

City of Bloomington: Bloomington Digital Underground Advisory Committee

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Rick Dietz, ITS Director

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Summary

Bloomington Digital Underground Advisory Committee meeting held Thursday, September 20, 2007 at 4:00 p.m. in the McCloskey Conference Room of City Hall at Showers.

401 N. Morton St.

Bloomington, Indiana

Roll Call

Committee Members Present

Mark McMath, CIO Bloomington Hospital

Eric Ost, Telecommunications Council

Mike Lucas

Vacancy

Brian Kleber

City of Bloomington Staff Present

Rick Dietz, Director, Bloomington ITS

Rick Routon, Assistant Director, Bloomington ITS

Andy DeLuce, ITS/SPEA Fellow

Guests Present

Frank Leicester, Unity Physicians Group

Matt Davies, Indiana University Chief Network Engineer

Dr. Mike Sullivan Bloomington E-Health Collaborative

Materials Provided

1. August 2, 2007 meeting notes
2. BDUAC September 20, 2007 meeting agenda

Bloomington Digital Underground Advisory Committee

September 20, 2007

- i. Housekeeping
 - a. Rick Dietz [RD]: There is a vacancy on the committee since Brian Kleber's recent resignation and we will be working to fill that void.
- ii. BEHC/ SIHIE Project
 - a. Mike Sullivan [MS]: The contract with Health Bridge and Axlotl was signed. The implementation is moving forward. We are now looking at milestones. The tentative ambition is to connect some facilities early in October, with additional data recipients in Orange County later in the month. This will make Bloomington one of only a handful of communities that are doing data exchange. There are now several organizations in every state attempting to do this. Some of the more ambitious attempts have recently shut down due to technical or political problems. The Bloomington project has been successful largely because of the commitment of Bloomington Hospital to data exchange.
- iii. VIM Clinic fiber
 - a. [MS]: Todd has been working with Smithville to try and get fiber to the VIM clinic. There is a tentative contract but I'm not sure exactly where that stands. Have you been involved in that Mark?
 - b. Mark McMath [MM]: I haven't been involved in the finalizing of the terms and conditions of the agreement but I think that the city was working with the VIM with assistance from Dr. Roland.
 - c. [RD]: We moved forward with our standard agreement that we have with the E-Health collaborative already. It has already gone to the board of public works and been authorized for over 2 years. There are 2 fiber strands available for the BEHC to manage for the VIM as part of the E health network. I don't know what is going on with the other side involving Smithville and Dr. Roland. I assume there has been some type of agreement....
 - d. Rick Rout on [RR]: Smithville digital has done all the configuration of the equipment; they are utilizing the internet through the fiber. It has been tested through Smithville Digital.

- e. [MS]: So there are 2 agreements. One between the collaborative and the city and the other between the collaborative and Smithville. Since we don't have the relationship with Smithville finalized it would be nice to ask Todd about where that stands. The agreement that I saw mentioned speeds of "up to 2 mega bit per second" which may not be enough for moving images around easily.
- f. [RD]: If we were able to make direct connections to facilities then we would not have that speed limitation that exists on the commodity internet.
- g. [MS]: Exactly. That is really the way we want to go, so we can transport images effectively within the community. My impression when we were working on the FCC grant was that IU would possibly provide a pathway to the Glgapop. From there we could get optimal pricing on bandwidth. I'm just wondering if there is some way to get that bandwidth onto the BDU.
- h. Matt Davies [MD]: We have already been discussing putting IU equipment in the telecom hotel. We already have fiber from there back to the main data center on campus. We are also discussing using the local peering point and tying that back to the telecom hotel. The peering point is not linked right now. We would need to splice some fibers outside the telecom hotel. We have fiber from both Smithville and Indiana Fiber Works headed up to Indianapolis that comes through there.
- i. [MS] If the collaborative had a direct path to the Gigapop we should be able to get a good rate on commodity internet and perhaps also internet 2.
- j. [EO] Does Smithville own that fiber?
- k. [MD]:Yes
- iv. VIM Clinic discussion
 - a. Mike Lucas [ML] the VIM contract basically includes free network management and internet connectivity for three years. We are using Smithville equipment to light the BDU fiber.
 - b. [MS] The contract also states that they can drop the contract without notice. I'm concerned that if we try to get our own path to the gigapop to get a wholesale price on commodity internet it could cause problems.
 - c. [ML] It would be unlikely that they would drop the contract. Commodity internet isn't the big price tag here is it?
 - d. [MD] There are widely varying rates. The Indiana gigapop is there primarily as a research project to provide connections to the national research networks internet 2 and lambda rail. In general we do not connect entities that can't connect to the national research networks. The Indiana gigapop does not just sell wholesale commodity internet.
 - e. [RD] One of the undercurrents in the original FCC grant was the desirability of connecting medical networks to important pops and access internet 2 resources. We had definitely discussed internet 2 memberships previously.
 - f. [ML] But the membership to the internet2 is \$25,000 per year isn't that kind of expensive?

- g. [MS] Presumably the internet2 cost would be distributed across a statewide network. The FCC grant pays for it but we don't know if we will get the grant yet.
- h. [MD] Internet 2 also has a sponsorship program where a member can sponsor a non-member to get them connected. IU sponsored the NCAA to get them on the network.
- i. [ML] we would like to have options where we can grow. If we had relatively infinite bandwidth who knows what we could do. I think that was the whole point of the gigabit network, experimentation.
- j. [MD] This is the same thing that many universities have seen in the past 10 years. It takes users years to hear the message that they have unlimited bandwidth but after a while they get ideas and funding and then everything starts taking off.
- k. [MS] In the fairly near future there may be an IU presence in the telecom hotel with a high bandwidth connection to the gigapop. So we could potentially go to Smithville and say that we would like to connect the fiber out of the VIM clinic up the gigapop so we can access Internet2. Does that imply provision of commodity internet?
- l. [MD] You must be a member of the gigapop which gives you the connection to the other research networks. You must also be a member of internet 2 to get on the network. You can then purchase bandwidth at a price per meg.
- m. [EO] What is the price per megabit?
- n. [MD] It is under 40\$ a megabit.
- o. [EO] The best price you can get in Bloomington right now is about 120\$ per megabit per month. That is a significant benefit.
- p. [RD] From the efficiency standpoint, we would like to deal with the e-health collaborative as opposed to the individual practices or organizations that may want to connect to the infrastructure.
- q. [ML] We can handle the relationships with the medical practices and educate them about the available opportunities and then create a process for connecting them that looks manageable.
- r. [MM] This will give the individual practices a point of aggregation.
- s. [ML] It gives us a value add for e-health membership. Initially we are doing free clinical messaging so we are trying to add services to create the overall membership model. Many of us feel it is the right place to be, we don't think it will generate much revenue.
- t. [MD] I forgot to mention that there is a membership fee for the gigapop that is quite substantial. I think it is something like \$25,000 per year. The price per meg is separate. If you are only buying 5 or 10 megabits it doesn't make much sense. Our primary members are IU, Purdue etc. If you are buying 100 megabits you can save money.
- u. [MS] Bloomington is going to be one of only a handful of communities in the country with a working data exchange system makes this a potential test bed.

- v. [ML] Are there people at IU thinking about this stuff? Are there researchers in Informatics looking at this? In Telecom?
 - w. [MD] Maybe in Informatics, probably not in Telecom. IU would be willing to help out with how to build the network and what the issues are. Equipment help is also feasible.
 - x. [ML] If we get the FCC grant will a lot more people/Smithville be interested in this?
 - y. [MM] I think they will be interested regardless. Since they are not a member of this committee we would need to be more proactive and make sure they attend the meetings when it comes up on the agenda. I think they would be very interested.
- v. IMA Discussion
- a. [MM] Is IMA a good candidate for connection to the VIM? Is there much communication between the two?
 - b. [RD] There should be a component within the e-health collaborative for designing and constructing the network that would connect to IMA. If the goal would be to connect them to the telecom hotel and then to the VIM, it should be planned out taking into account the entire infrastructure in the community. It probably shouldn't be planned out by an individual provider.
 - c. [ML] IMA has probably already contracted their connection on the new Eastside facility out to Smithville. At least to connect the two facilities if nothing else. They are opening in November.
 - d. [MS] The BDU has a limited footprint. For the time being if we want to connect a significant number of providers to a network it will be necessary to do that collaboratively with Smithville.
 - e. [EO] Another thing to consider is how we go about facilitating the use of the BDU. Cullen was very explicit in one of the meetings; they are very hesitant to use the BDU infrastructure for anything. How do we create incentive to use the BDU for Smithville? They don't want to use the BDU, they want to build their own proprietary network. I think that right now they are driving the market. We need incentives for both Smithville and also other providers. We need competitors to Smithville. We are better off building community infrastructure than allowing any one provider to develop the infrastructure. This is the same problem we are seeing in the telecom industry right now, people are building networks but no one is playing together or integrating the networks. Smithville needs to understand that they will have a much greater benefit by cooperating and not doing it all themselves.
 - f. [RD] From their perspective is that it may open a larger marketplace, but it increases their competition.
 - g. [EO] This is exactly what we want. We can't guarantee them that they will be better off, but we can make a convincing argument. The market will be larger so their piece will increase in size even though the market share might decrease. ATT&T is the elephant in this scenario. If they decided to compete with Smithville, they could do it because they have the resources.

- h. [MM] We would need to convince them that this isn't going the same way that cable franchises went. Didn't we give up a lot of local control in recent legislation?
- i. [EO] Yes we did. That was driven primarily by ATT&T. That is a concern.
- j. [RD]: There is another meeting in a few minutes so we need to bring this meeting to a close.