

Annual Report 2023

AUSTRALIA'S URBAN INTELLIGENCE NETWORK.

AURIN

aurin.org.au



NCRIS
National Research
Infrastructure for Australia
An Australian Government Initiative

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About AURIN

AURIN is a national research infrastructure supporting researchers, governments, not-for-profits and industry. We provide access to analytical and mapping tools, as well as thousands of multidisciplinary, clean, spatialised and research ready datasets.

Welcome



What an extraordinary year it's been at AURIN! 2023 marked the beginning of a new era for AURIN as we transition towards a future that is even more focused on supporting researchers and decision-makers with the high impact technology and hard-to-access datasets they need to shape a brighter future.

This transition was ushered in with several big milestones. The first was the securement of **\$25m in funding from NCRIS** following the hefty submission of AURIN's **Research Infrastructure Investment Plan**. This funding will be essential in helping AURIN achieve our ambitious goals over the next five years and we are so grateful for NCRIS's continued support.

Speaking of goals, 2023 also marked the launch of our **Strategic Plan for 2023-2028**—a roadmap that outlines AURIN's vision of delivering cutting-edge digital infrastructure that will be the bedrock on which decision-makers can build a smarter, more sustainable urban landscape. Now more than ever, we at AURIN are dedicated to fostering collaboration between industry, government and academia so that together, we can address some of the greatest challenges Australian communities will face in coming years.

To this end, we also launched our **Australian Urban Digital Twin community** in 2023. The potential of Urban Digital Twins to transform urban landscapes is truly astounding and I am so excited to continue building a collaborative foundation for UDTs that will change the lives of Australian urban populations for the better.

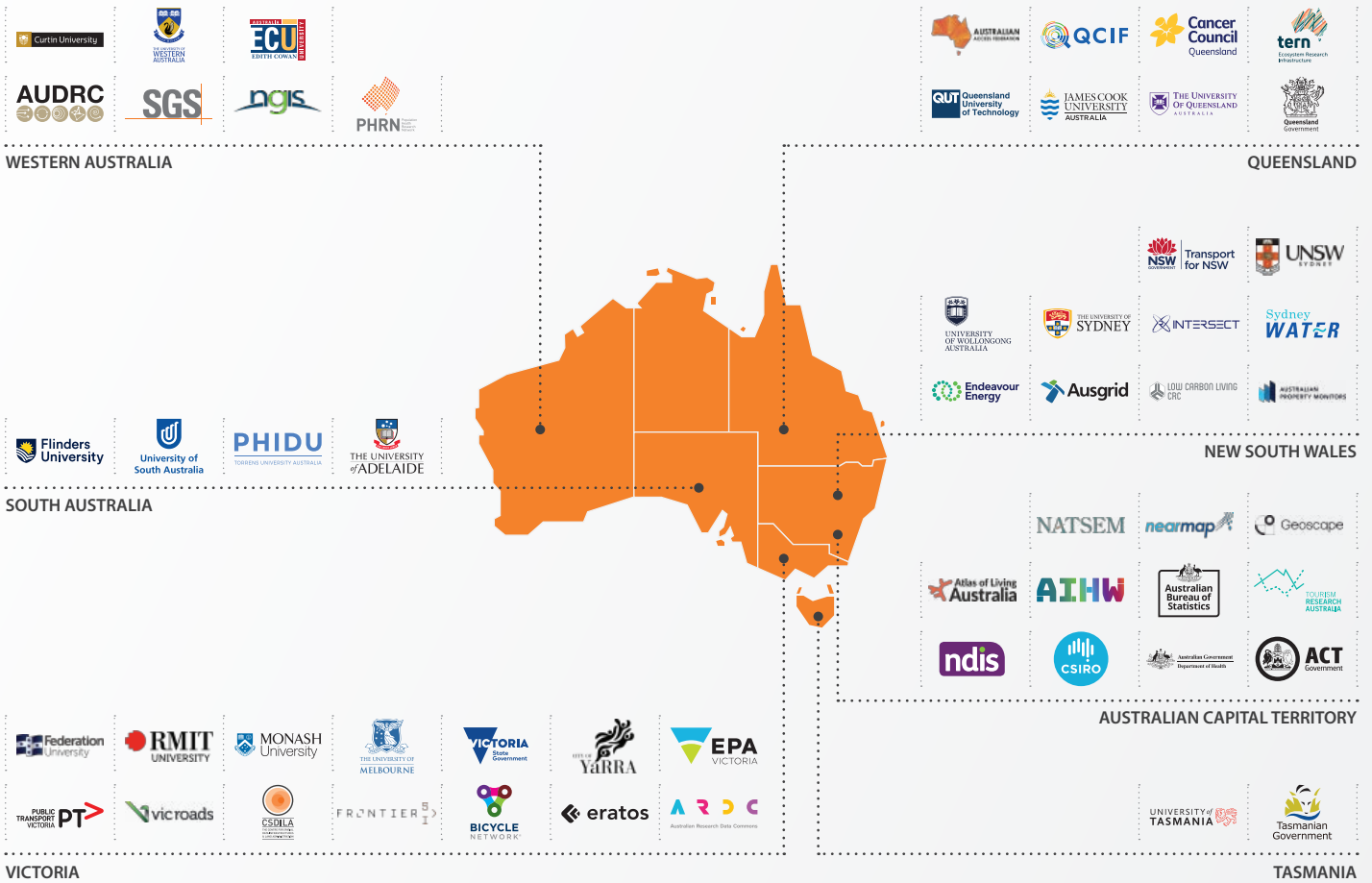
While there are significant challenges we must face in the coming years, it is easy to remain hopeful after seeing the amazing work researchers have done with our tools and data to identify, understand, and solve these problems. Over the past year, I have once again been thrilled to see AURIN's datasets used to fuel high impact and essential research in the areas of climate change, energy transition and changing demographics. I am so grateful to the research community whose data-driven work forms the foundation on which government and industry can build a resilient future.

In short, it has been an incredible year for the team at AURIN and we look forward to continuing it into 2024 and beyond.

A handwritten signature in black ink, appearing to read 'P. Perez'.

Professor Pascal Perez

Director



The AURIN Network

THE FUTURE OF AURIN

A milestone investment in AURIN

2023 was a milestone year for AURIN, as we applied for and successfully secured **\$25 million in funding** from the **Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS)**. This funding, which will be distributed over the next five years, ensures we can deliver on our ambitious **Strategic Plan** that is focused on addressing challenges such as climate change, energy transition, and demographic transformation with our leading digital infrastructure.

Submitting our **Research Infrastructure Investment Plan (RIIP)** to NCRIS was a huge undertaking and our success is a testament to not only the dedication of the AURIN team in putting it together but equally to the support and backing of our partners. AURIN's submission included more than two dozen letters of support from individuals and organisations across academia, government and industry, each of whom share our vision of creating a sustainable, equitable and resilient future for all Australians. These letters, which consolidated our partner's commitment to supporting our vision of delivering the best possible research outcomes for Australian communities, were an integral part of the success of our Research Infrastructure Investment Plan and we are so grateful to have had such deafening support from our partners in this endeavour.

The \$25 million will be distributed over the next 5-year period and will be a key component in delivering our Strategic Plan for 2023-2028. Given the ambition of AURIN's vision for the coming years, this funding represents an unprecedented level of commitment from the Australian government and is further proof of AURIN's industry-recognised position as a leader in providing the digital infrastructure that will lead Australian communities towards a brighter future.

AURIN is uniquely positioned to play a key role in supporting Australia's ability to respond to the greatest challenges it is facing. Our goal, as the connecting point between academia, government and industry, is to facilitate impactful solutions driven by access to hard-to-get data, high impact research and information sharing amongst scientific communities. This funding will enable us to do that over the next 5 years as we continue to enable cost-effective scientific investment, enhance research translation and cultivate and contribute to a vibrant innovation ecosystem.

We are entering a new era of growth and change—both as an organisation and as a society—and while there are significant challenges to overcome, AURIN is proud to play a key role in delivering solutions through our leading research and digital infrastructure. Our work on building a **collaborative foundation** for Australian Urban Digital Twins is only one example of this.

We're incredibly grateful to receive the financial support required to allow us to deliver on our strategic plan and look forward to providing government and researchers across Australia with the critical data and analytical tools they need to build a brighter future for Australian communities.

THE FUTURE OF AURIN

An ambitious vision for the future

In the coming decades, Australian cities, towns and regional centres will have to address several key challenges at a scale and pace never seen before—namely: adapting to the impact of climate change, facilitating energy transitions in all sectors and delivering adequate housing and social infrastructure to a population characterised by significant demographic transitions.

The magnitude of these challenges necessitates high impact solutions backed by high quality research. In short, a digital infrastructure that can support governments, industries and communities as they adapt to a challenging future. AURIN is poised to provide this infrastructure and in 2023 launched an ambitious **Strategic Plan** that outlines how we can address urban issues facing Australian communities as well as support the research that will underpin the necessary solutions.

Our Strategic Plan 2023-2028 aligns its objectives with the priorities identified for the National Reconstruction Fund to address the challenges set up in the **NCRIS Roadmap 2021**. By doing so, AURIN's vision is to become more responsive to national priorities and identified research gaps. Specifically, AURIN will provide crucial datasets and critical digital infrastructure to researchers and analysts focusing their work on the challenges of climate change, energy transition, and demographic transformation as these are undoubtedly some of the most pressing challenges urban communities are going to face. We will facilitate and coordinate efforts to generate, and provide access to, systemic and up-to-date data and technology. And we will ensure the data and analytics we provide are modular and compatible with efforts to develop an Urban Digital Twin for Australia.

Supporting our key stakeholders and developing stronger relationships within industry, government and academia is another integral component of AURIN's vision. AURIN has served over 24,000 users with access to over 5,000 datasets since its inception. These figures are expected to grow significantly over the next five-year period, as AURIN builds strategic partnerships with key government agencies and industry players and expands on its existing infrastructure to support both academic researchers and commercial partners.

AURIN is already well on its way to delivering on its vision. 2023 marked several significant milestones for us, as we began **building a collaborative Urban Digital Twin community** to further Digital Twin implementation and effectiveness in Australia. Securing access to hard-to-get data as part of our **AusUrb-HI project** in collaboration with other NCRIS facilities is another huge achievement that delivers on our vision of identifying and providing access to the tools and data decision-makers need.

With much to be done to overcome both present and future challenges, ambition and innovation have never been more critical. That is why AURIN'S Strategic Plan 2023-2028 puts us at the cutting edge of digital and data and doubles down on our commitment to provide the knowledge, tools, support and infrastructure to the researchers and decision-makers who are building a more sustainable future for Australian communities.



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RESEARCH IMPACT

Datasets reach thousands in transformative research impact

Providing datasets that inform high impact research is at the core of AURIN's vision and 2023 was a year that saw us deliver significantly on this, curating and sharing over 5,000 datasets that informed the work of researchers in Australia and internationally. In 2023, we logged approximately 2,200 AURIN Data Provider users while 32 scientific publications acknowledged AURIN's critical support to their work.

Over the course of the year, data accessed through AURIN was cited in ten papers published in peer-reviewed journals, one paper published in a book of conference proceedings, several conference papers and a peer-reviewed piece of research.

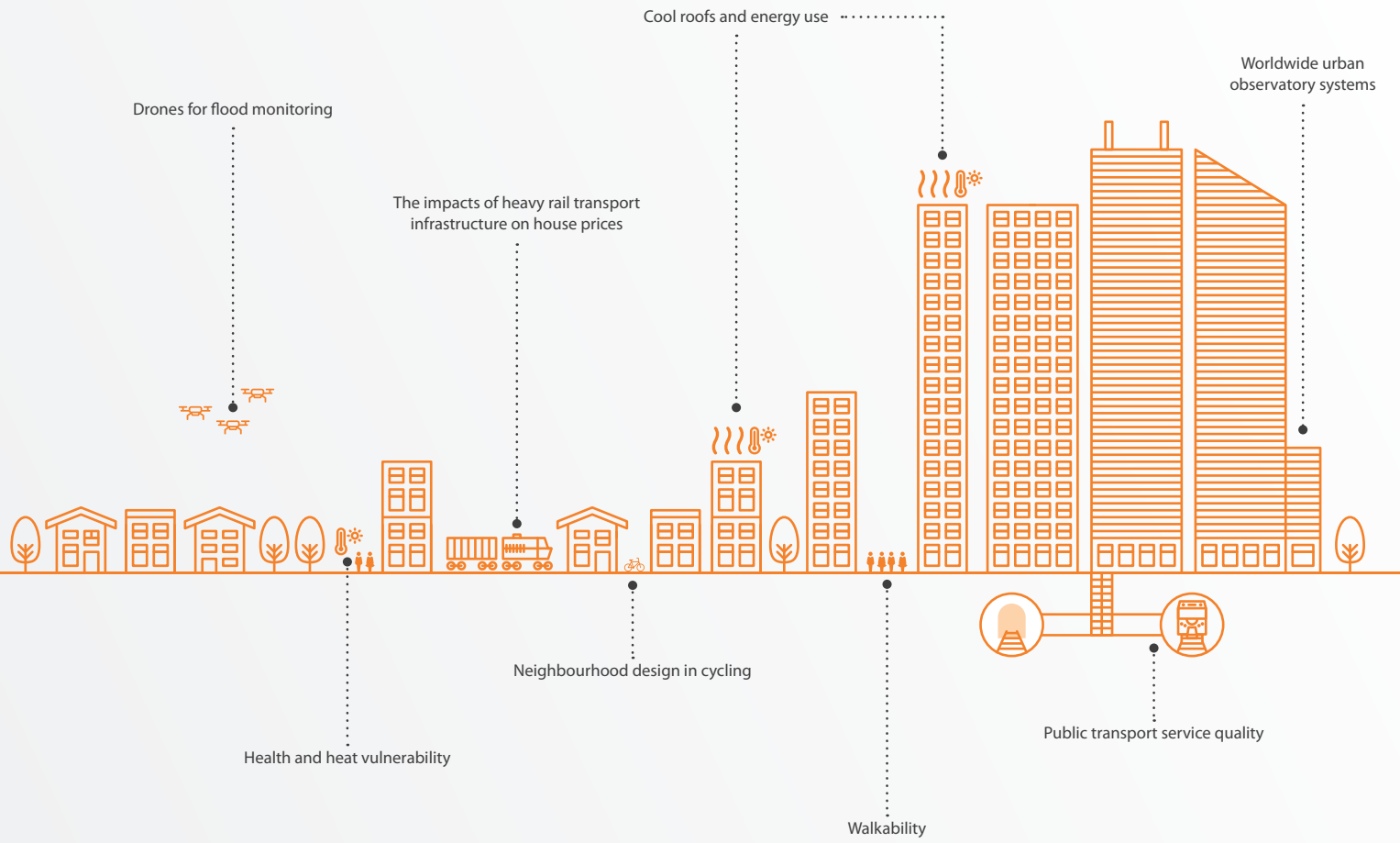
The data was used by researchers across Australia and internationally to inform analysis on topics including the use of drones for flood monitoring, the impacts of heavy rail transport infrastructure on house prices, health and heat vulnerability, cool roofs and energy use, walkability, public transport service quality, heat risk in cities, worldwide urban observatory systems and more.

A particular highlight was seeing AURIN cited as the leading urban observatory in Australia in the peer-reviewed paper, '**A review on worldwide urban observatory systems' data analytics themes: Lessons learned for Malaysia Urban Observatory (MUO)**', in the *Journal of Urban Management* (Vol. 12 Issue 3). Seeing AURIN's data analytic themes informing the development of the Malaysia Urban Observatory is an honour and proof of the important role AURIN plays in facilitating the development, deployment and long-term support of advanced data, analytical methods, simulation models and visualisation capability for the adoption of high-impact research within government and industry.

It's always exciting to see how AURIN's specialised datasets are able to support the work of urban, regional and social science researchers in academia, government and industry. It's particularly inspiring when the research aligns with AURIN's key vision and goes far in informing decisions on and providing solutions to many of the challenges AURIN is focused on addressing, such as the impacts of climate change.

We would like to congratulate all researchers who had their work published in 2023 and look forward to seeing more AURIN-facilitated research in 2024.





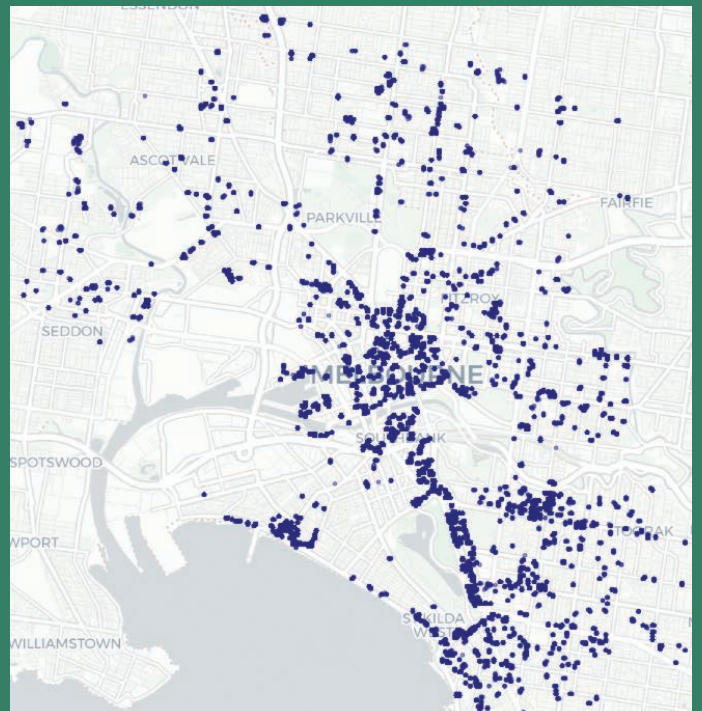
RESEARCH IMPACT

The financial impact of combustible cladding on the housing market

Data made accessible by AURIN from **Australian Property Monitors** was used in a **study by Dr Daniel Mesler** to examine the impact of combustible cladding on the housing market in Melbourne, Australia. This was a vital piece of research following the property crisis that ensued in the wake of two high-profile combustible cladding fires: the Lacrosse Tower fire in Melbourne in 2014 and the 2017 Grenfell Tower tragedy in London, in which 72 people died.

Dr Mesler used data provided by AURIN to determine whether the changes in rent and property prices following the Grenfell and Lacrosse Tower fires were caused by industry concerns about safety or financial repercussions. His analysis revealed that all properties likely to have combustible cladding, be they rental, owner-occupied or investment properties, were cheaper than properties that didn't. However, his research also revealed that there was a disparity in price amongst the different property types. Rental properties likely to contain combustible cladding cost 3% less than buildings without, while investors needed an 11% discount to be persuaded to purchase a property containing combustible cladding.

Dr Mesler's research therefore suggests that lower property prices were mostly driven by fear of the financial risks associated with combustible cladding rather than safety concerns. Dr Mesler's research is the first of its kind to highlight the impact combustible cladding has on the housing market in relation to house prices, rents and transaction frequency. This is crucial information for Melbourne's property industry as work continues to remove combustible cladding from buildings and neutralise its risks to the market. AURIN is delighted to have enabled Dr Mesler's research.



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RESEARCH IMPACT

Neighbourhood design and cycling activity during Covid-19

Cycling infrastructure data made available by AURIN was used in **a study analysing how neighbourhood design impacts cycling activity and experience**. The study assessed how various populations altered their cycling activity during Melbourne's COVID-19 lockdowns and used this, alongside data from the Victorian Government, Vicroads, AURIN, and the researchers' surveys, to better understand how infrastructure, design and demographics contribute to cycling behaviour.

Given the myriad benefits of cycling for urban communities, this was an important study in ascertaining what the barriers to this activity are and how urban planning can make cycling more accessible for different populations.

Through data analysis, it found that, among other observations, women and older people continued to avoid cycling at higher rates during the lockdowns, even with the incentives of reduced local traffic and other changed conditions. The study also noted that vulnerable populations rely on their local neighbourhood to provide safe cycling options, highlighting the close relationship between built environments and people's travel behaviours.

AURIN's data contribution to this study was considerable. In the words of one of the study's researchers, Mahsa Naseri, AURIN "facilitated a comprehensive analysis, connecting neighbourhood design, demographics and cycling behaviour during Covid-19 lockdowns, providing valuable input for urban planning and policy decisions."

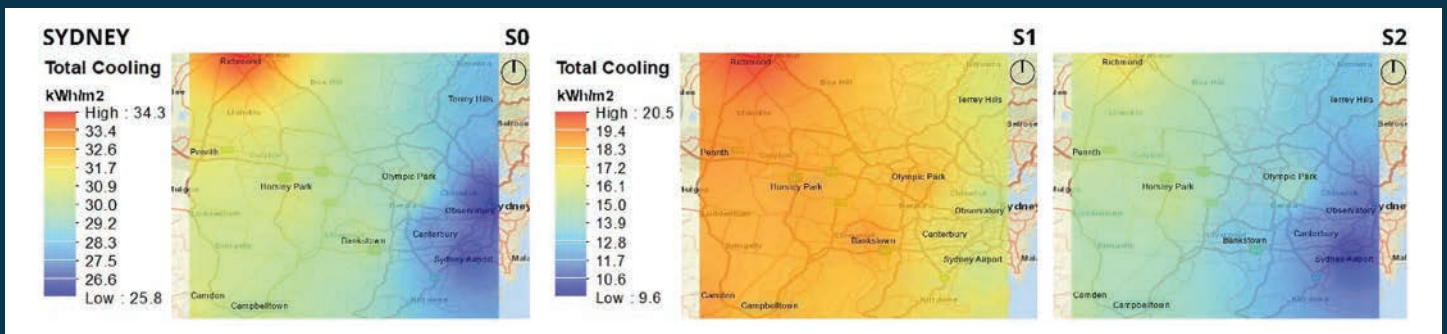
AURIN was delighted to contribute to such an important piece of literature that demonstrates, through exposing persistent age and gender gaps in cycling levels, how urban planning must reflect the needs of the wider community and the impact of supportive urban infrastructure on community health and wellbeing.



RESEARCH IMPACT

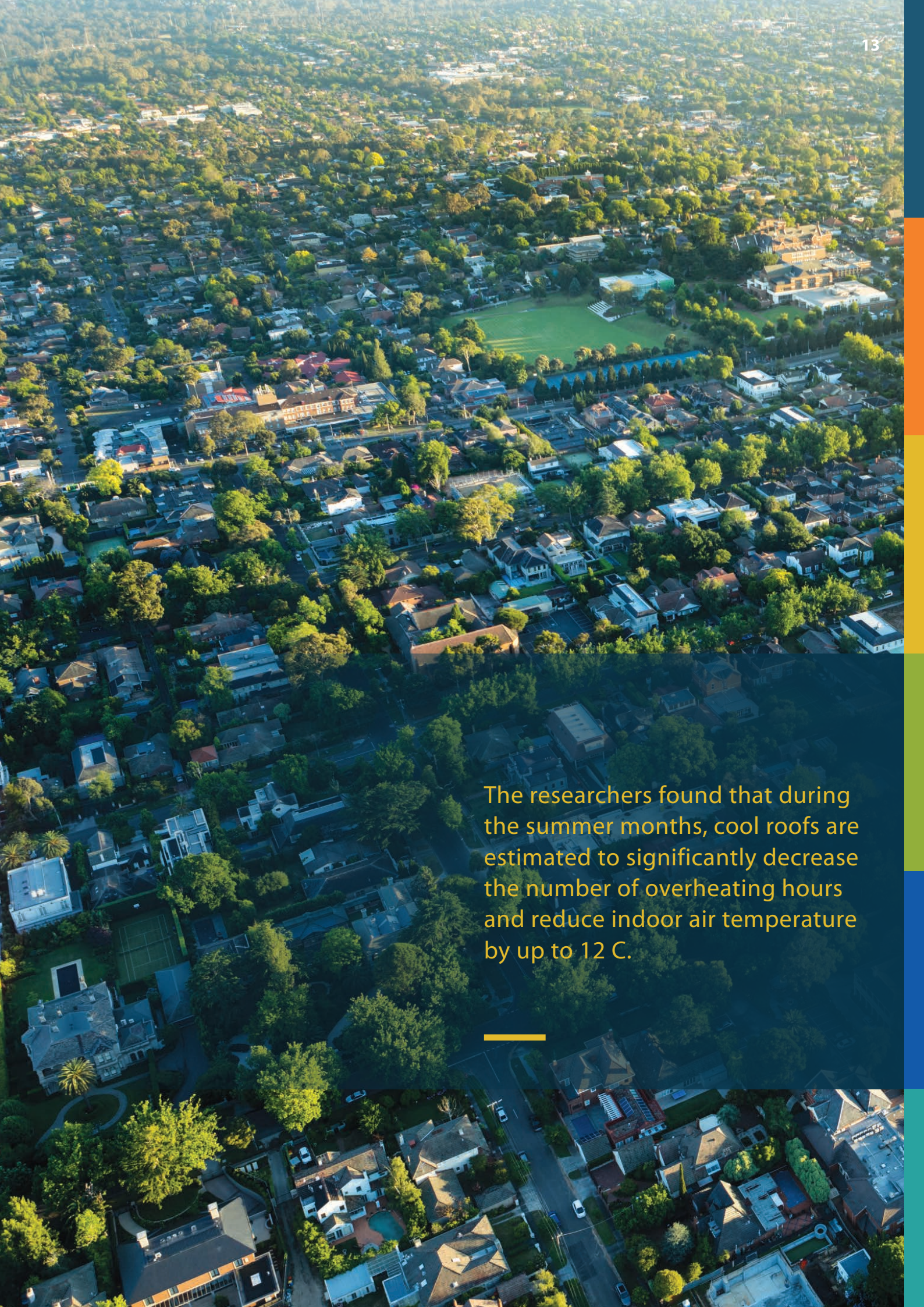
The energy impact of cool roofs in Australia

AURIN was delighted to provide data for an important collaborative **research project** between the School of Built Environment at University of New South Wales (UNSW), the University of Adelaide and the University of Calcutta, on the impact of urban-scale cool roofs on local urban climates. This comprehensive comparative analysis quantified, through building performance simulations, the energy and indoor air temperature benefits of cool roofs in 17 different types of buildings. The study was carried out across major Australian cities in January and February in 2023.



The researchers found that during the summer months, cool roofs are estimated to significantly decrease the number of overheating hours and reduce indoor air temperature by up to 12 C. Urban heat islands are a substantial environmental problem faced by cities worldwide and are only going to get worse as extreme weather events escalate. It's important to note that higher urban temperatures disproportionately affect low-income populations, resulting in severe health and mortality risks for low-income households. The impact of cool roofs underscored in this study is transformative as it demonstrates that cool roofs could drastically improve household temperatures for low-income populations, thereby improving their health and mortality.

Up until now, the existing research and data on cool roofs has been fragmented, which makes it difficult to gain a holistic understanding of the success of cool roofs as a method to reduce urban overheating. This analysis helps to fill that gap and provide planners and policymakers with the research they need to gain a deeper understanding of the benefits of cool roofs as well as evidence that large-scale application is a cost-effective means to build heat resilient cities. As this is the central focus of AURIN's work, we are delighted to have supported this research with data from our platform.

An aerial photograph of a suburban neighborhood, densely packed with houses and trees. The houses have various roof colors, including brown, grey, and blue. The trees are lush green, and the overall scene is bright and sunny. A large green field is visible in the upper middle section of the image. The text is overlaid on the bottom right portion of the image, which is slightly darker.

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RESEARCH IMPACT

AURIN Projects secure hard-to-access data and break down industry barriers

In 2023, AURIN supported and delivered 34 research projects, including 7 large strategic initiatives in collaboration with other National Research Infrastructures. Additionally, AURIN launched two new exciting projects—the **AusUrb-HI project**, which has already seen AURIN gain access to ground-breaking data, and the cutting-edge **Australian Urban Digital Twin Community**.



RESEARCH IMPACT

AusUrb-HI to Improve Urban Health and Liveability with a Heat Health Vulnerability Indicator

Australian Urban Health Indicators (AusUrb-HI) is an important collaboration between NCRIS facilities, AURIN, the Australian Research Data Commons (ARDC) and the Population Health Research Network (PHRN), and researchers. This project will develop a suite of new indicator data assets that will improve our understanding of the health of Australia's urban and regional populations, with the use of restricted linked population health data. Integrating health outcomes and health determinants for improved practice and policy, AusUrb-HI holds major potential to change policy and urban design in a way that can significantly improve the lives of Australian communities in the coming years.

The main objective of the project—which is also focused on developing cancer determinants, urban liveability and urban health indicators—is to facilitate access to restricted linked population health data and generate a new high value data asset: the Heat Health Vulnerability Indicator.

The Heat Vulnerability Indicator will illustrate which urban areas are at risk from extreme heat and the impact of this on human health. This will be achieved by combining data on population demographics, socioeconomic characteristics, health and environmental conditions in order to understand where the most vulnerable populations to extreme heat events are located.

In 2023, AURIN achieved a major milestone in the project's development with the **acquisition of individual linked health data** at SA1 level. This achievement was hard-won, with over 20 months of hard work from the AURIN team, but its impact will be far-reaching—not only for AURIN but for the entire research community.

SA1 data is the finest aggregated geography available for statistical analysis of people and place. It's data that is incredibly difficult to gain access to due to privacy concerns. Using data at a higher aggregation, like SA2 level, can inadvertently overlook intricate details like localised building densities or vegetation variations. Accessing data at SA1 level allows AURIN to delve deeply into health records and outcomes to improve the depth and impact of the Heat Health Vulnerability Indicator and forge the foundations for future research.

AusUrb-HI is a huge undertaking for AURIN with equally significant impacts. Part of the project will be developing a comprehensive and nationally recognised framework to save time and effort in obtaining similar data. This will ultimately contribute to the advancement of knowledge and the betterment of society. As our communities face the challenges of climate change impacts and a population with significant demographic transitions this couldn't be more important.



RESEARCH IMPACT

Digital Twins

The key to preparing for and adapting to the challenges urban communities across the world are going to face (such as climate change, energy transition, and changing demographics) lies in the potential of **Digital Twins**.

A digital twin is a virtual model designed to accurately represent a real world process or system. Urban Digital Twins (UDTs) allow researchers to comprehend complex urban phenomena across time and space through 3- and 4-D digital representations, real-time data acquisition and analytical and modelling capabilities. This access to hard-to-get data and digital simulation offers researchers, planners and policy makers the opportunity to transform the design and management of urban environments for the better, improving liveability and climate adaptability in the face of environmental challenges.

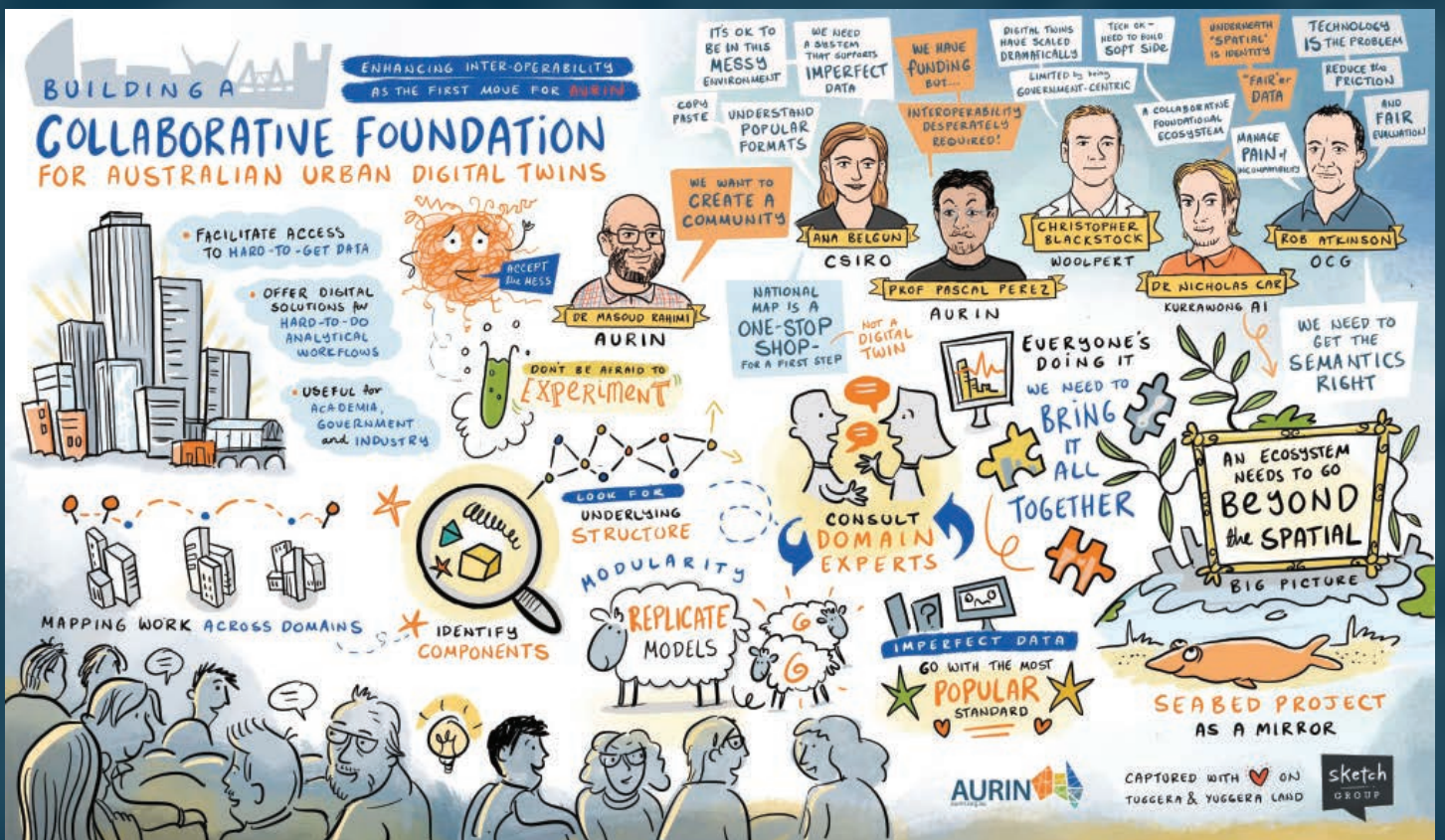
In short, Digital Twins offer leaders and decision makers an unparalleled opportunity to change the future and AURIN is leading this innovation, pioneering a collaborative foundation for Australian Urban Digital Twins to support this cutting edge technology.

As part of our five-year Strategic Plan, AURIN has developed key strategies to drive UDT development. Access to high quality data, and to the tools and algorithms that can adequately demonstrate the potential of UDTs, is being created through AURIN's Urban Data-as-a-Service (DaaS) and Analytics-as-a-Service (AaaS). Urban DaaS will unlock, generate, curate, catalogue and share the high value and hard-to-get data needed for Digital Twin research and planning. Urban AaaS will develop and maintain a modular, cloud-first digital research infrastructure that will dynamically support urban and regional analytics and modelling. The combination of these two cutting edge


digital infrastructures will provide interoperable, scalable and reusable foundations for Urban Digital Twins. To further consolidate these foundations, AURIN is also creating a UDT Testbed. The testbed is where AURIN will maintain a current and in-depth understanding of what's required to power UDTs across Australia. It will allow AURIN and its partners to test, prototype and share best practice standards, semantics, workflows and cutting-edge technologies for use in UDTs to understand how UDTs can inform decisions and positively impact lives.

AURIN is also **leading collaboration efforts on UDTs**. It is clear that the only way the transformative power of UDTs can be realised in Australia is through the collaboration of industries, academia and governments to develop and evaluate Urban Digital Twins' standards, technology, policies and procedures. To answer this, AURIN is **building a national community to establish collaborative foundations for Australian Urban Digital Twins**. We are working with a range of partners to break down the silos of knowledge, fostering interoperability and the development of social data and research mapping that will allow researchers and policy makers to better respond to a range of challenges across Australia.

AURIN is proud to be at the cutting edge of this transformative technology. Given the impact Digital Twins can have on our ability to respond to challenges posed by climate change, energy transition, and changing demographics, it is our imperative to continue coordinating a national dialogue on UDTs, facilitating testbed initiatives, and fostering partnerships that will build this essential and life-changing infrastructure.



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A photograph of a park scene. In the foreground, a brick path leads from the bottom left towards the center. To the right of the path, there is a green metal park bench. The background is filled with large, leafy trees with yellow-green foliage, suggesting late summer or early autumn. A dark blue semi-transparent banner is overlaid on the left side of the image, containing text.

This event was a highlight for AURIN as it encapsulates our vision of collaboration, engagement and accessibility in the research space, as well as underscoring the interconnectivity of health and spatial data, urban planning and human behaviour.

COMMUNITY ENGAGEMENT

Countering loneliness with green spaces

In April 2023, AURIN was delighted to take part in MPavilion’s seasonal program of community events by hosting **“Putting Down Roots: How Green Spaces Can Counter Loneliness”**. This was a lively and thought-provoking panel discussion between epidemiologist **Thomas Astell-Burt** and data analyst **Angela Ryan** and hosted by AURIN’s Outreach and Communications Manager, Lara Brown.

Lara is a writer-turned-urbanist who examines how built environments influence human behaviour, particularly when it comes to urban loneliness and ways to alleviate it in public spaces. Data analyst Angela Ryan (who was formerly a social data scientist at AURIN) uses health and spatial data to inform decisions around land use and city planning in her work at the Department of Transport and Planning (DoTP).

Thomas Astell-Burt is a researcher and epidemiologist whose work is focused on the interface of population, wellbeing, and environmental studies. Having co-authored research that examines “lonelygenetic environments”—built urban spaces that make connection difficult—Thomas’s work posits that access to more quality green spaces could reduce urban loneliness by up to a quarter.

The talk—which was recorded as a **podcast**—was an engaging dissection of the impact of lonelygenetic environments and the potential of green spaces to cultivate better connectivity and urban togetherness. Each contributor brought their specific area of expertise to the panel, creating a holistic and well-rounded discussion that ranged from the links between loneliness and other health conditions, and the benefits of nature prescriptions.

There couldn’t have been a better place to discuss the effect of built environments and green spaces on loneliness and human connection. The MPavilion is purpose-built to provide a cultural laboratory where Melbourne’s urban community can come together to engage, connect and knowledge-share in the spirit of collaboration and community building. This event was a highlight for AURIN as it encapsulates our vision of collaboration, engagement and accessibility in the research space, as well as underscoring the interconnectivity of health and spatial data, urban planning and human behaviour. We look forward to hosting more events like these in 2024.

COMMUNITY ENGAGEMENT

Nimble Chat series provides insight into Digital Twin implementation

AURIN's **Nimble Chats video series** continued last year as we hosted ENE.HUB's Head of Digital Urbanism, **Adam Beck**. Adam is the Chair of the Digital Twins Working Group for Standards Australia and host of the podcast **Digital Built Australia**, in which he and his co-host, Gavin Cotterell, discuss how policymakers and practitioners are using Digital Twins to improve cities and infrastructure.

This Nimble Chat was hosted by AURIN's Outreach and Communications Manager, Lara Brown. Here's some of Adam's insights from that chat.

On the importance of using data to improve communities

Adam: "What we need to focus on is the data that sits behind the greatest challenges we're facing and use that data to ensure we're getting smarter and building better outcomes. How do we even know if we're getting better without harnessing the power of digital and data? Powerful technological advancements in digital and data enable us to change tack or intervene so that we can offer better solutions quicker, faster and cheaper. It just makes sense."



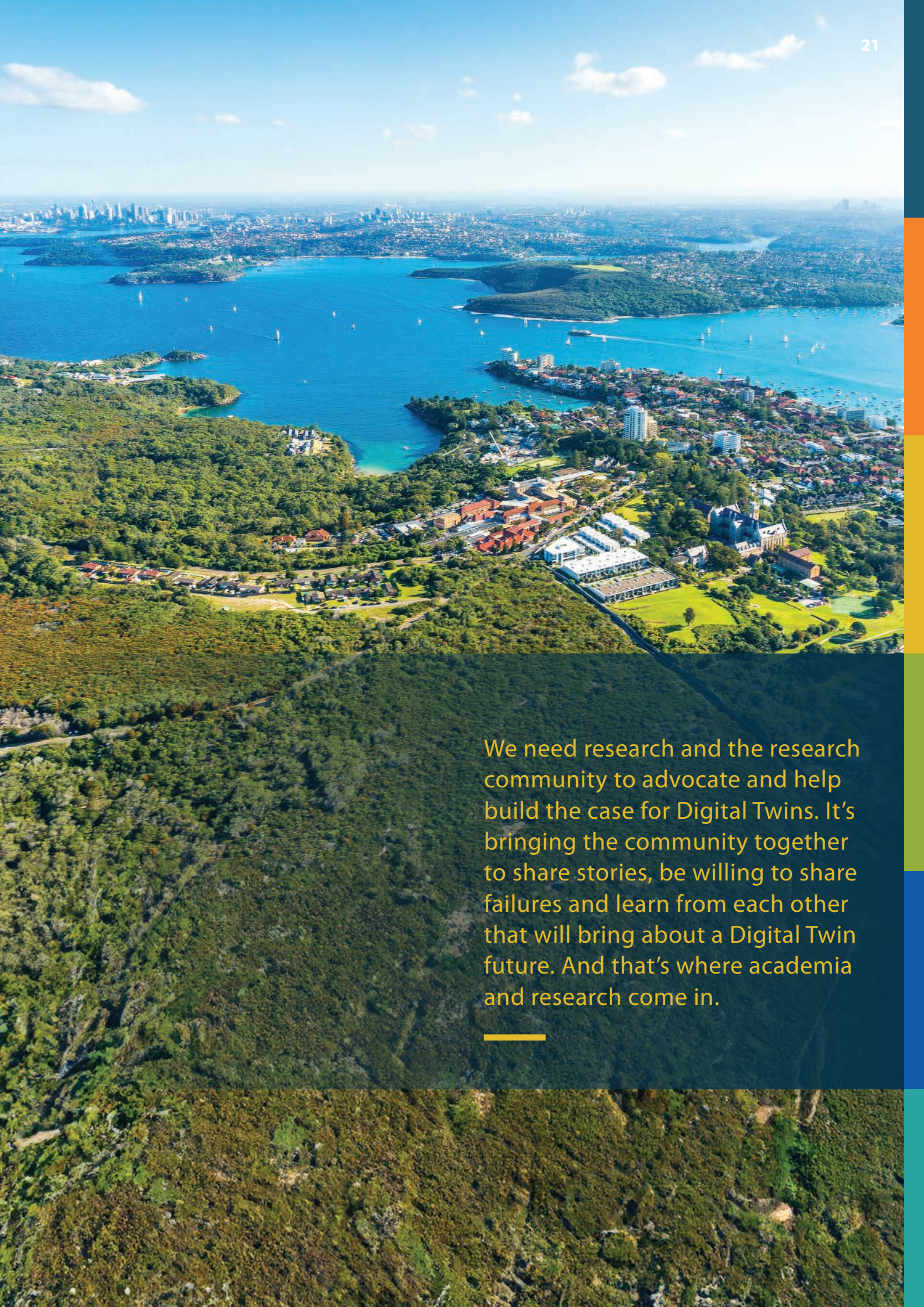
On the leaders in Digital Twin infrastructure in Australia

Adam: "We've got private sector leaders that have pursued digital twin capability development mining because they have the best tools, capability, and money to invest in it. For councils or local authorities, it's a little bit more challenging as they may not have the capability or the drive to do it, although we're seeing a few councils develop strategies and business cases which is a really good sign. However, the real leaders in Australia have been the state governments - New South Wales and Victorian governments, in particular. New South Wales has a spatial Digital Twin for almost the entire state so now they're building the apps to go on top of it. Digital Twin Victoria is moving at a great pace. They've secured tens of millions of dollars due to the strength of their business case and have a clear vision with a range of proof of concepts and projects that they're building out."

On the importance of research in Digital Twin infrastructure

Adam: "We need research and the research community to advocate and help build the case for Digital Twins. It's bringing the community together to share stories, be willing to share failures and learn from each other that will bring about a Digital Twin future. And that's where academia and research come in."

Adam was an insightful guest for this episode of Nimble Chat and AURIN looks forward to welcoming more thought-leaders and innovators like him onto the series in 2024.

An aerial photograph of a coastal city, likely Sydney, Australia. The image shows a large blue bay with many sailboats, surrounded by green hills and a dense urban area. In the foreground, there is a large green field, possibly a university campus, with several buildings and a church. The sky is blue with some clouds.

We need research and the research community to advocate and help build the case for Digital Twins. It's bringing the community together to share stories, be willing to share failures and learn from each other that will bring about a Digital Twin future. And that's where academia and research come in.

COMMUNITY ENGAGEMENT

Establishing collaboration and innovation at leading industry conferences

AURIN had the privilege of attending and speaking at industry conferences throughout 2023. This is an important part of our engagement strategy as it not only helps to consolidate our standing within the industry, it's integral to building key partnerships and facilitating knowledge-sharing in the field.

In 2023, AURIN presented at eight conferences across Australia, engaging with over 5,600 audience members. Some highlights from these events included exhibiting at the National General Assembly (NGA) and presenting at (as well as sponsoring) the **Institutes of Australian Geographers (IAG) conference**.

At the IAG Health Geography Study Group workshop, Dr Hao Chen, AURIN's Spatial Database Software Developer, presented our AusUrb-HI project to demonstrate Health Geographers' need for data and analysis techniques to tackle social and environmental challenges. AURIN Director, Pascal Perez, also spoke at the IAG, presenting the conference with AURIN's plans to build a collaborative foundation for Australian Urban Digital Twins. The IAG conference, which encourages cross-disciplinary collaboration, was an important opportunity to showcase our work and for our team to connect with researchers and government officials in Australia.

AURIN also presented at the **11th International Conference on Urban Climate (ICUC11)** which was a huge honour. This conference brings together a diverse international community of researchers, urban planners and designers, and policymakers to present research on urban climate, at all scales. As a platform to discuss modern developments in urban climate research, it was the perfect place for AURIN's Pascal Perez, Flavia Barar and a member of our Scientific Advisory Committee, Distinguished Professor Xuemei Bai, to speak about AURIN's mission to facilitate the design of better cities through high value climactic knowledge.





Several AURIN team members also presented at the **2023 eResearch Australasia Conference** in October. Pascal Perez and Masoud Rahimi held a thought-provoking Birds of a Feather session that discussed the need for collaboration in building an Australian Urban Digital Twin community. This lively session focused on enhancing interoperability and was made memorable by the contributions of colleagues from CSIRO Data61, Woolpert, Kurrajong AI and the Open Geospatial Consortium.

Members of the AURIN team also attended and presented at the **Locate 2023 Geospatial Evolutions**, Planning Institute of Australia and the NCRIS Forum in Canberra, where we were able to share lessons and strategies across all the NCRIS facilities. Locate23 was a personal highlight for many of the AURIN team, as we launched the inaugural **Peter Woodgate Award** and had the honour of announcing its first recipient.

Community engagement is a crucial part of AURIN's work and vision for the future. It's only through sharing knowledge and resources that we can achieve our greater goal of building a more sustainable future. We look forward to more opportunities to bring AURIN's vision to industry, government and academic communities in 2024.



GOVERNANCE

A new Chair for the AURIN Board

It was with great pleasure that AURIN appointed—after an extensive search—a new Chair of the AURIN Board: the esteemed Dr Chris Pigram. Dr Pigram replaced Mr Greg Tucker, who, as Interim Chair of the Board following the unexpected death of Dr Peter Woodgate, was a guiding light of steady reassurance and experience during a tumultuous time.

Dr Pigram is a geologist with over 40 years of experience in a wide range of geoscientific research and mapping. His expertise spans science, academia and government, with a deep understanding of managing the interface between science and government in stakeholder engagement.

He was the CEO of Geoscience Australia from 2010-2017 and is currently the Chairman of AuScope Ltd and MinEx CRC, a member of CSIRO's Deep Earth Imaging Advisory Panel, Chair of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mines and of the Australia New Zealand IODP Governing Council. He was made a member of the order of Australia in 2019.

Dr Pigram, who also has a deep understanding of the National Research Infrastructure landscape having formerly held the role of interim director of the National Computational Institute, brings a wealth of insight and expertise to AURIN. As AURIN expands its vision and we enter a new phase of innovation, Dr Pigram is an invaluable asset and one we are thrilled to have supporting us as we persevere in the development of a sovereign capability, including the design and implementation of Urban Digital Twins.



Dr Pigram is joining us at an important time as we accelerate our governance plans for 2024. We're looking forward to establishing our inaugural **Industry Advisory Committee** and to welcome new members to our **Scientific Advisory Committee**. We'd also like to thank inaugural members of the Scientific Advisory Committee for their contributions over the last three years.

GOVERNANCE

The inaugural Peter Woodgate Award

2023 brought an enormous loss to AURIN and the geospatial community at large with the sudden death of Peter Woodgate, the visionary Chair of the AURIN Board. Peter's contribution to AURIN was enormous, both in professional and personal capacities. He was instrumental in establishing AURIN as a key institution at the intersection between academia, government, and industry.

An undisputed trailblazer and thought leader with a pioneering career that spanned space and spatial information technologies, Peter will also be remembered for his integrity, kindness, calm demeanour, good humour, generosity of spirit and energy. He was AURIN's first and most powerful supporter and during his tenure provided the framework that continues to cement AURIN's long term sustainability.



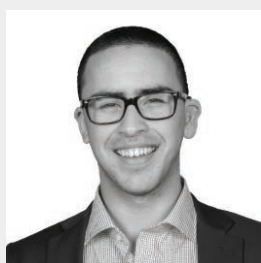
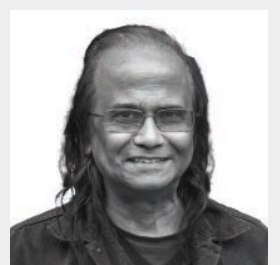
To mark Peter's exceptional contribution to AURIN, and to champion a new generation of geospatial researchers, AURIN and the Geospatial Council of Australia established the **Dr Peter Woodgate Award in 2023**. This award honours emerging leaders who embody the same qualities that characterised Peter and who are shaping the research and geospatial community through collaboration, mentorship, leadership and innovation.

We were delighted to present this inaugural award to Eva Rodriguez Rodriguez at Locate 23's APSEA Gala Dinner. Eva is a recognised innovator and STEM champion, having been selected along with 60 other Australian women to be part of the Superstars of STEM program. She previously worked at the European Space Agency prior to migrating to Australia where she worked under Peter at the CRC-SI. Most importantly, Eva encapsulates Peter's best qualities. She is driven, collaborative, respectful, and known for supporting her team members through both action and guidance.

While we will continue to feel Peter's absence strongly, establishing this award is a fitting way to ensure his legacy lives on through the next generation of geospatial researchers we seek to empower at AURIN.

Conclusion

AURIN has experienced tremendous growth in 2023. We are proud of how we have expanded, strengthened and improved our vision to guarantee better research outcomes. We cannot wait to continue the hard work into 2024 and beyond. While there is no doubt Australia is facing significant challenges, we are confident that our future, when backed by high value research and driven by high quality data, is bright indeed.



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