

Abridged Vita

W. ED. WHITELAW

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POSITION AND ADDRESS	President ECONorthwest 99 West 10th, Suite 400 Eugene, Oregon 97401 (541) 687-0051 whitelaw@eugene.econw.com	Professor Department of Economics University of Oregon Eugene, Oregon 97403 (541) 346-4661
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EDUCATION

Ph.D., Economics, Massachusetts Institute of Technology, 1968
B.A., Mathematics, Political Science, Economics, University of Montana, 1963

EMPLOYMENT

1981- Professor, Department of Economics, University of Oregon
1974- President, ECONorthwest
1987-90 President, Economic Policy Institute Northwest (EPI)
1974-75 Staff Economist, Oregon Coastal Conservation and Development Commission
1970-81 Associate Professor, Department of Economics, University of Oregon
1970-71 Visiting Research Fellow, Director of Urban Studies, Institute for Development Studies, University of Nairobi, Nairobi, Kenya (financed by the University Development Program, Rockefeller Foundation)
1970-71 Chief Economist, Nairobi Urban Study (financed by the Nairobi City Council, Kenya Ministry of Finance and Economic Planning, and the United Nations Development Program)
1967-70 Assistant Professor, Department of Economics, University of Oregon
1967-70 Research Associate, Bureau of Governmental Research, University of Oregon

HONORS, FELLOWSHIPS AND SCHOLARSHIPS

University of Oregon
Ersted Award for Outstanding Teaching, 1970

Harvard University
Dissertation Scholarship, Harvard Program on Regional and Urban Economics, 1966-67

MIT
Woodrow Wilson Fellowship, 1963-65
MIT Graduate Fellowship, 1965-66
Graduate Fellow, Economic Development Administration Summer Institute, Williamstown, Massachusetts, 1966

University of Montana
High Honors
Pi Mu Epsilon, Mathematics Honorary
Phi Kappa Phi, Scholastic Honorary

TECHNICAL ADVISORY AND EDITORIAL POSITIONS

- 1998- Goal 5 Regional Resources for Fish and Wildlife Habitat Protection Peer Review Committee, Portland Metro
- 1991- *Eugene Register Guard*, Board of Economists
- 1989-05 Oregon Progress Board, State of Oregon; committees: Chairperson, Benchmark Update Committee; Member, Vision Committee; Member, Sustainability Measurement Work Group
- 1995-98 Environmental Protection Agency, National Advisory Council for Environmental Policy and Technology
- 1987-92 *Pacific Northwest Executive*, Forecast Panel
- 1988-90 Board of Advisors, Northwest Policy Center, Seattle, Washington
- 1980-90 Board of Directors, Pacific Northwest Regional Economic Conference
- 1987-89 Economic Development Commission, State of Oregon
- 1986-87 Board of Directors, Eugene-Springfield Metropolitan Partnership
- 1984-86 *Portland Business Journal*, Board of Economists
- 1979-86 Head, Real Estate Research Committee, Eugene-Springfield
- 1972-86 Editorial Committee, *The Annals of Regional Science*
- 1984-85 *Oregonian*, Business Forecast Panel
- 1984-85 Demand Forecasting Advisory Committee, Northwest Power Planning Council
- 1981-83 Scientific and Statistical Advisory Committee, Northwest Power Planning Council
- 1980-82 Governor's Council of Economic Advisors, State of Oregon
- 1980 Water Resources Division, Department of Natural Resources and Conservation, State of Montana
- 1979-80 Employment and Training Division, Department of Labor and Industry, State of Montana
- 1977-78 Advisory Committee on Economic Decline and Fiscal Stress in Cities, President's Domestic Council
- 1977-78 Task Force on Local Economic Planning, Oregon Department of Economic Development
- 1976-77 Advisory Committee, National Science Foundation Project on Onshore Impacts of Offshore Oil and Gas Exploration and Development
- 1972-75 Citizens' Advisory Committee on Transportation Planning, Lane Council of Governments, Lane County, Oregon
- 1972-74 Planning Committee, University Consortium on Transportation, Oregon Department of Transportation

PUBLICATIONS

Subject to Formal Peer Review

An Analytic Typology for Examining the Economic Effects of Ecosystem Management. University of Michigan, School of Public Policy. Working Paper #407. With Paul Courant and Ernie Niemi. 1997.

Assessing Economic Tradeoffs in Forest Management. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. General Technical Report. PNW-GTR-403. With Ernie Niemi. 1997. 1999 (revised).

"Environmental Protection and Jobs: A Brief Survey." With E. Whitelaw. 1995.

A Method for Estimating the Economic Effects of Habitat Protection. Portland Oregon: U.S. Fish & Wildlife Service. With Ernest G. Niemi. 1993. January 1994 Final.

The Potential Social and Economic Impacts of Long Rotation Timber Management. Portland, Oregon: U.S. Forest Service, Pacific Northwest Research Station. With Ernest G. Niemi. May 1993.

Pacific Northwest Forest-Policy Baselines. Washington, D.C.: The Wilderness Society. With Ernest G. Niemi. April 1993.

"New Conflicts Stir Managers of U.S. Forests." *Forum For Applied Research and Public Policy*, Volume 6 (3). University of Tennessee, and Oak Ridge National Laboratory With Ernest G. Niemi and Rob Mendelsohn. 1992.

Transition Strategies for Timber-Dependent Communities. Washington, D.C.: The Wilderness Society. With Ernest G. Niemi and Carl Batten. 1990.

New Perspectives and the Forest Service: A New Way of Thinking. Washington, DC: U.S. Forest Service. With Niemi, Ernest G. and Robert Mendelsohn. 1990.

"Oregon's Strategic Economic Choices." In LuAnna McCann (Ed.), *Oregon Policy Choices.* University of Oregon Bureau of Governmental Research and Service. With Ernest G. Niemi. 1989.

The Economic Impact of Proposed Changes in Washington State Forest Practices Rules. Olympia: Washington State Department of Natural Resources. With Robin Gregory. 1987.

Generic Coal Study: Qualification and Valuation of Environmental Impacts. Portland: U.S. Department of Energy, Bonneville Power Administration. With Ernest G. Niemi. 1987.

Economic Analysis of the Environmental Effects of a Combustion-Turbine Generating Station (at Fredricksen, Washington). Portland: U.S. Department of Energy, Bonneville Power Administration. With Robert Mendelsohn and Ernest Niemi. 1984.

Economic Analysis of the Environmental Effects of a Coal-Fired Electric Generator (at Boardman, Oregon). Portland: U.S. Department of Energy, Bonneville Power Administration. With Robert Mendelsohn and Ernest Niemi. 1983.

Review of Methodologies for Assessing the Environmental Costs and Benefits of Acquisitions. Benefit-Cost Analysis and Environmental Impacts: A Review of the Literature and an Evaluation of Methodologies. Review of Methodologies for Assessing the Environmental Cost and Benefits of Acquisitions. Portland: U.S. Department of Energy, Bonneville Power Administration. With Julia M. Friedman and Ernest Niemi. 1981.

"Measuring the Effects of Public Policies on the Price of Urban Land". In J. Thomas Black and James E. Hoben (Ed.), *Urban Land Markets: Price Indices, Supply Measures, and Public Policy Effects.* Washington, DC: Urban Land Institute, 1980.

"Urban-Rural Income Transfers in Kenya: An Estimated Remittances Function." *Economic Development and Cultural Change* 22(3). With George E. Johnson. 1974.

Not Subject to Formal Peer Review

"Hungry for Answers." *Oregonian.* Tapogna, T. and E. Whitelaw. Spring 2004.

"Drifting away." *Oregonian.* Tapogna, T. and E. Whitelaw. October 2003.

"The High Cost of Free Water." Whitelaw E. and E. Niemi. *Oregon Quarterly.* Spring 2003.

- "Families and businesses that brave the state's faltering economy risk an unstable future." *Oregonian*. Whitelaw, E. and J. Tapogna. February 2003.
- "A Framework for Estimating the Costs and Benefits of Dam Removal." *BioScience*. Whitelaw, E. and E. MacMullan. August 2002.
- "Bridge Over Troubled Water." *Oregon Quarterly*. Whitelaw, E. and E. Niemi. Winter 2001.
- Coping with Competition for Water, Irrigation, Economic Growth, and the Ecosystem in the Upper Klamath Basin*. Niemi, E., and A. Fifield, E. Whitelaw. November 2001.
- "Evaluating Takings and Measure 7." *Oregon's Future*. Whitelaw, E. and R. Pozdena, T. Moore, J. Tapogna, J. Ebenhoh. Spring 2001.
- Green Building: Saving Salmon, the Environment, and Money on the Path to Sustainability*. Under a grant provided by: The Center for Watershed and Community Health, Mark O. Hatfield School of Government, Portland State University. 2000. ECONorthwest. 2000
- "Breaching Dam Myths." *Oregon Quarterly*. Whitelaw, E. Autumn 2000.
- "Bird Of Doom...Or Was It?" *The Amicus Journal*. Niemi, E., and E. Whitelaw, with Elizabeth Grossman. Fall 2000.
- Saving Salmon, Sustaining Prosperity, An Introductory Handbook and Reference for the Puget Sound Region and Washington*. Under a grant provided by: The Center for Watershed and Community Health, Mark O. Hatfield School of Government, Portland State University. 2000.
- "Salmon and the Economy." *Conservation Biology in Practice*. Niemi, E. and E. Whitelaw. Spring 2000.
- Salmon, Timber and the Economy*. Pacific Rivers Council, Oregon Trout, Audubon Society of Portland, and Institute for Fisheries Resources. Niemi, E. and E. Whitelaw, M. Gall, and A. Fifield. December 1999.
- The Economic Wellbeing of Michigan Bands of Native Americans*. Michigan Department of Natural Resources. December 1999. (Confidential litigation product.)
- Salmon and the Economy, A Handbook for Understanding the Issues in Washington and Oregon*. Under a Grant provided by: The Center for Watershed and Community Health, Mark O. Hatfield School of Government, Portland State University. ECONorthwest. November 1999.
- "Reforming Welfare Reform." *Oregon Quarterly*. Tapogna, J. and E. Whitelaw. Autumn 1999.
- An Economic Strategy for the Lower Snake River*. Trout Unlimited. With Ed MacMullan. November 1999.
- The Sky Did NOT Fall: The Pacific Northwest's Response to Logging Reductions*. Earthlife Canada Foundation. Sierra Club of British Columbia. Niemi, E., E. Whitelaw, and A. Johnston. April 1999.
- The Ecosystem-Economy Relationship: Insights from Six Forested LTER Sites*. National Science Foundation. Courant, P., E. Niemi, and E. Whitelaw. November 1997.
- "Costs and Benefits: Reflections of an Oregon Economist." *Inquiry*. November 21, 1997.
- "What Price Prisons?" *Oregon Quarterly*. Summer 1997.

"Integrating Resource Conservation and Economic Development." With Paul Courant and Ernie Niemi. 1997.

"New Economic Perspectives of Ecosystem Management: A Critique of Recent Efforts." May Submission to *Environmental Management*. With Paul Courant and Ernie Niemi. 1997.

The Potential Economic Consequences of Designating Critical Habitat for the Rio Grande Silvery Minnow: Draft Report. U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office. ECONorthwest. With Ernie Niemi and Tom McGuckin. 1996.

Economic Well-Being and Environmental Protection in the Pacific Northwest. Pacific Rivers Council. With Tom Power. 1996.

Facing the Tradeoffs: Economic Development and Resource Conservation in Louisiana. ECONorthwest. With Ernie Niemi, Colleen Heflin and Allison Gorr. 1996.

Pacific Northwest Regional Economic Elements Affected by Fish Hatchery Management Decisions. Columbia Basin Fish and Wildlife Foundation. 1996.

The Potential Economic Consequences of Designating Critical Habitat for the Marbled Murrelet: Final Report. US Fish and Wildlife Service, Portland Field Office. With Ernie Niemi, Ed MacMullan and David Taylor. 1996.

Economic Consequences of Management Strategies for the Columbia and Snake Rivers. With Ernie Niemi and Ed MacMullan. 1995.

Economic Consequences of an Injunction to Protect Salmon Habitat on the Wallowa-Whitman and Umatilla National Forests: Preliminary Report. With Ernie Niemi and Ed MacMullan. 1995.

"Putting Merit in the Matrix." *Oregon Quarterly*. Winter 1995.

"Rich Oregonian, Poor Oregonian." *Oregon Quarterly*. Summer 1995.

Integrating Economics and Resource-Conservation Strategies. With Ernie Niemi. June 1995

The Columbia River and the Economy of the Pacific Northwest. With Ernie Niemi and Ed MacMullan. May 1995.

"Dubious Theory About Economy Leads us Astray." *The Register Guard*. May 1995.

"Oregon's Money Doesn't Just Grow on Trees." *The Oregonian*. April 1995.

The Economic Consequences of Protecting Salmon Habitat in Idaho (Preliminary Report). With Ernie Niemi. Pacific Rivers Council. March 1995.

The Full Economic Costs of Proposed Logging on Federal Lands. With Ernie Niemi. March 1995.

"Other Lessons from the Northwest." *Vermont Law Review*. Volume 19, #2, Winter 1995.

The Potential Economic Consequences of Critical-Habitat Designation for the Lost River Sucker and the Shortnose Sucker, Final Report. U.S. Fish and Wildlife Service. With Ernie Niemi. August 1995.

The Potential Economic Consequences of a Reduction in Timber Supply from the Tongass National Forest. With Ed MacMullan. December 1994.

"Swimming Upstream." *Oregon Quarterly*. Winter 1994.

"School Dazed." *Oregon Quarterly*. Summer 1994.

Economic Critique of the FSEIS on Management of Old-Growth Habitat. With Ernie Niemi. March 1994.

"Guessing at the 'Hood: An Urban Future." *Oregon Business.* January 1994.

"Growing Pains." *Oregon Quarterly.* University of Oregon, Eugene, Oregon. With Terry Moore. Spring 1994.

Environmental Externalities and Utility Regulation. Washington, DC: National Association of Regulatory Utility Commissioners. With Ernest G. Niemi. September 1993.

"After the Owl." *Old Oregon.* With Ernie Niemi. Winter 1993. Reprinted in the Seattle Post-Intelligencer as "Jobs & Nature," December 12, 1993.

"Oregon's Real Economy." *Old Oregon.* Winter 1992. Reprinted in Eugene Register Guard. December 13, 1992, and through Oregon Business' datafax system, February 1993.

"Payback Time." *Old Oregon.* Spring 1992.

Investing in Dislocated Families. With Ernie Niemi. 1990.

"A More Civil War." *Old Oregon.* With Ernest G. Niemi. Winter 1990.

"Oregon's Turn: A Blueprint for Economic Growth in the 1990s." *Old Oregon.* Spring 1990.

"A Log-Export Ban, Alone, Is Not Enough." Eugene *Register-Guard.* October 13, 1989. Reprinted in Portland *Oregonian,* Pacific Northwest International Trade Association *Trade Winds,* and various Oregon weeklies. With Ernest G. Niemi

"Money: The Debt We Owe Ourselves." *Old Oregon.* With Ernest G. Niemi. Autumn 1989.

"Plan Now For More Timber Industry Changes." Eugene *Register-Guard.* July 25, 1989. Also published in Portland *Oregonian.* With Ernest G. Niemi.

"Looking Beyond the Owls and the Logs: A White Paper." Prepared for Governor Goldschmidt's statewide Timber Summit. With Ernest G. Niemi. June 1989.

"Improving Oregon's Economy by Improving its Schools." *Proceedings of the 23rd Annual Pacific Northwest Regional Economic Conference.* With Ernest G. Niemi. June 1989.

"Migration, Economic Growth, and the Quality of Life." *Proceedings of the 23rd Annual Pacific Northwest Regional Economic Conference.* With Ernest G. Niemi. June 1989.

"The Greening of the Economy." *Old Oregon.* Spring 1989. Reprinted in Portland *Oregonian* (April 3, 1989), the Sierra Club *Runoff* (April 1989), and *Forest Watch* (April 1989). With Ernest G. Niemi.

"The West, Garbage, and the American Dream." *Pacific Northwest Executive.* January 1989. With Ernest G. Niemi and Terry Moore.

"Focusing the Northwest's Vision." *Pacific Northwest Executive.* With Ernest G. Niemi. 1988.

"The Once and Future Northwest." *Old Oregon.* With Ernest G. Niemi. Autumn 1988.

"Developing a Strategic Plan for Regional Economic Growth." *Proceedings of the 22nd Annual Pacific Northwest Regional Economic Conference.* June 1988.

- "Getting Controversial Public Facilities Built: How Can Economics Help?" *Proceedings of the 22nd Annual Pacific Northwest Regional Economic Conference*. With Terry Moore. June 1988.
- "Electricity Prices and Economic Development: Implications for the Pacific Northwest." *Proceedings of the 22nd Annual Pacific Northwest Regional Economic Conference*. With Ernest G. Niemi. June 1988.
- "Focusing the Northwest's Vision." *The Once and Future Northwest*. University of Washington Institute for Public Policy and Management, Northwest Policy Center. With Ernest G. Niemi. April 1988.
- Managing Old-Growth Forests in the PNW*. With Ernie Niemi. 1987.
- "Strategic Economic Development for Oregon." *Governmental Notes*. Bureau of Governmental Research and Service, University of Oregon. December 1987.
- Accelerating Our Economic Development: Two Views*. Olympia, WA: The Washington State Institute for Public Policy. With Thomas Tabasz. October 1987.
- "New Economic Strategies for Regional Development." *Proceedings of the 21st Annual Pacific Northwest Regional Economic Conference*. June 1987.
- "Local Economy Slipped During the 1980s, Teachers Kept Ahead of Inflation." *Eugene Register-Guard*. With Ernest G. Niemi. May 5, 1987.
- "Investing in Oregon's Interests: Oregon Using Wrong Strategies." *Eugene Register-Guard*. January 27, 1987.
- "The Once and Future Northwest." *Pacific Northwest Executive*, 2(3). July 1986.
- "Smokestack Memories: The Future in Our Past." *Visions*. The Oregon Graduate Center. Spring 1986.
- "Economic Choices for the Future of Our Region." *Old Oregon*. University of Oregon Round Table. Autumn 1985.
- "More is More: Small Businesses Bring Diversity, Vigor to Economy." *Portland Oregonian*. June 16, 1985.
- "The Economy and the Student: Students need more training in analysis and expression." *Eugene Register-Guard*. May 22, 1984.
- "Rising Housing Starts Needed to Trigger Employment Drop: Local Economy May Stay Bad 'Til '84." *Eugene Register Guard*. February 23, 1984.
- Analysis and Forecasts of the Demand for Rock Materials in Oregon*, Oregon Department of Geology and Mineral Industries, Special Paper 5. With J.M. Friedman, E. Niemi. 1979.
- Rural-Urban Relations, Low-Income Settlements, Intra-Urban Mobility and the Spatial Distribution of Households in Nairobi, Kenya*. Working papers in Economics No. 6. Eugene: University of Oregon, Department of Economics. 1974.
- Nairobi Household Survey: Description of the Methodology and Guide to the Data*. Discussion paper No. 116. Nairobi: University of Nairobi, Institute for Development Studies. 1971.

Nairobi Household Survey: Some Preliminary Results. Staff paper 117. Nairobi: University of Nairobi, Institute for Development Studies. 1971.

The Employment and Income History of a House Servant in Nairobi 24. Staff paper 116. Nairobi: University of Nairobi, Institute for Development Studies. 1971.

The Objectives and Tasks of the Economics Group for the Urban Studies of Nairobi. Staff paper 84. Nairobi: University of Nairobi, Institute for Development Studies. 1970.

Interstate Comparisons of State and Local Revenues and Expenditures. Eugene: University of Oregon, Bureau of Governmental Research. 1968.

CONSULTING PROJECTS

Developed a model to estimate the range of economic costs and benefits of projects and policy options that affect water quality and quantity in the City's watersheds and section of the Willamette River, City of Portland. 2003-ongoing.

Evaluated the economic consequences of allowing, limiting, or prohibiting development in significant riparian areas and wildlife habitat in the Portland-Metro area. The analysis considered the economic impacts on development as well as the value of ecosystem services provided by riparian areas and wildlife habitat. 2002-ongoing.

Contributed to the drafting of a letter signed by more than 100 economists addressed to President Bush and the governors of eleven western states regarding the economics importance of the West's natural environment. Center for Watershed and Community Health. 2003.

Developed an economic model that estimated the net benefits of riparian-restoration projects. Clean Water Services. 2002.

Examined the competition for water in the Upper Klamath Basin, and the relationship between water and the economy. ECO also described strategic options for accommodating the growing competition for water, and recommended market mechanisms to help resolve these problems. Public Interest Projects. 2000-2002.

Developed a method to estimate the sediment and flooding downstream costs of timber-production activities on the City of Salem. Environmental Protection Agency. 1997-2002.

Developed a handbook of the economic factors associated with relicensing a hydroelectric dam. Hydropower Reform Coalition and American Rivers. 2001.

Developed a mitigation plan for the potential negative economic consequences of bypassing four dams on the Lower Snake River. The plan also outlined alternatives for enhancing the positive economic consequences of the bypass. Trout Unlimited. 1999-2000.

Initiated a multi-year effort to assess the economic costs and benefits of salmon conservation measures in the Pacific Northwest, and will offer policies to increase both the net benefits of salmon conservation and the probability that the region will accomplish its conservation goals. Center for Watershed and Community Health at Portland State University and Ford Foundation. 1998-2001.

Described the economic causes and effects associated with the dynamic ecological systems of Oregon's Willamette River Basin. Environmental Protection Agency. 2000.

Evaluated the issues of regulatory takings and compensation. The report discussed the potential effects of various implementations of Measure 7 and proposed guidelines for public policies that address the issues Measure 7 raised. Oregon Business Council. 2000.

Evaluated the potential economic consequences of efforts to adjust Oregon forest practices to provide a high probability of protecting and restoring aquatic habitat on forestlands important for salmonids. Pacific Rivers Council. 1998-1999.

Evaluated the economic consequences of ecosystem-management decisions in the upper Willamette River Basin, and how these consequences influence water and land use in the Eugene-Springfield area. Environmental Protection Agency. 1998-2000.

Analyzing the ecological, demographic and economic benefits and costs of watershed restoration as part of a multidisciplinary team, balancing ecological needs with social constraints on investments. Environmental Protection Agency. 1997-2001.

Designing the analysis and estimating the economic causes and effects relevant to the dynamic ecological systems characterizing the Willamette River Basin in Oregon. Environmental Protection Agency. 1995-2001.

Evaluated the economic impacts of bypassing four Federal dams on the Lower Snake River, and developed a plan to mitigate the negative consequences of the bypass. Trout Unlimited and Earth Justice. 1999.

Critiqued a draft report by the U.S. Forest Service regarding the Demand for Timber in the Tongass Forest. Alaska Rainforest Campaign. 1999.

Evaluated the economic consequences of new restrictions on Alaska's fishing industry. Earth Justice. 1999.

Described the economy's response in the Pacific Northwest (Oregon & Washington) to dramatic reductions in logging that occurred during the 1980s and 1990s; described how the economy prospered and why it did so much better than the predictions; and compared the logging reductions in the Pacific Northwest to the projected reductions in British Columbia. BC Wild, Earthlife Canada Foundation, and the Sierra Club of British Columbia. 1998-1999.

Analyzed the economic impacts of river and wetlands restoration in the Missouri River Basin, and prepared manual for assessing the socioeconomic impacts of ecological restoration projects for rivers and floodplains in the western U.S. Environmental Protection Agency. 1995-1997.

Analyzed the relationship between the regional economy and natural resources of Louisiana by presenting workshops and developing an information base for local stakeholders. Ford Foundation and Louisiana State University. 1996-1997.

Analyzed problems related to scarce water resources, environmental protection, economic development, tribal self-determination, public health and public land management in the Upper Rio Grande Basin, and recommended actions and federal policies to resolve these problems. Western Water Policy Review Advisory Commission. 1996-97.

Conducted a three-year study to describe, explain and communicate the relationships of forested ecosystems and regional economies. National Science Foundation. 1994-1997.

Developed the preliminary design of a study to assess the potential economic costs and benefits of mandatory medical monitoring of agricultural workers who load, mix, or apply the pesticide cholinesterase. Sierra Club Legal Defense Fund. 1996.

Evaluated alternatives for reforestation of marginal agricultural lands in the Lower Mississippi Delta. Business Council for Sustainable Development. 1996.

Analyzed the relationship between the regional economy and natural resources of Louisiana. W. Alton Jones Foundation. 1995-1996.

Analyzed the environmental externalities associated with industrial activities affecting coastal and estuarine resources in Louisiana. W. Alton Jones Foundation. 1995-1996.

Evaluated the role of natural resources and traditional extraction industries in the Pacific Northwest and how they influence future economic trends for individual communities. Pacific Northwest Economics Workshop, Pacific Rivers Council. 1995-1996.

Conducted an economic analysis of the designation of critical habitat for the Rio Grande silvery minnow in the Rio Grande River Basin. The project includes a variety of issues related to water policy in the Rio Grande basin. U.S. Fish & Wildlife Service. 1994-1996.

Conducted an economic analysis of the designation of critical habitat for the marbled murrelet in Oregon, Washington, and California. U.S. Fish & Wildlife Service. 1994-1996.

Estimated the economic effects of the designation of critical habitat to support the recovery of two endangered fish in the Upper Klamath Basin. U.S. Fish and Wildlife Service. 1993-1996.

Prepared a response to the Draft Environmental Impact Statement for the System Operation Review prepared by the federal water-management agencies for the Columbia River. Confederated Tribes of the Umatilla Indian Reservation. 1995.

Analyzed the role of the Columbia River in the economy of the Pacific Northwest, and described an economic framework for analyzing the economic consequences of alternatives for managing the Columbia River. Northwest Water Law and Policy. 1995.

Prepared a paper that demonstrated a common analytical framework for economic analysis to integrate resource-conservation and economic-development strategies. Ford Foundation Rural Poverty and Resources Program. 1995.

Analyzed issues related to integrating economics and resource-conservation strategies. Ford Foundation. 1995.

Analyzed the role of the Columbia River in the economy of the Pacific Northwest. Sierra Club Legal Defense Fund. 1995.

Analyzed the economic principles applied to state water regulation, describing how historic and current water-regulatory policies violate these principles, and illustrating the economic costs that accrue to citizens. Bullitt Foundation and Water Watch. 1994-1995.

Analyzed the relationship between the regional economy and natural resources of the Southern Appalachians. U.S. Forest Service. 1994-1995.

Participated in economic analysis of eastside ecosystem management project (EEMP) to ensure that the processes and the products of the EEMP internalize the externalities of resource-extraction industries (timber, grazing, mining, and hydropower) on federal lands in eastern Oregon, eastern Washington, and Idaho. W. Alton Jones Foundation. 1994-1995.

Evaluated the economic components of old-growth forests associated with spotted owls. The analysis included calculations illustrating the potential impact on employment of forest-management alternatives that would jeopardize the region's quality of life. Private client. 1994.

Analyzed the economic impacts of curtailing grazing on public lands that support endangered salmon in eastern Oregon, eastern Washington, and Idaho. Pacific Rivers Council. 1994.

Estimated the economic impacts and values associated with the public acquisition of private land for use as a wildlife habitat. The economic analysis included an analysis of economic values, an analysis of economic impacts, and an analysis of policy impacts. Washington Department of Wildlife. 1993.

Analyzed the Pacific Northwest timber situation in the context of the laws passed by Congress, the actions of executive-branch agencies, and the rulings of the federal judiciary. Wilderness Society. 1993.

Estimated the economic impact associated with a proposal to restrict logging in the Sequoia National Forest and to establish the Sequoia National Monument. Private client. 1993.

Developed a method for assessing the economic effects of designating critical-habitat for threatened or endangered species. The method incorporates a multi-sector, dynamic approach that emphasizes the analysis of effects on non-habitat-degrading activities, quality of life, and cost of living. U.S. Fish & Wildlife Service. 1993.

Integrated the results from past studies into a summary of the economic importance of the salmonid fishery in the Pacific Northwest. Pacific Rivers Council. 1993.

Assisted with the design and conducted an economic evaluation of the PRC's Restoration Initiatives, a series of demonstration projects designed to rehabilitate degraded watersheds. Pacific Rivers Council. 1993.

Described the theoretical issues underlying efforts by state commissions to introduce environmental externalities into the regulatory process, the procedural opportunities for doing so, and the practical lessons from case studies of six states. National Association of Regulatory Utility Commissioners. 1992-93.

Analyzed the social implications of managing the federal forests in the Douglas-fir regions on longer rotations, including aesthetics, value added, tourism, jobs (quantity and type), changes in recreational opportunities, and economic and community sustainability. U.S. Forest Service. 1992.

Developed the preliminary study design for using contingent-valuation methods to estimate the value of environmental externalities from electrical generation and transmission. Bonneville Power Administration. 1992.

Developed and evaluated alternative approaches for ensuring that the activities of state and federal agencies are consistent with Oregon's Strategic Plan. Oregon Economic Development Department. 1992.

Evaluated adjustments applied to the economic costs of alternative energy resources to account for environmental externalities in PGE's least cost planning effort. Portland General Electric. 1992.

Providing the Tri-County Metropolitan Transportation District in Portland with quarterly forecasts of its payroll-tax revenues, payments from the State of Oregon, the region's economic condition, employment by industry, income by source, the price of diesel fuel, and

the consumer price index for urban wage earners. Tri-County Metropolitan Transportation District. 1981-92.

Estimated the costs (equipment, resources, personnel) of responding to an off-shore oil spill within 24 hours. Private client. 1991-92.

Designed and conducted research on the impacts of land use on Oregon's transportation systems and costs. Oregon Department of Transportation. 1991-1992.

Developed a strategic plan for allocating state resources to assist dislocated workers and timber-dependent communities, and a set of legislative recommendations for implementing the plan. Oregon State Legislative Joint Committee on Forest Products Policy. 1990.

Described the forces and factors that underlie the controversy surrounding the U.S. Forest Service's land-management program and outlined corrective actions. U.S. Forest Service. 1990.

Analyzed the impact of the listing of the spotted owl as an endangered species for several public and private clients, including the City and School District of Eugene, Oregon, the Tri-County Metropolitan Transportation District in Portland, and electric utilities in the Eugene metropolitan area. 1990.

Assessed the impacts of timber harvests with and without a change in forest management policy that would protect most or all of the remaining old-growth forest on federal lands in three timbersheds: Grays Harbor and Pacific Counties in Washington; Linn and Lane Counties in Oregon; and Siskiyou County in California. Wilderness Society. 1990.

Assessed policies for redirecting growth from the Puget Sound region to other parts of the state, and policies for redirecting growth within the Puget Sound region. Puget Sound Council of Governments. 1990.

Described the economic and environmental impacts of the Exxon *Valdez* oil spill on Alaska's communities. 1989-90.

Analyzed the potential contribution to local and regional economic development of a proposed mixed-use development in downtown Eugene and the appropriateness of state support for required utility relocation. City of Eugene. 1989.

Developed a method for setting fees for over 500 services Lane County provides. Lane County Finance and Management Services. 1987-88.

Analyzed proposed economic evaluation procedures for allocating unappropriated water in the Snake River Basin, especially adapting to state and local policy the benefit-cost methodologies designed for federal decision-making. Idaho Office of the Governor, Division of Financial Management. 1985-88.

Supervised and directed analysis of the economic costs and benefits of the Northwest Power Planning Council's Columbia River Basin Fish and Wildlife Program. Northwest Power Planning Council. 1988.

Analyzed the economic feasibility of relocating the section of Interstate-5 between the Marquam and Fremont bridges in Portland. City of Portland Department of Transportation. 1988.

Conducted an economic feasibility analysis of a proposed publicly owned cable-television system. Springfield Utility Board. 1987-88.

Analyzed the economic impact of a plant closure in Dallas, Oregon and advised government officials on immediate mitigative solutions and on long-term economic development strategies. Mid-Valley Council of Governments. 1988.

Analyzed the development of independently-owned small electricity generators operating under PURPA contracts in Oregon. Oregon Public Utility Commission. 1988.

Analyzed the rate of absorption of industrial space in the Eugene-Springfield area since 1976. Eugene/Springfield Metropolitan Partnership. 1987-88.

Evaluated several land-use options for vacant property in the Glenwood district of Eugene, Oregon. City of Eugene. 1987-88.

Analyzed the likely effects of reopening part of Willamette Street to automobile traffic. City of Eugene. 1987-88.

Led a team of economists and planners studying the economic and demographic aspects of a comprehensive and integrated assessment of the socioeconomic impacts of a proposed nuclear waste repository to be sited at Hanford, Washington. Impact Assessment Inc. and the Washington Department of Ecology. 1987.

Analyzed the socioeconomic characteristics of Atlanta, Idaho and the likely impacts of a proposed open-pit gold-mine near Atlanta. Determined the dollar value of major costs and benefits. U.S. Forest Service. 1986-87.

Analyzed the fiscal impacts of changes in timber-sale contracts including the fiscal and economic implications of alternative proposals for offering contractual relief to firms holding contracts for state-owned timber. Oregon Division of State Lands. 1987.

Analyzed the impact of alternative wholesale power rates on irrigated agriculture and developed efficient rate mechanisms to enhance the viability of this industry. Northwest Irrigation Utilities. 1986-87.

Evaluated the feasibility of constructing an 18-hole regulation-size golf course on a 210-acre parcel of land, and conducted a market analysis and a financial plan for construction and operation. Lane County, Oregon. 1987.

Prepared baseline employment and income sections for the socioeconomic element of an environmental impact statement for the proposed Chartam gold and silver mine. A joint venture with Western Energy Corporation; private client. 1986-87.

Reviewed the adequacy and accuracy of sensitivity analysis and expected utility analysis of proposed nuclear-waste repositories. Evaluated methods, range of variation in outcomes of performance criteria, and utility values for pre- and post-closure scenarios developed by the U.S. Department of Energy. Washington State Department of Ecology. 1986-87.

Estimated the potential economic consequences of a ban on further harvest of old-growth timber from national forests in Western Oregon and Washington, and evaluated policies for mitigating potential adverse consequences. National Wildlife Federation. 1986.

Supervised and managed studies on property in Beaverton and Tigard, Oregon, and identified the current and future needs for residentially-related commercial land within the study areas. Cities of Beaverton and Tigard. 1986.

Analyzed the economic effects of proposed changes in the existing Forest Practices Rules for the State of Washington. State of Washington, Department of Natural Resources. 1986.

Performed a feasibility study for the creation of a 300-seat convention center at a beach resort in Lincoln City, Oregon. Private client. 1986.

Evaluated and proposed zone changes for the City of Troutdale based on an analysis of market conditions, land characteristics, the goals of the comprehensive plan, and the land owners' plans for current and future use of the property. City of Troutdale. 1986.

Analyzed the general economy, recommended strategies for improvement, and prepared a report summarizing the Forest Service's preliminary decision to retain its regional headquarters in Challis. North Custer Resource and Development Committee. 1985-86.

Evaluated cost information on landfills for solid waste to develop a computer model to estimate the economic value of environmental costs that accompany the construction, operation, and decommissioning of a land-fill. Oregon Department of Environmental Quality. 1986.

Analyzed factors relevant to the feasibility of a sewage treatment plan for the Keizer/Salem area. City of Keizer. 1985-86.

Analyzed the service sector in Portland, determined the strengths and weaknesses of a business location relative to other cities, and identified a target list of service-sector industries that would find Portland attractive. Portland Development Commission. 1986.

Provided an economic analysis associated with a proposed up-zoning of a site zoned for a neighborhood shopping center, based on consideration of existing land uses, existing zoning, and the current and expected needs of the community. Private client. 1985-86.

Assisted in the development of a comprehensive land-use plan and implementing ordinances for the City of Keizer, Oregon, including analysis and forecasting for population, housing, employment, and economic development. City of Keizer. 1984-86.

Served as staff to the Citizen's Rate Advisory Committee and prepared the Committee's final report, recommending goals and policies for economic development. Emerald People's Utility District. 1985-86.

Advised the State of Idaho on management of the water resources of the Snake River Basin and the implementation of the Swan Falls Agreement. State of Idaho. 1985.

Evaluated a mixed-use zone in the Whiteaker neighborhood. City of Eugene. 1984-85.

Analyzed and forecasted the tourism market in Pacific Power and Light's service area. Private client. 1985.

Performed a feasibility analysis on the expansion of an existing 18-hole golf course to 27 holes. Documented and projected the demand for golf, evaluated the City of Portland's ability to operate and finance additional debt, and analyzed its rates. City of Portland. 1985.

Analyzed and forecasted the demand for column inches of advertising for a metropolitan newspaper, estimating the growth of new households and subscriptions. Private client. 1983-85.

Analyzed three new sources of tax revenues: taxing the gross receipts of parking, wholesale fuel distributors, and automobile sales dealers. Tri-County Metropolitan Transportation District. 1985.

Evaluated the methods used by the U.S. Department of Energy to rank potential sites for nuclear waste repositories. Washington State, Joint Legislative Committee on Science and Technology. 1985.

Analyzed the public uses and private-market demand for county property. Multnomah County, Oregon. 1984-85.

Analyzed the cost of administering land-use changes and developed a system for setting fees that equitably allocates costs to applicants. Washington County, Oregon. 1984-85.

Designed and supervised the administration of a survey of fishermen on the Swan River and other drainages to determine the value they place on recreational fishing. Montana Department of Fish, Wildlife, and Parks. 1983-84.

Evaluated the environmental effects from energy development projects, estimating the value of the external costs and benefits accompanying the development of coal-fired or combustion-turbine power plants. Bonneville Power Administration, U.S. Department of Energy. 1983-84.

Analyzed the economic, legal, and political implications of annexing a large tract of industrially-zoned land to the city. City of Troutdale, Oregon. 1983-84.

Reviewed and critically evaluated an economic analysis of lease rates for submerged and submersible land. Oregon Division of State Lands. 1983-84.

Established rates for future sewer services under the county's long-range capital development plan. Multnomah County, Oregon. 1983.

Developed a method for evaluating which type of fringe benefits package would be most cost-effective considering both the demographic characteristics of the workforce and the institutional structure of the employer. City of Portland, Oregon. 1983.

Served as staff to the Citizen's Rate Advisory Committee; prepared the Committee's final report on a new rate structure for residential, commercial, and industrial customers; helped set goals for rate design; conducted a cost-of-service analysis. Emerald People's Utility District. 1983.

Evaluated a range of financing techniques to increase the conservation of energy among commercial users. City of Eugene. 1982-83.

Formulated the evaluation program for a HUD-funded grant used to provide low-interest loans to business for energy conservation measures. Lane County Housing Authority and Community Services Agency. 1982-83.

Prepared a financing plan for the Central County Service District; evaluated innovative financing mechanisms for funding the construction of a sewer system for East Multnomah County. Multnomah County. 1982-83.

Designated an economic development strategy for the City of Forest Grove. City of Forest Grove. 1982-83.

Reviewed the financial stability of one of an educational organization's member institutions, projected future revenues and expenditures, and made recommendations about the organization's continued funding of the institution. Private client. 1983.

Estimated the potential fiscal impacts of a proposed state lottery on the earnings of the Oregon Common School Fund. Oregon Division of State Lands. 1983.

Conducted a cost-benefit analysis of management options for mitigating the threat of flooding in the Toutle/Cowlitz watershed, which was damaged by the eruptions of Mt. St. Helens. Cowlitz County Department of Community Development. 1982-83.

Analyzed six prototypical neighborhoods to determine how the market would respond to new commercial zoning regulations. City of Seattle. 1982.

Forecasted the demand for coal in the Pacific Northwest, California, and Pacific Rim Countries, concentrating on the demand for steam and coal by electric utilities throughout the Western United States. Private client. 1980-82.

Analyzed the fiscal and economic impacts of alternative proposals for offering relief to firms holding contracts for state timber. Oregon Land Board. 1982.

Advised the City Manager on the implications of regional energy policies and helped the city develop appropriate responses to the regional policies. City of Eugene. 1981-82.

Analyzed the system of charges imposed on the City by the municipal utility for installing over-sized water mains to ensure adequate water service for fire protection. City of Eugene. 1981-82.

Evaluated policies to protect the water quality of the Rathdrum Prairie Aquifer from septic effluent resulting from indiscriminate development. Panhandle Health District, Kootenai County, Idaho. 1981-82.

Evaluated the past and current applications of economic theory to water resource management in the Columbia River Basin, assessed the effects of such policies on anadromous fish populations. Bonneville Power Administration, Northwest Resources Information Center. 1981-82.

Developed socioeconomic criteria to measure direct and indirect benefits of hydroelectric projects. Montana Department of Natural Resources and Conservation. 1981-82.

Developed recommendations for the State of Montana concerning its use of investment funds for in-state economic development. Northern Rockies Action Group. 1981-82.

Predicted the demand for housing in downtown Portland using sources of housing statistics and a statewide econometric model. Portland Development Commission. 1981-82.

Developed a reliable model for predicting future trends in 18 non-wood manufacturing industries. Lane County. 1981.

Identified and evaluated an exhaustive list of methodologies for assessing the environmental costs and benefits for acquisitions. U.S. Department of Energy, Bonneville Power Administration. 1981.

Assessed changes in housing demand and supply for the area and simulated future changes for the period 1980-2000. West University Neighborhood of Eugene. 1981.

Researched and reported on the locational criteria of high-technology firms in the Eugene-Springfield area. City of Eugene. 1981.

Identified the transportation problems in the Vancouver, Washington-Portland, Oregon corridor, isolated their causes, recommended solutions and the institutional and financial arrangements for implementing the solutions. Bi-State Task Force (Cities of Portland and Vancouver, Counties of Multnomah and Clark, Metropolitan Service District, Oregon Department of Transportation, Washington Department of Transportation) and the U.S. Department of Transportation. 1980-81.

Wrote the economic element of a draft environmental impact statement, which included estimates of the economic and land-use impacts of a proposed rapid transit system in the western Portland metropolitan area. Metropolitan Service District, Portland, Oregon. 1981.

Described the fiscal impacts of proposed urban development on the county and ten special districts, and analyzed the financing mechanisms available to mitigate those impacts. Washington County, Oregon. 1981.

Prepared a land-use, fiscal-impact, and feasibility analysis of a proposed light-rail system in Washington County, Oregon (in the Portland SMSA). Washington County, Metropolitan Service District (Portland), and U.S. Department of Transportation. 1980.

Developed a five-year fiscal action plan for Multnomah County, Oregon (in the Portland SMSA), including specifying and simulating the major alternative approaches available to the County for facing its fiscal problems. Multnomah County. 1980.

Specified and evaluated alternative programs for encouraging mixed-use districts. City of Eugene. 1980.

Assisted in devising and evaluating alternative policies of airshed management that accommodate anticipated future economic growth. Portland Interstate Air Quality Maintenance Area. 1979-80.

Analyzed the impacts of Montana's CETA program on its participants, developed models of the factors influencing the program's effectiveness, and trained the program's administrators in interpreting the models to improve the program. Montana Governor's Employment and Training Council, with a grant from the U.S. Department of Labor. 1979-80.

Prepared a grant application for a transit mall in Eugene under the Urban Initiatives Program of the U.S. Urban Mass Transit Administration. Lane Transit District, City of Eugene, Oregon. 1980.

Identified and evaluated the locational criteria of the high technology firms based in Santa Clara County, California. Private client. 1980.

Forecasted and evaluated the likely economic consequences of alternative air-quality strategies in the Portland interstate Air Quality Maintenance Area. City of Portland, U.S. Environmental Protection Agency. 1979-80.

Estimated the likely increases in storm water run-off that would result from future urbanization and changes in land use. City of Eugene.

Described and evaluated alternative programs for promoting downtown housing in a sample of four U.S. cities. City of Eugene, Oregon. 1980.

Prepared a work program for a market analysis of Blair Neighborhood's commercial revitalization. City of Eugene, Oregon. 1980.

Defined the objectives of the 19 Statewide Planning Goals, identified inconsistencies among them, and described a methodology for specifying and quantifying program objectives in a way which would allow them to be evaluated. Oregon Land Conservation and Development Commission. 1979-80.

Described and evaluated alternative growth-management programs in a sample of nine U.S. cities. City of Eugene, Oregon. 1979-80.

Prepared a cost-revenue analysis of the acquisition of land surrounding Mahlon Sweet Airport for the purpose of minimizing land-use conflicts with the airport. Mahlon Sweet Airport and the City of Eugene, Oregon. 1979-80.

Developed a short- and long-run evaluative framework for the Oregon Coastal Management Program. Department of Land Conservation and Development. 1979.

Analyzed the potential for a large West-Coast construction firm to secure construction-management contracts for public-sector construction projects, and developed a marketing strategy for the firm. 1979.

Analyzed the feasibility of a proposed major commercial-industrial park in Eugene. Private client. 1979.

Surveyed and inventoried the commercial and recreational boat launching and moorage facilities in Oregon's estuaries, and forecasts of the future demand for such facilities, based on models of commercial and recreational fishing effort and boat ownership. Oregon Department of Land Conservation and Development. 1979.

Analyzed the market for rental and multifamily housing in the central area of Eugene. Eugene Planning Department. 1978-79.

Developed forecasting models of demand for mineral aggregates for Oregon and for the market areas centered in Portland, Lincoln County, Medford and Ashland, Umatilla County (Pendleton, Umatilla, and Boardman), Deschutes County (Bend), and the Willamette National Forest. Oregon Department of Geology and Mineral Industries and the U.S. Army Corps of Engineers. 1978-79.

Analyzed Eugene's economy, with special emphasis on developing an economic management process for implementing the City's economic policies relating to industrial and commercial activity, land use, and the unemployed and economically disadvantaged. City of Eugene, Oregon. 1978.

Analyzed housing markets, matching and forecasting housing prices and household incomes in the Eugene-Springfield Metropolitan Area. Private client. 1978.

Prepared a program for revitalizing the downtowns of Spooner and Medford, Wisconsin, as part of the American Institute of Architects' Regional/Urban Design Assistance Team. The Wisconsin Northwest Regional Planning Commission and the Upper Great Lakes Regional Commission. 1978.

Estimated the effects of the City of Beaverton's building moratorium on homebuilders and households in and around Beaverton, Oregon. The Oregon State Homebuilders Association and the Portland Metropolitan Homebuilders Association. 1978.

Prepared the economic elements for the comprehensive land-use plans of Lincoln County, Newport, Lincoln City, Toledo, Waldport, Siletz, and Depoe Bay. Lincoln County Planning Department, with a grant from the Oregon Department of Land Conservation and Development. 1978.

Described the nature and location of unemployment in Lane County. Lane Council of Governments. 1978.

Analyzed Eugene's housing markets by type, tenure, and location; and analyzed the underlying supply and demand conditions for residential land in Eugene, Springfield, and the balance of the Metropolitan Area. City of Eugene. 1978.

Estimated the effects of Lane County's land-use and other regulations on the supply and costs of land and housing in Lane County and developed a system for monitoring, evaluating, and controlling these effects. The Lane County Planning Division. 1977-78.

Evaluated the effectiveness with which the West Eugene Industrial Area could expect to accommodate future industrial activity, and recommended methods for revitalizing the area and for establishing a vehicle for economic development. City of Eugene. 1977-78.

Estimated the effect of Eugene's Urban Service Boundary; developed a system for monitoring, evaluating and managing Eugene's growth. Eugene Planning Department. 1976-78.

Analyzed the single-family and multiple-family housing markets in Eugene, including an estimation of current and forecasts of the future housing by type, tenure, and location in Eugene, and analyzed the underlying supply and demand conditions for residential land in Eugene, Springfield, and the balance of the Metropolitan Area. City of Eugene, Oregon. 1977.

Prepared a work program and evaluation of the Permit System Improvement Projects in Portland, Salem, Eugene, and the State of Oregon. Oregon Executive Department, Intergovernmental grant from the U.S. Department of Housing and Urban Development. 1977.

Prepared the economic element for Marion County's Comprehensive Plan. Marion County, Planning Department, with a grant from the Oregon Department of Land Conservation and Development. 1976-77.

Evaluated the performance of the employment and training programs for adults in Jackson and Josephine Counties, Oregon. Jackson-Josephine Job Council with a grant under Title I of the comprehensive Employment and Training Act. 1977.

Developed a process to increase the efficiency of the local labor markets in Gilliam, Grant, Morrow, Umatilla, and Wheeler Counties, and evaluated the performance of the District 12 COG's Employment and Training Program. East Central Oregon Association of Counties, the Oregon Employment Division, and the U.S. Department of Labor. 1977.

Estimated the current and forecasted future employment in Eugene, Springfield, and the balance of the Metropolitan Area, by sector and location, and analyzed the underlying supply and demand conditions for commercial and industrial land in Eugene. City of Eugene, Oregon. 1977.

Feasibility analysis of the rehabilitation of the old St. Charles Hospital, Bend, Oregon. Economic Development Administration, U.S. Department of Commerce (Project No. 08-06-01776). 1976-77.

Evaluated the performance of the Greater Portland Convention Association and the Portland Chamber of Commerce, Convention Bureau, Portland, Oregon. Greater Portland Convention Association. 1976-77.

Analyzed the impact of zoning on land use in Portland and forecasted the demand and supply conditions of industrial land in Portland, Oregon. Portland Bureau of Planning; Economic Development Association, U.S. Department of Commerce. 1976.

Prepared work programs for a study of the economies of Linn and Benton Counties and of Lincoln County. Planning Departments of Linn, Benton, and Lincoln Counties, Oregon. 1976.

Preliminary feasibility analysis of a residential, office, and retail development in Eugene. Private client. 1976.

Evaluated and reorganized Ashland's Comprehensive Plan; developed evaluative criteria for land-use planning in Ashland, Oregon. City of Ashland. 1976.

Feasibility analysis of a 1200-room convention center in Downtown Portland. Convention Centers, Inc., Portland, Oregon. 1975-76.

Evaluated the performance of the Youth Work Experience Program in Jackson and Josephine Counties, Oregon. Jackson-Josephine Job Council, Medford, Oregon, with a grant under Title I of the Comprehensive Employment and Training Act. 1975-76.

Evaluated proposed comprehensive plans for the Camp Sherman Area and for Culver City in Jefferson County, Oregon. Planning Department of Jefferson County. 1976.

Analyzed economic impact of a proposed K-Mart development on the Salem business community, Salem, Oregon. Salem City Council. 1976.

Economic impact assessment: geological hazards; fish and wildlife; beaches and dunes; agriculture, forest, urban; historical and archaeological; continental shelf resources; estuary and wetland resources; visual values; freshwater resources, shoreland resources; general policies. Oregon Coastal Conservation and Development Commission. 1975.

EXPERT TESTIMONY IN TRIAL

Provided testimony and analyzed the economic damage incurred by citizens of the State of Yap, in the Federated States of Micronesia, from a ship that grounded on the coral reef and spilled oil into the mangrove-reef ecosystem. San Francisco, California : Davis Wright Tremaine LLP. 2003–2005.

Provided testimony and calculated lost wages and benefits in a wrongful discharge claim between a former employee and a hardwood-trading firm. Portland, Oregon: Dunn Carney Allen Higgins Tongue. 2004.

Provided testimony in a NAFTA arbitration matter in which the claimant, Canada-based Methanex Corporation, sought damages against the United States arising from the State of California's ban on the use of MTBE as a gasoline oxygenate. ECO examined the claimant's expert testimony, and also conducted a separate analysis of the costs and benefits of California's ban on MTBE. Washington, D.C.: U.S. Department of State. 2003-2004.

Provided testimony and evaluated the relevant product and geography for hospital services in Oregon for claims of monopolistic behavior. ECO also reviewed plaintiff's materials relating to economic damage claims. Portland, Oregon: Schwabe, Williamson & Wyatt. 2002-2003.

Provided telephone testimony and evaluated the U.S. market for suspension systems for bicycles. Portland, Oregon: Schwabe, Williamson & Wyatt. 2002-2003.

Provided economic analysis and testimony for the State of Oregon. Analyzed the economic damages to the Oregon coast resulting from an abandoned section of the *New Carissa* shipwreck. The analysis included damages incurred through risk to human life, increased safety and rescue operation costs, and diminution to the public valuation of the coastline. Salem, Oregon: Oregon Department of Justice; Eugene, Oregon: Jaqua and Wheatley. 2002.

Provided testimony and conducted an analysis of the defendant's claims of damages and critiqued these claims in testimony at trial. The dispute concerned a rental agreement for city-owned commercial property. Eugene, Oregon: Harrang, Long, Gary, Rudnick. 2002.

Provided testimony and evaluated the economic impacts to municipalities in Alaska of the oil spilled from the Exxon Valdez. Portland, Oregon: Stoll, Stoll, Berne, Lokting, Shlachter. 2000-2002.

Provided economic analysis and testimony for the South Tahoe Public Utility District. Compared the costs and benefits associated with adding MTBE, ethanol, or alkylates to conventional gasoline in Northern California. Sacramento, California: Miller, Sher & Sawyer. 1999-2002.

Researched the literature, evaluated the economic basis for antitrust claims in a franchise setting, and provided expert testimony to an arbitration panel evaluating antitrust and tying claims related to the cedar home market. Seattle, Washington: Cutler & Nylander. 2000-2001.

Provided economic analysis and testimony regarding the estimated impacts suffered by an oyster grower as a result of the grounding of the New Carissa. San Francisco, California: Davis Wright Tremaine. 2000-2001.

Provided economic analysis and testimony regarding the estimated economic damages to an irrigator resulting from sewage pollution in the South Umpqua River. Roseburg, Oregon: Dole, Coalwell, Clark, Mountainspring & Mornarich. 1998.

Provided economic analysis and testimony regarding the hiring and pay for head coaches at Oregon State University and estimated economic loss from gender-based hiring. Eugene, Oregon: Walters, Romm, Chanti, & Dickens. 1997.

Provided economic analysis and testimony regarding the lost profits from a patent infringement of an orbital sander by conducting surveys and econometric analysis. Portland, Oregon: Kolisch, Hartwell, Dickinson & McCormack. 1995-1997.

Provided economic analysis and testimony regarding the estimated uncompensated expenses and lost profits in a contract dispute between a manufacturer of video lottery terminals and the Oregon State Lottery. Portland, Oregon: Davis, Wright, Tremaine. 1996.

Provided economic analysis and testimony regarding the catalytic converter and recycling industries and estimated damages for the defendant. Eugene, Oregon: Luvaas, Cobb, Richards & Fraser. 1995-1996.

Presented economic testimony regarding antitrust liability and damages related to the wholesale markets for televisions. Portland, Oregon: Schwabe, Williamson, Wyatt. 1995.

Testified regarding damages to a rose nursery from actions by a natural-gas utility. Eugene, Oregon: Luvaas, Cobb, Richards, and Fraser. 1995.

Provided expert testimony regarding economic damages due to antitrust activity in the retail and wholesale markets for petroleum products. Anchorage, Alaska: Condon, Partnow & Sharrock. 1994-1995.

Provided economic analysis of and testimony on issues relating to relevant product and geography, the extent of power in the market for recreation equipment, and damages. Boise, Idaho: Clemons, Cosho and Humphrey. 1988-1992.

Provided testimony regarding whether a property purchase lease-back partnership was organized solely to generate reduced taxes, rather than economic profit for the partners. Oregon Department of Justice. 1991.

Provided economic analysis and testimony regarding price discrimination and tied houses in the alcoholic beverage industry. Portland, Oregon: Schwabe, Williamson, Wyatt, Moore, and Roberts. 1987-1988.

Provided analysis and testimony on the value of eight properties of real estate. Portland, Oregon: Hanna, Urbrikeit, Jensen, Goyak, and O'Connell. 1987-1988.

Provided analysis and testimony regarding the damages associated with alleged patent infringement. Portland, Oregon: Schwabe, Williamson, Wyatt, Moore, and Roberts. 1987.

Provided regulatory policy analysis and testimony regarding irrigation rate discounts, and the adverse economic impact of higher electrical rates. Boise, Idaho: Lindsay, Hart, Neil, and Weigler. 1987.

Provided analysis and testimony regarding the economy of Lincoln County for the years 1970-1986, with special emphasis on the variables of non-agricultural wage and salary employment, covered payrolls, restaurant and hotel payrolls, and total assessed true cash value. Lincoln City, Oregon: Lovejoy and Green. 1987.

Provided economic analysis and testimony regarding the economy of Oregon and the auto industry in the early 1980s. Eugene, Oregon: Swanson and Walters. 1987.

Provided economic analysis and testimony for a private utility regarding economic principles for efficient pricing of electricity sold to regulated utilities by independent producers. Boise, Idaho: Runft, Leroy, Stecher, Coffin, and Mathews. 1985-1986.

Provided economic analysis and testimony regarding a newspaper's alleged violation of antitrust laws with respect to the market for local printed advertising. Portland, Oregon: Gordon, Thomas, Honeywell, Malanca, Peterson, and Daheim. 1985.

Testified in a franchise dispute for Richard Fredricks, owner of Subaru in Multnomah County Circuit Court: State of Oregon. 1983.

Also testified in personal-injury and wrongful-death cases.

OTHER EXPERT ANALYSIS FOR LITIGATION

Provided a declaration in support of the fee that the City charges to access the municipal right-of-way. Portland, Oregon: Office of the City Attorney. 2004-ongoing.

For the defendants, ECO reviewed and critiqued the opposing expert's analysis in a wrongful discharge case. Portland, Oregon: Mersereau & Shannon LLP. 2004-2005.

Studied the economic performance of the ski industry in the Tahoe area and the market conditions that affect this sector of the region's economy. ECO's analysis also addressed the financial and economic factors associated with avoiding and complying with regional water quality regulations and County permitting processes. California: California Office of the Attorney General. 2003-ongoing.

Reviewed economic analyses, prepared by the U.S. Dept. of Agriculture and the Environmental Protection Agency, of the potential economic impacts of court-ordered restrictions on the

use of pesticides near salmon-bearing streams in the Pacific Northwest. Seattle, Washington: Earthjustice. 2004-ongoing.

Provided a declaration of opinion concerning adequacy of financial information. Seattle, Washington: Bricklin Newman Dold, LLP. 2004.

Reviewed economic issues specific to the Telecommunications Act of 1996 regarding the fees that Huntsville charges Level 3 Communications to use Huntsville's right-of-way. ECO expressed an opinion on these issues. Huntsville, Alabama: Fees & Burgess, P.C. 2003-ongoing.

Analyzed the economic damage to homeowners in the Coeur d'Alene Valley of Northern Idaho due to hazardous waste pollution from mining and mineral processing activities. ECO used hedonic modeling to determine the impact on residential housing values due to proximity to known concentrations of hazardous materials. ECO estimated both the capitalized value of future damages, as well as the total of past damages. Seattle, Washington: Hagens & Berman. 2002-ongoing.

Studied allegations of price-fixing in markets for agricultural commodities. Portland, Oregon: Tonkon Torp. 1997-2004.

Analyzed the royalty rate that the holders of a process patent could expect to receive in a licensing arrangement. As part of the analysis, ECO examined a number of factors that would have influenced the final royalty rate in a hypothetical licensing agreement between the two parties. The established success of the process patent in the marketplace, the competitive relationship between the parties, and the customary rates for patents in this field were among the factors considered. Portland, Oregon: Schwabe, Williamson & Wyatt. 2002-2004.

Evaluated and expressed an opinion regarding right-of-way fees that Qwest challenged in litigation in reference to certain provisions of the Telecommunications Act of 1996. Washington, D.C.: Miller & Van Eaton. 2002-ongoing.

Provided economic analysis regarding the economic impacts of a proposed aggregate mining operation on surrounding farms. Dayton, Oregon: Slegers, Inc. 2004.

Analyzed the fees the City of Santee charged Level 3 Communications to access the City-owned right-of-way. San Diego, California: Best Best & Krieger. 2003.

Evaluated the pricing structure that local governments charge providers of cable modem services for using the local right-of-way. In particular, ECO addressed the economic relevance of revenue-based fees in a congested right-of-way. Washington, D.C.: Miller & Van Eaton. 2002-2003.

Analyzed the statistical differences between groups of employment-related injury settlements. The key issue was whether or not the separate groups received different treatment in the settlement process. Seattle, Washington: Hagens & Berman. 2002-2004.

Provided economic consultation on the market for health-care services in Southern Oregon. Portland, Oregon: Schwabe, Williamson, & Wyatt. 2000-2002.

Provided economic analysis regarding the economic value of municipal rights-of-way (row) and use of the row by telecommunications companies. Portland, Oregon: City of Portland Attorney's Office. 2001-2002.

Provided economic analysis of a patent-infringement claim regarding suspension systems for bicycles. Portland, Oregon: Schwabe, Williamson, & Wyatt. 2001-2002

Evaluated the relevant product and relevant geography for hospital services in Southern Oregon. Analysis of economic damage claims. Portland, Oregon: Schwabe, Williamson, & Wyatt. 2000-2002.

Provided an economic analysis of the U.S. market for cookie stamps. Portland, Oregon: Schwabe, Williamson, & Wyatt. 2001.

Estimated the economic impacts of restricting a forest clearcut in the Carbon River Corridor Entrance to Mount Rainier National Park. Seattle, Washington: Washington Forest Law Center. 2000-2001.

Estimated the costs of a potential fuel spill at the mouth of the Columbia River. Potential costs included direct costs (e.g. ship damage, lost fuel, human injury and death, and property), and indirect costs (damage to species, habitat, and industries, including tourism, recreation, and river transportation). Portland, Oregon: Haglund, Kirtley, Kelley & Horngren. 2000-2001.

Estimated the appropriate sample size required to confirm key characteristics about CEC's phone pole population. Bend, Oregon: Karnopp, Petersen, Noteboom, Hansen, Arnett & Sayeg. 2000.

Evaluated the likely effects of certain labor practices on the working conditions of workers in the reforestation industry. Eugene, Oregon: Oregon Law Center. 1999-2001.

Estimating the socioeconomic impacts of a proposed petroleum-products pipeline across central Texas. Private client. Austin, Texas: George & Donaldson. 1999-ongoing.

Estimated the economic impacts of unauthorized construction activity that damaged a pueblo in New Mexico. Private client. 1999-2000.

Studied the economic status of bands of Native American in northern Michigan. Michigan Attorney General. 1999.

Determined the damages caused by two competitors who infringed on a patent for an invention used in the alarm and security industry. Private client. Portland, Oregon: Stoel Rives LLP. 1999.

Evaluated the economic impacts of the proposed Cross-Cascade Pipeline on businesses, grain producers, and consumers. Portland, Oregon: Schwabe, Williamson & Wyatt. 1999.

Studied the economic status of bands of Native American in northern Michigan. Lansing, Michigan: State of Michigan, Department of Natural Resources. 1999.

Estimated the damages in an employment discrimination suit. Portland, Oregon: Gordon Thomas Honeywell. 1998.

Studied factors associated with teen smoking, including price elasticities, research and development expenditures by tobacco companies, and profits generated from cigarette consumption by underaged smokers. Hagens & Berman (States of Washington and Arizona), Golub Silver (State of Connecticut). 1997-1998. Calculated damages to commercial fishermen, seafood wholesalers/processors, hotels, and on small businesses associated with a 1990 oil spill off Huntington Beach, California. Gretchen Nelson, Los Angeles, California. 1997- 2000

An analysis of economic loss suffered as a result of injury. Jamin, Ebell, Schmitt, & Mason. 1997-1998.

Evaluated unfair trade practices in the market for computer software. Eugene, Oregon: Butler, Burgott, Leslie & Stine. 1997-1998.

Estimated economic damages for a class action law suit against an insurance company which retroactively denied coverage to accident victims many months after they had received costly treatment. Seattle, Washington: Hagens & Berman. 1996-1997.

Estimated economic damages resulting from a breach of the 1991 Manufacturing Agreement and misappropriation of intellectual property, trade secrets and manufacturing tooling of vsi crusher parts. Portland, Oregon: Schwabe, Williamson & Wyatt. 1995-1997.

Analyzed the economic well-being of seven bands of Chippewa in Minnesota and Wisconsin. Minnesota Attorney General's Office and the Department of Natural Resources. 1995-1997.

Analyzed lost profits resulting from the improper implementation of a new area code by conducting a telephone survey of affected firms. Seattle, Washington: Hagens and Berman. 1996.

Developed and administered a survey of auto parts salespersons to calculate the value of lost wages. Eugene, Oregon: Hoag, Garrettson, Goldberg & Fenrich. 1995-1997.

Analyzed the relevant product and geographic markets for video superstores. Portland, Oregon: Davis, Wright, Tremaine. 1995-1996.

Analyzed the economic costs and benefits of differential tax treatment between in-state and out-of-state insurance companies by the State of Oregon. Eugene, Oregon: Harrang Long. 1995.

Analyzed emissions of CO₂, mercury, fine particles, and other air contaminants associated with electricity generation. Chicago, Illinois. Environmental Law and Policy Center. 1995.

Testified regarding the relevant geographic market for retail electronics for the 1970s and 1980s in Oregon. Portland, Oregon: Tonkon, Torp. 1995.

Described the relevant product market for lumber mill equipment in the U.S. and Canada, Portland, Oregon. Kolisch, Hartwell, Dickinson, McCormack and Heuser. 1994-95.

Addressed the severe shortcomings of the economic analysis in the Spotted Owl Final Supplemental Environmental Impact Statement, the failure to address those shortcomings, and the economic consequences of adopting a forest management plan based on an incomplete and inaccurate economic analysis. Seattle, Washington: Sierra Club Legal Defense Fund. 1994.

Provided expert analysis on class certification and economic damages for area businesses and property owners affected by airborne toxic pollutants. Seattle, Washington: Riddell, Williams, Bullitt & Walkinshaw. 1993-1995.

Analyzed the economic analysis in the Spotted Owl Final Supplemental Environmental Impact Statement. Seattle, Washington. 1994.

Provided expert analysis regarding the value of damages to municipalities suffered as a result of the Exxon *Valdez* oil spill and cleanup. Kodiak, Alaska: Jamin, Ebell, Bolger & Gentry. 1990-94.

Provided expert testimony on class certification and conducted economic analyses for area businesses and property owners affected by a toxic spill in the Sacramento River. San Francisco, California: Lieff, Cabraser and Heimann. 1992-94.

Analyzed impacts and damages for the various classes of plaintiffs' (e.g., fishermen and municipalities) as a result of the Exxon *Valdez* oil spill in Alaska. 1990-1995.

Analyzed economic impacts of a chemical spill in Lake Superior on municipal government, City of Superior. 1993

Provided expert analysis related to class certification and damages to property values from airport noise. Seattle, Washington: Hagens and Berman. 1992-1993.

Constructed an hedonic price model of the market for vacant commercial and industrial land in King County, Washington. Seattle, Washington: Betts, Patterson & Mines. 1992-93.

Analyzed the market for group dental insurance in Oregon and evaluated claims of antitrust liabilities and damages. Portland, Oregon: Schwabe Williamson. 1992-93.

Provided economic analysis of issues relating to relevant product market and relevant geographic market for neonatal-prenatal medicine. Eugene, Oregon: Calkins and Calkins. 1989-92.

Assessed the extent to which the Bureau of Land Management failed to satisfy the economic requirements for an exemption to the Endangered Species Act in its proposal to log timber in habitat for the northern spotted owl. Portland, Oregon: U.S. Department of Interior, Fish and Wildlife Service. 1991-92.

Determined the extent to which the behavior of an association of river pilots operating under the provisions of an association of a state regulatory authority constituted an antitrust violation. Portland, Oregon: Haglund and Kirtley. 1991-92.

Evaluated and recommended actions for improving the analysis underlying Washington's system for determining child-support payments. Seattle, Washington: Betts, Patterson & Mines. 1991.

Provided expert analysis and testimony regarding the economic impacts of certain injunctions on forest service timber sales in Washington, Oregon and northern California. Seattle, Washington: Sierra Club Legal Defense Fund. 1991.

Assessed the feasibility of a public agency's plan to condemn property and construct a hotel, thereby displacing planned private-sector development of a smaller hotel on the same site. Portland, Oregon: Pfister and Tripp. 1991.

Valued damages resulting from patent infringement by a competitor of a manufacturer of agricultural equipment who also made and sold similar, non-infringing equipment. Portland, Oregon: Schwabe, Williamson and Wyatt. 1991.

Analyzed the demand for recreational fishing in the Flathead Lake region in a dispute over the state's authority to regulate fish and game on an Indian reservation. Attorney General's Office, State of Montana. 1990.

Provided economic analysis, with specific emphasis on the issues of relevant market, barriers to entry, and competition, of the market for maraschino cherries. Portland, Oregon: Tonkon, Torp, Galen, Marmaduke & Booth. 1990.

Described the importance of the apple industry to Chelan County, Washington and estimated the likelihood that randomly-selected jurors will have a direct or indirect financial interest in the apple industry. Hoquiam, Washington: Stritmatter, Kessler and McCauley. 1989.

Provided economic analysis of the savings proposed by a private corporation to the Defense Logistics Agency. Boise, Idaho: Runft, Leroy, Coffin, and Mathews. 1985-1988.

Provided economic analysis regarding claims that a natural gas pipeline corporation violated antitrust laws in its interpretation and application of pipeline deregulation rules of the Federal Energy Regulatory Commission. Salt Lake City, Utah: Watkiss & Campbell. 1988.

Provided economic analysis regarding a claim by a roller-bearing manufacturer that a rock-crusher manufacturer violated antitrust laws by attempting to restrict after market sales of replacement roller bearings to crusher users. Pittsburgh, Pennsylvania: Springer, Bush, & Perry. 1988.

Provided economic analysis and testimony regarding a claim that the sale of television rights for professional bowling violated antitrust laws. Seattle, Washington: Hansen, Robinett & Krider. 1988.

Analyzed the economic impacts of a hostile takeover of Farmers Insurance by the British American Tobacco Company. Portland, Oregon: Lindsay, Hart, Neil, & Weigler. 1988.

Provided economic analysis for a school board during labor negotiations. Eugene, Oregon: 4J School District. 1987.

Reviewed plaintiffs appraisal of damages for appropriateness of method and amount for dependents' (countersuit) damages incurred resulting from breach of contract. Bend, Oregon: McCord & Haslinger, 1986.

Analyzed the present discounted value of damages incurred by a private corporation under an alleged restrictive settlement. Eugene, Oregon: Perrin, Gartland and Doyle. 1984-86.

Provided economic analysis regarding a claim that a manufacturer of Mexican coffee liqueurs exercised monopoly power to exclude or restrict competition in the market. Schwabe, Williamson, Wyatt, Moore & Roberts. 1985-86.

Provided economic analysis of the present discounted value of alleged damages sustained by Chrysler Corporation resulting from the action of two franchises. Seattle, Washington: Betts, Patterson, and Mines. 1986.

Assisted Multnomah County in their labor arbitration with corrections officers. 1985-86.

Provided economic analysis regarding an alleged restraint of trade for the sale and transportation of fly ash. Stoel, Rives, Boley, Fraser & Wyse. 1985-86.

Provided economic analysis regarding real estate markets and financial conditions in Ada County and the City of Boise. Boise, Idaho: Clemons, Cosho, and Humphrey. 1985.

Assessed the impact of the City of Ketchum's annexation of the Northwood Subdivision on the Ketchum Springs Water Supply Company's revenues, rate base, capital structure, customers, and stockholders. Private client. 1984-85.

Provided economic analysis regarding a claim that a video-game manufacturer violated antitrust laws with respect to the distributorship of video games. Seattle, Washington: Betts, Patterson, and Mines. 1985.

Analyzed relevant geographic markets for housing in Boise and Ada County. Private client. 1984-85.

Analyzed the disparities between procedures for determining taxable value for residential properties and those for commercial and industrial properties. Developed expert testimony on the reliability and validity of statistical techniques used in calculating ratios of assessed to market values. Montana Department of Revenue. 1983-84.

Provided economic analysis regarding a claim that the members of a medical clinic violated antitrust laws by using the peer-review process to restrict a competing surgeon's hospital privileges. Astoria, Oregon: Tonkon, Torp, Galen, Marmaduke, and Booth. 1984.

Provided economic analysis and calculation of damages regarding a newspaper's alleged violation of antitrust laws with respect to the market for local printed advertising. Boise, Idaho: Risch, Goss, Insinger, and Sallady. 1984.

Provided a condemnation appraisal for the Oregon Department of Justice in Umatilla County Circuit Court. State of Oregon. 1984.

Provided analysis and testimony regarding damages associated with a contract dispute from the loss of a lease and additional travel costs when defendant failed to vacate a space as promised. King County, Washington: Betts, Patterson, and Mines. 1984.

Provided business valuation for John McInnis and Rhodes Big O Tires, Inc. Mountain Home, Idaho: Hall and Friendly and the C.P.A. firm McMurtrey and Company. 1984.

Analyzed the disparities between procedures for determining taxable value for residential properties and those of commercial properties. Montana Department of Revenue. 1982-83.

Provided business valuation representing Robert Hammons & Associates in U.S. District Court, Idaho: Stephen, Slavin, Kvanvig, and Stephan. 1983.

OTHER EXPERT TESTIMONY

Testified at a hearing before Oregon's Attorney General regarding the proposed merger of McKenzie-Willamette Hospital and Triad Corporation. Springfield, Oregon: Thorp Purdy Jewett Urness & Wilkinson, P.C. 2003.

Presented oral testimony (via telephone) to the Oregon Senate Economic and Job Stimulus Committee, regarding an overview of Oregon's economy. December, 2001.

For Earthjustice, ECO prepared a declaration on the economic issues of critical habitat designation for endangered salmon. Seattle, Washington: Earthjustice Legal Defense Fund. 2001-2002.

Provided economic analysis and testimony regarding the economic impacts of a proposed sand-and-gravel mine on surrounding farms. Private client. Eugene, Oregon: Bahr & Stotter. 2000-2002.

Evaluated the economic impacts of bypassing four Federal dams on the Lower Snake River, developed a plan to mitigate the negative consequences of the bypass, and testified on these topics in a joint hearing before the House Subcommittee on Fisheries Conservation, Wildlife and Oceans, and the Subcommittee on Water and Power. Portland, Oregon: Trout Unlimited and Earthjustice Legal Defense Fund. 1999.

Testified before the Washington Shorelines Hearing Board regarding how locating a large retail shopping center on industrial land would affect neighboring industrial uses. Seattle, Washington: David C. Hall. 1996.

Provided oral testimony at an Antitrust Immunity Hearing regarding a petition seeking anti-trust immunity for a proposal to integrate health-care providers. Vancouver, Washington: Reed, McClure. 1995.

Testified before the Portland City Council regarding the proposed location of a Costco retail store in the Industrial Sanctuary of Portland, Oregon. Portland, Oregon: Kell, Alterman. 1995.

Testified on the economic impacts of proposed reforms to the Mining Law of 1872 before U.S. Senate Subcommittee on Forests and Public Land Management, Committee on Energy and Natural Resources, Washington, D.C.: Mineral Policy Center. 1995.

Testified regarding the Southeast Alaska Jobs and Communities Protection Act of 1995 before the U.S. Senate Committee on Energy and Natural Resources, Washington, D.C.: Sierra Club Legal Defense Fund Alaska Rainforest Campaign. 1995.

Testified on the Northern Spotted Owl and the timber industry in the Pacific Northwest before the U.S. Senate Subcommittee on Environmental Protection, Committee on Environment and Public Works, Washington, D.C.: U.S. Senate Committee on Environment and Public Works. 1992. Testified before the New Mexico Horizons Task Force on Strategic Thinking in Oregon and Utah. Santa Fe, New Mexico. 1994.

Testified before the Committee on Natural Resources House of Representatives on Changing Needs of the West. Salt Lake City, Utah. 1994.

Testified on the impacts of reduced timber harvest in the Tongass National Forest on the economy of southeast. Anchorage, Alaska: Alaska Sierra Club Legal Defense Fund. 1994-1995.

Provided analysis and testimony to the Oregon State Legislative Joint Committee on Forest Products and developed a strategic plan for allocating state resources to assist dislocated workers and timber-dependent communities and a set of legislative recommendations for implementing the plan. Participated in a one-day symposium sponsored by the Oregon State Legislative Joint Committee on Forest Products to identify timber-dependent communities. Salem, Oregon. 1990.

Provided analysis and testimony to the Oregon Legislature regarding a proposal to implement comprehensive effluent fees for air pollution. Salem, Oregon: Oregon Environmental Council. 1990.

Testified before Subcommittee on Regulation and Small Business Opportunities regarding the viability of flexible manufacturing networks. Washington, DC: U.S. House of Representatives Committee on Small Business. 1988.

Testified before the Portland City Council regarding the proposed location of a Fred Meyer shopping center in Portland, Oregon. Portland, Oregon: Sullivan, Josselson, Roberts, Johnson, and Kloos. 1985-86.

Testified before the Idaho Public Utility Commission regarding appropriate methodologies for deregulating the electricity-generating industry and for determining the fair-market value of electricity produced by cogenerators and small power producers. Boise, Idaho: Lindsay, Hart, Neil, and Weigler. 1985.

Estimated the competitive wages necessary to attract and retain police and firefighters. Testified at arbitration hearings between the City and the Public Employees' Union. City of Portland. 1984-85.

Provided regulatory policy analysis representing Hy-Tech Corporation in a rate hearing before the Idaho Public Utility Commission. Boise, Idaho: Runft, Leroy, Coffin, and Mathews. 1984.

STATE, REGIONAL, AND NATIONAL PRESENTATIONS AND CONFERENCES

"The Societal Costs and Benefits of Misallocating Water and Gasoline Additives." Universities Council on Water Resources Conference. July 2004.

"The Economic Importance of Ecosystem Services." Universities Council on Water Resources Conference. July 2004.

"The Economic Importance of Ecosystem Services." AWRA Summer Specialty Conference. June 2004.

"The Societal Costs and Benefits of MTBE as a Gasoline Additive in California." Presenter, NGWA Conference on MTBE, Assessment, Remediation, and Public Policy. June 2003.

"Paying Mother Nature." Speaker, 2003 American Planning Association National Planning Conference. Denver, Colorado. April 2003.

"The Economics of Dam Removal on the Lower Snake River." Presenter. Economic Value of Environmental Resources Conference. Chico, California. April 2003.

"Challenges to Economic Security." Panelist, Environmental Economics, Pacific Northwest Regional Economic Conference. Portland, Oregon. May 2002.

"Economic Alternatives in the Willamette River Basin." Keynote speaker, Willamette River Watershed Conference. Sponsored by: Oregon Chapters of the American Institute, and American Water Resources Association. Vancouver, Washington. April 2001.

"Economics, Salmon and the Pacific Northwest." Coordinator and presenter: Salmon/Water Workshop. Participants: ECONorthwest, Earthjustice, American Rivers, The Center for Environmental Law & Policy, Trout Unlimited, and Columbia River Inter-Tribal Fish Commission. Portland, Oregon. March 2001.

"Competition Matters: An Economist's Perspective of Collaborations and the National Forests." Speaker, University of Montana School of Forestry, Plum Creek Lectures. January, 2001.

"The New West: Changing Demographics, Economics, and Perceptions." Speaker, Washington State Trust Lands Conference. Seattle, Washington. November, 2000.

"Economic Benefits of Parks and Recreation." Speaker, 2000 Oregon Recreation & Park Association Annual Conference. Welches, Oregon. October, 2000.

"Hidden and Ignored Economic Costs in Natural Resource Decision Making." Speaker, NEPA/ESA Conference 2000. Austin, Texas. September, 2000.

"Regional Economic Impact Analysis." Speaker/Facilitator, Workshop on Estimating the Economic Values and Impacts of Water-Resources Projects in the Mississippi River Basin. Memphis, Tennessee. September, 2000.

"Application of Economic and Related Policy Information to Prioritize Riparian Restoration of the Willamette River, Oregon." Speaker, AWRA International Conference on Riparian Ecology and Management in Multi-Land Use Watersheds. Portland, Oregon. August, 2000.

"Economic Valuation and the Watershed." Speaker, Watershed Partnerships Seminar. U.S. Office of Personnel Management, Western Management Development Center. Denver, Colorado. September, June and March 2001, November and July, 2000, November and March, 1999, October and June, 1998.

"Both Sides Of The River: Salmon Recovery In The Columbia Basin." Panel participant: Searching for a Preferred Alternative. Eastern Washington University. Spokane, Washington. June, 2000.

"The Challenge of Healthy Communities," Keynote speaker, EPA Region 10 (Alaska, Washington, Oregon, Idaho) Office of Ecosystems and Communities. Seattle, Washington. May, 2000

"Beyond 2000: Regional, Border, and Global Issues for the Pacific Northwest." Panel participant: "Protection of salmon and other environmental issues." Western Washington University: Pacific Northwest Regional Economic Conference. Bellingham, Washington. April, 2000.

"The Economic Consequences of Watershed Management: Values, Impacts, and Equity." Speaker, Second Annual Wetland Workshop, Bureau of Reclamation, Great Plains Region. Estes Park, Colorado. October, 1999.

"Benefits and Mechanisms for Spreading Asset Ownership in the United States." Invited Participant, The Ford Foundation Conference. New York, New York. May, 1999.

"Economic Changes in the Pacific Northwest." Panel participant, Pacific Northwest Conference on Environmental & Resource Economics. Eugene, Oregon, May, 1999

"The Economic Consequences of Watershed Management: Values, Impacts, and Equity," Sustaining the Missouri River for Future Generations. Pierre, South Dakota, March, 1999

"The Ecosystem-Economy Relationship: Insights from Six Forested LTER Sites." Speaker, LTER Conference on Linking Natural and Socioeconomic Processes. Madison, Wisconsin, October, 1998.

"Making Decisions When Everything Matters." Speaker, National Wilderness Conference. Seattle, Washington, May, 1998.

"Designing a Report Card on the Health of the Nation's Ecosystems." Panelist, The H. John Heinz III Center for Science, Economics and the Environment. Washington, D.C., February 1998.

"Making Decisions When Everything Matters." Speaker, Oregon Chapter American Fisheries Society Annual Meeting; Population, Economics, and Ecosystems: Is Sustainability Attainable? Sunriver, Oregon, February 1998.

Participant, EPA/NSF Partnership for Environmental Research: Water and Watersheds STAR Grants Program Review Meeting. Corvallis, Oregon, January 1998.

"The Effects of Measure 47." Speaker, Oregon Speech-Language and Hearing Association's Fall Conference. Bend, Oregon, October 1997.

- "How Can Researchers and the EPA Work Together to Improve Benefit/Cost Analysis?"
Speaker, EPA Deputy Administrator's Environmental Economics Forum. Cambridge, Massachusetts, September 1997.
- "The Economic Effects of Ecosystem Management." Paper presented at the Western Economic Association International Conference. Seattle, Washington, July 1997.
- "Tracing the Economic Roots of Wetlands Restoration." Presenter, Pacific Northwest Chapter of Wetland Scientists and the Society for Ecological Restoration. Corvallis, Oregon, May 1997.
- "The Pacific Northwest Economy: Transitions from Brown to Green." Panel Moderator, Pacific Northwest Regional Economic Conference. Spokane, Washington, April 1997.
- Speaker, Oregon Department of Environmental Quality's Orphan Site Task Force, Portland, Oregon, January 1996.
- "The Evolution of the Pacific Northwest's Regional Economy." Speaker, Carroll College, Helena, Montana, January 1996.
- "Making Decisions When Everything Matters." Speaker, Washington Department of Ecology Director's Choice Forum, Seattle, Washington, September 1995.
- "Marketing of Indian Water Rights." Speaker, Western States Water Council's Symposium on the Settlement of Indian Water Rights' Claims, Portland, Oregon, September 1995.
- "Making Use of Experts When Litigating Disasters." Oregon Bar Association's 1995 Annual Meeting: Litigating Environmental Disasters: Lessons Learned Litigating the Exxon *Valdez* Oil Spill Case, Seaside, Oregon, September 1995.
- "The Changing Northwest Economy." Speaker, Pacific Rivers Council Northwest Economic Conference, July 1995.
- Invited Speaker, President Clinton's Pacific Rim Regional Economic Conference, Little Rock, Arkansas, June 1995.
- "Incentives and Subsidies: Water and Energy Use in the Columbia Basin." Speaker, Northwest Water Law and Policy Project on Water Policy and Sustainability in the Columbia River Basin. Lewis and Clark Law School. May 19, 1995.
- "The Two Oregons Debate: Timber vs. High-Tech." Speaker, City Club of Portland, Portland, Oregon. April 14, 1995.
- "Creating Community for Quality Education." Speaker, Confederation of Oregon School Administrators, Portland, Oregon. March 6, 1995.
- "Economic Forecast for 1995." Speaker, City Club of Portland, Portland, Oregon. January 6, 1995.
- "Northwest Environmental Economics." Speaker, Oregon Chapter of the American Society of Landscape Architects; USDA Forest Service, Mt. Hood National Forest Landscape Architects; and University of Oregon, Landscape Architecture Department's Conference on Sustainable Future, Beaverton, Oregon. October 28, 1994.
- "Managing the Northern Forests: Other Lessons from the West." Panelist, Vermont Law School's symposium on the northern forest lands and the law, South Royalton, Vermont. September 30, 1994.

"The Use of Economic Information in Decisionmaking and Economic Benefits of Spotted Owl Rules." Speaker, Washington Department of Natural Resources, Forest Practices Board Meeting, Olympia, Washington. September 13, 1994.

"Strategic Thinking in Oregon and Utah." Speaker, Meeting of the New Mexico Horizons Task Force, Santa Fe, New Mexico. August 25, 1994.

"Economics and Livability of Cities." Speaker, Washington State Department of Community, Trade and Economic Development Downtown Revitalization Program Meeting, Kent, Washington. August 5, 1994.

"Environmental Economics." Speaker, Sierra Club Legal Defense Fund Annual Meeting, Chico Hot Springs, Montana. May 24-28, 1994.

"Cycles & Trends: It's All a Matter of Timing." Speaker, 1994 Construction Industry Conference, Portland, Oregon. May 20, 1994.

"Contemporary Issues in Externalities." Speaker, NARUC-DOE Fifth National Conference on Integrated Resource Planning, Kalispell, Montana. May 15-18, 1994.

"The College Student and the Economy." Speaker, Pacific Northwest Association of College Admissions Counselors, Portland, Oregon. April 22, 1994.

"Oregon's Economy: The Recent Past and Projections for the Future." Keynote Speaker, Oregon State System of Higher Education's Counselor Conference, Eugene, Oregon. October 15, 1993.

"How Do We Value Biodiversity in Ecosystems?" Speaker, Forest Products Research Conference, U.S. Forest Service, Madison, Wisconsin. September 28, 1993.

"The Need for Sustainable Development and NW Regional Cooperation." Introduction, Pacific Northwest Sustainable Development Convenors Forum, Portland, Oregon. September 13, 1993.

"Role of Strategic Planning in Framing Performance Measures and Accountability." Speaker, City of Seattle Mayor's Retreat, Seattle, Washington. August 19, 1993.

"Meeting the Challenge: The Economic Benefits of Wildlife." Speaker, Oregon Department of Fish and Wildlife 100th Anniversary Celebration, Portland, Oregon. July 23, 1993.

"Oregon's Real Economy." Keynote Speaker, Oregon Downtown Development Association Annual Conference. June 11, 1993.

"Social Considerations of High Quality Forestry." Keynote Speaker, U.S. Forest Service Pacific Northwest Research Station Workshop on High Quality Forestry. May 11, 1993.

"The Effect of Taxes on Oregon's Economy." Oregon State Legislature, Joint Interim Committee on Revenue and School Finance. September 16, 1992.

"Trojan Shutdown or Phasedown - Who Pays?" Portland City Club. Portland, Oregon. August 21, 1992.

"Environmental Externalities and Utilities." Northwest Power Planning Council Work Session. June 24, 1992.

"Washington's Changing Economy: The Challenge for Future Regulation." Washington State Bar Association's Environmental and Land Use Law Section Seminar. May 29, 1992.

"Economic Forecast." District 10 Pacific Northwest Council Credit Professionals International Credit Association, 1992 Credit Conference. Portland, Oregon. May 19, 1992.

"The Economic Myths and Realities of Timber and Owls." Eugene City Club. Eugene, Oregon. March 1992.

"Economy of the Eugene-Springfield Area and How It May Influence Real Estate Values." Eugene Association of Realtors. Eugene, Oregon. March 1992.

"The Economics of the God Squad Hearings: How Will it Affect Oregonians?" League of Women Voters. Eugene, Oregon. February 1992.

"The Current Economic Issues Associated With Oregon's Natural Resources." City Club of Portland. Portland, Oregon. February 1992.

"The Oregon Economy: What's Going On and What's Going to Go On." Oregon Editorial Writers Conferences. Dinner Speaker, Eugene, Oregon. October 1991.

"The Economics of Water Resource Management." Western Regional Conference, National Association of State Budget Officers (NASBO). Seattle, Washington. August 1991.

"The Economy and Oregon's Public Schools." Oregon Association of School Business Officials (OASBO) 1991 Summer Conference. Bend, Oregon. July 1991.

"Achieving a Predictable Timber Supply and Community Stability While Protecting Forest Ecosystems." Briefing for Congressional and Governors' Staff of Oregon and Washington. Vancouver, Washington. May-June 1991.

"New Perspectives and the Forest Service: A New Way of Thinking." Portland Metropolitan Chamber of Commerce, Portland, Oregon. May 1991.

"Reversal of Fortune: The Economics of New Perspectives." Western Forest Economists Conference, Keynote Speaker, Portland, Oregon. May 1991.

"New Perspectives and the Forest Service." Pacific Northwest Regional Economic Conference, Portland, Oregon, May 1991.

"Economics of Pollution and Clean-up: What Price to Society Today and Tomorrow?" Water Quality, Water Quantity: The Reluctant Marriage Conference. Northwestern School of Law of Lewis and Clark College and WaterWatch of Oregon, Inc. February 1991.

"New Perspectives University Colloquium Coordination Workshop." U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Denver, Colorado. January 1991.

"The Northwest Economy." Oregon Municipal Finance Officers Association. Portland, Oregon. November 1990.

"Transforming From a Natural Resource Based Economy." Visualizing the Future - Idaho's Second Century Symposium. Idaho Centennial Commission. Boise, Idaho. November 1990.

"The Nineties - A Decade for Change." Twenty-Seventh Annual PNWIS-AWMA Conference. Portland, Oregon. November 1990.

"The Northwest Economy." Commercial Investment Realtors of Lane County. November 1990.

"Clear Cut Crisis." Panelist. Oregon Public Broadcasting Symposium. Portland, Oregon. August 1990.

"Oregon's Changing Economy and Marketplace." Panelist. Oregon Downtown Development Association Annual Conference. Eugene, Oregon. July 1990.

"Generators Beware: Environmental Firms are Clustering for a Reason." Environmental Hazards Annual Conference. Keynote Speaker. Seattle, Washington. May 1990.

"New Perspectives on Forest Management." U.S. Forest Service Symposium. Forestry Sciences Laboratory, Corvallis, Oregon. April 1990.

"The Economy and the College Student." National Academic Advising Association Region 8 Conference. Keynote Speaker. Portland, Oregon. March 1990.

"Fast Forward to 2000: The Once and Future Northwest." Keynote speaker. City Club. Portland, Oregon. January 1990.

"Futures Focus Group: Governor's Commission on Higher Education, Portland Metropolitan Area." December 1989. Portland, Oregon.

"The Anatomy of a Timber Supply Crisis." Moderator. The Timber Supply Crisis: Potential Impacts and Economic Development Policy Options, a Colloquium. Northwest Policy Center. Seattle, Washington. November 1989.

"Economic Impacts of Protecting the Environment." Pacific Northwest Pollution Control Association Annual Conference. Eugene, Oregon. October 1989.

"Global Warming: The Stakes." "Sustainable Energy: A Path for Environmental Stewardship." Solar Energy Association of Oregon Annual Conference. Eugene, Oregon. October 1989.

"Whose Water? Past; Present; Future." Institute for Environmental Studies, University of Washington. Seattle, Washington. September 1989.

"The Once and Future Northwest." West Coast Public Radio Conference. Seattle, Washington. September 1989.

"Strategic Economic Development and the Environment." Land Conservation and Development Commission Workshop. Silver Falls, Oregon. September 1989.

"Oregon's Plan for Excellence." Council for Economic Development in Oregon, Annual Conference. September 1989.

"Transportation to the 21st Century." American Economic Development Council 1989, Western Region Conference. Eugene, Oregon. September 1989.

"Planning for Economic Growth." Oregon's Next Decade of Land Use Planning. 1989 Oregon Planning Institute. Eugene, Oregon. September 1989.

"Resource Regulation in Oregon's Future." Statewide retreat for natural resource agency heads. Silver Falls, Oregon. August 1989.

"Future Social, Economic, and Cultural Trends for Oregon: Implications for Public School Education." Oregon Leadership Academy's Spring Leadership Conference. Confederation of Oregon School Administrators. Eugene, Oregon. April 1989.

"Governor Goldschmidt's Strategic Economic Plan for Oregon." Oregon Chapter, American Planning Association Spring Conference. Beaverton, Oregon. March 1989.

"The Linkage Between Public-Works Infrastructure Financing and Economic Development." Special Districts Association of Oregon, Annual Conference. Ashland, Oregon. February 1989.

"Economic Development Impacts of Old Growth Preservation." Oregon's Forests in 2010; a conference on the future of Oregon's forests, hosted by U.S. Representative Peter DeFazio and Oregon State Representative David Dix. Eugene, Oregon. February 1989.

"Regional Economic Development Issues." 1988 Issues Conference of the Northwest Business Coalition. Portland, Oregon. November 1988.

"The Economic Future of the Northwest." 1988 Government Finance Officers' Association, Annual Conference. Seattle, Washington. November 1988.

"The Changing of State Economic Development Policy." Tenth Annual Association for Public Policy Analysis and Management Research Conference. Seattle, Washington. October 1988.

"The Oregon Economy." Oregon Business Week. Western Oregon State College. Monmouth, Oregon. August 1988.

"Evaluating the Role of Fish in the Development of the Pacific Northwest's Economy--or Is It the Other Way Around?" Salmon and Steelhead Roundtable, sponsored by the Northwest Power Planning Council. June 1988.

"Developing a Strategic Plan for Regional Economic Growth." Northwest Policy Center Journalists Forum. May 1988.

"Regional Economic Strategies in the Pacific Northwest." An hour-long interview for KOEW Radio. Seattle, Washington. March 1988.

Invited panelist on urban and rural economic growth. Agriculture Conference Days, Oregon State University. Corvallis, Oregon. February 1988.

Invited testimony before the Committee on Trade and Economic Development. Oregon State Legislature. January 1988.

Invited participant. Regional Strategies Conference. University of Washington, Institute for Public Policy and Management. Seattle, Washington. January 1988.

"A New Approach to Old Economic Development Strategies." Washington Energy Task Force. Olympia, Washington. December 1987.

"The Economic Past and Future of Oregon." Sunset Corridor Association's Fall 1987 conference. Beaverton, Oregon. October 1987.

"Regional Development Strategies: State and Local Roles." Thirteenth Annual Oregon Planning Institute. Eugene, Oregon. October 1987.

"Accelerating Our Economic Development." State of Washington, Economic Conference for Senior Officials: The Economics of the State and Its Regions--What We Know About the Present and What We Can Do for the Future. Washington Institute for Public Policy. Olympia, Washington. June 1987.

"Perspectives on Economic Development Strategies." Northwest Allied Newspapers, Annual Meeting. May 1987.

"New Economic Strategies for Regional Development." Twenty-First Annual Pacific Northwest Regional Economic Conference. Seattle, Washington. May 1987.

Invited testimony before the Committee on Trade and Economic Development. Oregon State Legislature. January 1987.

"The Economics of Economic Development." Seventh Biennial Legislative Conference on the Economy. Salem, Oregon. January 1987.

"Changing Oregon's Economy From an Old Growth Economy." Oregon Natural Resources Council. September 1986.

"Outlook for the National, State, and Local Logging Industry for 1986." Associated Oregon Loggers, Inc. 16th Annual Convention. Springfield, Oregon. January 1986.

"Idaho Economic Development--Prescriptions for Progress." Governor's 1985 Economic Symposium. Boise, Idaho. December 1985.

"Getting the Goods and Paying for Them." PNPCA--Sewer Design/Construction Program. Portland, Oregon. October 1985.

"Small Businesses in the Pacific Northwest: The Real Wealth of Nations." Meeting of Portland *Oregonian* Business Forecast. Portland, Oregon. July 1985.

"Amendments to Oregon's Land Use Planning Goal 9: The Economy." Invited testimony before City Club of Portland, Standing Committee on Land Use. Portland, Oregon. July 1985.

"Making Sure Oregon's Journey on the River Styx is Roundtrip." Democratic Business Forum. Portland, Oregon. July 1985.

"A Look at the Northwest Region." Round Table for Unions in the Wood Products Industry. Portland, Oregon. May 1985.

"A Descriptive, Explanatory, and Prescriptive Analysis of the Economics of Washington and Oregon." Nineteenth Annual Pacific Northwest Regional Economic Conference. Portland, Oregon. May 1985.

"Economic Development and the Future of Portland." Invited testimony before Portland Commissioner, Mike Lindberg and staff. Portland, Oregon. January 1985.

"Can Our Taxes Survive Our Economic Development?" Council of Governments, Annual Dinner Meeting. Salem, Oregon. January 1985.

"Small Business Formation." Meeting of Portland *Oregonian* Business Forecast. Portland, Oregon. January 1985.

"Can Our Taxes Survive Our Economic Development?" League of Oregon Cities. Eugene, Oregon. November 1984. Also, the State Senate Democratic Caucus, Silver Falls State Park, Oregon. January 1985.

"Economic Development and the Future of Portland." Presentation and discussion. The City of Portland, Office of Public Works. November 1984.

"National and Northwest Economic Outlook" and "Business Formation in the Northwest." Inaugural Meeting of Portland *Oregonian* Business Forecast. Portland, Oregon. July 1984.

"State Economic-Diversification Strategies." Oregon Democratic Campaign Workshop. Portland, Oregon. June 1984.

"The Economy and the College Student: More Recent Observations." Pacific Northwest Regional Economic Conference. Olympia, Washington. May 1984.

"The Implications of Increasing Average Costs of Electrical Generation in the Pacific Northwest." Northwest Conservation Act Coalition Conference. Spokane, Washington. April 1984.

"The State of the Economy." Building Trades Business Agents Institute. Eugene, Oregon. March 1984.

"The Economics of Fish and Power." Pacific Northwest Electric Power and Conservation Planning Council. Portland, Oregon. February 1983.

"The Economics of Fish and Power." Hydro-Power Symposium, American Fish Society, Montana Chapter. Kalispell, Montana. February 1983.

"The Economy and the College Student." American Association of Higher Education. Seattle, Washington. November 1982.

"Directions in Oregon Land-Use Planning." Oregon Chapter of the American Society of Landscape Architects. Eugene, Oregon. November 1982.

"Housing and the Economy." State Housing Division and Oregon State Home Builders Association. Salem, Oregon. October 1982.

"Achieving Energy Conservation by Rate Design in the Residential Sector." Regional Power Plan Workshop, Pacific Northwest Electric Power and Conservation Planning Council. Seattle, Washington. October 1982.

"The Economics of the Northwest Region." Central Oregon Project Energy Conference. Sun River, Oregon. September 1982.

"Land Use, Public Facilities, and Economic Development." Portland City Club. Portland, Oregon. July 1982.

"Financing the Infrastructure." Oregon Legislative Joint Interim Task Force on Managing and Financing Growth. Eugene, Oregon. July 1982.

"Economic Impacts of Energy Investments." International City Management Association, Northwest Regional Conference, League of Oregon Cities. Salishan Lodge, Oregon. March 1982.

"Developing Industrial Lands." Testimony before the Industrial Lands Subcommittee of the Joint Legislative Committee on Land-Use. Portland, Oregon. March 1982.

"Current Economic Issues." Labor Education and Research Center, Building Trades Representative Institute. University of Oregon. Eugene, Oregon. March 1982.

"Oregon Economic Conditions and Forecasts." Presented to the Oregon Association of School Boards. Inn at Otter Crest, Newport, Oregon. January 1982.

"The State and National Economies: The Foreseeable Impact on Local Government." State Council of Firefighters, Labor Education and Research Center. University of Oregon. December 1981.

"Environmental Impacts and the Evaluation of Resource Acquisitions.". Third Annual, Alternative and Renewable Energy Resource Conference, and Bonneville Power Administration. University of Montana. September 1981.

"State and Local Economic Development: Target Variables--Tools and Strategies." Fifteenth Annual, Pacific Northwest Regional Economic Conference. Boise, Idaho. April 1981.

"Economic Growth--Public and Private Sector--Financing--Problems and Future Development." Oregon League of Women Voters. Eugene, Oregon. April 1981.

"The Economic Outlook." Society of Industrial Realtors, 1st Annual Real Estate Conference. Portland, Oregon. April 1981.

"Oregon's Economic Forecast". Oregon Senate Review Committee. Salem, Oregon. March 1981.

"Current Economic Conditions." Labor Education and Research Center's Session for Business Agents, Building Trades Union. University of Oregon. Eugene, Oregon. March 1981.

"Economics and Public Policy Issues in Mass Transit." Transit Union Representatives' Training Institute. Asilomar, California. January 1981.

"Mass Transit: Economics and Public Policy." Mass Transit Union Representative Training Institute. U.S. Department of Transportation and AFL-CIO, George Meany Center for Labor Studies. University of Oregon (Eugene, Oregon), July 1980. University of California (Berkeley, California). November 1980 and January 1981.

"National/Regional/Oregon Economics." League of Oregon Cities. Portland, Oregon. December 1980.

"Economics and Public-Policy Issues in the Mass Transit Industry." Transit Union Representatives' Training Institute. Asilomar, California. November 1980.

"State and Local Economic Development in Oregon." "Vehicles for Local Economic Development." Annual conference of the League of Oregon Cities. Salem, Oregon. November 1980.

"The Pacific Northwest as Viewed by a Practitioner of the Dismal Science." Fourth Annual, Northwest Regional Financial Planning Conference. May 1980.

"Approaches to Estimating the Effects of Public Policies on Urban Land Prices." Pacific Northwest Regional Economic Conference. Portland, Oregon. May 1980.

"The Pacific Northwest's Economic Future." Annual, Northwest Regional Financial Planning Conference, International Association of Financial Planners. Portland, Oregon. May 1980.

"New England and the Pacific Northwest: Regional Economic Comparisons." Fourteenth Annual, Pacific Northwest Regional Economic Conference. Portland, Oregon. May 1980.

"Approaches to Estimating the Economic Effects of Public Policies on Urban Land Prices." Pacific Northwest Regional Economic Conference. Portland, Oregon. May 1980.

"Measuring the Effects of Public Policy on Land Prices." U.S. Department of Housing and Urban Development and the Urban Land Institute. Washington, D.C. February 1980.

"The Economics of the Extended Family." Oregon Community Education Association. Eugene, Oregon. February 1980.

- "Urban Growth Boundaries." Oregon Land-Use Conference for Realtors and Homebuilders, sponsored by Dialogue Northwest. Portland, Oregon. May 1979.
- "Neighborhood Revitalization." Neighborhood Revitalization Workshop, Oregon Savings and Loan League. Portland, Oregon. May 1979.
- "The Economics of Land Use." Legislative Conference on the Economy, Oregon Council on Economic Education. Willamette University. Salem, Oregon. January 1979.
- "The Effects of Legislative Action on Land Value." Seminar on Residential Property Values in Transition. Central Oregon Chapter of the American Society of Appraisers. September 1978.
- "Shopping Patterns and Municipal Regulations in Nairobi." Western Regional Science Association meetings. Long Beach, California. February 1974.
- "Urbanization, Land Use and Long-Range Planning in the State of Oregon." Eighth Annual, Pacific Northwest Regional Economic Conference. Seattle, Washington. April 1974.
- "Land-Use Planning, Economic Development and the Distribution of Population in Oregon." Seventh Annual, Pacific Northwest Regional Economic Conference. Portland, Oregon. April 1973.
- "Critical Appraisal of the American Institute of Architects National Policy on Urban Growth." AIA/Press Seminar. Portland, Oregon. September 1972.
- "The Economics of Poverty in Relation to Choice." Annual Meeting of the American Psychology Association. San Francisco. September 1968.
- "Municipal Investment: An Econometric Analysis." Harvard Seminar on Regional and Urban Economics, Resources for the Future. Cambridge, Massachusetts. November 1967.

TELEVISION AND RADIO COMMENTARIES

National Public Radio, Talk of the Nation. Host: Neal Conan. "Northwestern U.S. Economy." November 2002

National Public Radio Series (taped for KLCC radio, Eugene, Oregon): "Current Economic Issues"

The defeat of Measure 28 and the future of Oregon's economy. January 2003.

"Bush vs. Clinton: A Clear Economic Choice." September 1992.

"Why Oregon's Water Policies Are All Wet." August 1992.

"Thanks for the Memories, Larry Campbell." July 1992.

"Tackling Intercollegiate Athletics." November 1991.

"Discussing the Conversation." September 1991.

"Coming Soon: The Legislative Session." July 1991.

"The Graduate (Circa 1991)." June 1991.

"The Prognosis for Health Care." May 1991.

"Family Crisis and Their Costs." April 1991.

"All in the Families." March 1991.

"Mixing Oil and Water." March 1991.

"An Oregon Forecast That's Partly Sunny." February 1991.

"Teaching Our Schools a Lesson." January 1991.

"Taking Five." November 1990.

"Clear Cut Crisis." Panelist. Oregon Public Broadcasting Symposium. Portland, Oregon. August 1990.

"Oregon's Changing Economy and Marketplace." Panelist. Oregon Downtown Development Association, Annual Conference. Eugene, Oregon. 1990.

"The Once and Future Northwest." West Coast Public Radio Conference. Seattle, Washington. September 1989.

"Regional Economic Strategies in the Pacific Northwest." An hour-long interview for KOEW Radio. Seattle, Washington. March 1988.

"The University of Oregon's Riverfront Research Park." Radio interview, Willamette Science and Technology Center's series, "Getting Technical." KWAX-FM. Eugene, Oregon. September 1985.

COMMUNITY SERVICE, SPEECHES, AND WORKSHOPS

"Economic Impacts of Ballot Measure 37," Panel presentation, sponsored by Eugene Area Chamber of Commerce. Eugene, Oregon. December 2004.

Lane County Forecast 2004, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 2004.

Lane County Forecast 2003, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 2003.

Lane County Forecast 2002, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 2002.

"Economic Matters & Economics Matters: Oregon's Road Into and Out of the Current Economic Recession." Keynote speaker, Mid-Willamette Valley Council of Governments Annual Meeting. Salem, Oregon. January 2002.

Lane County Forecast 2001, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 2001.

"Economic Case Against Logging." Panel participant, University of Oregon, Environmental Law Conference. Eugene, Oregon. March 2000.

Lane County Forecast 2000, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 2000.

"Space, Time and Eugene's Economy." Panel participant, City of Eugene, 1999-2000 City Goals Process, Environmental Scan. Eugene, Oregon. February 1999.

Lane County Forecast '99, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. February 1999.

"Making Sense of Trends and Cycles." Principal Speaker, Lane Council of Governments Appreciation Dinner. Eugene, Oregon. January 1999.

"Environmental Issues in the Pacific Northwest." Speaker, University of Oregon Department of Economics, Lecture Series. Eugene. Oregon. July 1998.

"Economic Forecast 1998." Oregon Association of Realtors: Spring Real Estate Conference. Eugene, Oregon. March 1998.

Lane County Forecast 1998, Panel discussion sponsored by the *Register-Guard* and Eugene Area Chamber of Commerce. Eugene, Oregon. January 1998

Oregon Speech-Language & Hearing Association's Fall Conference. Bend, Oregon. October 1997.

"Thriving in a Hostile Environment." Oregon Department of Revenue. Salem, Oregon. October 1996.

"Voting Your Pocketbook." City Club of Portland. Portland, Oregon. November 1996. Aired on Oregon Public Broadcasting and area cable television.

Lewis & Clark Law School, Seminar on Growth Management. November 1992.

"Measures 5 and 7: How Do They Impact the Oregon Economy?" Clergy and Laity Concerned (CALC) Fall forum. October 1992.

"The Changing Economy and Housing." Eugene Housing Committee/City Club. Eugene, Oregon. June 1991.

"Changes in the Pacific Northwest Economy." Eugene Estate Planning Council. Eugene, Oregon. May 1991.

"Eugene's Economic Future: If Not Timber, What?" City Club of Eugene. November 1990.

"Region on Trial." Northwest Public Affairs Network. Seattle, Washington. September 1990.

"Ancient Forest National Symposium and Retreat." The Wilderness Society. Breitenbush Park, Oregon. August 1990.

"Ancient Forests." Oregon Public Broadcasting. Portland, Oregon. August 1990.

"Oregon's Changing Economy and Marketplace." Oregon Downtown Development Association. Eugene, Oregon. July 1990.

"The Spotted Owl and the Northwest Economy." Local radio and television stations. Eugene, Oregon. Spring 1990.

"Economy and the College Student." Golden Key Club, University of Oregon. Eugene, Oregon. January 1990.

"Metropolitan Economic Development Strategies: A Panel Discussion." Eugene Area, Chamber of Commerce. Eugene, Oregon. December 1989.

"Lane County Regional Economic Trends." Conference on the Economy of Lane County, sponsored by Lane Council of Governments and Eugene-Springfield Metro Partnership. Springfield, Oregon. November 1989.

"Timber Issues Call-In." Invited participant. KSOR Public radio for Southern Oregon and Northern California. Ashland, Oregon. July 1989.

"Oregon's Economy in 1989 and Beyond." Emerald Valley Development Professionals. Eugene, Oregon. January 1989.

"Education and the Economy." Churchill High School, Career Awareness Program. Eugene, Oregon. January 1989.

"The Economic Future of Lane County." Eugene/Springfield Leadership Conference. Eugene, Oregon. September 1988.

"Career Opportunities in Economics." Student Economic Association. University of Oregon. May 1988.

"Developing Oregon's Economy Strategically." Junction City-Harrisburg Area, Chamber of Commerce. Junction City, Oregon. March 1988.

"Strategies for Oregon's Economic Development." Eugene Active 20-30 Club. Eugene, Oregon. March 1988.

"Presidential Campaign '88: The Candidates and the Economic Issues." Student Economics Association, Presidential Symposium. University of Oregon. March 1988.

"The Economy and the College Student." New Student Host Program's Academic Symposium. Eugene, Oregon. September 1987.

"The Economic Future of Lane County." Eugene/Springfield Leadership Conference. Eugene, Oregon. September 1987.

"The Environment and Regional Economic Development." Earth Week 1987. University of Oregon. April 1987.

"How to Make Oregon's Journey to the River Styx Roundtrip." Eugene/Springfield Leadership Conference. Eugene, Oregon. April 1987.

Reviewed nominations and selected award winners for the Oregon Chapter of the American Planning Association, Awards Jury. Albany, Oregon. March 1987.

"Lane County Business and Economic Forecast for 1987." Lane Community College. December 1986.

"Lane County Business and Economic Forecast for 1987 and Beyond." Eugene-Springfield Leadership Conference. September 1986.

"Old Growth, New Growth: Timber Issues in the Pacific Northwest." Earth Day. University of Washington. April 1986.

"The Economy and the College Student." Oregon State Correctional Institution and Oregon State Penitentiary. February 1986.

"Lane County Business and Economic Forecast for 1986." Eugene Kiwanis Club. February 1986.

"Lane County Business and Economic Forecast for 1986." Eugene Hospital and Clinic. February 1986.

"Economic Future of Lane County." Metro Scene sponsored by the Eugene Area Chamber of Commerce. Eugene, Oregon. January 1986.

"An Overview of the National, State, and City Outlook." Lane County Business and Economic Forecast for 1986. Eugene, Oregon. December 1985.

"The Economics of Housing." Lecture and discussion for a course on "Housing in Society." University of Oregon. November 1985.

"How to Make Oregon's Journey on the River Styx Roundtrip." South Lane Public Issues Forum. Cottage Grove, Oregon. November 1985.

"The Benefits of Small Business." University of Oregon, Speaker Service reception. University of Oregon. September 1985.

"Northwest Economic Future--Where We Are and Where We're Going." Eugene Downtown Rotary Club. Eugene, Oregon. September 1985.

"The University of Oregon's Riverfront Research Park." Radio interview. Willamette Science and Technology Center's series, "Getting Technical." KWAX-FM. Eugene, Oregon. September 1985.

"Making Sure Oregon's Journey on the River Styx is Roundtrip." National Association of Accountants. Eugene, Oregon. September 1985.

"How to Make Washington's Journey on the River Styx Roundtrip." Olympia Economist Club. Olympia, Washington. March 1985.

"Northwest Economic Future--Where We Are and Where We're Going." City Club of Portland, Standing Committee on Land Use. Portland, Oregon. March 1985.

"Oregon's Economic Development: Promises and Prospects." University of Oregon, Forum. Albany, Oregon. March 1985.

"Is There Economic Life After High School?" Student Body, Sheldon High School. Eugene, Oregon. March 1985.

"The Budget Deficit and the Trade Deficit: Symptoms of the Fiscal Revolution." First United Methodist Church. Eugene, Oregon. March 1985.

"Oregon's Economic Conditions, Prospects, and Policies." Lane Democratic Forum. Eugene, Oregon. February 1985.

"Myth and Reality: Oregon's Economy and Taxes." Southern Oregon State College. February 1985.

"Can Lane County Survive?" Eugene-Springfield Real Estate Research Committee, Semi-Annual meeting. November 1984.

"The Level and Composition of Economic Growth in Greater Portland." First quarterly meeting of *The Business Journal*, Board of Economists. Portland, Oregon. July 1984.

"Strategic Economic Planning for Higher Education." Mission Planning Commission, Lewis and Clark College. January 1984.

"Is There Economic Life After High School?" Crescent Valley High School. Corvallis, Oregon. November 1983.

"The U.S. Economy." Sundstrand Data Control. Sunriver, Oregon. September 1983.

"Economics and the Editorial Page." Wendell Webb Seminar, School of Journalism. University of Oregon. June 1983.

"Is There Economic Life After High School?" Sheldon High School. Eugene, Oregon. June 1983.

"Economic Recovery: How Soon? How Good?" Parents' Weekend. University of Oregon. May 1983.

"The Economy and the College Student." Economics Department, Lewis and Clark College. May 1983.

"The Economy and College Student." College Faculty and Staff and Guests of Business, Lewis and Clark State College. Lewiston, Idaho. February 1983.

"A Business and Economic Forecast for 1983: Eugene's Economy." Business Assistance Team, The Eugene Chamber of Commerce, and Lane Community College. Eugene, Oregon. December 1982.

"Local Economic-Development: Causes and Strategies." Linn-Benton Economic Development Forum. Corvallis, Oregon. November 1982.

"Economic Development in Lake Oswego." Lake Oswego Chamber of Commerce Workshop. Inn at Spanish Head, Lincoln City, Oregon. October 1982.

"Evaluation of the Industrial Sector Forecasting Models of the Pacific Northwest Utilities." Conference Commission and the Northwest Energy Policy Project, Bonneville Power Administration Workshop. Portland, Oregon. October 1982.

"The Oregon Economy." University of Oregon Day at the Eugene Hilton. Eugene, Oregon. October 1982.

"Capitalist Theory Today." Nineteenth Annual, Grace Graham Vacation College. August 1982.

"Economic Development Strategies." City of Coos Bay Workshop. Coos Bay, Oregon. August 1982.

"Economic Development Strategies." City of Oregon City Workshop. Oregon City, Oregon. August 1982.

"Reaganomics: A Status Report." Labor Education and Research Center, UFCW Training Program. University of Oregon. July 1982.

"Plant Modernization and Its Impact on Structure of Wood Products Industry." Bureau of Governmental Research Service, University of Oregon. July 1982.

"The Current Recession and the Prospects for Surviving." Office of University Relations Workshop. Bend, Oregon. June 1982.

"Economic Development Strategies." Lake Oswego Chamber of Commerce, Forum Meeting. Lake Oswego, Oregon. May 1982.

"The Economic Outlook for the 1980s." Spring Parents' Weekend, Student University Relations Council, University of Oregon. Eugene, Oregon. May 1982.

"Economic Recovery in Lane County." Lane County Small Business Association, Lane Community College Downtown Center. Eugene, Oregon. April 1982.

"Local Economic-Development Strategies." Employment and Training Department, Lane County. Eugene, Oregon. March 1982.

"Economic Outlook for the Forest-Products Industry." Koppers Chemicals and Coatings. Eugene, Oregon. March 1982.

"Future Options for Economic Development." KOZY-TV. Eugene, Oregon. January 1982.

"Basic Concepts of Economics--Schools of Thought, from Keynes to Reaganomics and Beyond."
"Economic Growth." "Policy Outcomes and Strategies for Labor." Labor Education and Research Center, Economics Seminar. Salem, Oregon. December 1981.

"Growth Industries: The Next 20 Years." Lane County Private Industry Council. Lane County Fairgrounds, Eugene, Oregon. November 1981.

"Reaganomics." Department of Economics. University of Montana. May 1981.

"Is There Life After High School." Junior Achievement's 1981 Oregon Management Conference. Inn at Otter Crest, Newport, Oregon. February 1981.

"The Economy of the Willamette Valley" and "Commercial and Industrial Locations--Some Hints About What Business Looks For." League of Oregon Cities. Portland, Oregon. November 1980.

"Economics of Today." Lecture and discussion. Economics Workshop sponsored by Rogue Community College. Grants Pass, Oregon. April 1980.

"Inflation, Recession, and Economic Growth." Lecture and discussion. Vacation College, University of Oregon. Eugene, Oregon. August 1980.

"Economic Conditions, Land-Use Patterns and Real Estate in Eugene-Springfield." Eugene Board of Realtors. Eugene, Oregon. March 1980.

"Economic Conditions, Land-Use Patterns, and Real Estate in Eugene-Springfield." Eugene Board of Realtors. Eugene, Oregon. March 1980.

"Oregon's Economy: Diagnosis and Prescription." Albany Area Chamber of Commerce. Albany, Oregon. May 1980.

"Northwest Economic Outlook." Oregon Society of Certified Public Accountants. Eugene and Portland, Oregon. November-December 1979.

"Oregon's Economy." Staff retreat, Eugene Hospital and Clinic. Eugene, Oregon. November 1979.

"Oregon's Economy." City Club of Portland. Portland, Oregon. September 1979.

"Economics: Various Viewpoints." Alumni Summer College. Linfield College. August 1979.

"Eugene's Economy and Growth Management." Lecture and discussion for a class on "Community Concerns." North Eugene High School. March 1979.

"Economic Costs of Growth Management Policies." Speech and discussion. Growth Management Workshop sponsored by Jackson and Josephine Counties and Oregon State University, Extension Service. February 1979.

"Urban Economics and Public Policy." Short Courses, Department of Urban and Regional Planning, University of Oregon. Eugene, Oregon. 1977, 1978, 1979.

- "Economic Forecasts for the Eugene-Springfield Area." Emerald Executive Association. Eugene, Oregon. October 1978.
- "Economic Growth in the Eugene-Springfield Area." League of Women Voters of Central Lane County. Eugene, Oregon. May 1978.
- "Hood River's Economy: Some Alternatives for Local Economic Planning." County Planning Commission, City Planning Commission, County Commissioners, City Council, Chamber of Commerce, and various citizens groups. Hood River, Oregon. March 1978.
- "Oregon's Non-Forest Economy." Forests and Oregon's Economic Future Conference, sponsored by the Oregon Student Public Interest Research Group (OSPIRG). Eugene, Oregon. February 1978.
- "Community Development Corporations and Eugene's Economy." Community Forum Series. Eugene, Oregon. February 1978.
- "The Economics of the Community School." Workshop on the Extended Family, sponsored by the Oregon Community Education Association. Eugene, Oregon. February 1978.
- "The Economy of the Eugene-Springfield Metro Area." Joint session of the Retired Officers Association and the Navy League. Eugene, Oregon. January 1978.
- "Lane County's Economy and Vehicles for Economic Development." Economic Development Forum, sponsored by the City of Eugene, the City of Springfield, Lane County, and the Eugene-Springfield Chamber of Commerce. Springfield, Oregon. November 1977.
- "Vehicles for Economic Development: Workshops on Local Economic Planning." Conducted for the Eugene City Council. Eugene, Oregon. October-November 1977.
- "Urban Fiscal Crises." Lecture and discussion. Vacation College, University of Oregon. Eugene, Oregon. August 1977.
- "The Economics of Oregon's Future." Oregon Conference on Survival. Menucha in Corbett, Oregon. June 1977.
- "Economic Development and Portland." Paper and discussion. Invited by Mayor Neil Goldschmidt. Portland, Oregon. November 1975.
- "The Western Environmental Trade Association's (WETA's) Evaluation of OCC&DC's Coastal Zone Management Program." Oregon's Lane Conservation and Development Commission. Salem, Oregon. May 1975.
- "Economic Impacts of the Proposed Pacific Rim Center." Portland City Planning Commission and the Portland City Council. August-November 1973.
- "Economics and Ecology: Key Issues in the Controversy." Public Discussion Series on Environment and Population. University of Oregon. February 1970.
- "Intra-Urban Industrial and Residential Location." "The Urban Ghetto Problems of Race and Poverty." "Urban Renewal and Federal Housing Policy." "Municipal Finance." "The Urban Transportation Problem." Short Course in Business and Economics, Hill Foundation Seminar for Newsmen, University of Oregon. Eugene, Oregon. July 1969.
- "The Application of Benefit-Cost Analysis to Education." NDEA School Administration, In-Service Project. Eugene, Oregon. October 1968, March 1969.

"Expenditures: Oregon in Perspective." Conference on State and Local Tax Policy for Oregon: Perspectives and Alternatives. Sponsored by the School of Business and Technology, Department of Economics and the Cooperative Extension Service of Oregon State University. Corvallis, Oregon. March 1969.

"Urban Problems; Finance, Housing and Transportation." Oregon House Committee on Urban Affairs. Salem, Oregon. February 1969.

"Economics and Real Property." Oregon State Tax Commission, Appraisal Short Course, Oregon State University. Corvallis, Oregon. August 1968.

"The Function and Incidence of Taxation." Hill Foundation Seminars for Newsmen, University of Oregon. Eugene, Oregon. July 1968.