#### Trevor D. Heaver

# Professor Emeritus, Sauder School of Business, University of British Columbia 2053 Main Mall, Vancouver, B.C., Canada V6T 1Z2

Email: <u>Trevor.heaver@sauder.ubc.ca</u>

Home: 3308 West 19<sup>th</sup> Ave., Vancouver, B.C., Canada V6S 1C2 Telephone: 604 738 6152

Dr. Heaver is a citizen of Canada and the United Kingdom. He received his B.A. from Oxford University and his PhD. from Indiana University

At UBC from 1960 through 1997, Dr. Heaver was the UPS Foundation Professor of Transportation, Director of the Centre for Transportation Studies and the Chair of the Transportation and Logistics Division in the Faculty of Commerce, 1965-1997. As Chair of the Division, he played a leading role in the development of the undergraduate and graduate programmes and in expanding the Division's faculty to one with a strong international reputation. He fostered close relationships between the programmes and employers. He was instrumental in the development of the Research Forum component of the annual meeting of the Canadian Association of Logistics Management. Dr. Heaver's specialisation in the economics, management and public policy issues associated with transport and logistics is reflected in his publications. He is the author of thirteen books and monographs, over one hundred articles published in journals and as chapters in books and many unpublished studies and submissions. He is a frequent participant in conferences in Canada and overseas.

Dr. Heaver has wide experience in transportation and logistics. He has served on various advisory committees for government and industry dealing with transportation, logistics and trade issues. They include:

- The Federal Task Force on Deep Sea Shipping Policy, 1984-85.
- The Multi-Modal Council of the Transportation Association of Canada. 1986-1990.
- The Federal Transportation Services, Sectoral Advisory Group on International Trade, 1991-1994.
- The Federal Task Force on Trade Policy for the International Trade Advisory Committee, 1991-1994.
- The Vancouver International Maritime Centre, 1988-1992.
- National Research Council, Committee on the St. Lawrence Seaway: Options to eliminate Introduction of Nonindigenous Species into the Great Lakes, 2006-2008.
- The Institute for Service Industry Research, National Science Council, Naples, Italy, 2005-2010.
- Member of the Expert Panel on the Social and Economic Value of Canadian Marine Shipping in Canada for the Council of Canadian Academies, 2015 -
- Director, Vancouver International Maritime Centre, 2016 -

He has appeared before the House of Commons Standing Committee on Transport on a number of occasions as well as before the Canadian Transport Commission and other commissions. He has undertaken consulting assignments related to logistics and transportation economics, management and policy for each of the modes of transport, ports and an airport, shippers and several agencies of provincial governments and a number of departments of the Canadian government. He has served as an Arbitrator in a dispute between two railways. His involvement in transportation and logistics includes considerable international experience, including assignments in Argentina, Australia, China, Europe, and South Korea. He has undertaken projects for the World Bank and the Asia Pacific Economic Conference.

His research reflects Canadian conditions and his personal interests in the maritime industry. He played a leading role in founding the World Conference on Transport Research as a society based on the success of the organisation's meeting in Vancouver in 1986 during his chairmanship, the first meeting held outside of Europe. He continued to play a leading role in the establishment of global transport research, management

and policy organisations as a founding member of the International Association of Maritime Economists and as its President for two terms. His international recognition includes having been:

- Fellow of the Chartered Institute of Logistics and Transport;
- Chairman of the World Conference on Transport Research, (1982-1986). He is an Honourary member of the Steering Committee.
- President of the International Association of Maritime Economists (two terms, 1994-1998);
- Distinguished Member Award, American Economics Association, Transportation and Public Utilities Group, 2001.
- Co-recipient of the 2015 Onassis Prize for Shipping (with Martin Stopford).

Since 1997, he has held the following academic positions: the International Francqui Chair Professor at the University of Antwerp, April-July 1998; Visiting Professor at the University of Antwerp, February 1999 and on-going; Visiting Professor at the Institute of Transport Studies, University of Sydney, Australia, October-December 1998 and 1999; and Visiting Professor, Unit for Maritime Studies, University of Stellenbosch, South Africa, February 1998 and March 1999; Visiting Professor at the Copenhagen Business School, Denmark, 2012. Professor Heaver remains active in research at UBC.

He is a member of the Advisory Board of the Institute of Transport and Logistics Studies, University of Sydney, and an Editorial Adviser to the Asian Journal of Shipping and Logistics.

#### **PUBLICATIONS**

# **BOOKS AND MONOGRAPHS:**

<u>The Economics of Vessel Size: A Study of Shipping Costs and Their Implication for Port Investment, National Harbours Board, Ottawa, 1968, pp. 96.</u>

<u>Colloquium on Investment Planning for Ports and Airports</u>, (edited proceedings) Faculty of Commerce and Business Administration, University of British Columbia, Vancouver, BC., 1970, pp. 121.

<u>Planning Transportation Corridors: Economic and Environmental Considerations</u>, Monograph No.3, Centre for Transportation Studies, U.B.C., 1973, pp. ii & 63, (with M.A. Goldberg).

<u>The Routing of Containers Through Seattle and Vancouver</u>, Western Transportation Advisory Council, Vancouver, B.C., 1975, pp. 145.

<u>Railway Pricing under Commercial Freedom: The Canadian Experience</u>, Centre for Transportation Studies, University of British Columbia, Vancouver, B.C., 1977, pp. 344, (with J.C. Nelson).

Oil Pollution from Tanker Operations - Causes, Costs, Controls, Centre for Transportation Studies, University of British Columbia, Vancouver, B.C., 1980, pp. 216, (with W.G. Waters II and T. Verrier)

<u>Liner Conferences</u>: <u>Issues with Special Reference to Freight Rates</u>, Transport Canada, Ottawa, TP 3904 E, 1982, pp. 186.

<u>National Flag Shipping:</u> An Analysis of Canadian Policy Proposals, Centre for Transportation Studies, University of British Columbia, Vancouver, B. C., 1982 pp. 70.

Competition and Collective Pricing by Railways in Canada, Transport Canada, Ottawa, 1983, pp. 157.

<u>Selected Proceedings of the Fourth World Conference on Transport Research, 1986, Centre for Transportation Studies, University of British Columbia, Vancouver, B.C., 1986, Volumes 1 and 2, pp. 1850.</u>

<u>Logistics in Canada: Responding to Change</u>, Centre for Transportation Studies, University of British Columbia, Vancouver, B.C., 1989, pp. 25.

<u>Europe '92: Implications for Canadian Freight Forwarders</u>, External Affairs and International Trade Canada, Ottawa, 1991 pp. 55.

<u>Trends and Practices in the Canadian Warehousing Industry</u>, Canadian Association of Warehousing and Distribution Services, and Industry Canada, 1996, pp. 21.

"Great Lakes Shipping, Trade and Aquatic Invasive Species," Transportation Research Board, Special Report 291, 2008, pp. 202. (Committee member)

### ARTICLES AND BOOK CHAPTERS:

"Business Logistics", Western Business and Industry, 37, 1:78-80 Jan. 1963 (first article in Management Technology Series).

"Equipment Selection", Western Business and Industry, 37, (two part series, July and September, 1963).

"Inventory Control", Western Business and Industry, 38, (six part series Feb.July, 1964).

"Freeways: Enthusiasm for Everything but the Bill", Western Business and Industry, 39, 1:10, 11 (Jan., 1965).

"Some Aspects of Transportation Project Evaluation", <u>Proceedings of Sixth Annual Meeting of the Transportation</u> Research Forum, R.B. Cross Co.: Oxford, Indiana: Selected Canadian Papers, 1965, pp. 407-423.

"Transportation", in <u>Report on Northern British Columbia Resource Development</u>, Vancouver Board of Trade, Dec. 1965, pp. 33-41.

"A Cost-Benefit Evaluation of Transportation Corridors", <u>Highway Research</u> Record, 305:28-40 (1970), (with M.A. Goldberg).

"The Cost of Large Vessels - An Examination of the Sensitivity of Total Vessel Costs to Certain Operating Conditions", Research and Technical Bulletin, 7:342-356 (1970) (National Ports Council, London).

"Trans-Pacific Liner Shipping, B.C. Business Journal, 44-46, (June 1970).

"Evaluating Transport Corridors: An Economic Model", <u>Journal of Transport Economics and Policy</u>, 1-10 (Sept. 1970), (with M.A. Goldberg).

"The Economics of Transportation Corridors: An Empirical Evaluation", <u>Highway Research Record</u> 356: 130-138 (1971), (with M.A. Goldberg).

"The Role of Transport Corridors in Transport Planning and Development", <u>Proceedings of Seminar Series on Transportation</u>, Centre for Transportation Studies, University of Manitoba, 1971, pp. 19-40.

"Multi-modal Ownership: The Canadian Experience", Transportation Journal, 11, 1:14-28 (1971).

"Shippers and the Rationalization of Liner Shipping", <u>International Journal of Physical Distribution</u>, 3, 1:91-96 (1972).

"Trans-Pacific Trade, Liner Shipping and Conference Rates", <u>The Logistics and Transportation Review</u>, 8, 2:3-28 (1972).

"Ship Size and Turn-Around Time - Some Empirical Evidence", <u>Journal of Transport Economics and Policy</u>, VI, 1:32-50 (Jan. 1972), (with K.R. Studer).

"How Are Liner Freight Rates to Be Set?", Fairplay, International Shipping Journal, 243: 39-41 (May 1972).

"Efficient Transport and Shipper's Councils", B.C. Business Journal, 26-27 (Nov. 1972).

"Market and Cost Structure in Shipping: Comment", in <u>Shipping Management</u>, P. Lorange (ed.), Institute for Shipping Research, Bergen, 1973, pp. 47-49.

"Wrong Way to Solve Ill-Defined Problems", Executive, 15, 78: 13-15 (July 1973).

"A Theory of Shipping Conference Pricing and Policy", <u>Maritime Studies and Management</u>, An International Journal, 1, 1:17-30 (July 1973).

"The Structure of Liner Conference Rates", <u>Journal of Industrial Economics</u>, 21 3:257-265 (July 1973).

"National Objectives and Transportation Planning", <u>Proceedings of 14th Annual Meeting of the Transportation Research Forum</u>, R.B. Cross Co.: Oxford, Indiana: Selected Canadian Papers, 1973, pp. 149-159.

"Shipping Conferences in Transition", <u>Proceedings of International Conference on Transportation Research</u>, <u>1st</u> Conference, Bruges, R.B. Cross and Co.: Oxford Indiana: Selected Canadian Papers, 1973, pp. 162-168.

"Transport Subsidies in Canada", in <u>Transportation Subsidies - Nature and Extent</u>, K.M. Ruppenthal (ed.), Centre for Transportation Studies, Vancouver, B.C., 1974, pp. 21-30.

"An Economic Analysis of Controls on the Discharge of Oil at Sea", <u>Proceedings</u> of <u>Transportation Research Forum</u>, R.B. Cross Co.: Oxford, Indiana, 1974, pp. 571-581, (with W.G. Waters II).

"Competitive Forces Affecting Canadian Rail Rates Through Shipper-Carrier Negotiations", <u>Proceedings of Seventeenth Annual Meeting, Transportation Research Forum</u>, R.B. Cross Co.: Oxford, Indiana, 1976, 388-397 (this article with minor revisions won Second Prize in the Competition of the Logistics and Transportation Review for paper devoted to railroad problems and appears in <u>The Logistics and Transportation Review</u>, Vol. 12, No. 5, pp. 309-327.

"A Statistical Analysis of the Canadian Railway Rate Structure", <u>Proceedings</u>, <u>17th Annual Meeting</u>, <u>Transportation Research Forum</u>, R.B. Cross Co.: Oxford, Indiana, 1976, pp. 510-578 (also published in <u>The Logistics and Transportation Review</u>, Vol. 12, No. 5, pp. 369-387), (with T.M. Oum).

"Comecon Shipping Policy", Marine Policy, 1, 4:359-360, (Oct. 1977).

"The Collective Negotiation of Overseas Freight-Rates", <u>Economic Activity</u>, 20, 4:41-44 (Oct. 1977) (Studies in Business and Economics, University of Western Australia).

"The Roles of Competition and Regulation in Transport Markets: An Examination of Bill C-33", in <u>Studies on Regulation in Canada</u>, W.T. Stanbury (ed.), Institute for Policy Research, Montreal, 1978, pp. 231-249.

"The Role of Railway Regulation in National Policy in Canada", <u>Journal of Transport Economics and Policy</u>, XIV, 1:7-18 (Jan. 1980), (with J.C. Nelson).

"Collective Ratemaking by Canadian Railways: An Appraisal", <u>The Logistics and Transportation Review</u>, 17, 1:3-22, (1981).

"A Canadian Merchant Marine: How, Why and When?", <u>Research Seminar Series</u>, Canadian Transport Commission, Spring, 1981, pp. 25-37.

"The Canadian Experience with Limited Regulation of Maximum Railway Rates", <u>Transportation Journal</u>, 21, 1:5-13 (Fall 1981).

"How Much Intramodal Competition for Railways?", Logistics and Transportation Review, 19, 4: 443-453 (1981).

"Terms of Shipment and Efficiency in Overseas Trade", <u>Journal of Maritime Policy and Management</u>, 8, 4: 235-252 (1981).

"The Timing of a Major Investment in Railway Capacity: CPR's 1913 Connaught Tunnel Decision", <u>Business</u> History, 24, 3: 300-314 (1982).

"The Regulation of Railway Access to Shippers Through Interswitching", <u>Proceedings of the Twenty-Third Annual Meeting</u>, <u>Transportation Research Forum</u>, 1982, R.B. Cross Co.: Oxford, Indiana, 1982, pp. 43-50.

"Lessons for the U.S. in Australia Shipping Policy", Logistics and Transportation Review, 18, 2, pp. 197-201 (1982).

"Public Enterprise Under Competition: A Comment on Canadian Railways", in <u>Managing Public Enterprises</u> ed. W.T. Stanbury and F. Thomson (New York: Praeger, 1982), pp. 152-162, (with W.G. Waters II).

"National-flag shipping: An appraisal of policy options from a Canadian perspective", <u>Maritime Policy and Management</u>, Vol. 10, 3, pp. 199-206 (1983).

"Management Strategies under Deregulation: The Case of the British Columbia Forest Industry", <u>Proceedings of the 25th Annual Meeting of the Transport Research Forum</u>, 1984, R.D. Cross: Oxford, Indiana, pp. 44-53 (with S. Lefebvre).

"International Shipping, Fiscal Policy and Shipping Costs", in <u>New Challenges for Shipping and Ports</u> (Haifa, Israel: Israel Shipping and Aviation Research Institute, 1984), pp. 75-95.

"The Treatment of Ships' Operating Costs", Maritime Policy and Management, 1, pp. 35-46 (1985).

"The Effects of Fiscal Policies on the Development of International Shipping", <u>Logistics and Transportation Review</u>, 21, 1, pp. 77-91 (1985).

"Transport Policy and Railway Services in Canada", <u>Transportation and Economy</u>, Tokyo, June 1985, pp. 30-43.

"Railway Ownership of Motor Carriers in Canada", <u>Transportation Practitioners Journal</u>, 52, 4, pp. 478-492 (1985).

"New Directions for Canadian Railway Demurrage", <u>Proceedings Twenty-Ninth Transportation Research Forum</u>, 26, 1, 1985, pp. 76-83 (with G. Chow and S.W. Kemp).

"Container Vessel Size and Service Patterns: Implications for North American Inland Carriers and Shippers", in <u>Logistics: International Issues</u>, ed. Chris Stevens (Cleveland: Leasawey Corp., 1985) pp. 241-249.

"The Privatization of C.N. A Case Study" in <u>Papers on Privatization</u>, eds. W.T. Stanbury and T.E. Kierans (Toronto: Institute for Research on Public Policy, 1985), pp. 167-177.

"Rail Cost-Distance Relationships and the Crow Rate Taper", <u>Proceedings Twenty-First Canadian Transportation</u> Research Forum, 1986, pp. 27-39 (with W.G. Waters and T.B. Schwetz).

"Forecasts and Strategies in Pacific Trade", Intermodal Forum, Autumn 1986, pp. 22-25.

"Planning and Scheduling for Efficiency in Liner Shipping", <u>Maritime Policy and Management</u>, 14, 2, pp. 109-125 (1987) (with D. Lane and D. Uyeno).

"Managing Risk Through Transportation Contracts", <u>Canadian Transportation and Distribution Management</u>, March 1988, pp. 44-45.

"The Changing Role of Government Intervention in Canadian Transportation", <u>Transportation Economy</u>, June 1988.

"Comments on Canadian Passenger Transportation Policy", in <u>Canadian Transportation Policy</u>, ed. David W. Gillen, Policy Forum Series, John Deutsch Institute, Queens University, 1990, pp. 35-38.

"Transportation Regulation and Privatization in Canada", in <u>Privatization and Deregulation in Canada and Britain</u>, J.J. Richardson, ed., (Aldershot, U.K.: Dartmouth Publishing, 1990) pp. 109-138.

"Alternate Strategies in Integrated Logistics", Canadian Shipper, March, 1990, pp. 36-40.

"The Canadian Intercity Bus Industry: Shaped by Public Policy", <u>Transportation Planning and Technology</u>, 15, 2, pp. 253-261 (1991).

"Transportation Deregulation and Privatization in Canada: The Forces for Change", in <u>Transport in a Free Market Economy</u>, eds. D. Bannister and K. Button (London: The MacMillan Press, 1991) pp. 82-114.

"Canada and the Evolving System of International Shipping Conferences", in <u>Canada and International Economic</u> Regimes, eds. M. Zacher and C. Cutler (Vancouver: U.B.C. Press, 1992) pp 215-237.

"Defining Multi-Modal Capacity Requirements", in <u>Canadian Freight Transportation Policy</u>, eds. S.N. Arnold and J. Jones, (Kingston: CIGGT, Queens University, 1992) pp. 91-101.

"The Role of Customs Administration in the Structure and Efficiency of International Logistics: An International Comparison", <u>The International Journal of Logistics Management</u>, Volume 3, No. 1 pp. 63-72 (1992).

"Subsidies, Taxes and Prices: their Roles and Effects in Transportation Planning in Vancouver" in <u>Urban Mobility:</u> <u>From Paralysis to Pricing</u>, eds. Charles Raux and Martin Lee-Gosselin (Lyon: Laboratoire d'Economie des Transports 1992) pp. 255-272.

"Subsidies in Canadian Passenger Transportation," Final Report of the Royal Commission on National Passenger Transportation, (Ottawa: Minister of Supply and Services, 1992) pp. 463-502.

"Workable Competition, Politics and Competition Policy in Liner Shipping", in <u>Current Issues in Maritime</u> Economics, ed. K.M. Gwilliam (Dordrecht, The Netherlands: Kluwer Academic Publishers, 1992) pp. 68-84.

"The Many Facets of Maritime Economics", Inaugural address to the Association of Maritime Economists, <u>Maritime Policy and Management</u>, 1993, Vol. 20, No. 2, 121-132.

"Rail Freight Service in Canada: Restructuring for the North American Market", <u>Journal of Transportation</u> <u>Geography</u>, 1993, Volume 1, Number 3, pp. 156-166.

"Shipping and the Market for Port Services", <u>De Dynamiek Van Een Haven</u>, Eds. G. Blauwens, G. De Brabander, E. Van de Voorde, Published by Uitgeverij Pelckmans Kapellen, 1993, pp. 227-248.

"Logistical Systems in An Age of Technological, Political and Market Change Implications for Spatial Development", Regional Development Dialogue, United Nation Centre for Regional Development, Vol. 14 #2, Summer 1993, pp. 95-117. (with G. Chow)

"Liner Freight Rates: Principles, Practices and Prognosis", *Competition Policy in Liner Shipping*, eds. H.J. Molenaar and E. Van de Voorde, (UFSIA University of Antwerp: Antwerp, Belgium) 1994, pp. 13-31.

"Logistics in the Canadian Health-Care Industry", *Canadian Logistics Journal*, Volume 1, Number 1, December 1994, published by the Canadian Professional Logistics Institute, pp. 29-74. (with G. Chow)

"Restructuring Carriers to Logistics Supplies: The Challenge for International Liner Shipping", a paper presented at the Canadian Transportation Research Forum, May 1994 Victoria

"Logistics Performance Definition and Measurement", *International Journal of Physical Distribution & Logistics Management*, Volume 24 Number 1, 1994, pp. 17-28. (with G. Chow and L. Henriksson) 1995 Award of Excellence for Outstanding Paper.

"Trends in Logistics: Implications for Carriers, Researchers and Policymakers", *Proceedings of the 29th Annual Meeting*, Canadian Transportation Research Forum, Victoria, May 1994, pp. 24-35. (with Garland Chow and Garland Chow and Len Henriksson).

"Getting Ahead of the Issues: The Implications of Today's Developments for the Shape of Things to Come in Canadian Transportation", *Proceedings of the 29th Annual Meeting*, Canadian Transportation Research Forum, Victoria, May 1994, pp. 184-195.

"The Implications of Increased Competition for Port Policy and Management", Journal of *Maritime Policy and Management*, 1995, Vol. 22, No. 2, 125-133.

"Strategy, Structure and Performance: A Framework for Logistics Research", *The Logistics and Transportation Review*, Volume 31-4, December 1995 pp. 285-307. (with G. Chow and L. Henriksson)

"Logistics Need and the Canadian Warehousing Industry" Logistics Research Forum, Canadian Association of Logistics Management, Toronto, ON, May 1996.

"Terminal Gate Management: Efficiency of Intermodal Traffic Through Ports," a keynote paper presented at the Maritime Economists Panel, Society of Naval Architects and Maritime Engineers, Washington, DC., April 1996.

"The Control of International Logistics Systems", <u>Maritime Economics</u>, <u>Essays in Memory of Professor Basil N. Metaxas</u>, edited by A. Goulielmos, (University of Piraeus, Greece), 1997, pp 461-478.

"The Restructuring of Inter-City Railway Freight Services in Canada", published by *Journal of International Association of Traffic and Safety Sciences Research*, Japan, Volume 21, No. 1 pp. 24-32 (March 1997). "Economic principles in transport policy," <u>Proceedings of the Forum of the Benelux Interuniversity Association of Transport Economists</u>, June 23, 1998, pp. 10.

"Global trends in seaport policy: a Canadian perspective," A paper presented at the Conference on *Seaport Policy in the 21st. Century*, Antwerp, May 22, 1998, pp. 9.

"Logistics Strategies in North America", in *Global Logistics and Distribution Planning*, Ed. Donald Waters, (London, Kogan Page, 3<sup>rd</sup> edition, 1999), Chapter 25, pp. 359-374, (with Garland Chow).

"Do mergers and alliances influence European shipping and port competition?" *Maritime Policy and Management*, Vol. 27, No. 4, 2000 pp. 363-373. (with H. Meersman, F. Moglia, E Van de Voorde.)

"The Commercialization of Airports and Air Navigation Systems: The Canadian Experience" (with Tae Oum) *The Journal of Aviation Management*, Vol.1, No.1, 2000, pp.32-44.

"Perspectives on Global Performance Issues," *Handbook on Logistics and Supply Chain Management*, Eds. A. Brewer, K.J. Button and D.A. Hensher, (Oxford, Pergamon Press, 2001), Chapter 2, 11-28.

"Co-operation and Competition in International Container Transport, Strategies for Ports," *Maritime Policy and Management*, Vol. 28, 2001 (With H. Meersman and E. Van de Voorde.)

"Vertical Integration in Liner Shipping: Strategy and Status," *Proceedings, Canadian Transportation Research Forum*, 2001, pp. 292-308.

"Competition and Integration: The implications for port authorities," Canadian Port Magazine, May 2001, pp. 39-41.

"Liner Shipping Strategies for Supply Chain Management," a paper presented to the World Conference on Transport Research, Seoul, July 2001, pp.19. (With P. Evangelista and A. Morvillo.)

"Liner Shipping and Logistics Strategy," in Quaderni, Genoa Port Authority, 2001.

"Logistics in East Asia," A paper presented at a conference on East Asia's Future Economy, organized jointly by the Development Economics Research Group, The World Bank, The Asia-Pacific Policy Program, Kennedy School of Government, Harvard University, and The Harvard Asia Center, Oct 1-2, 2001, pp. 37. Published in *Global Production Networking and Technological Change in East Asia*, eds. Shahid Yusuf, M. Anjum Altaf and Kaoru Nabeshima, co-published by Oxford University Press and the World Bank, 2004, pp. 297 - 351.

- "The Evolving Roles of Shipping Lines in International Logistics," *International Journal of Maritime Economics*, 2002, 4:3, pp. 210 230.
- "Supply Chain and Logistics Management: Implications for Liner Shipping," in *Maritime Economics and Business*, ed. Costas Grammenos, London, Lloyds of London Press, 2002, pp. 375 396.
- "The Economics and Politics of Taxation and Subsidies for Ports and Airports," *Proceedings of the International Association of Maritime Economists*, Panama, November, 2002, pp. 12 (with Michael W. Tretheway).
- "The Effects of Local Taxes and Subsidies on Port Competition in the Pacific Northwest of North America," *Proceedings of the International Association of Maritime Economists*, Panama, November, 2002, pp. 16 (with R.H. Fitzgerald, T. Frounfelker).
- "Logistics in East Asia," in *Global Production Networking and Technological Change in East Asia*, eds. Shahid Yusuf, M. Anjum Altaf and Kaoru Nabeshima, co-published by Oxford University Press and the World Bank, 2004, pp. 297 351.
- "Local Tax Systems Impact Port Competitiveness", *Canadian Ports Magazine*, 2004, pp. 28-31 (with R.H. Fitzgerald, T. Frounfelker).
- "Canadian Transport Policy," in *Transport Strategy, Policy and Institutions*, Eds. K.J. Button and D.A. Hensher, (Oxford, Pergamon Press, 2005), Chapter 45, pp. 779-802 (with W.G. Waters II).
- "Co-operation and Competition in International Container Transport: Strategies for Ports," *International Maritime Transport*, Eds. J. McConville, A. Morvillo, H. Leggate, (London, Routledge Press, 2005), Chapter 11, pp. 145-159 (with H. Meersman and E Van de Voorde).
- "Responding to Shippers' Supply Chain Requirements," *International Maritime Transport*, Eds. J. McConville, A. Morvillo, H. Leggate, (London, Routledge Press, 2005), Chapter 15, pp. 202-214.
- "The Evolution and Challenges of Port Economics," *Port Economics*, Eds. K. Cullinane and W Talley, (London: Elsevier, 2006) Chapter 2.
- "Logistics in North America," in *Global Logistics and Distribution Planning*, Ed. Donald Waters, (London, Kogan Page, 5<sup>th</sup> edition, 2006), Chapter 25, pp. 403-427 (with Garland Chow).
- "50 Years of Transport Education Then, Now and Next," Proceedings of the 43rd Annual Conference of the Canadian Transportation Research Forum, June, 2007, pp. (with W. G. Waters II)
- "Canadian Rail Service Issues in 2009," Canadian Transportation Research Forum, Proceedings of the 44<sup>th</sup> Annual Conference, May 2009, pp. 626-640.
- "The Response of Liner Shipping Companies to the Evolution of Global Supply Chain Management," in *Maritime Economics and Business*, 2<sup>nd</sup> edition, editor, Costas Grammenos, (London, Lloyds of London Press, 2010) pp. 457-477.
- "The Dynamic Role of International Shipping in Business Structures and Relationships" in *Applied Transport Economics*, Eds. E. Van de Voorde and T. Vanslander (Antwerp, Uitgeverji De Boeck, 2010) pp. 67-86.
- "Coordination in Multi-Actor Logistics Operations: Challenges at the Port Interface," in *Integrating Seaports and Trade Corridors*. Eds. P. Hall, R. McCalla, C. Comtois and B. Slack (Farnham, Ashgate Publishing, 2011) pp.155-170
- "A Canadian perspective on international shipping" in *Anchored in Excellence*, Volume 1, 2011, pp. 17-19.
- "The Evolution of Maritime Economics" in *The Blackwell Companion to Maritime Economics*, ed. Wayne K. Talley (New York, Wiley-Blackwell, 2012) pp.16-33.

"Evolution of Maritime Economics" a contribution to "Reflecting on 40 years of *Maritime Management and Policy*," *Maritime Policy and Management*, 42:3-4, 2015 pp. 278-292; http://dx.doi.org/10.1080/03088839.2013.873547

"Increased Collaborative Relationships in International Logistics: Canadian and other national and corporate examples," *Maritime Policy & Management*, 42:3-4, 2015 pp.278-292; published on line, 31 January 2014, at <a href="http://dx.doi.org/10.1080/03088839.2013.873547">http://dx.doi.org/10.1080/03088839.2013.873547</a>

"The Need to Look Beyond Fixes: Canada Transportation Act Review." BC Shipping News, 5:8, 2015, p. 35-36.

"Shippers and Shipping," Containerisation International, 28:9, November 2015, p.48.

"Getting it together: A discussion of the practical problems of collaboration in ports, and strategies for a solution," *Containerisation International*, 28:10, December 2015, p.53-54. (With David Lloyd)

"Vancouver sets its sights on attracting shipping firms," Lloyd' List, Wednesday, 24 February, 2016.

#### PUBLISHED TECHNICAL REPORTS:

"The Relative Cost of Transporting Coal and Other Export Commodities from British Columbia", Centre for Transportation Studies, U.B.C., Government of British Columbia and the Canadian Ministry of Transport, 1973, 117 pages (with others, T.D. Heaver, Research Director).

"Highway Development in Northern British Columbia - Priorities, Timing and Beneficiaries", Centre for Transportation Studies, U.B.C., Ministry of Highways, B.C., 1974, 270 pages (with others, T.D. Heaver, Project Director).

Overseas Cargo Shipping Legislation Report, Department of Transport, Canberra, Australia, 1977, 219 pages, (with I. Grigor).

"The British Columbia Railway as an Instrument of Public Policy", (with F. W. Anderson), Part I of six parts of the Submission of the Centre for Transportation Studies, UBC, on behalf of the BCR to the Royal Commission of Inquiry into the BC Railway, 1977, 71 pages (with W.G Waters II, Research Director, and K.M. Ruppenthal, Project Director).

#### UNPUBLISHED TECHNICAL REPORTS:

<u>The Cost of Ocean Transportation for Rapeseed and Rapeseed Products</u>, Department of Industry, Trade and Commerce, 1975, 48 pages.

<u>A Perspective on the Elements of an International Shipping Policy for Canada</u>, Department of Finance, Government of Canada, 1975, 58 pages (with W. G. Water II).

<u>Competitive Forces in Railway Rate Making</u>, a Report for Transport Canada, Government of Canada, 1976, 89 pages (with J.C. Nelson).

<u>Elements and Operations of Australia Shipping Policy</u>, A Report for the Director General, Maritime Policy and Planning, Transport Canada, Aug. 1977, 7 pages.

<u>Railway Policy in Canada and Its Applicability to Western Australia</u>, A Report for the South Western Australia Transport Study, Perth, Australia, Sept. 1977, 19 pages.

<u>The Implications for Canadian Policy Options of Developments in Shipping and Policy in the U.S.A.</u>, A Report to the Policy Shipping Branch, Transport Canada, Ottawa, Feb. 1978, 69 pages.

The Interests of British Columbia in the Railway Costing Study of the CTC, Report to the Ministry of Transport and Communications, Province of British Columbia, April 1978, 65 pages, (with W. G. Waters II).

Railroad Deregulation in Canada and its Applicability to the U.S.A., A Study Prepared for the Federal Railroad Administration, Washington, D.C., June 1979, XXIII and 169 pages.

<u>Railway Pricing and Regulation in Theory and Practice</u>, A Study Prepared for Alberta Economic Development and Transportation Planning, Oct. 1979, 78 pages, (with W. G. Waters II).

A Preliminary Study of the Regulation of Railway Interswitching and Routing, Centre for Transportation Studies, University of British Columbia, Vancouver, B.C., A Report prepared for Transport Canada, Ottawa, March 1980, 61 pages.

<u>Analysis of the Collective Negotiating Practices of Canadian Railways and Shippers</u>, Verified Statement before the Interstate Commerce Commission, Western Railroads Agreement, Section 5b, Application No. 2, et al., 1980, pp. 39.

<u>Demand-Based Pricing by Canadian Railroads Since 1967</u>, Verified Statement before the Interstate Commerce Commission, Coal Rate Guidelines Nationwide, Ex Porte No. 347 (Sub-No. 1), 1981, pp. 35.

<u>Canadian Experience with the Ownership of Motor Carriers by the Railways</u>, Verified Statement before the Interstate Commerce Commission, Finance Docket No. 30500, 1984, pp. 24.

<u>Competitive Advantage Through Integrated Logistics</u>, with Garland Chow for Canadian Professional Logistics Institute, 1993, 42 pages.

Terminal Gate Management: Efficiency of intermodal container traffic through ports, 1996 (with Jean-Pierre Piters)

<u>The Dispatch of Labour in Ports: The Potential Application of E-Commerce Technologies</u>, A Report to the TechBC Centre for Electronic Commerce, 26 October, 2000, pp. 15.

<u>The Statement of National Transportation Policy: Assessment and Suggestions for Change</u>, A paper for the Canada Transportation Act Review Panel, 21 March, 2001, pp. 17.

The Shipping Conferences Exemption Act: Review and Suggestions of Positions Appropriate for the Panel, A paper for the Canada Transportation Act Review Panel, 30 April 2001, pp.17.

# **SUBMISSIONS:**

<u>Submission to the Commission on the Costs of Transporting Grain by Rail,</u> Canadian National and CP Rail, 1976, 18 pages.

<u>Submission</u>, to the Inquiry of the Railway Transport Committee, Canadian Transport Commission, into Freight Traffic Interswitching Regulations, 1983, pp. 24.

<u>Submission</u>, to the Inquiry of the Railway Transport Committee, Canadian Transport Commission, into the Revision of Railway Regulation in Canada, 1985, pp. 28.

<u>Submission</u>, to the House of Commons Standing Committee on Transport on "Freedom to Move", Vancouver, November 19, 1985, pp. 9 (with T.H. Oum and M.W. Tretheway).

<u>Submission</u>, to the Railway Committee, Canadian Transport Commission, <u>re the matter of freight rate parity on movements of woodpulp from origins in Western Canada to destinations in the U.S.A.</u>, March 9, 1987, pp. 2.

<u>Submission</u>, to the House of Commons Standing Committee on Transport, "Amendments Recommended to Bill C-18 and Bill C-19", March 16, 1987, pp. 33 (with G. Chow et al).

<u>Submission</u>, to the National Transportation Agency on "The Pricing Policy of VIA Rail Canada Inc.", Vancouver, March 1989, (with M.W. Tretheway).

<u>Submission</u>, to the Royal Commission on National Passenger Transportation, December 6, 1990, pp. 7 (with G. Chow et al).

Submission, to the Minister of Transport, on Cost Recovery Policy, February 18, 1991, pp. 11 (with G. Chow et al).

<u>Submission</u>, to the Industrial Advisory Group, Transport Canada, on the Shipping Conference Exemption Act, September 25, 1991, pp. 6.

Submission, The Government Task Force on CN North America, November 1994

<u>Submission</u>, to the U.S. Maritime Administration on the causes of Division of Cargo from U.S. East Coast Ports, November 1996, pp. 2. (Cited in the *Journal of Commerce*, 8 *Jan 1997*, p.16)

<u>Submission</u>, to the Standing Committee on Transport, Infrastructure and Communities, Parliament of Canada, on Bill C-52, 15 February, 2013

Submission to the Canada Transportation Act Review Committee, December 2014, pp. 19.

## SELECTED CONSULTING STUDIES SINCE 2000

2000: Economic Advisor to Technum, NV, Netherlands on a study for the European Commission on "Port Pricing." The report was one input to the Commission in its consideration of a new Ports Policy.

2000: Advisor to Intervistas, Vancouver B.C., on a report on the value of Foreign Trade Zones in Canada with special reference to Hamilton Airport.

2000: <u>The Dispatch of Labour in Ports: The Potential Application of E-Commerce Technologies</u>, A Report to the TechBC Centre for Electronic Commerce, 26 October, 2000, pp. 15.

2001: Two papers commissioned by the Canada Transportation Act Review Panel. The first is "The Statement of National Transportation Policy: Assessment and Suggestions for Change." The second is "The Shipping Conferences Exemption Act: Review and Suggestions of Positions Appropriate for the Panel."

2001-2002: "Logistics in East Asia," a report for the Development Economics Research Group, World Bank, Washington D.C. The research was presented at a conference at the Kennedy School of Government, Harvard University and subsequently was selected for inclusion in a book.

2002: Korea Maritime Institute, Seoul, commissioned a paper on "Developments in Logistics: Implications for shipping and ports in Northeast Asia." The paper was presented and discussed at a public conference sponsored by the Institute.

2003-2004: Economic Advisor to Maritime Innovation, Rimouski, PQ, on the Ship Costs and Costing for a study for the International Joint Commission, International Lake Ontario – St. Lawrence River Study Board to develop an Economic Evaluation Model.

2003-2004: In conjunction with HLB Decision Sciences, responsible for the economic input to quantify in economic terms the effects on vessel operations of different water level and flow conditions in the Lake Ontario – St Lawrence River section of the Great Lakes – Seaway system

2004: Advisor to the Planning and Transport Research Centre, Western Australia on the development of and participation in a conference and research programme related to the logistics of inland container transport from and to the Port of Fremantle.

2004: Korea Transport Institute and the East-West Centre, Hawaii. Commissioned paper, "Regional Integration of Transportation: the NAFTA experience and implications for Northeast Asia" pp 36, for a conference on the prospects and challenges of regional integration in Northeast Asia. Also served as a discussant and panel member in final session.

2000-2005: Advisor on Shipping and Logistics to the Transportation Services Group, Naples, Italy, of the National Research Council of Italy. The work has lead to a number of projects reflected in research papers of the staff and in joint publications with staff members in academic journal, in book chapters and in conference proceedings.

2005: Lead consultant in a team with W.G.Waters II and W.H.Sheffield to advise the Washington Marine Group on "Strategies and Strategic Development within the Washington Marine Group."

2006-2007, Advisor to Maritime Innovation, Rimouski, Quebec on a project for Transport Canada, "Canada's Fleet of Merchant Vessels – Status, Projected Changes, and Implications."

2006-2007: InterVISTAS Consulting Inc.; Advisor on the Gateway Productivity Study for Transport Canada.

2006-2008: Transportation Research Board, Washington D.C., Member of Committee on the St. Lawrence Seaway: Options to Eliminate Introduction of Nonindigenous Species into the Great Lakes, Phase II.

2007, Keynote speaker on "Prospects and Strategies for the Development of Logistics and Related Businesses in the Northeast Asian Region," International Forum on Logistics, World Logistics Expo, Jeonbuk, Gunsan, October 10-11.

2007-2009: British Columbia International Commercial Arbitration Centre, Member of Arbitration Panel, BNSF Railway Company v. Canadian National Railway Company.

2008: "The Implications of Changing Conditions for Port Planning," A perspective on port planning for the Vancouver Fraser Port Authority (with P.V.Hall)

2014: "An Investigation into the Canadian Supply Chain Operational Landscape on the West Coast and the sharing of information among partners," a report on relationships in the port community for Transport Canada, pp. 32.

2014: Advisor to Camp Fiorante Matthews Mogerman, lawyers, concerning the structure and practices of the ocean car-carrying industry.

2015: "Shipping Management and Public Policy: Needs and Opportunities. The Case of Vancouver, Canada," a paper for the Vancouver International Maritime Centre, pp. 5.