ANDREW D. REAMER, Ph.D.

George Washington Institute of Public Policy George Washington University 805 21st St., NW Suite 613 Washington, DC 20036 areamer@gwu.edu (202) 994-7688

Education

- Ph.D. in Economic Development and Public Policy, Department of Urban Studies and Planning, Massachusetts Institute of Technology (1987)
- Master in City Planning, Department of Urban Studies and Planning, Massachusetts Institute of Technology (1981)
- Bachelor of Science in Economics, cum laude, Wharton School, University of Pennsylvania (1971)

Professional Experience

Research Professor, George Washington Institute of Public Policy, George Washington University (2011-present)

Focus on policies that encourage and support U.S. economic competitiveness. Areas of interest include innovation, regional economic and workforce development, and economic statistics.

Advisory Committees

- Member, National Advisory Committee on Innovation and Entrepreneurship, U.S. Department of Commerce (2016-2018)
- Member, Workforce Information Advisory Council, U.S. Department of Labor (2016-2018)
- Member, Data User Advisory Committee, U.S. Bureau of Labor Statistics (2009-2018, chair 2009-2011)
- Member, U.S. Bureau of Economic Analysis Advisory Committee (2008-present)
- Member, Statistics Committee, National Association for Business Economics (2013present)
- Member, Panel on Communicating National Science Foundation Science and Engineering Information to Data Users, Committee on National Statistics, National Research Council (2010-2011)

Publications

- "A Roadmap to a Nationwide Data Infrastructure for Evidence-Based Policymaking," with Julia Lane, *The ANNALS of the American Academy of Political and Social Science*, Vol 675, Issue 1, 2018
- "Before the U.S. Tariff Commission: Congressional Efforts to Obtain Statistics and Analysis for Tariff-setting, 1789–1916," chapter for *Centennial History of the United States International Trade Commission*, November 2017

- "Toward A U.S. Competitiveness Strategy," *Innovations: Technology, Governance, Globalization*, Policy Design issue, Summer-Fall 2017, Volume 11, Issue 3-4
- "Counting For Dollars: The Role of the Decennial Census in the Geographic Distribution of Federal Funds Initial Analysis: 16 Largest Census-guided Programs," August 2017.
- "Federal Efforts in Support of Entrepreneurship: A Reference Guide," prepared for the Kauffman Foundation, April 2017
- "Better Jobs Information Benefits Everyone," *Issues in Science and Technology*, v. 23, n. 1, Fall 2016, pp. 58-63.
- "Data Resources to Support Middle-Skill Workforce Development," research paper prepared for Committee on the Supply Chain for Middle-Skill Jobs: Education, Training and Certification Pathways, Board on Science, Technology and Economic Policy, National Academy of Sciences, August 2015
- "Analyzing Talent Flow: Identifying Opportunities for Improvement," with Robert Sheets and David Stevens, for the Talent Pipeline Management Initiative of the Center for Education and Workforce, U.S. Chamber of Commerce Foundation, July 2015
- "Stumbling into the Great Recession: How and Why GDP Estimates Kept Economists and Policymakers in the Dark," GWIPP research note, April 2014
- "Indicators of the Capacity for Invention in the United States," research paper prepared for the Lemelson Foundation, March 2014
- "The Impacts of Technological Invention on Economic Growth A Review of the Literature," research paper prepared for the Lemelson Foundation, February 2014
- "National Nonprofit Organizations That Inspire and Enable Invention and Inventionbased Enterprises," research paper prepared for the Lemelson Foundation, February 2014
- "Global Entrepreneurship Week Policy Survey," report, Public Forum Institute, November 2013
- "Improving Federal Statistics for Industry Studies," research paper presented at Industry Studies Association annual conference, Kansas City, Missouri, May 2013
- "Using Real-time Labor Market Information on a Nationwide Scale," policy brief, Credentials That Work Initiative, Jobs for the Future, April 2013
- "Labor Market Information Customers and Their Needs: Customer-Oriented LMI Product Innovation," with Center for Regional Economic Competitiveness, report for the Customer Consultation Study Group, Workforce Information Council, April 2012
- "Economic Intelligence: Enhancing the Federal Statistical System to Support U.S. Competitiveness," policy brief, Series on U.S. Science, Innovation, and Economic Competitiveness, Center for American Progress, February 2012
- "Say Goodbye to the Survey of Business Owners?," Policy Forum Blog, the Policy Dialogue on Entrepreneurship, September 26, 2011.

- "The Quality of Economic Statistics is About to Erode," Policy Forum Blog, the Policy Dialogue on Entrepreneurship, September 19, 2011
- "Putting America to Work: The Essential Role of Federal Labor Market Statistics," article, AMSTAT News, American Statistical Association, March 1, 2011
- "The Federal Role in Encouraging Innovation: The "I's" Have It," article, Innovation Policy Blog, December 18, 2010

Congressional and Other Public Testimony

- "The Evolution of the Federal Statistical System: Implications for Evidence-based Policymaking," testimony to the Commission on Evidence-based Policymaking, March 13, 2017
- "The American Community Survey: Approaches to Addressing Constituent Concerns," testimony before the Subcommittee on Federal Financial Management, Committee on Homeland Security and Government Affairs, U.S. Senate, Washington, DC, July 18, 2012
- "The Economic Impact of Ending or Reducing Funding for the American Community Survey and Other Government Statistics," testimony before the Joint Economic Committee, U.S. Congress, Washington, DC, June 19, 2012
- Testimony on the President's FY2012 Budget before the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies, Washington, DC, March 11, 2011

Public Presentations

- "A Compendium of Federal Efforts to Support Entrepreneurship: Assessment and Implications," Industry Studies Association, May 26, 2016
- "Communicating the American Community Survey's Value to Respondents," Committee on National Statistics, National Academy of Sciences, March 8, 2016.
- "The Mercantilist Policy Origins of Federal Economic Statistics Agencies," History of Economics Society annual conference, June 27, 2015.
- "Data Resources to Support Middle-Skill Workforce Development," Symposium on the Supply Chain for Middle-Skill Jobs: Education, Training and Certification Pathways, June 25, 2015.
- "Towards a Federal Strategy for U.S. Economic Competitiveness," Industry Studies Association, May 27, 2015
- "Madison's Legacy: Federal Statistical Products Based on the American Community Survey," ACS Data Users Conference, May 12, 2015
- "Stumbling into the Great Recession: How and Why GDP Estimates Kept Economists and Policymakers in the Dark," GW Forecasting Seminar, February 12, 2015
- "Efforts to Measure Trade in Value-Added and Map Global Value Chains: A Guide," Industry Studies Association Annual Conference, Portland, Oregon, May 29, 2014

- "Stumbling into the Great Recession: How and Why GDP Estimates Kept Economists and Policymakers in the Dark," presented to the U.S. Bureau of Economic Analysis Advisory Committee, Washington, DC, May 9, 2014
- "The Manufacturing Policy Origins of U.S. Economic Statistical Agencies," presentation to the Manufacturing Council, U.S. Department of Commerce, Washington, DC, July 23, 2013
- "A Foundation to Measure U.S. Economic Competitiveness: Proposals," presented at "Measuring Competitiveness: In Search of New Metrics" Luncheon, Bernard L. Schwartz Program in Competitiveness and Growth Policies, Carnegie Endowment for International Peace, Washington, DC, June 20, 2013
- "Sources and Uses of Federal Labor Market Information: Current Developments," presentation to the Real-Time LMI Innovators Network, Jobs for the Future, Boston, MA, April 16, 2013
- "The Economic Census and Its Role in Economic Statistics," 2012 Economic Census Conference, U.S. Census Bureau, Washington, DC, October 15, 2012
- "The Government's Role in Stimulating Clusters," Workshop: Encouraging the Commercialization of Research Results and the Utilization of Cluster Mapping through EU-US Collaborations, Center for Transatlantic Relations, Johns Hopkins University, Washington, DC, December 7, 2011
- "Employment and Workforce Data Systems at the Federal Level: New Developments, Challenges, and Opportunities for Community Colleges," presented to Real Time LMI Innovators Network, Jobs for the Future, Chicago, IL, November 29, 2011
- "Statistics for Cluster Analysis: Innovations and Opportunities," presentation to the Taskforce for the Advancement of Regional Innovation Clusters (TARIC), U.S. Department of Commerce, Washington, DC October 24, 2011
- "Sub-National STI Statistics: Recommendations for the National Center for Science and Engineering Statistics," presentation to panel on Developing Science, Technology, and Innovation Indicators for the Future, National Academies of Science, Washington, DC, July 12, 2011
- "Regional Clusters and Federal Economic Policy," presentation to Manufacturing Industry Study Seminar, Industrial College of the Armed Forces, Washington, DC, March 22, 2011
- "Innovations in Federal Statistics: New Views on Regions," presented to Understanding, Using, and Maximizing New Federal Data Workshop, IEDC 2011 Federal Economic Development Forum, March 20, 2011
- "The Changing Landscape of Federal Workforce Statistics: The Context for Real-Time LMI," presentation to Credentials That Work workshop, Jobs for the Future, Washington, DC, March 15, 2011
- "Putting America to Work: The Essential Role of Federal Labor Market Statistics," presentation to Local Employment Dynamics Partnership Workshop, Washington, DC, March 9, 2011

Hosted Public Events

- "Innovative Data Sources for Regional Economic Analysis," conference and symposium, Washington, DC, May 7-9, 2012
- "Roundtable on Science, Technology, and Innovation Data and Indicators," Washington, DC, June 29, 2011

Public Resource Material

- "Education and Workforce Data Resources," LMI Institute, Fall 2014
- "Public and Private Sources of Education and Workforce Data," April 2014
- "<u>Resources Regarding the American Community Survey (ACS) of the U.S. Census</u> <u>Bureau</u>," May-December 2012

Reports to Clients for Internal Use

- "Federal Manufacturing Policy: An Historical Overview," reference paper prepared for the U.S. Department of Commerce, August 2013
- Papers and reports prepared with the University of North Carolina for "Evaluation and Assessment of Economic Development Investments," a cooperative project with the U.S. Economic Development Administration, October 2011-December 2013
- Analyses prepared for the Panel on Developing Science, Technology, and Innovation Indicators for the Future, Committee on National Statistics in collaboration with the Board on Science, Technology, and Economic Policy, National Research Council, April 2011-December 2012.

Fellow, Metropolitan Policy Program, The Brookings Institution (2006-2010)

Managed the Federal Data Project, an effort that encouraged the federal government to produce the current, accurate, detailed geographic data needed by public and private decision-makers and researchers. Priorities included economic statistics, demographic statistics, and federal expenditures data. Methods include congressional testimony and briefings, public presentations, written and oral communications with federal statistical organizations, public and roundtable events, statistical system stakeholder network development, participation in statistical agency advisory committees, and data product development.

Examples of efforts included:

- Economic Statistics
 - "Putting America to Work: The Essential Role of Federal Labor Market Statistics" (2010)
 - Economic data roundtables with federal statistical agencies, professional and trade associations, policy research organizations, and federal program agencies (2008-2010)

- Regarding Census Bureau's Local Employment Dynamics program congressional briefings, annual conference and leadership meetings, panel session participation (2006-2010)
- "Measuring Up in a Changing Economy: A Look at New U.S. Service Sector Data and Why It Matters," public event and roundtable (2010)
- Who Cares About Economic Statistics," *Dismal Scientist*, Moody's Economy.com (2009)
- "The Structure of the U.S. Economic Statistical System: Implications for Public Policy," presentation to the International Statistical Institute conference, Durban, South Africa (2009)
- "In Dire Straits: The Urgent Need to Improve Economic Statistics," AmStat News (2009)
- "Ensuring Economic Programs Accurately Reflect the 21st Century," speech to the Census Bureau Economic Programs Directorate leadership off-site (2008)
- "The Department of Commerce Budget Request for Fiscal Year 2008: Observations for Consideration," testimony before the House Committee on Appropriations, Subcommittee on Commerce, Justice, Science and Related Agencies (2007)
- Demographic Statistics
 - "Surveying for Dollars: The Role of the American Community Survey in the Geographic Distribution of Federal Funds" (2010)
 - "Counting for Dollars: The Role of the Decennial Census in the Geographic Distribution of Federal Funds" (2010)
 - "The Federal Statistical System in the 21st Century: The Role of the Census Bureau," testimony before the Joint Economic Committee (2009)
 - o "Tempest Over the Census," Brookings editorial (2009)
 - Prototype database to determine geographic allocation of federal funds (counties, metros, states) on the basis on census statistics (2008-09)
 - Prototype tool to provide maps and tables on "hard-to-count" census tracts throughout the U.S. (2008-09)
 - Communications with OMB and Census Bureau leading to improved decennial census enumeration of households in small multi-unit buildings without traditional city-style addresses (2006-09)
 - Census Bureau-data user roundtables on improving Census Bureau's American Community Survey data products (2007-08)
 - "Preparations for 2010: Is the Census Bureau Ready for the Job Ahead?," testimony before the Senate Committee on Homeland Security and Governmental Affairs Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security (2007)
 - "The 2010 Census: What State, Local, and Tribal Governments Need to Know," workshop (2007)

- Federal Spending Transparency and Accountability
 - "Metro Potential in ARRA: An Early Assessment of the American Recovery and Reinvestment Act" (with Mark Muro, Jennifer Bradley, Alan Berube, Robert Puentes, and Sarah Rahman), chapter on transparency (2009)
 - Memos to and meetings with Congress and the Office of Management and Budget (OMB) on the design and implementation of the Federal Financial Accountability and Transparency Act of 2006 and American Recovery and Reinvestment Act (2007-09)
 - "OMB's Congressional Mandates to Provide Information on Federal Spending," presentations to the National Grants Partnership (2007) and National Academies of Science (2008)

Prepared briefs, articles, presentations, and testimony on federal economic development policy.

- "Stimulating Regional Economies: the Federal Role," presented at Growing Innovation Clusters for American Prosperity symposium, National Academy of Sciences (2009)
- Congress Directs EDA to Act on Clusters," *The New Republic* blog post (with Mark Muro, 2009)
- "Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies" (with Karen Mills and Elisabeth Reynolds, 2008)
- "The Department of Commerce Budget Request for Fiscal Year 2008: Observations for Consideration," testimony before the House Committee on Appropriations, Subcommittee on Commerce, Justice, Science and Related Agencies (2007)
- "The Federal Role in Regional Economic Development," testimony before the House Committee on Transportation and Infrastructure, Subcommittee on Economic Development, Public Buildings, and Emergency Management (2007)
- "How Economic Change Happens and Why We Resist It," speech before the Symposium on Change, University of Buffalo Regional Institute (2007)

Deputy Director and Fellow, Urban Markets Initiative, The Brookings Institution (2004-06)

Guided a foundation-funded effort to increase the availability and accessibility of data on urban neighborhoods. Projects managed included:

- Federal data agenda identifying ways in which the federal government can improve availability and accessibility of statistics for states, metro areas, cities, and neighborhoods
- National Infrastructure for Community Statistics managing a Community of Practice (CoP) focused on the development of a nationwide infrastructure to provide widespread access to data from multiple sources on multiple topics
- Urban budgets creating a tool to ascertain the flow of federal investments by type of investment and by county

Examples of efforts included:

- "To Take a Bite Out of Crime: Safeguard the Census," Brookings Alert (2006)
- "Anticipating the Unimaginable: The Crucial Role of the Census in Disaster Planning and Recovery," *Brookings Alert* (2006)
- "Apportionment in the Balance: A Look into the Progress of the 2010 Decennial Census," testimony before House Committee on Government Reform (2006)
- "Better Data for Better Decisions: The Value of the American Community Survey to the Nation," Brookings Briefings on the Census (2006)
- "The Road to 2010: Plans for the 2010 Census and the American Community Survey," Brookings Briefings on the Census (2006)
- "Federal Statistics: Robust Information Tools for the Urban Investor" (with Pari Sabety, 2005)

Principal, Andrew Reamer & Associates (full-time 1995-2004, part-time 2004-present)

Promotes sound public policy and effective economic development through three sets of activities:

- Building Capacities for Producing and Using Regional Socioeconomic Data
- Indicator Systems Design and Implementation
- Regional Economic Development Analysis, Strategy, and Program Development

Building Capacities for Producing and Using Regional Socioeconomic Data

- Determining Public and Private Sector Needs For Socioeconomic Data
 - Federal Data Agenda, Urban Markets Initiative, Brookings Institution (consultant, 2004). Managed staff assessments of 30 federal statistical agencies to determine issues and barriers to providing data useful for urban market decisions, and priorities for action to address these issues and barriers.
 - <u>Socioeconomic Data for Economic Development: An Assessment</u> (with Joseph Cortright, for U.S. Economic Development Administration, 1999)
- Mechanisms to Enhance Economic Markets Through Improved Data Development, Access, and Use
 - o Guides
 - <u>Socioeconomic Data for Understanding Your Regional Economy: A User's</u> <u>Guide</u> (with Joseph Cortright, for U.S. Economic Development Administration, 1998)
 - o Web sites
 - WorkforceUSA (adviser to Workforce Learning Strategies, for U.S. Department of Labor and Ford Foundation, 2002)

- Mapstats (adviser to Mapstats Working Group, FedStats Task Force, 2000-01)
- EconData.Net (co-developer and –owner, with Joseph Cortright, 1999present). Econdata.Net is a portal to 1,000 on-line sources of regional socioeconomic data, organized by topic and provider. The site has 14,000 visitors monthly, and 3,000 subscribers to a monthly newsletter, <u>StatScan</u>. EconData.Net was developed and operated using Economic Development Administration funds, and is now sponsored by the Fannie Mae Foundation.
- o CDs
 - R-Maps, Office of Policy Development and Research, U.S. Department of Housing and Urban Development (facilitator of development of CD with PD&R data sets and LandView mapping tool, 2000-01)
- o Conference Design and Development
 - America's Scorecard: The Historic Role of the Census Bureau in an Ever-Changing Nation, Woodrow Wilson International Center for Scholars, Washington, DC (for Census Bureau, March 2004)
 - International Conference on Community Indicators, Community Indicators Consortium, Reno, Nevada (March 2004)
 - Next Generation of Community Statistical Systems, Tampa, Florida (with University of Florida, for Ford Foundation, March 2002)
 - Innovations in Federal Statistics, Woodrow Wilson International Center for Scholars, Washington, DC (for the Center, May 2001)
- o Organizational and Professional Network Development and Management
 - Community Indicators Consortium (conference track chair, planning committee chair, 2004)
 - Community Statistical Systems Network (2002 04)

Indicator Systems Design and Implementation

- Working Poor Families Project, Annie E. Casey Foundation/Ford Foundation/Rockefeller Foundation (with Brandon Roberts + Associates, 2001 – present)
 - Annually oversee the preparation of state indicators on the economic conditions and characteristics of working families and individuals
 - With Brandon Roberts, advised state advocacy organizations (15 to date) in the preparation of policy reports on low-income working families
 - o Co-authored one national report (2004) and advised on second (2008)
- "Development Report Card for the States," Corporation for Enterprise Development (1987 – 2006)

- Annually prepared indicators on economic vitality for the 50 states
- o Advised on revisions of indicators framework

Regional Economic Development Analysis, Strategy, and Program Development

- Nationwide Analysis Of Regional Economic Dynamics and Programs
 - <u>Technology Transfer and Commercialization: Their Role in Economic</u>
 <u>Development (for Economic Development Administration, 2003) Note Chapter</u>
 Three and Appendix B on the geography of innovation in the U.S.
- Guides
 - <u>Strategic Planning in the Technology-Driven World: A Guidebook for Innovation-</u> <u>Led Development</u>, Collaborative Economics (co-author with Jennifer Montana, for Economic Development Administration, 2001)
- Regional Economic Analysis, Strategy, and Program Development (see next section)

Other Prior Professional Experience – Regional Economic Development

As co-founder and principal of Mt. Auburn Associates (1984-1995) and as principal of Andrew Reamer & Associates (1995-present), Andrew Reamer managed and participated in regional economic development studies of three types: analysis and strategy, program evaluation, and program design

Analysis and Strategy

• General Regional Economic Development Analyses and Strategies

Involved in over 30 general economic development studies, clients include:

- o States of Massachusetts, Rhode Island, Arkansas, Indiana, Georgia, and Colorado
- Regions in western Massachusetts, northeast and northwest Connecticut, northern New Mexico, northwest Oregon
- Metro areas of Boston, Worcester, and Springfield, Massachusetts; Nashua, New Hampshire; Indianapolis, Indiana; Memphis, Tennessee; Shreveport, Louisiana; Austin, Texas
- o Cities of Boston, Massachusetts, Dublin, Ohio, and Collierville, Tennessee
- o Clarke County, Georgia and Aiken County, South Carolina
- Regional Industry Competitive Analyses and Strategies
 - Examined competitive strengths, weaknesses, and strategy options for specific regional industries, include fiber optics, telecommunications, information technology, advanced materials, software, metalworking, environmental technology, marine technology, biomedical, food processing, footwear, plastics,

oil, natural gas, petrochemicals, wood products, warehousing and distribution, and heavy vehicles.

- Advanced Technology Analyses and Strategies
 - Analyzed key technology industries and development opportunities in Iowa and Virginia
- Prepared regional strategies for promoting technology transfer from the Los Alamos National Laboratory, the Department of Energy Jefferson National Accelerator Facility, and the Air Force's Rome Laboratory.Regional Defense Adjustment Efforts
 - Managed or participated in the preparation of conversion strategies for defensedependent regions, facilities reuse plans, and base closure impact analyses.
- Recyclable Material Markets Analyses and Strategies
 - Managed or participated in preparation of analyses and strategies in New York, Pennsylvania, Massachusetts, Connecticut, Rhode Island, Texas, North Carolina, Mississippi, and Iowa.

Program Evaluation

- Evaluation Of Federal Economic Development Programs
 - Managed or participated in evaluation of the U.S. Economic Development Administration's Revolving Loan Fund, Technical Assistance, Public Works, and Small Business Incubator programs.
 - Managed two evaluations of the Jobs Through Recycling program of the U.S. Environmental Protection Agency.
- Evaluation of State Economic Development Programs
 - Managed or participated in evaluation of Ohio's Edison Technology Centers and technology transfer intermediaries, New York's Office of Recycling Market Development, Iowa's small business incubator program, Oregon's Regional Strategy program, Georgia's economic development agencies, and Massachusetts' Community Development Finance Corporation.

<u>Program Design</u>

- Design Of State And Individual Small Business Incubator Programs
 - Managed program-specific efforts for the states of Massachusetts and Iowa and facility-specific efforts in New Mexico and Massachusetts.
- Design Of State Defense Industry Conversion Programs
 - For the National Governors Association, participated in the development of state defense industry conversion programs in Massachusetts, Rhode Island, and Virginia.

Chronology of Professional Experience

- Research Professor, George Washington Institute of Public Policy, George Washington University (2011-present)
- Nonresident Senior Fellow, Metropolitan Policy Program, The Brookings Institution (2010-2013)
- Fellow, Metropolitan Policy Program, The Brookings Institution (2005-2010)
- Deputy Director and Fellow, Urban Markets Initiative, Metropolitan Policy Program, The Brookings Institution (2004-06)
- Principal, Andrew Reamer & Associates (full-time 1995-2004, part-time 2004-present)
- Lecturer, Department of Urban Studies and Planning, Massachusetts Institute of Technology (1986, 2002-04)
- Principal, Mt. Auburn Associates (1984-1995)
- Case Team Member, Rhode Island Strategic Development Commission (1983-84)
- Consultant, Counsel for Community Development (1982-83)
- Graduate instructor, MIT Department of Urban Studies and Planning (1981-82)
- Policy Analyst, U.S. Department of Commerce, Office of the Assistant Secretary for Policy (1980)
- Research Assistant, MIT Center for Transportation Studies (1981-82)
- Research Assistant, MIT Energy Laboratory (1978-1981)
- Health Planner, Maryland Health Planning and Development Agency (1975-78)
- Administrative Assistant, Johns Hopkins Hospital (1974)
- Research Analyst, Boston Urban Observatory, University of Massachusetts (1973)
- Summer Intern, Mayor's Office of Public Service, City of Boston (1970, 1971)

Achievements and Honors

• Doctoral Fellow, Harvard-MIT Joint Center for Urban Studies (1983-1984)

Professional Affiliations

- Association of Public Data Users, Past President (2011-2012), President (2009-2010), Vice President (2008), Board member (2006-2007)
- Council for Community and Economic Research, Board member (2007-2012)
- National Association for Business Economics, Member of Statistics Committee (2013-present)
- International Economic Development Council
- American Economic Association
- History of Economics Association
- Association for Public Policy Analysis and Management
- American Statistical Association
- Association for Talent Development