

Connect.

Communicate.

EVENT DIRECTORY

January 22-24, 2008 | Radisson Fort McDowell Resort | Phoenix, AZ

Security that knows no bounds

From securing bridges



to perimeter security for buildings

to monitoring traffic intersections

to protecting children on a playground.



Proxim provides wireless IP surveillance, at a cost you can afford.

Download our surveillance white paper at www.proxim.com/go/surveillance

Lead. Connect. Communicate.

Digital CITY &

Connecting America's Communities Tuesday, January 22 — Thursday, January 24, 2008 Radisson Fort McDowll Resort — Phoenix, Arizona

CONTENTS

Welcome	.3
Schedule of Events	.4
Sponsors	.7
Partners	.8
Keynote Speakers	.9
Smart Community Awards	.9
Presenter Bios	.11
Detailed Agenda	.14
Exhibit Floor Map	.18
List of Exhibitors	.19

ABOUT DIGITAL CITY

Digital City EXPO is a conference and educational forum developed to provide community leaders with the information they need to make key business, technology and infrastructure decisions relating to the availability of IP communications in their communities. Our goal for each attendee is to walk away with the knowledge and know-how they need to drive results that better serve their communities. To learn more about our organization or to find out how you can be involved in our next event, please visit our Web site at www.digitalcityexpo.com

Welcome to DCE

Greetings Digital City EXPO Participants,

It is my pleasure to welcome you to Digital City EXPO (DCE) 2008. The goal of DCE is to address the issues communities face when they are preparing to build their broadband infrastructure (whether wired or wireless), and, once they do, the opportunities that will follow. Many cities across the United States are here and we have an excellent complement of vendors to serve your municipal needs.

The broadband market has received a bad rap in 2007 as we watched doom and gloom headlines about wireless woes for cities while the cost of wiring communities seemed extreme. The business plans seemed to be failing, the returns were not coming, and the people just were not subscribing.



All the more reason to look to DCE 2008

for answers about your connected community! DCE is a great forum for you to interact with the leaders in the broadband market today and to learn from past successes.

For all the bad national press, the broadband community has made great strides in 2007 and the successful communities are here for you to pick their brain. Be sure to congratulate Bristol, Virginia, (our 2008 Smart Community Award winner with a population under 200,000) and Tucson, Arizona (winner in the 200,000 plus category).

A special thanks to all of our sponsors, especially Proxim Wireless for supporting DCE and our attendees. Also, thanks to all of you for attending we know you will leave with a better understanding of how your community will succeed with broadband — wired and wireless.

See you around the show,

Kot hope

Rob Krzys

Digital City EXPO 2008 Schedule of Events

Tuesday, January 22, 2008

Tuesday, January 22, 2	008			
4:00 pm - 5:00 pm	US Connected Communities Association Open Meeting			
5:00 pm - 8:00 pm	Opening Welcome Reception (Exhibit Hall Open)			
Wednesday, January 2	3, 2008			
7:30 am - 8:30 am	Platinum and Gold Sponsor Hosts - Invite Only Breakfast Continental Breakfast - Exhibit Hall Open			
8:30 am - 9:30 am	Opening Keynote - Galen Updike, Arizona Government Information Technology Agency			
9:30 am - 11:30 am	Municipal Workshop - General Session			
11:30 am - 1:00 pm	Lunch in the Exhibit Hall			
	Educational Sessions			
1:00 pm - 1:45 pm	Session 1: Why Communities Need a Communications Master Plan for High-Speed Connectivity, by James Hettrick, US-CCA	Session 2: The Imperative FTTx Checklist: What Happens to Your Operations, by Chuck Flourney, Mapcom Systems		
1:45 pm - 2:30 pm	Session 3: Wireless Video Surveillance Networks in Action, by Bert Williams, Proxim; Daniel Coulombe, Hermiston, Ore. & Greg Conley, Systems Integrated	Session 4: 1st-Mile New Mexico Initiative Case Study, by Richard Lowenberg, 1st-Mile New Mexico/Design Nine Inc. & Andrew Cohill, Design Nine Inc.		
2:30 pm - 3:15 pm	Session 5: The Legal Battle for Municipal Broadband, by Kevin Krufky, Alcatel-Lucent	Session 6: Seeing Optical with Clarity, by Steven Glapa, Zhone		
3:15 pm - 4:00 pm	Session 7: Broadband Implementation Strategies for Communities, by Scott Wilkinson & Rick Schiavinato, Hitachi	Session 8: Funding Community Communications Infrastructure with Performance Based Contracting, by Bill Risse, Johnson Control Inc. & Todd Tanner, Conxx Inc.		
4:00 pm - 4:45 pm	Session 9: Optimizing Public-Private Partnerships for Municipals, by Clifford Clarke, Fort Wayne, Ind.	Session 10: Killer Apps for Last Mile, by Russ Sharer, Occam Networks		
5:00 pm - 7:00 pm	Networking Reception & Smart Community Awards Presentation (Exhibit Hall Open)			
7:00 pm - 9:00 pm	Municipal Only Dinner			
Thursday, January 24,	2008			
7:30 am - 8:30 am	Platinum and Gold Sponsor - Invite Only Breakfast			
7:30 am - 10:00 am	Continental Breakfast - Exhibit Hall Open			
	Educational Sessions			
10:00 am - 10:45 am	Session 11: Broadband and Economic Development, by Tim Scott, PacketFront Inc.	Session 12: The Broadband Marketplace: A New Field of Play for Municipalities, by Bryan Baker, Com-Control Inc.		
10:45 am - 11:30 am	Session 13: Architectural Approaches for Metro Wi-Fi Networks, by Ryan McCaigue, Ivy League Consulting.	Session 14: Future Proofing Using a PON Network, by Scott Burk, Tellabs		
11:30 am - 2:00 pm	Lunch in Exhibit Hall			
	Educational Sessions			
2:00 pm - 2:45 pm	Session 15: Community Design-Build-Operate by James Salter, Atlantic Engineering Group	Session 16: How to Develop a Good RFP by Jeanne Foreman, PacketFront Inc.		
2:45 pm - 3:30 pm	Session 17: Rural Broadband Issues Case Study, by Lester Godsey, Queen Creek, Ariz.	Session 18: Using Existing Utilities to Deploy Broadband Case Study, by Jack Conie, Ca-Botics Fiber Systems		
3:30 pm - 4:15 pm	Session 19: Educational Resources: WiMAX in Education (Case Study), by Frank Ohrtman, WMX Systems	Session 20: Broadband over Power Line (BPL), by Brett Kilbourne, UTC/UPLC		
4:15 pm - 5:00 pm	Closing Keynote - Mark Goldstei	in, International Research Center		

Hitachi GPON: The Speed you need to deliver HDTV



Source-to-Subscriber. Always Connected.

You ensure your subscribers' satisfaction by managing the chain from the source – the video, data and voice services – to the subscriber. Hitachi is with you all the way.

With our AMN1220 GPON system as the foundation, Hitachi now offers a variety of source-tosubscriber solutions, including video services all the way to the subscriber's HDTV.

Hitachi's AMN1220 GPON Fiber-to-the Premises product family supports any service or combination. Data, RF and IP video, standard and IP voice – even T1 services for businesses – all over one simple high-speed fiber optic infrastructure.

Connect with a Hitachi GPON Source-to-Subscriber solution today. Contact Hitachi at 770-797-2521 or email fttp@hitel.com to learn more.

Hitachi Telecom (USA), Inc. 3617 Parkway Lane Norcross, GA 30092 www.hitachitelecom.com



Subscribe Free

Cangour

670766776

infrøstructure

handle the

BE THE

www.lastmileonline.com

Prepare Your City For The Exaflood

ast

Lead. Connect. Communicate.

We would like to thank the following sponsors for their contributions in making the Digital City EXPO 2008 a great success:

PLATINUM SPONSOR - PROXIM WIRELESS

Proxim Wireless Corporation (NASDAQ: PRXM) is a leader in core-to-client solutions for broadband municipal wireless networks. Proxim systems enable a variety of wireless applications including security and surveillance systems, mobile workforce automation, and machine-to-machine communications. Proxim has shipped more than 1.5 million wireless devices to more than 200,000 customers worldwide.

GOLD SPONSOR - HITACHI TELECOM

Hitachi Telecom (USA), Inc. provides full-rate (2.4Gbps downstream/1.2Gbps upstream) GPON Fiber-tothe-Premises solutions that support RF/IP video, VoIP/POTS voice, and high-speed data services for single/multi-family residential and small/medium business applications. With the GPON system as a foundation, Hitachi enables quick time-to-market for services through a variety of source-to-subscriber solutions, including video, data, and voice services.

GOLD SPONSOR - PACKETFRONT

With more than 70 customers worldwide, PacketFront is a global leader in the FTTH industry, and offers the ultimate flexibility for utilities, municipalities, property owners, and alternative operators by designing, building, and operating open access fiber networks. Whether your strategy is to enable multiple services offered by competing service providers, or simply to provide a select variety of multi-play services, PacketFront helps put you in control of your technology and increase profitability.

SILVER SPONSOR - DESIGN NINE, INC

Design Nine provides the highest quality technology-neutral telecommunications project management and advisory services to our clients trying to make wise technology and telecommunications expenditures.

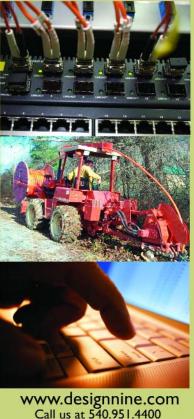








Broadband network design and development



Design Nine provides communities and developers with expert advice, planning, and project management for your wireless and fiber projects.

- Community broadband early phase planning
- Wireless and fiber designs and implementation
- Residential development broadband design
- Community broadband financial planning
- Asset mapping and needs assessment
- Broadband project marketing and public awareness
- Broadband project management
- Vendor and systems identification
- RFP design and management

We design and build open access and open service networks. Our broadband planners will identify appropriate business and financial models, select the right vendors and systems to meet your needs, identify funding options, manage the procurement process, and select qualified firms to build and manage your network.



Lead. Connect. Communicate.

Partners

Co-sponsoring Association: US-CCA

The United States Connected Communities Association represents the interests of community leaders in their quest to fulfill community communications infrastructure goals. The US-CCA educates members, provides and develops reference models and guides and advocates community standards and applications. Headquartered in Washington DC, the US-CCA also advises members and governmental bodies on research, community networking goals and activities, as well as serves as an inter-organizational liaison role to better community networking.

Association Partner: FTTH Council

The Fiber-to-the-Home (FTTH) Council is a market development organization whose mission is to educate, promote, and accelerate FTTH and the resulting quality-of-life enhancements. The Fiber-to-the-Home (FTTH) Council is a non-profit organization established in 2001 to educate the public on the opportunities and benefits of FTTH solutions. FTTH Council members represent all areas of broadband industries, including telecommunications, computing, networking, system integration, engineering and content-provider companies, as well as traditional telecommunications service providers, utilities and municipalities.

Association Partner: NATOA

The National Association of Telecommunications Officers and Advisors (NATOA) is a national association that represents the telecommunications needs and interests of local governments and those who advise local governments. Our membership includes local government agencies, local government staff and public officials, as well as consultants, attorneys, and engineers who consult local governments on their telecommunications needs. Our government members have responsibilities that range from cable administration, telecommunications franchising, rights-of-way management and governmental access programming to

information technologies and INET planning and management. We have members from not-for-profit organizations whose needs and interests are complementary to those of NATOA's members; we have members who are vendors to local governments and members who are telecommunications providers of all types of services to and for local governments.

League of Arizona Cities and Towns

The aim of the League of Arizona Cities and Towns is to promote local self-government, municipal independence, and provide professional and high guality assistance to the municipal governments in the State of Arizona. The League of Arizona Cities and Towns, a voluntary membership organization of the incorporated municipalities in Arizona, exists to provide vital services and tools to all its members, focusing principally on representing the interests of cities and towns

before the legislature, and secondarily on providing technical and legal assistance, coordinating shared services, and producing high quality conference and educational events.

Arizona Telecommunications and Information Council (ATIC)

ATIC is an economic development foundation of the Governor's Strategic Partnership for Economic Development (GSPED). ATIC functions as Arizona's recognized and authoritative organization guiding technology policy development, serving as a leading source of information and expertise on telecommunications and information

technology matters. ATIC develops, promotes and supports initiatives and guides adoption of effective public policies that encourages wide-scale deployment and availability of telecommunication services and information technologies to insure economic prosperity for the Arizona community, expand the region's global competitive advantage, enable continued educational advancement, and support an enhanced quality of life.

Power & Communication Contractors Association (PCCA)

PCCA is the national trade association for companies constructing electric power facilities, including transmission and distribution lines and substations and telephone, fiber optic, and cable television systems. Other areas of members' business activities include directional drilling, local area and premises wiring, water and sewer utilities, gas and oil pipelines. The membership includes hundreds of companies located throughout the United States, Canada, and Mexico. These companies are the leading construction, manufacturing, supply, and service firms within the industry.

National Conference of Black Mayors (NCBM)

Established in 1974, the National Conference of Black Mayors, Inc. is a private, nonpolitical, nonpartisan, nonprofit, 501(c)(3) tax-exempt organization. It serves over 500 mayors, nationwide, who represent more than 30 million citizens. NCBM's mission is to enhance the executive management capacity of its members for the purpose of governing viable municipalities. This is accomplished by providing technical and management assistance, articulating the membership's positions on national public policy and legislation, serving as a clearinghouse on information pertinent to municipal development and conducting educational forums for the exchange of ideas.

8





League of Arizona

ities an







lowns

Lead. Connect. Communicate.

Keynotes

Galen Updike

Telecommunications Development Manager, Government Information Technology Agency, State of Arizona. **Opening Keynote – Wednesday, Jan. 23, 8:30 a.m.**

Since August 2003, Galen Updike has been the Telecommunication Development Manager for the Arizona Government Information Technology Agency (GITA). He is actively involved as a panelist and speaker at many regional and national conferences, joining with others in the discussions about strategies, best practices and the necessary infrastructure to enable our entry into the Information Age. Prior to working at GITA, Updike's professional career spanned 29 years in high-tech applications, network sales and consulting, starting with Burroughs Corp. in 1974, and since, representing a number of resellers, system integrators and manufacturers. From 1986 through

1992, he also owned and operated his own company, Compu-Source. Besides his professional career, of significance, Updike served in the Arizona House of Representatives 2000-2001, as an interim Legislator, District 29 (Mesa), filling an unexpired term. Since 2001, Updike's public service activities have centered on fostering Broadband infrastructure deployment and closing the so called "digital divide" in all parts of Arizona. Updike is a past board member and current associate of the Arizona Telecommunications and Information Council (ATIC), and a past board member of Greater Arizona E-learning (GAZEL), promoting Arizona's e-Learning industry. Earlier he participated in the year long efforts of the Governor's Arizona Partnership for the New Economy (APNE). In other professional associations, Updike has also served as president of the Arizona Chapter of the Independent Computer Consultants Assoc. (ICCA), and as an elected member of the Minority Business Enterprise Input Committee (part of Arizona's Minority Business Council).

Mark Goldstein

President, International Research Center

Closing Keynote - Thursday, Jan. 24, 4:15 p.m.

Mark Goldstein is President of International Research Center, providing consulting, custom research, and strategic support for business, legal and public policy clients across a variety of high technology disciplines and arenas since 1992.Goldstein is a technophile and technology visionary, activist, advisor and entrepreneur with extensive experience and connections throughout numerous technology sectors. IRC concentrates on clients' needs in the complex worlds of telecommunications, information technology, e-commerce, e-content, e-learning, the Internet, biotechnology and other high-tech domains by harnessing global information resources for informed decision making. Goldstein is involved with a number of policy, economic development, professional and trade groups, as well as being a frequent speaker and trainer.

Smart Community Awards

The *Last Mile* Smart Community Awards recognize progressive municipalities that have addressed the need for broadband communications. Two awards are presented each year to a community with a population of more than 200,000 and another with less than 200,000, recognizing those municipalities that have bridged the digital divide.

Smart Communities are judged on the criteria of enabling ubiquitous broadband access, furthering economic development, enhancing public safety and education, employing innovative solutions in network deployment and application and fostering community involvement.

The 2008 Smart Community Awards will be honored at Digital City EXPO during the Networking Session at 5 p.m., Wednesday, Jan. 23, in the Exhibit Hall. This year's winners are Tucson, Ariz., for a population of more than 200,000, and Bristol, Va., for a population of less than 200,000.



Tucson deployed a 230 square-mile Wi-Fi network to enable ER-Link, the nation's first operational video-based Emergency Medical Services (EMS) telemedicine system. In addition, the same network infrastructure is being leveraged for traffic signal management. The network has helped the city cut its telecommunication costs by \$200,000 a year, while ER-Link enables doctors at Tucson's University Medical Center to use video and vital information telemetry to gain a sense of the severity of a patient's condition. In addition, traffic signal data and images that are transmitted over the network helps the city gather real-time information on where lights are red, yellow or green and where pedestrians are concentrated in order to optimize traffic settings for various days and times.

Bristol, which was featured in an article in the July/August 2007 issue of *Last Mile*, has been described as a pioneer in municipal fiber to the home networks. The city and BVU OptiNet, a division of Bristol Virginia Utilities that was launched in October 2002, which became the first municipal utility in the nation to offer triple-play services over a fiber-to-the-user (FTTU) network, with a total build-out investment of approximately \$50 million. Bristol leaders and the BVU Board of Directors chose to invest in a FTTU network to make advanced broadband more accessible and affordable to customers and to enhance the area's economic development opportunities and its citizens' quality of life.



Both deployments have made a important impact on the cities and the citizens who live there. Make sure you attend the Smart Community Awards ceremony and find how these cities overcame challenges and deployed broadband in their communities.





5 Reasons to Visit www.lastmileonline.com

To Get Answers to Your Tough Broadband Questions and win a FREE Last Mile T-shirt! Submit your questions about broadband design, construction and/or deployments and our crack staff will find out the answers from the industry's top minds. Your question(s) and the answer(s) will be published online and in print. Once your question is published we'll send you a Last Mile T-shirt!



Numerous articles, news items and product profiles at your fingertips. No charge to view – just click on the link and the entire article is available.

> To Enroll for the New *Last Mile* E-Newsletter.

Beginning in January 2008, you can get valuable and informative *Last Mile* news delivered biweekly to your inbox.



Broadband News	Featured Articles	LMU - Last Mile University
EarthLink to Cut 900 Jobs in Restructuring Plan	MEETINGS ON DEMAND Sep 15, 2007	FIBER BELOW THE SURFACE Aug 30, 2007
House Passes Minority Serving Broadband Bill	Modern technology innovations have ushered in a new era for government	Communities throughout the United States are opting for fiber to provide
 CALEA Compliance Deadline Past Due 	communication. Faster broadband networks and incr (http://www.communication.com/	last mile broadband hook-ups. These fiber-to-th flotto and
 Sprint and Google Collaborate on VVIMAX 	MIGRATING TO GPON Sep 15, 2007	WELCOME TO LMU Jun 18, 2007
 Chicago Stalls Wi-Fi Plan 	000 10, 2007	
 Business Ethernet Competition Heats Up 	Today's service providers are faced with major challenges in building and	Last Mile University serves developers, Municipalities, and
 Wavesat, ZTE Collaborate on WMAX Interoperability 	(FTTP) ne more >>>	anyone else interested in Broadband Deployment and Developme
NEWSFEED HEADLINES	MUNICIPALITIES GET IN THE KNOW Sep 15, 2007	EXAFLOOD Jun 14, 2007
 2007 Cyber Monday Sets U.S. Record 	While most government officials	is the internet ready for the next
 XO Communications Launches VM-Fi and Cellular Network Combo Trial with Sotto Wireless 	clearly understand the importance of providing fiber optics to residents, some still rem <u>more ==</u>	generation of web video and robust web applications?
XO Communications Launches Wi-Fi and Cellular Network Combo Trial with Sotto Wireless		

The Extra Last A

Thanks for taking the Last Mile fiber challenge.



Enroll for upcoming webinars or view archived Webinars FREE – thanks to the noted sponsors.

Nominate Your Community for the Last Mile Smart Community Award. It's never too

It's never too early to submit your community for the 2009 Smart Community Awards. Go to *www. lastmileonline.com* today and click on the Smart Community Award for details.

www.lastmileonline.com

Lead. Connect. Communicate.

Presenter Bios

Bryan Baker, President, Com-Control Inc.

Bryan Baker leads a team of tele-management professionals that provides crucial data and tele-management services to communities and corporations around the country. Their inside experience allows them to deliver the inside information critical to long term success in the broadband communications arena. After a decorated career managing strategic account teams for MCI, Ameritech and SBC, he and his team have been providing their valuable, unbiased services for over seven years. He speaks regularly to the tele/datacom management audience on a national basis and sits on many technology councils, task forces and broadband think tanks.

Scott Burk, Product Line Manager, Tellabs

As a product line manager at Tellabs, Scott Burk is responsible for the Tellabs 1000 multi-service access series product in fiber and broadband markets worldwide. Mr. Burk has more than 25 years of telecommunications industry experience. Previously, Mr. Burk was a director for Vinci Systems North American sales and marketing for fiber technology. In addition to previous leadership sales positions at Convergent Networks, Mr. Burk has held a variety of engineering posts at Siemens, Newbridge Networks, Timeplex Corporation and Vitalink Communications. Scott Burk also served as a telecommunications system controller for the United States Air Force.

Clifford M. Clarke, CIO/Chief Technology Officer, City of Fort Wayne, Indiana

Clifford M. Clarke is the Chief Information Officer (CIO) and Chief Technology Officer for Fort Wayne, Indiana. In these roles, Clarke is responsible for the technology strategies of the second largest city in Indiana. In a relatively short time with the city, Clarke used technology and process methodologies to optimize the delivery of services to the citizens and businesses of Fort Wayne. He's implemented best practice policies and procedures to enhance the IT operation. As a result, IT (as a service) is better unified across the local government enterprise. He works to improve and prepare the infrastructure of the city to move customer expectations to the next level. Mr. Clarke brings

more than 25 years of IT experience and a wealth of leadership expertise to his position. The city has put a premium on using technology to provide better services for citizens. Mr. Clarke is responsible for finding ways to make this vision a reality for Fort Wayne.

Jack J. Conie III, President/CEO, Ca-Botics Fiber Systems

Jack J. Conie III is the President, Chief Executive Officer and Founder of Ca-Botics Fiber Systems. Ca-Botics is the world's leading provider of advanced installation technologies for fiber cable deployment in sewers and collection systems. Ca-Botics provides infrastructure solutions, including robotics, to install fiber cable in existing sewer pipes in metropolitan areas. Ca-Botics is a private company and is headquartered in Dublin, Ohio. It completed the first North American installation of fiber cable in Toronto, Ontario, Canada, in 2000 and the first installation in the United States in October, 2001 in Dublin, Ohio. Before starting Ca-Botics, Mr. Conie

spent over 20 years in the sewer and waterline construction industry. He founded the Northwest Conduit Corp., which specialized in buried cable/ conduit for the telecommunications industry and open cut sewer and waterline construction. In 1990 he founded Environmental Pipeliners, which pioneered the trenchless construction industry utilizing remote CCTV and robots to repair and rehabilitate existing sewer lines. Mr. Conie is also a Founder and Principal of CIPP Corp., which manufactures cured-in-place lining systems. Mr. Conie has managed over \$300 million in construction contracts during this time period.

Daniel J. Coulombe, Chief of Police, Hermiston, Oregon

Chief Daniel J. Coulombe has served in municipal law enforcement for the past 27 years in Michigan, Colorado, Washington and Oregon. He has worked for municipalities with populations of 15,000 to 90,000. He has served as chief of the Hermiston Police Department for the past six years. This agency was awarded the 2006 Innovations in Technology Award from the International Association of Chiefs of Police (IACP) for its use of technology associated with evacuation. Coulombe holds Bachelors and Masters Degrees in Criminal Justice from Southwest University, and is a graduate and past adjunct instructor of Northwestern University School of Police Staff and Command. The Hermiston Police Department is using Wi-Fi technology in daily police operations and has developed exception-

al emergency preparedness capabilities.

Chuck Flournoy, Vice President and COO, Mapcom Systems

Chuck Flournoy oversees software development, product delivery and day to day operations. He has been integrally involved in the company's growth and success. Additionally, he provides a wide range of consulting services to Mapcom clients for plant documentation, workflow management and data integration for telecommunications companies in the United States and abroad. Mr. Flournoy currently serves on the NTCA Expo Advisory Committee and is a member of the Society of Cable Telecommunications Engineers. Mr. Flournoy earned a Bachelor's in Business Administration from Stetson University and holds a Masters in Liberal Studies from Duke University.

Jeanne Foreman, Sales Communications Manager, PacketFront Inc.

Jeanne Foreman has been in the business of reading and responding to RFPs from local, state and federal customers for 13 years; her time "in the trenches" as a proposal writer and manager has given her unique insights on the dos and don'ts of RFP writing, from the vendor's point of view. Foreman has also written sample RFPs for two industries and is well-versed with some of the new tools of the trade now in use by Proposal teams. She can offer sound advice on how to receive the kind of response you're looking for from vendors, including how to pre-qualify vendors before releasing your RFP.

Steven Glapa, Vice President of Marketing and Product Management, Zhone

Steven Glapa is responsible for setting product portfolio and go-to-market direction to maximize value for the Zhone's 600-plus customers worldwide. Previously at ArrayComm as VP of marketing, Glapa worked closely with carriers to clarify network economics value driven by new technology and repositioned the company for success in Multiple-Input/Multiple-Output (MIMO) software for WiMAX and 3G wireless systems. Glapa's prior experience also includes roles at Booz-Allen and Hamilton, developing strategy for Fortune 100 clients; at Lucent Technologies, as vice president and general manager of IP messaging and applications; and at Banter, a customer service software startup later acquired by iPhrase. Glapa holds an MBA from Columbia University, a BS in mechanical engineering and computer science from George Washington University, and a BA in physics from Carleton College.



11











Lester Godsey, Information Technology Division Manager, Town of Queen Creek, Arizona

Lester Godsey has been in the information technology field for the last 14 years, focused in the education and local government sectors. Mr. Godsey holds a Bachelor of Arts degree in Music and a Master of Science degree in Technology, both from Arizona State University. He has published articles on a variety of technology topics, ranging from municipal telecommunications to implementing technology in the print industry. Mr. Godsey has also presented at a number of conferences at both the state and national level, with the last one being at the Digital City EXPO in 2007. In addition to his presentation and writing activities, he teaches part-time for the University of Phoenix, facilitiating undergraduate-level

information technology and project management courses. Mr. Godsey is currently the Information Technology Division Manager for the Town of Queen Creek, an Arizona community of roughly 23,000. Among his responsibilities, he is leading a municipal wireless implementation, municipal fiber implementation and working on revising Queen Creek's codes and ordinances, all in efforts of improving telecommunication services in the community.

W. James Hettrick, President and Owner, ISMS Inc., and Chairman, US-CCA

W. James Hettrick started his business career focused on connecting with people in the academic world. Over the last decade his acumen in information services and networking has focused on connecting people with people. His vision and skillful application of technology to communications has produced worldwide recognition for himself and some of his clients. Hettrick built Information Systems Management Solutions Inc. (ISMS) to help business and government managers identify and successfully implement technology solutions that accomplish targeted business goals. Hettrick also serves as the chairman of the board of directors for the U.S. Connected

Communities Association (USCCA), which was founded in 2005 to promote community communication asset development by employing a standardsbased communications infrastructure. The group endeavors to connect interested communities, governmental organizations and the ecosystems of communications in dialog, education and the advancement of communications technologies.

Brett Kilbourne, Director of Regulatory Services and Associate Counsel, Utilities Telecom Council, Washington, D.C.

Brett Kilbourne is currently Director of Regulatory Services and Associate Counsel at the Utilities Telecom Council (UTC) and the United Power Line Council (UPLC), where he provides legal guidance to utilities on telecommunications issues both pending before federal and state agencies and being considered in Congress. UTC is the national representative on telecommunications matters for its electric, gas and water utilities and natural gas pipeline company members, which range in size from large combination electric-gas-water utilities which serve millions of customers, to smaller, rural electric cooperatives and water districts which serve only a few thousand customers each. UPLC is an independent affiliate of

UTC and was created to drive the development of broadband over power line (BPL) solutions in North America for electric utilities and their technology partners. Kilbourne received his juris doctor degree in 1998 from Catholic University and his bachelor of arts degree in 1987 from the University of the South. He is licensed to practice law in the state of Maryland and is a member of the American Bar Association and the Federal Communications Bar Association.

Kevin Krufky, Legislative Counsel, Global Government and Public Affairs, Alcatel-Lucent

Kevin Krufky serves as Alcatel-Lucent's Legislative Counsel for wireline technology and services. Prior to joining Alcatel-Lucent, he was in private legislative and regulatory practice with the law firm Paul, Hastings, Janosfky and Walter. Mr. Krufky has considerable public sector experience. Prior to joining the private sector, he served as Legislative Assistant to U.S. Senator Sam Brownback, and as legislative staff to Senator John McCain, then Chairman of the Senate Committee of Commerce, Science and Transportation, on the Subcommittee on Communications.

Richard Lowenberg, Founding Director, 1st-Mile New Mexico Initiative

Richard Lowenberg is the Founding Director of 1st-Mile New Mexico Initiative. He is also R&D organizational director, media artist, ecosystems designer and tele-community planner. He is Senior Broadband Planner for Design Nine Inc., a national broadband planning firm. He was Executive Director for the Davis Community Network in Davis, California, from 1996-2006. Mr. Lowenberg has acted as advising consultant to the CENIC and California Smart Communities Initiatives. He is an instructor at the University of California in the TechnoCulture Studies Program.

Ryan McCaigue, President, Ivy League Consulting

Currently, Ryan McCaigue is the President of Ivy League Consulting, a partner for end-to-end design, deployment and management of wireless networks. Formally Mr. McCaigue was Senior Technical Project Manager for Earthlink Municipal Networks. He managed network deployments in Anaheim, California, Corpus Christy, Texas, and design activities in Houston, San Francisco and Pasadena, California. Prior to Earthlink, he established the WAZChandler presence as partner in the WAZAlliance, which was sold to MoblePro in May 2005 forming Neoreach Inc. As Director of Engineering for NeoReach he was responsible for the design, construction and operation of the Tempe Network – a first of its kind mesh network, offering ubiquitous border to border wireless.

Frank Ohrtman, President, WMX Systems LLC

Frank Ohrtman has almost 20 years experience in telecommunications and wireless applications. He is a former Navy Intelligence Officer (1981-1991) who specialized in electronic warfare. Mr. Ohrtman is the president of WMX systems LLC, a consulting and systems integration firm in Denver, Colorado. His wireless consulting clients include national governments, Tier 1 telephone companies, school districts and WiMax vendors. Mr. Ohrtman is a Gerson Lehman Group Scholar and serves as Dean of WiMax for Applied Learning Solutions. He is a regular blogger and contributor to WiMax.com. and annual presenter at WiMax World as well as local Cisco Users Groups. His extensive published list can be found on Amazon.com.

Tim Scott, Director of Sales, PacketFront

Tim Scott has over 10 years experience in the IP networking industry, beginning his career in England, working in the systems integration channels. Scott later moved to Cisco Systems, starting in the Netherlands before taking on a sales management role based in Dubai in the Middle East. He is an eight-year veteran of Cisco Systems and the recipient of many awards and accolades for his work in the European and Middle East markets. Scott has a solid understanding of the network requirements needed to deploy IP services, including IP voice, having successfully led what was at the time the largest IP telephony deployment in Cisco's history. Scott held various sales management and business development roles with a primary emphasis on customer adoption of new technologies. He has been deeply involved in government technology initiatives as well as large enterprise and carrier markets. Scott leads the Sales activities at PacketFront as well as the North American Carrier strategy. He has been intrinsically involved in all PacketFront's activities in North America, which have included municipal and utility FTTH deployments as well as carrier broadband deployments.

Lead. Connect. Communicate.















Lead. Connect. Communicate.

Russ Sharer, Vice President of Marketing, Occam Networks

Digital CITY &

Mr. Sharer has more than 20 years in the telecommunications and data networking industry. Prior to Occam, Sharer was acting vice president of marketing for Ericsson Datacom Inc. At Ericsson, he also served as vice president of product marketing for the IP network access and IP telephony product units and as director of global alliances. Sharer also served as acting director of marketing of sales and operations for MediaOne Connect Inc. Sharer's previous experience includes director of sales operations, director of corporate access and director of client products at Xircom Inc. Sharer also worked at Rockwell International's CMC Network Products Division. He holds a B.S. in Industrial Engineering from California Polytechnic State University.

Rick Schiavinato, Vice President of Sales and Marketing, Hitachi Telecom Inc. (USA)

Rick Schiavinato is responsible for the sales and marketing activity for Hitachi's North American FTTP product line. Schiavinato is responsible for setting the commercial, institutional and product direction for North America through customer interaction, relationships with industry leaders and participation in industry associations. Prior to joining Hitachi Telecom Inc., Schiavinato has held various marketing and operation positions such as director of international business development at Wave7 Optics; senior international and corporate positions including COO for Latin America at Arris; director of marketing at Time Warner of Brazil. In addition to North America market experience, Schiavinato has over 15 years of international telecom involvement including assignments in Brazil and Mexico. Schiavinato has a Bachelor of Science in marketing statistics from the University of Illinois-Chicago.

Scott T. Wilkinson, PhD, Vice President of Product Management and System Engineering, Hitachi Telecom Inc. (USA)

Scott Wilkinson is in charge of the product management and system engineering department for Hitachi's North American FTTP product line. Wilkinson's department is responsible for the specification of Hitachi's North American products. Wilkinson has been involved with a variety of telecom technologies throughout his career. Prior to Hitachi Telecom, he was the executive director of system engineering and product management for Parama Networks, a developer of system-on-a-chip solutions for SONET/SDH networks. He was previously director of applications engineering for Kestrel Solutions, a company developing frequency division multiplexing equipment. Wilkinson

started his career with Fujitsu Network Communications in SONET and DWDM product areas. Wilkinson earned his PhD in Electrical Engineering from the Georgia Institute of Technology in 1996. His thesis focused on integrating semiconductor LEDs and VCSELs with silicon circuits and micro-machines (MEMS). He also earned his B.E.E., from Georgia Tech in 1990.

Bert Williams, Vice President of Marketing and Investor Relations, Proxim Wireless Corp.

Bert Williams is vice president of marketing and investor relations at Proxim Wireless Corp., leading the company's marketing, product management and investor relations teams. With more than 20 years of high-tech marketing experience, Williams previously held a variety of marketing, product management and corporate strategy positions at Tropos Networks, Alteon WebSystems (acquired by Nortel Networks), Bay Networks, Synernetics and Advanced Micro Devices. Williams holds a B.S. with University Honors in Electrical Engineering from Carnegie Mellon University and an M.B.A. from Harvard Business School.

NEXT LEVEL SOLUTIONS, INC. Wireless Networking Solutions that Take Your Business to the Next Level

Fundamental Experts in Wireless Technology

Next Level Solutions, Inc. is a turnkey provider of wireless data solutions ranging from In-Building wireless LAN to high bandwidth laser and microwave Point-to-Point and Multipoint links. Having the inherent capabilities to understand the technical and business challenges of today's business environment, we are proponent of A-Best-in-Class solutions to meet all customer needs regardless of size or scope.

Solutions

- Wi-Fi / WiMAX
- Microwave Backhaul
- Wireless Appliances
- Wireless Security
- Satellite
- Tower Construction
- Solar Solutions
- NEMA Enclosures
- VOIP

Next Level Solutions, Inc. 15455 N. Greenway-Hayden Loop, Suite C-8 Toll Free: 800-998-5060 Scottsdale, AZ 85260

Industry Focus

- Education (k-12 and Higher Ed)
- Healthcare
- Enterprise Commercial
- State & Local Government
- Federal Government (GSA Contract Holder)
- Hospitality
- Industrial







Agenda

Tuesday, January 22

4 p.m. – 5 p.m. U.S. Connected Communities Association (US-CCA) Open Meeting

The US-CCA helps communities understand and manage their communications future by providing a foundation for standards development, education awareness, non-partisan political advocacy and systematic approaches to applying communications and broadband networking goals. The US-CCA was founded in 2005 by community leaders, community communications products and service vendors and the communities that surround them. US-CCA seeks to get rid of connectivity deserts and the odd mess of community connectivity and replace it with models for universal access, new residential/commercial construction, and community services based on cohesive communications infrastructure. This is a vital step in every community's economic development plan — one that will allow businesses and residents to identify communities based upon their level of supportable services that are necessary for their protection, livelihood and enjoyment. Location: Room 110

5 p.m. – 8 p.m. Welcome Reception — Opening of Exhibit Hall Location: Exhibit Hall

Wednesday, January 23

7:30 a.m. – 8:30 a.m. Exhibit Hall Open

Platinum and Gold Sponsor Hosts – Invite Only Breakfast Location: Room 103

Continental Breakfast Location: Exhibit Hall

8:30 a.m. - 9:30 a.m.

Opening Keynote: Exciting New Age of Communications: Major Paradigm Shift Ahead – Galen Updike, Telecommunications Development Manager, Government Information Technology Agency, State of Arizona

With a vision of what lies ahead in ubiquitous broadband, Galen Updike will outline the barriers of municipal broadband deployment and how communities all over the United States have made communications networks a critical infrastructure. Updike will present such concerns about "middle mile" infrastructure, right of way and return on investment, as well as the need for a collective voice to lead the charge for ubiquitous broadband. Exemplary initiatives in California, Kentucky, Maine, Georgia and in Arizona will illustrate how challenges can be overcome, ferrying your community across the digital divide.

Location: Rooms 108-110

9:30 a.m. - 11:30 a.m.

Municipal Workshop: General Session – Dave Evertsen, Moderator, Municipal Solutions; Eric DaVersa, NetLogix; Paul Koebbe, Graybar; Michael Render, Render, Vanderslice & Associates; Tim Scott, PacketFront Inc.

The Municipal Workshop kicks off the Digital City EXPO speaking agenda with a two-hour panel discussion structured to give the municipal attendee a comprehensive and in-depth overview of the primary issues, drivers, best practices, technologies and business models affecting municipal broadband deployments nationwide. If you're looking for the facts about broadband and want to learn from the most experienced individuals in the country, then you should definitely plan on

Lead. Connect. Communicate.

attending this workshop. This general session will feature an extended audience question and answer session following the speaker presentations to ensure that attendees get all the information they need to know about the issues and challenges facing their broadband deployment. Speakers will cite examples of specific municipal deployments and lessons learned about how cities have succeeded or failed and why. Presenters will offer different deployment models and combinations of technologies, which will help community leaders learn how to determine what is most feasible for their community. The Municipal Workshop will present diverse opinions about both wired and wireline technology and the options that communities should consider with each. This general session is the perfect primer for any of the Digital City EXPO speaking sessions.

Location: Rooms 108-110

11:30 a.m. – 1 p.m. Lunch – Exhibit Hall Open Location: Exhibit Hall

1 p.m. - 1:45 p.m.

Session 1: Why Communities Need a Communications Master Plan for High-Speed Connectivity – James Hettrick, President of Information Systems Management (ISMS) and chairman of US-CCA.

Community Master Planning of networks will enable citizens to Think Beyond Broadband. This thought allows for a paradigm shift of enabling a community's economic vitality and prosperity. It alters how commerce can and will be conducted. It is a plan to facilitate the development of a viable economy now and into the future. It will catalyze a new robust economic engine; one which can generate sustainable economic growth and community prosperity for today and tomorrow's global stakeholders.

Location: Room 109

Session 2: The Imperative FTTx Checklist: What Happens to Your Operations – Chuck Flournoy, Vice President and COO,

Mapcom Systems.

What are the differences between running a telecommunications service over a legacy network and being a fiber-rich broadband communications provider? For many organizations, the move to a new technological platform can also be the much needed catalyst to take a fresh look at operational procedures. This session focuses on what happens to your operations after the fiber is in the ground. It examines each functional area of the service company — marketing, sales, dispatch, network operations, I&R, planning, and accounting, as well as engineering and construction — in a search for productivity gains, operational efficiencies, and customer service enhancements made possible by the enhanced visibility and remote management characteristics of today's FTTx platforms. Attendees will leave with an FTTx checklist that provides an effective blueprint for the operations side of an FTTx deployment. Attendees will benefit from topics including:

- Integrating key applications from each department to streamline operations and improve communications
- Creating a company-wide sales culture through ready access to the information necessary to sell new services
- · Reacting quickly and accurately during an outage
- Avoiding the dreaded "left hand doesn't know what the right hand is doing" curse
- Getting engineers and IT personnel (and systems) to play to their respective strengths
- Reducing I&R overlap and excessive windshield time through integrated workforce management
- Responding to the sophisticated network monitoring and management needs of enterprise customers
- Understanding where the best targets are in an overbuild environment
- Tracking expensive CPE equipment while meeting the challenges of home networking
 Location: Room 110

Location: Ro

Lead. Connect. Communicate.

1:45 p.m. – 2:30 p.m.

Session 3: Wireless Video Surveillance Networks in Action – Bert Williams, Vice President of Marketing and Investor Relations, Proxim Wireless; Daniel J. Coulombe, Chief of Police, Hermiston, Oregon; and Greg Conley, Systems Integrated.

The city of Hermiston, Oregon's broadband wireless surveillance network is a key component of an emergency preparedness and evacuation program that has been recognized by the IACP for its innovation and sophistication. In this session, Hermiston's chief of police will discuss the use of Wi-Fi and traffic management equipment, video cameras, warning systems, mapping and crime prevention technologies at the heart of its program. A systems integrator and service provider will also share their experiences implementing wireless video surveillance to dramatically reduce crime, increase the safety of public parks and other municipal areas, and even raise property values.

How are these networks being funded? In some cases, grants from the Department of Homeland Security are available. Also, learn the planning, cost and implementation considerations and what type of ROI these cities are experiencing. Location: Room 109

Session 4: 1st-Mile New Mexico Initiative Case Study -

Richard Lowenberg, 1st-Mile New Mexico and Design Nine, and Andrew Cohill, President, Design Nine.

Community-owned open fiber (and wireless) networks offer opportunities for rural community revitalization and economic generation. Learning turnaround lessons from supply-side to demand-side renewable energy and agriculture initiatives, local ownership of open network, broadband infrastructure allows for fair competitive services provision, synchronous connectivity, needed community income generation and lower priced and higher service guality for end-users. This new economic and technical model, originated in Europe, is beginning to be implemented in the United States and can set bottom-up examples for a much needed national broadband policy. The 1st-Mile New Mexico initiative advocates and works to strategically realize open, affordable, high-bandwidth "broadband for all" in New Mexico. New Mexico is near the bottom of the list of states on the wrong side of the digital divide. Rather than be a problem, this can be an opportunity. The state of New Mexico and local communities are taking innovative, example-setting steps to build a networked society that will improve lives and livelihoods. This presentation will include specific community examples, economic models and discussion of implementation strategies, as well as cite current and pending rural and urban open access broadband projects in New Mexico. Location: Room 110

2:30 p.m. - 3:15 p.m.

Session 5: The Legal Battle for Municipal Broadband -

Kevin Krufky, Legislative Counsel, Global Government and Public Affairs, Alcatel-Lucent.

The battle over whether municipalities can offer broadband service continues to rage among state and national government officials. While the U.S. Congress is moving slowly on municipal broadband, state legislative bodies are moving at a blistering pace. Municipalities interested in offering broadband service continue to fight with state legislators, who are often backed by incumbent phone and cable companies in their attempt to prohibit municipal broadband. Of the 14 states that have some type of restriction on municipal telecom, about half apply to municipal broadband. As many cities are successfully challenging prohibitive covenants that allow them to provide broadband services, the U.S. Senate and House of Representatives are once again considering legislation to protect the rights of municipalities to deploy broadband services. Krufky will examine these trends and address such questions as:

- What factors influenced these states to pass reform legislation?
- What tactics did cities use to win their legal battles?
- How are other states being influenced by this precedence?
- Under what conditions are incumbent service providers willing to support these reform efforts?

Location: Room 109

Session 6: Seeing Optical with Clarity: Broadband Technologies, Economics and Case Studies – Steven Glapa, Vice President of Product Management and Marketing, Zhone.

Municipalities all across the country are re-thinking their telecommunications strategies, to meet their own operational needs as well as to build a stronger foundation for future economic prosperity in their communities. This often means contemplating a step into the access networking business, one that can quickly lead municipal IT and planning teams into a thicket of confusing (and competing) technologies and network architecture decisions. This session will provide a detailed review of last-mile data, voice, and video access technologies in the full range of municipal applications, including comparative economics in deployment and operation of fiber-based (GPON, Active Ethernet), copper (EFM, xDSL), and wireless (WiMAX, WiFi) last-mile networks. The material will draw on cost modeling and application case studies from a wide variety of Zhone's real-world, carrier-class deployment experiences. Location: Room 110

3:15 p.m. – 4 p.m.

Session 7: Broadband Implementation Strategies for

Communities – Scott Wilkinson, Vice President of Product Management and System Engineering, and Rick Schiavinato, Vice President of Sales and Marketing, Hitachi Telecom Inc.

Most communities recognize the value in a broadband communications infrastructure: it allows residents, businesses and institutions to communicate effectively worldwide, supports telecommuting, offers the latest in home entertainment possibilities and enables new commercial opportunities for businesses. The combination of these attributes makes the community more desirable for residents and businesses alike. However clear this value proposition is, implementation can be a daunting task, especially for communities that do not have current operational expertise in communications networks. And competitive pressures can be intense, as traditional telephone companies, cable TV companies as well as municipalities are all competing for subscribers. As the saying goes, the devil is in the details. This session is presented in two parts: 1.) An overview of GPON, the highest capacity version of the most widely deployed fiber to the premises access technology, including next generation developments; 2.) Implementation and how to provide the services your subscribers want and provide revenue to support network and operational expenses. Location: Room 109

Session 8: Funding Community Communications Infrastructure with Performance-Based Contracting — Bill Risse, Johnson Control Inc., and Todd Tanner, Conxx Inc.

Johnson Controls Inc. and Conxx Inc. have joined together to use savings from energy savings, green initiatives and cost reductions to fund next generation community owned communications networks for economic development and social inclusion. Johnson Control Inc. (JCI), a Fortune 50 company, has developed a methodology that allows savings from a variety of sources (e.g., automated meter reading for utilities, SCADA, telemetry, energy reduction and co-generation) to fund necessary improvements to community, schools and public safety. After a rigorous study, JCI provides access to various capital sources and oversees all the improvements necessary to capture identified savings and revenue opportunities. Additionally, JCI guarantees the results over the performance period. Conxx builds and manages the premier wireless/fiber multiservice networks that provide the backbone for advanced communication infrastructure for economic development, schools, telemetry, AMR and public safety.

Location: Room 110

4 p.m. - 4:45 p.m.

Session 9: Optimizing Public-Private Partnerships for

Municipalities – Clifford Clarke, CIO and Chief Technology Officer, Fort Wayne, Indiana.

Fort Wayne has gained national recognition for its use of highly visible technology-based public-private partnerships, starting with the city-wide

deployment of a wireless network in 2001. The city of Fort Wayne continued this success by bringing Verizon FiOS Internet and TV to the first Midwest city. Through public-private partnerships the city opened the first regional Public Safety Academy in November 2007. This model has academia, public safety professionals and first responders training side by side. The city of Fort Wayne has consistently demonstrated how publicprivate partnership can work to benefit all in the community. This presentation will explore the techniques a "high performance government" can employ to be successful. Additionally, the presentation will review the challenges municipalities are facing as they execute their economic and community development projects, and the role of technology and technology partners play in their success. Clarke will explorer the cost of "free service" and how to create a sustainable model. Participants will hear about best practices from Fort Wayne, Indiana, and share models of what has worked and why from their locale. Participant will take away strategies to identify what could work in their community. Location: Room 109

Session 10: Killer Applications for the Last Mile – Russ Sharer, Vice President of Marketing, Occam Networks.

A paradigm shift is occurring in TV and in access — known as HDTV. This new technology allows the user to experience a clearer, more engaging and more satisfying viewing experience. As the next generation of broadband, high definition access will impact every end of the spectrum. From the TV, to cameras, to onscreen character make-up. Whether over copper or fiber, subscribers are starting to demand greater reliability, uptime, bandwidth and performance because the Internet is a greater part of their home or work life. This new demand is more pressure for the access network. The old way of doing broadband will not scale and will not deliver the required reliability. Sharer will discuss:

- How this new approach is enhancing IP and Ethernet with Telco grade service assurance software is needed
- How Occam is working with rural telcos to offer the same suite of offerings as larger telcos serving major metropolitan areas
 Location: Room 110

5 p.m. – 7 p.m. Networking Reception – Exhibit Hall Open Location: Exhibit Hall

7 p.m. — 9 p.m. Municipal Only Dinner Location: Room 108

Thursday, January 24

7:30 a.m. – 8:30 a.m. Platinum and Gold Sponsor Hosts – Invite Only Breakfast Location: Room 103

7:30 a.m. – 10 a.m. Continental Breakfast Location: Exhibit Hall

Exhibit Hall Open

10 a.m. — 10:45 a.m.

Session 11: Broadband and Economic Development – Tim Scott, Director of Sales, PacketFront Inc.

The United States has lost its technological edge to other countries (South Korea, Japan, Denmark, Sweden) that were far quicker to understand the economic impact of a community-wide "big broadband" infrastructure. While most of America is slugging along with 1.5 Mbps DSL (also known as 'little broadband'), other countries, are coasting along at a standard 50 Mbps symmetrical connection. Speeds like that easily accommodate the demands of the technical and entertainment industries, as well as emerging services such as telemedicine, distance education and visual

Lead. Connect. Communicate.

communications. It is an often repeated sentiment: communities that don't invest in a "big broadband" infrastructure will cease to grow and will lose businesses and residents as they relocate to better connected communities. This session explores some of the myths and realities of the impact of broadband availability on economic development. This session covers the means by which economic impact can be measured, who is currently doing the measuring and why. This session also explores some local case studies and reports, and explains the tangible economic effects on a community when a "big broadband" infrastructure is readily accessible. Location: Room 109

Session 12: Got... Light? The Broadband Marketplace: A New Field of Play for Municipalities – Bryan Baker, President,

Com-Control Inc.

As municipalities enter the competitive marketplace for providing broadband services, city leaders need a blueprint to compete and succeed in this new field of play. As municipalities enter the competitive marketplace for providing broadband services, city leaders need a blueprint to compete and succeed in this new field of play. Attend this informative discussion designed to provide attendees with the crucial information needed to set up a successful value proposition for their network initiatives. Baker will go over the importance of a solid purpose, its impact to your product, packaging and pricing models and how to succeed in one of the most volatile and competitive marketplaces in our global economy. Location: Room 110

10:45 a.m. - 11:30 a.m.

Session 13: Architectural Approaches for Metro Wi-Fi Networks – Ryan McCaigue, President, Ivy League Consulting, Tempe, Ariz.

While metro scale mesh systems have a number of factors in common, a number of different architectural approaches have been employed by the various vendors. What differentiates one from another is the ability to carry subscriber traffic over multiple hops to a wireline point of presence (POP), also called a bandwidth insertion point, without throughput degradation. Some architectures are extremely efficient in carrying subscriber traffic over many hops and may require as few as one Internet connectivity point for every one-hundred wireless nodes. Others devices are inefficient and may require as many as one bandwidth insertion point for every three nodes. In the latter case a potentially large number of additional building sites, additional costly wired insertion points, and many nonmeshed point-to-point microwave links are required to back-haul traffic which significantly drives OPEX upward. Management of multiple vendors' products and multiple complex backhaul links becomes increasingly complex. The use of a large number of backhaul links turns a fully meshed network into a partial mesh network. Fully meshed networks have more redundant paths back to the POP. Thus they will exhibit higher network availability and a single link outage is not service affecting. Learn more about metro mesh networks and how it worked in Tempe, Ariz. Location: Room 109

Session 14: Future Proofing Using a PON Network – Scott Burk, Product Line Manager, Tellabs.

Consumers are demanding faster, higher quality broadband services. To meet their needs, service providers around the world are beginning to deploy FTTP and PON-based access networks to future proof their service offerings. The basic principle of a PON network is to share the central office equipment and the fiber feeder cable with as many end users (subscribers) as possible, which reduces cost and increases simplicity and efficiency. To minimize FTTP Capital Expenditure (CapEx) and Operating Expenditure (OpEx), a passive optical network (PON) is used in the outside plant with a passive splitter to distribute the central office equipment, the Optical Line Terminal (OLT) downstream and upstream signals across 32 or 64 Optical Networking Terminals (ONTs). The Optical Network Terminal (ONT) in a PON architecture serves as the optical termination point at the customer premises. The bandwidth and advancements in PON technology will enable service providers to cost-effectively deliver services not yet realized to redefine the user experience. This presentation will explore:

- Lead. Connect. Communicate.
- The evolution of PON technology from BPON to GPON and beyond
- Comparison of BPON, GPON, Active Ethernet
- How PON technology enables service providers to redefine the user experience
- The competitive advantages of a PON-based network. Location: Room 110

11:30 a.m. — 2 p.m. Lunch Break Location: Exhibit Hall

Exhibit Hall Open

2 p.m. - 2:45 p.m.

Session 15: Community Design-Build-Operate – James Salter, Chairman and Chief Strategy Officer, Atlantic Engineering Group

The studies are done for a fiber to the premises (FTTP) network, the go-ahead has been announced, and the community is excited. Now what happens? This session will cover real world experiences in citywide FTTP deployments. What are the early decisions that will impact your budget and your schedule? What about video content what staff do you really need during the design and build? These are some of the questions that will be answered in this dynamic discussion of what really happens when you are told, "GO! And oh by the way, go fast."

Session 16: How to Develop a Good RFP – Jeanne Foreman, Sales Communications Manager, PacketFront Inc.

Writing an RFP for a broadband deployment entails many Dos and Don'ts. Jeanne Foreman has been in the business of reading and responding to RFPs from local, state and federal customers for 13 years, and throughout that time spent "in the trenches" as a proposal writer and manager has given her unique insights on RFP writing from the vendor's point of view. Learn about some of the new tools of the trade that are now in use by proposal teams. Foreman will also offer sound advice on how to receive the kind of response you're looking for from vendors, including how to pre-qualify vendors before releasing your RFP.

Location: Room 110

2:45 p.m. - 3:30 p.m.

Session 17: Rural Broadband Issues Case Study – Lester Godsey, Information Technology Division Manager, Queen Creek, Ariz.

Lately, there has been an increased spotlight placed on municipalities that are having difficulty in deploying municipal Wi-Fi networks. What the latest slew of municipalities (Chicago, San Francisco, etc.) have in common is that they are large metropolitan areas. What are some of the unique challenges that rural communities face in improving telecommunications? The Town of Queen Creek is a rural community that is facing "big city" telecommunication needs. It is a community that wants to embrace not only technology, but retain its small town charm, which has made it into a community that people want to work and live in. It is vital for any rural community to understand the ramifications that economic development, land use and fiscal direction has upon implementing effective telecommunications. See what rural communities are doing to ensure that telecommunications needs are being met.

Location: Room 109

Session 18: Using Existing Utilities to Deploy Broadband

Case Study – Jack J. Conie III, President of Ca-Botics Fiber Systems.

In today's competitive telecom market, finding new, cost effective methods for deploying fiber cable networks is imperative. Using one of the oldest municipal infrastructures and high-tech robots, three North American cities think "outside the box" using a process that delivers their ultimate goal and so much more. Location: Room 110

3:30 p.m. – 4:15 p.m.

Session 19: Educational Resources: WiMAX in Education Case Study – Frank Ohrtman, President, WMX Systems.

Key findings in education markets have determined that one-to-one computing (one laptop per student) is a powerful market driver for the deployment of WiMAX as a wireless broadband access technology. School districts could provide broadband wireless Internet or intranet access for students at home for as little as \$40 per student in capital expenditure or \$1 per month per student in operational expenditures. WiMAX-enabled laptops may be the only way for public schools to comply with federal mandates in education. WiMAX provides a low-cost means for crossing the digital divide. The WiMAX in Education market could be \$1.8 billion by 2015. Ohrtman will discuss how school districts can maximize after hours, off-campus Internet/intranet access for students, especially those of low socio-economic status. In addition, he will explain why WiMAX is the best technology for education and especially "digital inclusion," focusing on the cost per student to deploy WiMAX in a school district and how a school district can finance a WiMAX deployment. Location: Room 109

Session 20: Broadband over Power Line (BPL) and the Next Generation Utility – Brett Kilbourne, Director of Regulatory Services, United Telecommunications Council/United Power Line Council

Utilities are investing in next-generation communications systems to improve the efficiency, reliability, security and safety of critical infrastructure and to support community broadband networks. This trend is fueling the deployment of BPL and other communications systems that provide two-way real-time communications systems all the way to the customer. These systems provide mobile as well as fixed communications that are more reliable than commercial services and that reach places that are not served or are underserved by commercial service providers. Brett Kilbourne, an attorney from the Utilities Telecom Council and the United Power Line Council, will examine BPL deployment by utilities, the latest technical and industry developments, and look at the bigger picture for critical infrastructure communications and community broadband networks. Location: Room 110

4:15 p.m. – 5 p.m.

Closing Keynote: Storm Clouds, Silver Linings and Blue Skies for Wireless Broadband – Mark Goldstein, President, International Research Center

Despite the fact that many if not most domestic wireless broadband projects in major metropolitan areas have been troubled or failed this past year, there has been laudable progress in many quarters, including meeting the real need and challenges in underserved rural markets as well as the inexorable march of technology innovation. Mark Goldstein will focus on the success (and failure) factors for wireless broadband initiatives, evolving thinking and best practices, as well as prime examples of rural promise and success including:

- Open Range Communications which has secured \$268 million in USDA RDUP loan guarantees to build a national WiMAX network starting with over 500 communities across 17 states these next five years
- WI-VOD Communications launched with a U.S. DHS grant funded project in Southern Arizona and a subsequent USDA grant in Superior, now rapidly expanding across rural Arizona with a large Industrial Development Authority loan package near at hand
- The many Native American telecom initiatives underway or already successful in Arizona including those of the Fort Mohave Tribe, Gila River Tribe, Hopi Tribe, Navajo Nation, Salt River-Pima, San Carlos Apache, and Tohono O'odham Nation, demonstrating government assistance and innovative partnerships and thinking at their best

All in all, these are stories of progress and success that seem rarely reported, but are most telling and crucial to the future evolution of wireless broadband where it counts the most. Finally, we will focus on the road ahead, the outlook these next five years of innovative wireless technologies, and their prospects for deployment and adoption across the American landscape. Location: Rooms 108-110

Lead. Connect. Communicate.

Entrance

Exhibit Floor Map



Digital CITY 8

Exhibitors

Alcatel-Lucent

2301 Sugar Bush Road Raleigh, North Carolina 27612 919.850.6191 www.alcatel-lucent.com

ATIC (Arizona Telecommunications and Information Council)

PO Box 1119 Tempe, Arizona 85280 602.254.5587 www.arizonatele.com

Bristol Virginia Utilities/BVUF

PO Box 8100 Bristol, Tennessee 37620 866.623.6287 www.bvufocus.com

Com Control Inc.

401 E. Colfax, Suite 208 South Bend, Indiana 46617 574.234.9690 www.com-controlinc.com

Design Nine, Inc.

2000 Kraft Drive, Suite 2180 Blacksburg, Virginia 24060 540.951.4400 www.designnine.com

FTTH Council North America

1623 Maple Street Lake Oswego, Oregon 97034 503.635.3114 www.ftthcouncil.org

Graybar

34 North Meramec Avenue Clayton, Missouri 63105 314.573.9315 www.graybar.com

Hitachi Telecom (USA), Inc.

3617 Parkway Lane Norcross, Georgia 30092 770.797.2518 www.hitel.com

Last Mile Magazine

PO Box 190 Peninsula, Ohio 44264 330.467.7588 www.lastmileonline.com

Mapcom Systems

7345 Whitepine Road Richmond, Virginia 23273 804.743.1860 www.mapcom.com

MP Nexlevel, LLC

500 County Road, 37E Maple Lake, MN 55358 320-963-2400 www.mpnexlevel.com

Next Level Solutions, Inc.

1545 N. Greenway Hayden Loop, Suite C8 Scottsdale, Arizona 85260 480.998.5060 www.nxlevel.net

PacketFront

1805 Shea Center Drive Highland Ranch, Colorado 80129 603.888.5100 www.packetfront.com

Proxim Wireless

2115 O'Nel Drive San Jose, California 95131 408.542.3373 www.proxim.com

Strix Systems, Inc.

26610 Agoura Road Calabasas, CA 91302 Phone: 818-251-1017 Toll Free: 877-STRIXSYS Fax: 818-251-1099

TeraSpan Networks

1409 West Pender Street, 2nd Floor Vancouver, British Columbia V6G 2S3 604.684.8711 www.teraspan.com

Tropos

555 Del Rey Avenue Sunnyvale, CA 94085 408.331.6800 www.tropos.com

US-CCA

1901 Pennsylvania Avenue, NW, 5th Floor Washington, DC 20006 www.us-cca.org

Vyatta Inc.

1301 Shoreway Road, Suite 200 Belmont, California 94002 650.413.7200 www.vyatta.com

Bold = Sponsor

An open network, a world of choice

In an open-access broadband network powered by PacketFront, users are free to instantly choose from multiple competing services – not just a select few. Network operators benefit from greater profitability through lower operating costs and increased revenues per user. As pioneers of open-access, we're leaders in municipal FTTH deployments. And with multiple deployments around the globe, we're transforming communities and broadband businesses. Everywhere.

So come and visit our booth at Digital City Expo '08. Learn more about how our forward-thinking products and services can help you deploy a sustainable broadband network.

OPEN UP



10 M IN 10