

How Critical Conflicts are Transforming Road Safety and Operations Management Practice

Simon Washington, PhD

CEO and Managing Director

Advanced Mobility Analytics Group Pty Ltd – Brisbane, Australia

Thursday, November 10, 2022 • 3:00–4:15 pm (US Arizona)

Hybrid Attendance Options:

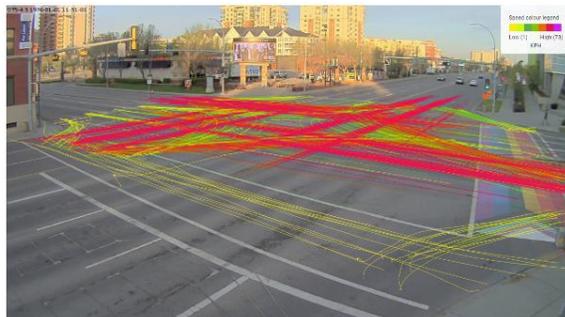
In-person: COOR HALL • L1-18 ([map](#))

Register for Virtual Attendance: <https://bit.ly/3CZGbCl>



About the Talk

There is increasing international attention being paid to the use of surrogate measures, or critical conflicts, to proactively assess and manage road safety. The clear advantage of such an approach is that hot spots, road safety improvements, treatment evaluations and other road safety management activities can be delivered without reliance on crashes as evidence to support decision-making. Cleverly combining video analytics, AI, and advanced econometrics, the technology ecosystem is currently ripe for enabling such methods.



Dr. Washington will first briefly highlight some of the seminal studies that have cemented the use of critical conflicts as a viable alternative to crash-based methods. Then, a discussion of the key analytics will be provided, with some insights on how the profession must be brought along on this journey. How AI is being harnessed to detect critical conflicts will be illustrated. A quick overview of how these technologies have been incorporated into AMAG's SMART Platform will be provided. Several case studies will be presented showing the use of the technology to evaluate the safety impact of Leading Pedestrian

Intervals in the US, Bicycle Treatments in Australia, and a complex freeway merge again in the US. Finally, a demonstration of AMAGs SMART Platform will be provided, including the real-time continuous operations and safety product which aims to more closely align safety and operations functions within governments.

About the Speaker

Dr. Simon Washington is currently Managing Director of Advanced Mobility Analytics Group (AMAG), based in Brisbane, QLD. [AMAG](#) currently employs a team of 40 and has tested or delivered its SMART Platform technology in more than 50 cities across 8 countries. During the previous 26 years Simon held academic appointments at UQ, QUT, UC Berkeley, Arizona State University, the University of Arizona, and the Georgia Institute of Technology. Simon has been an active researcher in road safety during his entire career, has co-authored more than 200 technical papers and 2 textbooks, and has won numerous awards for professional contributions.

This seminar will be presented in-person and webcast live to a worldwide audience using Zoom.

To register for the webinar, please visit: <https://bit.ly/3CZGbCl>

Recordings of all sem(web)inars may be accessed by semester at <https://www.tomnet-utc.org/seminars.html>.

For any assistance, please contact Irfan Batur at ibat@asu.edu