

Erin Tanenbaum, MA

erin@thetanenbaums.com

Analytics-focused researcher with over 20 years of experience and a proven record of progressive advancement. Skilled in navigating ambiguity in project expectations and resources to deliver high-impact results.

Key Qualifications:

- **Strategic Problem Solver:** Proactive and disciplined in addressing complex challenges.
- **Data-Driven Decision Maker:** Skilled at leveraging data and research to address real-world challenges and identify opportunities for strategic, mutually beneficial partnerships.
- **Impactful Communicator:** Strong written and verbal communication skills, with experience presenting findings to clients, Congress, the White House, and the media.
- **Customer-Centric:** Proven client management expertise, demonstrated by a strong record of repeat contracts.
- **Collaborative Leader:** Adept at fostering cross-organizational partnerships and integrating diverse perspectives to drive innovation.
- **Results-Oriented:** Consistently delivers exceptional results on schedule despite uncertainty.
- **Team Mentor and Leader:** Passionate about coaching and developing staff to enhance performance and ensure retention.
- **Skilled Database Programmer:** Over 25 years of expertise in data analytics programming, including mentoring staff and maintaining programming standards.
- **Statistics, AI/ML, and Analytics Expert:** Extensive experience in predictive analytics, Artificial Intelligence (AI), multivariate statistics, data visualization, survey sampling, data collection, and data science.
- **Contract and Budget Management:** Expert in overseeing contracts and budgets with meticulous attention to detail, ensuring compliance with all regulations.
- **Equity-focused evaluator:** More than ten years of experience in program evaluation, including quantitative evaluation of over 350 program awardees ranging from small rural health studies to large cross-functional initiatives.

Professional Experience

National Center for Education Statistics (NCES), Institute of Education Sciences (IES), U.S. Department of Education – Washington, DC

Statistician and Study Director, GS-14 (2024 - present)

Lead the [School Pulse Panel \(SPP\)](#), a high-visibility monthly survey of public K-12 schools covering learning strategies, staffing, crime and safety, public health, transportation, and more.

Key Responsibilities:

- Led an internal team, four contracts, and collaborations with 12 federal agencies
- Managed 10 data collections including sampling, instrument development, respondent recruitment (including recruiting states, school districts, elementary, middle, and high schools), logic checks, and compliance.
- Directed 11 data releases, briefings (Congress, White House, media), press releases, and post-release data inquiries.
- Planned the 2025-26 panel launch including timeline, sampling, recruitment, and questionnaire design.
- Managed SPP budget, new contracts, and coordination across multiple stakeholders.

Key Accomplishments:

- Accelerated data delivery by 50% through process redesign and automation.
- Published results within 7 weeks of collection.
- Coordinated across 12+ federal agencies to refine questionnaires, data strategy, and analytics.

- Enhanced pre-release briefings for policymakers and the media by integrating policy insights, doubling data visualizations and statistical comparisons, and automating reporting.
- Identified contractor budget inaccuracies, saving hundreds of thousands of dollars.
- Developed system to track trend breaks and improve longitudinal comparability.
- Trained and mentored statisticians, validated analyses.

National Opinion Research Center (NORC) at the University of Chicago – Bethesda, MD**Senior Statistician II (2015 - 2024)****Senior Statistician I (2011 - 2015)**

Managed teams and contracts to implement data-driven research for federal, nonprofit, and commercial clients.

Key Responsibilities:

- Managed small to large-scale research projects and deliverables.
- Supervised and mentored more than 50 staff, and led training on data science tools and quality standards.
- Led analytics across 30+ projects. Led predictive modeling, evaluations, statistical, and data mining initiatives.
- Consulted with clients, subject matter experts, researchers, statisticians, and data scientists to improve study quality and timelines.
- Automated large-scale reporting workflows.
- Presented at national conferences, led training initiatives.
- Spearheaded strategic efforts in AI/ML ethics and QA/QC.

Accomplishments:

- Managed over a dozen contracts and grants as a project manager, director, or Principal Investigator.
- Conducted evaluation of over 350 program awardees.
- Led analytics and data visualization for the High School and Beyond study.
- Exposed wage disparities using the National Survey of Early Care and Education.
- Led the National Survey of Early Care and Education center-based sample frame creation.
- Led the National Children's Study Regional Operations Center (ROC) data delivery for the Central and Eastern US including collecting biological, physical measures, and environmental specimen data. Successfully created a process to continue participation for children moving.
- Led quality control including data linkage for the Survey of Doctorate Recipients.
- Organized dozens of education events with the Department of Education including conceptualization, coordination and planning, and post-event follow-up assistance.
- Applied a wide array of quantitative methods including predictive analytics, Artificial Intelligence (AI), multivariate statistics, univariate statistics, data visualization, probability and non-probability sampling, disparity analysis, quasi-experimental program evaluation, data collection, primary and secondary data analysis, prevalence and incidence estimation, population enumeration, weighting, variance estimation, regression analysis, data science, data harmonization, randomized control trial, Statistical Process Control (SPC), small area estimation, data linkage, trend analysis, and segmentation.
- Validated administrative data use for the Census, saving \$1.4B.

The Nielsen Company – Arlington, VA**Black Belt (2010 - 2011)**

Tasked with improving a must-not-fail, high-profile product. Directed statistical and methodological improvements for the Retail Establishment Survey across Asia.

Key Responsibilities and Accomplishments:

- Improved quality across 12+ countries, impacting 3.5 million surveys annually.
- Achieved double-digit improvement in key performance indicators (retention, accuracy, mapping).
- Led cross-functional international teams.
- Led Lean Six Sigma Kaizen events, focus groups, and interviews with stakeholders, clients, and staff including pre-event planning, site management, facilitation of events, and post-event follow-up.
- Documented statistical operations throughout the US and Asia for quality improvements.

The Nielsen Company – Arlington, VA
Director of Statistical Resources, 2009 – 2010
Senior Statistician, 2006 – 2009

Directed R&D and product innovation for syndicated market research products.

Key Responsibilities and Accomplishments:

- Led R&D team responsible for products worth over \$100M in annual revenue.
- Used predictive analytics with 2006 data to uncover signs of the 2007–2008 financial crisis—a year ahead of the media.
- Developed PRIZM, P\$YCLE, and ConneXions segmentation systems, still widely used across telecom, retail, insurance, and real estate.
- Created Income Producing Assets & Net Worth by modeling individual and household wealth at a national scale.
- Oversaw end-to-end model lifecycle from model R&D to deployment and strategic client engagement.
- Predicted thousands of behavioral traits by integrating 3rd-party datasets with segmentation clusters—to support advanced audience modeling.
- Led Consumer Buying Power small area estimation creation, providing current consumer expenditure information to market research clients.
- Conducted vendor quality evaluations for third-party data partners.
- Supervised and mentored staff.
- Led dual-frame survey methodology transition.

PWC | EY | University of Michigan

Statistical and Consulting Roles (1997 – 2006)

Early-career roles focused on predictive modeling, sampling, data collection, and econometric analysis.

Education

The University of Michigan, Master in Applied Statistics
Kalamazoo College, Bachelor in Economics

Honors

- 2020, awarded the Committee on Applied Statisticians' first letter for recognition of exceptional service
- 2017 - 2018, Rural Health Fellow of the National Rural Health Association
- 2016, NORC Rural Health Recognition Award
- 2016, NORC Team Recognition Award, Presented to the Walsh Center for Rural Health Analysis
- 2016, NORC Team Recognition Award, Presented to the Health Care Innovation Award Team
- 2015, NORC Team Recognition Award, Presented to the Commercial Insurance Analytics Team
- 2010, Women's Leadership Program, the Nielsen Company
- 2009, Pinnacle Award, Nielsen Claritas
- 2007 - 2010, Measurement Science Executive Board Member, the Nielsen Company

Other Professional Activities

- 2021 - 2024, Washington Statistical Society President-Elect, President, and Past President
- 2019 - 2022, AAPOR Standards Committee Member (appointed)
- 2018, Chair of the American Statistical Association (ASA) Quality and Productivity Section
- 2017, Special Edition Co-Editor of the American Statistician (February edition)
- 2017 - 2021, Student Travel Award Committee Chair, Washington Statistical Society (appointed)
- 2015 - 2016, Chairperson of the ASA Committee on Applied Statisticians (appointed)

- 2015 - 2016, Board Member-at-Large of the Washington Statistical Society
- 2011, Completion of Lean Six Sigma Training, the Nielsen Company
- 2011, Presidential Appointee for the ASA 2011 initiative on Career Success Factors
- 2011, Member of the Public Awareness Workgroup for the ASA (appointed)
- 2010 - 2014, Vice-Chairperson of the ASA Committee on Applied Statisticians (appointed)
- 2010, Contributing Editor, Amstat News Magazine, American Statistical Society

Select Publications and Presentations

- Tanenbaum, E. (2008a). Customer profiling in mixed models: Data modeling with cluster analysis results. Section on Statistics and Marketing, Social Statistics Section. Joint Statistical Meetings, Alexandria, VA.
- Tanenbaum, E. (2008b, December). Customer profiling and data modeling. Virtual Direct Marketing Association.
- Tanenbaum, E. (2009a). New tricks for old media: What measurement and method tell us about traditional media consumption and effectiveness [Invited session]. Joint Statistical Meetings, Alexandria, VA.
- Tanenbaum, E. (2009b, June 11). Challenges in classification [Keynote speaker]. Classification Society Annual Meeting, St. Louis, MO.
- Vance, E. A., Tanenbaum, E., Kaur, A., Otto, M. C., & Morris, R. (2017). An eight-step guide to creating and sustaining a mentoring program. *The American Statistician* (1). <https://doi.org/10.1080/00031305.2016.1251493>
- Meit, M., Heffernan, M., Tanenbaum, E., & Hoffmann, T. (2017). *Appalachian diseases of despair*. Washington, DC: Appalachian Regional Commission.
- Fell, J. C., Tanenbaum, E., & Chelluri, D. (2018). Evaluation of a combination of community initiatives to reduce driving while intoxicated and other alcohol-related harms. *Traffic Injury Prevention* (19:sup1), S176–S179. <https://doi.org/10.1080/15389588.2018.1426904>
- Doogan, N. J., Roberts, M. E., Wewers, M. E., Tanenbaum, E., Mumford, E. A., & Stillman, F. A. (2018, October). Validation of a new geographic isolation scale: A tool for rural health disparities research. *Social Science & Medicine*, Volume 215, 123–132.
- Stillman, F., Tanenbaum, E., Wewers, M. E., Chelluri, D., Mumford, E. A., Groesbeck, K., Doogan, N., & Roberts, M. E. (2018, November). Variations in support for secondhand smoke restrictions across diverse rural regions of the United States. *Preventive Medicine*, Volume 116, 157–165. <https://www.sciencedirect.com/science/article/pii/S0091743518302925>
- Tanenbaum, E. (2010a). Why I took the red pill: Four consulting statisticians discuss making a difference in the real world [Invited session]. Joint Statistical Meetings, Alexandria, VA.
- Tanenbaum, E. (2010b, July). In the hot seat: Two experienced consultants discuss hiring statisticians. *AMSTAT News*.
- Tanenbaum, E. (2011). In over our heads? Demystifying complex problems with statistical engineering. Joint Statistical Meetings, Alexandria, VA.
- Tanenbaum, E. (2012). The human side of statistical engineering. Joint Statistical Meetings, Alexandria, VA.
- Tanenbaum, E., Krishnamurty, P., & Stern, M. (2013). How representative are Google Consumer Surveys? *JSM Proceedings*, 2481–2492.
- Meit, M., Knudson, A., Gilbert, T., Yu, A. T. C., Tanenbaum, E., Ormson, A. E., & Popat, M. S. (2014). *The 2014 update of the rural-urban chartbook*. Rural Health Reform Policy Research Center.
- Tanenbaum, E. R., Carpenter, R., Bishop, L., & Klipp, A. (2015). Response rates using mass mailing tools in the National Children's Study. In JSM Proceedings, Survey Research Methods Section, Government Statistics Section, Committee on Applied Statisticians. Alexandria, VA: American Statistical Association.
- Knudson, A., Meit, M., Tanenbaum, E. R., Brady, J., Gilbert, T., Klug, M., Arsen, E., Popat, S., & Schroeder, S. (2016, April). Exploring rural and urban mortality differences by HHS region, Appalachia, and Delta. Research Health Reform Policy.

- Tanenbaum, E. R. (2016, November). Analyzing data and interpretation. Rural Health Data Institute, National Organization of State Offices of Rural Health.
- Tanenbaum, E. R., Sinclair, M., Hasche, J., & Park, C. (2016b). A systematic review: Evaluating extant data sources for potential linkage. In *International Methodology Symposium Proceedings: Growth in Statistical Information—Challenges and Benefits*. Ottawa, Ontario: Statistics Canada.
- Hofmeyer, J., Leider, J. P., Satorius, J., Tanenbaum, E. R., Basel, D., & Knudson, A. (2018). Regional rural–urban differences in e-cigarette use and reasons for use in the United States. *The Journal of Rural Health*. <https://doi.org/10.1111/jrh.12333>
- Meit, M., Heffernan, M., & Tanenbaum, E. R. (2019). Investigating the impact of the diseases of despair in Appalachia. *Journal of Appalachian Health*, 1(2), 7–18. <https://doi.org/10.13023/jah.0102.02>
- Roberts, M. E., Doogan, N. J., Tanenbaum, E. R., Stillman, F. A., Mumford, E. A., Chelluri, D., & Wewers, M. E. (2021). How should we define “rural” when investigating rural tobacco use in the United States? *Substance Abuse*, 42(4), 788–795.
- Tanenbaum, E. R., Geistwhite, B., & Wells, B. (2023). A nonresponse bias analysis of the 2021 General Social Survey. In *JSM Proceedings, Survey Research Methods Section*. Joint Statistical Meetings, Alexandria, VA.