

## Actuaries Institute names Hugh Miller Actuary of the Year 2021

28 September 2021

The Actuaries Institute today named Hugh Miller 2021 Actuary of the Year.

Dr Miller's work has focused on social issues using data and complex analysis to improve public policy outcomes around intergenerational equity, homelessness, children who are in out-of-home-care, suicide prevention initiatives and the investment approach to welfare spending and public housing.

Dr Miller has a PhD in statistics. He is a Principal at Sydney-based actuarial consultancy Taylor Fry.

Actuaries Institute, Chief Executive, Elayne Grace said through his work, Dr Miller tackles some of the most complex issues facing communities. "Hugh has used data and advanced analytics to improve public policy across a very diverse range of sectors," Ms Grace said. "He champions genuine fairness and equity, using data to make informed and careful decisions that result in better outcomes for society."

Dr Miller's most recent and major work for the Actuaries Institute is the [Australian Actuaries Intergenerational Equity Index](#). "The Index is about trying to understand a very broad range of domains – the environment, housing, education, economics, health, and seeing the impact for different generations," Dr Miller said.

"Most Australians want fairer outcomes across the generations. Older Australians want a retirement with dignity. Middle-aged Australians want to be rewarded for work and see their children do well; and younger Australians want opportunities in education and employment. They increasingly recognise that environmental factors, including climate, are important to living a good life."

"The Intergenerational Index plants a signpost in the ground and says 'this is where we are, and this is where we are going' so we can see how different generations are faring. It shows whether wealth and wellbeing are getting better, or not, over time. And it highlights issues such as home ownership as pressing intergenerational concerns."

The first Index, released just over a year ago, showed a gap between the generations at a 20-year peak. The update, released in May, took into account the impact of COVID-19, across generations and through 24 indicators.

Dr Miller said some of his most interesting work has been in areas of underprivilege. "Whether it's long-term welfare receipt, the child protection system, the justice sector or homelessness, we consistently see significant concentrations of disadvantage and groups of people at high risk of poor long-term outcomes and high economic costs," Dr Miller said. "These groups can be identified very early, offering the opportunity to design better targeted interventions."

His work on welfare spending in New Zealand remains one of his favourite examples

"If you look at the proportion of people who are in the welfare system before they turn 20, it's a small pool. But if you look at future costs, three quarters of the future welfare spend is attributable to people who enter the welfare system at a very young age – under 20.

"That is a human cost. We can do better. We can design better systems. Defining what good outcomes are and making sure you can measure those properly is part of what we do. In time



that will support better programs and services. What's exciting is that government is increasingly keen to use good longitudinal data to make improvements."

Dr Miller has also been increasingly involved in data linkage projects, covering topics from suicide prevention, public housing, and homelessness.

He said linked data analysis helps provide a view across systems, allowing people and their interactions with services, over time, to be tracked. For example, he said there are common pathways to homelessness that can be traced through a range of government departments. People exiting out-of-home care or custody are at heightened risk of homelessness and it's important to understand these links to inform policy.

"In our work you can identify groups that have high future costs to government, design new initiatives around that and measure the outcomes every year," Dr Miller said. "What gets measures gets changed. Looking at the numbers is important."

"It's not super common to approach problems in this way," he said. "But in our work, we know that the idea of spending money upfront means you can get good outcomes for people and save money down the track – it's a good idea that is generating a lot of interest."

Actuaries Institute President Jefferson Gibbs thanked Dr Miller for his work in the Institute's data analytics team. "Hugh is extraordinarily skilled at his work, and extremely generous in his contribution to the industry and the Institute," Mr Gibbs said. "His modelling is of the highest technical skill. He uses detailed data sets and machine learning to bring very insightful analysis to modelling complicated problems."

"He is a very deserving recipient of the Actuary of the Year award for 2021."

**Dr Miller is available for interview.**

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**About the Actuaries Institute**

As the sole professional body for Members in Australia and overseas, the Actuaries Institute represents the interests of the profession to government, business and the community. Actuaries assess risks through long-term analyses, modelling and scenario planning across a wide range of business problems. This unrivalled expertise enables the profession to comment on a range of business-related issues including enterprise risk management and prudential regulation, retirement income policy, finance and investment, general insurance, life insurance and health financing.