



## EDUCATION

### **Bachelor of Engineering (Honours)** - Civil and Transport (2017-2020)

Queensland University of Technology

Final GPA: 6.78, including 7.0 GPA in traffic engineering and transport planning subjects

Honours thesis: Fare-Free Public Transport in South East Queensland for school students

### **Queensland Certificate of Education** (2015) - Overall Position 3

The Gap State High School

Maths B, Maths C, Physics, English, French, Accelerated Music, Industrial Technology Studies

## WORK EXPERIENCE

### **AECOM (Nov 2018 to present)**

Working in the Transport Engineering and Advisory team helping in all aspects of traffic and transport engineering. This includes:

- Using traffic modelling software including SIDRA, AIMSUN and EMME to determine optimum intersections design, options analysis and travel time data on projects such as Rockhampton Ring Road, Townsville Ring Road, Mount Lindsay Highway and the Sunshine Coast Mass Transit
- Developing excel spreadsheets to complete link analysis, crash analysis and safety assessment relating to development traffic for Inland Rail
- Undertaking Traffic Impact Assessments in line with the GTIA on wind farm and mining projects, including the analysis of pavement and safety impacts
- Assisting with transport planning projects in Bundaberg and Morayfield, including the development of a Movement and Place criteria set for the Bundaberg Integrated Transport Strategy, and assisting with the preparation of inputs for existing conditions reports about active transport and the existing road network.
- Completing MCA and options analysis for Park 'n' Ride feasibility and business case studies
- Swept path analysis using AutoCad Vehicle Tracker for Logan Hospital upgrade as well as the Banana Range Wind Farm Route Assessment
- Report writing on a range of projects with different mentors - learning the engineering writing style.

### **QUT Engineering Tutor** (Semester 2, 2019 and 2020)

Running tutorial classes for the 'Introduction to Civil Engineering' Unit, which involved helping first year students grasp the basic concepts in areas such as transport, water, geotechnical, structural and construction engineering.

## ACHIEVEMENTS

- QUT Dean's List for excellent academic performance in every semester of study
- Urban Challenge 2021 Event Chair attended by over 300 venturer scouts and 100 adult helpers
- Queensland Rovers Marketing Officer on the Queensland Branch Rover Executive
- Academic Excellence Medallion 2013 - 2015 at The Gap State High School (TGSHS)
- Certificate of Community Service 2015 by The Order of Australia Association

30 June 2021

To: QLD Branch President

Australian Institute of Traffic Planning and Management (AITPM)

Dear Mr Tattersall,

My name is Xanthia Dubler and I would like to nominate for the 2021 AITPM Young Professionals Award. I am someone who is extremely interested and passionate about transport and traffic. I realised my passion for transport and traffic engineering following a university subject in second year where we manually calculated intersection delay and signal phasing based on first principals. Following a three month internship, I was hooked and took the opportunity to undertake a second major in Transport as part of my studies.

An aspect I love about traffic engineering is the ability to see impacts first hand. I love to analyse my surroundings. Whether it be questioning signal phasing while stopped at a red light or reimagining Translink's public transport network while waiting for my late bus, my brain doesn't switch off the traffic channel. This is why I think attending the AITPM conference and joining the State Branch Committee would be exciting opportunities for me. These experiences will feed my passion for transport.

## **CAREER**

I began working in the transport engineering field after my second year of uni through the summer vacation program at AECOM. During the experience I had the chance to work on key projects such as InlandRail, Logan Hospital, and Mount Lindesay Highway. I had the opportunity to develop skills in SIDRA, AutoCad, and particularly Excel, which I had previously rarely used. Following the internship I was provided the opportunity to remain in the team as an undergraduate engineer in a casual role and continued to work on projects such as Rockhampton Ring Road, Townsville Ring Road, Park 'n' Ride Feasibility Studies and Business Cases and Banana Range Wind Farm.

While working casually, I continued my studies with a new focus on transport engineering and undertook subjects such as Advanced Transport Modelling, Advanced Transport Engineering, Transport Planning, Planning Law, Advanced Practices in Civil Engineering and my Honours Thesis which all had significant proportions of work directly related to my field. Through uni I extended my skills in SIDRA, as well as learnt new skills in AIMSUN, QGIS, Excel and data analytics software.

I loved the opportunity to undertake my honours thesis project about the benefits of fare-free public transport for school students in South-East Queensland. I researched the impacts that fare-free public transport has had around the world and undertook a pilot study with QUT employees to determine the likely impact of such a scheme in SEQ. I found it fascinating to undertake this research project and ever since undertaking the thesis I have been brainstorming other research topics to undertake for a Masters or PHD. This includes projects ideas around cycling and public transport improvements (modes I use daily for my commute), as well as safety (an area which is so important, both emotionally and economically, to society).

Since becoming a graduate at AECOM in February, I have loved the opportunity to take on more responsibility and to undertake projects from beginning to end. Two standout projects since beginning include:

*Clarke Creek Wind Farm Traffic Impact Assessment* where I undertook a complete traffic impact assessment in line with the GTIA for the development of a wind farm north-west of Rockhampton. The assessments included a 5% comparison, pavement impact assessment, crash analysis, link

analysis and SIDRA intersection assessments. It was an exciting opportunity to manage deadlines, liaise with the client and learn a new process all in one!

*Bundaberg Integrated Transport Strategy* where I have been involved in undertaking a movement and place assessment under the direction of our Industry Director - Cities, Mike Gillen. We reimaged the existing M&P framework used in NSW and VIC to design an appropriate assessment criteria for the Bundaberg region. It was an exciting opportunity to think about transport holistically and to discover the role movements and the transport network plays in creating a place for people.

## **NATIONAL TRAFFIC AND TRANSPORT CONFERENCE**

I am a hardworking individual who achieves fantastic things provided the opportunity. In my career, I want to redefine the limits of transport engineering and look to the future to see new and exciting opportunities for tackling congestion and safety. One of my career goals is to present at the AITPM National Conference and publish a research paper. Allowing me to attend the conference is not only an opportunity to hear about the exciting direction of transport in Australia, but also allows me to understand the process, atmosphere and style of presentations made at the conference.

I look forward to the sessions around automated and connected vehicles, and intelligent transport systems which are the way forward for our industry. I would also love to hear from and talk to Professor Graham Currie, who's research I was introduced to during my thesis. Public transport is a key area of interest for me, and I think this connection would be an exciting opportunity to discover what might be possible for me into the future if pursuing a research career.

I believe the conference is also a fantastic networking opportunity, and I would be thrilled to get to know the experts in traffic and transport, and believe attendance would be a great chance to engage with the broader profession.

## **STATE BRANCH COMMITTEE**

I am excited by the opportunity of sitting on the State Branch Committee as a Young Professional representative and I believe I would be a valuable member of the AITPM State Branch Committee.

Besides my passion for transport engineering, I am also heavily involved in Scouting, having joined when I was 7 years old. Through Scouts I have developed leadership and communication skills and I've been provided amazing opportunities, such as sitting on the National Youth Council and Branch Youth Council. Since the age of 16, I have held a role on the local group's venturer and rover unit's executives where I'm currently the chairperson. Recently I have also become more heavily involved in the higher level management of Queensland Rovers and have held a position on the Queensland Branch Rover Council for 2 years in the positions of Marketing Officer, Urban Challenge 2021 Event Chair, Merchandise Officer and Queensland Aquatic Rover Moot 2022 Event Chair.

I understand the requirements for taking on a role in an organisation's committee and believe this would give me valuable insight into AITPM. I love to work with passionate individuals to make the transport world a better place and I believe the State Branch Council would provide me with opportunity. I would also love to investigate further opportunities once this role is finished through continued involvement with AITPM.

Thank you for taking the time to read my application and I look forward to an opportunity to attend the AITPM National Conference.

Yours Sincerely,

Xanthia Dubler