CITY OF BROOKINGS
COMMON COUNCIL MEETING MINUTES
City Hall Council Chambers
898 Elk Drive, Brookings, OR 97415
February 25, 2002
7:00 p.m.

I. CALL TO ORDER

Mayor Bob Hagbom called the meeting to order at 7:02 p.m.

II. PLEDGE OF ALLEGIANCE

Led by Finance Director Paul Hughes

III. ROLL CALL

Council Present: Mayor Bob Hagbom, Council President Larry Curry, Councilors Frances Johns, Lorraine Kuhn, Rick Dentino, and Ex-Officio Student Councilor Noël Connelly, a quorum present.

Council Absent: none

Staff Present: City Manager Leroy Blodgett, City Attorney John Trew, Finance Director Paul Hughes, Municipal Court Judge Richard Harper, computer consultant Jim Relaford of PRN Data Services, Inc. and Administrative Secretary Sharon Ridens

Media Present: none

Other: Planning Commissioner Russ Fritz, Parks and Recreation Commission Chair Craig Mickelson, and approximately 20 other citizens

IV. CEREMONIES/APPOINTMENTS ANNOUNCEMENTS

A. Ceremonies

1. Oath of Office – City Recorder/Paul Hughes
   City Manager Blodgett explained Administrative Secretary Sharon Ridens had been filling the position of Interim City Recorder during the hiring process of a new Finance Director and had been asked to continue until new

Finance Director Paul Hughes had time to settle into his new position. Blodgett stated Hughes was present tonight to be sworn-in to his other role as City Recorder. The Honorable Richard Harper swore Hughes to the City's standard Oath of Office. Hughes was welcomed "officially" by Mayor and Council.

B. Appointments

Mayor Hagbom recommended two appointments with different effective dates, after reviewing the current Planning Commission members and the other applicants from prior openings retained for these two open positions. They are as follows:

1. Planning Commission/Position #2 – 4 year term expiring April 1, 2004 (effective February 26, 2002) – Craig Mickelson
2. Planning Commission/Position #5 – 4 year term expiring April 1, 2006 (effective April 1, 2002) – Ernest Cofrances

Councilor Johns moved, Councilor Kuhn seconded, and the Council voted unanimously to approve the appointment of Craig Mickelson to Planning Commission/Position #2, effective February 26, 2002 to complete a 4-year term expiring April 1, 2004.

Councilor Dentino moved, Councilor Kuhn seconded, and Council voted unanimously to approve the appointment of Ernest Cofrances to Planning Commission/Position #5, effective April 1, 2002, for a 4-year term expiring April 1, 2006.

C. Announcements

1. Proclamation: A commitment to all citizens to have the basic human right to live violence free in a "Zero Tolerance Community"

Mayor Hagbom proclaimed Brookings as a "Zero Tolerance Community," and urged all citizens with the full support of our City Council to support those who are working towards the end of domestic violence, giving needed priority in domestic violence awareness, education and intervention programs in our community.

V. SCHEDULED PUBLIC APPEARANCES

A. Beachcomber's Festival Committee Member Genie Gilliam

Chamber member Genie Gilliam and Beachcomber's Festival Committee member asked for Council's support of their festival being held March 23-24th at Azalea Middle School, and requested the use of sandwich "A" framed signs to advertise the event. City Manager Blodgett explained staff had researched the City's ordinance

regarding signs and found that these "sandwich" signs are an allowed use when they are a community event. Gilliam thanked Blodgett and announced the festival needed more vendors and encouraged everyone to get involve. Motion not necessary, however one was made.

Councilor Johns moved, Councilor Dentino seconded, and the Council voted unanimously to approve requested "sandwich" signs to advertise the community's Beachcomber Festival for March 23~24, 2002.

VI. ORAL REQUESTS AND COMMUNICATIONS FROM THE AUDIENCE

A. Committee and Liaison reports

1. Chamber of Commerce
   There was no report.

2. Council Liaisons
   Councilor Dentino attended the Harbor Sanitation District meeting, the Chamber Forum, Tech View 2002 Conference in Coos Bay, attended a Curry County Commission on Children & Families in Gold Beach, and represented the City on Saturday at a Boys Scout Court of Honor recognizing three young men who made Eagle Scout (miles above the national average): Kenneth Horn, Barton Land, and Jeffrey Paulson. Dentino will be attending an American Music Festival meeting this week.

   Councilor Kuhn attended a H.O.P.E. meeting last week and explained some of their funding issues and programs for youth and drugs/alcohol.

   Councilor John attended the Chamber Form and the school district site committee meeting.

   Councilor Curry had a lot of personal travel this month.

   Ex-Officio Councilor Connelly shared some personal information on the recent tragic death of BHHS teacher, Ms. McDonald, who passed away Saturday. She stated the Wrestling Team placed 4th place at State, and that the students are working on a memorial for Ms. McDonald.

   Mayor Hagbom attended a Transportation meeting on Friday, and reviewed issues discussed, including a new committee that will be working with legislature for more funding, preparing to prioritize STIP for 2004-2007 – which will need to include the rest of our couplet project. Hagbom reported

on trip to Cottage Grove regarding the Brookings Elks Scholarship winners and those who went on to the next levels including State and National. He stated he was asked to speak at their banquet and took advantage of speaking about our wonderful Brookings area and how great it is to work with those students!

B. Unscheduled

Mayor Hagbom asked for all comments to be limited to five minutes.

Vikki Nuss of 808 Pioneer, Brookings, read a prepared statement, which is provided as a part of these minutes. There were no questions or comments from Council.

Brookings citizen Don Nuss of 808 Pioneer advised Council he was waiting for a motion, in accordance with his wife's statements and request. City Attorney John Trew stated in his opinion, the City is in compliance and the information the City and Chamber has supplied is legal and in compliance with City ordinances and the contract between the City and the Chamber of Commerce. Nuss stated the City has conspired to have an illegal contract with the citizens' tax dollars and refused to be seated. He again asked Council to cancel contract with the Chamber. City Attorney Trew stated he has consistently advised council the contract is in compliance. Nuss argued. Trew advised Nuss, per rules of procedures for Oregon Law to turn the meeting over to the Chair. Nuss continued to refuse after several times of being asked. He continued to retain his physical position in front of Council and hold onto the microphone.

Mayor Hagbom called for a recess at 7:32 p.m.

Mayor Hagbom reconvened the meeting at 7:40 p.m.

Nuss remaining in front of Council and microphone in hand refused to be seated. City Attorney John Trew stated this was a public meeting, and asked if there was anyone else who wished to speak and asked Nuss to turn the microphone over to next person, so that the meeting could continue. Nuss argued. City Attorney advised Council they had an obligation to continue with the public meeting. Nuss argued again.

Mayor Hagbom proceeded and asked Council to continue with the agenda. Nuss remained standing in place with microphone. There were no other unscheduled appearances.

VII. STAFF REPORTS

A. City Manager

1. Cellular Phone Policy Report

Mayor Hagbom asked City Manager Blodgett to present the staff report, provided in Council packet, through the talking of Nuss, who had refused to be seated and continued talking. Blodgett asked Council to refer to the staff report because he could not talk over Mr. Nuss.

Councilor Kuhn moved, Councilor Curry seconded, and Council voted unanimously to authorize the City Manager to provide allowances for use of private cell phones to employees required to have them for city business as described in alternative #2 of the staff report: employees owning their phone and responsible for paying the bill. The City Manager and Department Head to determine an estimate of the cost to the City for each position required to have a phone for City business. The City then will give the employee that amount as a monthly allowance.

2. Cable TV Status Report

City Manager Blodgett stated Jim Relaford was present to introduce the staff report with the business plan provided with Council packets (a copy is included as a part of the permanent minutes). He stated the next step with cable TV service is to move forward with funding. Blodgett briefly reviewed, again over sounds of Nuss' refusal to be seated, the business plan costs and the next step of finding funds. He explained in order to secure the funding for the installation and start-up of installing a fiber line from Bandon to Brookings, which is estimated at two million dollars, the money would need to come in the form of a grant. With the right lobbying and grant writing, staff believes this is obtainable. Relaford has the knowledge and contacts to perform this next step for a cost not to exceed $15,000.00. Staff recommended Council accept the Fiber Network business plan and authorize expenditure of half the costs in cooperation with the Port of Brookings-Harbor. Nuss continued to interrupt the meeting by talking and refusing to be seated.

City Attorney Trew asked Don Nuss once again to hand over the microphone to Jim Relaford, who was attempting to talk to Council. Nuss made one last statement, but gave microphone to Relaford. The meeting continued without further interruption.

Relaford provided a brief review of his background and experience and

relationship with the City, the Port, and cable service. Further, he described the market nature of cable service in our area, and the need for developing partnerships with private sector but with publicly owned networks. He continued by explaining the possible scenario for this project (see business plan provided with permanent minutes). Relaford referred to additional information in packet as a part of the business plan, which lists the projects in QwestSB622. It was noted there was nothing for Curry County, and that was because we haven't asked. Relaford recommended Council ask by putting forth a request to secure fiber optics from Bandon to Brookings. Discussion ensued between Council and staff, noting many communities in Oregon and many throughout the nation have proceeded in this manner. Discussion continued. Blodgett encouraged a broad band for economic development and vitality to community, not to mention a more competitive market. Councilor Kuhn raised concerns and higher priorities, such as water issues for the City and the costs involved. Blodgett provided various options for Council.

Councilor Dentino moved, Councilor Johns seconded, and council voted by majority, Councilor Kuhn having voted no, to accept the Fiber Network business plan and authorize expenditure not to exceed $7,500 to the City for the next step in providing cable TV and high-speed internet service with the condition the Port of Brookings-Harbor Board of Commissioners approve an equal amount.

3. Other
City Manager Blodgett announced his upcoming wedding, and asked Council to excuse him from the March 25, 2002, Council meeting while on honeymoon. There was unanimous verbal approval and congratulations.

VIII. CONSENT CALENDAR

A. Approval of Council Meeting Minutes
   1. Minutes of January 26, 2002, Special Council Work-Session for setting 2002-2003 City Goals
   2. Minutes of February 11, 2002, Regular Council meeting

(end Consent Calendar)

Ex Officio Councilor Connelly discussed an error on page 6.

Councilor Johns moved, Councilor Dentino seconded, and Council unanimously approved the consent calendar with corrections on page 6, paragraph 2 - $1,134,76 to read $1,134.76.

IX. REMARKS FROM MAYOR AND COUNCILORS

A. Council
There were no additional remarks from Council.

B. Mayor
There were no additional remarks from the Mayor

XII. ADJOURNMENT

Mayor Hagbom and Council gave unanimous verbal approval to adjourn at 8:30 p.m.

Respectfully submitted:

Bob Hagbom
Mayor

ATTEST by City Recorder this 13 day of ~~January,~~ March 2002.

Paul Hughes
Finance Director/City Recorder

Handed out @ 2/25/02 Council mtg

Prepared Statement

To: Brookings Mayor and City Council
From: Vikki Nuss
Subject: Bed Tax Detail
Date: Feb 25, 2002

Recently, the Chamber of Commerce presented this body with its' Annual Report. Included is a 2-page document entitled "Marketing & Promotions Expenses (City Bed Tax Related Expenditures)".

This document claims that $52,754 was spent in 2001 for marketing and promotions of the Brookings-Harbor area and operation of a Visitor Information Center at the port.

One line item lumps $23,500 as "City Bed Tax Expenses-other". On February 20th, I requested from Brookings Finance Director Paul Hughes the detail for this amount. He replied: "I will not be receiving account detail of the monthly reports in our office. The City Manager and I agree that this information is not required according to our contract with the Chamber. We (the City) will perform an examination of the monthly reports supplied by the Chamber at some time during the year. Date and scope of this examination are unknown at this time".

Why do I care how the Chamber of Commerce spends public tax dollars? Because it appears that some of these public dollars are being used in a manner that actually hurts many local businesses, and our local economy.

For example, according to the report, $5,335 was used to print the B-H Community Profile & Business Directory. This Directory, paid for with tax dollars, only lists members of the B-H Chamber of Commerce! According to this Directory, there is no one in our community selling or servicing copiers, printers or faxes; we have only two attorneys, only two physicians, only two general contractors, and one coffeehouse!

This Directory completely misrepresents our community to both residents and visitors. Because TAX DOLLARS paid for the Directory, more than 700 other businesses in Curry County should have had the opportunity to be included in this publication.

Because the health of our ENTIRE local economy is of vital concern to this council, disclosure of HOW Bed Tax dollars are spent should be a matter of discussion. Public Tax Dollars are provided to the Chamber for the purpose of promoting the ENTIRE local economy. The Chamber should NOT assume that the local economy is limited to their membership.

If the Mayor and City Council do not require disclosure of the bed tax expenses reported, how would they expect to refute potential accusations of racketeering, embezzlement, personal gain, or just plain negligence? You hold the purse strings, you sign the checks, the buck stops here, and you can demand the details from the chamber.

As a business owner, resident and Certified Public Accountant, I ask one of you to please make a motion, and add to the agenda an item to discuss the cancellation of the contract between the city of Brookings and the chamber.

c.c. Curry Coastal Pilot

handed out w/ Cable TV Business Plan & as part of 2/25/02 cc Mtg

PRN Data Services, Inc

P.O. Box 7769, Brookings, OR 97415
541-469-7421 Phone Fax
jim@prn-data.com E-mail

February 20, 2002

Russ Crabtree
Executive Director
Port of Brookings Harbor

Leroy Blodgett
City Manager
City of Brookings

Dear Russ and Leroy:

As you requested, enclosed is the business model and plan for an anticipated Fiber Optic broadband network to be deployed in the Brookings Harbor area. This network will be capable of providing all of the residents of the area state of the art CATV as well as high speed Internet access. In addition it will lay the groundwork for future applications that will have real significance to the area in terms of economic stimulus and quality of life. I have attempted to describe in a fair amount of detail these applications and their import.

As you are aware there are two critical elements of this plan.

First: The delivery of broadband services is dependent upon our ability to provide a Fiber optic cable connection upstream to the NoaNet. (Northwest Open Area Network) in Bandon. Once this connection is complete then our cable TV content can be provided by many different sources around the country. In addition this is the link that will be our provider for Internet Access. The business plan does not address the construction of this link as it is my opinion we are eligible for funds in the form of grants to accomplish this task. (Please see the enclosed report regarding current Rural Telecommunications efforts by the State of Oregon)

Second: The organization, build out, and operation of the local infrastructure. The business plan does address this part of the project.

The business plan assumes the availability of the upstream connection to NoaNet and would need major revision if we were not able to accomplish the NoaNet connection. It is my recommendation that we focus the next 90 days securing the funds for this connection and then proceeding to implementing the business plan. I have made a proposal to you regarding my views on the best way to accomplish this task

The business plan does not address potential demand for services in other parts of the county although It's clear that with the fiber passing through all of the major cities in Curry county there would be some demand for our services.

In summary, It's apparent that a Brookings Harbor Fiber Network once deployed can be self sustaining and will deliver significant value to the community.

Thank you for the opportunity to participate in this exciting project.

Sincerely,

Jim Relaford
President

Benton-Lane- Lincoln- Linn Telecommunications Alliance			
	Projected Complete		
Establish Self Healing Fiber Ring for **"Central Coast Ring"**	Oct-02		
Install ATM switch in Florence	2003		
Install ATM switch in Newport	Oct-02		
Install DSLAMs in the following wire centers:			
Adair	3rd Quarter 2002		
Marcola	To Be Determined		
Leaburg	4th Quarter 2002		
Blue River	3rd Quarter 2002		
Culp Creek	3rd Quarter 2002		
Newport	4th Quarter 2002		
Siletz	3rd Quarter 2002		
Toledo	3rd Quarter 2002		
Florence	4th Quarter 2002		
Harrisburg	3rd Quarter 2002		
Mapleton	To Be Determined		
Veneta	4th Quarter 2002		
Lowell	4th Quarter 2002		
Oakridge	3rd Quarter 2002		
Cottage Grove	2nd Quarter 2002		
Junction City	4th Quarter 2002		
Install Voice Mail in :			
Cottage Grove	2003		
Oakridge	2003		
Newport	2003		

Central Oregon Intergovernmental Council			
	Projected Complete		
Establish Self Healing Fiber Ring for **"Central Cascade Ring"**	End of March /first part of April 2002		
Install ATM switch in Madras	Jul-02		
Install ATM switch in Redmond	Aug-02		
Install ATM switch in Bend	Sep-02		
Install DSLAMs in the following wire centers:			
Warm Springs	To Be Determined		
Madras	3rd Quarter 2002		
Culver	3rd Quarter 2002		
Redmond	3rd Quarter 2002		
Prineville	3rd Quarter 2002		
Black Butte	To Be Determined		
Sisters	3rd Quarter 2002		
Bend	3rd Quarter 2002		
Spring River	3rd Quarter 2002		
Eastern Oregon Telecommunications Consortium			
Establish Self Healing Fiber Ring for **"Eastern Ring"**	Jul-02		
Install an ATM switch in Baker City	Jul-02		
Install DSLAM in Baker City	3rd Quarter 2002		

Northwest Oregon Regional Partnership			
	Projected Complete		
Establish Self Healing Fiber Ring for **"Northwest Ring"**	Jul-02		
Install ATM in Astoria	Aug-02		
Install DSLAMs in the following wire centers:			
St. Helens	3rd Quarter 2002		
Rainier	To Be Determined		
Westport	To Be Determined		
Astoria	3rd Quarter 2002		
Warrenton	3rd Quarter 2002		
Seaside	3rd Quarter 2002		
North Plains	4th Quarter 2002		
Cannon Beach	3rd Quarter 2002		
Install Voice Mail in the following wire centers:			
St. Helens	2003		
Rainier	2003		
Westport	2003		
Astoria	2003		
Warrenton	2003		
Seaside	2003		
North Plains	2003		
Cannon Beach	2003		
Establish Fiber Mini-Ring for Warrenton	Oct-02		

Douglas, Jackson, Josephine,			
Lake,& Klamath Counties	**Projected Complete**		
Establish Self Healing Fiber Ring for **"Southern Ring"**	Mar-02		
Provide Point of Presence with Century Tel	Mar-02		
Install ATM switch in Roseburg	May-02		
Install ATM switch in Grants Pass	May-02		
Install ATM switch in Klamath Falls	May-02		
Install DSLAMS in the following wire centers:			
Oakland	4th Quarter 2002		
Sutherlin	2nd Quarter 2002		
Roseburg	2nd Quarter 2002		
Winston	2nd Quarter 2002		
Rogue River	2nd Quarter 2002		
Gold Hill	2nd Quarter 2002		
Central Point	2nd Quarter 2002		
Medford	2nd Quarter 2002		
Jacksonville	2nd Quarter 2002		
Phoenix-Talent	2nd Quarter 2002		
Ashland	3rd Quarter 2002		
Install Voice Mail in Klamath Falls	2003		
Central Oregon Intergovernmental Council			
Establish Prineville Mini-Ring	Oct-02		
Establish fiber to Business Parks in Madras & Redmond	2003		
Establish Voice Mail in Prineville and Madras	2003		
Gilliam, Sherman & Wheeler Counties			
	Projected Complete		

Install fiber to new meet point with TDS near Condon	2003		
La Pine Community Action Team			
Install DSLAM in La Pine	To Be Determined		
Malheur County			
Establish Point of Presence in Burns	Jul-02		
Install DSLAMS in the following wire centers:			
Vale	3rd Quarter 2002		
Nyssa	3rd Quarter 2002		
City of Pendleton			
Install ATM switch in Pendleton	Jul-02		
Install DSLAMs in the following wire centers:			
Athena	To Be Determined		
Hermiston	3rd Quarter 2002		
Pendleton	3rd Quarter 2002		
Umatilla	3rd Quarter 2002		
Stanfield	To Be Determined		
Milton Freewater	2nd Quarter 2002		

Polk County			
	Projected Complete		
Establish fiber mini-ring between Salem, Dallas & Indp.	Oct-02		
Install DSLAMs in the following wire centers:			
Woodburn	2nd Quarter 2002		
Dallas	2nd Quarter 2002		
Falls City	3rd Quarter 2002		
Independence/Monmouth	2nd Quarter 2002		
Jefferson	3rd Quarter 2002		
Install Voice Mail in the following wire centers:			
Woodburn	2003		
Dallas	2003		
Falls City	2003		
Independence/Monmouth	2003		
Jefferson	2003		
City of Portland			
Establish fiber build in NE Portland	Dec-02		
Establish fiber build in SE Portland	Dec-02		
Install Electronics for fiber or DSLAMs	2003		
Install DSLAM for Burlington	3rd Quarter 2002		
Union County			
Establish POP in LaGrande	Jul-02		

Referred to in Minutes Give to Council & public

BROOKINGS HARBOR FIBER NETWORK

BUSINESS PLAN

Prepared by

PRN Data Services, Inc.

February 15, 2002

EXECUTIVE SUMMARY

The purpose of this document is to describe a comprehensive and coordinated strategic direction involving telecommunications aimed primarily at assisting the Brookings Harbor area respond to a world of great change within the telecommunications industries. This Business Plan identifies the business parameters (i.e., markets and customers, products and services, technology requirements and opportunities, organizational structures, pricing, and financial requirements) to develop and implement an area-wide telecommunications infrastructure within the Brookings Harbor area. Hereafter, this business opportunity will be referred to as "The Brookings Harbor Fiber Network."

The telecommunications-related business opportunities arise out of three significant developments:

- Regulatory changes in both the utility and telecommunications industries
- Dramatic advances in telecommunications technologies
- Increasing customer expectations

In the midst of rapid market changes, telecommunications technologies have undergone rapid advances with increasing capabilities and decreasing costs.

Furthermore, information highways are anticipated to have widespread economic and societal effects on communities and the way that people affected by it live and work.

These telecommunications infrastructures can be expected to engender important stimuli for economic development, improved educational systems, as well as improved public services and safety.

DESCRIPTION OF THE BROOKINGS HARBOR FIBER NETWORK

The business proposition is to develop and install a telecommunications infrastructure, in the Brookings Harbor area, that provides connectivity products and services for broadband data, video, Internet, Video Conferencing and voice applications. This high-speed network will interconnect with other governmental, municipal, educational, and health-care institutions and enable the Corporation to provide an enhanced portfolio of products and services to the citizens of Ashland.

The business strategy is a phased approach allowing as much to be self-funded through system generated revenues as is possible. Initial products will center on high-speed, high bandwidth data and related systems and interconnections. CATV service will be offered to residential consumers as the network is installed throughout the community. The system complexity will grow gradually and customer needs will drive the introduction of more sophisticated broadband technologies.

The full infrastructure would utilize a ring topology and would be a hybrid fiber/coaxial cable system that can grow from an initial core network of 7.5 miles of principally 172-strand fiber

cable to a fully developed core and distribution network of 75 miles when it connects all potential users.

MARKET ASSESSMENT

APPLICATIONS

The products and services to be offered by The Brookings Harbor Fiber Network will evolve over time. Currently, the Corporation envisions two distinct generations of products and services. The first generation of products and services hereafter referred to as "**First Generation Applications**," will consist of the following:

- **Business Applications**
  - High-speed access to the Internet
  - Lease dark fiber to telephone companies
  - Lease dark fiber and/or general network capacity for business needs
  - Remote banking
  - Remote Home Security and Management
  - Hospital Telemedicine
- **High-Speed Digital Cable-Modem Internet Access**
  - Internet access
- **CATV (Digital Set-Top Box Delivery)**
  - Basic service
  - Premium service
  - Pay-per-view videos and events
- **Other Consumer Applications**
  - Remote Home Security and Management
  - Health Care Monitoring
- **Other City Operations**
  - Citizen surveys
  - Direct public input
  - Government-citizen transactions (e.g., registration and voting)
  - Internal communications
  - Real-time data acquisition and remote control (e.g., street conditions, parks and recreation, etc.)
  - Inter-government and business communications
  - Broadband/video conferencing needs
- **Business Applications**
  - Corporate communications
  - Sharing patient records and images
  - Medical administration
  - Distance learning
  - Broadband/video conferencing needs

It is envisioned that each of the above products and services will be made available by The Brookings Harbor Fiber Network to customers by the end of 2003.

Product development efforts will commence in 2002 and 2003, and market roll-out will begin as soon as possible.

MARKETING PLAN

The Brookings Harbor Fiber Network's initial marketing strategy includes the following components:

- Development of an effective management and marketing structure
- The Corporation will hire a sales and marketing person to implement an aggressive marketing campaign aimed at attracting subscribers to The Brookings Harbor Fiber Network's CATV service. The marketing strategy will be implemented on a neighborhood-by-neighborhood basis as the network is installed throughout the City. Advertising programs and other supporting marketing material will be developed to support the efforts of the sales person.
- In concert with efforts to attract CATV subscribers, The Brookings Harbor Fiber Network will work with existing and new Internet service providers to offer advance high-speed digital Internet access services to consumers throughout Brookings Harbor.
- In deciding how and what to charge customers, we have considered a number of factors driven by fundamental infrastructure economics which are similar to that of an electric system: namely, the initial fixed costs are high to install a system regardless of its capacity, that the cost of incremental capacity is low, and that variable operating costs are low. These factors have led us to developing the following preliminary pricing structures for its First generation Applications.

BUSINESS FORMATION

ORGANIZATION AND STAFFING

The Brookings Harbor Fiber Network would be established as a separate Non Profit Corporation. A Director (CEO) will need to be hired for the Brookings Harbor Fiber Network. He/She would report directly to the Board of Directors of the Corporation and will have day-to-day responsibility for the successful roll-out of the BHFN and establishing connections with CATV subscribers. Reporting to the BHFN Supervisor will be a marketing and operations staff with responsibility for the successful roll-out of the telecommunications network and customer solicitation.

To complete the required system build-out, A contract will need to be let for our-sourcing the initial design and buildout. In-house crews will complete the buildout in it's final phases and will provide required maintenance.

Initially, The Brookings Harbor Fiber Network will also hire one sales person to recruit CATV subscribers.

We would anticipate the Finance Department of the City of Brookings will be responsible for the monthly billing and collections function.

BUSINESS PARTNERSHIPS

The Brookings Harbor Fiber Network is dedicated to the proposition of working with all interested service providers and potential users of the system to maximize the benefits of that system accruing to the citizens and businesses within the Brookings Harbor community.

As part of this effort, The Brookings Harbor Fiber Network will pursue potential business partners as it moves forward. Public/private partnerships can pool resources, technology, expertise, and diminish financial and competency risks by a sharing of responsibilities and obligations.

There are a number of public and private parties, some local, who would qualify as logical partners to participate in the development of The Brookings Harbor Fiber Network.

FINANCIAL ANALYSIS

As part of this business planning process, we have completed a five-year financial analysis of the proposed business initiative. The input assumptions used in this financial feasibility assessment are discussed in detail in Section 8 and Appendix F contains the detailed output of the financial model.

We have chosen to use conservative input assumptions in its assessment. Particularly important assumptions included the following:

- It was assumed that the network would be fully installed by the end of the second year and, as a result, all residences would have BHFN CATV service available to them at that point in time.
- With regards to CATV, the Corporation used the following assumptions:
  - ⇒ 35% of the residences would subscribe to BHFN's CATV Basic Service as the network is built out, with 98% of those subscribers electing Expanded Basic Service.
  - ⇒ 90% of the Basic Service subscribers would also sign up for Premium Service.
  - ⇒ 22% of the Basic Service subscribers would also periodically choose Pay-Per-View Services.
- To be conservative, the Corporation included only the following additional sources of revenues in its financial projections:
  - ⇒ Business internet service provided by BHFN.
  - ⇒ Residential internet service provided by BHFN.
  - ⇒ Business internet service provided by another local ISP using BHFN's network.
  - ⇒ Residential internet service provided by another local ISP using BHFN's network.
  - ⇒ Dark fiber leases.

The results of the Corporation's financial analysis are summarized below:

- The installation of the BHFN network and other start-up expenditures will require outside long term financing totaling $5.5 million.
- Net income projections show losses of $1.08 million in year one and $1.07 million in year two. However, net income turns positive in year four, showing a profit of $41,380 in year four and $263.821 in year five.
- Cumulative cash flow turns positive in year 4.
- Revenues and operational savings grow from $0.02 million in year one to $2.5 million in year five, totaling $7.7 million over the five year period. Of the five-year total, CATV-related services, other services, and operational savings represent approximately 76%, 21%, and 3%, respectively.

RISK ASSESSMENT

The BHFN faces a number of significant technical, marketing, financial, and competitive risks as it enters the telecommunications market. We will employ the following strategies to address these risks:

- The system being proposed has been designed to fully support digital technology, which is becoming increasingly available and demanded by consumers and businesses alike.
- Maintain technological independence by not locking The Brookings Harbor Fiber Network to any set of vendors.
- Develop contingency plans and back-up strategies in case preferred technologies do not perform, or integrate, as expected.
- Form strategic alliances with companies offering leading edge products and largely avoid becoming a hardware/software developer.
- Assume technical modesty, using conservative estimates for the technical and price performance, and lifetimes of systems.
- Use realistic and conservative sales forecasts acknowledging the slow market penetration that can be anticipated.
- Target early adopters who are ready for change.
- Conduct continuous market research.
- Be honest about product availability schedules.
- Share the risk with other business partners

MAJOR CONCLUSIONS

The findings based on the analysis underlying this Business Plan are as follows:

- From our preliminary review and market assessment, there does appear to be interest in enhanced telecommunications from the institutional, commercial, and residential customers in Ashland.
- The construction of the fiber optic backbone would provide enhanced telecommunications services over the current systems in use today.
- Based upon this preliminary analysis, and the assumptions used herein, a publicly-owned telecommunications system with City-wide penetration does appear to have the potential to be economically viable .
- Slower development of the CATV system, and faster payback of the debt, would affect the economics and the feasibility of the system contemplated by the Corporation.
- The sensitivity analysis showed the dominate factor affecting the system's economic feasibility is market penetration of services, overshadowing both interest rate fluctuations and capital cost increases.
- There are indications that the potential revenue from these applications may be quite large.
- Digital communications technology is rapidly becoming available and future digital communications products will provides services such as compressed video, high definition television (HDTV), and 500 channel converters. The system being proposed will fully support digital technology.

REMAINING SECTIONS OF BUSINESS PLAN

The remainder of this Business Plan is organized as follows:

- Section 2 - Introduction
- Section 3 - Description of the Business
- Section 4 - Market Assessment
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Section 2

INTRODUCTION

The purpose of this section is to describe the context within which this Business Plan was developed. First, we provide an overview of the fundamental changes occurring within the electric utility industry, and the roles of telecommunications in positioning any electric utility to survive in an increasingly competitive environment. Next, we discuss the changes that have occurred within the telecommunications and CATV industries, followed by a discussion of the ongoing convergence of the energy and telecommunications industries. We then provide some background information on what is typically meant by the phrase "broadband communications system." We conclude with an overview of telecommunications-related products, services, and needs along with a discussion of what other utilities are doing with regards to the implementation of telecommunications systems.

THE CHANGING TELECOMMUNICATIONS INDUSTRY

In the late 1970s, the U.S. Justice Corporation initiated an anti-trust action against AT&T in an effort to break up the Bell System monopoly and to introduce competition into the communications marketplace. In 1982, Judge Harold Greene of the U.S. District Court in Washington, D.C. approved the Modified Final Judgment (MFJ), which, in essence, ordered the breakup of the Bell System through divestiture of the Bell Operating Companies (BOC) which provide local telephone service within certain defined areas known as Local Access Transport Areas (LATA) as regulated monopolies.

The divestiture of the BOCs left AT&T as the nation's dominant long distance carrier. Under the MFJ, the BOCs were prohibited from providing inter-LATA (long distance) services, while AT&T primarily provided inter-LATA services. While AT&T continues to be the dominant provider of long distance services, one purpose of the MFJ was to create a more competitive market for long distance services.

Since the divestiture of the BOCs in 1984, competition in the long distance industry has grown dramatically. Billions of dollars have been invested in alternative network transmission facilities, and the market share of non-dominant carriers has grown steadily. Non-dominant carriers include not only large facilities-based carriers such as MCI, Sprint and US West, but also smaller regional carriers, many of which lease a substantial portion of their transmission capacity from companies which own facilities (long distance resellers).

While most companies owning transmission facilities market their services directly to business or residential customers, some companies sell capacity on their own transmission networks primarily or exclusively to long distance resellers. These so-called "carriers' carriers" either provide non-facilities-based interexchange carriers (IXC) with leased network capacity or offer facilities-based IXCs as a cost-efficient way to supplement their owned networks.

The current size for the long distance telecommunications market is estimated at $70 billion and it is estimated to be growing at 7 percent to 9 percent per year. While AT&T still dominates the long distance business, a number of non-dominant carriers have emerged as viable participants in this enormous industry. Since the divestiture decree of 1984, the long distance market share of non-dominant IXCs has steadily increased each year. MCI Communications and Sprint are clearly the leading challengers to AT&T, but many smaller IXCs have also

developed into profitable and growing companies. The overall growth of voice transmission service stems from the combination of slower growing traditional "1 plus" service and faster growing products such as Wide Area Telephone Service (WATS), 800, 900, private line and operator services. The use of data transmission service is growing at a rate several times that of voice service.

There are several factors fueling overall telecommunications growth. First, prices have declined. Since the AT&T breakup in 1984, overall long distance rates have been cut nearly in half. Second, simpler product packaging is enabling many more businesses to receive volume discounts; most carriers now offer WATS-like products, stimulating demand. Third, with the substantial completion of a nationwide fiber optic network, and the emerging development of an "information superhighway," there is an increased use of data transmission services, one of the fastest growing market segments. Fourth, there is a continuing array of value-added services available to end users, such as facsimile, voice mail, video conferencing, and virtual private line services.

Resellers remain competitive by having access to the latest technological developments. New technology is available to fiber-based carriers and resellers alike. New and emerging hardware and software platforms allow faster call setups, checks for line availability before completing a call and verification of call completion (no charges to the customer for an incomplete call). New technologies also enable remote trouble-shooting capabilities which are desirable for both data and voice transmission services. These new standards keep all players on an equal footing, regardless of whether they own or lease facilities.

Due to the nature of network systems, a large portion of operating costs is relatively fixed. Once the break-even level of revenues has been achieved, incremental revenue generates high incremental profits. This operating leverage has helped to fuel the consolidation of small resellers within the industry. In 1986, consolidation began in earnest with resellers combining with carriers to form regional "hybrid" companies. The number of competitors has declined from several thousand in 1985 to approximately less than 450 today.

THE TELECOMMUNICATIONS ACT OF 1996

On February 8, 1996, President Clinton signed into law the Telecommunications Act of 1996 (Act), which constitutes the most significant and far-reaching amendment to the 60-year old Communications Act. The Act seeks to eliminate barriers to entry and to spur competition. The Federal Communications Commission has been fine-tuning the Act, adopting rules and regulations, policy statements and interpretations to implement the provisions of the Act.

The Act directly impacts local government, while presenting significant opportunities. The Act provides an economic development tool for municipalities. The nature of the business of at least one major business/customer in the community -- the local telephone company -- will change. As a significant consumer of telecommunications services, municipalities will have more options and negotiating leverage. Municipalities and their utilities can enter the telecommunications and cable businesses, making greater use of the assets they already have. Expanding telecommunications companies may also find value in municipally-owned assets (e.g., poles, towers, rights-of-way, fiber optic cable).

A more detailed description of this Act is provided in Appendix B. Additionally, Appendix B provides an overview of recent telecommunications-related regulatory activities at the Oregon Public Utility Commission.

CABLE TELEVISION INDUSTRY

HISTORY

The current CATV industry is an approximately $23 billion market and growing. In 1952, 70 CATV systems were in operation serving 14,000 subscribers. By contrast, in 1994 it was estimated there were 11,217 operating CATV systems serving 55,100,000 subscribers. Currently, the most popular channel capacity range is from 30 to 53 channels, representing over 57 percent of all CATV systems in operation. There are 1,175 CATV systems in the U.S. serving over 78 percent of all the CATV subscribers. These systems serve 10,000 or more subscribers. However, there are still 3,235 CATV systems, 29 percent of the total number of systems in the U.S., that serve less than 250 subscribers per system. The implication is that possible absorption of small systems into larger systems and mergers of larger systems to create "mega-systems" is still feasible.

From a "community antenna" project serving only remote areas in the 1940s, to the country's largest private construction program passing 92 million homes in 1993, cable television service is available today to 98 percent of American homes, and over 65 percent of all U.S. households with television sets subscribe to cable for video programming. The only other two major industries that can boast such market penetration are the telephone industry and the electric utility industry.

The current dominant architecture of a cable system is coax cable, although fiber optics is becoming increasingly popular. Coax cable is capable of carrying hundreds of channels of video, data, and other information. Called "broadband" for its high capacity, coax cable can carry at least 900 times more information than a telephone company's "twisted pair" copper wire. Copper wire cannot effectively transmit full motion video because of its narrow bandwidth. However, both coax and copper have their limitations with distance. This is why fiber optic cable has begun to take over the "backbone" of telecommunications systems, pushing fiber optic cable closer to the end user, and utilizing coax or copper the final short distance.

BASIC CATV TECHNOLOGY

The basic structure of a CATV system is relatively simple. Signals of various sources, including broadcast transmissions, satellite-delivered programming, and local television studio productions, are received and processed at a facility called a "headend." The cable operator then retransmits those signals through coax cable and/or fiber to subscribers' homes or businesses. Two types of systems are currently in use today. The first type of system is the traditional coaxial system and the second, more advanced, system is a hybrid fiber/coaxial system, which is the type of system being contemplated by the Electric Corporation.

Generally, a large "trunk" cable (main transmission cable) carries the signals to smaller "feeder" cables, which branch off into local neighborhoods(nodes). A "drop" cable then feeds directly into the customer's premises.

Signals that travel through coax cables' metal wires lose strength after traveling long distances, so these signals must be boosted with amplifiers, approximately every 2,000 feet. Because each amplifier adds a slight amount of distortion, long stretches or "cascades" of amplifiers can eventually cause poor signal quality or a loss in the number of channels deliverable. Because of this phenomenon, the average current coax cable system delivers about 40 channels of programming.

FIBER OPTICS

In an effort to increase channel capacity and to improve the reliability of CATV service, many current coax cable systems are deploying fiber optic technology. New cable systems utilize hybrid fiber/coax systems; fiber optic trunking applications and coax cable to the end user. Nearly 25 percent of cable systems use fiber in their networks today, and most will be upgraded within the next 10 years. Companies such as Time Warner, TCI, and Cox Cable plan to enhance most of their systems with fiber optics even sooner.

Optical fiber technology uses very thin strands of glass to carry light signals generated by laser transmitters. Fiber optic cable can carry signals for long distances without losing much of its power, thus allowing cable systems to reduce the number of amplifiers between the headend and the customer. Other benefits of fiber-enhanced systems include:

- **Cost-effective upgrades of channel capacity** - The existing coax cable to every user is theoretically capable of carrying 100 to 200 channels. Fiber allows significant channel upgrades without expensive replacement of the cable to individual end users. A cable system's "drop" cable, which is typically 100 feet long and connects the feeder cable to the end user, can comprise 50 percent of the system.
- **Improved reliability** - Smaller cascades of amplifiers mean fewer customers will be affected by any given individual amplifier failure.
- **Reduced operating costs** - Systems with fewer amplifiers spend less on maintaining, diagnosing, and locating faulty amplifiers.
- **Improved signal quality** - Transmissions along fiber optic cable degrade far less quickly and result in a stronger, clearer signal (picture) at the receiving end. Fiber also may be used to replace microwave transmission links, which are subject to radio and weather-related interference.

Fiber optics can enhance CATV systems, depending on how far the fiber extends into the system, through several applications:

- **Fiber backbone** - Fiber cable is used in the trunk lines to improve signal quality and increase reliability.
- **Fiber trunk to feeder** - Fiber is extended to the feeder portion of the system, breaking the cable system into individual areas serving as few as 200 users, increasing channel capacity, allowing the cable provider to provide specific programming to individual neighborhoods.

DIGITAL COMPRESSION

Consumer demand for even more variety and choice in television has led to the development of a technology called "digital compression," which is expected to significantly expand the channel capacity. Digital compression squeezes more information into a smaller amount of space, thus enabling cable systems to deliver many different signals in the amount of space currently needed to deliver one signal. Digital signals may be distributed to customers' premises where it is decoded and converted back into a visual image via a special set-top device.

Digital compression has been likened to the analogy of blinking while driving a car. Although you don't continually see everything, you still get the picture.

The primary benefit of digital compression will be for cable systems to offer subscribers additional choices, such as:

- Specialized niche programming produced for narrowly targeted audiences. These niche channels will likely be offered at inexpensive, a la carte prices of generally $1 to $4 per month.
- Greatly expanded pay-per-view channels that offer movies beginning at brief intervals, thus creating near "video on demand" to enable viewers to select the more convenient program starting time.
- Interactive or two-way programming allowing video, information or telephone calls to be routed from point to point (subscriber to subscriber), not just from one sender to many receivers.
- High definition television (HDTV).

INTERACTIVE TELEVISION

Interactive television represents the convergence of several industries:

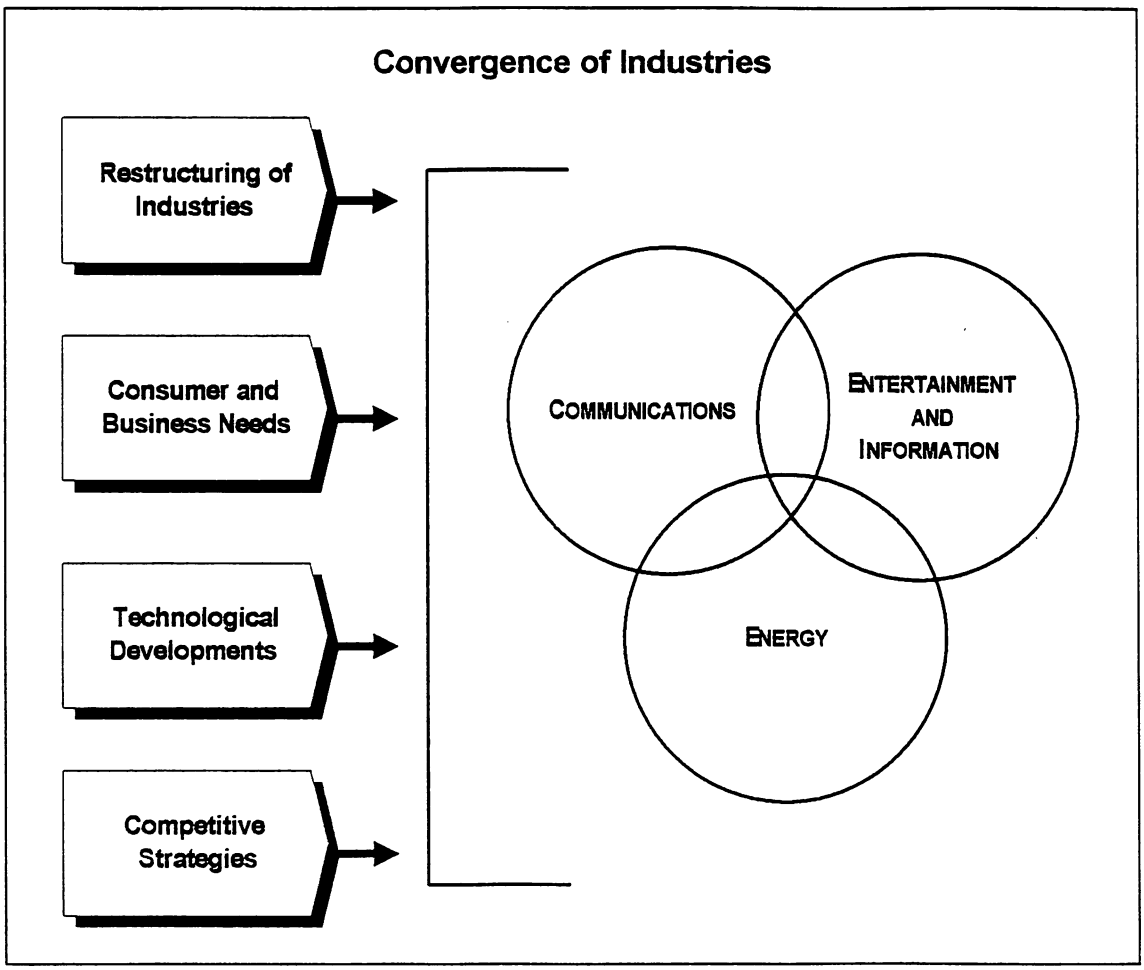
- Entertainment companies that provide programming
- CATV companies that distribute programming
- Computer companies that process digital information at both the cable system's central facilities and the end user's set-top converter box

CATV providers, or telecommunications providers, can offer interactive television by upgrading or designing their systems to make it capable of delivering two-way communications. On most existing systems, amplifiers and other electronic equipment will likely need to be upgraded or replaced to make coax systems two-way active, this being unlike the proposed BHFN system that will allow complete 2-way communication from the onset.

There are several interactive television services in development, ranging from distance learning to electronic retailing to financial services. Among those designed primarily for entertainment, however, there exists a wide variety in levels of interactivity.

CONVERGENCE OF INDUSTRIES

As noted earlier, the energy, telecommunications, and entertainment industries are experiencing a period of significant convergence. As shown in the graph below, this convergence is occurring due to four primary drivers. First, these industries have undergone or are currently undergoing fundamental restructuring. Second, consumers and businesses increasingly desire greater functionality in terms of the products and services provided by their suppliers. Third, there have been significant technological advancements and an increase in the speed at which those developments are occurring. Finally, the actions of individuals companies within these industries exhibit convergence.



- Within this dynamic environment, potential business opportunities are emerging for companies that can create strategic advantage through communications links with customers.

DEFINITION OF A BROADBAND COMMUNICATIONS SYSTEM

A broadband communications system is a system that provides for two-way communication of large amounts of data. The more data that is transported on the system, the more capacity is needed. The capacity of a communications system is generally referred to as its "bandwidth" or channel carrying capacity. A "channel" is a frequency band that carries data in a specific manner so it can be interpreted correctly at the receiving end. Channel frequencies are generally stacked in sequential order from the bottom of the band to the top, with certain frequencies not used, allowing for separation, and other frequencies used for other purposes. For a typical broadband system such as CATV, one channel has a bandwidth of 6 megahertz (MHz). A typical CATV system may have a CATV bandwidth from 156 MHz to 552 MHz, allowing for future channels, and have a carrying capacity of 50 to 60 channels. This CATV band would therefore be 396 MHz, or a nominally rated 400 MHz system. Its passive bandwidth may be from 5.75 MHz to 600 MHz, and carry other functions over the non-CATV band. The transporting media for such a system would probably be coax cable.

Broadband systems usually use coaxial cables or fiber optic cables for transmission media. Of these two media, fiber optics has the greatest bandwidth and range. Fiber optics is also lighter and immune to electro-magnetic interference and problems related to ground potential differences.

For the purpose of this report, there are two general types of broadband systems. The telephone industry predominately uses digital time-division multiplexing (TDM) while the CATV industry traditionally used analog frequency-division multiplexing (FDM). The telephone industry has long used fiber optics and digital TDM for voice and data transmission, especially in long-distance transmission. (For the purists, TDM is technically baseband because the data bits from each channel access the transmission media one at a time, although the telephone industry refers to it in discussion a multi-channel. The telecommunications industry frequently refers to TDM services, especially the high capacity fiber optic-based services as "broadband." FDM is truly broadband.)

Telephone broadband hierarchy starts with T-1. T-1 is 1.544 megabits per second (Mbps) and is also referred to as DS-1. A T-1 channel typically consists of 24 channels, each of 64 kilobits per second (kbps). The leading fiber optic digital TDM broadband technology is called SONET (synchronous optical network). The lowest level of SONET transport, referred to a OC-1, can carry 28 T-1s. The present SONET technology is capable of carrying a maximum of 1,344 T-1s (OC-48), the equivalent of 32,256 telephone conversations.

As communications technology becomes more advanced, sophisticated systems will be necessary to carry even more data, requiring a larger bandwidth. With the advent of interactive video, compressed video TV, and other emerging technologies, communications systems such as the standard 450 to 550 MHz systems over coax will not have the capability of providing these services. Broader broadband systems will be necessary. These systems will require a transportation medium that can handle the broader system. This is why fiber optics has become increasingly popular in the recent few years. Fiber optics has a bandwidth in excess of 1,000 MHz, or 1 gigahertz (GHz), and can transport data with very low losses and virtually no interference. For short distances, coax has a respectable bandwidth carrying capability which can be comparable to fiber optics. This is why CATV, telephone, and electric utility companies are installing fiber optics on their backbone communications system, and carrying coax or copper wire the final short distance to the end user. The combination fiber/coax or fiber/copper

is proving to be an economical compromise to bringing broadband services to the end user without incurring the incremental expense of taking fiber optics all the way into the customer's premises.

In the home, a broadband communication system utilizing fiber optics and maintaining a bandwidth of 750 MHz or more could provide interactive services, 500 channel CATV, access to thousands of movies, and have the ability to use a camcorder to send live videos to family and friends. In business, it could provide direct access to long distance telephone carriers, data links between industrial campuses, and video conferencing.

OVERVIEW OF TELECOMMUNICATIONS-RELATED PRODUCTS, SERVICES AND NEEDS

There are a number of telecommunications-related products and services that could be provided to the Brookings Harbor area by or through The Brookings Harbor Fiber Network. These services are discussed below and are divided into two major groupings: utility-related services and community-related services. A more detailed discussion of these products, services, and needs is provided in Appendix C.

COMMUNITY-RELATED SERVICES

There are a wide variety of community-related telecommunications needs that can be met by municipalities, including the following:

- **Internet Access**

  The Internet is becoming the path of choice for low-bandwidth data communications wherever a local area network is impractical. It is unlikely, however, that the Internet will satisfactorily serve high-bandwidth data needs anytime soon. Because of broad and growing public access, local governments should consider the Internet as their medium of choice for communication with citizens, at least for the present.

- **Public Needs**

  The potential roles of data communications between local governments and their citizens are broad, exciting, and significant. Some of these roles may raise profound policy questions. Most of the applications listed below could probably be handled using the existing infrastructure, although a dedicated high-bandwidth data path would be better. In most cases, the greatest barrier to implementation is the current lack of universal access to Internet services or to the equivalent dedicated data path. Public attitudes would also have to change, and changes in state law and local statute would be required in some cases.

  ⇒ Work-at-home
  ⇒ Public information
  ⇒ Library services
  ⇒ Customer surveys
  ⇒ Direct public input
  ⇒ Government-citizen transactions (e.g., registration and voting)

- **Corporate, Health Care and Education Needs**

  A good local communications infrastructure is important today in corporate siting decisions. It will be essential tomorrow. Cities interested in attracting corporate citizens must learn to think of communications in the same way they think of power and water.

  Hospitals and other health care providers are increasing their data transfers and will be major contributors to overall data flow. The use of data communications by the health care industry will increase the efficiency of their business operations as well as the effectiveness of diagnosis and treatment.

  Educational institutions are starting to use telecommunications for a variety of purposes, including delivery of education services. This effort is not well developed yet. The field commonly known as "distance learning" will probably burgeon only with the common availability of bandwidth and technologies sufficient to support two-way video conferencing.

  ⇒ Corporate communications
  ⇒ Sharing patient records and images
  ⇒ Medical administration
  ⇒ Distance learning

- **Local Government Needs**

  Closely located local government facilities are usually served satisfactorily by existing LANs. Any problems can often be solved by LAN or MAN upgrades, higher bandwidth links, etc. More remote facilities often need more bandwidth to enhance their communications with these government "hubs." The solutions and the economics depend entirely on the specific situation. In counties and smaller cities, good data communications systems may be outdated or non-existent. Most local governments could benefit from more effective internal telephone communications of these services were carried on a dedicated municipal system.

  Traffic control is potentially a major user of communications systems involving data acquisition and control. Police have needs for remote data access that will have major impact on effectiveness and safety. Other agencies of general government tend to have fewer identified needs that are not already being adequately served. Some savings could possibly be realized by moving current systems onto a new multi-purpose data path.

  The Internet has become the path of choice for low-bandwidth data communications among governments and between governments and their business partners. Significant needs for higher-bandwidth paths among these agencies are not yet widely perceived, but they will become more apparent in the future. The need for high-bandwidth paths among local governments will become an increasing issue as time goes on.

  ⇒ Internal communications
  ⇒ Real-time data acquisition and remote control (e.g., street condition, parks and recreation, etc.)
  ⇒ Inter-government and business communications

- **Broadband/Video Conferencing Needs**

  Applications of video conferencing are likely to change the way we live almost as fundamentally as did development of the telephone system. Video conferencing will rapidly become essential to corporations, meaning that a first-rate communications infrastructure will be a key siting factor. Video conferencing will also transform other sectors of civic life, particularly education, medicine, and government.

Experience has shown that many of the communications-enabled services discussed above, on a stand-alone basis, have difficulty passing financial feasibility screen on a stand-alone basis, but bundling services that share functionality maximizes the contribution available to pay for communication costs and makes deployment feasible in many cases.

SECTION 3

DESCRIPTION OF THE BUSINESS

This section provides an overview of The Brookings Harbor Fiber Network, the Electric Corporation's telecommunications initiative. We provide an overview of the business opportunity underlying this Business Plan and the Electric Corporation's telecommunications-related Mission Statement which will guide its efforts as its enters this market. We then provide an overview of the Electric Corporation's implementation schedule for the roll-out of the telecommunications network.

DEFINITION OF BUSINESS

The business proposition is to develop and install a telecommunications infrastructure, in the Brookings Harbor area, that provides connectivity products and services for broadband data, video, and voice applications. This high-speed network will interconnect governmental, municipal, educational, and health-care institutions and enable BHFN to provide an enhanced portfolio of products and services to the citizens of Ashland.

The business strategy is a phased approach allowing as much to be self-funded through system generated revenues as is possible. Initial products will center on high-speed, high bandwidth data and related systems and interconnections, particularly those related to the needs of the Corporation. In addition, CATV service will be offered to residential consumers as the network is installed throughout the community. The system complexity will grow gradually and customer needs will drive the introduction of more sophisticated broadband technologies. The theme is to lay a core infrastructure in the City's key corridors, supply the existing needs of the Electric Corporation, and build out the remainder as products, needs, and customers are developed.

TELECOMMUNICATIONS-RELATED OBJECTIVES

- Begin operations and generating revenues in 2002.
- Successfully introduce and market the First Generation Applications during 2002 and 2003.
- Complete development of Second Generation Applications in 2002 and 2003 and prepare for market introduction in 2003.
- Take a leadership role in the development of the telecommunications-related infrastructure to support Brookings Harbor quality of life and business community.

- Assure that the infrastructure will be able to meet broader public needs, in such areas as education, distance learning, instructional programming, training, health care, and other areas affecting the community's well being.
- Identify potential business partners to provide value-added services to The Brookings Harbor Fiber Network's customers. Seek to develop partnerships and agreements that are in the community's best interests, to build an infrastructure that will meet public needs and support new and improved municipal services, such as police, fire, and so forth.
- Effectively evaluate all broadband telecommunications infrastructure technologies that will support interactive voice, data, video, and multi-media advanced communications.
- Foster the development of an open system and ensure compatibility among network users and service providers.
- Minimize the community's cost of new infrastructure through leveraging and maximizing the value of in-place assets.

DESCRIPTION OF THE SYSTEM

The physical infrastructure itself will be a high speed, high capacity, wide-area network, initially interconnecting major governmental, municipal, utility, and educational sites in Ashland. In addition, the network will be capable of serving private, institutional, commercial, and residential customers. The network will utilize a SONET ring topology with network operating centers (NOCs) strategically located throughout the area. It would be a hybrid fiber/coaxial cable system that can grow from an initial core network of 11.3 miles of principally 172-strand fiber cable to a fully developed core and distribution network of 110.5 miles when it connects all potential users in all sections of Ashland.

Distribution spurs would utilize fiber optics to a node that could serve 400 or less customers per node via coax. The network design calls for a total of 19 nodes within the Brookings Harbor community. A fully built system would consist of a fiber/coax system with capacity to carry the necessary data for the near-term emerging technological services and allow for growth in the future. We have planned our fiber count to allow each node to be split in thirds, allowing approximately 133 customers per node. The less customers per node, the more bandwidth we can offer. Less is more.

The backbone of the communications system was chosen to pass most of the municipal and public properties in the City as well as other concentrations of business. The route was also selected to follow existing distribution or transmission lines where available.

In addition to the backbone and distribution cable systems, the following equipment will be necessary to make the entire network operational, including:

- Forward and reverse optoelectronics
- Status monitoring equipment
- Emergency Broadcasting System Override Equipment
- Digital Cable Modems

- Digital Set-Top Boxes
- Distribution equipment amplifiers

OVERVIEW OF PROJECT TIME FRAME

The main components of a CATV system are the headend, trunk cable, feeder cable and subscriber drops. There are active and passive devices associated with these components. At this point in time, the Corporation has developed the following eight-phase plan for completing the installation of the main fiber ring, distribution fiber rings, and coaxial plant required to offer CATV service. The Corporation has not completed a detailed work plan for the completion of other segments of the system that will be required to provide non-CATV service. This portion of the system design and implementation planning will be completed during 2002.

MAIN FIBER RING

- Phase 1 - involves hanging support strand down guys and pole hardware, and trenching for underground fiber.
- Phase 2 - involves hanging fiber on support strand, placing it into conduits, splicing all fiber, mounting all power supplies for the main fiber ring, splicing nodes onto the rings, and building the system's headend.

DISTRIBUTION FIBER RINGS

- Phase 3 - involves hanging all support strand down guys and pole hardware and trenching.
- Phase 4 - involves hanging fiber on support strand, placing it into conduit, splicing all fibers, and mounting all power supplies.

COAXIAL PLANT

- Phase 5 - involves hanging support strand for trunk and distribution cables, and mounting power supplies.
- Phase 6 - involves hanging all cables on support strand, splicing all amplifiers, activating cable plant, and installing homes as system activation is completed.
- Phase 7 - involves trenching and installing of conduit, placing cable into conduit, and cable splicing and activation.
- Phase 8 - involves connecting all subscribing homes to the system

The project timeline on the following page shows the projected start and completion dates for each of the seven phases.

Section 4

MARKET ASSESSMENT

This section will provide a summary of the major market-related factors that will affect the viability of the business plans.

CONSUMER AND BUSINESS MARKET RESEARCH RESULTS SUMMARY

INSTITUTIONAL/COMMERCIAL RESEARCH

The Corporation has had conversations with several institutions and commercial interests, listed below, in the Brookings Harborarea to identify their interest in The Brookings Harbor Fiber Network, discuss the types of products and services that they would be interested in, and their willingness to pay for those products and services.

- Brookings Harbor School District
- Brookings Harbor Public Library
- Technology Companies
- Chamber of Commerce
- Port of Brookings Harbor
- City of Brookings
- Curry County

Further Discussion Regarding CATV Services

Generally, there are two types of programming for CATV known as basic and premium. Basic programming may consist of all local stations, local programming, distant stations, superstations, and satellite broadcasts such as news, weather, sports and religious programming. Typically, CATV providers further divide basic channel offerings into two categories of basic and expanded basic. The basic tier generally offers the over-the-air broadcast channels which could be received by a subscriber's antenna, with perhaps one or two other channels. This is the current service provided by the existing franchisee, TCI. Premium stations may consist of movie channels, such as Home Box Office, Cinemax, Show Time, and The Disney Channel.

The basic and premium services are usually made available to the subscriber through tiered programming. For example, a subscriber may pay an additional charge for one or more packages of programs in addition to the basic service.

The existing franchisee currently carries 63 channels of programming, five of which are premium channels and four are pay-per-view channels. A second franchisee will have to meet or exceed the existing programming to generate a competitive edge. Programming costs vary due to discounts given; however, the table below lists the typical estimated costs for programming, assuming that the The Brookings Harbor Fiber Network system will carry programs that are equivalent to the current franchisee system.

CATV Programming Costs

Service	Estimated Cost of Programming
Basic	$3.50 / month per customer
Expanded Basic	$4.00 / month per customer
Premium	60%
Pay-per-View	60%

Over-the-air channels, the stations a CATV company receives normally using a regular television antenna and then retransmits the signal through its plant to the customer, have had no programming costs associated with them until recently. Generally, it has been on a case-by-case basis whether a cable company pays for retransmitting over-the-air channels. Typical charges are 5 to 10 cents per subscriber per month. We have no knowledge of any over-the-air channel charges to the existing City CATV provider. For the purpose of this Business Plan, we have assumed these charges do not exist. As with all programming costs, this needs to be confirmed before The Brookings Harbor Fiber Network embarks into the CATV business.

The Programming Committee will be charged with determining programming of the CATV system. Once the programming is established, the packaging of the tiered services can be accomplished.

Access To Distant Broadcast Signals

Distant Broadcast Signals are defined as television stations from another market imported and carried over the local CATV system. An example of distant stations would be Turner Broadcasting Station and superstations such as WGN and WTBS. The distant stations available to the subscribers will depend upon the programming selections. Another factor affecting the number of distant stations is the copyright fee costs of the stations. This cost is typically a percent of the gross revenue per distant station. A copyright fee of 1.5 percent of gross revenues is typical.

Public and Community Access

The Cable Act allows the franchising authority to establish requirements in the franchise regarding the designation of channels for public, governmental and educational use. Although the City may wish to set aside channel capacity and studio facilities for public use, it is not a requirement unless so specified by the franchising authority.

In regard to community access, a CATV system is required to set aside a percentage of channel capacity based upon the number of activated channels. The CATV system can use such channels until they are requested by a community user. The channel capacity requirements are as follows:

⇒ Less than 36 activated channels	0%
⇒ 36 to 54 activated channels	10%
⇒ 55 channels or more	15%

The City may wish to consider making more channels available for community use than the requirement. However, for the purposes of this Business Plan, we have assumed that the City system will allocate 8 channels in accordance with the FCC guideline.

Extended Services

A two-way CATV/telecommunications system has the potential of providing audio, video and data communications beyond the typical entertainment services. Of particular interest to a utility system and city government are functions which would be classified as distribution automated systems and community services. Earlier in this Business Plan, several possible services which could be provided on a two-way interactive CATV system were listed.

Each of the listed services is a possible revenue generator, or some functions may be provided as public service. It is therefore beneficial to design the CATV system to accommodate such functions as the demand requires. The Electric Corporation plans to design the system such that it will be able to have the capability to handle two-way communication and use of fiber optics in the main trunk feeders of the system, as a minimum.

- **Business Applications**
  - ⇒ Corporate communications
  - ⇒ Sharing patient records and images
  - ⇒ Medical administration
  - ⇒ Distance learning
  - ⇒ Broadband/video conferencing needs

Product developments efforts for this group of products and services will commence in 2002 and 1999, and market roll-out is expected to begin in 2000.

In some cases, such as remote meter turn-on/turn-off and outage notification, the Electric Corporation will be responsible for the development of the products and services. In other cases, such as Internet access and other products, the delivery of certain content over the network will occur through partnerships with outside providers or through the leasing of dark fiber on the The Brookings Harbor Fiber Network.

MARKET POTENTIAL AND PROJECTED PENETRATION

FIRST GENERATION APPLICATIONS

There is no totally accurate means to estimate the number of subscribers to a telecommunications service. However, sophisticated market surveys using statistical methods can be conducted to obtain an estimate of potential subscribers based on given market factors. These methods can estimate the potential number of subscribers based on a given confidence level and a given percent error. Further, the City needs to know if potential customers may be interested in services other than CATV, for example information-based services such as outage notification and on-line billing.

For purposes of this Business Plan, the following market potential and penetration projections has been used in the development of the financial analysis discussed in Section 8.

Market Potential and Penetration

Application	Market Potential	Projected Penetration
City Operations		
Public information dissemination	100%	50%
Direct public input	100%	25%
Internet access	100%	100%
Business Applications		
High-speed access to the Internet	100%	50%
Lease dark fiber to telephone companies	100%	0%
Lease dark fiber and/or general network capacity for business needs	100%	20%
CATV		
Basic service	100%	50%
Premium service	100%	50%
Pay-per-view videos and events	100%	50%
Other Consumer Applications		
Internet Connectivity		
Residential	100%	50%
Business	100%	50%

The market potential estimates and penetration projections for the non-CATV services are based upon management's best estimates given the information in hand. With regards to CATV service, as a point of reference, it has been reported that there are approximately 2800 subscribers in the existing Brookings Harbor CATV franchise area, with approximately 3100 homes passed with coax. This represents an 87% market penetration in the homes passed. It should be noted that this is a very good market penetration rate, based upon the results of the consumer research conducted.

COMPETITION

The entry into the CATV entertainment business as a competing franchisee has obstacles and business and political risks. These may include local franchising, federal laws, programming availability, capital requirements and competition.

The 1984 Cable Communications Act and subsequent amendments and changes, including the 1992 amendment (collectively, the Cable Act), allows the franchising authority to grant more than one franchise within its jurisdiction. Thus, a franchise would be required to own and operate a CATV system within Brookings Harboras with any other potential franchise.

The CATV programming industry does not appear to be overly anxious to provide competitive rates for overbuild CATV systems or alternative technologies. Therefore, it may be difficult to obtain the program discounts that a multiple system operator (MSO) may be able to negotiate. However, recent court rulings now prohibit programming owners to offer different rates for the same type of service. In any event, it is likely the City may not be able to enjoy volume discounts that might be offered to a larger vertically integrated CATV company. This could, and more likely will, result in higher programming costs to the City than its competition. Further, some MSOs partially own the majority of the programming services. To demonstrate that an entity is a recognized organization established to provide CATV services, the franchise should be obtained prior to negotiations with the programming services. For the purposes of this Business Plan, it is assumed that the City will not have any difficulty obtaining rates which are reasonably comparable to what the existing competition may be paying.

Construction and initial operation of a CATV system is capital intensive. Typically, existing CATV systems are purchased with 10 to 40 percent equity, and the remainder being financed. Revenue bonds may be required to obtain the capital to construct the CATV facilities, or a combination of short-term financing and bonds may be required. For the purpose of our analyses, we assumed the capital needed to build the system would be 100 percent debt financed.

Competition to a new CATV system may take various forms. The most obvious competition is the existing franchisee, which may use various marketing strategies to maintain or increase its market share against the overbuild system. One common strategy is to discount its current subscriber rate for basic service. The second franchisee is most vulnerable in the start-up period due to initial capital costs. Assuming that the overbuild system is successful in competing against the existing franchisee, market share may be challenged by alternative technologies. Current alternative technologies include:

- **Video Cassette Recorder (VCR)** - Many premium movies are available in video resale and rental markets before they are available on CATV movie services. Industry surveys indicate that VCR owners are more likely to subscribe to CATV services than non-VCR owners, thus not generating effective competition.

- **Over-the-Air Broadcasts** - These broadcasts are ultra-high frequency (UHF) and very high frequency (VHF) broadcast signals. Competition from this source is limited due to the availability of stations and the quality of the signals in the CATV franchise area.

- **Home Satellite Receivers (Earth Stations)** - This media consists of the installation of a six- to eight-foot dish and tuner, with an approximate cost to the owner of $2,000, or less. Signals are received from satellites. Most programming services now scramble their signal transmissions and charge the dish owner a fee for descrambling to receive the services. In general, this technology is not popular due to the scrambling and does not present effective competition where CATV services are available.

Using a similar concept, the National Rural Telecommunications Cooperative (NRTC), formed in 1986, is providing a variety of programming services to dish owners. This programming includes superstations, premium movie channels, sports stations, weather channels and other programming available for a CATV system. Thus, the range of programming is not as limited. The services sold are available only through rural utility systems by virtue of the NRTC Charter. The services can be made available outside the utility service area.

- **Direct Broadcast Satellite** - Although this technology is similar to the Earth Stations technology, it uses a stronger encoded signal transmission from the satellite to user. This allows a smaller dish, typically two- to six-feet, to be used either in a yard or on a roof top. Currently, there are an increasing number of channels available for this technology (100+) and the Earth Stations technology is generally attractive in areas where CATV services do not exist. However, DBS companies such as DirecTV, USSB, and PrimeStar intend to compete heavily in the wired CATV market. DirecTV has purportedly the capability to process and transmit as many as 216 video and audio channels simultaneously. Current offerings provide a reasonable programming line-up for about $1 a day. Capital costs to purchase the DBS receiving equipment can vary from about $700 to $1,600, depending upon the number of TVs and receivers desired for the service. Installation is about $200 extra.

  As an item to consider regarding competition, USSB estimates that in seven years, almost 40 percent of all television households may receive programming from DBS equipment.

- **Wireless CATV** - The wireless CATV concept is based on line of sight transmission, such as microwave. These systems are often referred to as multi-channel, multi-point distribution service (MMDS). This media technology makes use of channel allocations to various services described later. Depending upon the power of the transmitter, the MMDS can have an optimum range of approximately 30 miles.

  The advantages of the MMDS are that no franchise fees are required nor is there any cable plant to install and maintain. In general, the operation costs are less than that of a typical CATV system. However, the current capital cost of providing the equipment to the individual customers will generally be more than that of a typical CATV system.

  The disadvantages of wireless CATV include a limited number of channel availability, current lack of two-way communications media, licensing availability of the existing channels, rain fade and interference of obstructions in the signal path.

  The channel frequencies available to MMDS consist of two channels allocated to multi-point distribution services (MDS). One common function of the MDS was to provide pay TV to hotels. Eight channels are allocated to MMDS for 24-hour programming. The licenses for these channels were awarded by the FCC to lottery winners. There are 20 channels allocated to educational and non-profit institutions. These systems are known as Instructional Television Fixed Service (ITFS) and generally require a small percentage of the available 24-hour programming. Consequently, the FCC has made these channels available for other uses such as MMDS. The Operational Fixed Service ("OFS) has three channel allocations for voice and data but consideration is being given full-time programming transmission.

- CATV

  The Corporation will hire a sales person to implement an aggressive marketing campaign aimed at attracting subscribers to The Brookings Harbor Fiber Network's CATV service. The marketing strategy will be implemented on a neighborhood-by-neighborhood basis as the network is installed throughout the City. Advertising programs and other supporting marketing material will be developed to support the efforts of the sales person.

- **Other Consumer Applications**

  In concert with efforts to attract CATV subscribers, The Brookings Harbor Fiber Network with work with existing and new Internet service providers to offer enhanced Internet access services to consumers throughout Ashland.

All of the above marketing efforts will be coordinated by a newly hired Marketing Manager, as discussed in Section 7.

PRICING

FIRST GENERATION APPLICATIONS

In deciding how and what to charge customers, We have considered the following factors:

- In general, transmission and switching capacity are typically purchased and built in large segments. As a result, there are very high initial fixed costs. Variable costs of delivering additional or incremental applications, however, are relatively small.

- Transmission bandwidth cannot be treated as a resource in the same way as can electricity or water, as bandwidth is available at all times and is not consumed by use. It is merely occupied briefly by each message, or data packet. The saturation of a network node may not have a direct financial effect but the traffic at the time suffers a delay in transmission.

- Most of the costs are incurred in the network infrastructure and almost none in maintaining the data traffic. The incremental cost of an additional transmission is effectively zero, even if one or more of the network nodes involved is heavily used. All the benefits however, are derived from the applications and not from the infrastructure itself.

- There are non-monetary costs if the uses exceed the network's capacity, in the form of delay, disruption, user frustration, and even the occasional node-failure. As the network approaches saturation, there is no cost-based balancing mechanism. There may be a reduction in demand however, from users becoming impatient and delaying their transmissions.

- Consistency of transmission speed and the synchronicity of parallel data streams will have value to some customers but not to others. Some services value speed for prompt

transmission of single streams of data (such as audio in telephone conversations) while others value synchronicity for transmission of multiple streams of data (such as audio and video in video-telephone, video-conferencing).

- Generally, the simpler services, such as e-mail, bulletin boards and file transfer, are less disturbed by delays and can absorb longer delays if necessary.

With these factors in mind, the Corporation has assumed the following pricing structure for the First Generation Applications for use in the development of its financial projections in Section 8.

Preliminary Pricing Structures

Application	Pricing
	See Financial
Business Applications	
High-speed access to the Internet	Pro Forma
Lease dark fiber to telephone companies	
Lease dark fiber and/or general network capacity for business needs	
CATV	
Basic service	
Premium service	
Pay-per-view videos and events	
Other Consumer Applications	
Internet access	

SECTION 6

BUSINESS FORMATION

The purpose of this section is discuss certain issues related to the formation of The Brookings Harbor Fiber Network, including how it will be integrated within the Electric Corporation, staffing requirements and a discussion of the Corporation's legal authority to create The Brookings Harbor Fiber Network.

ORGANIZATION AND STAFFING PLAN

The Brookings Harbor Fiber Network is proposed as a Non-Profit Corporation formed by the City of Brookings and the Port of Brookings Harbor The Corporation will need to hire an overall Director (CEO). He will report directly to the Board of Directors of the Corporation and will have day-to-day responsibility for the successful roll-out of the telecommunications network and establishing connections with CATV subscribers. Reporting to the Director will be a marketing and operations staff with responsibility for the successful roll-out of the telecommunications network and customer solicitation.

To complete the required system build-out, we will out-source the initial construction. If required to meet higher than expected market demand for its services, The Brookings Harbor Fiber Network will be able to add field resources, probably through a contractor, to meet the needs of its customers.

Initially, The Brookings Harbor Fiber Network will also hire one sales person to recruit CATV subscribers. As noted in the previous sections, this individual will follow the installation crew as it moves throughout the community building the network. This individual will report to the Telecommunciations supervisor.

Finally, the Director will be supported by a newly hired Marketing Manager. This person will be hired by the Corporation.The Finance Department of the City of Brookings will be responsible for the monthly billing and collections function.

BUSINESS PARTNERSHIPS

The Brookings Harbor Fiber Network is dedicated to the proposition of working with all interested service providers and potential users of the system to maximize the benefits of that system accruing to the citizens and businesses within the Brookings Harbor community.

PROGRAMMING COMMITTEE

The Cable Act prohibits a municipality from exercising any editorial control regarding the content of a CATV service. It will be necessary to establish a Programming Committee which is representative of the community to select the programming to be shown on the CATV system.

This procedure is generally accomplished in the form of a City ordinance which commissions the committee, establishes the number of members, the length of the member's term, and how the members are to be selected.

The Corporation will work with other City officials and community representative to charter the Programming Committee, establish its responsibilities, and develop the appropriate process to identify community members to serve on it.

SECTION 7

FINANCIAL ANALYSIS

The purpose of this section is to summarize the input assumptions that were used in the Corporation's five-year financial analysis of the proposed business venture and to present the results of that analysis.

Appendix F contains the detailed output of the financial model. This model consists of the following schedules:

- Schedule 1 - Income Summary
- Schedule 2 - Cash Flow Statement
- Schedule 3 - Debt Summary
- Schedule 4 - Revenues/Operational Savings
- Schedule 5 - Operating Expenses
- Schedule 6 - Capital Expenditures
- Schedule 7 - Depreciation and Amortization
- Schedule 8 - Input Assumptions

INPUT ASSUMPTIONS

The Corporation's financial analysis was based largely upon the following input assumptions (except where noted, these input assumptions are detailed in Schedule 8 in Appendix F):

- Capital expenditures (Schedule 6) total $3.2 million—$2.3 million in the first year and $843,000 in year two. This consists of $2 million for the network-related fiber and equipment, $900,000 thousand for construction, and an additional $0.2 million for computers and other equipment and tools.
- Depreciation and amortization (Schedule 7) totals $900,000 over the five-year period.
- Inflation rate used was 3.5% per year.
- Interest rate on bonds used to finance the business was assumed to be 4.5% per annum.
- It was assumed that the network would be fully installed by the end of the second year and, as a result, all residences would have BHFN's CATV service available to them at that point in time. However, to be conservative, it was assumed that the first CATV subscriber would not occur until the second year of operations.
- With regards to CATV, the Corporation used the following assumptions:
  - ⇒ 50% of the residences would subscribe to BHFN's CATV Basic Service as the network is built out, with 98% of those subscribers electing Expanded Basic Service.
  - ⇒ 90% of the Basic Service subscribers would also sign up for Premium Service.
  - ⇒ 22% of the Basic Service subscribers would also periodically choose Pay-Per-View Services.

- To be conservative, the Corporation included only the following additional sources of revenues in its financial projections:
  - ⇒ Business internet service provided by BHFN.
  - ⇒ Residential internet service provided by BHFN.
  - ⇒ Business internet service provided by another local ISP using BHFN's network.
  - ⇒ Residential internet service provided by another local ISP using BHFN's network.
  - ⇒ Dark fiber leases.
- With regards to business and residential internet service provided by BHFN, the following assumptions were used:
  - ⇒ Business service starts in year one with 50 customers at $70 per month, growing to 210 customers in year five.
  - ⇒ Residential service starts in year one with 100 customers at $40 per month, growing to 1200 customers in year five.
- With regards to business and residential internet service provided by other local ISPs over BHFN's network, the following assumptions were used:
  - ⇒ Business usage over BHFN's network begins in year two with 344 customers at a capacity lease rate of $15 per month, growing to 458 customers in year five.
  - ⇒ Residential usage over BHFN's network begins in year two with 170 customers at a capacity lease rate of $15 per month, growing to 223 customers in year five.
- Staffing grows from a total of 5.7 full-time equivalents (FTEs) with salaries totaling $0.28 million in year one to 6.7 FTEs in year five with total salaries of $0.33 million.
- Other miscellaneous expenses (e.g., pole attachment charges, telephone service, marketing, centralized services from the City, etc.) are also shown in Schedule 8.

RESULTS OF FINANCIAL ANALYSIS

The results of the Corporation's financial analysis are summarized below:

- The installation of the BHFN network and other start-up expenditures will require outside bond financing totaling $5.5 million.
- Net income projections show losses of $1.5 million in year one and $1.0 million in year two. However, net income turns positive in year four, showing a profit of $41,000 in year four growing to $264,000 in year five.
- Cumulative cash flow turns positive in year 4.
- Revenues and operational savings grow from $0.02 million in year one to $2.5

million in year five, totaling $7.7 million over the five year period. Of the five-year total, CATV-related services, other services, and operational savings represent approximately 76%, 21%, and 3%, respectively.

SECTION 8

RISK ASSESSMENT

The purpose of this section is identify the most significant technical, marketing, financial, and competitive risks facing the Corporation as it enters the telecommunications market. Additionally, we will discuss the specific strategies that will be taken by the Corporation to manage these risks.

TECHNOLOGY ISSUES AND RISKS

The Brookings Harbor Fiber Network's infrastructure, products, and services all involve rapidly changing technologies. As a result, there are a number of technology-related issues and risks which The Brookings Harbor Fiber Network must address, including:

- The Brookings Harbor Fiber Network technologies not performing up to expectations.
- Integration of technologies being more difficult than expected.
- Lack of alternative back-up technologies to choose from.
- A competing technology coming in at a lower per-point price.
- Higher-capability technologies becoming cost-competitive sooner than expected.

Responses to these risks include:

- The system being proposed by the Corporation has been designed to fully support digital technology, which is becoming increasingly available and demanded by consumers and businesses alike.
- Maintain technological independence by not locking The Brookings Harbor Fiber Network to any set of vendors.
- Develop contingency plans and back-up strategies in case preferred technologies do not perform, or integrate, as expected.
- Form strategic alliances with companies offering leading edge products and largely avoid becoming a hardware/software developer.
- Assume technical modesty, using conservative estimates for the technical and price performance, and lifetimes of systems.

BUSINESS ISSUES AND RISKS

Beyond having functional technologies, The Brookings Harbor Fiber Network faces significant challenges as it enters this new market. Risks related to the general market include:

- Slower than expected pace of consumer and business adoption of new energy-related products and services.
- Buyer confusion due to the array of choices and conflicting messages regarding the future of the electric utility, telecommunications, and CATV industries.

- Growth in the community's general need for high-speed video and date transfer capability.
- Difficulties inherent in selling mass-market consumer services.

Risks related to products include:

- Enough products to sell to cover infrastructure costs.
- Designing products that match customers' high-value needs.
- Being able to meet customers' price points.
- Availability of products on schedule.
- Delivering products at predicted costs.

Risks related to sales include:

- Level of competition within the CATV industry.
- Caution about The Brookings Harbor Fiber Network as a new and unknown provider of telecommunications-related products and services.
- Customers' willingness to pay for products and services offered by The Brookings Harbor Fiber Network.

Risks related to competition include:

- Competition from multiple directions, known and unknown.
- Price undercutting by a "deep-pocket" competitor.
- The need for marketing muscle and staying power.
- The need to move quickly and aggressively.

The Brookings Harbor Fiber Network will employ a number of strategies to respond to the realities of this challenging marketplace. These strategies include:

- Use realistic and conservative sales forecasts acknowledging the slow market penetration that can be anticipated.
- Target early adopters who are ready for change.
- Conduct continuous market research.
- Be honest about product availability schedules.
- Share the risk with other business partners

Brookings Harbor Fiber Network
Financial ProFormas

SCHEDULE 1: INCOME SUMMARY						
	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
Revenues/Operational Savings (Schedule 4)	$116,217	$1,046,840	$1,714,503	$2,273,119	$2,576,354	$7,727,033
Cash Operating Expenses (Schedule 5)	$775,785	$1,626,396	$1,833,526	$1,810,211	$1,896,666	$7,942,584
Operating Income (Loss)	($659,569)	($579,556)	($119,023)	$462,909	$679,687	($215,551)
Depreciation/Amortization (Schedule 7)	$149,809	$194,999	$194,999	$194,999	$194,999	$929,804
Interest Expense (Schedule 3)	$244,406	$238,296	$232,339	$226,530	$220,867	$1,162,438
Net Income (Loss)	($1,053,784)	($1,012,851)	($546,360)	$41,380	$263,821	($2,307,793)

Brookings Harbor Fiber Network
Financial Pro Formas

SCHEDULE 2: CASH FLOW STATEMENT						
	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
Net Income (Schedule 1)	($1,053,784)	($1,012,851)	($546,360)	$41,380	$263,821	($2,307,793)
Plus:						
Depreciation & Amortization (Schedule 1)	$149,809	$194,999	$194,999	$194,999	$194,999	$929,804
Increase (Decrease) in Accounts Payable	$0	$0	$0	$0	$0	$0
Bond Proceeds (Schedule 3)	$5,724,930	$0	$0	$0	$0	$5,724,930
Less:						
Capital Expenditures (Schedule 6)	$2,353,320	$843,800	$0	$0	$0	$3,197,120
Net Change in Reserve Cash	$2,467,635	($1,661,652)	($351,362)	$236,379	$458,820	
Beginning Cash	$0	$2,467,635	$805,983	$454,622	$691,001	
Ending Reserve Cash	$2,467,635	$805,983	$454,622	$691,001	$1,149,821	

Brookings Harbor Fiber Network
Financial Pro Forma

SCHEDULE 3: DEBT SUMMARY						
	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
Amortization of/Interest on Bond Debt						
Interest Rate	4.50%					
Amortization	$137,500	$134,063	$130,711	$127,443	$124,257	$653,974
Interest	$244,406	$238,296	$232,339	$226,530	$220,867	$1,162,438
Total Amortization and Interest	$381,906	$372,359	$363,050	$353,973	$345,124	$1,816,412
Bond Debt						
Beginning Balance	$0	$5,362,500	$5,228,438	$5,097,727	$4,970,283	
Borrowings	$5,500,000	$0	$0	$0	$0	
'% Amortized	2.50%	2.50%	2.50%	2.50%	2.50%	
Ending Balance	$5,362,500	$5,228,438	$5,097,727	$4,970,283	$4,846,026	
Average Balance	$5,431,250	$5,295,469	$5,163,082	$5,034,005	$4,908,155	

Brookings Harbor Fiber Network
Financial Pro Forma

SCHEDULE 4: REVENUES/OPERATIONAL SAVINGS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
CATV (Schedule 8)						
Basic	$7,292	$67,422	$173,001	$231,845	$245,640	$725,199
Expanded Basic (Incremental to Basic)	$8,632	$84,649	$247,238	$369,122	$399,730	$1,109,371
Premium	$5,400	$52,956	$154,670	$230,920	$250,067	$694,013
Pay-Per-View	$1,056	$10,356	$31,378	$56,251	$82,515	$181,555
Additional Sets	$0	$0	$0	$0	$0	$0
Analog Decoder Rent	$54	$530	$1,547	$2,309	$2,501	$6,940
Digital Decoder Rent	$3,783	$37,098	$108,355	$161,772	$175,186	$486,194
Total CATV Revenue	$26,217	$253,010	$716,188	$1,052,219	$1,155,639	$3,203,273
Other Services (Schedule 8)						
Business Internet-AFN	$42,000	$94,000	$131,000	$173,000	$177,400	$617,400
Business Internet-local ISP's	$0	$36,550	$34,255	$37,681	$40,681	$149,167
Residential Internet-AFN	$48,000	$265,000	$372,500	$439,500	$591,000	$1,716,000
Residential Internet-local ISP		$306,000	$306,000	$336,600	$363,834	$1,272,348
Dark Fiber Lease	$0	$17,280	$34,560	$69,120	$172,800	$293,760
Dark Fiber Lease for Other Uses	$0	$45,000	$90,000	$135,000	$45,000	$315,000
Total Other Services Revenue	$90,000	$763,830	$968,315	$1,190,901	$1,390,715	$4,403,761
Operational Savings (Schedule 8)	$0	$0	$0	$0	$0	$0
Other City Operational Savings (Schedule 8)	$0	$30,000	$30,000	$30,000	$30,000	$120,000
Total Revenues/Operational Savings (Schedule 8)	$116,217	$1,046,840	$1,714,503	$2,273,119	$2,576,354	$7,727,033

Brookings Harbor Fiber Network
Financial Pro Forma

SCHEDULE 5: OPERATING EXPENSES	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
Salaries (Schedule 8)	$437,268	$452,572	$401,568	$415,623	$430,170	$2,137,201
Travel & Entertainment (Schedule 8)	$7,200	$7,452	$7,713	$7,983	$8,262	$38,610
Vehicle Expenses (Schedule 8)	$73,760	$147,520	$92,200	$92,200	$92,200	$497,880
Office Rent	$9,000	$12,000	$12,000	$12,000	$12,000	$57,000
Pole Attachments (Schedule 8)	$7,402	$14,805	$14,805	$14,805	$14,805	$66,622
Franchise Fee - CATV (Schedule 8)	$1,311	$12,651	$35,809	$52,611	$57,782	$160,164
Telephone (Schedule 8)	$2,400	$2,484	$2,571	$2,661	$2,754	$12,870
Office Utilities (Schedule 8)	$1,200	$1,242	$1,285	$1,330	$1,377	$6,435
Postage & Shipping (Schedule 8)	$3,600	$3,726	$3,856	$3,991	$4,131	$19,305
Office Supplies (Schedule 8)	$2,400	$2,484	$2,571	$2,661	$2,754	$12,870
Marketing & Advertising (Schedule 8)	$48,000	$49,680	$51,419	$53,218	$55,081	$257,398
Public Relations (Schedule 8)	$30,000	$31,050	$32,137	$33,262	$34,426	$160,874
Dues & Subscriptions (Schedule 8)	$1,200	$1,242	$1,285	$1,330	$1,377	$6,435
Office Repairs & Mintencnance (Schedule 8)	$1,800	$1,863	$1,928	$1,996	$2,066	$9,652
Centralized Services From City (Schedule 8)	$100,000	$103,500	$107,123	$110,872	$114,752	$536,247
System Operations & Maintenance (Schedule 8)	$0	$25,000	$75,000	$75,000	$75,000	$250,000
Programming Expenses (Schedule 8)	$4,245	$41,625	$122,255	$188,167	$216,730	$573,022
T-3 connectivity		$348,000	$348,000	$348,000	$348,000	$348,000
Internet Modems (Schedule 8)	$45,000	$180,000	$270,000	$330,000	$423,000	$1,248,000
Set Top Boxes (Schedule 8)		$187,500	$250,000	$62,500	$6,250	
Total Operating Expenses	$775,785	$1,626,396	$1,833,526	$1,810,211	$1,896,666	$7,942,584

Brookings Harbor Fiber Network
Financial Pro Forma

SCHEDULE 6: CAPITAL EXPENDITURES						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Capital Expenditures	$1,693,320	$360,000	$0	$0	$0	$2,053,320
Construction Expenditures	$440,000	$463,800	$0	$0	$0	$903,800
Computers & System Status Equipment	$150,000	$0	$0	$0	$0	$150,000
Office Furniture & Fixtures	$15,000	$0	$0	$0	$0	$15,000
Studio Equipment	$0	$0	$0	$0	$0	$0
Technician Tools & Equipment	$10,000	$5,000	$0	$0	$0	$15,000
Construction Tools & Equipment	$45,000	$15,000	$0	$0	$0	$60,000
Total Capital Expenditures	$2,353,320	$843,800	$0	$0	$0	$3,197,120

Brookings Harbor Fiber Network
Financial Pro Forma

SCHEDULE 7: DEPRECIATION AND AMORTIZATION								
	Cost	Depreciation Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
Total Capital Expenditures		5.00%						
Year 1	$1,693,320		$84,666	$84,666	$84,666	$84,666	$84,666	$423,330
Year 2	$360,000			$18,000	$18,000	$18,000	$18,000	$72,000
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$2,053,320		$84,666	$102,666	$102,666	$102,666	$102,666	$495,330
Total Construction Expenditures		5.00%						
Year 1	$440,000		$22,000	$22,000	$22,000	$22,000	$22,000	$110,000
Year 2	$463,800			$23,190	$23,190	$23,190	$23,190	$92,760
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$903,800		$22,000	$45,190	$45,190	$45,190	$45,190	$202,760
Computers & System Status Equipment		20.00%						
Year 1	$150,000		$30,000	$30,000	$30,000	$30,000	$30,000	$150,000
Year 2	$0			$0	$0	$0	$0	$0
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$150,000		$30,000	$30,000	$30,000	$30,000	$30,000	$150,000
Office Furniture & Fixtures		14.29%						
Year 1	$15,000		$2,143	$2,143	$2,143	$2,143	$2,143	$10,714
Year 2	$0			$0	$0	$0	$0	$0
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$15,000		$2,143	$2,143	$2,143	$2,143	$2,143	$10,714

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Studio Equipment		14.29%						
Year 1	$0		$0	$0	$0	$0	$0	$0
Year 2	$0			$0	$0	$0	$0	$0
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$0		$0	$0	$0	$0	$0	$0
Technician Tools & Equipment		20.00%						
Year 1	$10,000		$2,000	$2,000	$2,000	$2,000	$2,000	$10,000
Year 2	$5,000			$1,000	$1,000	$1,000	$1,000	$4,000
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$15,000		$2,000	$3,000	$3,000	$3,000	$3,000	$14,000
Construction Tools & Equipment		20.00%						
Year 1	$45,000		$9,000	$9,000	$9,000	$9,000	$9,000	$45,000
Year 2	$15,000			$3,000	$3,000	$3,000	$3,000	$12,000
Year 3	$0				$0	$0	$0	$0
Year 4	$0					$0	$0	$0
Year 5	$0						$0	$0
Total	$60,000		$9,000	$12,000	$12,000	$12,000	$12,000	$57,000
Total Depreciation & Amortization			$149,809	$194,999	$194,999	$194,999	$194,999	$929,804

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SCHEDULE 8: INPUT ASSUMPTIONS	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotals
GENERAL						
Expense Assumptions						
Inflation Factor						
This Period	0.00%	3.50%	3.50%	3.50%	3.50%	
Cumulative	0.00%	3.50%	7.12%	10.87%	14.75%	
Amortization of/Interest on Bond Debt						
Interest Rate	4.50%	per annum, amortized over 20 years				
Amortization	$137,500	$134,063	$130,711	$127,443	$124,257	$653,974
Interest	$244,406	$238,296	$232,339	$226,530	$220,867	$1,162,438
Total Amortization and Interest	$381,906	$372,359	$363,050	$353,973	$345,124	$1,816,412
Bond Debt						
Beginning Balance	$0	$5,362,500	$5,228,438	$5,097,727	$4,970,283	
Borrowings	$5,500,000	$0	$0	$0	$0	$5,500,000
'% Amortized	2.50%	2.50%	2.50%	2.50%	2.50%	
Ending Balance	$5,362,500	$5,228,438	$5,097,727	$4,970,283	$4,846,026	
Average Balance	$5,431,250	$5,295,469	$5,163,082	$5,034,005	$4,908,155	
Reserve Cash						
Ending Reserve Cash Required						
Projected Before Interest Income						
Surplus (Deficit)	$0	$0	$0	$0	$0	
REVENUE						
Miles of Construction						
Aerial	$0					$0
Underground						$0
Total	$0	$0	$0	$0	$0	$0
Cumulative Miles of Construction						
Aerial	$0	$0	$0	$0	$0	
Underground	$0	$0	$0	$0	$0	
Total	$0	$0	$0	$0	$0	

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Residential Passings						
New Passings	1,000	2,000	0	0	0	3,000
New Passings Due to Housing Growth	50	50	50	50	50	250
Total New Residential Passigns	1,050	2,050	50	50	50	3,250
Cumulative Residential Passings	1,050	3,100	3,150	3,200	3,250	
CATV Saturations						
Basic (BS) (%RP)	35.00%	50.00%	50.00%	50.00%	50.00%	
Disconnects (%BS)	2.50%	2.50%	2.50%	2.50%	2.50%	
Expanded Basic (%BS)	98.00%	98.00%	98.00%	98.00%	98.00%	
Premium (%BS)	90.00%	90.00%	90.00%	90.00%	90.00%	
Pay Per View (%BS)	22.00%	22.00%	22.00%	22.00%	22.00%	
Add Sets (%BS)	0.00%	0.00%	0.00%	0.00%	0.00%	
Analog Devices Needed (%BS)	3.00%	3.00%	3.00%	3.00%	3.00%	
Digital Decoders Needed (%BS)	97.00%	97.00%	97.00%	97.00%	97.00%	
CATV Subscriber Rates						
Basic	$8.82	$9.13	$9.45	$9.78	$10.12	
Expanded Basic (Incremental to Basic Rate)	$14.68	$15.19	$15.73	$16.28	$16.85	
Premium (Average)	$10.00	$10.35	$10.71	$11.09	$11.48	
Pay Per View (Average)	$4.00	$4.14	$4.28	$4.43	$4.59	
Add Sets	$0.30	$0.31	$0.32	$0.33	$0.34	
Analog Devices Rent	$3.00	$3.11	$3.21	$3.33	$3.44	
Digital Decoders Rent	$6.50	$6.73	$6.96	$7.21	$7.46	
Installation - Basic	$20.00	$20.70	$21.42	$22.17	$22.95	
Installation - Add Sets	$5.00	$5.18	$5.36	$5.54	$5.74	
CATV - Basic Subscribers						
Beginning	0	100	848	1,826	2,031	
Installs	100	750	1,000	250	25	2,125
Disconnects	0	3	21	46	51	120
Ending	100	848	1,826	2,031	2,005	
Average	50	474	1,337	1,928	2,018	
Revenue	$7,292	$67,422	$173,001	$231,845	$245,640	$725,199
% Residential Passings	4.76%	15.28%	42.44%	60.27%	62.09%	

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
CATV - Expanded Basic Subscribers						
Beginning	0	98	831	1,790	1,990	
Net Additions	98	733	959	200	-25	1,965
Ending	98	831	1,790	1,990	1,965	
Average	49	464	1,310	1,890	1,977	
Revenue	$8,632	$84,649	$247,238	$369,122	$399,730	$1,109,371
% Basic Subscribers	98.00%	98.00%	98.00%	98.00%	98.00%	
CATV - Premium Subscribers						
Beginning	0	90	763	1,644	1,828	
Net Additions	90	673	881	184	(23)	1,804
Ending	90	763	1,644	1,828	1,804	
Average	45	426	1,203	1,736	1,816	
Revenue	$5,400	$52,956	$154,670	$230,920	$250,067	$694,013
% Basic Subscribers	90.00%	90.00%	90.00%	90.00%	90.00%	
CATV - Pay-Per-View						
Purchases to Date (Beginning)	0	22	208	610	1,057	
New Purchases	22	186	402	447	441	1,498
Purchases to Date (Ending)	22	208	610	1,057	1,498	
Revenue	$1,056	$10,356	$31,378	$56,251	$82,515	$181,555
% Basic Subscribers	22.00%	22.00%	22.00%	22.00%	22.00%	
CATV - Additional Set Subscribers						
Beginning	0	0	0	0	0	
Net Additions	0	0	0	0	0	0
Ending	0	0	0	0	0	
Average	0	0	0	0	0	
Revenue	$0	$0	$0	$0	$0	$0
% Basic Subscribers	0.00%	0.00%	0.00%	0.00%	0.00%	
CATV - Analog Decoders Needed						
Beginning	0	3	25	55	61	
Net Additions	3	22	29	6	(1)	60
Ending	3	25	55	61	60	

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Average	2	14	40	58	61	
Revenue	$54	$530	$1,547	$2,309	$2,501	$6,940
% Basic Subscribers	3.00%	3.00%	3.00%	3.00%	3.00%	
CATV - Digital Decoders Needed						
Beginning	0	97	822	1,772	1,970	
Net Additions	97	725	949	198	(25)	1,945
Ending	97	822	1,772	1,970	1,945	
Average	49	460	1,297	1,871	1,957	
Revenue	$3,783	$37,098	$108,355	$161,772	$175,186	$486,194
% Basic Subscribers	97.00%	97.00%	97.00%	97.00%	97.00%	
Other Services - Business Internet-BHFN						
Subscribers	50	100	150	200	210	210
Monthly Rate	$70	$70	$70	$70	$70	
Annual Revenue	$42,000	$84,000	$126,000	$168,000	$176,400	$596,400
Installation	$100	$10,000	$5,000	$5,000.00	$1,000.00	$21,000
Other Services - Residential Internet-BHFN						
Subscribers	100	500	750	900	1,200	1,200
Monthly Rate	$40	$40	$40	$40	$40	
Annual Revenue	$48,000	$240,000	$360,000	$432,000	$576,000	$1,656,000
Installation	$50	$25,000	$12,500	$7,500.00	$15,000.00	$60,000
Other Services - Business Internet-local ISP						
Subscribers	0	170	187	206	223	223
Monthly Rate	$15	$15	$15	$15	$15	
Annual Revenue		$30,600	$33,660	$37,026	$40,086	$141,372
Installation	$35	$5,950	$595	$654.50	$595.00	$7,795
Other Services - Residential Internet-local ISP						
Subscribers	0	1,530	1,683	1,851	2,004	2,004
Monthly Rate	$15	$15	$15	$15	$15	
Annual Revenue	$0	$275,400	$302,940	$333,234	$360,774	$1,272,348
Installation	$20	$30,600	$3,060	$3,366.00	$3,060.00	$40,086
Other Services - Dark Fiber Lease						
Subscriber/miles ($ per fiber per route-mile per year ($/FMY).	0	5	10	20	50	85
Monthly Rate(per mile)	$288	$288	$288	$288	$288	
Annual Revenue	$0	$17,280	$34,560	$69,120	$172,800	$293,760
Installation(per engineered drop) $500						

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Other Services - Dark Fiber Lease for Other Uses						
Subscribers on Services(Home security/Telephony, etc)	0	500	1,000	1,500	500	3,500
Monthly Rate	$5	$5	$5	$5	$5	
Annual Revenue	$0	$30,000	$60,000	$90,000	$30,000	$210,000
Installation	$30	$15,000	$30,000	$45,000.00	$15,000.00	$105,000
Utility Operational Savings	$0	$0	$0	$0	$0	$0
Other City Operational Savings	$0	$30,000	$30,000	$30,000	$30,000	$120,000
OPERATING EXPENSES						
Director						
Number of Staff	1.00	1.00	1.00	1.00	1.00	
Annual Salary Each	$75,000	$77,625	$80,342	$83,154	$86,064	
% Allocated to BHFN	100.00%	20.00%	20.00%	20.00%	20.00%	
Subtotal	$75,000	$15,525	$16,068	$16,631	$17,213	$140,437
Operations & Technical Manager						
Number of Staff	1.00	1.00	1.00	1.00	1.00	
Annual Salary Each	$49,860	$51,605	$53,411	$55,281	$57,215	
% Allocated to BHFN	100.00%	100.00%	100.00%	100.00%	100.00%	
Subtotal	$49,860	$51,605	$53,411	$55,281	$57,215	$267,373
Field Installation Personnel						
Number of Staff	3.00	3.00	2.00	2.00	2.00	
Annual Salary Each	$48,000	$49,680	$51,419	$53,218	$55,081	
% Allocated to BHFN	100.00%	100.00%	100.00%	100.00%	100.00%	
Subtotal	$144,000	$149,040	$102,838	$106,437	$110,162	$612,477
Field Sales Personnel						
Number of Staff	1.00	1.00	1.00	1.00	1.00	
Annual Salary Each	$30,000	$31,050	$32,137	$33,262	$34,426	

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
% Allocated to BHFN	100.00%	100.00%	100.00%	100.00%	100.00%	
Subtotal	$30,000	$31,050	$32,137	$33,262	$34,426	$160,874
ISP personnel						
Number of Staff	0	2	2	2	2	
Annual Salary Each	30000	$31,050	$32,137	$33,262	$34,426	
% Allocated to BHFN	100.00%	100.00%	100.00%	100.00%	100.00%	
Subtotal	$0	$62,100	$64,274	$66,523	$68,851	
Marketing						
Number of Staff	1.00	1.00	1.00	1.00	1.00	
Annual Salary Each	$55,000	$56,925	$58,917	$60,979	$63,114	
% Allocated to BHFN	50.00%	50.00%	50.00%	50.00%	50.00%	
Subtotal	$27,500	$28,463	$29,459	$30,490	$31,557	$147,468
Support Staff						
Number of Staff	1.00	1.00	1.00	1.00	1.00	
Annual Salary Each	$20,000	$20,700	$21,425	$22,174	$22,950	
% Allocated to BHFN	50.00%	50.00%	50.00%	50.00%	50.00%	
Subtotal	$10,000	$10,350	$10,712	$11,087	$11,475	$53,625
Total Salaries	$336,360	$348,133	$308,898	$319,710	$330,900	$1,644,001
Payroll Taxes & Fringe Benefits	30.00%	of salaries				
Total Salaries and Benefits	$437,268	$452,572	$401,568	$415,623	$430,170	$2,137,201
Business Travel ($600 per month)	$7,200	$7,452	$7,713	$7,983	$8,262	$38,610
Vehicles						
Number of Service Trucks (FTE)	2.00	2.00	0.50	0.50	0.50	
Rate for Service Trucks ($16/hour)	$33,280	$33,280	$33,280	$33,280	$33,280	
Other Vehicles (FTE)	0.00	2.00	2.00	2.00	2.00	
Rate for Other Vehicles ($16/hour)	$33,280	$33,280	$33,280	$33,280	$33,280	
Gas and Maintenance ($200 per month per vehicle)	$4,800	$9,600	$6,000	$6,000	$6,000	
Insurance ($1,200 per year per vehicle)	$2,400	$4,800	$3,000	$3,000	$3,000	

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Total Vehicle Expenses	$73,760	$147,520	$92,200	$92,200	$92,200	$497,880
Office Rent	$9,000	$12,000	$12,000	$12,000	$12,000	$57,000
Pole Attachments ($9.87 per pole for 1,500 poles)	$7,402	$14,805	$14,805	$14,805	$14,805	$66,622
Franchise Fee - CATV (5% CATV Revenues)	$1,311	$12,651	$35,809	$52,611	$57,782	$160,164
Telephone ($200 per month	$2,400	$2,484	$2,571	$2,661	$2,754	$12,870
Office Utilities ($100 per month)	$1,200	$1,242	$1,285	$1,330	$1,377	$6,435
Postage & Shipping ($300 per month)	$3,600	$3,726	$3,856	$3,991	$4,131	$19,305
Office Supplies ($200 per month)	$2,400	$2,484	$2,571	$2,661	$2,754	$12,870
Marketing & Advertising ($4000 per month)	$48,000	$49,680	$51,419	$53,218	$55,081	$257,398
Public Relations ($2500 per month)	$30,000	$31,050	$32,137	$33,262	$34,426	$160,874
Dues & Subscriptions ($100 per month)	$1,200	$1,242	$1,285	$1,330	$1,377	$6,435
Office Repairs & Maintenance ($150 per month)	$1,800	$1,863	$1,928	$1,996	$2,066	$9,652
Centralized Services From City	$100,000	$103,500	$107,123	$110,872	$114,752	$536,247
System Operations & Maintenance ($100,000 per year)	$0	$25,000	$75,000	$75,000	$75,000	$250,000
T-3 connectivity($29,000 mo.)		$348,000	$348,000	$348,000	$348,000	$348,000
Programming Expenses						
Rates						
Basic Service (per month per subscriber)	$3.50	$3.62	$3.75	$3.88	$4.02	
Expanded Basic Service (per month per subscriber - increme	$4.00	$4.14	$4.28	$4.43	$4.59	
Premium (% of premium revenue)	60.00%	60.00%	60.00%	60.00%	60.00%	
Pay-Per-View (% of PPV revenue)	60.00%	60.00%	60.00%	60.00%	60.00%	
Expenses						
Basic Service	$175	$1,716	$5,012	$7,484	$8,104	$22,491
Expanded Basic Service	$196	$1,922	$5,614	$8,382	$9,077	$25,190
Premium	$3,240	$31,773	$92,802	$138,552	$150,040	$416,408
Pay-Per-View	$634	$6,213	$18,827	$33,751	$49,509	$108,933
Total Programming Expenses	$4,245	$41,625	$122,255	$188,167	$216,730	$573,022
Internet Modems ($300 per modem)	$45,000	$180,000	$270,000	$330,000	$423,000	$1,248,000
Set Top Boxes ($250 per)		$187,500	$250,000	$62,500	$6,250	
CAPITAL EXPENDITURES						
Administrative Fees/Start-up Design and Planning	$100,000	$0	$0	$0	$0	$100,000
Fiber/SONET Ring Material & Associated Equipment	$400,000	$0	$0	$0	$0	$400,000

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SCHEDULE 8: INPUT ASSUMPTIONS						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Subtotals**
Headend Equipment for Video & Data Support	$0	$0	$0	$0	$0	$0
MFR Fiber	$400,000					
Distribution Equipment	$511,100	$300,000	$0	$0	$0	$811,100
Subtotal Capital Expenditures	$1,411,100	$300,000	$0	$0	$0	$1,711,100
Contigency (20% Subtotal)	$282,220	$60,000	$0	$0	$0	$342,220
Total Capital Expenditures	$1,693,320	$360,000	$0	$0	$0	$2,053,320
Construction						
Main Ring and Distribution Ring						
Hours	1,000	1,595	0	0	0	2,595
Rate (Salaries & Benefits)	$40	$40	$40	$40	$40	
Subtotal	$40,000	$63,800	$0	$0	$0	$103,800
Hanging Strand & Cable/Install Subscribers						
Hours	10,000	10,000	0	0	0	20,000
Rate (Salaries & Benefits)	$40	$40	$40	$40	$40	
Subtotal	$400,000	$400,000	$0	$0	$0	$800,000
Total Construction Expenditures	$440,000	$463,800	$0	$0	$0	$903,800
Computers & System Status Equipment	$150,000	$0	$0	$0	$0	$150,000
Office Furniture & Fixtures	$15,000	$0	$0	$0	$0	$15,000
Studio Equipment	$0	$0	$0	$0	$0	$0
Technician Tools & Equipment	$10,000	$5,000	$0	$0	$0	$15,000
Construction Tools & Equipment	$45,000	$15,000	$0	$0	$0	$60,000
	$0					
DEPRECIATION & AMORTIZATION						
	Method	Life	% Per Year			
Total Capital Expenditures	Straight Line	20	5.00%			
Total Construction Expenditures	Straight Line	20	5.00%			
Computers & System Status Equipment	Straight Line	5	20.00%			
Office Furniture & Fixtures	Straight Line	7	14.29%			
Studio Equipment	Straight Line	7	14.29%			
Technician Tools & Equipment	Straight Line	5	20.00%			
Construction Tools & Equipment	Straight Line	5	20.00%			