

# ANSON F. STEWART

Conveyal  
64 Pleasant St, c/o Sasaki Incubator  
Watertown MA 02472

T: 1-812-202-6766 E: ansonstewart@gmail.com

## EDUCATION

**Massachusetts Institute of Technology** | Cambridge, MA  
Ph.D., Interdepartmental Transportation Program [2017]  
Dissertation: *Advancing Accessibility: Public Transport and Urban Space*  
Committee: Nigel H. M. Wilson (chair), Frederick Salvucci, Christopher Zegras, Jinhua Zhao  
  
Master in City Planning and Urban Design Certificate [2014]  
  
M.S. in Transportation [2014]

**Swarthmore College** | Swarthmore, PA  
B.A. Special Major in Urban Studies [2010]  
  
B.S. in Engineering [2010]

## RESEARCH AFFILIATIONS

**JTL Urban Mobility Lab and MIT Transit Lab** | Research Assistant [2015 – 2017]  
Developed reliability and matching adjustments for accessibility metrics

**MIT Mobility Futures Collaborative** | Research Assistant and CoAXs Technical Lead [2014 – 2017]  
Designed and evaluated interactive tools for collaborative design of transit corridors  
(partnerships with MIT Media Lab, among others)

**BRT+ Centre of Excellence** | Research Assistant [2011 – 2014]  
Compared ridership, performance, and land use of bus corridors using GTFS and PostGIS

## PROFESSIONAL EXPERIENCE

**Conveyal** | Project Lead, Analysis and Research | Watertown, MA [2017 – present]  
Developing open-source land-use/transport modeling software, researching extensions of accessibility measures, managing shared computational infrastructure, and coordinating global practitioner network

**Transport for London** | Customer Experience Analytics visiting researcher | London, United Kingdom [2015 – 2017]  
Supported Travel Demand Management and Stakeholder Engagement teams with interactive mapping tools

**LA Metro** | System-wide Planning / Transit Corridors intern | Los Angeles, CA [2013]  
Created dynamic visualizations of high-volume transfer locations and arterial bus network

**Transantiago** | Planning intern | Santiago, Chile [2012]  
Helped implement service changes and developed maps of passenger flow and transfers

**Alternatives for Community and Environment** | Development and Communications Intern | Roxbury, MA [2008 – 2009]  
Supported community organizing and online campaigns

**City of Irvine** | City Council Executive Assistant | Irvine, CA [2006]  
Reported on transportation and community development meetings

## TEACHING AND MENTORING

- Comparative Land Use and Transportation Planning** | MIT 1.251/11.526 | Lecturer [ Spring 2019 ]  
with Christopher Zegras
- Public Transportation Analytics and Planning** | MIT 11.S953 | Lead Instructor [ January 2019 ]  
with Jinhua Zhao
- Transportation Policy, the Environment, and Livable Communities** | MIT 1.253/11.543 | Teaching Assistant [ 2013 ]  
Led reading discussions and helped design assignments
- BRT Corridor Workshop** | MIT 11.S940 | Teaching Assistant [ 2013 ]  
Prepared data resources and organized international visits
- Swarthmore College Writing Center** | Writing Associate [ 2007 – 2010 ]  
Assisted peers with written communication, served as a program coordinator (2008–2010)
- Introduction to Economics** | Swarthmore ECON 1 | Assistant [ 2009 ]  
Helped students revise papers on foundational economics readings

## AWARDS AND HONORS

- Design Award, Sasaki Foundation [ 2018 ]  
Part of ECHOLocator team with Boston Housing Authority, developing digital tools for housing assistance recipients
- Excellence Award, Open Data Challenge for Public Transportation in Tokyo [ 2018 ]  
Interactive online map to visualize accessibility of lodging options for 2020 Olympics venues
- Honorable Mention, Michael Beesley Award, Thredbo International Conference Series [ 2015 ]  
Paper on using interactive, accessibility-focused mapping tools for stakeholder engagement
- Outstanding MCP Thesis, MIT Department of Urban Studies and Planning [ 2014 ]  
Masters thesis: *Visualizing Urban Accessibility Metrics for Incremental Bus Rapid Transit Projects*
- Ivy Award, Swarthmore College [ 2010 ]  
For graduating student exemplifying leadership, scholarship, and contributions to the college community
- Bramson Prize in Sociology/Anthropology, Swarthmore College [ 2010 ]  
Urban studies thesis: *Rides and Rights: Organizing for Transportation Justice in Boston and Los Angeles*
- Honorable Mention, Alice Crossley Prize in Asian Studies, Swarthmore College [ 2008 ]  
Paper on railroads and Beijing's urban form
- Irvine Company Student Leadership Award Winner [ 2006 ]  
Awarded for youth leadership and participation in urban design charrette

## RESEARCH FUNDING AND GRANTS

- Visualization tool to encourage improvements in the urban transportation planning process in Santiago, Chile. [ 2016 – 2017 ]  
Collaborator (PI: Christopher Zegras). MISTI MIT-Chile Graduate Student Seed Fund (\$20,000)
- Scaling up Co-creative Planning of Transit Corridors using Accessibility-Based Stakeholder Engagement. [ 2016 – 2017 ]  
Proposal co-author (PI: Christopher Zegras). TransitCenter (\$150,000)
- Innovations in Participatory Design of BRT Systems. Collaborator (PI: Christopher Zegras). [ 2014 – 2016 ]  
Barr Foundation (\$300,000)

- School Bus Migrations: Recycling Transit in the Global South – one-year fellowship to research informal transit in Latin America and Africa. Thomas J. Watson Foundation (\$25,000) [ 2010 – 2011 ]
- greenRELAY – online platform and youth leadership for environmental justice in Los Angeles. Lang Center for Civic and Social Responsibility (\$11,500) [ 2008 – 2010 ]

## **JOURNAL ARTICLES**

- Conway, M. W. and A. F. Stewart (in press). "Getting Charlie off the MTA: A multiobjective optimization method to account for cost constraints in public transit accessibility metrics." *International Journal of GIS*.
- Stewart, A. F., P. C. Zegras, P. Tinn, and J. Rosenblum (2018). "Tangible Tools for Public Transportation Planning: Public Involvement and Learning for BRT Corridor Design." *Transportation Research Record (published online)*.
- Stewart, A. F. (2017). "Mapping Transit Accessibility: Possibilities for Public Participation" *Transportation Research Part A*, 104, pp. 150-166.
- Stewart, A. F. and P. C. Zegras (2016). "CoAXs: A Collaborative Accessibility-based Stakeholder Engagement System for Communicating Transport Impacts" *Research in Transportation Economics*, 59, pp. 423-433.
- Stewart, A. F., J. P. Attanucci, and N. H. M. Wilson (2015). "Ridership Response to Incremental Bus Rapid Transit Upgrades in North America: Demographic and Network Effects" *Transportation Research Record*, 2538, pp. 37–43.

## **BOOK CHAPTERS**

- Hensher, D., C. Balbontin, C. Q. Ho, C. Mulley, R. Macario, and A. Stewart (2019). "Evaluating BRT and LRT on a level playing field in developed economies: A cross cultural comparison" in F. Ferbrache, editor, *Developing Bus Rapid Transit: The Value of BRT in Urban Spaces*. Edward Elgar.
- Zegras, P. C., A. Stewart, R. Hidalgo, R. Forray, C. Figueroa, F. Duarte, and J. Wampler (2016). "Designing BRT Oriented Development". Chapter 10 in J.C. Muñoz and L. Paget-Seekins, editors, *Restructuring Public Transport through Bus Rapid Transit*. Policy Press.
- Ortega, E. and A. Stewart (2016). "Parque Textil Milenio" in X. Samper and O. Grauer, editors, *Formality and Informality, Public Space and Urban Equity: Parque Tercer Milenio*. Universidad de los Andes, Departamento de Arquitectura.

## **WORKING PAPERS**

- Stewart, A. F. and J. Zhao. "Regional Employment Connectivity and Transit Accessibility Metrics" presented at ACSP Annual Meeting, 2017.

## **SELECTED PRESENTATIONS**

- "Getting the Most from Transit Data," UCLA ITS Downtown Forum on Transportation, Land Use and the Environment: From Public Transit to Public Mobility | Los Angeles, CA [ 2019 ]
- "Comparing Accessibility and Travel-Time Framings for Engaging Public Transport Stakeholders: An Experiment with an Interactive Mapping Tool," Transportation Research Board Annual Meeting | Washington, DC [ 2019 ]
- "Generating Detailed Multimodal Choice-sets Using Distributed Parallel Computing," Transportation Research Board Innovations in Travel Modeling | Atlanta, GA [ 2018 ]
- "Digital Tools for Accessibility-driven Engagement in Transport Planning," Movilidad y Transporte | Bogotá, Colombia [ 2018 ]
- "Public Transport Reliability Assessment and Sketch Planning with Web-based Accessibility Software," SMART Future Urban Mobility Seminar | Singapore [ 2018 ]

“Accessibility-Based Reliability Metrics for Public Transport: Application of Automatic Vehicle Location Data with a Boston Case Study,” International Symposium on Transport Network Reliability   Sydney, Australia	[ 2018 ]
“Tangible Tools for Public Transportation Planning: Public Involvement and Learning for BRT Corridor Design” Transportation Research Board Annual Meeting   Washington, DC	[ 2018 ]
“Network-level Indicators Based on Access to Opportunities” Interoperable Transit Data Workshop   New York, NY	[ 2017 ]
“Regional Employment Connectivity and Transit Accessibility Metrics,” ACSP Annual Conference   Denver, CO	[ 2017 ]
“Reliability-Adjusted Accessibility Metrics from Automatic Vehicle Location Data,” TransitData   Santiago, Chile	[ 2017 ]
“Transit Unreliability and Healthcare Access: Findings from a Boston Case Study,” TransitCenter   New York, NY	[ 2017 ]
“Interactive, Collaborative Mapping of Accessibility: Generating New Learning About Public Transportation Benefits,” Association of American Geographers Annual Meeting   Boston, MA	[ 2017 ]
“CoAXs   Gospel Oak-Barking Overground Closure and Extension Impacts”, demo for Our Lives in Data event at the UK Science Museum   London, United Kingdom	[ 2016 ]
“Comparing Scheduled and Actual Transit Accessibility to Health Centers,” Exploring Data and Metrics of Value at the Intersection of Health Care and Transportation: Workshop at the National Academies   Washington, DC	[ 2016 ]
“CoAXs: Interactive Mapping for Communicating Accessibility Impacts to Support Co-creative Transit Planning,” Thredbo International Conference on Competition and Ownership in land Passenger Transport   Santiago, Chile	[ 2015 ]
“Accesibilidad, el transporte público, y el riesgo vial: nuevas herramientas para visualización interactiva,” Road Safety Seminar at Universidad Andrés Bello   Santiago, Chile	[ 2015 ]
“Visualizing Urban Accessibility Metrics for Incremental Bus Rapid Transit Projects: A Participatory Framework,” COST & CITTA Joint Conference at the University of Porto   Porto, Portugal	[ 2014 ]
“Future Leaders in Sustainable Transport,” Transforming Transportation at the World Bank   Washington, DC	[ 2014 ]

## RECENT PROFESSIONAL AND EDITORIAL ACTIVITIES

Member of technical advisory group, FTA study on Multimodal Public Transportation System Connectivity Measures

Member of GTFS-ride Consortium Group

Expert interviewee, Urban Land Institute Technical Assistance Panel on North-South Rail Link

Member of Tau Beta Pi (National Engineering Honor Society)

Reviewer for *Transportation Research Part A, Journal of Modern Transportation, Research in Transportation Economics*

## INDUSTRY AND POPULAR PRESS

Featured in “40 Brilliant Open Data Projects And How They’re Redefining Smart Cities in 2017”, *Carto Location Intelligence* [ 2017 ]

Authored “Following the Migrations”, World View feature in *Mobility* (Cape Town, South Africa) [ 2011 ]

Contributing Editor for *School Transportation News* (Torrance, CA) [ 2010 – 2011 ]

Letters to the editor published in the *Los Angeles Times, Boston Globe*

## **SERVICE AND LEADERSHIP**

MIT DUSP City Design and Development Group   Student reader for MCP Admissions	[ 2014 ]
MIT Transportation Students Group   Conference Coordinator Helped arrange speakers at annual New York City Transportation Diversity Council conference	[ 2011 – 2012 ]
Swarthmore College Senior Class Council   Vice President Vice President, led shuttle scheduling and coordinated events	[ 2009 – 2010 ]
Tau Beta Pi (National Engineering Honor Society)   Swarthmore Chapter President Organized professional development program and conference attendance	[ 2009 – 2010 ]
Tri-College Multicultural Institute   Student Resource Person Facilitated discussions about identity and leadership for new Swarthmore, Haverford, and Bryn Mawr students	[ 2007 – 2008 ]
Swarthmore College Intercultural Center   Intern Facilitated student discussions, coordinated online communications	[ 2007 – 2008 ]
Chester-Upland School District   Volunteer Volunteer in afterschool engineering design program through Swarthmore College Engineering Department	[ 2006 – 2010 ]
Orange County Human Relations Council   Human Relations Associate Leader in diversity education programs for youth, Member of Board of Directors (2005–2006)	[ 2001 – 2006 ]