My name is Nabela Tasnim and I am a first year graduate engineer with the Department of Planning, Transport and Infrastructure (DPTI) in South Australia, an organisation I joined upon the completion of my Master's Degree in Transport from the University of South Australia.

I started my career as a Civil and Structural Engineer, and worked in this area for nearly 4 years (in Bangladesh and South Australia), before making the tough decision to change my career path and to pursue my passion in traffic and transport engineering. This is one the best decision I have made in my career so far.

My current title within DPTI is a Graduate Traffic Engineer, where I am responsible for the provision of a range of technical support and advisory services pertaining to the identification, development, implementation and maintenance of the most appropriate traffic engineering solutions relating to hazardous locations, speed zoning and a variety of other related issues and problems to ensure the ongoing provisions of the most effective and efficient traffic management services.

In order to perform the duties in my current role, I have, over time, undertaken formal and informal training to advance my skills in transportation/traffic modelling, which includes modelling signalised and unsignalised intersections and roundabouts, and strategic modelling which is forecasting the traffic demand for future.

I truly enjoy being a traffic/transport professional and I believe, with the skills and knowledge that I have, I can contribute a lot to the transportation engineering field in coming years.

The upcoming AITPM Conference in Perth will be a great opportunity for me to network and establish connections with other professionals in traffic/transportation industry. For a young professional like me, it would be a great opportunity to learn from the experts in this field and improving my skills and knowledge of transportation engineering.

In regards to be in the AITPM SA Branch committee as a Young Professional representative, I consider this a privilege and an honour, and will look forward to it, should I win this award.

## **Achievements**

These are some of my career achievements since I started working as a graduate engineer in DPTI.

## **Publications**

1<sup>st</sup> author of "Walking access to public transport in Adelaide: Issues and Concerns", published in the International Conference on Computers in Urban Planning (CUPUM) 2017.

Co-author of "Investigation of the performance of traffic flow gating using signalised and unsignalised design and research aid (SIDRA)", published in the conference of Eastern Asia Society for Transportation Studies, 2017.

## Traffic Modelling using SIDRA, examples include:

Sir Donald Bradman Drive and Tapleys Hill Road: Intersection Upgrade

Fullarton/Claremont/Kitchener: Signalised Intersection Upgrade

Main North Road and Mawson Lakes Boulevard: Addition of U-Turn movements

Walkleys Road/ Wright road: Controlling Right Turn Movements

**Dernancourt shopping centre access**: Proposed Traffic Signal

Newton Road/Graves St: Proposed Traffic Signal

West Lakes Boulevard/Brebner Drive: Proposed Traffic Signal

Darley Gorge and Newton Road: Controlled right turn

Glynburn Road and Shelley St: Proposed signal

Military Road Jetty St: Proposed Roundabout

Strategic modelling (future traffic forecasts up to the year 2036) for 30 intersections across the state, examples include:

Main North Road/ Grand Junction Road/Port Wakefield road Hackney Road/Nottage Terrace/ Botanic Road Fullarton Road Cross Road Tapleys Hill road, Brighton Road, Anzac Highway Regency Road/ Churchill Road Successfully closed over 150 traffic investigation from various sources (Ministerials, Councils, general public).

The following highlights some of my investigation that was conducted successfully and have achieve good outcomes:

Feasibility Study on introducing scramble pedestrian crossing at the intersection of The Parade and George Street, Norwood – Planning and design to identify the impact associated with an all pedestrian phase, and the development of a concept design / cost estimate.

Feasibility study of introducing U-turn movements at the signalised intersection of Main North Road and Mawson Lakes Boulevard, which involved concept design, modelling the existing signal operation and assessing the overall operational impact.

Reviewing the speed limit at the Eyre Highway and Tod Highway north and south approaches, Kyancutta after receiving a request from Wudinna Police. We undertook an investigation which resulted in the changing the position of the "80 Ahead" signs to make it more conspicuous to road users, in accordance with the South Australian Speed Limit Guidelines.

Reviewing the right turn trap lane from Cavan Road onto Grand Junction Road and proposed an advance direction sign showing multiple direction/lane type diagrammatic sign to inform the drivers about the presence of "Right Turn Only" Lanes.

Investigation into high incidences of red light running on Diagonal Road, adjacent to the Glenelg Primary School. A site audit /observation was undertaken, that resulted in a series of improvements being implemented, including tree trimming and sign relocations.