

DR CHINH HO

BE (Hons) HCMUT ME Nagoya PhD Sydney

Research Fellow, Institute of Transport and Logistics Studies

The University of Sydney Business School NSW 2006

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CAREER OBJECTIVES

- To work on cutting edge issues, relevant to transport planning, modelling and policy that have real impact on economic productivity and social equity.
- To apply my expertise and knowledge in a research/consultant position to make a practical difference to local transport and local sustainability, and modelling practice in an international context.

ACADEMIC QUALIFICATIONS

- 2013, **Doctor of Philosophy (Transport Economics)**, the University of Sydney Business School, Australia.
- 2010, **Master of Civil Engineering (Transport Planning)**, Nagoya University, Japan.
- 2005, **Bachelor of Civil Engineering (1st class Honours Bridge and Highway Engineering)**, Vietnam National University, Ho Chi Minh City University of Technology (HCMUT), Vietnam.

PUBLICATIONS

Book chapters

- Hensher DA, Ellison R, Ho C and Weisbrod G (2018 Forthcoming) 'How well does BRT perform in contrast to LRT? An Australian case study using MetroScan_TI' in *Bus Rapid Transit*, ed. Ferbrache F., Edward Elgar Publishing, Cheltenham, United Kingdom (Accepted on 17/09/2017).
- Hensher DA, Balbontin C, Ho C, Mulley C, Macario R and Stewart A (2018 Forthcoming) 'Evaluating BRT and LRT on a level playing field in developed economies: A cross cultural comparison' in *Bus Rapid Transit*, ed. Ferbrache F., Edward Elgar Publishing, Cheltenham, United Kingdom (Accepted on 17/09/2017).
- Mulley, C. and Ho, C. (2017) 'Understanding the determinants of walking as the basis for social marketing public health messaging' Chapter 3 in Mulley C, Gebel K, Ding D (ed). *Walking: Connecting sustainable transport with health*. Emerald Publishing.41-59.
- Ho, C. and Hensher, D.A. (2015) 'Greening demand chains in urban passenger transport: emissions saving from complex trip chains' in B. Fahimnia, M.G.H. Bell, D.A. Hensher & J. Sarkis (Ed) *Green Logistics and Transportation: A Sustainable Supply Chain Perspective*, pp. 131-46: Springer International Publishing, Cham, Switzerland, 131-46.
- Ison, S. Mulley, C. Mifsud, A. and Ho, C. (2014) 'Parking Space Levy: a case study of Sydney, Australia' in Ison, S. and Mulley, C. (Ed) *Transport and Sustainability Volume 5: Parking Issues and Policy*, pp. 319-336: Emerald Publishing.

Refereed journal articles

Note: Journal Ranks are based on Scimago (SJR score and Quarter) that accounts for both the number of citations and the importance of the journal. Number of citations from Google Scholar is also included. In total, I have published 25 journal articles with 18 in Q1 ranked (i.e. Top Quarter) and 7 in Q2 ranked (i.e., 2nd Top Quarter).

- Ho, C. and Mulley, C. (2013) 'Multiple Purposes at Single Destination: a Key to a Better Understanding of the Relationship between Tour Complexity and Mode Choice', *Transportation Research Part A: Policy and Practice*, vol. 49, no. March, pp. 206-19. SJR =1.613, Top quarter. 30 citations
- Ho, C. and Mulley, C. (2013) 'Tour-based mode choice of joint household travel patterns on weekend and weekday', *Transportation*, vol. 40, no. 4, pp. 789-811. SJR =1.587, Top quarter. 33 citations
- Ho, C. and Mulley, C. (2013) 'Incorporating Intrahousehold Interactions into Tour-Based Model of Public Transport Use in Car-Negotiating Households', *Transportation Research Record*, vol. 2343, pp. 1-9. SJR =0.494, 2nd top quarter. 10 citations
- Mulley, C. and Ho, C. (2013) 'Evaluating the impact of bus network planning changes in Sydney, Australia', *Transport Policy*, vol. 30, pp. 13-25. SJR =1.241, Top quarter. 7 citations
- Ho, C. and Hensher, D.A. (2014) 'Housing prices and price endogeneity in tenure and dwelling type choice models', *Case Studies on Transport Policy*, vol. 2, no. 3, pp. 107-15. SJR =0.536, 2nd top quarter. 1 citation
- Ho, C. and Mulley, C. (2014) 'Metrobuses in Sydney: How high capacity and high frequency services are benefiting the Metropolitan fringe', *Research in Transportation Economics*, vol. 48, pp. 339-48. SJR =0.789, 2nd top quarter. 7 citations
- Ho, C. and Mulley, C. (2015) 'Intra-household Interactions in tour-based mode choice: The role of social, temporal, spatial and resource constraints', *Transport Policy*, vol. 38, pp. 52-63. SJR =1.241, Top quarter 13 citations
- Ho, C. and Mulley, C. (2015) 'Intra-household interactions in transport research: a review', *Transport Reviews*, vol. 35, no. 1, pp. 33-55. SJR =2.09, Top quarter. 17 citations
- Hensher, D.A., Ho, C. and Mulley, C. (2015) 'Identifying resident preferences for bus-based and rail-based investments as a complementary buy in perspective to inform project planning prioritisation', *Journal of Transport Geography*, vol. 46, pp. 1-9. SJR =1.558, Top quarter. 6 citations
- Hensher, D.A., Ho, C. and Mulley, C. (2015) 'Identifying preferences for public transport investments under a constrained budget', *Transportation Research Part A: Policy and Practice*, vol. 72, pp. 27-46. SJR =1.613, Top quarter. 6 citations
- Hensher, D.A. and Ho, C. (2015) 'The role of perceived acceptability of alternatives in identifying and assessing choice set processing strategies in stated choice settings: The case of road pricing reform', *Transportation Research Part E: Logistics and Transportation Review*, vol. 83, pp. 225-37. SJR =1.694, Top quarter. 1 citation
- Ho, C. and Hensher, D.A. (2016) 'A workplace choice model accounting for spatial competition and agglomeration effects', *Journal of Transport Geography*, vol. 51, pp. 193-203. SJR =1.558, Top quarter. 7 citations
- Hensher, D.A. and Ho, C. (2016) 'Identifying a behaviourally relevant choice set from stated choice data', *Transportation*, vol. 43, no. 2, pp. 197-217. SJR =1.587, Top quarter. 8 citations
- Hensher, D.A., Greene, W. and Ho, C. (2016) 'Random Regret Minimization and Random Utility Maximization in the Presence of Preference Heterogeneity: An Empirical Contrast',

- Journal of Transportation Engineering*, vol. 142, no. 4. SJR =0.721, 2nd top quarter. 5 citations
- Hensher, D.A., Ho, C. and Knowles, L. (2016) 'Efficient contracting and incentive agreements between regulators and bus operators: The influence of risk preferences of contracting agents on contract choice', *Transportation Research Part A: Policy and Practice*, vol. 87, pp. 22-40. SJR =1.613, Top quarter. 3 citations
 - Ho, C., Mulley, C., Shiftan, Y. and Hensher, D.A. (2016) 'Vehicle value of travel time savings: Evidence from a group-based modelling approach', *Transportation Research Part A: Policy and Practice*, vol. 88, pp. 134-50. SJR =1.613, Top quarter. 1 citations
 - Hensher, D.A., Ho, C. and Mulley, C. (2016) 'Disruption costs in contract transitions', *Research in Transportation Economics*. SJR =0.789, 2nd top quarter. 3 citations
 - Hensher DA and Ho C (2016) 'Experience conditioning in mode choice modelling – does it make a difference?', *Transportation Research Part E: Logistics and Transportation Review*. SJR =1.694, Top quarter. 3 citations
 - Hensher DA, Ho C., and Liu W. (2016) 'How much is too much for tolled road users: toll saturation and the implications for car commuting value of travel time savings?', *Transportation Research Part A: Policy and Practice*. SJR =1.613, Top quarter. 1 citation
 - Ho, C. and Mulley, C. (2016) 'Developing good practice outcomes in passenger transport: Strategic policy and practical implementation: Editorial', *Research in Transportation Business & Management*, 1-2. SJR =0.395, 2nd top quarter.
 - Hensher, D.A., Li, Z. and Ho, C. (2015) 'The Role of Source Preference and Subjective Probability in Valuing Expected Travel Time Savings', *Travel Behaviour and Society*, vol. 2, no. 1, pp. 42-54. SJR =1.156, Top quarter. 8 citations
 - Hensher, D.A., Ho, C. and Beck, M.J. (2017) 'A simplified and practical alternative way to recognise the role of household characteristics in determining an individual's preferences: the case of automobile choice', *Transportation*. 1-16. SJR =1.587, Top quarter
 - Ho, C. and Hensher, D.A. (2017) 'Application of irrelevance of state-wise dominated alternatives (ISDA) for identifying candidate processing strategies and behavioural choice rules adopted in best-worst stated preference studies', *Journal of Choice Modelling*, vol. 25, 40-49. SJR =0.576, 2nd top quarter.
 - Ho, C., Mulley, C., Tsai, C.-H., Ison, S. and Wiblin, S. (2017) 'Area-wide travel plans - targeting strategies for greater participation in green travel initiatives: a case study of Rouse Hill Town Centre, NSW Australia', *Transportation*, pp.1-28. SJR =1.587, Top quarter. 1 citation
 - Ho C, Hensher DA and Ellison R 2017 'Endogenous treatment of residential location choices in transport and land use models: introducing the MetroScan framework', *Journal of Transport Geography*, vol.64, pp. 120-31. SJR =1.558, Top quarter.

Fully refereed conference proceedings

- Ho C (2013) Interpersonal cooperation in tour-based mode choice: The role of household resources and spatial setting. The 13th World Conference on Transport Research WCTR. Rio de Janeiro, Brazil, 15-18 July 2013. (**Winner of the WCTR Innovation Grant**)
- Hensher, D.A., Ho, C. and Mulley, C. (2015) 'Identifying preferences for public transport investments under a constrained budget', *94th Annual Meeting of the Transportation Research Board TRB*, Washington, D.C., United States, 11 - 15 January.
- Ho, C. and Hensher, D.A. (2015) 'A workplace choice model accounting for spatial competition and agglomeration effects', *Proceedings of the 37th Australasian Transport Research Forum ATRF 2015*, Sydney, Australia, 30 September - 2 October.

- Ho, C., Mulley, C., Shiftan, Y. and Hensher, D.A. (2015) 'Value of travel time savings for multiple occupant car: evidence from a group-based modelling approach', *37th Australasian Transport Research Forum ATRF 2015*, Sydney, Australia, 30 September - 2 October.
- C Mulley, C Ho, L Ho, D Hensher, J Rose (2018) Will Bus Travellers Walk Further for a More Frequent Service? An International Study Using a Stated Preference Approach, *97th Annual Meeting of the Transportation Research Board*, Washington, D.C., United States, - 11 January.
- Ho, C. and Mulley, C. (2013) 'Group travel and public transport use: the effect of fare discounts', *Proceedings of the 36th Australasian Transport Research Forum ATRF 2013 - "Transport and the New World City"*, Brisbane, Australia, 2 - 4 October.
- Ho, C. and Mulley, C. (2013) 'Tour-based mode choice of joint household travel patterns on weekend and weekday', *Proceedings of the 92nd Annual Meeting of the Transportation Research Board - "Deploying Transportation Research - Doing Things Smarter, Better, Faster"*, Washington D.C., United States, 13 - 17 January.
- Ho, C. and Mulley, C. (2013) 'Incorporating intra-household interactions into tour-based model of public transport use in car-negotiating households', *Proceedings of the 92nd Annual Meeting of the Transportation Research Board - "Deploying Transportation Research - Doing Things Smarter, Better, Faster"*, Washington D.C., United States, 13 - 17 January.
- Mulley, C. and Ho, C. (2012) 'Evaluating the impact of bus network planning changes in Sydney, Australia', *35th Annual Australasian Transport Research Forum ATRF 2012*, Perth, Australia, 26 - 28 September.
- Ho, C. and Mulley, C. (2012) 'Incorporating intra-household interactions into a tour-based model of public transport use in car-negotiating households', *35th Annual Australasian Transport Research Forum ATRF 2012*, Perth, Australia, 26 - 28 September (**Winner of the John H Taplin Award**).
- Ho, C., Mulley, C. and Shaz, K. (2012) 'Data inconsistencies detection and correction: an application to identifying joint household travel from the household travel survey', *Proceedings of the 1st European Symposium on Quantitative Methods in Transportation Systems*, Lausanne, Switzerland, 6 - 9 September.
- Ho, C. and Yamamoto, T. (2011) 'The role of attitudes and public transport service on vehicle ownership in Ho Chi Minh, Vietnam', *Proceedings of the 34th Australasian Transport Research Forum ATRF 2011*, Adelaide, Australia, 28 - 30 September.

Other publication outputs

- Balbontin C, Hensher DA, Ho C and Mulley C 2017 'Developing country cross-cultural contrasts of preferences for BRT and LRT', 15th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 15), Stockholm, Sweden, 17th August 2017
- Ho C, Hensher DA, Mulley C and Wong Y Zhuxiao 2017 'Prospects for switching out of conventional transport services to mobility as a service subscription plans: A stated choice study', 15th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 15), Stockholm, Sweden, 17th August 2017
- Ho C, Hensher DA and Ellison R 2017 'Endogenous treatment of residential location choices in transport and land use models: introducing the MetroScan framework', 5th International Choice Modelling Conference, Cape Town, South Africa, 5th April 2017
- Ho C, Hensher DA, Mulley C, Landau SR and Duncan CS 2017 'U.S. and Australian Experience with Surveys of Ridesharing Markets', 96th Annual Meeting of the Transportation Research Board TRB, Washington, D.C., United States, 12th January 2017.

- Ho C and Hensher DA 2016 'Joint estimation of mode and time of day choice accounting for arrival time flexibility, travel time reliability and crowding on public transport', 14th World Conference on Transport Research, Shanghai, Chile, 15th July 2016
- Hensher DA, Ho C and Mulley C 2015 'Disruption costs in contract transitions', *14th International Conference on Competition and Ownership in Land Passenger Transport - Thredbo 14*, Santiago, Chile, 3rd September 2015
- Hensher DA, Ho C and Knowles L 2015 'Efficient contracting and incentive agreements between regulators and bus operators: the influence of risk preferences of contracting agents on contract choice', *14th International Conference on Competition and Ownership in Land Passenger Transport - Thredbo 14*, Santiago, Chile, 3rd September 2015
- Ho C and Hensher DA 2015 'Application of irrelevance of state-wise dominated alternatives (ISDA) for identifying candidate processing strategies and behavioural choice rules adopted in best-worst stated preference studies', *14th International Association for Travel Behaviour Research IATBR Conference*, Windsor, United Kingdom, 23rd July 2015
- Ho C and Mulley C 2015 'How much walking do Sydneysiders do in their daily life? Evidence from the Household Travel Survey', *1st International Conference on Transport and Health*, London, United Kingdom, 8th July 2015
- Hensher DA, Ho C and Mulley C 2015 'Identifying Preferences For Public Transport Investments Under A Constrained Budget', *94th Annual Meeting of the Transportation Research Board TRB*, Washington, D.C., United States, 15th January 2015
- Ho C, Tsai C, Mulley C, Ison S and Wiblin S 2014 'Area-wide travel plans - targeting strategies for greater participation in green travel initiatives: A case study of Rouse Hill Town Centre, NSW Australia', *World Symposium on Transport and Land Use Research WSTLUR*, Delft, Netherlands, 27th June 2014
- Ho C and Hensher DA 2014 'Housing prices and price endogeneity in tenure and dwelling type choice models', *32nd Conference of Australian Institutes of Transport Research CAITR*, University of NSW, Australia, 18th February 2014
- Mulley C and Ho C 2013 'Metrobuses in Sydney: how high capacity and high frequency services are benefiting the Metropolitan fringe', *13th International Conference on Competition and Ownership in Land Passenger Transport - Thredbo 13*, Oxford, United Kingdom, 19th September 2013 (**Winner of Michael Beesley Award**)
- Ho C 2013 'An investigation of intra-household interactions in travel mode choice'. PhD Thesis, *Institute of Transport and Logistics Studies*, University of Sydney, Sydney, Australia.
- Ho C and Mulley C 2012 'Multiple purposes at single destination: a key to a better understanding of the relationship between tour complexity and mode choice', *ITLS Working Paper WP-12-15 University of Sydney*, Sydney, Australia

TEACHING AND SUPERVISING EXPERIENCE

Teaching Experience

- ITLS5200 *Quantitative Logistics and Transport*, offered to Master's students at The University of Sydney Business School, 2017 Semester 2. Responsibility: deliver a third of this unit.
- BUSS6002 *Data Science in Business*, offered to Master's students at The University of Sydney Business School, 2017 Semester 2. Responsibility: Tutor.
- ITLS6106 *Infrastructure Appraisal*, offered to Master's students at The University of Sydney Business School, 2017 Semester 1. Responsibility: deliver a third of this unit.
- *Network Planning* short course, offered to Planners of Transport for New South Wales, February 2017. Responsibility: lecturer.

- ITLS5100 *Transport and Infrastructure Foundation*, offered to Master's students at The University of Sydney Business School, 2017 Semester 1. Responsibility: guest lecturer.
- BUSS6002 *Data Science in Business*, offered to Master's students at The University of Sydney Business School, 2017 Semester 1. Responsibility: Tutor.
- ITLS6107 *Applied GIS and Spatial Analytics*, offered to Master's students at The University of Sydney Business School, 2016 SS. Responsibility: guest lecturer.
- ITLS6106 *Infrastructure Appraisal*, offered to Master's students at The University of Sydney Business School, 2016 Semester 1. Responsibility: guest lecturer.
- ITLS6107 *GIS for Transport and Logistics*, offered to Master's students at The University of Sydney Business School, 2015 Int Jan. Responsibility: guest lecturer.
- ITLS6107 *GIS for Transport and Logistics*, offered to Master's students at The University of Sydney Business School, 2015 Int Jan. Responsibility: guest lecturer.
- ITLS6107 *GIS for Transport and Logistics*, offered to Master's students at The University of Sydney Business School, 2015 Int Jan. Responsibility: guest lecturer.
- CIVL801027, *Highway Engineering*, offered to 4th year undergraduate students at the Vietnamese National University, 2006 Semester 1. Responsibility: lecturer and coordinator.
- CIVL801037, *Geometric and Structural Design of Roads*, offered to 3rd year undergraduate students at the Vietnamese National University, 2005 Semester 2. Responsibility: lecturer and coordinator.
- CIVL812021, *Laboratory and Field Testing of Highway Materials*, offered to 3rd year undergraduate students at the Vietnamese National University, 2005 Semester 2. Responsibility: lecturer.

Academic Supervising Experience

- Associated Supervisor of Nina Verzosa, PhD Candidate at ITLS, The University of Sydney, Nov 2017 – present
PhD thesis: Gamification in Travel Survey.
- Co-Supervisor of Dr Loan Ho, Research Analyst/Postdoc at ITLS, The University of Sydney, Feb 2016 – present.
Research projects: bus network planning, crowding on public transport, residential mobility, walking further to access better bus services, transport opinion surveys (TOPS).
- Supervisor of Eneko Echaniz, visiting PhD Student from University of Cantabria, Spain, Sep – Dec 2017.
Research topic: Modelling public transport quality with Best-Worst choice method
- Supervisor of Hadi Mostafavi, Systems Developer/Casual Research Analyst at ITLS, The University of Sydney, Nov 2016 – Jul 2017.
Project: Programming CAPI survey instruments for Mobility as a Service
- Co-supervisor of Dat Nguyen, Senior Programmer/Casual Research Analyst at ITLS, The University of Sydney, Nov 2016 – Jul 2017.
Project: Developing web-based user-interface for MetroScan software
- Co-supervisor of Zheyu (Tony) Liu, Honours Student at the Faculty of Agriculture and Environment, The University of Sydney, 2017 Semester 2.
Research topic: Willingness to pay for attributes related to sustainability of liquid milk
- Co-supervisor of Lu Li, visiting PhD Student from Tongji University, China, Feb – May 2017.
Research topic: An application of discrete choice models to simulate the impact of transport policies on freight movements.
- Supervisor of Elodie Boué, visiting Master Student from Ecole Nationale des Travaux Publics de l'Etat (ENTRE), France, Mar – Aug 2016.
Research topic: Change to bus network planning focuses to increase patronage and social equity
- Supervisor of Jun Zhang, Senior programmer at ITLS, The University of Sydney, Dec 2014 – July 2015.
Projects: Delivering better public transport for our cities: an international survey

RESEARCH FUNDING

External research funding

- *Public Preferences and Willingness to Pay for new mobility services in the UK context*
Funding body: CATAPULT
Awardees: Dr Chinh Ho, Prof Corinne Mulley, Prof David Hensher)
Amount funded: £9,990
Year of agreement: 2018
- *Centre of Excellence on Bus Rapid Transit*
Funding body: Volvo Research and Education Foundation (VREF)
Awardees: International Consortium of The University of Sydney (Australia), PUC (Chile), MIT (USA), EMBARQ (World Resource Institute), and The University of Pretoria (South Africa)
Amount funded: US\$ 3,300,000 (of which US\$ 385,000 is allocated to ITLS collaborators including Prof David Hensher, Prof Corinne Mulley, and Dr Chinh Ho)
Year of agreement: 2017
- *Artemis High Performance Computer Grand Challenge Scheme*
Funding body: Deputy Vice-Chancellor (Research), The University of Sydney
Awardees: Professor David Hensher, Dr Richard Ellison, Dr Chinh Ho, Professor Michiel Bliemer, Wen Liu, Collins Teye
Amount funded: AU\$336,000 in kind support (192 Cores for 4 years)
Year of agreement: 2016
- *Departure time choice model for Sydney Strategic Model (consulting)*
Funding body: Transport for NSW, Australia
Awardees: Professor Michiel Bliemer, Dr Chinh Ho
Amount funded: AU\$ 36,000
Year of agreement: 2016
- *Trip timing choice model for Sydney Strategic Model (consulting)*
Funding body: Transport for NSW, Australia
Awardees: Dr Chinh Ho, Professor Michiel Bliemer
Amount funded: AU\$ 51,575
Year of agreement: 2016
- *Pedestrian study in the Darlington and Camperdown Precinct*
Funding body: The University of Sydney
Awardees: Professor David Hensher, Dr Chinh Ho, Chris Standen
Amount funded: AU\$ 35,625
Year of agreement: 2016
- *Trial of ITLS MetroScan Model*
Funding body: Transport for NSW, Australia
Awardees: Professor David Hensher, Dr Chinh Ho, Dr Richard Ellison, Wen Liu, Collins Teye
Amount funded: AU\$ 55,000
Year of agreement: 2016
- *Planning for Growth of Sydney Southern CBD knowledge and education Precinct (consulting)*
Funding body: EmergeCap
Awardees: Professor David Hensher, Dr Chinh Ho, Dr Richard Ellison
Amount funded: AU\$ 40,000
Year of agreement: 2015
- *Sydney City – Southwest Metro project: the case for a station at the University of Sydney*

(consulting)

Funding body: EmergeCap

Awardees: Professor David Hensher, Dr Chinh Ho, Dr Richard Ellison

Amount funded: AU\$ 60,000

Year of agreement: 2015

– *Disruption cost in contract transitions*

Funding body: Transit Systems

Awardees: Professor David Hensher, Dr Chinh Ho

Amount funded: AU\$ 10,000

Year of agreement: 2015

– *Benchmarking Bus Contract B*

Funding body: Bus for NSW

Awardees: Professor David Hensher, Dr Chinh Ho

Amount funded: AU\$ 10,000

Year of agreement: 2014

– *Innovation Grant of the World Conference on Transport Research Society*

Funding body: World Conference on Transport Research Society (WCTRS)

Awardee: Dr Chinh Ho

Amount funded: EU 4,000

Year of agreement: 2012

Internal research funding

– *Conference Travel Grant International Conference Series on Competition and Ownership in Land Passenger Transport (Thredbo)*

Funding body: The University of Sydney Business School

Amount funded: AU\$ 4,928

Awardee: Dr Chinh Ho

Year of agreement: 2017

– *2016 Publication Award Scheme*

Funding body: The University of Sydney Business School

Amount funded: AU\$ 20,090

Awardee: Dr Chinh Ho

Year of agreement: 2017

– *Business School Pilot Research Grant*

Funding body: The University of Sydney Business School

Amount funded: AU\$ 19,000

Awardee: Dr Chinh Ho, Prof David Hensher, Prof Corinne Mulley

Year of agreement: 2016

– *Conference Travel Grant International Choice Modelling Conference*

Funding body: The University of Sydney Business School

Amount funded: AU\$ 4,340

Awardee: Dr Chinh Ho

Year of agreement: 2017

– *2015 Publication Award Scheme*

Funding body: The University of Sydney Business School

Amount funded: AU\$ 11,900

Awardee: Dr Chinh Ho

Year of agreement: 2016

- *Conference Travel Grant 14th World Conference on Transport Research*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 5,236.8
Awardee: Dr Chinh Ho
Year of agreement: 2016
- *Business School Early Career Researcher Grant*
Funding body: The University of Sydney Business School
Awardee: Dr Chinh Ho
Amount funded: AU\$ 12,500
Year of agreement: 2015
- *Conference Travel Grant Thredbo 14 - International Conference Series on Competition and Ownership in Land Passenger Transport*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 4,000
Awardee: Dr Chinh Ho
Year of agreement: 2015
- *Conference Travel Grant 14th International Association for Travel Behaviour Research Conference*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 5,000
Awardee: Dr Chinh Ho
- *Conference Travel 2014 World Symposium on Transport and Land Use Research*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 4,803
Awardee: Dr Chinh Ho
Year of agreement: 2014
- *2013 Publication Award Scheme*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 6,100
Awardee: Dr Chinh Ho
Year of agreement: 2014
- *Conference Travel 2014 Australasian Transport Research Forum*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 899.85
Awardee: Dr Chinh Ho
Year of agreement: 2014
- *2014 Publication Award Scheme*
Funding body: The University of Sydney Business School
Amount funded: AU\$ 425
Awardee: Dr Chinh Ho
Year of agreement: 2014

EDITORIAL APPOINTMENT AND REVIEW SERVICES

- 2016, Guest Editor for a Themed Volume in “Benchmarking and good practice in passenger transport” *Research in Transportation Business & Management*.
- 2010, Reviewer of Vietnam High-Speed Rail Feasibility Study (US\$55.6 billions) <http://www.railjournal.com/index.php/asia/vietnams-railway-projects-face-bumpy-ride.html>
- Since 2014, Ad-hoc reviewer for high-ranking journals including *Transportation Research Part A, C, D, Transportation, Public Transport, Journal of Urban Science, Urban Planning and Transport Research, Transport Policy*; placing in the 92nd percentile for verified review contributions on Publons as of March 2017.

MEDIA ENGAGEMENT

- 02 February 2017, *ITLS Thinking Outside the Box*, Australia, ‘Autonomous Vehicles and Implications for Future Transport Systems’. http://sydney.edu.au/business/itls/thinking/2017/autonomous_vehicles_and_implications_for_future_transport_systems
- 20 November 2016, *Sydney Morning Herald*, Australia, ‘Sydney 2026: The commute’ <http://www.smh.com.au/interactive/2016/sydney2026/chapter1.html>
- 25 November 2016, *Sydney Morning Herald*, Australia, ‘How we’ll drive into the future’ <http://www.smh.com.au/interactive/2016/sydney2026/chapter8.html>
- 10 July 2015, *ABCNews*, Australia, ‘Fact check: Do nine in 10 Australians spend more than 90 minutes a day commuting?’ <http://www.abc.net.au/news/2015-07-09/fact-check-how-much-time-do-people-spend-commuting-to-work3f/6604518>
- 06 March 2014, *Sydney Morning Herald*, Australia, ‘All roads lead to city centre but bus use in Sydney rises fastest in outer suburbs’. <http://www.smh.com.au/nsw/all-roads-lead-to-city-centre-but-bus-use-in-sydney-rises-fastest-in-outer-suburbs-20140305-34715.html>
- 06 April 2011, *Opinion piece, Vietnamnet, Vietnam*, ‘What a good city looks like’.

INVITED TALKS

- November, 2017, Beijing Institute of Transport, China. Presenter in a 3-day workshop on Strategic Travel Models.
- October, 2017, Queensland Department of Transport and Main Roads, Australia. Briefing key modellers, planners and treasures in Queensland the use of MetroScan for strategic planning and appraisal of transport initiatives.
- October, 2016, Beijing Municipal Commission of Transport, China.
- October, 2016, Guangdong Provincial Department of Transportation Intelligent Transportation System, China.
- September, 2016, Japanese Railway Society, Japan.
- April, 2016, ‘Sydney bus network: finding the right balance of planning principles to improve efficiency’, briefing key CEOs of the Infrastructure and Service Divisions at Transport for NSW, Australia.
- April, 2016, briefing key modellers and planners at Transport for NSW, Australia on the capacity of MetroScan in evaluating transport-related initiatives.
- November, 2015, Chartered Institute of Logistics and Transport, Australia.
- February, 2014, Divisional Learning and Development program of Transport for NSW, Australia.
- September, 2014, ‘Career planning and development for future civil engineers’, Vietnam National University, Ho Chi Minh City University of Technology, Vietnam.

ACADEMIC AWARDS AND SCHOLARSHIPS

- The Michael Beesley Award for the best workshop paper presented at the 13th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo Series), 2013
- The Institute of Transport and Logistics Studies Prize (The University of Sydney) for Research Excellence in Transport, 2013
- John H Taplin Prize Winner for the best paper presented to Australasian Transport Research Forum, 2012
- Research Innovative Grant of the World Conference on Transport Research Society, 2013
- The University of Sydney International Scholarship for PhD study, 2010 – 2013
- Japanese Government Scholarship for Masters course, 2008 – 2010
- Certificate of excellent presentation at The Four-University Transport Conference (Tokyo, Nagoya, Kyoto, and Kobe Universities), 2009
- Certificate of Merit, Vietnam Embassy in Japan, 2008
- Japanese Government Research Fellowship, 2007 – 2008
- University Silver Medal, 2005
- Second Prize, the University Mechanics Olympic Competition, 2004
- Japanese Business Association of Ho Chi Minh City Scholarship, 2002 – 2004
- Bronze Medal, the National Mechanics Olympic Competition, 2003
- Third Prize, the University Materials Olympic Competition, 2003

VOLUNTEER EXPERIENCE

- June – July 2005, *The Green Summer Voluntary Program*, Vietnam National University, Ho Chi Minh City University of Technology, **Chief Engineer**: led a group of 15 Civil Engineering students in their final year building a bridge in a remote area of Tra Vinh Province (southwest of Ho Chi Minh City, Vietnam) to improve residents' access to schools, hospitals and markets. During this 30-day voluntary program, all volunteers left the convenience of a city lifestyle behind, travelled to a remote village, stayed with the host families, and built roads, bridges, schools for them. The local community partly supplied labours and we raised fund ourselves to help them. The program also received donations from construction firms in terms of materials (pre-cast concrete bridge girders, cement, and gravels).
- June – July 2006, *The Green Summer Voluntary Program*, Vietnam National University, Ho Chi Minh City University of Technology, **Structural Engineer**: led a group of 8 Civil Engineering students in their final year doing geotechnical survey and structural design of 93 bridges in Ben Tre Province (southwest of Ho Chi Minh City). The designs were used for construction in the following year under the same volunteer program.

TRANSFERABLE AND TECHNICAL SKILLS

Transferable skills

Strong communication and interpersonal skills

- I often request data from the Transport Performance and Analytics department (Transport for NSW) to undertake various analyses for projects at the Institute of Transport and Logistics Studies (ITLS). This has meant dealing with many different individuals who require an explanation of the need for such data. Recently, the Director (Phil Bullock) contacted me regarding one project which resulted in a desire to know more about a large project at ITLS. This led to an invitation for me to brief key CEOs at Transport for NSW.
- My writing is best demonstrated by quoting Professor Darren Scott's comments on my PhD thesis: "The thesis is very easy to read for two reasons: As mentioned, it is very well-written; also, the work is presented with a superior level of detail, thus ensuring that a reader is not left asking questions. Overall, the thesis was a pleasure to read, and compared to others that I have examined over the past

several years, it stands in a league of its own. It is very clear from this thesis that Chinh Ho takes great pride in the presentation of his work.”

- My presentations at academic and industry conferences have received very good feedback from audiences. I won best paper awards at the Australian Transport Research Forum 2012 and the International Conference on Competition and Ownership in Land Passenger Transport 2013 (held at the University of Oxford).
- I feel confident and comfortable contributing to teamwork and group discussion, something required almost daily in my roles as the Project Manager for three large research projects in ITLS. This is also demonstrated through my strong engagement in industry collaboration and consulting projects.
- In my current role, I take initiative and have successfully persuaded other research group members to support my ideas. I am an active listener and able to reconcile different points of view to a consensus position.
- I am confident in liaising with colleagues at all levels, including briefing senior management and directing junior staff.

Demonstrated leadership skills

- I have a lead role in ITLS’ collaboration in the Bus Rapid Transit Centre of Excellence, funded by the Volvo Research and Educational Foundations. In this role, I initiate multidisciplinary multinational research projects, introduce industry engagement initiatives, and lead industry-funded research projects.
- I am the manager of the MetroScan demand and supply modelling team at ITLS. In this role, I lead a team of four people to develop the MetroScan software which draws significant interests from transport authorities (NSW, Queensland, Victoria, Perth, Fiji, Boston, Singapore, Beijing) and large consultancy firms (e.g., PwC and Deloitte Access).
- In 2010, I was left in charge of the business of the NewCC Construction Consultants Co. Ltd., (60 employees) for more than a month in the Director’s absence due to serious illness.
- Between 2005 and 2007, I was a Chief Site Engineer at the Research and Application Center for Construction Technology, in charge of organising works for my fellow engineers to ensure projects are completed on time and on budget.

Efficient problem-solving skills

- I can quickly identify problems, develop approaches to address the issues, and implement solutions. The following example demonstrates my abilities. In February 2016, The University of Sydney asked ITLS to undertake a study to obtain counts of pedestrian movements within a predefined precinct of The University. The invitation was made on 25 February 2016, with the requirements of undertaking 3-day pedestrian traffic counts at 11 sites across the Darlington and Camperdown campuses, analysing the data and providing recommendations to Campus Infrastructure Services (CIS) on 4 March 2016 (the following week) for discussion with Roads and Maritime Services (RMS) about pedestrian safety and movements across the University’s campuses. I was appointed Project Manager, overseeing the entire project with the knowledge that tasks were many and time was limited. I worked with another team member over the weekend to recruit 37 surveyors, roster them according to their availability, coordinate the logistics (prepare counters, data entry sheets, planning stand-by surveyors), brief surveyors, organise data entry, analyse data and write a summary report. The project was very successful: high data quality obtained, survey ran smoothly with no surveyor left their shifts, and recommendations to CIS were delivered on time. The short-term impacts of this study can be seen in Codrington Street and Butlin Avenue. In short, we convinced RMS to: (i) keep the two zebra crossings on these streets despite being very close to each other; and (ii) introduce traffic calming measures for Codrington Street (pedestrian crossing signage painted on road in front of the H70 building) to improve pedestrian safety at Abercrombie roundabout. Long-term recommendations included widening the footpath along Lawson Street and building a grade separated pedestrian crossing at City Road, which were well received by RMS.
- Academics and PhD students at ITLS come to my office with their problems/research questions and go out with a solution/research design.
- At ITLS, I am in charge of designing most choice experiments and developing statistical models to

address problems, be they research questions or industry queries.

Critical thinking and reasoning skills

- My research area is travel behaviour which requires critical thinking and reasoning to interpret study results and write journal articles. My superior record of publications demonstrates my critical thinking and reasoning skills.
- I regularly act as a reviewer for top journals, a role that requires critical thinking and reasoning to give the Editors justified recommendations on whether papers are publishable.

Specialist skills and knowledge

Transport industry and market research

- I have designed many revealed preference (RP) and stated preference (SP) surveys to collect data for market research.
- I have been recognised as a transport expert and occasionally approached by journalists and activists seeking comments on transport-related matters (see **Media Engagement** section).
- I have been invited to present my research to a number of transport professional bodies, including the Chartered Institute of Logistics and Transport Australia (CILTA), Transport for NSW, and Bus NSW, a peak body of bus operators in NSW (see **Invited Talks** section).
- I have contributed to a number of consultancy projects, particularly those with a research component (see **Research Funding** section).

Applied discrete choice modelling

- I am a co-developer of MetroScan, a strategic travel model system that is used to undertake demand forecasts and cost-benefit analysis. The software has received substantial interest from Transport for NSW (who provided research funds for a proof-of-concept study) MetroTrains in Melbourne, Department of Transport and Main Roads in Queensland, and several international consulting companies (e.g., PricewaterhouseCoopers, Deloitte Access Economics, and Economic Development Research Group – a US-based think-tank).
- I have been an external expert advisor to the Transport Modelling team at Transport for NSW. In this role, I have reviewed recommendations of consultants, identified options for developing new travel models and suggested various ways to improve practice.
- I have assisted Transport for NSW to develop and build new trip timing models into their Strategic Travel Model. This model is officially used to do Master Planning and evaluate transport projects in NSW.

Applied spatial analysis

- I am the developer of a Clearway Planning Tool currently used by the Road and Maritime Services for planning Sydney Future Clearways. The tool is run on Python and Arcpy platforms.
- I am the developer of a Bus Planning Tool used by network planners to assess the performance of the Sydney Bus network and identify areas where network improvements can be obtained. This tool runs on Python and Arcpy platform.

Data visualisation

- In 2013, I used Tableau to develop a Census Profiler, published on the Bureau of Transport Statistics website at www.bts.nsw.gov.au/Graphs/Census
- In 2014, I set up an Excel template to automatically update the Transport Opinion Surveys (TOPS) data and produce graphs for TOPS reports at <http://www.sydney.edu.au/business/itls/tops>.

Programming languages, modelling software, and data processing packages

- I am able to program software in Gauss, Python, and R.
- I use Nlogit to estimate all choice models used in the MetroScan software and my journal articles.
- I write SPSS scripts to process data, track online surveys and do statistical analysis on a daily basis.
- I write Ngene scripts to generate efficient choice designs for all research projects I am involved in at ITLS and beyond (consulting works and industry-partner research projects)

- I use MySQL to query and process big data including Opal and PTIPS.

ADMINISTRATIVE AND MANAGEMENT EXPERIENCE

- Lead role in the Bus Rapid Transit Centre of Excellence funded by Volvo Research and Educational Foundations.
- Manager of the Travel Demand and Supply Modelling team at ITLS.
- Effectively managing my time to ensure the correct prioritisation of multiple projects, many with changing deadlines and priorities due to outside influences when working at ITLS and Transport for NSW.
- Experienced in maintaining, filing and updating documentation of data sources and reports, through direct involvement in MetroScan, bus benchmarking, and TOPS projects at ITLS.
- Fully involved with the commissioning and development of surveys with different survey companies (main tasks are seeking quotes, negotiating timelines, organising briefings, managing progress and providing daily feedback to survey companies to improve data quality, and analysing data collected).
- Successfully managed a construction project to build a bridge in a month for residents in a remote area in Southwest Vietnam (position: manager and chief site engineer).
- Supervised a team of eight civil engineers doing geotechnical surveys and structural designs for a number of small bridges in Southwest Vietnam through a voluntary program.
- Managed a team of five civil engineers at NewCC Construction Consultants Co., Ltd.
- Experienced in training graduates at NewCC Construction Consultants Co., Ltd.
- Coordinated and organised a job fair for Vina Eco Board Co., Ltd. (VECO) to recruit graduates from Vietnam National University Ho Chi Minh City University of Technology (for which a commendation was received).

EMPLOYMENT HISTORY

Academic Appointments

- December 2016 – current, **Research Fellow**, the University of Sydney, *fulltime continuing* (funding contingent). Responsibilities: Lead role in the Bus Rapid Transit Centre of Excellence funded by Volvo Research and Educational Foundation; Manager of MetroScan supply and demand models, an overarching role in managing the development of MetroScan software; managing multidisciplinary multinational research projects; introducing and managing industry engagement initiatives; leading industry-funded research projects and consultancy projects; lecturing postgraduate units in the area of transport economics and transport planning; developing research proposals for internal and external research funding; supervising Research Assistants and mentoring PhD students; providing technical support to academics and PhD students; representing The University of Sydney Business School in many seminars, briefings and industry events.
- September 2014 – November 2016, **Research Fellow**, the University of Sydney, *full time fixed term*. Responsibilities: same as above.
- September 2013 – August 2014, **Postdoctoral Research Fellow**, the University of Sydney, *fulltime fixed term*. Responsibilities: managing multidisciplinary research teams; developing travel demand and location choice models for MetroScan software; sourcing, development and management of primary and secondary data; developing stated and revealed preference surveys; commissioning and co-coordinating online surveys; maintaining the currency of online documentation of models and assumptions; providing support to a research team of five scholars working on an ARC-funded project; contributing to industry engagement initiatives; developing research proposals for internal research funding; mentoring PhD students and supervising Research Assistants; lecturing postgraduate subjects in the area of transport planning.
- February – August 2013, **Research Analyst**, the University of Sydney, part-time.

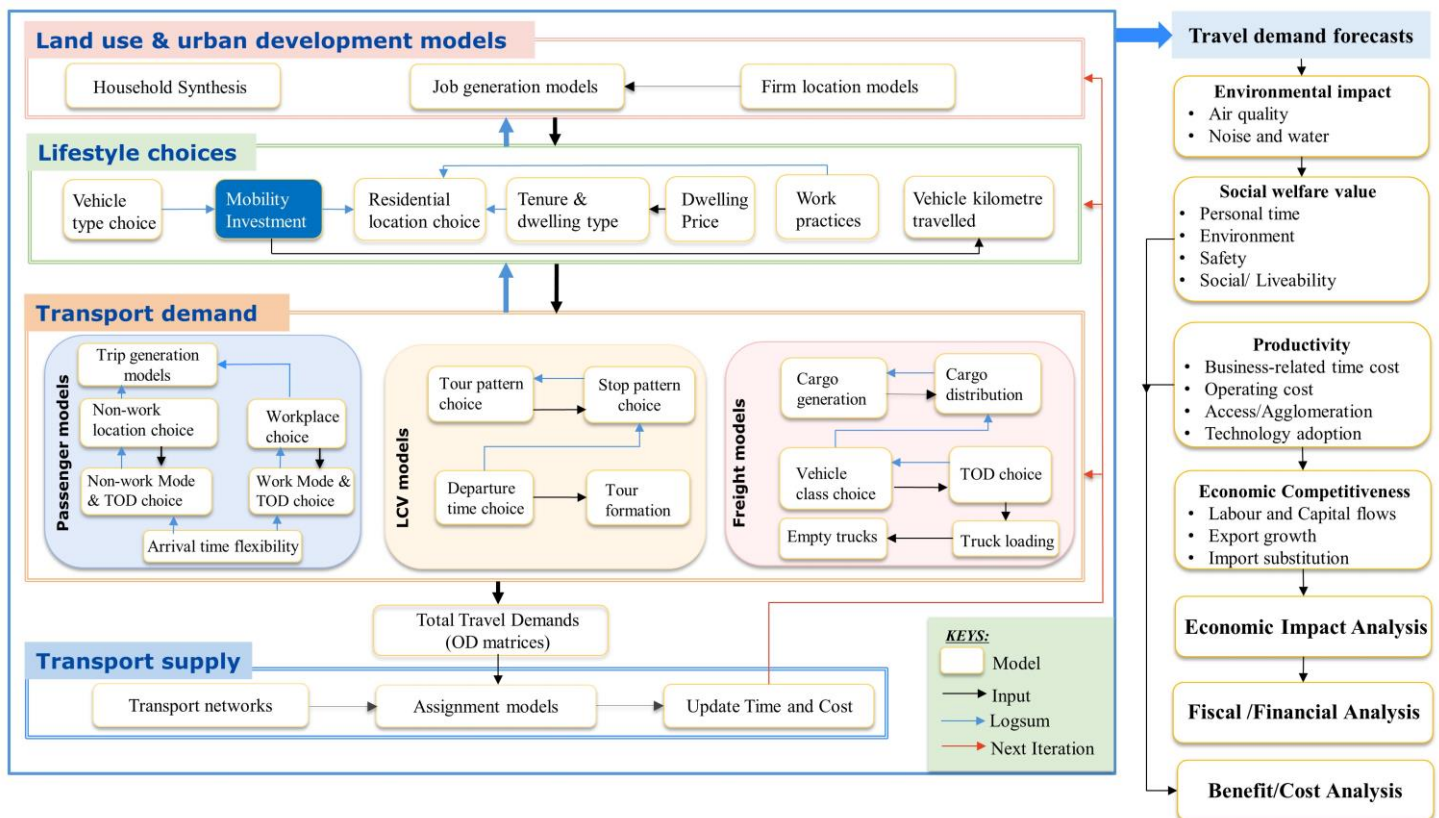
- Responsibilities: sourcing and preparing secondary data from Census, Sydney Household Travel Survey and other databases for the development of MetroScan software.
- June – September 2012, **Research Analyst**, the University of Sydney, part-time.
Responsibilities: evaluating the performance of bus services in Sydney metropolitan area following the introduction of bus reform; writing journal and conference papers; presenting analysis results to academic conferences.
- January – February 2012, **Tutor**, the University of Sydney, part-time.
Responsibilities: tutoring postgraduate students and evaluating their performance in the ‘International Freight Transportation’ unit.
- May 2005 – April 2007, **Lecturer**, Vietnam National University, Ho Chi Minh City University of Technology, *fulltime continuing*.
Responsibilities: coordinating and lecturing undergraduate units in the areas of highway engineering and urban transport; supervising honoured bachelor students; introducing and leading industry engagement initiatives; curriculum development and innovation; managing a team of five Civil Engineers working on an industry-funded project.

Industry Appointments

- November 2012 – May 2013, **Project Officer**, Transport for NSW, part-time.
Responsibilities: analysing Census and transport-related data; creating visualisation to present data and results in a popular series of TransFigures and Visualisations; making all publications accessible according to the Australian Government *Web Content Accessibility Guidelines*; projects include census profiler and journey to work tables, public transport customer satisfaction, rail barrier counts;
- February – July 2010, **Line Manager**, NewCC Construction Consultants Co., Ltd., fulltime continuing
Responsibilities: managing a team of ten civil engineers providing concept and detailed structural designs of state roads; residential and industrial buildings (medium-to-large scale), internal roads and drainage systems; liaising with clients to resolve issues and obtain action agreement; training graduate structural engineers; verifying structural models and technical designs; design concrete and steel structures for commercial and industrial buildings; coordinating office and site works to ensure that projects are on time and on budget.
- May 2005 – April 2007, **Civil Engineer**, Research and Application Center for Construction Technology, Ho Chi Minh City University of Technology, part-time.
Responsibilities: chief site engineer, verifying the quality of road pavement and backfilling through laboratory experiments; dealing with clients and preparing bidding documents for various consultancy projects relating to civil works, structural designs, and peer reviews.

EXPERIENCE IN TRAVEL DEMAND MODELLING AND DATA ANALYSIS

- *Project: MetroScan – a powerful scanning tool for infrastructure planning and evaluation (2014 – present)*
Clients: Not applicable, software
Description: As manager, I lead the team of four gifted researchers developed the MetroScan software which draws significant interests from transport authorities (e.g., Transport for NSW, Department of Traffic and Main Roads in Queensland, Victoria Roads, Perth, Fiji, Boston, Singapore, Beijing) and large consultancy firms (e.g., PwC and Deloitte Access). MetroScan is an integrated transport and land use modelling system which links many inter-dependent location and travel-related decisions in an innovative utility maximisation framework (see figure below). This is the only strategic travel demand model in the world that can integrate passenger travel demand with freight and light commercial vehicle travel demands; firm location with work place choice and residential location choice, and most importantly, travel demand forecasts with cost-benefit and economic-impact analyses. That is, MetroScan forecast travel demands and feed them seamlessly into economic modules to obtain BCR and productivity gains.



MetroScan demand and economic modelling systems

Co-developers: Prof David Hensher, Dr Chinh Ho, Dr Richard Ellison and Glen Weisbrod

- *Project: Australian Transport Assessment and Planning Guideline: Willingness to Pay Survey Design and Test (2016 - 2017)*
Client: Austroads
Description: As a member of the consulting team, I took part in the development and test of an experimental survey instrument, sampling method, and modelling approach to obtain car user's WTP for savings travel time, improving reliability and reducing road crashes.
- *Project: Trip timing choice models for Sydney Strategic Model – Phase 1 (2016 - 2017)*
Client: Transport for New South Wales
Description: As project leader, I developed trip timing choice models for STM using the Sydney Household Travel Survey data, provided instruction for model implementation and validated trip timing models.
- *Project: Which postcodes should you look for your ideal home (2017)*
Client: House-hunters, software
Description: motivated by the need of finding an ideal suburb for my first home in Sydney, I developed an GIS-based software that allow me (and will soon be any house-hunter in Australia) to identify suburbs/postcodes that tick the desired boxes (e.g., maximum of \$1.2m, 3-bedrooms, 2+ bathrooms, 1+ car-space within the catchment of good public school, good public transport, CBD, and locating in a low crime-rate, highly educated area). I use my expertise in data analytics, infrastructure planning, economic modelling, and spatial analysis to design this software which helps me buy my first home in four months – a task that seems impossible to many house-hunters.
- *Project: Bus Contract Region 6 Tender (2017)*
Client: UGL

Description: As an external expert, I assisted UGL in the development of their bid for the operation of bus services in Contract Region 6 in Sydney.

- *Project: Improving Beijing Strategic Transport Model (2017)*
Client: Beijing Transport Research Institute
Description: As project leader, I reviewed Beijing Strategic Transport Models and identified options, potential data sources and modelling methods for improving accuracy of travel demand forecasts and sensitivity of their model to transport and land use policy.
- *Project: MetroWest via Usyd: Network Patronage Forecasts and Catchment Analysis (2017)*
Client: The University of Sydney
Description: As project leader, I used the MetroScan software we developed to estimate future travel demand and benefit-cost associated with different alignments of the Metro West Link assisted The University of Sydney putting forward a business case for a Metro West station on The University Precinct.
- *Project: Development of Clearway Tool for Sydney (2016)*
Client: Road and Maritime Services (RMS)
Description: As a developer, I developed an ArcGIS-based software for RMS to identify and prioritise road segments that warrant a clearway treatment to improve traffic flow and road safety.
- *Project: Sydney STM departure time choice – approach to implementation (2016)*
Client: Transport for New South Wales
Description: As external expert, I reviewed a desktop study conducted by RAND Europe, reviewed the Sydney Strategic Travel Model (STM3) structure, and identified options for integrating time of day choice models into this structure.
- *Project: MetroScan – Proof of Concept Study (2016)*
Client: Transport for NSW
Description: As project leader, I requested cost data from TfNSW, built scenarios into MetroScan to evaluate the impact of three big infrastructure investments in NSW, namely the WestConnex, City-SW Metro and CBD-SE Light Rail, on future travel demand and productivity of the city. Results are very welcomed by TfNSW who consider using MetroScan as a supplement tool for their STM.
- *Project: Planning for Growth of Sydney Southern CBD knowledge and education Precinct (2015)*
Client: EmergeCap, The University of Sydney, Royal Prince Alfred Hospital
Description: As project leader, I applied MetroScan to forecast travel demand in 2026 for Sydney South and identified the needs of better transport services to support future growth of the Precinct.
- *Project: Sydney City – Southwest Metro project: the business case for a station at the University of Sydney (2015)*
Client: EmergeCap and The University of Sydney
Description: As project leader, I developed and built scenarios into the MetroScan software and processed the results to obtain travel demand forecast and train patronage for the business case.

PROFESSIONAL MEMBERSHIPS

- Permanent Scientific and Technical member of the Cooperation for urban mobility in the developing world (CODATU), 2014 – present
- The World Conference on Transport Research Society (WCTRS), 2012 – present
- International Association of Travel Behaviour Research (IATBR), 2015 – present
- World Symposium on Transport and Land Use Research (WSTLUR), 2014 – present
- The Eastern Asia Society for Transportation Studies (EASTS), 2009 – present