



wsp

FUTURE
READY™

Factsheet



Question today *Imagine tomorrow* *Create for the future*

Our future world will be very different from today. Trends in climate, society, technology, and resources will have a big impact on the communities in which we live and the infrastructure we develop.

For Australia – whether it's more extreme weather events, rising seas, densification of our cities, digital expectations, declining biodiversity, or the circular economy – our clients need to understand and prepare for these trends now.

Future Ready is WSP's innovation platform. It enables us to design to both the current code and for this future world.

The benefits? Our clients will realise peace of mind, lower lifecycle costs, and bolster resilience. Communities will have better places to work, live, study, and play.

WSP considers the effects that trends in climate, society, technology and resources will have on our communities into the future. We help our clients look beyond traditional paradigms with design solutions that have a future bias.

For example, how can we make sure a bridge will meet future infrastructure hardening criteria? How can we anticipate city-based energy requirements for electric vehicles? How can we connect communities to improve access to healthcare and social networks? How do we create new, resilient places for people?

OUR APPROACH

As our global innovation platform, Future Ready helps our people think beyond the conventional, so that we can design and deliver advice that is ready for the changes and challenges our world will face in the future.

Being future focused, understanding what the world might look like in the next several decades, and taking action to prepare for this future, is essential to what we do at WSP. Our clients count on it and our communities thrive because of it.

With Future Ready, you can:

- Assess the key trends affecting your organisation, projects and communities - and the impact they may have on your future developments.
- Consider how future trends can be addressed in our design, so we can deliver immediate value and long-term benefits.
- Leverage insights from WSP experts backed by science to help you understand what the trends mean and how they can be integrated into your projects.

UNDERSTANDING FUTURE TRENDS

Climate



Climate change is expected to increase the risks to our natural and built environments. There will be more extreme weather events like bushfires, drought and floods. We will also experience increasingly drier conditions, hotter temperatures, and rising sea levels.

A commitment to Net Zero by 2050 will need innovation in low-carbon technologies and action to bring about a fair transition.

With climate risk high on government, corporate, and community agendas, there will be an increasing expectation of full, transparent climate risk disclosure.



Technology

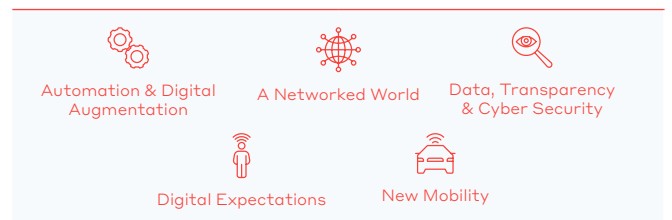


Ubiquitous connectivity continues to transform people's expectations of their physical and virtual environments. The pandemic accelerated our demands for digital offerings.

In a world increasingly awash with data and devices, we will need innovation to leverage the benefits and avoid the risks.

Cyber safety will become increasingly critical for businesses and government. People will continue to expect high ethical standards and transparency from institutions that gather, store, or handle their data.

Advances in technology will continue to bring about increased automation, so businesses will need to focus on new opportunities to reskill and upskill workers. In the transport sector, we expect transformative change born of electric vehicles, connectivity, automation and sharing.



Society



Australia's society is changing. We are becoming more culturally and socially diverse, but also more divided. We have inequalities in wealth, housing status, digital access and literacy as well as health outcomes.

The pandemic has highlighted the centrality of health and wellbeing to our lives and underlines the importance of investing in our local spaces.

As our population ages, and with many experiencing a physical or less visible disability, we need to shift our thinking about accessibility towards a broader concept of inclusion for everyone.

Welcoming and encouraging Indigenous perspectives to inform the design and management of our places remains crucial for a better and more inclusive Australia.



Resources



The future availability of resources, particularly food, water, energy, is critically important to our prosperity.

An enormous ongoing challenge is halting declining biodiversity in the face of urbanisation.

The circular economy, water scarcity, declining biodiversity and the role of renewables are key trends we need to consider for future ready advice and designs.

COVID-19 demonstrated Australia's vulnerability to international supply chains. We need to consider options to mitigate this risk.



WHY FUTURE READY?



- Design codes don't always look far enough into the future we're anticipating.
- Large infrastructure projects can take 20+ years to build.
- Industry-changing technologies are being introduced faster than ever.
- No skyscraper has ever been dismantled.
- A building's mechanical and electrical system on average has a 25-year design life.
- Bridges typically have a design life of up to 100 years, railways 50 years.

PROJECTS AT A GLANCE

Growthpoint Properties

We are supporting Growthpoint Properties Australia in their journey to achieving net zero across their operationally controlled office assets and corporate activities by 2025.

Trends considered

| | |
|--|--|
|  Net Zero & Beyond |  Energy Transition |
|--|--|

Outcomes





As part of our work, we analysed the energy performance of Growthpoint's office portfolio and assisted with the development and visualisation of pathways to meet its goal of net zero by 2025.



Newcastle Smart Cities

The City of Newcastle engaged us to co-design and implement a Smart City Intelligent Platform to complement its national award-winning Newcastle Smart City Strategy (2017-2021).

Trends considered

| | |
|---|--|
|  New Mobility |  Data, Transparency & Cyber Security |
|  Automation & Digital Augmentation |  Water Scarcity |

Outcomes

This project has delivered a city-scale transport, energy and digital infrastructure network including laser-enabled roadside poles, solar and battery powered electric vehicle charge points, smart bus stops and smart parking. It is a key benchmark for integrated urban systems at a city scale which is driving productivity and resources management with direct benefits to the City and its residents.













Future Ready Kerbside

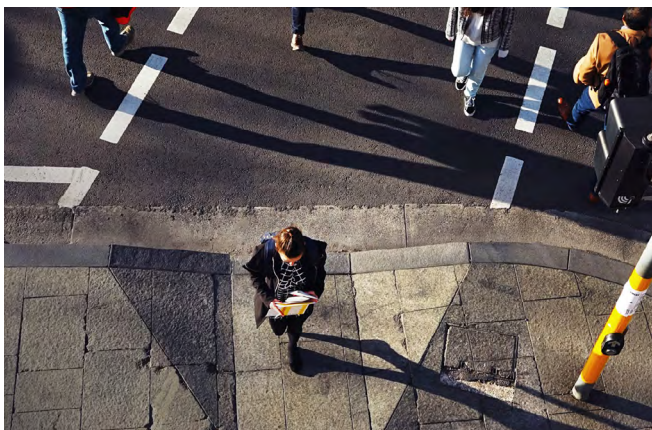
We partnered with UBER to release a white paper examining what we need to do today to ensure our kerbsides and streetscapes enable the places people want now and into the future. The white paper introduces new analytical techniques to deliver into what the future may hold.

Trends considered

| | |
|--|---|
|  Access For All |  A Focus on Health |
|  Local Places |  New Mobility |
|  Automation & Digital Augmentation |  Digital Expectations |
|  Circular Economy |  Energy Transition |

Outcomes




We have provided key recommendations to assist city leaders to drive co-design between communities, businesses and governments for a shared vision for places.



Green Building Council of Australia (GBCA)

We worked with the GBCA, in an exclusive technical partnership, to develop the next generation of Green Star rating tools. Specifically, we have contributed to contributed to the development of new versions of two rating tools: Green Star for Buildings, and Green Star for New Communities.

Trends considered

| | | |
|---|--|--|
|  Circular Economy |  Energy Transition |  Valuing Natural Capital |
|---|--|--|

Outcomes

Our work has helped to broaden Green Star's scope to encourage buildings and precincts to be healthy, resilient, people centric, and responsive to the natural environment and mobility connections.



Contact

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 **Our Offices**
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About us

WSP is one of the world's leading engineering professional services consulting firms, bringing together approximately 4,500 talented people across 14 offices in Australia. We are technical experts who design and provide strategic advice on sustainable solutions, and **future ready** engineering projects that will help societies grow for lifetimes to come.

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