



AITPM Queensland Young Professional Award

Tierney George



Qualified. Bachelor of Engineering (Civil Engineering) (Hons I), Bachelor of Business Management (Sustainability). University of Queensland (UQ).

Passionate. Tierney is excited about pursuing her career in transport and traffic engineering, and is passionate about sustainability. She is currently a graduate in GHD's Transport Planning Team. Tierney hopes to complete further study, and envisions that attending the National Conference will be an opportunity to network and learn more about new advances in industry.

Connected. Tierney has served as a leader and representative on multiple committees and is excited by the opportunity to represent young professionals for AITPM's Queensland Branch.

To the Panel

My name is Tierney George and I would like to put forward my nomination for the 2020 AITPM Young Professional Award for Queensland.

Eligibility and background

I am a Graduate Civil Engineer in GHD's Transport Planning team. I graduated from the University of Queensland in July 2019 as Valedictorian with a Bachelor of Engineering (Civil) (Honours I) and a Bachelor of Business Management. I began my undergraduate career with Brisbane City Council, where I gained a few months' experience working in the Road Design team. Having tried a few other disciplines in my rotations following, I became convinced that transport was the right field for me. I have now been working full time at GHD for ten months, growing my experience and understanding of traffic engineering, transport planning and transport advisory. In this time, I have found that the more I learn through work and broader industry engagement, the more my passion for transport planning grows.

Career ambition

I am excited about being part of creating a sustainable and efficient transport future, and plan to devote my working life to fulfilling this goal.

To work in transport engineering and sustainability has been my ambition since 2016. In my third year of study, I undertook an extra-curricular research project with UQ's Icarus program. Our project focused on investigating and improving customer experience at Brisbane Airport in order to accommodate increasing passenger flow and service demands, with key target users being the general public and disability groups. This project gave me exposure to the human side of transport, and made me consider how a design can be inclusive and affect the physical and emotional experiences we have within our environments.

Later the same year, I completed subjects in engineering economics and transport while on student exchange in Canada. The perspective I came to understand in Toronto helped form what I hope to be my long-term career path. The importance of balancing technical outcomes with environmental, social and economic ones was poignant. Returning from exchange, I refocused my business studies on environmental management and sustainability, and my engineering studies on transport engineering.

In my final year, I completed an elective research project titled the *Contribution of zero emission vehicles in meeting Queensland's carbon targets*. This project sought to answer the question of if and how Queensland can reach zero transport emissions by 2050, with particular emphasis on the impact of electric passenger and low emission freight vehicles. This project was fundamental in solidifying my passion for transport sustainability. I was able to read about leading policies from around the world, and dissect their effectiveness. Interestingly, alongside a lack of infrastructure, poor market acceptance was one of the key barriers to meeting or missing emissions targets in the transport sector.

These experiences led me to the understanding that transport and traffic engineering is not just dependent on design standards. It requires a fundamental understanding of how people interact with physical infrastructure and react to change. Transport is a complex and dynamic field that I believe truly affects quality of life. What an engineer calls 'efficiency' must translate to 'convenience' for the customer. As a student, this really appealed to me as I have always wanted to have a career that I felt made peoples' lives better.

In my role at GHD, I have already begun to be a part of exciting changes. As a consultant for local and state governments, I have worked on projects that will improve safety and encourage active transport. I am fortunate to be supported by excellent managers and colleagues, who have been instrumental to my professional development so far. My favourite experience on a project has been pursuing a new cycling treatment for an industrial road that has been the product of collaboration and best practice across states and countries. It is fantastic to see how an idea could turn into a real project outcome due to the passion of engaged professionals.

Looking forward, I hope to be a part of forging the future of transport as the world, especially as we recover from COVID-19. The pandemic has changed demand patterns and significantly influenced mode choice, highlighting how integrated transport is with all other parts of our lives, particularly health and economy. The situation has proven that mass societal behavioural shifts are possible, but we are yet to figure out how to support them in the long term.

With the introduction of electric vehicles, autonomous vehicles, and the emergence of hydrogen and alternative fuels, we're on the cusp of a potential revolution in the transport sector. Our public transport is getting smarter and active transport networks are becoming increasingly important as urbanisation continues to rise, and will be even more important if people remain adverse to crowded public transport services. With autonomous vehicles and the sharing economy, we may see an overhaul of land use as private vehicle ownership shrinks. On the other hand, if working from home is normalised in the long term, we may see a reduction in travel, a decentralisation of our CBDs and a rise in more affordable rural living, each of which come with varied transport challenges and opportunities. The future is uncertain, and our networks need to be resilient and ready.

Supporting and shaping these changing possibilities is incredibly exciting to me. I engage in these sorts of conversations by joining webinars and reading research updates and articles. I follow industry groups like AITPM, Engineers Australia, ARRB and others to keep up to date with current trends and future possibilities. I also try and engage these ideas as talking points with a range of people, including managers, colleagues, peers from university, and friends and family outside of the technical circle.

While I am only in my first year of work, I find myself looking at things from a traffic perspective, thinking 'how could we make that better?'. I am constantly excited by the diverse projects and new ideas I've been able to explore so far as a graduate, and am looking forward to a long and rewarding career in the transport industry.

Conference

I would be grateful to attend the National Conference as I expect it to be an excellent opportunity to network and further develop my interests in transport planning. I learned about AITPM and the National Conference from discussions with my team at work. My colleague's submission was accepted for the National Conference, and there has been much excitement about the chance to attend. I understand that the 2020 conference has been postponed, however, I would still value the opportunity to be a part of the online events, with the hopes of being able to be a part in person when it returns in 2021.

I am passionate about innovation, and wish to pursue a higher education degree in the next five years. I hope to do additional study in the field of transport sustainability, to produce meaningful work that furthers the use of sustainable transport solutions in industry. I feel that attending the AITPM conference will help me

to develop networks and identify skills that I will need in order to pursue this goal. This would be my first professional conference experience, and I would hope to be able to see how and what presentations are held, and begin to build an understanding of what may be required to successfully submit a conference paper myself.

Although impacted by government restrictions, I believe that this year's online conference activities are likely to be one of the best and most important opportunities for networking with other professionals. The global health crisis has spawned a myriad of new ideas and policies around reshaping our cities' transport networks to better support a post-COVID-19 society. In addition, the pandemic has presented a unique opportunity for reform amidst the climate emergency, and I feel strongly that the more that these two situations are paired in our discussions, the greater transport planners and engineers are going to be able to respond in the coming months to changing needs in our urban centres. I would love to be a part of these discussions, to be able to learn, and to share and develop these ideas with clients so that they may become a reality.

Attending the conference and online discussions would enable me to build my professional network and get a grasp of cutting-edge ideas that I would bring back to my colleagues and clients as a champion for the continual innovation and development in the field.

Committee

I would be grateful for the opportunity to sit on the State Branch Committee as a Young Professional representative. Whilst studying, I was Vice President of the Civil Engineering Student Association, media coordinator for Brisbane's Spark Engineering Camp Committee and student representative on the UQ School of Civil Engineering Teaching and Learning Committee. I have always tried to be actively involved in my communities, and would look forward to the chance to get to do this in our industry.

GHD has a large network of young professionals, and my alumni networks also include a diverse range of young professionals and committee members of other groups. Surrounding myself with these connections would enable me to discuss and develop a true voice for young professionals on the AITPM committee. I'm excited to be able to be a part of bringing together these networks and growing the presence of AITPM in graduate and young professionals' circles.

Further, I am aware that legislative and political policies will be required to support changing technology and approaches to transport planning. As a voice for the experts, I believe AITPM and its networks will have a role in shaping these, and the transport industry as a whole. The discussions we have now will go on to be a part of this change, and as the leaders of the future, it's important that young professionals are involved in the conversation now.

Summary

I would be grateful to be considered for the Young Professionals Award as I would consider the educational and networking opportunities to be invaluable. I see the role of transport professionals as a critical link towards global sustainability, with the power to affect environmental, economic and social outcomes. I would welcome the chance to meet more young and experienced professionals in this industry who feel the same, and learn from those who have different ideas and experiences. My goal is to work every job and every day towards solutions that improve how we move, and I look forward to seeing how AITPM will be a part of shaping that career.

Kind Regards



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