

**CURRENT POSITION:**

Professor of Operations Management	Cell Phone (Preferred)	1 615 473 5195
Owen Graduate School of Management	Office Phone	1 615 322 3662
Vanderbilt University	E-mail:	<a href="mailto:larry.leblanc@vanderbilt.edu">larry.leblanc@vanderbilt.edu</a>
Nashville, TN 37203 USA		

**HOME ADDRESS:**

424 Manor View Lane  
Brentwood, TN 37027 USA

**PERSONAL DATA:**

Born July 21, 1947, New Orleans, LA. Married, 2 daughters.  
Interests: instrument flying, scuba diving, photography, biking.

**EDUCATION:**

- Ph.D. Industrial Engineering/Management Sciences, Northwestern University, Evanston, Illinois, 1973
- M.S. Industrial Engineering/Management Sciences, Northwestern University, Evanston, Illinois, 1971
- B.S. Mathematics, Loyola University, New Orleans, Louisiana, 1969

**RESEARCH INTERESTS:**

Reducing spreadsheet error risk in optimization models, optimization in medical systems and supply chains, telecommunication network design and analysis, and computer implementation of algorithms for large-scale optimization models.

**TEACHING INTERESTS:**

Advanced spreadsheets for business analytics, management science in spreadsheets, and international operations. Data visualization. My Spreadsheets for Business Analytics elective is now one of the most popular electives in the Owen School. Secondary interests: simulation, transportation/logistics, and introduction to operations management.

**AWARDS AND HONORS:**

- Invited senior fellow to “Second Chan Wui & Yunkin Rising Star Workshop” in Bellagio, Italy (2019).
- Plenary Speaker: “Teaching Management Science with Spreadsheets,” International Symposium on Operational Research and Applications, Morocco. May 2013.
- Invited speaker, INFORMS Workshop on Teaching Management Science. July 2007.
- Dean’s Award for Teaching Excellence, 2000 and 2002.
- Scientific Advisor to France Telecom, January 1 - December 31 1996 and June 1 - December 31, 1997. Visiting consultant at Sophia Antipolis, France office for 2-3 weeks during 1994, 95, 96, and 97.
- Japanese Government Research Award for travel and living expenses. 1994. I visited Japan five times to observe advanced manufacturing and information systems for vendor coordination.
- Visiting Professor for short periods at City University of Hong Kong (2019), Korea University (2008 thru 2016), Higher Colleges of Technology (U.A.E., 2009 and 2010), Tel Aviv University (Israel, 1997), NISTEP (Japan, 1992), INRO (the Netherlands, 1991), University of Chile (2009, 05, 02, 1988 and 78), University of Ulm (Germany, 1981-84, 85), the Technion (Israel, 1984), and Linkoping Institute of Technology (Sweden, 1980).
- Invited speaker at Sultan Qaboos University (Oman), Kuwait University, Indonesian Institute for Management Development, University of Science & Technology of China at Shanghai, Hong Kong University of Science & Technology, University College London, University of Ulster (N. Ireland), University of Thessaloniki (Greece), Ecole Centrale Paris, Royal Institute of Technology (Stockholm), Karlsruhe University (Germany), Mu’tah University (Jordan), Technical University of Crete, U.S.-Italian Traffic Network Seminar (Naples, Italy), University of Costa Rica, Nippon Telephone & Telegraph (Japan), Keio University (Japan), and University of Padova and University of Pisa (Italy).
- Listed in American Men and Women of Science, Who's Who in Technology Today, Frontier Science and Technology, Community Leaders of America, Who's Who of Emerging Leaders in America, and Who's Who in American Education.

## ACADEMIC EMPLOYMENT:

- September, 1980 - present  
Associate Professor, then Professor, Owen Graduate School of Management, Vanderbilt University, Nashville, Tennessee
- August, 1973 - August, 1980  
Assistant Professor, then Associate Professor (with tenure), Department of Operations Research and Engineering Management, Southern Methodist University, Dallas, Texas

Research into computer implementation techniques for optimization models for problems in telecommunications, distribution, production/inventory control and traffic management. Developed solution techniques for large scale traffic assignment models; these techniques were used by the U.S. Department of Transportation in computer software available to local governments. Supervised graduate students and taught graduate-level courses.

## FUNDED RESEARCH:

- “U.S.-Japan Technology Management and Industrial Training,” investigator, U.S. Air Force grant (1992-93, 1994-97).
- “Collaborative Research on Validation of Network Equilibrium Models of Urban Location,” principal investigator, \$7,790 NSF Grant (1982-83).
- “Multimodal Network Equilibrium Models of Urban Location,” principal investigator on subcontract from University of Illinois, \$66,000 NSF grant (1980-81).
- “Models for Transit Network Design Using Multimodal Network Equilibrium,” principal investigator, \$65,380 contract with U.S. Department of Transportation (1979-80).
- “Evaluation of an Efficient Technique for Equilibrium Traffic Assignment on Urban Networks,” principal investigator, \$6,000 NSF seed grant (1974).

## PROFESSIONAL AFFILIATIONS / EDITORIAL RESPONSIBILITIES:

- Member of Editorial Board of *Telecommunication Systems*, 2008-09.
- Guest Editor for special issue of *Interfaces* on Spreadsheet Applications of MS/OR, 2006-08.
- Member of the Editorial Board of *Operations Management Education and Review*.
- Guest Editor for special issue of *International Journal of Technology Management* on the Impact of Information Systems Technology on Operations Management, Vol. 20, Nos. 3/4, 2000.
- Guest Associate Editor for special issue of *Telecommunication Systems* on Modeling and Analysis of Telecommunication Systems in Korea, 1999.
- Secretary, Telecommunications Section of INFORMS, 1992-1994. Council Member, 1988-91.
- Chairman, Transportation Science Section of the INFORMS, 1984-86. Vice-Chairman, 1982-84. Council Member, 1978-81.
- Member of the Editorial Advisory Board, *Transportation Research*, 1973-1995.
- Transportation Science Section session coordinator to Colorado Springs and Detroit INFORMS meetings.
- Member of INFORMS and Beta Gamma Sigma.

## MEDIA QUOTES:

- My research on *spreadsheet risk* was the topic of a FinancialTimes.com article (4/10/09)
- Video interview was televised by WSMV (Channel 4, Nashville, TN)—Impact of GM plant closings on local vendors (11/22/05)
- Quoted by Nashville Business Journal – Prospects for economic recovery (2/28/03)
- Quoted by The Tennessean newspaper—Dell Computer Corp’s logistics outsourcing strategies compared to industry trends (2/14/02)
- Recorded interview was broadcast by WPLN Radio (Nashville Public Radio)—Beneficial impacts of technology during the 20<sup>th</sup> century and its potential for invading privacy (12/15/99)

### **MEDIA QUOTES, CONTINUED:**

- Recorded interview was broadcast by WSM/WWTN Radio in Nashville—Impact of computers on society: e-mail, electronic commerce, and EDI over the Internet (12/14/99)
- Recorded interview was broadcast by WLAC Radio in Nashville—Best and worst business innovations in recent years (12/13/99)
- Quoted by Newsday (Long Island, NY newspaper)—Impact of Bell Atlantic/GTE merger on consumers (7/29/98)
- The Knoxville News-Sentinel—Forecast demand for new wireless services; viability of new wireless service provider (10/12/97)
- Quoted by the Jackson Sun newspaper—Economic impact on a city of gaining new industries (2/4/97)
- Recorded interview was broadcast by radio affiliates of Standard News—Impact of NYNEX/Bell Atlantic merger on telecommunication services for manufacturing management (4/22 and 23, 1996)
- Quoted by Corpus Christi Caller Times newspaper—Importance of telecommunication systems for JIT manufacturers (9/18/94)
- Video interview was televised by WTVF (Channel 5, Nashville, TN) —Price of gasoline after the first Gulf War (1/19/91)

### **MISCELLANEOUS:**

**Member of Board of Examiners** for Ph.D. dissertation for Indian Institute of Technology, New Delhi (twice) and for Universite Blaise Pascal, France. **Reviewer** for Management Science, INFORMS Journal on Computing, Telecommunication Systems, IEEE Transactions on Communications, Transportation Science, Naval Research Logistics, Networks, Mathematical Programming, The European Journal of Operational Research, Journal of Operations Management, AIIE Transactions, Opsearch, Transportation Research, Transportation Engineering, Environment and Planning, Geographical Analysis and Systems, Man and Cybernetics, and for the National Science Foundation. **Book reviewer** for Irwin, McGraw Hill, Duxbury, and for the joint book review section of ORSA and TIMS (now INFORMS).

### **CONSULTING:**

- Nissan North America Supply Chain Management group—3-day executive seminar on Excel
- Recover Green Roofs (Boston) – 2-day executive seminar on Excel
- The Rogers Group—1-day executive seminar on VBA in Excel.
- KOSTA (Seoul, Korea) – 2-day executive seminar on Visual Basic for Applications in Excel.
- Maury Regional Medical Center– Executive seminars on Excel.
- DaVita – 0-1 optimization model using OPL/CPLEX for assigning dialysis patients to time periods.
- American Sentinel University – 0-1 optimization models for scheduling course offerings with instructor load limits.
- Mendocino Forrest Products – Optimization models for finding minimal-cost flows from suppliers to treating plants to distribution centers to customers.
- Johnson Electric – 2-day executive seminar on Visual Basic for Applications in Excel.
- FedEx – 2-day executive seminar in advanced features of Microsoft Excel.
- Ingram Barge – Optimization models for assigning multiple types of available empty barges to customer demands with time constraints.
- Nu-kote International, Inc. – Linear programming and 0-1 optimization models and solution software for international supply-chain optimization and optimal warehouse routing (“put” lists). Management seminars and support for advanced Excel and VBA within Excel.
- U.S. Army Inventory Research Office – Solution of inventory stockage optimization models with side constraints on total inventory weight, volume, and the number of different items stocked.
- Heery International, Inc. – 0-1 optimization models for assigning engineers to manage construction projects with maximum-intensity constraints for each manager in each period.
- WFAA Radio – Developed interactive software for determining fastest routes for drivers when traffic is backed up. Advised on microcomputer hardware requirements for implementing software.
- Mississippi Chemical Company – Linear programming models for monthly production-inventory scheduling and integer programming models for daily assignments of products to refineries.
- McDermott, Inc. – Linear programming models for production-inventory and financial planning.

## **CONSULTING, CONTINUED:**

- Hickory Specialties Co., Inc. – Cost analysis for distribution planning: warehouse rental, handling, storage and transportation.
- Port Everglades Steel Corporation – Distribution and warehouse location analysis to augment existing warehouse system.
- Pan Technology Corporation – Computer simulation of railroad operations. Comparison of energy costs of diesel vs. electric power.
- Dr. Pepper Company – CPM studies for advertisement and sales incentive projects.
- John Hamburg & Associates, Inc. - Solution strategies for large scale linear and nonlinear optimization models.
- Trailways, Inc. – Revenue projection techniques for new Trailways service.
- Urban Systems, Inc. – Assistance in writing proposal for improved solution methodologies for transportation problems.
- Eaton Corporation – Executive seminar on linear programming, inventory control and scheduling techniques.
- The Carbon/Graphite Group – Recommendations for Master Production Schedule software and computer simulation of plant operations.
- COTENE (Brazilian textile manufacturer) – Simulation models for alternative production processing methods.
- Ingram Periodicals, Inc. – Detailed and aggregate forecasting of customer demands for magazines.
- The Murray Ohio Manufacturing Company – Aggregate planning, master production scheduling and final assembly scheduling techniques.
- KAIST (Korea Advanced Institute for Science and Technology) – Executive seminar on strategies in Telecommunications for Global Competition, Seoul, Korea

## **REFERENCES:**

Dr. Amit Basu  
Charles Wyly Professor of Information  
Systems  
Cox School of Business  
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Dr. David E. Boyce  
Professor Emeritus, University of Illinois at Chicago  
Adjunct Professor, Northwestern University  
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Mr. Jerry Harder, President  
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Center for Transportation and Logistics  
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Massachusetts Institute of Technology  
Cambridge, MA 02139  
Phone: (617) 253-5316

**BOOK: Introduction to Operations Research Models (Leon Cooper, U. Narayan Bhat, Larry LeBlanc), W.B. Saunders Co. (1977).**

**REFEREED PUBLICATIONS:**

**Supply Chain Management/Electronic Commerce/Applications of Management Science:**

1. Managing the Hyflex Scheduling Activity Using Excel Dynamic Arrays. Larry J. LeBlanc, Thomas. A. Grossman, Michael R. Bartolacci. Revised and re-submitted to INFORMS Transactions on Education. (2021)
2. A Heuristic Approach for GPS-Based Routing”, International Journal of Interdisciplinary Telecommunications and Networking. Larry J. LeBlanc and Thomas A. Grossman,13(4):71-84, (2021).
3. Using Spreadsheet Maps for the Placement of Low Altitude Platform (LAP) Wireless Network Nodes After Disasters: A Practitioner-Friendly Approach to Visual Optimization. Larry J. LeBlanc, Michael R. Bartolacci, and Thomas A. Grossman. International Journal of Disaster Response and Emergency Management 4(1):31-46, January-June 2021.
4. Ensuring Scalability and Re-Usability of Spreadsheet Linear Programming Models. Larry J. LeBlanc, Thomas A. Grossman, and Michael R. Bartolacci. Omega: The International Journal of Management Science. Vol 84, pp 55-69 (2019).
5. Identifying the Key Success Factors in Strategic Alignment of Transport Collaboration Using a Hybrid Delphi-AHP. Yasanur Kayikci, Michael R. Bartolacci, Larry J. LeBlanc. Chapter 1 of Contemporary Approaches and Strategies for Applied Logistics, IGI Global, Editors: Lincoln C. Wood (2018).
6. A Generalized Modelling Discussion for Portable Wireless Base Stations During Emergencies. Larry J. LeBlanc, International Journal of Mobile Network Design and Innovation. Vol 8, No. 2 pp 61-64 (2018)
7. Increasing Productivity and Minimizing Errors in Operations Research Spreadsheet Analytics. Larry J. LeBlanc, Michael R. Bartolacci, Thomas A. Grossman. Interfaces. Vol 47, No. 3, pp 260-269 (2017).
8. Personal Denial of Service (PDOS) Attacks: A Discussion and Exploration of a New Category of Cyber Crime. Michael R. Bartolacci, Larry J. LeBlanc Ashley Podhradsky. The Journal of Digital Forensics, Security and Law. Vol. 9, No. 1, pp. 19-36 (2014).
9. A Novel Application of a Hybrid Delphi-Analytic Hierarchy Process (AHP): Identifying Key Success Factors in the Strategic Alignment of Collaborative Heterarchical Transportation Networks for Supply Chains. Yasanur Kayikci, Volker Stix, Larry J. LeBlanc, Michael R. Bartolacci. International Journal of Applied Logistics, Vol 5, No. 1, pp. 52-75 (2014).
10. Policing Public Companies: An Empirical Examination of the Role of State Securities Regulators. (Amanda M. Rose and Larry J. LeBlanc) Florida Law Review, Vol. 65, No. 2, pp. 395-442 (2013).
11. Optimization Modeling for Logistics: Options and Implementations. (Michael R. Bartolacci, Larry J. LeBlanc, Yasanur Kayikci, Thomas A. Grossman). Journal of Business Logistics, Vol. 33, No. 2, pp. 118-127 (2012).
12. Overcoming Spreadsheet Risk in Supply Chain Management. (Michael Galbreth and Larry J. LeBlanc) Journal of Business Logistics. Vol. 31, No. 2 pp. 21-34. (2010).
13. Forecasting Emergency Department Crowding: An External, Multi-Center Evaluation. (N. R. Hoot, S.K. Epstein, T.L Allen, S.S Jones, K.M Baumlin, N. Chawla, A.T. Lee, J.M. Pines, A.K. Klair, B.D Gordon, T.J. Flottemesch, Larry J. LeBlanc, I. Jones, S. Levin, C. Zhou, C. Gadd, D. Aronsky) Annals of Emergency Medicine, Vol. 54 Issue 4, pp. 514-522. e19, (2009).
14. Forecasting Emergency Department Crowding: A Prospective, Real-Time Evaluation. (N.R. Hoot, Larry J. LeBlanc, I. Jones, S.R. Levin, C. Zhou, C.S. Gadd, D. Aronsky) Journal of the American Medical Informatics Association, Vol. 16, No. 3, pp. 338-345 (2009). (doi: 10.1197/jamia.M2772)
15. Forecasting Emergency Department Crowding: A Discrete Event Simulation. (Nathan Hoot. Larry LeBlanc, Ian Jones, Scott Levin, Chuan Zhou, Cynthia Gadd, Brent Lemonds, & Dominik Aronsky. Annals of Emergency Medicine, Vol. 52, Issue 2, pp. 116-125 (2008).
16. The Use of Spreadsheet Software in the Applications of Management Science and Operations Research (Larry J. LeBlanc, Thomas A. Grossman), Interfaces, Vol. 38, No. 4, pp. 1-3 (2008).
17. Modeling Uncertain Forecast Accuracy in Supply Chains with Postponement. (Larry J. LeBlanc, James A. Hill, Jerry Harder, Gregory W. Greenwell), Journal of Business Logistics, Vol. 30, No. 1, pp.19-31 (2009).
18. Implementing Large-Scale Optimization Models in Excel Using VBA. (Larry LeBlanc, Michael Galbreth), Interfaces, Vol. 37, No. 4, pp. 370-382 (2007).

19. Designing Large-Scale Supply-Chain Linear Programs in Spreadsheets (Larry LeBlanc, Michael Galbreth), Communications of the ACM, Vol. 50, Issue 8, pp. 59 - 64 (2007).
20. Nu-kote's Spreadsheet Linear Programming Models for Optimizing Transportation. (Larry LeBlanc, James Hill, Gregory Greenwell, Alexandre Czesnat), Interfaces, Vol. 34, No. 2, pp. 139-146 (2004).
21. Visualizing Solutions in Network Analysis with Visual Basic for Applications. (Larry LeBlanc), Asia Pacific Management Review, Vol. 8, No. 4, pp. 523-543 (2003).
22. Adoption of Business-to-Business Electronic Commerce: The Role of Buyer-Supplier Relationships. (Basuki Iskandar, Susumu Kurokawa, Larry LeBlanc), IEEE Transactions on Engineering Management, Vol. 48, No. 4, pp. 505-517 (2001).
23. Business-To-Business Electronic Commerce from First- and Second-Tier Automotive Supplies' Perspectives: A Preliminary Analysis for Hypotheses Generation (Basuki Iskandar, Susumu Kurokawa, Larry LeBlanc), Technovation, Vol. 21, No. 11, pp. 719-731 (2001).
24. Heery International's Spreadsheet Optimization Model for Assigning Managers to Construction Projects. (Larry LeBlanc, Dale Randels, Jr., Ken Swann), Interfaces, Vol. 30, No. 6, pp. 95-106 (2000).
25. The Impact of Information Systems Technology on Operations Management. (Larry LeBlanc), International Journal of Technology Management, Vol. 20, Nos. 3/4, pp. 243-251 (2000).
26. EDI Performance in the Automotive Supply Chain. (Bordin Rassameethes, Susumu Kurokawa, Larry LeBlanc), International Journal of Technology Management, Vol. 20, Nos. 3/4, pp. 287-303 (2000).
27. Comparison of U.S. and Japanese Technology Management and Innovation. (Larry LeBlanc, Robert Nash, Daniel Gallagher, Kinji Gonda, Fumihiko Kakizaki), International Journal of Technology Management, Vol. 13, Nos. 5/6, pp. 601- 614 (1997).
28. Innovation and Technological Change in Small and Medium Japanese Manufacturing Companies (Larry LeBlanc, Robert Nash, Robert Peerman), Operations Management Review, Vol. 11, No. 2/3, pp. 1-24 (1995/96).
29. Construction of a Real-World Bilevel Linear Programming Model of the Highway Network Design Problem. (Omar Ben-Ayed, Charles Blair, David Boyce, Larry LeBlanc), Annals of Operations Research, Vol. 34, pp. 219-254 (1992).
30. Modeling Emergency Department Operations Using Advanced Computer Simulation. (Charles Saunders, Paul Makens, Larry LeBlanc), Annals of Emergency Medicine, Vol. 18, No. 2, pp. 134-140 (1989).

#### **Teaching Management Science:**

1. Verifying Documentation Standards in Spreadsheet Analysis. (Larry LeBlanc, Michael Galbreth), DSI Journal of Innovative Education Vol. 7. No. 1, pp 81-88. (2009)
2. Teaching Management Science/Operations Research Using Spreadsheets. (Larry LeBlanc), Ricerca Operativa, Vol. 30, Nos. 94/95, pp. 75-100 (2000).

#### **Telecommunications:**

1. Design of Reliable SONET Feeder Networks. (June Park, Byung Lim, Larry LeBlanc), Information Technology and Management, Vol. 8, Issue 1, pp. 19-29 (2007).
2. Telecommunication Access Network Design with Reliability Constraints. (Samit Soni, Sridhar Narasimhan, Larry LeBlanc), IEEE Transactions on Reliability, Vol. 53, No. 4, pp 532 – 541 (2004).
3. Network Design Using SMDS and Leased Lines. (June Park, Larry LeBlanc, Byung Lim), Telecommunication Systems, Vol. 20, Nos. 1-2, pp. 151-162 (2002).
4. Planning Models for Wide-Area Communication Network Design with Response-Time-Dependent Offered Traffic. (Larry LeBlanc, Sridhar Narasimhan, Bin Ran), Information Technology and Management, Vol. 3, No. 3, pp 229-245 (2002).
5. Packet Routing in Telecommunication Networks with Path and Flow Restrictions. (Larry LeBlanc, Jerome Chifflet, Philippe Mahey), INFORMS Journal on Computing, Vol. 11, No. 2, pp. 188-197 (1999).
6. A New Proximal Decomposition Algorithm for Routing in Telecommunication Networks. (Philippe Mahey, Adam Ouorou, Larry LeBlanc, Jerome Chifflet), Networks, Vol. 31, pp. 227-238 (1998).
7. Iterative Improvement Methods for a Multi-Period Network Design Problem. (Bruno-Laurent Garcia, Philippe Mahey, Larry LeBlanc), European Journal of Operational Research, Vol. 110, No. 1, pp. 150-165 (1998).
8. Topology Design and Bridge Capacity-Assignment for Interconnecting Token Ring LANs: A Simulated Annealing Approach. (Larry LeBlanc, June Park, V. Sridhar, Joakim Kalvenes), Telecommunication Systems, Vol. 6, pp. 21-43 (1996).

9. Topological Expansion of Metropolitan Area Networks. (Larry LeBlanc, Sridhar Narasimhan), Computer Networks and ISDN Systems, Vol. 26, pp. 1235-1248 (1994).
10. Optimization Models for Design and Routing in Wide-Area Data-Communication Networks. (Larry LeBlanc, Jerry Harder), Studies in Locational Analysis, Special Issue on Network Design, Issue 6, pp. 3-18. (1994).
11. Design and Operation of Packet-Switched Networks with Uncertain Message Requirements. (Larry LeBlanc), IEEE Transactions on Communications, Vol. 38, No. 8, pp. 1223-1230 (1990).
12. Continuous Models for Capacity Design of Large Packet-Switched Telecommunication Networks. (Larry LeBlanc, Ronald Simmons), ORSA Journal on Computing, Vol. 1, No. 4, pp. 271-286 (1989).

#### **Production/Logistics:**

1. Formulating and Solving Production Planning Problems. (Larry LeBlanc, Avraham Shtub, G. Anandalingam), European Journal of Operational Research, Vol. 112, No. 1, pp. 54-80 (1999).
2. Scheduling Projects to Maximize Net Present Value – The Case of Time-Dependent, Contingent Cash Flows. (Ran Etgar, Avraham Shtub, Larry LeBlanc), European Journal of Operational Research, Vol. 96, pp. 90-96 (1996).
3. Scheduling Programs with Repetitive Projects: A Comparison of a Simulated Annealing, a Genetic, and a Pair-Wise Swap Algorithm. Avraham Shtub, Larry LeBlanc, Ziyong Cai), European Journal of Operational Research, Vol. 88, No. 1, pp. 124-138 (1996).
4. Optimization Methods for Large-Scale Multiechelon Stockage Problems. (Larry LeBlanc), Naval Research Logistics, Vol. 34, No. 2, pp. 239-249 (1987).
5. Improved Efficiency of the Frank-Wolfe Algorithm for Convex Network Programs. (Larry LeBlanc, Richard Helgason, David Boyce), Transportation Science, Vol. 19, No. 4, pp. 445-462 (1985).
6. Optimization Models for Distribution Planning. (Larry LeBlanc), Risk and Capital, Springer-Verlag Lecture Notes in Economics and Mathematical Systems, Vol. 227, pp. 203-223 (1983).
7. Solving the Pipe Network Analysis Problem Using Optimization Techniques. (M. Collins, L. Cooper, R. Helgason, J. Kennington, Larry LeBlanc), Management Science, Vol. 24, No. 7, pp. 747-760 (1978).
8. A Heuristic Approach for Large Scale Discrete Stochastic Transportation Location Problems. (Larry LeBlanc), Computers and Mathematics with Applications, Vol. 3, No. 2, pp. 87-94 (1977).
9. Stochastic Transportation Problems and Other Network Related Convex Problems. (Leon Cooper, Larry LeBlanc), Naval Research Logistics Quarterly, Vol. 24, No. 2, pp. 327-337 (1977).
10. Global Solutions for a Non-Convex, Non-Concave Rail Network Model. (Larry LeBlanc), Management Science, Vol. 23, No. 2, pp. 131-139 (1976).
11. The Transportation-Production Problem. (Larry LeBlanc, Leon Cooper), Transportation Science, Vol. 8, No. 4, pp. 344-354 (1974).

#### **Transportation:**

1. Solving an Instantaneous Dynamic User-Optimal Route Choice Model (David Boyce, Bin Ran, Larry LeBlanc), Transportation Science, Vol. 29, No. 2, pp. 128-142 (1995).
2. A New Class of Instantaneous Dynamic User-Optimal Traffic Assignment Models. (Bin Ran, David Boyce, Larry LeBlanc), Operations Research, Vol. 41, No. 1, pp. 192- 202 (1993).
3. Network Equilibrium Models of Urban Location and Travel Choices: A Retrospective Survey. (David Boyce, Larry LeBlanc, Kyung Chon), Journal of Regional Science, Vol. 28, No. 2, pp. 159-183 (1988).
4. Implementation and Computational Issues for Combined Models of Location, Destination, Mode and Route Choice. (David Boyce, Kyung Chon, Y. Lee, K. Lin, Larry LeBlanc), Environment and Planning A, Vol. 15, pp. 1219-1230 (1983).
5. Equilibrium in Transportation Networks - the Basic Model and Extensions for Integrated Transportation Planning. (in German, Larry LeBlanc, Werner Rothengatter), German Journal of Regional Science, Vol. 3, pp. 82-115 (1982).
6. Combined Mode Split-Assignment and Distribution-Mode Split Assignment Models with Multiple Groups of Travelers. (Larry LeBlanc, Mustafa Abdulaal), Transportation Science, Vol. 16, No. 4, pp. 430-442 (1982).
7. Selection of a Trip Table Which Reproduces Observed Link Flows. (Larry LeBlanc, Keyvan Farhangian), Transportation Research, Vol. 16B, No. 2, pp. 83-88 (1982).

8. Efficient Algorithms for Solving Elastic Demand Traffic Assignment Problems and Mode Split-Assignment Problems. (Larry LeBlanc, Keyvan Farhangian), Transportation Science, Vol. 15, No. 4, pp. 306-317 (1981).
9. Methods for Combining Modal Split and Equilibrium Assignment Models. (Mustafa Abdulaal, Larry LeBlanc), Transportation Science, Vol. 13, No. 4, pp. 292-314 (1979).
10. An Analysis and Comparison of Behavioral Assumptions in Traffic Assignment. (Larry LeBlanc, Ed Morlok), Springer-Verlag, Lecture Notes in Mathematics and Economic Systems, Vol. 118, pp. 413-425 (1976).
11. The Use of Large Scale Mathematical Programming Models in Transportation Systems. (Larry LeBlanc), Transportation Research, Vol. 10, No. 6, pp. 419-421 (1976).
12. An Efficient Approach to Solving the Road Network Equilibrium Traffic Assignment Problem. (Larry LeBlanc, Ed Morlok, William Pierskalla), Transportation Research, Vol. 9, No. 5, pp. 309-318 (1975).
13. An Accurate and Efficient Approach to Equilibrium Traffic Assignment on Congested Networks. (Larry LeBlanc, Edward Morlok, William Pierskalla) Transportation Research Record 491-Interactive Graphics and Transportation Systems Planning, pp. 12-23 (1974).

#### **Network Design:**

1. Transit System Network Design. (Larry LeBlanc), Transportation Research, Vol. 22B, No. 5, pp. 383-390 (1988).
2. A Bilevel Programming Algorithm for Exact Solution of the Network Design Problem with User-Optimal Flows. (Larry LeBlanc, David Boyce), Transportation Research, Vol. 20B, No. 3, pp. 259-265 (1986).
3. A Comparison of User-Optimum vs. System-Optimum Traffic Assignment in Transportation Network Design. (Larry LeBlanc, Mustafa Abdulaal), Transportation Research, Vol. 18B, No. 2, pp. 115-121 (1984).
4. Equilibrium in Transportation Networks - Applications to Road and Rail Network Design. (Larry LeBlanc, Werner Rothengatter), German Journal of Regional Science, Vol. 4, pp. 51-77 (1983).
5. Continuous Equilibrium Network Design Models. (Mustafa Abdulaal, Larry LeBlanc), Transportation Research, Vol. 13B, No. 1, pp. 19-32 (1979).
6. An Efficient Dual Approach to the Urban Road Network Design Problem. (Larry LeBlanc, Mustafa Abdulaal), Computers and Mathematics with Applications, Vol. 5, pp. 11-19 (1979).
7. The Conjugate Gradient Technique for Certain Quadratic Network Problems. (Larry LeBlanc), Naval Research Logistics Quarterly, Vol. 23, No. 4, pp. 597-602 (1976).
8. An Algorithm for the Discrete Network Design Problem. (Larry LeBlanc), Transportation Science, Vol. 9, No. 3, pp. 183-199 (1975).

#### **SELECTED OTHER PUBLICATIONS:**

- Numerous conference proceedings publications.
- Technology Development, Management, and Transfer in Small and Medium Size Japanese Manufacturing Firms - 1. (With Kinji Gonda, Robert Peerman, Robert Nash), Center for U.S.-Japan Technology Management, Vanderbilt University (1992).
- Technological Development, Management, and Transfer in Small and Medium-Size Japanese Manufacturing Firms - 2, Center for U.S.-Japan Technology Management, Vanderbilt University (1993).
- Development and Applications of a Highway Network Design Model, Volume I and II. (With Edward K. Morlok, William P. Pierskalla, et al), Final Report: Federal Highway Administration Network Contract Number DOT-FH-121-7862, Northwestern University (1973).
- Optimization Methods for Design of Multimodal Networks. (With Mustafa Abdulaal), Research Directions in Computer Control of Urban Traffic Systems, American Society of Civil Engineers, New York, pp. 149-164 (1979).
- Estimation of an Origin-Destination Trip Table Based on Observed Link Volumes and Turning Movements. (With Yehuda Gur, Mark Turnquist, Mort Schneider and David Kurth), Final Report: Department of Transportation Contract Number DOT-FH-11-9292 (1979).
- Combined Assignment and Traffic Signal Optimization, Issues in Control of Urban Traffic Systems, Proceedings of the Engineering Foundation Conference, Henniker, NH, pp. 105-122 (1981).

- Two Methodologies for Combat Unit Stockage. (With Martin Cohen, Alan Kaplan and Sally Frazza), Army Inventory Research Office Report TR 81-1, 800 U.S. Custom House, 2nd and Chestnut Sts., Philadelphia, PA 19106 (1981).

#### **SELECTED PRESENTATIONS (EXCLUDES PRESENTATIONS AT INFORMS CONFERENCES):**

- “Managing the Hyflex Scheduling Activity Using Excel Dynamic Arrays.” Distinguished Seminar Series, Advanced Design and Systems Engineering, City University of Hong Kong. Presented using Zoom, September 15, 2021.
- “New Excel Dynamic Array Worksheet Functions.” Seminar speaker, Department of Business Analytics & Information Systems, University of San Francisco. Presented using Zoom, 9/2020.
- Using Spreadsheet Maps for Heuristic Site-Selection Algorithms, presented at Phoenix INFORMS, November 11, 2018.
- “Promoting Resiliency in Emergency Communication Networks: A Network Interdiction Modeling Approach.” Hawaii Intl Conference on System Sciences: 1/4/17. (I answered questions. My co-author gave the presentation.) January 4, 2017.
- “Increasing Productivity and Minimizing Errors in Spreadsheet Analytics.” Boeing Aircraft in Tukwila WA. May 11, 2017.
- “Reducing Errors in Spreadsheet Design,” Nissan North America Headquarters, Franklin, TN. March 3, 2018.
- Nashville Analytics Summit: Increasing Productivity and Minimizing Errors in Operations Research Spreadsheet Models. August 8, 17.
- “Effective Design of Spreadsheets for Analytics: Methods for Minimizing Errors,” IEOM Conference, Dubai, UAE (March, 2015)
- **Plenary Speaker:** “Teaching Management Science with Spreadsheets,” International Symposium on Operational Research and Applications, Morocco (May, 2013)
- “Implementing Optimization Models: Organization Capability and Analytical Needs,” IFORS, Melbourne, Australia (July, 2011)
- “Management Science in Spreadsheets,” KAIST Industrial Engineering Department and KAIST Business School, Seoul, Korea (May and June, 2010)
- “Overcoming Spreadsheet Risk in Supply Chain Modeling,” Korea University Business School, Seoul, Korea, (May, 2010)
- “Management Science in Spreadsheets,” Full day seminar, IPMI Business School, Jakarta, Indonesia (June, 2009)
- “Management Science in Spreadsheets,” Higher Colleges of Technology, Abu Dhabi, U.A.E., November, 2008.
- “Management Science in Spreadsheets.” Sultan Qaboos University, Muscat, Oman, November, 2008.
- “Simulation Models for Just-in-Time Provision of Resources in an Emergency Department,” Kuwait University, November, 2008.
- “Overcoming Spreadsheet Risk in Supply Chain Management” Kuwait University, November, 2008.
- “Management Science in Spreadsheets,” Kuwait University, November, 2008.
- “Simulation Models for Just-in-Time Provision of Resources in an Emergency Department,” National Taiwan University of Science and Technology, May, 2008.
- “Modeling Uncertain Forecast Accuracy in Supply Chains with Postponement,” National Taiwan University, May, 2008.
- “Innovation and Productivity—Management Science in Spreadsheets,” SDS (Samsung), Seoul, Korea, June, 2008.
- “Building Enrollments in Management Science Courses by Teaching Advanced Excel” Logistics, Service, and Operations Management Conference, Seoul, Korea, May, 2008.
- “Teaching Management Science in Spreadsheets,” City University of Hong Kong, Hong Kong University of Science and Technology, and Tsinghua University, Beijing, May and June, 2007.
- “Modeling Uncertain Forecast Accuracy in Supply Chains,” City University of Hong Kong, May, 2007.
- “Management Science in Spreadsheets,” Rai Business School and Indian Institute for Foreign Trade, New Delhi, November, 2006.

- “Optimal Production in Supply Chains with Uncertain Information,” ILS conference, Lyon, France, May, 2006.
- “An Overview of Optimization Modeling for Transportation and Related Problems,” University of Chile, Santiago, November, 2005.
- “Spreadsheet-Based Linear Programming for Global Supply Chain Optimization,” Pan Pacific Conference XXII, Shanghai, China, May, 2005.
- “Management Science in Spreadsheets,” University of Science and Technology of China, May, 2005.
- “Capacitated Global Supply Chains with Alternative Production Sources,” Euro XX Conference on Operations Research and the Management of Electronic Services, Rhodes, Greece, July, 2004
- “Simulation of Supply-Side Information and the Product Flows,” presented at 5th EURO/INFORMS Joint International Meeting on New Opportunities for Operations Research, Istanbul, Turkey, July, 2003.
- “University-Industry Relations in the Context of OR/MS,” Panel speaker, 5th EURO/INFORMS Joint International Meeting on New Opportunities for Operations Research, Istanbul, Turkey, July, 2003.
- “Optimizing Nu-kote’s Supply Chain with Linear Programming,” presented at the Second International Workshop on Freight Transportation and Logistics, Sicily, Italy, May, 2003.
- “Advanced Spreadsheets for Information Technology Applications with Emphasis on VBA for Operations Research Problems,” one-week seminar, Department of Industrial Engineering, University of Chile, Santiago, Chile, August, 2002.
- “Management Science in Spreadsheets,” Universita di Pisa and Universita di Padova, Italy, May, 2002.
- “Information Sharing in Business-to-Business Supply Chains,” 6th Asia-Pacific DSI Conference, Singapore Also presented to Executive MBA class at Kasetsart University, Bangkok, Thailand, July, 2001.
- “Management Science Using Spreadsheets” (two seminars), Universita di Napoli, Italy, May, 2001.
- “An Optimization Model for Vendor Selection” and “Simulating Multi-Server Queues with Balking Using Simple Excel Functions,” Universita di Padova, Italy, May, 2000.
- “International Operations,” two-day course, Institute of Industrial Logistics, Bordeaux School of Management, France, November, 1999.
- “Teaching Operational Research Using Spreadsheets,” full-day invited tutorial, Operations Research Society of Italy, Naples, September, 1999.
- “The Impact of Information Systems Technology on Operations Management,” Technical University of Crete, Greece July, 1999.
- “Strategic Issues in Global Operations Management: Using ERP Software for Superior Global Competitiveness,” Samsung Data Systems, Seoul, Korea, August, 1998.
- “Packet Routing in Telecommunication Networks with Path and Flow Restrictions,” Mu’tah University, Jordan, July, 1998.
- “Optimal Topology for Wide-Area Networking of LANs Using SMDS,” Universite Blaise Pascal, Clermont-Ferrand, France, May, 1998.
- “Iterative Improvement Methods for a Multi-Period Network Design Problem,” University of Pisa, Italy, May, 1998.
- “Survey of Multi-Hour Routing/Design Models for Telecommunication Networks,” CNET (France Telecom), Sophia Antipolis, France, November 1997.
- “A Comparison of U.S. and Japanese Technology Management and Innovation,” Tel Aviv University, Israel, May, 1997.
- “Routing in Backbone Networks with Response-Time-Dependent Offered Traffic,” CNET (France Telecom), Sophia Antipolis, France, November 1996.
- “Implementing Hop Limits in the Flow-Deviation Algorithm,” CNET (France Telecom), Sophia Antipolis, France, May, 1995.
- “A Comparison of Simulated Annealing, Genetic Algorithms and Tabu Searches for Solving Discrete Optimization Programs,” Universite Blaise Pascal, Clermont-Ferrand, France, May, 1995.
- “Topology Design and Bridge Capacity Assignment for Interconnecting Token Rings,” CNET (France Telecom), Sophia Antipolis, France, June, 1994.
- “Genetic Algorithms and Simulated Annealing for Transport Optimization,” University of Ulster, Belfast, Northern Ireland, July, 1993.

- “Optimal Topology and Bridge Capacity Assignment for Interconnecting Token Ring Networks,” one of five invited speakers at Telecommunication Workshop at University of Iowa sponsored by MCI Telecommunications, October, 1993.
- Invited participant (panel member) in Symposium on Globalization of Operations Management, Georgetown University, Washington, D.C., USA, May, 1993.
- “Reliable Link Topology/Capacity Design and Routing in Backbone Telecommunication Networks,” University of Science and Technology at Hong Kong, June 1993.
- “A Comparison of Simulated Annealing, Genetic Algorithms and Tabu Searches for Solving Discrete Optimization Programs,” University of Thessaloniki, Greece, June 1992, and University of Science and Technology at Hong Kong, June 1993.
- “Dynamic Travel Choice Models for Urban Transportation Networks,” University of Thessaloniki, Greece, June 1992.
- “Design of a Toll System for a Congested Intercity Road Network: The Dutch Road Pricing Scheme,” INRO-TNO, Delft, the Netherlands, June, 1991.
- “Dynamic Traffic Models,” Dutch Ministry of Transportation, The Hague, the Netherlands, July, 1991.
- “Algorithms for Backbone Telecommunication Network Design with Discrete Capacity Choices” and “Topological Design of Metropolitan Area Networks,” Centre for Research on Transportation, University of Montreal, Canada, April 1991.
- “Continuous Models for Capacity Design of Large Packet-Switched Telecommunication Networks,” Nippon Telegraph and Telephone Corporation, Tokyo, Japan, June 1990.
- “Design and Operation of Packet-Switched Networks with Uncertain Message Requirements,” Keio University, Tokyo, Japan, June 1990.
- “Telecommunication Network Configurations for In-Vehicle Route-Guidance Systems,” US-Italian Joint Seminar on Urban Traffic Networks, Naples, Italy, June 1989.
- “Logistics and Distribution Systems,” 7-hour plenary lecture, 11th Annual Conference on Systems Engineering, Santiago, Chile, July 1988.
- “A Maximal-Flow Model with Vehicle Constraints for Analyzing Interregional Trade,” Department of Industrial Engineering and Management Science, Ecole Centrale Paris, France, June 1987.
- “A Bilevel Programming Algorithm for Exact Solution of Network Design Problems with User-Optimal Flows,” TIMS XXVII International Meeting, Gold Coast, Australia, July 1986.
- “A Model for the Rail Blocking Problem,” Abt. Wirtschaftswissenschaften, University of Ulm and Karlsruhe University, West Germany, May 1985.
- “A Comparison of the Lagrange Multiplier Technique with the Simplex Method for Solving Multi-Echelon Stockage Problems,” TIMS XXVI International Meeting, Copenhagen, Denmark, June 1984.
- “Optimization Models for Large-Scale Multi-Echelon Stockage Problems,” Department of Industrial Engineering and Management, Technion Israel Institute of Technology, Haifa, Israel, May 1984.
- “Efficient Algorithms for Large-Scale Traffic Assignment Models,” Department of Civil Engineering, Technion Israel Institute of Technology, Haifa, Israel, May 1984.
- “Optimization Models for Distribution Planning,” Second Summer Workshop on Risk and Capital, University of Ulm, West Germany, June 1983.
- “Applications of Linear Programming to Transportation and Distribution Planning,” Abt. Wirtschaftswissenschaften, University of Ulm, West Germany, June 1982.
- “Combined Models of Assignment, Distribution and Mode Split,” Department of Economics, University of Bamberg, West Germany, June 1982.
- “Optimization Models for Large-Scale Multi-Echelon Stockage Problems,” Lausanne, Switzerland, 1982.
- “Efficient Optimization Procedures for Large-Scale Constrained Multiple-Item Stockage Problems,” 9th Triennial Conference on Operations Research, Hamburg, West Germany, July 1981.
- “Urban Traffic Management,” Linkoping University, Institute of Technology, Linkoping, Sweden, May 1980.
- “Mathematical Programming Methods for Predicting Urban Traffic Flows,” Departments of Optimization and Systems Theory and Traffic Planning, Royal Institute of Technology, Stockholm, Sweden, June 1980.
- “Models for the Urban Road Network Design Problem,” 19th European Congress of the Regional Science Association, London, England, August 1979.

- “Transportation Systems and Operations Research,” Faculty of Engineering, Ciudad Universitaria Rodrigo Facio, San Jose, Costa Rica, May 1978.
- “Models for Traffic and Transportation Planning,” two-week seminar, Department of Industrial Engineering, University of Chile, Santiago, Chile, August 1978.
- “Optimization Models for Nonlinear Network Problems,” Division of Transportation Engineering, University of California, Berkeley, May 1977.
- “An Analysis and Comparison of Behavioral Assumptions in Traffic Assignment,” International Symposium on Traffic Equilibrium Methods, Montreal, Canada, November 1974.

In addition, I have given presentations at most national INFORMS meetings since 1974 and have chaired sessions at many of these meetings.