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## ELIJAH KNAAP

appointments	<i>University of California-Riverside</i> School of Public Policy & Center for Geospatial Sciences Postdoctoral Scholar	2018 –
	<i>University of Illinois at Chicago</i> Dept. of Urban Planning and Policy Visiting Assistant Professor & Postdoctoral Research Associate	2017 – 2018
	<i>University of Maryland</i> Dept. of Urban Studies and Planning & School of Information Studies Adjunct Professor	2016 – 2017
	<i>Enterprise Community Partners, Inc.</i> Bart Harvey Postdoctoral Research Fellow	2016 – 2017
	<i>University of Maryland</i> National Center for Smart Growth Research and Education Spatial Research Coordinator Graduate Research Assistant	2013 – 2016 2011 – 2013
education	<i>Ph.D. - Urban Studies and Planning</i> , University of Maryland	2013 – 2016
	<i>M.A. - Community Planning</i> , University of Maryland	2011 – 2013
	<i>B.A. - Sociology</i> , University of Maryland	2006 – 2011
publications	<i>Journal Articles</i>	
	Nicholas Finio, Gerrit Knaap, Willow Lung-Amam, Casey Dawkins, & Elijah Knaap, “Metropolitan Planning in a Vacuum.” <i>Journal of Urban Affairs</i> . Under Review.	
	Willow Lung-Amam, Rolf Pendall & Elijah Knaap, “Mi Casa no es Su Casa: Transit-Induced Gentrification and the Fight for Equitable Development in an Inner-Ring, Immigrant Suburb..” <i>Journal of Planning Education &amp; Research</i> . Under Review.	
	Willow Lung-Amam, Elijah Knaap, Casey Dawkins & Gerrit Knaap, “Opportunity for Whom? The Diverse Definitions of Neighborhood Opportunity in Baltimore.” <i>City &amp; Community</i> . Forthcoming.	

- Knaap, E. [Elijah]. (2017). The Cartography of Opportunity: Spatial Data Science for Equitable Urban Policy. *Housing Policy Debate*, 27(6), 913–940. doi:[10.1080/10511482.2017.1331930](https://doi.org/10.1080/10511482.2017.1331930).
- Knaap, E. [Elijah], Ding, C., Niu, Y., & Mishra, S. (2016). Polycentrism as a sustainable development strategy: empirical analysis from the state of Maryland. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 9(1), 73–92. doi:[10.1080/17549175.2015.1029509](https://doi.org/10.1080/17549175.2015.1029509).
- Pendall, R., Hayes, C., George, A., Dawkins, C., Jeon, J. S., Knaap, E. [Elijah], ..., Smart, M. et al. (2015). Driving to Opportunities: Voucher Users, Cars, and Movement to Sustainable Neighborhoods. *Cityscape*, 17(2), 57. Retrieved from.
- Mishra, S., Welch, T., Torrens, P., Fu, C., Zhu, H., & Knaap, E. [Eli]. (2014). A tool for measuring and visualizing connectivity of transit stop, route and transfer center in a multimodal transportation network. *Public Transport*, 7(1), 77–99. doi:[10.1007/s12469-014-0091-2](https://doi.org/10.1007/s12469-014-0091-2).
- Mishra, S., Welch, T., Torrens, P., Zhu, H., & Knaap, E. [Eli]. (2014). Locating the Most Connected Transit Stop, Route, and Transfer Center: Tool for Users and Decision Makers. In *Transportation research board 93rd annual meeting* (14-5367).
- Pendall, R., Hayes, C., George, A. T., Mcdade, Z., Dawkins, C., Jeon Sik, J., ... Smart, M. (2014). *Driving to Opportunity: Understanding the Links among Transportation Access, Residential Outcomes, and Economic Opportunity for Housing Voucher Recipients* (tech. rep. No. March). Urban Institute. Washington DC.

#### *Manuscripts in Progress*

- Elijah Knaap & Nicholas Finio, “Machines Learn the Chicago School: A Spatiotemporal Markov Model of Gentrification & Neighborhood Change.” *In Progress*. .
- Elijah Knaap, “Who Moves to Opportunity? Spatial Returns to Housing Assistance and the Effect of Specialized Mobility Programs.” *In Progress*. .
- Elijah Knaap, “Housing Assistance in Black and White: A Discrete Choice Model of Residential Sorting in Housing Voucher Programs.” *In Progress*. .

- awards** Innovative Student Contribution to Planning Tools Award - Scenario Planning Applications Network (2015)
- Outstanding Graduate Assistant Award - National Center for Smart Growth (2014)
- Robert Janes Award for contribution to the field of Urban Studies - University of Maryland Dept. of Urban Studies and Planning (2012)

- grants** All S.T.A.R. fellowship, \$10,000 fellowship from the University of Maryland Graduate School
- URSP Course Development, \$10,000 grant from UMD Department of Urban Studies and Planning. Course: Urban Planning Technology (with Chao Liu). 2012–2013.
- URSP Course Development, \$10,000 grant from UMD Department of Urban Studies and Planning. Course: Intermediate Geographic Information Systems (with Chao Liu). 2013–2014.
- invited talks** “The Geography of Neighborhood Change: Poverty, Immigration and Gentrification.” Makeover Montgomery 3, Balancing Change in America’s Suburbs. May 4, 2016.
- “The Promise and Challenge of Equitable Transit-Oriented Development in Diverse Suburbs.” Transit, Development, and Forme Urbaine: Washington et Paris, Washington, DC. October 18, 2014.
- “Retail Location and Transit: An Econometric Examination of Retail Location in Prince George’s and Montgomery County.” Transit, Development, and Forme Urbaine: Washington et Paris, Paris, France. March 14, 2015.
- conference talks** “Machines Learn the Chicago School: Spatiotemporal Markov Models of Neighborhood Change.” Elijah Knaap & Nicholas Finio, Association of Collegiate Schools of Planning, Denver, Colorado. October, 2017.
- “The Cartography of Opportunity: Spatial Data Science for Equitable Urban Policy.” Elijah Knaap, American Association of Geographers, Boston, Massachusetts. April, 2017.
- “Who Moves to Opportunity? Residential Sorting Models from a Unique Housing Mobility Program in Baltimore.” Elijah Knaap, Association of Collegiate Schools of Planning, Portland, Oregon. November, 2016.
- “Regional Planning, Access to Opportunity, & Freddie Gray: Lessons from Baltimore.” Gerrit Knaap, Elijah Knaap, Nick Finio, Casey Dawkins, Willow Lung-Amam, Association of Collegiate Schools of Planning, Portland, Oregon. November, 2016.
- “Opportunity, Transportation, and Neighborhood Choice: A Quantitative Examination of Housing Voucher Use in Baltimore.” Elijah Knaap, Association of Collegiate Schools of Planning, Houston, Texas. October, 2015.
- “Networks and Neighborhood Effects: The Role of Accessibility in Economic Mobility.” Elijah Knaap & Casey Dawkins, Federal Reserve System Community Development Research Conference, Washington D.C.. April 3, 2015.
- “Improving Social and Economic Equity in Maryland.” Chao Liu, Elijah Knaap & Gerrit Knaap, 14th Annual New Partners for Smart Growth Conference Tech Fair, Baltimore, Maryland. January 3, 2015.

- “Trajectories of Neighborhood Attainment: Evidence from MTO in Baltimore.” Elijah Knaap, Association of Collegiate Schools of Planning, Philadelphia, Pennsylvania. October, 2014.
- “The Use and Misuse of Opportunity Maps.” Elijah Knaap & Chao Liu, Association of Collegiate Schools of Planning, Philadelphia, Pennsylvania. October, 2014.
- “Identifying Maryland Transportation Place Types.” Chao Liu, Ting Ma, Elijah Knaap, & Gerrit Knaap, Association of Collegiate Schools of Planning, Philadelphia, Pennsylvania. October, 2014.
- “Opportunity Mapping Tools to Improve Social and Economic Equity in Maryland.” Elijah Knaap, Chao Liu, & Gerrit Knaap, Makeover Montgomery II, Silver Spring, Maryland. October, 2014.
- “Locating the Most Connected Transit Stop, Route, and Transfer Center: Tool for Users and Decision Makers.” Mishra, S., Welch, T. F., Torrens, P. M., Zhu, H., & Knaap, E., Transportation Research Board 93rd Annual Meeting, Washington D.C.. October, 2014.
- “Opportunity Mapping: A Conceptual Analysis and Application to the Baltimore Metropolitan Area.” Chao Liu, Elijah Knaap & Gerrit Knaap, Annual Conference of the Association for Public Policy Analysis & Management, Washington D.C.. 2013.
- “Opportunity Mapping: Concepts and Techniques.” Elijah Knaap, Chao Liu, & Gerrit Knaap, Joint Meeting of the Association of Collegiate Schools of Planning & Association of European Schools of Planning, Dublin, Ireland. 2013.
- “Reclassification of Sustainable Neighborhoods: An Opportunity Indicator Analysis in Baltimore Metropolitan Area.” Chao Liu, Elijah Knaap, & Gerrit Knaap, Joint Meeting of the Association of Collegiate Schools of Planning & Association of European Schools of Planning, Dublin, Ireland. 2013.
- “Economic Clusters and Transit Oriented Development: Two for the Price of One.” Elijah Knaap, Yi Niu, Chengri Ding, Sabyasachee Mishra, Tim Welch, Annual Meeting of the Association of Collegiate Schools of Planning & Association, Cincinnati, Ohio. 2012.
- “Improving Opportunity Accessibility for Underserved Populations: A Sustainable and Equitable Economic Development (SEED) Initiative for the State of Maryland.” Chao Liu, Gerrit Knaap, Jason Sartori & Elijah Knaap, Annual Meeting of the Association of Collegiate Schools of Planning & Association, Cincinnati, Ohio. 2012.

#### **courses taught**

UPP 461: GIS for Urban Planners	Fall 2017
URSP 688Y: Smart Cities and Urban Data Science	Spring 2017

URSP 688Q: Intermediate GIS (Co-Taught with Chao Liu)	Spring 2014
URSP 688G: Urban Planning Technology; (Co-Taught with Chao Liu)	Fall 2014
URSP 688G: Urban Planning Technology; (Co-Taught with Chao Liu)	Spring 2013

## public history

*Selected media coverage*

Baltimore's Housing Voucher Program Almost Gets It Right - *CityLab*, January 5, 2016

Defining 'opportunity' in Baltimore - *The Baltimore Sun*, August 3, 2015

## service

*Service to the Profession*

Steering Committee Member: Scenario Planning Applications Network. 2013–Present.

Member: American Sociological Association. 2015–Present.

Member: American Association of Geographers. 2013–Present.

Member: Association of Collegiate Schools of Planning. 2013–Present.

research  
competencies*Computing Platforms*

Substantial experience: R, Python, ArcGIS/QGIS, HTML5/CSS

Research/collaborative use: Javascript, Postgresql/PostGIS, D3, LaTeX, JQuery, STATA, SPSS, Git, Shell scripting

*Planning Support Systems*

Urban Data Science Toolkit, CommunityViz, EnvisionTomorrow+, SILO