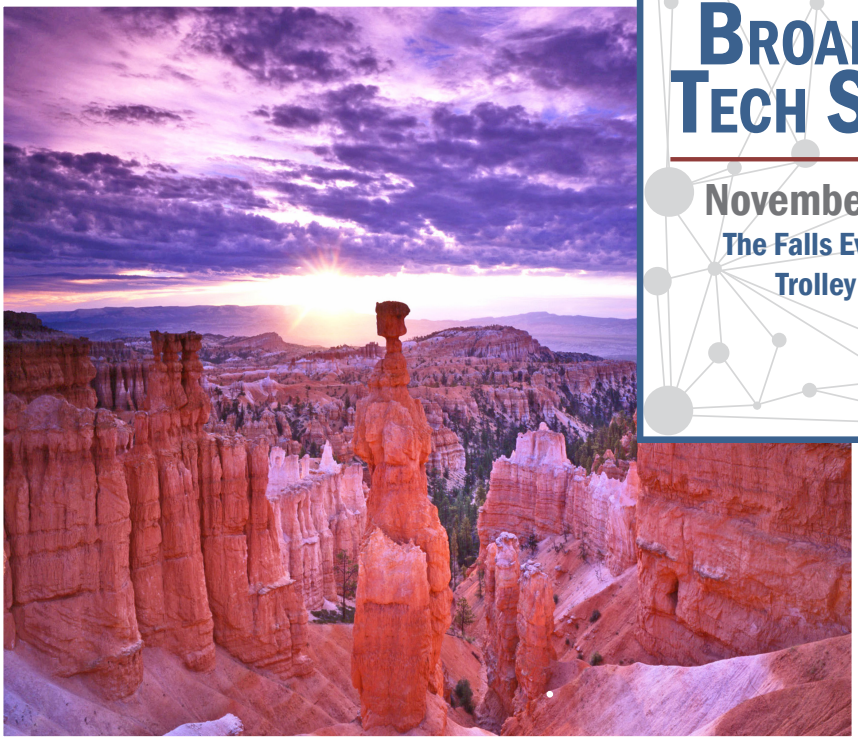
2016 Broadband Tech Summit

November 9, 2016

The Falls Event Center
Trolley Square

Salt Lake City, UT



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Utah Governor's Office *of* Economic Development
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Welcome

WEDNESDAY, NOVEMBER 9, 2016 | 9:30 AM - 4:00 PM
THE FALLS EVENT CENTER, TROLLEY SQUARE
580 SOUTH 600 EAST, SALT LAKE CITY, UTAH

Welcome to the 2016 Broadband Tech Summit presented by the Utah Broadband Outreach Center, with help from the Lehi and Salt Lake Chambers of Commerce and local sponsors.

The Utah Broadband Outreach Center is a joint effort between the Governor's Office of Economic Development and the Department of Technology Services' Automated Geographic Reference Center (AGRC) to develop a statewide map of available broadband services and implement a plan to increase broadband adoption and deployment in the state.

Utah has been ranked the fastest Internet in the West, fifth in the U.S., and eight in the world by Akamai Technologies. The broadband infrastructure in Utah has made the state a nation-leading tech center and the home of "Silicon Slopes." We are proud that many industry leading companies choose to call Utah home.

This summit will focus on how advances in technology are supported by a strong broadband infrastructure. Topics include the Internet of Things, virtual reality, Internet identity, new advances in research, public safety, and digital inclusion.

This year we invited our speakers to share the stage equally, challenging them to present complex ideas in only 18 minutes. Each presentation can be appreciated by broadband service providers, government officials, high-tech business leaders, industry professionals and those interested in the latest news on broadband technologies.

We hope you will find the 2016 Broadband Tech Summit informative, enjoyable and an effective use of your time. Please visit broadband.utah.gov for more information about the Utah Broadband Outreach Center and be sure to visit broadband.utah.gov to get a snapshot of your community.

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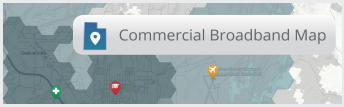
About The Utah Broadband Outreach Center

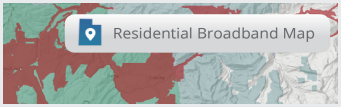
The Utah Broadband Outreach Center is a joint effort between the Governor's Office of Economic Development (GOED) and the Department of Technology Services' Automated Geographic Reference Center (AGRC) to maintain a statewide map of available broadband services, strategically plan to increase broadband adoption and deployment in the state, and to advise on policy decisions that impact broadband providers and consumers in the State of Utah.

How We Can Help

Know Your Area

The best planning requires information. The Outreach Center's Maps can give you accurate and up to date coverage data.

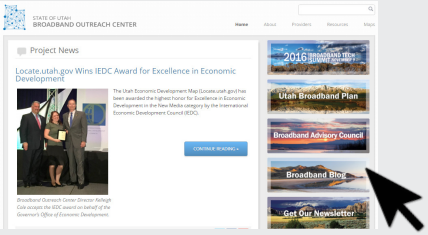




Know What's Happening

The Outreach Center can help brief you on policy that could impact your area, alert you to new grants, and keep you in the know about planned infrastructure deployment.

Follow the **Broadband Blog** on our website or give us a call.



Get Excited!

Communities need champions and industry needs to see demand. Follow along with innovations in technology that utilize fast broadband networks. Grow your understanding of how broadband influences education, health, quality of life, and economic development.

Visit BROADBAND.UTAH.GOV for more information

Val Hale

Executive Director, Governor's Office of Economic Development

Val Hale is the Executive Director of the Utah Governor's Office of Economic Development (GOED), which promotes state growth in business, tourism and film. Val was appointed to the position in 2014 by Gov. Gary R. Herbert. Before accepting the position as executive director, Val served for two years as president and CEO of the Utah Valley Chamber of Commerce, leading efforts in business community issues— including regional economic development and branding initiatives. Prior to serving in the chamber, Val was vice president (2010-2012) for university relations at Utah Valley University (UVU), overseeing legislative, marketing and public affairs, along with media and community relations.

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Agenda

9:30 AM - 10:00 AM Welcome and Opening Remarks

Kelleigh Cole, Director, Broadband Outreach Center
Val Hale, Executive Director, Governor's Office of Economic Development

10:00 AM - 11:00 AM Speaker Presentations

Danilo Campos, Technical Director for Social Impact, GitHub
Mike Spaulding, VP of Engineering for the Mountain West Region, Comcast
Glenn Ricart, Founder and CTO, US Ignite

11:00 AM - 11:15 AM Break

11:15 AM - 12:15 PM Speaker Presentations

Ken Malm, Principal Technical Consulting Engineer, AT&T
Joe Dougherty, Public Information Officer, Utah Division of Emergency Management
Jeremy Ferkin, VP of Operations for UT, NV & CA, CenturyLink

12:15 PM - 1:30 PM Lunch

1:30 PM - 2:30 PM Speaker Presentations

Dennis Kish, President, Google Fiber
Bert Granberg, Director, Utah Automated Geographic Reference Center
Darin Howe, Product Line Manager, Corning Optical Communications

2:30 PM - 2:45 PM Break

2:45 PM - 3:45 PM Speaker Presentations

Roger Timmerman, Executive Director, UTOPIA
Phil Windley, Enterprise Architect, Lab Director, Brigham Young University
Chrisella Herzog, Editor-in-Chief, WhiteHat Magazine

3:45 PM - 4:00 PM Conclude

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Speakers

Danilo Campos

After the Digital Divide

GitHub

Danilo will share his personal journey in tech and discuss the barriers that exist for underrepresented populations entering the tech industry. He will also make the case for why businesses should invest in digital literacy efforts.

Danilo Campos works as the Technical Director for Social Impact at GitHub. He taught himself to use a Macintosh SE at age 7. Danilo was born in Puerto Rico, but grew up in New Mexico studying the interfaces of every piece of software he could find. He continued to teach himself programming during college, and eventually quit his job to start a career in software. Danilo now works for GitHub drawing upon his personal experience to develop tech inclusion programs to benefit underserved communities.

Mike Spaulding

Investment, Inclusion & Innovation

COMCAST NBCUNIVERSAL

Mike's presentation will cover the three "I's" of forward thinking service provision: Investment, Inclusion, and Innovation. He will discuss Comcast's DOCSIS 3.1 gigabit Internet service, the Internet Essentials program and digital inclusion, and ubiquitous service delivery.

Mike Spaulding is the VP of Engineering for the Mountain West Region of Comcast. He has 19 years of experience in the cable and telecommunications industry, holding multiple technical leadership positions over the years. In his current position with Comcast, he's responsible for the oversight of all engineering functions including Advanced Engineering/Headend Operations, Hybrid Fiber Coaxial Network Maintenance, and Construction for Colorado, New Mexico, Arizona, and Utah.

At AT&T, we're using the power of our network and IoT innovations to create ***Smart Cities*** by connecting things like utility meters, street lights and water systems. Adding connectivity to these physical properties can transform how cities serve their citizens, use energy and preserve natural resources.

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AT&T

Speakers

Glenn Ricart

Smart Community Applications and Services That Will Drive Broadband

usignite

Glenn's presentation will address Utah's role as a test bed for the National Science Foundation's advanced networking research. He will also explore the possibilities of gigabit bandwidth across healthcare, education, and other public sectors.

Glenn Ricart, Ph.D., is the Founder and CTO of US Ignite in Utah, bringing 40 years of innovation in computer networking and related fields to his post at the organization. Glenn was inducted into the Internet Hall of Fame in 2013 after having implemented and led several ground breaking achievements in the field. He's held senior management positions in several companies, including Novell and PricewaterhouseCoopers, and has founded or co-founded five startups.

Ken Malm

Mobile Technology, Looking Ahead

AT&T

Ken will describe the latest advances in wireless broadband, how these networks function and how they are changing the way we all live and work. He will also discuss how wireless networks are enabling one of the fastest growing technology trends – The Internet of Things (IoT).

Kenneth Malm is the Principal Technical Consulting Engineer with AT&T and has been with the company for 20 years serving in various roles. He has experience in Radio Frequency Design, Performance and Optimization, Radio Frequency Safety and Compliance, Mobility Network Sales Support, and Technical Communications. Ken has a B.S.E.E. from the University of Colorado, Denver. He's been married to his wife Wendy for 21 years and has two children.

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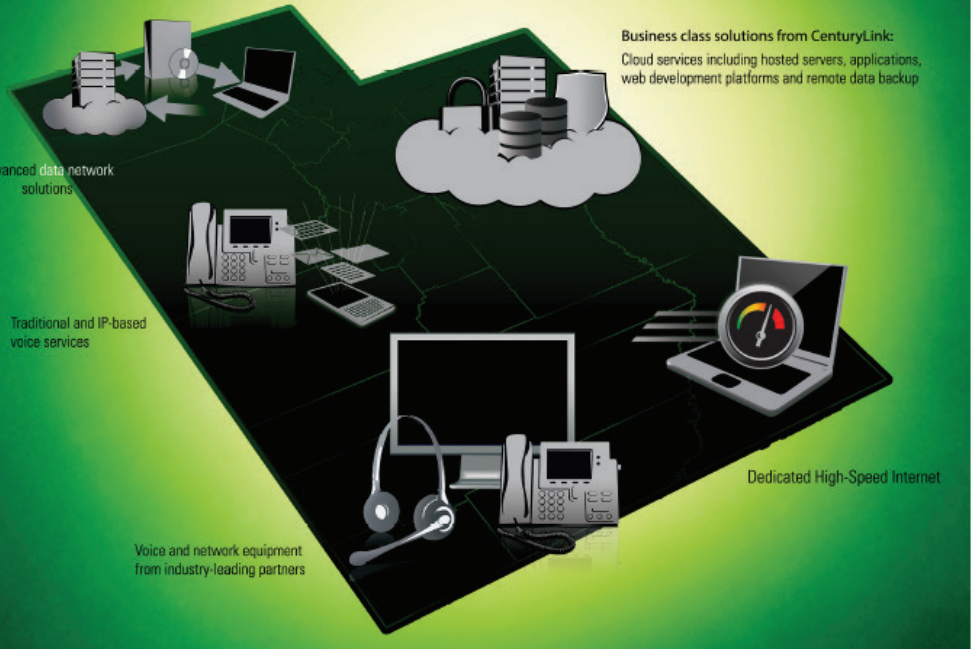

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Speakers

Joe Dougherty

So You Want to Fly a Drone?

Joe will discuss what it takes to fly a drone, including the many legal hoops to jump through. He will also explore the possible applications for drones in emergency and government related functions.

Prior to joining the Utah Division of Emergency Management, as a Public Information Officer, Joe Dougherty worked for seven years as an award-winning journalist for the Standard-Examiner and Deseret News. In addition to giving over 100 media interviews per year on disaster related topics, Joe also organizers the Great Shakeout and serves as the Division's drone pilot. He lives in Davis County with his wife and four children.

Jeremy Ferkin

Global, Regional, and Local Networks - Efficiency, Efficacy, and Evolution

Jeremy will discuss the evolution of networks on various scales and address the blurring lines and distinctions between them. He will also explore the challenges of leveraging national networks in a hyper-local marketplace.

Jeremy Ferkin joined CenturyLink in March of 2003, bringing with him a wealth of telecom experience from roles with Broadwing Communications, Sonic Foundry, and Electric Lightwave. In his current position as VP of Operations for Utah, Nevada, and California, Jeremy works as one of the nation's strongest advocates for CenturyLink's role in the Gigabit Economy. Jeremy is a South Jordan, Utah resident and enjoys hunting, horseback riding, and outdoor sports with his wife Cindy and two children.

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Google fiber

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Speakers

Dennis Kish

Building an Internet That is Always Fast, Always Open

Google fiber

Dennis will talk about the evolution of Fiber from its early days in Kansas City and Provo, to continuing launches across the country, including Salt Lake City.

Prior to joining Google Fiber as President, Dennis Kish was Senior Vice President and General Manager of the Qualcomm Microelectromechanical systems Technology Division, where he helped to pioneer ultra-low power displays. He has also held multiple leadership positions in companies focusing on mobile apps. Dennis has a Bachelor of Science in electrical engineering from Michigan State University. In his spare time, he enjoys skiing, boating, reading and travel.

Bert Granberg

Where? In Utah!

UTAH AGRC
Automated Geographic Reference Center

Bert will present a case example from the Automated Geographic Reference Center (AGRC) that illustrates the application of high-speed broadband in Utah. In 2015, AGRC and its funding partners licensed high resolution aerial photography and a cloud-based web service delivery platform from Google. Usage metrics of this new system around the state will make for an interesting map and story.

Bert Granberg directs AGRC, the State of Utah's mapping technology office. He joined AGRC after completing a master's degree in geographic information systems from the U of U in 2000. Bert and his team have been an integral part of the Broadband Outreach Center since its 2010 inception.

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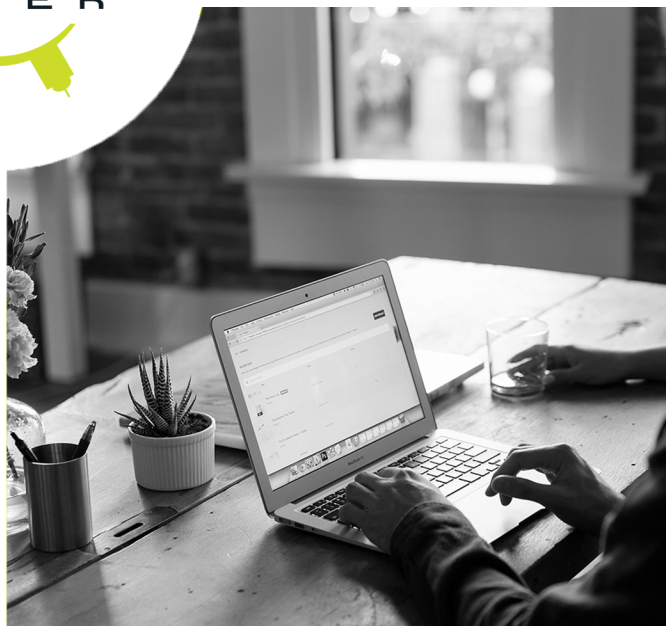
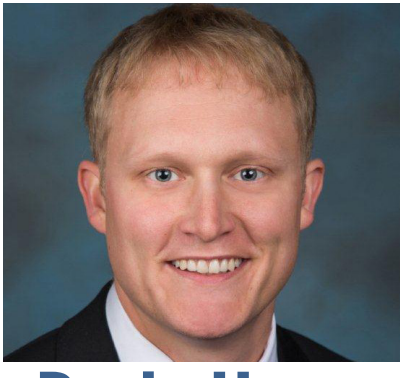


Speakers



Darin Howe

Think Small! Smaller Cable, Bigger Possibilities

CORNING

Darin's presentation will document the evolution of optical cables from traditional loose tube designs to smaller, lighter micro cables and the unique benefits and deployment capabilities they enable.

Darin Howe is a Product Line Manager for Outside Plant Cable at Corning Optical Communications. He has 8 years of experience in the industry, working primarily with Outside Plant construction and Fiber to the Home installations. Prior to working for Corning, Darin spent 5 years as a Signal Corps Officer in the United States Army. He is a graduate of the United States Military Academy with a bachelor's degree in Information Systems Engineering.

Roger Timmerman

Now Playing: Virtual Reality Live

UTOPIA FIBER

Roger's presentation will address recent trends in Virtual Reality (VR), like advancements in video stitching and encoding that enable live streaming in VR, and how VR will impact the future of broadband connectivity.

Roger Timmerman is the Executive Director and CEO of the 11 city UTOPIA fiber project in Utah. He is a technology management professional with over 15 years of experience in telecommunications and information technology. Roger has been designing and building networks throughout his career in various roles. He earned Bachelor of Science and Master of Science degrees in Information Technology from Brigham Young University.

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Speakers

Phil Windley

An Internet for Identity

Phil's Presentation will address recent developments in distributed technology, such as the Bitcoin blockchain, and how these changes will overhaul identity on the Internet. He will discuss important implications for businesses with online components, and explore the benefits for users.

Phil Windley, Ph.D., is a passionate tech educator, chair of the Dovrin Foundation, and co-founder and organizer of the Internet Identity Workshop. He is an Enterprise Architect in the Office of the CIO at Brigham Young University, Director of Pico Labs, and an Adjunct Professor of Computer Science. In addition to several executive leadership roles in various companies, he served as the Chief Information Officer for the State of Utah and as Senior Staff on Governor Mike Leavitt's Cabinet.

Chrisella Herzog

Tech for Social Good: Empowering Communities in Global Development

Chrisella will discuss the role of broadband and Information and Communications Technology as a catalyst for global development. She will cover two trends: the economy's shift into the Fourth Industrial Revolution, and the implementation of the United Nation's Sustainable Development Goals.

Chrisella Herzog is the Founder of Fibonacci Media and the Editor-in-Chief of WhiteHat Magazine, a digital multimedia organization covering global stories of science and technology for social good. Previously, Chrisella served as Managing Editor of Diplomatic Courier magazine, as well as Managing Editor and later Editor-in-Chief of the official G20, G7/G8, and APEC summit publications.

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