



TED HELVOIGT

Vice President

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PROFILE

Dr. Ted Helvoigt has almost 20 years of professional experience in economic and statistical analysis and modeling. He has applied these methods in a wide range of projects dealing with evaluation of energy efficiency programs, natural resource economics and policy, benefit-cost analysis and regional economic and demographic forecasting. Dr. Helvoigt is a former member of the faculty of the Lundquist College of Business at the University of Oregon, where he taught applied regression analysis and other statistical methods. Dr. Helvoigt has delivered technical findings to a variety of governing bodies, including the Alaska Senate and House Finance Committees, the Puget Sound Regional Transit Investment District (RTID), the Seattle Monorail Commission, The Oregon Board of Forestry and the Columbia River Gorge Commission.

EDUCATION

Ph.D., Operations Research, Management Science, Oregon State University, College of Forestry

M.S., Resource Economics, University of Montana

B.A., Business Administration, Ashland University (Ohio)

SELECTED RECENT INDUSTRY EXPERIENCE

- **Idaho Low-income Energy Efficiency Evaluation** – For Idaho Power Company, developed statistical billing regression models to estimate energy savings and realization rates for two low income energy efficiency programs.
- **Economic Review of Hydroelectric Power Acquisition** – For the Montana Public Services Commission (MPSC), reviewed the economic analysis conducted by NorthWestern Energy (NWE) in support of its application to acquire 11 hydroelectric facilities representing 633 MWS of generation from PPL Montana, LLC.
- **Analysis of Highly Energy Efficient Homes** – For the Northwest Energy Efficiency Alliance (NEEA), developing current and future baseline adoption forecasts for a new type of highly energy-efficient single-family home.
- **Strategic Energy Management in Hospitals**– For NEEA, conducting a market study of strategic energy management (SEM) Practices in the Northwest hospitals and healthcare sector.
- **State of Ohio Independent Evaluator** - Served as a project manager of a comprehensive evaluation of the state of Ohio’s residential, commercial and industrial energy efficiency programs. As the Independent Evaluator reporting to the Public Utilities Commission of Ohio (PUCO), Evergreen worked with representatives of the four investor-owned utilities and their respective energy efficiency evaluators to coordinate and oversee the evaluation of energy efficiency programs of the four utilities.
- **Large Industrial Sector Custom Impact Evaluation** - For NEEA, conducted impact analysis of the energy efficiency actions taken by NEEA at 19 large food product and pulp & paper

manufacturing facilities in the Northwest. Results of the analyses were used by NEEA to assess the impact of their programs targeting large Northwest manufacturers.

- **Commercial Sector Impact Evaluation** - For NEEA, conducted impact analysis of the energy saving associated with the BetterBricks project for the commercial office sector in Portland, Oregon.
- **Nevada Energy-Use Analysis & Targeting of Low-Income Households** - For Nevada Energy, conducted analysis of the differences in household composition, housing characteristics, energy use, energy burden and payment default rates for low-income and other residential customers. In addition, developed statistical models to predict likelihood that a residential customer is low-income and the likelihood that the customer would participate in an energy assistance program based on monthly energy use, physical location and other characteristics already collected and maintained by the utility.
- **California Utilities Low-Income Energy Efficiency Program Evaluation** - Conducted statistical analysis for the annual process and impact evaluation of weatherization and energy efficiency programs for low-income residents. Alternative analyses were conducted on all program participants, a subset of participants that received phone verification and a subset of participants that received on-site verification.
- **California Small Commercial Lighting Impact Evaluation** - Lead analyst in the development of a nested logic regression model to estimate gross and net energy savings associated with a lighting program for small commercial customers in California. It is our understanding that this project represents the first time that nested logic methods have been applied in the evaluation of an energy efficiency program.
- **Alaska Wage Differential Study** - Lead statistician for the Alaska Wage Differential Study. Project included statewide surveys of purchasing behavior of households and prices for goods and services from retail and other establishments. Results of study were used to adjust wages of state employees working in communities across Alaska.
- **Puget Sound Regional Forecast** - Developed long-term economic and demographic forecasts for the Puget Sound Region. These forecasts are used by area governments for long-term planning purposes.
- **Commercial & Industrial Energy Efficiency Evaluation for Consumers Energy** - Lead statistical analysis for the impact evaluation of the commercial/industrial energy efficiency program for Consumers Energy. Core responsibilities include sampling design and statistical modeling and analysis.
- **PG&E Retail and Hospitality Process Evaluation** - Lead analyst for research on the retail and hospitality sectors in PG&E's service territory. For this project, we developed an on-line "con-joint" survey for program participants. The analysis of the information gathered from this survey will be used to statistically estimate the relative importance that participants place on each attribute of the program.

- **California Home Energy Efficiency Survey (HEES) Program** - Lead statistician for 2008 HEES evaluation. Developed two-stage model to estimate energy savings and the proportion of savings attribution to the HEES program.

PEER-REVIEWED PUBLICATIONS

- Plantinga, A., Helvoigt, T., & K. Walker, 2013, "Critical Habitat for Threatened and Endangered Species: How Should the Economic Costs Be Evaluated?", Submitted to *Journal of Environmental Management*, 2013.
- Helvoigt, T. & Adams, D., 2009, "A Stochastic Frontier Analysis of Technical Progress, Efficiency Change, and Productivity Growth in the Pacific Northwest Sawmill Industry", *Journal of Forest Policy and Economics*.
- Helvoigt, T. & Adams, D., 2008, "Data Envelopment Analysis of Technical Efficiency and Productivity Growth in the U.S. Pacific Northwest Sawmill Industry", *Canadian Journal of Forest Research*.
- Helvoigt, T. & Montgomery, C.A., 2006, "Changes in Attitudes about Importance of and Willingness to Pay for Salmon Recovery in Oregon", *Journal of Environmental Management*.
- Helvoigt, T. & Grosskopf, S., 2005, "Productivity Growth, Technical Efficiency, and Returns to Scale in the Washington State Sawmill Industry", *International Journal of Information Technology and Decision Making*.
- Helvoigt, T., Adams, D. & Ayre, A.L., 2003, "Employment Transitions in Oregon's Wood Products Sector During the 1990s", *Journal of Forestry*.