

HODJAT GHADIMI

Associate Professor
School of Design and Community Development
West Virginia University
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ACADEMIC APPOINTMENTS

Associate Professor, School of Design and Community Development, West Virginia University
Research Associate, Regional Research Institute, West Virginia University
Adjunct Professor, Geology and Geography, West Virginia University

EDUCATION

- 1987-93 **The Ohio State University, Columbus, Ohio**
Doctor of Philosophy in City and Regional Planning
Major Field of Research: Development Planning
Minor: Quantitative Methods, Computer Applications
- 1985-87 **The Ohio State University, Columbus, Ohio**
Master's in City and Regional Planning
- 1975-79 **Lawrence Technological University, Southfield, Michigan**
Bachelor of Science in Architecture

ACADEMIC EXPERIENCE:

- 1/2016 – Present **School of Design and Community Development, West Virginia University (WVU)**
Associate Professor
School of Design and Community Development, Davis College of Agriculture, Natural Resources and Design
- 1/2010 – 2016 **School of Design and Community Development, West Virginia University (WVU)**
Assistant Professor
Tenure track faculty, teaching in Design and Landscape Architecture programs; School of Design and Community Development, Davis College of Agriculture, Natural Resources and Design
- 12/2005 – 12/09 **Regional Research Institute, West Virginia University**
Research Associate Professor

Conducting scholarly research, modelling regional development processes, managing and coordinating interdisciplinary proposal preparation and research projects.

9/1993 – 9/05 **Shahid Beheshti University (formerly National University of Iran)**
Faculty member (Planning Dept. Chair 2/004-9/005)
Taught computer applications, quantitative methods, urban and regional modelling, urban and regional planning courses for the graduate programs in architecture and planning; developed new courses on intelligent built environment, and development planning.

9/1993 – 6/97 **University of Tehran, College of Fine Arts**
Part Time Faculty
Taught information technology in architecture, and national and regional planning courses in the Ph.D. programs in Architecture and in Urban and Regional Planning.

1986 – 93 **Department of City & Regional Planning, The Ohio State University**
A. Graduate Research Assistant Position
Research assistant to Richard Florida on venture capital and analyses of high technology complexes in the United States. I developed a unique database to capture the regional structure of venture capital investment in the US.

Collaborated on using input-output modeling to analyze the economic impact of the AmeriFlora'92 (International Floral Exposition) on the Metropolitan Columbus area.

B. Teaching Assistant Position

Assisted with graduate courses and taught computer applications, analytical methods, and project analysis methods in developing countries. I also organized and supervised short-term study programs for international students visiting the department on UNDP grants.

TEACHING

Courses taught in West Virginia University:

- Sustainable Cities: Best Practices (new course developed)
- Creative Economies (new course developed)
- Global Context for Design (new course developed)
- Intro to Urban Design Issues
- Regional Design
- Graduate Research Seminar
- Co-taught, Advanced Landscape Design Studio
- Also taught a module on CGE modelling in a graduate course in WVU's School of Business and Economics

Courses taught in other institutions

- Information Technology in Architecture
- Intelligent Built Environment

- Computer Applications in Planning/Architecture
- Modelling in Urban and Regional Planning
- National and Regional Planning
- Systems Theory for Designers/Planners
- Project Management and Professional Practice
- Thesis Seminar and Research Methods
- Management of Sustainable Development
- Urban and Regional Planning Studios

NON-ACADEMIC EXPERIENCE:

- 9/2002 – 11/04 **Ministry of Information and Communication Technology**
Technical Director of TSITP Project
 Directed strategic planning process for Tehran Software and IT Park (TSITP) – a project envisioned by the Ministry of Information and Communication Technology and Municipality of Tehran to study and establish an IT park in the city of Tehran.
- 10/2000 – 6/02 **Municipality of Tehran**
Project Director, Tehran Strategic Planning Center
 Set up a Planning Support System (PSS) as a basis for constructing a large scale urban model for drafting strategic plan of Tehran. This PSS was also used for coordinating various urban development projects.
- 9/96 – 9/98 **Ministry of Housing and Urban Development**
Director of ICIC project
 Planned and directed a project to establish Iran Construction Information Center (ICIC) – a research and development center concentrating on applications of information technology in the design and construction sector and serving as the national focal point for the information related to construction sector.
- 9/95 – 9/96 **Center for Architecture and Urban Design Studies, Tehran**
Member, Scientific Advisory Council
 Reviewed research proposals and research reports; oversaw the preparation of master plan for the greater Tehran urban region.
- 6/95 – 9/96 **High Council of Informatics, Plan and Budget Organization**
Head of GIS Standards Committee
 This committee was a part of the information technology standard setting body and was responsible for drafting standards for Geographic Information Systems (GIS).
- 2/94 – 3/95 **Research Center for Tourism, Ministry of Culture and Islamic Guidance**
Member of Research Council; Consultant
 Reviewed research proposals submitted to the center; developed a DSS (Decision Support System) for tourism industry in Iran. Served as a

member of the steering committee for the preparation of national tourism master plan.

- 1982-85 **Rural Areas' Research Center; Tehran, Iran**
Planner and Designer
Responsible for economic feasibility and impact analyses of regional development projects. Designed housing and public buildings for rural centers.
- 1980 – 82 **Organization of City Development, Hamedan, Iran**
Technical Officer, Member of the Board of Directors
Responsible for the physical development projects and implementation of the comprehensive plan.
- 1978 – 79 **Barton Malow Construction Company, Detroit, Michigan**
Programmer / Monitor
Prepared CPM programming of large construction projects and monitored the implementation process.
- 1976 – 78 **Interiors Unlimited, Southfield, Michigan**
Part time Designer
Engaged in designing and presenting interiors for commercial and office spaces.

PUBLICATIONS

(* indicates externally refereed submission)

Refereed Journal Articles Published/In Press

*Ghadimi, Hodjat. 2016. Sustainable Economic Development Planning in Energy Rich Regions. *The Journal of Energy and Development*. Volume 41, joint issue number 1 and number 2.

*Ghadimi, Hodjat., Trevor Harris, and Timothy Warner. 2015. A Geospatial Approach to Measuring Regional and Sub-Regional Inclusive Wealth: The case of resource rich West Virginia, USA. *Regional Science, Policy and Practice*. Volume 7, Number 4, pp. 199-224. doi:10.1111/rsp3.12067

*Ghadimi, Hodjat. 2015. Energy Rich Regions in the United States and China: Sustainability and Global Implications. *The Global Studies Journal*. Vol 9, Issue 1, pp. 35-42. Available as a PDF download at <http://gsj.cgpublisher.com/product/pub.184/prod.418>. DOI: 10.18848/1835-4432/CGP/v09i01/40946

*Ghadimi, Hodjat. 2015. Strategic Investment Decisions in Oil Exporting Economies: The Effects of Government Savings Rule. *Strategic Management Quarterly*. Vol. 3, No. 3, pp. 25-32. ISSN: 2372-4951 (Print), 2372-496X (Online).

*Ghadimi, Hodjat. 2012. Global Impact of Energy Use in Major Oil Economies: A Modeling Framework. *The Journal of Energy and Development*, Vol 36, Issue numbers 1 and 2, pp 85-97.

Book Review Published

Ghadimi, Hodjat. 2017. Review of *Energy-based economic development: How clean energy can drive development and stimulate economic growth*, by Sanya Carley and Sara Lawrence. Springer-Verlag London 2014. *Economic Development Quarterly*. Vol. 31, Issue 1. pp 92-96. DOI: 10.1177/0891242416673541.

Refereed Journal Articles Submitted (Under review)

*Abutalebpur, Ali., and Hodjat Ghadimi. 2015. Urban spatial structure and sustainability: A modeling framework using the genuine progress indicator (GPI). Submitted to *Review of Urban & Regional Development Studies*. June 4, 2015. Under Revision.

Books Published

*Ghadimi, Hodjat. 2012. Economic Development Planning in Oil Economies: A Dynamic Computable General Equilibrium Analysis. AV Akademikerverlag ISBN-10: 3639452135, ISBN-13: 978-3639452136. Initially published in 2007 by VDM Verlag Dr. Mueller e.K. ISBN: 978-3836434553. 300 pages.

Book Chapters Published/In Press

*Ghadimi, Hodjat. CGE Models of Optimal Energy Depletion. 2016. In Volume Three: Global Economic and Computable General Equilibrium Models of Society, Environment and Resources. Series Editor Ariel Dinar, Volume Editor, Tony Bryant. pp. 333-349. doi: 10.1142/9789813208179_0011. Web: http://www.worldscientific.com/doi/pdf/10.1142/9789813208179_0011

*Jackson RW, Court CD and H Ghadimi. 2015. Linking Environment and Economic Frameworks to Model Technology Transitions. In Handbook of Research Methods and Applications in Environmental Studies. Matthias Ruth (Ed). Edward Elgar.

*Ghadimi, Hodjat, Trevor Harris, and Timothy Warner. 2014. Measuring the wealth of regions: Geospatial approaches to empirical capital estimation. A book chapter in Rural Wealth Creation. Pender JL, Weber BA Johnson TG, and M Fannin (eds). Routledge. 2014.

Other Publications

Ghadimi, Hodjat., and Davina Bird. 2012. A Knowledge Base for the World's Energy Rich Regions. Paper #2012-07, Regional Research Institute, West Virginia University.

Ghadimi, Hodjat. 2010. Sustainable Economic Development in Energy Rich Economies: A Regional Approach. Research Paper #2010-18, Regional Research Institute, West Virginia University.

Bird, Davina., Hodjat Ghadimi, and Randall Jackson. Fayette County, WV Case Study: A Look at the Movement Towards Energy and Water Efficiency. Research Paper #2010-19, Regional Research Institute, West Virginia University.

Ghadimi, Hodjat. 2008. Energy in a resource-based regional economy: A dynamic general equilibrium analysis Research Paper #2008-02, Regional Research Institute, West Virginia University.

Ghadimi, Hodjat. 2007. CGE Modeling and Applications: A Short Course: A teaching resource on Regional Research Institute website (<http://www.rr.i.wvu.edu/CGECourse/index.htm>), West Virginia University.

Ghadimi, Hodjat. 2007. Global impact of energy use in oil economies of the Middle East: A modeling framework for analyzing technology-energy-environment-economy chain. Research Paper #2007-5, Regional Research Institute, West Virginia University.

Ghadimi, Hodjat. 2006. An Optimal Depletion CGE Model: A Systematic Framework for Energy-Economy Analysis in Resource-based Economies. Research Paper #2006-11, Regional Research Institute, West Virginia University. July 2006.

Ghadimi, Hodjat. 2006. A Dynamic CGE Analysis of Exhaustible Resources: The Case of an Oil Exporting Developing Country. Research Paper #2006-7, Regional Research Institute, West Virginia University.

PRESENTATIONS

Abstracts, Posters, Presentations Accepted/Presented

*"A Geospatial Approach to Wealth Accounting for Urban and Regional Sustainability", Accepted for presentation as Digital Media Short in Environmental Design Research Association (**EDRA**) conference. Brooklyn, New York. May 22-26, 2019.

* "Virtual Regional Wealth Scanner: A Geodesign Approach", Presented as a lightning talk at 2019 Geodesign Summit and published in the Summit proceedings. February 26-18, 2019. ESRI, Redlands, California.

http://proceedings.esri.com/library/userconf/geodesign19/papers/Geodesign_06.pdf

*"Sustainability in the World's Energy Rich Regions: A Wealth Approach", Paper Presented at the 12th World Congress of Regional Science Association International (RSAI). May 29-June 1, 2018. Goa, India.

*"A Regional and Multi-Regional Approach to Sustainable Global Energy Systems: Prospects for Energy Rich Regions", Accepted for presentation in 56th Annual Meeting of Western Regional Science Association. February 15-18 2017. Santa Fe, New Mexico.

*“Wealth and Sustainability in the World’s Energy Rich Regions”, Accepted. Regional Science Association International (RSAI) 11th World Congress. April 25-28, 2016. Istanbul, Turkey. Conference postponed to a later date for security reasons.

*“Measuring the Sustainability of Urban Spatial Structure: A Capital Approach”, The 5th World Sustainability Forum. Basel- Switzerland, September 7-9, 2015. (with Ali Abutalebpur).

*“Energy Rich Regions in the US and China: Sustainability and Global Implications”, Seventh Global Studies Conference, Shanghai University, China, June 19-21, 2014.

*“Virtual ETown: Linking Urban Sustainable Design and Development”, 6th Urban Research and Knowledge Symposium. Sponsored by The World Bank, Barcelona, Spain, October 8-10, 2012.

*“Knowledge Base with Regional Perspective to Support Community Design and Development Programs in Resource Rich Regions: The Case of West Virginia”, The Environmental Design Research Association (EDRA) 42, Chicago, IL May 25-28, 2011.

*“Towards a Sustainable Global Energy System: A Regional Approach”, 10th IAEE European Conference, Vienna, Austria, 7-10 September 2009.

*“Energy-Economy Interactions in Oil Exporting Countries: A Dynamic CGE Framework”, 6th International Conference of the Middle East Economic Association (MEEA) in association with Zayed University, Dubai, UAE. March 2007.

Abstracts, Posters, Presentations Completed

*“Measuring Regional Inclusive Wealth: The Case of West Virginia Counties”, North American Regional Science Council (NARSC), Portland, Oregon. November 11-14, 2015.

“Wealth Creation and Sustainability in Energy Rich Regions”, Southern Regional Science Association (SRSA), Mobile, Alabama, March 2015.

“Economic Development Planning in Energy Rich Regions in the US and China: A CGE Analysis”, North American Regional Science Council (NARSC), Washington DC, November 2014.

*“An Integrated Modeling Framework for Simulating the Effects of Spatial Structure on Sustainable Urban Development”, Washington DC, November 2014. (with Ali Abutalebpur).

“An Optimal Depletion CGE model for an Energy Rich Region: The case of West Virginia”, North American Regional Science Council (NARSC), Atlanta, Georgia, November 2013.

“Energy Rich Regions of the World: The Development and Discoveries of a Basic Knowledge Base”, North American Regional Science Council (NARSC), Miami, Florida, November 2011.

“Virtual Wealth Scanner: Estimating Regional Capital Assets Using GIS and Remote Sensing”, Rural Wealth Creation and Livelihood (RWCL), National conference, Washington DC, October 2011.

“Energy Development: Exploring energy rich regions (ERRs) within the current global energy system”, Southern Regional Science Association (SRSA) Meeting, New Orleans, Louisiana, March 2011. (with Davina Bird).

“Virtual Capital Stock Scanner: Estimating Regional Capital Assets Using GIS and Remote Sensing”, GeoDesign Summit, Redlands, CA, January 2011.

“Sustainable economic development in energy rich economies: A regional approach”, GeoDesign Summit, Redlands, CA, January 2010.

“Regional economic development analysis of oil and gas megaprojects: A dynamic CGE modeling framework”, North American Regional Science Council (NARSC), Brooklyn, New York, November 2008.

“Energy in a resource-based regional economy: A dynamic general equilibrium analysis”, Western Regional Science Association (WRSA), Waikoloa, Hawaii, February 2008.

Global Impact of Energy Use in Middle East Oil Economies: A Modeling Framework for Analyzing Technology-Energy-Environment-Economy Chain”, Southern Regional Science Association (SRSA), Charleston, South Carolina, March 2007.

GRANTS/PROJECTS

*Designates External Funding

Grants Awarded/Ongoing

HATCH research “Rich-Regions Poor-People Dichotomy: A Wealth Approach to Building a Sustainable Future in Energy-Rich Regions of Appalachia” PI: Hodjat Ghadimi, Source US Department of Agriculture, NIFA.

Grants Completed

*2012-2016 “Economic and environmental impacts of increased woody biomass utilization for bioenergy production on the rural communities of the central Appalachian region” PI: Jingxin Wang; **Co-PIs:** Randall Jackson, **Hodjat Ghadimi**, Kaushlendra Singh, Wesley Burnett. Source: US Department of Agriculture, NIFA (\$349,998).

- *2012-2015 “The Technology, Energy, Economy, and Environment (TEEE) Chain: Integrated Modeling for Technology Transitions in Energy Rich Regions”, **PI: Hodjat Ghadimi**, Co-PIs: Randall Jackson, Jerry Fletcher, Wesley Burnett. Source: National Science Foundation. (\$335,930).
- *2011-2012 “Pilot Test the Ecological Approaches to Environmental Protection Developed in Capacity Research Projects C06A and C06B (SHRP 2)” PI: James Anderson. **Co-PIs: Hodjat Ghadimi**, Michael Strager, Walter Veselka, J. Todd Petty, Todd Katzner. Source: Transportation Research Board of the National Academies (\$345,604).
- *2010-2011 “Support Analysis for Senate Bill 518.” My contribution title: “The Global and National Energy Trends and Challenges: Opportunities for West Virginia”. PI: Carl Irwin. **Co-PIs: Hodjat Ghadimi**, Randall Jackson, Robert Duval. Source: West Virginia Division of Energy (\$79,000)
- 2011 “Collaboration in Chester WV Redevelopment Plan”, **Co-PIs: Hodjat Ghadimi**, Kevin Leyden. Northern WV Brownfield Assistance Center (\$5,000).
- 2011 “Sustainable Development Planning in Energy Rich Regions: Estimating Regional Capital Assets Using Remote Sensing and GIS”. **Co-PIs: Hodjat Ghadimi**, Trevor Harris, Tim Warner. Source: Regional Research Institute (\$1,000 plus one year of Research Assistance support).
- *2009-2010 “Planning and Financing Energy Efficient Infrastructure”, **PI: Hodjat Ghadimi**. Source Appalachian Regional Commission (\$27,000).

PUBLICATIONS, PRESENTATIONS, REPORTS (Prior to joining WVU in 2005)

“Strategic Planning of Science and Technology Parks”. A presentation at School of Architecture and Urban Planning, Shahid Beheshti University. March 2005.

“Identifying and Evaluating Site Options for Tehran Software and Information Technology Park (TSITP)”. A report on location and site analysis for TSITP project prepared for the Ministry of Information and Communication Technology and the Municipality of Tehran. June 2003.

“Vision and Visioning for an IT Park”. A report on the visioning and consensus building among key decision makers and stakeholders of Tehran Software and IT Park project prepared for the Ministry of Information and Communication Technology and the Municipality of Tehran. April 2003.

“Planning Support System”. A comprehensive spatial and non-spatial information system prepared for the Municipality of Tehran to be used for strategic planning and construction of integrated transportation and land use model. March 2002.

“National Housing Strategy”. A report prepared for the ministry of Housing and Urban Development; presented at the cabinet meeting. March 4, 2000. (In Persian)

“Social Accounting Matrix of Iran”. Part of a project to construct a CGE model for Iran. Research Center of the Parliament of Iran. April 5, 2000. (In Persian)

“Applications of information technology in construction sector”. Published at *Sharif Journal*. No. 15. 1999. (In Persian)

“Intelligent buildings and cities: Physical impacts of information revolution”. Presented at the Second Environmental Engineering & Architecture Forum. June 22-24, 1999 Tehran, Iran. (In Persian)

“Information technology and physical development”. Presented at the workshop organized by Association of Iranian Civil Engineers. October 19, 1998. (In Persian)

“Using Information technology in housing construction”. Presented at Conference of the outlook of housing in the Second Development Plan. Ardabil, July 8. 1997. (In Persian)

“A review of GIS technology in Iran”. Published in *Khabarnameh Informatic*. No 61, pp 95-102. 1996. (In Persian)

“GIS standards, why and how?” Published in *Khabarnameh Informatic*. No. 60. Pp 93-100. 1995. (In Persian)

“Energy-economy interaction analysis in oil exporting developing countries: A dynamic multisectoral framework”. A paper presented at the Sixth International CGE Modelling Conference, University of Waterloo, Canada. October 26-28, 1995.

“Geographic Information Systems (GIS) standardization initiatives in Iran”. Presented at the ESCAP Expert Group Meeting. Kuala Lumpur, Malaysia, September 20-22, 1995.

“Development planning in oil economies”. Presented at Plan and Budget Organization. October 3. 1994. (Partly printed in *Ettelaat* daily news paper). (In Persian)

“Energy sector and national economy: A quantitative analysis”. Presented at National Energy and Economy Conference. January 24, 1994. Tehran. (In Persian)

“A dynamic computable general equilibrium (CGE) model for Iran”. Submitted to the Second Conference on Planning and Development, Tehran, Iran 1992.

“An optimal depletion computable general equilibrium (CGE) model”. Presented at the summer school at the International Institute for Applied Systems Analysis (IIASA), Laxenburg Austria (1991).

“A simple computable general equilibrium model: Development and implementation on GAMS”. Unpublished manuscript, Department of City and Regional Planning, The Ohio State University (1990).

“A dynamic two region model: An optimal control analysis”. Unpublished manuscript, Department of City and Regional Planning, The Ohio State University (1989).

REVIEWS FOR SCIENTIFIC JOURNALS

- Journal of Regional Science
- Annals of Regional Science
- Regional Studies
- Journal of Global Studies

PROFESSIONAL ASSOCIATIONS

- Regional Science Association International (RSAI)
- North American Regional Science Council (NARSC)
- Southern Regional Science Association (SRSA)
- Western Regional Science Association (WRSA)