



BI-ANNUAL eMAG
(END 2020)



CONTENTS:

WELCOME

ABOUT QPEG

GETTING INVOLVED

INDUSTRY NEWS

LIVE EVENTS | WEBINARS | PODCASTS

UPCOMING EVENTS

CURRENT RESEARCH PROJECT

SPONSORS

WELCOME

As fellow engineers, we're excited to share our first eMagazine to provide information about upcoming events offered by the Queensland Professional Engineering Group (QPEG) in the Toowoomba and surrounding regions, as well as relevant news and research projects for the coming six months.

This year was the inaugural inception year of QPEG and has been a challenging one with the global COVID-19 pandemic halting progress. For safety reasons, our first ever live event "Stormwater: Lawful Point of Discharge – Discharging the Myths" was postponed from March to August. We had a great turnout for this event. It provided the opportunity for attendees to ask questions to an industry professional and a number of people remained after the presentation to network with peers. We hope for continued success with future events through active, local and regional participation.

Please note that all our events adhere to strict COVID-19 protocols and planning, and therefore may have capped limits on attendance numbers.

We look forward to seeing you at our next event.



Brock Tomkins

Senior Civil Engineer
Director, QPEG Pty Ltd
RPEQ MIEAust CPEng NER



Adam Gwatking

Principal Traffic Engineer
Director, QPEG Pty Ltd
RPEQ MIEAust CPEng NER DipPM

ABOUT QPEG

The Queensland Professional Engineering Group (QPEG) provides professional development, training and networking opportunities in Toowoomba and rural areas. At QPEG we acknowledge there is a smaller offering of educational and training opportunities for professionals outside of Metropolitan areas. One of our primary goals is to remedy this gap within Toowoomba and the surrounding regions.

At QPEG, our intention is to provide a local and regional technical focus to professionals (not only in Engineering) but to the wider inter-connected industry that Engineers, Technologists and Associates must liaise and communicate with in order to achieve our goals. This ranges from designers and surveyors, town planners and architects, project managers and soil scientists to mechanics, educators, and government officials.

Our purpose is to promote excellence in the Engineering field through the sharing of best practices, resources and new innovations from Queensland, Australia and internationally.

Our technical focus not only stems from our passion for the Engineering profession, but also the knowledge that exponential improvements in technology are changing the way we all do business. There will be major changes in the way we plan, manage, design, deliver and construct infrastructure.

Visit us at www.qpeg.com.au



GETTING INVOLVED

There are numerous ways that you can help the engineering profession in Toowoomba and surrounding regions through QPEG. These include:

- Attend live events and networking;
- Let us know about a topic, experience or learning that you would like us to cover;
- Contribute to our eMag, events or webinars;
- Nominate a guest speaker;
- Helping out with research projects.
- Spread the word

CONTACT US

events@qpeg.com.au

INDUSTRY NEWS



Thirteen new electric vehicle charging stations to Queensland's Electric Vehicle Super Highway

Transport and Main Roads Minister Mark Bailey said the new charging sites would boost the total number of charge points between Coolangatta and Cairns, and west to Toowoomba, to 31 along the world's longest electric vehicle highway in a single state.

<https://statements.qld.gov.au/statements/90696>

Queensland could generate more renewable energy than coal and gas, report finds

Renewable energy projects in Queensland could generate more power than coal and gas combined if all proposed projects go ahead, a new report has found.

<https://www.abc.net.au/news/2020-08-19/qld-could-generate-more-renewable-energy-than-coal-and-gas/12570598>

Image: UQ's 64 megawatt solar farm at Warwick is part of a large renewable energy mix. (Supplied: UQ)



Beyond the COVID-19 crisis: The student perspective

University of Queensland – Contact spoke to three Liveris Academy scholars about the role of universities during global challenges, and how they're adjusting to new ways of learning.

<https://stories.uq.edu.au/contact-magazine/2020/beyond-the-covid-19-crisis-the-student-perspective/index.html>

Image: metamorworks/Getty Images

Multi-million dollar expansion set for engineering at USQ Springfield

Work on the \$5.8 million expansion of USQ's engineering building at Springfield begins. The building will offer four times more space for teaching, learning and research, with construction scheduled to be finished for the start of Semester 1, 2021.

<https://www.usq.edu.au/news/2020/08/engineering-building-expansion-spr>

Image: Artist's impression of the expanded engineering building at the Springfield campus.



World-leading connected vehicle trial begins in Ipswich

Up to 500 participants will have their cars fitted with C-ITS technology, allowing those vehicles to communicate with each other, cloud systems, and with road infrastructure.

<https://imoveaustralia.com/news-articles/intelligent-transport-systems/ipswich-connected-vehicle-trial/>

TRC to start a short-term trial for thermal treatment of waste

The Toowoomba Region's bold ambition to dispose of waste more efficiently is a step closer following today's (September 15) Council approval for an innovative waste treatment trial with Toowoomba firm Pyrocal. The trial would allow Council to work towards meeting the Queensland Waste Management and Resource Recovery Strategy that encouraged waste businesses to investigate alternative waste management processing.

<https://www.tr.qld.gov.au/about-council/news-publications/media-releases/14513-trc-to-start-a-short-term-trial-for-thermal-treatment-of-waste>

Image: The Pyrocal Rotary Hearth Carbonisation Unit



LIVE EVENTS | WEBINARS | PODCASTS

Live Events using a local venue within the community remain to be our focus, providing a key-note speaker, networking and varied levels of catering. Face to face interaction while not deemed necessary in the current climate has a range of benefits that remote events simply can't offer.

Webinars are an increasing focus of ours given the recent emphasis on remote working. This not only alleviates health concerns but also increases the mobility for attendance.

Podcasts are an ongoing initiative that we aim to provide in two formats. The first is a summarised video podcast between 3-6 minutes in length to delve into a subject to provoke thought. The second is a full length audio podcast which document the entire discussion.

SOCIAL NETWORKS

LinkedIn <https://www.linkedin.com/company/qpeg/>



YouTube <https://www.youtube.com/channel/QPEG>



UPCOMING EVENTS

The current calendar year is organised with monthly events touching on an array of subjects to suit all skill levels and interest groups.

To register: <https://www.qpeg.com.au/live-events>



Thu, 24 Sep | Highfields Tavern

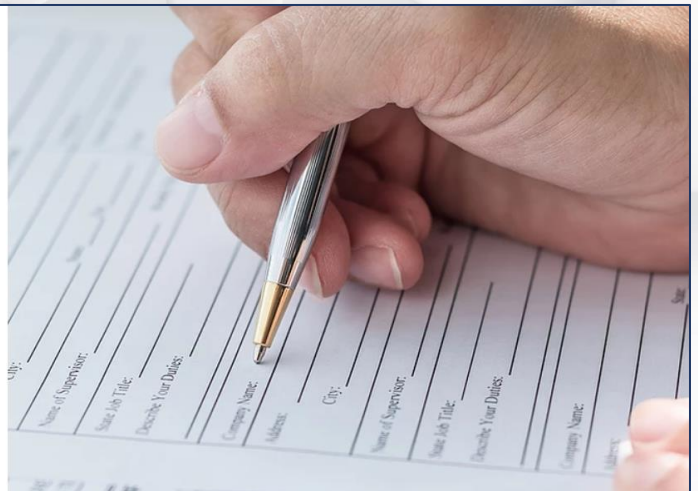
Behind the Scenes - Traffic Signals, talking the same language

A technical presentation by Principal
Traffic Engineer - Adam Gwatking

Thu, 15 Oct | Blue Mountain Hotel

Development Applications 101: The Basics

A two hour technical forum discussing
the basics involved in the submission of
development applications. How to go
about it, the usual process and best
practice from local Planners in the
industry.



Thu, 19 Nov | University of Southern Qld

LED Lighting - Ipswich Council Installation Project

A technical presentation by Principal
Traffic Engineer - Adam Gwatking on his
experience on the 2016 LED Retrofit
project (of over 2,500 Mercury Vapour
lights to LED) from during his time at
Ipswich City Council.



Fri, 27 Nov | König's Biergarten Toowoomba

End of Year Gathering - Canapes and Drinks

An excuse to get together and share a
story or two over finger food and a
beverage



CURRENT RESEARCH PROJECT

QLD TRAFFIC VOLUMES AND PATTERNS BEFORE, DURING AND AFTER THE COVID-19 PANDEMIC

Background: The COVID-19 pandemic has recently changed the way many of us are living and undertaking everyday activities. On a global scale, this includes increased unemployment, people working from home, meetings held via video conferencing, home schooling of children, banning of non-essential consumer activity and restrictions to many recreation, social and tourist activities.

These changes have affected the way we travel with a reduction of traffic volumes observed on local and state Queensland (QLD) roads. The reduction in traffic volumes and public transport ridership also impacts on the way traffic and transport specialists undertake traffic impact assessments for new development, forecasting for planning projects, pavement and seal designs, and academia research. This is because traffic survey data cannot be accurately quantified in the current restricted environment as the data will not reflect typical travel and freight patterns.

Objective: The objective of this research project is to gain an understanding of the influence of the COVID-19 pandemic on QLD traffic, and active and public travel and document the findings in a way that benefits the engineering community. Questions that we want to answer include:

- How has traffic changed during the pandemic?
- Is there consistent correlation, patterns and factors that can be applied to estimate future traffic volumes?
- After the pandemic (and when life returns to normal), will the traffic volumes and public transport ridership return to normal pre-pandemic levels?
- What are the impacts to both light and heavy vehicle volumes?
- Is there a difference regarding locality of the sites?
- Is there a difference regarding hierarchy of the road (i.e. between local, collector, distributor, arterial and highway)?
- What are the impacts to active transport and public transport users?

Requirements: We are looking for expressions of interest from different road authorities (local and state) and entities in QLD to help where they can to provide traffic count data (via existing inductive loop count data), surveys and public transport passenger data (within relevant date ranges). More specifics on data and dates can be discussed with interested parties.

Contact: If you are interested in contributing to this research project, or have any suggestions for the project, please contact us at events@qpeg.com.au to discuss further.



SPONSORS

QPEG would like to thank our current 2020-21 Sponsors for their support:



If you are interested in sponsoring QPEG, please contact us at events@qpeg.com.au