



The 68th North America Meetings of the Regional Science Association International

Co-hosted by
the North American Regional Science Council and
the Mid-Continent Regional Science Association

November 8 – 13, 2021
Denver, Colorado

Virtual: November 8
In-person: November 10-13

Welcome to the 68th Annual North American Meetings of the Regional Science Association International, November 8-13, 2021!

On behalf of the North American Regional Science Council, and the Mid-Continent Regional Science Association, we welcome you to the 68th Annual North American Meetings of the Regional Science Association International.

We look forward to some exciting events this year including Adam Rose's RSAI Fellow Lecture on Wednesday, Nov. 10, 6:30 PM -7:30 PM, "A Disaster Economics Framework for Estimating the Consequences of COVID-19." Steve Deller's Presidential Plenary on Thursday, Nov. 11, 10:30 AM -12:00 PM is entitled "Community Systems Thinking and Modeling Uncertainty".

We hope everyone is doing well as we all continue to determine what normal means nowadays. We welcome you to beautiful Denver, Colorado. In addition, we are having one day of a Virtual Conference to accommodate our colleagues who are unable to attend in person. Like all of you, we are looking forward to catching up with old friends and making new acquaintances.

We are all committed to making the 68th Annual Meetings of the Regional Science Association International a safe and healthy event for our attendees, industry partners, exhibitors, volunteers, and team members (see the note on a Safe and Healthy Conference that follows). We continue to work closely with our partners at the Denver Grand Hyatt to discuss guidance and recommendations of the federal Centers for Disease Control and Prevention (CDC) and other public health authorities.

This is a great opportunity to renew and expand your professional network. You continue to have the opportunity to learn about cutting-edge research in a variety of regional science disciplines.

We hope that you enjoy catching up with old friends and making new acquaintances. Hopefully, these conversations will stimulate new ideas for collaborations...and we can hear about them next year in Montreal, Canada!

We'd like to extend our special thanks to Neil Reid for his ongoing support and guidance throughout the planning process. We also want to thank our sponsors, IMPLAN and REMI.

Enjoy the NARSC 68th Annual Conference!

John Sporing, Local Organizer

Soomi Lee, Program Chair

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A Safe and Healthy Conference

NARSC is committed to making the 68th Annual Meetings of the Regional Science Association International a safe and healthy event for our attendees, industry partners, exhibitors, volunteers, and team members. As the conference draws nearer, we have been working closely with our partners at the Denver Grand Hyatt to discuss guidance and recommendations of the federal Centers for Disease Control and Prevention (CDC) and other public health authorities.

It is important to note that large, in-person meetings are happening throughout the country, and they are happening safely. All conference attendees must agree to the Duty to Self-Monitor during the conference. Now, we would like to share information about the venue and our steps to address concerns.

- **Vaccination Rates:** Colorado has one of the highest vaccination rates with 70% of eligible people fully immunized. Hyatt requires all employees to wear a mask when on duty.
- **Hyatt's Commitment:** Hyatt continues to host large events. Hyatt reviews and updates its Covid mitigation and hygiene protocol regularly. You may review it [here](#).
- **Masking:** In accordance with Colorado state mandate, face coverings are required in all indoor public areas. We'll have masks available at the registration desk. Staff and key volunteers will observe this rule.
- **Deep Sanitation:** Hyatt will sanitize all conference spaces before use and overnight throughout the conference to ensure we start each day with clean, hygienic spaces.
- **Personal Comfort Levels:** We recognize that our attendees will have a range of comfort levels. We encourage you to attend the conference and engage with other members as you feel is appropriate under the circumstances. We encourage you to congregate with people you know. The most important thing is that we respect each other's feelings and individual approach to this issue while we enjoy being together and sharing our research.

We continue to monitor the situation with our partners at Hyatt, and we are confident that these adaptations will allow us to have a safe, fun, edifying conference in Denver.

IMPORTANT INFORMATION:

Considering the ongoing issue of COVID-19, individuals who fall within any of the categories below should not engage in any NARSC events, or, if registered and fall into one of those categories prior the conference, should request a refund. By attending the 68th Annual Meetings of the Regional Science Association International, you certify that you do not fall into any of the following categories and have complied with the following:

- Individuals who have tested positive for COVID-19 within the prior 10 days of the event or are currently showing COVID-19 symptoms.
- Individuals who within the prior fourteen (14) days of the event have experienced any symptoms associated with COVID-19, which include fever, cough, and shortness of breath among others.
- Individuals who believe that they may have been exposed to a confirmed or suspected case of COVID-19 or have been diagnosed with COVID-19 and are not yet cleared as non-contagious by state or local public health authorities or the health care team responsible for their treatment.

DUTY TO SELF-MONITOR:

Attendees to any activity connected with the 68th Annual Meetings of the Regional Science Association International agree to self-monitor during the event for signs and symptoms of COVID-19 (symptoms typically include fever, cough, and shortness of breath) and immediately contact the AWS staff on-site should they test positive for COVID-19 or experiences symptoms of COVID-19.

LIABILITY WAIVER AND RELEASE OF CLAIMS:

By attending the 68th Annual Meetings of the Regional Science Association International, you acknowledge that your decision to attend is personal and voluntary in nature, and in choosing to do so, recognize, assume all risks associated with attendance, including exposure to COVID-19.

2021 Organizing and Program Committee

Local Arrangements

John Spring, BEA, U.S. Department of Commerce (retired)

Program Chair

Soomi Lee, University of La Verne

Session and Workshop Organizers

Eleni Bardaka, North Carolina State University

Peter Batey, University of Liverpool

Jaime Bonet, Banco de la República de Colombia

Louafi Bouzouina, Transport Economy Planning Laboratory - ENTPE

Dani Broitman, Technion – Israel Institute of Technology

Kevin Credit, Maynooth University

Daniel Czamanski, Ruppin Academic Center

Tomaz Dentinho, University of the Azores

Güney Celbiş Yeditepe University

Eduardo Haddad, University of São Paulo

Kingsley Haynes, George Mason University

Geoffrey Hewings, University of Illinois at Urbana-Champaign

Elijah Knaap, University of California – Riverside

Karima Kourtit, Open University, Heerlen, the Netherlands

Matthew Lehnert, Al Akhawayn University

Sarah Low, University of Missouri – Columbia

Elizabeth Mack, Michigan State University

Alan Murray, University of California – Santa Barbara

Peter Nijkamp, Open University, Heerlen, the Netherlands

Yasuhide Okuyama, University of Kitakyushu

Dimitra Pyrialakou, West Virginia University

Neil Reid, University of Toledo

Sergio Rey, University of California – Riverside

Adam Rose, University of Southern California

Sicheng Wang, Michigan State University

Ran Wei, University of California – Riverside

Stephan Weiler, Colorado State University

NARSC Graduate Student Paper Competitions

Committee Co-Chairs

Christa Court, University of Florida

Carlianne Patrick, Georgia State University

Reading Committee

Kace Chalmers, California State University, Sacramento

Tessa Conroy, University of Wisconsin – Madison

Michael Delgado, Purdue University

Tony Grubescic, University of Texas at Austin

Ayoung Kim, Mississippi State University

Juan Carlos Lopez, University of Denver

Bruce Newbold, McMaster University

Mallory Rahe, University of Missouri

Juan Tomas Sayago Gomez, Universidad Icesi

NARSC Directory

Voting Members

Steven Deller, President, University of Wisconsin-Madison
Jason Brown, Councilor at Large, 2019-2021 and NARSC Chair, Federal Reserve Bank of Kansas City
Daoqin Tong, Councilor-at-Large, 2020-2022, Arizona State University
Amanda Ross, Councilor-at-Large, 2020-2022, University of Alabama
John V. Winters, Councilor-at-Large, 2021-2023, Iowa State University
Amelia Pludow, Student Representative, 2021-2022, UC-Santa Barbara
Bruce Newbold, Canadian RSA, McMaster University
Tessa Conroy, Mid-Continent RSA, University of Wisconsin - Madison
Kieran Donaghy, Northeast RSA, Cornell University
Amanda L. Weinstein, Southern RSA, University of Akron
Jaewon Lim, Western RSA, University of Nevada-Las Vegas

Ex Officio (Non-Voting) Members

Neil Reid, NARSC Executive Director, University of Toledo
Andrea Caragliu, RSAI Executive Director, Politecnico di Milano,
Tomaz Lopes Cavalheiro Ponce Dentinho, Editor-in-Chief, Regional Science Policy & Practice, Universidade dos Açores
Roberta Cappelo, Editor-in-Chief, Papers in Regional Science, Politecnico di Milano
Michael L. Lahr, Editor, Papers in Regional Science
David Folch, Editor, Papers in Regional Science
Isabelle Nilsson, Editor, Regional Science Policy and Practice
Yuri Mansuri, NARSC Diversity and Inclusion Committee
Kevin Credit, NARSC Young Scholars Committee
Haifeng Qian, Immediate Past Chair, University of Iowa

2021 Nominations Committee

Jason Brown (Chair), Amanda Ross, and Isabelle Nilsson

2021 Honors Committee

Kata Kockelman (Chair), Stephan Goetz (Chair), and Steven Deller

2021 Executive Committee

Jason Brown (Chair), Steven Deller, and Neil Reid

2021 Ben Stevens Fellowship Committee

Daoqing Tong (Chair), Elizabeth Mack, Daoqing Tong, Nicholas Nagle, Steven Deller, Shaoming Cheng

2021 William Alonso Memorial Prize Committee

Janet Kolhase (Chair), David Plane, Gordon Mulligan, Roberta Capello

Past and Future Conferences

Detroit, MI	December 27-29, 1954
New York, NY	December 27-30, 1955
Cleveland, OH	December 27-29, 1956
Philadelphia, PA	December 28-30, 1957
Chicago, IL	December 27-29, 1958
Washington, DC	December 27-29, 1959
St. Louis, MO	December 28-30, 1960
New York, NY	December 27-29, 1961
Pittsburgh, PA	December 27-29, 1962
Chicago, IL	November 15-17, 1963
Ann Arbor, MI	November 13-16, 1964
Philadelphia, PA	November 12-14, 1965
Clayton, MO	November 4-6, 1966
Cambridge, MA	November 3-5, 1967
Cambridge, MA	November 8-10, 1968
Santa Monica, CA	November 7-9, 1969
Philadelphia, PA	November 6-8, 1970
Ann Arbor, MI	November 12-14, 1971
Philadelphia, PA	November 10-12, 1972
Atlanta, GA	November 9-11, 1973
Chicago, IL	November 8-10, 1974
Cambridge, MA	November 7-9, 1975
Toronto, Ontario	November 12-14, 1976
Philadelphia, PA	November 11-13, 1977
Chicago, IL	November 10-12, 1978
Los Angeles, CA	November 9-11, 1979
Milwaukee, WI	November 14-16, 1980
Montreal, Quebec	November 13-15, 1981
Pittsburgh, PA	November 12-14, 1982
Chicago, IL	November 11-13, 1983
Denver, CO	November 9-11, 1984
Philadelphia, PA	November 15-17, 1985
Columbus, OH	November 14-16, 1986
Baltimore, MD	November 6-8, 1987
Toronto, Ontario	November 11-13, 1988
Santa Barbara, CA	November 10-12, 1989
Boston, MA	November 9-11, 1990
New Orleans, LA	November 7-11, 1991
Chicago, IL	November 12-14, 1992
Houston, TX	November 11-14, 1993
Niagara Falls, Ontario	November 17-20, 1994
Cincinnati, OH	November 8-13, 1995

Arlington, VA	November 14–17, 1996
Buffalo, NY	November 5–9, 1997
Santa Fe, NM	November 11–14, 1998
Montreal, Quebec	November 11–14, 1999
Chicago, IL	November 9–11, 2000
Charleston, SC	November 15–17, 2001
San Juan, PR	November 14–17, 2002
Philadelphia, PA	November 20–23, 2003
Seattle, WA	November 11–13, 2004
Las Vegas, NV	November 10–12, 2005
Toronto, Ontario	November 15–19, 2006
Savannah, GA	November 7–11, 2007
New York City, NY	November 19–22, 2008
San Francisco, CA	November 19–21, 2009
Denver, CO	November 10–13, 2010
Miami, FL	November 9–12, 2011
Ottawa, Canada	November 7–10, 2012
Atlanta, Georgia	November 13–16, 2013
Washington, DC	November 12–15, 2014
Portland, OR	November 11–14, 2015
Minneapolis, MN	November 9–12, 2016
Vancouver, Canada	November 8–11, 2017
San Antonio, TX	November 7–10, 2018
Pittsburgh, PA	November 13–16, 2019
Virtual Conference	November 9–13, 2020
Denver, CO	November 10–13, 2021
Montreal, QC	November 9–12, 2022
San Diego, CA	November 14–18, 2023

Instructions to Session Chairs, Presenters, and Discussants

In-Person Sessions

1. Please adhere to the times printed in the program. Each session presentation is assigned a specific time. If you have a no-show, use the time for a discussion of the proceeding paper(s) or for a recess. Do not shift papers to fill voids, as individuals may want to attend a particular paper.
2. Most sessions have 4 papers. Session Chairs should allocate 30 minutes to each paper (20 minutes presentation, 5 minutes discussant, and 5 minutes for audience questions/comments). If you 3 or 5 papers in your session allocate the time accordingly.
3. Hold each individual to the time allotted. If a speaker continues after time has expired, rise, ask those present to join you in thanking the speaker, and announce the next presentation. The audience and the other speakers will respect and support your decision.
4. Please be considerate of the next session by ensuring your session is completed at the appropriate time and that the virtual meeting room is vacated in time for the next session to set up.
5. Each paper is assigned a discussant to review and offer constructive comments on the paper. There is one discussant for each paper. The discussants for each session are listed in the program. Discussants are listed in sequential order. The first discussant listed is responsible for discussing the first paper presented; the second discussant listed is responsible for discussing the second paper presented etc. Organized sessions may have allocated their discussant differently.
6. The discussant should come prepared to provide approximately 5 minutes discussion of the paper. Possible speaking points include its merits and questions' regarding methods, data, or findings – a summary of the paper is neither expected nor appropriate. As a presenter, we ask that you share your paper (or PowerPoint presentation) with your discussant as early as possible, so that the discussant has sufficient time to review it.

Additional Instructions for Virtual Participants on Monday, November 8

1. The virtual room will be available 5-10 minutes before the start of each session.
2. When you arrive in the virtual room, please “raise your hand” so that the room host can make you a panelist and allow you to share your screen. The chair is responsible in making sure everyone is present.
3. Please be considerate of the next session by ensuring your session is completed at the appropriate time and that the virtual meeting room is vacated in time for the next session to set up.
4. If there are any technology issues, please contact your room host. Emails will be provided.

Conference Highlights and Business Meetings

Wednesday, November 10

Workshop: Spatial Data Analysis with PySAL and GeoSNAP.

Wednesday Nov 10 | 8:00 AM-5:00 PM | Room: Mt. Columbia

[Pre-registration required](#)

Workshop: Occupation, Environmental, and Even More Data in IMPLAN.

Wednesday Nov 10 | 8:00 AM-5:00 PM | Room: Mt. Wilson

[Pre-registration Required](#)

Workshop: Using Convex Combinations of Spatial Weight Matrices

[Free registration. Pre-registration Required](#)

RSAI Fellows Lecture:

A Disaster Economics Framework for Estimating the Consequences of COVID-19.

Wednesday Nov 10 | 6:30 PM-7:30 PM | Room: Aspen

Speaker: Adam Rose, University of Southern California

NARSC Icebreaker Reception.

Wednesday Nov 10 | 8:00 PM-9:00 PM | Room: Aspen Foyer

Thursday, November 11

Advanced Brainstorm Carrefour (ABC) of The Regional Science Academy: Pandemic and the City

Thursday Nov 11 | 8:00 AM-10:00 AM | Room: Mt Columbia

NARSC Council Meeting (By Invitation Only)

Thursday Nov 11 | 8:00 AM-10:00 AM | Room: Colorado A

The NARSC Presidential Address

Community Systems Thinking and Modeling Uncertainty

Thursday Nov 11 | 10:30 AM-12:30 PM | Room: Aspen.

Speaker: Steven Deller, University of Wisconsin-Madison

REMI Special Session: Diversity, Equity, and Inclusion in Regional Economic Development

Thursday Nov 11 | 4:00 PM-6:00 PM | Room: Mt Columbia

Regional Science Policy and Practice Business Meeting
Thursday Nov 11| 4:00 PM-5:00 PM | Room: Colorado A

North Eastern RSA Meeting (Open to All)
Thursday Nov 11| 5:00 PM-6:00 PM | Room: Colorado A

NARSC Reception - Sponsored by IMPLAN
Thursday Nov 11 | 6:30 PM-8:00 PM | Room: Aspen Foyer

Friday, November 12

The Regional Science Academy (TRSA) Special Sessions | Mt Columbia

- 8:00 AM-10:00 AM: The New Data Revolution in Regional Science and the Dilemma of More, and Better Measurement: A Tribute to Stan Czamanski
- 10:30 AM – 11:00 AM: International Regional Science Review Trends and Context: New Data Revolution
- 11:00 AM – 12:30 PM: Great Minds in Regional Science
- 1:30 PM – 3:30 PM: Roundtable Discussion, Pandemics, Location and Mobility

SRSA Council Meeting (By Invitation Only)
Friday Nov 12 | 12:30 PM-1:30 PM | Room: Colorado A

Saturday, November 13

Student-Authored Paper Competition Finalists Session
Saturday Nov 13 | 8:00 AM-10:00 AM | Room: Mt Columbia

Student-Authored Paper Competition Finalists Session
Saturday Nov 13 | 10:30 AM-12:30 AM | Room: Mt Columbia

NARSC Award Luncheon
Saturday Nov 13| 12:30 pm-2:30 pm | Room: Aspen

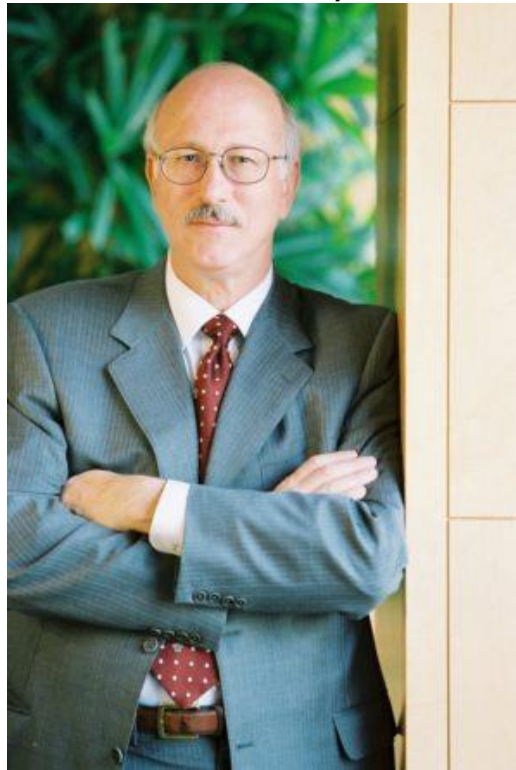


RSAI Fellows Lecture

*A Disaster Economics Framework
for Estimating the Consequences of COVID-19*

Wednesday, November 10
6:30pm-7:30PM | Room: Aspen

Speaker: Adam Rose: University of Southern California



Chair: Sergio Rey, University of California-Riverside



THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

NARSC Presidential Lecture

Community Systems Thinking and Modeling Uncertainty

Thursday, November 11
10:30AM-12:30PM | Room: Aspen

Speaker: Steven Deller: University of Wisconsin-Madison



Chair: Jason Brown, Federal Reserve Bank of Kansas City

Detailed Program

Monday, November 8, 2021

Virtual Day

VIRTUAL SESSION TIME ZONE: CENTRAL TIME

Zoom links to be provided.

1. Natural Disasters and Resilience (Virtual)

Monday | 10:00 am-12:00 pm | Maroon's Peak

Chair: Sultana Fouzia, Oregon State University

- *Economic Analysis of Resilience to Natural Hazards in Industrial Sectors* - Huan LIU, Kyoto University; Hirokazu Tatano, Kyoto University
- *Urbanization and Weak Linkages of Social Capital for Natural Disaster Resilience* - Kiyomi Kawamoto, Toyo University; Eric Yamashita, University of Hawaii - Manoa
- *Equilibrium analysis of waiting-lines for fuels in the aftermath of disaster* - JUNYA FUKUMOTO, Tohoku University
- *Spatial equilibrium analysis of the hurricane impact on the coastal counties* - Sultana Fouzia, Oregon State University; Yong Chen, Oregon State University

Discussants:

- Kiyomi Kawamoto, Toyo University
- JUNYA FUKUMOTO, Tohoku University
- Sultana Fouzia, Oregon State University
- Huan LIU, Kyoto University

2. Public Health and Safety (Virtual)

Monday | 10:00 am-12:00 pm | Mt Princeton

Chair: Ihsan Khan, North Dakota State University

- *Green Infrastructure and Energy Justice in Health Adaptation: Leveraging Climate Policy Innovation and Vulnerability-Readiness Nexus* - Hyun Kim, Chungnam National University
- *Coming Out of the Woods. Do local support services influence the propensity to report sexual violence?* - Daria Denti, GSSI
- *Data-Driven Seatbelt and Impaired Driving Enforcement Priorities, North Dakota Case Study* - Ihsan Khan, North Dakota State University; Kimberly Vachal, North Dakota State University

Discussants:

- Daria Denti, GSSI
- Ihsan Khan, North Dakota State University
- Hyun Kim, Chungnam National University

3. The New Economy in Regional Economies (Virtual)

Monday | 10:00 am-12:00 pm | Torrey's Peak

Chair: Santiago Pinto, Federal Reserve Bank of Richmond

- *The knowns and unknowns of accepting cryptocurrency as legitimate currency: Insights from an agent-based simulation* - Haoying Wang, New Mexico Tech; Riana Foley, New Mexico Tech
- *The "Resource Curse" in the Digital Economy: an Econometric Assessment* - Ekaterina Kadochnikova, Kazan Federal University; Nailya Bagautdinova, Kazan Federal University
- *The Degree of Sharing in Peer-to-peer Accommodations: A Case Study of Airbnb in Thailand* - Nij Tontisirin, Thammasat University; Sutee Anantsuksomsri, Chulalongkorn University; Areen Phuntarakit, Chulalongkorn University; Jean-Claude Thill, University of North Carolina - Charlotte
- *Heterogeneous Districts, Interests, and Trade Policy* - Santiago Pinto, Federal Reserve Bank of Richmond; Pablo Pinto, University of Houston; Kishore Gawande, University of Texas - Austin

Discussants:

- Ekaterina Kadochnikova, Kazan Federal University
- Jean-Claude Thill, University of North Carolina - Charlotte
- Santiago Pinto, Federal Reserve Bank of Richmond
- Haoying Wang, New Mexico Tech

4. [Special Session] Location and Spatial Analysis I (Virtual)

Monday | 10:00 am-12:00 pm | Mt Columbia

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California, Riverside

Chair: Richard Church, University of California - Santa Barbara

- *Reducing Racial Segregation of Public Schools* - Ran Wei, University of California, Riverside
- *Incorporating Census Data Uncertainty in Location Modeling: The P-Median and Maximum Covering Cases* - Daoqin Tong, Arizona State University; Mark Daskin, University of Michigan; Ruiwei Jiang, University of Michigan; Sadie Cox, University of Michigan

- *Using quantum computing to solve NP-hard problems in regional science: The Maximal Covering Location Problem and the p-regions problem* - .Alejandro Giraldo, EAFIT University; Juan G. Lalinde, EAFIT University; Daniel Sierra-Sosa, Hood College; Juan Duque, EAFIT University
- *Assessment of Development Plans for Small Urban Areas of Bangladesh: Remote Sensing and GIS-based Approach* - Mohammad Ridwan Tanvir, Bangladesh University of Engineering and Technology; Afsana Haque, Bangladesh University of Engineering and Technology

Discussants:

- Daoqin Tong, Arizona State University
- Alejandro Giraldo, EAFIT University
- Mohammad Ridwan Tanvir, Bangladesh University of Engineering and Technology
- Ran Wei, University of California, Riverside

5. [Special Session] Regional Economic Effects of Disasters 1 (Virtual)

Monday | 10:00 am-12:00 pm | Mt Oxford

Organizers: Yasuhide Okuyama, University of Kitakyushu; Adam Rose, University of Southern California

Chair: Adam Rose, University of Southern California

- *Flood insurance take-up after Hurricane Harvey: The information spillover effect* - Yilan Xu, University of Illinois - Urbana-Champaign
- *COVID-19 impacts on historically underrepresented group operated businesses outweigh the concurrent impacts from natural hazards and the pandemic* - Jennifer Helgeson, National Institute of Standards and Technology; Payam Aminpour, National Institute of Standards and Technology
- *Empirical Estimation of Economic Resilience to Infrastructure Disruptions* - Charles Morin, Ohio State University; Noah Dormady, Ohio State University; Adam Rose, University of Southern California
- *The Effect of Flood Insurance on Property Values after a Flood* - Sebastien Box-Couillard, University of Illinois - Urbana-Champaign

Discussants:

- Jennifer Helgeson, National Institute of Standards and Technology
- Sebastien Box-Couillard, University of Illinois - Urbana-Champaign
- Yilan Xu, University of Illinois - Urbana-Champaign
- Adam Rose, University of Southern California

6. [NARSC-NECTAR Special Session] Workforce Impact of Autonomous Technologies
Monday | 10:00 am-12:00 pm | Mt Wilson

Organizers: Sicheng Wang, Michigan State University; Elizabeth Mack, Michigan State University

Chair: Sicheng Wang, Michigan State University

- *Human Capital Externalities in the Geography of Occupations* - Narae Lee, George Mason University
- *Occupational Transitions for Older Workers in an Era of Technological Change* - Sicheng Wang, Michigan State University; Elizabeth Mack, Michigan State University; Shelia Cotten, Clemson University; Chu-Hsiang Chang, Michigan State University; Jenna Van Fossen, Michigan State University; Shubham Agrawal, Clemson University; Nathan Baker, Michigan State University
- *Acceptance of Autonomous Vehicles in Last-mile Logistics Operations* - Valeska Katharina Engesser, Vrije Universiteit Brussel

Discussants:

- Elizabeth Mack, Michigan State University
- Valeska Katharina Engesser, Vrije Universiteit Brussel
- Narae Lee, George Mason University

7. Topics in the Labor Market (Virtual)
Monday | 12:00 pm-2:00 pm | Maroon's Peak

Chair: Catherine Isley, University of Missouri - Columbia

- *The Long Run Effects of Military Service* - Craig Carpenter, Texas A&M University; John Anders, Trinity University
- *The geography of employment polarisation, skills mismatch and labor productivity in the Netherlands* - Nikolaos Terzidis, University of Groningen; Raquel Ortega-Argiles, University of Birmingham
- *Determinants of Labor Shortages in Missouri's Food Manufacturing Industry* - Catherine Isley, University of Missouri - Columbia; Sarah Low, University of Missouri - Columbia
- *Artificial Intelligence in the Hiring Process and Organizational Trust: The role of Ethical Perceptions* - Serge da Motta Veiga, EDHEC Business School; Maria Figueroa-Armijos, EDHEC Business School; Brent Clark, University of Nebraska - Omaha

Discussants:

- Nikolaos Terzidis, University of Groningen

- Sarah Low, University of Missouri - Columbia
- Maria Figueroa-Armijos, EDHEC Business School
- Craig Carpenter, Texas A&M University

8. Papers in Public Finance (Virtual)

Monday | 12:00 pm-2:00 pm | Mt Wilson

Chair: Carlos Mesa-Guerra, Cornell University

- *Public spending and economies of scale in partial fiscal decentralized governments: The case of Chile* - Alicia Chávez, Universidad Católica del Norte; Dusan Paredes, Universidad Católica del Norte
- *Shocks derived from mining windfalls and horizontal transfers: Exploring the permanent-income hypothesis in Chilean municipalities from a spatial competition approach* - Mauricio Oyarzo, Universidad de Concepción; Dusan Paredes, Universidad Católica del Norte
- *Ricardian Land Rent, Tax Incidence, and Pasture/Cropland Value* - Katie Welch, Oklahoma State University; Dayton Lambert, Oklahoma State University; Notie Lansford, Oklahoma State University
- *The Fiscal Impact of Immigration: Labor Displacement, Wages and Community Networks* - Carlos Mesa-Guerra, Cornell University; Andres Castano Zuluaga, Cornell University

Discussants:

- Mauricio Oyarzo, Universidad de Concepción
- Katie Welch, Oklahoma State University
- Carlos Mesa-Guerra, Cornell University
- Alicia Chávez, Universidad Católica del Norte

9. Issues in Regional Economies (Virtual)

Monday | 12:00 pm-2:00 pm | Torrey's Peak

Chair: Marcos Valdivia, National University of Mexico

- *Better together: Untapped potentials in Central Europe* - Andrea Caragliu, Politecnico di Milano
- *Capital Shocks, Real Estate Risks and the Effects of the Global Financial Crisis in European Regions and Cities* - Michiel Daams, University of Groningen; Philip McCann, University of Sheffield; Paolo Veneri, OECD; Richard Barkham, CBRE Global Investors
- *The Role of Industrial Chain in the Over Construction in China's High-Speed Rails* - Meng Yu, Ohio State University; Zhenhua Chen, Ohio State University

- *Contribution and regional disparities of intangible capital in Mexico* - Marcos Valdivia, National University of Mexico; Rafael Borrayo, National University of Mexico

Discussants:

- Michiel Daams, University of Groningen
- Meng Yu, Ohio State University
- Marcos Valdivia, National University of Mexico
- Andrea Caragliu, Politecnico di Milano

10. [Special Session] Location and Spatial Analysis II (Virtual)

Monday | 12:00 pm-2:00 pm | Mt Columbia

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California, Riverside

Chair: Ran Wei, University of California, Riverside

- *The p-innovation ecosystems problem* - Daniel Restrepo, University of Texas - Austin; Juan Duque, EAFIT University; Richard Church, University of California - Santa Barbara
- *Optimizing Geographic Access to Fertility Clinics* - Micajah McGarity, Johns Hopkins University
- *A Local Gaussian Process Regression approach to Mass Appraisal of Residential Properties* - Jacob Dearmon, Oklahoma City University; Tony Smith, University of Pennsylvania
- *An open-source framework to measure pedestrian accessibility for cities worldwide* - Shiqin Liu, Northeastern University; Carl Higgs, Royal Melbourne Institute of Technology; Jonathan Arundel, Royal Melbourne Institute of Technology; Geoff Boeing, University of Southern California; Nicholas Cerdera, University of Southern California; David Moctezuma, University of Southern California; Ester Cerin, Australian Catholic University; Deepti Adlakha, Queen's University Belfast; Melanie Lowe, University of Melbourne; Billie Giles-Corti, Royal Melbourne Institute of Technology

Discussants:

- Micajah McGarity, Johns Hopkins University
- Jacob Dearmon, Oklahoma City University
- Shiqin Liu, Northeastern University
- Juan Duque, EAFIT University

11. [Special Session] Regional Economic Effects of Disasters 2 (Virtual)

Monday | 12:00 pm-2:00 pm | Mt Oxford

Organizers: Yasuhide Okuyama, University of Kitakyushu; Adam Rose, University of Southern California

Chair: Yasuhide Okuyama, University of Kitakyushu

- *Assessing Tourism Damage and Recovery after a Major Earthquake in Japan* - Mingji CUI, Toyohashi University of Technology; Hiroyuki SHIBUSAWA, Toyohashi University of Technology; Kotaro OKUDAIRA, Toyohashi University of Technology
- *A Probabilistic Integration of Seismic Risk Models and Interregional CGE Modeling to Estimate the Economic Consequences of Earthquakes* - Jose Antonio Leon Torres, National Autonomous University of Mexico; Mario Ordaz, National Autonomous University of Mexico; Eduardo Haddad, University of São Paulo; Araújo Inácio, University of São Paulo
- *Economic Structural Changes under a Disaster* - Yasuhide Okuyama, University of Kitakyushu
- *Remittance Diversity and Economic Vulnerability to Remittance Shocks* - Elizabeth Mack, Michigan State University; Geoffrey Henebry, Michigan State University

Discussants:

- Jose Antonio Leon Torres, National Autonomous University of Mexico
- Yasuhide Okuyama, University of Kitakyushu
- Elizabeth Mack, Michigan State University
- Mingji CUI, Toyohashi University of Technology

12. [Special Session] In Honor Kieran Donaghy I

Monday | 12:00 pm-2:00 pm | Mt Princeton

Organizer: John Carruthers, Cornell University

Chair: Yuri Mansury, Illinois Institute of Technology

- *Spatial Equity in Secondary Education: Evidence from Point Pattern Analysis in Two Asian Megacities* - Zhuojun Wang, Cornell University; John Carruthers, Cornell University
- *Revisiting the value of accessibility: Do destinations and mode of travel matter?* - Gerrit Knaap, University of Maryland - College Park; Qiong Peng, University of Washington; Richard Kuzmyak, University of Maryland - College Park; Nicholas Finio, University of Maryland - College Park
- *Bottom-Up Land Use Modeling in an Integrated Assessment Model of US Great Lakes Ecosystem Services* - Brian Cultice, Ohio State University; Mackenzie Jones, Ohio State University; Elena Irwin, Ohio State University

- *The convergence of trade, growth, and conflict in a spatial structural equation model* - Yuri Mansury, Illinois Institute of Technology; Woosung Kim, Korea University; Jingwen Li, Cornell University

Discussants:

- Gerrit Knaap, University of Maryland - College Park
- Brian Cultice, Ohio State University
- Yuri Mansury, Illinois Institute of Technology
- Zhuojun Wang, Cornell University

13. Commuting and the Labor Market (Virtual)

Monday | 2:00 pm-4:00 pm | Maroon's Peak

Chair: Deborah Salon, Arizona State University

- *Do more opportunities lead to higher income: the effects of transit access on household income* - Yun Li, Ohio State University
- *Analyzing America's Commuter Networks and Economic Activity* - Samhitha Srinivas, University of Wisconsin - Madison
- *Can high speed rail mitigate the urban labor misallocation?* - Menger Tu, Shanghai University; Linnan Yan, Shanghai University; Andre Chagas, University of São Paulo
- *The determinants of telecommuting in the United States and how the COVID-19 pandemic changed them* - Deborah Salon, Arizona State University; Matthew Conway, University of North Carolina - Chapel Hill; Laura Mirtich, Arizona State University

Discussants:

- Samhitha Srinivas, University of Wisconsin - Madison
- Menger Tu, Shanghai University
- Deborah Salon, Arizona State University
- Yun Li, Ohio State University

14. Analyzing Space and Location: Development and Applications (Virtual)

Monday | 2:00 pm-4:00 pm | Mt Columbia

Chair: Ran Tao, University of South Florida

- *RELATIONSHIP BETWEEN LABOR PRODUCTIVITY AND WAGES: AN ANALYSIS OF SPATIAL PROXIMITY AT THE STATE LEVEL IN THE MANUFACTURING INDUSTRY IN MEXICO, 2004, 2009, 2014 AND 2019* - Enrique González Mata, Economic Commission for Latin America and the Caribbean; Jesús López Cabrera, Tec de Monterrey; René Cabral Torres, Tec de Monterrey

- *A New Urban Change Detection Method based on the Local G and LOSH Statistics* - yuzhou chen, University of South Florida; Ran Tao, University of South Florida
- *Establishment Location Choice Model Considering Intrafirm Interactions* - Usman Ahmed, University of Toronto; Jason Hawkins, University of Texas - Austin; Matthew Roorda, University of Toronto
- *Modifying Local Indicators of Spatial Association (LISA) to Analyze Longitudinal Data* - Ran Tao, University of South Florida; yuzhou chen, University of South Florida

Discussants:

- Yuzhou Chen, University of South Florida
- Usman Ahmed, University of Toronto
- Ran Tao, University of South Florida
- Jesús López Cabrera, Tec de Monterrey

15. Housing Market I (Virtual)

Monday | 2:00 pm-4:00 pm | Mt Oxford

Chair: Ethan Baron, University of Toronto

- *The impacts of 19-o riots on demand for rentals and insecurity sentiments on Santiago city* - ariel arcos, Catholic University of the North; Dusan Paredes, Universidad Católica del Norte; Bernardo Lara, University of Talca
- *Modelling Housing Supply: An Autoregressive Distributed Lag Model of Housing Starts in the Greater Toronto and Hamilton Area* - Billy Zhang, University of Toronto; Eric Miller, University of Toronto
- *A time series analysis of foreclosures rates in Spain* - Rafael González-Val, Universidad de Zaragoza; Miriam Marcén, Universidad de Zaragoza
- *Modelling Average Dwelling Value of Toronto Dissemination Areas* - Ethan Baron, University of Toronto; Eric Miller, University of Toronto

Discussants:

- Billy Zhang, University of Toronto
- Rafael Garduno-Rivera, Universidad Panamericana
- Ethan Baron, University of Toronto
- ariel arcos, Catholic University of the North

16. Neighborhoods and Local Governments (Virtual)

Monday | 2:00 pm-4:00 pm | Mt Wilson

Chair: David Folch, Northern Arizona University

- *Media and Corruption in Brazilian Municipalities* - Suzana Quinet Bastos, Federal University of Juiz de Fora; Fabio Gama, Federal University of Brasilia; Ana Beatrice Maciel, Federal University of Juiz de Fora
- *A Political-Economy Perspective on Mayoral Elections and Urban Crime* - Amit Batabyal, Rochester Institute of Technology; Hamid Beladi, University of Texas at San Antonio
- *The Association of Neighborhood Childhood Opportunity with Young Adult Arrest Rates in Dallas, TX* - Alaina Beauchamp, University of Texas Health Sciences Center at Houston; Amy Hughes, University of Texas Southwestern Medical Center
- *Measuring the Gentrification Life Course in US Neighborhoods* - David Folch, Northern Arizona University

Discussants:

- Amit Batabyal, Rochester Institute of Technology
- Alaina Beauchamp, University of Texas Health Sciences Center at Houston
- David Folch, Northern Arizona University
- Suzana Quinet Bastos, Federal University of Juiz de Fora

17. Learning from Machine Learning (Virtual)

Monday | 2:00 pm-4:00 pm | Torrey's Peak

Chair: Gary Cornwall, BEA

- *Reducing Reoffense in First-Time DUI Cases, A Machine Learning Approach* - Shantanu Awasthi, North Dakota State University; Ihsan Khan, North Dakota State University; Yun Zhou, North Dakota State University; Kimberly Vachal, North Dakota State University
- *Understanding Equitable Outcomes in Public Service Coproduction via Machine Learning: An Analysis of 311 Service Requests of Miami-Dade County* - Shaoming Cheng, Florida International University; Sukumar Ganapati, Florida International University; Giri Narasimhan, Florida International University
- *For What It's Worth: Measuring Land Value in the Era of Big Data and Machine Learning* - Gary Cornwall, BEA; Jeremy Moulton, University of North Carolina - Chapel Hill; Scott Wentland, BEA

Discussants:

- Shaoming Cheng, Florida International University
- Gary Cornwall, BEA
- Shantanu Awasthi, North Dakota State University

18. [Special Session] In Honor of Kieran Donaghy II

Monday | 2:00 pm-4:00 pm | Mt Princeton

Organizer: John Carruthers, Cornell University

Chair: Geoffrey Hewings, University of Illinois - Urbana-Champaign

- *Income Interdependence in the UK Multi-Regional Economy* - André Carrascal Incera, University of Oviedo; Geoffrey Hewings, University of Illinois - Urbana-Champaign
- *Urbanization and Child Growth Failure in Sub-Saharan Africa: A Geographical Analysis* - Yating Ru, Cornell University; John Carruthers, Cornell University; Beliyu Haile, International Food Policy Research Institute
- *The Long Shadow of Major Disaster: Dynamic Regional Economic Consequences of the HayWired Earthquake Scenario* - Ian Sue Wing, Boston University; Dan Wei, University of Southern California; Adam Rose, University of Southern California; Anne Wein, U.S. Geological Survey
- *Residential Vertical Price Curve in Beijing* - Ziye Zhang, Princeton University; Wenzheng Li, Cornell University

Discussants:

- Ziye Zhang, Princeton University
- Adam Rose, University of Southern California
- Geoffrey Hewings, University of Illinois - Urbana-Champaign
- Yating Ru, Cornell University

19. Impacts of Public Transit (Virtual)

Monday | 4:00 pm-6:00 pm | Maroon's Peak

Chair: Junmei Cheng, Ohio State University

- *Standing Strong? The Impact of Public Transit on Firms: A Survival Analysis* - Marie-Pier Champagne, Laval University; Jean Dubé, Laval University
- *Does Ridesourcing Provide Equitable Accessibility?* - Sicheng Wang, Michigan State University; Robert Noland, Rutgers University; Xiao Huang, University of Arkansas
- *Does High-Speed Rail Improve the Attractiveness of Cities? Evidence from China* - Junmei Cheng, Ohio State University; Zhenhua Chen, Ohio State University

Discussants:

- Sicheng Wang, Michigan State University
- Junmei Cheng, Ohio State University
- Marie-Pier Champagne, Laval University

20. Air Pollution: Impacts and Policies

Monday | 4:00 pm-6:00 pm | Mt Columbia

Chair: Andre Avelino, National Renewable Energy Laboratory

- *Ambient air pollution and physical productivity: Evidence from ultramarathons* - Michael Cary, West Virginia University
- *CAFE Standards and Public Transport* - Julius Berger, ifo Institute; Waldemar Marz, ifo Institute
- *BIOCAST: A Non-Linear Demo-Economic Forecasting Model for the U.S. Bioeconomy* - Andre Avelino, National Renewable Energy Laboratory; Patrick Lamers, National Renewable Energy Laboratory; Yimin Zhang, National Renewable Energy Laboratory; Greg Avery, National Renewable Energy Laboratory; Mengming Li, University of Florida

Discussants:

- Julius Berger, ifo Institute
- Andre Avelino, National Renewable Energy Laboratory
- Michael Cary, West Virginia University

21. Housing Market II (Virtual)

Monday | 4:00 pm-6:00 pm | Mt Oxford

Chair: Mitchell Livy, California State University - Fullerton

- *It's the Smell: How Resolving Uncertainty about Local Disamenities Affects the Housing Market* - Gary Cornwall, BEA; Scott Wentland, BEA; Jeff Chen, University of Cambridge
- *Predicting Housing Construction Period Based on Cox Proportional Hazard Model - An Empirical Study of Housing Completions in the Greater Toronto and Hamilton Area* - Billy Zhang, University of Toronto; Eric Miller, University of Toronto
- *Determining the Drivers of Housing Market Seasonality* - Mitchell Livy, California State University - Fullerton

Discussants:

- Billy Zhang, University of Toronto
- Mitchell Livy, California State University - Fullerton
- Gary Cornwall, BEA

22. Entrepreneurship (Virtual)

Monday | 4:00 pm-6:00 pm | Mt Princeton

Chair: Chao Ma, Xiamen University

- *Spatial interaction between FDI and female entrepreneurship* - Alicia Gómez Tello, Universitat de Valencia & IVIE; Rosella Nicolini, Universitat Autònoma de Barcelona
- *Entrepreneurship in China's Peripheral Regions* - Fenjie Long, Shijiazhuang Tiedao University; Tsinghua University; Longfei Zheng, Tsinghua University; Haifeng Qian, University of Iowa
- *The impact of R&D subsidies and tax incentives on firm innovation: complements or substitutes? --- Firm-level evidence from China* - Jieping Chen, Tongji University
- *Housing Purchase Restrictions and Entrepreneurship* - Chao Ma, Xiamen University

Discussants:

- Haifeng Qian, University of Iowa
- Jieping Chen, Tongji University
- Chao Ma, Xiamen University
- Rosella Nicolini, Universitat Autònoma de Barcelona

23. Understanding Challenges in Cities and Regions (Virtual)

Monday | 4:00 pm-6:00 pm | Mt Wilson

Chair: Ricardo Arguello, Universidad de Ibagué

- *Native Population Turnover & Emerging Segregation: The Role of Amenities, Crime and Housing* - Martin Korpi, Ratio Institute; Daniel Halvarsson, Ratio Institute; Özge Öner, Cambridge University; William A.V. Clark, University of California - Los Angeles; Oana Mihaescu, Södertörn University; Olof Bäckman, Stockholm University; John Östh, Uppsala University
- *Understanding the spread of COVID-19 infection in the major cities of the United States* - Khyati Malik, Ohio State University
- *Aspects of Income Inequality in a Creative Region* - Amit Batabyal, Rochester Institute of Technology
- *The Effect of Spatial Accessibility on Violent Crime Hot Spots in Korea: Applications of Discrete Spatial Econometrics Models* - Kyungjae Lee, Seoul National University
- *Agricultural policy and informality. A post conflict perspective in Colombia* - Ricardo Arguello, Universidad de Ibagué

Discussants:

- Khyati Malik, Ohio State University

- Amit Batabyal, Rochester Institute of Technology
- Kyungjae Lee, Seoul National University
- Ricardo Arguello, Universidad de Ibagué
- Martin Korpi, Ratio Institute

24. Urban Growth & Sprawl (Virtual)

Monday | 4:00 pm-6:00 pm | Torrey's Peak

Chair: Conor O'Driscoll, University College Cork

- *Urban growth in the long term: Belgium, 1880–1970* - Rafael González-Val, Universidad de Zaragoza; Arturo Ramos, Universidad de Zaragoza; Samuel Standaert, Ghent University
- *Measuring and Exploring the Dynamic Patterns of Urban Spatial Structure in China, 2000 to 2020* - Wenzheng Li, Cornell University
- *Retail Sprawl and CO2 emissions: the location of large retail centres in Irish cities* - Conor O'Driscoll, University College Cork; Frank Crowley, University College Cork; Justin Doran, University College Cork; Noirín McCarthy, University College Cork

Discussants:

- Wenzheng Li, Cornell University
- Conor O'Driscoll, University College Cork
- Rafael González-Val, Universidad de Zaragoza

Wednesday, November 10, 2021

In-Person Meetings in Denver, CO

25. [Workshop] Spatial Data Analysis with PySAL And GeoSNAP

Wednesday | 8:00 am-5:00 pm | Mt Columbia

Instructors:

- Sergio J. Rey. Professor of Public Policy & Founding Director of the Center for Geospatial Sciences at the University of California, Riverside.
- Elijah Knaap. Project director for PySAL & the creator of the open-source package STARS: Space-Time Analysis of Regional Systems.

A unique feature of this tutorial is the use of Python-based software tools for spatial data analysis. Python is an object-oriented scripting language that is gaining rapid adoption in the computational sciences. Since its initial release in July 2010, PySAL has been downloaded over 1 million times. This two-part tutorial will first provide participants with an introduction to Python and related tools for spatial and regional analysis. Part I is thus designed for participants with no prior Python experience, while the second part assumes knowledge of materials covered in Part I. In the second part of the tutorial, participants will learn version 2.5 of PySAL applied to spatial and regional analysis.

Registration required. For more information: <http://www.narsc.org/newsite/wp-content/uploads/2021/07/PySAL.pdf>

26. [Workshop] Occupation, Environmental, and Even More Data in IMPLAN

Wednesday | 8:00 am-5:00 pm | Mt Wilson

Instructors:

- Candi Clouse, PhD. Director of Education Services for IMPLAN.
- Michael Nealy. Education Support Specialist at IMPLAN.

This IMPLAN workshop is a one-day interactive training course designed for veteran IMPLAN users to dive into the new offerings in IMPLAN including occupation data, environmental data, and our Data Library. The workshop will cover the three newest offerings in IMPLAN. IMPLAN occupation data shows estimates of occupation employment, wages, hours, and core competencies which include knowledge, skills, abilities, education, work experience, and on-the-job training levels for each of over 800 different occupations. Occupation data can be examined for each region and is tied to economic impact analyses.

IMPLAN's environmental data consist of Industry-specific coefficients of physical emissions or resource use per dollar of Industry Output. This brand-new dataset will be released in the summer of 2021 and this will be the first training to dig into how the environmental data corresponds to economic impacts analyses. Finally, this workshop will dive into IMPLAN's Data Library. This is an improved option for comparing data across regions, industries, and time. Data Library is a new IMPLAN data product powered by Looker that allows you to produce data queries and reports on any region in the US on commodities, core competencies, deflators, demographics, employment & wages, environmental, industry, occupation, tax, and trade flow data. Upon completion of the workshop, users should feel comfortable using the new data offerings in conjunction with their economic impact analyses.

Registration required. For more information: <http://www.narsc.org/newsite/wp-content/uploads/2021/05/IMPLAN-NARSC-Workshop-Outline-2021.pdf>

27. [Workshop] Using Convex Combinations of Spatial Weight Matrices **Wednesday | 10:00 am-2:00 pm | Mt Oxford**

Instructor: James P. LeSage, Professor Emeritus, University of Toledo

This workshop will focus on cross-sectional and spatial panel regression models that rely on convex combinations of weight matrices. The workshop relies on my new Spatial Panel Data Toolbox for MATLAB (available for free at: www.spatial-econometrics.com). Spatial regression models can rely on more than a single weight matrix, each with an estimated weight parameter that can be interpreted as indicating the relative importance of the type of connectivity described by each weight matrix. For example, models for patent/knowledge production often rely on technological similarity between regions in place of spatial proximity of regions. A convex combination model would allow use of both spatial and technological weight matrices, with estimated parameters (say) 0.3 assigned to spatial weights matrix and 0.7 to the technological weights pointing to relatively more importance associated with technological similarity between regions. The intended audience is regional scientists using spatial regression modeling in empirical studies.

Free. Registration required. For more information: <http://www.narsc.org/newsite/wp-content/uploads/2021/09/Using-Convex-Combinations-of-Spatial-Weight-matrices-JimLeSage.pdf>

Plenary Session
The RSAI Fellows Lecture
Wednesday | 6:30 pm-7:30 pm | Aspen

- Chair: Sergio Rey, University of California, Riverside.
- Speaker: Adam Rose. University of Southern California.

Icebreaker Reception
Wednesday | 8:00 pm-9:00 pm | Aspen Foyer

Thursday, November 11, 2021

In-Person Meetings in Denver, CO

30. [Special Session] Advanced Brainstorm Carrefour (ABC) of The Regional Science Academy: Pandemic and the City

Thursday | 8:00 am-10:00 am | Mt Columbia

Organizers: Güney Celbiş; Karima Kourtiti, Open University, The Netherlands; and Peter Nijkamp, Open University, The Netherlands

[Zoom link to Pandemic and the City](#)

Chair: Güney Celbiş

Welcome: Peter Nijkamp, Open University, The Netherlands, Vice President of The Regional Science Academy (TRSA)

- A Post-Corona Perspective for Smart Cities: "Should I Stay or Should I Go?" - Saskia Sassen, Columbia University; Karima Kourtiti, Open University, The Netherlands
- The Pandemic Challenge, Big Data, and Cities - Laurie Schintler, George Mason University
- A Post-2021 Space - Michael Lahr, Rutgers University
- There will be No Post-Covid City - Helen Couclelis, University of California, Santa Barbara

31. [Special Session] Regional/Rural Development I: Broadband

Thursday | 8:00 am-10:00 am | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: John Pender, USDA Economic Research Service

- *Broadband and local economic development: Evidence from Louisiana* - Tim Komarek, Old Dominion University; Gary Wagner, University of Louisiana at Lafayette
- *Measuring the Impact of the Broadband Initiatives Program on Property Values* - Joshua Goldstein, University of Virginia; Aritra Halder, University of Virginia; John Pender, USDA Economic Research Service; Neil Kattampallil, University of Virginia; Devika Mahoney-Nair, University of Virginia; Aaron Schroeder, University of Virginia; Stephanie Shipp, University of Virginia; Sallie Keller, University of Virginia

- *Place-Based Subsidies and Employment Growth in Rural America: Evidence from the Broadband Initiatives Program* - Anil Rupasingha, USDA; John Pender, USDA Economic Research Service; Ryan Williams, USDA Economic Research Service
- *Broadband, Self-Employment, and Work-from-Home – Evidence from the American Community Survey* - Luyi Han, Pennsylvania State University

Discussants:

- Joshua Goldstein, University of Virginia
- Anil Rupasingha, USDA
- John Pender, USDA Economic Research Service
- Tim Komarek, Old Dominion University

32. NARSC Business Meeting (By Invitation Only)
Thursday | 8:00 am-10:00 am | Colorado A

Coffee Break
Thursday | 10:00 am-10:30 am | Columbia Foyer

Plenary Session
The NARSC Presidential Address
Thursday | 10:30 am-12:30 pm | Aspen

- **Chair:** Jason Brown, Federal Reserve Bank of Kansas City
- **Speaker:** Steve Deller, University of Wisconsin - Madison

Lunch
Thursday | 12:30 pm-1:30 pm | on your own

34. Impacts of Covid-19 on People and Small Businesses

Thursday | 1:30 pm-3:30 pm | Mt Columbia

Chair: Soomi Lee, University of La Verne

- *Understanding mobility change in response to COVID-19: A Los Angeles Case Study* - Yougeng Lu, University of Southern California; Genevieve Giuliano, University of Southern California
- *The Effects of COVID-19 on the U.S. Labor Force Nonparticipation* - Oudom Hean, North Dakota State University; Nattanicha Chairassamee, Kasetsart University
- *Different Sizes of Small Businesses In the COVID-19 Pandemic: The Role of Work from Home* - Ting Zhang, University of Baltimore
- *Regional Banking Market and Emergency Loans to Small Businesses: Examining the Paycheck Protection Program during the Covid-19 Pandemic* - Soomi Lee, University of La Verne

Discussants:

- Oudom Hean, North Dakota State University
- Ting Zhang, University of Baltimore
- Soomi Lee, University of La Verne
- Yougeng Lu, University of Southern California

35. [Special Session] Regional/Rural Development II: COVID-19

Thursday | 1:30 pm-3:30 pm | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Elizabeth Dobis, USDA Economic Research Service

- *Living and Working in Rural Regions: Survey Perceptions During the COVID Pandemic* - Mallory Rahe, University of Missouri - Columbia; Sarah Low, University of Missouri - Columbia; Andrew Van Leuven, University of Missouri - Columbia
- *Resiliency and Vulnerability to COVID-19 in Small Towns* - David Peters, Iowa State University; Nicole Novak, University of Iowa; Mark Berg, University of Iowa
- *Creative Accounting? Assessing the Economic Impact of COVID-19 on the Creative Industries in the Cardiff City-region* - Matthew Lyons, University of Birmingham
- *The Interaction of Healthcare Supply and Demand in the United States: Regionality of COVID-19 Infections and Deaths* - Elizabeth Dobis, USDA Economic Research Service; David McGranahan, USDA Economic Research Service

Discussants:

- Elizabeth Dobis, USDA Economic Research Service
- Andrew Van Leuven, University of Missouri - Columbia

- David Peters, Iowa State University
- Matthew Lyons, University of Birmingham

36. Regional Governance

Thursday | 1:30 pm-3:30 pm | Mt Princeton

Chair: Jaewon Lim, University of Nevada - Las Vegas

- *Network effects of Local corruption on Foreign Direct Investment: Evidence from China* - Yao-Yu Chih, Texas State University; Firat Demir, University of Oklahoma; Chenghao Hu, San Francisco State University; Hewei Shen, University of Oklahoma
- *State Media and the Transition to Democracy: Evidence from the Former GDR* - Matthias Brachert, Halle Institute for Economic Research
- *LitioMex: a new governance model for Lithium in Mexico. A Law & Economic analysis* - Rafael Garduno-Rivera, Universidad Panamericana; Miguel Marmolejo-Cervantes, UANL
- *The Improvement of the Regional Regulatory Governance System for Radiation Risk Management: Spatial Analysis on Radiation Hazards in South Korea* - Sangwon Lee, Korea Institute of Nuclear Safety; Jaewon Lim, University of Nevada - Las Vegas

Discussants:

- Matthias Brachert, Halle Institute for Economic Research
- Rafael Garduno-Rivera, Universidad Panamericana
- Sangwon Lee, Korea Institute of Nuclear Safety
- Yao-Yu Chih, Texas State University

37. [Special Session] Machine Learning in Regional Science: Perspectives, Methods, and Applications

Thursday | 1:30 pm-3:30 pm | Mt Wilson

Organizers: Kevin Credit, Maynooth University; Matthew Lehnert, Al Akhawayn University

Chair: Kevin Credit, Maynooth University

- *Machine Learning Application to Spatio-Temporal Modeling of Land-Use Changes Using Florida Parcel-Level Data* - Emre Tepe, University of Florida; Abolfazl Safikhani, University of Florida; Yuna Kim, University of Florida
- *Promoting Earthquake Risk Reduction for Wood-Frame Soft-Story Buildings: A Case Study of San Francisco's Seismic Retrofit Program* - Yating Zhang, University of Maryland - College Park; Juan Fung, national institute of standards and technology

- *T-GCN delay operator model for the predict DNL operators* - amirreza bagherzadehkhorsani, Pennsylvania State University; Terry Friesz, Pennsylvania State University
- *Explanatory random forest: A critical comparison of approaches using on-road CO2 emissions at the block group level* - Kevin Credit, Maynooth University; Matthew Lehnert, Al Akhawayn University; Barrett Lopez, University of Chicago

Discussants:

- Yating Zhang, University of Maryland - College Park
- amirreza bagherzadehkhorsani, Pennsylvania State University
- Kevin Credit, Maynooth University
- Emre Tepe, University of Florida

38. Spatial Analysis on the Labor Market

Thursday | 1:30 pm-3:30 pm | Torrey's Peak

Chair: John Winters, Iowa State University

- *Spatial social effects on the decision to participate in the youth labor market in a developing country* - Jhon James Mora R, Universidad ICESI
- *Spatial Variation in Census Responses, Voting Behavior, and Labor Participation: A Spatial SUR Analysis* - Zheng Tian, Pennsylvania State University; Stephan Goetz, Pennsylvania State University
- *Field-of-Study Mismatch and the Impact on Regional Growth* - Brandon Genetin, Ohio State University
- *Immigrant Self-Employment across the United States* - John Winters, Iowa State University

Discussants:

- Zheng Tian, Pennsylvania State University
- Brandon Genetin, Ohio State University
- John Winters, Iowa State University
- Jhon James Mora R, Universidad ICESI

39. [Special Session] Demographic Transitions: Regions, Cities and Neighborhoods

Thursday | 1:30 pm-3:30 pm | Maroon's Peak

Organizers: Bruce Newbold, McMaster University; Rachel Franklin, Newcastle University;

Chair: Bruce Newbold, McMaster University

- *The pathway to success: global education context and inequality in STEM* - Sijiao Xie, Arizona State University

- *Drought, Crop Yield and Outmigration, County-level Evidence from the U.S* - Farjana Ahmed, Colorado State University
- *The Impact of the Two Child Policy on China's Fertility Rate* - seunghun chung, Ohio State University
- *Stepping Out: Technology Validation of Personal Mobility Monitoring Technology* - Bruce Newbold, McMaster University; Marla Beauchamp, McMaster University; Darren Scott, McMaster University; Renata Kirkwood, McMaster University; Cody Cooper, McMaster University; Matthew Brown, McMaster University; Vincenza Gruppuso, mcmaster; Ayse Kuspinar, McMaster University; Julie Richardson, McMaster University; Brenda Vrkljan, McMaster University; Qiyin Fang, McMaster University; Paul McNicholas, McMaster University; Paula Gardner, McMaster University; Manaf Zargoush, McMaster University

Discussants:

- Farjana Ahmed, Colorado State University
- seunghun chung, Ohio State University
- Bruce Newbold, McMaster University
- Sijiao Xie, Arizona State University

Coffee Break

Thursday | 3:30 pm-4:00 pm | Columbia Foyer

40. Public & Community Health

Thursday | 4:00 pm-6:00 pm | Maroon's Peak

Chair: Elham Erfanian, University of Kentucky

- *Reimagining the food desert: The role of relative food access on community health outcomes* - Shriya Rangarajan, Cornell University
- *Social Determinants of Health and Clinical Hypertension Prevalence on Chicago's South Side* - Marynia Kolak, University of Chicago
- *An Evaluation of Databases Drawn from the National Survey of Substance Abuse Treatment Services (N-SSATS)* - Brian Cushing, West Virginia University; Elham Erfanian, University of Kentucky

Discussants:

- Marynia Kolak, University of Chicago
- Elham Erfanian, University of Kentucky
- Shriya Rangarajan, Cornell University

41. [Special Session] Regional/Rural Development VIII: Health and Housing Impacts
Thursday | 4:00 pm-6:00 pm | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Scott Langford, University of North Carolina - Chapel Hill

- *We're Not in Dreamland Anymore: How Region-Level Opioid Use Affects Firm Resources and Industrial Composition* - Scott Langford, University of North Carolina - Chapel Hill
- *High Minded and High Priced: Legalized Marijuana's Impact on Denver Colorado Housing Prices* - Jorgen Rasmussen, Colorado State University; Stephan Weiler, Colorado State University
- *With Nothing But the Clothes on Their Back The Role of Personal Bankruptcy Protections on Homelessness: Do Property Exemptions Provide an Effective Cushion?* - Ignacio Correias, Colorado State University; Stephan Weiler, Colorado State University
- *Sources and Labor Market Consequences of Increases in Rural Prime Age Mortality and Disability* - Sarah Low, University of Missouri; David McGranahan, USDA Economic Research Service; Andrew Van Leuven, University of Missouri - Columbia; Mark C. White, University of Missouri; Rob Russell, University of Missouri

Discussants:

- Jorgen Rasmussen, Colorado State University
- Ignacio Correias, Colorado State University
- Sarah Low, University of Missouri
- Scott Langford, University of North Carolina - Chapel Hill

42. Determining Housing Prices
Thursday | 4:00 pm-6:00 pm | Mt Princeton

Chair: Rounaq Basu, Massachusetts Institute of Technology

- *Impact of the Oishei Children's Hospital on Surrounding Residential Property Prices* - Allyssa Wadsworth, West Virginia University
- *Housing Price Indices from volunteered data: The need for expansion weights* - Esteban Lopez, University of Texas - San Antonio
- *Better, faster, more diverse? Fiber internet expansion and its implications for housing prices and neighborhood demographics* - Nicholas Irwin, University of Nevada - Las Vegas; David Wolf, Kobe University
- *Exploring housing programs and market responses to car-lite policies: A LUTI microsimulation approach* - Rounaq Basu, Massachusetts Institute of Technology; Joseph Ferreira, Massachusetts Institute of Technology

Discussants:

- Esteban Lopez, University of Texas - San Antonio
- Nicholas Irwin, University of Nevada - Las Vegas
- Rounaq Basu, Massachusetts Institute of Technology
- Allyssa Wadsworth, West Virginia University

43. Measurements & Methods

Thursday | 4:00 pm-6:00 pm | Mt Wilson

Chair: Steven Deller, University of Wisconsin - Madison

- *Instrumental Variable Network Difference-in-Differences (IV-NDID) estimator: model and application* - Sandy Dall'erba, University of Illinois - Urbana-Champaign; William Ridley, University of Illinois - Urbana-Champaign; Yilan Xu, University of Illinois - Urbana-Champaign; Andre Chagas, University of São Paulo
- *Forecasting Regional Unemployment across National Boundaries* - Roberto Patuelli, University of Bologna; Matías Mayor, University of Oviedo
- *Impacts of variable uncertainty in spatial interaction modeling of population flows* - Yongwan Chun, University of Texas - Dallas; Daniel Griffith, University of Texas - Dallas; David Wong, George Mason University
- *Understanding the Differences in Labor Force Participation Rates* - Heather Stephens, West Virginia University; Steven Deller, University of Wisconsin - Madison

Discussants:

- Roberto Patuelli, University of Bologna
- Daniel Griffith, University of Texas - Dallas
- Steven Deller, University of Wisconsin - Madison
- Sandy Dall'erba, University of Illinois - Urbana-Champaign

44. [Special Session] Diversity, Equity, and Inclusion in Regional Economic Development - REMI Sponsored

Thursday | 4:00 pm-6:00 pm | Mt Columbia

Organizer: Fred Treyz, Regional Economic Models Inc

Chair: Fred Treyz, Regional Economic Models Inc

- *Credit Availability for Minority Business Owners in an Evolving Credit Environment: Before and During the COVID-19 Pandemic* - Mark Schweitzer, Federal Reserve Bank of Cleveland; Brett Barkley, Federal Reserve Bank of Cleveland

- *House Prices in Black Neighborhoods: Exploring Heterogeneity Across the House Price Distribution* - Tammy Leonard, University of Dallas; Lei Zhang, North Dakota State University
- *Transit-induced Agglomeration, Opportunity, and Equity: A spatial econometric analysis on job opportunity by skill level and industry sector in Philadelphia, PA* - .Seunghoon Oh, University of Cincinnati; Rainer vom Hofe, University of Cincinnati
- *REMI Modeling of Diversity, Equity, and Inclusion (DEI) Impacts of National, State, and Local Policy* - Fred Treyz, Regional Economic Models Inc; Peter Evangelakis, Regional Economic Models Inc; Katy Koon, Regional Economic Models Inc; Haozheyi Guan, Regional Economic Models Inc; Kevin Persons, Regional Economic Models Inc; May Lin, Regional Economic Models Inc

Discussants:

- Tammy Leonard, University of Dallas
- Seunghoon Oh, University of Cincinnati
- Fred Treyz, Regional Economic Models Inc
- Mark Schweitzer, Federal Reserve Bank of Cleveland

45. Measuring Intangibles

Thursday | 4:00 pm-6:00 pm | Torrey's Peak

Chair: Mckenzie Carvalho, Mississippi State University

- *Operationalization of Well-Being: A Benefit of the Doubt model for Dutch municipalities* - Jeroen Content, PBL Netherlands Environmental Assessment Agency; Mark Thissen, PBL Netherlands Environmental Assessment Agency
- *Measuring environmental performance in a Colombian University: The case of the EAN University carbon footprint* - Enrique Gilles, College of Higher Studies of Administration
- *Measuring Regional Financial Literacy: The Comparison of Methods and Results* - Mckenzie Carvalho, Mississippi State University; Ayoung Kim, Mississippi State University; Rebecca Smith, Mississippi State University

Discussants:

- Enrique Gilles, College of Higher Studies of Administration
- Mckenzie Carvalho, Mississippi State University
- Jeroen Content, PBL Netherlands Environmental Assessment Agency

46. NERSA meeting (Open to All)
Thursday | 5:00 pm-6:00 pm | Colorado A

Reception
Sponsored by IMPLAN
Thursday | 6:30 pm-8:00 pm | Aspen Foyer

Friday, November 12, 2021

In-Person Meetings in Denver, CO

48. Impacts of Agricultural Production

Friday | 8:00 am-10:00 am | Maroon's Peak

Chair: Shriya Rangarajan, Cornell University

- *Measuring crop diversity and agricultural intensification: An impact of bioenergy consumption on water quality* - Seong Yun, Mississippi State University; Matthew Interis, Mississippi State University
- *Hoggin' the Road: Pork Slaughterhouses Increase Heavy Truck Traffic, Reducing Road Quality* - Benjamin Blemings, Cornell University; Margaret Bock, Goucher College; Alex Scarcioffolo, Georgia College & State University
- *Economic Valuation of Hypoxia Impacts on Blue Crab Fishery in the Gulf of Mexico* - Shelby Brewer, Mississippi State University; Seong Yun, Mississippi State University; Daniel Petrolia, Mississippi State University
- *Influences of social capital on the resilience of local food networks: A case-study in Upstate New York* - Shriya Rangarajan, Cornell University

Discussants:

- Margaret Bock, Goucher College
- Shelby Brewer, Mississippi State University
- Shriya Rangarajan, Cornell University
- Seong Yun, Mississippi State University

49. [Special Session] Regional/Rural Development IV: Gender and Industry Studies

Friday | 8:00 am-10:00 am | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Zheng Tian, Pennsylvania State University

- *Female Farmers and Community Wellbeing* - Steven Deller, University of Wisconsin - Madison; Claudia Schmidt, Pennsylvania State University; Stephan Goetz, Pennsylvania State University; Zheng Tian, Pennsylvania State University
- *A New Look at the Gender Wage Gap* - Ayoung Kim, Mississippi State University; Brigitte Waldorf, Purdue University
- *Extractive Industry and Gendered Employment Outcomes* - Tessa Conroy, University of Wisconsin - Madison; Mairi-Jane Fox, Regis University
- *Tourism and Economic Growth in Georgia* - Elene Murvanidze, Colorado State University

Discussants:

- Ayoung Kim, Mississippi State University
- Tessa Conroy, University of Wisconsin - Madison
- Elene Murvanidze, Colorado State University
- Zheng Tian, Pennsylvania State University

50. Environment and the Economy

Friday | 8:00 am-10:00 am | Mt Wilson

Chair: Harvey Cutler, Colorado State University

- *Simulation Modeling of the Environmental-economic Policy Evaluation in Finland* - Katsuhiro Sakurai, Aalto University; Ilkka Jokinen, Aalto University; Matti Lehtonen, Aalto University
- *Identifying the atmospheric and economic key drivers of global air pollution change: a combined SDA approach* - Sandy Dall'erba, University of Illinois - Urbana-Champaign; Yilan Xu, University of Illinois - Urbana-Champaign; Nicole Riemer, University of Illinois - Urbana-Champaign
- *Estimating the economic impacts of cost savings in electricity generation due to improved windspeed forecasts* - Harvey Cutler, Colorado State University; Brad Hartman, Colorado State University; Hwayoung Jeon, Colorado State University; Martin Shields, Colorado State University; Dave Turner, U.S. Department of Commerce

Discussants:

- Sandy Dall'erba, University of Illinois - Urbana-Champaign
- Harvey Cutler, Colorado State University
- Katsuhiro Sakurai, Aalto University

51. [Special Session] The New Data Revolution in Regional Science and the Dilemma of More, and Better Measurement: A Tribute to Stan Czamanski

Friday | 8:00 am-10:00 am | Mt Columbia

Sponsored by SAS (Special Academic Session) of The Regional Science Academy in cooperation with the International Regional Science Review

[Zoom link to the Session](#)

Organizers/coordinators: Dani Broitman, Technion - Israel Institute of Technology, Haifa; Karima Kourtit, Open University, The Netherlands; Daniel Czamanski; Peter Nijkamp, Open University, The Netherlands; Peter Batey, University of Liverpool; Alan Murray, University of California, Santa Barbara

Chair: Dani Broitman, Technion - Israel Institute of Technology, Haifa

Welcome: Kingsley Haynes, George Mason University, Vice-President of The Regional Science Academy (TRSA)

- *Demo-Economic Modeling: Some further Thoughts on Measuring the Economic Impact of Demographic Change* - Peter Batey, University of Liverpool; Geoffrey Hewings, University of Illinois-Urbana Champaign
- *Impacts of Monetary Policy on Consumer Demand of High- and Low-Income Groups in Indonesia* - Kieran P. Donaghy, Cornell University
- *The Drivers of Livable Cities: A Conceptual Approach* - Dani Broitman; Daniel Czamanski
- *A Structural Equation Model for Place-based City Love: An Application to Swedish Cities* - Karima Kourtiti, Open University, The Netherlands; Bart Neuts, KU Leuven, Belgium; Peter Nijkamp, Open University, The Netherlands; Marie H. Wahlstrom, KTH Stockholm, Sweden/ Tyrens, Stockholm, Sweden

52. [Special Session] Location and Spatial Analysis III

Friday | 8:00 am-10:00 am | Torrey's Peak

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California, Riverside

Chair: Alan Murray, University of California - Santa Barbara

- *Solving a location-allocation problem that addresses access and coverage* - Seonga Cho, University of California - Santa Barbara; Alan Murray, University of California - Santa Barbara; Somayeh Dodge, University of California - Santa Barbara
- *The alternatives to formulating classic location problems, part I: the p-median problem* - Richard Church, University of California - Santa Barbara
- *Assessing trauma center accessibility for the Improvement of healthcare equity using anti-covering approach* - Heewon Chea, University of Tennessee; Hyun Kim, University of Tennessee; Yongwan Chun, University of Texas – Dallas
- *Addressing multiple resource possibilities in the Weber model* - Alan Murray, University of California - Santa Barbara; Richard Church, University of California - Santa Barbara; Jiwon Baik, University of California - Santa Barbara

Discussants:

- Richard Church, University of California - Santa Barbara
- Heewon Chea, University of Tennessee
- Alan Murray, University of California - Santa Barbara
- Seonga Cho, University of California - Santa Barbara

53. Public Finance I

Friday | 8:00 am-10:00 am | Mt Princeton

Chair: Marina Manganaris, George Mason University

- *Expenditure Smoothing with Balanced Budget Rules: US State Governments* - Steven Craig, University of Houston; Bent Sorensen, University of Houston; Xavier Bautista, Sim Kee Boon Institute for Financial Economics; Priyam Verma, Aix-Marseille School of Economics; Yu-Hsin Hiu, University of Houston; Vasundhara Tanwar, University of Houston
- *Declining transport costs, declining tax base? The impact of limits to tax collection from e-commerce* - Juan Carlos Lopez, University of Denver
- *Crisis Impacts on Transportation Infrastructure Financing: Cost of Capital Considerations for P3 and Conventional Projects* - Marina Manganaris, George Mason University; Narae Lee, George Mason University; Carter Casady, George Mason University; Jonathan Gifford, George Mason University; Tim Hurley, George Mason University; Caroline Gao, George Mason University

Discussants:

- Juan Carlos Lopez, university of Denver
- Marina Manganaris, George Mason University
- Steven Craig, University of Houston

Coffee Break

Friday | 10:00 am-10:30 am | Columbia Foyer

55. [Special Session] Transportation and the COVID-19 Pandemic

Friday | 10:30 am-12:30 pm | Maroon's Peak

Organizers: Eleni Bardaka, North Carolina State University; Dimitra Pyrialakou, West Virginia University

Chair: Dimitra Pyrialakou, West Virginia University

- *An inverse OD matrix model to quantify Covid-19 propagation via transportation networks* - Daniel Graham, Imperial College London
- *The Impact of COVID-19 on Texas Rural Transit Districts with Emphasis on Their Older Adult Riders* - Mark Dinholb, Texas A&M University; Sarah Fasanando, Texas A&M University; Rebekka Dudensing, Texas A&M University; James Mjelde, Texas A&M University

- *Will Employees Continue to Telecommute after COVID-19 Pandemic?* - Motahare Mohammadi, University of Illinois - Chicago; Ehsan Rahimi, University of Illinois - Chicago; Amir Davatgari, University of Illinois - Chicago; Mohammadjavad Javadinasr, University of Illinois - Chicago; Ali Shamshiripour, Massachusetts Institute of Technology; Abolfazl Mohammadian, University of Illinois - Chicago; Deborah Salon, Arizona State University; Rishabh Singh Chauhan, University of Illinois - Chicago; Matthew Wigginton Conway, Arizona State University; Denise Capasso da Silva, Arizona State University; Sybil Derrible, University of Illinois - Chicago; Ram M. Pendyala, Arizona State University

Discussants:

- Motahare Mohammadi, University of Illinois - Chicago
- Daniel Graham, Imperial College London
- Mark Dinhl, Texas A&M University

**56. [Special Session] Regional/Rural Development V: Labor, Race and Ethnicity
Friday | 10:30 am-12:30 pm | Mt Oxford**

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Luke Petach, Belmont University

- *The Rise of Guard Labor in the United States: Evidence from Local Labor Markets* - Luke Petach, Belmont University; Anastasia Wilson, Hobart and William Smith Colleges
- *Pushed, Pulled, and Stuck: Labor Markets and Barriers to Growth for Business Owners of Color* - Nicholas Kacher, Scripps College; Austin Landini, Colorado State University; Stephan Weiler, Colorado State University; Tessa Conroy, University of Wisconsin - Madison; Mary McDermott, Harvard University
- *Exploring the relationship among the intensity of Farm to School program activities, the local food environment, and stocks of community wealth* - Pratyosh Kashyap, Colorado State University; Becca Jablonski, Colorado State University; Allie Bauman, Colorado State University
- *Impacts of the Broadband Initiatives Program on Different Racial and Ethnic Groups* - John Pender, USDA Economic Research Service; Joshua Goldstein, University of Virginia; Aritra Halder, University of Virginia; Devika Mahoney-Nair, University of Virginia; Aaron Schroeder, University of Virginia; Stephanie Shipp, University of Virginia; Sallie Keller, University of Virginia; Anil Rupasingha, USDA

Discussants:

- Becca Jablonski, Colorado State University
- John Pender, USDA Economic Research Service
- Nicholas Kacher, Scripps College

- Luke Petach, Belmont University

57. Public Finance II

Friday | 10:30 am-12:30 pm | Mt Princeton

Chair: David Brasington, University of Cincinnati

- *Philadelphia's Sugary Beverage Tax: A CGE Analysis of Child Daycare and Labor Market Services* - Michael Lahr, Rutgers University
- *The effect of school district social media usage on school bond election outcomes* - Nicholas Messenger, Ohio State University
- *Rent Capture by Central Cities* - Steven Craig, University of Houston; Annie Hsu, University of Houston; Janet Kohlase, University of Houston
- *Investment in Local Government Services Spurs New Construction of Commercial and Retail Buildings* - David Brasington, University of Cincinnati; Evan Carson, University of Cincinnati

Discussants:

- Nicholas Messenger, Ohio State University
- Steven Craig, University of Houston
- David Brasington, University of Cincinnati
- Michael Lahr, Rutgers University

58. Property Values

Friday | 10:30 am-12:30 pm | Mt Wilson

Chair: Yang Zhou, University of North Texas

- *The Value of Historic District Status* - Carlianne Patrick, Georgia State University
- *The Impact of Legalizing Accessory Dwelling Unit Rentals on Property Values: Evidence from Ogden, Utah* - Jennifer Gnagey, Weber State University; Matt Gnagey, Weber State University; Christopher Yench, Bradley University
- *The Price Effect of Demolishing Abandoned Houses - The Case of Youngstown, Ohio* - Sowon Kim, Ohio State University
- *Craft Breweries and Residential Property Values* - Yang Zhou, University of North Texas; Michael Carroll, University of North Texas; Neil Reid, University of Toledo

Discussants:

- Jennifer Gnagey, Weber State University
- Sowon Kim, Ohio State University
- Yang Zhou, University of North Texas
- Carlianne Patrick, Georgia State University

59. [Special Session] Location and Spatial Analysis IV

Friday | 10:30 am-12:30 pm | Torrey's Peak

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California, Riverside

Chair: Daoqin Tong, Arizona State University

- *Evaluating wildfire risk reduction scenarios in the wildland-urban interface* - Amelia Pludow, University of California - Santa Barbara; Alan Murray, University of California - Santa Barbara
- *Revisiting the impact of climate change on agriculture through spatially-varying and place-tailored Ricardian estimates* - Noé J Nava, University of Illinois - Urbana-Champaign; Sandy Dall'erba, University of Illinois - Urbana-Champaign; A. Stewart Fotheringham, University of Arizona; Chang Cai, University of Illinois - Urbana-Champaign
- *Parameter settings in regionalization* - Xin Feng, University of Oklahoma
- *Evaluation of heuristics for local network connectivity optimization: A case study of complex spatial networks* - Hyun Kim, University of Tennessee; Jeremy Auerbach, Queen's University Belfast

Discussants:

- Noé J Nava, University of Illinois - Urbana-Champaign
- Xin Feng, University of Oklahoma
- Hyun Kim, University of Tennessee
- Amelia Pludow, University of California - Santa Barbara

54. [Special Session] International Regional Science Review Trends and Context: New Data Revolution

Friday | 10:30 am-11:00 am | Mt Columbia

Speaker: Alan Murray, University of California - Santa Barbara

60. [Special Session] Great Minds in Regional Science

Friday | 11:00 am-12:30 pm | Mt Columbia

Chair: Peter Batey (University of Liverpool), President of the Regional Science Academy (TRSA)

- *Karen Polenske and her Scholarship* - Geoff Hewings, University of Illinois-Urbana Champaign
- *Hendra Esmara and his Scholarship* - Yuri Mansury, Illinois Institute of Technology; Budy Resosudarmo, Australian National University

61. SRSA Business Meeting (By Invitation Only)

Friday | 12:30 pm-1:30 pm | Colorado A

Lunch

Friday | 12:30 pm-1:30 pm | on your own

62. [Special Session] Regional/Rural Development VI: Rural-Urban Bridges

Friday | 1:30 pm-3:30 pm | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Austin Landini, Colorado State University

- *Demographics and Economic Health: An Analysis of Colorado Census Tracts* - Austin Landini, Colorado State University
- *So Close, Yet So Far: The Benefits and Limits of Rural-Urban Industry Linkages* - Anders Van Sandt, University of Wyoming; Craig Carpenter, Texas A&M University
- *Rural Agglomeration: Examining the Population Distribution Between Towns and the Open-Countryside in Rural America* - Austin Sanders, U.S. Department of Agriculture; Sarah Low, University of Missouri - Columbia
- *A Tale of Four Cities, from Big City to Rural* - Jeff Romine, City & County of Broomfield

Discussants:

- Anders Van Sandt, University of Wyoming
- Austin Sanders, U.S. Department of Agriculture
- Jeff Romine, City & County of Broomfield
- Austin Landini, Colorado State University

63. Innovation: Landscape & Resilience

Friday | 1:30 pm-3:30 pm | Mt Wilson

Chair: Timothy Slaper, Indiana University

- *Firm Decline, Job Displacement, and Inventor Performance in US Cities, 1976-2014* - Melissa Haller, University of California - Los Angeles
- *How Entrepreneurial Experiences Foster Resilience - Survival and Performance of New Ventures and Incumbents* - Pontus Braunerhjelm, KTH Royal Institute of Technology; Emma Lappi, Jonkoping International Business School

- *'Hipsters vs. Geeks?' and Patenting Productivity: A Replication Using an Unbiased Measure* - Timothy Wojan, National Science Foundation
- *Defining the Landscape of Intellectual Property: Mapping patent creation by technology class* - Timothy Slaper, Indiana University

Discussants:

- Pontus Braunerhjelm, KTH Royal Institute of Technology
- Timothy Wojan, National Science Foundation
- Timothy Slaper, Indiana University
- Melissa Haller, University of California - Los Angeles

64. [Special Session] Location and Spatial Analysis V

Friday | 1:30 pm-3:30 pm | Torrey's Peak

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California, Riverside

Chair: Ran Wei, University of California, Riverside

- *Spatial and Racial Group Disparities of COVID-19 Mortality: an Exploratory Spatial Analysis to Understand Dimensions of Structural Factors* - Qinyun Lin, University of Chicago; Susan Paykin, University of Chicago; Dylan Halpern, University of Chicago; Andrés Crucetta, University of Chicago; Marynia Kolak, University of Chicago
- *What about institutions in Regional Science?* - Carlos Baez, University of California - Santa Barbara
- *Where Are Street Trees Planted? Urban Forestry and Environmental Equity* - Hanxue Wei, Cornell University; John Carruthers, Cornell University
- *Interpreting Spatial Regression Models with Multiplicative Interaction Explanatory Variables* - Yuxue Sheng, Guangxi University; James LeSage, University of Toledo

Discussants:

- Carlos Baez, University of California - Santa Barbara
- Hanxue Wei, Cornell University
- James LeSage, University of Toledo
- Qinyun Lin, University of Chicago

65. [Special Session] Roundtable Discussion: Pandemics, Location, and Mobility

Friday | 1:30 pm-3:30 pm | Mt Columbia

Sponsored by SAS (Special Academic Session) of Regional Science Policy (RSPP) & Practice and The Regional Science Academy (TRSA)

[Zoom link to Roundtable Discussion](#)

Organizers/coordinators: Tomaz Dentinho, University of Azores, Portugal); Karima Kourtit, Open University, The Netherlands; Louafi Bouzouina, University of Lyon, France/ Open University The Netherlands; Peter Nijkamp, Open University, The Netherlands

Chair: Karima Kourtit, Open University, The Netherlands; Louafi Bouzouina, University of Lyon, France/ Open University, The Netherlands

Welcome: Peter Batey, University of Liverpool, President of the Regional Science Academy (TRSA)

Panelists:

- Edward Glaeser, Harvard University, USA
- Peter Nijkamp, Open University, The Netherlands
- Carlo Ratti, Senseable City Lab, MIT, USA
- Shahla Hebets, Think Media Consulting, Denver, USA
- Kingsley Haynes, George Mason University, USA
- Tomaz Dentinho, University of Azores, Portugal

**66. [Special Session] The Child and Elderly Population in Regional Science
Friday | 1:30 pm-3:30 pm | Mt Princeton**

Organizer: Ting Zhang, University of Baltimore

Chair: Ting Zhang, University of Baltimore

- *Population Ageing, Immigration and Income Inequality: The Chicago Experience* - Geoffrey Hewings, University of Illinois - Urbana-Champaign
- *Older Migrant Workers in an Aging China* - Haobin Fan, Shanghai Academy of Social Sciences; Xi Bai, Guangdong University of Finance and Economics; Ting Zhang, University of Baltimore
- *Recruitment of children in Colombian Municipalities an Spatial Probit approach* - Juan Tomas Sayago Gomez, Universidad Icesi
- *The long-term economic impacts of migration on children* - Rodrigo Perez-Silva, Universidad Mayor; Orsa Kekezi, SOFI

Discussants:

- Haobin Fan, Shanghai Academy of Social Sciences
- Juan Tomas Sayago Gomez, Universidad Icesi
- Rodrigo Perez-Silva, Universidad Mayor
- Geoffrey Hewings, University of Illinois - Urbana-Champaign

**67. Transportation & Neighborhoods
Friday | 1:30 pm-3:30 pm | Maroon's Peak**

Chair: Isabelle Nilsson, University of North Carolina - Charlotte

- *Can Cities Leverage School Transportation Policy to Reduce Urban Congestion?* - Christopher Rick, Syracuse University
- *Planning car-lite neighborhoods: How does bikesharing affect auto-dependence and the housing market?* - Rounaq Basu, Massachusetts Institute of Technology; Joseph Ferreira, Massachusetts Institute of Technology
- *A New Neighborhood Connectivity Matrix in Geographically Weighted Regression* - Hanxue Wei, Cornell University; Liao Zhu, Cornell University
- *A Longitudinal Analysis of the Relationship between Transportation Amenities and Neighborhood Change using Text from Property Listings* - Isabelle Nilsson, University of North Carolina - Charlotte; Elizabeth Delmelle, University of North Carolina - Charlotte

Discussants:

- Rounaq Basu, Massachusetts Institute of Technology
- Hanxue Wei, Cornell University
- Isabelle Nilsson, University of North Carolina - Charlotte
- Christopher Rick, Syracuse University

Coffee Break

Friday | 3:30 pm-4:00 pm | Columbia Foyer

68. Covid-19 & the Economy around the Globe

Friday | 4:00 pm-6:00 pm | Mt Columbia

Chair: Euijune Kim, Seoul National University

- *Causal effects of the COVID-19 pandemic on the subnational public finances: case study for Colombia* - Javier Perez, Banco de la Republica (The Central Bank of Colombia)
- *COVID-19 threat to Economic Development in South Asia: An Empirical Study from Bangladesh* - Md. Mizanur Rahman Sarker, Sher-e-Bangla Agricultural University; TAHMINA BEGUM, Bangladesh University of Professionals
- *Stimulus Package Policy of Bangladesh Compare to Fiscal Space in Response to Covid-19: Perspective to South Asia* - TAHMINA BEGUM, Bangladesh University of Professionals; M. Mizanur Rahman Sarker, Sher-e-Bangla Agricultural University
- *How much does COVID-19 Pandemic cost regions of South Korea?* - Euijune Kim, Seoul National University; Hojune Lee, Seoul National University; Min Jiang, Seoul National University; Seulki Kim, Seoul National University

Discussants:

- M. Mizanur Rahman Sarker, Sher-e-Bangla Agricultural University
- TAHMINA BEGUM, Bangladesh University of Professionals
- Euijune Kim, Seoul National University
- Javier Perez, Banco de la Republica (The Central Bank of Colombia)

69. [Special Session] Regional/Rural Development VII: Creativity, Innovation and Methods

Friday | 4:00 pm-6:00 pm | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Anna Poerbonegoro, Colorado State University

- *The Creative and Entertainment Sectors and Employment Growth in Colorado* - Anna Poerbonegoro, Colorado State University
- *Is Surprise Enough for Identification? Evidence from Natural Gas Cash Windfalls and Household Borrowing* - Daniel Berkowitz, University of Pittsburgh; Andrew Boslett, Rochester Data Science Consortium; Jason Brown, Federal Reserve Bank of Kansas City; Jeremy Weber, University of Pittsburgh
- *The Geography of Self-Reported Innovation: Results from the 2018 Annual Business Survey* - Timothy Wojan, National Science Foundation
- *The Lag Structure of Rural and Urban Spillovers from Federal R&D* - John Mann, Michigan State University; Thomas Keene, Michigan State University; Scott Loveridge, Michigan State University
- *Do Patent & Technology Creation and Industry Production Co-locate? (And if so, is it industry dependent?)* - Timothy Slaper, Indiana University; Riley Zipper, Indiana University; Zheng Ping, Indiana University

Discussants:

- Timothy Slaper, Indiana University
- Timothy Wojan, National Science Foundation
- Thomas Keene, Michigan State University
- Jason Brown, Federal Reserve Bank of Kansas City
- Anna Poerbonegoro, Colorado State University

70. Environment and Public Health

Friday | 4:00 pm-6:00 pm | Mt Wilson

Chair: Monica Haddad, Iowa State University

- *Environment and Health Benefit of Cleaner Port Trucks in New Jersey* - Yeonkyeong Park, Cornell University

- *A “Pooling” Equilibrium? Harmful Algal Blooms’ Impact on Home Improvement Decisions* - Will Georgic, Ohio Wesleyan University; David Wolf, Kobe University
- *Urban heat island and vulnerable population in the Global South* - Monica Haddad, Iowa State University; Meen Wook Jung, Iowa State University; Ana Clara Mourao Moura, Federal University of Minas Gerais

Discussants:

- Will Georgic, Ohio Wesleyan University
- Monica Haddad, Iowa State University
- Yeonkyeong Park, Cornell University

71. Location Decisions

Friday | 4:00 pm-6:00 pm | Torrey's Peak

Chair: Gregory Macfarlane, Brigham Young University

- *Higher Education, College Location, and Migration* - Shu Cai, Jinan University; Xiaozhou Ding, Dickinson College; Rui Du, Oklahoma State University
- *The Impact of Geography, Compensation, and Quality of Life on Location Decisions by Aviation Professionals* - Russell Mills, Bowling Green State University; Jason Jolley, Ohio University
- *Delineating police patrol areas using a p-median location problem* - Changho Lee, University of Texas - Dallas; Hyun Kim, University of Tennessee; Yongwan Chun, University of Texas - Dallas; Daniel Griffith, University of Texas - Dallas
- *Utility-Based Accessibility to Community Resources: An Application of Location-Based Services Data* - Gregory Macfarlane, Brigham Young University; Michael Copley, Brigham Young University; Emma Stucki, Brigham Young University

Discussants:

- Russell Mills, Bowling Green State University
- Changho Lee, University of Texas - Dallas
- Gregory Macfarlane, Brigham Young University
- Shu Cai, Jinan University

72. [Special Session] The Colombian Economy and its Regional Structural Challenges

Friday | 4:00 pm-6:00 pm | Mt Princeton

Organizers: Eduardo Haddad, University of São Paulo; Jaime Bonet, Banco de la República; Geoffrey Hewings, University of Illinois - Urbana-Champaign

Chair: Eduardo Haddad, University of São Paulo

- *The Colombian Economy and its Regional Structural Challenges* - Eduardo Haddad, University of São Paulo; Jaime Bonet, Banco de la República; Geoffrey Hewings, University of Illinois - Urbana-Champaign
- *Revisiting the Structural Interdependence among Colombian Departments* - Fernando Perobelli, Federal University of Juiz de Fora; Geoffrey Hewings, University of Illinois - Urbana-Champaign
- *Trade in Value-Added: Does MFN Status Matter for Colombian Regions?* - Rodrigo Pacheco, University of São Paulo; Inácio Araújo, University of São Paulo; Eduardo Haddad, University of São Paulo

Discussants:

- Fernando Perobelli, Federal University of Juiz de Fora
- Inácio Araújo, University of São Paulo
- Geoffrey Hewings, University of Illinois - Urbana-Champaign

73. Transportation: Preferences, Choices, and Consequences

Friday | 4:00 pm-6:00 pm | Maroon's Peak

Chair: Lisa Losada-Rojas, Purdue University

- *Long-Distance Travel Impacts of Automated Vehicles: A Survey of American Households* - Yantao Huang, University of Texas - Austin; Natalia Zuniga-Garcia, University of Texas - Austin; Kara Kockelman, University of Texas - Austin
- *How does the cost of commuting impact an individual's choice in vehicle?* - Christina Gore, Ohio State University
- *Transportation-Related Energy Consumption: Exploring the Missing Links* - Dimitra Pyrialakou, West Virginia University; Amrit Williams, West Virginia University; Wilson McNeil, West Virginia University
- *Travel behavior in rural areas: Implications for physical activity and health* - Lisa Losada-Rojas, Purdue University; Dimitra Pyrialakou, West Virginia University; Konstantina Gkritza, Purdue University

Discussants:

- Christina Gore, Ohio State University
- Dimitra Pyrialakou, West Virginia University
- Lisa Losada-Rojas, Purdue University
- Yantao Huang, University of Texas - Austin

Saturday, November 13, 2021

In-Person Meetings in Denver, CO

74. [Special Session] Regional/Rural Development III: Migration and Mobility Saturday | 8:00 am-10:00 am | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Kenese Io, Colorado State University

- *Student Mobility and Academic Performance: Evidence from Colorado High Schools* - Kenese Io, Colorado State University
- *Natural and Structural Migrations: Refining Migration Classification* - Peter Schaeffer, West Virginia University
- *"Do Remittances Effect on School Attainment in Tajikistan?"* - Ulmaskhon Kalandarova, Colorado State University; Stephan Weiler, Colorado State University; Anita Pena, Colorado State University
- *Validating Community Disaster Resilience: Evidence from Economic Activity after TORNADOS* - Bradley Ewing, Texas Tech University; Maria Gomez Saldarriaga, East Carolina University; Jamie Kruse, East Carolina University; Anita Pena, Colorado State University

Discussants:

- Andrew Van Leuven, University of Missouri - Columbia
- Anita Pena, Colorado State University
- Peter Schaeffer, West Virginia University
- Ulmaskhon Kalandarova, Colorado State University

75. Papers on Migration

Saturday | 8:00 am-10:00 am | Mt Princeton

Chair: Andre Comandon, University of Southern California

- *Human capital migration in and development in oil and gas regions* - Michael Betz, Ohio State University
- *Bilateral Aid and Migration* - Hyeji Jang, Ewha Womans University
- *Moving away from extreme housing cost, where do people go? The case of the Bay Area region* - Andre Comandon, University of Southern California; Seva Rodnyansky, Occidental College; Marlon Boarnet, University of Southern California

Discussants:

- Hyeji Jang, Ewha Womans University
- Andre Comandon, University of Southern California
- Michael Betz, Ohio State University

76. Perspectives in Regional Science

Saturday | 8:00 am-10:00 am | Mt Wilson

Chair: Zhenhua Chen, Ohio State University

- *The Megaregion – Forms, Functions, and Potential? A Literature Review and Search for a Comparative Framework* - Brian Woodall, Georgia Institute of Technology
- *An Aggregate Approach to Estimating Quality of Life in Micropolitan Areas* - Amanda Weinstein, University of Akron; Michael Hicks, Ball State University; Emily Wornell, Ball State University
- *Rediscovering Regional Science: A Bibliometric Analysis* - Zhenhua Chen, Ohio State University; Laurie Schintler, George Mason University

Discussants:

- Amanda Weinstein, University of Akron
- Zhenhua Chen, Ohio State University
- Brian Woodall, Georgia Institute of Technology

77. [Special Session] Student-Authored Paper Competition Finalists Session

Saturday | 8:00 am-10:00 am | Mt Columbia

Organizer: Christa Court, University of Florida

Chair: Christa Court, University of Florida

- *Effect of Medicaid Expansion on Maternal Mental Health and Labor Supply* - Samhitha Srinivas, University of Wisconsin - Madison; Arwa Alalwani, University of Wisconsin - Madison
- *How does rural demographic changes affect rural policy outcomes: a cohort analysis of Korea's rural revitalization project* - Eunji Choi, Seoul National University
- *Does the Earned Income Tax Credit Birth New Establishments?* - Kristopher Deming, Colorado State University
- *Industrial Agglomeration and Infrastructure Investment Prioritisation: Evidence from Peruvian Firm-Level Data* - PEDRO HERRERA-CATALAN, AUTONOMOUS UNIVERSITY OF MADRID

Discussants: TBD

Coffee Break

Saturday | 10:00 am-10:30 am | Columbia Foyer

78. Regional Economies and their Industries

Saturday | 10:30 am-12:30 pm | Maroon's Peak

Chair: Theodore Panagiotidis, University of Macedonia

- *The Copper Price Super Cycle and its impact on the Chilean Regional Diversification* - Patricio Aroca, Universidad Adolfo Ibáñez; Esteban López, Universidad Adolfo Ibáñez
- *Rebuilding a Regional Logistics System in a Post-Conflict Zone in the Presence of Multiple Non-Cooperative Agents* - Terry Clower, George Mason University; Kieran Donaghy, Cornell University; Michael Ferris, University of Wisconsin - Madison; Terry Friesz, Pennsylvania State University; Adam Rose, University of Southern California
- *How Important is Tourism for Growth: A Panel Quantile Regression Approach* - Theodore Panagiotidis, University of Macedonia; Maurizio Mussoni, University of Bologna; George Voucharas, University of Macedonia

Discussants:

- Kieran Donaghy, Cornell University
- Theodore Panagiotidis, University of Macedonia
- Patricio Aroca, Universidad Adolfo Ibáñez

79. [Special Session] Regional/Rural Development IX: Entrepreneurship and Rural Economic Development

Saturday | 10:30 am-12:30 pm | Mt Oxford

Organizers: Sarah Low, University of Missouri; Stephan Weiler, Colorado State University

Chair: Ignacio Correas, Colorado State University

- *The Role of Personal Bankruptcy Protections on Entrepreneurship: Cushion v. Forgiveness* - Ignacio Correas, Colorado State University; Stephan Weiler, Colorado State University
- *Does Downtown Revitalization Enhance Entrepreneurship? Evidence from Firm Births in Rural Missouri* - Andrew Van Leuven, University of Missouri - Columbia; Sarah Low, University of Missouri - Columbia; Alan Spell, University of Missouri - Columbia

- *Students or Prisoners: Contrasting Approaches to Rural Economic Development* - Katherine Chalmers, California State University - Sacramento; Walter Schwarm, California Department of Finance
- *What Matters for Lagging Regions? The Role of Entrepreneurship and Industrial Diversity in Rural and Distressed Areas* - Heather Stephens, West Virginia University; Zachary Keeler, Texas Tech University

Discussants:

- Andrew Van Leuven, University of Missouri - Columbia
- Katherine Chalmers, California State University - Sacramento
- Zachary Keeler, Texas Tech University
- Ignacio Correias, Colorado State University

80. Crime & Violence

Saturday | 10:30 am-12:30 pm | Mt Princeton

Chair: Amanda Ross, university of Alabama

- *To Be Blunt: The Impact of Marijuana Legalization on Crime Rates in California* - Gina Price, Ohio State University
- *Spatial Association of Built Environment with Crime Rate in Detroit: Did It Change In COVID-19?* - Ahmad Ilderim Tokey, Ohio State University; Yanqing Xu, University of Toledo
- *Does variability in climate precipitate intimate partner violence in sub-Saharan Africa? Does this operate through water insecurity?* - Amanda Ross, University of Alabama; Amber Pearson, Michigan State University; Elizabeth Mack, Michigan State University; Richard Marcantonio, University of Notre Dame; Andrew Zimmer, University of Arizona; Erin Bunting, Michigan State University; Audrey Culver Smith, University of Florida; Tom Evans, University of Arizona; Laura Miller-Graff, University of Notre Dame

Discussants:

- Ahmad Ilderim Tokey, Ohio State University
- Amanda Ross, University of Alabama
- Gina Price, Ohio State University

81. Covid-19 & U.S. Regions

Saturday | 10:30 am-12:30 pm | Mt Wilson

Chair: Karima Kourtit, Open University

- *COVID19 State Level Lockdown Policies on Regional Economic Activities* - seunghun chung, Ohio State University; Elena Irwin, Ohio State University
- *Competitive or Complementary Destination Choices of Tourists in COVID-19 Pandemic: A Case Study of Las Vegas and its Surrounding Tourism Destinations* - Jaewon Lim, University of Nevada - Las Vegas; Karima Kourtiti, Open University; Peter Nijkamp, Open University; Christopher Stream, University of Nevada - Las Vegas
- *Disparities in Accessibilities and Acceptance of COVID-19 Vaccinations among the Counties of Texas over Time* - Michael Tiefelsdorf, University of Texas – Dallas; Kyunghye Rhyu, University of Texas – Dallas
- *CGE exploration of economic, environmental, and social changes to Hawaii Post-Covid 19* - patrick buckley, Western Washington University; jason levy, University of Hawaii - West Oahu

Discussants:

- Jaewon Lim, University of Nevada - Las Vegas
- Michael Tiefelsdorf, University of Texas - Dallas
- patrick buckley, Western Washington University
- seunghun chung, Ohio State University

82. [Special Session] Student-Led Paper Competition Finalists Session Saturday | 10:30 am-12:30 pm | Mt Columbia

Organizer: Carlianne Patrick, Georgia State University

Chair: Carlianne Patrick, Georgia State University

- *State Failure, Violence and Trade: Deadly Trade Routes in Colombia* - Paul Jung, University of North Carolina - Charlotte; Jean-Claude Thill, University of North Carolina - Charlotte; Luis Armando Galvis-Aponte, Banco de la Republica, Columbia
- *Broadband's Impact on Rural Employment During COVID-19* - Catherine Isley, University of Missouri - Columbia; Sarah Low, University of Missouri - Columbia
- *The Effects of Tornadoes on Housing Prices in Moore, Oklahoma* - Whoi Cho, Oklahoma State University; Brian Whitacre, Oklahoma State University; Claudia Rhoades, Oklahoma State University
- *Housing prices and public transportation improvements. Evidence from Medellin, Colombia* - Luz Yadira Gómez-Hernández, Autonomous University of Barcelona; Miquel-Àngel Garcia-López, Universitat Autònoma de Barcelona, Institut d'Economia de Barcelona

Discussants: TBD

NARSC Award Luncheon

Saturday | 12:30 pm-2:30 pm | Aspen

84. Regional Labor Market Issues & Education

Saturday | 2:45 pm-4:45 pm | Mt Columbia

Chair: Jinhwan Oh, Ewha Womans University

- *The impact of placing public employment in lagging regions: Evidence from Germany* - Matthias Brachert, Halle Institute for Economic Research; Alexander Kubis, Institute of Employment Research (IAB); Mirko Titze, Halle Institute for Economic Research (IWH) - Member of the Leibniz Association
- *Individual wages and regional market accessibility* - Bartlomiej Rokicki, University of Warsaw; Andrzej Cieslik, University of Warsaw
- *The Gravity Approach of Inbound Education Aid: The Case of South Korea* - Jinhwan Oh, Ewha Womans University

Discussants:

- Bartlomiej Rokicki, University of Warsaw
- Jinhwan Oh, Ewha Womans University
- Mirko Titze, Halle Institute for Economic Research (IWH) - Member of the Leibniz Association

85. Regional Economy: Rural and Urban Interactions

Saturday | 2:45 pm-4:45 pm | Maroon's Peak

Chair: Benjamin Blemings, Cornell University

- *Decomposing the Europe's Great Recession: A Structural Decomposition Analysis of Southern European countries* - Joao Ferreira, University of Florida; Mengming Li, University of Florida; Christa Court, University of Florida
- *Expanded Alcohol Retail in Rural and Urban Areas: A Colorado Case Study* - Nathan Palardy, Colorado State University; Marco Costanigro, Colorado State University; Jude Bayham, Colorado State University; Joshua Berning, Colorado State University
- *Heterogenous Effects of Local Market Power Between Rural and Urban Veterinary Firms* - Benjamin Blemings, Cornell University; Clinton Neill, Cornell University

Discussants:

- Nathan Palardy, Colorado State University
- Benjamin Blemings, Cornell University
- Joao Ferreira, University of Florida

Participant Index

A.V. Clark, William (wclark@geog.ucla.edu): 23,56
Adlakha, Deepti (d.adlakha@qub.ac.uk): 10
Agrawal, Shubham (agrawa3@clemson.edu): 6
Ahmed, Farjana (farjana.ahmed@colostate.edu): 39
Ahmed, Usman (um.ahmed@mail.utoronto.ca): 14
Alalwani, Arwa (arwa.622@gmail.com): 77
Aminpour, Payam (payam.aminpourmohammadabadi@nist.gov): 5
Anantsuksomsri, Sutee (sutee.a@chula.ac.th): 3
Anders, John (janders@trinity.edu): 7
Araújo, Inácio (inaciofaj@gmail.com): 72
arcos, ariel (arielarcos2013@gmail.com): 15
Arguello, Ricardo (arguello.ricardo@gmail.com): 23
Aroca, Patricio (patricio.aroca@uai.cl): 78
Arundel, Jonathan (jonathan.arundel@gmail.com): 10
Auerbach, Jeremy (Jeremy.Auerbach@colostate.edu): 59
Avelino, Andre (Andre.FernandesTomonAvelino@nrel.gov): 20
Avery, Greg (Greg.Avery@nrel.gov): 20
Awasthi, Shantanu (shantanu.awasthi@ndsu.edu): 17
Bäckman, Olof (olof.backman@criminology.su.se): 23
Baez, Carlos (cabaiez@gmail.com): 64
Bagautdinova, Nailya (nailya.mail@mail.ru): 3
bagherzadehkhosravan, amirreza (abb6024@psu.edu): 37
Bai, Xi (baixipiaoyic@163.com): 66
Baik, Jiwon (jiwonbaik@ucsb.edu): 64
Baker, Nathan (bakerna7@msu.edu): 6
Bardaka, Eleni (ebardak@ncsu.edu): 55
Barkham, Richard (richard.barkham@cbre.com): 9
Barkley, Brett (brett.barkley@clev.frb.org): 44
Baron, Ethan (eth.baron@mail.utoronto.ca): 15
Bastos, Suzana Quinet (quinet.bastos@ufjf.edu.br): 16
Basu, Rounaq (rounaq@mit.edu): 42,67
Batabyal, Amit (aabgsh@rit.edu): 16,23
Batey, Peter (Pwjbatey@liverpool.ac.uk): 51,60,65
Bauman, Allie (allie.bauman@colostate.edu): 56
Bautista, Xavier (xmgbautista@gmail.com): 53
Bayham, Jude (Jude.Bayham@colostate.edu): 85
Beauchamp, Alaina (alain.m.beauchamp@uth.tmc.edu): 16
Beauchamp, Marla (beaucm1@mcmaster.ca): 39
BEGUM, TAHMINA (tahminanupur@gmail.com): 68
Beladi, Hamid (Hamid.Beladi@utsa.edu): 16

Berg, Mark (mark-berg@uiowa.edu): 35
 Berger, Julius (berger@ifo.de): 20
 Berkowitz, Daniel (dmberk@pitt.edu): 69
 Berning, Joshua (Joshua.Berning@colostate.edu): 85
 Betz, Michael (betz.40@osu.edu): 75
 Blemings, Benjamin (benblemings@gmail.com): 48,85
 Boarnet, Marlon (boarnet@price.usc.edu): 75
 Bock, Margaret (margaret.bock@goucher.edu): 48
 Boeing, Geoff (boeing@usc.edu): 10
 Bonet, Jaime (jbonetmo@banrep.gov.co): 72
 Borrayo, Rafael (mara@servidor.unam.mx): 9
 Boslett, Andrew (aboslet1@gmail.com): 69
 Box-Couillard, Sebastien (sb38@illinois.edu): 5
 Brachert, Matthias (matthias.brachert@iwh-halle.de): 36,84
 Brasington, David (david.brasington@uc.edu): 57
 Braunerhjelm, Pontus (pontus.braunerhjelm@indek.kth.se): 63
 Brewer, Shelby (slb928@msstate.edu): 48
 Brown, Jason (jason.brown@kc.frb.org): 33,69
 Brown, Matthew (brownmj3@mcmaster.ca): 39
 buckley, patrick (patrick.buckley@wwu.edu): 81
 Bunting, Erin (ebunting@msu.edu): 80
 Cabral Torres, René (rcabral@tec.mx): 14
 Cai, Chang (ccai5@illinois.edu): 59
 Cai, Shu (shucaijnu.edu.cn): 71
 Capasso da Silva, Denise (denise.silva@asu.edu): 55
 Caragliu, Andrea (andrea.caragliu@polimi.it): 9
 Carpenter, Craig (craigwesleycarpenter@gmail.com): 7,62
 Carrascal Incera, André (carrascalandre@uniovi.es): 18
 Carroll, Michael (Michael.Carroll@unt.edu): 58
 Carruthers, John (jc3437@cornell.edu): 12,18,64
 Carruthers, John (john.carruthers@cornell.edu): 12,18
 Carson, Evan (carsonen@mail.uc.edu): 57
 Carvalho, Mckenzie (mlc960@msstate.edu): 45
 Cary, Michael (macary@mix.wvu.edu): 20
 Casady, Carter (c.casady@ucl.ac.uk): 53
 Castano Zuluaga, Andres (ac986@cornell.edu): 8
 Cerdera, Nicholas (cerdera@usc.edu): 10
 Cerin, Ester (ester.cerin@acu.edu.au): 10
 Chagas, Andre (achagas@usp.br): 13,43
 Chairassamee, Nattanicha (chairassamee.1@buckeyemail.osu.edu): 34
 Chalmers, Katherine (chalmers@csus.edu): 79
 Champagne, Marie-Pier (marie-pier.champagne.5@ulaval.ca): 19
 Chang, Chu-Hsiang (cchang@msu.edu): 6
 Chávez, Alicia (alicia.chavez@ce.ucn.cl): 8
 Chea, Heewon (hchea@vols.utk.edu): 52

Chen, Jeff (contact@jeffchen.org): 21
 Chen, Jieping (Jieping_chen@yeah.net): 22
 Chen, Yong (yong.chen@oregonstate.edu): 1
 chen, yuzhou (yuzhouchen@usf.edu): 14
 Chen, Zhenhua (chen.7172@osu.edu): 9,19,76
 Cheng, Junmei (cheng.1359@osu.edu): 19
 Cheng, Shaoming (scheng@fiu.edu): 17
 Chih, Yao-Yu (y_c66@txstate.edu): 36
 Cho, Seonga (seonga_cho@ucsb.edu): 52
 Cho, Whoi (whoi@okstate.edu): 82
 Choi, Eunji (ejchoi@snu.ac.kr): 77
 Chun, Yongwan (ywchun@utdallas.edu): 43,52,56,71
 chung, seunghun (chung.627@osu.edu): 39,81
 Church, Richard (church@geog.ucsb.edu): 4,10,52,64
 Church, Richard (rick.church@ucsb.edu): 52
 Cieslik, Andrzej (cieslik@wne.uw.edu.pl): 84
 Clark, Brent (bbclark@unomaha.edu): 7
 Clower, Terry (tclower@gmu.edu): 78
 Comandon, Andre (comandon@usc.edu): 75
 Conroy, Tessa (tessa.conroy@wisc.edu): 49,56
 Content, Jeroen (jeroencontent@gmail.com): 45
 Conway, Matthew (matt@indicatrix.org): 13
 Cooper, Cody (cooperce@mcmaster.ca): 39
 Copley, Michael (michaeljcooley@gmail.com): 71
 Cornwall, Gary (gary.cornwall@bea.gov): 17,21
 Correas, Ignacio (sargoi@yahoo.com): 41,79
 Costanigro, Marco (Marco.Costanigro@ColoState.EDU): 85
 Cotten, Shelia (scotten@clemson.edu): 6
 Court, Christa (ccourt@ufl.edu): 77,85
 Cox, Sadie (sadiex@umich.edu): 4
 Craig, Steven (sgcraig@sbcglobal.net): 53,57
 Credit, Kevin (kevin.credit@mu.ie): 37
 Crowley, Frank (Frank.Crowley@ucc.ie): 24
 Crucetta, Andrés (andresc@uchicago.edu): 64
 CUI, Mingji (cui.mingji.iq@tut.jp): 11
 Cultice, Brian (cultice.7@osu.edu): 5,12
 Culver Smith, Audrey (audreyculver@ufl.edu): 80
 Cushing, Brian (brian.cushing@mail.wvu.edu): 40
 Cutler, Harvey (harvey.cutler@colostate.edu): 50
 da Motta Veiga, Serge (serge.damottaveiga@gmail.com): 7
 Daams, Michiel (m.n.daams@rug.nl): 9
 Dall'erba, Sandy (dallerba@illinois.edu): 43,50,59
 Daskin, Mark (msdaskin@umich.edu): 4
 Davatgari, Amir (Adavat2@uic.com): 55
 Dearmon, Jacob (JDearmon@okcu.edu): 10

Deller, Steven (scdeller@wisc.edu): 43,49
 Delmelle, Elizabeth (edelmell@uncc.edu): 67
 Deming, Kristopher (Kristopher.Deming@colostate.edu): 77
 Demir, Firat (fdemir@ou.edu): 36
 denti, daria (daria.denti@gssi.it): 2
 Dentinho, Tomaz (tomas.lc.dentinho@uac.pt): 65
 Derrible, Sybil (derrible@uic.edu): 55
 Ding, Xiaozhou (dingx@dickinson.edu): 71
 Dinhobl, Mark (markdinhobl@tamu.edu): 55
 Dobis, Elizabeth (eadobis@gmail.com): 35
 Dodge, Somayeh (sdodge@ucsb.edu): 52
 Donaghy, Kieran (kpd23@cornell.edu): 51,78
 Doran, Justin (Justin.Doran@ucc.ie): 24
 Dormady, Noah (dormady.1@osu.edu): 5
 Du, Rui (rui.du@okstate.edu): 71
 Dubé, Jean (Jean.Dube@esad.ulaval.ca): 19
 Dudensing, Rebekka (rmdudensing@tamu.edu): 55
 Duque, Juan (jduquec1@eafit.edu.co): 4,10
 Engesser, Valeska Katharina (valeska.katharina.engesser@vub.be): 6
 Erfanian, Elham (el.erfanian@gmail.com): 40
 Evangelakis, Peter (Peter.Evangelakis@remi.com): 44
 Evans, Tom (tomevans@arizona.edu): 80
 Ewing, Bradley (Bradley.Ewing@ttu.edu): 74
 Fan, Haobin (haobin@g.clemson.edu): 66
 Fang, Qiyin (qfang@mcmaster.ca): 39
 Fasanando, Sarah (sffasana@tamu.edu): 55
 Feng, Xin (applexin.feng@gmail.com): 59
 Ferreira, Joao (joao.ferreira@ufl.edu): 85
 Ferreira, Joseph (jf@mit.edu): 42,67
 Ferris, Michael (ferris@cs.wisc.edu): 78
 Figueroa-Armijos, Maria (mfigueroaarmijos@gmail.com): 7
 Finio, Nicholas (nfinio@umd.edu): 12
 Folch, David (dfolch@gmail.com): 16
 Foley, Riana (riana.foley@student.nmt.edu): 3
 Fotheringham, A. Stewart (sfotheri@asu.edu): 59
 Fouzia, Sultana (fouzias@oregonstate.edu): 1
 Fox, Mairi-Jane (mfox003@regis.edu): 49
 Franklin, Rachel (rachel.franklin@newcastle.ac.uk): 39
 Friesz, Terry (tlf13@psu.edu): 37,78
 FUKUMOTO, JUNYA (fukumoto@plan.civil.tohoku.ac.jp): 1
 Fung, Juan (Juan.fung@nist.gov): 37
 Galvis-Aponte, Luis Armando (lgalviap@banrep.gov.co): 82
 Gama, Fabio (f140383@gmail.com): 16
 Ganapati, Sukumar (ganapati@fiu.edu): 17
 Gao, Caroline (cgao5@masonlive.gmu.edu): 53

Garcia-López, Miquel-Àngel (MiquelAngel.Garcia@uab.cat): 82
 Gardner, Paula (gardnerp@mcmaster.ca): 39
 Garduno-Rivera, Rafael (rgardunor@up.edu.mx): 15,36
 Gawande, Kishore (kishore.gawande@mcombs.utexas.edu): 3
 Genetin, Brandon (genetin.4@buckeyemail.osu.edu): 38
 Georgic, Will (wgeorgic@gmail.com): 70
 Gifford, Jonathan (jgifford@gmu.edu): 53
 Giles-Corti, Billie (billie.giles-corti@rmit.edu.au): 10
 Gilles, Enrique (enrique.gilles@cesa.edu.co): 45
 Giraldo, Alejandro (agiraldoq@eafit.edu.co): 4
 Giuliano, Genevieve (giuliano@usc.edu): 34
 Gkritza, Konstantina (nadia@purdue.edu): 73
 Gnagey, Jennifer (jennifernagey@weber.edu): 58
 Gnagey, Matt (mattgnagey@weber.edu): 58
 Goetz, Stephan (sjg16@psu.edu): 38,49
 Goldstein, Joshua (jrg3bs@virginia.edu): 31,56
 Gomez Saldarriaga, Maria (gomezsaldarriagam14@students.ecu.edu): 74
 Gómez Tello, Alicia (alicia.gomez-tello@uv.es): 22
 Gómez-Hernández, Luz Yadira (lygomezh@unal.edu.co): 82
 González Mata, Enrique (enrique.gonzalez@un.org): 14
 González-Val, Rafael (rafaelg@unizar.es): 15,24
 Gore, Christina (christinagore13@gmail.com): 73
 Graham, Daniel (d.j.graham@imperial.ac.uk): 55
 Griffith, Daniel (dagriffith@utdallas.edu): 43,71
 Gruppuso, Vincenza (gruppuso@mcmaster.ca): 39
 Guan, Haozheyi (Haozheyi.Guan@remi.com): 44
 Haddad, Eduardo (ehaddad@usp.br): 11,72
 Haddad, Monica (haddad@iastate.edu): 70
 Haile, Beliyu (b.haile@cgiar.org): 18
 Halder, Aritra (gxk9jg@virginia.edu): 31,56
 Haller, Melissa (mhaller@ucla.edu): 63
 Halpern, Dylan (dhalpern@uchicago.edu): 64
 Halvarsson, Daniel (daniel.halvarsson@ratio.se): 23
 Han, Luyi (lkh5474@psu.edu): 31
 Haque, Afsana (afsanahaque@urp.buet.ac.bd): 4
 Hartman, Brad (bradhartman91@gmail.com): 50
 Hawkins, Jason (jason.hawkins@austin.utexas.edu): 14
 Hean, Oudom (oudom.hean@ndsu.edu): 34
 Helgeson, Jennifer (Jennifer.helgeson@nist.gov): 5
 Henebry, Geoffrey (henebry@msu.edu): 11
 HERRERA-CATALAN, PEDRO (peherrera@hotmail.com): 77
 Hewings, Geoffrey (hewings@illinois.edu): 18,51,66,72
 Hicks, Michael (mhicks@bsu.edu): 76
 Higgs, Carl (carl.higgs@rmit.edu.au): 10
 Hiu, Yu-Hsin (yhsu5@cougarnet.uh.edu): 53

Hsu, Annie (yuhsinhsuinuh@gmail.com): 57
 Hu, Chenghao (chhu@sfsu.edu): 36
 Huang, Xiao (xh010@uark.edu): 19
 Huang, Yantao (yanatao.h@utexas.edu): 73
 Hughes, Amy (AmyE.Hughes@UTSouthwestern.edu): 16
 Hurley, Tim (thurley5@gmu.edu): 53
 Inácio, Araújo (inacio.araujo@usp.br): 11
 Interis, Matthew (m.interis@msstate.edu): 48
 Io, Kenese (kenese@colostate.edu): 74
 Irwin, Elena (irwin.78@osu.edu): 12,81
 Irwin, Nicholas (nicholas.irwin@unlv.edu): 42
 Isley, Catherine (isleycatherine@gmail.com): 7,82
 Jablonski, Becca (becca.jablonski@colostate.edu): 56
 Jang, Hyeji (wkdgpwl0120@naver.com): 75
 Járosi, Péter (peter.jarosi@mail.wvu.edu): 85
 Javadinasr, Mohammadjavad (mjavad2@uic.edu): 55
 Jeon, Hwayoung (hwayoung.jeon@colostate.edu): 50
 Jiang, Min (minmin@snu.ac.kr): 68
 Jiang, Ruiwei (ruiwei@umich.edu): 4
 Jokinen, Ilkka (ilkka.a.jokinen@aalto.fi): 50
 Jolley, Jason (jolleyg1@ohio.edu): 71
 Jones, Mackenzie (jones.6342@osu.edu): 12
 Jung, Meen Wook (mjung@iastate.edu): 70
 Jung, Paul (pjung1@uncc.edu): 82
 Kacher, Nicholas (nkacher@scrippscollege.edu): 56
 Kadochnikova, Ekaterina (kad-ekaterina@yandex.ru): 3
 Kalandarova, Ulmaskhon (Ulmaskhon.Kalandarova@colostate.edu): 74
 Kashyap, Pratyosh (pratyosh.kashyap@colostate.edu): 56
 Kattampallil, Neil (nak3t@virginia.edu): 31
 Kawamoto, Kiyomi (kawamoto021@toyo.jp): 1
 Keeler, Zachary (zkeeler@ttu.edu): 79
 Keene, Thomas (thomasc.keene@gmail.com): 69
 Kekezi, Orsa (orsa.kekezi@sofi.su.se): 66
 Keller, Sallie (sak9tr@virginia.edu): 31,56
 Khan, Ihsan (ihsan.khan@ndsu.edu): 2,17
 Kim, Ayoung (a.kim@msstate.edu): 45,49
 Kim, Euijune (euijune@snu.ac.kr): 68
 Kim, Hyun (hkim56@utk.edu): 52,59,71
 Kim, Hyun (hkim9129@gmail.com): 2
 Kim, Seulki (skkim1120@snu.ac.kr): 68
 Kim, Sowon (kim.7139@osu.edu): 58
 Kim, Woosung (woosungkim@korea.ac.kr): 12
 Kim, Yuna (ynkim732@ufl.edu): 37
 Kirkwood, Renata (kirkwor@mcmaster.ca): 39
 Knaap, Gerrit (gknaap@umd.edu): 12

Kockelman, Kara (kkockelm@mail.utexas.edu): 73
 Kohlhase, Janet (janetkohlhase@sbcglobal.net): 57
 Kolak, Marynia (marynia.kolak@gmail.com): 40
 Kolak, Marynia (mkolak@uchicago.edu): 40,56,64
 Komarek, Tim (tim.komarek@gmail.com): 31
 Koon, Katy (Katy.Koon@remi.com): 44
 Korpi, Martin (martin.korpi@ratio.se): 23
 Kourtit, Karima (Karima.Kourtit@ou.nl): 30,51,65,81
 Kruse, Jamie (KRUSEJ@ecu.edu): 74
 Kubis, Alexander (alexander.kubis@iab.de): 84
 Kuspinar, Ayse (kuspinaa@mcmaster.ca): 39
 Kuzmyak, Richard (richkuz@outlook.com): 12
 Lahr, Michael (lahr@rutgers.edu): 30,57
 Lalinde, Juan G. (jlalinde@eafit.edu.co): 4
 Lambert, Dayton (dayton.lambert@okstate.edu): 8
 Lamers, Patrick (Patrick.Lamers@nrel.gov): 20
 Landini, Austin (alandini@colostate.edu): 56,62
 Langford, Scott (scottlangford2@gmail.com): 41
 Lansford, Notie (notie.lansford@okstate.edu): 8
 Lappi, Emma (emma.lappi@ju.se): 63
 Lara, Bernardo (bdo.lara@gmail.com): 15
 Lee, Changho (changho.lee@utdallas.edu): 71
 Lee, Hojune (dlghwnsdlekd@naver.com): 68
 Lee, Kyungjae (lkj9311@snu.ac.kr): 23
 Lee, Narae (nlee25@gmu.edu): 6,53
 Lee, Sangwon (its2401@kins.re.kr): 36
 Lee, Soomi (slee4@laverne.edu): 34
 Lehnert, Matthew (M.Lehnert@uiowa.edu): 37
 Lehtonen, Matti (matti.lehtonen@aalto.fi): 50
 Leon Torres, Jose Antonio (jjtonoleont@hotmail.com): 11
 Leonard, Tammy (tleonard@udallas.edu): 44
 LeSage, James (james.lesage@txstate.edu): 52
 levy, jason (jlevy@hawaii.edu): 81
 Li, Jingwen (jl3447@cornell.edu): 12
 Li, Mengming (Mengming.Li@nrel.gov): 20,85
 Li, Wenzheng (wl563@cornell.edu): 18,24
 Li, Yun (li.10490@osu.edu): 13
 Lim, Jaewon (jaewon.lim@unlv.edu): 36,81
 Lin, May (Zhuyin.Lin@remi.com): 44
 Lin, Qinyun (qinyunlin@uchicago.edu): 64
 LIU, Huan (huan.liu.b05@kyoto-u.jp): 1
 Liu, Shiqin (liu.shiqi@northeastern.neu.edu): 10,56
 Livy, Mitchell (mlivy@fullerton.edu): 21
 Long, Fenjie (longfj@mail.tsinghua.edu.cn): 22
 López Cabrera, Jesús (jalcabrera5@gmail.com): 14

Lopez, Barrett (barrettlopez@uchicago.edu): 37
 López, Esteban (esteban.lopez@uai.cl): 78
 Lopez, Esteban (lopezchoa.estebanalejandro@gmail.com): 42
 Lopez, Juan Carlos (juancarlos.lopez@du.edu): 53
 Losada-Rojas, Lisa (llosadar@purdue.edu): 73
 Loveridge, Scott (loverid2@msu.edu): 69
 Low, Sarah (lowsa@missouri.edu): 7,35,62,79,82
 Low, Sarah (sarahalow@gmail.com): 31,35,41,49,56,62,69,74,79
 Lowe, Melanie (mdlowe@unimelb.edu.au): 10
 Lu, Yougeng (yougengl@usc.edu): 34
 Lyons, Matthew (m.lyons@bham.ac.uk): 35
 M. Pendyala, Ram (Ram.Pendyala@asu.edu): 55
 Ma, Chao (ma.271@buckeyemail.osu.edu): 22
 Macfarlane, Gregory (gregmacfarlane@gmail.com): 71
 Maciel, Ana Beatrice (anabeatricemaciel1998@gmail.com): 16
 Mack, Elizabeth (emack@msu.edu): 6,11,80
 Mahoney-Nair, Devika (devikamn@virginia.edu): 31,56
 Malik, Khyati (malik.203@osu.edu): 23
 Manganaris, Marina (mmangana@gmu.edu): 53
 Mann, John (mannjoh3@msu.edu): 69
 Mansury, Yuri (ymansury@iit.edu): 12,60
 Marcantonio, Richard (Richard.A.Marcantonio.3@nd.edu): 80
 Marcén, Miriam (mmarcen@unizar.es): 15
 Marmolejo-Cervantes, Miguel (mmarmolejoc@uanl.edu.mx): 36
 Marz, Waldemar (marz@ifo.de): 20
 Mayor, Matías (mmayorf@uniovi.es): 43
 McCann, Philip (p.mccann@sheffield.ac.uk): 9
 McCarthy, Noirín (noirin.mccarthy@ucc.ie): 24
 McDermott, Mary (marymcdermott@college.harvard.edu): 56
 McGarity, Micajah (mmcgarity@jhu.edu): 10
 McGranahan, David (david.mcgranahan@usda.gov): 35,41
 McNeil, Wilson (whm0005@mix.wvu.edu): 73
 McNicholas, Paul (paulmc@mcmaster.ca): 39
 Mesa-Guerra, Carlos (cm956@cornell.edu): 8
 Messenger, Nicholas (messenger.37@buckeyemail.osu.edu): 57
 Mihaescu, Oana (oana.mihaescu@sh.se): 23
 Miller-Graff, Laura (lmiller8@nd.edu): 80
 Miller, Eric (eric.miller@utoronto.ca): 15,21
 Mills, Russell (millsrw@bgsu.edu): 71
 Mirtich, Laura (lmirtich@asu.edu): 13
 Mjelde, James (j-mjelde@tamu.edu): 55
 Moctezuma, David (rosasflo@usc.edu): 10
 Mohammadi, Motahare (mmoham73@uic.edu): 55
 Mohammadian, Abolfazl (kouros@uic.edu): 55
 Mora R, Jhon James (jjmora@icesi.edu.co): 38

Morin, Charles (morin.42@osu.edu): 5
 Moulton, Jeremy (moulton@email.unc.edu): 17
 Mourao Moura, Ana Clara (anaclaramoura@yahoo.com): 70
 Murray, Alan (amurray@ucsb.edu): 4,10,52,54,56,59,64
 Murvanidze, Elene (murvanidzee@gmail.com): 49
 Mussoni, Maurizio (maurizio.mussoni@unibo.it): 78
 Narasimhan, Giri (giri@fiu.edu): 17
 Nava, Noé J (noejnava2@gmail.com): 59
 Neill, Clinton (cln64@cornell.edu): 78
 Newbold, Bruce (newbold@mcmaster.ca): 39
 Nicolini, Rosella (rosella.nicolini@uab.cat): 22
 Nijkamp, Peter (pnijkamp@hotmail.com): 30,51,65,81
 Nilsson, Isabelle (inillsso1@uncc.edu): 67
 Noland, Robert (rnoland@ejb.rutgers.edu): 19
 Novak, Nicole (nicole-novak@uiowa.edu): 35
 O'Driscoll, Conor (117337281@umail.ucc.ie): 24
 Oh, Jinhwan (joh@ewha.ac.kr): 84
 Oh, Seunghoon (ohs2@mail.uc.edu): 44
 OKUDAIRA, Kotaro (okudaira.kotaro.ut@tut.jp): 11
 Okuyama, Yasuhide (okuyama@kitakyu-u.ac.jp): 5,11
 Öner, Özge (oo263@cam.ac.uk): 23
 Ordaz, Mario (mordazs@iingen.unam.mx): 11
 Ortega-Argiles, Raquel (R.OrtegaArgiles@bham.ac.uk): 7
 Östh, John (john.osth@kultgeog.uu.se): 23
 Oyarzo, Mauricio (mauriciooyarzo@udec.cl): 8
 Pacheco, Rodrigo (rcesarpacheco@gmail.com): 72
 Palardy, Nathan (npalardy@colostate.edu): 85
 Panagiotidis, Theodore (tpanag@uom.edu.gr): 78
 Paredes, Dusan (dparedes@ucn.cl): 8,15
 Park, Yeonkyeong (yp394@cornell.edu): 70
 Patrick, Carlianne (cpatrick@gsu.edu): 58,82
 Patuelli, Roberto (roberto.patuelli@unibo.it): 43
 Paykin, Susan (spaykin@uchicago.edu): 64
 Pearson, Amber (apearson@msu.edu): 80
 Pena, Anita (anita.pena@colostate.edu): 74
 Pender, John (john.pender@usda.gov): 31,56
 Peng, Qiong (xqpengumd@gmail.com): 12
 Perez-Silva, Rodrigo (rodrigo.perez@umayor.cl): 66
 Perez, Javier (gjavierperezv@gmail.com): 68
 Perobelli, Fernando (fernando.perobelli@ufjf.edu.br): 72
 Persons, Kevin (Kevin.Persons@remi.com): 44
 Petach, Luke (luke.petach@belmont.edu): 56
 Peters, David (dpeters@iastate.edu): 35
 Petrolia, Daniel (d.petrolia@msstate.edu): 48
 Phuntarakit, Areen (superareenp@gmail.com): 3

Ping, Zheng (pzheng@indiana.edu): 69
 Pinto, Pablo (ppinto@central.uh.edu): 3
 Pinto, Santiago (pinto.santiago@gmail.com): 3
 Pludow, Amelia (bapludow@geog.ucsb.edu): 59
 Poerbonegoro, Anna (annap66@colostate.edu): 69
 Price, Gina (gprice825@gmail.com): 80
 Pyrialakou, Dimitra (dimitra.pyrialakou@mail.wvu.edu): 73
 Pyrialakou, Dimitra (vdprialala@gmail.com): 55,73
 Qian, Haifeng (haifeng.qian@gmail.com): 22
 Rahe, Mallory (mallory.rahe@missouri.edu): 35
 Rahimi, Ehsan (erahimi4@uic.edu): 55
 Ramos, Arturo (aramos@unizar.es): 24
 Rangarajan, Shriya (sr2248@cornell.edu): 40,48
 Rasmussen, Jorgen (jorgen.a.rasmussen@gmail.com): 41
 Reid, Neil (NEIL.REID@UTOLEDO.EDU): 58
 Restrepo, Daniel (daerestrepomo@utexas.edu): 10
 Rhoades, Claudia (claudam@ostatemail.okstate.edu): 82
 Richardson, Julie (jrichard@mcmaster.ca): 39
 Rick, Christopher (carick@syr.edu): 67
 Ridley, William (wridley@illinois.edu): 43
 Riemer, Nicole (nriemer@illinois.edu): 50
 Rodnyansky, Seva (srodnyansky@oxy.edu): 75
 Rokicki, Bartlomiej (brokicki@wne.uw.edu.pl): 84
 Romine, Jeff (jtromine@gmail.com): 62
 Roorda, Matthew (matt.roorda@utoronto.ca): 14
 Rose, Adam (adam.rose@usc.edu): 5,11,18,78
 Ross, Amanda (aross@cba.ua.edu): 80
 Ru, Yating (yr97@cornell.edu): 18
 Rupasingha, Anil (anil.rupasingha@usda.gov): 31,56
 Russell, Rob (russellrob@missouri.edu): 41
 Safikhani, Abolfazl (a.safikhani@ufl.edu): 37
 Sakurai, Katsuhiko (k-sakurai@ris.ac.jp): 50
 Salon, Deborah (dsalon@asu.edu): 13,55
 Sanders, Austin (adsf3d33@gmail.com): 62
 Sarker, M. Mizanur Rahman (sarker@sau.edu.bd): 68
 Sarker, Md. Mizanur Rahman (mrs_bd@yahoo.com): 68
 Sayago Gomez, Juan Tomas (juantomas.sayago@gmail.com): 66
 Scarcioffolo, Alex (ar0044@mix.wvu.edu): 48
 Schaeffer, Peter (peter.schaeffer@mail.wvu.edu): 74
 Schintler, Laurie (lschintl@gmu.edu): 30,76
 Schmidt, Claudia (czs786@psu.edu): 49
 Schroeder, Aaron (aaron.schroeder@virginia.edu): 31,56
 Schwarm, Walter (walter.schwarm@dof.ca.gov): 79
 Schweitzer, Mark (mark.schweitzer@clev.frb.org): 44
 Scott, Darren (scottdm@mcmaster.ca): 39

Shamshiripour, Ali (ashams5@uic.edu): 55
 Shen, Hewei (hewei.shen@ou.edu): 36
 Sheng, Yuxue (nkshengyuxue@126.com): 52
 SHIBUSAWA, Hiroyuki (hiro-shibu@tut.jp): 11
 Shields, Martin (martin.shields@colostate.edu): 50
 Shipp, Stephanie (sss5sc@virginia.edu): 31,56
 Sierra-Sosa, Daniel (dsierrasosa@gmail.com): 4
 Singh Chauhan, Rishabh (rchauh6@uic.edu): 55
 Slaper, Timothy (slaper@gmail.com): 63,69
 Smith, Rebecca (becky.smith@msstate.edu): 45
 Smith, Tony (tesmith@seas.upenn.edu): 10
 Sorensen, Bent (bsorensen@Central.UH.EDU): 53
 Spell, Alan (alan.spell@missouri.edu): 79
 Srinivas, Samhitha (sam19197@gmail.com): 13,77
 Standaert, Samuel (samuel.standaert@gmail.com): 24
 Stephens, Heather (heather.stephens@mail.wvu.edu): 43,79
 Stream, Christopher (chris.stream@unlv.edu): 81
 Stucki, Emma (stuckiemma@gmail.com): 71
 Sue Wing, Ian (isw@bu.edu): 18
 Tanvir, Mohammad Ridwan (ridwantanvir@gmail.com): 4
 Tanwar, Vasundhara (vtanwar@central.uh.edu): 53
 Tao, Ran (rtao@usf.edu): 14
 Tatano, Hirokazu (tatano.hirokazu.7s@kyoto-u.ac.jp): 1
 Tepe, Emre (emretepe@ufl.edu): 37
 Terzidis, Nikolaos (terzidisnik@gmail.com): 7
 Thill, Jean-Claude (Jean-Claude.Thill@uncc.edu): 3,82
 Thissen, Mark (mark.thissen@pbl.nl): 45
 Tian, Zheng (zzt36@psu.edu): 38,49
 Tiefelsdorf, Michael (tiefelsdorf@utd.edu): 81
 Titze, Mirko (mirko.titze@iwh-halle.de): 84
 Tokey, Ahmad Ilderim (ahmadtokey@gmail.com): 80
 Tong, Daoqin (Daoqin.Tong@asu.edu): 4,59
 Tontisirin, Nij (nij@ap.tu.ac.th): 3
 Treyz, Fred (fred@remi.com): 44
 Tu, Menger (tme18tc@gmail.com): 13
 Turner, Dave (dave.turner@noaa.gov): 50
 Vachal, Kimberly (kimberly.vachal@ndsu.edu): 2,17
 Valdivia, Marcos (marcosv@crim.unam.mx): 9
 Van Fossen, Jenna (vanfos10@msu.edu): 6
 Van Leuven, Andrew (avanleuven@missouri.edu): 35,41,74,79
 Van Sandt, Anders (avansand@uwyo.edu): 62
 Veneri, Paolo (paolo.veneri@oecd.org): 9
 Verma, Priyam (priyamverma.2992@gmail.com): 53
 vom Hofe, Rainer (vomhofr@ucmail.uc.edu): 44
 Voucharas, George (g.voucharas@uom.edu.gr): 78

Vrkljan, Brenda (vrkljan@mcmaster.ca): 39
 Wadsworth, Allyssa (allyssawadsworth@gmail.com): 42
 Wagner, Gary (wagnerg@gmail.com): 31
 Waldorf, Brigitte (bwaldorf@purdue.edu): 49
 Wang, Haoying (halking.econ@gmail.com): 3
 Wang, Sicheng (sicheng.wang@rutgers.edu): 6,19
 Wang, Zhuojun (zw553@cornell.edu): 12
 Weber, Jeremy (j.weber@pitt.edu): 69
 Wei, Dan (danwei@usc.edu): 18
 Wei, Hanxue (hw652@cornell.edu): 64,67
 Wei, Ran (ran.wei@ucr.edu): 4,10,52,56,59,64
 Weiler, Stephan (Stephan.Weiler@colostate.edu): 31,35,41,49,56,62,69,74,79
 Wein, Anne (awein@usgs.gov): 18
 Weinstein, Amanda (aweinstein@uakron.edu): 76
 Welch, Katie (katwelc@okstate.edu): 8
 Wentland, Scott (scott.wentland@bea.gov): 21
 Wentland, Scott (scottwentland@gmail.com): 17
 Whitacre, Brian (brian.whitacre@okstate.edu): 82
 White, Mark C. (whitemc@missouri.edu): 41
 Wigginton Conway, Matthew (mwconway@asu.edu): 55
 Williams, Amrit (avwilliams1@mix.wvu.edu): 73
 Williams, Ryan (ryan.williams@usda.gov): 31
 Wilson, Anastasia (awilson@hws.edu): 56
 Winters, John (winters1@iastate.edu): 38
 Wojan, Timothy (twojan@nsf.gov): 63,69
 Wolf, David (wolf@econ.kobe-u.ac.jp): 42,70
 Wong, David (dwong2@gmu.edu): 43
 Woodall, Brian (brian.woodall@inta.gatech.edu): 76
 Wornell, Emily (ejwornell@bsu.edu): 76
 Xie, Sijiao (sxie20@asu.edu): 39
 Xu, Yanqing (yanqing.xu@utoledo.edu): 80
 Xu, Yilan (yilanxu@illinois.edu): 5,43,50
 Yamashita, Eric (ericyama@hawaii.edu): 1
 Yan, Linnan (elena0813lny@gmail.com): 13
 Yench, Christopher (cyencha@fsmail.bradley.edu): 58
 Yu, Meng (yu.3066@osu.edu): 9
 Yun, Seong (seong.yun@msstate.edu): 48
 Zargoush, Manaf (zargousa@mcmaster.ca): 39
 Zhang, Billy (yyu.zhang@mail.utoronto.ca): 15,21
 Zhang, Lei (lei.zhang.3@ndsu.edu): 44
 Zhang, Ting (tzhang@ubalt.edu): 34,66
 Zhang, Yating (zhangyatingemail@gmail.com): 37
 Zhang, Yimin (Yimin.Zhang@nrel.gov): 20
 Zhang, Ziyi (ziyez@princeton.edu): 18
 Zheng, Longfei (zhenglf17@mails.tsinghua.edu.cn): 22

Zhou, Yang (Yang.Zhou2@unt.edu): 58
Zhou, Yun (ashely.yun.zhou@gmail.com): 17
Zhu, Liao (zla618382@gmail.com): 67
Zimmer, Andrew (azimmer@email.arizona.edu): 80
Zipper, Riley (zipperr@iu.edu): 69
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