

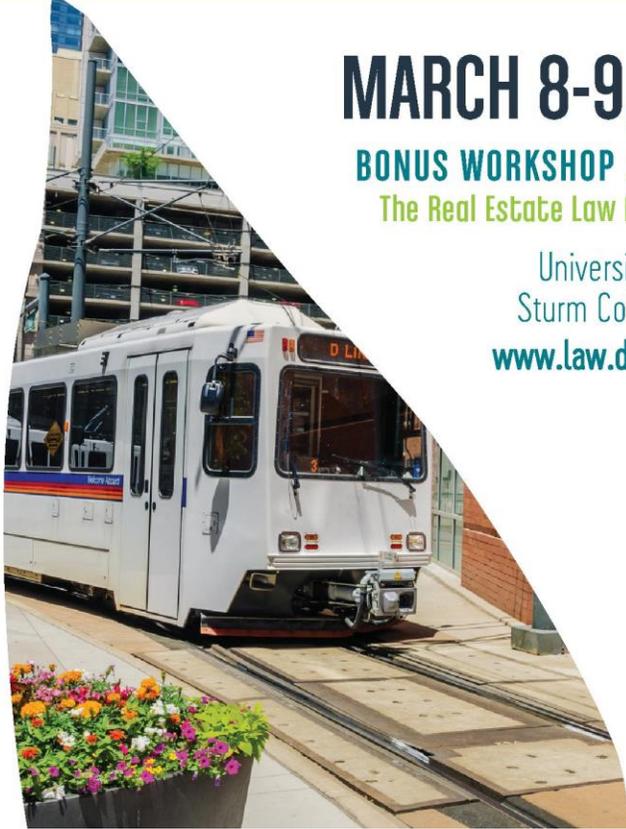


**DISRUPTION, INNOVATION, AND PROGRESS**

WESTERN PLACES / WESTERN SPACES

# DISRUPTION, INNOVATION, AND PROGRESS:

PLANNING FOR AN UNCERTAIN FUTURE



**MARCH 8-9, 2018**

**BONUS WORKSHOP / MARCH 7**  
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# WESTERN PLACES/WESTERN SPACES: DISRUPTION, INNOVATION, AND PROGRESS

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How do we plan for the future when we don't know what it holds? This is a common dilemma for planners and land use practitioners everywhere. Despite the best-laid plans, new practices or technology can disrupt the entire process. The sharing economy—with the advent of Uber, Lyft, Airbnb, and others—has already made an impact on transportation and housing. Cities are exploring how to become smarter through the use of responsive infrastructure, but question how to integrate this model into the existing city-scape. And with fleets of driverless cars on the horizon, what will this mean for our mobility networks and parking structures?

Disruptive influences impact more than just cities. Landscape managers can now track livestock and grazing, map remote areas, and monitor plant and animal species using drones and GIS mapping. The rise of e-commerce is disrupting both big-box stores and Main Street shops. What additional impacts will drone delivery have on brick-and-mortar retail? And how can rural communities improve their communication and data networks so their residents can also benefit from the smart economy?

In addition to all the change being brought about by technology and innovation, communities also have to contend with the disruptions brought on by natural processes. How do communities embed resilience and adaptation in their long-range planning to address potential impacts caused by climate change, for example, including prolonged droughts, heat waves, and extreme weather events? What adaptive strategies can cities employ to protect public health and safety in the face of extreme weather? How do rural communities manage the risk of wildfire at the wildland-urban interface?

In a world full of disruptions, how do we build infrastructure and craft policies that not only meet our present-day needs, but also have the flexibility to adapt to future scenarios? These questions will help frame our discussions at the 2018 Western Places/Western Spaces conference.

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## DISRUPTION, INNOVATION, AND PROGRESS

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The courses in this track highlight cutting-edge issues that are disrupting land use practices, as well as the innovative solutions and policies being used to plan for the future. While we may not know what the future will bring, innovations around smart cities, wireless connectivity, blockchain, and more will help pave the way.

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## **BLOCKCHAIN: THE NEXT INNOVATION TO MAKE COMMUNITIES SMARTER AND SAFER**

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Against a backdrop of internet hacking, privacy breaches, and concerns about cybersecurity, local officials are increasingly moving towards the use of internet platforms and big data to create smart cities. Vance Brown, the CEO of the National Cybersecurity Center, will explain blockchain technology, its potential role in disrupting business as usual, and innovative applications that can make our communities smarter and safer.

### **SPEAKER INFORMATION**

#### **Vance Brown**

CEO, National Cybersecurity Center  
Denver, CO

Vance Brown is the CEO of the National Cybersecurity Center. He also is Executive Chairman and Co-founder of Cherwell Software, rated in 2014 as one of the 101 fastest growing companies in North America. In 2015, Cherwell was recognized as the top software company in all of Colorado. Formerly, Mr. Brown was President and CEO of GoldMine Software, which at the time was rated as one of the top 100 software companies in the United States. Mr. Brown was named the 2014 EY Entrepreneur of the Year in technology, and in 2017 was named one of the "100 most intriguing entrepreneurs" by Goldman Sachs. He graduated summa cum laude and a member of Phi Beta Kappa from Wake Forest University, with degrees in Economics and Computer Science, and then from the University of North Carolina School of Law. Finishing on Law Review and Order of the Coif, Mr. Brown then mostly practiced law in the area of intellectual property.

### **OUTLINE:**

Topics will include

- What is blockchain technology?
- How blockchain technology is being used in the business world
- What blockchain technology can do for government
- The role of blockchain technology in transactions (business, real estate, etc.)

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## CAN YOU HEAR ME NOW? INNOVATIVE WIRELESS REGULATIONS AND BEST PRACTICES

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Wireless service providers and infrastructure owners have inundated communities across the nation with requests to deploy new technology to meet the growing/changing demand for wireless broadband services and the expected future deployment of what has become known as “5G” technology. Changes in state laws and pending changes in federal law have created a need to reexamine how these facilities are sited. This session will explore the current state of the wireless industry nationwide and provide examples of how communities can effectively promote fair deployment of new facilities while protecting local interests through innovative changes to their right-of-way and zoning regulations.

### MODERATOR:

#### **Robert Widner**

City Attorney, City of Centennial; Widner Juran LLP  
Centennial, CO

Bob Widner is a founding partner of the law firm of Widner Juran LLP. His legal practice has consistently focused upon local government representation with a special emphasis in land use planning law. Bob serves as the City Attorney for the City of Centennial. Bob also serves as an adjunct professor with the University of Colorado School of Law where he teaches Land Use Planning Law. In 2015, Bob is a fellow of the International Municipal Lawyers Association (IMLA) and one of fewer than 80 attorneys worldwide to hold that distinction as a recognized expert in municipal government law. Bob was elected in 2015 to the Executive Board of the Colorado Municipal League, a nonpartisan organization representing Colorado cities and towns. His experience is derived from nearly 30 years of representation of local governments in service as the city or town attorney for the municipalities of Cherry Hills Village, Arvada, Lyons, Hot Sulphur Springs, and the county attorney for Park County, Colorado. In addition, Bob has provided special project advice and counsel on land use and regulatory projects for the municipalities of Lakewood, Loveland, Crested Butte, and Fort Collins, and the Lowry Redevelopment Authority.

### SPEAKERS:

#### **Derek Holcomb, AICP**

Deputy Director of Community Development, City of Centennial  
Centennial, CO

Derek Holcomb is the Deputy Director of Community Development for the City of Centennial. Derek spends his days (and many nights) managing operations of the Planning, Engineering and Long-Range Planning Divisions, and leading key municipal/zoning code amendments to keep Centennial at the forefront of emerging needs and trends impacting the City. Derek is a Colorado native and Certified City Planner, and a member of the American Planning Association (APA) and American Institute of Certified Planners (AICP). Derek has authored numerous articles and amendments to the LDC, including regulations for PUDs, breweries/wineries, design standards and, most recently, wireless communications facilities. Derek will use this knowledge and experience to speak about Centennial Staff's coordination with the wireless industry and city policymakers, providing recommended best practices for updating right-of-way and zoning regulations to accommodate new and modified wireless communications facilities

#### **Ken Fellman**

President, Kissinger & Fellman, P.C.  
Denver, CO

Ken Fellman is a partner in the Denver law firm of Kissinger & Fellman, P.C., and has worked with local governments, regional entities, state government, government associations and non-profit entities on communications and utility issues for 32 years. Ken has served as a municipal attorney for multiple Colorado jurisdictions and currently serves as Yuma County Attorney. He serves as the local government legal counsel representative on the FCC's Intergovernmental Advisory Committee, and is a former president of the National Association of Telecommunications Officers and Advisors. He is a fellow at the Silicon Flatirons

Telecommunications Program at the University of Colorado and periodically teaches Telecommunications Law and Policy. Ken also has an understanding of broadband and communications issues from a policy perspective, having served 6 years as city council member and 8 years as mayor of the City of Arvada from 1993 - 2007. In that capacity he served as chair of the Metro Mayors Caucus, chair of the National League of Cities' Information, Technology and Communications Committee, and as a member of SAFECOM, an advisory committee to the US Department of Homeland Security. Ken has testified on communications matters before the US House of Representative and Senate, and the Colorado General Assembly. Ken is currently working with multiple local governments on wireless facilities siting in Colorado, Washington and Minnesota.

**Jonathan Kramer**

Principal Attorney, Telecom Law Firm, P.C.  
Los Angeles, CA

Jonathan started his telecom career in the late 1970s as a broadband and wireless telecom engineer. He now has over 35 years of telecom engineering experience. For more than 25 years, Jonathan has served over 1,000 private and government clients as a wireless technology and deployment advisor, compliance inspector, and telecom site lease negotiator. In addition to being a telecommunication engineer, Jonathan is also an attorney at law admitted in California (2006) and New Mexico (2013). He and his firm's attorneys advise private clients, trustees, government agencies, and other attorneys on telecom matters around the country. The co-author and co-editor of the FCC's national guide to radio frequency transmission safety guide, Jonathan deals with RF safety concerns raised by building tenants and members of the public. He also has been a testifying witness or trial advisor in over 40 wired and wireless cases. As a lawyer, he is involved in depositions of wireless industry experts, and is representing local government interests in the siting of wireless facilities in California, New Mexico, Arizona, Oregon and Washington. Jonathan holds five FCC licenses and license endorsements, and also holds a communications contractor license in California. In 2013, Jonathan completed his Masters of Law degree in information technology and telecom law from Strathclyde University in Glasgow, Scotland. Jonathan completed his doctorate in Law and Policy at Northeastern University in Boston in 2016.

**OUTLINE:**

1. Legal and Regulatory Framework
  - a. Existing federal law requirements under statute and FCC regulations
  - b. Impact of new state law passed in 2017 and expected proposals for 2018
  - c. Pending proceedings at the FCC that may further impact local rights-of-way, zoning and deployment issues
  - d. Examples of how communities in Arizona, California, Colorado, Minnesota, New Mexico, Oregon and Washington have been working with the wireless industry to address these issues
2. City of Centennial Case Study
  - a. History of wireless regulations in Centennial
  - b. Process to update ROW and wireless regulations in 2017
  - c. Explanation of newly adopted regulations for facilities in the ROW
    1. Design, height, spacing, equipment, placement
  - d. Explanation of newly adopted regulations for facilities on private property
    1. Design, height, equipment, placement
  - e. Explanation of newly adopted process for non-standard facilities (conditional use)
  - f. Update on the status of coordination/agreements with wireless providers
3. Questions and Answers

**LEARNING OBJECTIVES:**

- •Gain an understanding of the emerging needs and trends in communication technology from the perspective of public sector entities.
- Learn about how recent changes in state and federal laws impact local authority and the ability of local communities to protect local interests when siting wireless communications facilities through zoning regulations, right-of-way regulations and license agreements..
- Learn about best practices for innovative changes to local right-of-way and wireless regulations that strike a proper balance between the needs of wireless service providers, public sector entities and the broader community.

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## **DISRUPTIONS IN THE FORCE: HOW THE ENERGY SECTOR IS CHANGING**

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We are a nation addicted to energy to power our homes and businesses, propel our vehicles, and to run the machinery that makes our stuff. While fossil fuels have been the largest source of energy, natural gas has been edging out oil and coal in recent years. In addition, the last few decades have seen a surge of growth in renewable energy development, which are contributing a larger percentage to the energy grid every year. This session looks at the major disruptions in energy policy, production, distribution, and development, as well as how these changes are affecting key stakeholders.

### **MODERATOR:**

#### **Samuel Panarella**

Professor, University of Montana Law School  
Missoula, MT

Professor Sam Panarella teaches in the areas of business, environmental, and energy law and is the Director of the Max S. Baucus Institute. Before joining the law school faculty, Professor Panarella was the CEO of Crux Consulting, LLC, a legal process and management consulting firm whose clients include the legal departments of several Fortune 500 companies. Prior to that, Professor Panarella was a partner at Stoel Rives LLP, a leading western law firm, where he focused his legal practice on energy law, with a specialty in renewable energy development, and representing public and private companies in large-scale industrial and commercial project development. Professor Panarella clerked for United States 9th Circuit Court of Appeals Judge Otto R. Skopil, Jr. before entering private practice. Professor Panarella was selected for inclusion in the 2007 edition of *The Best Lawyers in America*.

### **SPEAKERS:**

#### **Elizabeth Elsbach**

Law Clerk to the Honorable Judge George N. Bowden, Snohomish County Superior Court  
Everett, WA

Elizabeth Elsbach is currently the Judicial Law Clerk to the Honorable Judge George N. Bowden. She has published multiple scholarly works including *Living the World War: A Weekly Exploration of the American Experience in World War I, Volumes I and II*; "Small Towns, Big Projects" as featured in *Sharing the Impacts and Benefits of Energy and Resources Activity*; and several articles about global privacy law. Her areas of focus and practice are intellectual property, environmental, criminal, civil, business associations and legislative history.

#### **Carmine Iadarola**

Founder & President, AquaSan Network  
Denver, CO

Carmine Iadarola has more than forty-five years of experience in environmental policy, energy and water project management and development, and land use planning and permitting. He has worked for Denver Water, the Colorado Legislature and has been an Asst. Attorney General, and is the founder and President of AquaSan Network, a water and energy firm committed to understanding the nexus of these important resources. Mr. Iadarola has been a site developer for major energy projects (gas, biomass, hydro, wind and solar), throughout the U. S. and around the world. He is presently, developing the largest open access solar project in Rajasthan India. He is an Associate Professor at the University of Colorado School of Political Science, organized and served as first president of statewide organization Colorado Water Education Foundation, and served on the Board of various public, private, and nonprofit institutions, including the NPO Understanding Disruption. He has been guest lecturer and invited guest to Israel, Philippines, Ghana, India, Guam, and Ivory Coast on the topics of energy, water and sustainability.

**Nikki Springer**

PhD Candidate, Yale University School of Forestry & Environmental Studies  
New Haven, CT

Nikki Springer is a PhD candidate at the Yale School of Forestry & Environmental Studies. Her dissertation focuses on renewable energy development on public lands in the United States and the complex relationship between government, industry, and conservation groups in regards to environmental regulation, compliance, mitigation, and development incentives. Nikki holds a B.S. in Architecture from MIT and a Master of Landscape Architecture and Master of Urban Planning, both from the Harvard Design School. She is the former Manager of Landscape and Environmental Maintenance for Walmart Stores, where she developed and implemented many sustainable landscape design and management practices for the company's domestic portfolio. She was also the Garvan Chair and Visiting Professor in Landscape Architecture at the University of Arkansas, and has worked for Walt Disney Imagineering, the White House Council on Environmental Quality, and on several large urban waterfront park projects with landscape architecture firms in New York and Shanghai.

**OUTLINE:**

1. Sam Panarella
  - a. Welcome
  - b. Introduction to topic with discussion on the current state of energy law and policy
2. Elizabeth Elsbach
  - a. Impacts of coal mining and mine closures are impacting coal communities
3. Nikki Springer
  - a. Impacts of renewable energy development on endangered species and public lands
4. Carmine Iadarola
  - a. Discussion of the current state of energy distribution and how it could change
5. Sam Panarella
  - a. Conclusions
6. Q&A

**LEARNING OBJECTIVES:**

- An understanding of the current state of energy law and policy
- An understanding of how coal communities are adapting to the new role of coal
- Renewable energy production is a balancing act between climate change and minimizing land use impacts
- An understanding of how changes to the way energy is distributed impacts the grid

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## **EYES IN THE SKY: LOCAL REGULATION OF UNMANNED AERIAL SYSTEMS**

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Unmanned Aerial Systems (UAS or drones) are flying over communities in greater numbers, raising questions about privacy, safety, noise and other issues. Both the Federal Aviation Administration and local governments have been working to extend regulations to cover widespread UAS use and rapidly evolving technology. However, both FAA and UAS users have argued that many local efforts are preempted by federal law. This session will evaluate the scope of permissible local regulation of UAS, grounded in current federal regulation of drone use and technology.

### **SPEAKERS:**

#### **John Putnam**

Managing Partner, Kaplan Kirsch & Rockwell  
Denver, CO

As part of his legal practice, John Putnam has represented airports and local governments nationwide for more than 20 years on issues relating to airspace, noise and environmental regulation of airports and aircraft operation. This has included litigation regarding airspace, noise and preemption of local laws, and counseling regarding the development of ordinances, regulations and similar provisions relating to UAS. John has been asked to present airport and local government perspectives on UAS and airspace issues to the Colorado Municipal League, Federal Aviation Administration Drone Advisory Committee, City Councils and the U.S. General Accountability Office. John also is the Chairman of the City of Boulder Planning Board.

#### **Daniel Reimer**

Assistant General Counsel, Denver International Airport  
Denver, CO

Dan Reimer is the Assistant General Counsel for the Denver International Airport, where he addresses the full spectrum of airport-related legal issues. This includes airspace and safety issues associated with UAS. Dan also was in private practice and represented airports throughout the United States.

### **OUTLINE:**

1. Federal regulatory framework for UAS
  - a. Commercial uses
    - i. 14 C.F.R. Part 107
  - b. Recreational uses
    - i. Statutory restrictions on regulation
    - ii. D.C. Circuit litigation
  - c. Public uses
2. Areas of local concern and interest regarding UAS; existing regulations
3. Preemption issues regarding local regulation of UAS
  - a. Sources of local power
  - b. Limits on local power
  - c. Litigation regarding local authority
  - d. FAA guidance
4. Upcoming regulatory, legislative and other initiatives

### **LEARNING OBJECTIVES:**

- Understanding of federal regulatory regime for
- Understand the bases for local regulation of activities relating to the use of UAS
- Be familiar with regulatory approaches that would increase or decrease risks associated with federal preemption of local regulation relating to UAS

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## LAND USE LESSONS FROM THE LAND OF POT

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It has been seventeen years since Colorado legalized medical marijuana, and five years since the legalization of retail marijuana. This session will review the lessons we have learned about how legalization has affected planning, land use, zoning, and land use enforcement. It will also review what aspects of marijuana regulation did not turn out the way we thought they would, and what we might have done differently.

### MODERATOR:

#### **Don Elliott**

Director, Clarion Associates  
Denver, CO

Donald L. Elliott is a Director with Clarion Associates, LLC, a land use consulting firm with offices in Denver and Chapel Hill, and affiliate offices in Chicago, Cincinnati, and Philadelphia. Don's practice focuses on land planning and zoning, growth management, and international land and urban development issues. He has managed planning and zoning projects that have been state level award recipients from the American Planning Association in Colorado, Arizona, Indiana, New Mexico, and Pennsylvania. Don teaches graduate level course on Land Use Regulation at the University of Colorado at Denver School of Architecture and Planning and is a member of the Denver Planning Board. He is the author of *A Better Way to Zone* (Island Press 2008), co-author of *The Rules that Shape Urban Form* (APA 2012) and *The Citizen's Guide to Planning* (APA 2009) and has served as the editor of *Colorado Land Planning and Development Law* for over 20 years. Don has a bachelor's degree in Urban Planning and Policy Analysis from Yale University, a law degree from Harvard Law School, and a master's degree in City and Regional Planning from the John F. Kennedy School of Government at Harvard.

### SPEAKERS:

#### **Kyle Dalton**

Principal City Planner, City and County of Denver  
Denver, CO

Mr. Dalton leads the Department of Community Planning & Development's regulatory planning teams and work program, including zoning code text amendments, rezonings, general development plans, and other tools, with a focus on keeping Denver's regulations modern, clear, and user-friendly. He is a frequent speaker to industry, real estate, and citizen groups about Denver's form-based and context-based code, and is an instructor for the Denver Citizens' Planning Academy. He previously worked for other community planning departments in Colorado and Arizona.

#### **Bronwyn Scurlock**

Assistant City Attorney, City of Fort Collins  
Fort Collins, CO

Bronwyn Scurlock graduated Cum Laude from the University of Toledo College of Law in 2004. After moving to Colorado, she began her career in the Denver City Attorney's Office in 2006 prosecuting general sessions cases including state criminal matters, city ordinance violations, traffic violations, and domestic violence cases. In June of 2010, she accepted a position in the Fort Collins City Attorney's Office where she currently works handling liquor licensing, marijuana licensing, municipal court prosecutions, and advising Fort Collins Police Services.

#### **Noah Beals**

Senior City Planner, City of Fort Collins  
Fort Collins, CO

Noah Beals is a Senior City Planner-Zoning with the City of Fort Collins. He started with the City of Fort Collins 6 years ago as a Zoning Inspector. Prior to working in Fort Collins, Noah worked at the City and County of Denver as a Neighborhood Inspector. He received a Master of Urban and Regional Planning from CU Denver and a Bachelor of Science in Urban Planning at the University of Utah. Working in both the City and County of Denver and Fort Collins he has seen the progression of marijuana regulations and impacts on communities.

**OUTLINE:**

1. Introduction
  - a. Brief review of legalization history and related non-land use impacts for context. (Elliott -- 10 min)
2. Land use and planning impacts of legalization
  - a. Denver's story (Dalton -- 10 minutes)
3. Business licensing impacts of legalization
  - a. Fort Collins' story (Scurlock - 10 min)
4. Zoning enforcement impacts of legalization
  - a. Fort Collins' story (Lenderts and Beals -- 15 minutes)
5. Real estate market impacts (Brue -- 15 minutes)
6. Questions and Answers (15 min)

**LEARNING OBJECTIVES:**

- Understand how the demand for commercial, retail, agricultural, and industrial land uses has changed approaches to land use planning.
- Understand how the combination of land use regulations and marijuana business regulation has been enforced -- and the remaining enforcement challenges
- Understand how the emergence of a variety of new marijuana related businesses has impacted land markets and the secondary market impacts on surrounding areas

**ADDITIONAL INFORMATION:**

Most sessions on marijuana legalization have focused on use, behavior change, driving and walking safety, and health impacts -- but few to date have addressed land use planning or enforcement impacts of this significant change in public policy.

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## **MAKING DO WITH DIAL-UP IN A HIGH-SPEED WORLD: THE CASE FOR EQUITABLE ONLINE ACCESS**

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As the world gets “smarter” and essential services increasingly require online submissions, internet access is becoming a necessity rather than a luxury. But where does that leave rural communities that don’t always have the needed infrastructure to provide their citizens—who are often spread over large distances—with online access? Although frequently seen as a rural issue, many people in urban areas also lack reliable service if they can’t afford to pay for the service. This session will investigate the solutions some communities are using to address this issue.

### **MODERATOR:**

#### **Miriam Gillow-Wiles**

Executive Director, Southwest Colorado Council of Governments  
Durango, CO

Miriam Gillow-Wiles is Executive Director of the Southwest Colorado Council of Governments (SWCCOG). The SWCCOG is a regional organization working in the Four Corners area of Colorado; comprised of Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties, including the municipalities of Bayfield, Cortez, Dolores, Dove Creek, Durango, Ignacio, Mancos, Pagosa Springs, Rico, and Silverton. The SWCCOG covers about 6500sqmi. With about 100,000 people, or 15.5 people/sqmi, the region is very rural with topographic challenges and long distances between population centers. The SWCCOG works on a variety of projects and programs including aging, environment, housing, transportation, telecommunications, and tourism, throughout the region and state. When not advocating for the region, she is mountain biking and running in the mountains of SW Colorado.

### **SPEAKERS:**

#### **Bob Fifer**

ITS Smart Mobility Manager, Colorado Department of Transportation  
Denver, CO

Bob Fifer's record includes over twenty years of developing and directing strategic business and network/technology operations and engineering initiatives for Intelligent Transportation Systems, telecommunication, and IT industries. He is currently the Business Development and Planning Manager for the ITS Branch at the Colorado Department of Transportation. Mr. Fifer also serve on the Arvada City Council, FCC Intergovernmental Advisory Committee, and the Colorado FirstNet Governance Board.

#### **Blake Mobley**

IT Director, Rio Blanco County  
Meeker, CO

Rio Blanco County IT Director, Blake Mobley, is the project manager of the Rio Blanco Broadband project. The RBC Broadband project provides an FTTH solution in Meeker and Rangely and a fixed wireless solution for rural Rio Blanco. Prior, Blake served as Meeker School District's IT Director for nearly 20 years and in 1999, implemented one of the first fully fiber connected school districts in Colorado. Later, In 2001, the school, town, hospital, library and county formed a joint fiber optic, metropolitan area network which served these entities for about 15 years until the entire infrastructure evolved into the RBC Broadband project. Rio Blanco County is now the fastest internet county in Colorado.

#### **Chris Perlitz**

Director of Business Development, Municipal Capital Markets Group  
Greenwood Village, CO

Christopher Perlitz serves as an investment banker with extensive experience with project development and industry innovation straddling both the public/private sectors. He has a thorough knowledge of the Capital Markets and Capital Leases and thus works with both types of complex transactions. In addition, he has a thorough knowledge of new finance policy and the evolving financial regulatory landscape. He continues to work on ways to improve and make our Federal lending program more efficient through a greater use of global

Capital Market product and investment marketization. He holds a Bachelor's Degree from the University of Colorado at Boulder and is an active member of the National Broadband Strategy Coalition and several non-profit organizations in the Denver area.

**OUTLINE:**

1. Introductions of speakers and topic
2. Broadband Access in Rural Communities
  - a. Rio Blanco County case study
  - b. Vermont case study
3. Urban Perspective on Barriers to Broadband Access
  - a. Income inequality
  - b. Impacts of not having reliable access
4. Wrap-up and Q&A

**LEARNING OBJECTIVES:**

- Understand the issues related to a lack of reliable internet connections
- Learn about opportunities available to rural communities to build a broadband network
- Learn about the barriers facing residents in urban areas to accessing reliable connectivity.

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## THE NEW MOBILITY TRIFECTA: AVS, EVS, AND SHARING

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Rapid growth, lagging infrastructure investments, and new expectations for connected mobility are dynamic trends challenging the ability of our states, regions, and local communities to strategically leverage our current transportation assets. How do we use new technologies to provide an integrated, convenient transportation system of the future? What is the future for Hyperloop projects? How do we maximize rail transit investments; as new opportunities emerge to enhance connectivity; and make our roadways more efficient, reliable, and safe? This panel will explore visionary efforts underway to re-envision the infrastructure—both physical and technological—needed to accommodate significant projected growth in the coming decade and optimize and generate smart technologies.

### MODERATOR:

#### **Daniel Hutton**

Executive Director, Denver South Transportation Management Association  
Denver, CO

Daniel Hutton joined the Denver South TMA as Director of Transportation Demand Management (TDM) Programs after nearly four years with the City of Centennial, most recently as Manager for the City's Bloomberg Philanthropies-funded Innovation Team. Daniel will be building on his past experiences in the public, non-profit and private sectors to develop next-generation TDM solutions for advancing Denver South's culture of innovation and high quality of life. Daniel's professional passions involve connecting people with places, things and one another, whether through multi-modal mobility options or telecommunications networks. His work with the City of Centennial included analysis and project/program management involving the City's Fiber Optic Initiative, the Go Centennial First/Last Mile Pilot Program, and the City's successful proposals for the Innovation Teams and Smart Cities programs. Prior to working for City of Centennial, Daniel co-founded a telecommunications consulting firm specializing in site selection for nationwide edge data networks. He received his Master's of Public Administration from the University of Colorado Denver while working as a policy fellow for another regional TMA.

### SPEAKERS:

#### **John Tolva**

Co-founder, CityFi; Director, Colorado Smart Cities Alliance  
Denver, CO

Formerly John was the president of PositivEnergy Practice, an urban systems engineering firm based on data-driven planning for new building design, retrofits, and urban design. John's career has focused on developing and applying technology to improve the urban environment. From 2011 to 2013 he was Chief Technology Officer for the City of Chicago, leveraging technology to streamline public services through more efficient data-sharing, digital communications, and next-generation infrastructure. He led the development of 'The City of Chicago Technology Plan', an initiative that sets forth a series of public-private strategies to accelerate economic growth, build educated and digitally-engaged communities and workforce, improve government services, and reduce costs through technology. In 2012, the White House recognized John as a 'Champion of Change'. Prior to joining the City, he was Director of Citizenship and Technology at IBM Corp, where he worked on the firm's 'smarter cities' initiative, advising cities how to incorporate data analytics into planning and operations. John led the City Forward project, the first global aggregator and visualizer of urban data sets.

#### **Don Hunt**

Advisor, Mobility Choice  
Denver, CO

Don has built his career developing urban transportation solutions. As the Executive Director of the Colorado DOT, he moved the agency forward in intelligent transportation systems and roadway operations. Don also served on national committees focusing on emerging connected and automated mobility. He is the founder of Mobility Choice, an ongoing public-private effort to ready the Denver region for technology-enabled mobility.

**Peter Kozinski**

RoadX Director, Colorado Department of Transportation  
Denver, CO

Peter Kozinski is the Director of the RoadX Program at the Colorado Department of Transportation. In that position, he is responsible for the integration of technology into the transportation system including planning, engineering design and construction. Peter was appointed to this position in September 2015 after serving 2-years in CDOT's Office of Major Project Development where he was responsible for developing and delivering Major Projects via innovative delivery methods including Public-Private-Partnerships. Peter has a diverse background of experience – ranging from Major Projects like I-70 Central (\$1.1 billion) and The I-70 Mtn. Corridor (\$13 billion solution) to the development of Context Sensitive Solutions (CSS) guidance and Colorado's first proposed vegetated wildlife overpass. Prior to joining the Colorado Department of Transportation, Peter worked in the private sector for 6-years and holds Bachelor's and Master's degrees in Civil Engineering from Colorado State University. Peter is a licensed Professional Engineer in the State of Colorado and currently holds memberships with a number of professional affiliations.

**OUTLINE:**

5. A mix of collaborations, alliances, public-private partnerships, demonstrations and pilots are emerging in states, regions and local governments to support mobility infrastructure investments integrating new technologies that are autonomus, on-demand, shared, and multimodal transportation infrastructure. This panel will use "Innovation Practioners" currently directing several of these collaborations to leverage, demonstrate and facilitate changes in mobility choices and transportation. The following topics will be addressed by the panel:
  - a. The New Mobility Trifecta of Av's Ev's and Sharing
  - b. The implications of Smart Technology Trends Regionally and Locally
  - c. How new collaborations are applying smart city best practices
  - d. Developing Mobility Choice – the Blueprint Project
  - e. Managing Innovation and Change: The Road X Approach

**LEARNING OBJECTIVES:**

- Develop an understanding of what and how transportation agencies are implementing changing technologies aand planning future mobility investments
- Learn how other communities are designing, managing and leveraging transportation advancements and the future of our communities
- Develop an understanding of how three collaborations are organizing smart city transportation programs and projects to address mobility needs and opportunities to implement new technological and social innovations

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## **SMART CITIES 2.0: INNOVATIONS THAT ARE DRIVING TRANSFORMATIONAL CHANGE**

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A smart city is an environment that enables all of us to more effectively and efficiently live, work and play in the face of increasing urbanization and density. It leverages advancements in science and technology to create an area that is intelligent about the strategic and tactical needs and wants of all the constituents. It embraces policies and regulations that allow it to be nimble, welcomes its constituents to be prosumers, and thrives on local vibrancy and global connections. It challenges the status-quo, conducts careful experiments and continuously reinvents itself through public, private and academic partnerships. This session will examine the technologies involved, the areas of service being impacted, and how cities are implementing these changes.

### **MODERATOR:**

#### **Jake Rishavy**

Vice President of Innovation, Denver South Economic Development Partnership (EDP)  
Denver, CO

As Vice President of Innovation, Jake Rishavy works to elevate Colorado's visibility as one of the world's premier places to do business for growth-oriented startup and second-stage companies. He achieves this by making the ecosystem of resources accessible to growing companies and bridging connections between innovative, emerging companies and larger, at-scale companies. In this role, Jake has built and continues to build programs to support entrepreneurs in Denver South's key industry verticals and niche markets. Jake co-founded Prime Health, a community of 1000+ Colorado-based health care executives, clinicians, entrepreneurs and technologists dedicated to supporting innovation digital health technologies to improve care and lower cost. The group supports now a broader network of 120+ Colorado digital health companies. Jake also founded TechIoT, an IoT community focused on accelerating the commercialization of IoT innovations through community building, education, design mentorship and supply chain financing, among many other tools. Finally, Jake is a founding member of Innovators Colorado, a state chapter of Innovators International, a roundtable of the Chief Innovation Officers of non-competing large companies who jointly problem-solve each other's biggest innovation-related challenges. Jake also works to promote the Denver South region locally, nationally and internationally, and serves as liaison to a number of partner organizations, including business associations and regional economic development groups.

### **SPEAKERS:**

#### **Vic Ahmed**

Founder and CEO, Innovation Pavilion  
Denver, CO

Vic Ahmed has been involved in the cross section of economic development, policy-making, government and innovation ecosystems for 20+ years. He is the Founder & Chairman of the Innovation Pavilion; Chairman of the Colorado Association of Manufacturing Technology; and past chairman of the Colorado Technology Association.

#### **Aleta Jeffress**

Chief Information Officer, City of Aurora  
Aurora, CO

Aleta Jeffress is the Chief Information Officer for City of Aurora, CO. She has over 20 years of success as an Executive IT leader with a proven track record of establishing relationships between business and technology. Aleta has experience in building and transforming start up software companies, provided consulting services focused on IT Leadership and Risk Management, and has built Project Management and IT Security offices from the ground up. Previous to her current position Aleta managed large federal government contracts, and was the CIO for the Indiana Department of Revenue. Originally from Indiana, Aleta graduated from Indiana University Bloomington, and her family moved to Colorado in the summer of 2014.

**Darin Atteberry**

City Manager, City of Fort Collins  
Fort Collins, CO

Darin Atteberry is the City Manager for the City of Fort Collins, CO, a position he has held since December 2004. Prior to that, Darin served as the Fort Collins Assistant City Manager for more than 8 years. As City Manager, Darin has led the City government through a time of transformational change, moving the organization from a "trust us" model to one that uses a data-driven, performance based approach. Darin is an advocate for community collaboration and has built strong relationships with both public and private sector partners. He serves as a member on the Board of Directors for Transforming Local Governments' Alliance for Innovation and for the Center for Public Safety Excellence. In 2016 he was elected as a Fellow with the National Academy of Public Administration, chartered by Congress to serve federal, state, and local governments. Prior to coming to Fort Collins, Darin worked with cities in California, Washington, and Georgia. He attended Harvard University in 2000, completing the Senior Executive Program in State and Local Government. He received his Master of Science in Civil Engineering and Master of City Planning at Georgia Institute of Technology in 1991. In 1989, he received a Bachelor of Science from California Polytechnic State University.

**OUTLINE:**

Communities are responding to technological and social changes as "Smart Cities" to create an agenda and programmatic response to manage this rapid transformation in our lives and our communities. This panel will be led by an "Innovation Practioner" currently directing the Colorado Smart Cities Alliance – one of many alliances that have emerged across the country to leverage and respond to change. The following topics will be addressed by the panel:

1. The Technologies Transforming Our Lives and Our Communities
2. Smart Cities Economic Development Strategies
3. Managing Innovation and Change: The Fort Collins Model /Approach
4. Public/Private/Academic Partnerships

**LEARNING OBJECTIVES:**

- Develop an understanding of what and how technological changes are already impacting how we live, work and play in our communities
- Learn how other communities are managing and leveraging advancements in science and technology to create an environment that is intelligent about strategic and tactical needs and wants of all the constituents.
- Develop an understand of how a smart city embraces policies and regulations that allow it to be nimble, welcomes its constituents to be prosumers, and thrives on local vibrancy and global connections
- Learn how communities are managing innovation and developing public/private/academic partnerships to build smart city capacity