BRIAN HANNA F. MULLER

Education

Yale University	1979	B.A.	History and Anthropology
University of California, Berkeley	2001	PhD	City and Regional Planning

Appointments

2015-2018 Faculty Director, CEDaR, University of Colorado Boulder, CO
2015-2018 Affiliated Faculty, ENVS, University of Colorado Boulder, CO
2012-2018 Associate Professor, ENVD, University of Colorado Boulder, CO
2013-2014 Visiting Professor, Faculty of Architecture, University of Naples Federico II, IT
2011-2012 Director of Planning and Design, ENVD, University of Colorado Boulder, CO
2009-2012 Chair, Department of Planning and Design, University of Colorado Denver, CO
2002-2009 Assistant Professor, University of Colorado Denver, CO
2002-2009 Assistant Professor, University of Colorado Denver, CO
2002-2009 Assistant Professor, University of Colorado Denver, CO
20195-1997 Graduate Instructor, University of Colorado Denver, CO
1990-1991 Urban Planning Consultant, Austin, TX and Berkeley, CA
1990-1991 Committee Staff, Special Proj. Director, TX State Senate, Austin, TX
1986-1990 Director of Agricultural Diversification, TX Dept. of Ag., Austin, TX

Selected Publications

Afzalan, Nader and Brian Muller. Online Participatory Technologies: Opportunities and Challenges for Enriching Participatory Planning. *Journal of the American Planning Association*. Spring 2018.

Muller, Brian and Travis Flohr. 2016. A Geodesign Approach to Environmental Design Education: Framing the Pedagogy, Evaluating the Results. *Landscape and Urban Planning*. 156: 101-117.

Muller, Brian. 2016. Mending Man's Ways: Wickedness, Complexity and Off-Road Travel. *Landscape and Urban Planning*. 154: 93-101.

Afzalan, Nader and Brian Muller. 2014. The Role of Social Media in Green Space Planning: A Case Study of Neighborhood Participation in Park Siting. *Journal of Urban Technology*. 21 (3) 67-83.

Tao Ye, Brian Muller and Peijun Shi. 2014. Urbanization, Urban Form and Adaptation: A Case Study of Four US and Chinese Cities. In Rudi Hartman and Wang Jing'ai (eds). A Comparative Geography of China and the U.S. Beijing: Springer Press.

Muller, Brian, Travis Flohr and Mehdi Heris. 2014. Urban Morphology and Heat: Exploring the Relationships. In Francesco Moccia (ed.) Sustainable Stormwater Management Infrastructures: Principles and Guidelines. Naples: Clean Press.

Muller, Brian and Stacey Schulte. 2011. Governing Wildfire Risks: What Shapes County Hazard Mitigation Programs. *Journal of Planning Education and Research*. 31(1) 60-74.

Muller, Brian. 2009. Adapting to Post-Oil Futures: Community Action and the Urban Sustainability Retrofit. *University of Colorado Law Review*. 80 (4) 1017-1031.

Muller, Brian and Li Yin. 2009. Regional Governance and Wildfire Hazard: Opportunities for Coordinated Risk Assessment and Regional Spatial Accounting. *Journal of Environmental Planning and Management*. 53 (1) 1-29.

Bhandary, Uddhab and Brian Muller. 2009. Land Use Planning and Wildfire Risk Mitigation: An Analysis of Wildfire-Burned Subdivisions Using High-Resolution Remote Sensing Imagery and GIS Data. *Journal of Environmental Planning and Management*. 52 (7) 939-955.

Yin, Li and Brian Muller. 2008. Urbanization and Resort Regions: Creating an Agent-Based Simulation of Housing Density in "Ski Country". *Journal of Urban Technology*. 15 (2)_55-75.

Muller, Brian, Yuseung Kim, Li Yin and Florin Alexandrescu. 2008. The Dynamics of Land Development in Resort Communities: A Multi-Agent Simulation of Growth Regimes and Amenity-Based Housing Choice. *Environment and Planning A*. 40 (7) 1728-1743.

Yin, Li and Brian Muller. 2007. Residential Location and the Biophysical Environment: Exurban Development Agents in a Heterogeneous Landscape. *Environment and Planning B: Planning and Design*. 34 (2) 279–295.

Muller, Brian, Stacey Schulte and Uddhab Bhandary. 2006. Resort Development and Wildfire: Managing the Accumulation of Risks. In Tom Clark, Alison Gill and Rudi Hartmann (eds.), *Mountain Resort Planning and Development in an Era of Globalization*. Putnam Valley, NY: Cognizant Communications. 234-247.

Muller, Brian, Li Yin, Florin Alexandrescu and Yuseung Kim. 2005. The Dynamics of Density Change in Rocky Mountain Resort Communities: A Multi-Agent Simulation. *Computers in Urban Planning and Urban Management;* 2005 June 29-July 1; London, England. Proceedings. 1-16.

Bradshaw, Ted and Brian Muller. 2004. Shaping Policy Decisions with Spatial Analysis. In Michael Goodchild and Donald Janelle (eds.), *Spatially Integrated Social Science*, Oxford: Oxford University Press. 300-322.

Roper, William and Brian Muller. 2002. Envisioning Rural Futures Through CommunityViz: Innovative Software Applied to Community Planning. In James Levitt (ed.), *Conservation in the Internet Age: Threats and Opportunities*. Washington, D.C.: Island Press. 218-242.

Muller, Brian and Abdulkader Al-Gilani. 2001. GIS decision tools: Where will they lead us? In Willem VanVliet (ed.), *Cities in an Urbanizing World; Global Report on Human Settlements.* United Nations for Human Settlements. London: Earthscan.

Bradshaw, Ted and Brian Muller. 1998. Impacts of rapid urban growth on farmland conservation: Application of new regional land use policy models and geographic information systems. *Rural Sociology* 63 (1): 1-25.

Muller, Brian. 1988. Science and Technology Policy. In Frederick Williams (ed.), *Measuring the Information Society*. Newbury Park, CA: Sage Publications.

Muller, Brian. 1988. Diversification of Agriculture. In Richard C. Boehm and Larry L. Bybee (eds.), *Glencoe World Geography*.

Muller, Brian. 1987. Texas. In Jurgen Schmandt and Robert Wilson (eds.), *Promoting High Technology Industry: Initiatives and Policies for State Government*. Boulder and London: Westview Press. 231-257.

Publications in Referred Proceedings

Muller, Brian, Lynn Johnson, John Wyckoff, Fred Nuszdorfer, and Brad Beckham. 2007. Areawide Cumulative Effects Analysis Using GIS, *TRB 86th Annual Meeting Compendium of Papers*. Paper #07-2611. 1-16.

Muller, Brian, Li Yin, Florin Alexandrescu and Yuseung Kim. 2005. The Dynamics of Density Change in Rocky Mountain Resort Communities: A Multi-Agent Simulation. *Computers in Urban Planning and Urban Management;* 2005 June 29-July 1; London, England. Proceedings. 1-16.

Muller, Brian and Stacey Schulte. 2004. Wildfire Mitigation and Private Lands: Managing Long-Term Vulnerabilities. Aguirre-Bravo, Celedonio, et.al. eds. *Monitoring Science and Technology Symposium: Unifying Knowledge for Sustainability in the Western Hemisphere*; 2004 September 20-24; Denver, CO. Proceedings. 1-14.

Book Reviews

Muller, Brian. 2005. Leadville: The Struggle to Revive an American Town. Book Review. *Journal of the American Planning Association* 71 (3): 346-347.

Muller, Brian. 2001. Monitoring Land Supply with Geographic Information Systems: Theory, Practice, and Parcel-Based Approaches. Book Review. *Journal of the American Planning Association* 67 (4): 483-485.

Non-Referred Publications and Reports

Muller, Brian, Pan Sawyer, Jessica Hernandez and Michael Hinke. 2008. *Land Use Priorities and Travel Route Alternatives for the Apache-Sitgreaves National Forest, Springerville, Arizona.* Report to United States Forest Service, Springerville, AZ.

Muller, Brian, Pamela Wridt, Kelly Zuniga, Chris Haller. 2008. *Risks and the Walk to School: Tools for Assessing Route Safety and Planning for Walkability*. Colorado Department of Transportation, Denver, CO.

Muller, Brian, Stacey Schulte, Siegmund Langegger and Bambi Yost. 2008. *Learning from Public Comments: Lessons from the Western Oregon Plan Revision*. US Institute for Environmental Conflict Resolution, Tucson, AZ.

Muller, Brian, Lynn Johnson, Fred Nuzdorfer and John Wyckoff. 2008. *Areawide Coordinated Cumulative Effects Assessment*. Colorado Department of Transportation, Denver, CO.

Muller, Brian. 2007. Transportation Planning and Sustainable Uses of the Public Lands: Prototype of a Planning Support System for Assessing Travel Patterns and Routes. Bureau of Land Management, Prineville, OR.

Muller, Brian, Jessica Hernandez and Michael Hinke. 2007. Land Use Priorities and Travel Route Designations for the John Day Resource Management Plan, Prineville, Oregon. Bureau of Land Management, Prineville, OR.

Schulte, Stacey and Muller, Brian. 2006. *Wildfire Mitigation and Land Use Planning Practices in Colorado: Survey of County Governments*. Urban Futures Lab, Boulder, CO.

Muller, Brian. 2006. Conceptual Land Use Plan for Ikh Nart Wildlife Reserve, Mongolia. Denver Zoological Foundation, Denver, CO.

Muller, Brian, et. al.. 2006. *Open Space Plan for the East End of Galveston Island*. Galveston Futures Project, Galveston, TX.

Muller, Brian, Diana Shannon, Anirban Pal, Anuradha Kamath and Tom Rogers. 2006. *Environmental Justice Methods: Review and Recommendations*. Colorado Department of Transportation, Denver, CO.

Muller, Brian and Michael Hinke. 2005. *Large Lot Development in Colorado: Comparison of Nine Front Range and Western Slope Counties*. Colorado Environmental Coalition, Denver, CO.

Muller, Brian and Paul Glasgow. 2004. *Patterns of Population Growth in Forested Counties of Colorado*. Colorado State Forest Service, Denver, CO.

Muller, Brian, Kevin Puccio, Heidi Baker and Li Yin. 2003. *Custer County, Colorado: Alternative Growth Futures*. Sonoran Institute, Tucson, AZ.

Muller, Brian, Cameron Bertron and Li Yin. 2002. *Alternatives for Future Growth in the Tri-River Region: How Policies Affect Growth and the Cost of Services*. American Farmland Trust, Washington, DC.

Muller, Brian and Li Yin. 2001. Salinas-Pajaro Alternative Growth Futures Project: Analysis of Growth Patterns and Alternatives. American Farmland Trust, Washington, DC.

Muller Brian and Ted Bradshaw. 1998. Central Valley Alternative Growth Futures Project: Analysis of Growth Patterns and Alternatives. American Farmland Trust, Washington, DC.

Muller, Brian. 1993. Rural Economic Strategies and the State Development Budget: Issues and Policy Options for the "New Texas". Texas Center for Policy Studies, Austin, TX.

Muller, Brian. 1992. Innovations in State Rural Development Policy: Implications for Rural Texas. Texas Rural Communities, Austin, TX.

Muller, Brian. 1992. Analisis de Distintas Experiencias Europeas de Rindustrializacion y Reactivacion de Regiones de Cuencas Mineras Ligadas a la Industria Siderometalugica asi como Formulacion de Remoenadaciones de Estrategias de Desarollo y de Inversion. Estudio de Caso: Nord-Pas-de-Calais, Francia. Industry and Trade Strategies. San Francisco, CA. Report to the Governor of Asturias, Spain.

Muller, Brian. 1992. Analisis de Distintas Experiencias Europeas de Rindustrializacion y Reactivacion de Regiones de Cuencas Mineras Ligadas a la Industria Siderometalugica asi como Formulacion de Remoenadaciones de Estrategias de Desarollo y de Inversion. Estudio de Caso: Ruhegebeit. Industry and Trade Strategies. San Francisco, CA. Report to the Governor of Asturias, Spain.

Texas Department of Agriculture. 1990. *Texas Agriculture: Growing a Sustainable Economy, A Greenprint for Action*. Texas Department of Agriculture; Austin, TX. (contributor)

Muller, Brian. 1987. Grassroots Economic Development and the 70th Texas Legislature. Journal of the Texas Lyceum.

Texas Department of Agriculture. 1986. *Economic Growth through Agricultural Development: A Blueprint for Action.* Texas Department of Agriculture; Austin, TX. (contributor)

Publications in Preparation

Kim, Yuseung and Brian Muller. (Submitted) Developer Preferences and Urban Intensification: The Choice between Greenfield and Infill Development Sites.

Hsu, Chengmin and Brian Muller. (In Progress) Recreational Travel, Route Formation and Land Disturbance: Applications of an Object-Based Road Detection Algorithm.

Courses Taught

Introduction to GIS City Design Studio (Naples, Italy) GIS and Geodesign GIS Seminar City Design Studio (Kunming, China) Planning Issues and Processes Environmental Impact Assessment (graduate) Environmental Impact Assessment (undergraduate) Environmental Planning Planning Studio Natural Resource Planning Land Use Planning Sustainability Planning Planning Theory Planning History Intervention and Implementation Urban Economics

Presentations at Meetings and Seminars Presented

Muller, Brian and Mehdi Heris, October, 2015. Neighborhood Green Infrastructure Planning. American Collegiate Schools of Planning. Houston, TX.

Brian Muller and Yuseung Kim. June, 2015. Developers as Innovators: Alternative Roles in Urban Adaptation. International Association for China Planning (IACP) Conference, Chongqing, China.

Muller, Brian and Daryoosh Ardalan. May 2014. Workshop: Geodesign and Qualitative Research. University of Naples Federico II, Naples, Italy.

Muller, Brian and Travis Flohr. A Geodesign Approach to Environmental Design Education: Framing the Pedagogy, Evaluating the Results. 2014. International Association for China Planning (IACP) Conference, Guangzhou, China.

Muller, Brian. Invited Speaker. Geodesign and Planning Curriculum: Innovations and Obstacles. December 2013. University of Naples Frederico II, Naples, Italy.

Muller, Brian. Invited Participant. Regulation with Wickedness: Social Travel and Public Lands. Workshop organized by Journal of Landscape and Urban Planning. Planning and Wickedness. University of California, Berkeley, CA. October 2013.

Li Yin and Brian Muller. Comparison of Walkable Environments in Chinese and US Cities. June, 2013. International Association for China Planning (IACP) Conference, Shanghai, China.

Invited Speaker and Facilitator. June, 2013. International Association for China Planning (IACP) Conference, Shanghai, China.

Muller, Brian and Daryoosh Ardalan. Infill and Intensification in China and the US: A Morphological Comparison of Four Cities. June, 2013. International Association for China Planning (IACP) Conference, Shanghai, China.

Muller, Brian, Travis Flohr and Mehdi Heris. Urban Morphology and Heat: Exploring the Relationships. November 2012. American Collegiate Schools of Planning Conference. Cincinnati, Ohio.

Muller, Brian, Travis Flohr and Mehdi Heris. Methods for Spatial Accounting of Urban Heat Effects. September, 2012. Seminar: Good Sun and Bad Sun. American Planning Association. Golden, Colorado.

Muller, Brian, Travis Flohr and Mehdi Heris. Heat and City Design: Assessing the Relationship between Heat Island Effect and Urban Morphology. July 2012. Association of European Schools of Planning Conference. Ankara, Turkey.

Muller, Brian and Li Yin. Sustainability of Chinese Satellite Cities: the Case of Chenggong, Kunming City. June, 2012. International Association for China Planning (IACP) Conference, Wuhan, China.

Primary Organizer and Speaker. Symposium. Urban Environmental Design: Integrating Natural and Built Systems. April, 2012. College of Architecture and Planning. Boulder, Colorado.

Buma, Brian, Brian Muller, Carol Wessman, Travis Flohr, Mehdi Heris, and Mahda Mohammadbagher. 2012. Assessing the Benefits of Green Infrastructure: The Dynamics of Landscape Decision, Built Morphology, and Ecosystem Services. Poster presented at the 2012 United States Regional Association of the International Association for Landscape Ecology: Informing Decisions in a Changing World Annual Symposium. April, 2012. Newport, Rhode Island.

Buma, Brian, Travis Flohr, Mehdi Heris, Mahda Mohammadbagher, Daryoosh Ardalan, Brian Muller, and Carol Wessman. Phenology of Green Infrastructure in Cities: A window into ecosystem services in urban environments. Poster presented at the 2012 Front Range Student Ecology Symposium. February, 2012. Colorado State University, Fort Collins, Colorado.

Wessman, Carol, Brian Muller, Brian Buma, Mehdi Herris, Travis Flohr, Mahda Mohammadbagher, and Daryoosh Ardalan. Phenology of Green Infrastructure in Cities: A window into ecosystem services in urban environments.Poster presented at the Spring 2012 Cooperative Institute for Research in Environmental Sciences: Innovative Research Program Poster Session. April, 2012. University of Colorado Boulder, Boulder, Colorado.

Muller, Brian. Colorado Conservation Summit. (Invited Speaker) Large Lot Development in Colorado: History and Policy. October 2008. Breckenridge, Colorado.

Muller, Brian. Mt Hood Summit. (Invited Speaker) The Quandary in Recreational Travel Planning: Accounting for Cumulative Effects. September 2008. Portland, Oregon.

Muller, Brian, Jessica Hernandez and Chengmin Hsu. American Collegiate Schools of Planning Conference. Accounting for Social Travel: Applications of an Agent-Based Simulation to Open Space Planning. July 2008. Chicago, Illinois.

Muller, Brian. Quiet Travel Summit. (Invited Speaker) Tools for Assessing Recreational Travel: A Spatial Accounting Approach. April 2008. Boise, Idaho.

Muller, Brian, Lynn Johnson, John Wyckoff and Fred Nuzdorfer. (Invited Speaker) Areawide Coordinated Cumulative Effects Analysis Project – Phase 1. CDOT Environmental Winter Conference. January 2007. Denver, CO.

Lynn Johnson, Brian Muller, John Wyckoff and Fred Nuzdorfer. Analysis of Cumulative Transportation Effects in the Denver Metro Area. American Association of Geographers. April 2007. Chicago, Ill.

Lynn Johnson, Brian Muller, John Wyckoff and Fred Nuzdorfer. Cumulative Effects and Impervious Surface: A Case Study of Denver Colorado. ESRI Conference. May 2007. San Diego, CA. Muller, Brian. Digitizing the Comprehensive Plan: Practices and Trends. Invited Lecture. University of Kunming. Kunming, China. June 2007.

Muller, Brian. Regional Planning and GIS: Monitoring Growth, Measuring Sustainability. Invited Lecture. Kunming Polytechnic University, June 2007. Kunming, China.

Muller, Brian. The Web and Urban Planning: Pitfalls and Opportunities. Invited Lecture. Sponsor: Department of Planning, City of Kunming. June 2007. Kunming, China.

Muller, Brian. Environmental Planning and the Web: Assessing Current Trends. Staff Presentation. China National Office, Nature Conservancy. June 2007. Kunming, China.

Wyckoff, John, Brian Muller, Lynn Johnson and Fred Nuzdorfer. Cumulative Effects Assessment and Transportation. Transportation Research Board. January 2007. Washington, D.C.,

Muller, Brian and Tammi Laninga. Transportation Planning on Federal Lands: Politics, Protocols, and Practices. American Collegiate Schools of Planning Conference. November 2006. Fort Worth, Texas.

Moderator (with Martina Alberti). Modeling Land Use/Land Cover Change. American Collegiate Schools of Planning. October 2005. Kansas City, MS.

Muller, Brian. Assessing Cumulative Development Patterns: Monitoring Growth and Land Use Change in the Colorado Front Range. October 2005. Kansas City, MS.

Panel Co-Chair (with Bill Johnson). Strategies for Integrating Land Use and Transportation Planning. Colorado Tomorrow Conference. September 2005. Denver, CO.

Muller, Brian, Mike Hinke, Brad Hahn, Fred Nuszdorfer. Regional Cumulative Impact Assessment: Evaluating Land Use Effects of Transportation Investments on Open Space, Recreation and Agriculture. GIS in the Rockies. September 2005. Denver, Colorado.

Muller, Brian. Envisioning Growth in Colorado: Activities of the Colorado Center for Sustainable Urbanism. Colorado American Planning Association Conference. September 2005. Fort Collins, Colorado.

Muller, Brian, Li Yin, Florin Alexandrescu and Yuseung Kim. The Dynamics of Density Change in Rocky Mountain Resort Communities: A Multi-Agent Simulation. Computers in Urban Planning and Urban Management. July 2005; London, England.

Muller, Brian, Florin Alexandrescu, Yuseung Kim and Stacey Scaravelli. Mores and Misbehaving: The Effect of Regulatory Regimes on Land Developers. American Association of Geographers. April 2005. Denver, Colorado.

Muller, Brian, Paul Glasgow and Mike Hinke. Large Lot Development in Colorado: Past and Future. Rocky Mountain Land Use Institute. April 2005. Denver, Colorado.

Muller, Brian. Visualizing Land Use Change: Innovations and Opportunities. Rocky Mountain Land Use Institute. April 2005. Denver, Colorado.

Muller, Brian. Exurban Growth and Wildfire Risk. Front Range Forest Health Roundtable. Golden, November 2004

Muller, Brian. Alternative Growth Futures for the Colorado Front Range. University of Colorado Center for Sustainable Urbanism, Colorado Tomorrow Conference. Denver, October 2004.

Muller, Brian. Wildfire and Community Mitigations: Jumpstarting the Land Use Planning Process. American Collegiate Schools of Planning Conference. October 2004. Portland, Oregon.

Yin, Li and Brian Muller. Recreation Development and Urbanization in the New West: Models of Density Increase. American Collegiate Schools of Planning Conference. October 2004. Portland, Oregon.

Muller, Brian and Stacey Schulte. Wildfire Mitigation and Private Lands: Managing Long-Term Vulnerabilities. Monitoring Science and Technology Conference. August 2004. Denver, Colorado.

Muller, Brian. Distributed Planning Support Systems and the Web: Planning for Wildfire Mitigation. Natural Hazards Conference. July 2004. Boulder, Colorado. (Poster Session)

Muller, Brian. Mapping Colorado Urban Futures. Colorado Environmental Coalition Seminar. Denver. July 2004.

Muller, Brian. Urban Growth in the Colorado Front Range. Geospatial Seminar, University of Colorado at Boulder. October 2003. Boulder, Colorado.

Yin, Li and Brian Muller. Exurban Growth in the Western United States: An Agent-Based Model. American Collegiate Schools of Planning/Association of European Schools of Planning. July 2003. Leuven, Belgium.

Muller, Brian and Li Yin. Wildfire Vulnerability and Residential Development: Assessing Land Use Mitigations. American Collegiate Schools of Planning/Association of European Schools of Planning. July 2003. Leuven, Belgium

Muller, Brian. Assessing Future Wildfire Vulnerability. Natural Hazards Conference. July 2003. Boulder, Colorado.

Muller, Brian. Uses of Cadastral Data in Land Use Planning. National Governor's Association, Cadastral Data Policy Conference. May, 2003. Salt Lake City, Utah.

Muller, Brian. Wildfire and Urban Growth: Mapping the Risks/Imagining the Alternatives. Institute for Building and Home Safety. January 2003. Tampa, Florida. (Invited Speaker)

Muller, Brian. Alternative Growth Futures: Front Range Development Model. United States Geological Survey Seminar. Denver, October, 2002. (Invited Speaker)

Muller, Brian. The Alternative Growth Futures Approach to Urban Growth Modeling. CIRES Biocomplexity Seminar. University of Colorado. Boulder, October, 2002

Muller, Brian. Urban Development Patterns and the Risks from Wildland Fire. Wildfire Mitigation Conference. Longmont, September, 2002

Muller, Brian. Wildland Fire and Resort Communities: Assessing Future Risk. Conference on Mountain Resort Communities. Steamboat Springs, September, 2002

Muller, Brian. Modeling Alternative City and Regional Futures in Colorado. Forum on Colorado Cities and Regions. National Center for Atmospheric Research. Boulder, August, 2002

Other Indicators of Scholarship

Annual Award for Excellence in Service, University of Colorado Denver College of Architecture and Planning, 2011.

Annual Award for Excellence in Research, University of Colorado Denver College of Architecture and Planning, 2007.

Annual Award for Excellence in Research, University of Colorado Denver College of Architecture and Planning, 2001.

Research Support

<u>2018</u>

Principal Investigator (with Willem VanVliet, ENVD) Housing Outcomes Assessment Source: Boulder Housing Partners Award: app. \$40,000 Status: Funded - Renewal

Principal Investigator The Citizen's Institute on Rural Design: Building Rural Communities Through the Arts and Economic Revitalization

Source: National Endowment for the Arts Award: \$354,000 Not Funded

Co-Principal Investigator (with Marcel deLange) **Public Art, Urban Design and Community Engagement on University Hill** Source: City of Boulder Award: \$94,000 Status: Funded

Principal Investigator (with Sara Tabatabaie and Michael Szuberla) **Reconceptualizing Community Science: City of Boulder's Integrated Ecology Strategy** Source: Office of Outreach and Engagement Award: \$5,000

Status: Not Funded

Co-Principal Investigator (with Danielle Rivera, Siobhan Brooks and Bruce Goldstein) Interdisciplinary and Inclusive Approaches to Teaching and Researching Green Infrastructure

Source: University of Colorado Boulder Environmental Design Program Award: \$39,000 Status: Funded

Principal Investigator (with Sara Tabatabaie and Michael Szuberla)

Assessing Community Knowledge of the Emerald Ash Borer

Source: Office of Outreach and Engagement Award: \$2,000 Status: Funded

Principal Investigator Community Engagement Institutionalization Source: Office of Outreach and Engagement Award: app. \$10,000 Status: Funded

Principal Investigator **Mapping Cultural Assets** Source: City of Boulder Award: \$3,000 Status: Funded

Principal Investigator Design of the East Bookend Area and Dushanbe Teahouse Restoration Source: City of Boulder Award: \$126,000 Status: Funded

Principal Investigator Bringing School Home Source: Boulder Housing Partners Award: \$10,000 Status: Funded

<u>2017</u>

Principal Investigator (with Willem VanVliet, ENVD) Housing Outcomes Assessment. Source: Boulder Housing Partners Award: app. \$40,000 Status: Funded - Renewal

Principal Investigator (with Wangda Zuo, Engineering) Green Infrastructure, Urban Design and Smart Cities: Assessing Integrated Environmental and Social Performance of Streets Source: City of Denver Status: Not Funded

Principal Investigator Community Engagement Institutionalization Source: Office of Outreach and Engagement Award: app. \$15,000 Status: Awarded

Principal Investigator (with Brian Johnson, Earth Lab; Carol Wessman, CIRES/EBIO/ENVS; Jordan Winkler, Digital Globe; Wangda Zuo, Engineering; Mark Gross, Atlas; Srinivas Vallabhaneni and Amy Boughton, Stantec.) Heterogeneity, Connectedness and Community: Big Data and Decision-Making in the Smart and Connected City Source: RIO Innovative Seed Grant Program Award: \$49,000 Not Funded

Principal Investigator Metrolab: CU-City Design Workshop Source: Office of Outreach and Engagement Award: app. \$10,000 Status: Awarded

Principal Investigator Impervious Cover Forecast and Policy Analysis Source: City of Denver Award: \$98,000 Status: Funded

Principal Investigator Westwood Community Science: Assessing Neighborhood Benefits of Trees and Landscape Source: Trust for Public Lands Award: \$22,000 Status: Funded

Co-Principal Investigator (with Wangda Zuo, Engineering, PI and Stefan Lek, Geography) Interdisciplinary Approach Towards Smart and Connected Affordable Housing Communities Source: National Science Foundation Award: \$1.8 million Status: Not Funded

<u>2016</u>

Principal Investigator (with Soheil Muhajer, University of Minnesota and Behrouz Touri, Engineering, CU) Smart Neighborhood Networks: A Data-Driven Approach to Integrated Microclimate and Water Management Source: National Science Foundation Award: app. \$750,000 Status: Not Funded

Principal Investigator

Building Community Knowledge Around Sustainable Neighborhood Design Source: Office of Outreach and Engagement Award: \$20,000 Funded

Principal Investigator (with Willem VanVliet) Housing Outcomes Assessment Source: Boulder Housing Partners Award: app. \$40,000 Status: Funded

Cities, Infrastructure and Environmental Adaptation: Building a CU-Boulder Smart Cities Agenda Source: University of Colorado Award: app. \$30,000

Award: app. \$30,000 Status: Not Funded

Principal Investigator (with Carol Wessman, Jill Litt and Balaji Rajagopalan)

Green Infrastructure Seed Grant

Source: University of Colorado Award: \$20,000 Stats: Funded

<u>2015</u>

Principal Investigator (with Carol Wessman) Evaluation of Municipal Landscape Design Programs and Partnerships Source: Office of Outreach and Engagement Award: \$20,000 Status: Not Funded

2012

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$22,000 (2012) Status: Funded

<u>2011</u>

Principal Investigator Assessing the Benefits of Urban Green Infrastructure: The Dynamics of Landscape Decisions, Built Morphologies and Ecosystem Services Source: National Science Foundation Award: \$246,785 Status: Not Funded

Co-Principal Investigator (with Carol Wessman, CIRES). **Course Proposal - Urban Sustainability: Ecological Systems and City Design** Source: College of Arts and Sciences GAMM Interdisciplinary Course Solicitation Award: \$13,000 Status: Not Funded

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$22,000 (2011) Status: Funded

Co-Principal Investigator (with Carol Wessman) Adaptive Capacity of the Colorado Front Range: the Role of a Multifunctional Green Infrastructure Source: Western Water Assessment Award: \$117,600

Status: Not Funded

<u>2010</u>

Co-Principal Investigator (with Carol Wessman) Adaptive Capacity of the Colorado Front Range: the Role of a Multifunctional Green Infrastructure Source: Western Water Assessment Award: \$117,600 Not Funded

Co-Principal Investigator (with Carol Wessman) Assessing the Benefits of Green Infrastructure: The Dynamics of Landscape

Decision, Built Morphology, and Ecosystem Services.

Source: CIRES – Institutional Research Project (IRP) Award: \$20,000 Funded

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$22,000 (2010) Status: Funded

Co-Principal Investigator (with Arunprakash Karunanithi) Urban Sustainability Assessment: Integrating Geographical Information Systems (GIS), Agent-Based Modeling and Information Metrics Source: UST Collaborative Grant Award: \$8,000 Status: Funded

2009

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$22,000 (2009) Status: Funded

Co-Principal Investigator (with Arunprakash Karunanithi) Urban Sustainability Assessment: Integrating Geographical Information Systems (GIS), Agent-Based Modeling and Information Metrics Source: UST Collaborative Grant Award: \$8,000 Status: Funded Principal Investigator Assessing the Adaptive Potential of Green Infrastructure Source: NASA Award: app. \$240,000 Status: Not Funded

Co-Principal Investigator (with Raphael Moreno)

ULTRA-Ex: Assessing the Interoperability and Integration of Data, Models, and Policy Development Within and Between Urban and Natural Environments Source: NSF Award: \$299,972 Status: Not Funded

Principal Investigator Risk and landscape decisions: determinants of high-resolution landscape change

Source: NSF Award: Status: Not Funded

2008

Principal Investigator (with CIRES and ARS-Jornada Long-Term Ecological Research Project) Accounting for Social Travel Source: NASA Award: \$1.3M (2008-2013) Status: Not Funded

Principal Investigator Sustainable Travel Planning Toolkit Source: United States Forest Service Award: \$50,000 (2008) Status: Funded

Principal Investigator Sustainability of Travel on the Public Lands Source: Wyss Foundation Award: \$122,000 Status: Funded

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$22,000 (2008) Status: Funded

<u>2007</u>

Principal Investigator Learning from Public Comments: the Western Oregon Plan Revision Source: US Institute for Environmental Conflict Resolution Award: app. \$120,000 (2007-2008) Status: Funded

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$28,000 (2007) Status: Funded

Principal Investigator Sustainability of Travel on the Public Lands Source: Wyss Foundation Award: \$122,000 (2007) Status: Funded

Co-Principal Investigator (with Anu Rameswami, John Brett and Paul Teske) IGERT: Sustainable Urban Infrastructure Source: NSF Award: \$3,080,972 (2007-2012) Status: Funded

Co-Principal Investigator (with Robert Harriss, **Collaborative Research: Agent-Based Simulation of Hurricane Evacuation Decision-Making** Source: NSF Award: \$190,000 (Second Submittal in 2007) Status: Not Funded

Principal Investigator (UCD) Collaborative Research: Agent-Based Simulation of Hurricane Evacuation Decision-Making Source: NSF Award: \$190,000 (Second Submittal in 2007) Status: Not Funded

2006

Principal Investigator **Map Explorer: Integrating Public Comments into Planning Support Tools** Source: US Institute for Environmental Conflict Resolution Award: \$48,000 (2006) Status: Funded

Principal Investigator (with Willem VanVliet) **Development of a City-Wide SR2S Model in Denver and Its Application at Munroe Elementary School** Source: Colorado Department of Transportation Total Award: \$26,000 (2006-2008) Status: Funded

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$25,000 (2006) Status: Funded

Principal Investigator **The E-Participation Partnership: Web-based Methods to Support Community Involvement in Land Use Decisions** Source: Placematters Total Award: \$38,000 (2006) Status: Funded

Principal Investigator Sustainability of Travel on Public Lands: Assessing Environmental Impacts of Travel Demand with a Web-Based, Open Source Planning Support System. Source: Wyss Foundation Award: \$68,000 (2006) Status: Funded

Co-Principal Investigator (with John Wyckoff) Colorado Environmental Geodatabase: Habitat Suitability Indexing Source: Colorado Department of Transportation Total Award: \$25,000 (2006) Status: Funded

Co-Principal Investigator (with Robert Harriss, NCAR) Collaborative Research: Agent-Based Simulation of Hurricane Evacuation Decision-Making Source: NSF Award: \$190,000 Status: Declined

<u>2005</u>

Principal Investigator (with Nick Flores and Randall Walsh) Collaborative Research: Household and Community Response to Wildfire Risk: Social and Landscape Dynamics. Source: NSF Request: \$461,093 Status: Declined

Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$39,000 (2005) Status: Funded

Principal Investigator Environmental Justice Methodology: Integrating High-Resolution Spatial Data Source: Colorado Department of Transportation Award: \$24,000 (2005) Status: Funded Co-Principal Investigator (with Rob Guralnick) **Mountain and Plains Spatio-Temporal Database and Informatics Initiative (MaPSTeDI) Phase 2: Distributed Online Mapping and Analysis Web Services** Source: NSF Request: \$689,280 Status: Declined

Principal Investigator Large Lot Development and Exurban Growth Patterns Source: Colorado Environmental Coalition Award: \$3,000 (2005) Status: Funded

Principal Investigator (with Lynn Johnson and John Wyckoff) **Areawide Coordinated Cumulative Effects Analysis** Source: Colorado Department of Transportation Award: \$147,000 (2005-2008) Status: Funded

2004 Principal Investigator Geographic Resource Information Management Source: National Park Service Award: app. \$25,000 (2004) Status: Funded

Co-Principal Investigator (with Ernie Arias) Creating Hazard Resistant Communities Source: National Center for Atmospheric Research Award: \$48,500 (2003-2005) Status: Funded

Principal Investigator (with Tom Veblen) Biocomplexity and Wildland Fire Risk: Forest Dynamics, Urbanization and Mitigation Source: NSF Request: \$1,782,391 Status: Declined

Co-Principal Investigator (with Lynn Johnson and John Wyckoff) Colorado Environmental Geodatabase Source: Colorado Department of Transportation Award: \$80,000 (2004-2005) Status: Funded

Principal Investigator Envisioning Futures in the Colorado Front Range Source: Colorado Center for Sustainable Urbanism Award: \$25,000 (2004) Status: Funded Co-Principal Investigator **The Future of E-Planning in Land Use Management: Assessment and Recommendations for BLM's ePlanning Program** Source: NSF Award: \$799,223 Status: Declined

<u>2003</u>

Principal Investigator (with Tom Veblen) Biocomplexity and Wildfire: Vulnerability of Wildland-Urban Landscapes. Source: NSF. Request: \$1.6 million Status: Declined

Co-Principal Investigator (with Ernie Arias) Creating Hazard Resistant and Resilient Communities National Center for Atmospheric Research Request: \$43,800 (2003-2005) Status: Funded

Principal Investigator (with Carol Wessman, Nick Flores and Randall Walsh) Biocomplexity and Socio-Economic Choice in the Urban Landscape: Policy and Landscape Resilience in a Carbon-Based World Source: NSF Request: \$1.9 million Status: Declined

Principal Investigator (with Tom Clark and Gene Bressler) Community Futures Simulation Center: Planning the Future of Front Range Neighborhoods Source: Department of Housing and Urban Development, COPC Request: \$402,466 Status: Declined

Co-Principal Investigator (with Rob Guralnick) **Mountain and Plains Spatio-Temporal Database and Informatics Initiative (MaPSTeDI) Phase 2 - Distributed Online Mapping and Analysis Web Services** Source: NSF Request: \$680,000 Status: Declined

Principal Investigator **Planning Support Systems: Do They Influence Public Decisionmaking?** Source: NSF Award: \$45,394 Status: Declined

<u>2002</u>

Principal Investigator (with Tom Veblen) Biocomplexity and Wildland Fire: Forest Dynamics, Urbanization and Mitigation Source: National Science Foundation Request: \$1,642,244 Status: Declined

Co-Principal Investigator (with Carol Wessman, Nick Flores and Randall Walsh) **Functional Complexity in Urban Landscapes: Finding Resilience in the Socio- Physical Environment** Source: National Science Foundation Request \$1.5 million Status: Declined

Principal Investigator (with Richard Braile and Bob Johnston) **Planning Support Systems: Do They Influence Public Decisionmaking? - Building a Social Science Research Agenda.** Source: National Science Foundation Request: \$45,343 Status: Declined

Principal Investigator (with USGS) Local Governments and Wildfire Hazard: The Wildfire Mitigation Planning Support System Source: USDOI/USDA Joint Fire Science Program Request: \$589,586 Status: Declined

Principal Investigator (with Dave Theobald) **Mapping Communities at Risk of Wildfire in Colorado** Source: Colorado State Forest Service Award: \$10,000 (2002) Status: Funded

Principal Investigator (with Willem VanVliet) GIS Assessment of Public Housing in Denver Source: Enterprise Foundation Award: \$5,000 (2002) Status: Funded

Principal Investigator **Mapping Rural Community Change** Source: Microsoft Foundation Award: \$40,000 (in-kind support of approximately \$10,000) (2002) Status: Funded

Principal Investigator **Local Applications of the Alternative Growth Futures Model: Custer County, Colorado** Source: Sonoran Institute Award: \$15,000 (2002) Status: Funded

2001 Co-Principal Investigator (with Lynn Johnson and John Wyckoff)

Expansion of the Facility for Advanced Spatial Technology

Source: University of Colorado Denver Technology Improvement Program Award: app. \$400,000 Status: Funded

Principal Investigator **Evaluating Access to Environmental Databases: Experiences of Other States and Applications to Colorado** Source: Bureau of Land Management/Southwest Data Center Award: \$7000 (2001) Status: Funded/Returned

Principal Investigator California Central Coast Alternative Growth Futures Project Source: American Farmland Trust Award: \$20,000 (2001) Status: Funded

Principal Investigator Colorado West Slope (Tri-Rivers Region) Alternative Growth Futures Project Source: American Farmland Trust Award: \$15,000 (2001) Status: Funded

Principal Investigator **Geographic Information Systems Technology in Local Land Use Planning: Exploring Impacts on Participation and Collaboration** Source: NSF Award: \$241,472 Status: Declined

<u>2000</u>

Co-Principal Investigator (with Richard Braile) **Impacts of Geographic Information Systems Technology on Land Use Planning** Source: NSF Award: \$233,510 Status: Declined

<u>1999</u>

Co-Principal Investigator (with Lynn Johnson) Acquisition of Spatial Analysis System Enhancements for Colorado Region Interdisciplinary Research Source: NSF Award: \$583,869 Status: Dcelined