#### Ashleigh Filtness Ph.D, BSc (hons), DPS, CBiol, FHEA

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#### **Personal summary**

I am a driven and enthusiastic academic with 9 years post Ph.D experience in road safety and sleep research, **77 peer reviewed publications (47 journal, 30 conference), over £3.3mil of research income** (including over £1 mil as principle investigator), 3 book chapters and over 40 government/industry reports

#### **Research and Teaching Interests**

Causes and contributors to sleepiness and fatigue, impact of fatigue and sleepiness on safety, mitigating and managing sleepiness/fatigue impairment, road transport safety, rail transport safety, occupational safety and fatigue, human factors, evidence-based policy making, driver impairment, driving simulators, mixed methods.

#### **Education**

ı	LM (2019)	Institute of Leadership and Management Level 5 Diploma
F	PhD (2011)	Doctor of Philosophy Driver Sleepiness, Loughborough University, UK
		Thesis: Obstructive Sleep Apnoea and Daytime Driver Sleepiness
		Supervision: Dr Louise Reyner, Director of Research: Prof Jim Horne
В	Sc (2007)	Bachelor of Science, Human Biology (Honours) First Class, Loughborough University, UK
		Final Year project: The effect of a high sugar content drink on an afternoon nap

#### **Professional Status**

FHEA (2020)	Fellowship of the Higher Education Academy
<b>CBiol (2012)</b>	Royal Society of Biology, UK: Professional status: Chartered Biologist, MRSB

#### **Employment History**

Oct 2020 - present	Loughborough University School of Design and Creative Arts
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Senior Lecturer of Human Factors in Transport Safety

- Strategic leadership in School and Centre committees.
- Leading a team of researchers
- Teaching on undergraduate and masters programmes

#### May 2018 – Sept 2020 Loughborough University Design School

**Lecturer in Transport Safety** 

- Supervision of students and research assistants.
- Working in international research collaborations.

#### Feb 2016 – April 2018 Loughborough University Design School

Senior Research Associate (100% research), Supervisor: Prof Pete Thomas

- Work Package leader on Horizon 2020 funded project SafetyCube.
- Leading the Loughborough research involvement in all work packages.
- Supervision of research staff.

## Feb 2013 – Jan 2016 Centre for Accident Research and Road Safety – Queensland (CARRS-Q ) Queensland University of Technology

Research Fellow (100% research), Supervisor: Prof Narelle Haworth

- Leading grant and tender applications to state and national funding schemes.
- Project manager ensuring completion of projects in a timely, cost effective manner.
- Involvement in centre strategic planning activities.

### Feb 2011 – Feb 2013 Monash University Accident Research Centre (MUARC), Human Factors Team Monash University

Research Fellow (100% research), Supervisor: Dr Missy Rudin-Brown

- Developing and conducting driving simulator studies.
- Working on both large grant projects and industry funded research.

#### **Honours and Awards**

Competitive • awards •

- Prince Michael International Road Safety Award (2019) for SafetyCube project
- William Floyd Award of the Chartered Institute of Ergonomics and Human Factors (2019) for outstanding and innovative contribution by a single project: Application of contemporary systems based methods to reduce trauma at rail level crossings.
- British Sleep Society young sleep researcher award (2009).

Visiting Fellow

Queensland University of Technology (2019 – 2021) and (2016 - 2017)

Expert advisory board /reviewer

ADAS&Me EC H2020 project Expert Advisory Board

Expert reviewer Navigatus Consulting, NZ

Partnerships and

collaborations

 Competitively awarded by the Health Collaborative Research Network in recognition of merit for existing research and for potential in establishing high performing and sustainable partnerships. Human Factors in Transport Exchange Program with Appleton Institute, Central Queensland University: Fatigue and SPAD risk.

Best conference paper

- The Peter Vulcan Award for best research paper at the 2013 Australasian Road Safety Research, Policing and Education Conference. Salmon, P. M., Lenné, M. G., Walker, G., & Filtness, A. J. (2013, August 28-30). Investigating the factors influencing cyclist awareness and behaviour: an on-road study of cyclist situation awareness.
- The best paper award at the 11<sup>th</sup> International Symposium of the Australian Aviation
   Psychology Association. Lenné, M., Salmon P.M., Beanland V., Stanton N.A., Filtness A.
   J. (2014, Nov) The application of decision-making paradigms to map real-world driver
   decision-making at rail level crossings.

Competitive training courses

- Selection on to the 2011 International Master Class in Biomechanics for Design for Injury Prevention, Loughborough University, UK. This 4 day classroom based training course was conducted by international experts, including a focus on anthropometry and ergonomics for design. A travel grant to attend was awarded.
- Selection to ESRS-EU Marie Curie FENS Project 2007 2010. Sleep Research Training Course and practical training. A 6 day residential training course in sleep research, a 5 day practical training at Sleep and Wake Disorders Center, Department of Neurology, University Hospital Zürich, Switzerland 2009 and a 5 day symposium.

Travel awards

- Travel award to attend the 2011 World Sleep Conference, in Kyoto, Japan.
- Travel award to attend the APSS SLEEP 2010 meeting, in San Antonio, Texas

#### Professional service and professional memberships

Editorial board •

- International editorial board, Applied Ergonomics. ISSN:0003-6870
- Guest editor
- Shiftwork special issue Chronobiology International (in prep) ISSN:0742-0528
- Fitness to Drive special issue Transportation Research Part F (2018). ISSN:1369-8478

Book editor •

• Fatigue in Transportation (working title; in prep), CRC Press, co-editor Dr Rudin-Brown

Grant reviews

- Independent expert Innovation and Networks Executive Agency (INEA) Mobility for growth European Commission Horizon 2020.
- Peer Reviewer Australian Research Council (ARC)

Manuscript • reviews

 Applied Ergonomics, Accident Analysis and Prevention, Traffic Injury Prevention, IET Intelligent Transport Systems, IATSS, Human Factors of Ergonomics in Manufacturing and Service Industries, Safety Science, Journal of Psychosomatic Research, Journal of Sleep Research, Biological Psychology, Injury.

University service •

• Loughborough University senate (elected member), School Athena SWAN subgroup member, School Outreach team member, School Research Events team member, HF lead of School Transport Safety Lab. Lead Loughborough University Sleep Research Network. Loughborough University Research Staff Association committee 2016-2018.

External • Committees

- European Sleep Research Society, Early Career Network Executive Committee 2014-16. Chair June 2015 Feb 2016.
- 2016 International Symposium on Somolence and Safety. Scientific Committee member
- Australasian College of Road Safety Queensland, 2015.

Memberships

• European Sleep Research Society, Royal Society of Biology, UK Road Safety Policing Academic Network, Women's Higher Education Network (WHEN)

#### **Supervision**

#### **Current (primary)**

• Ph.D, Frances Pilkington-Cheney, "Individual Countermeasures to Driver Sleepiness" School of Design and Creative Arts, Loughborough University.

#### **Current (secondary)**

• Ph.D, Amy ODell "Investigating Interactions between vulnerable road users and autonomous vehicles" School of Design and Creative Arts, Loughborough University.

#### Completed

- Ph.D, Alexander Kunze "Enhancing User Experience and Safety in the context of Automated Driving Through Uncertainty Communication" (2019)School of Design and Creative Arts, Loughborough University.
- BSc Hons, Marcus Adie "Use of mobile music devices to stream music in cars" (2020) School of Design and Creative Arts, Loughborough University.
- BSc Hons, Edward Morgan "An investigation into the effectiveness of a sugary snack as a countermeasure to driver sleepiness" (2020) School of Design and Creative Arts, Loughborough University.
- BSc Hons, Sophie Curzon "The effect of caffeine on sleep quality and subsequent morning driving performance" (2019) Design School, Loughborough University.
- Ph.D David Rodwell "Investigating Perceptions of emerging technology in Driver Education" (2018) Centre for Accident Research and Road Safety – Queensland, Queensland University of Technology. Primary supervisor 2015-2016.
- PGDip Psychology Peter Sheppard "Driver sleepiness in urban driving" (2016) Centre for Accident Research and Road Safety Queensland, Queensland University of Technology
- PGDip Georgina Lavan "Driver personality and driver sleepiness in urban driving" (2016) Centre for Accident Research and Road Safety Queensland, Queensland University of Technology
- Vacation Research Scholar Alana Hawkins "Driver Sleepiness and social media" (2016) Output: one journal paper, one conference paper

#### **Teaching**

#### Loughborough University School of Design and Creative Arts (2018 - present)

<u>Lecturing:</u> Understanding Users-Cognitive (DSA205), Driver and Vehicle Ergonomics (DSC117), Introduction to Ergonomics (DSP101), Transport Safety (DSP121).

Workshops: Design Research and Professional Practice (DSA201)

<u>Project supervision:</u> Design Research (DSC021), Ergonomics Project (DSC100), HF Masters Project (DSP100)

Tutoring: Diploma of industrial studies (DSI001), Personal tutor

**Invited lectures:** Loughborough University (2017) Ergonomics BSc, Belarusian Road Safety Network/Loughborough University (2016) Road Safety MSc, Australian National University (2012) Biological Psychology BSc

#### **Continued Professional Development**

- My commitment CPD in activities related to human measurement (e.g. EEG and eye tracking) has been recognised by the Royal Society of Biology in awarding Chartered Biologist Status (2012 present).
- ILM Level 5 Diploma in Leadership and Management (2019). Modules completed: Becoming an effective leader, Human Resource Management, Leading Innovation and Change, Managing Improvement, Making a Financial Case, Project management, Understanding Financial Management, Understanding the impact of stress, the Importance of Marketing for the Organisation, Understanding the Management Role.
- Aurora Woman in Academic Leadership. Example modules: Identity, Impact and Voice.
- Loughborough University Centre for Academic Practice Taught Course (resulting in FHEA). Modules completed: Approaches to Learning and Teaching, Curriculum Design, Assessment, Inclusivity, Personal tutoring, Teaching small groups, Teaching large groups, Communicating research, Digital resources for teaching, Academic Enterprise, Embedding research and enterprise in the curriculum, Ph.D Examination
- Example training undertaken at Loughborough University: Writing Successful Research Grant Proposals, Recruitment and Selection, Unconscious Bias and Respective Diversity.
- Example training undertaken at QUT: statistical methodology in meta-analysis and logistic regression.

#### Research and Enterprise funding (>£3.3mil total)

## Internationally • competitive

- Brijs, T, Filtness, A.J et al., (2019). iDreams Awarded by The European Commission H2020.
   ~€6.3mil Euro across 12 partners. ~€960k to home institute as PI
- grants
  - Thomas, P., **Filtness, A.J** et al., (2018) Levitate. Awarded by The European Commission H2020. ~€6.4mil across 12 partners. ~€1.4mil to home institute.

# National competitive grants

- Filtness, A.J., Talbot R., (2020) Reducing the risk of sleep-related crashes in young drivers.
   Awarded by Road Safety Research Grant Funding Support from Department for Transport.
   £73,746
- Morris, A., Thomas, P., Filtness, A.J et al., (2019) International Research Centre to Investigate
  the Effects of Vehicle Automation on Vulnerable Road Users (ICAROS). Awarded by Research
  England International Investment Initiative Funding (I3). ~£1.4mil across 3 partners. £435k to
  home institute.
- Watson, B., Bates, L., & Filtness, A. J. (2014, June) Developing and evaluating a theoretically grounded novice driver education program incorporating simulators. Awarded by Australian Research Council Linkage Projects. \$203,000, plus \$75,000 partner contribution.
- Beanland, V., & **Filtness, A. J.** (2014, July) Effects of sleep loss on change detection while driving. Awarded by the NRMA-ACT Road Safety Trust. \$51,814 home institute PI

# Commercial • contract research •

- **Filtness, A.J.** (2020, Jan). Review of Go-Ahead fatigue event data collection form. Awarded by Go-Ahead London Ltd., £1300.
- **Filtness, A. J.**, Waterson, P. (2019, Dec) Understanding the factors affecting safety behaviours of controllers of site safety (COSSs). Awarded by Rail Accident Investigation Branch £22,855.
- **Filtness, A. J.**, Anund, A (2018, July). London Bus Driver Fatigue. Awarded by Transport For London. £179,320
- **Filtness, A.J,** Haslam, R., Gibb, A., Jones, W., (2018, May). Investigating fatigue in tunnelling workers. Awarded by Tideway £26,500.
- Debnath, A., Haworth., N., **Filtness A.J.** Demmel, S. (2015 Oct). Road User Interaction with worksites. \$49,779
- Wishart, D., Biggs, B., Filtness, A.J., Watson, A., Rowland, B., Schramm, A, Haworth, N. (2015, Mar). Research proposal to reduce the crash involvement of taxis in Queensland: Situational analysis and crash and exposure analyses. Awarded by the Motor Accident Insurance Commission (MAIC). \$109,543
- Freeman, J., Watson, A., **Filtness, A.J.**, Wilson, H., Siskind V. (2015, Feb). Understanding drink-drivers, their re-offence and crash rates and the impact of sanctions. Awarded by VicRoads, State Government of Victoria. \$99,492
- Laure, G., Filtness, A.J., Wood, J., Naweed, A., Rakotoniraiy, A (2015, Jan). Review of stop sign level crossing sighting distance. Awarded by Australasian Centre for Rail Innovation. \$159,049.
- Rakotonirainy, A., **Filtness, A. J\*.,** Demmel, S., Blackman, R., Wishart D (2014, Dec). Literature and Product Review of Motorcycle Instrumentation Systems for Naturalistic Riding Studies. Awarded by Transport for New South Wales. \$32,945.
- Smith, S., **Filtness, A.J\*.,** Rowland, B. (2014, Nov) Review of taxi driver fatigue. Awarded by Transport for New South Wales. \$43, 194.
- Freeman, J., Armstrong, K., Palk, G., **Filtness, A. J\***., Davey, J., & Kiata-Holland, E. (2014, April) Drug driving policy review. Awarded by Transport for New South Wales. \$42,724
- Watson, B., Bates, L., Filtness, A. J., & Fleiter, J. (2013, August) Research services to investigate how changing driver training in the Queensland licensing system would affect road safety. Awarded by Queensland Department of Transport and Main Roads. \$74,882
- Rakotonirainy, A., Filtness, A. J\*., Larue, G., & Schramm, A. (2013, July) Ability to absorb information from electronic and static signs (Austroads NT1782). Partnership program contract with ARRB. Awarded by ARRB. \$65,000
- Freeman, J., **Filtness, A. J,** Armstrong, K., Sheehan, M. & Fleiter, J. (2013, February) Options for rehabilitation in alcohol interlock programs (SS1755). Awarded by Austroads. \$94,496
- Rudin-Brown, C. M., Filtness, A. J., Lenné, M. G., & Young, K. L. (2011, July) Operational Pilot of electronic work diaries (EWD) and speed monitoring systems Stage 1. Awarded by Transport Certification Australia Ltd. (TCA) \$81,030

Rudin-Brown, C. M, Filtness, A. J., Lenné, M. G., Logan, D., & Young, K.L. (2011, April) TCA
 Electronic Work Diaries – Operational Pilot. Awarded by TCA. \$33,780

# Competitive • Internal University Grants •

- **Filtness A.J.,** Smith S (2015, May) Caffeine and rear-end crashes in urban driving; developing a new test paradigm. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation. \$8,000.
- Freeman J., Larue G., **Filtness A.J.**, Delhomme P (2015, May) Good intention but bad judgement? An intelligent transport system study to examine objective and subjective driving performance. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation. \$7,500.
- Naweed, A, Filtness, A.J. (2014, Oct) Human factors in Transport Exchange Program: Fatigue and SPAD risk. Awarded by Health Collaborative Research Network (CRN) University Exchange Program. \$7,000.
- **Filtness, A. J.** (2014, Aug) Understanding sleepy drivers: towards development of a targeted intervention. Mentors: Smith, S., & Anund, A. Awarded by Queensland University of Technology, Institute of Health and Biomedical Innovation Early Career Research award scheme. \$9,977
- **Filtness, A. J.**, Davey J., & Beanland, V. (2013, August) Proof of concept investigation into time of day effects on attentional blink. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation. \$7,960.

#### **Publications and Research Output**

reviewed Journal

Articles

- 1. **Filtness, A. J.**, Beanland, V., Miller, K. A., Larue, G. S., & Hawkins, A. (2020). Sleep loss and change detection in simulated driving. Chronobiology International
- 2. Pilkington-Cheney, F., **Filtness, A. J.**, & Haslam, C. (2020). A qualitative study exploring how city bus drivers manage sleepiness and fatigue. Chronobiology international.
- 3. Maynard, S., Jones, W., **Filtness, A**., Gibb, A., & Haslam, R. (2021) Going underground: fatigue and sleepiness in tunnelling operations. Applied Ergonomics, 90, 103237
- 4. Miller, K. A., **Filtness, A. J.**, Anund, A., Maynard, S. E., & Pilkington-Cheney, F. (2020). Contributory factors to sleepiness amongst London bus drivers. Transportation Research Part F: Traffic Psychology and Behaviour, *73*, 415-424.
- 5. **Filtness, A.J**, Hickman, J, Mabry, J.E, Glenn, , Mao H, Camden, M, Hanowski, R.J (2020). Associations between high caffeine consumption, driving safety indicators, sleep and health behaviours in truck drivers. Safety Science, 126.
- 6. Shenfield, L., Beanland, V., Filtness, A., & Apthorp, D. (2020). The impact of sleep loss on sustained and transient attention: an EEG study. PeerJ, 8, e8960.
- 7. Pilkington-Cheney, F., **Filtness, A.J.**, Jones, W., Maynard, S., Gibb, A.G.F., Haslam, R. (2020) Biomathematical modelling for fatigue management in construction. Proceedings of the Institution of Civil Engineers Civil Engineering. March, 1-6.
- 8. Pilkington-Cheney, F., **Filtness, A.J.**, Haslam C. (2019) Sleepiness, shift work and sleep related road crashes. Journal of Personal Injury Law. Issue 4. 231-238.
- 9. Samuel, O., Walker, G., Salmon, P., **Filtness, A.**, Stevens, N., Mulvihill, C., Payne S & Stanton, N. (2019). Riding the emotional roller-coaster: Using the circumplex model of affect to model motorcycle riders' emotional state-changes at intersections. Transportation Research Part F: Traffic Psychology and Behaviour, 66, 139-150.
- 10. Bates, L., Hawkins, A., **Filtness, A**. & Larue, G. (2019). Simulators, driver education and disadvantaged groups: A scoping review, Journal of the Australasian College of Road Safety
- 11. Rodwell, D., Hawkins, A., Haworth, N., Larue, G., Bates, L., & **Filtness, A**. (2019). What do driver educators and young drivers think about driving simulators? A qualitative draw-and-talk study. Transportation Research Part F, 62:282-293.
- 12. Papadimitriou, E., **Filtness, A.J.,** Theofilatos, A., Ziakopoulos, A., Quigle, C & Yannis, G. (2019). Reviewing and ranking of crash risk factors related to the road infrastructure. Accident analysis and prevention, 125, 85-97.
- 13. Bates, L., Hawkins, A., Rodwell, D., Anderson, L., Watson, B., **Filtness, A. J.**, & Larue, G. S. (2019). The effect of psychosocial factors on perceptions of driver education using the goals

<sup>\*</sup>Project Manager

- for driver education framework. *Transportation research part F: traffic psychology and behaviour, 66,* 151-161.
- 14. Salmon, P., Read, G., Beanland, V., Thompson, J., **Filtness, A.**, Hulme, A., McClure R & Johnston, I. (2019) Bad behaviour or societal failure? Perceptions of the factors contributing to drivers' engagement in the fatal five driving behaviours. Applied Ergonomics, 74, 162-171
- 15. Pérez, K., Weijermars, W., Bos, N., **Filtness, A.J.,** Bauer, R., Johannsen, H., Nuyttens, N., Pascal, L., Thomas, P., Olabarria, M. (2019) Implications of estimating road traffic serious injuries from hospital data. Accident Analysis and Prevention 130,125-135.
- 16. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2019). Function-Specific Uncertainty Communication in Automated Driving. *International Journal of Mobile Human Computer Interaction (IJMHCI)*, 11(2), 75-97.
- 17. Martensen, H., Diependaele, K., Daniels, S., Van den Berghe, W., Papadimitriou, E., Yannis, G., Van Schagen, I., Weijermars, W., Wihnen W., Filtness, A., Talbot, R., Thomas P., Machata, K., Aigner-Breuss, E., Kaiser, S., Hermitte, T., Thomson, R. & Elvik, R (2018). The European road safety decision support system on risks and measures. Accident Analysis & Prevention.
- 18. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J**. (2018). Automation Transparency: Implications of Uncertainty Communication for Human-Automation Interaction and Interfaces. Ergonomics, 66(3) 345-260.
- 19. Rodwell, D., Hawkins, A., Haworth, N., Larue, G., Bates, L., & **Filtness, A.** (2018) A mixed-methods study of driver education informed by the Goals for Driver Education: Do educators and young drivers agree on what was taught?, Safety Science, 108, 140-148.
- 20. Weijermars, W., Bos, N., Schoeters, A., Meunier J., Nuyttens N., Dupont, E., Machata K., Bauer R., Perez K., Martin, J., Johansson H., Filtness, A., Brown., Thomas P (2018) Serious road traffic injuries in Europe, Lessons from the EU research project SafetyCube. Transportation Research Record.
- 21. Larue, G., **Filtness, A.J.,** Wood, J., Demmel, S., Watling, C., Naweed, A., Rakotonirainy, A (2018) Is it safe to cross? Identification of trains and their approach speed at level crossings. Safety Science, 103, 33-42.
- 22. Weijermars, W., Bos, N., **Filtness, A.J.**, Brown, L., Bauer, R., Dupont, E., Martin, J.L., Perez, K., Thomas, P. (2018). Burden of injury of serious road injuries in six EU countries. Accident Analysis and Prevention, 111, 184-192.
- 23. **Filtness A.J.,** Beanland V., Sleep loss and change detection in driving scenes. (2018) Transportation Research Part F. 57, 10-22
- 24. Beanland, V., Salmon, P., **Filtness, A.J.**, Lenné M.G, Stanton, N. (2017) To stop or not to stop: Contrasting compliant and non-compliant driver behaviour at rural rail level crossings. Accident Analysis and Prevention, 108, 209-219.
- 25. Watson, A., Freeman, J., Imberger, K., **Filtness, A.J.**, Wilson, H., Healy, D., Cavallo, A (2017) The effects of licence disqualification on drink-drivers: is it the same for everyone?. Accident Analysis and Prevention, 107, 40-47.
- Filtness A.J., Larue G., Schramm A., Fuller J., Rakotonirainy A., Han C., Cairney P.(2017)
   Safety implications of co-locating road signs: a driving simulator investigation.
   Transportation Research Part F, 47, 187-198
- 27. Cox J., Beanland V., **Filtness A.J.** (2017) Risk and Safety perception on urban and rural roads: Effects of environmental features, driver age and risk sensitivity. Traffic Injury Prevention, 18 (7), 703-710.
- 28. Beanland V., **Filtness A.J.**, Jeans R. (2017) Change detection in urban and rural driving scenes: Effects of change target and safety relevance on change blindness. Accident Analysis and Prevention, 100, 111-122.
- 29. **Filtness, A. J.**, Armstrong K., Watson A., Simth S.S. (2017) Sleep-related vehicle crashes on low speed roads. Accident Analysis and Prevention, 99 Part A, 279-286.
- 30. **Filtness, A.J.,** Naweed, A. (2017) Causes, consequences and countermeasures to driver sleepiness in the rail industry. Applied Ergonomics, 60, 12-21.
- 31. **Filtness, A. J.**, Armstrong K., Watson A., Simth S.S. (2017) Sleep-related crash characteristics: Implications for applying a fatigue definition to crash reports. Accident Analysis and Prevention, 99, Part B, 440-444.
- 32. Hawkins, A., **Filtness, A.J.** (2017) Driver sleepiness on YouTube: A content analysis. Accident Analysis and Prevention, 99, Part B, 459-464.

- 33. Anund, A., Ihstrom, J., Fors C., Kecklund, G., **Filtness, A.J.** (2016) Factors associated with self-reported driver sleepiness in city bus drivers. Industrial Health, 54(4), 337-346.
- 34. Stefanova, T., Burkardt, J-M., **Filtness, A.J.,** Wullems, C., Rakotonirainy, A., Delhomme, P. (2015) Systems-based approach to investigate unsafe pedestrian behaviour at level crossings. Accident Analysis and Prevention, 81, 167-186
- 35. Cain, S.W., **Filtness A.J.**, Phillips, C., Anderson, C. (2015) Enhanced preference for high fat foods following a simulated night shift. Scandinavian Journal of Work, Environment and Health. 41(3), 288-93
- 36. **Filtness A.J.,** Goode N., Cook R. (2014) Causal factors of hot air ballooning incidents: identification, frequency and potential impact. Aviation, Space and Environmental Medicine, 85(12), 1190-1198.
- 37. **Filtness, A. J.**, Mackenzie, J., Armstrong K. (2014). Longitudinal change in sleep and daytime sleepiness in postpartum women. PLOS ONE, 9 (7), e103513.
- 38. Salmon P.M., Lenné M.G., Walker G. Stanton N.A., **Filtness, A. J.** (2014). Using the Event Analysis of Systemic Teamwork (EAST) to explore conflicts between different road user groups when making right hand turns at urban intersections. Ergonomics, 57(11), 1628-1642.
- 39. **Filtness A.J.,** Anund A., Fors C., Ahlström C., Åkerstedt T., Kecklund G. (2014). Sleep related eye symptoms and their potential for identifying driver sleepiness. Journal of Sleep Research, 23(5), 568-575.
- 40. **Filtness A. J.,** Mitsopoulos-Rubens E., Rudin-Brown M (2014). Police officer in-vehicle discomfort: appointments carriage method and vehicle seat features. Applied Ergonomics, 45(4), 1247-1256.
- 41. Salmon P.M., Lenné M.G., Walker G. Stanton N.A., **Filtness, A. J.** (2014) Exploring schemadriven differences in situation awareness across road users: an on-road study of driver, cyclist and motorcyclist situation awareness. Ergonomics, 57(2), 191-209
- 42. Armstrong K., **Filtness A. J.,** Watling C., Barraclough P., Haworth N. (2013). Efficacy of proxy definitions for identification of fatigue/sleep-related crashes: an Australian evaluation. Transportation Research Part F, 21, 242-252
- 43. **Filtness A. J.,** Rudin-Brown M., Mulvihill C.M., Lenné M.G. (2013). Impairment of simulated motorcycle riding performance under low dose alcohol. Accident Analysis and Prevention, 50, 608-615.
- 44. Rudin-Brown M., **Filtness A. J.**, Allen A., Mulvihill, C.M. (2013). Performance of a cognitive, but not visual, secondary task interacts with alcohol-induced balance impairment in novice and experienced motorcycle riders . Accident Analysis and Prevention, 50, 895-904.
- 45. **Filtness A. J.**, Reyner L. A., Horne J. A. (2012). One night's CPAP withdrawal in otherwise compliant OSA patients: marked driving impairment but good awareness of increased sleepiness. Sleep and Breathing, 16(3), 865-871.
- 46. **Filtness A. J.**, Reyner L. A., Horne J. A. (2012). Driver sleepiness comparisons between young and older men during a monotonous afternoon simulated drive. Biological Psychology, 89(3), 580 583.
- 47. **Filtness A.J.**, Reyner L.A., Horne J.A. (2011). Moderate sleep restriction in treated older male OSA participants: greater impairment during monotonous driving compared with controls. Sleep Medicine, 12(9), 838-843.
- Peer Reviewed Conferenc e Papers
- Dragomanovits, A., Yannis, G., Roussou, J., Elvik, R., Hu, B., Millonig, A., Filtness, A.J & Thomas, P. (2020, Apr) Developing a Policy Support Tool for Connected and Automated Transport Systems. TRA
- 2. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J**. (2019, Sept). Conveying Uncertainties Using Peripheral Awareness Displays in the Context of Automated Driving. In *Proceedings of the 11th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 329-341).
- 3. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2018, Sept). Evaluation of variables for the communication of uncertainties using peripheral awareness displays. In *Adjunct Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 147-153).

- 4. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2018, Sept). Augmented reality displays for communicating uncertainty information in automated driving. In *Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 164-175).
- 5. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2018, Sept). Preliminary evaluation of variables for communicating uncertainties using a Haptic seat. In *Adjunct Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 154-158).
- 6. Rodwell, D., Hawkins, A., Haworth, N., Larue, G., Bates, L. & **Filtness, A.** (2018, Jan). Using drawings to probe young driver and driver educator understanding of simulators, Transportation Research Board, Washington.
- 7. Hawkins, A., Belsham, D., Bates, L., **Filtness, A. J.,** Larue, G. S., Rodwell, D., & Makin, S. (2018, October). Technology and driver education for Indigenous Australians. In *Australasian Road Safety Conference, 2018, Sydney, New South Wales, Australia*.
- 8. Yannis, G., Papadimitriou, E., Theofilatos, A., Thomas, P., **Filtness, A.,** Martensen, H., ... & Kaiser, S. (2018). SafetyCube-the European Road Safety Decision Support System. *the Proceedings of the Transport Research Arena, Vienna*.
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- 10. Hawkins, A., Filtness, A., & Fleiter, J. (2017, October). Lost in Translation? A Humorous International Driver Sleepiness Advertisement Viewed by Australian Young Drivers. In Australasian Road Safety Conference, 2017, Perth, Western Australia, Australia.
- 11. Salmon, P., Read, G., Beanland, V., Thompson, J., **Filtness, A.J.**, Johnston I (2017). From on High? A systems analysis of the contributory factors that lead to the fatal five behaviours. Australasian Road Safety Conference, 10 12 October, Perth.
- 12. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2017, September). Enhancing driving safety and user experience through unobtrusive and function-specific feedback. In *Proceedings of the 9th International Conference on Automotive User Interfaces and Interactive Vehicular Applications Adjunct* (pp. 183-189).
- 13. Talbot R., Waterson P., Spuzlo G., **Filtness A.J.** (2016, June 30 July1) Fatal and Serious Pedal Cycle and Truck Collisions in the UK: A Systems Approach. Paper submitted to European Conference on Human Centre Design for Intelligent Transport Systems.
- 14. Larue, G., **Filtness A.J.**, Wood, J., Demmel, S., Naweed A., Rakotonirainy A. (2016, May) Visual performance at passive level crossing with long sighting distance. Paper presented at the Conference on Railway Excellence (CORE), Melbourne, Australia.
- 15. Han C., Cairney P., **Filtness A.J.,** Larue G., Schramm A., Rakotonirainy A. (2016, Jan). Driver's ability to absorb information from co-located signs along motorways. Paper presented at Transportation Research Board 95<sup>th</sup> Annual Meeting. Washington, USA.
- 16. Hawkins A., **Filtness A.J.** (2015, October). In-vehicle filming of driver fatigue on YouTube: vlogs, crashes and bad advice. Paper presented at Australasian Road Safety Conference. Gold Coast, Australia.
- 17. Watson A., Imberger K., Cavallo A., Healy D., **Filtness A.J.**, Wilson H., Freeman J., Catchpole J. (2015, October). Understanding drink drivers, their re-offence and crash rates and impact of sanctions in Victoria. Paper presented at Australasian Road Safety Conference. Gold Coast, Australia.
- 18. **Filtness A.J.,** Goode N., Cook R. (2015, July 26-30) Incident and near miss reporting culture in recreational hot air ballooning. Paper presented at the Applied Human Factors and Ergonomics conference. Las Vegas, USA.
- 19. Salmon P.M., Lenné M., Beanland V., Young K., **Filtness A.J.**, Stanton N, Read, G. (2014, November 12-14). From the Bush to the Burbs: an on-road study of driver situation awareness at rural and urban railway level crossings. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Melbourne, Australia.

- 20. Lenné M.G., Salmon P., Walker G. H., **Filtness A. J.** (2013, October 23-25). An On-Road Study of Driver and Rider Situation Awareness at Urban Intersections. Paper presented at the 4th International Conference on Road Safety and Simulation. Rome, Italy.
- 21. **Filtness A. J.,** Lenné M. G., Mitsopoulos-Rubens E. (2013, September 4-6). The impact of interface modality on police officers' visual behaviour when using an in-vehicle system. Paper presented at the 3rd International Conference on Driver Distraction and Inattention. Gothenburg, Sweden.
- 22. Mitsopoulos-Rubens E., **Filtness A. J.,** Lenné, M.G (2013, August 28-30). Assessment of police subjective workload and preference for using a voice-based interface during simulated driving. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Brisbane, Australia.
- 23. Salmon P.M., Lenné M.G., Walker G., **Filtness A. J.** (2013, August 28-30). Complex cognitive interactions in a badly designed world: investigating the underlying causes of collisions between distinct road users. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Brisbane, Australia.
- 24. Salmon P.M., Lenné M.G., Walker G., **Filtness A. J.** (2013, August 28-30). Investigating the factors influencing cyclist awareness and behaviour: an on-road study of cyclist situation awareness. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Brisbane, Australia. *Received the Peter Vulcan Award for best research paper for scientific / technical merit of the work; potential contribution to road safety; and originality of approach.*
- 25. Mulvihill C.M, Salmon P.M, **Filtness A. J.**, Lenné M., Walker G. H., Cornelissen M., Young, K.L. (2013, August 28-30). Lane filtering and situation awareness in motorcyclists: an on-road proof of concept study. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Brisbane, Australia.
- 26. Lenné, M., Salmon P.M., Beanland V., Stanton N.A., **Filtness A. J.** (2013, August 28-30). Onroad driving studies to understand why drivers behave as they do at regional rail level crossings. Paper presented at the Australasian Road Safety Research, Policing and Education Conference. Brisbane, Australia.
- 27. Salmon P. M., Lenné M. G., Walker G., **Filtness A. J**. (2013, July 21-26). Awesome foursome? The compatibility of situation awareness across drivers, riders, cyclists, and pedestrians. 15th International Conference on Human-computer interaction. Las Vegas, USA
- 28. Lenné M.G., Salmon P., Beanland V., Walker G. H., Underwood G., Filtness, A. J. (2013, June 17-20). Interactions between cars and motorcycles testing underlying concepts through integration of on-road and simulator studies. Paper presented at the 7th International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design. New York, USA.
- 29. **Filtness A. J.,** Rudin-Brown C. M. (2012, October 4-5). Drinking and riding: is subjective workload related to performance? Australasian Road Safety Policing and Education Conference. Wellington, New Zealand.
- 30. Rudin-Brown C. M., Clark B., Allen A., Mulvihill C., **Filtness A. J.** (2011, November 6-9). Do drinking and riding mix? Effects of legal doses of alcohol on balance ability in experienced motorcyclists. Australasian Road Safety Research, Policing and Education Conference. Perth, Australia.
- Scholarly Book
- 1. Bates L., **Filtness, A.J.,** Watson B (2018) Driver education and licensing programs. Chapter 4 in Safe Mobility: Challenges, methodology and Solutions. Emerald Publishing Limited. 13-36
- Chapters 2. Lenné M. G., Beanland V., Salmon P., **Filtness A. J.**, Stanton, N. (2013). Checking for trains: An on-road study of what drivers actually do at level crossings. In Dadashi N., Scott A., Wilson J.R., Mills, A. (Eds.) Rail Human Factors: Supporting reliability, safety and cost reduction. Taylor & Francis. 53-59.
  - 3. Salmon P. M., Beanland V., **Filtness A. J.**, Lenné M. G., Stanton N. (2013). Waiting for warning: Driver situation awareness at rural rail level crossings. In Anderson M. (Ed.) Contemporary Ergonomics and Human Factors, Taylor & Francis. 403-410. Bates L., Filtness, A.J., Watson B. Driver education and licensing programs. Chapter 4 in Volume 8: Safe Mobility: Background, Challenges and Solutions.

## Research 1. Reports

- 1. **Filtness A.J,** Waterson, P., Maynard S, Quigley, C. (2020) Understanding the factors affecting safety behaviours of controllers of site safety (COSSs). Report to RAIB. TSRC LU.
- 2. **Filtness A.J.,** Anund A., Maynard S., Miller K., Dahlman A., Ihlström J (2019) Pilot study to understand the impact of Controller/Driver relationship on stress and fatigue. Report to Transport for London. TSRC LU.
- 3. **Filtness A.J.,** Anund A., Maynard S., Miller K., Pilkington-Cheney F., Dahlman A., Ihlström J. (2019) Bus Driver Fatigue. Report to Transport for London. TSRC LU.
- Filtness A.J., Jones W., Maynard S., Pilkington-Cheney F., Stuttard N., Gibb A., Haslam R. (2019) Fatigue and Sleepiness in Tunnelling Operations: An initial scoping study. Report to Tideway. TSRC LU.
- 5. **Filtness AJ,** Thomas P, Talbot R, Papadimitriou E, Yannis G, Kaiser S, Machata K, Eenink R, Weijermars W (2018) The Future Decision Support System, Deliverable 8.5 of the H2020 project SafetyCube
- 6. Papadimitriou E, Yannis G, Ziakopoulos A, Marinos C, **Filtness A,** Talbot R, Thomas P, Papazikou E, Kaiser S, Machata K, Weijermars W, VanSchagen I, Elvik R, Hermittee T, Leopold F, Tompson R (2018) The European Road Safety Decision Support System. A clearinghouse of road safety risks and measures, Deliverable 8.3 of the H2020 project SafetyCube The European Road Safety Decision Support System. A clearinghouse of road safety risks and measures, Deliverable 8.3 of the H2020 project SafetyCube
- 7. Usami D, Papadimitriou E, Ziakopoulos A, Quigley C, Katrakazas C, Durso C, Marinko V, Leskovšek B, Pogačnik-Kokol E, Sgarra V, Ammari A, Noella K, Diamandouros K, Arampidou K, Machata K, Soteropoulos A, Stadlbauer S, **Filtness AJ**, Papazikou E, Botteghi G, Theofilatos A, Schermers G, van Petegem JH, Goldenbeld C, Loenis B, Weijermars W, Rodriguez Palmeiro A, Elvik R, Hesjevoll I, Daniels S, Schoeters A, De Ceunynck T, Focant N, Martensen H, Leblud J (2017) Inventory of assessed infrastructure risk factors and measures, Deliverable 5.4 of the H2020 project SafetyCube
- 8. Machata K, Papadimitriou E, Soteropoulos A, Stadlbauer S, Pogačnik-Kokol E, Daniels S, De Ceunynck T, Focant N, Leblud J, Ammari A, Noella K, Usami D, Ziakopoulos A, Botteghi G, Theofilatos A, Diamandouros K, Arampidou K, Goldenbeld C, Loenis B, Schermers G, van Petegem JH, Elvik R, Hesjevoll I, Quigley C, **Filtness AJ** (2017) Identification of safety effects of infrastructure related measures, Deliverable 5.2 of the H2020 project SafetyCube.
- Wijnen W, Weijermars W, Vanden Berghe W, Schoeters A, Bauer R, Carnis L, Elvik R, Theofilatos A, Filtness AJ, Reed S, Perez C, Martensen H ijnen W, Weijermars W, Vanden Berghe W, Schoeters A, Bauer R, Carnis L, Elvik R, Theofilatos A, Filtness AJ, Reed S, Perez C, Martensen H (2017) Crash cost estimates for European countries, Deliverable 3.2 of the H2020 project SafetyCube
- 10. Schoeters A, Sijnen W, Carnis L, Weijermars W, Elvik R, Johannsen H, Vanden Berghe W, Filtness AJ, Daniels S Schoeters A, Sijnen W, Carnis L, Weijermars W, Elvik R, Johannsen H, Vanden Berghe W, **Filtness AJ**, Daniels S (2017) Costs related to serious injuries, Deliverable 7.3 of the H2020 project SafetyCube.
- 11. Weijermars W, Bos N, Wijlhuizen GJ, Meunier J-C, Nuytens N, Dupont E, Barnes J, Brown L, Quigley C, Filtness AJ, Perez C, Olabarria M, Duran X, Hours M, Martin J, Bauer R, Johannsen H Weijermars W, Bos N, Wijlhuizen GJ, Meunier J-C, Nuytens N, Dupont E, Barnes J, Brown L, Quigley C, Filtness AJ, Perez C, Olabarria M, Duran X, Hours M, Martin J, Bauer R, Johannsen H (2017) Physical and psychological consequences of serious road traffic injuries, Deliverable 7.2 of the H2020 project SafetyCube.
- 12. Thomas, P, **Filtness, A.J.**, Talbot, R, Magrin, A (2016, Nov) Project Report months 1 18, Deliverable 1.2 of the H2020 project SafetyCube. Report to the European Commission.
- 13. **Filtness, A.J.,** Papadimitriou, E, Leskovšek, B, Focant, N, Martensen, H, Sgarra, V, Usami, DS, Soteropoulos, A, Stadlbauer, A, Theofilatos, A, Yannis, G, Ziakopoulos, A, Diamandouros, K, Durso, C, Goldenbeld, C, Loenis, B, Schermers, G, van Petegem, J-H, Elvik, R, Hesjevoll, IS, Quigley, C, Papazikou, E (2016, Oct) Identification of infrastructure related risk factors, Deliverable 5.1 of the H2020 project SafetyCube. Report to the European Commission.
- 14. **Filtness, AJ,** Thomas, P, Talbot, RK, Quigley, C, Papadimitriou, E, Yannis, G, Theofilatos, A, Aigner-Bruss, E, Kaiser, S, Machata, K, Weijermars, W, Van Schagen, I, Hermitte, T (2016,

- Oct) The application of systems approach for road safety policy making, Deliverable 8.1 of the H2020 project SafetyCube. Report to the European Commission.
- 15. Hermitte, T., Reed, S., **Filtness, A. J.**, Talbot, R., Thomson, R., Jaensch, M., Johannsen, H., Niewöhner, W., Ancona, L., Martin, O., Vazquez de Prada, J., Papadimitriou, E., Phan, V., Saade, J., Cuny, S., Lesire, P., Leopold, F., Labrousse, M (2016, Oct) Identification of Vehicle Related Risk Factors, Deliverable 6.1 of the H2020 project SafetyCube. Report to the European Commission.
- 16. Talbot, RK, Aigner-Breuss, E, Kaiser, S, Alfonsi, R, Braun, E, Eichhorn, A, Etienne, V, Gabaude, C, Goldenbeld, C, Hay, M, Jansch, M, Leblud, J, Leskovšek, B, Filtness, AJ, Paire-Ficourt, L, Papadimitrious, E, Pilgerstorfer, M, Rußwurm, K, Sandin, J, Soteropoulos, A, Strand, N, Theofilatos, A, Van Schagen, I, Yannis, G, Ziakopoulos, A (2016, Oct) Identification of Road User Related Risk Factors, Deliverable 4.1 of the H2020 project SafetyCube. Report to the European Commission.
- 17. Pérez, K, Weijermars, W, Amoros, E, Bauer, R, Bos, N, Dupont, E, Filtness, A.J., Houwing, S, Johannsen, H, Leskovsek, B, Machata, K, Martin, JL, Nuyttens, N, Olabarria, M, Pascal, L, Van den Berghe, W (2016,Sept) Practical guidelines for the registration and monitoring of serious traffic injuries, D7.1 of the H2020 project SafetyCube. Report to the European Commission.
- 18. Thomas, P, Filtness, AJ, Talbot, RK, Magrin, A (2016, April) Collaboration with other H2020 projects. D1.1 of the European Commission H2020 project SafetyCube. Report to the European Commission.
- 19. Debnath, A., Filtness., A.J., Demmel, S., Haworth, N., Hawkins, A. (2016, Jan) Road user interaction with worksites. Report to Roads and Maritime Services. Brisbane: CARRS-Q.
- Wishart D., Watson A., Rowland B., Filtness A., Fleiter J., Biggs H., Schramm A. (2015, Dec)
  Reducing the crash involvement of taxis in Queensland. A situational analysis and analysis of
  crash and exposure data. Report to the Motor Accident Insurance Commission (MAIC)
  Brisbane: CARRS-Q.
- 21. Watson, A., Freeman, J., Filtness, A.J., Wilson, H. (2015, July) Understanding drink-drivers their re-offence and crash rates and the impact of sanctions. Report to VicRoads. Brisbane: CARRS-O.
- 22. Larue, G., Filtness A.J., Wood, J., Naweed A., Rakotonirainy A. (2015, July). Testing the limitation of sighting distances in the AS1742 part 7 standard. Report to Australasian Centre for Rail Innovation. Brisbane: CARRS-Q.
- 23. Blackman, R., Demmel, S., Filtness A.J., Wishart, D., Haworth, N., Rakotonirainy A. (2015, Mar). Literature and product review of instrumentation systems for naturalistic riding studies. Report to Transport for New South Wales. Brisbane: CARRS-Q.
- 24. Darvell, M., Filtness, A.J., Rowland, B., Smith, S. (2015, Feb). Literature review of taxi driver fatigue. Report to Transport for New South Wales. Brisbane: CARRS-Q.
- 25. Freeman J., Kiata-Holland E., **Filtness A.J.**, Palk G., Armstrong K., Davey J. (2014, July). A review and comparative analysis of international drug driving policies. Report to Transport for New South Wales. Brisbane: CARRS-Q.
- 26. Filtness A.J., Schramm A., Larue G., Rakotonirainy A. (2014, June). The impact of co-locating electronic and static signs on driver's response in an emergency situation. Report to Australian Road Research Board (ARRB Group Ltd). Brisbane: CARRS-Q.
- 27. **Filtness A.J.,** Sheehan M., Armstrong K., Fleiter J., Freeman J. (2014, January). Options for rehabilitation in interlock programs. Project SS1755.Report to Austroads.Brisbane:CARRS-Q.
- 28. Fleiter J., Filtness A.J., Bates L., Watson B., Williamson A. (2013, Dec). How would changing driver training in the Queensland licensing system affect road safety? Deliverable 4: Evidence-based driver education policy options. Report to the Department of Transport & Main Roads. Brisbane: CARRS-Q.
- 29. Filtness A.J., Tones M., Bates L., Watson B., Williamson A. (2013, Dec). How would changing driver training in the Queensland licensing system affect road safety? Deliverable 2: Simulators for skill acquisition training and assessment, and their impact on road safety. Report to the Department of Transport & Main Roads. Brisbane: CARRS-Q.
- 30. Bates L., **Filtness A.J.**, Fleiter J., Watson B., Tones M., Williamson A. (2013, Dec). How would changing driver training in the Queensland licensing system affect road safety? Deliverable 1: Trends in driver education and training. Report to the Department of Transport & Main Roads. Brisbane: CARRS-Q.

- 31. Mitsopoulos-Rubens E., Filtness A. J., Lenné M. G (2013, April). Injuries to police officers associated with police vehicle travel: Report 5: Simulator study. Report to Police Association of New South Wales. Melbourne: MUARC.
- 32. Mitsopoulos-Rubens E., Filtness A. J., Rudin-Brown C. M. (2012, Aug). Injuries to police officers associated with police vehicle travel: Report 4: Seat Usability Study. Report to Police Association of New South Wales. Melbourne: MUARC.
- 33. Young K. L., Filtness A. J., Rudin-Brown C. M. (2013, Feb). Operational pilot of electronic work diaries (EWDs). MUARC Stage 2 Final report HMI guidelines for Electronic Work Diaries. Report to TCA. Melbourne: MUARC.
- 34. Young K. L., Filtness A. J., Rudin-Brown C. M. (2013, Feb). Operational pilot of electronic work diaries (EWDs). MUARC Stage 2 Final report Survey and Targeted interview Results. Report to TCA. Melbourne: MUARC.
- 35. Young K. L., Rudin-Brown C. M., Filtness A. J. (2012, June). Operational pilot of electronic work diary (EWD) and speed monitoring systems. Stage 2 Interim report: Survey 1 results. Report to TCA. Melbourne: MUARC.
- 36. Filtness A. J., Young K. L., Rudin-Brown C. M. (2012, May). Operational pilot of electronic work diary (EWD) and speed monitoring systems stage 2 Report 1: Literature review. Report to TCA. Melbourne: MUARC.
- 37. Rudin-Brown C. M., Filtness A. J., Keall M. D., Mulvihill C., Clark B., Allen A., Lenné M.G. (2012, March). Investigation of Zero BAC for all Motorcycle riders in Queensland. Final Report. Report to the Queensland Department of Transport & Main Roads. Melbourne: MUARC.
- 38. Filtness A. J., Trotter M., Mitsopoulos-Rubens E., Rudin-Brown C. M. (2011, August). Injuries to police officers associated with police vehicle travel: vehicle seat design Report 3: expert survey. Report to Police Association of New South Wales. Melbourne: MUARC.
- 39. Filtness A. J., Young K. L., Rudin-Brown C. M. (2011, August). Operational pilot of electronic work diary (EWD) and speed monitoring systems Report 1: targeted literature review. Report to TCA. Melbourne: MUARC.
- 40. Rudin-Brown C. M., Young K. L., Filtness A. J. (2011, November). Operational pilot of electronic work diaries (EWDs). Interim report, survey results. Report to TCA. Melbourne: MUARC.
- 41. Filtness A. J., Rudin-Brown C. M., Allen A., Mulvihill C., Lenné M. G. (2011, November). Investigation of zero BAC for all motorcycle riders in Queensland. Simulator and balance studies report. Report to the Queensland Department of Transport & Main Roads. Melbourne: MUARC.
- 42. Filtness A. J., Rudin-Brown C. M., Young K. L. (2011, December). Operational pilot of electronic work diaries (EWDs). Report on telephone interviews with drivers, transport operators and EWD providers. Report to TCA. Melbourne: MUARC.
- 43. Young K. L., Filtness A. J., Rudin-Brown C. M. (2011, December). Operational pilot of electronic work diaries (EWDs). Report on enforcement officer focus groups. Report to TCA. Melbourne: MUARC.

Conferenc 1. Filtness A.J., Ralbot, R., Brijs, K., Ross, V., Brijs, R (accepted) IDreams: Using theory to define a safety tolerance zone. Paper to be presented at the International Conference on Traffic and Transport Psychology. Gothenburg, Sweden.

Presentati ons (peer reviewed abstracts)

- 2. Pilkington-Cheney, F., Filtness, A.J., Haslam, C (accepted) Sleepiness countermeasure use and implications for driving. Paper to be presented at the International Conference on Traffic and Transport Psychology. Gothenburg, Sweden
- 3. Filtness A.J., Jones, W., Maynard, S., Pilkington-Cheney, F., Haslam, R., Gibb, A., Stuttard, N. (accepted). Fatigue in tunnelling operations: A qualitative scoping study. Paper to be presented at 11<sup>th</sup> international conference on Managing Fatigue. Freemantle, Australia.
- 4. Filtness A.J., Anund A., Maynard S., Miller K., Pilkington-Cheney F., Dahlman A., Ihlström J (accepted). Driver Sleepiness amongst city bus drivers. Paper to be presented at 11th international conference on Managing Fatigue. Freemantle, Australia.
- 5. Filtness A.J., Anund A., Maynard S., Miller K., Pilkington-Cheney F., Dahlman A., Ihlström J (2019) Self-reported driver sleepiness in London bus drivers. Paper presented at 24th

- International symposium on shiftwork and working time. 9-13 Sept Coeur D'Alene, Idaho, USA.
- Filtness A.J., Pilkington-Cheney, F., Jones, W., Stuttard, N., Maynard, S., Haslam, R., Gibb, A., (2019) Biomathematical modelling for shift planning in the tunnelling industry. Paper presented at 24<sup>th</sup> International symposium on shiftwork and working time. 9-13 Sept Coeur D'Alene, Idaho, USA.
- 7. Pilkington-Cheney F., **Filtness, A.J.**, Haslam, C., Maynard, S. A (2019) Qualitative investigation into the use of sleepiness countermeasures in London city bus drivers. Paper presented at 24<sup>th</sup> International symposium on shiftwork and working time. 9-13 Sept Coeur D'Alene, Idaho, USA.
- Anund A., Filtness A.J., Miller K., Dahlman A., Ihlström J., Maynard S., Pilkington-Cheney F. (2019) City bus drivers' fatigue an explorative study among city bus drivers in London. Paper presented at 24<sup>th</sup> International symposium on shiftwork and working time. 9-13 Sept Coeur D'Alene, Idaho, USA.
- Dahlman A., Anund A., Filtness A.J., Ihlström J., Miller K., Maynard S., Pilkington-Cheney F. (2019) Sleep patterns in relation to work schedules in London city bus drivers. Paper presented at 24<sup>th</sup> International symposium on shiftwork and working time. 9-13 Sept Coeur D'Alene, Idaho, USA.
- 10. Rodwell, D., Hawkins, A., Bates, L., Larue, G., Haworth, N. & **Filtness, A.** (2017). Mismatches between trainee and educator perceptions regarding the use and value of driving simulators. 2017 Australasian Road Safety Conference, 10 12 October, Perth.
- 11. Hawkins, A., Rodwell, D., Bates, L., Larue, G. & **Filtness, A**. (2017). Developing a technology based driver education intervention: theory and practice, Australasian Road Safety Conference, Perth, 10-12 October.
- 12. Bauer, R., Pérez, K., Weijermars, W., Bos, N., **Filtness, A.J.**, Johannsen, H., Pascal, L., Nuyttens, N., Olabarria, M. Measuring the severity of road injuries in the EU, European Journal of Public Health, Volume 27, Issue suppl 3, 1 November 2017
- 13. **Filtness A.J.,** Talbot R., Thomas P., Aigner-Breuss E., Kaiser S., Martensen H., Papadimitriou E.(2017, Mar). Obstructive sleep apnoea and crash risk: Case study results within the development of the European road safety Decision Support System. Paper to be presented at 10<sup>th</sup> international conference on Managing Fatigue. San Diego, USA. Paper to be presented at 10<sup>th</sup> international conference on Managing Fatigue. San Diego, USA.
- 14. **Filtness A.J.,** Beanland V., Larue G., Hawkins A (2017, Mar). Sleep loss and change detection: a driving simulator study. Paper to be presented at 10<sup>th</sup> international conference on Managing Fatigue. San Diego, USA.
- 15. **Filtness A.J.,** Beanland, V., Jeans R. (2016, Feb). Sleep-Related impairment at detecting changes in rural driving scenes. Paper to presented at SomnoSafe. Brussels, Belgium.
- 16. Beanland, V. C., Salmon, P., Young, K. L., **Filtness, A.**, Read, G. J. M., Lenne, M. G., & Stanton, N. A. (2016). Differences in drivers' perception and interactions with boom-controlled rail level crossings in urban versus rural environments. In *Australasian College of Road Safety Conference 2016: Agility, Innovation, IMPACT!*.
- 17. **Filtness A.J.,** Naweed A (2015, Nov). Fatigue in the rail industry: The driver's perspective. Paper presented at the 4<sup>th</sup> International Conference on Driver Distraction and Inattention. Sydney, Australia.
- 18. Beanland V., **Filtness A.J.**, Jeans R. (2015, Nov). Effects of sleep loss on change detection in urban and rural driving scenes. Paper presented at the 4<sup>th</sup> International Conference on Driver Distraction and Inattention. Sydney, Australia.
- 19. **Filtness A.J.**, Armstrong K., Watson A., Smith S. (2015, March 23-26). Sleep-related crashes in high speed environments. Presented at 9th International Conference on Managing Fatigue. Fremantle, Australia.
- 20. Freeman J., Kiata-Holland E., **Filtness A.J.**, Palk G., Armstrong K., Davey J. (2015 March 17-20). Directions for the future: A Comparative analysis of emerging international drug driving policies. Presentation at the 7th Australasian Drug and Alcohol Strategy Conference. Brisbane, Australia.
- 21. Lenné, M., Salmon P.M., Beanland V., Stanton N.A., **Filtness A. J.** (2014, Nov) The application of decision-making paradigms to map real-world driver decision-making at rail level

- crossings. Oral presentation, 11th International Symposium of the Australian Aviation Psychology Association, Melbourne, Australia. Recipient of Best Paper Award.
- 22. Filtness A.J., Beanland V. (2014, Sept). Sleep restriction impairs vigilance but not temporal attention. Poster presentation at the European Sleep Research Society meeting, Tallinn, Estonia.
- 23. Filtness A.J., Armstrong K., Watson A. (2014, Sept) Sleep related crashes in urban, low speed environments. Poster presentation at the European Sleep Research Society meeting, Tallinn, Estonia.
- 24. Goode N., Salmon P.M., Lenné M.G., Walker G. Filtness A. J. (2014, July). An analysis of cyclist situation awareness during near collisions with motor vehicles: failure of the road or road user? Oral presentation, International Conference of Applied Psychology, Paris, France.
- 25. Filtness A.J., Mackenzie J., Armstrong K. (2013, Oct). Hush-a-by mummy: interactions between co-sleeping and maternal sleep disturbance. Poster presentation, Australian Sleep Association Conference, Brisbane, Australia
- 26. Lenné M. G., Beanland V., Salmon P. M., Filtness A. J., Stanton N. A., Triggs, T. J. (2012). Onroad assessment of driver behaviour at regional highway-rail grade crossings. In Proceedings of the 4th International Conference on Applied Human Factors and Ergonomics. San Francisco, USA.
- 27. Filtness A. J., Reyner L. A., Horne J. A. (2011, Oct). One night CPAP withdrawal impairs performance at a driving simulator task faster than sleep restriction to 5 hours with treatment in OSA patients. Poster presentation at the World Sleep Conference, Kyoto, Japan.
- 28. Filtness A. J., Reyner L. A., Horne, J. A. (2011, Oct). Prevalence of risk factors for undiagnosed obstructive sleep apnoea is high in truck drivers on UK roads. Poster presentation at the World Sleep Conference, Kyoto, Japan.
- 29. Filtness A. J., Reyner, L. A. (2010, Sept). Is the two hour recommended maximum driving time appropriate for both healthy older and treated obstructive sleep apnoea drivers? Oral presentation at the European Sleep Research Society meeting, Lisbon, Portugal.
- 30. Filtness A. J., Reyner L. A. (2010, Sept). Continuous Positive Air Pressure treatment for Obstructive Sleep Apnoea patients: effects on sleep quality and quantity as measured by Actigraphy. Poster presentation at the European Sleep Research Society meeting, Lisbon, Portugal.
- 31. Filtness A. J., Reyner, L. A. (2010, Sept). Driver sleepiness in younger and older participants. Paper presented at the British Sleep Society annual meeting, Cambridge, UK.
- 32. Filtness A. J., Reyner L. A. (2010, June). Countermeasures to driver sleepiness: is the message getting through? Poster presentation at SLEEP meeting of the American Academy of Sleep Medicine and the Sleep Research Society, San Antonio, USA.
- 44. Filtness A. J., Reyner, L. A. (2009, Sept). Sleep restriction increases driving risk in treated obstructive sleep apnoea patients. Paper presented at the British Sleep Society annual meeting, Cambridge, UK.

#### e papers (non-peer review)

- Conferenc 1. Papadimitrioua E., Yannis G., Theofilatosa A., Thomas P., Filtness A.J., Martensen H., Machatad K., Elvike R., Shingo Usamif D. (2016, Oct) Development of a road safety Decision Support System for road infrastructure. 1st European Road Infrastructure Congress. Leeds, UK.
  - Thomas P., Filtness A.J., Yannis G., Papadimitrioua E., Theofilatosa A., Martensen H., Diependaele K. (2016, June) Developing the european Road Safety Decision Support system. Expert Symposium on Accident Research. Hannover, Germany.

#### Magazine **Articles**

- 1. Jones, W., Filtness, A. J., Haslam, R., Gibb, A. G., & Stuttard, N. (2019). Waking up to fatigue. Tunnelling Journal 28, TGS Media Ltd https://repository.lboro.ac.uk/articles/Waking up to fatigue/9352931
- 2. Naweed, A., & Filtness, A.J. (2015). Fatigue & sleepiness: Complex bedfellows [Safety]. Track & Signal, 19(1), 60-61. Circulation 7,000
- 3. Filtness A.J., Goode N., Cook R, Eighani G (2015) What causes hot air balloon accidents? Aerostat, Journal of the British Balloon and Airship Club. 46(6), 16-17.

- 4. **Filtness A.J.,** Goode N., Cook R, Eighani G (2015) What causes hot air balloon accidents? Ballooning, Journal of the Ballooning Federation of America. Sept/Oct. 2015, 48(4), 30-32.
- 5. **Filtness A.J.,** Goode N., Cook R, Eighani G (2015) <u>Prepare and prevent, don't repair and repent: Causal factors of hot air ballooning incidents</u>. Aeronotes, the official journal of the Australian Ballooning Federation 37(2), 8-10. ISSN:1036-8264
- 6. **Filtness A.J.,** Goode N., Cook R, Eighani G (2015) When should ballooning incidents be reported? Aeronotes, the official journal of the Australian Ballooning Federation 37(3), 6-7. ISSN:1036-8264

#### **Invited Speaker**

- Filtness, A.J., (2019, Nov) Bus driver fatigue TfL Bus Safety Summit
  - **Filtness, A.J.,** (2019, Sept) Bus driver fatigue Confederation of Passenger Transport UK Road Operations Committee meeting.
- Thomas P., Filtness A.J. (2017, Feb) SafetyCube project. Department for Transport, UK.
- **Filtness A.J** (2016, Oct) SafetyCube project. Queensland Road Safety Research Network. Queensland University of Technology, Brisbane, Australia.
- **Filtness A. J.** (2015, July) Understanding Driver Sleepiness: characteristics, causes and cultural acceptance. Transport Research Laboratory, Wokingham, UK.
  - **Filtness A.J.,** Goode N., Cook R. (2015, June) Causal factors of hot air ballooning incidents and incident reporting culture Sports Aviation Safety Forum of the Civil Aviation Safety Authority. Sydney, Australia
  - **Filtness A.J.,** (2015, June) Older vs Young drivers and the effect of sleep restriction. Queensland University of Technology Community of former Staff Alumni Group.
  - **Filtness A. J.** (2015, Feb) Understanding Driver Sleepiness: characteristics, causes and cultural acceptance. Central Queensland University, Appleton Institute, Adelaide, Australia.
- Filtness A. J. (2013, Oct) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Nottingham University Accident Research Unit, UK.
  - **Filtness A. J.** (2013, Oct) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Leeds University Institute of Transport Studies, UK.
  - **Filtness A. J.** (2013, Sept) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Swedish Road Transport Institute (VTI), Linkoping, Sweden.
  - **Filtness A.J.**, Goode N., Cook R. (2013, June) An investigation into the factors contributing to hot air balloon incidents. Sports Aviation Safety Forum of the Civil Aviation Safety Authority. Sydney, Australia.
  - **Filtness A. J.** (2013, April) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Woolcock Institute of Medical Research, Sydney, Australia.
- **Filtness A.J.** (2012, Oct) Sleep The most important thing you will do today. Monash University Mental Health week. Melbourne, Australia.
- Filtness A.J., Reyner L.A. (2010, April) Obstructive sleep apnoea and driving. Oral presentation at Leicester Sleep Apnoea Patients Association (LSAPA) annual general meeting. Leicester, UK.

#### **Example Media and Publicity**

Television •

- Lofthouse A and Downes M (Presenters). 2015. Channel 9, Brisbane, National Nine News, 16 Oct 6:30PM. Topic: Road safety experts are learning why sleepy drivers crash through YouTube videos.
- Wilding, R (Presenter). 2008. BBC One's The One Show (national). Topic: Obstructive sleep apnoea and driver tiredness.
- Ashby, M (Presenter). 2007. BBC One's Inside Out East Midlands (regional). Topic: Sleepiness in young drivers.
- Radio 98five Sonshine FM (Western Australia). 2014, August 5. [Radio interview with Polly and Moro]. Breakfast show. Topic: New mums still excessively sleepy.

- ABC Brisbane (Queensland). 2015, September 15 (Radio interview with Emma Griffiths). Drive show. Topic: Stop and revive those tired eyes <a href="http://blogs.abc.net.au/queensland/2015/09/stop-and-revive-those-tired-eyes.html">http://blogs.abc.net.au/queensland/2015/09/stop-and-revive-those-tired-eyes.html</a>
- Att. S1 Ep6. Tired to death why we need to talk about sleep and fatigue <a href="https://activetrainingteam.co.uk/podcasts/view/6">https://activetrainingteam.co.uk/podcasts/view/6</a>
- Online Caffeine consumption in truck drivers 2020

News Commercial motor <a href="https://www.commercialmotor.com/news/product/warning-issued-over-high-caffeine-consumption-truck-drivers">https://www.commercialmotor.com/news/product/warning-issued-over-high-caffeine-consumption-truck-drivers</a>

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Fleet owner <a href="https://www.fleetowner.com/news/article/21126403/truck-drivers-who-drink-more-caffeine-are-in-more-crashes-study-says">https://www.fleetowner.com/news/article/21126403/truck-drivers-who-drink-more-caffeine-are-in-more-crashes-study-says</a>

Driver sleepiness on YouTube, 2015

Central Telegraph: <a href="http://www.centraltelegraph.com.au/news/videos-show-sleep-drivers-dicing-death/2809353/">http://www.centraltelegraph.com.au/news/videos-show-sleep-drivers-dicing-death/2809353/</a>

Science Daily: http://www.sciencedaily.com/releases/2015/10/151020103837.htm

Driver simulator research. 2015 Brisbane times.

http://www.brisbanetimes.com.au/queensland/why-so-angry-researchers-try-to-get-in-the-minds-of-young-drivers-20151002-gk09bp.html

• Sleep related eye symptoms. 2015

Medical xpress <a href="http://medicalxpress.com/news/2015-09-sleepy.html">http://medicalxpress.com/news/2015-09-sleepy.html</a>
Health canal <a href="http://www.healthcanal.com/disorders-conditions/sleep/66915-do-you-know-the-signs-of-being-too-sleepy-to-drive-carrs-q-study.html">http://www.healthcanal.com/disorders-conditions/sleep/66915-do-you-know-the-signs-of-being-too-sleepy-to-drive-carrs-q-study.html</a>

New mums excessively tired at four months. 2014,

The Australian: <a href="http://www.theaustralian.com.au/news/latest-news/new-mums-excessively-tired-at-four-months/story-fn3dxiwe-1227010136040">http://www.theaustralian.com.au/news/latest-news/new-mums-excessively-tired-at-four-months/story-fn3dxiwe-1227010136040</a>

The Herald sun: <a href="http://www.heraldsun.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi4-1227010136040">http://www.heraldsun.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi4-1227010136040</a>

The Daily Telegraph: <a href="http://www.dailytelegraph.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi3-1227010136040">http://www.dailytelegraph.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi3-1227010136040</a>

 $\label{lem:courier-mail} The \ Courier \ Mail: \ \underline{http://www.couriermail.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fnihsfrf-1227010136040}$ 

 $\label{lem:decomposition} \textbf{Daily Mail:} \ \underline{\text{http://www.mailonsunday.co.uk/health/article-2715346/Why-new-mothers-shouldnt-rush-work-Many-exhausted-four-months-giving-birth.html}$ 

The New Zealand Herald:

http://www.nzherald.co.nz/lifestyle/news/article.cfm?c id=6&objectid=11304206

• Young male drivers more vulnerable than older men to sleepiness.

ABC news:

http://www.abc.net.au/science/articles/2012/02/29/3441594.htm?site=science/memory&topic=latest

University Media Release

- Future Transport, ask the expert Loughborough University <a href="https://www.youtube.com/watch?v=KMBvGzg-q9c&feature=youtu.be">https://www.youtube.com/watch?v=KMBvGzg-q9c&feature=youtu.be</a>
- More caffeine is not the answer 2020. <a href="https://www.lboro.ac.uk/media-centre/press-releases/2020/march/caffeine-not-answer-for-tired-lorry-drivers/">https://www.lboro.ac.uk/media-centre/press-releases/2020/march/caffeine-not-answer-for-tired-lorry-drivers/</a>
- Loughborough's lifesaving road safety research given royal recognition
   2019.<a href="https://www.lboro.ac.uk/media-centre/press-releases/2019/december/road-safety-award-prince-michael-of-kent/">https://www.lboro.ac.uk/media-centre/press-releases/2019/december/road-safety-award-prince-michael-of-kent/</a>
- New measures to tackle bus driver fatigue. 2019. <a href="https://www.lboro.ac.uk/media-centre/press-releases/2019/august/bus-driver-fatigue-research/">https://www.lboro.ac.uk/media-centre/press-releases/2019/august/bus-driver-fatigue-research/</a>