



EXHIBIT A

Thomas J. Adler, President Resource Systems Group

Biographical Summary

Dr. Adler serves as a consultant and technical expert on market research methods and applications of discrete choice modeling. He is a co-founder of RSG and has over 30 years of related consulting experience working on nationally and internationally-prominent projects in more than 30 U.S. states, five Canadian provinces and 20 other countries. He has published more than 50 papers on travel demand modeling and, for ten years, was a professor and director of the graduate program in transportation at Dartmouth College.



Education

- Ph.D. Transportation and Management, Massachusetts Institute of Technology, MA (1976)
- S.M. Transportation and Management, Massachusetts Institute of Technology, MA (1975)
- B.S. Civil & Environmental Engineering, Cornell University, NY (1972)

Experience

1986 - present President, Resource Systems Group, Inc.; Principal-in-Charge for transportation projects.
 1984 - 1986 Research Associate Professor of Engineering, Thayer School of Engineering, Dartmouth College. Coordinator of Master of Science Program at Resource Policy Center.
 1982 - 1984 Director, Resource Policy Center, and Associate Professor of Engineering, Dartmouth College; Adjunct Associate Professor of Policy Studies, Dartmouth College.
 1976 - 1982 Assistant Professor of Engineering, Thayer School of Engineering, Dartmouth College.
 1975 - 1986 Independent transportation consultant for state, regional and local agencies.
 1975 - 1976 Research Fellow, Joint Center for Urban Studies of Harvard and M.I.T.
 1972 - 1976 Research/teaching, Transportation Systems Division, M.I.T.

Selected Responsibilities and Relevant Engagements

Research

Principal Investigator and researcher for numerous national research projects, including:

- *Interactions Between Energy Supply and Transportation-Related Energy Use (US DOT)*
- *ACRP 3-23: Integrating Aviation and Passenger Rail Planning*
- *ACRP 3-19: Passenger Value of Time, Benefit-Cost Analysis, and Airport Capital Investment Decisions*
- *ACRP 3-10: Innovative Approaches to Addressing Aviation Capacity Issues in Coastal Mega-Regions*
- *ACRP 10-02: Planning Guide for Offsite Terminals*
- *ACRP 10-06: A Handbook to Assess Impacts of Constrained Airport Parking*
- *TCRP H-37: Characteristics of Premium Transit Services that Affect Choice of Mode*
- *TCRP H-31: Understanding How Individuals Make Travel and Location Decisions: Implications for Public Transportation*
- *NCHRP 08-57: Improved Framework and Tools for Highway Pricing*
- *SHRP 2 C04: Improving Our Understanding of How Highway Congestion and Pricing Affect Travel Demand*

Travel Demand Modeling

Various projects conducted for over 150 clients including: U. S. DOT (FHWA, FTA, FRA), New York MTA, Chicago Regional Transportation Authority, New Jersey Transit, the Tampa Bay region, New York Thruway Authority, California Private Transportation Corporation, Massachusetts Turnpike Authority, Florida DOT, Texas DOT, Ohio DOT, Wisconsin DOT; Georgia DOT and Illinois DOT, CP Rail Canada, Ontario Ministry of Transportation, Government of Singapore, Hong Kong Transport Dept, Trenes de Buenos Aires.

- Directed development of travel demand models for major transportation projects including air transport, toll roads, high speed passenger rail systems, urban transit systems, highway projects and ride-sharing programs, using advanced self-administered computer-based stated preference survey techniques and nested logit model forms. Developed implementation procedures for travel demand forecasting systems.

Market Research

Various projects conducted for Fortune 500 clients including: American Airlines, Motorola, Ford, John Deere and Time Warner.

- Conducted quantitative market research consisting of large-scale stated preference/conjoint surveys of markets and development of market simulation models for major products and services. Provided general market strategy consulting services.

Transportation Planning

Over 200 projects for diverse private and public sector clients

- Directed studies providing transportation planning services to regions throughout the U.S. and traffic impact analyses for major retail, commercial, industrial, residential, recreational and institutional development projects throughout the Northeast.

Selected Publications

- "A Joint Model for Vehicle Type and Fuel Type," with S. Hess, M. Fowler and A. Bahreinian, presented at the World Conference on Transport Research, Lisbon, Portugal, July 2010.
- "Tool for Estimating Managed Lane Traffic and Variable Toll Rates," with J. Klodzinski and W. Olsen, presented at the Innovations in Pricing of Transportation Systems Conference, May 2010.
- "Improving Quality of Demand Forecasts Through Cross-Nested Logit: Stated-Choice Case Study of Airport, Airline, and Access Mode Choice," with S. Hess, T. Ryley and S. Davison, presented at the Annual Meeting of the Transportation Research Board, January 2010.
- "Experimental Designs for the Real World," with S. Hess, presented at the Annual Meeting of the Transportation Research Board, January 2010.
- "Application for Post-Processing of Travel Demand Forecasts for Estimating Express-Lane Traffic and Variable Toll Rates," with J. Klodzinski and W. Olsen, presented at the Annual Meeting of the Transportation Research Board, January 2010.
- "The Use of Cross-nested Logit Models for Multi-Dimensional Choice Processes: The Case of the Demand for Alternative Fuel Vehicles," with S. Hess, M. Fowler and A. Bahreinian, *Proceedings of the 2009 European Transport Conference*, Leiden, Netherlands, 2009.
- "An Analysis of Trends in Air Travel Behaviour Using Four Related SP Datasets Collected Between 2000 and 2005," with S. Hess, *Proceedings of the 2009 European Transport Conference*, Leiden, Netherlands, 2009.
- "Optimizing Product Portfolios Using Discrete Choice Modeling and TURF," with C. Smith and J. Dumont, presented at the International Choice Modeling Conference, Harrogate, England, March 2009.
- "Evaluation of Time-of-Day Fare Changes for Washington State Ferries," with Y. Dehghani and C. Gehring, *Proceedings of the 21th TRB Application of Transportation Planning Methods Conference*, Houston, Texas, May 2009.

- “A Multimodal Approach to Aviation Capacity Planning in the Coastal Mega-regions,” with M. Coogan, presented at the Annual Meeting of the Transportation Research Board, January 2009.
- “Modelling Airport and Airline Choice Behaviour with the Use of Stated Preference Survey Data,” with S. Hess and J. Polak, *Transportation Research Part E*, 43, pp. 221-233, 2007.
- “Exploring Market Support for New Products and Services for Transit and Walking: A New Market Research Approach,” with K. Karash and M. Coogan, *Transportation Research Record 2034*, Washington DC 2007.
- “Design of Florida’s Turnpike’s State Integrated Land-Use Travel Demand Model,” with Y. Dehghani and M. Doherty, *Proceedings of the 11th TRB Application of Transportation Planning Methods Conference*, Daytona, 2007.
- “Health Promoting Community Design and Culture Change: The Role of Personal Values, Urban Form, and Auto Availability in the Analysis of Walking for Transportation,” with M. Coogan, K. Karash and J. Sallis, *Journal of Health Promotion*, Vol. 21, Number 4, 2007.
- “Exploring Market Support for New Products and Services for Transit and Walking: New Market Research Approach,” with K. Karash and M. Coogan, presented at the 86th Annual Meeting of the Transportation Research Board, Washington D. C., 2007.
- “Florida’s Turnpike State Model: Development and Validation of an Integrated Land Use and Travel Forecasting Model,” with Y. Dehghani, M. Doherty and W. Olsen, presented at the 86th Annual Meeting of the Transportation Research Board, Washington D. C., 2007.
- “Modeling Demographic and Unobserved Heterogeneity in Air Passengers’ Sensitivity to Service Attributes in Itinerary Choice,” with Chandra Bhat (University of Texas – Austin) and Valdemar Warburg (Technical University of Denmark), *Transportation Research Record 1951*, Transportation Research Board, Washington D. C., 2006.
- “Risk Averseness Regarding Short Connections in Airline Itinerary Choice,” with George Theis, John-Paul Clarke and Moshe Ben-Akiva (MIT), *Transportation Research Record 1951*, Transportation Research Board, Washington D. C., 2006.
- “Changing Travel Behavior in Environmental Strategies,” with M. Coogan and K. Karash, *Conference Proceedings, Volume 1, 2nd Conference on Environment and Transport*, INRETS, Reims, France, June 2006.
- “Computing Willingness-to-Pay Indicators for Air-Travelers from SP Survey Data,” with S. Hess and J. Polak, presented at Air Transport Research Society, 2005 World Conference, Rio de Janeiro, July 2005.
- “Modeling Service Trade-offs in Air Itinerary Choices,” with C. Falzarano and G. Spitz, *Transportation Research Record 1915*, Transportation Research Board, Washington D. C., 2005.
- “A Multi-Period Toll Mode Choice Model for Florida’s Turnpike Enterprise,” with Y. Dehghani, M. Doherty, J. Klodzinski and W. Olsen, *Proceedings of the 10th TRB Transportation Planning Applications Conference*, Portland, OR, April 2005.
- “Does Brand Play A Significant Role In Consumer Selection Of Handsets?” with N. Whipple and L. Rimmer, *Excellence in International Research*, ESOMAR, Amsterdam, ©2005.
- “A Facility-Level Model of Peak Spreading,” with W. Olsen and Y. Dehghani, presented at the 83rd Annual Meeting of the Transportation Research Board, Washington D. C., 2004.
- “Using Web-Based Longitudinal Panel to Measure Customer Satisfaction,” with G. Spitz, J. Pepper, V. Chakravarti and F. Niles, *Transportation Research Record 1887*, Transportation Research Board, Washington D. C., 2004.
- “Experimental Assessment of Incentives for Alternative Fuel Vehicles,” with L. Wargelin, L. Kostyniuk, C. Kavalec and G. Occhiuzzo, presented at the 83rd Annual Meeting of the Transportation Research Board, Washington D. C., 2004.
- “Incentives for Alternate Fuel Vehicles: A Large-Scale Stated Preference Experiment,” with L. Wargelin, L. Kostyniuk, C. Kavalec and G. Occhiuzzo, presented at the 10th International Conference on Travel Behaviour Research, Lucerne, August 2003.
- “Reducing the Effects of Item Nonresponse in Transport Surveys,” in *Transport Survey Quality and Innovation*, P. Stopher and P. Jones eds., Pergamon Press, Oxford, © 2003.

- “Mixed Mode Surveys,” with J. Morris, in *Transport Survey Quality and Innovation*, P. Stopher and P. Jones eds., Pergamon Press, Oxford, © 2003.
- “Estimating the Effects of a Commuter Fringe Benefit Program,” with S. Falzarano, R. Bergwall and S. Donovan, *Proceedings of the 9th TRB Application of Transportation Planning Methods Conference*, Baton Rouge, 2003.
- “Development of a New Toll Mode Choice Modeling System for Florida’s Turnpike Enterprise,” with Y. Dehghani, M. Doherty and R. Fox, *Transportation Research Record 1858*, Transportation Research Board, Washington D. C., 2003.
- “Customers’ Perspectives on Using Multilevel Coaches to Increase Rail System Capacity,” with J. Pepper and G. Spitz, *Transportation Research Record 1838*, Transportation Research Board, Washington D. C., 2003.
- “Use of an Internet-based Household Travel Diary Survey Instrument,” with L. Rimmer and D. Carpenter, *Transportation Research Record 1804*, Transportation Research Board, Washington D. C., 2002.
- Quantifying the Value of Transit Station and Access Improvements for Chicago’s Rapid Transit System, with S. Falzarano and R. Hazlett, presented at the Transportation Research Board’s 80th Annual Meeting, January 2001.
- “Evaluating the Effects of Transit Station and Access Improvements,” with R. Hazlett and C. Falzarano, *Proceedings of the 15th Annual Transport Chicago Conference*, Chicago, IL, 2000.
- “Use of Respondent Interactive Geocoding in the Baltimore Mode Choice Survey,” with L. Rimmer and G. Bandy, *Transportation Research Record 1719*, Transportation Research Board, Washington D. C., 2000.
- “Analysis of Congestion Pricing Concepts for New York’s Tappan Zee Bridge,” with C. Szeto, W. Ristau and C. Falzarano, presented at the 79th Annual Meeting of the Transportation Research Board, Washington D. C., 2000.
- “Development of a Computer-Based Intelligent Travel Survey System,” presented at the Travel Model Improvement IV conference, Philadelphia, 1999.
- “Traveler Reactions to Congestion Pricing Concepts for New York’s Tappan Zee Bridge,” with W. Ristau and C. Falzarano, *Transportation Research Record 1659*, Transportation Research Board, Washington D. C., 1999.
- “Traffic-Related Issues in Project Permitting,” presented at Vermont Bar Association Environmental Law Seminar, May 1996.
- “Multimodal Statewide Travel Demand Modeling with a GIS,” with S. Lawe and N. Marshall, presented at the 75th Annual Meeting of the Transportation Research Board, Washington D. C., 1996.
- “Sensitivity of the Hudson-Bergen Light Rail Transit System Forecast,” with B. Johnson, presented at the 75th Annual Meeting of the Transportation Research Board, Washington D. C., 1996.
- “Computer-Based Travel Data Collection for Statewide Transportation Planning,” with M. Anderson, in *Proceedings of the Institute of Transportation Engineers Annual Meeting*, ITE, Washington D. C., 1995.
- “A Comparison of Alternative Survey Approaches for Mode Choice Model Estimation,” with L. Saben and R. Pratt, *Proceedings of the TRB Fifth National Transportation Planning Methods Applications Conference*, Seattle, 1995.
- “A Quick Response Screening Model for Planning Statewide Origin Destination Surveys,” with S. Lawe, N. Brand and H. Wilson, *Proceedings of the TRB Fifth National Transportation Planning Methods Applications Conference*, Seattle, 1995.
- “Ridership Estimation for a Suburban PRT System,” with C. Szeto, R. North, L. Rimmer and R. Shimizu, *Proceedings of the TRB Fourth National Transportation Planning Applications Conference*, Daytona, 1993.
- “Household Survey for the Tampa Bay Regional Transportation Planning Model,” with D. Bredahl, D. Lamb and L. Rimmer, *Proceedings of the TRB Fourth National Transportation Planning Applications Conference*, Daytona, 1993.
- “Estimation and Testing of Alternative Approaches to Model Intercity Rail Ridership,” with F. S. Koppelman, C. Bhatt and B. Williams, *Proceedings of the ASCE International Conference on High Speed Ground Transportation Systems*, Orlando, 1992.

- “Traffic Effects of Creating a City Center in a Suburban Community,” with C. Leiner, in *Proceedings of the Institute of Transportation Engineers Annual Meeting*, ITE, Washington D. C., 1991.
- “Hillsborough County, Florida Rail Transit Study Mode Choice Model Estimation,” with Y. Dehghani, in *Proceedings of the Second Conference on Applications of Transportation Planning Methods*, National Academy of Science, 1989.
- “Modeling the Effects of Design and Operating Policies on Toll Road Volumes,” with R. C. Schaevitz, in *Paying the Toll: National Perspectives on Toll Road Development*, University of California, Irvine, 1989.
- *An Analysis of Wood Transport Systems: Costs and External Impacts*, USDA Forest Service Report 23-729, March 1985.
- “Review of Recent Advances in Travel Demand Analysis,” *Transportation Science*, V. 18, N. 3, August 1984.
- *Low Density Transit Planning Package*, with S. Tahmosh and M. Burton, turnkey PASCAL software system, distributed by U.S. DOT UMTA, February 1984.
- *Paratransit Planning System PARAS Cost Model Description*, with H. Hazard, DSD #495, U.S. DOT Report UMTA-NH-06-0002-1, January 1983.
- *Technical Review of the ORNL Highway Gasoline Demand Model*, report DE-AC01-81EI-11976, U.S. Dept of Energy, Energy Information Administration, February 1982.
- *Transportation of U.S. Coal Through Eastern Ports*, with F.W. Lipfert and others, Report prepared for U.S. DOE under contract DE-AC01-81FE-20036, September 1982.
- *Guide to Forecasting Travel Demand with Direct Utility Assessment*, with G.A. Kocur and others, U.S. DOT, Urban Mass Transit Administration, Report UMTA-NH-11-0001-82-1, September 1982.
- *Analysis of Transportation Energy Conservation Policies Using the ENTRANS Model*, with J.W. Ison, Solar Energy Research Institute report, January 1981.
- “Analysis of Long-Term Transportation Energy Use,” with J.W. Ison, *Transportation Research Record #801*, 1981.
- *Interactions Between Energy Supply and Transportation-Related Energy Use, Vol. II Technical Appendices*, with J. Ison and J. Geinzer, final report submitted to U.S. DOT under Contract DOT/RC/82003, DSD #183, 1980.
- *Interactions Between Energy Supply and Transportation-Related Energy Use, Vol. I*, with J. Ison and J. Geinzer, final report submitted to U.S. DOT under Contract DOT/RC/82003, DSD #182, January 1980.
- “Forecasting Experiments for Rural Transit Policymakers,” with Y. Stephanedes, *Transportation Research Record #718*, Transportation Research Board, Washington, D.C., 1979.
- “Disaggregate Models for Decisions Other Than Travel Mode Choice,” in *New Horizons in Travel-Behavior Research*, W. Brog and P. Stopher, eds., 1980.
- “ENTRANS: A Model of the Interactions Between Energy Supply and Transportation Energy Use,” in *Proceedings of the Summer Computer Simulation Conference*, 1979.
- *Techniques for Analyzing the Performance of Rural Transit Systems, Vols. I & II*, with S.R. Stearns and Y.J. Stephanedes, prepared for U.S. Dept of Transportation, Research and Special Project Administration under Contract DOT/OS/80006, September 1979.
- “Directions for Improvements in Urban Travel Forecasting Procedures”, with M. E. Ben-Akiva and S. Lerman; in *Conference Summary and White Papers*, U.S. Department of Transportation, 1979.
- *The Direct and Indirect Costs of Transporting Wood Chips to Supply a Wood-Fired Power Plant*, with M. Blakey and T. Meyer; report submitted to the U.S. Dept of Energy Solar/Biomass Division under Contract EG-77-C-0204487, DSD #103, February 1978.
- “A Theoretical and Empirical Model of Trip Chaining Behavior”, with M.E. Ben-Akiva, *Transportation Research, Series B, Methodology*, 13B, pp. 243 - 257, 1979.
- “Disaggregate Models of Trip Distribution”, with S.R. Lerman, in *Behavioral Travel-Demand Models*. Lexington Books, D.C. Heath and Co., Lexington, MA, 1976.
- “Joint-Choice Model for Frequency, Destination, and Travel Mode for Shopping Trips”, with M.E. Ben-Akiva. *Transportation Research Record #369*, Transportation Research Board, Washington, D.C., 1976.

- *Modeling Non Work Travel Patterns*. Center for Transportation Studies (CTS) Report, M.I.T., Cambridge, MA, 1976.
- *Experiments to Clarify Priorities in Urban Travel Forecasting Research and Development: Summary Report*, with M.E. Ben-Akiva and J. Jacobson. Prepared for U.S. DOT contract with M.I.T., DOT-OS-30120, 1976.

Courses Taught

Dartmouth College

- Transportation Systems Analysis
- Transportation Engineering
- Travel Demand Forecasting
- Models in the Policy Process
- Probability and Statistics
- Modeling Consumer Choices
- Resource Models
- Introduction to Computer Science
- Engineering Economics and Optimization
- Optimization Applied to Environmental Engineering
- Modeling Complex Systems

Massachusetts Institute of Technology

- Travel Demand Forecasting (Course for practicing professionals)

Resource Systems Group

- Network Models for Transportation Planning (Course for practicing professionals)
- Introduction to Conjoint Analysis (U. S. DOT Volpe Center Workshop for ITS Program Managers)

Memberships/Affiliations

- Member, Transportation Research Board Committee on Traveler Behavior and Values
- Member, Transportation Research Board Committee on Travel Demand Forecasting
- Member, Transportation Research Board Special Committee on Travel Demand Forecasting Resources
- Co-founder, New England Transportation Institute
- Advisory Board for University of Minnesota's Center of Excellence in Rural Transportation Safety and
- University of Vermont's Transportation Research Center
- Editorial Board for *Journal of Choice Modeling* and *American Journal of Health Promotion*
- Marketing Research Association Expert Level Professional Researcher Certification
- Past Chair, Travel Demand Modeling Committee, Institute of Transportation Engineers (ITE)

Awards and Honorary Societies

- Chi Epsilon, Civil Engineering Honorary Society
- Sigma Xi, Scientific Honorary Society
- Catherine Wurster Fellow, Joint Center for Urban Studies of Harvard/M.I.T.