FUTURE TALENT COUNCIL

Future Talent Insight Brief

Pain And Gain: Lessons In Enhanced Bureaucratic Productivity Through Artificial Intelligence In Australia, The United States, The United Kingdom, And Mexico

Yolanda Cuevas Aguilar '27, Alamo Colleges District, USA
Hugh Bright '27, University of Newcastle, Australia
Mohammad Tasfiq Jawaad '27, Leeds University, UK
Elena Motayne '28, Northwestern University, USA

Brief Objectives and Preliminary Trends

A productive bureaucracy enabled through strategic implementation of Artificial Intelligence (AI) will result in greater environmental sustainability, healthier people, and more equitable cities. Hand-in-hand with human oversight, AI may deliver dependability in areas where human subjectivity produces unreliability. AI under-utilisation - either inefficient deployment or persistent concerns of vulnerability or market exposure - leads to lagging financial investment and worker innovation. The world's bureaucracies and governments must refine the lessons learnt globally from AI use to reap the productivity benefits possible through its use. This insight brief links the lessons learnt across four international contexts to analyse the structural barriers and enablers of AI-derived bureaucratic productivity. The case studies explored are:

- **Productivity in Australian governmental environmental assessments**
- **Administrative productivity in the United Kingdom's National Health Service**
- **Productive bridging of the urban-rural divide in Mexico' public healthcare**
- **Productivity and consistency in American urban development**

Augmented intelligence is hardly new, with robotic manufacturing being an analogous example illustrating immense productivity benefits and employment insecurity. Globalised trading and knowledge sharing positions generative and agentic AI as revolutionary for governmental administration - and cooperation across jurisdictions will reduce unproductivity in piloting AI. Despite the cosmetic benefits of AI, creativity and innovation in the bureaucracy runs parallel to feelings of job insecurity (McKinsey, 2025). Only 20-40% of American workers believe they are AI literate (Crane, Green & Soto, 2025) but over double this amount believe AI use should be clearly disclosed in commercial and government contexts (Stanford, 2026). From a productivity standpoint, these figures demonstrate marked insecurity and distrust in AI, meaning governmental implementation relies on both the productivity reaped and the construction of social licence.

Australia: Urban Development, Environmental Assessments, and Workforce Implications

In the Australian context, environmental assessments for urban and infrastructural development are subject to a complex suite of human-based approvals, leading to extensive delays and intensive human interventions. Human oversight ensures that projects are considered on their merits rather than a rigid criterion of considerations, but this approach results in investor uncertainty and commercial hesitancy. Implementing AI in the Australian Department of Climate Change, Energy, Environment, and Water is an untapped potential area for revolutionary environmental productivity. From the outset, interweaving AI and human oversight of development applications may assure investors and the community of dependable and consistent outcomes. Productively, this may reduce the duration of the approvals process while enhancing environmental scrutinisation. While human oversight is essential for ensuring that environmental assessments are administered competently and consistently, AI may be used to augment this process and ensure dependable data deployment and trend recognition. Consequently, AI may assist in the delivery of consistent environmental approvals, increase sustainability, and reduce bureaucratic backlog if used in conjunction with human expertise.

Development of an AI system for environmental approvals poses a contradictory hypothetical for entry-level workers, exacerbated by the announcement of funding for AI-augments environmental approvals in the annual Australian Federal Budget, delivered in May 2026. If one Department utilises an AI system and can reap the productivity benefits associated with this reduced human output, and another Department continues to rely heavily on human-based interactions solely, does this pose a disparity between the efficiency of different government services? Would a whole-of-government AI regime produce any better outcomes? These questions must be considered into the future to ensure the viability of employees in the system while enhancing assessment productivity.

If adopting an AI-human derived environmental assessment regime, the Australian Government must illustrate why dependability matters in environmental assessment processes to build social licence. A consistent set of guidelines for developers, environmental groups, and communities against which an AI system can analyse a project's veracity augments reliable sustainability outcomes. The Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) is the keystone policy of major development projects across all jurisdictions, however, the Minister for the Environment retains substantial oversight for all projects that are referred to the Commonwealth. In this context, AI may be utilised to ensure that the Minister is presented with all relevant information relating to all aspects of an individual project. AI input may further enhance project scrutinisation, increasing community participation and sustainability considerations. Accessibility would consequently lead to greater public participation and technical details can be readily presented for scrutiny.

A dependable environmental approvals system for public scrutiny has three benefits:

- **Fiscal reliability**: Consistent triaging will increase dependability for investors. This raises the financial solubility and sustainability of projects
- **Reduced bureaucratic and administrative burdens**: The increase of reliable technologically-assisted outcomes will ensure that more projects can be analysed in less time
- **More rigorous and detailed analysis**: AI systems can be inputted with different environmental datasets, ensuring that projects account for the impact of deleterious environmental burdens without allowing the proponent to commandeer the environmental assessment process (i.e. by neglecting to consider different impacts of the project)

For administrative employees, a dependable environmental assessment system ensures that time can be apportioned to analyse the environmental veracity of a particular project rather than studying a plethora of datasets. For entry-level workers, developing a consistent and dependable bureaucratic system enhanced by an AI program leads to a better refined educational system, ensuring that the skills developed in environmental engineering, architecture, law, policy, and urban planning are complementary to the requirements of the Australian Government. At present, departmental workload remains focused on analysing vast swathes of environmental regulation in an attempt to ensure that project time blowouts are less frequent. Despite this, Australian development environmental approval regularly exceeds 1,000 days from initial application to approval. Through targeted AI deployment, a triaging system may reduce the time taken to assess and approve while increasing the veracity of the analysis itself.

UK: AI and Administrative Productivity in the UK National Health Service

The UK government has positioned the NHS as the central test case for whether artificial intelligence can rescue public-service productivity. Matt Clifford's AI Opportunities Action Plan, accepted in full by the Starmer government, names NHS data a "uniquely comprehensive" national asset (DSIT, 2025a), and the 10-Year Health Plan for England commits the service to becoming "the most AI-enabled healthcare system in the world" (DHSC, 2025). The pressure on adoption is as much fiscal as it is clinical. AI is being asked to convert political ambition into measurable output, and the gap between what the technology can do and what the system actually absorbs is the real story.

That gap starts from a steep baseline. ONS figures show healthcare productivity in 2024 was 7.8% below its 2019 level (ONS, 2025), even as hospital staff numbers grew by 17% and output per clinician fell across outpatient, surgical and emergency work (Darzi, 2024). Administration is a major driver: the peer-reviewed TACT study found NHS resident doctors spend 73% of their time on non-patient-facing tasks (Arab et al., 2025), and the NHS Long Term Workforce Plan's central wager is that AI could automate up to 44% of GP administrative workload (NHS England, 2023). The King's Fund notes this assumes productivity growth roughly doubles the historical average (King's Fund, 2023). AI, in short, is being asked not just to help but to reverse a decade of structural decline.

Deployment is real, but the rollout is where ambition meets human reality. The Federated Data Platform, led by Palantir on a contract with whole-life costs above £1bn, reports gains in elective surgery and delayed discharges where adopted (NHS England, 2025), yet FOI evidence indicates only around 15% of signed-up trusts were actively using it by early 2025 (Corporate Watch, 2025), and the BMA voted in June 2025 to oppose it (Digital Health, 2026). The lesson is not that the technology fails but that deployment is not adoption: a capable platform stalls when clinicians and trusts withhold their buy-in. Elsewhere, the picture is brighter, from the £21m AI Diagnostic Fund (NHS England, 2024) to Skin Analytics' DERM (NICE, 2025) and a TORTUS ambient-scribing trial reporting a 23.5% rise in patient-interaction time and modelled savings of up to £834m a year (GOSH, 2025). Even these warrant scepticism: most evaluations are vendor-sourced, and a Lancet eClinicalMedicine study found a third of funded trusts still not using the tools 18 months past deadline (UCL/Nuffield Trust/Cambridge, 2025).

It is also a story about how a government chooses to govern. The UK has deliberately diverged from the EU AI Act, relying on five cross-cutting principles applied by existing regulators, MHRA, NICE, CQC and ICO, rather than statutory legislation, none of which has yet been enacted (DSIT, 2024). The MHRA's AI Airlock sandbox is a world-first (MHRA, 2025), and the Data (Use and Access) Act 2025 has loosened restrictions on automated decision-making to enable triage and transcription tools (ICO, 2026). Speed has been favoured over codification, but the assurance gap shows. NHS trusts sit outside the mandatory Algorithmic Transparency Recording Standard, so most clinical AI is not publicly logged (DSIT/GDS, 2025), and the share of staff saying technology made care worse tripled from 6% to 19% in a single year (Health Foundation, 2026). Trust, once lost, is far harder to win back than to design around.

This raises the question the headline figures rarely answer: who actually benefits? Exposure

is concentrated in administrative Agenda for Change Bands 2 to 4, such as medical secretaries, ward clerks and schedulers (NHS Employers, 2025), with IPPR modelling placing 11% of UK tasks within reach of first-wave generative AI, rising to 59% with deeper integration (IPPR, 2024). Yet the most revealing finding concerns what people do with the time AI returns: a Nuffield Trust/RCGP survey of 2,108 GPs found 28% already use AI clinically, and freed-up time is going to reduced overtime, burnout and admin, not to extra appointments (Nuffield Trust, 2025; Health Foundation, 2024). The government's model assumes a throughput machine; the evidence describes tired people choosing recovery.

The NHS shows that technical success and real-world success are not the same thing. A near-faultless tool can still fail, because healthcare is a human system, and improving a metric without improving the experience of the people inside it will not scale. For governments and global employers now redefining entry-level work, the binding constraint is rarely the algorithm; it is trust, change management, and honesty about where saved time actually goes. That reframes the opportunity for the young generation: the durable skills are not the ones AI displaces but the ones that make it work inside human institutions, namely judgment, oversight, and the ability to carry colleagues through change.

Mexico: Public Healthcare Efficiency and Healthcare Accessibility

Mexico's public healthcare system demonstrates that bureaucratic productivity is not just about increasing speed, but also about improving citizens' ability to access essential services. The Instituto Mexicano del Seguro Social (IMSS), Mexico's largest public healthcare provider, continues to face challenges including overcrowding, staff shortages, and unequal access to healthcare services across regions (Commonwealth Fund, 2023). Inefficient administrative processes and modernization challenges further limit service delivery and reduce overall productivity (International Trade Administration, n.d.).

An example of these productivity challenges is the prolonged patient wait times at public healthcare facilities. A national study of Mexico's public hospitals reported average waiting periods of approximately 14 weeks for surgical procedures and 11 weeks for diagnostic services, with IMSS facilities also experiencing delays for routine diagnostics (Contreras-Loya, et al., 2015). These delays reduce productivity because healthcare workers spend additional time working through overloaded administrative systems rather than focusing directly on patient care. AI supported tools such as scheduling, patient intake, and resource allocation may help reduce delays and increase patient contact time leading to improvement of treatment and patient satisfaction.

Another major issue is unequal access between urban and rural communities. Rural populations continue to experience barriers in obtaining timely care and specialist services (Commonwealth Fund, 2023), while healthcare infrastructure and modernization efforts remain concentrated in urban areas (International Trade Administration, n.d.). These geographic disparities contribute to negative health outcomes and place additional strain on already overcrowded urban facilities. AI supported digital healthcare systems may help reduce these discrepancies through telehealth services, remote diagnostics, and improved healthcare facility planning. Telemedicine could connect rural patients with healthcare professionals without requiring extensive travel, while AI assisted systems may help

governments identify underserved regions and distribute personnel and infrastructure more efficiently.

Mexico has emerged as an early regional actor in developing artificial intelligence governance frameworks and continues expanding this effort through its proposed National Artificial Intelligence Agenda 2024–2030. This strategy is a governmental effort to use AI to strengthen public services and improve institutional responsiveness while promoting responsible implementation and long-term social benefit (Lagunes Soto Ruíz et al., 2024). Within healthcare, this creates opportunities to improve service delivery and support more equitable access to care across communities, advancing the broader purpose of public healthcare in Mexico by providing more timely, reliable, and effective care for citizens.

Ultimately, the success of implementing these AI initiatives should not be measured solely by increased administrative efficiency or automation. Public-sector AI should be evaluated by its improvements in treatment, patient satisfaction, and expanding equitable access to quality care. Bureaucratic effectiveness should not be defined by efficiency alone, but by whether those improvements result in better services and outcomes for the people the system was designed to support.

USA: Using AI In Urban Planning to Build Better, More Equitable Cities

In the American context, urban planning has been a longstanding source of inequity. Legacies of redlining and uneven investment have left historically Black and Brown neighborhoods with 50% less tree canopy and parkland than areas historically populated by White Americans (Locke et al., 2021) – translating into reduced cooling capacity as global temperatures rise. Disproportionate transportation development across racial and north-south city divides compounds this: between 2016 and 2020, 90% of transit-oriented developments in Chicago occurred on the more economically developed, majority-White North Side (Hawkins, 2026), while South Side residents continued feel repercussions from discriminatory practices that have limited business development. These inequities are institutional as much as infrastructural. A 1990 study by the Association of Collegiate Schools of Planning (ACSP) found two-thirds of minority and female planning faculty had experienced discrimination in their departments, with little improvement recorded by 2019 – a bias embedded in the institutions training the next generation of planners, carrying forward into the cities they design.

Environmental racism extends beyond transit. It encompasses the siting of toxic industrial facilities near minority residential areas, the absence of grocery stores in low-income neighborhoods creating food deserts, and the urban heat effects produced by decades of underinvestment in green space. Urban areas like New York face compounding climate risk due to the heat-absorbing qualities of dense concrete infrastructure, and as global temperatures rise, cities that have historically neglected disadvantaged communities will feel these effects most acutely in those same communities.

AI, used as a decision-support tool that balances human judgement and computational capability, presents the potential to change course. AI could enable key improvements across a few specific areas:

- **Increased levels of equity**: Reconciliation of structural racism in urban spaces and prevention of future structural racism via more equitable distribution of transportation infrastructure, green space, and key structures like grocery stores.
- **Citizen participation**: Increased incorporation of public input by lowering technical barriers for community members to engage directly with planning decisions.
- **Climate preparedness**: Enhanced preparation of cities for climate change via simulation of future conditions.

Applied to transit planning specifically, AI could be trained to triangulate equitable access and prioritize underserved populations – a simulation tested this for Cape Town, generating transit stop locations that maximized coverage for the most disadvantaged areas rather than defaulting to efficiency and profit-focused metrics (Urban AI, 2025). Tools like UrbanistAI have already lowered technical barriers to citizen participation in cities including Cleveland, enabling residents to actively shape planning decisions rather than react to them. MIT's Senseable City Lab has developed B++, using sensor networks and machine learning to monitor urban biodiversity and target green infrastructure investment in real time – a model for how AI can support climate adaptation planning at the city level. Additionally, AI could be utilized to map and quantify disparities in urban tree canopy across racial divides, and then analyze targeted solutions to ensure they are genuinely resolving the inequity.

The quantitative case for AI in urban planning is compelling. AI-optimized transit systems have been shown to reduce operating costs by approximately 12% and improve punctuality by up to 18% (Market.us, 2025). AI combined with digitization could cut urban CO_2 emissions by as much as 225 million metric tons by 2030. According to Market.us (2025), smart city infrastructure already accounts for 34% of the AI in the public services market – signaling that the shift towards AI in urban planning has already begun.

Yet a deeper contradiction lurks in the background. The physical infrastructure enabling AI – vast data centers with enormous energy and water demands – is being disproportionately sited near lower-income, predominantly Black and Brown communities across the United States (Wilson, 2026), positioning them as a modernized reinvention of the toxic factory and food desert problems AI ostensibly seeks to solve. Even if AI has the potential to remedy environmental racism, the means which allow its use risk dragging inequity right back to square one. When governments implement AI in urban planning, it is essential that they consider the place of data centers in structural racism and act accordingly – incorporating direct feedback from affected communities and ensuring they have a genuine hand in the implementation process.

For entry-level workers entering urban planning, policy, and public administration, this landscape is both an opportunity and a responsibility. Peng et al. (2026) propose a Symbiotic Planning Model, a framework in which AI and human planners operate as collaborative partners rather than substitutes. AI handles data processing, pattern recognition, mitigating human bias, and scenario modeling while human planners retain authority over values-based decisions, community engagement, and ethical judgment. This model positions AI not as a replacement for human planners but as a tool that expands their capacity – therefore enabling more decisions, better informed by data, more rigorously evaluated for bias, with greater community input than current human-only processes allow. For the future of entry level work, the key to success is to learn how to work alongside and maximize the usage of AI. Rather than displacing human skillsets, the rise of AI will simply shift the type of skill work demands. Durable skills will be those that enable AI to work

equitably inside human institutions: judgment, oversight, and the ability to analyze both the promise and the risk of these tools.

Conclusion

AI will be the frontier of innovation, productivity, and creativity in the 21st century. The creativity and innovation enabled need not be artificially generated, but includes AI providing space for human input to develop new ideas in relevant areas against a backdrop of reduced administrative burdens. We describe this potential through our case studies as a productivity praxis. AI empowers more decisions to be made by public servants in lesser amounts of time. The worker is thereby permitted greater time to innovate and create, addressing fundamental issues in areas of long-standing concern. Explored through the Australian and US context, AI can be used to bolster productivity and enhance creativity by reducing time taken to manually deliberate on planning considerations whilst simultaneously improving community participation and investment reliability. In the healthcare context described in the United Kingdom and Mexico, greater administrative burdens can be reduced through the strategic deployment of AI, leading to greater patient outcomes and improving the overall efficiency and efficacy of these systems.

Conclusively, the use of AI in developing and implementing policy is a seminal opportunity for governments across the world. The lessons outlined in this brief are geographically and socially isolated and the deployment of AI must be tailored to a government's conditions. As we look to the future of AI in policy, we must contend with the possibilities that AI could permit entry-level workers greater amounts of time challenging the immovable problems of our generation - an investment in new technology to develop solutions to our greatest threats. With AI in healthcare, the general population may see doctors faster, our citizenry may become healthier and happier, and countries can deploy the lessons learnt to other nations through technology and knowledge sharing. In environmental approvals, countries could become more environmentally resilient and governments more inquisitorial whilst expending less human output on ensuring assessments are adequate. In urban planning, our cities could be more equal and the barriers of human prejudice in determining service provision could be removed. In all of these areas, the human must remain at the forefront as more than a mere mouthpiece of AI-derived policy. AI must be a tool to enhance productivity, not enable laziness. With these topical issues within grasp - climate change, urban inequity, health systems -, the strategic deployment of AI must become a central feature of all government platforms globally.

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