

## Broadband 101 Session – The Basics of Broadband

This popular pre-conference session for **industry managers, public policy and government decision makers** delivers an understanding of the basic concepts of broadband networking technology, economics, and public policy. The session is geared to all levels of technical expertise using straightforward, non-technical language to provide need-to-know knowledge.

### Session Learning Objectives

- Gain an understanding of broadband networks and accompanying technologies
- Understand the different wireline and wireless technology options for broadband networks, and their strengths and weaknesses in carrying broadband services
- Uncover trends and economic trade-offs in the deployment of the different broadband network options
- Evaluate prospects for competitive deployment of broadband access networks in your community
- Understand and discuss key broadband policies and regulations such as the policy definition of broadband by the Federal Communications Commission (FCC), net neutrality, universal service, and the national broadband plan

The session instructor is Dr. David Reed, Scholar in Residence in the Computer Science Department at the University of Colorado Boulder. Dr. Reed provides unique and useful insights into the evolution of Broadband based upon over 30 years of experience at the FCC, as a senior executive at CableLabs, and a professor at CU.

### Session Outline (4-hours duration)

#### Section I: Wireline Broadband Networks (1<sup>st</sup> hour)

- What is the Definition of Broadband?
- Understanding Broadband: Basic network components and software systems

Break for Lunch (20 minutes)

#### Section II: Future Trends in Wireline and Wireless Broadband Networks (2<sup>nd</sup> hour)

- Copper, Coax, Fiber and Edge Networks
- LTE, Wi-Fi, 5G, Satellite, Small Cells and Seamless Access

Coffee Break (10 minutes)

#### Section III: Broadband Policy Issues (3<sup>rd</sup> hour)

- Spectrum Management Basics
- Broadband as a Universal Service

Coffee Break (10 minutes)

Section IV: Future Trends and Prospects (4<sup>th</sup> hour)

- FCC Approach to 5G
- Net Neutrality – It's Back!