

# Aaron D. Schroeder

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## Summary

Dr. Schroeder's overarching research focus is the enablement of Evidence-Based Policy-Making and Program Evaluation through the secure liberation, integration and analysis of administrative data.

A particular focus has been the integration of education, health, social service and non-profit administrative data streams to support policy analyses and program evaluations across pre-K services, child care, K-12 and adult education, state workforce training, and U.S. veteran services.

High-profile information integration projects in the Commonwealth of Virginia include the USED-funded Statewide Longitudinal Data System, the USHHS-funded Project Child HANDS, and the USDOT-funded design and evaluation of the U.S.'s first statewide travel information system, Virginia 511.

## Education

<b>PhD</b>	<b>Virginia Tech University</b> , Public Policy & Administration <ul style="list-style-type: none"> <li>• Areas: Organization Theory, Data Management, Privacy Law, Implementation</li> <li>• Dissertation: Building Implementation Networks</li> </ul>	Jan 2001
<b>MPA</b>	<b>James Madison University</b> , Public Administration <ul style="list-style-type: none"> <li>• Areas: Geographic Information Systems, Administrative Law</li> </ul>	Jan 1993
<b>BA</b>	<b>University of Delaware</b> , Psychology <ul style="list-style-type: none"> <li>• Areas: Brain &amp; Behavior (incl. graduate-level Neuropsychology)</li> <li>• Minor: Political Science</li> </ul>	Jan 1991

## Experience

<b>Associate Research Professor</b>	Research Associate Professor at Social and Decision Analytics Division, Bioinformatics Institute, University of Virginia	2018-Present
<b>Senior Data Scientist &amp; Architect</b>	Social Decisions & Analytics Lab, Biocomplexity Institute at Virginia Tech (BI)	2014-2018
<b>Co-Program Director &amp; Instructor, Data Science for the Public Good</b>	(2015-2018) Social & Decision Analytics Laboratory (SDAL), Biocomplexity Institute of Virginia Tech (2019-2024) Social & Decision Analytics Division (SDAD), University of Virginia Biocomplexity Institute	2015-2024
<b>Information Architect &amp; Data Scientist, Leader, Public Policy Data Group</b>	Virginia Tech Institute for Policy & Governance (VTIPG)	2010-2014
<b>Research Scientist</b>	Virginia Tech Institute for Policy & Governance (VTIPG)	2008-2010
<b>Visiting Assistant Professor</b>	Virginia Tech Center for Public Administration & Policy (CPAP)	2007-2010
<b>Research Scientist, Director, Center for Technology Deployment</b>	Virginia Tech Transportation Institute (VTTI)	2004-2006

<b>Senior Research Associate, Leader, Information Applications Group</b> Virginia Tech Transportation Institute (VTTI)	2002-2004
<b>Visiting Assistant Professor</b> Virginia Tech Center for Public Administration & Policy (CPAP)	2002-2010
<b>Senior Research Associate</b> Virginia Tech Transportation Institute (VTTI)	1998-2002
<b>Adjunct Instructor</b> Virginia Tech Center for Public Administration & Policy (CPAP)	1994-2001
<b>Research Associate</b> National Academy of Public Administration (NAPA)	1995-1996
<b>Adjunct Instructor</b> Elon University Department of Political Science & Public Administration	1995-1996
<b>Research Projects</b>	
<b>Leveraging Large Language Models to Identify Green Innovation</b> National Center for Science and Engineering Statistics (NSF) — \$101,000 (PI)	2023-2024
<b>Developing Predictive Models of U.S. Army Career Pathways</b> U.S. Army Research Institute for the Behavioral and Social Sciences — \$813,848 (years 4–5) (PI)	2021-2025
<b>The Social Component of the Human Dimension - Leveraging Existing DoD Data Towards Optimized Individual and Team Performance in the Army</b> Army Research Institute — \$3,000,000 (Senior Personnel)	2017-2022
<b>Use Statistical and Survey Methodology Research to Improve or Redesign Surveys</b> United States Department of Agriculture / National Science Foundation — \$2,500,000 (Senior Personnel / Founding Co-PI)	2017-2021
<b>Towards an Integrated Data Framework for Understanding the Context of Military Environments</b> Army Research Institute — \$1,691,337 (Co-PI)	2015-2018
<b>Bringing Evidence-Based Decision Making to Local Communities through Community Learning</b> Laura and John Arnold Foundation — \$144,000 (Co-PI)	Jan 2016
<b>Actionable Intelligence for Social Policy Innovation</b> University of Pennsylvania / Laura and John Arnold Foundation — \$22,500 (Co-PI)	2016-2017
<b>ATIS Implementation Center</b> U.S. DOT Research and Special Programs Administration (RSPA) — \$543,000 (Co-PI)	2004-2005
<b>Virginia Longitudinal Data System Expansion - Linking to Workforce and Postsecondary</b> U.S. Department of Education — \$1,760,000 (PI)	2010-2013
<b>Virginia Early Childhood Professional Registry</b> Virginia Department of Social Services — \$110,840 (PI)	2010-2016

<b>Child HANDS: Building Child and Family Policy Research Data Capacity for the Commonwealth of Virginia: An Integrated Model</b> Administration for Children & Families (US Department of Health & Human Services) — \$650,000 (PI)	2008-2011
<b>I-81 Design &amp; Implementation of Database Management System</b> VA Department of Transportation (VDOT) — \$180,000 (PI)	Jan 2002
<b>Intelligent Transportation Systems Implementation: Virginia Traveler Information Clearinghouse</b> Research and Special Programs Administration (US Department of Transportation) — \$1,800,000 (PI)	1999-2006
<b>I-81 Interim Data Operation Center</b> VA Department of Transportation (VDOT) — \$747,817 (PI)	2002-2005
<b>Advanced Travel Information Systems</b> Virginia Department of Transportation (VDOT) — \$60,733 (PI)	Jan 1999
<b>511 Virginia</b> Virginia Department of Transportation (VDOT) — \$1,207,000 (PI)	2000-2003
<b>Travel Shenandoah – An Advanced Traveler Information System for Virginia’s Shenandoah Valley</b> Virginia Department of Transportation (VDOT) and Shenandoah Telecommunications (SHEN-TEL) — \$1,400,000 (PI)	1998-2000
<b>Design and Implementation of a Truck Fleet Alert Service for I-81 and the Virginia Inland Port/Port of Virginia</b> Virginia Department of Transportation (VDOT) — \$75,000 (PI)	1999-2000
<b>Travel Virginia – A Statewide System of Private-Public Partnerships</b> Virginia Department of Transportation (VDOT) — \$200,000 (Co-PI)	1999-2000
<b>Enhanced Night Visibility</b> Federal Highway Administration (FHWA), US Department of Transportation (USDOT) — \$125,000 (Co-PI)	1997-2002
<b>Bedford Ride</b> Bedford County, VA — \$86,000 (PI)	2000-2001
<b>ACCESS to Rides – A Dynamic System for Volunteer and Transportation Resource Management</b> Federal Highway Administration (FHWA), US Department of Transportation (USDOT) — \$56,000 (PI)	1998-2002
<b>Wireless Linear LAN for Interstate 81 (Salem District)</b> Virginia Department of Transportation (VDOT) — \$593,603 (PI)	2003-2005
<b>US460 Wireless Corridor</b> Virginia Department of Transportation (VDOT) — \$250,000 (PI)	2001-2004
<b>I-81 Video System Design &amp; Implementation</b> USDOT Center for ITS Implementation Research — \$80,000 (PI)	Jan 2003

<b>Development of cisco-based urban wireless networks for infrastructure surveillance and public fleet communications</b> Cisco Systems, Inc. — \$89,000 (PI)	Jan 2005
<b>Deployment and performance testing of an 8 hop 4.9ghz cisco metro grid on the smart road</b> Cisco Systems, Inc. — \$100,000 (PI)	2005-2006
<b>Virginia's Wounded Warriors: Assessment of the Experiences, Supportive Service Needs and Service Gaps of Veterans within the Commonwealth of Virginia</b> Virginia Department of Veteran Services — \$148,780 (Co-PI)	2009-2010
<b>Saving Dollars While Making Sense: Comparing Operational Costs of Intergenerational Shared Site Facilities</b> Generations United (GU) and the MET Life Foundation — \$14,000 (Co-PI)	2006-2007
<b>I-81 Evaluation Framework</b> Virginia Department of Transportation (VDOT) — \$140,200 (PI)	2002-2004
<b>Case Study Evaluation of the Virginia Department of Transportation's I-81 ITS Program</b> Virginia Department of Transportation (VDOT) — \$140,200 (PI)	Jan 2003
<b>Corridor Concept of Operations</b> Virginia Department of Transportation (VDOT) — \$50,000 (PI)	Jan 2001
<b>Staunton District ITS Concept of Operations</b> Virginia Department of Transportation (VDOT) — \$125,000 (PI)	Jan 2000
<b>I-81 Intelligent Transportation Systems Task Force</b> Virginia Department of Transportation (VDOT) — \$275,000 (PI)	2000-2001
<b>Building Research Infrastructure and Community to Advance Social Scientific and Educational Use of Administrative Data</b> National Science Foundation — \$500,004 (Co-PI)	2013-2017
<b>Regional Pedestrian Activity Measurement</b> USDOT Center for ITS Implementation Research — \$50,000 (PI)	Jan 2006
<b>Virginia Department of Emergency Management (VDEM) Data Flows - Establishing a Baseline</b> VA Department of Emergency Management — \$50,000 (PI)	Jan 2016
<b>Baseline Distinct Counts of Select Data Sets to Support Early Childhood Integrated Data System (ECIDS) Establishment</b> Virginia Early Childhood Foundation (VECF) — \$75,000 (PI)	Jan 2018
<b>Iowa Early Childhood Integrated Data System (IDS) Development Support</b> Iowa State University — \$77,761 (PI)	2019-2020
<b>The American Soldier in World War II - Advanced Data Operations</b> National Endowment for the Humanities — \$60,971 (part of a larger American Soldier in World War II initiative led by Virginia Tech) (PI)	Jan 2021
<b>VDH Data Commons</b> U.S. Centers for Disease Control (via the Virginia Department of Health) — \$1,150,000 (PI)	2021-2024

## Social Impact Data Commons Implementation – National Capital Region

2021-2025

Mastercard Center for Inclusive Growth — \$1,100,000 (PI)

### Presentations

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<b>The Social Impact Data Commons: Supporting local equity-informed decision-making in the National Capital Region</b>	Dec 2023
Lecture at Council of Professional Associations on Federal Statistics (COPAFS)	
Presenter/Panelist at 2023 ACS Data Users Conference	May 2023
Presenter/Panelist at Mid-Atlantic Statistics Network (MASN)	May 2022
Presenter/Panelist at 2021 Governor’s Summit on Rural Prosperity	Nov 2021
Presenter/Panelist at Implementation Working Group, Open Data Charter	Mar 2020
Presenter/Panelist at Government Advancement of Statistical Programming (GASP) Workshop	Sept 2019
Presenter/Panelist at 2019 Midwest Big Data Summer School, Iowa State University	May 2019
Presenter/Panelist at Data Science for the Public Good, Iowa State University	Mar 2019
Presenter/Panelist at Data Science for the Public Good, Iowa State University	Mar 2019
Presenter/Panelist at 2018 ADRF Network Research Conference	Nov 2018
Presenter/Panelist at National Academy of Sciences	June 2017
Committee Member at Governor’s Data Analytics Summit	Apr 2017
Panelist at Office of Planning, Research and Evaluation (OPRE), US DHHS Administration for Children and Families	Oct 2015
Presenter at Second Annual High Performance Computing Day, Virginia Tech	Apr 2015
Panelist at Normative Dimension of Resilience Conference	Oct 2014
Panelist at 2013 VLDS Insights Conference	June 2013
Panelist at 2013 VLDS Insights Conference	June 2013
Panelist at 26th Annual Management Information Systems (MIS) Conference, NCES, IES	Feb 2013
Panelist at 26th Annual Management Information Systems (MIS) Conference, NCES, IES	Feb 2013
Presenter at Virginia’s Early Childhood Advisory Council (ECAC)	May 2012
Expert at BUILD Initiative / Early Learning Challenge Collaborative	Oct 2011
Expert at Early Learning Challenge Collaborative	Aug 2011
Expert at US Department of Education Race-To-The-Top Early Learning Challenge Grant Program	Aug 2011
Panelist at 2011 ACF Early Childhood State Advisory Council Grantees Meeting	Apr 2011

Presentation at Governor's Early Childhood Advisory Council (ECAC)	Dec 2010
Presentation at 2010 USHHS Child Care Policy Research Consortium (CCPRC)	Nov 2010
Workshop at National Institute of Statistical Sciences (NISS), the National Center for Education Statistics (NCES), and the Institute of Education Sciences (IES)	Feb 2010
Presentation at National Child Care Policy Research Consortium	Oct 2009
Workshop at Intelligent Transportation Systems of Virginia Annual Conference	Nov 2003
Presentation at Rural Advanced Traveler Information Systems Conference	Oct 2003
Presentation at Technology in Public Administration Conference, University of LaVerne	Nov 2000
<b>Data - The New Asset Class</b> Presenter at April 6. HPC Day, Virginia Tech	Apr 2012
<b>Building Data Sharing Infrastructures: Taking Context and Stakeholders Seriously</b> Presenter at November 17. Global Forum on Urban and Regional Resilience (GFURR) Resilience Workshop, Virginia Tech	Apr 2012
<b>Association between perceived university environment and physical activity in college students. 1-Nov. American Public Health Association 139th Annual Meeting and Exposition</b> Presenter at November 1. American Public Health Association 139th Annual Meeting and Exposition. Washington, DC	Apr 2012
<b>The Social Impact Data Commons: Regional Data-Driven Decision-Making</b> Presenter at BigSurv23 Conference, Quito, Ecuador	Oct 2023
<b>Virginia's New Rural Health Data Commons: Informing Health Policy through Featuring Health Related Metrics for Visualizing Health Services Access</b> Presenter at International Conference on Health Policy Statistics, Scottsdale, AZ	Jan 2023
<b>Best Practices in Coordinating Large-Scale Data Science Initiatives</b> Presenter at Joint Statistical Meetings 2022, Washington, DC	Aug 2022
<b>Evaluating the Impact of USDA Broadband Subsidy Programs Using Differentiable Gaussian Random Fields</b> Presenter at Joint Statistical Meetings 2022	Aug 2022
<b>Building the Social Impact Data Commons - Data Discovery and Acquisition Lessons Learned</b> Presenter at Federal Committee on Statistical Methodology Research and Policy Conference, Washington, DC	Aug 2022
<b>Social Impact Data Commons: an innovative approach to inform equitable growth</b> Presenter at APDU Data Symposium and CIC Symposium, virtual	May 2022
<b>Data Science for the Public Good (DSPG) Young Scholars Program - Overview 2014-2021</b> Presenter at Data Science Approaches to Health Disparities Research Symposium, Biocomplexity Institute, UVA	Jan 2022

<b>Virginia's New Rural Health Data Commons - Supporting the 2022-2026 Virginia Rural Health Plan</b> Presenter at National Association of County and City Health Officials (NACCHO 2022)	July 2022
<b>Example Metrics of The Social Impact Data Commons</b> Presenter at Biocomplexity Institute Spring 2022 Research Symposium, Arlington, VA	Apr 2022
<b>Building a Data Commons</b> Presenter at Biocomplexity Institute Spring 2022 Research Symposium, Arlington, VA	Apr 2022
<b>Challenges in conceptualizing and modeling performance in the U.S. Army</b> Presenter at Military Operations Research Society (MORS) 90th Symposium	Jan 2022
<b>Measuring the Cost and Impact of Open-Source Software Innovation on GitHub</b> Presenter at Federal Committee on Statistical Methodology (FCSM) CSPOS Webinar on Blended Data, Washington, DC	May 2020
<b>Ethical Principles and Data Science - Repurposing Administrative and Opportunity Data</b> Presenter at Federal Committee on Statistical Methodology, virtual	Sept 2020
<b>Impacts of the Broadband Initiatives Program on Rural Prosperity</b> Presenter at Agricultural and Applied Economics Association Community and Regional Economics Network annual meeting, online	Aug 2020
<b>Impacts of Broadband Access and the Broadband Initiatives Program on Telework</b> Presentation (venue not specified)	Nov 2020
<b>Economic and Social Impact of Arlington Restaurant Initiative</b> Presenter at Data Science for the Public Good Program Symposium, Arlington, VA	Aug 2019
<b>Measuring the Universe of Open-Source Software</b> Presenter at Data Science for the Public Good Program Symposium, Arlington, VA	Aug 2019
<b>Measuring the Eligibility, Incidence, and Impact of Rural Utilities Service (RUS) Broadband Programs</b> Presenter at USDA Rural Utilities Service, Service Seminar	May 2021
<b>Evaluation of Broadband Subsidy Programs - Combining Spatial Regression Discontinuity Designs and Bayesian Wombling</b> Presenter at 2021 Joint Statistical Meetings	Aug 2021
<b>Measuring the Impact of the Broadband Initiatives Program on Property Values</b> Presenter at 68th North America Meetings of the Regional Science Association International, Denver, CO	Nov 2021
<b>Learning to Live with Chaos - A Case for the Dissipative Structure Metaphor in Policy Subsystem Analysis</b> Presenter at Intergovernmental Analysis Conference, Copenhagen, Denmark	Jan 1997
<b>Policy Subsystems and the New Physics - Policy Development and Implementation at the Edge of Chaos</b> Presenter at Network Analysis and Innovations in Public Programs Conference, University of Wisconsin - Madison	Jan 1994

## Teaching

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<b>Administrative Data Systems &amp; Technologies</b>	May 2013
<b>Policy &amp; Program Evaluation</b>	May 2013
<b>Public Administration &amp; Policy Inquiry (Research Design &amp; Statistics)</b>	May 2013
<b>Dissertations &amp; Theses</b>	May 2013

## Refereed Journal Articles

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<b>Smart Metadata in Action: The Social Impact Data Commons</b> Joanna Schroeder, Alan Wang, Kathryn Linehan, Joel Thurston, <b>Aaron Schroeder</b> <a href="https://doi.org/10.48550/arXiv.2511.17694">10.48550/arXiv.2511.17694</a>	Nov 2025
<b>Open Source: The Future of Software Innovation</b> Cong, C., Isch, C., Tobin, E., Korkmaz, G., Calderón, J.B.S., <b>Schroeder, A.</b> , Kramer, B.L. <a href="https://researchmethodscommunity.sagepub.com/blog/open-source-the-future-of-software-innovation">researchmethodscommunity.sagepub.com/blog/open-source-the-future-of-software-innovation</a> (MethodSpace, SAGE Publishing)	Jan 2020
<b>Doing Data Science: A Framework and Case Study</b> Keller, S. A., Shipp, S. S., <b>Schroeder, A. D.</b> , Korkmaz, G. <a href="https://doi.org/10.1162/99608f92.2d83f7f5">10.1162/99608f92.2d83f7f5</a> (Harvard Data Science Review. 2(1).)	Mar 2020
<b>The Scope and Impact of Open Source Software as Intangible Capital: A Framework for Measurement with an Application Based on the Use of R Packages</b> Robbins, C., Korkmaz, G., Calderon, J. B. S., Chen, D., <b>Schroeder, A.</b> , Kelling, C., ..., Keller, S. (Big Data for 21st Century Economic Statistics. University of Chicago Press.)	Apr 2019
<b>Predicting postsecondary trajectories in Virginia high schools using publicly available data</b> Pires, B., Crandell, I., Arnsbarger, M., Lancaster, V., <b>Schroeder, A.</b> , Shipp, S., Kang, W., Robinson, P., Keller, S. <a href="https://doi.org/10.3233/SJI-180455">10.3233/SJI-180455</a> (Statistical Journal of the IAOS, 34(4))	Dec 2018
<b>Record Linkage Reconciliation of Arlington Department of Human Services Administrative Data Using Potts Models</b> Crandell, I., <b>Schroeder, A.</b> , Higdon, D., Irwin, M. D. <a href="https://doi.org/10.23889/ijpds.v3i5.1061">10.23889/ijpds.v3i5.1061</a> (International Journal of Population Data Science, 3(5))	Oct 2018
<b>Harnessing the power of data to support community-based research</b> Keller, S., Shipp, S., Korkmaz, G., Molfino, E., Goldstein, J., Lancaster, V., ..., <b>Schroeder, A.</b> <a href="https://doi.org/10.1002/ijpds.v3i5.1061">ijpds.org/article/view/1061</a> (Wiley Interdisciplinary Reviews: Computational Statistics, 10(3), e1426)	May 2018
<b>Estimating individualized exposure impacts from ambient ozone levels: A synthetic information approach</b> Pires, B., Korkmaz, G., Ensor, K., Higdon, D., Keller, S., Lewis, B., <b>Schroeder, A.</b> <a href="https://doi.org/10.1016/j.envsoft.2018.02.007">10.1016/j.envsoft.2018.02.007</a> (Environmental Modelling & Software. Volume 103, May 2018, Pages 146–157)	Mar 2018
<b>Can Administrative Housing Data Replace Survey Data?</b> Molfino, E., Korkmaz, G., Keller, S. A., <b>Schroeder, A.</b> , Shipp, S. <a href="https://www.jstor.org/stable/26328312?seq=1">www.jstor.org/stable/26328312?seq=1</a> (Cityscape, 18(4))	Apr 2017

- The Evolution of Data Quality: Understanding the Transdisciplinary Origins of Data Quality Concepts and Approaches** Mar 2017  
Keller, S.A., Korkmaz, G., Orr, M., **Schroeder, A.**, Shipp, S.  
[10.1146/annurev-statistics-060116-054114](https://doi.org/10.1146/annurev-statistics-060116-054114) (Annual Review of Statistics and Its Application, 4(1))
- Does Big Data Change the Privacy Landscape? A Review of the Issues** Nov 2016  
Keller, S. A., Shipp, S., **Schroeder, A.**  
(Annual Review of Statistics and Its Application, 3(1))
- Towards an in silico Experimental Platform for Air Quality - Houston, TX as a Case Study.** Nov 2015  
Pires, B., Korkmaz, G., Ensor, K., Higdon, D., Keller, S. A., **Schroeder**  
(Computational Social Science Society of America Conference. Santa Fe, New Mexico.)
- Pad and Chaff: Secure Approximate String Matching in Private Record Linkage** May 2012  
**Schroeder, A.D.**  
[10.1145/2428736.2428757](https://doi.org/10.1145/2428736.2428757) (Proceedings of the 14th International Conference on Information Integration and Web-based Applications and Services (iiWAS '12))
- New Data on Child Care Subsidy Programs** May 2012  
Spears, John V., Bradburn, Isabel., **Schroeder, Aaron D.**, Tester, Diana., Forry, Nicole  
[www.researchgate.net/publication/232095799\\_New\\_Data\\_on\\_Child\\_Care\\_Subsidy\\_Programs](https://www.researchgate.net/publication/232095799_New_Data_on_Child_Care_Subsidy_Programs) (Policy & Practice)
- IP Wireless Networks for Digital Video and Data along Highway Right Of Way** May 2004  
Amanna A., Schroeder, A.  
(Proceedings International Symposium on Advanced Radio Technologies)
- Serial Wireless IP Networks for DOT Applications** May 2004  
Amanna A., Schroeder, A.  
(Proceedings IEEE Conference on Intelligent Transportation Systems. October. IEEE.)
- Serial Wireless LANs along DOT Right of Way** May 2004  
Amanna A., Schroeder, A.  
(Proceedings ITS America. June.)
- Network Organizational Development in the Public Sector. Journal of the American Society for Information Science** May 2000  
Ward, R., Wamsley, G.L., **Schroeder, A.D.**, Robins, D.B.  
[onlinelibrary.wiley.com/doi/10.1002/1097-4571\(2000\)9999:9999%3C::AID-ASI1004%3E3.0.CO;2-5/abstract](https://onlinelibrary.wiley.com/doi/10.1002/1097-4571(2000)9999:9999%3C::AID-ASI1004%3E3.0.CO;2-5/abstract) (Journal of the American Society for Information Science)
- Escalating in a Quagmire: The Changing Dynamics of the Emergency Management Policy Subsystem** May 1996  
Wamsley, G.L., **Schroeder, A.D.**  
[www.researchgate.net/publication/272574256\\_Escalating\\_in\\_a\\_Quagmire\\_The\\_Changing\\_Dynamics\\_of\\_the\\_Emergency\\_Management\\_Policy\\_Subsystem](https://www.researchgate.net/publication/272574256_Escalating_in_a_Quagmire_The_Changing_Dynamics_of_the_Emergency_Management_Policy_Subsystem) (Public Administration Review)
- To Politicize is Not to Control** Apr 1996  
Wamsley, G.L., **Schroeder, A.D.**, Lane, L.M.  
[www.researchgate.net/publication/238430496\\_To\\_Politicize\\_is\\_Not\\_to\\_Control\\_The\\_Pathologies\\_of\\_Control\\_in\\_Federal\\_Emergency\\_Management](https://www.researchgate.net/publication/238430496_To_Politicize_is_Not_to_Control_The_Pathologies_of_Control_in_Federal_Emergency_Management) (The American Review of Public Administration)

## Book Chapters

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- The Evolution of Emergency Management in America: From a Painful Past to a Promising but Uncertain Future** July 2012  
**Schroeder, A.D.**, Wamsley, G.L., Ward, R.  
(Handbook of Emergency Management)

## Conference Proceedings / Presentations

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- Data - The New Asset Class** Apr 2012  
Keller, S., **Schroeder, A.D.**  
(April 6. HPC Day, Virginia Tech)
- Building Data Sharing Infrastructures: Taking Context and Stakeholders Seriously** Apr 2012  
**Schroeder, A.D.**  
(November 17. Global Forum on Urban and Regional Resilience (GFURR) Resilience Workshop, Virginia Tech)
- Association between perceived university environment and physical activity in college students. 1-Nov. American Public Health Association 139th Annual Meeting and Exposition** Apr 2012  
Stephanie Goodwin, Hosig K.W., Serrano E., Redican K., Schroeder A.D., You W., Anderson E.S.  
(November 1. American Public Health Association 139th Annual Meeting and Exposition. Washington, DC)
- Stakeholder Analysis** Apr 1999  
Tennert, J.R., **Schroeder, A.D.**  
(60th Annual Meeting of the American Society for Public Administration, Orlando, FL.)

## Research / Technical Reports

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- Census Curated Data Enterprise Use Case Demonstration: Climate Resiliency of Skilled Nursing Facilities** Jan 2023  
Lancaster V, Shipp S, Keller S, **Schroeder A**, Mortveit H, Swarup S, Xie D  
[10.18130/ce97-sp05](https://doi.org/10.18130/ce97-sp05) (Proceedings of the Biocomplexity Institute, Technical Report. TR# 2023-53. University of Virginia.)
- Translating the Curated Data Model into Practice-Climate resiliency of skilled nursing facilities** Jan 2024  
Lancaster, Vicki, Shipp, Stephanie, Keller, Sallie, Mortveit, Henning, Swarup, Samarth, **Schroeder, Aaron**, Xie, Dawen  
(Royal Statistical Society, in partnership with the American Statistical...)
- USDA ERS Broadband: Comparison of boundary analysis methods for spatial models** May 2018  
Goldstein, Joshua; Halder, Aritra; Schroeder, Aaron; Shipp, Stephanie; Kattampallil, Neil  
(Economic Research Service - USDA)
- Analysis of the Capabilities of the Virginia Longitudinal Data System (VLDS) to support Baseline Distinct Counts of Select Data Sets to support the Establishment of a Virginia Early Childhood Integrated Data System (ECIDS)** May 2018  
**Schroeder, A.D.**  
[dads2busy.github.io/downloads/Distinct%20Counts%20from%20VLDS%20to%20Support%20ECIDS.pdf](https://dads2busy.github.io/downloads/Distinct%20Counts%20from%20VLDS%20to%20Support%20ECIDS.pdf) (Virginia Early Childhood Foundation)

<p><b>Towards State-of-the-Art IDS Technology and Data Security Solutions</b></p> <p>Patterson, David, Ken Steif, Niall Brennan, Andreas Haeberlen, Aaron Schroeder, Adam Smith  <a href="http://www.aisp.upenn.edu/wp-content/uploads/2016/07/Technology-Data-Security.pdf">www.aisp.upenn.edu/wp-content/uploads/2016/07/Technology-Data-Security.pdf</a> (Actionable Intelligence for Social Policy, University of Pennsylvania)</p>	Apr 2017
<p><b>Leveraging External Data Sources to Enhance Official Statistics and Products</b></p> <p>Keller S., Shipp S., Orr M., Higdon D., Korkmaz G., Schroeder A.D., Molfino E., Pires B., Ziemer K., Weinberg D.  (U.S. Census Bureau)</p>	Aug 2016
<p><b>Virginia Department of Emergency Management’s Changing Information Requirements and Recommendations</b></p> <p>Schroeder A.D., Molfino, E.  (Virginia Department of Emergency Management.Richmond, VA.)</p>	Aug 2016
<p><b>VT-VLDS Identity Resolution and Query Execution Process Overview</b></p> <p><b>Schroeder, A.D.</b>  <a href="https://dads2busy.github.io/downloads/VT-VLDS%20Identity%20Resolution%20and%20Query%20Execution%20Process.pdf">dads2busy.github.io/downloads/VT-VLDS%20Identity%20Resolution%20and%20Query%20Execution%20Process.pdf</a>  (Virginia Information Technologies Agency)</p>	May 2012
<p><b>VT-VLDS Shaker Specifications</b></p> <p><b>Schroeder, A.D.</b>  <a href="https://dads2busy.github.io/downloads/VT-VLDS%20Shaker%20Specifications%20v2.pdf">dads2busy.github.io/downloads/VT-VLDS%20Shaker%20Specifications%20v2.pdf</a>  (Virginia Information Technologies Agency)</p>	May 2012
<p><b>VT-VLDS Data Adapter User Guide</b></p> <p><b>Schroeder, A.D.</b>  <a href="https://dads2busy.github.io/downloads/VT-VLDS%20Data%20Adapter%20User%20Guide.pdf">dads2busy.github.io/downloads/VT-VLDS%20Data%20Adapter%20User%20Guide.pdf</a> (Virginia Information Technologies Agency)</p>	May 2012
<p><b>VT-VLDS Lexicon Metadata Tool Design</b></p> <p><b>Schroeder, A.D.</b>  <a href="https://dads2busy.github.io/downloads/VT-VLDS%20Lexicon%20Metadata%20Tool%20Design%20Document.pdf">dads2busy.github.io/downloads/VT-VLDS%20Lexicon%20Metadata%20Tool%20Design%20Document.pdf</a> (Virginia Information Technologies Agency)</p>	May 2012
<p><b>VT-VLDS Lexicon Specifications</b></p> <p><b>Schroeder, A.D.</b>  <a href="https://dads2busy.github.io/downloads/VT-VLDS%20Lexicon%20Specifications%20v1.pdf">dads2busy.github.io/downloads/VT-VLDS%20Lexicon%20Specifications%20v1.pdf</a> (Virginia Information Technologies Agency)</p>	May 2012
<p><b>Multi-Agency Integration of Child-Relevant Data Sets in the Commonwealth of Virginia: Application of a Privacy Protecting Federated Model</b></p> <p><b>Schroeder, A.D.</b>  (Data Quality Campaign: Washington, DC)</p>	May 2012
<p><b>Local School Division Student Assessments at Kindergarten Enrollment and During Kindergarten: Current Practices Across Virginia</b></p> <p><b>Schroeder, A.D.</b>, Bradburb, I.  (Project Child HANDS, VA)</p>	May 2012
<p><b>Virginia’s Local Social Service Agencies: Child Care Quality, Improvement, Subsidy Data, and What Would be Most Useful in an Early Childhood Data System</b></p> <p><b>Schroeder, A.D.</b>, Bradburb, I.  (Project Child HANDS, VA)</p>	May 2012

<p><b>Development of a Classification System for Quality Initiative (QI) Activities Reported by Local Social Service Agencies in Virginia</b>  <b>Schroeder, A.D.</b>, Bradburb, I.  (Project Child HANDS, VA)</p>	May 2012
<p><b>Saving Dollars While Making Sense: An Analysis Comparing Operational Costs of Inter-generational Shared Site Facilities</b>  Jarrott, S.E., <b>Schroeder, A.D.</b>  (Generations United: Washington, DC)</p>	May 2012
<p><b>511 Virginia Email Alert System</b>  <b>Schroeder, A.D.</b>  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Wireless Testing Protocols</b>  <b>Schroeder, A.D.</b>  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Route 460 Wireless Network</b>  <b>Schroeder, A.D.</b>  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Regional pedestrian activity measurement</b>  <b>Schroeder, A.D.</b>  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Enhanced Night Visibility Series, Volume II: Overview of Phase I and Development of Phase II - Experimental Plan</b>  Dingus, T.A. Allen, G.R. Stephen C. Brich, S.C. Neale, V.L. Schroeder, A.D. Blanco, M. Schnell, T. Gillespie, J.S. Schroeder, T.T. Simmons, C., Hankey, J.M.  (Office of Safety Research and Development, Federal Highway Administration)</p>	May 2012
<p><b>I-81 ITS Program Evaluation Framework</b>  Baker, S. Schroeder, A.D., Rakha, H. Hintz, R.  (Virginia Department of Transportation)</p>	May 2012
<p><b>Evaluation of the Truck Fleet Support Program</b>  Bergoffen, G., <b>Schroeder, A.D.</b>, Swan, N.  (Virginia Department of Transportation)</p>	May 2012
<p><b>Travel Virginia</b>  <b>Schroeder, A.D.</b>  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>I-81 Video System Design and Implementation</b>  Schroeder, A.D. Amanna, A.  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Transportation Data Clearinghouse</b>  Schroeder, A.D. Laskowski, K.  (USDOT Center for ITS Implementation Research)</p>	May 2012
<p><b>Case Study Evaluation of the Virginia Department of Transportation's I-81 ITS Program</b>  Baker, S., <b>Schroeder, A.D.</b>  (Virginia Department of Transportation)</p>	May 2012

<p><b>Extension of ‘Travel Shenandoah’ North to Harrisburg, Pennsylvania: Historical Development and Lessons Learned</b>  <b>Schroeder, A.D.</b>, Hales, R.  (I-95 Corridor Coalition)</p>	May 2012
<p><b>Bedford Ride Strategic Plan and Operations Guide. Strategic Plan</b>  <b>Schroeder, A.D.</b>, Stebner, M.  (County of Bedford, VA)</p>	May 2012
<p><b>TravelShenandoah.Com Market Definitions: A Plan to Increase Users</b>  Hintz, R., <b>Schroeder, A.D.</b>  (Virginia Department of Transportation)</p>	May 2012
<p><b>Travel Virginia: A Statewide System of Public-Private Partnerships for ATIS Deployment</b>  Worrall, R.D., <b>Schroeder, A.D.</b>  (Virginia Department of Transportation)</p>	Apr 2012
<p><b>Advanced Traveler Information Systems and Commercial Vehicle Operations Components of the Intelligent Transportation Systems: Investigation of User Stereotype and Preferences</b>  Neale, V.L., Dingus, T.A., Schroeder, A.D.  (Federal Highway Administration Contract No. DTFH61-92-C-00102, Item No. 0021)</p>	Apr 2012
<p><b>Development of Human Factors Guidelines for Advanced Traveler Information Systems and Commercial Vehicle Operations: Advanced Traveler Information System Feature Standardization</b>  Neale, V. L., Dingus, T. A., <b>Schroeder, A. D.</b>, Zellers, S., Reinach, S.  (Federal Highway Administration (FHWA-RD-96-149))</p>	Apr 2012
<p><b>I-81 Intelligent Transportation Systems (ITS) Program Evaluation Plan</b>  Baker, S., <b>Schroeder, A. D.</b>, Rakha, H. A., Hintz, R.  (Joint Program Office for Intelligent Transportation Systems (DOT-HS-811328))</p>	May 2003
<p><b>Annual Report: Leveraging Existing DoD (Department of Defense) Data Towards Optimized Individual and Team Performance in the Army</b>  Shipp, S., Goldstein, J., Lancaster, V., Linehan, K., <b>Schroeder, A.</b>, Schroeder, J., Thurston, J.  (For Sponsor Only (U.S. Army Research Institute))</p>	May 2023
<p><b>CoreLogic: Housing Data, Challenges and Applications to Program Evaluation</b>  Kattampallil, T., <b>Schroeder, A.</b>, Goldstein, J., Zhu, Z.  (USDA Economic Research Service)</p>	May 2023
<p><b>Social Impact Data Commons Technical Review</b>  Thurston, J., <b>Schroeder, A.</b>, Linehan, K., Iserman, M.  (Biocomplexity Institute, University of Virginia)</p>	Aug 2022
<p><b>A 20-year review of accession characteristics in the U.S. Army</b>  Ratcliff, N., Thurston, J., Linehan, K., Mikytuck, A., Oh, E., Halder, A., Goldstein, J., Lancaster, V., <b>Schroeder, A.</b>, Shipp, S., Keller, S.  (Personnel Psychology (in preparation))</p>	Jan 2021

## Editorials

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<p><b>The Political Roots of Hating Government</b>  <b>Schroeder, A.D.</b>  (April 30. Roanoke Times and World News)</p>	Apr 2012
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## Dissertation

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**Building Implementation Networks: Building Multi-organizational, Multi-sector Structures for Policy Implementation** July 2012  
**Schroeder, A.D.**  
[scholar.lib.vt.edu/theses/available/etd-05082001-162010/unrestricted/ImplementationNetworks.pdf](https://scholar.lib.vt.edu/theses/available/etd-05082001-162010/unrestricted/ImplementationNetworks.pdf) (Virginia Polytechnic Institute and State University)

## Data & Software

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**Social Data Commons - Master Metadata** Jan 2022  
Dataset deposited in UVA Dataverse, University of Virginia

**Social Impact Data Commons Website - National Capital Region** Jan 2022  
Interactive data commons web platform

**VDH Data Commons Website** Jan 2022  
Interactive data commons web platform for Virginia Department of Health

**Travel Information Data Clearinghouse and Management System** Jan 1999  
Copyright held by Virginia Polytechnic Institute and State University

**Web-Based Dynamic Ride Request, Assignment, and Tracking System** Jan 1999  
Copyright held by Virginia Polytechnic Institute and State University

## Awards & Honors

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**Member, Arlington County Open Data Advisory Group: 2018-2019**

**COVITS Winner — Cross-Boundary Collaboration on IT (VLDS): 2013**

**COVITS Finalist — Virginia Longitudinal Data System: 2012**

**Invited, Virginia Governor’s Early Childhood Advisory Council: 2010**

**Invited, National Institute of Statistical Sciences Workshop: 2009**

**Invited, National Press Club — intergenerational day care findings: 2008**

**Invited speaker, Florida DOT ITS Conference: 2003**

**Invited workshop lead, Univ. of LaVerne — IT implementation: 2000**

**Invited, Virginia Transportation Conference: 1999-2000**

**Nominee, ASG Award for Innovation in State Government (Travel Shenandoah): 1999**

**Appointed Member, Congressional Commission on I-81 Truck Safety: 1999**

**Eno Transportation Fellow: 1997**

**Invited Guest Editor, Administration & Society: 1997**

**Member, iTHRIV (integrated Translational Health Research Institute of Virginia) Scientific Advisory Board: 2021-2025**

**Brookings Institute, Consulting Scholar, Roundtable for Equitable Data Pathways Data Governance Project: 2024**

**Proposal Reviewer, NSF Methodology, Measurement, and Statistics (MMS) Program: 2022**

## Skills

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Python

PostgreSQL

Oracle PL/SQL

MS SQL Server

Linux Admin

Docker

JavaEE

ASP.NET/C#

SAS

SPSS

Network Admin

Photoshop/GIMP

LLMs/AI