### **CURRICULUM VITA**

### GARY L. HUNT

School of Economics University of Maine, Orono, Maine 04469 gary.hunt@ maine.edu

#### Academic Background

B.A., Urban Studies, Wright State University, 1973M.C.R.P., City and Regional Planning, The Ohio State University, 1976M.A., Economics, University of Colorado at Boulder, 1983Ph.D., Economics, University of Colorado at Boulder, 1984

#### Past Areas of Research

Energy, Migration, Immigration, Regional Economic Growth

#### Work Experience

Professor, School of Economics, University of Maine, Orono, ME, 2007Professor, Interim Chair, and Interim Graduate Coordinator, Department of Economics, University of Maine, Orono, ME, 2006-07
Professor, Department of Economics, University of Maine, Orono, ME, 1998-2006
Libra Professor, Department of Economics, University of Maine, Orono, ME, 1993-1997
Associate Professor, Department of Economics, East Carolina University, Greenville, NC, 1990-92
Research Associate, Center for Economic Analysis, University of Colorado-Boulder, 1985-90
Economist, Federal Reserve Bank of Chicago, 1984-85
Project Director and Analyst, Abt Associates, Inc. (Denver, Colorado office), 1979-81
Project Manager /Analyst, Oblinger-McCaleb, Architects, Engineers, Planners, Denver, CO, 1978-79
Economic Development Analyst, City of Kansas City, Missouri, 1976-78

#### **Other Professional Appointments**

Cooperating Faculty, School of Policy and International Affairs, University of Maine, 2010-Cooperating Faculty, AEWC Advanced Structures and Composites Center, University of Maine, 2010-Editorial Advisory Board, *The Journal of Choice Modelling*, 2007-2015 Associate, Centre Interuniversitaire sur le Risque, les Politiques Économiques et l'Emploi, L'Université du Québec à Montréal, 2004-2011 Editorial Board, *International Regional Science Review*, University of Illinois, 1995-2010 Associate Editor, *Journal of Regional Science*, University of California at Irvine, 1994-2010

#### Research interests of the past ten years (past four years in bold typeface)

#### Energy: Renewables

"Market for biofuel derivatives: The case of furfural," with Rubin, J.R. and Dalvand, K. under review at Biomass and Bioenergy

"The cost of producing drop-in biodiesel from woody biomass residues in the Northeast United States," with Klein, S.J.W. and Langton, R. (in process)

"Social costs of wind, fossil, and nuclear power"

#### Regional economics: impact studies

"An Analysis of the Economic Impacts of Big-Box Stores on Maine's Retail Sector," with E. Freedman, T. Gabe, and J. McConnon, *Journal of Regional Analysis and Policy*, vol. 46, no. 2 (2017): 138-153.

#### Regional economics: migration

"The creative economy: Cultural and technology sector complementarity"

#### Regional economics: economic growth

"Economic growth in the American states"

#### **Selected Professional Presentations**

# "Future Electricity Supply: Some Key Factors," presented at Metso User's Group Meeting, Newry, Maine, July 15, 2013

"Are Subsidies Worth It?," E2TECH Wind Power Forum, University of Maine and University of Southern Maine, October, 26, 2011

"Maine's Offshore Wind Vision," Institut National de Recherche Agricole (INRA), Dijon, France, September 6, 2011

"The Creative Economy: Cultural and Technology Sector Complementarity," INRA, Dijon, France, September 5, 2011

"Local Amenities and Skilled Labor Migration in the U.S.: 1995-2000," with Andrew Plantinga, Cécile Détang-Dessendre, and Virginie Piguet, European Regional Science Association Meetings, Barcelona, Spain, September 2, 2011

"The Market For and Competitiveness Of Wind Generated Electricity in Maine: A Social Cost Assessment," (poster) European Wind Energy Association Conference (Mar. 14-17, 2011), Brussels, BE.

"Economics Overview," Developer's Conference for Deepwater Offshore Wind Opportunities in Maine," AEWC/DeepcWind Consortium, University of Maine (Feb. 22, 2011), Orono, Maine

"From 20 Cents to 10 Cents: Economics of Offshore Wind Power," Maine Wind Energy Association Conference (Jan. 25, 2011), Augusta, Maine

"From 20 Cents to 10 Cents: Economics of Offshore Wind Power," Island Institute Conference (Dec. 14, 2010), Belfast, Maine

"Modeling Stakeholder Acceptance of Solutions to Environmental Problems," Maine EPSCoR conference poster, Nov. 8, 2010, Augusta, Maine, with M. Teisl, S. McCoy, C. Noblet, *et al.* 

#### Publications (past four years bold typeface of publication number in brackets)

- [36] "An Analysis of the Economic Impacts of Big-Box Stores on Maine's Retail Sector," with E. Freedman, T. Gabe, and J. McConnon, *Journal of Regional Analysis and Policy*, vol. 46, no. 2 (2017): 138-153.
- [35] "Fiscal Policy, Returns to Skill, and Canada-U.S. Migration by Skill Level: Evidence from the Late-1990s," with R.E. Mueller; *Canadian Public* Policy, 39(1), March 2013: 153-182.
- [34] "Housing Prices and Inter-urban Migration," *Regional Science and Urban Economics* (March, 2013); with Cécile Détang-Dessendre, Andrew Plantinga, and Virginie Piguet.
- [33] "Effective Environmental Marketing of Green Cars: A Nested-logit Approach," *Transportation Research Part D: Transport and Environment* 17 (3) (2012): 237-242; with S. Siriwardena, M.F. Teisl, and C. Noblet.
- [32] "Local Employment Growth, Migration, and Public Land Policy: Evidence from the Northwest Forest Plan," with A. Plantinga, H. Eichman, and J. Kerkvliet, *Journal of Agricultural and Resource Economics*, 35 (2), August 2010: 316-333.
- [31] "Population-Employment Models: Nonstationarity, Cointegration, and Dynamic Structure and Adjustment," *Journal of Regional Science*, 46 (2), May 2006: 205-244.
- [30] "Annual Estimates of Human Capital by State: 1976-2000," *The Review of Regional Studies*, 35 (1), Summer 2005: 8-37 (with Philip Trostel)
- [29] "Food Prices and the Timing of Welfare Payments: A Canadian Study," *Canadian Public Policy*, 31, June 2005, 145-160 (with Georges Tanguay and Nicolas Marceau)
- [28] "North American Migration: Returns to Skill, Border Effects, and Mobility Costs," *The Review of Economics and Statistics*, 86, November 2004, 988 -1007 (with R.M. Mueller).
- [27] "Public Conservation Lands and Local Wage Growth," *Growth and Change*, 34, Winter 2003, 64-86 (with A.J. Plantinga and D.J. Lewis)
- [26] "The Early History of Migration Research," *International Regional Science Review*, 26, January 2003, 3-37 (with M.J. Greenwood)
- [25] "Public Conservation Land and Employment Growth in the Northern Forest Region," *Land Economics*, 78, May 2002, 245-259 (with A. Plantinga and D. Lewis)
- [24] "A Methodology for Estimating Returns to Skills for Canadian Provinces and U.S. States," *Journal of Regional Science*, 42, February 2002, 127-143 (with R.M. Mueller)

- [23] "International and Interregional Migration in North America: The Role of Returns to Skill," *Canadian Migration Patterns from Britain and North America*, B. Messamore (ed.), International Canadian Studies Series, Proceedings of the Migration Conference, University of Edinburgh, Scotland, May 1998, University of Ottawa Press, 2002 (with R. Mueller)
- [22] "Short and Long Run Consequences of Unskilled Immigration to the U.S.," reprinted in David Greenway and Douglas R. Nelson (eds.). *Globalization and Labour Markets*, Vol. 2 (Cheltenham, U.K. and Northampton, MA: Elgar, 2001).
- [21] "Alternative Nested Logit Model Structures and the Special Case of Partial Degeneracy," *Journal of Regional Science*, 40, February 2000, 89-113
- [20] "The U.S. Labor Market Impacts of Low-Skill Migration from Mexico", in Mexico-United States Binational Commission (ed.), *Migration between Mexico and the United States, volume 3*. Mexico City: Mexican Ministry of Foreign Affairs, and Washington, D.C.: U.S. Commission on Immigration Reform, 1998 (with Paul S. Davies, Michael J. Greenwood, Ulrich R. Kohli, and Marta Tienda)
- [19] "Migration, Regional Equilibrium, and the Estimation of Compensating Differentials," (with M.J. Greenwood, G.I.Treyz, and D. Rickman) in: *Modern Classics in Regional Science*, Kenneth J. Button and Peter Nijkamp (series eds.), *Regional Dynamics*, Kingsley E. Haynes (ed.), Edward Elgar Publishing Ltd., 1997.
- [18] "The Factor Market Consequences of Unskilled Immigration to the United States," *Labour Economics*, 4, 1997,1-28 (with M.J. Greenwood and U.R. Kohli)
- [17] "The Short-Run and Long-Run Factor-Market Consequences of Immigration to the United States," *Journal of Regional Science*, Feb. 1996, 43-66 (with M.J. Greenwood and U.R. Kohli).
- [16] "Economic Effects of Immigrants on Native and Foreign-Born Workers: Complementarity, Substitutability, and Other Channels of Influence," *Southern Economic Journal*, April 1995, 1076-1097 (with M.J. Greenwood)
- [15] "Specification and Econometric Improvements in Regional Portfolio Diversification Analysis," *Journal of Regional Science*, May 1994, 217-235 (with T.J. Sheesley)
- [14] "The Dynamics of U.S. Internal Migration," *The Review of Economics and Statistics*, 1993, 209-214, (with G.I.Treyz, D. Rickman, and M.J. Greenwood)
- [13] "Equilibrium and Disequilibrium in Migration Modelling," Regional Studies, 1993, 341-349
- [12] "Migration, Regional Equilibrium, and the Estimation of Compensating Differentials," *American Economic Review*,1991, 1382-1390 (with M.J. Greenwood, G.I. Treyz, and D. Rickman)

- [11] "Forecasting State and Local Population Growth Based on Employment Migration Relationships and with Limited Data," *Environment and Planning A*, 1991, 987-1005, (with M.J. Greenwood)
- [10] "Jobs Versus Amenities in the Analysis of Metropolitan Migration," *Journal of Urban Economics*, January, 1989, 1-16 (with M.J. Greenwood)
- [9] "A Method for Obtaining Consistent Regional Industry-Price Indexes," *Recent Advances in Regional Economic Modelling*, edited by F. Harrigan and P.G. McGregor, London Papers in Regional Science 19, (London: Pion, 1988), 100-120
- [8] "A Multiregional Economic-Demographic Model for Regions in the United States," *Recent Advances in Regional Economic Modelling*, edited by F. Harrigan and P.G. McGregor, London Papers in Regional Science 19, (London: Pion, 1988), 66-82 (with G.I. Treyz, M.J. Greenwood, and B. H. Stevens)
- [7] "The Impact of Oil Price Fluctuations on the Economies of Energy Producing States," *Review of Regional Studies*, Fall 1987, 60-76
- [6] "The Economic Effects of Space Science Activities on Colorado and the Western United States," *Annals of Regional Science*, July 1987, 21-44 (with M.J. Greenwood and E.L. Pfalzgraff)
- [5] "Migration and Employment Change: Empirical Evidence on the Spatial and Temporal Dimensions of the Linkage," *Journal of Regional Science*, May 1986, 223-234 (with M.J. Greenwood and J.M. McDowell)
- [4] "Econometrically Accounting for Identities and Restrictions in Models of Interregional Migration: Further Thoughts," *Regional Science and Urban Economics*, November 1985, 605-614 (with M.J. Greenwood)
- [3] "Migration and Interregional Employment Redistribution in the U.S.," *American Economic Review*, December 1984, 957-69 (with M.J. Greenwood)
- [2] "Econometrically Accounting for Identities and Restrictions in Models of Interregional Migration," *Regional Science and Urban Economics*, February 1984, 113-128 (with M.J. Greenwood)
- [1] "An Econometrics Laboratory," Journal of Economic Education, 1984, (with R.F. McNown)

#### **Book Reviews**

- W. Barnes and L. Ledebur, The New Regional Economics, Journal of Regional Science (1998)
- L. Anselin, Spatial Econometrics, Journal of Economic Literature (1991)

P. Beaumont, <u>ECESIS: An Interregional Economic-Demographic Model of the United States</u>, *Journal of Regional Science* (1991)

L. Long, <u>Migration and Residential Mobility in the United States</u>, *Journal of Economic Literature* (1990)

#### **Teaching Experience (last four years bold typeface)**

- <u>Undergraduate</u>: **Renewable Energy Economics and Policy**, Principles of Economics, Urban-Regional Economics, Econometrics, Economic Statistics, **Intermediate Microeconomics**, Policy Analysis/Benefit-Cost Analysis, **Mathematical Economics, Economic Growth**, International Trade
- <u>Graduate</u>: Regional Economics and Policy, Labor-Demographic Economics, **Economic Growth**, **Applied Econometrics, International Economics (trade, commercial policy, openeconomy macroeconomics, economic growth and development), Time Series Econometrics**

Student Committees:

B.A. Honors (Chair): C. Howland, M. Berube
B.A. Honors (Member): M. Schneider, R. Hathaway
M.A./M.S. (Chair): T. Sheesley, L. Irwin, W. Sun, A. Jones, A. Sabatova, S. Yoder, C. Hughes-Hallett, C. Lessard, S. Siriwardena (co-chair), K. Hassett (co-chair), B. Brown, C. O'Donnell, K. Dalvand, G. Lindbom, S. Larkin, A. Shah
M.A./M.S (Member): E. Kleczyk, S. Mehmood, D. Lewis, Q. Fan, R. Roper, E. Freedman, B. Balila, R. Langton

Ph.D. (Member): D. Hu, N. Bichraoui

#### **Professional and Other Service Activities**

Referee for various journals (occasional)

Participant: Oxford Round Table, Harris Manchester College, Oxford University, Summer 2007

Faculty Advisor: Omicron Delta Epsilon, International Honor Society in Economics, 2007-08

President: The Honor Society of Phi Kappa Phi, University of Maine Chapter, 2009-2011

Contributor: Vibrant Maine Economy Virtual Conference (2008-2009) Recorded Session with James McConnon for "Maine's Brain Gain" Bangor Daily News invited op-ed "Maine's Brain Gain" Radio Interview "Maine's Brain Gain"

Policy Advisory Committee, School of Economics, University of Maine, 2007-2015, 2016-Peer Committee, School of Economics, University of Maine, 2007-2015, 2016-Graduate Committee, School of Economics, University of Maine, 2007-2010

#### Computing

Programming languages: FORTRAN, Mathematica; Statistical packages: STATA, LIMDEP, EVIEWS

#### **Awards and Honors**

Member, Honor Society of Phi Kappa Phi (Academic Honor Society) Member, Omicron Delta Epsilon (International Honor Society in Economics) Mentor, University of Maine Senior Skulls Honor Society, 2006 Mentor, University of Maine Senior Skulls Honor Society, 1999 Varsity Athlete with Greatest Academic Achievement, Wright State University, 1973

#### **Research Grant and Contract Activity**

"Economic Incentives to Increase Adoption of Woody Biomass as a Feedstock for Liquid Fuels for Road, Off-road and Aviation Transport," FAA (proposal submitted March, 2013; not funded)

"Developing a World Leading Research Program in Deepwater Offshore Wind Energy," NSF—EPSCoR, FY2014-19 (revised concept paper under review; not advanced)

"Renewable Energy and Decision Science," NSF—EPSCoR, FY2014-19 (revised concept paper under review; not advanced)

"SEP Integrated National Framework for Cellulosic Drop-in Fuels," NSF, 2012-2016 (funded, \$1,999,786, SP)

## "Advanced Technologies Demonstration Projects, DOE, 2013-14 (funded), about \$4,000,000

"Sustainable Energy Pathways," NSF, 2012-2016 (not funded, SP)

"Comprehensive Design Study for the First Floating Deepwater Offshore Wind Farm in the United States, to be built in the Gulf of Maine by 2017," DOE, 2012-2015 (not funded, Co-PI)

"Growth of Microalgae on Industrial Cellulosic Residues for Enhanced Bio-oil, Structural Biomaterials, and Food Supplement Production--Planning," AFRI, USDA, 2011-2012 (funded \$50,000, Co-PI)

"Growth of Microalgae on Industrial Cellulosic Residues for Enhanced Bio-oil, Structural Biomaterials, and Food Supplement Production," AFRI, USDA, 2011-2016 (not funded, Co-PI)

"Economic, Law and Ethics" portion of the University of Maine System Strategic Investment Fund (SIF) Grant, 2010 (\$616,000 over three years)

"A Business and Outreach Plan for Maine's Deepwater Offshore Wind Energy Development," Rockefeller Brothers Fund, 2010-11 (funded \$32,500, collaborating investigator) "Assessment of Leakage and Product Substitution Benefits from Forest Carbon Offset Projects in Maine," Maine DEP, 2010-2014 (not funded, Co-PI)

"The Importance of Local Area Cultural Goods to the Residential Location of College-Educated Workers and Retirees," University of Maine Summer Faculty Research Competition, 2006 (\$7,500, principal investigator)

"The Migration of Highly Skilled Individuals Within and Between Canada and the United States," Skills Research Initiative, Human Resources and Social Development Canada – Industry Canada – Social Sciences and Humanities Research Council, 2005-06 (\$17,000, collaborating investigator)

"North American Migration since NAFTA and Pre-9/11," Canadian Embassy, Canadian Studies Grant Program for American Scholars, 2004-05 (\$10,000, principal investigator)

"Using a Canadian-American Natural Experiment to Study Relative Efficiencies of Social Welfare Payment Systems," Canadian Embassy, Canadian Studies Grant Program for American Scholars, 2001-02 (\$10,000, collaborating investigator)

"The Effects of Migration on Children," National Institutes of Child Health and Human Development, 2001-02 (not funded, principal investigator)

"A Review of the Effects of Immigration on Native Workers," Organization for Economic Cooperation and Development, Paris, France, 1997 (\$5,000, participating investigator)

"An Econometric Analysis of the Impacts of Mexican Immigration on the Labor Market Outcomes of Natives by Skill Level and Selected Demographic Characteristics," United States -Mexico Binational Study on Migration, The U.S. Commission on Immigration Reform, 1996 (\$50,000, participating investigator), 1996

"Estimating the Labor Market Impacts of Low-Skill Immigration on Native Workers Using a Migration Methodology," National Science Foundation (\$25,000 for one year, principal investigator), 1996 (unfunded)

"Estimates of Skill and Mobility Characteristics of Native and Foreign-Born Workers in Selected U.S. Metropolitan Areas," U.S. Department of Labor (\$35,000 for one year), 1995 (funded \$35,000)

"Forecasting State and Local Population Growth Based on Employment-Migration Relationships," U.S. Census Bureau (\$10,000 for one year), 1989 (funded \$10,000)