

# Medina County Ohio To Build a Fiber Ring

## How a Group of Dedicated Citizens Decided on Open Access and a Port Authority as the Financial Vehicle - an Inspiring 3 Year Effort of Education and Commitment Told Here for the First Time [Highlights](#)

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**Editor's Note:** Macy Hallock started out as a telephone company technician and central office engineer. Later he worked for a company installing PBXs. In the 70s he founded his own alarm and communications company. He formed another company in the early 90s to focus on technology convergence. As an amateur radio operator he has always been a "pretty hands on person." In 1993 he and a partner started one of the very first ISPs in Ohio. I interviewed Macy on June 14, 2005. I find that the infrastructure Macy describes becomes even more important from the point of view of enabling the loosely coupled ecologies of Seely Brown and Hagel.

**COOK Report:** You have built a unique and little known but impressive effort. Not only are you going to build a county-wide LoopCo but you are doing it under the aegis of a Port Authority. Both are quite unusual in the muni-network field. Please help me to understand how you got started and have progressed.

**Hallock:** We have been going well over three years and, near the outset, one of the things that we explored were the legal and funding issues that we might face in trying to put together some type of entity. We explored many different kinds of public private ownership models. We were given some good advice by one of the representatives who sat on our government subcommittee to talk to a local law firm that did a great deal of bonding and municipal regulatory work.

They were able to explain to us in layman's terms some of the issues that we would face in bonding and financing for the ownership and operation of an entity that was not really a utility but had utility-like aspects. It got interesting because we found that there were certain legal forms in Ohio that could hold assets and certain forms that could not.

### Choosing the Port Authority Model

Our subcommittee was operating under the auspices of the county economic development corporation that found, as we did this investigation, that they had parallel needs in other forms of development. We were warned that laws vary greatly from state to state, so what might be the right thing in one state might not work at all in another state. We found that in Ohio there were only a couple of different forms of entities that could own assets, collect and disperse monies, operate independently and float a bond and even make a profit.

The one that we settled on that made the most sense for us was a port authority. These are being used for a number of economic development related activities – not just seaport and airports, but for infrastructure improvements, and industrial parks as well as telecom. Apparently a number of states allow port authorities to exist but the details of what they can do vary greatly from state to state. For us the authority allowed fundraising capability plus it could hold the assets involved, collect the monies and operate in a familiar way without being part of the county's general fund or other financial organization. Individual projects under the auspices of the authority can be funded in a variety of ways if the entities responsible for those funds agree.

A port authority must be sanctioned by a municipal entity and in our state that can be a city or a county. The authority must have a Board and the organizing papers for the authority give the details of how that Board is appointed. In our case Medina as county seat was technically not part of the development corporation but rather a parallel entity with some interlocking memberships. We found that forming the port authority was only one

part of a rather challenging process. With a port authority with board members you still don't have anything that you can get a lot accomplished with, because it also requires funding and money and appropriately designated projects. Bonding authorities that are involved are quite aware of this and want to look at each individual bonding project on its own merits – obviously looking very closely at how those funds are going to be guaranteed.

In our state it is possible for the sponsoring municipal unit to guarantee those funds with the assets and revenues of that unit or not. When you go to look at issues of bonding, it turns out that how the bonds are rated, depends to a great deal on assets and cash flow and guarantees that are part this particular project. We have had discussion with our local county commissioners and they are very reluctant to commit any of the general funds of the county as a guarantee on this project.

In choosing a port authority we were looking for something that had the necessary agility, flexibility and bonding authority, along with the ability to own and manage assets, and the ability to collect money from the management of those assets that were not just partial repayment of costs but also derived from a fee schedule and profitable in some fashion. This was very intentional because we thought of this entity as a public/private entity that would service some pipes and that there would be different schedules for repayment along with the ability to hold onto funds for future expenses in anticipation of maintenance or even disaster. And again the port authority seemed to fit this kind of need very well.

**COOK Report:** When you mention a desire for autonomy, can you be more explicit as to what you were looking for?

**Hallock:** Because the entity operates under the auspices of a municipality or county, it is not entirely free of the influence of the authorizing entity. On the other hand there is autonomy that comes from management being exerted by a separate governing board. There is a formula established by state law that specifies how those board members are to be named. There is also financial oversight because the port authority entity has legal responsibilities to its sponsors to maintain records and satisfy other requirements for record keeping and revenue accounting.

The concept reminded me of the economic development corporation that we have in this country. One that is also semi-autonomous but still a part of the county's local government structure. We have an airport that is largely under the control of the city of Cleveland Port Authority. There are other port authorities that are county-related that have different lines of authority. What's at stake here is the ability to be a public corporation with the power to bond and generate funds. In our case, also of possible interest, was the ability to collect funds on the basis of other than just allocation of cost so that the organization could set aside revenue for future use and contingency, and perhaps further development.

**COOK Report:** How did all of this happen?

**Hallock:** Approximately three years ago the Medina City Chamber of Commerce convened a group of people who were interested in technology and economic development and furtherance of business interests as Chambers of Commerce generally are. This happened as the direct result of the local cable television company committing to build a fiber optic ring within the city of Medina.

## Cable Re-franchise Spawns a Telecom Assessment Group

What we found was that the city had previously negotiated a franchise agreement that basically gave away the store to the cable TV to do whatever they wanted

to. What had occurred was that during a franchise renewal the company had inserted wording such that cable modem and data services were not regulated by the franchise agreement. There was a substantial disagreement between the city and the company over the cost of cable modem service to City Hall and eventually a compromise was reached. But it was quite clear that the company wanted to be sure that new Internet-related services were excluded from city control.

Finally one individual who was responsible for getting city-related content on the system consulted with some of us about getting further guidance in a effort to gain some additional benefits from the cable company's hybrid fiber co-ax up grade. This would be a small ring that would allow the coax to stay in place. It was really only the remodeling of their network from a one-way delivery system for television to a more evolved digital two-way capable system.

**COOK Report:** How did the link to economic development corporation's involvement get made?

**Hallock:** When the cable television liaison person for the city started talking with the cable systems general manager, they spoke to the director of the local Chamber of Commerce who requested information on how the installation of the fiber technology could be of larger benefit to the city. It started out being a situation where the cable system was pretty much dictating to us. We will have web sites available and all that sort of thing they said. What they were really trying to do I think was to have us market their services and do a PR effort on their behalf.

A couple of the people who sat on this informally convened subcommittee started speaking about some of the issues that we were aware of. DSL was starting to roll out in the area. By the way, at the time I owned a local ISP that I had founded nearly 10 years earlier.

As I grew up in Medina many years ago the independent local telephone company, called Northern Ohio Telephone

Company. There was only a small Bell System presence. The rest of the county was quite rural and has several independent companies. One of the things I learned early on was that communications in Medina was very different than that available in the metropolitan areas just a few miles away. These areas were served by Ohio Bell Telephone and had much more sophisticated services and a different level of availability than what we could get in Medina County.

When I worked for Northern Ohio Telephone that was then purchased by an entity called Carol Telephone, that I had never heard of before, that had substantial problems with some of their customers over service. In the rural areas some of their Central Offices were all relay Northern Electric COs. I actually maintained some of these. It was a very different world than that just a few miles away where Ohio Bell was able to maintain an entirely different level of service. Although at a later date I found out that even Ohio Bell was not perfection personified.

To bring this full circle, after I left the local phone company I worked for ones in Akron and Cleveland that installed PBX systems back in the days where privately owned telephone systems were a fairly new concept. I went through a great deal of phone company battles over having to use things like interconnect couplers and all kinds of other things which were really just methods of penalizing privately owned telephone systems. I worked on my first T1 when I worked for General Telephone back in 1970. Getting things done in spite of the telephone company was always a theme for my life.

## An Underdeveloped Area Gets Things Done in Spite of the Phone Company

One of the things that I learned from owning an alarm company was that if you wanted to get signaling from Point A to Point B, you rented copper pairs from the phone company but you did it on

their terms. I actually maintained some of those loops when I worked for the phone company so I had literally been on the other side of the patch. It gave you a certain insight into what the phone company would permit you to do versus what was really possible. You might recall that at one point the phone company arbitrarily said: guess what - there are not going to be any more copper cable pairs and the alarm industry went absolutely ballistic. This actually occurred during the 1980s and they didn't want to offer copper because it was being "abused." You would order a bare copper pair and then could put a PBX tie line on it. The bare copper pair went for \$12 a month where the PBX tie line cost \$100 a month.

To move things forward a bit, the point I am trying to make with this is that both with my background and with the background of many of the lifetime residents of the city and county where I resided, we had a very strong sense that the area was under-developed and suffering due to a poor communications infrastructure. We had lost business and would continue to lose business to this day because other areas in the state, that are just a few miles away in many cases, have far better infrastructure.

What evolved was that the fiber optic subcommittee that began with the interactions with chamber of commerce that were perhaps envisioned by the local cable company as a PR tool for its purposes morphed into a discussion by local business people and even a few people from local institutions. While this was occurring, the Economic Development Authority was bending over backwards to get a college branch within the county. We had been passed over some years earlier for a state-sponsored community college. The issue came up again. There had been specific initiatives about trying to get a video channel for the local high school from the University of Akron. All of this history was behind this sense of Medina County being under-developed for communications and fiber infrastructure.

Even though the phone company and cable companies were doing a few things, what they were doing was not enough to

level the playing field in comparison to some of the nearby, better developed, urban industrial and suburban areas. I would stress that the common theme here is "level the playing field." We concluded that we need to take some action.

What happened was that our subcommittee went back to the Chamber of Commerce with its findings and the Chamber Director said this now has really become an Economic Development initiative and there is a specific economic development corporation within this country to deal with such issues. I think you ought to move this under their aegis and make this a county-wide initiative with much more focus and attention the economic development aspects of all this. This is exactly what we did.

**COOK Report:** So going through this drill really got everyone to begin to understand that there is more to telecom than using a wire, a fiber or a coax to deliver entertainment to people, places of business. Right?

## Education Must Precede Action

**Hallock:** I might add that a very large segment of the population and even the business community does not understand this distinction between a triple play by the telco and what businesses really need. They have not felt they pain or have experienced no perception of need. But there was a very important section of the community – some larger businesses and even some smaller ones who were finding that they needed better options and less expensive services and were painfully aware that only a few miles away just across county borders there were areas where they could receive fare better and less expensive services combined with options that they could not receive at any cost within our county.

For example, we found that one major corporate player, with headquarters in Medina County, had moved their data center to Columbus because they couldn't get level of service required by a data center necessary to remain competitive within their industry. Another CTO from

another manufacturer within the county expressed the same concern, saying that were going to build a new data center only 30 miles away because they could not receive the services they wanted in the manner they wanted. This had a lot to do with the fact that they ordered a DS3 from Verizon, negotiated it very carefully and then watched as Verizon installed it 18 months late.

**COOK Report:** From these examples it would seem that you could quantify the negative economic impact and emerge with powerful arguments. Were you able to do this?

**Hallock:** We tried to do that and went to several major employers and found that some of them were not yet feeling pain. They were complacent and apathetic. Some were in fact feeling pain and making adjustments. Our economic development director in his approaches to them pursued just the line of questioning that you are talking about.

We found that there were only a small number of organizations that were able to express something that detailed. Namely we aren't getting what we want and therefore we are making other plans and moving jobs and people and resources. The number of organizations that were expressing immediate pain was relatively small – about half a dozen.

The attitude that was reflected to us when we had discussions with others in the community was that is their problem - not mine. They will have to buy what they need or find a solution. There was no consensus or political will that something had to be done. The attitude of some was: Well, that's life in Medina County. Many others said hey we can get DSL or cable modem – what's the worry?

Now if we went to local corporations and said: "What do you do for T1s"? They would say: "Well, we go to ATT and yes they are more expensive here than in most other places." Others were saying: "It's no big deal. Corporate headquarters in NJ orders whatever they think we need and we never see the bill." Those kinds of responses made it very difficult to try

to quantify things. We were only able to gather information from about a half dozen different entities.

We talked to the local hospital which said that it had a couple of T1s from ATT for long distance service and yes, the local cable co had given them a cable modem. At conferences they keep talking about this telemedicine sort of things but the doctors aren't asking for it.

We were looking at the largest employers and especially hard at the largest private employers in the county because from an economic development and political standpoint, jobs are likely the single most important index of well-being. If you are able to quantify some outcome in terms of jobs, your chances of having a conversation with one of the local politicians and having them pay attention to what you are trying to get across is much greater than if you are trying to quantify your point in other ways.

We found that while a few employers had felt pain, even fewer were willing to try to quantify that pain. It was rather interesting how much work it became to draw that out of them.

**COOK Report:** But how many large employers were there?

**Hallock:** The county has some industrial infrastructure – most of it developed in the 60s and 70s. Most of the businesses were branch offices of larger companies or small employers. It was particularly hard to get information from these branch offices because the decisions affecting their telecommunication were not made locally. We would talk to the plant manager and, as far as he knew, a T1 was something that the headquarters IT manager mumbled about and that the next thing that happened someone walked in the back room, did something and there was the T1. If you tried to ask him about costs of deployment, he would have no idea. Now of the companies that had corporate ownership within the county, a few were able to be more helpful.

We have one moderately large financial service company headquartered in the county. That is the only organization we

encountered that had a full time telecommunications department. In other words, a human being whose job it was to manage telecommunications. They tried to be helpful. We found they were one of the companies that had to moved part of their data center outside the county because they were unable to get what they needed, when they needed it, at a reasonable price.

They are heavily committed to the county and have no intention of moving their corporate headquarters and, as a firm, they are a key participant in our local fiber optic ring initiative. We've met with the president and IT head of the company, who expressed definite interest. Their telecom manager recently sent me an eight page list of questions focused on how they can participate in the project and fully benefit from our endeavor.

### **Complexity and Decentralization Makes Sensing of Impacts Very Difficult**

They are quite interesting. As a financial company they have the ability to participate in funding this project but they also have to do so in a very responsible manner. As financial company, there are defined standards by which their investments have to be graded. We are just to the point of engaging them in this. They are proving to be very helpful but they are also challenging us a great deal because they are making us jump through the hoops that financial companies make bonding operations do.

Now another major company headquartered in the county is a major manufacturer of outdoor consumer products. This company owns a variety of brands, has several North American plants and has a new partnership with an Asian manufacturer. Their corporate headquarters and two or three of their plants are located in a rural area of the county. This is the organization that ordered a DS3 from the telco and then had to wait 18 months for installation. It just killed them. But on the other hand they are not so large that

they have dedicated telecom staff, all voice/data is handled by IT staff.

In fact one of the problems we have had in dealing this manufacturer is that they buy communications like a retail end user as a turn key service. Consequently when we went to them and talked about acquisition of fiber, it was very difficult for them to understand that fiber was not a bundled service. The concept of buying a physical loop separated from connectivity to the rest of the world was foreign to them. We had to very patiently teach them the details. Their overriding concern, beyond cost, was management and repair: when something breaks who's responsible for fixing it? Who's managing it on a day-to-day basis? Their known method for network management was: call ATT or Sprint, open a ticket, they (eventually) fix everything.

When we went to them and started to try to get them to quantify some of this, it was a great deal of work because they really did not understand what we were talking about. When we asked the questions in a format that they knew how to answer, the best that we got was "we are making future plans to put facilities else where and it will look something like that." Our economic development director at least understood what they were saying.

Now I just described to you the two largest employers in our county. Beyond these two firms, it was an uphill battle. There's another up and coming mid-sized coatings company HQ here in the county. They have been in the county 30 odd years and have grown to be a large organization now owning several coating-related operations around the country. Many years earlier I had helped them struggle with their PBX. They were disgusted with service. You'd be surprised however how small their corporate headquarters is. It has 100 people at most. They do have IT people, but they do not have telecommunications specialists. It is an outsourced activity for which Sprint, or ATT or MCI walk in the door and deliver the goods. Everyone also complains about problems with the local telco, but mostly when outages occur they pick up the phone and open

a ticket with the contracted IXC to fix their Router, T1 or Frame Relay circuit. Once more, you have here the retail end user mentality.

When we went to them to inquire how the current telecom situation was hand-capping them, it took a great deal of probing to uncover the pain much less to even try to quantify the results. Now when we got down to smaller companies, we found out that there were a lot that said: I can't get DSL or I can't get cable modem service. For example, the cable company had not built out the industrial areas of the county. The cable company – not surprisingly – was strictly residentially focused. They were saying to people in industrial parks: if you want cable modem service, you are going to have to pay us to extend the cable to you.

In the meantime the phone company in some areas was offering ADSL and in some areas not. In one of our northern areas there was an industrial park where the only thing you could get was a T1 – anything less forget it! On top of that because the T1 had to be hauled in all the way from Akron or Cleveland, it was expensive. We were able to find a lot of small companies who complained because they could not get reasonably priced broadband but this did not readily quantify into economic justification for our project. In fact, we found the smaller companies were more aware of their limited choices for voice and data services than the mid-sized organizations. These small, locally-owned and managed organizations were feeling the pain and had figured out that they had less options (and higher costs) than their competitors located in areas with better competitive fiber access.

When we went to our schools, it was even crazier. They all had T1s. The state had set up subsidized data networks and data centers, essentially making data an outsourced activity for the schools. Basically they get a T1 at a subsidized rate and everything else is outsourced, they don't understand, they want to talk about it, they just want to order the service and benefit. They don't understand the technology, the process or the costs, and think it is going to continue this way forever but in reality it isn't.

They wanted us to locate funding and pay for services for them and had no vision of what the future would bring or what they wanted to do. For example, when we went to the local school district management and said to them we could put together a fiber optic ring that would connect all your schools and let all of you do remote video, distance learning, and things like that, their eyes glazed over. They said what do we need that for? We don't do that very much now and what we do use is handed to us by the state Dept of Education or universities.

**COOK Report:** Were they beholden to the bureaucrats of the schools and library corporation, or to state level programs?

**Hallock:** All of the above, plus they were influenced by the additional reason that these are small and relatively unsophisticated school districts - all of whom are struggling just to pay for what they have.

This URL gives you a good thumbnail sketch of the demographics of Medina County. <http://www.odod.state.oh.us/research/files/s0/medina.pdf>

**COOK Report:** Can you begin to take me through the process of how you got from your data gathering to where things stand now?

## Educational Work by and Backgrounds of the Key Sub-Committee Members

**Hallock:** The sub-committee, over a period of three years, developed a profile for the demand – both satisfied and unsatisfied. We did this by funding a study that was paid for partly with privately raised funds and a modest amount of money provided by the county commissioners. We did an initial feasibility study. Then there was a business plan that was paid for, and generated and then revised.

**COOK Report:** How did you get to the point of the studies? When you formed the committee, how did you make the transition from discussion to action?

**Hallock:** Although the sub committee was more than 30 members there were about 8 or 9 people who were the key motivators of the project. We all worked together and melded our individual visions. I had a vision because I understood the CLEC and neutral transport model because I had lived it and bought it and used it in running an ISP and being a data consultant and Cisco VAR.

We have a County Economic Development Director, Jim Douitt, who now very much understands why fiber and telecommunications access is as essential to community development and economic development and business and industry siting today as transportation and railroads had been 30 years previously. He has specific anecdotes that I think he would share about how he learned this, that the county has lost a number of new businesses due to poor communications infrastructure vs. other better developed areas. So, early on, he was very aware that the county was underserved and many prospective new employers were simply going elsewhere as a result.

My co-chair, Jim Gerspacher, is a local real estate broker and developer specializing in commercial and industrial property. He, too, had become aware that his industrial and commercial projects were influenced by communications – especially over the course of the last few years.

Then we had another interesting resource. There is a local municipality, the City of Wadsworth, Ohio, that owns its own electric utility. Wadsworth got into a franchise spat with Time Warner (TW) several years ago. TW wanted to dictate the terms of their franchise and Wadsworth City Council wasn't going along. A couple of folks proposed to build their own CATV system. Since Wadsworth had the electric utility and owned the poles, they proceeded to build their own cable system, did so very economically, and undercut Time Warner, providing comparable service at lower cost.

The city constructed a very respectable cable service within their electric utility area and later upgraded that system to

a hybrid fiber cable system that would support cable modems. However, to get access to the outside world for their cable modem ISP, they had to purchase T1s and then DS 3s going all the way back to Akron.

Wadsworth's representative on our committee was the director of the Electric Utility and recently named the Service Director for the city of Wadsworth. He is a man who is very aware of what we could do with little effort – of what in short is possible because he has done it for the residents of Wadsworth. They are very interested of course in getting dark fiber back to Akron and Cleveland but they are also interested in other way to help with they service. Their mandate however is only to provide service to members of their utility district, so discussion about any other possibilities would be premature.

Another member of the sub committee was the economic development director for the City of Brunswick which is another city on the northern edge of Medina County. Brunswick is a suburb of Cleveland. Just to its north on the other side of the county line is another suburb called Strawnsville. The economic development between the two is sharply contrasted. There you can receive not only telecom and DSL services from SBC and Ameritech but you can also get competitive fiber and other competitive services. But just on the other side of that line in Medina county, that is Verizon territory and served by Adelphia you cannot get these services. In addition they had a very late rollout of cable modem and DSL service there. I might add that Brunswick has had a spat with Adephia and is in the process of re-bidding their franchise. Their economic development director has been a key participant in the sub-committee.

Another individual who has been essential is the now retired Superintendent of Medina County schools and who now runs an educational services center for the county. This is one of those entities that handles certain outsourced activities for the county schools.

There were also a couple of other end

users who participated in the sub committee. They were end users in the truest sense. They were smaller organizations that very much felt the pain. We did have participation by the local hospital. They were very tangential but when we asked them for information they were very cooperative.

The county government was very difficult to work with because they are not very centralized and they are understaffed. A lot of the individual departments handle their needs on an individual basis. County governments because they are made up of individual elected officials who run departments tend to be a strange mix of centralized and decentralized data and communications services.

One thing was frustrating for me was that I tried to share with the county the disposition of a county-wide IP telephone system. Calling across the county is long distance and the county officials were constantly complaining about the difficulty they were having in providing a local service to all residents who complained about how expensive county government was.

On top of this a couple of years ago the county elected to remove its PBX and outsource its communications needs to GTE Verizon by means of a Centrex contract. They did it because it was very easy. Want a phone line? You pay for it out of your budget. They don't have to take services they buy from the incumbent utility to bid. That makes them attractive. They can do a Centrex contract without a competitive bidding process. Therefore the county administrator did things that were easiest for him in terms of allocating budget and getting things fixed. He signed a contract with the incumbent phone company that got in a Centrex with all the services and distributed the billing costs of a per line basis to all its departments.

His model in data is not the same but the problem persists. Going to the county and asking what the costs are in order to find out what we can offset required us to literally act as a consultant and redesign everything for them. Even then they wanted to know how they would get the

capital for the new IP phone system we were suggesting.

## The Daunting Task of Consensus Building

You have to understand that this is a very conservative county. The county administrator and county commissioners were cooperative but shall we say skeptical. That they were antagonistic means only that they did not see the vision or understand that there was a better solution in front of them. The key members of the subcommittee went around and made many presentations about this idea and this vision to all the local institutions to all the local major employers and to the schools and even the libraries of the area. We did our best a publicly oriented committee to try to build awareness and consensus.

We did get some information back. A lot of it was very vague. Yeah this would be interesting but how would this help me? Would it really make my T1 cheaper? One question always was: What's in it for me?

In the meantime we are trying to gather information to put together the economic impact, as you have understandably wondered about, was a very frustrating process because there was a lack of awareness and a lack of commitment. We ran into apathy and into skepticism: Why are you trying to do this? This should be done by private business. Remember that people who don't feel pain, don't feel any need. Many, many of these organizations did not feel pain or believe that they had a big problem. On top of this, apart from the handful of large organizations that we talked about earlier, most of these organizations did not rely on anything beyond basic telephone service or maybe a cable modem or a T1 for essential operations.

Remember the organizations that couldn't make do with the minimum? Most never came here in the first place. Or, if they did they have turned around and left. We were able to document a few businesses that outright left because they couldn't get what they wanted. They were not

huge businesses. But what we may never know is: Were they just the tip of the iceberg? Suppose you have an organization looking to site a new plant or office with 100 to 200 employees. What do they do? Most of the time they employ a real estate broker or site consultant.

The Economic Development Director is very aware that the site selection process is critical to his task. I will tell you that I have an immense amount of respect for what he does and has to go through. I did not have this when I began this process. I simply didn't understand how things worked from a county, regional or even city perspective.

The thing that Jim Doust our Economic Development Director got real early in this process was: "My phone's not even ringing." Consultants are looking at site selection and I am not even making the B list much less the A list. I am loosing before I can do anything because I don't make the cut.

I have some real estate background in my family and remember that I mentioned that my co-chair, Jim Gerspacher, is a commercial real estate developer. In some ways Jim had the situation pinpointed better than I did. We interviewed and presented and over a period of at least two years we tried to build awareness and consensus because we realized that if we had this port authority and this project that the county commissioners were not going to support the project unless they had demand expressed to them by institutions and by major employers. Both my co-chair and the Economic Development Director are experienced in building consensus and political support for a project like this and it's kept the project moving forward.

## Organizing the Port Authority and Additional Constituencies

The port authority route was a long process that was done in parallel. What happened was that the economic development director and my co-chair seized up the port authority concept as being

the right entity. They started and found a way within the county to have the port authority formed.

**COOK Report:** So you have already done this?

**Hallock:** Understand that organizing it and funding it are two separate problems entirely. They have organized it, but it turns out that funding it is a very different problem. We have ascertained that some port authorities float bonds for other port authorities within the state of Ohio. It is possible that instead of floating the bond directly by the Medina Port Authority it might be done under the aegis of some other nearby authority with a better track record since this would be our first project.

I don't want to amplify on this since it is better described by the two people who are much more immersed in it. Last winter I relocated to Florida and although I am still very devoted to this project keeping absolutely up to date on this aspect of our project from a distance of 1100 miles away, adds to the challenge.

Where we stand is that we have done the studies I told you about. We have the Port Authority foundation built. We think we have 80% of the work done and are trying to wrap up the final 20% before the end of this year, so that we can bond it and build it. We are trying to do all that is necessary to get the port authority approval from the county commissioners. They are not yet 100% convinced and they have made it very clear that if we were to put together a bond they would not offer any county assets as a guarantee for the bond. The only guarantee for the bond would be the assets of the fiber ring itself plus any revenues.

In addition we have gone looking for grants and have found out that the grant money is gone. There may have been some there 2 or 3 years ago but we have certainly not been able to find any grant money for general development. We have found some minor grant possibilities. For example, one of the uses would be for enhanced emergency communications to tie all the police and fire departments

together.

**COOK Report:** Homeland Security?

**Hallock:** Exactly right. There are Homeland Security funds. We have met with the County Emergency Management Coordinator and with a representative from the Sheriff's Office. They have said that they are aware of some small amounts of money on the order of 50 or 60 thousand dollars but that to make that work you have to interconnect with another emergency management center.

There is another aspect of interest. The fiber ring represents security and diversity. Diversity in the sense that it is an entirely independent route. That if the phone company had a failure, or someone knocked down one of their cables or their central office was damaged, it could continue to operate. And security, because we can continue to offer them knowledge of physical routing of the system that is something that you can't get from the telco.

You cannot get a secure route from the telco at any price. So we went to the county and said we can give you direct physical access to everything. If you want military grade, you can be that and know it. And they said: "Yeah - that is good. We like that." But when we said can you help fund it, they said: "No money."

**COOK Report:** What are the total funds you are looking for?

**Hallock:** It's not a lot. We will try to quantify this in a more specific fashion before you publish. [Editor: I later heard \$8.5 million was the total estimated amount needed.]

Meanwhile we went to the local fire chiefs of the various townships and cities in the county. They told us that they were laboring under a tremendous training burden being required to give their people newly extensive training. This costs us a lot of time and money. Well how do you do that we asked? We send them to classes or we get expensive videotapes for them to watch. It turns out that a lot

of this training comes from the local universities. When we said how about video links to the local universities for classes, they said: "Yeah, we could use that." Who's going to pay for it? Well, we will have to go look for a grant.

We got this kind of response from virtually every government entity. We have tried to put together this fiber ring based on a justification of offset costs as opposed to wild projections. We have tried to base our finding on displaced costs – monies being spent now that would not have to be spent if the ring were in place. We asked the folk we talked to whether they can project their communication costs a year in the future. They have a lot of difficulty beyond saying that they need more capability and expenses are somewhat flat line.

## Educating the Financial Services and Consumer Products Companies

Let me give you the example of the local financial services company HQ staff. Very nice people to work with, very committed and cooperative. In fact, they have ramped up their cooperation. They are the ones who sent me the eight page fax of questions to which I will supply answers. As a financial company, they are very numbers oriented. But they also listen well and respond. I told them that instead of buying a brand new DS3 from the telco, you could put a fiber loop into a carrier hotel in Akron, or Cleveland or both on a diverse fiber path that is totally secure and then you could buy all your communications services at those telco meet points at wholesale rates or less.

You could bid what you need and have multiple vendors competing for your business. In such a case what you will have done is instead of being a retail-based end user you become the equivalent of a Fortune 500 company and you will have the carriers falling all over themselves to serve you. They know that if they don't, they are gone because you literally don't need them anymore. This company's telecom staff and IT management is only just beginning to understand

what this might mean to them.

Now I went to the consumer products manufacturing company mentioned previously and tried to paint the same picture. At first the new IT Director totally didn't get it. They thought in terms of retail end user concepts: if it breaks who do I call? How does ATT connect to them? The only way they could envision it was as a retail process: I sign a contract with ATT and they make it all happen. If it breaks at least I know who is responsible. I had to paint the picture of vendor independence and them as owner and operator of their own WAN. This scared the daylights out of them as they asked: "How they would manage it"? I said off the shelf technology. The phone company uses it. Why not you? Cisco does this. Do you have someone who is Cisco certified? Can we project this into your budgets? They went: "Huh?" We are then back to the same problem.

This pattern, on a lesser scale, we found repeated again and again. The world of small and medium sized businesses in less populated areas is so hugely different from that of the big cities and Fortune 1000 customers with more sophisticated IT staffing. This is exactly why.

End users in the small and medium size range do not buy services based on components. They buy "solutions." They are always understaffed. They are always less technical than they should be and they are always struggling to keep up with the mandates they have been given. To get them to express planning and vision is always very difficult unless you have a CIO or someone in senior management who can see beyond this year's budget. Without exception in every entity that we went to in the county, we found that we had to deal with this.

We were a bunch of volunteers who had to put together a business plan, after we scrapped up \$35,000 for a study. This is a shoestring operation – but nevertheless you can see now what we have done.

## The Problem is Funding

I'll tell you where we are right now. The

problem is funding. The problem is floating the bond. The county commissioners have said to us this is all very interesting but we will not use the general funds of the county to guarantee the project. If the county were to change its mind we could go to bonding tomorrow because the bonding companies only question is in the event of a default who is going to make things good?

The question boils down to the essential issue of if the bonding company writes a bond and eventually if the LoopCo cannot pay it off, who does the bonding company send the bill to? To the Port Authority? But the Port Authority doesn't have any money. The Port Authority went to the county and said put us in the general fund, but the county said: "Heck no, we can't pay for what we are obligated to now."

The bonding company wants to look at collateral, cash flow and track record. Going to the other port authority gives us the track record. But the cash flow and the assets we have to supply. But they want to see not only pro formas but also letters of intent or contracts. Now here's a question. How do I go to a bonding company and sign a contract on a network that I have not yet funded or built?

*COOK Report:* I sure don't know.

**Hallock:** Well, that is the challenge before us. We ended up frankly having to make a lot of assumptions for the study I sent you. When you make a business plan you also make a lot of assumptions for which you bear the responsibility. In our plans we tried to use third party expertise from consultants to identify cost displacement opportunities. We then tried to go to these individual entities that we have just talked about and asked whether they would give us a non binding letter of intent to participate and put a number in that? You'd be surprised how hesitant a lot of people are about doing that even though the legal significance of such a letter is vanishingly small.

Remember here that the challenge is to build local commitment and political will. What I find is that we are in the odd

intersection between finance and politics. The port authority gives us the legal framework to do what we want to do but we still have to go through the full process of developing the necessary documentation to make the bonding company willing to rate and issue the bond. That's where we are right now.

Now one of the other things that has happened of late is that there is a local CLEC that is affiliated with a local electric company. The electric company has sold the majority of the CLEC to a private investor because in Ohio if it is 51% privately owned it gets the whole entity out from under the regulatory umbrella. That group got wind of what we are doing, they also own a local WISP operation, who had talked with us about using the fiber backbone to serve the area. They came to us and asked to be updated on our plans. They have come back and made a first cut at building a network for us and helping us fund it. But they still want us to float most of the bonds. What is important here is that someone credible now has actually come to our table and said we are interested in participating.

This is a first offer. First offers are never best offers and there are details in this offer that don't fit the vision we have. But this CLEC is willing to come to the table and negotiate for what they see as a credible business opportunity, if we can provide much of the funding.

Now I will give you an interesting undercurrent to our work. As discussed earlier, much of our problem is we have multiple cable companies here who are not motivated to improve services or expand offerings. They will not work with each

other unless someone pushes them to the wall. Ditto the phone companies. The major utility companies here just do not see the county as an area that they have pay any special attention to, it's just business as usual, take our standard offerings, such as they are, and don't complain. We're treated as a backwater. The county and various municipalities have no leverage to negotiate improved services or more competitive prices, much less advanced offerings.

The cable company in Medina City is a regional operation, Armstrong Utilities, a smaller privately owned utility holding company that owns electric utilities, ILECs and cable cos and is headquartered in Butler, Pennsylvania. Now Medina County is a small speck on the map for the big utilities here, Verizon, Time Warner, Adelphia, and Alltel. But for Armstrong, their Medina City franchise is a major client (and growth) area in the over all scheme of things.

Armstrong has actually responded to our competitive access initiative by beefing up its offerings. They have a local general manager and to them Medina is a major service area. They are paying attention. Armstrong's position used to be that anyone in an industrial park who wanted cable modem service would have to pay them to extend their plant to the unserved park. This has changed now. They will bring service to you and they have now committed to roll out on all the major city streets. Why? They did this because they hired a new general manager who came out of the wireless world and who also understood competition would come.

What I am saying is that the mere pres-

ence of our fiber optic committee has had an impact on the level of service offered by at least one of the incumbent utilities. So far, this smaller regional player was the only utility that had local management present and enough brains to make more investment in the face of possible competition. But there's a direct benefit to the end users as a direct result of our work to bring competitive access to the area.

We have another city that has its own electric system and its own cable system and here the service director is making more aggressive plans to market services and price bandwidth as a result of our move. There has actually been an identifiable affect already. Our hope is we can take this project to bonding and that one of the local cable companies would say: "Gee we'll bid on it as well because we'd love to have local management and local maintenance on our ring." But one thing we will not do is abandon the idea of open architecture, the idea in short of the LoopCo.

Let's conclude now by bringing this thing fill circle. The subcommittee began because there was frustration at the lack of local investment and lack of local control for communications infrastructure. What we, through the port authority, are determined not to allow to occur is that no matter what choice we make we are not going to give up local control. We want funding but to get it we will not give the funder exclusive control over setting pricing and the signup of customers.

We are now ready to go the final 20 percent of bonding, bidding, building, and setting up customers.