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Date of Birth: June 24, 1938
Registered Professional Engineer in the State of Ohio

Degrees	Field	Institution	Date Conferred
B.S.	Civil Engineering	Northwestern University	1961
Master	City Planning	University of Pennsylvania	1963
M.A.	Regional Science	University of Pennsylvania	1964
Ph.D.	Regional Science	University of Pennsylvania	1965

Academic Positions

Northwestern University

2004-to date Adjunct Professor, Department of Civil and Environmental Engineering, McCormick School of Engineering and Applied Science

University of Illinois at Chicago

2003-1997-2003 Professor Emeritus of Transportation and Regional Science
Professor of Transportation and Regional Science, Department of Civil and Materials Engineering, (retired May 31, 2003)

1988-1996 Director, Urban Transportation Center, and Professor of Transportation and Regional Science in the College of Urban Planning and Public Affairs and in the Department of Civil and Materials Engineering

1993-1995 President, Illinois Universities Transportation Research Consortium

1988-1993 Member, Administrative Committee, Illinois Universities Transportation Research Consortium

1999-2002 Member, Senate Executive Committee

University of Illinois at Urbana-Champaign

1977-1988 Professor of Transportation and Regional Science, Department of Civil Engineering; secondary appointment in Department of Urban and Regional Planning

1980-1988 Chair, Regional Science Program in the Graduate College

1979-1988 Director, Office of Transportation Research, Office of the Vice Chancellor for Research

1981-1988 Member, Administrative Committee, Illinois Universities Transportation Research

University of Pennsylvania

1966-1968	Assistant Professor of City and Regional Planning
1968-1977	Assistant Professor, Associate Professor, Professor of Regional Science and Transportation
2003	Visiting Professor of Systems Engineering, Department of Electrical and Systems Engineering

Other Academic Experience:

1972-1973	Senior Visiting Fellow, University of Leeds, England
1982	Lecturer, International School on Transportation Planning, Amalfi, Italy, October 11-16
1983	Visiting Professor of Optimization, Department of Mathematics, University of Linköping, Sweden, and Royal Institute of Technology, Stockholm, Sweden, 1984
	Visiting Professor of Transportation and Urban Planning, Northwestern University, Evanston
1996	Visiting Professor of Urban and Regional Research, Technical University of Vienna, Austria, March-April
1996	Visiting Professor of Regional Science, University of Karlsruhe, Germany, June-July
1996	Visiting Professor of Transportation Planning, Royal Institute of Technology, Stockholm, Sweden, September-October
1996	Visiting Professor of Optimization, Linköping University, Sweden, November-December
2003	Visiting Professor of Civil Engineering, National University of Singapore, January-February
2003	Visiting Erskine Fellow in Civil Engineering, University of Canterbury, Christchurch, New Zealand, April-June

Honors, Prizes, Awards:

Tau Beta Pi, Northwestern University	1960
Sears-Roebuck Foundation Fellowship	1961-1963
National Science Foundation Fellowship	1963-1964
Japan Society for the Promotion of Science Short Term Fellowship	1984 (declined)
Who's Who in America,	1980-2003
Medal of the City of Kulmbach, Germany	1984
John Nuveen Center for International Affairs, University of Illinois at Chicago	1994
Distinguished Service Award, North American Regional Science Council	1994
Named for David E. Boyce	1995
ADVANCE Project Steering Committee, Recognition of Service to the ITS Field	1995
North American Regional Science Association Reception Guest of Honor	1996
College of Engineering Faculty Research Award	2000
UIC Inventor of the Year Award	2000
Founder's Medal of the Regional Science Association International	2000
UIC Flame Award for Teaching Excellence	2001
Fellows Award (Inaugural) of the Regional Science Association International	2002
Life Member, American Society of Civil Engineers	2003
Emeritus Member, Transportation Research Board	2003
Robert Herman Lifetime Achievement Award,	
Transportation and Logistics Section, INFORMS	2003
Fellows Award of INFORMS	2003

Honors Received by Students Supervised:

Hillel Bar-Gera, Transportation Science 2000 Dissertation Prize, INFORMS.

Der-Horng Lee, The Technology Review 100: World 100 top innovators under 35 whose work and ideas will change the world, **MIT Technology Review**, 2002.

Muanmas Wichiensin, Thai Government Scholarship, Ph.D. study, Imperial College, London, 2003.

Professional Societies and Activities:

Regional Science Association International	1961-
Secretary	1969-1978
International Conference Coordinator	1978-1988
Program Chairman, North American Meetings	1977-1989
President	1987
Chair and Past Chair, North American Regional Science Council	1989-1992
Secretary, Benjamin H. Stevens Graduate Fellowship Fund	1998-
Archivist	1998-
Founder's Medal	2000
Fellow (one of four Inaugural Fellows designated by RSAI Council)	2002
Institute for Operations Research and the Management Sciences (formerly Operations Research Society of America)	1964-
Transportation Science Section Council	1978-1981
Member, TS Lifetime Achievement Award Selection Committee	1993-1996, 2007
Chair, Transportation Planning Interest Group, TS Section	1995-2002
Robert Herman Lifetime Achievement Award, Transportation and Logistics Section	2003
Fellows Award of INFORMS	2003
Transportation Research Board	
Committee on Urban Activity Systems, Chairman	1974-1979
Committee on Transportation Network Modeling, or predecessors	1979-2002
University Representative, University of Illinois at Chicago	1988-1999
Emeritus Member	2003
American Society of Civil Engineers	1960-
Life Member Award	2003

Public Service or Similar Activity:

Associate Editor: Transportation Science	1978-1994
Guest Editor: Transportation Research	1978, 1985
Co-Editor: Environment and Planning A	1979-1988
Journal Editorial Advisory Boards:	
Annals of Regional Science	1977-1982
	1989-1992
Environment and Planning A	1977-1978
	1988-1991
International Regional Science Review	1976-1982
	1989-1991
Journal of Regional Science	1970-1977
Transportation Research	1974-
Transportation Science	1995-
Networks and Spatial Economics	2003-

Member, Panel on Transportation Systems Research, Engineering Research Board, National Research Council	1984-1985
Council of University Transportation Centers: Director, NSF Workshop on Transportation Research	1984-1985
Chair, NSF Liaison Committee	1986-1989
Member, Milton Pikarsky Dissertation Award Judging Committee	1992-1994
PRT Advisory Group, Regional Transportation Authority, Chicago	1991-1992
Metropolitan Planning Council, Chicago: Transportation Committee	1993-2002
Market Based Solutions Advisory Committee	1994-1995
Co-chair, Research Community Panel, Forum on Future Directions of Transportation R & D, National Science and Technology Council	1995
Chair, 14 th Annual International EMME/2 Users' Group Conference, Chicago	1997-1999
Member, Organizing Committee for NSF-ESF Conference on Social Change and Sustainable Transport	1998-1999

Consulting Activities:

Battelle Memorial Institute, Columbus, OH	1966-1968
General Motors Research Laboratories, Warren, MI	1972-1976
Regional Science Research Institute, Philadelphia, PA	1975-1977
Metropolitan Transportation Commission, Berkeley, CA	1978
Korea Institute of Science and Technology, Seoul, Korea	1979-1980
LJL and Associates, Nashville, TN	1983-1991
JFT and Associates, Pacific Palisades, CA	1988-1992
University of Texas, Austin, TX	1991-1993
Comsis Corporation, Silver Spring, MD	1995
SRF Consulting Group, Inc.	2003

Teaching Activity at the University of Illinois at Chicago:

Courses	Credit Hours	Clock Hrs. Per Week	Number of Students	Type of Instruction	%
<u>Fall, 2000, Spring, 2001, Summer, 2001</u>					
CEMM 302	4	3	21	Lect.-Disc	100
CEMM 594-UT	4	3	4	Lect.-Disc	100
CEMM 594-TN	4	3	5	Seminar	
Honors 201	1	1	15	Lect.-Disc	100
CEMM 508	4	3	11	Lect.-Disc	100
CEMM 509	4	6	3	Lect.-Disc	100
<u>Fall, 2001, Spring, 2002, Summer, 2002</u>					
CEMM 302	4	3	25	Lect.-Disc	100
CEMM 501	4	3	8	Seminar	
CEMM 508	4	3	12	Lect.-Disc	100
CEMM 509	4	6	5	Lect.-Disc	100
<u>Fall, 2002</u>					
CEMM 302	4	3	31	Lect.-Disc	100
CEMM 501	4	3	8	Seminar	

Ph.D. Thesis Students Supervised at Present: M.S. Thesis Students Supervised at Present: Other Ph.D. Committee Service:

Students Supervised who Received M.S. Degree:

D. Poo	1978
T. Wells	1979
S. MacArthur	1981
M. Dunn	1982
P. Fahrenwald	1982
Y. J. Lee	1982
J. Parsons	1982
J. Hicks	1985
J. Hochmuth	1986
C. Meneguzzer	1986
K. Lennerstrand	1987
D. Reiland	1987
M. Tatineni	1992
O. Smoliak	1993
M. Lupa	1994
K. Compere	1995
H. Ran	1996
S. May	1998
J. Souden	1998
K. Balasubramaniam	1999
M. Wichiensin	2000
E. Chang, NU (Co-Sup.)	2000
A. Morshed	2000
B. Ralevic-Dekic	2001
K. Nizamuddin	2000
A. Sreenivasan	2001
M. Sanakkayala	2001
O. Cuceu	2001
F. Noeth	2001
Q. Xiong	2002
T. Sonkhya	2003
B. Pandey	2003
A. Stryker	2003

Students Supervised who Received Ph.D. Degree:

J. M. Choukroun	1972
C. McDonald	1972
R. Mudge	1972
J. Platt	1972
P. Slater	1972
G. Desfor	1973
S. Hakin	1974
A. Isserman	1975
T. Miller	1975
F. Tang	1975
J. Green	1976
C. Yang	1976
C. DeFiglio	1977
B. Douglas (Co-Sup.)	1977
C. Frank	1978
B. N. Janson	1981
K. S. Chon	1982
M. E. Ferris	1982
Y. J. Lee	1985
C. K. Lee	1987
O. Ben-Ayed (Co-Sup.)	1988
D. G. Brown	1988
H. K. Chen	1989
C. S. Griffin	1990
C. Meneguzzer	1990
J. E. Hicks	1992
B. Ran	1993
K. Said (Co-Sup.)	1993
S. Berka	1994
Y. Zhang	1995
F. Karuma	1995
M. Tatineni	1996
D-H. Lee	1996
M. Hribar, NU (Co-Sup.)	1997
X. Tian	1999
H. Bar-Gera	1999
B. Hafeez	2000
H. Ham, UIUC (Co-sup.)	2001

Post-Doctoral Students Supervised:

K. Mouskos	1991
A. Tarko	1994
S. Berka	1995
M. Tatineni	1997
P.-W. Chang	1998
H. Bar-Gera	1999

Reviewer Activities

Journals, publishers, and research supporting agencies for whom papers, books, or proposals were reviewed:

Transportation Research
Transportation Science
Transportation Research Board
Journal of Transportation Engineering, ASCE
Environment and Planning A
Journal of Regional Science
Annals of Regional Science
International Regional Science Review
Papers in Regional Science
Journal of the American Institute of Planners
National Science Foundation
National Research Council, Canada
University Grants Committee, Research Grants Council of Hong Kong
North-Holland Publishing Company
Elsevier Science, Oxford
John Wiley and Sons
Springer
Kluwer Academic Publishers

Publications:

1. Boyce, D. E. The Effect of Direction and Length of Persons Trips on Urban Travel Patterns, **Journal of Regional Science**, **6** (1966): 65-82.
2. Boyce, D. E. and R. W. Cote. Verification of Land Use Forecasting Models: Procedures and Data Requirements, **Highway Research Record**, **126** (1966): 60-65.
3. Boyce, D. E. and S. E. Goldstone. A Regional Economic Simulation Model for Urban Transportation Planning, **Highway Research Record**, **149** (1966): 29-41; reprinted in **Managerial Applications of Systems Dynamics** (E. B. Roberts, ed.) MIT Press, Cambridge (1978): 561-576.
4. Boyce, D. E. Effect of Trip Direction on Interzonal Trip Volumes: Test of a Basic Assumption of Trip Distribution Models, **Highway Research Record**, **165** (1967): 76-88.
5. Boyce, D. E. Communication in the Field of Urban Development Models, **Highway Research Board Special Report**, **97** (1968): 239-250.
6. Boyce, D. E., A. Farhi and R. Weischedel. A Computer Program for Optimal Regression Analysis, **Discussion Paper Series No. 28**, Regional Science Research Institute, Philadelphia, 27 pp. (1969).
7. Boyce, D. E., N. D. Day and C. McDonald. **Metropolitan Plan Making, Monograph Series No. 4**, Regional Science Research Institute, Philadelphia, 491 pp. (1970).
8. Hickey, R. J., D. E. Boyce, E. B. Harner and R. C. Clelland. Ecological Statistical Studies Concerning Environmental Pollution and Chronic Disease, **IEEE Transactions on Geoscience Electronics**, **GE-8** (1970): 186-202; reprinted as Chapter 11, Environmental Pollution and Human Health, **Urban Environmental Management Planning for Pollution Control**, B. J. L. Berry and F. E. Horton (eds.), Prentice-Hall, Englewood Cliffs (1974).
9. Hickey, R. J., D. E. Boyce, E. B. Harner and R. C. Clelland. Ecological Statistical Studies on Environmental Pollution and Chronic Disease in Metropolitan Areas of the U.S., **Discussion Paper Series No. 35**, Regional Science Research Institute, Philadelphia, 111 pp. (1970).
10. Boyce, D. E. Notes on the Methodology of Urban Transportation Impact Analysis, **Highway Research Board Special Report**, **111** (1970): 41-44.
11. Boyce, D. E. The Role of Urban Development Models in Metropolitan Plan Making, in **Models of Urban Structure**, D. C. Sweet (ed.), D. C. Heath Co., Lexington (1971): 27-36.
12. Boyce, D. E., C. McDonald and A. Farhi. **An Interim Report on Procedures for Continuing Metropolitan Planning**, Regional Science Department, University of Pennsylvania, Philadelphia, xxxiii + 565 pp. (1971).
13. Boyce, D. E. The Metropolitan Plan Making Process: Its Theory and Practical Complexities, in **Urban and Regional Planning, London Papers in Regional Science**, **2**, A. G. Wilson (ed.) Pion Ltd., London (1970): 96-109.

14. Hickey, R. J.; D. E. Boyce; E. B. Harner and R. C. Clelland. **Exploratory Ecological Studies of Variables Related to Chronic Disease Mortality Rates**, National Technical Information Service, Springfield, VA, PB246383, 195 pp. (1971).
15. Boyce, D. E. (ed.) Studies of the Philadelphia-Lindenwold Rapid Transit Line, **Discussion Paper Nos. 1-4**, University of Pennsylvania, Philadelphia (1971).
16. Boyce, D. E. and B.V.A. Murthy. **Analysis of Peak Period Passenger Flows**, National Technical Information Service, Springfield, VA PB203780, 23 pp. (1971).
17. Boyce, D. E. Toward a Reformulation of the Modal Choice Problem of Urban Transportation Planning, in **Recent Developments in Regional Science, Karlsruhe Papers in Regional Science**, R. Funck (ed.), Pion Ltd., London (1972): 61-84.
18. Boyce, D. E. Toward a Framework for Defining and Applying Urban Indicators in Plan Making, **Urban Affairs Quarterly**, 6 (1970): 145-171; reprinted in I. M. Robinson (ed.) **Decision-Making in Urban Planning**, Sage Publications, Beverly Hills (1972): 61-84.
19. Boyce, D. E., C. McDonald and A. Farhi. Specification of Plan Making Procedures for a Given Planning Situation, **Highway Research Record**, 394 (1972): 19-32.
20. Boyce, D. E. and C. McDonald. **The Refinement of Procedures for Continuing Metropolitan Planning**, Regional Science Department, University of Pennsylvania, Philadelphia (1972).
21. Boyce, D. E. Assessing Impacts of Urban Transportation, **Transportation Engineering Journal, ASCE 98, TE3** (1972): 645-652.
22. Boyce, D. E., B. Allen, R. Mudge, P. Slater and A. Isserman. **Impact of Rapid Transit on Suburban Residential Property Values and Land Development**, National Technical Information Service, Springfield, VA PB220693, 370 pp. (1972).
23. Boyce, D. E., B. Allen, G. Desfor and R. Zuker **Impact of Access Distance and Parking Availability on Suburban Rapid Transit Station Choice**, National Technical Information Service, Springfield, VA PB220694, 360 pp. (1972).
24. Boyce, D. E., A. Farhi and R. Weischedel. Optimal Network Problem: A Branch and Bound Algorithm, **Environment and Planning**, 5, (1973): 519-533.
25. Boyce, D. E. and B. Allen. Transportation Research: Problems and Prospects, **Papers of the Regional Science Association**, 32 (1974): 21-51.
26. Boyce, D. E. and C. McDonald. **Procedures for Continuing Metropolitan Planning**, Federal Highway Administration, Washington, D.C., 142 pp. (1974).
27. Boyce, D. E., A. Farhi and R. Weischedel. **Optimal Subset Selection: Multiple Regression, Interdependence and Optimal Network Algorithms, Lecture Notes in Economics and Mathematical Systems**, 103, 187 pp. Springer-Verlag, Heidelberg (1974).
28. Boyce, D. E. and W. B. Allen. Impact of Rapid Transit on Suburban Residential Development, in **New Jersey Trends**, T. P. Norman (ed.), Rutgers University, New

- Brunswick (1974): 478-497.
29. Boyce, D. E. and W. B. Allen. Impact of a High Speed Rapid Transit Facility on Residential Property Values, **High Speed Ground Transportation**, **8** (1974): 53-60.
 30. Boyce, D. E. and G. Desfor. **Impact of Suburban Rapid Transit Station Location, Fare and Parking Availability on Users' Station Choice Behavior**, Office of the Secretary, U.S. Department of Transportation, Washington, D.C., 313 pp. (1974).
 31. Boyce, D. E., K. Nguyen, T. Noyelle and K. Webb. **Impact of a Suburban Rapid Transit Line on Fuel Consumption and Cost for the Journey-to-Work**, Federal Energy Administration, Washington, D.C., vi + 68 pp. (1975).
 32. Boyce, D. E., W. B. Allen and F. Tang. Impact of Rapid Transit on Residential-Property Sales Prices. **Space, Location and Regional Development**, M. Chatterji (ed.), Pion Ltd., London (1976): 143-153.
 33. Boyce, D. E. and H. Rosen. **Locational Choice and Travel Behavior of Commercial and Governmental Offices in Suburban Rapid Transit Station Areas**, Federal Energy Administration, Washington, D.C. (1977).
 34. Boyce, D. E. and J. Kohlhasse. **Choice of Mode and Suburban Apartment Location During a Period of Gasoline Shortages and Price Increases**, Federal Energy Administration, Washington, D.C. (1977).
 35. Coughlin, R. E., D. Berry, K. Bieri, D. Boyce, J. Kohlhasse, E. Leonardo, J. Pickett, T. Plaut, B. Stevens, A. Strong, D. Vining and K. Wallace. **Saving the Garden: The Preservation of Farmland and Other Environmentally Valuable Land**, Report to NSF (RANN) (1977).
 36. Boyce, D. E., J. Kohlhasse and T. Plaut. **Estimating the Value of Development Easements on Agricultural Land: Methods and Empirical Analysis, Appendix to Saving the Garden**, Report to NSF (RANN) (1977).
 37. Boyce, D. E. Equilibrium Solutions to Combined Urban Residential Location, Mode Choice and Trip Assignment Models, in **Competition Among Small Regions**, W. Buhr and P. Friedrich (eds.), Nomos Verlagsgesellschaft, Baden-Baden, Germany (1978): 246-264.
 38. Murawski, C. A. and D. E. Boyce. Variation in Trip Length by Mode, Location, and Worker Characteristics, **Transportation Research**, **12** (1978): 97-109.
 39. Boyce, D. E., J. Kohlhasse and T. Plaut. The Development of a Planning Oriented Method for Estimating the Value of Development Easements on Agricultural Land, **Discussion Paper Series No. 105**, Regional Science Research Institute, Philadelphia (1978).
 40. Boyce, D. E., M. E. Ferris and K. Nguyen. Energy Consumption of the Journey-to-Work With and Without a Suburban Rapid Transit Line, **Transportation Research Record**, **689** (1978): 38-44.
 41. Boyce, D. E. and J. Soberanes. Solutions to the Optimal Network Problem with Shipments Related to Transportation Cost, **Transportation Research**, **13B** (1979): 65-80.
 42. Boyce, D. E. (guest editor) **Transportation Network Design**, **Transportation Research**, **13B** (1979): 1-90.

43. Boyce, D. E. and F. Southworth. Quasi-dynamic Urban Location Models with Endogenously Determined Travel Costs, **Environment and Planning A**, **11** (1979): 575-584.
44. Boyce, D. E., R. W. Eash and B. N. Janson. Equilibrium Trip Assignment: Advantages and Implications for Practice, **Transportation Research Record**, **728** (1979): 1-8.
45. Boyce, D. E., G. Provenzano, F. Southworth, K. Cromwell-Cain and K. S. Chon. **Modeling the Impacts of Transportation Systems Management on Vehicle Emissions, Phase I Report, Document No. 79/09**, Illinois Institute of Natural Resources, Chicago, vi + 119 pp. (1979).
46. Boyce, D. E. and B. N. Janson. A Discrete Transportation Network Design Problem with Combined Trip Distribution and Assignment, **Transportation Research**, **14B** (1980): 147-154.
47. Boyce, D. E. A Framework for Constructing Network Equilibrium Models of Urban Location. **Transportation Science**, **14** (1980): 77-96; reprinted in **Classics in Regional Science**, P. Nijkamp and K. Button (eds.), Edward Elgar, Cheltenham, (1995).
48. Boyce, D. E. Impact of Federal Rail Transit Investment Programs on Urban Spatial Structure, in **The Urban Impacts of Federal Policies**, N. J. Glickman (ed.), Johns Hopkins Press, Baltimore (1980): 398-425.
49. Boyce, D. E., F. Southworth, T. J. Kim, G. Provenzano, K. S. Chon, K. Cromwell-Cain and T. R. Wells. **Testing Models for Estimating the Impact of Transportation Systems Management on Travel Choices and Vehicle Emissions, Phase II Report, Document No. 81/32**, Illinois Institute of Natural Resources, Chicago, ix + 187 pp. (1981).
50. Eash, R. W., B. N. Janson and D. E. Boyce. Direct Energy Consumption for Personal Travel in the Chicago Metropolitan Area, **Transportation Research Record**, **801** (1981): 15-22.
51. Boyce, D. E., M. C. Romanos, B. N. Janson, P. Prastacos, M. Ferris and R. W. Eash. **Urban Transportation Energy Accounts, Report No. IL-11-0027, Volumes I and II**, Urban Mass Transportation Administration, Washington, D.C., 239 pp., PB 82-135542 (1981).
52. Boyce, D. E., M. C. Romanos, B. N. Janson, M. Ferris, P. Prastacos, R. W. Eash and A. Vyas. **Personal Travel Energy Consumption**, Chicago Area Transportation Study, Chicago, iii + 78 pp. (1981).
53. Boyce, D. E., B. N. Janson and R. W. Eash. The Effects on Equilibrium Trip Assignment of Different Link Congestion Functions, **Transportation Research**, **15A** (1981): 223-232.
54. Boyce, D. E., G. R. Provenzano, M. R. Thompson, R. Bender, M. Engelhardt, L. Keasler, J. Schneider and T. Wells. **Implications of Expanding Coal Production for Illinois Transportation Systems, Document No. 81/10**, Illinois Institute of Natural Resources, Chicago, vii + 106 pp. (1981).
55. Fisk, C. S., D. E. Boyce and D. G. Brown. **A Perspective on the Problem of Combining Network Equilibrium with Urban Systems Models**, Publication No. 1, Department of Civil Engineering, University of Illinois at Urbana-Champaign (1981).

56. Boyce, D. E., R. R. Braeutigam, T. J. Kim, R. P. Ancar, C. S. Griffin, J. T. Lefever and J. Parsons. **Analysis of Selected Problems Related to Transportation of Illinois Coal, Document No. 83-03**, Illinois Department of Energy and Natural Resources, Springfield, xi + 190 pp. (1982).
57. Boyce, D. E., K. S. Chon and R. W. Eash. Development of a Family of Sketch Planning Models, **Research News**, Chicago Area Transportation Study, **22(1)**, (1982): 1-11.
58. Eash, R. W., K. S. Chon, Y. J. Lee and D. E. Boyce. Equilibrium Traffic Assignment on an Aggregated Highway Network for Sketch Planning, **Transportation Research Record**, **994** (1983): 30-37.
59. Boyce, D. E., L. J. LeBlanc, K. S. Chon, Y. J. Lee and K. T. Lin. Implementation and Computational Issues for Combined Models of Location, Destination, Mode and Route Choice, **Environment and Planning A**, **15** (1983): 1219-1230.
60. Fisk, C. S. and D. E. Boyce. A Note on Trip Matrix Estimation from Link Count Data, **Transportation Research**, **17B** (1983): 245-250.
61. Fisk, C. S. and D. E. Boyce. Alternative Variational Inequality Formulations of the Network Equilibrium-Travel Choice Problem, **Transportation Science**, **17** (1983): 454-463.
62. Kim, T. J., D. E. Boyce and G. J. D. Hewings. Combined Input-Output and Commodity Flow Models for Interregional Development Planning: Insights from a Korean Application, **Geographical Analysis**, **15** (1983): 330-342; also published in **Proceedings of the Conference on Urban Planning and Regional Development in a Rapidly Changing Society**, Princeton University, Princeton (1983); reprinted in **Classics in Planning**, A. Reggiani, K. Button and P. Nijkamp (eds.), Edward Elgar, Cheltenham (2006).
63. Fisk, C.S. and D. E. Boyce. A Modified Composite Cost Measure for Probabilistic Choice Modeling, **Environment and Planning A**, **16** (1983): 241-248.
64. Boyce, D. E. Network Models in Transportation/Land Use Planning, in **Transportation Planning Models**, M. Florian (ed.), North-Holland Publishing Company, Amsterdam (1984): 475-498.
65. Boyce, D. E. Urban Transportation Network Equilibrium and Design Models: Recent Achievements and Future Prospects, **Environment and Planning A**, **16** (1984): 1445-1474.
66. Boyce, D. E., K. S. Chon, M. E. Ferris, Y. J. Lee, K-T. Lin and R. W.Eash. **Implementation and Evaluation of Combined Models of Urban Travel and Location on a Sketch Planning Network**, Chicago Area Transportation Study, xii + 169 pp. (1985).
67. Boyce, D.E. (guest editor) **Transportation Research: The State of the Art and Research Opportunities, special issue of Transportation Research**, **19A** (1985): 349-542.
68. Schofer, J. L. and D. E. Boyce. Conference Summary and Conclusions, **Transportation Research**, **19A** (1985): 351-354.

69. LeBlanc, L. J., R. Helgason and D. E. Boyce. Improved Efficiency of the Frank-Wolfe Algorithm for Convex Network Programs, **Transportation Science**, **19** (1985): 445-462.
70. Boyce, D. E. Optimal Design and Operation of Highly Congested Urban Transportation Systems with Regard to Environmental, Energy, Equity and Travel Cost Impacts, **The Korean Journal of Regional Science**, **1** (1985): 15-23.
71. B. O'hUallachain, C. S. Griffin; P. Farris and D. E. Boyce. **Markets and Transportation Requirements for Selected Illinois Manufacturing Industries**, Final Report to Office of the Governor of Illinois (1986).
72. LeBlanc, L. J. and D. E. Boyce. Bilevel Programming Algorithm for Exact Solution of the Network Design Problem with User-optimal Flows, **Transportation Research**, **20B** (1986): 259-265.
73. Boyce, D. E. Integration of Supply and Demand Models in Transportation and Location: Problem Formulations and Research Questions, **Environment and Planning A**, **18** (1986): 485-489.
74. Boyce, D. E., Y. J. Lee; R. W. Eash and D. Zavertero. Direct Energy Consumption for Urban Travel: Comparisons of Travel to Chicago's O'Hare Airport with the Chicago Region, **Papers of the Fourth International Transport Conference**, Tokyo, Japan (1986): 307-342.
75. Batten, D. F. and D. E. Boyce. Spatial Interaction, Transportation, and Interregional Commodity Flow Models, in **Handbook of Regional and Urban Economics, Volume 1**, P. Nijkamp (ed.), North-Holland, Amsterdam (1986): 357-406.
76. Boyce, D. E. and T. J. Kim. The Role of Congestion of Transportation Networks in Urban Location and Travel Choices, **Transportation**, **14** (1987): 53-62.
77. Eash, R. W. and D. E. Boyce. **The Sketch Planning Ridership Model for the Regional Transportation Authority**, Chicago Area Transportation Study, iv + 70 pages (1987).
78. Boyce, D. E. and L. Lundqvist. Network Equilibrium Models of Urban Location and Travel Choices: Alternative Formulations for the Stockholm Region, **Papers of the Regional Science Association**, **61** (1987): 91-104.
79. Rho, J. H., D. E. Boyce and T. J. Kim, Comparison of Solution Methods for Wilson's Interregional Commodity Flow Model, **Geographical Analysis**, **21**(1987): 259-267.
80. Boyce, D. E., J. J. Hochmuth, C. Meneguzzo and R. G. Mortimer. **Cost-Effective 3R Roadside Safety Policy for Two-Lane Rural Highways**, Final Report to Illinois Department of Transportation, Springfield, x + 121 pages (1987).
81. Boyce, D. E., L. J. LeBlanc and K. S. Chon. Network Equilibrium Models of Urban Location and Travel Choices: A Retrospective Survey, **Journal of Regional Science**, **28** (1988): 159-183.
82. Boyce, D. E. Route Guidance Systems for Improving Urban Travel and Location Choices, **Transportation Research**, **22A** (1988): 275-281; reprinted in **Classics in Transport Analysis: Transport and Information Systems**, R. Stough, Y. Higano, K. Button and P. Nijkamp (eds.), Edward Elgar, Cheltenham, UK (2002).

83. Boyce, D. E. Combining Communication and Transport Technology to Improve Urban Travel Choices, **Information Technology: Social and Spatial Perspectives**, I. Orishimo, G. J. D. Hewings and P. Nijkamp (eds.), Springer, Berlin (1988): 141-152.
84. Ben-Ayed, O., D. E. Boyce and C. E. Blair, III. A General Bi-level Linear Programming Formulation of the Network Design Problem, **Transportation Research**, **22B** (1988): 311-318.
85. Hewings, G. J. D., K. Lennerstrand, J. H. Rho and D. E. Boyce. **Impacts of Extremes in Lake Michigan Levels along Illinois Shorelines, Part II: Effects of Higher Levels on Transportation**, Final Report to U.S. Environmental Protection Agency, Washington, D.C. (1988).
86. Boyce, D. E. Presidential Address: Renaissance of Large-Scale Models, **Papers of the Regional Science Association**, **65** (1988): 1-10.
87. Boyce, D. E., R. W. Eash and B. N. Janson. Direct and Indirect Transportation Energy Consumption in Urban Travel Markets, in **Spatial Energy Analysis**, L. Lundqvist, L. G. Mattsson and E. A. Eriksson (eds.), Gower, Aldershot (1989): 359-379.
88. Boyce, D. E., N. Rouphail, A. Sen and H. K. Chen. **Subregional Route Choice Models with Link Travel Times Reflecting Intersection Flows**, Final Report to Illinois Department of Transportation, Springfield, 185 pp. (1989).
89. Boyce, D. E. Contributions of Transportation Network Modeling to the Development of a Real-time Route Guidance System, in **Transportation for the Future**, D. F. Batten and R. Thord (eds.), Springer, Berlin (1989): 161-177.
90. Boyce, D. E., C. Meneguzzer, N. Rouphail, A. Sen and T. Lauritzen. **A User-Optimal Route Choice Model with Asymmetric Cost Functions Incorporating Intersection-related Travel Times**, Final Report to Illinois Department of Transportation, Springfield, viii + 143 pp. (1990).
91. Boyce, D. E. Network Equilibrium Models of Urban Location and Travel Choices: A New Research Agenda, in **New Frontiers in Regional Science**, M. Chatterji and R. E. Kuenne (eds.), New York University Press, New York (1990): 238-256.
92. Boyce, D. E. and A. Sen. Estimation Procedures for Transportation Network Equilibrium Models, **Infrastructure and the Space-Economy**, K. Peschel (ed.), Springer, Berlin (1990): 163-179.
93. Boyce, D. E., A. M. Kirson and J. L. Schofer. **Scope, Feasibility and Cost of a Dynamic Route Guidance System Demonstration Program**, Final Report to Illinois Department of Transportation, Springfield, 55 pp. (1990).
94. Meneguzzer, C., D. E. Boyce, N. Rouphail and A. Sen. **Implementation and Evaluation of an Asymmetric, Equilibrium Route Choice Model Incorporating Intersection-related Travel Times**, Final Report to Illinois Department of Transportation, Springfield, 173 pp. (1990).
95. Boyce, D. E., P. Nijkamp and D. Shefer. A Preface to Regional Science. Chapter 1 in **Regional Science: Retrospect and Prospect**, D.E. Boyce, P. Nijkamp and D. Shefer (eds.), Springer, Berlin (1991): 1-11.
96. Boyce, D. E., A. M. Kirson and J. L. Schofer. Design and Implementation of ADVANCE:

- The Illinois Dynamic Navigation and Route Guidance Demonstration Program, **Vehicle Navigation and Information Systems Conference Proceedings, P-253, Part 1** (1991): 415-426.
97. Halati, A. and D. E. Boyce. Effectiveness of In-Vehicle Navigation Systems in Alleviating Non-Recurring Congestion, **Vehicle Navigation and Information Systems Conference Proceedings, P-253, Part 2** (1991): 871-889.
 98. Ben-Ayed, O., C. E. Blair, D. E. Boyce and L. J. LeBlanc. Construction of a Real-world Bi-level Linear Programming Model of the Highway Network Design Problem, **Annals of Operations Research, 34** (1992): 219-254.
 99. Boyce, D. E., M. Tatineni and Y. Zhang. **Scenario Analyses for the Chicago Region with a Sketch Planning Model of Origin-Destination, Mode and Route Choice**, Final Report to Illinois Department of Transportation, Springfield, vi + 63 pp. (1992).
 100. Hicks, J. E., D. E. Boyce and A. Sen. **Static Network Equilibrium Models and Analyses for the Design of Dynamic Route Guidance Systems**, Technical Report to Illinois Department of Transportation, Schaumburg, x + 142 pp. (1992).
 101. Boyce, D. E., L. J. LeBlanc and B. Ran. Dynamic Travel Choice Models for Urban Transportation Networks, **Proceedings of 1992 IEEE International Conference on Systems, Man and Cybernetics, 1** (1992): 225-231.
 102. Ran, B., D. E. Boyce and L. J. LeBlanc. A New Class of Instantaneous Dynamic User-Optimal Traffic Assignment Models, **Operations Research, 41** (1993): 192-202.
 103. Ran, B., D. E. Boyce and L. J. LeBlanc. **Dynamic Transportation Network Models for Advanced Traveler Information Systems**, Technical Report to Illinois Department of Transportation, Schaumburg, x + 170 pp. (1993).
 104. Said, K.; N. Rouphail; D. E. Boyce and A. Sen. **Optimization of Traffic Signal Controls within Equilibrium Route Choice Models**, Final Report to Illinois Department of Transportation, Springfield, xii + 130 pp. (1993).
 105. Boyce, D. E., M. Lupa and Y. Zhang. Possible Schemes for Introducing 'Feedback' into the Four-Step Travel Forecasting Procedure vs. the Equilibrium Solution of a Combined Model: Comparisons for the Chicago Region, **Transportation Planning Methods Applications, 4th National Conference, Volume I** (1993): 663-681.
 106. Boyce, D. E. and Y. Zhang. Estimation and Testing of a Combined Network Equilibrium Model of Travel Choices for the Chicago Region, Chapter 4 in **Potentials and Bottlenecks in Spatial Development**, H. Kohno and P. Nijkamp (eds.), Springer, Berlin (1993): 45-69.
 107. Boyce, D. E., A. M. Kirson and J. L. Schofer. ADVANCE: The Illinois Dynamic Navigation and Route Guidance Demonstration Program, Chapter 11 in **Advanced Technology for Road Transport: IVHS and ATT**, I. Catling (ed.), Artech House, London (1994): 247-270.
 108. Ran, B. and D. Boyce. **Dynamic Urban Transportation Network Models: Theory and Implications for Intelligent Vehicle Highway Systems**, **Lecture Notes in Economics and Mathematical Systems, 417**, 391 + xv pp., Springer, Berlin (1994).
 109. Boyce, D. E., M. R. Lupa and Y. Zhang. Introducing 'Feedback' into Four-Step Travel

Forecasting Procedure vs. Equilibrium Solution of Combined Model, **Transportation Research Record**, **1443** (1994): 65-74.

110. Boyce, D. E., A. Tarko, S. Berka and Y. Zhang. Estimation of Link Travel Times with a Large-Scale Network Flow Model for a Dynamic Route Guidance System, **Proceedings, IVHS America Fourth Annual Meeting** (1994).
111. Boyce, D. E. and J.F. Ligas. The ADVANCE Project: Status and Recent Achievements, **Intelligent Vehicle and Highway Systems and Geographic Information Systems for Transportation, Proceedings of the 1994 Korea-USA Symposium on IVHS and GIS-T**, Seoul (1994): 1-11.
112. Berka, S., D. E. Boyce, J. Raj, B. Ran, A. Tarko and Y. Zhang. **A Large-Scale Route Choice Model with Realistic Link Delay Functions for Generating Highway Travel Times**, Technical Report to Illinois Department of Transportation, Schaumburg, x + 121 pp. (1994).
113. Zhang, Y., J. E. Hicks and D. E. Boyce. Trip Data Factoring for the ADVANCE Network Flow Model, **ADVANCE Working Paper Series, Number 43**, Urban Transportation Center, University of Illinois, Chicago, 16 pp. (1994).
114. Boyce, D. E. Martin J. Beckmann, Robert Herman Lifetime Achievement Award in Transportation Science: Award Citation, **Transportation Science**, **28** (1994): 177-179.
115. Tatineni, M. R., M. R. Lupa, D. B. Englund and D. E. Boyce. Transportation Policy Analysis Using a Combined Model of Travel Choice, **Transportation Research Record**, **1452** (1994): 10-17.
116. Boyce, D. E., B. Ran and L. J. LeBlanc. Solving an Instantaneous Dynamic User-Optimal Route Choice Model, **Transportation Science**, **29** (1995): 128-142.
117. Chen, H.-K., C.-Y. Wang and D. E. Boyce. New Solution Algorithms for Asymmetric Traffic Assignment Model, **Journal of the Chinese Institute of Engineers**, **18** (1995): 411-426.
118. Metaxatos, P., D. E. Boyce, M. Florian and I. Constantin. Introducing 'Feedback' Among the Origin-Destination, Mode and Route Choice Steps of the Urban Travel Forecasting Procedure in the EMME/2 System, **Transportation Planning Methods Applications, Fifth National Conference, Volume I**, (1995): 11-17.
119. Metaxatos, P., D. E. Boyce, M. Florian and I. Constantin. Implementing Combined Model of Origin-Destination and Route Choice in EMME/2 System, **Transportation Research Record**, **1493** (1995): 57-63.
120. Hribar, M., V. E. Taylor and D. E. Boyce, Choosing a Shortest Path Algorithm. Technical Report No. CSE-95-004, Department of Electrical and Computer Engineering, Northwestern University, Evanston, IL (1995).
121. Ran, B. and Boyce, D. E., A Link-Based Variational Inequality Formulation of Ideal Dynamic User-Optimal Route Choice Problem, **Transportation Research**, **4C** (1996): 1-12.
122. Ran, B., R. W. Hall and D. E. Boyce, Dynamic User-Optimal Departure Time/Route

- Choice: A Link-Based Variational Inequality Formulation, **Transportation Research, 30B**, (1996): 31-46.
123. Ran, B. and D. Boyce, **Modeling Dynamic Transportation Networks**, 2nd revised edition, Springer, Berlin (1996).
 124. Tatineni, M. R., D. E. Boyce and P. Mirchandani, **Solution Properties of Stochastic Route Choice Models**, Report to National Institute of Statistical Sciences, Research Triangle Park, NC (1996).
 125. Lee, D.-H., D. E. Boyce and B. N. Janson, **Formulation and Solution of a Dynamic User-Optimal Route Choice Model on a Large-Scale Network**, Report to National Institute of Statistical Sciences, Research Triangle Park, NC (1996).
 126. Berka, S. and D.E. Boyce, Generating Highway Travel Times with a Large-Scale, Asymmetric User Equilibrium Assignment Model, in **Advanced Methods in Transportation Analysis**, L. Bianco and P. Toth (eds.), Springer, Berlin (1996): 29-61.
 127. Ran B., H. K. Lo and D. E. Boyce. A Multi-Class Dynamic Traffic Assignment Model: Formulation and Computational Experiences, **Proceedings of 13th International Symposium on Transportation and Traffic Theory**, 195-216 (1996).
 128. Lee, D.-H., D. E. Boyce, B.N. Janson and S. Berka, Dynamic Route Choice Model of Large-Scale Traffic Network, **ASCE Journal of Transportation Engineering, 123** (1997): 276-282.
 129. Boyce, D. E. and M. S. Daskin, Urban Transportation, Chapter 7 in **Design and Operation of Civil and Environmental Engineering Systems**, C. ReVelle and A. McGarity (eds.), Wiley, New York (1997): 277-341.
 130. Ran, B., N. M. Roupail, A. Tarko and D. E. Boyce, Toward a Class of Link Travel Time Functions for Dynamic Assignment Models on Signalized Networks, **Transportation Research, 31B** (1997): 277-290.
 131. D. Boyce, P. Dowell and J. Ligas, Contractual and Management Challenges of the *ADVANCE* Project, Appendix A, **The ADVANCE Project: Insights and Achievements**, Document No. 8465.ADV.01, Illinois Department of Transportation, Schaumburg, IL (1997): 18 pp.
 132. Boyce, D. E. and Y. Zhang, Calibrating a Combined Model of Trip Distribution, Modal Split, and Traffic Assignment. **Transportation Research Record, 1607** (1997): 1-5.
 133. Tatineni, M., D. E. Boyce and P. Mirchandani, Comparisons of Deterministic and Stochastic Traffic Loading Models. **Transportation Research Record, 1607** (1997): 16-23.
 134. Hribar, M., V. E. Taylor and D. E. Boyce, Performance Study of Parallel Shortest Path Algorithms: Characteristics of Good Decompositions, **Proceedings of the ISUG 1997 Conference**, June (1997).
 135. Boyce, D., Long-Term Advances in the State of the Art of Travel Forecasting Methods, Chapter 4 in **Equilibrium and Advanced Transportation Modelling**, P. Marcotte and S. Nguyen (eds.), Kluwer, Dordrecht, The Netherlands (1998): 73-86.

136. Boyce, D., and Y. Zhang, Parameter Estimation for Combined Travel Choice Models, Chapter 10 in **Network Infrastructure and the Urban Environment**, L. Lundqvist, L.-G. Mattsson and T. J. Kim (eds.), Springer, Berlin (1998): 177-193.
137. Tatineni, M., H. Edwards and D. Boyce, Comparison of Disaggregate Simplicial Decomposition and Frank-Wolfe Algorithms for User-Optimal Route Choice, **Transportation Research Record 1617** (1998): 157-162.
138. Boyce, D. E., D.-H. Lee and B. N. Janson, Roadway Incident Analysis with a Dynamic User-Optimal Route Choice Model, **Knowledge and Networks in a Dynamic Economy**, M. J. Beckmann, B. Johansson, F. Snickars and R. Thord (eds.), Springer, Berlin (1998): 371-390.
139. Boyce, D. E., D.-H. Lee and B. N. Janson, Variational Inequality Model of Ideal Dynamic User-Optimal Route Choice, **Transportation Networks: Recent Methodological Advances**, M. G. H. Bell (ed.), Elsevier, Oxford (1998): 289-302.
140. Boyce, D. E., B. Ran and I. Y. Li, Considering Travelers' Risk-Taking Behavior in Dynamic Traffic Assignment, **Transportation Networks: Recent Methodological Advances**, M. G. H. Bell (ed.), Elsevier, Oxford (1998): 67-81.
141. Boyce, D., A Practitioner's Guide to Urban Travel Forecasting Models, **Proceedings, Metropolitan Conference on Public Transportation Research** (1998): 309-319.
142. Hribar, M., V. E. Taylor and D. E. Boyce. Reducing the Idle Time of Parallel Shortest Path Algorithms, Technical Report No. CPDC-TR-9803-016, Department of Electrical and Computer Engineering, Northwestern University, Evanston, IL (1998).
143. Boyce, D., and L.-G. Mattsson, Modeling Residential Location Choice in Relation to Housing Location and Road Tolls on Congested Urban Highway Networks, **Transportation Research, 33B** (1999): 581-591.
144. Bar-Gera, H., and D. Boyce, Route Flow Entropy Maximization in Origin-Based Traffic Assignment, **Transportation and Traffic Theory, Proceedings**, 14th International Symposium on Transportation and Traffic Theory, Jerusalem, A. Ceder (ed.), Elsevier, Oxford (1999): 397-415.
145. Hribar, M., V. E. Taylor and D. E. Boyce. Termination Detection for Parallel Shortest Path Algorithms, Technical Report, Department of Electrical and Computer Engineering, Northwestern University, Evanston, IL (1999).
146. Ran, B., and D. Boyce, Modelling Dynamic Transportation Networks with Variational Inequalities, **Behavioural and Network Impacts of Driver Information Systems**, R. Emmerink and P. Nijkamp (eds.), Ashgate, Aldershot, UK (1999): 53-67.
147. Mirchandani, P. B., K. L. Head and D. Boyce, Model-based Transportation Policy Analysis, **International Journal of Technology Management, 19** (2000): 507-531.
148. Boyce, D., Remarks in Response to the Presentation of the RSAI Founder's Medal, **Papers in Regional Science, 79** (2000): 352-354.
149. Boyce, D., H. Bar-Gera and others, **Final Report, Regional Travel Forecasting Model Validation**, National Institute of Statistical Sciences, July, 2000.

150. Boyce, D. and H. Bar-Gera, Network Equilibrium Models of Travel Choices with Multiple Classes, Chapter 6 in **Regional Science Perspectives in Economic Analysis**, M. L. Lahr and R. E. Miller (eds.), Elsevier, Amsterdam (2001): 85-98.
151. Kim, T. J., H. Ham and D. E. Boyce, Implementation of a Combined Trip Generation, Mode Choice, Flow Distribution and Route Choice Model for Interregional Commodity Flows, **Proceedings**, Ninth World Conference on Transport Research, 2001, Seoul, Korea.
152. Boyce, D.E., Lee, D.-H. and Ran, B. Analytical Models for the Dynamic Traffic Assignment Problem, **Networks and Spatial Economics**, **1** (2001): 377-390.
153. Chang, E. , A. Ziliaskopoulos, D. Boyce and S. T. Waller, Solution Algorithm for Combined Interregional Commodity Flow and Transportation Network Model with Link Capacity Constraints, **Transportation Research Record**, **1771** (2001):114-123.
154. Lee, D.-H., D. E. Boyce and B. N. Janson, Analysis of lane-blocking events with an analytical dynamic traffic assignment model. **ITS Journal**, **6** (2001): 351-374.
155. Boyce, D., K. Balasubramaniam and X. Tian, Implications of Marginal Cost Road Pricing for Urban Travel Choices and User Benefits, **Transportation and Network Analysis - Current Trends**, M. Gendreau and P. Marcotte (eds.), Kluwer, Dordrecht (2002): 37-48.
156. Kim, T. J., H. Ham and D. E. Boyce, Economic Impacts of Transportation Network Changes: Implementation of a Combined Transportation Network and Input-Output Model, **Papers in Regional Science**, **81** (2002): 223-246.
157. Bar-Gera, H., and D. Boyce, Origin-Based Network Assignment, **Transportation Planning**, M. Patriksson and M. Labbé (eds.), Kluwer, Dordrecht (2002): 1-17.
158. Boyce, D., Is the Sequential Travel Forecasting Procedure Counterproductive? **ASCE Journal of Urban Planning and Development**, **128** (2002): 169-183.
159. Boyce, D., A Memoir of the ADVANCE Project, **ITS Journal**, **7** (2002): 105-130.
160. Li, Y., A. Ziliaskopoulos and D. Boyce, Combined Model for Time-Dependent Trip Distribution and Traffic Assignment, **Transportation Research Record**, **1783** (2002): 98-110.
161. Boyce, D., Combined Model of Interregional Commodity Flows on a Transportation Network, **Trade, Networks and Hierarchies**, G. J. D. Hewings, M. Sonis and D. Boyce, (eds.), Springer, Berlin, (2002): 29-40.
162. Hewings, G. J. D., M. Sonis and D. Boyce (eds.), **Trade, Networks and Hierarchies, Modeling Regional and Interregional Economies**, Springer, Berlin (2002).
163. Bar-Gera, H., and D. Boyce, Origin-Based Algorithms for Combined Travel Forecasting Models, **Transportation Research**, **37B** (2003): 403-422.
164. Boyce, D. and H. Bar-Gera, Validation of Multiclass Urban Travel Forecasting Models Combining Origin-Destination, Mode, and Route Choices, **Journal of Regional Science**, **43** (2003): 517-540.

165. Boyce, D., A Short History of the Field of Regional Science, **Papers in Regional Science**, **83** (2004): 31-57; reprinted in **Fifty Years of Regional Science**, R. J. G. M. Florax and D. A. Plane (eds.), Springer, Berlin, (2004).
166. Boyce, D., B. Ralevic-Dekic and H. Bar-Gera, Convergence of Traffic Assignments: How Much Is Enough? **ASCE Journal of Transportation Engineering**, **130** (2004): 49-55.
167. Boyce, D. and H. Bar-Gera, Multiclass Combined Models for Urban Travel Forecasting, **Network and Spatial Economics**, **4** (2004): 115-124.
168. Bar-Gera, H., and D. Boyce, Combined Travel Forecasting Models: Formulations and Algorithms. In **Urban and Regional Transportation Modeling**, D.-H. Lee (ed.), Edward Elgar, Cheltenham, UK (2004): 43-57.
169. Boyce, D., and Q. Xiong, User-Optimal and System-Optimal Route Choices for a Large Road Network, **Review of Network Economics**, **3** (2004): 371-380.
http://www.rnejournal.com/abstract_boyce_xiong_dec04.html
170. Boyce, D., Transportation Systems, Section 6.40.2, *Transportation Planning and Engineering*, T. J. Kim, ed., **Encyclopedia of Life Support Systems**, EOLSS Publishers, Oxford, UK, 2005. <http://www.eolss.net>
171. Boyce, D., Urban Travel, Section 6.40.2.8, *Transportation Planning and Engineering*, T. J. Kim, ed., **Encyclopedia of Life Support Systems**, EOLSS Publishers, Oxford, UK, 2005.
<http://www.eolss.net>
172. Ham, H., T. J. Kim and D. Boyce, Implementation and Estimation of a Combined Model of Interregional, Multimodal Commodity Shipments and Transportation Network Flows, **Transportation Research**, **39B**, (2005): 65-79.
173. Boyce, D. E., H. S. Mahmassani and A. Nagurney, A Retrospective on Beckmann, McGuire and Winsten's *Studies in the Economics of Transportation*, **Papers in Regional Science**, **84** (2005): 85-103.
174. Boyce D. E., and H. C. W. L Williams, Urban Travel Forecasting in the USA and UK. In **Methods and Models in Transport and Telecommunications: Cross Atlantic Perspectives**, A. Reggiani and L. Schintler (eds), Springer, Berlin (2005): 25-44.
175. Bar-Gera, H. and D. Boyce, User-Equilibrium Route Set Analysis of a Large Road Network. In **Transportation and Traffic Theory: Flow, Dynamics and Human Interaction**, H. S. Mahmassani (ed), Elsevier, Oxford (2005): 673-692.
176. Ham, H., T. J. Kim and D. Boyce, Assessment of Economic Impacts from Unexpected Events with an Interregional Commodity Flow and Multimodal Transportation Network Model, **Transportation Research**, **39A** (2005): 849-860.

177. Nagurney, A., and D. Boyce. Preface to “On a Paradox of Traffic Planning,” **Transportation Science**, **39** (2005): 443-445.
178. Bar-Gera, H. and D. Boyce. Solving a Nonconvex Combined Travel Forecasting Model by the Method of Successive Averages with Constant Step Sizes, **Transportation Research**, **40B** (2006): 351-367.
179. Boyce, D. and A. Nagurney. In Memoriam: C. B. McGuire and C. B. Winsten, **Transportation Science**, **40** (2006): 1-2.
180. Siegel, J. D., J. De Cea, J. E. Fernández, E. E. Rodríguez and D. Boyce, Comparisons of Urban Travel Forecasts Prepared with the Sequential Procedure and a Combined Model, **Networks and Spatial Economics**, **6** (2006): 135-148.
181. Boyce, D., C. Xiong, Y. Nie and W. Shen, Forecasting Travel for Very Large Cities: Challenges and Opportunities for China, **Urban Transport of China**, **4** (6) (2006): 5-14 (in Chinese translation).
182. Boyce, D. and C. Xiong, Forecasting Travel for Very Large Cities: Challenges and Opportunities for China, **Transportmetrica**, **3** (2007): 1-19.
183. Boyce, D. Forecasting Travel on Congested Urban Transportation Networks: Review and Prospects for Network Equilibrium Models, **Networks and Spatial Economics**, **7** (2007): 99-128.
184. Boyce, D. Future Research on Urban Transportation Network Modeling, **Regional Science and Urban Economics**, **37** (2007): 472-481.
185. Boyce, D., C. O’Neill and W. Scherr, New Computational Results on Solving the Sequential Procedure with Feedback, **Proceedings, 11th TRB National Transportation Planning Applications Conference**, Transportation Research Board (2007): 1-10, <http://www.trb-appcon.org/program.html#s2>.
186. Bar-Gera, H. and D. Boyce, Some Amazing Properties of Road Traffic Network Equilibria, In **Network Science, Nonlinear Science and Infrastructure Systems**, Friesz, T. L. (ed), Springer, Berlin (2007): 305-335.
187. Boyce, D. An Account of a Road Network Design Method: Expressway Spacing, System Configuration and Economic Evaluation, in **Infrastrukturprobleme bei Bevölkerungsrückgang (Infrastructure Problems under Population Decline)**, X. Feng (ed.), Schriften zur öffentlichen Verwaltung und öffentlichen Wirtschaft, Bd. 202, Berliner Wissenschafts-Verlag, Berlin, (2007) forthcoming.