

# DUNCAN J. MAYER

DATA SCIENTIST | SOCIAL SCIENTIST | HEALTH SCIENTIST

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## EDUCATION

### Case Western Reserve University

PhD in Social Welfare

*Dissertation:* Essays on Community-Organization Dynamics

Cleveland, OH  
(Expected August) 2023

### Marywood University

Masters of Social Work

*Thesis:* Evaluation Capacity; Structures, Stakeholders, Attitudes, and Environment

Scranton, PA  
2017

Bachelors of Social Work

2015

## RESEARCH INTERESTS

**Substantive Domains:** Health Equity, Data Use, Program Evaluation, Neighborhoods, Organizational Ecology, and Community-Organization Dynamics

**Methodological:** Hierarchical models (rich parameterizations), Model Criticism, Measurement Error, Nonlinearity, and Spatial Statistics

**Programming:** R (8 years) | SQL (4 years) | Stan (3 years) | Python (1 year)

## RECENT PROFESSIONAL EXPERIENCE

### BeVera Solutions

*Health Statistician (full-time)*

Atlanta, GA  
Sept. 2022 – Present

- Led statistical development of several white papers related to the COVID19 vaccine program for the Centers for Disease Control and Prevention's [National Center for Infectious and Respiratory Disease](#), evaluating efficacy of the vaccine program and indicators of health equity.

### Case Western Reserve University

*Research fellow (full-time)*

Cleveland, OH  
Aug. 2018 – June. 2022

- Developed and led all aspects of several studies resulting in multiple publications and presentations.
- Provided ad hoc methodological support and consultation for select research reports and evaluation including formative and process evaluation, affiliated with the [The Center on Poverty and Community Development](#).
- Delivered over 150 hours of course lectures and developed a programming course for the [data science for social good](#) certificate.

### The Institute for Public Policy and Economic Development

*Research Analyst (full-time)*

Wilkes-Barre, PA

July 2017 – June 2018

- Co-authored 11 funded research papers on topics related to public policy, public health, and economic development, leading data analysis in 5.
- Provided ad hoc data analysis to a variety of public and private stakeholders.
- Contributed to the design of evaluation and monitoring plans for program implementation.
- Ran focus groups and conducted qualitative analysis (thematic coding).

### Marywood University

*Research Assistant (part-time)*

Scranton, PA  
March 2017 – July 2017

- Provided methodological support for studies of childcare centers across Northeast Pennsylvania, responsibilities included data management, analysis, and writing.

## SELECT HONORS

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Case Western Reserve University Social Justice Institute Research Fellow	2022-2023
Association for Research on Nonprofit Organizations and Voluntary Action Doctoral (ARNOVA) Fellow	2022
Jack, Joseph and Morton Mandel School of Applied Social Sciences Research Fellow	2018-2022

## PUBLICATIONS

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### Articles in Referred Journals

**Mayer, D. J.** (accepted). Understanding Location and Density; A Spatial Analysis of Cuyahoga County Ohio's Nonprofit Sector. *Nonprofit and Voluntary Sector Quarterly*.

**Mayer, D. J.** Groza, V. (in press). Promoting Children's Rights in Program Evaluation. *American Journal of Evaluation*.

**Mayer, D. J.,** Fischer, R. L. (2023). Exploring Niche Alteration in Nonprofit Organizations. *Administration and Society*. DOI: [10.1177/00953997231165255](https://doi.org/10.1177/00953997231165255)

**Mayer, D. J.** (2023). Social Capital and the Nonprofit Infrastructure; an Ecological Study of Child Maltreatment. *Journal of Community Psychology*. DOI: [10.1002/jcop.22984](https://doi.org/10.1002/jcop.22984)

**Mayer, D. J.** (2023). Understanding Social Disorganization and the Nonprofit Infrastructure; An Ecological Study of Child Maltreatment Rates. *Social Currents*. DOI: [10.1177/23294965231159317](https://doi.org/10.1177/23294965231159317)

**Mayer, D. J.** Fischer, R. L. (2023). Exploring data use in nonprofit organizations. *Evaluation and Program Planning*. DOI: [10.1016/j.evalprogplan.2022.102197](https://doi.org/10.1016/j.evalprogplan.2022.102197)

**Mayer, D. J.** (2022). Simmer Down Now! A Study of Revenue Volatility and Dissolution in Nonprofit Organizations. *Nonprofit and Voluntary Sector Quarterly*. DOI: [10.1177/08997640221126147](https://doi.org/10.1177/08997640221126147)

**Mayer, D. J.** (2022). Fischer, R. L. (2022). Can a Measurement Error Perspective Improve Estimation in Neighborhood Effects Research? A Hierarchical Bayesian Methodology. *Social Science Quarterly*. DOI: [10.1111/ssqu.13190](https://doi.org/10.1111/ssqu.13190)

### Manuscripts Under Review

**Mayer, D. J.** (revise and resubmit). Revisiting Portfolio Composition and Volatility: Short- and Long-Term Perspectives. *Public Budgeting and Finance*.

**Mayer, D. J.,** Fischer, R. L. (revise and resubmit). Teaching Spatial Data Analysis; A Case Study with Recommendations. *Nonprofit Policy Forum*.

**Mayer, D. J.** (under review) Let's Try That Again: Improving the Teaching of Statistical Inference Through the Bootstrap. *Journal of Teaching Social Work*.

**Mayer, D. J.** (under review) Exploring Variation in the Relationship Between Deprivation and the Density of Human Service Nonprofits. *Administration and Society*.

**Mayer, D. J.** (under review) A Note on Empirical Models for Nonprofit Density and Vital Events. *Nonprofit and Voluntary Sector Quarterly*.

### Manuscripts In Preparation

**Mayer, D. J.** Can Specialization Protect Against Competitive Effects? A Study of Contributions in US Nonprofits. Target Outlet: *Public Administration*.

**Mayer, D. J.** A Note on the Adjacency Matrix in ICAR Prior Models. Target Outlet: *Social Science Quarterly*.

### Dissertation Papers

**Mayer, D. J.** The Nonprofit Response to Neighborhood Conditions: Incorporating Space-Time Heterogeneity.

**Mayer, D. J.** Revealed Preference for Nonprofit Organizations; A Hedonic Price Analysis.

**Mayer, D. J.** Connecting Founding and Dissolution; A Demographic Study of The US Nonprofit Sector.

### Book Chapters and Reviews

Fischer, R. L., **Mayer, D. J.** (2022) Nonprofit Management: Beyond Managerialism. In W. Brown, M. Hale (eds). *Preparing Nonprofit Leaders: Contemporary Perspectives*. Routledge.

Fischer, R. L., **Mayer, D. J.** (2020). Macro Social Work Practice: Working for Change in a Multicultural Society. *Journal of Teaching in Social Work*. DOI: [10.1080/08841233.2020.1809257](https://doi.org/10.1080/08841233.2020.1809257)

## Professional or Technical Reports

Fischer, R., Mansoor, D., **Mayer, D. J.** (2020). A Study of the Educational Needs of Fundraising and Grant Making Professionals in Northeast Ohio.

Atwell, M., Fischer, R., L., Chan, T, **Mayer, D. J.**, Henderson, M. (2019). Year Two Gap Analysis: Accountable Health Communities. The Center on Poverty and Community Development.

Ooms, T., Chew, A., **Mayer, D. J.** (2018). Senior Needs Assessment: 2018. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, Ritter, C. (2018). Berwick Community Needs Assessment. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). The Intersection of Transit and Land Use. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). Social Determinants of Health. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). Health Literacy: A Public Health Challenge. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). What's Next? A Technical Report on 2018 Post-Graduation Polls. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). The Nonprofit Social Service Sector in Luzerne and Lackawanna Counties. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). Workforce Trends and Challenges in Northeastern Pennsylvania. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). The Behavioral Health Initiative: A Report on the Behavioral Health Workforce. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2017). Public Policy and Civic Engagement: A Technical Report on 2017 Polls. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

**Mayer, D. J.** (2017). Preschool and Dibels Assessments. Scranton, PA: United Way of Lackawanna and Wayne Counties.

## MEDIA

"Duncan Mayer writes about revenue volatility", featured in [Case Western Reserve University's "the Daily."](#) December 2nd, 2022.

## PRESENTATIONS

### Presentations at National Conferences

**Mayer, D. J.** (2022, accepted but not presented). Understanding Social Disorganization and the Nonprofit Infrastructure; An Ecological Study of Child Maltreatment Rates. The Society for Social Work Research. Juried poster presentation.

**Mayer, D. J.** (2022). Revealed Preference for Nonprofit Organizations; A Hedonic Price Analysis. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

**Mayer, D. J.** (2022). Nonprofit Response to Neighborhood Conditions: Incorporating Space-Time Heterogeneity. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

**Mayer, D. J.** Fischer, R. L. (2021). Examining Revenue Volatility in Nonprofit Organizations with a Discussion of Measurement and Portfolio Representation. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

### Presentations at Local Conferences

**Mayer, D. J.** (2022). Understanding the Geography of Cuyahoga County's Nonprofit Sector Through Form-990 Data. Data Days Cleveland. Juried oral presentation.

**Mayer, D. J.** (2017). Evaluation Capacity: Structures, Stakeholders, Attitudes, and Environment. Annual Conference of the National Association of Social Workers, Pennsylvania. Juried poster presentation.

## TEACHING (AND RELATED) EXPERIENCE

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### Instructor of Record

*Case Western Reserve University*

Evidence-informed practice (SASS 528)

Masters of Social Work: 2021 (in-person), 2022 (online)

Theoretical contexts shaping community practice (SASS 534)

Masters of Social Work: 2021 (online), 2022 (in-person)

Poverty, wealth building, and social entrepreneurship (SASS 367)

Social Work Minor: 2020 (online)

### Course Development

*Case Western Reserve University*

Working with data for organizational empowerment (SASS 500)

Masters of Social Work, Certificate in Data Sciences for Social Impact, Approved 2021

Community practice policy: Analyzing and changing social policy (SASS 561)

Masters of Social Work, 2020 (online)

### Teaching Assistant

*Case Western Reserve University*

Data-based decision making (SASS 410)

Masters of Nonprofit Organizations, 2020 (online)

Theoretical contexts shaping community practice (SASS 534)

Masters of Social Work, 2019-2021 (online/in-person)

Community practice policy: Analyzing and changing social policy (SASS 561)

Masters of Social Work, 2019-2021 (online/in-person)

*Marywood University*

Social work research: Implementation and analysis (SW 702)

Masters of Social Work, 2017 (in-person)

## SERVICE

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PhD executive committee

2017-2019

Community practice committee on curriculum

2019

*Ad hoc Reviewer*

Nonprofit Management and Leadership

## PROFESSIONAL AFFILIATIONS

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Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA)

2021-present

*Academic Honor Societies*

Sigma Zeta (Phi Alpha)

Inducted 2017

Alpha Delta Mu

Inducted 2015

Delta Epsilon Sigma

Inducted 2015

## INTERSHIPS

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The United Way of Lackawanna and Wayne Counties (Scranton, PA)

2016-2017 (440 hours)

- Developed data briefs for task forces focused on education and health programs.

The Institute for Public Policy and Economic Development (Wilkes-Barre, PA)

2016 (250 hours)

- Analyzed survey data related to the child welfare workforce.
- Developed a literature review related to the effects of truancy.

United Neighborhoods Center of Northeast PA 2015 (450 hours)  
(Scranton, PA)

- Provided case management for a range of clients facing chronic health problem and utility shut offs.

Prevention Point Philadelphia (Philadelphia, PA) 2015 (500 hours)

- Provided case management to clients in a medication assisted treatment program focused on substance use.
- Distributed syringes and wound kits as part of the agency's mobile clinic and syringe exchange.

Community Intervention Center (Scranton PA) 2014 (30 hours)

- Developed a drawing group for the clients in the agency's drop-in center.

## **References Available Upon Request**