

## **New Hampshire Broadband Conference**

May 16, 2014

Grappone Conference Center / Concord, New Hampshire

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Joanna Young

Chief Information Officer
And Associate Vice President for
Finance

May 16, 2014

NH Broadband Conference Attendee:

On behalf of the University of New Hampshire and the NH Broadband Mapping & Planning Program, we welcome you to the "NH Broadband Conference" of 2014. We have assembled an impressive group of speakers and participants to address what we share as a common interest – expanding broadband access, adoption, and utilization in New Hampshire. We have designed the program to include ample opportunity for you to participate in the sessions, speak with the vendors, and visit the technology demonstrations that will be available throughout the day. Please also take the time to network with friends and colleagues, as well as to make new connections. At the conclusion of the day, we would appreciate it if you would take a moment to complete the evaluation form you will find in the conference packet.

If you have any questions during the day, please visit the registration table in the main lobby. Again, thank you for your participation in the "NH Broadband Conference" and we hope you enjoy the program.

Yours sincerely,

Joanna C. Young

jeannac Young.

**Chief Information Officer** 

Associate Vice President for Finance

## **CONFERENCE COMMITTEE**

#### Michael Blair

NH Broadband Mapping & Planning Program, University of New Hampshire

#### **Susan Corcoran**

NH Broadband Mapping & Planning Program, University of New Hampshire

#### **David Foote**

NH Broadband Mapping & Planning Program, University of New Hampshire

#### George Fryburg

ConnectNH, University of New Hampshire

#### **Carol Miller**

NH Dept. of Resources and Economic Development

#### **Tim Murphy**

Southwest Region Planning Commission

### **Fay Rubin**

GRANIT, University of New Hampshire

#### **Brian Shepperd**

Broadband Services, University of New Hampshire

#### **Scott Valcourt**

Strategic Technology, University of New Hampshire

## **CONFERENCE INFORMATION**

### Registration

The registration table will be open throughout the conference; stop by with any questions!

#### **Technology Demonstrations**

Tables will be set up in the Granite Ballroom, showcasing broadband technologies and applications.

#### **Sector Lightning Talks**

Representatives from Municipal Government, Business, Healthcare, and Education will speak for "7" minutes and then participate in a panel Q&A. Panelists will give a brief overview of: (1) the extent to which their sector: needs broadband access to be successful; (2) the degree to which their sector has adopted broadband so far; and (3) what they think is the biggest hurdle to increased adoption in the future in their sector, and needs to be done to overcome it.

### Speakers:

**Steve Schneider**, *Town Manager*, *Enfield*, *NH* (Government Sector)

Ryan Barton, CEO, MainStay Technologies (Business Sector)

**Nick Toumpas**, Commissioner, NH Dept. of Health and Human Services (Health Sector)

**Stan Freeda**, Specialist for Educational Technology and Online Learning, NH Dept. of Education (Education Sector)

## SCHEDULE-AT-A-GLANCE

8:00 -	Registration & Continental Breakfast	Pre-function	
9:00am		Area	
9:00 -	Welcome Remarks	Granite	
9:50am		Ballroom	
	Keynote: Senator Kelly Ayotte		
9:50 –	Plenary Session: "Broadband	Granite	
10:25am	Initiatives in NH"	Ballroom	
10:25 -	Coffee Break w/ Exhibitors	Pre-function	
10:45am		Area	
10:45am –	Concurrent Sessions		
12:00pm	<ul> <li>Government</li> </ul>	°Webster	
	<ul> <li>Economic Dev. &amp; Business</li> </ul>	°Pierce	
	<ul> <li>Health &amp; Public Safety</li> </ul>	°Concord	
	<ul> <li>Education</li> </ul>	°Merrimack	
12:00 -	Lunch	Granite	
1:20pm	Sector Lightning Talks	Ballroom	
	Technology Demonstrations		
1:30 -	Concurrent Sessions		
2:45pm	<ul> <li>Government</li> </ul>	°Webster	
	<ul> <li>Economic Dev. &amp; Business</li> </ul>	°Pierce	
	<ul> <li>Health &amp; Public Safety</li> </ul>	°Concord	
	<ul><li>Education</li></ul>	°Merrimack	
2:45 –	Coffee Break w/ Exhibitors	Pre-function	
3:00pm	,	Area	
3:00 -	Plenary Session: "A 2030 Vision for	Granite	
3:35pm	Broadband"	Ballroom	
3:35 –	Plenary Session: "Looking Forward	Granite	
4:00pm	– What Happens Next?"	Ballroom	

## **KEYNOTE / PLENARY SESSIONS**

#### **Opening Keynote Address**

Senator Kelly Ayotte

#### **Morning Plenary: Broadband Initiatives in NH**

Scott Valcourt, UNH Strategic Technology

Over the past 5 years, significant investment and activity has propelled NH into a position of strength as compared to other states relative to broadband. A sampling of the efforts, both public and private, will be highlighted.

#### Afternoon Plenary: A 2030 Vision for Broadband

Dr. Rouzbeh Yassini, UNH Broadband Center of Excellence

Broadband connectivity is as important today to job growth and economic development as electricity was in the 20<sup>th</sup> Century. But many in the state and the world are underserved or unserved, for a variety of reasons. For instance, the International Telecommunications Union reports that worldwide some 4.4 billion people lack Internet access. This presentation will focus on explaining broadband technology, discuss the applications and services that broadband enables, and lay out some ways to overcome many of the obstacles to having ubiquitous broadband deployment.

## Closing Plenary: Looking Forward – What happens next? Scott Valcourt, UNH Strategic Technology

Where do we go from here? Stay for a brief wrap of the day and a challenge going forward.

## **CONCURRENT WORKSHOP GRID**

10:45am – 11:20am					
Webster	Pierce	Concord	Merrimack		
Municipal	Broadband &	Telehealth &	K-12		
eGovernment	Economic	Telemedicine	Broadband		
	Development		Needs		
			(ConnectED,		
			DOE)		
11:25am – 12:00pm					
Webster	Pierce	Concord	Merrimack		
Broadband	Broadband &	Health	Connecting		
Legislative	Small Business	Information	Kids: Resources		
Update		Exchange	& Tools		
	1:30pm -	 - 2:05pm			
Webster	Pierce	Concord	Merrimack		
Broadband	Panel: Last	Public Safety:	Higher		
Broadband Regional	Panel: Last Mile	Public Safety: NHSafenet &	Higher Education		
		·	_		
Regional	Mile	NHSafenet &	Education		
Regional	Mile Broadband	NHSafenet &	Education Broadband		
Regional	Mile Broadband Solutions	NHSafenet &	Education Broadband Initiatives and		
Regional	Mile Broadband Solutions	NHSafenet & FirstNet	Education Broadband Initiatives and		
Regional Planning in NH	Mile Broadband Solutions 2:10pm	NHSafenet & FirstNet  - 2:45pm	Education Broadband Initiatives and Resources		
Regional Planning in NH Webster	Mile Broadband Solutions  2:10pm -  Pierce	NHSafenet & FirstNet  - 2:45pm  Concord	Education Broadband Initiatives and Resources		
Regional Planning in NH  Webster Broadband	Mile Broadband Solutions  2:10pm - Pierce Panel: Last	NHSafenet & FirstNet  - 2:45pm  Concord  Public Safety:	Education Broadband Initiatives and Resources  Merrimack Interactive		
Regional Planning in NH  Webster  Broadband Community	Mile Broadband Solutions  2:10pm - Pierce Panel: Last Mile Broadband Solutions	NHSafenet & FirstNet  - 2:45pm  Concord  Public Safety: NHSafenet &	Education Broadband Initiatives and Resources  Merrimack Interactive Learning at a		
Regional Planning in NH  Webster  Broadband Community Resources in	Mile Broadband Solutions  2:10pm - Pierce Panel: Last Mile Broadband	NHSafenet & FirstNet  - 2:45pm Concord Public Safety: NHSafenet & FirstNet	Education Broadband Initiatives and Resources  Merrimack Interactive Learning at a Distance		
Regional Planning in NH  Webster  Broadband Community Resources in	Alle Broadband Solutions  2:10pm - Pierce Panel: Last Mile Broadband Solutions (Continued)	NHSafenet & FirstNet  - 2:45pm Concord Public Safety: NHSafenet & FirstNet	Education Broadband Initiatives and Resources  Merrimack Interactive Learning at a Distance		

Economic Development and Business.....Pierce
Health and Public Safety.....Concord
Education.....Merrimack

## **WORKSHOP DETAILS**

#### Session 1 10:45 am – 11:20 am

#### **Track: Municipal eGovernment**

Meeting Room: Webster

## Small Town Use of the Internet (Broadband Piecemeal and on a Shoestring Budget)

Robert Houseman, Town of Wolfeboro

This presentation will cover creative solutions to deliver eGovernment services in communities with no IT staff and/or low budget operations. Services discussed will include: Town website development and management; Online bill paying, program registration and car registration; Online GIS and tax cards; Data collection for asset management; Smart metering; etc.

## Mobile Connectivity – Lowering Costs While Improving Services Jennie Angell, City of Manchester

Many City of Manchester employees have been called upon to provide a higher quality of service with less staff. Equipping these employees with mobile devices that interface with their backend systems has facilitated their success in continuing to maintain and improve service during shrinking budgets. The consumerization of mobile connectivity has driven down the cost of this connectivity making it more accessible than ever. This presentation will review what the City of Manchester has done with mobile connectivity for the Department of Public Works, Office of Youth Services and the Emergency Responders along with some of the mobile plans for the future.

#### Session 1 10:45 am - 11:20 am

#### **Track: Broadband & Economic Development**

Meeting Room: Pierce

#### **Broadband and Economic Development – Overview**

Dr. Charlie French, UNH Cooperative Extension

The link between broadband and economic development seems clear. Data from the Bureau of Labor Statistics suggests that employment has grown faster in regions that have better broadband internet access and New Hampshire as a whole ranks well with respect to broadband internet access, as compared to other states. Over the past few years, the public and private sectors have invested significant resources in laying broadband infrastructure in New Hampshire. This has not only helped to create new employment opportunities by firms that depend on this infrastructure – such as financial, biotechnology, and communications firms – but the investment has helped to insulate the state's economy from the recent recession, as compared to other states in the region and nationally.

## **Encouraging an Entrepreneurial & Innovation Ecosystem** *Brandon Stauber, Exeter Economic Development Committee*

Encouraging economic development is more than just incentives, job training and planning/zoning... Economic development is well served by creating an ecosystem to support growth... creating the networks, both technological and human to encourage entrepreneurship and innovation can be extremely effective. Just as the railways and interstate highways were drivers of commerce and interaction, so too is broadband. But it is a long journey; let's take the first step today!

#### **Questions & Answers**

Andre Garron, UNH Cooperative Extension

#### Session 1 10:45 am - 11:20 am

#### Track: Telehealth and Telemedicine

Meeting Room: Concord

Telehealth and Telemedicine -The Dartmouth-Hitchcock Perspective Tom Winchell, Center for Telehealth at Dartmouth-Hitchcock Medical Center; Fred Glazer, Dartmouth Medical (Video Production)

This presentation will address a general overview of telemedicine – technology, applications, operations, etc., and will explore the strategic and tactical elements of the DHMC Center for Telehealth's program.

#### Session 1 10:45 am - 11:20 am

#### Track: K-12 Broadband Needs (ConnectedED; DOE)

Meeting Room: Merrimack

## Ensuring equitable home access to broadband and computers for low-income students and families

Bob McLaughlin, DOE & Digital Opportunity Consortium

The Digital Opportunity Consortium is a NH-based national nonprofit, powered by volunteers committed to proactive steps to greatly narrow the digital divide at home for the nation's low-income students and their families. In this interactive session, we'll explore the costs of failing to provide such access and brainstorm steps by which participants can narrow the digital divide in New Hampshire. The Consortium's partners include American Association of School Librarians, Comcast, EBSCO, GenYes, GovConnection, myON, NH Department of Education, NH School Library Media Association, and NH Society for Technology in Education.

## Session 2 11:25 am - 12:00 pm

#### **Track: Broadband Legislative Update**

Meeting Room: Webster

#### **Broadband Legislative Update**

Carol Miller, NH Department of Resources and Economic Development; David Borden, NH House of Representatives; Charles Townsend, NH House of Representatives

The session will focus on recent legislative efforts regarding broadband policy in New Hampshire. Featured will HB286 – relative to broadband, HB1305 – reestablishing the exemption from property taxation for telecommunications poles and conduits and establishing a committee to study how utilities are taxed by the state and municipalities; and HB1314 – relative to the approval of a telecommunication utility merger, consolidation, reorganization, or sale by the Public Utilities Commission. The session will wrap up with Q&A to engage participants on future legislation to remove barriers to broadband expansion and encourage deployment through public/private partnerships.

## Session 2 11:25 am - 12:00 pm

#### **Track: Broadband and Small Business**

Meeting Room: Pierce

#### Broadband and Small Business - Overview

Dr. Charlie French, UNH Cooperative Extension; Thomas "Tom" Obrey, PixelMedia

Today's businesses must ask themselves, is broadband nice, or is it necessary to survive and thrive in today's marketplace? Today, more than one in three businesses sells their products and services on-line, and nearly two-thirds connect with customers via the internet. Yet, in New Hampshire, over one-third of businesses say that their internet speed is not fast enough for them to conduct basic business functions. Considering that businesses that use broadband report median annual revenues that are approximately \$300,000 higher than businesses that do not use broadband – according to a recent research brief – there appears to be a strong relationship between businesses' access to broadband internet and their success.

Tom Obrey will discuss how his company, PixelMEDIA, has leveraged technology, including high speed internet, to provide cutting edge marketing and communication services to companies large and small. He will outline what role technology plays in their provision of services, from on-line strategy and digital marketing to brand design user interface. He will also talk about what it takes to stay ahead of the technology and innovation curve to remain competitive and help companies solve problems and expand their reach.

## Session 2 11:25 am - 12:00 pm

**Track: Health Information Exchange** 

Meeting Room: Concord

#### **Health Information Exchange in New Hampshire**

Jeff Loughlin, NH Health Information Exchange; Bill Baggeroer, NH Department of Health and Human Services

As healthcare organizations look to transform healthcare by providing better healthcare, improving the health of their patients, and reducing costs, the need to more effectively and efficiently coordinate the care of patients has never been more important. The electronic transmission of patient health information between health care providers in a timely, secure, and confidential manner is an important next step in the evolution of health care delivery in the Granite State. This presentation will review the current status of the Health Information Exchange and how organizations can get connected to expand their electronic capabilities including: Health Information Exchange – what is it; what are the benefits – why is it important to healthcare consumers and providers; where are we as a state; what capabilities do we have; what is currently happening; where are we going; and New Hampshire Health Information Organization – what is it; what does it do; what does it not do; what are our plans for the future.

## Session 2 11:25 am - 12:00 pm

**Track: Connecting Kids: Resources & Tools** 

Meeting Room: Merrimack

Claremont School District: "Technology on the Move – Leaning Into Excellence

Nathan LaVanway, SAU #6

Grab a seat and enjoy the journey as Nathan walks you through how instructional technology is being transformed in the Claremont School District! 21st Century skills are no longer an option for our K-12 learners. As online resources continue to expand and improve, reliable access to online information becomes the differentiator for success in the classroom, community, and our fast-moving global society. Public schools participate in an everyday challenge to stay relevant in a fast moving information society. It takes people, commitment, and a dose of technology to make the grade! Through rigorous focus, back-to-basics marketing, and capitalizing on opportunities like the FastRoads network, Claremont School District is "Leaning Into Excellence."

## Session 3 1:30 pm – 2:05 pm

Track: Broadband Regional Planning in NH

Meeting Room: Webster

Planning for Broadband in New Hampshire: A Regional Focus
Tim Murphy, Southwest Regional Planning Commission; Tara
Germond, Southwest Regional Planning Commission; Rachel Ruppel,
Upper Valley Lake Sunapee Regional Planning Commission

Broadband today is what electricity was in the 1940s – a necessity. Since 2012, NH's 9 regional planning commissions have worked with local residents in an ambitious undertaking to create regional-scale broadband plans. These plans highlight the needs and barriers to universal broadband in each region of the state and make recommendations to enhance connectivity and utilization. Multiple sectors, ranging from education to economic development, were analyzed, identifying each sector's unique needs as well as common threads across sectors. Discover how to use these plans can be used as a resource for catalyzing broadband expansion in your community.

### **Session 3 1:30 pm – 2:45 pm** (*Double Session*)

Track: Panel: Last Mile Broadband Solutions

Meeting Room: Pierce

Internet Service Provider Panel – Last Mile Broadband Solutions

Carol Miller, NH Department of Resources and Economic Development; Ellen Scarponi, FairPoint Communications; Carol Monroe, New Hampshire FastRoads, LLC; Brian Foucher, WiValley; Chris Hodgdon, Comcast; Maura Weston, MM Weston & Associates

What is the last mile? Why should you care? This moderated discussion will be framed by a panel of telecommunications sector industry representatives who provide broadband service last mile solutions to New Hampshire businesses and residents. They will discuss company philosophy, technology, coverage, and expansion of services. How do they keep up with technology changes and what is their investment strategy for the growing need for speed?

## Session 3 1:30 pm – 2:45 pm (Double Session)

Track: Public Safety: NHSafenet and FirstNet

Meeting Room: Concord

#### **Broadband for Public Safety**

Brian Shepperd, University of New Hampshire; John Stevens, NH Department of Safety

This session will provide a panel discussion of broadband in public safety and the implementation of FirstNet. Brian Shepperd from UNH will review the recently completed public safety microwave project known as NHSafeNet and the successes and challenges associated with this type of project. He will also discuss the potential for implementing this model for collaboration and efficiencies in other sectors. John Stevens, the New Hampshire SWIC and William Casey, FirstNet Region I Liaison will review the goals of the FirstNet national public safety interoperability broadband project, outline where New Hampshire stands today, and describe the process and structure for moving this project forward. There will be ample opportunity to ask questions and see how your organization can participate in the planning.

## Session 3 1:30 pm - 2:05 pm

### **Track: Higher Education Broadband Initiatives and Resources**

Meeting Room: Merrimack

#### **Higher Education Broadband Initiatives and Resources**

Scott Valcourt, UNH Strategic Technology; Doug Green, UNH Information Technology; Sarah Grosvenor, UNH Cooperative Extension

Broadband's impact in education is just beginning to be realized by educators. Discover how every educator in NH has the opportunity to increase STEM outreach, research and learning through broadband's reach.

### Session 4 2:10 pm – 2:45 pm

#### Track: Broadband Community Resources in NH

Meeting Room: Webster

## Broadband and your community's "Readiness" / Resources available for towns

Susan Corcoran, New Hampshire Broadband Mapping and Planning Program; Andre Garron, UNH Cooperative Extension; Molly Donovan (Facilitator, Q&A)

Want to improve broadband in your community, but don't know where to start? This session will identify tools that can be used to identify your community's broadband "readiness". We will review the online survey developed by the UNH Cooperative Extension and discuss how to interpret the results. We will also give an overview of the NHBMPP Speed Test as a tool that will help your community "baseline" current service in your community. You're bound to learn something you can use when you return home.

#### Session 4 2:10 pm – 2:45 pm

#### Track: Interactive Learning at a Distance

Meeting Room: Merrimack

### **Broadband and Distance Learning**

George Fryburg, UNH ConnectNH

\* Remote sites to be included in presentation: Mount Washington Observatory, White Mountain Community College - Nursing

As broadband expands around NH, distance learning becomes more of a reality. This session will highlight broadband-based technologies being adopted by K-12 and Higher ED to effectively address changing student population demographics and delivery methods.

Demonstrations of how educators are using videoconferencing and video on demand technologies to engage students and to enhance learning at a distance, will be conducted.

## **SPEAKER DIRECTORY**

#### Jennie Angell

Director of Information Services, City of Manchester

Jennie Angell has been the Director of Information Services for the City of Manchester since 2007. Her responsibilities include the successful selection, implementation and operation of automated systems throughout all city departments. These systems serve all constituents and 1000 employees in 55 buildings around the city that are connected through 60 miles of city-owned fiber. Jennie has an MBA from Plymouth University, a BS from Northeastern University and an AS from NHTI which is where her career started over 30 years ago.

#### **Senator Kelly Ayotte**

U.S. Senate

Kelly Ayotte is a New Hampshire native who has devoted her life to public service. A prosecutor at heart, Kelly was the first woman to serve as the state's Attorney General. Appointed to that position in 2004 by a Republican governor, she was twice reappointed by a Democrat governor. In her first bid for public office, she was elected to the U.S. Senate in 2010 with 60 percent of the vote. In the Senate, Kelly serves on the Armed Services, Homeland Security & Governmental Affairs, Commerce, Budget, and Aging Committees. She is the Ranking Member - top Republican - on the Armed Services Subcommittee on Readiness and Management Support. As Attorney General, Kelly worked with law enforcement officials statewide to protect New Hampshire citizens - helping to distinguish the state as the safest state in the nation. She fought to pass tough new laws cracking down on sexual and Internet predators, particularly those who target children. And strongly committed to honesty in government, she held public officials accountable - regardless of their position or political affiliation. For successfully leading efforts to secure the first capital murder convictions in the state in over 60 years, the Union Leader newspaper named Ayotte "Citizen of the Year" in 2008. She also has been recognized by Business NH Magazine as one of the ten most powerful leaders in New Hampshire, and New Hampshire Magazine listed her as one of the state's remarkable women. Born in Nashua, Kelly attended public schools there. She

graduated with honors in 1990 from Pennsylvania State University and earned a Juris Doctor degree in 1993 from the Villanova University School of Law. She is married to Joe Daley, a Nashua native who flew combat missions during the Iraq war and retired as a Lieutenant Colonel in the Air National Guard. She helped him launch a landscaping and snow removal company, which provides her with a firsthand understanding of how decisions made in Washington impact small businesses. Kelly and Joe live in Nashua with their two children.

#### **Bill Baggeroer**

Director of Health and Human Services, CIO, NH Department of Health and Human Services

Bill joined the Department of Health and Human Services as Chief Information Officer in July 2008 and also as the Director of the Office of Information Services since July 2012. Bill oversees the Department's information services which include information systems strategy, planning and management; project management services; statewide health information technology / exchange coordination; information security management; Lean / business process improvement services and data management services, including the Department's data warehouse. Prior to joining the Department, Bill held several positions as an information systems manager and consultant within the private sector, including positions at Sapient Corporation, Mirror Image Internet; Malden Mills Industries, DMR Group, Wang Laboratories, Charrette Corporation and Arthur Andersen Consulting (Accenture). Bill holds a Bachelor of Science in Computer Science from Purdue University and a Master of Science in Management (MBA) at the Massachusetts Institute of Technology Sloan School of Management.

#### **Ryan Barton**

CEO, MainStay Technologies

Ryan is the founder and CEO of Mainstay Technologies – an IT services firm IT firm that specializes in providing technology support and implementation services for municipalities and other organizations throughout New Hampshire.

Mainstay has been recognized as the NH Business of the Year by Business NH Magazine in 2013, and is listed as one of the fastest growing small businesses on the annual Inc. 500 | 5000 list.

#### **David Borden**

Chairman of the House Science, Technology and Energy Committee, New Hampshire House of Representatives

Rep. David Borden was elected to the New Hampshire House of Representatives in 2006 and serves as Chairman of the House Science, Technology and Energy Committee. David was born in New Hampshire and raised on a farm in Vermont. He attended undergraduate and graduate studies at the University of Colorado and Columbia University after serving as an infantry medic in the US Army's 10th (Mountain) Division. He worked as a Peace Corps Training Officer, a community organizer in East Harlem, New York and for 30 years directed Victoria International Corporation. David married a New Castle resident, Nancy Horner in 1974 when they moved into an old house on Walbach St. which had been previously vacated by the Sweets. The Sweets had moved one door to the south and the two families share an ancient stonewall. David has been Chair of Sustainable Harvest International and River Network. He serves or has served on the boards of the Portsmouth Athenaeum, New Hampshire Rivers Council, Sustainable Energy Association, Conservation New Hampshire, the Southeast Land Trust and the New Hampshire Energy Efficiency and Sustainable Energy Board.

#### Susan Corcoran

Project Manager, NH Broadband Mapping and Planning Program

Susan Corcoran is a Project Manager for the University of New Hampshire and is currently working with the Capacity Planning team for the BTOP Strategic Broadband Initiative. Her previous project was the Network New Hampshire Now project, a \$66M federal stimulus public/private partnership project. This project, completed earlier this year, constructed over 750 miles of middle mile fiber throughout all 10 counties in NH, established a last mile fiber project in southwestern NH, and upgraded a 20 site, IP based, public safety microwave network. Prior to joining UNH, she was an Assistant Vice President at Putnam Investments. Susan has over 25 years of experience in Telecommunication Operations and Project Management. Susan holds a Bachelor of Science degree in Business Administration from the University of Maine and a Master of Business Administration degree from Bentley University.

#### **Brian Foucher**

WiValley

Seven years ago, Brian spent most of his time on the road working with leading edge technology companies, and when home he telecommuted to meetings around the world. His Broadband options were so limited he established a wireless backhaul link into his neighborhood and delivered broadband service for himself and his neighbors. WiValley, Inc. was established about a year later and began growing their service area into unserved and underserved communities in Southwestern NH with wireless coverage in over 50 communities in New Hampshire, Massachusetts and Vermont. Today, WiValley not only provides Broadband Solutions through their Fixed Wireless Technology delivering broadband from mountain top sites, they also deliver Broadband over Fiber to customers over Gigabit Networks such as NH FastRoads and Mass Broadband Institute 123 which has expanded their service range into over 200 Communities providing 50, 100 Mbps or Faster Speeds to residential and business customers

#### Stan Freeda

Specialist for Educational Technology and Online Learning, NH Department of Education

Stan is the specialist for Educational Technology and Online Learning at the New Hampshire Department of Education. He works out of the Office of Educational Technology. One of his primary roles is coordinating the NH e-Learning for Educators project, which offers online professional development courses for teachers through OPEN NH. Another of his roles is to support educational technology in New Hampshire schools by reviewing school ICT Literacy programs, reviewing and approving district technology plans, and coordinating and monitoring the funding for technology projects awarded to districts through the Title IID Enhancing Education Through Technology program. Stan is also the state technology readiness coordinator on the NH team participating in the Smarter Balanced Assessment Consortium. Stan received bachelor's degrees in both physics and biology; and has earned master's degrees in limnology and oceanography and in education. He also earned a graduate certificate in Educational Technology and Online Learning. As a classroom teacher, Stan has taught a wide range of sciences at both the middle and high school levels. He has also taught and developed science and

education courses at the college level, both in the online and face to face environments. Stan completed advanced training in both teaching and developing online courses for both children and adults. Along with membership in SETDA, Stan has memberships in the New Hampshire Library Trustees Association, the New Hampshire Science Teachers Association, the New Hampshire Society for Technology in Education, and the International Association for K-12 Online Learning.

#### Dr. Charlie French

**UNH Cooperative Extension** 

Charlie French leads UNH Cooperative Extension's Community and Economic Development Program, which provides communities with planning assistance in the areas of land use, tourism, community development, and economic development. From 1999 - 2001, Charlie served as an Economic Development Educator for the University of Illinois Extension and from 1995 - 1997 he served as a Peace Corps Volunteer in rural Panama, where he worked with subsistence farmers to implement sustainable farming practices. He brings his experience into the classroom as a faculty member at the University of New Hampshire, where he teaches undergraduate and graduate courses in community and economic development. His current research, funded by NH SeaGrant, is focused on cultivating alternative markets and value-added opportunities for NH-caught seafood — including innovative technologies to get seafood to market.

#### **George Fryburg**

Director, UNH ConnectNH

George Fryburg is Director of ConnectNH (formerly the Granite State Distance Learning Network) at UNH. He is involved in growing its membership and infrastructure capabilities for videoconferencing and distance learning utilizing broadband technologies in the areas of education, telehealth and outreach. Previously George was executive vice president and chief operating officer for StockerYale Inc., responsible for operations involving the manufacture of laser, LED and optical fiber products. George also served on the board of directors and as president of the company's Innovative Specialty Optical Fiber Corp. subsidiary. Since 1986, George has been an adjunct professor of Operations Management at Southern New Hampshire University, teaching in the MBA and undergraduate programs. He also has been on the adjunct faculty of Granite State College, Norwich University and

Worcester Polytechnic Institute. He has published several papers in the areas of statistical process control, design of experiments for new product development and operational productivity. George received a Master of Business Administration degree from Southern New Hampshire University, a Master of Science in Ceramics and Materials from Case Western Reserve University and a Bachelor of Arts from the College of Wooster. He holds seven patents and is a Fellow of the American Ceramic Society.

#### **Andre Garron**

Regional Economic Development Specialist, UNH Cooperative Extension

Andre Garron is a Regional Economic Development Specialist with the University of New Hampshire Cooperative Extension's Community and Economic Development team. He has over 25 years of Community Planning and Economic Development experience with the City of Lee's Summit, MO, Town of Goffstown, NH and the Town of Londonderry, NH. His primary responsibility for UNH Cooperative Extension is to provide Broadband and Economic Development technical assistance and outreach education to municipalities, planning and economic development practitioners, chambers of commerce and the business community. Andre has an M.S. in Community Economic Development from the University of Southern New Hampshire, a B.S. in Community Development, University of New Hampshire, and a Certificate of Completion from the Oklahoma Economic Development Institute. Andre is a member of the American Institute for Certified Planners, the American Planners Association, the NH Economic Development Association, and the NH Planners Association

#### **Tara Germond**

Senior Planner, Southwest Region Planning Commission (SWRPC)

Tara Germond is a Senior Planner at the Southwest Region Planning Commission (SWRPC) in Keene, NH. Tara joined SWRPC in 2009, following graduation from the University of Massachusetts Amherst's Master of Regional Planning Program. As SWRPC's program manager for the New Hampshire Broadband Planning Program, Tara has played an active role in planning for improved broadband availability in the Southwest Region. In this position, she provides staff support to the Region's Broadband Stakeholder Group and has facilitated the

development of the 2014 Southwest New Hampshire Regional Broadband Plan.

#### Fred Glazer

Dartmouth Medical (Video Production)

Mr. Glazer is a technology specialist on Dartmouth-Hitchcock's telehealth technology team. Fred brings 13 years of experience in the fields of telemedicine and videoconferencing, first with the Massachusetts prison telemedicine program at Tufts University, and for the last eleven years as the lead videoconferencing technician at Dartmouth-Hitchcock. He's a graduate of Ithaca College in Ithaca, NY, with a bachelor of science in communications. Fred grew up in the Boston area and is a life-long Red Sox fan.

#### **Doug Green**

Network Manager/Architect, UNH Information Technology

Doug Green is Network Architect for the Network New Hampshire Now project, the regional optical broadband network providing highspeed Internet connectivity to critical locations throughout New Hampshire. In his current role, Doug is responsible for design and implementation of Network New Hampshire Now's high-capacity dense wave division multiplexing and carrier Ethernet networks and their associated operations, administration, maintenance and provisioning, along with management of the project's technical staff, development of contracts, budget oversight and more. A veteran information technology professional, Doug was previously Manager/Architect for Networks and Network Security within the University of New Hampshire's Information Technology department, where he designed and operated networks for UNH, the Granite State Distance Learning Network and the community college system of New Hampshire. Prior to joining UNH, Doug was responsible for network and technology management and architect roles for companies including Telebit/Octocom Corp. and General Data Communication. Doug holds a U.S. patent for modem processing technology, and serves as a member of UNH's Enterprise Architecture Committee and IT Security Committee while chairing the university's Techtel intercampus telecommunications and technology planning committee and working group.

#### Sarah Grosvenor

Extension Field Specialist - Science Literacy and STEM, UNH Cooperative Extension

Sarah joined Cooperative Extension in July 2013 as a Field Specialist in Science Literacy and STEM. Sarah has been involved in science education for 10 years and was most recently a middle school science teacher at Hartford Memorial Middle School in White River Junction, VT, where her focus was place-based education. Sarah enjoyed working as an environmental and agricultural educator at the beautiful Shelburne Farms, in Shelburne. VT. Sarah also spent time in Hillsborough County as an outdoor educator at the Boston University's Sargent Center in Peterborough, and was an AmeriCorps VISTA at ECHO Lake Aquarium and Science center, in Burlington, VT where she developed an award winning teen science program. Sarah lives in Concord with her husband and two dogs and enjoys hiking and skiing in the mountains. Her degrees include: Bachelor of Science, Wildlife Biology and Master of Teaching, Middle Level Education, Science and Language Arts, from the University of Vermont.

#### **Chris Hodgdon**

Senior Director Government Affairs, Comcast

Chris Hodgdon is Comcast NBC Universal's Senior Director of Government Affairs in New Hampshire and Maine. He is responsible for managing the organization's public policy and advocacy initiatives in addition to coordinating directly with policy makers and thought leaders in those states. Prior to joining Comcast, Hodgdon was the President and CEO of the Greater Nashua Chamber of Commerce a business advocacy organization with over 700 member businesses in the Southern New Hampshire region. Before leading the Chamber, Chris was a principle in Stepping Stone Management, LLC a political consulting firm with a specialty in organizational, media and fundraising initiatives. Chris serves as the Board President of the Granite State Children's Alliance which is dedicated to pursuing the truth in child abuse cases and coordinating social services for children. Since 2007, he has served on New Hampshire's Telecommunications Advisory and Planning Board and more recently the state's Economic Development Advisory Commission. He lives in Hopkinton with his wife Elizabeth and two daughters Grace and Molly.

#### **Robert Houseman**

Director of Planning and Development, Town of Wolfeboro

Robert (Rob) Houseman has served as a professional planner for 27 years, working the last 18 years in the town of Wolfeboro, NH. In his current position, he works in conjunction with town boards and committees to develop long-range and capital improvement plans, reviews and revises town ordinances and regulations related to planning and zoning, conducts public awareness campaign efforts to enforce building codes and ordinances, and manages the town's GIS, planning department website, and economic development website. Rob has a BS in geography and an MS in community economic development.

#### Nathan LaVanway

Director of Technology, SAU # 6

Nathan LaVanway is an Information Systems and Quality Improvement professional who has led operational improvements at several NH-based organizations to include Geographic Data Technology (currently TomTom), Dartmouth-Hitchcock Medical Center, and more recently at SAU#6 in Claremont, NH. Nathan holds a Master of Business Administration Degree from the College of Graduate Studies at Plymouth State University and a Bachelor of Science Degree in Information Technology. Nathan has past and present professional certifications in Project Management (PMI) and Quality Assurance (ASQ).

#### Jeff Loughlin

Executive Director, NH Health Information Exchange

Jeff Loughlin is the Executive Director of the New Hampshire Health Information Organization (NHHIO), working with providers, practice leaders, medical and administrative staffs to ensure successful adoption and Meaningful Use of Health Information Technology (HIT) and the implementation of the statewide health information exchange (HIE). Jeff holds a Master's Degree in Healthcare Administration from Simmons College in Boston.

#### Dr.Bob McLaughlin

Administrator, DOE & Digital Opportunity Consortium

Bob McLaughlin administers the review and approval of educator preparation programs in New Hampshire, for the NH Department of Education. He conceived and co-chairs the Digital Opportunity Consortium, (digitalopportunityforall.org), chairs the Association of Teacher Educators' (ATE) national commission on technology and the future of teacher education, and co-chairs ATE's new presidential task force on providing resources for educators in the digital age. He serves as adjunct professor for doctoral and graduate courses in educational policy, reform, and technology. Bob began his career in education in 1979, serving as a Vista volunteer for a tribal college on a North Dakota Indian reservation, where he ended up working for three years as instructor, grant writer and college planner. His doctorate at Ohio State in educational policy and leadership focused on educational strategies for local economic development and opportunity.

#### **Carol Miller**

Director of Broadband Technologies, NH Department of Resources and Economic Development

Carol Miller has been the Director of Broadband Technologies, at the Division of Economic Development, the NH Department of Resources and Economic Development, since November 2009. Carol is a native of the North Country. Born in Berlin and a resident of Gorham, her career covers a wide range of technologies. She was co-owner and founder of NCIA with husband Jeff Schall. As an entrepreneur they built an internet service business in the underserved North Country deploying changing technologies from dial-up, dsl, and wireless high speed service across the northern 3 counties. Carol managed the internet business, and established and grew a retail network and computer center. In addition she has been an adjunct faculty at WMCC teaching financial software and a part-time radio disk jockey for FM and AM stations in the North Country. Her affiliations and state-wide networking skills got her the position she holds today which has allowed the Division of Economic Development to focus on broadband and its economic benefits to the State of NH.

#### **Carol Monroe**

Executive Director, New Hampshire FastRoads, LLC

Carole Monroe brings 30 years of technology and leadership experience to the New Hampshire FastRoads broadband initiative for Western New Hampshire. Over the last 4 years, she has managed the FastRoads fiber-to-the-premise project in western New Hampshire. New Hampshire FastRoads is a LLC under Monadnock Economic Development Corporation in Keene, NH. FastRoads is a regional 247 mile fiber-optic network that provides fiber-based broadband services to homes in Rindge and Enfield and to community anchor institutions in southwest New Hampshire. Prior to this opportunity, Carole served as the Vice President of Administrative Services and CIO at Franklin Pierce University in Rindge, N.H. and previously at BankBoston, as a Sr. Technical Manager Networking Services leading various technology and networking services projects and departments. Carole was cochair of Monadnock Connect, a predecessor to New Hampshire FastRoads, founded in 2001. She was a member of the Monadnock Economic Development Corporation board of directors. She holds a MBA in finance from the University of Connecticut and a bachelor's degree in marketing from Western Connecticut University.

#### Tim Murphy

Executive Director, Southwest Regional Planning Commission

Tim serves as Executive Director of the Southwest Region Planning Commission, a position he has held since 1995. Tim holds a degree in interdisciplinary studies from the University of Michigan and a M.S. in Geography from Eastern Michigan University. A regional planner for nearly 30 years, Tim has a passion for addressing the resource needs of communities essential for maintaining vibrant economies and quality of life. Tim has played a leadership role in coordinating the participation of regional planning commissions in developing regional-scale broadband plans in New Hampshire.

#### Thomas "Tom" Obrey

Chief Operating Officer, PixelMedia

Tom Obrey co-founded Pixelmedia in 1994 and serves as Chief Operating Officer. Over the past two decades, he has led Pixel's creative strategy that forged it as one of New Hampshire's fastest-growing technology enterprises. As the company's Chief Operating

Officer, he is responsible for the day-to-day operations, as well managing its professional services. Over the years, he has forged lasting relationships with notable companies such as Lojack, Bauer, Nokia, and Teradyne. Prior to founding PixelMEDIA, Tom worked at Cabletron. And he has been twice named as a Top 100 Media Producer in the Country by AV/Multimedia Producer Magazine.

#### Rachel Ruppel

Senior Planner, Upper Valley Lake Sunapee Regional Planning Commission

Rachel has served the twenty-seven municipalities of the Upper Valley Lake Sunapee Regional Planning Commission since 2007. She holds a B.S. in Environmental Science and is working towards a M.S. in Management from Marlboro College in Brattleboro, VT. As a Senior Planner, she has led her region's broadband mapping and planning programs and has worked with local stakeholders to create a regional broadband plan that prioritizes action on the federal, state and local levels. She also coordinates the data collection efforts for the statewide database of more than 4,000 Community Anchor Institutions containing information on location, broadband service type and speed.

#### Ellen Scarponi

Director of Government Relations and Economic Development, FairPoint Communications

Ellen Scarponi is the Director of Government Relations and Economic Development for FairPoint Communications in New Hampshire. In this role she brings her 30+ years of telecommunications and business experience to promote effective and strategic communications between FairPoint and the Governor's office, Members of the NH Legislature, Business Leaders and Organizations, Municipal Officials and Residents of our fine State. FairPoint has invested over one million dollars a week in new technology, infrastructure and services for Northern New England since April 2008 to help empower our communities to make strong connections. Ellen is an appointed member of the NH Telecommunications Planning and Development Advisory Council, a member of the NH Humanities Council and Greater Nashua Chamber of Commerce Boards of Directors, and an active participant on the Greater Concord, Manchester and Nashua Chambers of Commerce Legislative Committees, as well as the BIA

Energy & Telecommunications and Economic Development & Fiscal Policy Committees. Ellen lives with her husband, Bob, in Canterbury.

#### Steve Schneider

Town Manager, Enfield, NH

Steve is the Town Manager of Enfield, NH. He has managed in three other communities; Richmond Vermont, Tobyhanna Pennsylvania and Batavia New York. Steve has a BA in History from SUNY Plattsburgh and an MPA from the University of Vermont. He is a board member of NH FastRoads, Grafton County Economic Development, and the Upper Valley Lake Sunapee Regional Planning Commission. He lives in Enfield with his wife and two children and thoroughly enjoys everything New Hampshire has to offer.

#### **Brian Shepperd**

Director of Broadband Services, University of New Hampshire

Brian Shepperd is the Director of Broadband Services at the University of New Hampshire. He has over 35 years of telecommunications experience and is currently responsible for the University System's wide area network as well as videoconferencing services for education and telehealth throughout New Hampshire. Over the past four years he was the program director for the \$63M Network New Hampshire Now broadband expansion project awarded to the University of New Hampshire. Prior to that he was the Chief Technology Officer at New Hampshire Public Television. Brian earned his bachelor's degree in Electrical Engineering - Computer Engineering from the University of New Hampshire. He is an appointed member of the Northeast Research and Education Network (NEREN) and the NH Telecommunications Planning and Development Advisory Council (TAB) since 2004. He was an active member of the sub-committee responsible for the development of the State of New Hampshire Broadband Action Plan.

#### **Brandon Stauber**

Member, Exeter Economic Development Committee, Exeter Economic Development Committee

Brandon Stauber began his career in economic development in the early 1990s as part of a program in California designed to assist in the massive economic shift due to defense downsizing and re-alignment. As part of his work at the Los Angeles Regional Technology Alliance, Stauber worked to connect displaced aerospace and defense engineers with federal and state grants, local universities, technology transfer programs at national laboratories, other entrepreneurs and both angel and venture capitalists. A serial entrepreneur, having started, grown and sold several of his own businesses, Stauber now works at Portsmouth-based PixelMEDIA on their project leadership team as well as an independent technology and startup consultant. He also actively serves as a citizen member of the Exeter Economic Development Commission and is active in several community and nonprofit groups on the NH Seacoast. Stauber received a Masters of Public Policy, with an emphasis on economics and international relations from the University of Southern California.

#### John Stevens

New Hampshire Statewide Interoperability Coordinator, NH Department of Safety

John Stevens was appointed as the New Hampshire SWIC in November 2013. Assigned to the Commissioner's Office in the New Hampshire Department of Safety, John is responsible for Statewide interoperability coordination as it relates to Federal, State, county, and local government as well as non-governmental agencies. As Program Manager, he currently coordinates activities critical to Statewide Public Safety Communications and the development of broadband planning, works in partnership with FirstNet, and assists in facilitating the deployment of the NPSBN in New Hampshire. Before serving as New Hampshire SWIC, John retired from the New Hampshire State Police as a Commanding Officer responsible for Troop Operations. John was assigned as a contractor to the US Department of Homeland Security working in the metropolitan Washington, DC area. Some of his assignments as a Subject Matter Expert and Support Lead included providing national security to many NSSEs, such as the 2002 Winter Olympic Games in Salt Lake City, Utah; the 2003 Women's World Cup Soccer Finals; the 2004 G-8 Conference

in Sea Island, Georgia; the 2004 DNC in Boston, Massachusetts; the 2008 RNC in Minneapolis-St. Paul, Minnesota; the 2008 DNC in Denver, Colorado; Presidential Inaugural Events in Washington, DC; all four Top Officials Exercises; and several NLEs. John also served as the Program Manager for the US DHS Regional Exercise Support Program (RESP) in FEMA Regions I & III; the Program Manager for the US DHS Terrorism Prevention Exercise Program (TPEP); and as a Regional Facilitator for the DHS Tactical Interoperability Communications Exercises.

#### **Nick Toumpas**

Commissioner, NH Department of Health and Human Services

Commissioner Nicholas "Nick" Toumpas is the Commissioner of the New Hampshire Department of Health and Human Services, the largest State agency in New Hampshire with a \$2 billion budget and 2,900 employees in more than 50 locations. Nick began serving in this role in August 2007 when he was appointed Acting Commissioner, followed by his appointment as Commissioner in January 2008. In December 2011, Nick was reappointed to another four-year term as Commissioner. Nick has been instrumental in leading the Department through unprecedented challenges. Since assuming the role of Commissioner, the demand for the Department's services has increased dramatically while human and financial resources have diminished. Despite the difficulties, Nick views the challenges as opportunities. As such he has worked with his management team and staff to implement initiatives that focus on improving clients' health while at the same time achieving greater efficiencies. He has helped build the foundation that will keep the Department viable and relevant in the future. Nick was born in New York City, raised in Concord, New Hampshire, and earned his undergraduate and graduate degrees from the University of New Hampshire. He began his career with the Department in 1973 when it was known as the Department of Welfare. After several years of state service, Nick left for the private sector where, for more than 20 years, he worked in the information technology and telecommunications field.

#### **Charles Townsend**

Science, Technology, and Energy Committee, New Hampshire House of Representatives

Rep. Charles Townsend is a New Hampshire State Representative serving on the Science, Technology, and Energy committee. He continues to be interested in regional differences in education, access to telecommunication services, and healthcare. After completing a ScB degree from Brown University, Chuck Townsend joined the Peace Corps and worked in the Philippines with teachers and developing science curriculum. He returned to the US and earned an M.A.T. in physical sciences at Johns Hopkins. He bought a farmstead in Canaan, NH, and he spent the next 15 years teaching in Hanover. He followed his interest in computers to Dartmouth College where he earned a Master of Arts in Computer and Information Systems. He worked at Dartmouth-Hitchcock Medical Center for 25 years as a systems and information analyst studying population health in regional service areas.

#### Scott Valcourt

Director of Strategic Technology, UNH Information Technology

Scott Valcourt serves as the Director of Strategic Technology at the University of New Hampshire and is the chief visionary for UNH's investment in cyberinfrastructure. Named "one of the most powerful people in networking" by NetworkWorld Magazine in 2001, Scott has been part of the development process for over a dozen networking technologies as a consortium manager and director of the UNH InterOperability Laboratory from 1993-2004 and as a Research Project Manager in the UNH Computer Science department. Presently, Scott is the principal investigator (PI) of Network NH Now, a collaboration of public and private partners, developing critically needed broadband expansion across NH through more than 750 miles of new and existing fiber and microwave technologies. Scott also is the co-PI of the New Hampshire Broadband Mapping and Planning Program that is developing a statewide broadband plan through a concentrated collection of local, regional and sector-based planning efforts across the state. Scott manages a grant portfolio of over \$75 million focused on the creation of next generation infrastructure and applications utilizing broadband across the region.

#### **Maura Weston**

Attorney, MM Weston & Associates

Maura Weston is an Attorney in Concord, New Hampshire and practices primarily in the area of government relations. She works with businesses and organizations to develop and execute legislative, regulatory and administrative strategies. Maura has represented ATT since they acquired Cingular Wireless, represented Cingular wireless and its predecessor companies going back to 2001. She has substantial experience in the areas of telecommunications, health care, pharmaceuticals, insurance, energy, and general business. Prior to founding MM Weston & Associates, Maura was a partner with the law firm of Rath, Young and Pignatelli. She currently serves on the New Hampshire Telecommunications Advisory Board, the Small Business Development Advisory Council, the Dartmouth Hitchcock Hospital Assembly of Overseers and the New Hampshire Furniture Masters Advisory Board. Maura has been a director of the Capitol Center for the Arts and Concord Hospital.

#### Tom Winchell

Technology Manager, Center for Telehealth at Dartmouth-Hitchcock Medical Center

Mr. Winchell has twenty-five plus years of experience in telemedicine, telecommunications, networking and videoconferencing as an administrator, project manager, consultant, and business owner/entrepreneur. As the Technology Manager for the Center for Telehealth at Dartmouth-Hitchcock Medical Center, he currently is responsible for the planning, design and implementation of the technical elements of a multi-application program. Prior to coming to DHMC, he worked with Louisiana State University Health Sciences Center as the Telemedicine Program Coordinator since 1996. His duties in that capacity included management and operational oversight of a multi-site network of hospitals, clinics and correctional facilities. The LSU program was comprised of 100+ codecs, multiple MCUs, and related infrastructure components operating over a robust IP network. He was responsible for a staff of eight and for the coordination of clinic support activities including training, scheduling, and administration for services in two dozen specialty areas. His role included planning and interacting with partner entities at the executive level for delivery of solutions for clinical, educational and administrative video activities.

#### Dr. Rouzbeh Yassinni

Director, UNH Broadband Center of Excellence

Dr. Rouzbeh Yassini is Executive Director of the University of New Hampshire Broadband Center of Excellence and is CEO of YAS Capital Partners. He is widely regarded as the "father of the cable modem," reflecting his pioneering work in cable broadband technology as the founder and CEO of LANcity, and as a prominent contributor to the CableLabs Data over Cable Service Interface Specification (DOCSIS). Yassini is a member of the Lane Department Academy and the WVU Academy of Distinguished Alumni. CED Magazine named him "1998 Man of the Year" for creating and fostering the multibillion-dollar cable modem broadband industry. Yassini is the author of Planet Broadband, a humanized look at broadband technology. The National Cable and Telecommunications Association awarded him with a 2004 Vanguard Award, the association's highest honor.

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The New Hampshire Municipal Association is a non-profit, non-partisan membership association working to strengthen New Hampshire cities and towns and their ability to serve the public. As a member-funded, member-governed and member-driven organization established in 1941, we serve as a resource for information, education and legal advice, and provide a strong, clear voice advocating for New Hampshire municipal interests.

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DTC Lawyers is a full service law firm serving business, municipalities and individuals from our three locations, in Portsmouth, Meredith and Exeter. Our firm has extensive experience in telecommunications law, including representing scores of municipalities for negotiation of cable TV franchises, deployment of fiber communications networks, and permitting of personal wireless services facilities, including cell towers. Our attorneys are skilled in negotiation, litigation and creative resolution of telecom challenges facing municipalities and public entities.

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FirstLight Fiber, headquartered in Albany, NY, provides fiber optic data, colocation, and high-speed Internet services to enterprise and carrier customers in Upstate New York and Northern New England with connectivity to Canada utilizing its own fiber optic network, which spans over 190,000 fiber miles connecting in excess of 1,400 lit buildings. FirstLight is a portfolio company of Boston-based private equity firm Riverside Partners.

## NH Dept. of Resources and Economic Development, Division of Economic Development

Carol Miller 172 Pembroke Rd. Concord, NH 03302 Ph: 603-271-2341 x138

Email: carol.miller@dred.nh.gov Web: www.nheconomy.com

The Division of Economic Development provides comprehensive services to New Hampshire businesses and those outside the state considering expanding or relocating here. For more information, call at 603-271-2591.

#### NH EPSCoR

Susan Higgins 35 Colovos Road Durham, NH 03824 Ph: 603-862-1804

Email: susan.higgins@unh.edu Web: www.epscor.unh.edu

NH EPSCoR, funded by the National Science Foundation, advances NH's competitiveness in science and engineering by strategically investing in research infrastructure; promoting STEM education; and partnering with businesses that enhance job creation and economic development.

#### WiValley

Kate Albert 310 Marlboro Street Keene, NH 03444 Ph: 603-546-7204

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WiValley is a growing Internet Service provider based out of Keene serving New Hampshire, Massachusetts, and Vermont customers. WiValley began offering service in 2008 offering Residential and Business Wireless Solutions to customers throughout the region. WiValley currently provides Fiber, Hybrid and Wireless Internet service for business and residential customers in addition to engineering community wide solutions using state of the art technology. We are leading the effort to bring fiber optics to communities where there will be no speed limit.

#### **Exhibitors**

#### Celeriss, Inc.

Fausto Molinet 11B Industrial Way Salem, NH 03079

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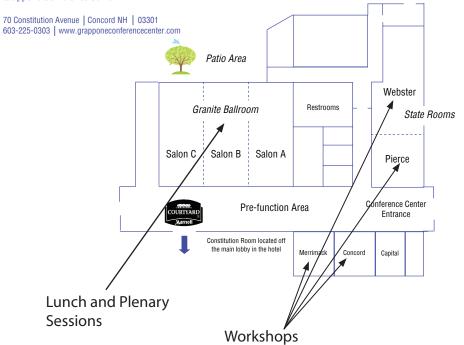
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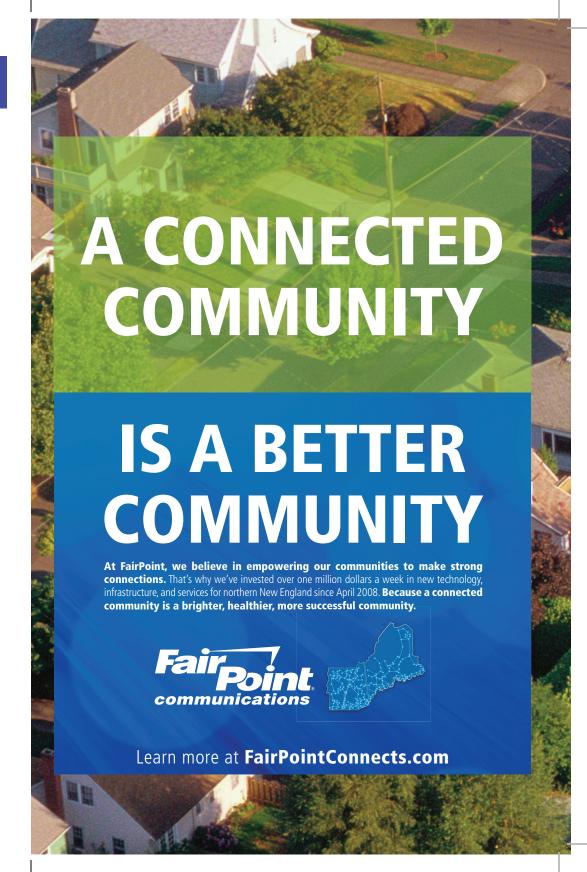
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