# **Curriculum vitae**

## JONATHAN SCHWABISH

PolicyViz Founder and CEO

Urban Institute Senior Fellow Income and Benefits Policy Center and Communications Department

## **PROFESSIONAL SYNOPSIS**

Jonathan Schwabish is a Senior Fellow at the <u>Urban Institute</u>, a nonprofit research institution in Washington, DC, and founder of the data visualization and presentation skills firm, <u>PolicyViz</u>. At Urban, he is a researcher in the Income and Benefits Policy Center and a member of the Institute's Communication team where he specializes in data visualization and presentation design. His research primarily focuses on issues around nutrition and disability policy.

Dr. Schwabish is also considered a leader in the data visualization field and is a leading voice for clarity and accessibility in research. He has written on various aspects of how to best visualize data including technical aspects of creation, design best practices, and how to communicate social science research in more accessible ways. He speaks widely on the issues of data visualization, open data, and data use in organizations.

Dr. Schwabish also teaches data visualization and presentation skills at Georgetown University and American University, as well as in public workshops and for private clients through his consulting firm, <u>PolicyViz</u>. He also hosts the <u>PolicyViz Podcast</u>, which focuses on data, open data, and data visualization. His book about presentation design and techniques, <u>Better Presentations: A Guide for Scholars, Researchers, and</u> <u>Wonks</u>, helps people improve the way they prepare, design, and deliver data-rich content. In his edited book, <u>Elevate the Debate: A Multilayered Approach to Communicating Your Research</u>, Schwabish and his colleagues help people develop a strategic plan to communicating their work across multiple platforms and channels. His book, <u>Better Data Visualizations: A Guide for Scholars, Researchers, and Wonks</u> details essential strategies to create more effective data visualizations. His next book, *Data Visualization in Excel*, will be published by CRC Press in Mary 2023 and is a step-by-step guide to creating data visualizations in Excel. He is on Twitter <u>@jschwabish</u>.

## **EDUCATION**

Ph.D., M.A., Economics, Syracuse University, 2003

M.A., Economics, The Johns Hopkins University, 2001

B.A., Economics, University of Wisconsin-Madison, 1998

## **PROFESSIONAL BACKGROUND**

| <i>Long-Term Positions</i><br>May 2014–Present | Urban Institute, Income and Benefits Policy Center and the<br>Communications Department, Washington, DC<br>Senior Fellow (2016–Present)<br>Senior Research Associate (2014–2016)  |
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| April 2005-April 2014                          | Principal Analyst, Congressional Budget Office<br>Long-Term Analysis Unit<br>Microeconomic Studies Division   |
| July 2003–March 2005                           | Senior Director<br>Partnership for New York City  |
| Consulting, Teaching, and Othe                 | er Short-Term Positions   |
| September 2017-Present                         | Adjunct Professor<br>American University<br>School of Public Affairs<br>Core Principles of Data Visualization<br>Better Presentations   |
| September 2007-Present                         | Adjunct Professor<br>Georgetown University<br>McDonough School of Business<br>Introduction to Data Visualization (September 2014–Present)<br>Data Visualization for Policy Analysis (September 2012–December 2012)<br>Georgetown Public Policy Institute<br>Statistical Methods for Policy Analysis (September 2007–May 2010) |
| May 2014–December 2017                         | Adjunct Professor<br>Maryland Institute College of Art (MICA)<br>Statistical Applications for Information Visualization   |

## PUBLICATIONS

#### Books

Data Visualizations in Excel, CRC Press, Boca Raton, Florida, forthcoming 2023.

Better Data Visualizations, Columbia University Press, New York, New York, 2021.

Elevate the Debate: A Multi-Layered Approach to Communicating Your Research, editor, John Wiley & Sons, Inc., February 2020.

Better Presentations: A Guide for Scholars, Researchers, and Wonks. Columbia University Press, New York, New York, November 2016.

Human Capital in the United States from 1975-2000: Patterns of Growth and Utilization. W.E. Upjohn Institute for Employment Research, Kalamazoo, MI (2003) (with Robert Haveman and Andrew Bershadker). \*Princeton University Industrial Relations "Noteworthy Books", July 2004. \*Choice Magazine "Outstanding Academic Title", January 2004.

#### **Data Visualization Papers and Reports**

- "Do No Harm Guide: Centering Accessibility in Data Visualization." Urban Institute report, (2022) (with Susan Popkin and Alice Feng).
- "Do No Harm Guide: Additional Perspectives on Data Equity." Urban Institute report, (2022) (with Alice Feng and Wesley Jenkins).
- "Categorizing and Ranking Graphs in Economics Research: The American Economic Review over the Last Century," *Journal of Benefit-Cost Analysis*, 13, no. 1 (2022): 20-33 (Spring 2022).
- "Are Your Data Visualizations Racist?" Stanford Social Innovation Review, (December 2021) (with Alice Feng).
- "The Practice of Visual Data Communication: What Works," *Psychological Science in the Public Interest*, December 2021; 22(3):97-109. doi:10.1177/15291006211057899.
- "Innovative Graphics for NCES Online Reports," *National Institute of Statistical Sciences Technical Expert Panel Report*, January 2021 (with Daniel B. Carr, Nola du Toit, Miriah Meyer, and Leland Wilkinson).
- "Do No Harm Guide: Applying Equity Awareness in Data Visualization," Urban Institute Report, (June 2021) (with Alice Feng).
- "Applying Racial Equity Awareness in Data Visualization," OSF Preprint, (August 2020) (with Alice Feng), https://doi.org/10.31219/osf.io/x8tbw.
- "Ten Guidelines for Better Tables," Journal of Benefit-Cost Analysis 11, no. 2 (2020): 151-178 (Summer 2020).
- "Organizing the Work of Data-Driven Visual Storytelling," in *Data-Driven Storytelling*, AK Peters, Riche, Hurter, Diakopoulos, and Carpendale, eds. (April 2018) (with Christina Elmer and Benjamin Wiederkehr).
- "Communicating Data to an Audience," in *Data-Driven Storytelling*, AK Peters, Riche, Hurter, Diakopoulos, and Carpendale, eds. (April 2018) (with Steven Drucker, Samuel Huron, Robert Kosara, and Nicholas Diakopoulos).
- "Data Journalism in 2017: The Current State and Challenges Facing the Field Today," Google News Lab Report (September 2017) (with Simon Rogers and Danielle Bowers).
- "Visualizing Data: An Economist's Guide," *Journal of Economic Perspectives*, Vol. 28, No. 1 (Winter 2014): pp. 209-234.

#### **Economics Papers and Reports**

- "The Geography of Disability and Food Insecurity," Urban Institute brief, (March 2022) (with Barbara Butrica and Stipica Mudrazija).
- "The Relationship Between Disability Insurance Receipt and Food Insecurity," Boston College Center for Retirement Research at Boston College Working Paper 2021-16 (November 1, 2021), (with Barbara Butrica and Stipica Mudrazija).
- "Economic Development Administration Programs and Project Types," Urban Institute Report, (October 2021) (with Brett Theodos, Leiha Edmonds, Daniel Teles, Christina Plerhoples Stacy, Christopher Davis, Benny Docter, and Tanay Nunna).

- "History and Programmatic Overview of the Economic Development Administration," Urban Institute Report, (October 2021) (with Brett Theodos, Leiha Edmonds, Daniel Teles, Christina Plerhoples Stacy, Christopher Davis, Benny Docter, and Tanay Nunna).
- "The Relationship Between Disability Insurance Receipt and Food Insecurity," Retirement and Disability Research Center Working Paper, 2021. Chestnut Hill, MA: Center for Retirement Research (with Barb Butrica and Stipica Mudrazija).
- "Are There 'Hot Spots' of Primary Impairments Among New SSDI Awardees—and Do We Know Why?" Retirement and Disability Research Center Working Paper, 2021. Chestnut Hill, MA: Center for Retirement Research (with Jody Schimmel Hyde, Anna Hill, and Aaron R. Williams).
- "Understanding the Local-Level Predictors of Disability Program Flows: New Adult Awards and Beneficiary Work Activity," Retirement and Disability Research Center Working Paper, 2020. Chestnut Hill, MA: Center for Retirement Research. (with Jody Schimmel Hyde, Paul O'Leary, and Dara Lee Luca).
- "The Impact of SNAP Able-Bodied Adults Without Dependents (ABAWD) Time Limit Reinstatement in Nine States," Urban Institute Report (June 2021) (with Laura Wheaton, Tracy Vericker, Theresa Anderson, Kevin Baier, Josseph Gasper, Nathan Sick, and Kevin Werner).
- "Rethinking Economics in the Black Lives Matter Era," Urban Institute Report, (April 2021) (with Kilolo Kijakazi).
- "Geographic Patterns in Disability Insurance Receipt: Mental Disorders in New England," Urban Institute Research Report (June 2017).
- "Reforming the Disability Insurance Program Should Start Now: Long-Term Reform Requires Structural Change," Urban Institute Brief (June 2017).
- "Analysis of the Impact of Expiration of Time Limit Waivers on ABAWD Participation: Literature Review and Insights from Regional Directors," Exploratory Research Memorandum for the Food and Nutrition Service (February 2017) (with Elaine Waxman and Laura Wheaton).
- "The Social Genome Model: Estimating How Policies Affect Outcomes, Mobility and Inequality across the Life Course," *Journal of Social Issues* 72: 656-675 (December 2016) (with Greg Acs, Steven Martin and Isabel V. Sawhill).
- "Understanding Social Security Disability Insurance: Interactions with Other Programs," Urban Institute Brief (February 2016) (with Stephan Lindner and Pamela J. Loprest).
- "Understanding Social Security Disability Programs: Diversity in Beneficiary Experiences and Needs," Urban Institute Brief (February 2016) (with Melissa M. Favreault).
- "Challenges and Choices for the New Mayor: Leveraging the Power of Open Data to Improve City Services," Urban Institute Brief (December 2014) (with Kathryn L.S. Pettit).
- "Promoting Social and Economic Mobility in Washington, DC: Challenges and Choices for the New Mayor," Urban Institute Brief (April 2015) (with Gregory Acs and Lauren Eyster).
- "Effects of a Higher Minimum Wage in the District of Columbia," Urban Institute Research Report (July 2014) (with Austin Nichols).
- "Modeling Individual Earnings in CBO's Long-Term Microsimulation Model," Congressional Budget Office Working Paper No. 2013-04 (June 4, 2013).

- "The Future of Social Security Disability Insurance," *Federal Reserve Bank of San Francisco Economic Letter*, June 24, 2013 (with Mary C. Daly and Brian Lucking).
- "Subtle Sources of Bias and Error," in *Bad Data Handbook*, Q. Ethan McCallum, ed., O'Reilly publishing, November 2012.
- Policy Options for the Social Security Disability Insurance Program. Congressional Budget Office (July 2012).
- Supplemental Nutrition Assistance Program. Congressional Budget Office (April 2012) (with Molly Dahl, Kathleen FitzGerald, and Emily Holcombe).
- "The Earned Income Tax Credit and Expected social Security Retirement Benefits Among Low-Income Women," Congressional Budget Office Working Paper No. 2012-06 (March 2012) (with Molly Dahl, Thomas DeLeire, and Timothy Smeeding).
- A Description of the Immigrant Population: An Update. Congressional Budget Office (June 2011) (with Nabeel Alsalam).
- "Identifying Rates of Emigration in the U.S. using Administrative Earnings Records," International Journal of Population Research (Summer 2011).
- *Migrants' Remittances and Related Flows.* Congressional Budget Office (February 2011) (with Robert Shackleton).
- "Year-to-Year Variability in Workers Earnings and in Household Incomes: Estimates from Administrative Data," *Journal of Human Resources* Vol. 46, No. 1 (Winter 2011) (with Molly Dahl and Thomas DeLeire).
- "The Long-Term Budget Outlook in the United States and the Role of Health Care Entitlements," *National Tax Journal* Vol. 63 (June 2010): 285-305 (with Joyce Manchester).
- Changes in the Distribution of Workers' Annual Earnings Between 1979 and 2007. Congressional Budget Office (October 2009) (with Molly Dahl).
- "Stepping Stone or Dead End? The Effect of the EITC on Earnings Growth," *National Tax Journal*, Vol. 62, No. 2 (June 2009): 329-346 (with Thomas DeLeire and Molly Dahl).
- CBO's Long-Term Model: An Overview. Congressional Budget Office Background Paper (June 2009) (with others).
- "Measurement Error in the SIPP: Evidence from Administrative Matched Records," *Journal of Economic and Social Measurement*, Vol. 34, No. 1 (2007) (with Julian Cristia); Congressional Budget Office Working Paper 2007-03 (January).
- Assigning Education Status in CBO's Long-Term Microsimulation Model. Congressional Budget Office Background Paper (October 2008).
- Recent Trends in the Variability of Individual Earnings and Household Income. Congressional Budget Office (June 2008) (with Thomas DeLeire and Molly Dahl).
- "Can America Afford to Get Sick?" *National Tax Journal*, Vol. 60, No. 3 (September 2007): 407-418 (with Julie Topoleski and Ignez Tristao).
- Trends in Earnings Variability Over the Past 20 Years. Congressional Budget Office, April 2007 (with Thomas DeLeire and Molly Dahl).

- "Take a Penny, Leave a Penny: The Propensity to Round Earnings in Survey Data," *Journal of Economic and Social Measurement*, Vol. 32, No. 2-3 (2007): 93-111.
- "Social Security Individual Accounts and the Impact on Low Earners," *Journal of Pension Economics and Finance*, Vol. 7, No. 2 (2008) (with Julie Topoleski).
- "Estimating Employment Spillover Effects In New York City with an Application to The Stock Transfer Tax," *Public Finance Review*, Vol. 33 (November 2005): 663-689.
- Earnings Inequality and High Earners: Changes During and after the Stock Market Boom of the 1990s. Congressional Budget Office Working Paper 2006-06 (April 2006).
- "Do youth nonmarital childbearing choices reflect income and relationship expectations?" *Journal of Population Economics*, Vol. 20 (January 2007): 73-100 (with Barbara Wolfe, Robert Haveman and Karen Pence).
- Projecting Labor Force Participation and Earnings in CBO's Long-Term Microsimulation Model. Congressional Budget Office Background Paper (October 2006) (with Amy Rehder Harris and John Sabelhaus).
- "Income Distribution and Social Expenditures: A Cross-National Perspective," In *The Distributional Effects of Government Spending and Taxation*, Dimitri Papadimitriou, ed., New York: Palgrave Macmillan (2006) (with Timothy M. Smeeding and Lars Osberg).
- "Regulating Underground Industry: An Economic Analysis of Sports Betting," New York State Economic Review (Fall 2005): 65-77.
- "New Job and Business Growth among Recent Immigrants: Rising Self-Employment in New York City," *Regional Labor Review* (Fall 2005) (with Jane E. Lynch): 33-44.
- "Employment Spillover Effects in New York City with an Application to the Stock Transfer Tax," *Public Finance Review* (Fall 2005): 663-689.
- "Insurance Coverage for New York City in an Age of Terrorist Risk," In *Resilient City: The Economic Impact of 9/11*, Howard Chernick, ed., New York: Russell Sage Foundation (August 2005) (with Joshua Chang).
- Hidden Revenue: Regulating the Underground Economy of Sports Betting. Partnership for New York City Issue Brief No. 3 (February 2005) (with Michael Simas).
- The Stock Transfer Tax and New York City: Potential Employment Effects. Partnership for New York City Issue Brief No. 2 (December 2004).
- New York City and Terrorism Insurance in a Post-9/11 World. Partnership for New York City Issue Brief No. 1 (September 2004) (with Joshua Chang).
- "Accounting for the wage-benefit tradeoff using the ECI," *Monthly Labor Review* (September 2004): 26-41.
- "Income Distribution and Public Social Expenditure: Theories, Effects, and Evidence," In Social Inequality, Kathryn Neckerman, ed., New York: Russell Sage Foundation (2004) (with Lars Osberg and Timothy M. Smeeding).

- Income Distribution and Social Expenditures: A Cross-National Perspective, Luxembourg Income Study Working Paper No. 350. Center for Policy Research, Syracuse, NY: Luxembourg Income Study (May 2003) (with Timothy M. Smeeding and Lars Osberg).
- "Has Macroeconomic Performance Regained its Antipoverty Bite?" *Contemporary Economic Policy*, 18(4) (2000): 415-427 (with Robert Haveman).
- "Economic growth and poverty: A return to normalcy?" *Focus*, Institute for Research on Poverty publication, 20(2) (1999): 1-7 (with Robert Haveman).

## PRESENTATIONS

| 2022 | Association for Public Policy Analysis and Management Fall Conference, Washington, DC<br>University of Iowa Tippie College of Business<br>Data Visualization Society Outlier Conference<br>Centers for Disease Control and Prevention<br>Department of Health and Human Services<br>University of Pittsburgh<br>Horizon Health Network (Halifax, Canada)   |
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| 2021 | SELC Applying Racial Equity Awareness in Data Visualization (virtual)<br>Washington Evaluators (virtual)<br>People Analytics World Conference (virtual)<br>Data Visualization New York City Meetup (virtual)<br>Data Visualization Dallas-Fort Worth Meetup (virtual)<br>Columbia University (virtual)<br>South Big Data Hub (virtual)<br>Freddie Mac (virtual)<br>University of California-Irvine (virtual)<br>Lisbon (Portugal) Data Visualization Meetup (virtual)<br>Creative ProWeek (virtual)<br>United Way of Houston (virtual)<br>20 <sup>th</sup> Annual Social Equity Leadership Conference (virtual)<br>Apolitical: An Introduction to Inclusive Data Practices (virtual)<br>US Bureau of the Census (virtual)<br>Federal Reserve Board Tableau Day (virtual)<br>University of Pittsburgh (virtual) |
| 2020 | IEEEVIS Annual Conference (virtual)<br>AARP (virtual)<br>NABE Annual Conference (virtual)<br>Data Visualization New York Meetup (virtual)<br>University of Minnesota (virtual)<br>JMP (virtual)<br>DataVizLive conference (virtual)<br>Denver University, Denver, CO<br>University of Denver, Denver, CO<br>Princeton University, Princeton, NJ  |
| 2019 | Human Capital Institute, Miami, FL<br>Graphic Hunters, Amsterdam, Netherlands  |

|      | University of Calgary, Calgary, Canada<br>Population Association of America, Austin, TX<br>Oracle, San Francisco, CA   |
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| 2018 | AUBER Annual Conference, Salt Lake City, UT<br>Mid-Atlantic StatNet, Largo, MD<br>Washington University, St. Louis, MO<br>Measure4Change, Baltimore, MD<br>Center for Medicare and Medicaid Innovation, Baltimore, MD<br>University of Minnesota, Minneapolis, MN<br>APPAM Fall Conference, Washington, DC<br>University at Buffalo, Buffalo, NY<br>World Bank, Washington, DC<br>Federal Reserve Bank of Chicago, Chicago, IL<br>Columbia University, NY, NY<br>Princeton University, Princeton, NJ<br>Facebook, Menlo Park, CA<br>World Bank, Washington, DC<br>NERA, White Plains, NY; NY, NY; San Francisco, CA; Los Angeles, CA<br>Claremont Graduate School, Claremont, CA |
| 2017 | NERA, Paris, France<br>Vanderbilt University School of Medicine, Nashville, TN<br>Grantmakers for Effective Organizations Annual Conference, Chicago, IL<br>Data Driven Storytelling: A Deep Dive into Visualization Techniques, Washington, DC<br>World Bank, Washington, DC<br>NERA Economic Consulting senior staff meeting, Miami, FL<br>Bureau of Economic Analysis, Suitland, MD<br>Malofiej World Infographic Summit, Pamplona, Spain<br>RTI International, San Francisco, CA   |
| 2016 | TEDxJNJ, Philadelphia, PA<br>APPAM Fall Conference, Washington, DC<br>Indiana University, Bloomington, IN<br>Centre College, Danville, KY<br>Presentation Summit, Las Vegas, NV<br>Inter-American Development Bank, Washington, DC<br>Department of Justice, Washington, DC<br>Voxy, New York, NY<br>Tableau User Group, Washington, DC<br>Dagstuhl Storytelling Conference, Germany<br>Minnesota Population Research Center, Minneapolis, MN<br>Responsible Data Forum, New York, NY<br>Population Association of American preconference workshop   |
| 2015 | Socrata Customer Summit, Washington, DC<br>Freddie Mac, Tysons Corner, VA<br>IRP-Urban Institute Webinar, Washington, DC<br>APPAM Spring Conference, Washington, DC<br>University of Akron, Akron OH<br>Bureau of Labor Statistics, Washington, DC<br>Measurement and Accountability for Results in Health, Washington, DC<br>Visualized: Political Data, Washington, DC<br>Bureau of Economic Analysis, Washington, DC  |

|      | comScore, Reston, VA<br>CDO Executive Summit, Washington, DC<br>Federal Reserve Bank of San Francisco, San Francisco, CA<br>Apple Inc., Cupertino, CA<br>American Economic Association Annual Conference, Boston, MA<br>Bureau of Economic Analysis, Washington, DC<br>Tow Center for Digital Journalism, Columbia Journalism School, New York, NY  |
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| 2014 | Charlotte Data Day, Charlotte, NC<br>Northeastern Agricultural and Resource Economics Association, Morgantown, WV<br>ComScore, Reston, VA<br>Inter-American Development Bank, Washington, DC<br>Academy Health Conference, Washington, DC<br>Tapestry Conference, Annapolis, MD<br>SXSW, Austin, TX<br>Harvard University, Cambridge, MA<br>Congressional Research Service, Washington, DC  |
| 2013 | Association for Public Policy Analysis and Management Fall Conference, Washington, DC<br>Congressional Research Service, Washington, DC<br>Data Science DC MeetUp Group, Washington, DC<br>Tableau Customer Conference, Washington, DC<br>University of Wisconsin at Madison, Madison, WI<br>American Economic Association Annual Meeting, San Diego, CA  |
| 2012 | Visweek, Seattle, WA<br>Social Security Advisory Board, Washington, DC<br>U.S. Census Bureau, Suitland, MD<br>George Washington University, Washington, DC<br>Brookings Institution, Washington, DC<br>Congressional Budget Office<br>American Association for Budget & Program Analysis Annual Conference, Washington, DC<br>Federal Reserve Board of Governors, Washington, DC<br>American Economic Association Annual Meeting, Chicago, IL<br>Tax Economists Forum, Washington, DC<br>Department of Commerce, Washington, DC |

### SERVICE

#### **Policy Service**

Bureau of Labor Statistics Data Users Advisory Committee, 2020-present World Bank Group Gender Data Portal Advocacy Advisory Group Meeting, 2020-present Co-Organizer, VisComm Workshop, 2021-present Co-Organizer, Data Visualization DC Meetup Group, 2013-2015 President, Society of Government Economists, 2005-2006

#### **Journal Referee**

Eastern Economic Journal, Economic Development Quarterly, IEEE Computer Graphics and Applications, Journal of Economic Inequality, Journal of Economic and Social Measurement, Journal of Human Resources, Journal of Policy Analysis and Management, Journal of Population Economics, New York State Economic Review, National Tax Journal, Review of Income and Wealth, Scandinavian Journal of Economics, Social Security Bulletin, Southern Economic Journal