John Abowd to Receive 2016 Julius Shiskin Award

John M. Abowd, Edmund Ezra Day Professor at Cornell University and currently Associate Director for Research and Methodology and Chief Scientist at the Census Bureau, has been selected to receive the 2016 Julius Shiskin Memorial Award for Economic Statistics. The award recognizes original and unusually important contributions in the development of economic statistics or in the use of statistics in interpreting the economy. **Professor Abowd is recognized for designing and implementing disclosure avoidance techniques that enable federal statistical agencies to greatly expand the availability of their data while preserving respondents' confidentiality and for his leadership at Cornell providing access to these data over the Internet. He is also recognized for developing econometric and statistical techniques to conduct labor market analysis.** Professor Abowd is the 44nd recipient of the Award; he will be honored at events hosted by the three award sponsors: the Washington Statistical Society, the National Association for Business Economics, and the Business and Economics Statistics Section of the American Statistical Association (ASA).

Abowd's most important contribution to economic statistics was his pioneering efforts to design and implement statistical disclosure avoidance techniques that have enabled statistical agencies to produce and release detailed tabulations and micro-data that both preserve the statistical properties of the original data and their confidentiality. After receiving a PhD in economics from the University of Chicago, Abowd worked on measurement issues in labor economics and on estimating gross labor force flows. A 1989 *Econometrica* article (with David Card) focused on identifying statistical models for dynamic wage processes and investigated the covariance structure of changes in earnings and hours. Subsequently, Abowd used linked data on employers and employees in several European countries to research the joint role of workers and firms in determining labor market outcomes. In conjunction with various collaborators, he developed innovative new econometric methods to analyze these linked employer-employee data. His most notable contribution in this area was the model developed in a 1999 *Econometrica* article (with Francis Kramarz and David Margolis) that used a matched sample of French employees and employers to decompose compensation into components related to employee characteristics, firm heterogeneity, and residual variation. Its econometric approach laid the groundwork for a large body of subsequent research using employee-employer linked data to understand topics such as the role of human capital in wage determination, the measurement and interpretation of wage differentials, and the dynamics of employment and wages.

Following his work with French linked data, in 1998 he joined the team of senior research fellows at the Census Bureau that developed the Longitudinal Employer-Household Dynamics (LEHD) program, which provides public-use data by integrating demographic and economic surveys and administrative data. During the course of developing the LEHD with Professors Julia Lane and John Haltiwanger, it became clear that to make the detailed data from this program available to the public, it would be necessary to develop new methods of statistical disclosure avoidance, because the existing methods were not adequate.

Abowd led the development of these new methods, the first of which was dynamic noise-infusion. This

method introduced noise at the microdata level, and used the noise-infused microdata to create aggregate statistics that did not distort critical properties of the underlying data, like trends, while still protecting confidentiality. The second method was the application of synthetic data techniques. Although this was not a new concept, Abowd was one of the first to put the idea into practice as described in a 2001 paper (with Simon Woodcock). He further stimulated research in this area as a founding editor of the online *Journal of Privacy and Confidentiality* and as a major contributor to the literature on privacy and confidentiality.

Abowd's methods have been adopted by many Census Bureau programs -- initially the Quarterly Workforce Indicators and OnTheMap, and more recently Job-to-Job Flows, County Business Patterns, the Survey of Business Owners, Statistics on Businesses, Non-employer Statistics, the Survey of Income and Program Participation, and the Economic Census of Outlying Areas. As a result, the amount of detailed industry and geographic detail accessible to researchers and policy analysts has substantially increased – in the case of Non-employer Statistics by almost double.

Abowd began teaching and conducting research at Cornell in 1987 and is now the Edmund Ezra Day Professor of Economics, professor of information science, and professor of statistics at Cornell University. Other contributions came primarily through the establishment and leadership of several institutions at Cornell. He and his colleague, Lars Vilhuber, created and led the Cornell Virtual Research Data Center, which provides access to synthetic data over the Internet. He is the Director of the Cornell Labor Dynamics Institute, which creates and provides access to data on the dynamics of labor markets, meeting the needs of users while maintaining confidentiality. He served as the Director, Cornell Institute for Social and Economic Research (CISER) from 1999 to 2007. CISER provides Cornell social scientists with computing systems and software support, data access, and related consulting services, and includes the Cornell Federal Statistical Research Data Center, which provides researchers access to confidential microdata files from the Census Bureau, the National Center for Health Statistics, and the Agency for Healthcare Research and Quality. While at Cornell, he also worked at the National Bureau of Economic Research and at several research organizations in France and Germany, as well as with the French national statistical office.

He made other important contributions through the National Research Council. He served as a member of the Committee on National Statistics' "Panel on Measuring Business Formation, Dynamics, and Performance" and "Panel on Access to Research Data." He also served as a member and chair of the Technical Advisory Board for the National Longitudinal Surveys of the Bureau of Labor Statistics.

Professor Abowd is a fellow of the Society of Labor Economists, the ASA, and the Econometric Society, as well as an elected member of the International Statistical Institute. He currently serves on the American Economic Association's Committee on Economic Statistics and the Executive Committee, Conference on Research in Income and Wealth. In addition, he has served as the Chair of the Business & Economic Statistics Section of the ASA.

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