#### TEACHING AND RESEARCH INTERESTS

Juan Antonio Carrasco teaches courses on Transportation Engineering both at undergraduate and graduate levels. At undergraduate level, he teaches an introductory course about Operations Research and Transportation Engineering. In these courses, Dr. Carrasco covers all aspects of transportation engineering, including planning and modelling transport systems as well as fundamental methods to analyse and design their performance. At graduate level, he teaches courses in his main areas of expertise: Integrated Land Use and Transportation Models, Transportation Planning Policy, and Travel Demand and Network Models. In these courses, Dr. Carrasco teaches the most important methods to analyse and model demand and supply for large-scale urban transportation projects, as well as the relationship between the urban context and the transportation system, and the large set of policy implications, social, economic, and environmental. All these teaching activities are enriched both by his professional experience and research.

Dr. Carrasco's research has mainly focused on the development of analytical methods for modelling and understanding travel behaviour, and its implications in the overall urban context. He is a pioneer studying the role of social networks in travel behaviour, both in the development of new data collection techniques as well in the analysis of the role of social structure in space and its travel implications. Dr. Carrasco has also focused in the relevance of understanding travel demand as derived from the people's need on performing activities, and the relationship between people's travel decisions and other key aspects of their lives, such as their use of information and communication technologies, and the characteristics of their urban environment. He also has focused his research on studying how changes in land use patterns are related to the transportation system, focusing both on existing empirical evidence as well as on method to analyse this relationship. Finally, Dr. Carrasco has studied the role of transportation in people's social inclusion, developing conceptual frameworks and empirical indicators to understand how transportation affects the quality of life of different population groups.

## BIOGRAFÍA RESUMIDA

Juan Antonio Carrasco es Ingeniero Civil de Industrias de la P. Universidad Católica de Chile, Magíster en Ciencias de la Ingeniería de la misma casa de estudios, y PhD en Ingeniería y Planificación de Transporte de la Universidad de Toronto, Canadá. Trabajó como consultor en Steer Davies Gleave, y realizó pasantías en Sectra y The Hague Consulting Group (actualmente RAND-Europe). En estos lugares, trabajó en el estudio de la demanda de transporte de diversos proyectos, incluyendo el diseño, implementación y recolección de datos de comportamiento de transporte (tanto de Preferencias Reveladas como Declaradas), así como su posterior modelación y evaluación. Además, entre los años 2009 y 2010, se desempeñó como miembro del Directorio de FESUB (Ferrocarriles Suburbanos de Concepción), filial de EFE. Actualmente es Profesor Asociado del Departamento de Ingeniería Civil de la Universidad de Concepción, donde ejerce labores de docencia de pre y postgrado, y de investigación. La investigación del doctor Carrasco se ha concentrado principalmente en el desarrollo de métodos de análisis para comprender el comportamiento de transporte y sus implicancias en el contexto urbano. Es pionero mundial en el estudio del rol de las redes sociales en el comportamiento de viajes, tanto en el uso de técnicas interdisciplinarias para desarrollar de nuevas técnicas de recolección de datos, así como en el análisis cuantitativo de estos impactos. Finalmente, el doctor Carrasco ha estudiado el rol del transporte en la exclusión social, desarrollando indicadores que permitan medir y entender el efecto de los patrones de viajes en la calidad de vida de las personas en las ciudades.

### **CONTACT INFORMATION**

Department of Civil Engineering Universidad de Concepción P.O. Box 160-C Concepción, Chile Phone (+56 41) 220 3603 Fax (+56 41) 220 7089

#### **EDUCATION**

## **Doctor of Philosophy, Transportation Engineering and Planning**

(Major in Transportation Engineering, Minors in Urban Planning, Econometrics, and Social Networks and Community), University of Toronto, 2006

Thesis: Social Activity-Travel Behaviour: A Personal Networks Approach (supervisor: Eric J. Miller, co-supervisor: Barry Wellman)

# Master in Engineering Science, Transportation Engineering

Pontificia Universidad Católica de Chile, 2001

Thesis: Discrete Choice with Correlated Homoscedastic Alternatives: The Nested Logit Model in Depth (supervisor: Juan de Dios Ortúzar)

## **Industrial Engineer, Diploma in Transportation Engineering**

Pontificia Universidad Católica de Chile, 2001

## **Bachelor of Engineering Science**

Pontificia Universidad Católica de Chile, 1999

## ACADEMIC AWARDS AND SCHOLARSHIPS

- "Jane Addams Paper Award," honourable mention (second place), Community and Urban Sociology section, American Sociological Association, 2010.
- "Pyke Johnson Award," best paper in the area of Planning and Environment, Transportation Research Board, 2008.
- Eric Pas Dissertation Prize (honourable mention), outstanding doctoral dissertations on travel behaviour in 2006, awarded by the International Association for Travel Behaviour Research.
- Academic merit award, Universidad de Concepción, 2011-2013.
- Teaching merit award, Faculty of Engineering, Universidad de Concepción, 2010-2012.
- Postdoctoral fellowship, project "Development of an Operational Integrated Urban Modelling System", financed by Transport Canada in 2006.
- Open Fellowship, University of Toronto, 2002-2005.
- Research Assistantship, Department of Civil Engineering, University of Toronto, 2002-2006.
- Alan Tonks Scholarship, Department of Civil Engineering, University of Toronto, given to incoming first year students, considering academic merit, 2002.
- Juan Pablo II Foundation financed all undergraduate Engineering studies, between 1994 and 1999. Awarded by the P. Universidad Católica, considering academic merit and financial need.

#### RESEARCH AND WORK POSITIONS

**Associate Professor,** Department of Civil Engineering, Universidad de Concepción, from 2013. **Assistant Professor,** Department of Civil Engineering, Universidad de Concepción, 2007-2012.

• Full time (tenured) professor, with teaching, research, outreach, administrative, and consultancy activities.

#### Board Member, FESUB S.A., 2009-2010.

• FESUB (Ferrocarriles Suburbanos de Concepción) is a state-owned company, part of the Chilean National Railway Company (EFE), managing *Biotren* (suburban train serving the Great Concepción Area), and other passenger railway services in the Concepción and Temuco Area.

**Postdoctoral Fellow,** Department of Civil Engineering, Transportation Engineering and Planning, University of Toronto, 2006

- Development of the Integrated Land Use, Transport, and Environment model (ILUTE), which
  uses a microsimulation framework to model urban areas. My work included the development of
  the following modules: population synthesis, household evolution and formation, and labour
  market; as well as collaborating in the development of the overall architecture of the system.
- Development of the Toronto Area Scheduling model for Household Agents (TASHA), which
  uses a microsimulation activity-based approach to model travel demand. My work consisted on
  the refinement of the destination choice model, studying the use of constraint choice sets and
  new functional specifications, as well as collaborating in the development of the overall
  architecture of the system and its integration with ILUTE.

**Research Assistant,** Department of Civil Engineering, Transportation Engineering and Planning, University of Toronto, 2002–2006

Assisting on the development of the ILUTE and TASHA model. In the case of ILUTE, my
work included development of the auto-ownership component of the model, as well as
conducting literature reviews for some components of the model. In the case of TASHA, my
work included collaborating in the development of the generation and mode choice models, as
well as the calibration, validation, and analysis of applications in the Toronto Area.

Research Assistant, Centre for Urban and Community Studies, University of Toronto, 2004–2006

• Working on the "Connected Lives Study", which consisted in surveys, interviews and observations to people from East York, Toronto; researching their communication and activity-travel patterns. The work involved the design, implementation, and field work of the study in a multidisciplinary setting also composed by sociologists and social workers; and also consisted in the co-supervision of the data entry process.

#### Consultant, Steer Davies Gleave Chile, 2001

- Supervising, conducting, and analysing Stated Preference surveys of mode choice and consumption behaviour.
- Economic and social (cost-benefit) evaluation for light trains in Santiago de Chile.
- Demand study, economic evaluation, and financial models for parking lots and airports

**External researcher and consultant,** Hague Consulting Group (The Hague, Netherlands; chief and supervisors: Andrew Daly and Hugh Gunn), second half of 2000.

• Research on destination-mode discrete choice models, especially on the effect of Mixed Logit Models on the calibrated value of time in cities such as Sydney, Paris and Amsterdam.

- Help on the development of the latest version of the ALOGIT software.
- Statistical study for mode-destination choices for several purposes.

**Professional experience term,** SECTRA (Executive Secretariat, Infrastructure Investment Planning Commission, government office), summer 1999.

• Revision of traffic and demand studies in Chilean urban areas.

#### PUBLICATIONS AND PRESENTATIONS

#### **Peer Reviewed ISI Publications**

<u>Farber</u>, S., T. Neutens, J.A. Carrasco, and C. Rojas (2014), "Exploration of Social Interaction Potential (SIP) and the spatial distribution of face-to-face social interactions," *Environment and Planning B*, accepted.

Kowald, M., P. van den Berg, A. Frei, <u>J.A. Carrasco</u>, T. Arentze, K. Axhausen, D. Mok, H. Timmermans, and B. Wellman (2013), "Distance patterns of personal networks in four countries: A comparative study," *Journal of Transport Geography*, 31, 236-248.

Whalen, K., <u>A. Páez</u>, and J.A. Carrasco (2013), "Mode choice of university students commuting to school and the role of active travel," *Journal of Transport Geography*, 31, 142-132.

Moore, J., <u>J.A. Carrasco</u>, and A. Tudela (2013), "Exploring the links between personal networks, time use, and the spatial distribution of social contacts," *Transportation*, 40(4), 773-788.

<u>Carrasco</u>, <u>J.A.</u> and B. Cid-Aguayo (2012), "Network capital, social networks, and travel: An empirical illustration from Concepción, Chile," *Environment and Planning A*, 44(5), 1066-1084.

<u>Carrasco</u>, <u>J.A.</u> (2011), "Personal network maintenance, face to face interaction, and distance: Studying the role of ICT availability and use," *Transportation Research Record: Journal of the Transportation Research Board*, 2231, 120-128.

Galdames, C., <u>A. Tudela</u>, and J.A. Carrasco (2011), "Exploring the role of psychological factors on mode choice models using a latent variables approach" *Transportation Research Record: Journal of the Transportation Research Board*, 2230, 68-74.

Habib, K.N., and <u>J.A. Carrasco</u> (2011), "Investigating the role of social networks in start time and duration of activities: A trivariate simultaneous econometric model," *Transportation Research Record: Journal of the Transportation Research Board*, 2230, 1-8.

Mok, D., B. Wellman and J.A. Carrasco (2010), "Does distance matter in the age of the Internet?" *Urban Studies*, 47(13), 2747-2784.

M. Roorda, M., J.A. Carrasco, and E.J. Miller (2009), "An integrated model of vehicle transactions, activity scheduling and mode choice," *Transportation Research Part B*, 43(2), 217-229.

<u>Carrasco</u>, <u>J.A.</u> and E. J. Miller (2009), "The social dimension in action: A multilevel, personal networks model of social activity frequency," *Transportation Research Part A*, 43(1), 90-104.

<u>Carrasco, J.A.</u>, E.J. Miller, and B. Wellman (2008), "How far and with whom do people socialize? Empirical evidence about distance between social network members," *Transportation Research Record: Journal of the Transportation Research Board*, 2076, 114-122.

Habib. K.N., J.A. Carrasco, and E.J. Miller (2008), "Social context of activity scheduling: Discrete-continuous model of relationship between "with whom" and episode start time and duration," *Transportation Research Record: Journal of the Transportation Research Board*, 2076, 81-87.

<u>Carrasco, J.A.</u>, B. Hogan, B. Wellman, and E. J. Miller (2008), "Agency in social activity and ICT interactions: The role of social networks in time and space," *Tijdschrift voor Economische en Sociale Geografie (Journal of Economic & Social Geography*), 99(5), 562-583.

<u>Carrasco, J.A.</u>, B. Hogan, B. Wellman, and E. J. Miller (2008), "Collecting social network data to study social activity-travel behavior: An egocentric approach," *Environment and Planning B*, 35(6) 961-980.

<u>Hogan, B.</u>, J.A. Carrasco, and B. Wellman (2007), "Visualizing personal networks: Working with participant-aided sociograms", *Field Methods*, 19(2), 116-144.

<u>Carrasco</u>, <u>J.A.</u> and E. J. Miller (2006), "Exploring the propensity to perform social activities: A social network approach", *Transportation*, 33, 463-480.

Miller, E. J., M. Roorda, and J.A. Carrasco (2005), "A tour-based model of travel mode choice", *Transportation*, 32, 399-422.

Carrasco J.A. and <u>J. de D. Ortúzar</u> (2002), "A review and assessment of the nested logit model", *Transport Reviews*, 22(2), 197-218.

#### **Books Edited**

Zmud, J., M. Lee-Gosselin, M. Munizaga, and J.A. Carrasco, eds. (2013), *Transport Survey Methods: Best Practice for Decision Making*. London: Emerald Press.

Carrasco, J.A., S. Jara-Díaz, and M. Munizaga, eds. (2011), *Time Use Observatory*. Santiago de Chile: Ed. LOM.

### **Peer Reviewed Book Chapters**

Morency, C. and J.A. Carrasco (2013), "Photo stories of hard-to-model and hard-to-understand travel behavior," in Chapter 1 in *Travel Behaviour Research: Current Foundations, Future Prospect*, M. Roorda and E.J. Miller (eds.), USA: Lulu Publishers.

Carrasco, J.A., C. Bustos, and B. Cid-Aguayo (2013), "Affective personal networks versus daily contacts: Analyzing different name generators in a social activity-travel behaviour context," Chapter 22, p. 407-424, in *Transport Survey Methods: Best Practice for Decision Making*, J. Zmud, M. Lee-Gosselin, M. Munizaga, and J.A. Carrasco (eds.), London: Emerald Press.

Daly, A. and J.A. Carrasco (2009), "The influence of trip length on marginal time and money values: An alternative explanation," Chapter 31, p.673-701, in *Proceedings IATBR 2006*, R. Kitamura Ed. Elsevier.

Wellman, B., B. Hogan, K. Berg, J. Boase, J.A. Carrasco, R. Côté, J. Kayahara, T. Kennedy, and P. Tran (2006), "Connected Lives: The Project," Chapter 8 in *The Networked Neighbourhoods*, P. Purcell, Ed. Berlin: Springer.

#### **Editorial / Special Issue**

Dugundji, E., D. Scott, J.A. Carrasco, and A. Páez (2012), "Urban mobility and social-spatial interaction," special issue of *Environment and Planning A*, 44(5), 1011-1015.

Dugundji, E., A. Páez, T. Arentze and J. Walker, with contributions from J.A. Carrasco, F. Marchal, and H. Nakanishi (2011), "Transportation and social interactions," Guest Editorial, *Transportation Research Part A*, 45(4), 239-247.

### **Other Peer Reviewed Publications**

De la Fuente, H., C. Rojas, M.J. Salado, J.A. Carrasco, and T. Neutens (2013), "Socio-spatial inequality in education facilities in the Concepción Metropolitan Area (Chile)," *Current Urban Studies*, 1(4), 117-129, DOI: 10.4236/cus.2013.14013.

Roa, H., C. Rojas, J.A. Carrasco, and A. Tudela (2013), "Movilidad urbana e indicadores de exclusión social del sistema de transporte: evidencia en una ciudad intermedia chilena," *Revista Transporte y Territorio*, Universidad de Buenos Aires, Nº 8, 72-91.

Bustos, C. J.A. Carrasco, C. Rojas, and A. Tudela (2012), "Indicadores del espacio de actividades sociales de individuos del Gran Concepción utilizando la perspectiva de las redes personales," *Ingeniería de Transporte*, 16.

Jara, M. and J.A. Carrasco (2010), "Indicadores de inclusión social, accesibilidad y movilidad: Experiencias desde la perspectiva del sistema de transporte", *Ingeniería de Transporte*, 14(1), 19-26.

Carrasco, J.A. (2007), "Redes sociales y comportamiento de transporte: Marco teórico y resultados empíricos", *Ingeniería de Transporte*, 13(1), 11-17.

### **Peer Reviewed Conference Proceedings and Presentations**

Rojas, C., A. Schäfer, F. Aguilera, C. Peyrin, J.A. Carrasco, A. Tudela, T. Neutens (2014), "Accessibility to educational and health facilities in the middle city of Los Angeles, Chile, as an indicator of transport disadvantage," *NECTAR Cluster 6 meeting: Accessibility and Policy Making*, Sevilla, February 6-7, 2014.

Tapia, A., V. Sichel, A. Tudela, and J.A. Carrasco (2013), "El impacto de variables de personalidad en la estimación de la demanda: Un estudio de caso en Concepción," in *XVI Congreso Chileno de Ingeniería de Transporte*, Santiago de Chile, October 22-25, 2013.

Moore, J., J.A. Carrasco, and A. Tudela (2013), "Exploring the links between personal networks, time use, and the spatial distribution of social contacts," in *92nd Annual Meeting of the Transportation Research Board*, Washington D.C., January 13-17, 2013.

Farber, S., T. Neutens, J.A. Carrasco, and C. Rojas (2013), "Exploration of Social Interaction Potential (SIP) and the Spatial Distribution of Face-to-face Social Interactions," in *92nd Annual Meeting of the Transportation Research Board*, Washington D.C., January 13-17, 2013. Also presented at the *13th International Conference on Travel Behaviour Research*, Toronto, 15-20 July 2012.

Lucas, K., J. Bates, J. Moore, and J.A. Carrasco (2013) "Modelling the relationship between travel behaviours and social disadvantage," 45th Annual Universities' Transport Studies Group (UTSG) Conference, Oxford, UK, January 2-4, 2013. Also presented at the 13th World Conference on Transport Research, Rio de Janeiro, Brazil, July 15-18, 2013; XVI Congreso Chileno de Ingeniería de Transporte, Santiago de Chile, October 22-25, 2013; 13th International Conference on Competition and Ownership in Land Passenger Transport, Oxford, UK, September 15-19, 2013.

- Schwanen, T., K. Lucas, J.A. Carrasco, T. Neutens, N. Akyelken D. Solsona (2013) "Reconceptualising the links between transport disadvantage and social exclusion," *45th Annual Universities' Transport Studies Group (UTSG) Conference*, Oxford, UK, January 2-4, 2013.
- Martínez, M., C. Rojas, J.A. Carrasco, and A. Codeço (2012), "Indicadores de accesibilidad para la evaluación territorial de la red por carretera desde una perspectiva geográfica," *PANAM 2012: XVII Congreso Panamericano de Ingeniería de Tránsito y Transporte y Logística*, Santiago de Chile, September 24-27, 2012.
- Roa, H., M. Jara, J.A. Carrasco, C. Rojas, and A. Tudela (2012), "Contexto urbano e indicadores de exclusión social relacionada al sistema de transporte: Evidencia de dos ciudades chilenas," *PANAM 2012: XVII Congreso Panamericano de Ingeniería de Tránsito y Transporte y Logística*, Santiago de Chile, September 24-27, 2012.
- Tudela, A., R. Daziano, and J.A. Carrasco (2012), "El papel de los factores contextuales, socioeconómicos y psicológicos en la elección de modo: Un estudio de caso en Concepción," *PANAM 2012: XVII Congreso Panamericano de Ingeniería de Tránsito y Transporte y Logística*, Santiago de Chile, September 24-27, 2012.
- Cerda, Z., A. Tudela, J.A. Carrasco (2012), "On the role of personality when assessing the role of transport on social exclusion," *Fifth International Conference on Traffic and Transport Psychology*, Groningen, The Netherlands, August 29-31, 2012.
- Kowald, M., P. van den Berg, A. Frei, J.A. Carrasco, T. Arentze, K. Axhausen, D. Mok, H. Timmermans, and B. Wellman (2012), "The Spatiality of Personal Networks in Four Countries: A Comparative Study," *13th International Conference on Travel Behaviour Research*, Toronto, 15-20 July 2012.
- Tudela, A., J.A. Carrasco, and R. Daziano (2012), "Personal factors on mode choice: Attitude, affect, social and habit. Measuring and studying their role," *13th International Conference on Travel Behaviour Research*, Toronto, 15-20 July 2012.
- Carrasco. J.A., C. Bustos, and B. Cid-Aguayo (2011), "Affective personal networks versus daily contacts: Analyzing different name generators in an activity-travel behaviour context," in *9th International Survey Methods Conference*, Termas de Puyehue, Chile, November 14-18, 2011.
- Bustos, C. J.A. Carrasco, and C. Rojas (2011), "Indicadores del espacio de actividades sociales de individuos del Gran Concepción utilizando la perspectiva de las redes personales," in *XV Congreso Chileno de Ingeniería de Transporte*, Santiago de Chile, October 3-6, 2011.
- Carrasco J.A. (2011), "Redes sociales, movilidad espacial y patrones de interacción: Cuatro barrios de Concepción, Chile," in *XXVIII Congreso Internacional de la Asociación Latinoamericana de Sociología (ALAS)*, Recife, September 6-11, 2011.
- Tudela, A., K.N. Habib, A. Osman, and J.A. Carrasco (2011), "Incorporating the explicit role of psychological factors on mode choice: A hybrid mode choice model by using data from an innovative psychometric survey," in *International Choice Modelling Conference 2011*, Leeds, U.K., July 4-6, 2011.
- Carrasco, J.A. (2011), "Personal network maintenance, face to face interaction, and distance: Studying the role of ICT availability and use," in *90th Annual Meeting of the Transportation Research Board*, Washington D.C., January 23-27, 2011.
- Habib, K.N., and J.A. Carrasco (2011), "Investigating the role of social networks in start time and duration of activities: A trivariate simultaneous econometric model, " in 90th Annual Meeting of

the Transportation Research Board, Washington D.C., January 23-27, 2011. A previous version was presented at 12th World Conference on Transport Research, Lisbon, Portugal, July 11-15, 2010.

Galdames, C., A. Tudela, and J.A. Carrasco (2011), "Exploring the role of psychological factors on mode choice models using a latent variables approach" in *90th Annual Meeting of the Transportation Research Board*, Washington D.C., January 23-27, 2011.

Céspedes, N., A. Páez and J.A. Carrasco (2010), "Tertiary streets and the strength of autocorrelation using Moran's Coefficient," 57<sup>th</sup> Annual North American Meetings of the Regional Science Association International, Denver, November 11-13, 2010.

Jara, M. and J.A. Carrasco (2010), "Indicadores temporales y espaciales de exclusión social y transporte: Una ilustración empírica," *PANAM 2010: XVI Congreso Panamericano de Ingeniería de Tránsito y Transporte y Logística*, Lisbon, Portugal, July 15-18, 2010.

Ruminot, N., A. Páez, and J.A. Carrasco (2010), "Network Topology, Autocorrelation, and Node Vulnerability," in 89th Annual Meeting of the Transportation Research Board, Washington D.C., January 10-14, 2010.

Carrasco, J.A (2009), "Unravelling the social, urban, and time-space context of activity-travel behaviour: Results from a social network data collection experience", 12<sup>th</sup> International Conference on Travel Behaviour Research, Jaipur, December 13-18, 2009.

Carrasco, J.A and K.N. Habib (2009), "Understanding the social embeddedness of activity-travel participation: The case of frequency and duration of social activities", 12<sup>th</sup> International Conference on Travel Behaviour Research, Jaipur, December 13-18, 2009.

Jara, M. and J.A. Carrasco (2009), "Indicadores de inclusión, accesibilidad y movilidad espacial: Análisis desde la perspectiva del comportamiento de transporte urbano," *XV Congreso Latinoamericano de Transporte Público y Urbano – CLATPU*, Buenos Aires, Argentina, March 31 – April 3, 2009.

Ruminot, N., A. Páez, and J.A. Carrasco (2008), "Vulnerable nodes in networks: An autocorrelation approach," 48<sup>th</sup> Congress of the European Regional Science Association, Liverpool, August 27-31, 2008. Also presented at TRANSLOG 2009 (Transportation and Logistics), 1st Annual International Conference, June 17-18, 2009, McMaster University, Hamilton, ON, Canada.

Mok, D., B. Wellman and J.A. Carrasco (2008), "Does distance matter in the age of the Internet: Are cities losing their comparative advantage?" 103<sup>rd</sup> Annual Meeting of the American Sociological Association, Boston, August 1-4, 2008.

Carrasco, J.A., E.J. Miller, and B. Wellman, (2008), "How far and with whom do people socialize? Empirical evidence about distance between social network members," in 87th Annual Meeting of the Transportation Research Board, Washington D.C., January 13-17, 2008. A previous version was also presented at the 53<sup>rd</sup> Annual North American Meetings of the Regional Science Association International, Toronto, November 26-28, 2006.

Habib. K.N., J.A. Carrasco, and E.J. Miller (2008), "Social context of activity scheduling: Discrete-continuous model of relationship between "with whom" and episode start time and duration," in 87th Annual Meeting of the Transportation Research Board, Washington D.C., January 13-17, 2008.

- Carrasco, J.A. (2007), "Redes sociales y comportamiento de transporte: Marco teórico y resultados empíricos", in *XIII Congreso Chileno de Ingeniería de Transporte*, Chile, Santiago, October 22-26, 2007.
- Hogan, B., J.A. Carrasco and B. Wellman (2007), "Maintaining ties near and far: Agency and social accessibility in personal communities", 102<sup>nd</sup> Annual Meeting of the American Sociological Association, New York, August 11-14, 2007. Also presented at the International Sunbelt Social Network Conference XXVII, Corfu Island, Greece, May 1-6, 2007.
- Carrasco, J.A., D. Mok, and B. Wellman (2007), "Integrating distance, travel, and the mode of contact: The Connected Lives Study", *Communities and Technologies* 2007, Michigan, June 28-30, 2007.
- Habib, K.M.N, J.A. Carrasco, and E.J. Miller (2007), "The social dimension of individual's activity scheduling: How "with whom" influences activity participation", 11<sup>th</sup> World Conference on Transport Research, Berkeley, June 24-28, 2007. Also presented at the XIII Congreso Chileno de Ingeniería de Transporte, Chile, Santiago, October 22-26, 2007.
- Carrasco, J.A. and E. J. Miller (2007), "The social dimension in action: A multilevel, personal networks model of social activity frequency," in 86th Annual Meeting of the Transportation Research Board, Washington D.C., January 21-25, 2007.
- Carrasco, J.A., E.J. Miller, and B. Wellman, (2006), "Spatial and social networks: The case of travel for social activities", 11<sup>th</sup> International Conference on Travel Behaviour Research, Kyoto, August 16-20, 2006.
- M. Roorda, M., J.A. Carrasco, and E.J. Miller (2006), "A joint model of vehicle transactions, activity scheduling, and mode choice", 11<sup>th</sup> International Conference on Travel Behaviour Research, Kyoto, August 16-20, 2006.
- Daly, A. and J.A. Carrasco (2006), "The influence of trip length on marginal time and money values", 11<sup>th</sup> International Conference on Travel Behaviour Research, Kyoto, August 16-20, 2006.
- Carrasco, J.A., B. Hogan, B. Wellman, and E. J. Miller (2006), "Collecting social network data to study social activity-travel behavior: An egocentered approach," in 85th Annual Meeting of the Transportation Research Board, Washington D.C., January 22-26, 2006 [Also presented at MCRI/GEOIDE Second International Colloquium on the Behavioural Foundations of Integrated Land-use and Transportation Models: Frameworks, Models and Applications, Toronto, June 13-14, 2005; and as an invited paper at the workshop Frontiers in Transportation: Social and Spatial Interactions, Amsterdam, Netherlands, July 2-6, 2005]
- Carrasco, J.A. and E. J. Miller (2006), "Exploring the propensity to perform social activities: A social networks approach," in 85th Annual Meeting of the Transportation Research Board, Washington D.C., January 22-26, 2006.
- Carrasco, J.A. and E. J. Miller (2005), "Socialising with people and not places: Modelling social activities explicitly incorporating social networks," in 9th Computers in Urban Planning and Urban Management Conference, CUPUM, London, June 29 July 1, 2005.
- Miller, E. J., M. Roorda, and J.A. Carrasco (2003), "A Tour-Based Model of Travel Mode Choice", 10<sup>th</sup> International Conference on Travel Behaviour Research, Lucerne, 10-15 August, 2003.
- Carrasco J.A., J de D. Ortúzar, and M. Munizaga (2001), "Una revisión y análisis del modelo Logit Jerárquico", 10<sup>th</sup> Chilean Transport Engineering Conference, Concepción, 8 -12 October, 2001 (in Spanish).

### **Invited Presentations**

Carrasco, J.A. (2012), "Social exclusion and personal networks in the context of travel behaviour: Theoretical and empirical discussions," Guest seminar, ETH-Zürich, July 5 2012, Switzerland.

Carrasco, J.A. (2011), "Social capital, and the spatial and temporal context of travel behaviour: Investigating personal network communities in Concepcion, Chile" *Transport Studies Unit Seminar*, University of Oxford, January 14, 2011, Oxford, UK.

Carrasco, J.A. (2011), "Data collection on social networks and travel: Some past experiences and future challenges" at the 2<sup>nd</sup> FUTURENET Social Network Analysis in Transport Workshop. January 11-12, 2011, University of Manchester, UK.

Carrasco, J.A. (2010), "Travel behaviour research: A personal perspective of present and future challenges" *UK Transport Research Centre (UKTRC) Scanning Exercise Workshop 1*. November 19, 2010, Imperial College, London, UK.

Carrasco, J.A. (2009), "Social networks and travel behaviour: State of the art and prospective research," Panel "Social Networks and Travel in the Information Age" at the 88th Annual Meeting of the Transportation Research Board. January 12-16, 2009, Washington D.C.

Carrasco, J.A. (2009), "Social networks and travel behaviour," Université Laval, October 6, 2009, Quebec, Canada.

Carrasco, J.A. (2006), "Interaction of social, physical, and cyberspace: Some evidence from Toronto," Panel "Cybermobility and Evolution of Personal Travel" at the 85th Annual Meeting of the Transportation Research Board. January 22-26, 2006, Washington D.C.

#### Other Relevant Publications, Scholar Research, and Presentations

Schafer, A., F. Aguilera, C. Peyrin, C. Rojas, and J.A. Carrasco (2013), "Accesibilidad a equipamientos colectivos en la ciudad de los Ángeles, Región del Biobío: Aproximaciones a un sistema de indicadores espaciales de accesibilidad para el entendimiento de la exclusión social," *XXXIV Congreso Nacional y XIX Internacional de Geografía*, Chillán, Chile, October 15-19, 2013.

Araneda, G., J.A. Carrasco, C. Rojas (2013), "Accesibilidad al capital en red: Análisis de casos de cuatro barrios del Gran Concepción", *XXIX Congreso Latinoamericano de Sociología*, Santiago de Chile, September29 - October 4, 2013.

Carrasco, J.A. (2013), "Space, time, and social support dynamics in personal networks," presented at the *Fifth Workshop Frontiers in Transportation: Social Interactions*, Munich, July 31- August 4, 2013.

Carrasco, J.A., A. Tudela, and C. Rojas (2012), "Redes sociales personales, movilidad espacial cotidiana y exclusión social en cuatro barrios del Gran Concepción," *XXXIII Congreso Nacional y XVIII Internacional de Geografía*, Arica, Chile, October 15-18, 2012.

Schäfer A., C. Rojas, J.A. Carrasco (2012), "Indicadores espaciales de accesibilidad a equipamientos educacionales en la ciudad de Los Ángeles. Avances en la comprensión de la exclusión social," *XXXIII Congreso Nacional y XVIII Internacional de Geografía*, Arica, Chile, October 15-18, 2012.

Woywood, M., T. Echaveguren, J.A. Carrasco, A. Tudela, C. Rojas, and C. García-Lima (2012), "Gestión integral del sistema de transporte público en el Gran Concepción: Diseño de una

plataforma tecnológica," XXXIII Congreso Nacional y XVIII Internacional de Geografía, Arica, Chile, October 15-18, 2012.

Moore, J., J.A. Carrasco, and A. Tudela (2012), "Personal networks and daily activities: Studying the role of income and urban context on frequency, duration and spatial distribution of social contacts," *Third Time Use Observatory Workshop*, Santiago, March 21-23, 2012.

Carrasco, J.A., C. Rojas, C. Bustos, and A. Tudela (2012), "Personal networks, income and urban context: Studying social activity spaces in a Chilean city," *AAG Annual Meeting*, New York, USA, February 24-28, 2012.

Jara, M., J.A. Carrasco, A. Tudela, and C. Rojas (2011), "Indicadores del rol del sistema de transportes en la exclusión social: Metodología y aplicación en el Gran Concepción," *XXXII Congreso Nacional y XVII Internacional de Geografía*, Valparaíso, Chile, November 22-25, 2011.

Carrasco, J.A., A. Frei, M. Kowald, P. van der Berg, K. Axhausen, T. Arentze, H. Timmermans, B. Wellman and D. Mok (2011), "The spatiality and frequency of interaction of personal networks in four countries: A comparative study," presented at the *Fourth Workshop Frontiers in Transportation: Social Interactions*, Niagara Lake, Canada, October 20-22, 2011.

Carrasco, J.A. (2009), "Beyond substitution and complement: Strategies among high and low income groups in the use of ICT to maintain personal networks," *Fourth International Specialist Meeting on ICT, Everyday Life and Urban Change*. Québec, Canada, October 7-9, 2009.

Carrasco, J.A. (2009), "Social capital, social networks and travel: An empirical illustration," presented at the *Third Workshop Frontiers in Transportation: Social Interactions*, Niagara Lake, Canada, August 25-27, 2009.

Carrasco, J.A., J. Núñez, and K. Inostroza (2008), "Redes sociales y movilidad diaria en el espacio urbano: Marco teórico, datos y métodos de análisis," *XXIX Congreso Nacional y XIV Internacional de Geografía*, Temuco, Chile, October 14-17, 2008.

Carrasco, J.A., S. Ureta and B. Cid (2008), "Actor Network Theory on ICTs and mobility research: An assessment and empirical illustration for social interactions," *Third International Specialist Meeting on ICT, Everyday Life and Urban Change*. Coombe Lodge, Bristol, UK, March 16-19, 2008

Mok, D. and J.A. Carrasco (2008), "A comparison of the role of distance in affecting the frequency of contact, pre- and post-Internet", *International Sunbelt Social Network Conference XXVIII*, Tradewinds Island Resort, St. Pete Beach, Florida, USA, January 22-27, 2008.

Carrasco, J.A., K.M.N. Habib and E.J. Miller (2007), "'Elicited' versus 'revealed' personal networks: How much social activity-travel can we learn from each?" presented at the *Second Workshop Frontiers in Transportation: Social Interactions*, Amsterdam, Netherlands, October 14-16, 2007.

Carrasco, J.A., B. Hogan, B. Wellman, and E. J. Miller (2006), "Agency in social activity and ICT interactions: The role of social networks in time and space," invited paper at the *Second International Specialist Meeting on ICT*. Bergen, Netherlands, November 10-11, 2006.

Carrasco, J.A. (2006), "Social networks: Recent research and future challenges", *Double Workshop on Transport and Sustainable Cities*. Santiago de Chile, August 7-11, 2006

Wellman, B., B. Hogan, K. Berg, J. Boase, J.A. Carrasco, R. Côté, J. Kayahara, T. Kennedy, and P. Tran (2006), "Connected Lives: The Project," *International Sunbelt Social Network Conference XXVI*, Vancouver, British Columbia, April 24-30, 2006.

Wellman, B., K. Berg, J. Boase, J.A. Carrasco, R. Côté, B. Hogan, J. Kayahara, and T. Kennedy (2005), "Connected Lives: How the networked transformation of society affects communication, community and domestic relations," *Internet Generations, 6th International and Interdisciplinary Conference of the Association of Internet Researchers*. Chicago, IL, October 5-9, 2005.

Hogan, B., J.A. Carrasco, and B. Wellman, (2005), "Generating names in East York: An analog approach", *International Sunbelt Social Network Conference XXV*, Redondo Beach, California, February 16-20, 2005.

Carrasco, J.A. (2005), "Not only how often and where you go, but who you see: social networks and activity-travel behaviour" Presented at the CSpA seminar series, March 4, 2005. Centre for Spatial Analysis, McMaster University, Hamilton, ON, Canada. [Also presented at the MCRI/GEOIDE Second International Colloquium on the Behavioural Foundations of Integrated Land-use and Transportation Models: Frameworks, Models and Applications, Toronto, June 13-14, 2005.]

Carrasco, J.A. (2005), "Social networks and activity-travel behaviour" Presented at the Transportation Engineering and Planning Friday seminar series, February 25, 2005. University of Toronto, Toronto, ON, Canada.

Carrasco, J.A. (2003) "Social Networks and Activity-travel modelling: some research ideas" MCRI Student/PDF Caucus Workshop, September 14, 2003. University of Toronto, Toronto, ON.

Carrasco, J.A. (2003) "Destination Choice Models under a microsimulation (ILUTE) context" MCRI/GEOIDE Student/PDF Cross-Project Workshop, January 10, 2003. University of Toronto, Toronto, ON.

Carrasco, J.A., G. Hutt, P. Pérez, and U. Velarde (2001) "Evaluation of New Public Transport Alternatives Using Stated Preference Techniques", Internal Research Document, Steer Davies Gleave Consultants, Santiago, Chile (in Spanish).

Carrasco, J.A. (2000) "A Theoretical Revision of the Nested Logit Model", Working Paper No 66, Department of Transport Engineering, Pontificia Universidad Católica de Chile (in Spanish).

# RESEARCH PROJECTS, GRANTS AND CONTRACTS

### Current

"Center for Sustainable Urban Development (CEDEUS)," (2013-2017) Fondo de Financiamiento de Centros de Excelencia en Investigación (Fund for Advanced Research in Priority Areas, Centers of Excellence FONDAP), Chilean National Commission for Science and Technology, CONICYT (project 15110020). Total budget: US\$7,500,000 (PI).

"Understanding mobility strategies to perform daily activity-travel in two Chilean cities," (2014-2017) Chilean National Fund of Science and Technology, FONDECYT (project No 1140519). Total budget: US \$80,000 (PI).

"Plataforma Tecnológica para la Gestión Integral del Sistema de Transporte en la Región del Bío Bío," (2012-2014) Fondo de Innovación Tecnológica de la Region del Biobio (Fund for Technological Innovation, Biobio Region), Innova Biobio (project ibb-11-PCS2-1116). Total budget: US \$250,000 (co-PI).

"TranSENDaNC Transport and Social Exclusion: New Directions and National Comparisons" (2012-2014), Marie Curie Actions - International Research Staff Exchange Scheme (IRSES), FP7-PEOPLE-2011, European Union, with Oxford University and Ghent University (project 294963). Total budget: €88,200 (PI).

"Instituto de Sistemas Complejos de la Ingeniería y Tecnología" (Institute of Complex Systems of Engineering and Technology) (2009-2014), Chilean Research, Science and Technology Council (CONICYT), Programa de Financiamiento Basal para Centros de Excelencia, FBO-16. Direct budget: US \$52,000 (researcher member).

### **Previous**

"Understanding the link between transport and social exclusion in the Chilean context: An assessment through quantitative indicators" (2011-2014) Chilean National Fund of Science and Technology, FONDECYT (project No 1110920). Total budget: US \$120,000 (PI).

"La experiencia urbana cotidiana en Concepción: Una exploración por los usos, imaginarios y redes sociales en el Eje Bicentenario" (The daily urban experience in Concepción: An exploration about the use, images, and social networks in a main avenue in the city) (2009-2011) Proyecto DIUC Ciencias Sociales, 209.173.038-1FI (Internal Social Sciences Research Fund, Universidad de Concepción) (co-PI).

"Social networks, mobility, and accessibility: Unravelling the social dimension of travel behaviour in a middle size city" (2007-2010) Chilean National Fund of Science and Technology, FONDECYT (project No 11070075). Total budget: US \$60,000 (PI).

"Graduate Students' Exchange Program (GSEP) Competition" (2008-2011), Canadian Commonwealth Scholarship Program (CCSP) and Government of Canada Awards (GCA), Government of Canada. US \$40,000. Exchange program that has financed four undergraduate students to perform research in Canada for four months as part of a joint research with Professor Antonio Páez (McMaster University).

"Development of an operational integrated urban modelling system" (2006). *Transport Canada* (NoH057/06), Government of Canada. US \$22,500. Total budget of the project: US\$ 140,000. (postdoctoral researcher)

"Access to activities and services in urban Canada: Behavioural processes that condition equity and sustainability" (2002-2005). *SSHRC Major Collaborative Research Initiative*, Government of Canada, US \$80.000. Total budget of the project: US\$ 2,100,000. (doctoral researcher)

### **TEACHING EXPERIENCE**

#### Instructor.

Undergraduate and M.Sc. programs, Departamento de Ingeniería Civil, Facultad de Ingeniería, Universidad de Concepción.

- Redes de Transporte (Transportation Networks, cross-listed graduate and undergraduate course, 2007-2008, 2010-2013)
- Modelos de Demanda de Transporte (Travel Demand Analysis, cross-listed graduate and undergraduate course, 2009-2013)
- Fundamentos de la Ingeniería de Transporte (Transportation Engineering Fundamentals, undergraduate course, 2007-2013)
- Planificación de Transporte (Transportation Planning and Policy, cross-listed graduate and undergraduate course, 2007-2013)

- Uso de Suelo y Transporte (Land Use and Transportation, cross-listed graduate and undergraduate course, 2008-2013)
- Métodos de Optimización (Operation Research Methods, undergraduate course, 2008-2013)
- Desafíos de la Ingeniería Civil (Introduction to Civil Engineering, undergraduate course, 2008, 2012-2013)
- Seminario de Postgrado (Graduate Thesis Seminar, graduate course, 2008-2011, 2013)

Masters Degree in Geographical Analysis, Departamento de Geografía, Facultad de Arquitectura, Urbanismo y Geografía, Universidad de Concepción.

 Análisis Espacial de la Movilidad y el Transporte (Spatial Analysis of Mobility and Transport, graduate course, 2012)

Masters Degree in Social Research and Development, Departamento de Sociología y Antropología, Facultad de Ciencias Sociales, Universidad de Concepción.

• Escuela de Verano: Análisis de Redes Sociales (Social Network Analysis, graduate summer school, 2012-2013)

#### Instructor,

Department of Civil Engineering, Faculty of Applied Science and Engineering, University of Toronto

Applied Probability and Statistics in Civil Engineering (graduate course, 2003 – 2006)

The course consisted in an introduction to Probability and Statistics to first year graduate students from the Civil Engineering department, with an average enrolment of 30 students. Coursework involved designing and delivering the lectures (twice per week); and designing and marking course assignments, which consisted in bi-weekly short assignments, a course project (related with each students' thesis research), and two written exams.

## Teaching assistant,

Conducting tutorials, marking assignments and examinations, and preparing and delivering some lectures on the following courses:

Department of Civil Engineering, Faculty of Applied Science and Eng., University of Toronto

- Transport Operations (cross listed graduate and undergraduate course, 2005 2006)
- Traffic Engineering (cross listed graduate and undergraduate course, 2003)
- Economic Decision Analysis (undergraduate course, 2002)

Department of Transport Engineering, Faculty of Civil Engineering, Pontificia Universidad Católica de Chile

- Econometric Models in Engineering (graduate course, 1999 2000)
- Travel Demand Modelling (graduate course, 1999)
- Numerical Analysis in Engineering (undergraduate course, 1998)
- Stochastic Models (undergraduate course, 1997 1998)
- Marketing (graduate course, 1999 2000)

### **TEACHING TRAINING**

- University Teaching (Programa de Pedagogía Universitaria, Universidad de Concepción, 2007). 95-hour workshop about teaching, didactic, and course evaluation techniques and theory.
- Didactic and Evaluation Techniques (Formas Didácticas y Evaluativas para Mejorar la Calidad de la Educación Superior, Universidad de Concepción, 2007). One—week workshop about didactic, and course evaluation theory and techniques.
- Service Learning (Aprendizaje y Servicio, U. de Concepción, 2007). One-week workshop.

- Teaching in Higher Education. (University of Toronto, 2004). Half year seminar and workshop course about several key aspects of teaching such as presentation skills; stimulating class discussion; grading, assessment and evaluation; equity issues; use of technology; and course design.
- Evaluation Techniques (Técnicas de Evaluación Docente, Universidad de Concepción, 2010).
   6-hour workshop about multi-response evaluation instruments.
- Course Syllabus based on the Competences' Paradigm (Programas de Cursos Basado en el Paradigma de Competencias, Universidad de Concepción, 2010). 6-hour workshop implementing syllabus with that approach.

### THESIS SUPERVISION AND COMMITTEE MEMBER

#### **Supervisor**

# Graduate level, Engineering

- Óscar Chávez, "Personal network dynamics and mobility," masters degree level, in progress.
- José Moore, "Social exclusion modelling in the UK context," masters degree level, (2013).
- Claudia García, "Analysis of the relationship between the urban context and social interactions: Four cases from Concepción, Chile", masters degree level, (2012).

### Graduate level, Sociology

- Diego Solsona, "Accessibility to transport modes, social activities, and social networks in the Greater Concepción Area" masters degree level, in progress.
- Paulina Henríquez, "Association in small and medium size metal-mechanic businesses in Concepción," (2013)

#### Graduate level, Geography

• Gerson Araneda, "Physical and social space of personal networks," (2014)

## Undergraduate level, Engineering

- Nicolás Urrutia, "Mobility indicators in the Greater Concepción Area," (in progress)
- Óscar Chávez, "Understanding the dynamic of social networks in time and space," (in progress)
- Cristián Cares, "Modelling a Participation Index for understanding social exclusion in different areas," (in progress)
- Zoraida Cerda, "Psychological indicators of social exclusion," (co-supervisor, in progress)
- Hernán Linco, "Modelling the differences between four neighbourhoods in the Greater Concepcion Area," (2013)
- Álvaro Gamonales, "Social exclusion indicators using Origin-Destination surveys," (2013)
- José Moore, "Time use and personal networks in Concepción," (2012).
- Mónica Parada, "Frequency and spatial distribution of social activities and travel in Concepción: analysis from a social network approach," (2012).
- Nicolás Céspedes, "T-communities and spatial autocorrelation," (co-supervisor, 2011).
- Cristián Bustos, "Spatial indicators of social networks," (2011).
- Marcelo San Martín, "Voyager module, software CUBE," (2011).
- Mauricio Jara, "Social exclusion indicators from a transportation perspective," (2009)
- Camila Galdames, "A panel study about the role of psychosocial factors on mode choice: A structural equations approach," (co-supervisor, 2010).
- Natalia Ruminot, "Vulnerable nodes in networks: An autocorrelation approach," (co-supervisor, 2009).

- Felipe Sanhueza, "Mode choice, attitudes and physical environment in a campus University," (co-supervisor, 2009).
- David Permuth, "Evolution of the travel structure in Concepción, 1989-1999", (co-supervisor, 2009)

### *Undergraduate level, Sociology*

- Stefano Baeza, "personal networks, mobility, and exclusion," (co-supervisor, in progress)
- Daniel Sandoval, "Personal networks in small agro-businesses," (2012, co-supervisor)
- Joaquín Núñez, "ICT and social networks," (2009, co-supervisor)

### *Undergraduate level, Geography*

- David Muñoz, "Participation index and mobility in Los Ángeles," (co-supervisor, in progress)
- Gloria Fuentes, "Social exclusion indicators for services," (co-supervisor, in progress).
- Fabián Pérez, "Social networks social segregation and mobility," (co-supervisor, in progress).
- Consuelo Peyrin, "Social exclusion indicators for educational purposes: Quality of destination indicators," (2014, co-supervisor).
- Felipe Aguilera, "Social exclusion indicators for health purposes," (2013, co-supervisor)
- Herty Roa, "Social exclusion accessibility indicators in Los Ángeles," (2012, co-supervisor)
- Andrés Shaffer, "Social exclusion indicators for educational purposes," (2012, co-supervisor)

### Committee member (students from Universidad de Concepción, except where noted)

#### *Graduate level, Engineering*

- Néstor Gallegos, "Fare evasion correction factors for public transport origin-destination matrices in Santiago obtained through smart cards," masters level, Universidad de Chile, in progress.
- Arnoldo Tapia, "Psychological factors in car ownership," masters level, in progress.
- Andreas Frei, "Social networks and travel," doctorate level, ETH, Switzerland, 2012.
- Rodrigo Díaz, "Transporte de Alto Tonelaje: Análisis mecanicista-empírico del impacto structural en pavimentos asfálticos," masters level, 2011.
- Pablo Bass, "Assessing public transport demand stability using mode choice and quality service data," masters level, Universidad de Chile, 2011.
- Francisca Yáñez, "Discrete choice models with panel data," doctorate level, P. Universidad Católica de Chile, 2010.

### *Graduate level, Geography*

 Cristián Borjas, "Geo-spatial standards for a transport data platform," masters level, in progress.

#### Graduate level, Urban Planning

Beatriz Mella, masters level, P. Universidad Católica de Chile, (2013)

# Undergraduate level, Engineering

Arnoldo Tapia (in progress), Valentina Sichel (2013), Víctor Solís (2011), Constanza Alderete (2011), Rodrigo Benavente (2009), Rodrigo Winkler (2009), Javier Mondaca (2009), Manuel Escobar (2008), Rodrigo Gutiérrez (2007).

# *Undergraduate level, Geography*

• Helen de la Fuente (2012), Marcela Martínez (2012)

# *Undergraduate level, Sociology*

Priscila Rodríguez (2010)

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

Transportation Research Board (TRB), International Association for Travel Behaviour Research (IATBR), World Conference on Transport Research Society, Sociedad Chilena de Ingeniería de Transporte (Chilean Society of Transportation Engineers, SOCHITRAN, part of the Institute of Engineers of Chile), Sociedad Chilena de Ciencias Geográficas (Chilean Society of Geographical Sciences), International Network of Social Network Analysts (INSNA), and Institute of Transportation Engineers (ITE).

### PROFFESIONAL ACTIVITIES

#### Journal Editorial

- Associate editor Transportation Research Part A: Policy and Practice (current)
- Associate editor *Ingeniería de Transporte*, dependent of the Chilean Society of Transportation Engineers, SOCHITRAN (2007-2010 and current). Co-editor (2011-2013)
- Editorial Board, Revista Geográfica del Sur (current).

#### Scientific Committees

- Member, Traveler Behavior and Values Committee, ADB10, Transportation Research Board, National Academy of Sciences, USA (from 2011).
- Co-chair, Time Use and Activity Patterns Subcommittee, ADB10(3), Transportation Research Board, National Academy of Sciences, USA (from 2014).
- Member, Telecommunications and Travel Behaviour Committee, ADB20, Transportation Research Board, National Academy of Sciences, USA (from 2009).
- Member, International Steering Committee for Travel Survey Conferences (from 2010)

#### Scientific and Organizing Conference Committees

- Member, organizing committee, *Uneven mobilities: Access to activities, people and places in contemporary cities*, organized by the PanAmerican Mobility Network, Santiago de Chile, October 2014.
- Chair, scientific committee, *Workshop on Urban Sustainable Transportation*, Santiago de Chile, September 2-4, 2013.
- Member, scientific committee 16th Congreso Chileno de Ingeniería de Transporte, Santiago de Chile, October 21-24, 2013.
- Member, organising committee *12th International Conference on Travel Behaviour Research*, Toronto, Canada, July 11-18, 2012.
- Scientific Committee Secretariat, *Time Use Observatory Workshops (TUO)*, held in Santiago de Chile (6-8 January, 2009) and Termas Alto Jahuel, Chile (17-19 March, 2010). Member Organizing Committee *Time Use Observatory Workshop (TUO)* held in Santiago de Chile (21-23 March, 2012)
- Co-chair, organizing committee, *9th International Survey Methods Conference*, Termas de Puyehue, Chile, November 14-18, 2011.
- Member, organising committee *14th Congreso Chileno de Ingeniería de Transporte*, Concepción, October 5-9, 2009.
- Volunteer coordinator, organising committee of the 9th International IEEE Conference on Intelligent Transportation Systems, Toronto, September 17-20, 2006.

### International networks

• Member, convening committee of the workshop series *Frontiers in Transportation: Social Interactions*, Amsterdam (2007), Toronto (2009, 2011), Munich (2013)

- Member, international network of researchers *Time Use Observatory (TUO)*
- Member, international network of researchers ICT: Mobilizing persons, places and spaces: An
  International Network on Information and Communication Technologies, Everyday Life and
  Urban Change. http://www.geo.uu.nl/mobilizingICT/index.php

#### Scientific Reviewer

- Reviewer for the academic journals Transportation, Transportation Science, Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Part A, Transportation Research Part B, Social Networks, Environment and Planning B, Information Communication & Society (ICS), Journal of Transport Geography, International Journal of Geographical Information Science, New Media and Society, Annals of the Association of American Geographers, Field Methods, European Journal of Transport and Infrastructure Research, Computers Environment and Urban Systems, and Revista de Geografía Norte Grande
- Reviewer for the conferences Chilean Transport Engineering Conference, World Conference on Transportation Research, Panamerican Conference on Transport and Traffic Engineering, International Association for Travel Behaviour Research, International Choice Modelling, International Conference on Advanced Systems for Public Transport, and Transportation Research Board conferences.
- Proposal reviewer for the National Science Foundation, (NSF, USA), Alberta Innovates Technology Futures (Alberta, Canada), Research Foundation Flanders (FWO, Belgium), Sustainable Transportation Center at UC Davis (faculty fellowship, University of California at Davis, USA), and the Chilean National Fund of Science and Technology (FONDECYT, Chile).
- Reviewer Committee Engineering I, Program of Advanced Human Capital Formation, *Becas Chile, Chilean National Council of Science and Technology* (CONICYT, Chile).
- Reviewer Eric Pas Dissertation Prize, outstanding doctoral dissertations on travel behaviour, awarded by the *International Association for Travel Behaviour Research*, 2011 and 2013.

#### Advisory Committees and Consultancy

- Consultant Project "Recommendations for the urban transport system in a model city: Talca" (financed by the World Bank, 2011).
- Member, advisory committee tram project for Concepción (2009).
- Member, advisory committee of the Chilean National Transportation Policy White Paper.
   Ministry of Transport of Chile (2013)

### ADMINISTRATIVE SERVICE

Departamento de Ingeniería Civil, Universidad de Concepción

- Director, Magister en Ciencias de la Ingeniería mención Ingeniería Civil, 2008-2010.
- Member, Teaching Council, 2008-2010.
- Member, Accreditation Committee (Civil Engineering Professional Degree), 2008-2009.
- Member, Accreditation Committee (Masters Degree in Civil Engineering), 2012-2013.
- Transportation Engineering Laboratory coordinator, 2007-2011.
- Library book acquisition coordinator, 2007-2008.
- Research coordinator, 2009-2012.
- Finance coordinator, from 2010.
- Outreach coordinator, from 2011.
- Professional experience coordinator, 2013.

# **OTHER SKILLS**

Languages

Spanish (native language), English (read, speak, and write fluently), Portuguese and Italian (read).

Programming and specialized software

MS Access, SPSS, STATA, Lisrel, Mlwin, GAUSS, , UCINET, R, HLM, Limdep, Alogit, basis on C, C++ and Python, HTML language, GIS software; NVivo (qualitative analysis).