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"If You Build It, They Will Come" : Lusk, Wyoming, and the Information Highway Imaginaire, 1989-1999

Nadine I. Kozak
University of Wisconsin - Milwaukee, kozakn@uwm.edu

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"If You Build It, They Will Come": Lusk, Wyoming, and the Information Highway Imaginaire, 1989-1999

Nadine I. Kozak

In W. P. Kinsella's 1982 novel *Shoeless Joe*, baseball aficionado and Iowa farmer Ray Kinsella hears a voice advising him, "If you build it, he will come."[1] Mayor Donald Whiteaker of Lusk, Wyoming, population 1,504, adopted this slogan and embarked on an industrious plan to build an information superhighway rather than a baseball diamond. Whiteaker dreamed of bringing his town into the information age. Lusk, however, was an unlikely place for an information revolution. A traditional ranching community, Lusk is the county seat of the least populated county in the U.S.' least populous state. Until late 1993, residents could not direct dial calls to Europe as the telephone system used an outdated electromechanical switch.[2] When surveying his town, Whiteaker envisioned advanced telecommunications infrastructure, non-polluting businesses, and economic bounty. He was confident "***If you build it, they will come!***" and "***If you don't—they won't***."[3]

Local networking initiatives are of concern to historians of information as they are one social response to the information age. Scholars, such as William H. Dutton, Jay G. Blumer, and Kenneth L. Kraemer in their edited volume *Wired Cities: Shaping the Future of Communications*, have analyzed the "wired city" concept, a prescriptive understanding of the use of advanced communications technology, such as coaxial and fiber optic cable, to foster desired social, economic, and political goals in urban areas.[4] Originally, the "wired city" followed the public utility model, but this yielded to the understanding of communications as a commercial good.[5] Private companies proposed cable franchises to cities, promising dozens of channels and interactive systems that were slow to materialize leading to considerable discontent.[6] While rhetoric about decentralization abound and companies sought to move back office functions out

of metropolitan areas, service disparity existed between urban and rural areas.[7] Urban offices were the first beneficiaries of cable and new telecommunications infrastructure[8] while rural areas lagged behind.

As private telecommunication companies wired urban businesses, grassroots organizations began to develop community networks, also called FreeNets. According to Douglas Schuler in "Community Networks," FreeNets use computer technology to foster relationships and communication within a specific area to advance social goals such as "building community awareness, encouraging involvement in local decision making, or developing economic opportunities in disadvantaged communities."[9] In the early 1990s, Schuler found over one hundred community networks either planned or operation. He surveyed these networks and found they were, excepting Montana's Big Sky Telegraph, in urban and suburban areas. Additionally, Schuler found 51% of systems had a university association and 45% were associated with libraries.[10] The Blacksburg Electronic Village, in Virginia, for example, began as a partnership between Virginia Tech, Bell Atlantic, and the town of Blacksburg.[11] Schuler argued successful FreeNets require more than technological infrastructure and they "must be developed within existing social and technological contexts." He identified five social and political components required for success: the online community or the group of FreeNet users; individual and organizational participants who provide information and services, including technical expertise and content; influencing organizations, which either participate in the development and coordination of FreeNets or compete with them; the community networking organization that oversees the network; and infrastructure providers such as telephone and cable companies.[12]

Patrice Flichy's *The Internet Imaginaire* provides a useful lens through which to view Lusk's network project. The book argues discourse plays a central role in the development of technical systems. Through discourse, designers, users, and other meaning makers such as the media, collectively build a common vision, an imaginaire, about a new technical system and the role it will play in society. Flichy finds these common visions are either utopias, used to envision an ideal world brought on by a technological device, or a legitimizing ideology, employed to justify particular political decisions. Imaginaires are profoundly powerful tools, shaping and being shaped by decisions made in a variety of political, economic, and social realms.[13]

Lusk entered into its network project seeking a solution to its serious economic and material challenges: economic stagnation, outmigration, an aged telephone system, and discontent with

the cable provider. This article illustrates the information superhighway imaginaire influenced Lusk's leaders and in turn Lusk's fiber optic project contributed to the imaginaire. Accepting the common vision and building infrastructure, however, were not enough to bring Lusk into the information age. Lusk lacked participants to provide technical services and content, such as a university or library partner, and a dedicated community network organization to implement a FreeNet. While the majority of community networking projects were in cities, this work analyzes a rural municipal fiber optic network. Originally conceived of as an information superhighway, this system is now one tiny part of the network of networks that compose the Internet. Lusk, an early local adopter of fiber optics in the United States, offers a starting point from which to analyze the history of rural, local networking policy. To accomplish this goal, this project draws on town council meeting minutes from 1989 until 1999, local and national newspaper and newsmagazine articles from the period, and oral histories conducted by the author.

Implementing the Imaginaire

Lusk, Wyoming, founded in 1886, reached its apogee in the 1920s when oil swelled its population to 10,000.[14] Over time, the populace dwindled, and the exodus increased during the rural crisis of the 1980s when land and oil prices fell. By the end of the decade, only 1,504 people resided in town.[15]

During the doldrums of the mid-1980s, Mayor Whiteaker realized the town had basic infrastructure, but lacked "advanced telecommunications."[16] This realization coincided with the immense popularity of John Naisbitt's bestseller *Megatrends: Ten New Directions Transforming Our Lives*, a book Whiteaker cited as an influence.[17] *Megatrends* appeared on the *New York Times* best-seller list from late 1982, shortly after its release, until November of 1984, a period of over one hundred weeks.[18]

Naisbitt outlined ten major shifts, or megatrends, that would dramatically alter American society. The first trend was the transition from an industrial to an information society.[19] Naisbitt argued networked, converged digital technologies would instantaneously transmit data between people and computers in the new era.[20] An additional trend of interest to rural dwellers was "Centralization → Decentralization," which found businesses locating new facilities in the open

spaces of small towns and rural regions rather than in urban areas.[21] In this vision of the information society, places without advanced telecommunications would be left behind.

Lusk's experience with advanced telecommunications began in 1989, inspired by Naisbitt's book and the town of Glasgow, Kentucky's construction of a coaxial cable network the previous year.[22] Whiteaker helped to organize a telecommunications seminar in a nearby town and shortly thereafter brought an ordinance before his town council to "establish a municipal telecommunications cable system,"[23] which passed unanimously.[24] The mayor envisioned many uses for the system, including cable television service, "radio service, load control service [for the electrical grid], security, [and] meter reading."[25] These were largely municipal services.

Akin to other municipalities,[26] the residents and local government of Lusk were dissatisfied with their cable provider. To document the complaints they had heard, the town council surveyed residents and concluded over 85 percent of respondents "were not satisfied" with the cable provider.[27] Concerns included poor service, bad reception, and rising costs.[28] The survey's decisive results spurred the council to further investigate municipal cable provision.[29]

The specter of municipal competition prodded Platte River Cable, the local cable company, to undertake a multifaceted public relations campaign to ameliorate townspeople's perceptions of the monopoly, adding a local information channel, opening a local office, and conducting a door-to-door check of cable connections.[30] Additionally, the company vowed to challenge the municipality's venture, as other companies did at the time.[31] Despite these actions, in 1990, Lusk started planning its municipal telecommunications cable system (MTCS) and pursuing a public-private partnership with the incumbent telephone company, US West.[32]

Whiteaker saw the MTCS as integral to Lusk's future. He argued in the *Conservation and Renewable Energy Bulletin* in 1990, "We in rural America need to get involved in the information age to reap the benefits of all that modern technology makes available to us."[33] Rather than simply joining the information society, Whiteaker wanted his town on the leading edge. Wyoming's Chief Information Technology Officer, Larry Stolz, noted retrospectively that Whiteaker had "always been one to want to be ahead of the game as far as telecommunications."[34] To achieve his goals, Whiteaker investigated "state-of-the-art" technologies for implementation in the town,[35] inducing Lusk's leaders to expand their initial vision. The original MCTS ordinance called for a system using coaxial cable exclusively, which the council argued in November 1990 was "too narrow ins cope [*sic*]." The council, thus, passed

an amendment, allowing it to use coaxial cable, copper wire, fiber optics, or any other suitable medium, thereby increasing flexibility and the number of services the system could support.[36] The transition from coaxial cable to additional technologies marks the town's shift from the smaller aim of a community cable service to the larger goal of an interactive broadband telecommunications system, a change in accord with the era's common vision.

In September 1991, US West consented to a partnership with the town. This agreement opened the possibility of connecting the town to US West's fiber optic trunk line 40 miles away, a necessity to link Lusk's network to others. The town attorney outlined the factors influencing the telephone company's decision, explaining US West "has neglected rural America and felt it was time to do something with [it]. … That and the fact that Whiteaker went for it and wanted a joint venture."[37] US West officials noted the construction was a special case; they would invest in Lusk because the town was building infrastructure. They would not bring fiber to other Wyoming communities.[38] Mayor Whiteaker argued Lusk's technological progress would spur economic development, an idea popular in the imaginaire. The *Herald* paraphrased him as stating, "After the trunk line [to Lusk] is built, [the mayor] said the next challenge for the area will be to show large companies that it has the housing and warehousing [capacity] those companies need to locate here. Once that is accomplished, the economic growth of the area should follow naturally."[39] The use of the word "naturally" is important. By having adequate facilities and telecommunications, town leaders believed they needed to do little else to encourage companies to relocate and trigger a booming information economy.

Lusk was not alone in granting power to advanced information and communication technologies (ICTs). In September 1991, *Business Week* and *Scientific American* hailed ICTs as necessary components of the information age. *Business Week's* article discussed Senator Al Gore's advocacy of an "information superhighway," the "first step of creating a new infrastructure—for a new Information Economy."[40] Gore argued developing advanced telecommunications was essential as they would be imperative to the U.S.' future competitive success. The article stated "the service economy seems to have an insatiable appetite for communications capacity—for conducting video teleconferences, processing financial and other transactions, distributing information-based services, and moving data from PC to PC."[41] Without adequate telecommunications capacity, America would be unable to compete in the information age.[42]

In mid-September, *Scientific American* published an issue dedicated to "Communications, Computers, and Networks," with articles written by technological luminaries, academics, a communications lawyer, and Gore. The introductory article admitted "The authors of this issue share a hopeful vision of the future" built on information infrastructure. Indeed, the convergence of communication and computer technologies, and the networks interlinking them, would "create an infrastructure that will profoundly reshape our economy and society."[43] The special issue presented the era of networked computing and communications as a given; authors wrote about their version of the future as a certainty and informed readers that for progress to be made, information infrastructures needed to be built. One technology deemed crucial for this development was fiber optics; many of the authors chose it as for the basis of the network due to its speed, capacity, and falling cost.[44]

The metaphor of the "information highway" or "superhighway," describing the fiber optic network that would eventually cover the United States, rose to prominence in 1992. In their bid for the presidency that year, Bill Clinton and Gore repeatedly employed the metaphor to describe the infrastructure necessary to progress in the information age and what their administration would do, if elected, to create the network.[45] It was against this backdrop of unrestrained technological optimism, widespread belief that advanced networks would provide economic advantages,[46] and the glorification of optical fiber that Lusk planned its network.

The local press promoted the information highway imaginaire in Lusk, printing optimistic articles and expounding the benefits of fiber optics. In January 1992, the Lusk *Herald* journalist Catherine DeCastro asked readers to "Envision a new electronic heartland. Consider a 'Golden Triangle' free trade linkup of North America, Europe and Japan."[47] These tantalizing comments opened the front-page article, whereas later in the report, she wrote, "Ideally, the technology would bring down the barriers of isolation, jolt the rural economy and provide increased opportunity for residents."[48] DeCastro realized these goals were not givens, however, she did not state these reservations on the front page.

A central facet of Lusk's proposed system was a load control project to manage and conserve electric consumption; a partnership between Lusk and the Wyoming Municipal Power Association (WMPA). Lusk's system was a pilot project for "distributed control of customer level loads" for the eight WMPA member towns. The mayor served on the WMPA's board, likely a factor in the selection of his town for the pilot project.[49] The system sought to lessen

electric peaks by shifting operations to low demand times. The WMPA was responsible for the installation, operation, and control of the load control system, whereas the town's obligation was to provide the broadband pipeline.[50] Wyoming's State Economic Energy Conservation Program provided Lusk and the WMPA with a $295,000 grant in July 1992, funds used to purchase telecommunications monitoring equipment for Lusk's electric utility.[51]

U.S. West announced plans to modernize Lusk's aged telecommunications equipment in October 1992. The company would upgrade the town's analog technology to a digital switch and have operational fiber optic cable connecting the town in fall 1993. The company argued "The new facilities will position the Town … to retain and/or attract businesses which have the need for complete digital connectivity to the world."[52] The upgrades would provide Whiteaker the ability to connect Lusk's network to others.

The national press first noticed Lusk's telecommunications ambitions in November 1992. In addition to drawing from the information superhighway imaginaire, Lusk began to contribute to it. *Forbes* discussed the town's ambitions and US West's upgrades in "The Virtual Workplace." The article highlighted Lusk as an example of the "hinterlands" using advanced telecommunications to enable businesses to locate increasingly further from central cities. *Forbes* called fiber optics the "third wave" of business migration from cities, following those due to electric power and railroads and the Interstate highway system.[53] The journalist noted when businesses were searching for areas in which to locate, a critical factor would be the availability of advanced telecommunications.

The election of Clinton and Gore fuelled media interest in the information superhighway and fiber optics. Articles in the major news outlets discussed the technology, mechanics of implementation, and economic impacts. Journalists reported fiber optic cable was the foundation of the information superhighway.[54] In a *Newsweek* cover story, Bill Powell and Anne Underwood wrote "Today's wars are fought over tiny strands of high-strength glass, called fiber-optic cable, and the pulses of light they transport. Whoever controls these information pipelines and whoever figures out how to use them to deliver something valuable to a society that consumes information voraciously will get very, very rich."[55] The media noted while telephone and cable companies were building fiber optic cable between cities, the "last mile" between the local service provider and customers' homes remained unconnected.[56] A *Time* cover story discussed a cost-effective solution to this problem; the use of fiber optic cable to get near homes

and coaxial cable, which has vast capacity over short distances, to connect to them.[57] Vice President Gore discussed information superhighways, telling listeners at the National Press Club in December 1993, "Virtually every business and consumer in America will benefit dramatically from the telecommunications revolution."[58] He argued the rapid deployment of data highways would give U.S. businesses "enormous" competitive advantages in the global marketplace.[59] Lusk, by planning to connect the "last mile" and convincing US West to build the middle mile, was positioning itself for success.

Construction of Lusk's telecommunications system began in October 1993 and continued for two years.[60] The town installed fiber optic cable for the main system and coaxial cable "feeders" past all businesses and residences.[61] The town placed the coaxial cable on power poles; because Lusk owns the electric network, it did not have to pay for access.[62] To save money, the town's staff performed the installations;[63] thus construction supplies, including fiber optic and coaxial cable, constituted the majority of the $300,000 cost. The *Herald* celebrated the carrier wire installation as the "first physical evidence" of Whiteaker's efforts to place the town "in the mainstream of the electronic heartland." This was only the first phase of the telecommunications project. It connected town-owned buildings and a handful of residences to the system for testing purposes, allowing the electrical utility to monitor demand.[64] The second phase would connect all buildings to the system.[65] The *Herald* reported the project would, once complete, support "traditional telephone, cable television, business and personal communication applications"[66]; a broader menu of services than Whiteaker discussed in 1989.

In addition to the town's construction work, U.S. West installed digital equipment in the switching office in October 1993, at an estimated cost of $1.4 million.[67] A company representative stated the new digital telephone office would be a part of the town's economic development because "Where your office is actually located becomes less and less important in the Information Age. This lets a business decide on where to locate based on factors like the quality of education, lack of crime—the overall quality of life. Factors that make Wyoming, and Lusk, such an attractive selling point."[68] Additionally, the telephone company spent $2.4 million building the middle mile fiber to connect the town to the fiber-optic backbone 40 miles away.[69] U.S. West bore the bulk of the construction expenses, $3.5 million of the $4.1 million spent.

In 1994, the national news media introduced Americans to a new communications network, the Internet, which eventually replaced the information superhighway in the common vision.

Time described the Internet as "the nearest thing to a working prototype of the information superhighway."[70] *Business Week* suggested the Internet would be a placeholder until the information highway arrived.[71]

When Lusk completed the first phase of its telecommunications project in 1995, the local, regional, and national media celebrated its achievement. Lusk's fiber optic system illustrated and reinforced the collective vision that America, even its rural towns, was joining the information age. The first feature appeared in the Denver *Post Magazine* in June. Dinah Zeiger's article discussed Lusk's telecommunications project and framed it using the trope of the frontier. Zeiger wrote, "Lusk defines the frontier. If it's the new frontier of electronic highways that unites the town now, it's the old frontier values of self-help, thriftiness and neighborliness that made it possible."[72] The article highlighted Lusk's small size and remoteness, but argued, "fiber optics will give it an edge that few communities can rival." The *Post* discussed Whiteaker's vision that "catalog ordering or clearinghouse telemarketing may be easy markets to tap with the sophisticated telecommunications system in place." Despite the optimism, Whiteaker revealed a moment of uncertainty, stating, "I honestly don't know if we'll attract new jobs. But I do know I can't attract them if I don't have a highway. If you build it and nobody comes, that's their problem. But I know for sure they won't come if it isn't built."[73]

Excitement and optimism peaked in Lusk over the summer of 1995. The local newspaper encouraged residents to attend a session called "Telecommunications and You" in late July, an "historic meeting, as Lusk steps into the future of telecommunications."[74] The *Herald* promised the session would "actually get Lusk moving on the information superhighway. If the town is waiting at the entrance ramp, it should be ready to merge onto the highway at the morning's end."[75] The paper set high expectations for a half-day meeting.

The session featured two presenters from Nebraska who discussed establishing a community network, or FreeNet, in front of a capacity crowd. The purpose of a FreeNet, according to the presenters, was to provide people with community information and network community members. Lusk's focus up to this time was on the technological infrastructure whereas this session explored how it could use the network. The presenters recommended residents organize and educate themselves about networking. Additionally, they provided what the *Herald* called "an operable format" of the stages needed to create a FreeNet.[76] The newspaper quoted one presenter, Steve Buttress of the Community Networking Institute, as saying "networks are more

about people than technology."[77] The *Herald* reported 27 of the attendees wanted to subscribe to the FreeNet,[78] however, no one undertook the task of creating it. There is no further mention of a community network in the records. Indeed, the Chamber of Commerce director's rallying cry, "let's get busy and get to work all of us" went unheeded.[79]

In the fall of 1995, a pair of national media stories showcased Lusk's telecommunications system and reinforced the information highway imaginaire. Both reports employed John Battelle, the executive managing editor of *Wired* magazine, as an expert to evaluate Lusk's progress. CBS Television's "Sunday Morning" featured the town in September. The segment celebrated Lusk as a small town rooted in the past, but using the future of telecommunications to illustrate how, according to Battelle, "technology, intelligently applied, could possibly make the idea of a small town viable again from an economic standpoint."[80] *USA Today* featured Lusk the following month. Paul Hoversten's article noted the network would assist Lusk in attracting businesses. Battelle stated the "informationally wealthy" were going to look "for places to live that are clean and beautiful."[81] Hoversten highlighted that Lusk had "one of the nation's most sophisticated links." Battelle forecasted, "There is a possibility that in 15 or 20 years, we'll look back and see Lusk as the ancestral root of a network model that everyone takes for granted."[82] Hoversten noted other municipalities asked Lusk for advice on building networks. For example, Whiteaker visited Spokane, Washington in December 1995 and discussed Lusk's telecommunications initiative at a seminar. An article in the Spokane *Spokesman-Review* covered the event and noted Whiteaker's philosophy, "if you build it, things will happen," a nuanced version of his previous maxim.[83] Although the first sentence read "the much-hyped information superhighway can reach small town America," the *Spokesman-Review* provided the most balanced account of Lusk's network to date. The article stated Lusk's system only had four "power users," three schools and a business. This, however, was only partially accurate. The school district used two strands of fiber to connect its two buildings and was, along with the electric utility, the system's only users.[84] No businesses connected to the network. In the article, Whiteaker expressed uncertainty whether people would sign up for service; however, he noted that without advanced telecommunications the town would "continue dying and never get connected to the outside world."[85]

The business the *Spokesman-Review* called a "power user" was a publishing and advertising company that moved to Lusk because the town's network would allow it to "do the same

publishing and creative work here in Lusk" it could do in a city at a lower cost.[86] The firm's relocation to Lusk was one of the few material results of the telecommunications project. Despite the press attention and climate of optimism, the town had completed phase one only; it had yet to connect homes and businesses to the network. Additionally, Lusk's fiber went to the US West office, but did not connect to the telephone system.[87] Finally, residents did not develop a community network. Despite these, the *Herald* proclaimed the town's goal was to "provide broad ban [*sic*] technology to every home in town."[88]

Testing the Vision

In May 1996, Lusk voters unseated Whiteaker, the mayor since 1982, and chose a new person to lead the town. There is little in the press to explain the long-standing mayor's defeat but his failure to make his technological visions reality likely played a part in his loss. In the fall of 1995, Whiteaker declared in *USA Today*, "I had complete cooperation not only from my council but also from about 100% of the public."[89] Lusk resident Mark Lohr, however, noted the project generated controversy.[90] Voters perhaps felt Whiteaker had over six years to bring the project to fruition and failed. The town's new mayor, Don Wilson, did not invest in the fiber optic network; rather his priorities were "town finances" and the "water system."[91]

Once Whiteaker was no longer mayor, the magic surrounding Lusk's telecommunications system faded. Wilson reframed the system as an infrastructure in need of a revenue-generating use. He wanted outside service providers to use the equipment and pay the town for access. In late 1996 and early 1997, the town met with three interested providers.[92] At these meetings, the town learned Communicom, formerly Platte River Cable, wanted to conduct a high-speed Internet pilot project in Lusk. Access to the town's fiber optic network would allow the incumbent to do this at less expense.[93]

In a 1997 *Salon.com* article, "Small Town Net of Dreams," Jon Healey provided a critical analysis of Lusk's accomplishments. Healey contrasted town officials' original vision of "catalog companies, reservation systems, corporate branches" locating in town and using the telecommunications system, with the reality that the network did not provide residential or business services.[94] Healy blamed the system's lack of use on an absence of demand. Lusk's superintendent of municipal works argued the project's stagnation resulted from a lack of

funding. Whiteaker, however, clung onto the imaginaire, stating the problem was residents "don't have the dream."[95] Wilson showed little sympathy for the town's shattered vision. He told Healey, "They got themselves into a position that nobody likes to get into, of not getting [the network] completed and not having it down to the place they advertised they were going to be with it." Wilson continued, "It kind of devastated this little town. Broke their back, really."[96] He told a motel reservation firm interested in relocating to Lusk that the telecommunications system was not ready for use. Opinions differed between the mayor, town council, and residents over whether to lease capacity or sell the system outright.[97]

To create consensus over the system's future, Wilson appointed a Telecommunications Task Force in June 1997 to study possibilities and determine the cost of each.[98] This group, and its partner the North East Wyoming Economic Development Coalition, worked over the next year to determine area needs,[99] surveying residents and businesses about their telecommunications use and future requirements.[100] The partners also held an informational meeting in Lusk about the network's future, but only nine people attended, illustrating residents' disillusionment with the system.[101]

In early 1998, the Governor of Wyoming recommended Lusk for the Western Governors' Association project Centers for Excellence in Rural America (CERA). In February, seventy residents attended a meeting held by state representatives and employees of Science Application International Corporation (SAIC), a science, technology, and engineering applications firm heading the CERA project. This meeting resurrected the imaginaire. The *Herald* noted residents "got a tantalizing glimpse of a potential … county future…."[102] SAIC stated it designed the CERA initiative to "test the hypothesis that creating a network of small rural towns deploying affordable, high speed telecommunications services will result in increased job creation and/or income in those towns."[103] The town was to appoint a champion, develop goals, and create a plan to implement them. Lohr reflected, "We appear to be on the verge of reaping some economic benefit from our telecommunications system."[104] In March, Lusk hired a champion to liaise between the town and organizations interested in developing the system.[105] The Task Force applied for state funding to pay the champion and extend the network.[106]

At this time, *Yahoo! Internet Life* highlighted Lusk's struggles with using its infrastructure in its "America's 100 Most Wired Cities and Towns." The town, according to Ben Greenman, illustrated that providing telecommunications infrastructure is "affordable" and "has immediate

benefits" but also "an infrastructure and an active online community are not always one and the same."[107] The inability to generate an online community continued to plague the town.

The fiber optic system was a central issue in the 1998 mayoral election, with all candidates, except Mayor Wilson, mentioning the network.[108] Voters elected Wilson's challenger Mark Lohr, who hoped that by the close of his two-year term, "some of the potential [of the telecommunications project] will be realized."[109] Despite this goal, in September, the champion reported the project was on hold until the town could secure funding.[110] The town of Lusk was either unwilling or unable to fund the network's extension and it did not secure grant funding.

Despite this lack of resources, in November, Lusk held a two-day CERA meeting to chart community needs and discuss potential solutions. Lohr noted, "We need to help the community use the technology we have available."[111] Later that month, Lusk's first webpage went online, listing area businesses, information, and community events.[112] The local group working on the CERA project had two main goals: to determine how much it would cost to finally connect Lusk's network to the telephone switching office and to create a business plan to attract new businesses, as well as keep existing ones.[113]

In end, the CERA recommendations did not meet the town's expectations, leading the town council to call for "a Fiber System Inspection," suggesting it considered an outright sale. One council member strongly disagreed, arguing the town was "closing a door that we should not."[114] While the town floundered with finishing and effectively using the telecommunications system, another outside organization arrived in Lusk to celebrate its progress.

An advertising firm working for Microsoft chose Lusk as the focus of a campaign in 1998, filming four commercials starring local residents. The television advertisements aired nationally in 1999, again putting the town in the spotlight. One of the commercials announced, "This is Lusk, Wyoming. Cows outnumber people here 100 to 1. The thing that isn't apparent about Lusk is it's wired, Lusk has strung fiber optic cable for the future of high-speed internet." The advert greatly over-simplified Lusk's situation. By contrasting images of computers with cattle and Main Street, Microsoft stoked the imaginaire.[115] It enticed the American imagination to see rugged rural people entering the digital age. The Microsoft commercials electrified the town. The *Herald* published a feature about the adverts and their impact on Lusk. Town offices received many phone calls and email messages and visits to the town's web page spiked each time a commercial aired. Some residents believed new businesses would finally flood in sparking an

information economy. The Chamber of Commerce director optimistically noted, "Moving a business is a big deal" and "Some people are still in the planning stages."[116] Despite this optimism, no new businesses arrived.

February and March 1999 witnessed a fresh spate of media interest in Lusk, undoubtedly a result of the Microsoft adverts. On February 14, the Billings *Gazette* published an article about Lusk's fiber optic project focusing on the Microsoft commercials and promoting the imaginaire. The author suggested "…there is hope for rural communities that can blend a small-town feel with high-technology, a recipe that [Lusk] seems to have mastered."[117] On the same day, the Seattle *Times* published an article challenging Microsoft's portrayal of Lusk and more accurately recounted the town's struggles. Eric Sorensen's article noted that although Whiteaker designed the telecommunications project to help the town join the information age, "it is a high-tech on-ramp into nowhere." The community development coordinator summed up Lusk's situation noting the town faltered on the "intelligent application" of the system.[118] In March, *Time* magazine and *Yahoo! Internet Life* mentioned Lusk. *Time* framed the town as a successful illustration of municipalities that have "decided to take matters into their own hands" and provide high-speed network facilities to overcome the digital divide.[119] *Yahoo! Internet Life* provided a more nuanced account. The journalist, Michael Freidson, observed Lusk does not know what to do with its system. Lohr admitted, "I cannot tell you glowing things about additional pickup and usage. But we're certainly going forward."[120]

The dormant Technology Task Force, established in 1997, began working in earnest in March 1999. Although Whiteaker believed a large business would come to town and connect and use the fiber optic system, the Task Force had increasingly modest goals. Its mission became to help local businesses and individuals pursue economic development opportunities, rather than entice businesses to move to Lusk. Its coordinator stated, "We don't have the infrastructure to handle" large firms moving in. Additionally, the committee wanted to help launch a local Internet provider.[121]

The End of the Imaginaire

In May 1999, despite the Task Force's renewed vigor, the town council asked Lohr to determine Communicom's "level of interest" in leasing or buying the fiber optic system.[122] A

meeting between cable company and town officials ensued. In June, the *Herald* reported the cable company sought to buy the system and rebuild their plant,[123] possibly providing high-speed Internet to Lusk. The cable company offered $225,000 for the system that cost the town $300,000 to build.[124] At the July meeting, the councilors again debated the possible sale. Another matter discussed was SAIC's final CERA report, giving insight into the abrupt end of the CERA project. Lohr recommended the state pay only $5,000 of SAIC's $24,000 bill because he argued the CERA report was "as close to being worthless as it could be" as SAIC provided a "generic report which is no longer applicable and doesn't say anything unique" about Lusk.[125] The council's disillusionment with the CERA report and the cable company's offer led the council to favor an outright sale.

Lusk sold its fiber optic system to Communicom in mid-1999. The cable company spent a year retrofitting the system and then began providing high-speed Internet service to Lusk. Ironically, this was the incumbent provider Whiteaker planned to replace. The publishing company, whose owners worked with CERA to attract businesses and, as a result, finally connect the fiber optic network to the telephone system, shuttered their business and moved to Colorado in September 1999 for immediate access to high-speed Internet and overnight shipping services.[126]

Conclusion

The history of Lusk's fiber optic system illustrates the power that imaginaires have on actions as well as how actions, in turn, reinforce society's collective visions. In Lusk's case, the information highway imaginaire helps contextualize the development of the town's telecommunications network. Lusk sought to join the information highway to reap the economic and social benefits of the information age, especially as the imaginaire held that companies sought to flee cities and suburbs and locate in less populated areas. Mayor Whiteaker accepted the imaginaire and worked diligently to ensure his town had the infrastructure required for the rapidly approaching era. Whiteaker, US West, the Lusk *Herald*, and many of the outside media outlets that reported on the town ascribed to the imaginaire. The town's residents were less invested in the vision and did not rally to provide the necessary community involvement or technical skills to organize a FreeNet. Lusk's experience, therefore, illustrates that if you build it,

but do not spur community participation or create intelligent applications, it will not work and people will not come. Lusk, like other rural regions in the U.S., continues to struggle with economic stagnation, outmigration, and the digital divide.

Flichy concludes that imaginaires do not bring the utopias they promise, but since they are malleable, one common vision is replaced by, or folded into, another.[127] The commercial Internet and its possibilities began as a "placeholder" until the information superhighway could be built. Instead, the Internet became the subject of a new imaginaire, replacing the previous vision. In Lusk's case, the Internet, a technical reality that was quickly able to provide service to town residents, subsumed the municipal network. In this transition, Lusk's network lost its sublime association to the information age and instead became a material reality as the local Internet backbone. The history of Lusk's telecommunications project illustrates that developments that did not begin as the commercial Internet eventually became a part of the network of networks.

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