





NAB's Catalyst Insights Series brings together industry experts and leading thinkers to discuss the issues that are central to securing Australia's future prosperity. Its purpose is to take ideas beyond the boardroom, to help shift the national conversation in the direction of action and discover possible solutions to some of Australia's biggest social, economic and community challenges.

The series reflects NAB's strong commitment to working with industry, business and community stakeholders to support growth and opportunity in an inclusive Australian economy.

Reimagining Australia's Future Infrastructure is the first report in the Catalyst Insights Series. The report was developed following a roundtable focused specifically on infrastructure, where NAB Chairman Ken Henry was joined by:

- Garry Bowditch, Executive Director, Better Infrastructure Initiative at the John Grill Centre for Project Leadership, University of Sydney
- Cathryn Carver, Acting Chief Customer Officer Corporate and Institutional Banking, National Australia Bank
- Sam Kaplan, Managing Director, Kaplan Funds Management
- Steve Lambert, Executive General Manager, Capital Financing, National Australia Bank
- Mike Mrdak, Secretary, Federal Department of Infrastructure and Regional Development
- John Pierce, Chairman, Australian Energy Market Commission
- Kerry Schott, Chairman, Moorebank Intermodal Company Ltd
- Robert Stewart, Managing Partner, Global Infrastructure Partners

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Australia's population is set to grow by about 400,000 people each year for the next several decades, reaching nearly 40 million by 2055. This is the equivalent of building a new city the size of Sydney every decade. As it currently stands, Australia's infrastructure is not sufficient to meet this expected increase in population, nor slow trends like increased congestion, deteriorating housing affordability and travel times that are impacting upon the quality of life of many Australians.

Our population isn't just growing, it's ageing too. As the Australian community gets older, the lack of appropriate infrastructure will hinder access to essential services like hospitals, public transport and community-based care. This means we have to think now about what kind of infrastructure the Australian community needs in the decades to come, not just the next one to two years.

The role of Australia's banks in this task goes beyond just financing projects. We are critical in bringing together the many players in the infrastructure sector to collaborate and search for better outcomes. In particular, we have a role to play in championing system-based thinking approaches and supporting an emerging proactive customer voice.

At NAB, we are motivated by the interests of all of our customers. Our customers include the businesses that build infrastructure, the people who deliver services through that infrastructure, superannuation funds that invest in infrastructure, everyday Australians whose super goes into those funds, and the users of roads, hospitals, public transport and airports. We have a powerful and unique perspective.

The Australian private sector has a shared responsibility to build confidence in the future of Australia to secure the ongoing economic and social prosperity of the nation. This means embracing bold thinking, guided by a long-term vision, and taking a strong leadership position to turn ideas into reality. It is a collective challenge that NAB is committed to tackling with our customers, for our customers.

Dr Ken Henry

Chairman, National Australia Bank



Key recommendations

To gather momentum behind action that will lead to a better future for Australia's infrastructure, **businesses** should collaborate to:



Take a leadership role in identifying the infrastructure opportunities that might be advanced without the assistance of government.



Embrace system-based thinking so that infrastructure projects are considered, not on a case-by-case basis, but according to how they operate within a broader system to support the community.



Champion customer-focused governance frameworks that are based on an understanding of service outcomes for users.



Help empower communities to resolve some of the infrastructure challenges facing the nation.



Be prepared to **disrupt infrastructure funding models** and consider new ways of

delivering sustainable profits that result in good social outcomes.



Advocate for responsive regulatory systems that

support investment in emerging technologies, such as autonomous vehicles.



"When you've got people travelling huge distances each way on public transport to get to their place of employment, they're suddenly completely disconnected from work, let alone access to services."

Mike Mrdak, Secretary, Department of Infrastructure and Regional Development



The changing face of our nation

Good infrastructure enables social and economic gain. When infrastructure meets the needs of society there are widespread benefits that improve quality of life for every Australian – by growing the economy, creating jobs and connecting communities.

Health and wellbeing, mobility and human development are all intrinsically linked to good infrastructure. Conversely, if not properly planned, targeted and centred on its customers, infrastructure can stymie economic and social progress. Business and the broader community have a role to play in identifying the infrastructure opportunities that might be advanced without the assistance of government.

The consumer infrastructure vision

When NAB asked Australians how they thought our country could best meet our future needs¹ they told us we should have:

- more thriving and growing regional areas, not just bigger capital cities;
- more done to address climate change;
- more public infrastructure paid for by taxpayers;
- more investment in roads and public transport;
- more affordable housing; and
- more support for public health and education.

Australia's **population growth** is about three times that of China²



Australia's **estimated population** in 2055 will be 39.7 million³



Between 2011 & 2031, almost three quarters of Australia's population growth will occur in **Sydney**, **Melbourne, Brisbane & Perth**⁴



1. Source: NAB's Life in the Lucky Country survey. 2. Source: Bowditch, G., 2016, 'Shifting Australia's infrastructure mindset to the long game', Better Infrastructure Initiative, John Grill Centre for Project Leadership. 3. Source: The Commonwealth of Australia, Intergenerational Report 2015, Australia in 2055. 4. Source: Infrastructure Australia, Australian Infrastructure Audit 2015.

"You really can't have an efficient infrastructure system until you have an efficient land-use system. The two are intimately related."

Garry Bowditch, Executive Director of the Better Infrastructure Initiative at the John Grill Centre for Project Leadership, University of Sydney.

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Taking a system-based thinking approach

No infrastructure project should ever be viewed in isolation. Thinking must be broadened so that, for example, the utility of an urban road is judged on how it affects the usage of other roads and alternative modes of transport, improves access to essential services and travel times for a whole city – not just the direct benefit to the people who use it every day.

Poor project outcomes are largely the result of failing to plan across a system.

Thinking at a system-wide level has proved difficult for decision makers because of the range of questions and uncertainties it leads to: What are the boundaries of the system? What type of transport modes should be captured within it? And how can we judge when a system is operating to the benefit of its users?

Now is the time to stop allowing these questions to act as barriers. Now is the time for action.

Large companies (including banks) can bring the right people and organisations together to find the answers to these questions through system-based thinking. Importantly, the customer perspective has to be given primacy in the development of system thinking.

The power of proactive customers in building a system

Where ecosystems of partners are working together toward a common goal, the result can be ground breaking. In Victoria last year, a consortium of energy users got together to proactively procure a clean energy power purchasing agreement.

The organisations – City of Melbourne, Melbourne Zoo, Australia Post, RMIT, Melbourne University, NextDC and NAB – used their collective knowledge and resources to fill the role traditionally held by an energy retailer and create an outcome which was not possible individually.

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"We have to question to what degree the voice of the customer is really heard in some of these infrastructure decisions, and how that changes over time? And, what's the role of technology in that?"

Steve Lambert, Executive General Manager, Capital Financing, National Australia Bank



Turning to customers for the answers

Adapting for the future doesn't necessarily entail new, big-ticket infrastructure items or more money. Research carried out by the University of Sydney's Better Infrastructure Initiative places emphasis on better planning, and better societal and economic outcomes, with infrastructure that puts the customer at the centre of the service provision.

Every piece of infrastructure has a customer: the family with children at the school around the corner; the retiree with their GP at the local hospital; businesses and workers that use freeways every day; train tracks that transport goods and commuters. Unlocking the voice of these customers is essential.

Research by NAB¹ shows Australians don't think about infrastructure projects as just concrete, bricks and mortar, but rather as the services or conveniences that are derived from them. It follows that highly-valued infrastructure exists where the governance frameworks focus on service outcomes, not the asset itself, and how those services adapt to a changing world. The debate around the price charged for using infrastructure, such as a toll road, is currently concerned with whether investors in the project will recover their costs – but its focus should be discovering the value of the project to the broader community, including its social contribution.

So how can we shift thinking so that a decision on whether an infrastructure project is built – or how it is priced – is determined by all who are affected by it, not only its direct users? Before we answer that question, we need a better understanding of the value provided to customers.





Developing a better understanding of how customers value infrastructure

NAB and the Better Infrastructure Initiative are currently designing a Customer Asset Rating system that will measure, benchmark and enhance the transparency of customer stewardship by asset owners and their appointed operators.

The role of the customer, and their satisfaction, has been a weakness in the infrastructure governance settings for some time, particularly because of the significant role played by governments in the provision of infrastructure. Putting a ratings system around infrastructure assets means the role of the customer, and their satisfaction, becomes transparent.

The Customer Asset Rating will be tested and refined throughout this year, before it is piloted by BII Leadership Partners and research associate organisations at the end of 2017.

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Empowering communities to lead the way

Australia has long had a 'do-it-yourself' attitude and history of community-led infrastructure – from communities committing to debentures and building new club rooms, to privately building an airport to meet Asian demand for high value agricultural exports.

We can apply that same attitude to more of our infrastructure planning and investment, and build confidence in sector participants outside of government so that they themselves can provide the infrastructure Australia requires.

Investigating areas where DIY principles could be more aggressively pursued, and new financing models that might support community-led infrastructure, will be explored in a report to be released by the Better Infrastructure Initiative and NAB in mid-2017.

Disrupting for social outcomes

Another pathway is for businesses to disrupt their traditional funding models; to look at new ways of creating sustainable business value that solve problems faced by their customers and perhaps address societal challenges at the same time. For NAB, this presents an opportunity to use our banking tools, knowledge and relationships to help solve infrastructure challenges at scale.

How **customer-focused** are certain types of **infrastructure?**

A quantitative online survey conducted by Newgate Research for the Better Infrastructure Initiative asked more than 1,000 Australian consumers which types of infrastructure operators they consider to be the most focused on customers.









"Once a regulatory system is in place it's very difficult to change it. We need to put a system in place with review points, so that as technology changes, regulations can too."

Kerry Schott, Chairman of the Moorebank Intermodal Company Ltd.



Allowing technology to thrive

Technology is also having a profound impact on the way we live. Innovators overseas are testing a drone that can transport people, potentially revolutionising the way humans can get from A to B. Autonomous vehicles have the capacity to increase the mobility of the aged, or people with a disability, at a price that is potentially lower than any option currently available.

Should we expect that such innovation, driven by private sector ingenuity and market demand, is the way of the future? To make this future a reality, we have to create pathways for investment in emerging technologies, supported by a regulatory system that can respond and adapt quickly to rapid technological advances.

New playgrounds for collaboration

In 2014 NAB helped create a new form of funding for local councils in Victoria, who were experiencing higher capital costs under new Basel III regulations facing the banks. So that these councils could access lower cost funding in the bond markets, the Municipal Association of Victoria established a trust called the Local Government Funding Vehicle (LGFV), which could sell bonds backed by council rates.

The vehicle has raised \$340 million across 33 councils so far to build infrastructure in local Victorian communities, including libraries, meeting spaces, stormwater drains and leisure centres.

For more information

As Australia's leading arranger of project and infrastructure finance, NAB has committed to fund \$18 billion of clean energy projects by 2022 and to finance \$100 billion of infrastructure over the next seven years.

At NAB, we believe we have a responsibility to help secure a prosperous and comfortable future for our customers, communities and economy by identifying and promoting the needs of our nation's infrastructure. We want to be as good with people and the whole community as we are with money, so people can secure better lives. That's why NAB is talking to experts and our customers about how we can work together to solve some of the nation's challenges.

We encourage clients to get in contact with the NAB Capital Financing team to find out more:

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Reports by the Better Infrastructure Initiative can be viewed at: nab.com.au/corporateinsights