Bloomington Digital Underground Advisory Committee
February 1st, 2007

City of Bloomington: Bloomington Digital Underground Advisory Committee

Date of Record: February 1, 2007

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Summary
Bloomington Digital underground Advisory Committee Meeting held Thursday, February 1' 2007 at 4:00 PM 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
Mark Bruhn, Associate Vice President for Telecommunications, IU
Brian Kleber, Small Business Development Center / inVenture
Eric Ost, Telecommunications Council
Greg Travis, Citizen

Committee Members Absent
Ron Walker, BEDC

Vacancy
1 Council Appointee

City of Bloomington Staff Present
Rick Dietz, Director, Bloomington ITS
Rick Routon- Assistant Director ITS
Andy DeLuce, ITS/SPEA Fellow

Guests Present
Trisha Runkle- Student observer
Kristen Springer- Student observer
Karen Portle, MCCSC
Dr. Mike Sullivan, BEHC/SIHIE
Ned Baugh, Monroe County Public Library

Materials Provided
- Agenda
- Notes from January meeting
- Updated BDU Map
- Current policy definitions

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i. Housekeeping
   a. Review of Minutes
   b. Minutes Adopted

c. (RD) Agenda is updates and member reports, discussion to help get Greg up to speed. Mike Sullivan will provide update on BEHC/SIHIE. That is all for this meeting.

ii. Updates and Staff Reports

a. (RD) Board of Public Works approved our price schedule on Jan 23rd.They approved new appointments for Greg Travis and Ron Walker and reappointments of Mark McMath and Brian Kleber to the BDUAC.
b. (RD) The price schedule needs to be put together for the council by Feb 26th. The first reading will probably be March 7th and the vote will be on March 21st. If anything changes I will let everyone know.
c. (MM) How will interested parties be made aware of that? Is that the point of the initial reading?
    1. (RD) We will be briefing council members after the 26th meeting. After it is solidified I will publicize it to the people we have on our list.
    2. (RR) Rick Routon: The City Council agenda is also in the newspaper. It has to be posted before the meeting.

iii. Member Reports
a. (MB) I have a related update about IU's fiber problems at 10th and Union. The trustees just approved a $2 million dollar project go around Eigennmann through the parking lot and then around the old Ashton complex. We will then have our ring back.

iv. General Discussion

a. Greg Travis (GT) My last contact with the BDU was when there were some people talking with outside consultants about what to do with the BDU ring after it was put in the ground. So I guess I don't know much about what has happened since then.
    1. (MM) You are here at the perfect time. We have gotten the report and we wanted to have a full committee here so we could discuss it and then accept it or make the necessary changes.
    2. (GT) The lingering questions are still here though….who is allowed to hook on in Policies Section 4.2B
    3. (EO) That document hasn't changed since 2003 though.
    4. (RD) This is really the second set of directions the BDU has had. There was a small group process that was supplemented and redeveloped into a larger group that drafted this resolution. The current resolution is what is in place now.
    5. (GT) So what are the lingering issues?
    6. (RD) The main restriction is on the direct lease of BDU fiber to interested parties. There is no restriction on non-profits or public entities. Right now the fiber is being used by the City, County, MCCSC and MCPL. The policy envisions ISP's trying to buy dark fiber from us and that would be the constituency beyond the public and non-profit as opposed to an entity that has a location near the BDU who is not an ISP but simply wants the dark fiber. That is where the restrictions come into play right now. I guess the question is whether or not this is a valuable restriction to retain in the first place.
b. (GT) What is the relationship between the BDU and IU's fiber plan?
    1. (MB) We now have fiber into the Carrier Hotel at Scotty's. We did that so that if we had to "get out" we could do it through the BDU ring instead of up 37. There are no current cross connections.
    2. (GT) There are likely to be IU ventures in the technology park that might need fiber right?
    3. (MB) It comes very close at different points between the two fiber networks

4. (RD) There are certainly opportunities for crossovers in the areas near campus. There are firehouses that are in that vicinity. Possibly the transit facility….

c. (EO) I spoke to an ATT&T tech who is doing deployments of their Uverse product in the neighborhood West of High St. That product is fiber to the node and then copper into the home. He said they were measuring 70-80 MegaBits into the D-Mark. It is VDSL.
   1. (RR) Any new additions, new plants, will be fiber in my understanding.
   2. (EO) They have been running the backbone for at least 2 years.
   3. (GT) I think the ATT&T plan is to take fiber stubs to neighborhood nodes and then use VDSL from there.

d. (RD) The policies present the following BDU goals…
   1. The BDU provides for the city's telecommunications needs. It serves as the backbone of our network.
   2. The ring protects city investment in visual attractiveness by limiting road cuts. It hasn't served in this capacity yet. And many providers want there own infrastructure.
   3. Lowering barriers to entry for competitive Telecom providers. If we lease the dark fiber to ISP's then that would serve as a subsidy of some form to make the services more widely available.
   4. Economic development capacity is another aspect of having the BDU. According to Linda Williamson just having a fiber optic ring makes Bloomington more attractive to businesses. It remains to be seen if an outside business could use the BDU. Much of that depends on how the policies are articulated about who can buy dark fiber.
      I. (MM) Would these policies be updated based on the action the city council takes? Do we need to bring them a recommendation?
      II. (MB) So this document is already in force and one of the roles of this group is to monitor what is happening and how that relates to the policy in place…..but we are not looking at doing that right now.
      III. (RD) Correct. The resolution that established these policies also established the board.
      I. (MM) The price schedule we are taking to council on the 7th is actually expanding the definition of 4.2B…In addition to keeping things up to date I thought were making this available to for profit entities?
      II. (RD) Under 4.2A for profit entities can use the BDU as long as they meet the definition of a telecom provider.
      III. (MM) I thought it was going to be available to for profit non-telecom providers….That's not the case?
      IV. (RD) No, I don't object to that idea but we would have to change this policy to reflect that. There is a subset that is left out of the pricing model and the policies. You can be a non-profit or a public entity of any sort and utilize the fiber. A for profit entity would have to take the form of a telecom provider under the current policy.
      V. (MB) The issue is competition here. We can give it to telecom providers because they are the ones selling it to everyone else. We can't sell it to private business because they are the customers for the telecom providers.
      VI. (RD) It depends on what the definition is. From an economic development standpoint I don't see the problem. Increasing competition could be positive and the revenues to support the BDU are another goal as well. The main point of the BDU is not just to provide a lower cost alternative for telecom providers. The policies and the pricing schedule leave out a segment of potential users. If we want to address that we can but the price schedule itself doesn't reflect any change in the policy. The BDU was under contract in the past for the partial construction of the

ring. Going forward I think we need to clarify the language with the Legal staff.

e. (RD) The fee schedule has gone through this board and public works but it still has to go through council. They can amend or rewrite it.

I. (MB) But if an organization wanted to purchase fiber and they don't fit into this policy perfectly would the case go to the board? Would it come through us first?
II. (RD) It wouldn't have to work that way but I think it would be the most effective method. Having a hearing here first before taking it to public works would make sure we have all our ducks in a row. Is this a scenario that we want to discuss in a future meeting? (general agreement to review policies and process for left out parties at a future meeting)

f. (GT) What does it mean to connect to the BDU?

I. (RR) It means running conduit to the nearest manhole or splice point. You pay all the charges for the lateral and splicing work. The city contractor does the work. A customer gets 2 strands which go back to the telecom hotel. It is then up to you where we cross connect over. Right now there is only 1 provider at the telecom hotel, blue marble (Smithville digital).
II. (GT) So you are limited by the number of available strands?
III. (RR) Yes. You pay a monthly fee and then also for the buildout (lateral). A lateral can cost anywhere from 15-40K. The customer does get the actual fiber.

iv. SIHIE Update and Map discussion

a. Mike Sullivan (MS) The current map shows the healthcare providers as red dots and the county board of health offices as blue or purple dots. Bloomington has lots of red dots. I don't think we have all the addresses yet… There is a question currently about how to prioritize who to connect. The FCC's program has stated objective about connecting as many rural healthcare providers a possible. The more that are included the more they will like the application. They would like to have coverage for the whole state presumably. There are some potential targets out in the counties that might be potential connections. The county boards of health offices are by definition included as "rural health care providers." Another target in the county is critical access hospitals. We need to make a more thorough appraisal of the potential connections in the area.

I. (MM) We would have three potential connections- 2 in Lawrence and one in Orange. Also Memorial is in Daviess.
II. (MS) There is a list of Critical Access Hospitals on the web and I am sure we will be determining what is nearby soon. I just came from a rural health association meeting in Indy where Senator Ford spoke. During the talk he announced that he will be introducing legislation for the state to match the 85% with the 15%. He seemed a little uncertain of whether it would pass. The open question we have been looking at is what types of activities the FCC would fund. Whether it was limited to cable infrastructure and network related equipment or if it would fund services over a network like telemedicine or videoconferencing. I spoke to someone at the FCC and she indicated that information services refer to ISP basically. She indicated it wouldn't fund anything to help with videoconferencing.
III. (MM) Right now it only covers voice and not VOiP
IV. (MS) The 465 form has 3 boxes, Telecom, Internet Service Provider or Both. If your application is approved then you fill out this form stating what it being bid on. That gets posted on the internet and providers bid. After 28 days you can contract with anyone.
V. (MM) the current program is only for your ongoing cost not any infrastructure, correct?
VI. (MS) Yes, it does not cover any build out costs. However the pilot program will cover build out costs including network design. I asked her if it covered costs related to starting up a new network such as forming an entity to operate it. She said she couldn't speak for the FCC but her impression was no. She indicated that if the project is biddable then it is much more likely to be approved for funding. Based on the statements of the commissioners it seems clear that there is great faith that if the cables are put in the ground the applications to run on them will follow.

VII. (RR) If it is a bidding situation we can also look at muxxing at each location and then making the project more worthwhile by picking up more facilities. The map does show the most medical facilities as being in Lawrence, Monroe and Orange.

VIII. (MS) Telemedicine is also probably not going to be covered according to the language of the order but we have some contacts at the FCC now to verify that. The question is if there is anyone else prepared to take on a project to deploy broadband to a wide geographic area. The people from the board of health said that they had been charged with coordinating the efforts by the governor's office. Apparently we are the only group in the state that has approached them with a plan. They were trying to get money for telemedicine and I think they will find out soon that it isn't going to be covered. The FCC is looking for someone to come in and develop a methodology for how to do this nationally.

IX. (RR) Police stations and Sheriffs depts. Might be another source of funds for developing this project with additional homeland security funds.

X. (MS) In the order they mention Emergency Response Services favorably. They won't fund existing deployments, but if you want to upgrade a connection then that is encouraged.

b. (MB) Our (IU) fiber Backbone comes down the middle to Bloomington then over to Columbus then up to Shelbyville then back to Indy. The far west leg is over to Vincennes and Terre Haute.

I. (RR) Cinergy has a lot of aerial fiber in the southern part of the state near Evansville.

II. (MS) You might have to use different technologies to solve the independent issues for connectivity. Strategies using new technologies are definitely possible. There is a problem with trenching heading south due to limestone.

III. (MB) It would be interesting to know where the cell towers are in this area…

IV. (MS) The FCC requires a list of addresses facilities and RCA codes for the application. The Telecom providers are waiting to see those addresses so we can talk about possibilities.

V. (RR) Who pays the monthly recurring charges after it is installed?

VI. (MS) I think there will be funding available for that type of thing. It may come down from 85% because the standard is 50%. The pilot program is scheduled to go on for two years but could continue indefinitely. They want sustainability addressed in the application.

VII. (MS) So Time Warner, Insight and Cinergy each have fiber which might be of use. A strategy might be to get as many addresses and have them as clustered as possible.

(End of Meeting)