This can only be progressed following a broader review of APS work level standards.

### Horizon 3 (years 4-5)

#### Explore options for APS digital, data and cyber remuneration and conditions

Drawing on the annual APS digital, data and cyber salary survey and remuneration report as a key input, explore options to reduce the gap between public and private sector remuneration for specialists and minimise sector-wide competition for specialist talent within the context of a broader EVP strategy.

## Supporting activities and enablers

Key activities underway that support this plan

### APS Strategic Commissioning Framework

Agency heads are accountable for rebalancing their workforce to prioritise direct employment for core work, including any ‘ICT and Digital Solutions’, ‘Data and Research’ and cyber related work their agency identifies as core. The Strategic Commissioning Framework sets this policy direction for the APS and provides guidance to support agencies to make this change.

### Contractor conversion

Conversion of contract labour occurs when a position or role that is currently being, or would normally be, performed by a contractor becomes an APS position or role. Contractor conversion is currently an activity being progressed in many agencies to rebalance their workforce and to build in-house specialist expertise.

### Specialist arrangements guidance

The APSC has provided [guidance](#) to agencies which assists in defining a specialist and in creating senior specialist roles.

## Case study

### Tapping into mid-career talent

Meet Brandon

The Australian Government Digital Traineeship Program (AGDTP) is an innovative capability building initiative introduced in 2022. The program is designed to address the digital skills shortage and increase digital workforce diversity across the APS by attracting First Nations peoples, women, people aged over 45 and veterans.

The AGDTP encourages skilled individuals with diverse working experience to transition into a digital career in the APS. Through a combination of hands-on-training, expert mentorship and real-world project experience trainees can rapidly develop the expertise needed to support digital transformation across the APS.

Brandon Maruna, an ADF veteran with over a decade of experience, was recruited via the AGDTP into a digital specialist role in the APSC in 2023. An interest in emerging technology, coding and web development, combined with prior working experience, allowed Brandon to transition into an APS5 role focused on the continued development of the APS Career Pathfinder tool.

*“The skills I’ve developed in the Army, such as working in a high-pressure team environment, attention to detail and problem-solving complex systems, are directly transferrable into a digital role. Thanks to the AGDTP I’ve been able to leverage these skills from day one and look forward to building my digital future in the public service.”* – Brandon.

The program provides the APS with a year-round recruitment mechanism, strengthening the talent pipeline to address immediate and emerging capability gaps.



## ACTION AREA 4:

# Increase capability planning maturity



**We will enhance capability planning maturity across the APS by leveraging data-driven insights and ensuring access to high-quality data, empowering agencies to make informed workforce decisions.**

## New initiatives

### Horizon 1 (year 1)

#### **Digital workforce data insights report**

Develop a digital workforce data insights report to improve the ongoing collection, analysis and reporting of workforce data, risks and insights for agencies.

#### **Remuneration benchmarking and report (pilot)**

Undertake external salary benchmarking for the top five in-demand data, digital and cyber roles to inform options to close the gap between public/private sector remuneration for specialists, reduce internal competition for talent and strengthen the overall EVP for the APS.

A remuneration report will be prepared to support talent management and retention efforts in agencies by ensuring salary negotiations are aligned with employee's experience, qualifications and skills and considered in the context of the broader APS EVP. The remuneration report will be closely linked to broader contractor conversation strategies.

#### **Harmonise workforce data**

Develop a workforce data strategy and roadmap to improve the consistency of workforce data across the APS, enhance workforce planning capability and better inform future strategic and operational decisions. This includes:

- agreeing baseline workforce data to be collected
- common data capture approaches
- improvements to APSJobs
- data harmonisation
- guidance to support agencies.

## Horizon 2 (years 2-3)

### Long-term insights briefing

Develop an insights briefing on emerging technology to inform thinking and decision making on specific policy and workforce challenges that may affect Australia and the APS in the medium and long term.

### Skills forecasting and program policy alignment

Collaborate with agencies to identify current and future skills needs, using data collection from Digital Investment Plans, Career Pathfinder, and/or direct engagements.

Align data, digital and cyber workforce programs and policies, such as entry-level programs and learning and development offerings, to better address identified and anticipated critical skills gaps.

Explore opportunities to enhance capability through Volume Sourcing Agreements and contracts that incorporate skills building.

## Horizon 3 (years 4-5)

### Digital skills directive

Develop a digital workforce policy or other appropriate instrument, aligned with contemporary policy development approaches and based on digital workforce data, to enhance APS-wide planning, data collection and reporting.

## Supporting activities and enablers

Key activities underway that support this plan

### APS workforce data

The APSC collects workforce information in a number of different ways to provide a full picture of the APS workforce. Regular data updates are published online, including:

- APS Employment Data Releases
- APS Employment Database interactive interface (APSEDii)
- APS Employee Census
- APS New Starter Survey
- APS Remuneration Reports
- State of the Service Reports.

### APS Data Maturity Assessment Tool and guide

The Department of Finance has developed the Data Maturity Assessment Tool to provide agencies with a consistent approach to measuring and understanding their organisation's data maturity.

The tool has been released for annual completion by in-scope government agencies. The tool's results will help agencies understand and strengthen their data capabilities, identify their capability gaps, compare their progress against other agencies over time, and support cross-agency activities. The tool will provide evidence of the data maturity of the APS as a whole to support decision making and target investment.

The assessment tool complements existing mechanisms and is an important source of metrics to measure progress towards the Data and Digital Government Strategy's 2030 vision.

### APS digital maturity assessment

The DTA is currently working with agencies across the APS to explore a digital maturity assessment. A maturity assessment could provide agencies with a consistent approach to measuring and reporting their digital maturity and allow the DTA to adapt requirements for digital proposals and projects based on varying levels of agency maturity.

## Data Job Role Personas

The suite of Data Job Role Personas developed by the Data Profession in collaboration with the Australian Taxation Office cover roles such as data architect, analyst, engineer, manager, scientist, steward and translator, as well as geospatial analyst, metadata specialist and statistician.

Each persona includes key descriptors to provide a common language as well as keywords at a glance, industry standards, key technologies, potential domain interactions and connections across the data lifecycle.

The personas assist agencies to describe essential skills and knowledge and enhance skills mapping.

## APS Centre of Excellence for Workforce Planning

The APS Centre of Excellence for Workforce Planning supports the implementation of Delivering for Tomorrow: APS Workforce Strategy 2025 through building and deploying a strategic workforce planning capability in the APS.

## APS Workforce Metrics Modernisation Program

The APS Workforce Metrics Modernisation Program seeks to stabilise the APS Employment Database (APSED), improving its security, usability and functionality. The program aims to integrate APSED data with existing ABS data assets to enable APS agencies and external researchers to drive greater actionable insights from government employment data to support and improve government policy, programs and operations.

## Framework for Governance of Indigenous Data

The Framework for Governance of Indigenous Data aims to provide Aboriginal and Torres Strait Islander people greater agency over how their data are governed in the APS so government held data better reflects their priorities and aspirations.

## Case study

### Improving how we plan and deliver major digital investments

*The Digital Transformation Agency: the Investment Oversight Framework*

The Investment Oversight Framework (IOF) is a comprehensive management approach for digital and ICT-enabled investments across the Australian Government. The IOF supports the government in making informed decisions about digital investments, ensuring that they are well planned and that they are made at the right time and in the right way in order to realise planned benefits. Australia has been recognised as a world leader in this space as one of only five OECD countries with an integrated approach to digital investment oversight.

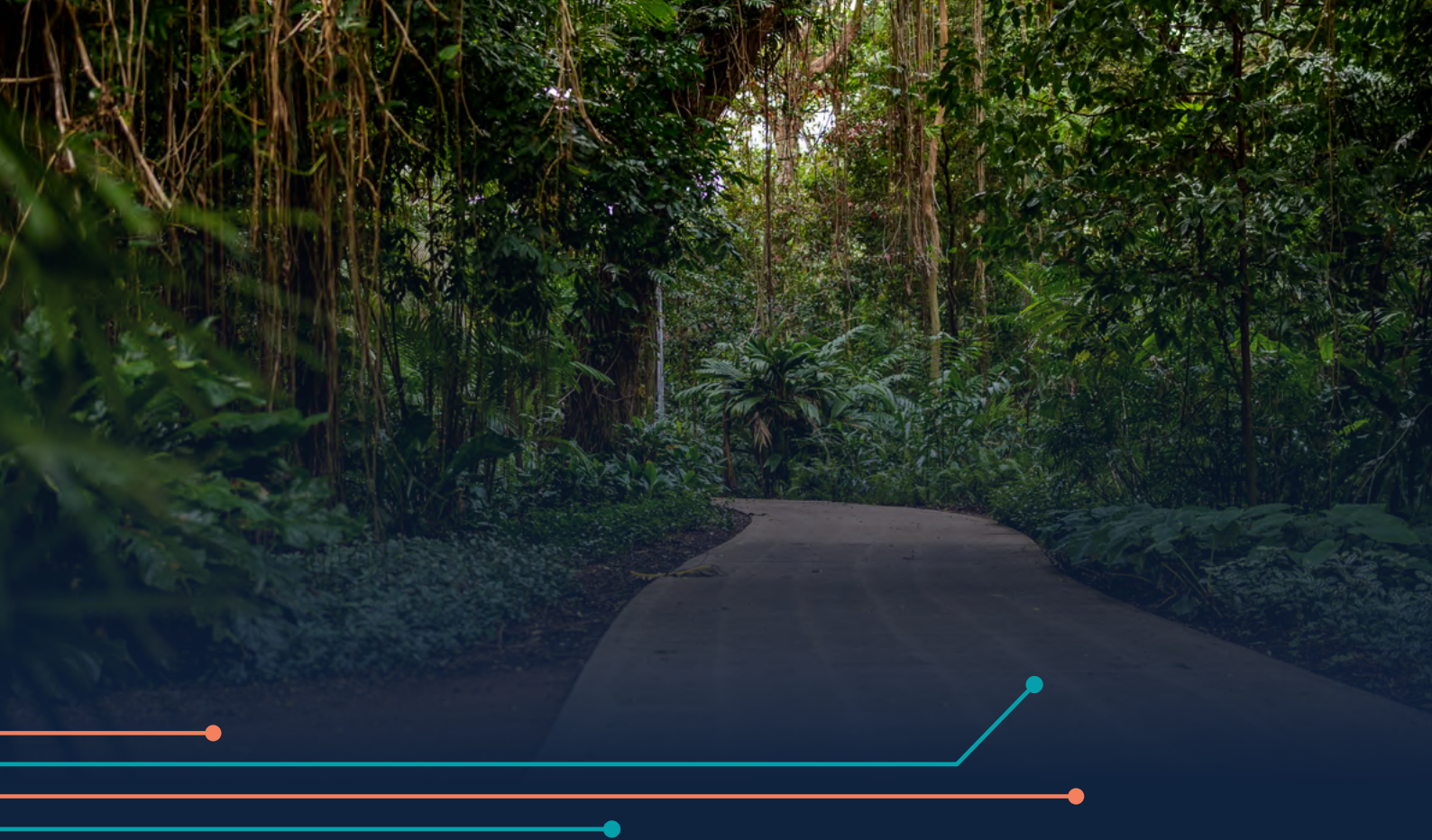
The IOF helps agencies to align their digital investment plans with broader government priorities, ensuring that investments are strategically sound and deliver long-term benefits.

This approach has enhanced consistency in the communication of agencies' proposal and project resourcing, allowing for a more vertical view of the skills required for the government's digital investment pipeline. This enables resourcing risks to be captured with more transparency leading to circular flow-on benefits to agencies, assisting them with their forward workforce planning and needs.

The IOF supports the vision of the DDGS by ensuring that digital investments align with the strategy's missions. One of the key elements of the strategy is to build a data and digital-capable APS. The IOF plays a crucial role in this mission by identifying capability gaps and prioritising investments that help to address these gaps. This helps to ensure that the workforce is equipped with the necessary skills and resources to support the government's digital transformation goals. The Framework's emphasis on strategic planning and continuous improvement helps build a mature and resilient digital workforce, capable of adapting to evolving technological demands.

Overall, the IOF provides a clear and consistent approach to digital investments, fostering a well-prepared and capable digital data and cyber workforce into the future.





## 5. Roadmap

### **The delivery of the workforce plan requires whole-of-APS collaboration and leadership.**

Sponsoring and contributing agencies for Horizon 1 initiatives have been identified, while those for Horizons 2 and 3 will be determined following the delivery of Horizon 1 initiatives. The delivery horizons build on important initiatives currently in place across the APS. In addition, they are deliberately flexible to allow for re-prioritisation and the addition of more ambitious targets at each annual review of the workforce plan.





**Table 2. APS Data, Digital and Cyber Workforce Plan roadmap**

<b>New initiatives and lead agencies</b>	<b>Horizon 1 Year 1</b> Initiatives that strengthen foundations and enable longer term success.	<b>Horizon 2 Years 2-3</b> Initiatives that will have the most significant impact on advancing outcomes.	<b>Horizon 3 Years 4-5</b> Future-focused initiatives that look to address systemic issues.
<b>Attract, recruit and retain a data, digital and cyber workforce</b>	<b>Digital and cyber employee value proposition</b> <i>Sponsor: Digital Transformation Agency</i> <b>Enhance APS-wide recruitment programs and pathways</b> <i>Sponsor: Australian Public Service Commission</i> <b>APS Career Pathfinder and APSJobs enhancements</b> <i>Sponsors: Australian Public Service Commission, Digital Transformation Agency</i>	<b>Data, digital and cyber recruitment pilot</b>  <b>Digital Role Description Library extension</b>  <b>Data and Digital Cadet Program extension</b>  <b>AI skills suggester</b>	<b>Reduce barriers to re-entry</b>
<b>Uplift technical capabilities</b>	<b>EL2 and SES data capability uplift</b> <i>Sponsors: Australian Bureau of Statistics; Australian Public Service Commission</i> <b>SES Accountabilities for Data</b> <i>Sponsor: Department of Finance</i> <b>APS digital skills program (pilot)</b> <i>Sponsor: Services Australia</i> <b>SRO digital governance program</b> <i>Sponsor: Digital Transformation Agency</i> <b>Support legacy technology transition</b> <i>Sponsor: Digital Transformation Agency</i>	<b>Technical fast track (digital skills program extension)</b>  <b>Data capability uplift (academic extension)</b>  <b>Transition to retirement guidance</b>	<b>APS digital micro-credentialing bootcamps</b>
<b>Grow and deploy a specialist cohort</b>	<b>Specialist deployment framework</b> <i>Sponsors: Digital Transformation Agency; Australian Public Service Commission</i>	<b>Specialist work level standards</b>	<b>Explore options for APS digital, data and cyber remuneration and conditions</b>
<b>Enhance capability planning maturity</b>	<b>Digital workforce data insights report</b> <i>Sponsors: Digital Transformation Agency; Australian Public Service Commission</i> <b>Remuneration benchmarking and report (pilot)</b> <i>Sponsors: Digital Transformation Agency; National Disability Insurance Agency</i> <b>Harmonise workforce data</b> <i>Sponsor: Digital Transformation Agency</i>	<b>Long-term insights briefing</b>  <b>Skills forecasting and program policy alignment</b>	<b>Digital skills directive</b>



## 7. Governance, evaluation and reporting

**The governance, evaluation and reporting of this plan will prioritise pragmatism and flexibility. This will allow responsiveness to, and alignment with, the dynamic nature of the data, digital and cyber domains.**

The APSC will oversee and manage progress against this plan, working closely with initiative sponsors and subject matter expert agencies and without imposing unnecessary reporting burden on agencies.

This plan is supported by an endorsed evaluation framework. Evidence that will be used to track progress against this plan include measures

relating to recruitment, retention, diversity group representation, employee experience and capability.

To streamline reporting, the APSC will collaborate with the DTA to report to the Digital Leadership Committee as part of a standing agenda item. For initiatives impacting the data domain, there may be instances where the Data Deputy Secretary Governance Group is used to oversee the progress of initiatives. This flexible approach ensures initiatives are attached to suitable governance pathways, avoiding duplication and maintaining transparency and efficiency.

This plan will be reviewed annually. As new priorities emerge, adjustments may be made to initiatives to ensure this plan remains contemporary.

# Appendix 1: Workforce profiles



## APS data workforce



**>5,500**

data professionals within the APS workforce



**3.2%**

of the total APS workforce

Predominantly represented within the 'Data and Research' job family

### Labour market insights

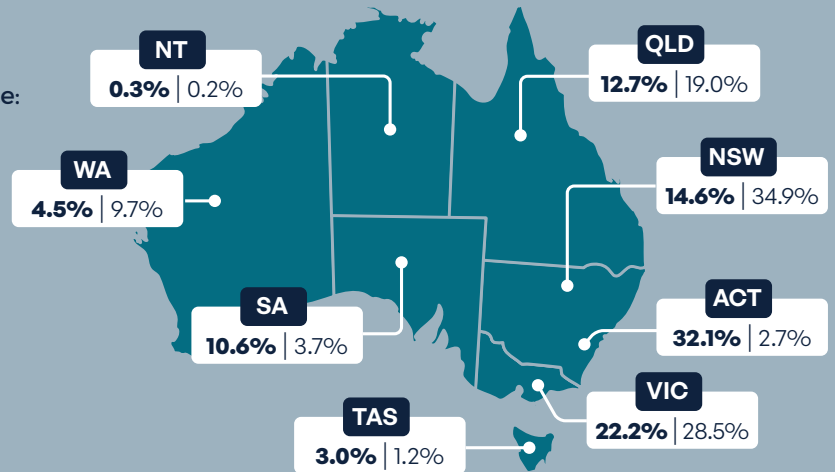
Location of the Australian data workforce: APS (bolded) compared to broader labour market

APS workforce distribution, 'Data and Research' job family, ongoing employees only.

Source: APSED database (Agency HR systems); 30 June 2024

Australian Labour Market (weighted average, ANZSCO-4).

Source: ABS Labour Force Sept 2024 Release, EQ08 May 2024



### During 2023-24



**746**

ongoing employees were engaged to the APS within the 'Data and Research' job family



**2.8%**

ongoing employees within the 'Data and Research' job family separated from the APS



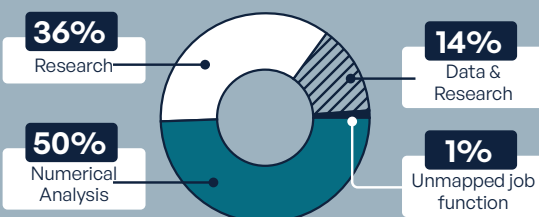
**70%**

of APS agencies identified critical data skill shortages

### Cohort diversity (ongoing employees)

Measure	First Nations	CALD	LGBTIQ+	Female	Disability	Neurodivergent	Aged 55+
'Data and Research' job family	1.1%	31.4%	32.5%	46.7%	5.7%	11.9%	15.1%
APS	3.4%	25.8%	7.2%	60.2%	5.6%	8.5%	18.1%

### Job function breakdown



Source: APS Employment Database (APSED); June 2024; 'Data and Research' job family, ongoing staff only

### Emerging roles we may be recruiting for in 2030

- Data privacy expert
- Machine learning engineer
- Algorithm bias auditor
- Data detective

Representing the significant role played by big data in complex problem solving, coupled with a focus on data privacy, ethics and scrutiny.

# APS digital workforce



**>7,500**

digital professionals within the APS workforce



**4.4%**

of the total APS workforce

Predominantly represented within the 'ICT and Digital Solutions' job family

## Labour market insights

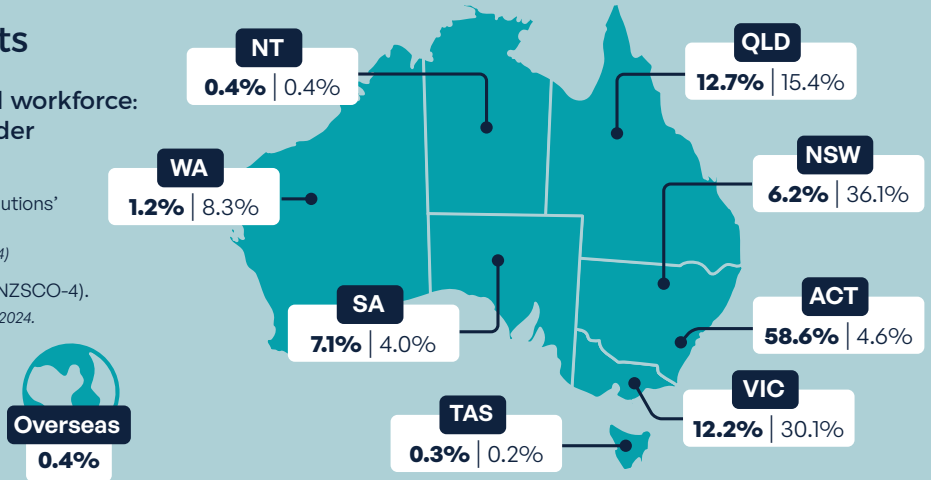
Location of the Australian digital workforce: APS (bolded) compared to broader labour market

APS Workforce Distribution, 'ICT and Digital Solutions' job family, ongoing employees only.

Source: APSED database (Agency HR systems, June 2024)

Australian Labour Market (weighted average, ANZSCO-4).

Source: ABS Labour Force Sept 2024 Release, EQ08 May 2024.



## During 2023-24



**845**

ongoing employees were engaged to the APS within the 'ICT and Digital Solutions' job family



**3.2%**

ongoing APS employees within the 'ICT and Digital Solutions' job family separated from the APS



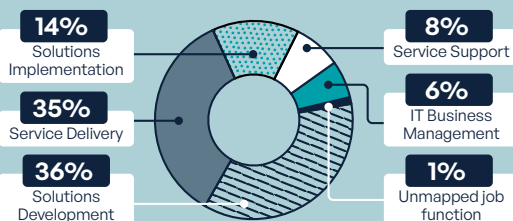
**71%**

agencies identified critical digital and ICT skill shortages

## Cohort diversity (ongoing employees)

Measure	First Nations	CALD	LGBTIQ+	Female	Disability	Neurodivergent	Aged 55+
'ICT and Digital Solutions' job family	1.6%	39.0%	32.5%	32.5%	6.0%	9.8%	21.1%
APS	3.4%	25.8%	7.2%	60.2%	5.6%	8.5%	18.1%

## Job function breakdown



Source: APS Employment Database [APSED], 30 June 2024, 'ICT and Digital Solutions' job family, ongoing staff only

## Emerging roles we may be recruiting for in 2030

- Cloud automation engineer
- Human-machine interface manager
- XR immersion counsellor

Representing shifts in how the APS will deliver services, solve problems, build capability and interact with the public.

# Appendix 2: Data tables

## 1. Workforce size and distribution

**Table 1.1 Headcount (ongoing employees)**

	30 June 2023	30 June 2024
All APS job families	151,058	170,186
Data and Research job family	4,813	5,506
ICT and Digital Solutions job family	6,757	7,556

**Table 1.2 Proportion of ongoing APS workforce**

	30 June 2023	30 June 2024
All APS job families	100.0%	100.0%
Data and Research job family	3.2%	3.2%
ICT and Digital Solutions job family	4.5%	4.4%

**Table 1.3 Headcount (non-ongoing employees)**

	30 June 2023	30 June 2024
All APS job families	19,071	15,157
Data and Research job family	444	381
ICT and Digital Solutions job family	234	320

**Table 1.4 State with largest gap: ongoing APS workforce distribution compared to broader labour market distribution**

	30 June 2023	30 June 2024
All APS job families	n/a	n/a
Data and Research job family	-	+29% (ACT)
ICT and Digital Solutions job family	-	+54% (ACT)

**Table notes:** Data sourced from the APS Employment Database – Data Release Tables as at 30 June 2023 and 30 June 2024, and Australian Labour Market (weighted average, ANZSCO-4), ABS Labour Force September 2024 release, EQ08 May 2024. Non-ongoing employee count includes non-ongoing (specified term), non-ongoing (specified task) and casual employment categories.

## 2. Attraction, recruitment and retention (ongoing employees only)

**Table 2.1 Number of ongoing engagements to the APS**

	FY 2022-23	FY 2023-24
All APS job families	22,056	30,540
Data and Research job family	406	746
ICT and Digital Solutions job family	636	845

**Table 2.2 Mobility rate**

	FY 2022-23	FY 2023-24
All APS job families	5.4%	5.3%
Data and Research job family	3.4%	3.4%
ICT and Digital Solutions job family	3.3%	3.0%

**Table 2.3 Average length of service (years)**

	30 June 2023	30 June 2024
All APS job families	12.1	11.2
Data and Research job family	12.4	11.4
ICT and Digital Solutions job family	13.1	12.6

**Table 2.4 Average length of service at time of separation from the APS (years)**

	30 June 2023	30 June 2024
All APS job families	12.5	11.3
Data and Research job family	12.5	13.9
ICT and Digital Solutions job family	13.8	14.8

**Table 2.5 Voluntary separation rate (resignations from the APS), ongoing employees only**

	FY 2022-23	FY 2023-24
All APS job families	4.9%	4.3%
Data and Research job family	4.3%	2.8%
ICT and Digital Solutions job family	3.6%	3.2%

**Table notes:** Data sourced from the APS Employment Database – Data Release Tables as at 30 June 2023 and 30 June 2024. The mobility rate represents the number of movements (promotion to another agency, permanent transfer and transfer to a lower classification) divided by the average headcount for the same period. Average length at time of separation includes all separation types.

### 3. Diversity (ongoing employees only)

**Table 3.1 First Nations**

	30 June 2023	30 June 2024
All APS job families	3.5%	3.4%
Data and Research job family	1.6%	1.1%
ICT and Digital Solutions job family	1.7%	1.6%

**Table 3.2 Culturally and Linguistically Diverse**

	30 June 2023	30 June 2024
All APS job families	24.4%	25.8%
Data and Research job family	30.0%	31.4%
ICT and Digital Solutions job family	39.5%	39.0%

**Table 3.3 LGBTIQA+**

	2023	2024
All APS job families	8.3%	8.9%
Data and Research job family	9.8%	10.3%
ICT and Digital Solutions job family	7.0%	7.2%

**Table 3.4 Female**

	30 June 2023	30 June 2024
All APS job families	60.0%	60.2%
Data and Research job family	47.8%	46.7%
ICT and Digital Solutions job family	32.3%	32.5%

**Table 3.5 Disability**

	30 June 2023	30 June 2024
All APS job families	5.4%	5.6%
Data and Research job family	5.5%	5.7%
ICT and Digital Solutions job family	5.6%	6.0%

**Table 3.6 Neurodivergent**

	2023	2024
All APS job families	7.3%	8.5%
Data and Research job family	10.7%	11.9%
ICT and Digital Solutions job family	8.8%	9.8%

**Table 3.7 Age 55+**

	30 June 2023	30 June 2024
All APS job families	18.6%	18.1%
Data and Research job family	14.8%	15.1%
ICT and Digital Solutions job family	20.7%	21.1%

**Table notes:** Data sourced from the APS Employment Database – Data Release Tables as at 30 June 2023 and 30 June 2024. APS Employee Census data was used to determine the relative proportion of neurodivergent and LGBTIQ+ employees, calculated as the number of employees answering ‘yes’ to neurodivergent or LGBTIQ+ diversity questions as a proportion of all employees responding to the APS Employee Census.

## 4. Capability

**Table 4.1 My workgroup has the appropriate skills, capabilities and knowledge to perform well**

	2023	2024
All APS job families	78%	78%
Data and Research job family	81%	82%
ICT and Digital Solutions job family	75%	77%

**Table notes:** Data sourced from the APS Employee Census, ‘agree’ and ‘strongly agree’ responses, ongoing APS employees only by job family.



## 5. Employee experience (ongoing APS employees)

**Table 5.1 Overall, I am satisfied with my job**

	2023	2024
All APS job families	73%	75%
Data and Research job family	77%	79%
ICT and Digital Solutions job family	71%	74%

**Table 5.2 I am fairly remunerated (e.g salary, superannuation) for the work that I do**

	2023	2024
All APS job families	50%	63%
Data and Research job family	54%	64%
ICT and Digital Solutions job family	44%	57%

**Table 5.3 I am satisfied with my non-monetary employment conditions (e.g leave, flexible work arrangements, other benefits)**

	2023	2024
All APS job families	75%	82%
Data and Research job family	82%	90%
ICT and Digital Solutions job family	76%	84%

**Table 5.4 I want to leave my position as soon as possible/in the next 12 months**

	2023	2024
All APS job families	34%	32%
Data and Research job family	31%	30%
ICT and Digital Solutions job family	30%	28%

**Table 5.5 I want to leave my position as soon as possible/in the next 12 months (reason = for another position in my agency or the APS)**

	2023	2024
All APS job families	71%	72%
Data and Research job family	69%	70%
ICT and Digital Solutions job family	64%	66%

**Table 5.6 Top three reasons given for staying in the APS (2023)**

	1	2	3
All APS job families	Job security (75%)	Non-monetary employment conditions (53%)	Type/nature of the work (49%)
Data and Research job family	Job security (75%)	Non-monetary employment conditions (65%)	Type/nature of the work (54%)
ICT and Digital Solutions job family	Job security (74%)	Non-monetary employment conditions (54%)	Service to the Australian public (45%)

**Table 5.7 Top three reasons given for staying in the APS (2024)**

	1	2	3
All APS job families	Job security (75%)	Access to flexible work (64%)	Type/nature of the work (50%)
Data and Research job family	Job security (77%)	Access to flexible work (75%)	Type/nature of the work (55%)
ICT and Digital Solutions job family	Job security (75%)	Access to flexible work (68%)	Service to the Australian public (47%)

**Table notes:** Data sourced from the APS Employee Census, ongoing APS employees only by job family. Satisfaction with job, remuneration and non-monetary employment conditions reflect the proportion of respondents agreeing and strongly agreeing to the statements. Intentions to leave current position reflect the proportion of respondents indicating their intention to stay in/leave their current position and reasons for staying. Respondents were able to select multiple responses to the question “What are your reasons for staying in the APS”.

# Appendix 3: Acknowledgements

The APS Data, Digital and Cyber Workforce Plan 2025-30 has been developed with the significant participation and contribution from the government agencies and other organisations listed below.

## APS agencies

- Attorney General's Department
- Australian Bureau of Statistics
- Australian Public Service Commission
- Australian Signals Directorate
- Australian Taxation Office
- Bureau of Meteorology
- Department of Agriculture, Fisheries and Forestry
- Department of Climate Change, Energy, the Environment and Water
- Department of Defence
- Department of Education
- Department of Employment and Workplace Relations
- Department of Finance
- Department of Foreign Affairs and Trade
- Department of Health and Aged Care
- Department of Home Affairs
- Department of Industry, Science and Resources
- Department of Infrastructure, Transport, Regional Development, Communications and the Arts
- Department of Parliamentary Services
- Department of Social Services
- Department of Veterans' Affairs
- IP Australia
- National Disability Insurance Agency
- National Indigenous Australians Agency
- Parliamentary Workplace Support Services
- Services Australia

## Industry organisations

- Australian Computer Society
- Executive Cyber Council
- Tech Council of Australia

## Academic institutions

- University of Newcastle

# References

APSC (Australian Public Service Commission), 2024, APS New Starter Survey results.

ACS (Australian Computer Society), 2024, ACS Digital Pulse, accessed September 2024.

DTA (Digital Transformation Agency), 2024a, Approved programs collection (WAVE BAU).

DTA, 2024b, Digital Investment Overview.

DTA, 2024c, Digital Marketplace RFQ data (roles and rates) for the period 2 September 2016 to 16 October 2024.

JSA (Jobs and Skills Australia), 2024, Labour market projections for the Professional, Scientific and Technical Services – Computer System Design and Related Services, accessed 3 September 2024.

# Glossary

The **APS Employee Census** is an annual survey which is used to collect confidential attitude and opinion information from APS employees on issues in the workplace. It is an opportunity for APS employees to share their experiences of working in the APS.

---

**APSJobs** is a platform for government agencies (APS and non-APS) to advertise their vacant positions, notify of certain employment decisions, such as promotions, and to provide general information for job seekers.

---

The **APS Location Framework** equips agencies to use workforce location as a tool to attract and retain people who have the skills the APS needs, now and into the future. It connects agency heads and their corporate teams to tools that can support their decisions on appropriate workforce locations within Australia and shows what it looks like to manage a dispersed workforce well.

---

The **APS Strategic Commissioning Framework** helps agency heads meet their responsibilities to reduce reliance on the external workforce and prioritise APS employment and capability.

---

**Artificial intelligence (AI)** is an engineered system that generates predictive outputs such as content, forecasts, recommendations or decisions for a given set of human-defined objectives or parameters without explicit programming. AI systems are designed to operate with varying levels of automation.

---

**Attraction** is the process of reaching individuals with the necessary skills and abilities to fill vacant positions within an organisation or industry.

---

The **Australian Public Service (APS)** comprises entities that employ their staff under the *Public Service Act 1999*.

---

**Australian Public Service Employment Database (APSED)** includes information on staffing, including trends in the size, structure and composition of the APS, contributes to research and evaluation work on the changing nature of the APS and the impact of people management policies on the structure of the APS.

---

**Average Staffing Level (ASL)** refers to the number of full-time equivalent employees receiving salary or wages (paid FTE) by an organisation over the course of a financial year.

---

**Budget Process Operational Rules (BPORs)** are standing rules endorsed by the Cabinet that outline the major administrative and operational arrangements for managing the Australian Government Budget and its related processes.

---

**Capability** refers to what a person or organisation can do. In the context of this plan, people capability is the focus. There are many aspects of capability which can be described through industry and APS capability models.

---

**Capability uplift** is the process of improving the skills and knowledge of an organisation's employees to help them perform better in their roles. Additionally, it can help organisations prepare for new roles and challenges.

---

A **career changer** is someone who leaves one job or profession to pursue another. This can involve working in a different industry or organisation.

---

A **career pathway** is a defined route for professional growth and advancement within an industry or occupation.

---

A **Community of Practice (CoP)** is a group of people who share a common concern, a set of problems, or an interest in a topic and who come together to fulfill both individual and group goals. Communities of Practice often focus on sharing best practices and creating new knowledge to advance a domain of professional practice.

---

**Competency** refers to the demonstrated capability of a person, often in the form of outcomes achieved in the workplace. A capability becomes a competency when it is expressed in terms of observable and measurable outcomes. A competency can be thought of a capability applied in context.

---

**Cyber roles**, for the purpose of this plan, implement, monitor and assure systems and processes that protect the integrity and security of an organisation's digital environment and data. Many cyber roles are technical, such as Vulnerability Researcher, and Penetration Tester, while others are non-technical such as the Chief Information Security Officer and Operations Coordinator.

---

**Cyber security** includes measures used to protect the confidentiality, integrity and availability of information technology (IT) and operational technology (OT) systems, applications and data.

---

**Data** is any information in a form capable of being communicated, analysed or processed (whether by an individual or by computer or other automated means).

---

**Data literacy** is about being able to read, understand, create and communicate data in context.

---

**Data maturity** is a measure of an organisation's current data management capabilities and capacity.

---

**Data roles**, for the purpose of this plan, are primarily those represented within the 'Data and Research' job family. They collect, analyse, interpret and manipulate data to drive smarter decisions across the APS. Most data professionals perform technical work, such as a Data Analyst, Statistician, and Data Scientist.

---

**Deployment** refers to the process of assigning employees to jobs and positions to achieve specific goals.

---

**Digital and ICT Investment Oversight Framework (IOF)** is a six-state, end-to-end framework providing a way for the government to manage digital investments across the entire project lifecycle.

---

**Digital roles**, for the purpose of this plan, are primarily those represented within the 'ICT and Digital Solutions' job family. Some examples of digital roles include Software Engineers, Technology Architects, and Interaction Designers.

---

**Digital transformation** refers to the government's acceleration of reforms and investments to enable greater adoption of digital technologies, supporting the government vision to deliver simple, secure and connected public services, for all people and business, through world class data and digital capabilities.

---

**Domain**, for the purpose of this plan, is an area of interest, or high level grouping of related job roles. Within this plan, digital, data and cyber are considered professional domains.

---

An **employee value proposition (EVP)** is a statement outlining the unique set of benefits, rewards, and values that an organisation offers its employees in exchange for their skills, experience, and commitment.

---

**Engagement** refers to the engagement or re-engagement of staff under Section 22 of the *Public Service Act*.

---

**Entities**, for the purpose of this plan, refer to entities and companies within the *Public Governance, Performance and Accountability Act 2013*. See the Flipchart of Commonwealth entities and companies.

---

**Fluency** is a general capability related to being comfortable and productive in some area of activity.

---

**Forecasting** is the ability to use data and analysis to predict future events.

---

**Generalist skills** are those that are commonly demonstrated across the broader workforce.

---

**Individual Flexibility Arrangements** are a written agreement used by an employer and employee to change the effect of certain clauses in their award or registered agreement (such as an enterprise agreement).

---

The **Job Family Framework (APS)** is a workforce segmentation tool used for workforce planning purposes. It outlines an occupational grouping for the APS and is a way of defining and grouping roles that require the performance of similar or identical sets of tasks.

---

**Labour market** refers to the relationship between the supply of workers and the demand for workers. It's also known as the job market.

---

**Legacy technology** is an information system that may be based on outdated technologies but is critical to day-to-day operations.

---

**Literacy** is a general capability related to understanding and functioning adequately in some area of activity.

---

**Micro-credentials** are small, certification-style courses that focus on a particular area of study to hone proficiency over the shortest possible time.

---

**Mobility** refers to the movement of ongoing APS employees between agencies on a permanent basis.

---

**Mobility rate** represents the number of movements (promotion to another agency, permanent transfer, and transfer to a lower classification) divided by the average headcount for the same period.

---

**Ongoing employment** refers to the employment of an APS employee as an ongoing employee as mentioned in Section 22(2) (a) of the *Public Service Act*.

---

**Policy/government policy** is the basic agreed principles by which government is guided. The APS provides policy advice to government decision makers, to equip them with the information they need to make the best possible decision.

---

**Professional skills** relate to someone competently performing activities in a specialist area of application in order to achieve organisational outcomes. Sometimes referred to as technical skills, these are skills that are only found in certain pockets of the workforce.

---

**Retention** refers to an organisation's ability to retain skilled employees over time, minimising turnover and ensuring that critical knowledge, skills and experience stay within the organisation.

---

**Separation**, for the purpose of this plan, occurs when an employee ceases to be employed under the *Public Service Act*. It does not refer to employees moving from one APS agency to another.

---

**Skills based workforce planning** refers to workforce planning that prioritises skills and competencies over traditional job classifications or roles.

---

**Skills for the Information Age (SFIA)** is a framework that defines the skills and competencies required by professionals who design, develop, implement, manage and protect the data and technology that power the digital world.

---

**Specialist/specialisation** refers to capability that typically only applies to a certain pocket of activity, often in just one industry or area of professional endeavour.

---

The **State of the Service Report** identifies year-to-year trends in the APS workforce. Information is collected through the annual APS agency survey, a census of all APS agencies with at least 20 employees.

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**Strategic workforce planning** is a long-term, data-driven approach to aligning workforce supply, capability and demand with organisational objectives.

---

**Technical leadership** is about guiding and influencing primarily in a technical or other professional domain.

---

**Upskilling and reskilling** refers to programs designed to help employees develop new skills to stay relevant in evolving job markets.

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