

CT Broadband Internet Coordinating Council Minutes of First Meeting, July 15, 2008

Call to Order

Chairman Manzione called the meeting to order. He thanked the council members for their participation and thanked Richard Strauss and Ann Bertini from the Connecticut Academy of Science and Engineering for supporting the Council so effectively.

Introduction of Council Members and Visitors

- **Anthony Santino**, Laurel Woods Inc.
- **Bill Vallée**, Office of Consumer Counsel
- **Robert Mundy**, *Ex-officio*, DPUC
- * **Lou Manzione**, *Council Chairman*, University of Hartford
- **Julie Cammarata**, *Ex-officio*, OPM
- **Greg Shimer**, The Imaginos Partnership
- **John Emra**, AT&T
- **Jack McCoy**, Town of Manchester
- **Rob Earley**, Comcast
- **Rob Vietzke**, Internet 2
- * **Ed Murphy** (*via phone*), JDSU
- **Mike Chowanec**, Cablevision

* Manzione and Murphy were both members of the 2006 CASE Study Committee for the "Advanced Communications Technologies" study.

Public attendees introduced themselves. They represented the following groups: *AT&T, Comcast, Speaker's Office, Conference of Municipalities, Connectia and T-Mobile*

Charge to the Council - State Representative Chris Perone (Norwalk - District 137)

Perone authored last year's broadband bill and said that for the state to be competitive it had to be able to work with municipalities and give them ability to have access to municipal broadband. He emphasized the fast pace of technology and the need for public access.

Perone said he envisions the Council helping municipalities zero in and make the best decisions, helping them to navigate new terrain and sort through the morass of information.

Manzione added to Perone's points by stating that information channels are the new avenues of commerce of the 21st Century, just as the rivers, canals and ports were for the 18th and 19th centuries, and the interstate highway system in the 20th century. Proximity to these channels is an economic enabler and a leveler in terms of education and economic growth. The council should work with the legislature to ensure that Connecticut remains at the forefront of this technology.

Brief Summary of the January 2007 CASE Study Report to the Legislature on Advanced Communications Infrastructurestructure for Connecticut

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Rick Strauss, CASE Executive Director, provided background on how the study came to be and the CASE study process. See PowerPoint presentation by Chairman Manzione (attached in e-mail) outlining the study's findings and recommendations.

Objectives of the Council – Discussion

Chairman Manzione began the discussion with an overview, stating that the Council's mission will be vitally important in three areas for Connecticut: economic development, transportation and education.

CT's level of broadband deployment is high in the United States but lags behind the rest of the world. CT needs to be competitive with this wider international community to sustain economic vitality. How do we encourage the expansion of broadband in planning and construction especially with regard to fiber to the node, fiber to the curb, FTTX)? In wireless, Manzione cited possible zoning issues with regard to new antenna technologies which could form pencil beams and allow re-use of the bandwidth that will be needed for video downloads. In addition, Connecticut should aspire to be an early adopter of the emerging wireless technologies such as Wi-Max and mobile Wi-Max.

Key objectives that this Council could consider include:

- Broadband Internet and communications infrastructure as an economic enabler
- Distance learning, and ubiquitous high bandwidth as an Educational enabler
- The potential of Broadband to relieve transportation and road congestion through telecommuting and video-conferencing.

Reaching out to leadership:

Rep. Perone said that the bill he authored allows municipalities to apply for special funds. He agreed that there should be a partnership among the municipalities, the state, and this council. He recommended that we should pursue a mechanism for outreach and mentioned the CT Conference of Municipalities.

Vallée said municipalities can potentially jump start this process. He cited Vermont where the Governor is leading the charge toward broadband internet, and also Kentucky where the counties have been empowered to implement broadband.

Government's role vs. private sector

Shimer disagreed with the earlier study recommendation that the state should not be directly involved in broadband infrastructure development. He cited the example of the State building roads to stimulate economic development. He also mentioned that it is both an environmental mandate in keeping cars off un-expandable roads like I-95, and an issue of quality of work/life in Connecticut.

Emra said the Council would need to monitor and stay abreast with the docket from DPUC and further from FCC. Many municipal broadband projects have not worked out, he said, although Wi-Max is perhaps a better option than Wi-Fi.

Shimer said each of 169 towns cannot be relied on to have their own project; it should be regionalized. He cited the NE corner of Connecticut, and the need for technical capability and leadership there.

Vietzke disagreed that it's the state's job to build infrastructure. CCM municipalities might be the point on the spear. What about asking CT Public Utilities to build infrastructure instead of trying to build niche infrastructure?

Emra cited Utah's planned network which has not panned out and said the council should encourage private sector investment. Preliminary recommendations are that states will be able to access some funds (not sure of details) with the possibility of State matching funds. State will have to enact language to access FCC dollars. He emphasized CT's private sector has made the state a leader in broadband interconnection, and competition has consistently benefited consumers. He cited the Waterbury region and the partnership between the development authority and AT&T so that cost is eliminated up front.

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Discussion about who has broadband, where consumers use it.

Emra cited Pew Study that showed that 50% of consumers who do not have broadband don't want it. Shimer pointed out that many people get their broadband at work and that it might be worth talking with sociologists, behaviorist, futurist types on how to encourage the appreciation of broadband in the home.

Vietzke asked if cost is the issue. What are the gaps? Emphasis should be on a long-term strategy that addresses what we are not doing today to meet business needs.

McCoy pointed out that PEW studies don't ask young adults and students. He cited the North Carolina County that gave notebook computers to all students and the result was that High School graduation rates went up 30%. Emphasis should be on understanding the need and finding evidence to support the Council's mission. Mundy highlighted the length of time it took for electricity service in the home to become widespread. We need to place emphasis on educating the public.

Existing Infrastructure

McCoy cited Manchester's network of cell towers and fiber optic cabling. (See Handouts: Manchester Municipal Asset Map and WIMAX Analysis for Manchester.) The map represents some typical buildings and non-typical FiberNet and Cell Tower assets which McCoy referenced in discussing the communication industry's Wireless CAPEX problem and possible solution. Municipal buildings are dispersed over the entire city and cell towers are placed strategically for coverage purposes. In Manchester, all those municipal buildings are now connected by fiber optic networks. Can we make that asset available in a partnership with our telecommunications industry to speed up this deployment? Small WIMAX and LTE might be a model to explore. What other infrastructure assets are out there? The Council might be able to enlighten small communities without their own technical expertise.

Broadband as Education Enabler and CT Education Network (CEN)

Manziona: Broadband interconnectivity as an education enabler could be a rallying point for communities? Can we learn more about the the CT Education Network (CEN)?

Vietzke provided background on CEN as he was involved in its development. The goal behind it was linking the school districts with each other and the Internet. It was done with at least one fiber-optic drop per community, and then the municipalities were responsible for extending the network out to schools and libraries. It's an unconstrained backbone with no pressure on any one type of technology. Towns had varying success building it out. McCoy added that not all towns could afford it.

- 20 % of the schools are at a gigabit -- 30% are okay, not constrained -- 50% need work

Manziona brought up distance learning and Vietzke said technology was not the only issue there. Some of the problems in implementation of distance learning centered around class scheduling among the schools participating.

Manziona asked how might CEN be enhanced. McCoy said communities would like to explore CEN being expanded to all municipal buildings and departments, but Emra said there are limitations there because CEN was built with educational fund dollars.

Manziona stressed that the Internet is an extender of human resources. Part of the Council's role should promote access as a means for students to get interested in the STEM subjects to address the needs in Connecticut for more workers with technical educations. There are chronic shortages of quality instructors in calculus, physics and chemistry that might be addressed with distance learning over broadband networks delivering many different courses to many classrooms.

Earley seconded having education as high on the agenda for this council.

Closing Discussion

Perone posed the hypothetical: What if internet came first and then roads? This is essentially the "If you build it – they will come," notion. A lot of demand for broadband is need-based, but many people may not know they need it. Adult learners in the home would be a good example of this.

Shimer said it's important to invest now in creating the proper information infrastructure, so that the State will be in better shape down the line.

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Manziona also said it is not just an issue of the channels and the network but the availability and cost of the information terminals. He cited the shortage of public availability to quality video teleconferencing facilities. What might be the Council's role in encouraging the wider deployment of terminals such as laptops and palm devices, as well as video teleconference centers? A stimulus initiative by the state on terminals may actually do more to encourage the service providers and consumers to embrace and invest in broadband connectivity than others actions we can take.

Timelines, Reporting Schedules, Frequency of Meetings

Chairman Manziona asked Rep. Perone to advise about reporting to the legislature.

Perone's points:

- State government lags behind in knowing what's necessary and needed. Consider scheduling a hearing when we have a thorough set of recommendations.
- Know your targets and reach out to people in education and business who can drive the need for capacity.
- Council has to decide how long it would take to pull the information together. A good time for the Council to deliver its recommendations is prior to the start of the budget session in January (during a budget year). It was the general consensus of the council to not aim for input for the January budget session.

Manziona stressed the need to reach out to the business community, especially medium and smaller businesses. Discussion of talking with Dept. of Higher Educations, Departments of Commerce, and chamber of commerce organizations.

Public invited to comment. No comments.

Outcomes

- Manziona stated that we should launch an information gathering phase to help us understand the issues and support our future recommendations.
- Manziona to prepare a list of emphasis areas and seek volunteers for information gathering. This could include due diligence studies and benchmarking of other states activities, as well as reporting back to the council on what was learned.
- Manziona will ask the Council members to suggest subject matter experts and others that can be invited to address the Council as part of our information gathering phase. Invitation to be extended to Chambers of Commerce to participate in a Council meeting.
- Council to meet next in late September.

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Resources cited:

- CASE Report "Advanced Communications Technologies";
- "The World is Flat," by Thomas L. Friedman
- 2007 Brookings institute report (by Robert Crandall, William Lehr & Robert Litan) which showed for every 1% of growth in broadband there is at 2-3% growth in employment.
http://www.brookings.edu/~media/Files/rc/reports/2007/06labor_crandall/200706litan.pdf
- PEW report on household broadband