Application

To	Mr Bill Cirocco & Mr James Parrott		
From	Eli Alabaster	**Date**	26 June 2023
Subject	Young Professionals Award 2023		

Dear Bill & James,

I wish to nominate myself for the AITPM Young Professionals Award in 2023. I feel I would be an excellent candidate to represent South Australia as part of the Young Professionals Awards for the AITPM National Conference in September 2023.

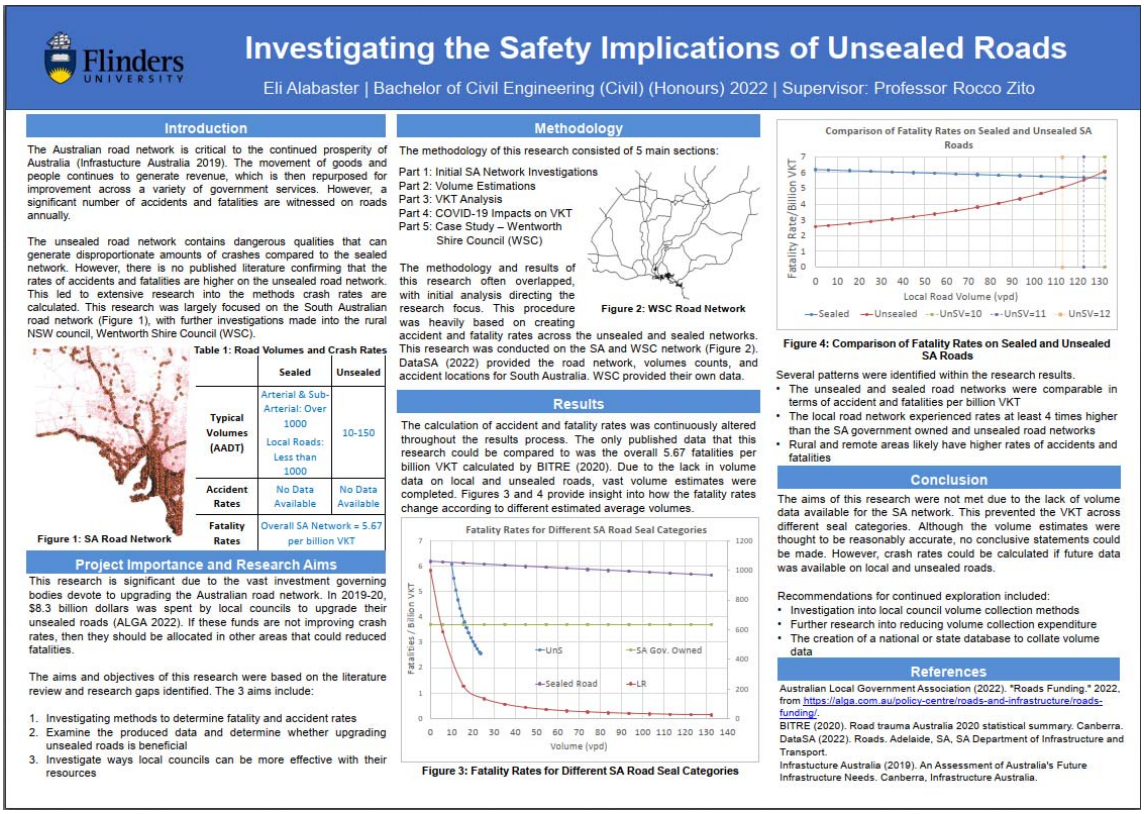
My name is Eli Alabaster, I am a recent Civil Engineering graduate from Flinders University who has begun my career within the transport field at Tonkin Consulting. I was thankful to be notified of an opportunity to initiate my career through James Arnold. James had approached my Coordinator Mr Rocco Zito seeking interested young professionals to join Tonkin, who are a recognised engineering consultancy. Like this nomination, I was eager to jump on board and explore this opportunity to develop a rapport with the organisation and hopefully establish a career.

My interest in becoming a transport professional was solidified during my placement at the Wentworth Shire Council between 2021 - 2022. As a part of the 6-month employment with Council, I was heavily involved with the unsealed roads program and other road renewal/upgrade projects. I was able to see projects through from the early stages of design through to construction. This experience was greatly satisfying as it provided me with the confidence that this was a field I wanted to continue in. The diverse range of projects within Council was also appealing to me and I expected to return to once I had completed my studies.

My experience working with Council also fuelled my passion in road safety, with a specific focus on rural areas. The topic of my honours thesis undertaken in 2022 was titled, "Investigating the Safety Implications of Unsealed Roads", which involved conducting research on the SA casualty and fatality crash rates on unsealed roads and comparing this to the sealed road network (State Owned & Local Roads). Providing safe conditions on our roads and reducing fatalities is a critical focus of federal and state governments and significant amounts of money is spent on sealing programs to upgrade the unsealed road network at all levels of government.

My aim was to identify whether continuously upgrading the road network to sealed roads was necessary across the road network to reduce severe crash rates. My research concluded that the fatality rates per billion vehicle kilometres travelled were extremely similar on unsealed and sealed roads. However, when comparing state owned roads and local council roads, the crash rates and fatality rates were significantly higher on local roads.

This research also concluded that the crash and fatality rates were likely to be higher in rural areas. I was lucky enough to be able to source data from the Wentworth Shire Council as a part of my thesis and compare the data to what I had gathered on SA roads. However, due to the small amount of local roads volume data available to me, I could not definitely state which road networks experienced the highest crash and fatality rates. My thesis concluded that the identification of black spots and dangerous roads on the unsealed road network should be a priority for Councils, however the high accident and fatality rates on local sealed roads indicates that more money and effort should be spent on improving the local street network and reducing travel speeds in these environments.



I was able to relay this research to a local Council to provide them some extra insight to the benefit of sealing their unsealed road network and whether there was a cost-benefit ratio of not sealing some roads.

After concluding my studies, I accepted the position in January 2023 as a Project Engineer to work for the Traffic and Transport Team at Tonkin. I have received significant development as a professional in the first 6 months of my time with this consultancy which has helped me to diversify and understand the broad nature of the Traffic and Transport Profession. For example, I have been exposed to the range of projects below.

- Traffic Calming Device Design (Traffic Engineering)
- Integrated Transport Plans (Transport Planning)
- Concept Designs for road reconstructions (Traffic Engineering)
- Traffic and Parking Plans (Transport Planning)
- Pavement Design (Civil Engineering)
- Active Transport Solutions (Transport Planning/Traffic Engineering)
- Traffic Impact Assessments (Traffic Modelling)

These projects have strengthened my understanding and progression as a graduate with less than 3 years' experience. It has also assisted me with understanding what potential field of the traffic and transport profession that I want to specialise in. I have taken on more responsibilities with projects and have begun learning how to engage with clients and other professionals within the field. I believe communication is an integral part of any work we do, working in a niche profession results in sometimes a gap between the client needs and what is possible from a traffic and transport perspective.

My goals for the future are to continue to learn the craft of civil engineering and expand my knowledge as a traffic engineer. This will hopefully extend to becoming a project leader in the short term and then becoming a well-rounded senior engineer in the long term. I want to continue being involved within the industry and provide other young professionals with the same opportunities afforded to myself. This also involves the possibility of continuing research within the academic field and contributing to the conversations about transport issues at local levels.

Being involved with a transport association such as AITPM will progress my development as a young engineer, while also exposing me to people with much greater experiences than I have. With Tonkin's association with AITPM, I have attended several of the transport related events this year. This has been thoroughly enjoyable and provided a new perspective on transport research.

The National Conference will be a great platform for me to network and connect with like-minded people. Networking is such an important part of engineering because there is always someone who looks at life a little differently with a range of experiences, I would love to see what this profession means to them through their lens.

I would also be interested in engaging with other young professionals within AITPM Branches through involvement in any existing State Branch Young Professionals Network committee. Meeting and communicating with people in similar positions to me could be a great opportunity in progressing my goals as a leader and assisting with organising YP events.

Thank you for taking the time to read my nomination and looking forward to hearing from you in the future.

Kind Regards

Eli Alabaster