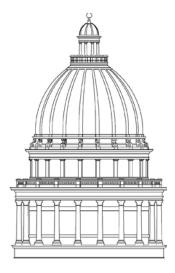
REPORT TO THE

UTAH LEGISLATURE

Number 2012-08



A Performance Audit of the Utah Telecommunication Open Infrastructure Agency

August 2012

Office of the LEGISLATIVE AUDITOR GENERAL State of Utah



Office of the Legislative Auditor General

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August 1, 2012

TO: THE UTAH STATE LEGISLATURE

Transmitted herewith is our report, **A Performance Audit of Utah Telecommunication Open Infrastructure Agency** (Report #2012-08). A digest is found on the blue pages located at the front of the report. The objectives and scope of the audit are explained in the Introduction.

We will be happy to meet with appropriate legislative committees, individual legislators, and other state officials to discuss any item contained in the report in order to facilitate the implementation of the recommendations.

Sincerely,

M. S.L.

John M. Schaff, CIA Auditor General

JMS/lm

Digest A Performance Audit of Utah Telecommunication Open Infrastructure Agency

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) is an interlocal agency aimed at providing its users with some of the most advanced communications services available. The agency is building a wholesale fiber-optic network that offers its users access to high-speed video, data, and phone services. Once completed, supporters of the network believe it will help improve the quality of life for city residents and promote economic growth for the business community. Due to a number of unforeseen challenges, the agency was unable to complete construction of the network as quickly as planned. This report describes some of the challenges UTOPIA faces, the possible causes for those challenges, and suggestions for strengthening organizational oversight and accountability.

UTOPIA's Ambitious Goals Have Not Been Met. UTOPIA

originally planned to build a broadband network in three years and to achieve a positive cash flow in five years. However, it has not met that schedule. Instead, the cost of financing and operating the network increased before UTOPIA could provide a substantial number of customers with service. As a result, revenues have not been sufficient to cover its costs. Year after year, as operating deficits have accrued, the agency has developed a large negative asset balance.

UTOPIA's Bond Proceeds Were Not Put to Productive Use.

UTOPIA has issued \$185 million in bonds to pay the cost of building its fiber-optic network. Most of the bond proceeds have been invested in poorly utilized and partially completed sections of network. As a result, the network is not generating sufficient revenue for the agency to cover its annual debt service and operating costs.

UTOPIA Used Bond Proceeds to Cover Operating Costs and Debt Service. Slow progress in building the network and a general lack of subscribers have forced UTOPIA to use a large portion of its bond proceeds to cover operating deficits and debt service costs. The use of debt to cover the cost of operations and debt service is symptomatic of an organization facing serious financial challenges.

Chapter I: Introduction

Chapter II: UTOPIA Faces a Challenging Financial Situation Chapter III: UTOPIA's Financial Woes Attributed to Many Different Causes

Chapter IV: Improved Accountability Will Increase Likelihood of Success **Poor Planning, Mismanagement, and Unreliable Business Partners Have Contributed to the Agency's Financial Difficulties.** UTOPIA's board members, staff, and outside consultants readily admitted that mistakes were made during the rollout of the network. To summarize, the mistakes they described generally began before UTOPIA's current management's tenure and fall into one of the following three categories: (1) poor construction planning, (2) mismanagement, and (3) unreliable business and finance partners.

A Lack of Sufficient Subscribers Also Contributes to UTOPIA's Condition. In addition to UTOPIA's problems with poor planning, mismanagement, and unreliable business partner performance, a lack of sufficient customers is also a cause for the agency's slow progress. UTOPIA's historic and current subscriber rates, coupled with its revenues, strongly suggest either a lack of consumer demand or an agency inability to meet the consumer demand that does exist. A contributing factor to UTOPIA's difficulty in meeting targets may also be its wholesale-only operating model.

Better Management and Financial Controls Are Needed to Improve Accountability. UTOPIA can increase its chances of success by taking steps to hold its staff and business partners accountable for results. Even if UTOPIA has prepared a viable new development strategy, it will not be successful unless the agency and its partners can execute that plan. For this reason, we suggest that UTOPIA's board and management team adopt a number of management and financial controls that will strengthen their oversight of the agency and their ability to hold people accountable for the results they seek.

Chapter IV describes four steps UTOPIA should take to strengthen its oversight and accountability:

- Adopt better management controls, including written narrative plans, formal policies, and performance measures.
- Adopt the financial controls commonly used by public agencies.
- Improve compliance with the Utah Open and Public Meetings Act.
- Strengthen board oversight of agency operations.

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Report No. 2012-08

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August 2012

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Chapter I Introduction

In 2002, a group of cities formed the Utah Telecommunication Open Infrastructure Agency (UTOPIA). Their goal was to build an advanced communications network that would offer broadband services to each home and business within their cities. However, due to a number of unforeseen challenges, the agency was unable to complete construction of the network as quickly as planned. Furthermore, poor construction planning, mismanagement, and unreliable business partners have placed the agency in a precarious financial situation. This report describes some of the challenges UTOPIA faces, the possible causes for those challenges, and suggestions for strengthening organizational oversight and accountability.

UTOPIA Is a City-Owned Telecommunications Network

UTOPIA is an interlocal agency aimed at providing its users with some of the most advanced communications services available. The agency is building a wholesale fiber-optic network that offers its users access to high-speed video, data, and phone services. Once completed, supporters of the network believe it will help improve the quality of life for city residents and promote economic growth for the business community.

UTOPIA Is Comprised of Eleven Pledging Member Cities

UTOPIA was formed as an interlocal agency under the Utah Interlocal Cooperation Act (*Utah Code* 11-13-101 et seq.). Eleven member cities agreed to pledge some of their sales tax revenue as a security guarantee for UTOPIA bonds. Several years later, after UTOPIA encountered financial difficulties, nine cities formed another, related entity called the Utah Infrastructure Agency (UIA). Through the UIA, eight of those cities were able to raise additional funds needed to continue construction of the network by pledging some of their franchise tax revenue. The UIA has no staff of its own but contracts with UTOPIA to build that portion of the network which

UTOPIA is a municipal fiber-optic network owned by 11 Utah cities. will be funded through UIA financing. Both UTOPIA and UIA are overseen by separate boards of directors comprised of administrators or elected officials from their member cities. Figure 1.1 lists the UTOPIA member cities and those which have formed the UIA.

Figure 1.1 UTOPIA and UIA Network Membership. UTOPIA has 11 pledging Utah cities. Eight pledging cities went on to form the UIA, which raised the additional funds needed to complete construction of the network.

Member Cities ₁	UTOPIA	UIA
Brigham City	X	X
Centerville	X	Х
Layton	X	Х
Lindon	X	Х
Midvale	X	Х
Murray	X	Х
Orem	X	Х
Payson ₂	X	
Perry	X	
Tremonton	X	
West Valley	X	X

1. UTOPIA non-pledging cities: Cedar City, Cedar Hills, Riverton, Vineyard, and Washington. 2. Non-pledging UIA member.

UTOPIA Offers Advanced Speed through A Fiber-to-the-Home Network

UTOPIA is a fiber-to-the-home (FTTH) network, meaning that it employs fiber-optic cable throughout the entire network to speed the transmission of data. UTOPIA's network has three main sections: (1) the Network Operations Center (NOC) and other central infrastructure (lines running from city to city), (2) the middle mile or local level infrastructure (e.g. fiber-optic lines running down neighborhood streets or electronics shelters), and (3) the last mile, which represents the fiber-optic line extending from the street curb to the customer premise (normally much shorter than an actual mile).

Currently Provo, with its iProvo Network, is the only other Utah city to attempt a municipal FTTH network. Spanish Fork also operates a municipal telecom network that employs fiber-optics to a neighborhood node from which coaxial cable lines extend the service to the home.

UTOPIA was created to bring high speed telecommunications to member cities.

UTOPIA Believes It Offers a Public Sector Solution to a Local Need

UTOPIA's critics question whether a public entity should provide services already offered by private industry. However, UTOPIA's founding members believe that advances in entertainment, business, medicine, and education are increasing the demand for high bandwidth communications. The private sector, they say, is reluctant to replace its existing copper wire and coaxial cable technologies with the more advanced fiber-optic technology required to meet that growing need. In fact, the leaders of several UTOPIA member cities report that the lack of advanced communication services makes it difficult to attract new businesses to their communities and retain existing ones. For this reason, they believe that UTOPIA is addressing a vital community need that is not being addressed by the private sector providers.

State Law Prohibits UTOPIA From Offering Retail Services

Utah Code 10-18-101 et seq. limits head-to-head competition between the public and private sectors by requiring municipal broadband networks to offer services on a wholesale basis. Unlike their private networks, governmental agencies are prohibited from selling telecommunications services directly to consumers. As a result, both UTOPIA and iProvo must rely on retail service providers to directly engage the customer. Retailers offer bundled or stand-alone services. For example, they may provide their own proprietary video service in combination with high-speed internet connection. Some offer a "triple play" package which includes data, video, and voice communications for a single monthly fee. Provo City's iProvo network also operates under the same legal constraints as UTOPIA. In contrast, Spanish Fork created its broadband network before the restrictions were put in place. For this reason, the Spanish Fork network is allowed to offer network services directly to city residents.

Audit Scope and Objectives

Members of the Utah Legislature asked for an audit of UTOPIA so residents of UTOPIA member cities might know how the organization has used its funds. Legislators also asked for a review of Member cities report that private industry was unwilling to provide their communities with advanced communications services. the organization's general management practices. To address their concerns, we developed an audit plan to review the following areas:

- The size and use of UTOPIA's debt financing
- The causes leading to UTOPIA's current financial condition
- UTOPIA's management and board governance practices

Chapter II describes how UTOPIA has used \$185 million in debt financing. Chapter III examines causes for UTOPIA's performance to date. Chapter IV identifies steps that the UTOPIA board and management can take to improve their oversight and control of the organization.

Due to a lack of reliable information, the audit team found it difficult to document much of UTOPIA's operating activities. The financial records are independently audited and were found to be complete and accurate. We also conducted some tests to verify the accuracy of the subscriber counts included in this report. However, we found a lack of reliable data regarding the agency's past and ongoing operating activities. For this reason, the audit staff was required to rely heavily on information gathered during interviews with principal staff, board members, and consultants.

This audit addresses UTOPIA's debt, past problems, and management practices.

Chapter II UTOPIA Faces a Challenging Financial Situation

In 2003, the Utah Telecommunication Open Infrastructure Agency (UTOPIA) set out to quickly build a fiber-optic network that would reach each residence and business within its member cities. Those associated with UTOPIA believed that, once its network was built, it would sign up enough network subscribers to generate a positive cash flow within a few years. However, nine years have passed since construction began and only one-third of the network has been completed. Because cost increases have outpaced the growth in revenue, the agency has consistently posted large annual operating deficits. As a result, UTOPIA has found itself in a weakened financial condition.

One underlying challenge is that UTOPIA's infrastructure investment is not producing sufficient revenue. In most areas where construction has been completed, UTOPIA has insufficient subscribers to cover the cost of building and operating the infrastructure. Additionally, UTOPIA made a large investment in other sections of the network where the network infrastructure was never completed. Until UTOPIA completes the stranded sections of the network, those sections will not produce any revenue. UTOPIA officials report that since 2008, UTOPIA has been working to put its stranded investments into production.

UTOPIA's Ambitious Goals Have Not Been Met

UTOPIA originally planned to build a broadband network in three years and to achieve a positive cash flow in five years. However, it has not met that schedule. Instead, the cost of financing and operating the network increased before UTOPIA could provide a substantial number of customers with service. As a result, revenues have not been sufficient to cover its costs. Year after year, as operating deficits have accrued, the agency developed a large negative asset balance.

UTOPIA has not met growth or revenue targets established in 2003.

UTOPIA Did Not Reach Its Goal to Build Its Network in Three Years and Be Profitable in Five Years

In December 2003, UTOPIA issued a plan to build its network in three phases. However, as the first phase was nearing completion, UTOPIA made a major change in the construction plan to accommodate a new source of financing. The change in plans led to delays, a loss in financial support, and a partially completed network.

Initially, UTOPIA Planned to Complete Construction in Three Phases. In December 2003, UTOPIA stated that "within a 3 to 4 year period the network will be available to every home/business in each member city." By the third quarter of 2007, the agency expected to make services available to all 141,000 addresses within its eleven member cities. By 2009, the agency predicted it would have sufficient revenues to operate with a positive cash flow. Figure 2.1 summarizes UTOPIA's 2003 construction plan.

Figure 2.1 UTOPIA Planned to Complete Construction by 2007. In December 2003, UTOPIA reported that it had developed a three-phase construction plan in which construction of the network would be complete by the third quarter of 2007.

Phase	Timeline	Homes Passed During Phase	Cumulative Households Passed	Financing Amount
1	3 rd Quarter 2004	52,000	52,000	\$90 Million
2	3 rd Quarter 2006	63,500	115,500	\$115 Million
3	3 rd Quarter 2007	25,500	141,000	\$77 Million

Source: UTOPIA feasibility study.

During the first stage of phase one, UTOPIA tested the viability of the network by providing service to 2,000 to 3,000 homes. Once UTOPIA deemed the initial test a success, UTOPIA planned to complete the first phase and have its network pass by 52,000 addresses. If construction went as planned, UTOPIA intended to complete the second and third phases by the third quarter of 2007. By that time, UTOPIA would make service available to all 141,000 addresses within its 11 member cities. In addition, the most conservative estimate predicted that UTOPIA would have a 35 percent subscription rate. With that subscription rate (or take rate) UTOPIA would have about 49,000 actual subscribers by the latter part of 2007. By 2009, UTOPIA operations were expected to

The initial plan was to quickly complete the network and to offer services to 141,000 addresses. generate a positive cash flow which, in turn, would fuel further expansion in UTOPIA's non-pledging member cities.

The Focus of Construction Shifted to Six Rural Cities. In 2005, the agency reported that the first phase of construction was a success and had achieved "take rates high enough to meet business plan objectives." By June 2006, the agency had nearly completed 52 sections (or footprints) of the network in its phase one plan. However, at that time, the agency decided to make a major change in the direction of its construction plan. UTOPIA discovered that it could qualify for additional financing through the Rural Utility Service (RUS), a federal agency charged with financing rural utility projects.

In July 2006, RUS agreed to provide UTOPIA up to \$66 million in debt financing if UTOPIA would use the funds to build its network in rural cities which the federal agency described as communities with populations of less than 20,000 residents. Although the change in plans delayed the construction schedule, UTOPIA accepted the federal loans and shifted its attention to building the network in its six rural cities. Plans for building in UTOPIA's larger cities were replaced with a plan that focused on building the network in the six smallest cities: Brigham City, Centerville, Lindon, Payson, Perry, and Tremonton.

In February 2008, almost two years after approving up to \$66 million in debt financing and seven months after paying out an initial sum of \$21 million, RUS notified UTOPIA that it was withholding additional support until UTOPIA improved its financial condition and developed a new business plan. The loss of financial support came as a surprise to UTOPIA. Because UTOPIA had a signed contract with RUS authorizing construction in Centerville, UTOPIA officials believed they were assured funding beyond the initial \$21 million they had already received from RUS. For this reason, UTOPIA authorized contractors to begin construction before the next round of RUSsponsored financing had been completed. When RUS suspended its support, UTOPIA officials report that their agency was left without the resources to pay outstanding obligations to its contractors. Facing potential lawsuits from contractors, UTOPIA paid the contractors for the partial work they had performed. UTOPIA then spent several years attempting to resolve its dispute with RUS and searching for the additional financing needed to complete the project. That search eventually led to two rounds of refinancing and the creation of the UIA, which has qualified for up to \$65 million in debt financing.

RUS withdrew its support, and UTOPIA was unable to finish its construction as planned. UTOPIA did not achieve its goal to complete construction of the network by the 3rd Quarter of 2007. **UTOPIA Did Not Achieve Its Construction Goals.** By the end of June 2007, UTOPIA had made service available to only 37,160 addresses–less than a third of the original goal. Instead of having 49,350 subscribers, the network had only 6,161 subscribers. Figure 2.2 compares UTOPIA's original goals to the number actually achieved by the years 2007, 2009, 2011, and 2012.

Figure 2.2 UTOPIA Was Not Successful in Its Goal to Complete the Network by 2007. Initially, UTOPIA planned to offer services to 141,000 addresses by the third quarter of 2007. It was able to offer service to only 37,160 addresses that year. Of those, only 6,161 actually chose to subscribe.

	Goal	Actual			
	Sept. 2007	June 2007	June 2009	June 2011	April 2012
Addresses Passed	141,000	37,160	48,646	56,000	58,100
Subscribers	49,350	6,161	8,009	8,572	9,340
Subscription Rate	35%	16.6%	16.5%	15.3%	16.1%

Sources: 2007 Goals - UTOPIA presentation dated December 2003.

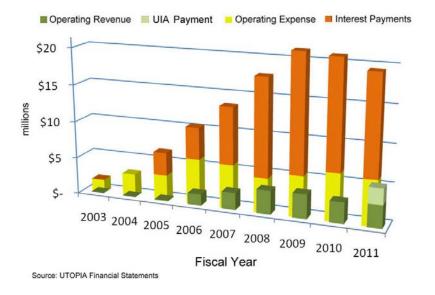
2007, 2009 & 2011 Actuals - UTOPIA Annual Financial Statements.

2012 Actuals - Extracted from UTOPIA Operations Database, April 5, 2012.

Figure 2.2 shows that UTOPIA did not achieve its goal to have service available to 141,000 addresses by the year 2007. The figure also shows that the agency continues to struggle in its effort to expand its network and add subscribers.

UTOPIA Did Not Reach Its Goal to Be Profitable by 2009.

According to the initial feasibility studies, even under the most conservative scenario, UTOPIA's operating revenues were expected to exceed its operating costs and debt service obligation by 2009. However, due to unforeseen circumstances, operating revenues remained low while operating and interest expenses rose. **Figure 2.3 UTOPIA's Expenses Exceed Revenues.** The data show the degree to which UTOPIA's operating revenue (in green) falls short of covering annual operating costs (yellow) and interest payments (orange).



In 2011, nearly half of UTOPIA's revenue was not customer payments but funds received from UIA, its affiliate.

Figure 2.3 shows that UTOPIA's revenues never grew fast enough to cover operating costs and interest payments as expected. Until 2011, UTOPIA was using part of its bond proceeds to cover the difference between revenues and expenditures.

In 2011, UTOPIA began to rely on payments from its newly formed affiliate, the Utah Infrastructure Agency (UIA), to cover most of its annual operating deficit. In Figure 2.3, the lighter green portion of the revenue for fiscal year 2011 represents an additional \$2.1 million payment from UIA that UTOPIA counted as operating revenue. Clearly distinguishing between revenues from subscriber sales and payments from UIA is important. The reported operating revenue increase in 2011 resulted from a transfer of funds between organizations rather than a large increase in consumer payments.

UTOPIA Faces Serious Financial Challenges

As shown previously in Figure 2.3, since 2003, UTOPIA has had nine consecutive years of operating losses. These annual deficits have caused serious damage to the agency's financial position. At the end of fiscal year 2011, UTOPIA had total net assets of negative \$120 million. As shown in Figure 2.4 below, in fiscal year 2011 the expenses of both UTOPIA and UIA far exceeded their revenues.

Because of continued yearly losses with little revenue generation, UTOPIA's book value has declined to negative \$120 million. **Figure 2.4 Summary of the Agencies' Statements of Revenues, Expenses, and Changes in Fund Net Assets.** In fiscal year 2011, both UTOPIA and UIA posted losses.

Revenues	UTOPIA	UIA
Operating Revenues	\$ 5,235,876	\$ 368,452
Non-Operating Revenues	959,679	2,831
Total Revenues	\$ 6,195,555	\$ 371,283
Expenses		
Operating Expenses	\$ 6,110,348	\$1,050,149
Non-Operating Expenses	5,518,567	6,083
Bond Interest and Fees	13,326,289	231,287
Total Expenses	\$ 24,955,204	\$1,287,519
Change in Net Assets	\$ (18,759,649)	\$ (916,236)
Source: UTOPIA and UIA financial statements		

Source: UTOPIA and UIA financial statements.

A significant portion of the operating revenues shown in Figure 2.4 are not customer payments. Although UTOPIA had operating revenues of \$5.2 million, \$2.1 million was a payment received from UIA. Of that \$2.1 million, UIA recognized just over \$1 million as operating expenses, but it capitalized the remaining \$1.1 million payment which therefore did not appear in UIA's statement of revenues and expenses. In contrast to UIA's approach, UTOPIA posted the entire payment from UIA as operating revenue. For UIA, nearly all of the revenue in Figure 2.4 represents direct payments made by UIA's member cities, not revenue from customers.

UTOPIA's loss of over \$18 million in fiscal year 2011 increased its total deficit to over \$120 million. Figure 2.5 summarizes UTOPIA's assets and liabilities at the end of the year.

Figure 2.5 Summary UTOPIA Statement of Financial Position, June 30, 2011. UTOPIA's liabilities exceed its assets by \$120 million.

Assets	Millions
Fiber-Optic Network (net of \$32.2 depreciation)	\$ 79.3
Current and Other Assets	6.1
Deferred Outflow of Resources	52.4
Total Assets	\$ 137.8
Liabilities	
Revenue Bonds Payable	\$ (185.0)
Note Payable (to member cities)	(15.9)
Interest Rate Swaps Liability	(52.4)
Current and Other Liabilities	(4.4)
Total Liabilities	\$ (257.8)
Net Assets	\$ (120.1)

Source: UTOPIA financial statements.

Much of UIA's recognized revenue for FY 2011 came directly from member cities. UTOPIA's major liabilities include \$185 million of bonds payable, nearly \$16 million in notes payable to member cities, and over \$52 million in interest rate swap liability. The swap liability is something that need only be paid if UTOPIA terminates the bonds before maturity. UTOPIA's major asset is the fiber-optic network. The deferred outflow of resources, although shown as an asset, reflects the accounting treatment of the swap liability. The interest rate swap is described in greater detail in Chapter III.

UIA had limited operations in fiscal year 2011, but Figure 2.6 shows its year-end financial position statement. Most of the bonds were not spent and are shown as restricted investments. In addition, UIA and UTOPIA agreed to a capital lease agreement allowing UIA the right to use the UTOPIA network over the next 30 years in exchange for lease payments.

Figure 2.6 Summary UIA Statement of Financial Position, June 30, 2011. UTOPIA's liabilities exceed its assets by less than \$1 million.

Assets	Millions
Fiber-Optic Network	\$ 1.5
Intangible Right to UTOPIA Network	17.4
Restricted Investments	25.1
Other Assets	1.7
Total Assets	\$ 45.7
Liabilities	
Revenue Bonds Payable	\$ (29.8)
Capital Lease Payable to UTOPIA	(16.2)
Other Liabilities	(0.6)
Total Liabilities	\$ (46.6)
Net Assets	\$ (0.9)

Source: UIA financial statements.

The financial statements shown above demonstrate that UTOPIA faces serious financial challenges. However, as a public entity, backed by city sales tax obligations, the organization can continue operations as long as it receives support from its member cities. The following section describes the liability to which the cities are exposed.

Cities Must Follow Through on Their Pledges to Back UTOPIA's Bond Payments. Because revenues have not been sufficient to cover expenses, let alone to cover debt service, and because UTOPIA has spent its entire bond proceeds, its member cities are obligated to follow through on their pledges to provide sales tax revenue as security for UTOPIA's bonds. Because of recent UIA also now has a negative financial position.

refinancing, the maximum amount pledged by the cities for 2012 is only about \$6 million. Figure 2.7 shows the maximum amount that UTOPIA's member cities may have to pay in 2013. The obligation increases at a rate of 2 percent a year and will continue until the year 2040.

Figure 2.7 Cities May Pay Nearly \$13 Million in Fiscal Year 2013. UTOPIA's 11 member cities pledged a portion of their sales tax revenue as security for UTOPIA's bonds. Due to revenue shortfalls, the cities may be required to pay nearly \$13 million next year for UTOPIA's debt service.

City	2013 Pledge
Midvale	\$778,700
Brigham City	430,039
Centerville	427,697
Layton	2,146,598
Lindon	395,126
Murray	1,580,908
Orem	2,802,924
Payson	259,920
Perry	105,494
Tremonton	324,459
West Valley City	3,593,091
Total	\$12,844,956

Source: UTOPIA financial statements.

The pledges represent the amounts needed to pay the annual interest and principal owed to bondholders in the event UTOPIA is unable to pay. As of June 30, 2011, the total city contributions to UTOPIA's Debt Service Reserve Account had reached almost \$16 million. That amount will continue to grow by about \$13 million each year that UTOPIA continues to have an operating deficit. The contributions consist of public funds the cities have had to pay to help UTOPIA cover its debt obligations. UTOPIA intends to repay the cities for their pledge payments once the network begins to generate a positive cash flow. In addition, eight cities also made financial contributions to start the UIA. The following section describes some of the reasons that UTOPIA's network is not generating the level of revenue needed to cover its operating expenses and debt service.

UTOPIA's member cities must pay about \$13 million (growing 2 percent annually) each year that UTOPIA is unable to service the debt on its bonds.

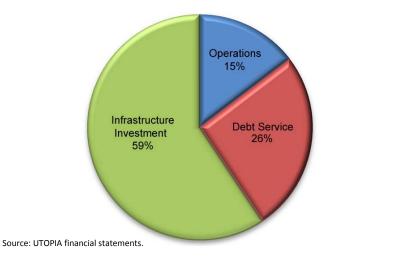
UTOPIA's Bond Proceeds Were Not Put to Productive Use

For any self-sustaining enterprise to succeed financially, whether public or private, investment capital must be used for activities that produce a positive cash flow. UTOPIA has issued \$185 million in bonds to pay the cost of building its fiber-optic network. Most of the bond proceeds have been invested in poorly utilized and partially completed sections of network. As a result, the network is not generating sufficient revenue for the agency to cover its annual debt service and operating costs.

UTOPIA Has Raised \$185 Million In Debt Financing

On three occasions, UTOPIA has entered the bond market to raise the capital it needs to build its fiber-optic infrastructure. UTOPIA issued bonds in 2004, 2006, and 2008 that raised a total of \$185 million in debt financing. By June 2010, UTOPIA had spent virtually all its \$185 million bond proceeds. Figure 2.8 shows that 59 percent of the bond proceeds, or about \$110 million, was spent on the construction of its fiber-optic network. UTOPIA used 26 percent of the bond proceeds, or about \$48 million, to pay its debt service. Another 15 percent, or \$27 million, was used to cover the agency's operating deficits. These amounts only include costs through fiscal year 2010 and do not include contributions or loans from member cities.

Figure 2.8 UTOPIA Has Raised a Total of \$185 Million in Debt Financing. The funds have been used to build the network infrastructure, cover the agency's operating deficits, and pay debt service.



UTOPIA's bonds raised \$185 million. Of that amount only 59 percent was used to cover infrastructure costs. One consequence of the slow growth of the network is that UTOPIA has used a large portion of its bond proceeds to cover interest expense and operating deficits. The balance of this chapter describes the reasons that more of UTOPIA's investment capital has not been used for its intended purpose-to build the infrastructure.

UTOPIA's Infrastructure Investment Is Underutilized

As mentioned, UTOPIA's original financial goals were not met partly because of disruptions in the construction schedule and a loss of federal financing. UTOPIA also saw a large number of subscribers drop the service. As a result, the agency's average subscription rate has dropped well below the critical 30 percent rate, the point at which UTOPIA begins to cover its costs. Currently, Lindon is the only city with a subscription rate that remains higher than 30 percent.

UTOPIA's Subscription Rate Needed to Cover Costs Was Predicted to Be 30 Percent. The subscription rate (often referred to as the "take rate") is a common measure of the success of a fiber-optic network. The take rate represents the percentage of addresses where service is available.

A 2003 feasibility study predicted that UTOPIA was likely to achieve a 55 percent take rate within ten years. The analysis, prepared by an independent consulting firm, was based on the results of a local market survey and the experience of other municipal networks in other states. The study also predicted that if the project reached a 30 percent take rate, the network would begin to have a positive cash flow and be able to operate without additional financial support. In effect, the 30 percent take rate was identified as the breakeven point beyond which the agency would operate as a self-sustaining enterprise.

Only Lindon Has a Subscription Rate in Excess of 30 Percent. According to early feasibility assumptions, Lindon is the only UTOPIA member city with a sufficient number of subscribers to support the cost of the network. As of April 5, 2012, access to service had been provided to seven of the nine construction areas or "footprints" in Lindon. Of the 4,024 addresses where service is available, 1,357 subscribe to one or more UTOPIA services. That equals a subscription rate of 34 percent. The residential areas alone had a subscription rate of 36 percent.

For UTOPIA to reach breakeven, planners predicted it must have a 30 percent take rate. While Lindon is the only city that currently has a subscription rate higher than 30 percent, at one time, Orem and Payson appear to have had subscription rates higher than 30 percent. However, due to a loss of subscribers, the take rates in those cities have declined. For example, Orem has 3,553 addresses that have subscribed to services at one time or another. Of those, over one-third (1,275 addresses) have dropped the service.

Lately, UTOPIA has focused a new marketing effort with some of its legacy neighborhoods where infrastructure has been installed but is underutilized. Those efforts have yielded modest results. From November 2010 to July 2012, through construction largely funded through UIA, UTOPIA's subscriber data shows it has gained 281 additional subscribers in Orem. Even so, Orem's take rate among addresses where service is available has dropped to 23 percent. As a result, Orem, as well as Payson, no longer has a sufficient number of subscribers to generate the revenue UTOPIA needs to recover its investment in those communities. Because service is not available to many addresses, only 9 percent of all Orem and Payson residents and businesses subscribe to UTOPIA.

As shown in Figure 2.2 (page 8), as recently as April 2012, UTOPIA offered services to 58,100 addresses. That means the network service has been completed near the street address and is available for service. Of those available addresses, 9,340 subscribe to the service, for a system-wide take rate of 16 percent. However, the residential areas appear to have higher rates of acceptance than the business and multi-dwelling units. System-wide, the residential take rate is 21 percent. Therefore, even the residential sector is still well below the critical 30 percent breakeven point needed to generate a positive cash flow.

We are especially concerned about some footprints where UTOPIA has made a large investment but has very few subscribers. For example, one highly underutilized footprint is located in West Valley City. UTOPIA has invested over \$1 million to install cable, cabinets and conduit systems in an area that has only 27 subscribers. The investment in that section of West Valley is not capable of producing the revenue UTOPIA needs to cover its costs.

Under UTOPIA's new business model, which is financed through UIA, the potential for return on investment is one of the most critical

While some areas of the network appear adequately utilized, the network on the whole remains underutilized (16 percent subscription rate). factors in deciding where to build. UTOPIA and UIA have expressed a commitment to build only in areas that have demonstrated a level of interest sufficient to recover the investment.

Many Footprints Have Stranded Investments

In addition to having some neighborhoods with very low subscription rates, UTOPIA has made a substantial investment in other neighborhoods with no subscribers at all. These are areas where construction was halted before the final components of the network could be installed. These stranded areas create a drain on the agency's finances because they do not provide any income. Perry City is an example of a community with a sizable amount of stranded investments.

UTOPIA Has Invested at Least \$10.8 Million in Locations Where No Users Have Been Connected to the Network. UTOPIA's engineering staff have divided its member cities into 178 unique construction zones or footprints. We found 21 footprints in which UTOPIA has invested a total of \$10.8 million but has no subscribers.

Figure 2.9 shows the extent to which UTOPIA's network is underutilized. Each footprint is classified into one of three categories: (1) those that are in production, where UTOPIA has connected subscribers, (2) those not yet in production, where UTOPIA has partially completed construction but has not connected any subscribers, and (3) those where UTOPIA has made no investment.

At least \$10.8 million worth of infrastructure currently serves no subscribers. Figure 2.9 Capital Investment in 21 Footprints Is Partially Completed. By June 2011, UTOPIA had invested \$112.7 million in its network infrastructure. Of that, \$10.8 million was invested in 21 footprints which were only partly completed. While UTOPIA could not offer services in those footprints, five businesses paid the cost of connecting on their own.

Type of Footprint	Number of Footprints	Number of Users ₃	Amount Invested
1. In Production	78	8,739	\$ 80.1 m
2. Partial Investment Made	21	5 ₁	10.8 m
3. Not in Production	79	13 ₁	\$ 0.0 m
Local Totals:	178	8,757	90.9 m
System-wide Investment			26.7 m
Network Totals:	178	8,757	\$ 117.6 m ₂

1. Represents business subscribers that paid the cost of connecting to the network.

 Includes just over \$1 million in infrastructure investment funded through federal stimulus funds and \$5 million Brigham City invested on its own infrastructure.

3. User data is from 7/31/11.

Figure 2.9 shows that as of June 2011, nine years after the agency was formed, UTOPIA has provided service to only 8,757 customers. That number represents only 6 percent of all the addresses within its 11 pledging member cities. Updated data from UTOPIA for July, 2012 places the number of subscribers at 9,480. Figure 2.9 also shows that 79 footprints were not in production because UTOPIA had not begun construction in those locations. However, a few businesses in those footprints have paid the cost of connecting to the network on their own.

Perry City Has \$2 Million in Stranded Infrastructure.

UTOPIA made a large investment in network infrastructure in its smallest member city before it was forced to halt construction. Initially, the construction of the network in Perry was to be paid from the financing provided by the Rural Utility Services. UTOPIA staff report that when RUS withdrew support, UTOPIA left Perry with a partially built network because it did not have sufficient resources to complete that city's infrastructure construction. As a result, UTOPIA's investment in Perry does not generate any revenue, although UTOPIA must still service the debt on that investment.

With a 7 percent cost of capital (which is the interest on its debt financing), we estimate that UTOPIA pays about \$138,000 each year for its unused infrastructure in Perry. Had the network been

While Perry has \$2 million in infrastructure, none of it is operational. completed in a timely fashion and had subscribers been signed up for service, UTOPIA would instead be generating income to offset that interest expense. Since Perry did not join UIA, UTOPIA administrators have no current plans to complete the network in Perry.

Some Footprints Already in Production Also Contain Stranded Investments. In addition to the stranded investment in 21 partially completed footprints, we have identified other footprints in production that also contain stranded infrastructure. Although we were unable to identify the exact amount, 78 footprints in production (see Figure 2.9) contain at least some of the stranded investment. For example, UTOPIA staff were able to identify many footprints where service is provided to some neighborhoods but not others even though they contain network conduit, main lines, and even electronics cabinets. Those footprints appear to contain millions of dollars in partially completed infrastructure that has not been put into use.

In summary, UTOPIA has invested over \$117 million in infrastructure that is currently underused or unused. The annual interest expense on that investment is a major financial drain on the agency. For the \$10.8 million in stranded investments that we could identify, UTOPIA's interest expense is roughly \$756,000 each year. The underutilized and stranded investments are one reason UTOPIA has spent a large portion of its bond proceeds on interest expense. Instead of generating revenue for UTOPIA, those areas are placing a financial burden on the agency.

Efforts Are Being Made to Put Stranded Investment into Production. UTOPIA officials report that since 2008 the agency has worked to connect stranded sections of the network. For example, when UTOPIA's RUS funding was suspended in 2008, UTOPIA had completed 74 percent of the infrastructure in Tremonton. However, UTOPIA could connect no customers in that city because it had not yet installed any fiber. Since that time, UTOPIA raised the additional funds needed to complete the network in Tremonton and has been able to provide service to that community.

UTOPIA officials report that between 2008 and 2010, they were able to make additional investment in cities with stranded infrastructure. In all, they report that \$11.6 million in previously stranded investment has been connected to the network since 2010

Some footprints currently in operation still contain areas of stranded investment.

and is now operational. During 2012, UTOPIA staff report they began to make the additional investment needed to complete the network in Centerville City, which in 2008 had \$3.4 million in stranded investments.

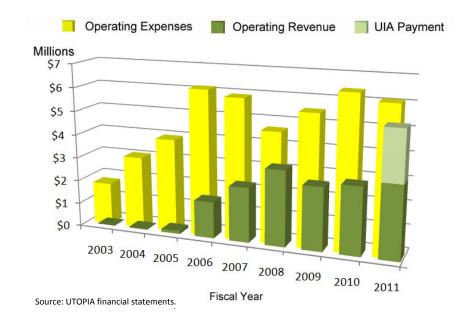
UTOPIA Used Bond Proceeds to Cover Operating Costs and Debt Service

Slow progress in building the network and a general lack of subscribers have forced UTOPIA to use a large portion of its bond proceeds to cover operating deficits and debt service costs. The use of debt to cover the cost of operations and debt service is symptomatic of an organization facing serious financial challenges.

\$27 Million of Bond Proceeds Used to Cover Annual Operating Deficits

Early feasibility studies predicted UTOPIA would suffer operating deficits for only a brief period of time. A 2003 feasibility study reported that some of the bond proceeds would be used to cover the agency's cost of operations and some debt service during the initial phase of network operations. However, the study predicted that by 2009, even in the most conservative scenario, UTOPIA's operating revenues would exceed the network's operating costs and its debt service requirements. Unfortunately, it has been seven years since UTOPIA began construction and the agency is still unable to generate sufficient revenue to cover its operating and debt service costs. Figure 2.10 compares revenues to the cost of operations without the debt service.

After 7 years of operation, UTOPIA is still unable to cover the interest payments on its bonds. **Figure 2.10 Seven Years of Operating Deficits Have Cost \$27 Million.** During UTOPIA's first seven years of connecting customers (since 2005), it did not generate revenues sufficient to cover the agency's operating costs, which have averaged \$5.5 million a year.



UTOPIA's increased revenue in 2011 is attributable to payments made by UIA.

Figure 2.10 shows that UTOPIA's operating revenues, shown in green, have been consistently below its operating costs, shown in yellow. During fiscal year 2011, roughly \$3 million in residential access fees (green bar) plus a \$2.1 million payment from the UIA (light green) comprised the operating revenues. Business installation fees also generated a small amount of revenue.

As for the operating expenses (shown in yellow), the payroll represents the largest single operating cost at about \$2.5 million in fiscal year 2011. Professional services cost \$1.4 million that year. The cost of accessing the network added \$1.5 million and UTOPIA spent another \$700,000 for materials and supplies.

Figure 2.10 shows that after seven years of connecting customers, UTOPIA has yet to achieve a positive cash flow. In 2011, UTOPIA's revenues increased to the point of almost equaling its operating costs. However, the increase in revenue is largely attributable to the additional funds received from UIA. Although UTOPIA has suggested that the increased revenue in 2011 demonstrates a marked improvement in the agency's financial condition, we question whether reliance on payments from an affiliate truly represents an improvement. Because those receipts are actually payments from UIA's bond proceeds, rather than customer receipts, we believe that "revenue" is actually a transfer of debt financing from one entity to another.

Because UIA had no real operating revenues of its own and used debt to pay for its use of the UTOPIA network, UTOPIA should not view UIA's payments in the same light as revenue from sales. When the revenue from UIA is excluded, UTOPIA's operating revenues are still below the levels posted in fiscal years 2008 and 2009. Furthermore, during fiscal year 2011, UIA posted an operating deficit of its own, amounting to \$687,780. That deficit was largely due to the agency's start-up costs and the cost of financing its bond issue. Combined, UTOPIA and UIA suffered operating deficits in fiscal year 2011 amounting to \$1.6 million. A true improvement in the agencies' combined financial position will occur if and when they can reduce their combined operating deficits.

UTOPIA Has Also Used Bond Proceeds to Cover Its Annual Debt Service Obligations. If UTOPIA's business plan had been completed in 2007 as intended, a larger number of subscribers would be receiving service and paying the fees UTOPIA needs to cover its debt obligations. In fact, the original plan anticipated the network would have been built and generating revenues before interest expense grew to the present levels. Instead, completion of the network was delayed. UTOPIA was therefore unable to develop the customer base it needed to generate revenues and cover its annual debt obligations. By 2008, the annual debt service grew to roughly \$13.1 million (see Figure 2.11).

UTOPIA has been using bond proceeds to make interest payments on the bonds.

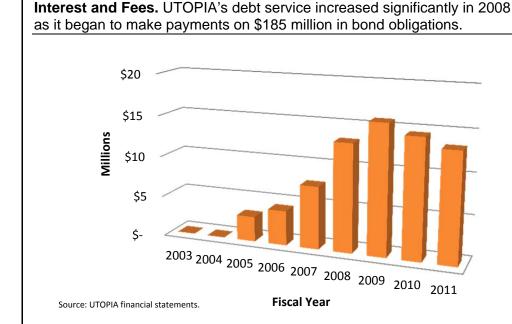


Figure 2.11 By 2010, UTOPIA Had Spent \$58.4 Million in Bond

From 2003 until 2010, UTOPIA used \$58.4 million to pay for the principal and interest on its bonds. The vast majority of that amount was paid from the agency's bond proceeds. However, during fiscal year 2010, UTOPIA had nearly used up all of its bond proceeds and its member cities were required to carry out their pledges to cover UTOPIA's debt obligations. In 2010, the cities paid \$6.7 million to help cover UTOPIA's debt service. During fiscal year 2011, having spent all its bond proceeds, UTOPIA's member cities were required to contribute \$9.1 million toward the agency's \$13 million annual debt payments.

Using bond proceeds to pay for interest expense should have been a temporary expense during those first years when interest costs were low. Now that UTOPIA's annual interest costs have reached \$13 million, UTOPIA faces the challenge of financing a network that is only partially built, has few remaining resources to complete construction, and has insufficient revenues to cover the cost of operating the network. Chapter III, which follows, describes the factors that contributed to UTOPIA's financial problems.

Interest payments using bond proceeds amount to \$58.4 million.

Chapter III UTOPIA's Financial Woes Attributed To Many Different Causes

The Utah Telecommunication Open Infrastructure's (UTOPIA's) financial difficulties have been attributed, at least in part, to mistakes in planning, mismanagement, and unreliable business partners. Many of those issues began with the agency's former management. Another cause of UTOPIA's poor performance is an insufficient number of subscribers, either because of a lack of consumer demand or because UTOPIA has not effectively responded to the consumer demand that does exist.

Poor Planning, Mismanagement, and Unreliable Partners Led to UTOPIA's Poor Performance

We found that the board minutes provide little insight into the challenges UTOPIA has faced during the past ten years. Furthermore, the agency was not able to provide much documentation of its first few years of operation. For this reason, we were forced to rely heavily on the recollections of those involved with UTOPIA since its inception. UTOPIA's board members, staff, and outside consultants readily admitted that mistakes were made during the rollout of the network. To summarize, the mistakes they described generally began before UTOPIA's current management's tenure and fall into one of the following three categories: (1) poor construction planning, (2) mismanagement, and (3) unreliable business and finance partners. The following sections describe examples of each.

Poor Construction Planning Put the Agency at Financial Risk

Staff and others associated with UTOPIA during its early years have suggested that some of the agency's problems stem from the lack of an effective construction plan. They say it was a mistake for UTOPIA to try to build sections of the network in many different cities at once. In addition, the agency decided to pay for the full construction of the network without charging residents an installation fee. Further, the agency's construction plan underestimated the difficulty of accessing certain rights of way. Finally, the construction UTOPIA staff and board members describe their problems as arising from poor construction planning and mismanagement. plan did not anticipate the difficulty UTOPIA would face in resolving right-of-way disputes. These mistakes were costly and contributed to the delayed completion of the project.

We believe an underlying problem throughout UTOPIA's expansion is the lack of a carefully prepared development plan and policies to guide the construction of the network. When we asked to see the original planning document for UTOPIA's expansion, staff were unable to produce one. They said the planning of the network was initially carried out by UTOPIA's contractor, Dynamic City, and that they may or may not have had a written plan. However, if it existed, no copy was on record at UTOPIA's main offices. We would find it alarming if a government entity attempted such a highly complex and expensive construction project without drafting a formal written plan approved by a governing board. However, board minutes make no mention of the board ever reviewing and approving such a document and staff report that no such document is on file.

The Decision to Build in Many Cities Simultaneously Was a Mistake. UTOPIA board and staff commonly identified as one mistake the decision to attempt a "ubiquitous build." That is, the agency attempted to build at least a portion of its network infrastructure in each of its member cities at the same time. This approach to construction led to partially completed sections of network in multiple cities at different locations that are still incapable of producing revenue.

At first, UTOPIA intended to complete construction of the network in a few construction areas or footprints at a time. In addition, the initial strategy focused on locations that were expected to provide a high initial return on investment. Once an area was completed, UTOPIA could enroll subscribers and immediately begin generating the revenue needed to build in other locations.

One consultant, who worked with UTOPIA from the beginning, told us that political pressure led them to adopt the strategy whereby they would build portions of the network in many different communities at once. In 2007, a year after the agency completed its first phase of construction, UTOPIA was accused of abandoning its commitment to universal service. Instead, its critics said, the agency was focused exclusively on wealthier neighborhoods and was "cherry picking" the high-end subscribers.

Citing political pressures, UTOPIA leadership altered its build strategy to appear more demographically inclusive. One former executive reported that UTOPIA leadership addressed the cherry-picking concern by directing contractors to focus on areas where the build would be the cheapest and UTOPIA could maximize its investment. The agency sought to demonstrate its commitment to equal treatment by disregarding income level or economic status in the building strategy.

Furthermore, UTOPIA staff and consultants reported the agency felt pressure to begin construction in many different locations in order to demonstrate to as many cities as possible that they were benefitting from participation in UTOPIA. The result was a rather haphazard series of disconnected sections of network.

While the agency's ubiquitous approach to construction may have addressed the complaints of some critics, it turned out to be a financially risky strategy. The construction effort was not aimed at completing sections of network that could immediately generate revenue. Thus, when funding became scarce, UTOPIA found it did not have the ability to complete partly built sections of network in several different communities. The result was a significant amount of stranded investment.

As reported in Chapter II, UTOPIA officials state they are making a concerted effort to free already stranded assets. Additionally, moving forward UTOPIA officials have committed to requiring a minimum level of interest before investing in any new infrastructure.

The Decision to Connect Subscribers without Charging a Connection Fee Was Costly. UTOPIA's former management team exposed the agency to financial risk when it decided to not charge homeowners at least a portion of the installation cost. As an alternative to charging a connection fee, UTOPIA might have followed a more widely accepted industry practice of requiring a minimum subscription period. When a large number of homeowners chose to stop subscribing to the service, UTOPIA was unable to recover much of its local infrastructure investment.

UTOPIA's early board and staff appear to have been overly confident, believing that residents would be so drawn to the new service that few subscribers would drop it. In fact, a large number of early subscribers did choose to drop the service. As a result, UTOPIA ended up with a large amount of "last-mile" infrastructure (the length from the street curb to the premise) that was not being used. By the

UTOPIA's commitment to build in many cities at once proved to be financially risky and resulted in significant stranded investment. end of 2010, 3,698 former subscribers who had not been required to pay a last-mile installation fee had dropped the service. That represents 31 percent of UTOPIA's subscribers at that point. We estimate UTOPIA's stranded investment in those homes to be \$4.4 million. Because the subscribers left the network, UTOPIA has no way of recovering that investment in last-mile infrastructure.

UTOPIA is also losing money on many early subscribers who remain on the network. Because UTOPIA did not require these subscribers to pay an installation fee, they did not contribute to the cost of installing the network infrastructure. Current monthly fees have not yet been sufficient to cover the network's operating cost and so cannot provide anything toward repaying infrastructure costs. By our latest estimate, UTOPIA connected 7,329 subscribers (in addition to those 3,698 who dropped the service) who did not pay an installation fee. At \$1,183 per home, we estimate the last-mile costs to those homes represent an \$8.7 million investment.

Taken together, we estimate UTOPIA has paid about \$13 million in last-mile costs for subscribers, both those still with the network and those who dropped the service, who never paid installation fees. Going forward, UTOPIA's current management team has sought to address that problem by requiring new subscribers to pay the cost of installation.

Development Held Up Due to Disputes Over Rights of Way. UTOPIA's construction plan may have been overly optimistic regarding the accessibility of utility poles in certain neighborhoods. UTOPIA staff report that much of the stranded investment and delays in the construction schedule can be attributed to disputes over access rights. In some neighborhoods, UTOPIA planned to install its fiberoptic cables on certain utility poles owned by the telephone or power companies. UTOPIA staff report that disputes over access to those utility poles prevented them from installing UTOPIA's equipment in certain neighborhoods. Rather than hold up construction until such disputes were resolved, UTOPIA contractors were instructed to move on to other areas where access was not in dispute.

After eighteen months, UTOPIA and Qwest finally resolved their dispute over access rights. By that time, however, UTOPIA staff report that the agency's construction contractors had moved on to other locations and the financial resources had been committed

The cost to provide last mile installations to subscribers amounts to an estimated \$13 million on UTOPIA's books. elsewhere. As a result, the financing was no longer available to complete the partially built neighborhoods. The result is a patchwork of service with some neighborhoods receiving services and with other, adjacent neighborhoods without service.

By May 2010, UTOPIA had been able to put 78 footprints into production. However, due to previous access issues and other obstacles, 19 percent of the residential addresses in those footprints could not be provided access to services. As a result, each footprint was not capable of generating the expected level of revenue.

Mismanagement Has Been Costly

Costly management mistakes have also contributed to UTOPIA's financial problems. Interviews with UTOPIA board members, staff, and consultants uncovered a number of poor decisions and weak business practices. We offer three examples: (1) UTOPIA's slow response to retailers with bad debts, (2) UTOPIA's use of complex financing called interest rate swaps, and (3) the purchase of \$3 million in set-top boxes that became obsolete before many were used.

Retailers' Bad Debts Have Hurt UTOPIA's Bottom Line. UTOPIA wrote off over \$3.1 million in bad debt expense incurred by several retail providers who would not pay UTOPIA's fees for network use. Retail providers offer services directly to subscribers and bill them connection and content fees. The retailers then pay UTOPIA for their use of the network. Several retailers did not keep current on payments which, according to one officer, forced UTOPIA to write off those unpaid fees. Figure 3.1 identifies the amount of bad debt incurred during the past three years. UTOPIA did not post any bad debt expense prior to 2009.

Figure 3.1 Bad Debt Expenses Increased During the Past Three Years. UTOPIA has had several retail providers who have not paid the agency its share of customer receipts.

Fiscal Year	Bad Debt Expense
2009	\$ 669,152
2010	1,127,875
2011	1,265,873
Total	\$ 3,062,900

Source: UTOPIA financial statements.

Mismanagement is also to blame for UTOPIA's financial condition. Uncollected revenues from retail providers have cost UTOPIA \$3 million. If retailers had paid all they owed, UTOPIA's operating deficits would have been much smaller during the past three years. With nearly \$3.1 million left unpaid, the retailers and UTOPIA have imposed a significant financial burden on UTOPIA's member cities.

UTOPIA has shown a great interest in developing a group of retail providers for its open access network. This desire to develop its retail partners may have led the agency to be overly patient with retailers who failed to pay their network fees. In addition, UTOPIA staff report they were reluctant to drop some delinquent providers because UTOPIA could not afford the cost of replacing the providers' proprietary set-top equipment. They also report reluctance to drop providers because of difficulty in finding other providers who would offer video on the UTOPIA network.

In our view, UTOPIA should have taken quicker action to transfer clients away from retailers who failed to pay their bills and reassign those clients to other more reliable providers. By not responding more quickly to delinquent retail providers, UTOPIA may have incentivized its providers to postpone paying their debts. One provider in good standing with UTOPIA said he believed the agency's lack of action toward delinquent providers has been unfair to his organization and to other more responsible service providers because it puts them at a competitive disadvantage. Had UTOPIA taken a more aggressive stance, we believe the agency could have reduced its operating deficits and the financial burden now placed on its member cities.

The Use of Interest Rate Swaps Prevented UTOPIA from Taking Advantage of the Decline in Interest Rates. When UTOPIA issued its first bonds in 2004, its bond underwriter encouraged the board to approve a set of variable rate bonds in order to obtain a reduced interest rate. UTOPIA's financial advisor reports the underwriter also insisted on an interest rate swap agreement if UTOPIA sought a variable rate loan.

According to the minutes of the July 20, 2006 board meeting, the board was told that "swaps are designed to reduce debt and risk and result in lower cost of borrowing." The savings from the use of the swap agreement were predicted to be \$7 million. According to UTOPIA's financial advisor, the interest rate swap agreement would only be an impediment if interest rates were to drop significantly and if it became necessary to refinance the agency's debt.

UTOPIA's method of bond financing hurt its ability to take advantage of changing market conditions and refinance at lower interest rates. One and a half years after the initial bond agreement, interest rates dropped sharply and the agency needed to refinance its debt after it became entangled in a dispute over another financing package with the federal Rural Utility Service. As a result, the highly leveraged swap instrument became a significant obstacle when UTOPIA set out to refinance its debt in 2008. Although it was successful in refinancing its debt, the high cost of liquidating the swap agreement has made it difficult for UTOPIA to refinance its debt and take advantage of lower interest rates. Instead of being able to refinance its bond issues at historic low rates, the swap has effectively fixed the agency's cost of capital at 7 percent. At the end of fiscal year 2011, UTOPIA reported that the cost of closing out the swap agreement, if it chose to do so, had reached \$52 million.

UTOPIA Purchased \$3.3 Million in Set-Top Boxes that Were Soon Outdated. In hopes of minimizing unit costs, UTOPIA's former management authorized a \$3.3 million bulk purchase of 17,915 set-top boxes used to display the network's video content on subscriber's televisions. UTOPIA's managers appear to have been overly optimistic regarding the number of subscribers they would be able to enroll. Due to the slow pace of construction, only 5,683 (32 percent) of the set-top boxes were used. In addition, 5,425 boxes quickly became outdated and went unused when digital video recording (DVR) became a popular service. A portion (64 percent) of the original set-top boxes was not DVR-capable. Eventually, UTOPIA sold some surplus boxes for \$274,000, a fraction of the original \$2 million cost for the unused boxes.

Unreliable Business Partners Blamed for Setbacks

UTOPIA staff and board members attribute many setbacks to the poor performance of the agency's business partners. They claim some retail providers, general contractors and financiers share part of the blame for UTOPIA's lack of progress in completing the infrastructure. In fact, a few board members and staff admit they bear some responsibility for placing the future of the agency in the hands of less qualified outside contractors. One even said that, in hindsight, UTOPIA probably should have delayed proceeding with the project until it had a stronger set of business partners.

UTOPIA Lost the Support Previously Offered by the Rural Utilities Services. In 2006, the federal Rural Utilities Service (RUS) Purchase of bulk quantity equipment went largely unused, costing UTOPIA \$2 million in wasted investment.

UTOPIA partners share some of the blame for UTOPIA's condition, according to board and staff. agreed to provide UTOPIA with a \$66 million loan to build the network in six of UTOPIA's member cities.

Although RUS appears to have been closely involved in the planning and design of the network for approximately two years, it eventually withdrew its support. When asked, RUS declined to comment on its reasons other than to refer us to a letter they sent to UTOPIA (see Appendix A). In the letter, RUS informed UTOPIA that it "had not met the terms under the Bond Acquisition Agreement" and RUS was therefore withholding additional financial support. RUS then gave the following two reasons for withdrawing its support:

- RUS raised concerns about UTOPIA's solvency.
- RUS stated that UTOPIA's business plan had failed due to "poor prior management" of the project. Specific problems observed included an ineffective business plan, ineffective marketing, and cost overruns.

Although the RUS said it was "ready to work with UTOPIA ... to bring its operation out of financial difficulty," the federal agency required that UTOPIA meet a number of conditions before it would agree to provide the remaining funds.

UTOPIA disputes the claim that it did not comply with the terms of its agreement with RUS. In fact, UTOPIA staff report that partially completed sections of network Centerville were actually authorized by RUS before construction began. UTOPIA staff say that by withholding the funds, RUS forced UTOPIA to use its remaining bond proceeds to pay contractors for the work they had performed. Because construction in most areas was not yet completed, staff say that UTOPIA was unable to enroll any subscribers in those communities and generate the income it needed to cover its costs. In effect, UTOPIA claims that RUS was actually the cause for the stranded investment and UTOPIA's inability to generate revenue from that infrastructure. As a result, UTOPIA has filed a legal claim against RUS for the damages UTOPIA has suffered.

Retail Providers Blamed for Poor Customer Support, Loss of Subscribers. Initially, UTOPIA assumed that once the network was built, it could rely on its retail providers to market the network services. Perhaps naively so, the agency assumed that UTOPIA's high

about UTOPIA's solvency and its business plan when it withdrew its support.

RUS cited concerns

bandwidth services and the marketing by its retail providers would attract tens of thousands of families and businesses. Instead, UTOPIA's board and staff say they were surprised to find that retail providers did not aggressively market the service, and that they signed up far fewer subscribers than anticipated. Furthermore, the board also expressed disappointment with the lack of customer service offered by some retail providers.

To address these issues, UTOPIA has since modified its business model to include its own marketing effort. UTOPIA administrators believe this change in marketing approach will increase the number of subscribers and educate those subscribers on their ability to change retail providers if service does not meet expectations.

UTOPIA's Troubles Also Attributed to the Poor Execution by a General Contractor. Initially, UTOPIA relied on an outside general contractor to develop and operate the network. UTOPIA's board made a commitment to "keep government small" by contracting out as many functions as possible. For this reason, from 2004 until 2007, the agency had a minimal in-house staff, relying mainly on the part-time support of staff provided by its member cities. For example, for the first few years, UTOPIA's executive director split his time with his responsibility as city attorney for West Valley City.

UTOPIA relied on its outside general contractor to plan and oversee network construction. Once built, the contractor managed the network operations center on UTOPIA's behalf. The general contractor was also responsible for all administrative functions, such as the design and construction of the network, hiring construction contractors, and building and operating the network operations center.

After several years of relying on outside support, mainly from its general contractor, UTOPIA's board realized that it did not have adequate control over the agency's operations. Furthermore, some observed that although its general contractor had essentially developed the concept of an open-access broadband network, the contractor did not have the expertise to effectively execute that vision. UTOPIA insiders said they began to reconsider their decision to rely on outside assistance when the general contractor was purchased by another firm which soon fired a majority of the contractor's employees. UTOPIA officials say retail providers did not market UTOPIA's product as actively as anticipated.

Inexperience of its general contractor was also cited as a cause for UTOPIA's troubles. As problems mounted, the board decided to hire its own in-house staff to assume greater control over the construction and operations of the network. For this reason, in 2008, UTOPIA severed ties with its contractors and consultants, hiring a new executive director and developing its own in-house staff to carry out the agency's new business plan.

A Lack of Sufficient Subscribers Also Contributes to UTOPIA's Condition

In addition to UTOPIA's problems with poor planning, mismanagement, and unreliable business partner performance, a lack of sufficient customers is also a cause for the agency's slow progress. UTOPIA's historic and current take rates, coupled with its revenues, strongly suggest either a lack of consumer demand or an agency inability to meet the consumer demand that does exist. A contributing factor to UTOPIA's difficulty in meeting targets may also be its wholesale-only operating model.

Take Rates Did Not Reach Projected Levels

In the past five years of operation, UTOPIA has failed to reach its target take rates (projections for subscribing residents). Currently, the Utah Infrastructure Agency (UIA) is also falling behind its most recent targets.

Historic Take Rates Never Reached Projections. The original UTOPIA feasibility study predicted rapid growth in take rates. The 2003 study gave a base case scenario for UTOPIA, projecting the network's success according to the performance of similar networks across the nation. The study, based on a survey of residents in each member city, predicted take rates beginning at around 5 percent in the first year and steadily climbing to above 50 percent by the eighth year of operations.

Actual take rates in the network showed a far different pattern. In the first year of operations, UTOPIA's take rate rose to almost 5,000 subscribers of roughly 24,000 marketable addresses, giving it a take rate of 20 percent. However, during the next several years, the number of subscribers grew at a slower pace than did marketable addresses, causing the take rate to drop and then hold relatively steady at around

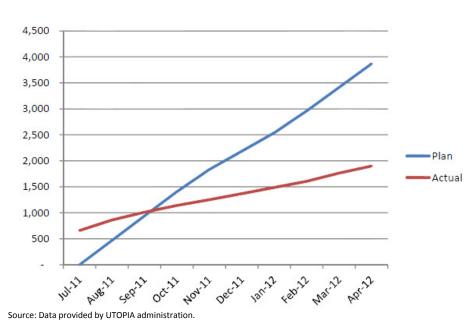
UTOPIA's original model predicted subscription rates far higher than UTOPIA has yet achieved. 16 percent. In fiscal year 2011, UTOPIA reported fewer subscribers than it had in 2010, making 2011 the first year UTOPIA actually lost more subscribers than it gained.

While UTOPIA did grow during its first five years of operation, after the first year, it never met the expected growth rates. While multiple factors may have contributed to UTOPIA's lack of subscribers, one explanation is that demand for the product was not as strong as first predicted by outside consultants.

Current Take Rates Are Falling Below UIA Targets. UIA developed a financial model that gave subscription targets for each month of the next five years. UIA predicted first-year subscriptions to come from areas where UTOPIA was already present as well as from new construction areas.

Actual subscriptions have not kept pace with the targets outlined in UIA's financial model. Figure 3.2 compares the number of new UIA subscribers to the targeted growth in subscribers since July 2011. The blue line represents UIA model projections while the red line shows UIA's actual progress. The red line starts higher than the plan line because the marketing program began weeks before the start date in the plan.

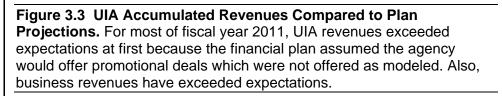
Figure 3.2 Growth in Subscriptions Compared to Targets. The actual number of new subscribers during the first year of the new five-year development plan is below the targeted amount.

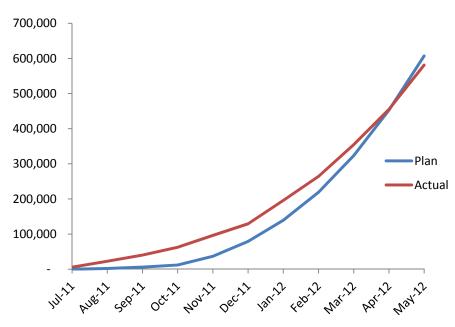


UIA's current subscription rate is falling behind projections, averaging 190 new subscribers per month instead of 450.

The data in Figure 3.2 shows that, while the new marketing program began with a head start on planned enrollment, new subscriptions have grown at a much slower pace than anticipated in the five-year plan. To achieve the expected number of new subscribers, UTOPIA, under its new UIA-financed plan, would need to add about 450 subscribers each month for the first year. From July to April, the agency added about 190 subscribers each month. Despite focused marketing efforts, the agency has been consistently missing its subscriber targets.

UTOPIA Reports UIA Revenues Are Meeting Expectations. Apart from subscribers, another indicator of the network's success is its revenue growth. UTOPIA officials argue that while their subscriber counts are below target, the real test of network health will be revenues. Figure 3.3 shows that reported accumulated revenues were performing better than plan targets until May, 2012.





UIA accumulated revenues initially performed better than projected because of earlier than anticipated revenue collection.

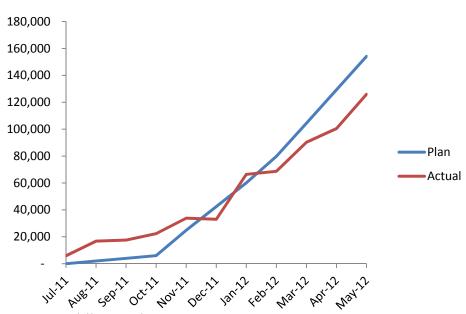
The CFO reports that UTOPIA staff originally modeled a possible promotion into their projections that they did not use, allowing more

Source: Data provided by UTOPIA administration.

revenues to be collected early in the plan's implementation. Another reason for higher than anticipated revenues is increased business revenues early on in the plan.

While accumulated revenues had been performing ahead of projections until May 2012, a review of monthly revenues shows more cause for concern. Figure 3.4 shows monthly revenue targets compared with actual revenues collected.

Figure 3.4 UIA Monthly Revenues Compared to Plan Projections. UIA monthly revenues began ahead of target because of unanticipated business revenues and unutilized residential promotions, which were modeled into original plan projections.



Source: Data provided by UTOPIA administration.

While UIA's plan predicts a steep increase in monthly revenues after October 2011, actual revenues have not kept pace with projections. The main reason revenues are falling below targets relates to the information presented in Figure 3.2, which outlines UIA's progress in subscribing residents in its member cities. Subscribers are not growing at the levels UIA anticipated, and thus UIA is unable to match its revenue projections. Figure 3.4 shows the impact of UTOPIA's promotional deal. The planned revenue (in blue) grew very slowly between July and October 2011 because the agency included a promotional offering to new subscribers in its projections. The actual revenue (in red) exceeded the plan because the promotional deal was not offered, or at least not to the extent identified in the plan.

UIA monthly revenues are falling behind targets because of slow subscriber growth. As stated previously, two possible explanations for the agency's poor performance are (1) demand for UTOPIA's product has not been high enough, and (2) UTOPIA has been unable to meet existing demand sufficient to reach agency projections. Another possible explanation is the limitations of UTOPIA's open-access model, which offers service delivery on a wholesale basis.

UTOPIA's Wholesale Model Faces Limitations

One limitation of UTOPIA's strategy to offer services on a wholesale basis is that it relies on outside retail providers to provide customer service and support. If a retailer's service quality falls short and subscribers leave the network, it can adversely affect UTOPIA's chances for success.

The Wholesale Model May Be Part of the Problem. Outside observers have indicated that UTOPIA's business model, which relies heavily on outside retail providers, is part of the problem. David Chaffee and Mitchell Shapiro, in a publication titled *Municipal & Utility Guidebook to Bringing Broadband Fiber-Optics to Your Community* specifically mentions Utah's "wholesale only model" as one reason UTOPIA has "struggled to achieve targeted penetration rates and revenues." They observed the following:

> ... If retail providers drop the ball in terms of attracting and retaining customers, the network owner is left with the burden of debt repayment, but without corresponding control over the growth of its subscriber base and revenue...

> The wholesale model also leaves a network owner at the mercy of the service quality provided by retailers using its network. . . . If that quality does not measure up in customers' eyes . . . the network owner loses revenue-generating customers, and is likely to get much of the blame, even if it had nothing to do with the problem and can do very little to correct it.

UTOPIA administrators have since altered their business model to include the new UIA-financed effort to allow UTOPIA to market directly to potential subscribers instead of expecting service providers to fill that role. However, even if UTOPIA's marketing effort is

UTOPIA's previous business model was criticized for its lack of control over marketing. UTOPIA has since shifted its model to provide its own direct marketing. successful and achieves its enrollment goals, the network will have difficulty retaining those subscribers if the retail providers do not offer the level of customer support that clients expect.

Lack of Subscribers May Impede Performance of Retail Providers. UTOPIA board members have suggested that the loss of former subscribers and the lack of new subscribers could be attributed to the retail providers' poor performance. On the other hand, service providers may be having difficulty succeeding because of the lack of subscribers. If their business plans were based on UTOPIA's initial projections of 49,000 subscribers by the third quarter of 2007, then it may explain why retail providers are having difficulty performing as expected.

A 2004 feasibility study of phase one of the "11-City Build" suggested that, even with a projected 28,000 subscribers, the network could probably only support two or three retail providers. The retail providers, the study explained, would need enough subscribers to meet the significant fixed costs of providing triple play services (voice, data, and video). Instead, UTOPIA's 2006 financial statements listed four providers on the network with only 4,844 subscribers to support them. While the total number of subscribers has not yet reached 10,000, UTOPIA continues to invite additional retail providers to operate on its network, though few of its providers offer video, which staff report is a costly service to operate. The failure of providers to remain financially viable and/or to pay UTOPIA for network usage may be due to an insufficient number of subscribers per provider to sustain operating profits.

The Best Test of UTOPIA's Model May Be Its Efforts in Centerville and with Legacy Customers. The next test of the viability of UTOPIA's new business plan will be the success it has in signing up new subscribers in Centerville and in those legacy areas where the network services are already available. If UTOPIA's new marketing efforts produce a sizable increase in subscribers in Centerville and in legacy neighborhoods, then there may be some justification for continued support of the plan. If the number of subscribers continues to fall below projected levels, and certainly below 30 percent, then there would be cause to question the viability of UTOPIA's new business plan. Insufficient subscribers could be the cause of retail provider difficulty, particularly for video providers.



Chapter IV Improved Accountability Will Increase Likelihood of Success

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) must take steps to hold its staff and business partners accountable for results. Although UTOPIA is pursuing a new development plan, it will not be successful unless the agency and its business partners can execute that plan. For this reason, we suggest that UTOPIA's board and management team adopt a number of management and financial controls that will strengthen their oversight of the agency and their ability to hold people accountable for the results they seek.

This chapter describes four steps UTOPIA should take to strengthen its oversight and accountability:

- Adopt better management controls, including written plans, formal policies, and performance measures
- Adopt the financial controls commonly used by public agencies
- Improve compliance with the Utah Open and Public Meetings Act
- Strengthen board oversight of agency operations

UTOPIA has repeatedly created ambitious plans, establishing high goals and objectives for itself, but performance has consistently fallen short. On several occasions, UTOPIA has developed a new strategy for completing its network. Outside advisors repeatedly examined the development plans and each time certified that the plans are achievable and financially sound. Yet, poor execution by UTOPIA, its business partners, or both, has caused performance to fall short of expectations. By holding itself accountable for results and communicating those results to stakeholders, UTOPIA will increase the likelihood of achieving its goals and increasing support from its member cities. To improve oversight and accountability, UTOPIA should follow four steps.

UTOPIA Has a New Development Plan Aimed at Avoiding Past Mistakes

After weighing their options, eight of UTOPIA's member cities agreed to move forward with a new plan to continue the construction of the broadband network. Through a new entity called the Utah Infrastructure Agency (UIA), the eight cities have obtained the additional resources needed to finance the plan. In addition, UIA has expressed a commitment to a number of new business practices aimed at avoiding past mistakes.

Eight Cities Have Raised Additional Funds Through the Utah Infrastructure Agency

By creating UIA, eight UTOPIA cities have formed a separate legal entity to finance new construction of the network, without exposing that new capital to the liabilities incurred by UTOPIA.

UIA Is a Separate Legal Entity. The UIA is an interlocal agency independent of UTOPIA. Technically, UIA contracts with UTOPIA for the use of UTOPIA network infrastructure and staff support, while building its own infrastructure and subscribing its own residents. One reason UIA is structured as a separate legal entity is to isolate its new debts and revenues from that of other cities which elected not to continue building and investing in the UTOPIA network.

Through a formal agreement, UTOPIA has committed to provide UIA with all the services needed to build and operate the network in UIA's behalf. In return, UIA provides UTOPIA with badly needed funds to shore up UTOPIA's operating losses.

UIA Is Authorized to Raise Up to \$66 Million in New Investment Capital. In 2011, UIA issued \$30 million in revenue bonds purposed mainly to facilitate additions to the UTOPIA network. The agency is authorized to issue up to \$66 million in bonds. Another source of capital for the plan is a \$16 million grant obtained through the American Reinvestment and Recovery Act of 2009. These stimulus funds, as they are commonly known, were awarded to connect community anchor institutions such as schools, libraries, and fire departments to the UTOPIA network.

Although UTOPIA is overseeing the new construction and is connecting UIA subscribers to its network, both the new

Eight UTOPIA cities formed UIA and authorized up to \$66 million in bond financing. infrastructure and the new subscribers belong to the UIA. However, the distinction between UIA and UTOPIA is not always clear. UTOPIA staff report they do not have written policies regarding how to designate subscribers as belonging to UTOPIA or UIA. During the writing of this report, UTOPIA officers were in the process of defining distinctions between the two agencies, though they report they have since designated each subscriber, current or potential, as pertaining to either UIA or UTOPIA.

UTOPIA Hopes with UIA to Avoid Past Mistakes

UTOPIA staff and its board of directors report they have taken steps to correct the problems caused by the poor planning and mismanagement of the past. They claim their new business model includes a more conservative approach to construction, a financing plan that requires subscribers to cover the cost of installation, and an independent marketing effort.

Though UTOPIA claims it has made many improvements to its business model, the exact features of its new business strategy have not been articulated in a written narrative form that we could review. When asked for a description of the new business plan, UTOPIA could not provide us with a formal written narrative of the new business model. Instead, they directed us to a set of financial spreadsheets used to forecast the plan's five-year financial performance. That set of spreadsheets, they said, represents the agency's new development plan.

Our concern is that UTOPIA has created ambitious plans in the past but its performance has consistently fallen short. Each time, outside consultants have been asked to examine the agency's new business plan and each time the consultants have certified that the plan is achievable and financially sound. Yet, due to poor execution by UTOPIA, its business partners, or both, performance has usually fallen short of expectations.

The latest five-year plan has also been reviewed by outside consultants who have expressed the opinion that the plan is "achievable and reasonable." However, we cannot verify whether the plan does in fact correct past mistakes because there is no formal written narrative describing the agency's new goals, objectives, and policies that will guide the agency to a successful outcome. In fact, while observing UTOPIA's latest efforts to complete the network in In the past, poor execution has hurt UTOPIA's performance. Centerville and in its legacy areas, we found that many of the agency's past practices have not changed. For example, the agency has not followed its commitment to invest funds only in those locations where 25 percent of residents have agreed to purchase the service.

UTOPIA officials report they never intended to hold Centerville to its 25 percent standard. However, the five-year financial forecasts do assume a 25 percent standard, and we have no evidence to show that such an exemption was approved by the board. The reason UTOPIA needs a formal written plan in narrative form is to document in clear language its new development policies and any exemptions that may have been authorized.

Unless UTOPIA's board and managers take steps to ensure greater control and accountability over the agency's operations, they risk repeating past mistakes and achieving the same poor results. They need to hold the agency and their business partners accountable to a clearly defined development plan, a set of new policies and practices, specific benchmarks to measure performance, and a timeline describing when certain milestones should be reached. These steps, described in the balance of this chapter, should improve the organization's control over its processes and the likelihood it will achieve its development goals.

UTOPIA Can Improve Accountability through Better Management Controls

We found that UTOPIA lacks some of the basic management controls typically required of such large and costly public enterprises. In this section, we describe three management controls UTOPIA should adopt to improve accountability to its stakeholders. First, the agency should draft a written development plan and have the board review and approve the plan. Second, the agency needs to draft a set of policies to formalize the changes made as part of its new development plan. The board should also approve those policies. Third, the agency should develop benchmarks and performance measures to evaluate its progress toward completing the new development plan. Implementing these management controls should improve the ability of the board and management team to hold the agency accountable for the results it seeks.

To make sure its new plans will be executed successfully, UTOPIA needs to adopt better management and financial controls.

UTOPIA Should Draft a Formal Development Plan

Any large, publicly-funded construction project, particularly one the size of UTOPIA's fiber-optic network, should be guided by a carefully prepared planning document. However, UTOPIA's officers report that a formal written planning document was never developed, other than the spreadsheets used to model its five-year cash flow. Furthermore, the board meeting minutes show that no such plan has been approved by the board. Without such a written narrative of its new business plan, we question how the agency can gain the support of its board and member cities, and how those stakeholders can hold UTOPIA accountable for achieving specific results.

No Written Narrative of UTOPIA's New Business Strategy Has Been Prepared. When an outside consulting firm was asked to examine the feasibility of UTOPIA's new five-year development plan, the consultants could not review any narrative to a written plan. UTOPIA had not prepared such a document. Instead, the consultants reviewed a set of spreadsheets that contained the agency's five-year financial model and its accompanying assumptions. UTOPIA representatives describe that financial model and the assumptions built into the model as the basis for their decision to proceed with the construction. In effect, they said that the set of spreadsheets is the agency's planning document.

On the other hand, it appears that at one time UTOPIA did attempt to summarize in writing its new construction plan. We found a document titled "UIA Five-Year Plan: Executive Summary" that was presented to the Centerville City Council (see Appendix B). The phrase "executive summary" in the document's title implies that it is a summary of a more detailed planning document. However, this is not the case. UTOPIA officers report that the document is not a summary of any formal planning document. In fact, UTOPIA officials said they were not even aware that such a document had been presented to Centerville City. They could only speculate as to who might have been its author. One concern we have is that the Centerville City Council and its residents may have been given the impression that UTOPIA does in fact have a well-crafted, written development plan and that the document, attached herein as Appendix B, is that plan. This however, is not the case. UIA's development strategy is encapsulated in a set of financial forecasts but contains no supporting narrative. UTOPIA should identify specific areas where mistakes have been made and draft a formal policy to address each problem.

UTOPIA should formalize in writing the plans and policies regarding a minimum level of interest needed for building in new areas. A Written Plan Is a Basic Accountability Tool. By drafting a written development plan, UTOPIA can articulate the changes it has made to its construction process, communicate the steps it has taken to address past mistakes and provide a timeline when certain goals and milestones might be accomplished. A well-written plan can also help UTOPIA gain the support it needs from its member cities, ensure staff and board members clearly understand the strategy, and hold staff accountable for achieving the agreed-upon goals. Without specific narrative to a written development plan approved by the board, we question how UTOPIA can claim it is committed to a new business strategy that will lead to the completion of the network and avoid repeating past mistakes.

Improved Management Practices Should Be Formalized in Policy and Approved by the Board

As mentioned in Chapter III, UTOPIA's board and management team readily admit that several mistakes have been made in the past that contributed to the agency's weakened financial condition. They have also told us that they have taken a number of steps to make sure the problems have been addressed. However, we have not been able to document that any formal board action has been taken to prevent the agency from repeating the management mistakes and poor business practices of the past. To provide greater assurance that corrective action has been taken, the agency should identify specific areas where mistakes have been made and draft a formal set of policy guidelines to address each problem. The policies should then be submitted for board approval. The following sections describe three examples.

Policy Action Is Needed to Avoid Additional Underutilized Investments. Chapter II describes the financial challenges UTOPIA faces, in part because of its many stranded and underused investments. UTOPIA staff have assured us they are taking steps to avoid creating additional underused investments. No longer will they build sections of network with the mere hope that subscribers will decide to use the service. Instead, the agency states that in the future it will only build in locations where a demonstrated customer demand justifies the cost of construction. Specifically, staff report that 25 percent of addresses must commit in writing to the service before they will authorize construction.

However, we have not yet observed any formal action to demonstrate that a new policy is in place or being followed. In fact, we

A Performance Audit of the Utah Telecommunication Open Infrastructure Agency (August 2012)

have observed the opposite. As UTOPIA has worked to connect residents in Centerville, we found that households are being connected to the network before the agency has been able to verify that a 25 percent take rate will be achieved in that area. We understand that Centerville is being treated as an exception because of the large amount of existing investment in that community. However, we cannot verify that the agency is truly committed to a new strategy unless we can review a written plan and policies describing how they intend to proceed, and then action taken (or not taken) according to those plans and policies.

UTOPIA Needs a Policy to Address Delinquent Payments by Its Retail Providers. UTOPIA staff report having adopted a strategy to reduce delinquent payments by retail providers. Staff report that stipulations have been placed in new service provider contracts that allow UTOPIA to collect provider revenues directly from a lockbox if the providers miss any payments. However, while the provision allowing lockbox collections may be in the contracts, UTOPIA does not have or follow any formal policy for enforcing that contract clause, nor has the clause ever been enforced. A formal policy adopted and enforced by the board could help protect future revenues and provide guidance to staff who have made past decisions regarding debt forgiveness without any formal policy direction from the board.

The Board Needs to Adopt a Fee Policy. We identified a number of problems with UTOPIA's fee schedule. The lack of consistency in the fees charged for UTOPIA products raises questions about fairness and equity. It also raises questions about the level of oversight the UTOPIA board provides to the agency in establishing its fees. The governing boards of state and local entities in Utah generally reserve to themselves the right to establish the fees their organizations charge for services. For example, the city councils of several of UTOPIA member cities formally approve fee schedules with their budgets each year. Although they may or may not choose to approve the actual fees charged for each service, the UTOPIA board should at least exercise some policy oversight of the process for establishing fees.

UTOPIA's board meeting minutes provide no evidence that the board of directors has ever approved a fee schedule or a set of policies to govern fee establishment and collection. Instead, we were told that setting fees is a staff responsibility. Furthermore, we understand the staff, not the board, are deciding when certain promotional rates may UTOPIA's board of directors can take greater control over the fees charged to customers by requiring the agency to follow a formal fee policy. be applied. Not surprisingly, we found dozens of different fee scenarios and promotional deals. In some cases, different fees are charged for essentially the same type of service.

The lack of a simple fee schedule and policy has also allowed some of UTOPIA's retail providers to take advantage of the fee schedule. We found that some retail providers have registered new subscribers for special pricing for which they are not eligible. For example, we found that subscribers in Murray had been registered for a promotional rate offered only to residents of Tremonton. The lack of consistency in the agency's fees suggests that the board and management team need to exercise greater oversight by drafting policies to guide the process of establishing and assessing fees.

Better Performance Measures Are Needed to Hold the Agency Accountable for Results

In order to verify that the agency actually follows plans and policies, the board should require staff to provide information regarding the progress made toward achieving agency performance goals. Additionally, we suggest the agency consider a three-step process suggested by the United States Government Accountability Office (GAO).

Actual Performance Data Is Often Lacking. We found that the UTOPIA board of directors as a whole receives little measurable information regarding the agency's progress toward achieving its specific goals and objectives. The board's executive committee receives much more information but most of it is not useful for quickly evaluating the agency's operational performance.

Each month, the executive committee of the board receives a financial statement and a document titled the *Flash Report*. The financial information compares actual performance against a budgeted amount. However, most of the operational information presented to the executive committee does not compare actual activity against any type of standard or goal. As a result, much of the operational data presented to the executive committee is not useful for evaluating performance.

One example of a useful performance report is a chart presented to the board's executive committee in recent months. It describes the progress made toward achieving the take rate goals for new customers

While the UTOPIA executive committee receives some data on monthly progress, it could require more meaningful performance measures. in Centerville and in areas already in production. The chart is shown in Figure 3.2 on page 33 of the previous chapter. We believe this chart offers a good example of the type of information that should be used regularly to monitor the agency's performance.

In addition to improving the usefulness of information presented to the executive committee, we believe that key performance indicator reports should be used to demonstrate progress in a wide range of areas and provided to the full board of directors. Periodically, such reports should also be given to UTOPIA's member city councils.

UTOPIA Should Follow a Three-Step Process for Strengthening

Accountability. The GAO has identified a three-step process that managers should use to monitor an organization's performance. Written plans, fee schedules, and other controls described above are all elements of the control system described by the GAO in its publication titled *Executive Guide - Effectively Implementing the Government Performance and Results Act*. We recommend that UTOPIA's board and managers carry out the following three steps described in that publication:

- Define clear missions and desired outcomes
- Measure performance to gauge progress
- Use performance data as a basis for decision making

To carry out these steps, UTOPIA's board and managers should identify key areas of concern, develop outcome measures, and monitor results. For example, one area of concern previously mentioned in this report is the amount of bad debt expense accumulated by UTOPIA. To address the problem, the agency might draft a plan for reducing debt expense, identify measurable goals for accomplishing that plan, then provide the board with monthly updates regarding progress toward those goals. We believe that by completing this process for each area of concern, UTOPIA will be more likely to see the results it expects.

UTOPIA Can Strengthen Its Financial Controls

UTOPIA's financial controls also require greater attention. While the agency follows many of the provisions in the Utah Fiscal Procedures Act for Utah Cities, it would be well advised to follow the UTOPIA should follow a three-step process by defining mission critical objectives, measuring objective performance, and using performance information in decision making. act in its entirety. Also, the agency does not use several financial controls commonly used by local government. By more closely scrutinizing the agency finances, the board should be able to identify and address costly problems before they become serious.

UTOPIA Should Adopt the Financial Controls Required by State Law

The Uniform Fiscal Procedures Act for Utah Cities (*Utah Code* 10-6-101 *et seq.*) describes the budget procedures that each public agency in the state must use. Even though it is not specifically mentioned, UTOPIA appears to be subject to the act.

UTOPIA Should Follow the Fiscal Procedures Act. The Uniform Fiscal Procedures Act for Utah Cities (*Utah Code* 10-6-136) identifies a number of procedures that local governments must use to manage agency finances. For example, the act requires board or council approval before making expenditures above the authorized budget. During fiscal years 2001 and 2009, we noticed that UTOPIA's operating expenditures exceeded the budgeted amount. Yet the board was not asked to authorize a revision to the budget.

When we asked UTOPIA staff why they did not comply with this provision of the act, they reported that the agency does not believe it is subject to the act. In fact, according to UTOPIA's board meeting minutes, the board has been advised that the agency is not required to follow the Uniform Fiscal Procedures Act for Utah Cities. For this reason, the agency chose to follow certain requirements but not others. For example, the board has chosen to follow the requirement that the annual budget be reviewed during a public meeting and that it be approved by a formal vote by the board. However, the agency believes it is not subject to all provisions in the act.

In fact, *Utah Code* does not contain fiscal procedures that specifically target interlocal entities. Title 10 Chapter 6 contains the Uniform Fiscal Procedures Act for Utah Cities. Title 17B contains similar fiscal procedures for local and special services districts. Neither section of statute mentions any applicability to interlocal agencies such as UTOPIA. However, the Utah Attorney General has issued an opinion stating that Title 10 does apply to interlocal agencies:

> Cities may not grant powers to an interlocal agency which they do not possess themselves individually. It

UTOPIA's board should follow the Fiscal Procedures Act and more closely scrutinize the agency's finances. necessarily follows that cities have no power or authority to act in contravention to the requirements of the Fiscal Procedures Act and they cannot endow their interlocal progeny with such power or authority. (*Office of the Attorney General State of Utah Informal Opinion No. 87-31*, June 17, 1987)

In keeping with this opinion, we recommend that UTOPIA begin to follow the Uniform Fiscal Procedures Act for Utah Cities. These are practices that local governmental entities commonly use to maintain control over agency finances. By applying all the principles contained in the act, we believe the UTOPIA board can maintain greater accountability over the agency's finances. A few of those practices are listed below:

- The board should specify a maximum sum over which all purchases may not be made without the approval of the board. (*Utah Code* 10-6-159)
- All expenditures must conform with the agency budget. (*Utah Code* 10-6-121-123)
- Board approval should be sought before expenditures are made above the amount authorized by the budget. (*Utah Code* 10-6-127)

Once we brought this matter to their attention, UTOPIA's staff made a commitment to comply with the act. In fact, during their June 2012 meeting, the board authorized an increase in the agency's spending plan, which otherwise would have exceeded the budgeted amount. We believe following all of the provisions of the Uniform Fiscal Procedures Act for Utah Cities will enable the board of directors and UTOPIA staff to exercise greater control over the agency's finances.

UTOPIA Should Adopt Financial Oversight Practices Commonly Followed by Local Governments

To assist local governments in managing their finances, the Utah State Auditor has published several accounting manuals. One such document is the *Little Manual for Local and Special Service Districts*. It identifies fiscal controls that are commonly used by local government entities. The state auditor has also issued a *Uniform Accounting* UTOPIA's board should set maximum expenditure limits, require conformance of expenditures to budget, and authorize any expenditures over budgeted amounts. *Manual*, which describes how local agencies should organize and manage their finances. These manuals identify the fiscal procedures required of all local governments in Utah. They also describe some best practices for overseeing local government finances.

UTOPIA would be well served to consider the fiscal practices described in these manuals. They contain a number of practices that could facilitate the board's ability to oversee and control UTOPIA's finances. For example, the *Little Manual* states: "Deposits and disbursements should be reviewed by a governing board at least quarterly. Board members should ask questions if something is unclear or looks unusual."

The members of UTOPIA's board of directors should be familiar with the financial practices described in the *Little Manual* and the *Uniform Accounting Manual*. UTOPIA's board is comprised of city mayors, council members, and administrators who should be following these procedures in their own jurisdictions. We recommend that they rely on these same procedures and financial controls to carry out their fiduciary responsibilities for UTOPIA. Though the following controls are commonly used by local governments, we found no evidence they are being implemented by the UTOPIA board.

- The board should receive monthly or quarterly financial statements comparing actual versus budgeted expenditures.
- The board should require staff to seek approval for changes to the budget if the agency is expected to exceed authorized spending limits.
- The board and the public should receive operational data comparing actual performance against boardapproved benchmarks.
- The board should review and approve individual expenditures over a certain dollar amount.

These are practices commonly used by local government boards and should be followed by UTOPIA's board of directors as well.

UTOPIA's entire board should receive monthly financials and operational data comparing targets to actual performance.

UTOPIA's Board of Directors Can Provide More Effective Oversight

UTOPIA's board of directors should take steps to improve its oversight and control of the organization. Although we have no doubts concerning the board's level of commitment to the success of the organization, we do question whether the current board structure provides the most effective oversight possible. We also question whether the meetings of the executive committee are held in compliance with the Utah Open and Public Meetings Act. Considering the challenges it faces, and the need for strong oversight, we suggest the board consider increasing its reliance on the committees that have been formally created but are no longer meeting.

The UTOPIA Board Has Delegated Many Responsibilities to the Executive Committee

UTOPIA's board of directors is comprised of one representative from each of UTOPIA's 16 member cities. The board members are typically a mayor, council member, or administrator in the cities they represent. Only those representing the 11 pledging member cities may vote on matters related to the construction and financing of the network. Five members of the board also form an executive committee. The Utah Infrastructure Agency (UIA) has a similar board of directors with an executive committee of its own.

We observed several board meetings and found that the business conducted during those meetings is generally quite brief. Typically, matters put before the full board receive little discussion before decisions are made. The majority of meetings we observed lasted no more than 25 minutes. A few lasted longer because they went into a closed session.

Although the agency faces considerable financial and operational challenges, we were surprised by the lack of discussion of such matters during the board's regular monthly meetings. The board minutes also indicate that the board has received little information concerning the challenging problems faced by the agency. Apparently, the board of directors has delegated much of its oversight responsibility to its executive committee.

We also observed several meetings of the board's executive committee. We found that although the full board holds its meetings UTOPIA's board may be more effective if it changes board deliberation practices and its committee structure. in public, the executive committee meetings are closed to the public. Executive committee meetings often last several hours, during which the committee members receive a great deal of information regarding the weightier matters facing UTOPIA. In addition, the members of the executive committee are given a packet of information regarding UTOPIA's budget, financial position, and other matters. However, this information is not presented to the full board of directors and is not typically discussed during the meetings of the full board.

The reason, we are told, that the board relies so heavily on its executive committee is that UTOPIA wishes to avoid providing the incumbent telecommunications providers with insights into UTOPIA's business strategy. Their concern is that if UTOPIA's business strategies were discussed openly, during a public meeting, the incumbent providers would focus their marketing efforts in those neighborhoods targeted by UTOPIA's business plan. UTOPIA board members and administrators are concerned that incumbents would entice residents with deeply discounted rates and multi-year contracts, thus preventing UTOPIA from gaining a foothold in the community. Despite these concerns, UTOPIA is a government entity and must adhere to laws applicable to all interlocal agencies.

UTOPIA May Not Be Complying with the Intent Of the Open Meetings Act

We believe meetings of the executive committee may not be in compliance with the intent of the Utah Open and Public Meetings Act. We have two main concerns. First, during executive committee meetings, the members of the UTOPIA board of directors often deliberate on matters later presented to the full board of directors. State law requires that boards hold their deliberations during open and public meetings. Second, the executive committee constitutes a separate public body and is therefore required to conduct its business in an open meeting. We believe most topics discussed by the executive committee do not qualify as matters that may be handled during a closed session under the Utah Open and Public Meetings Act.

The Executive Committee Deliberates on Matters to Be Taken Up by the Board of Directors. As mentioned, we observed that the executive committee meetings are closed to the public. They generally include rather lengthy discussions of UTOPIA's financial position, its marketing strategies, and problems faced in building the network infrastructure. Occasionally, matters discussed by the executive

UTOPIA board relies heavily on the executive committee to review critical information and make important deliberations. committee are later voted on by the full board of directors. For example, we found that budgets, payrolls, an interlocal agreement, and a policy regarding vehicle leases were all discussed during executive committee meetings and later taken up and acted on by the full board of directors.

The Open and Public Meetings Act (*Utab Code* 52-4-102(2)) states the following: "It is the intent of the Legislature that the state, its agencies, and its political subdivisions: (a) take their actions openly; and (b) conduct their deliberations openly."

We believe the board is not in compliance with the intent of the act because board members are deliberating on matters in a closed executive session, then acting on those deliberations during their regular board meetings.

The Executive Committee Is a Separate Public Body. According to the Utah Open and Public Meetings Act in Utah Code 52-4-103 (8) (a): "Public body" means any administrative, advisory, executive, or legislative body of the state or its political subdivisions that:

- 1. Is created by the Utah Constitution, statute, rule, ordinance or resolution
- 2. Consists of two or more persons
- 3. Expends, disburses, or is supported in whole or in part by tax revenue
- 4. Is vested with the authority to make decisions regarding the public's business

We find that UTOPIA's executive committee qualifies as a separate public body under the four items listed above. It was formally created as a separate body in the UTOPIA bylaws and its members have been appointed by resolution. In addition, the committee includes more than two individuals and is supported by tax dollars (that is, city pledges). Finally, the board has granted the executive committee formal authority to make decisions. In fact, the UTOPIA board passed a resolution specifying a voting process for the executive committee to follow. As a result, the executive committee must be considered a Occasionally, UTOPIA's executive committee deliberates and takes action on behalf the board. Such action may be in violation of state open meetings laws.

The executive committee can also be considered a separate public body that must comply with state open meetings laws. separate public body that must comply with the Utah Open and Public Meetings Act.

We reviewed the meeting minutes of the UTOPIA board of directors and have identified numerous occasions in which the board has delegated to the executive committee certain tasks and responsibilities. For example, the board asked the executive committee to craft a compensation plan for staff and to develop a contract with a major service provider. In one instance, the board asked the executive committee to discuss and finalize an agreement with a provider and to hold a separate vote on the matter. These actions provide evidence that the executive committee is a public body that has been given authority to conduct the public's business. It must therefore carry out its responsibilities during an open public meeting.

Board Members Are Concerned about Protecting UTOPIA's Commercial Information. Members of UTOPIA's board and its staff have asserted that the executive committee must conduct its business during a closed session in order to avoid disclosing the agency's commercial information to its competitors. That information, they contend, is protected under the Government Records Access Management Act. They believe that disclosing such information in a public meeting would violate that act.

We acknowledge that the authors of the Utah Open and Public Meetings Act may not have envisioned a situation in which a public enterprise, such as UTOPIA, may need to discuss protected commercial information in a closed meeting. If UTOPIA believes strongly that they cannot comply with both statutes, they should ask the Legislature to consider addressing the problem in future legislation. However, at present, we do not believe that UTOPIA has the option of disregarding the Utah Open and Public Meetings Act. We therefore encourage the board to explore ways to conduct its business without disclosing confidential information.

UTOPIA may need to seek change in legislation to protect commercially sensitive information in board meetings.

Board Should Rely on Its Committees

UTOPIA's board of directors should consider reinstating the three standing committees it formed in 2008. During its October, 2008 meeting, the board of directors discussed the need to provide the agency with greater oversight. In recognition of the need, the board approved a resolution creating three new oversight committees:

- Economic Development Committee
- Finance Committee
- Network Advancement Committee

The board expressed its justification for creating the committees in the following statements:

The Board is tasked with certain oversight responsibilities to ensure the network fulfills its goals to aid in economic development. It is prudent for UTOPIA to study the economic development needs of its members and ways in which the network can help meet these needs.

The Board is also responsible for budgetary oversight of UTOPIA's operations. It is therefore imperative that the Board remain vigilant over the financial condition of UTOPIA.

As part of this responsibility the Board should continuously seek methodologies through which UTOPIA can better advance the deployment and public awareness of the benefits of the network.

The above statements suggest that the board of directors once recognized the need to provide the agency with greater oversight and guidance. For this reason, they created three additional oversight committees. However, UTOPIA staff report that the three committees are no longer active.

In view of the ongoing need to provide oversight of UTOPIA activities, we recommend that the board of directors reinstate its committees and again provide the same oversight it has offered in the past. However, to the extent that they are created by resolution and handle the public's business, the committees should be considered In the past, the board has formed committees aimed at providing oversight of the agency's economic development, finances, and technology.

We recommend that UTOPIA reinstate standing committees to strengthen board involvement and oversight. public entities that are subject to the Utah Open and Public Meetings Act.

Recommendations

1. We recommend that UTOPIA's board of directors strengthen its management controls. Specifically, the agency should (1) draft a formal development plan to be reviewed and approved by the board, (2) formally adopt its new management practices as policies to be approved by the board, and (3) adopt a set of benchmarks with metrics to evaluate the agency's progress toward achieving its goals.

2. We recommend that the UTOPIA board adopt the financial controls required by the Uniform Fiscal Procedures Act for Cities and which are described in detail in the *Uniform Accounting Manual*.

3. We recommend that the UTOPIA board of directors and its executive committee make sure that its business is always conducted in a manner consistent with the Utah Open and Public Meetings Act.

4. We recommend that the board provide the agency with greater guidance and oversight by reactivating its three standing committees.

Appendices

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Appendix A

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United States Department of Agriculture Rural Development

Business and Cooperative Programs

Housing and Community Facility Programs

Utilities Programs
Washington, DC 20250

February 20, 2008

Mr. Alex Jensen Chairman, Board of Directors UTOPIA 1385 West 2200 South Street, Suite 302 West Valley City, Utah 84119

Dear Mr. Jensen:

This letter confirms numerous meetings between UTOPIA representatives and members of USDA Rural Development culminating in our conference call meeting on February 7, 2008. At that meeting, Rural Development officials indicated that they would provide UTOPIA with a response to its request for consideration of additional funding for this project.

As background, Rural Development's Rural Utilities Service ("RUS") and UTOPIA entered into a Bond Acquisition Agreement, dated July 5, 2007. Pursuant to the Bond Acquisition Agreement, RUS has purchased a Series 2007 Priority Bond in the amount of \$21,354,052. The Bond Acquisition Agreement contemplates the purchase of bonds up to an aggregate amount of \$66,166,000.

Since the purchase of the first Series 2007 Priority Bond, UTOPIA has informed RUS of a material adverse change in its financial performance and prospects resulting in an overhaul of management and a dramatic change in its business model. Despite these adverse changes, UTOPIA has expressed a desire for additional funding under the Bond Acquisition Agreement. In a conference call held on February 7, 2008, RUS informed UTOPIA that additional bond purchases would not be made until substantial improvements are realized within the UTOPIA organization and its business plan. Our decision is based on two principal determinations:

1. UTOPIA cannot meet the terms under the Bond Acquisition Agreement and the Fourth Supplemental Indenture for the purchase of additional bonds.

Such terms include obtaining UTOPIA's Certification that there has been no material adverse change in its financial condition or operations. Furthermore,

1400 Independence Avenue, Washington, DC 20250 Phone: (202) 720-9540 • Fax: (202) 720-1725 • Web: http://www.rurdev.usda.gov/index.html Mr. Alex Jensen Page 2

February 20, 2008

UTOPIA must show that it is solvent in accordance with Section 6.1(v) of the Fourth Supplemental Indenture which specifically provides:

After giving effect to the Series 2007 Priority Bonds and this Fourth Supplemental Indenture, the Issuer is solvent. As used in the preceding sentence, "solvent" means that at the time of determination:

> (i) the fair value of the Issuer's assets (as determined and valued under generally accepted accounting principles), both at fair valuation and at present fair saleable value, is in excess of the total amount of its liabilities, including, but not limited to, contingent claims;

> (ii) the Issuer is then able and expects to be able to pay its debts as they mature; and

(iii) the Issuer has capital sufficient to carry on its business as conducted and as proposed to be conducted.

2. UTOPIA's original business plan has failed and there is insufficient evidence to support UTOPIA's new business plan which relies on substantial membership fees.

RUS' recent review of UTOPIA's operations disclosed that the current situation is reflective of poor prior management of the project, including an inefficient system-wide construction plan, ineffective marketing, cost overruns, and a misunderstanding of Rural Development's requirements for fund re-imbursements. Current management has recognized many of these shortfalls; however, serious problems remain. In particular, RUS does not believe UTOPIA's new business model, which relies heavily on substantial membership fees, is viable.

Rural Development is prepared to work with UTOPIA and its partners to achieve our mutually desired outcome: providing affordable, high-speed broadband services to residents in rural Utah. As such, Rural Development may consider further purchases of bonds (under modified terms and conditions) subject to the following:

- 1. Installation of an experienced financial and technological management team.
- 2. Development of a realistic financial overhaul of the existing financing structure, including additional equity contributions, refinancing of current debt, etc.
- 3. Development of a new business/marketing plan which does not rely on membership fees and reflects the ability to increase subscriber levels adequate to support the debt incurred and operating costs. The plan must include

Mr. Alex Jensen Page 3 February 20, 2008

specific construction schedules for completion of the system in the most effective manner.

Rural Development continues to stand ready to work with UTOPIA and its partners to develop a sound business plan and strategy to bring its operation out of financial difficulties. In the coming week, we will be contacting you to arrange a meeting with UTOPIA's officials in Utah. Prior to setting up such a meeting we would like UTOPIA's response to the following questions:

- 1. What number of subscribers is required for UTOPIA to be self supporting?
- 2. How much capital investment is required to obtain an adequate subscriber base?
- 3. Specify the construction projects and other tasks which need to be accomplished to obtain an adequate subscriber base.

Please contact Mr. David J. Villano, Assistant Administrator, Telecommunications Program, on (202) 720-9554, if you have any questions related to this or other matters.

Sincerely,

JXMES M. ANDREW Administrator Utilities Programs

cc: Jim Reams Interim Executive Director UTOPIA

Appendix B

UIA Five-Year Plan: Executive Summary

The Utah Infrastructure Agency (UIA) has developed a five-year plan to expand fiber-optic infrastructure within their communities. To aide in this endeavor, the UIA has developed a relationship with the UTOPIA network to build and manage their fiber-to-the-premise network. This executive summary is intended to give an outline of the UIA's plans, how they'll move forward and the benefits of the new strategy.

What is UIA's six-phase strategy? How is it different than other models?

UIA's strategy is largely a continuation of the six-phase strategy implemented by UTOPIA over recent years, leveraging the lessons the cities have learned from this project in the past and from other projects around the country, riding on successes and carrying them through to a new organization. When member cities selected new network management two years ago, the team was tasked with creating a completely different paradigm and making comprehensive changes to develop an environment for the cities to move forward. Because of this work – adding a dozen new service providers, proving the market with a growing customer base, expanding the availability and offering of video products on the network, and strategizing, implementing and completing a ubiquitous build in Brigham City – member cities are able to extend and expand the benefits of a fiber-to-the-premises network through UIA. As a reminder, the six phases the cities have been engaged in are:

- 1. Refinance
- 2. Baseline
- 3. Operational Readiness
- 4. Operation Prime
- 5. Sustainable financial modeling
- 6. Expansion and proliferation

UIA continues to pursue these phases as part of the organization's strategy because it has proven successful and they are interrelated; many of these phases happen concurrently and continuously, in response to a dynamic and ever-changing broadband market – as new initiatives and policies develop within the country and the world.

How is the strategy applied going forward?

As mentioned, based on lessons learned in each phase and the cities' guiding principles for forming a fiber-optic network, a five-year plan was created under the Utah Infrastructure

Agency (UIA). The plan entails both new build and additional penetration in existing areas. The plan is designed to be somewhat flexible, allowing customers to get connected in areas that express the most demand. Demand will be measured by launching an extensive awareness campaign in member cities. The campaign will allow residents to 1) be educated about the community network -- many people are unaware of cities' fiber-optic infrastructure today; 2) learn about the power of choice and the opportunity for emerging technology that a community network affords them; 3) become educated about their different options for connecting and sign up to be installed. The awareness campaign will be comprehensive, relying on: traditional and new media, a high penetration of awareness representatives in the community to help answer questions, and broad grassroots and city efforts to help keep the community educated. The model anticipates construction activity in each of the participating cities and projects subscriber growth of about 20,000 over the next five years.

Funding and deploying the five-year plan

The first year calls for a bonding of approximately \$20 Million. This initial draw will provide funding for the first year's awareness, construction costs and associated debt service. As mentioned previously, new construction will not occur until the demand has been identified. However, customer connections in existing areas (already built out) will take place as customers sign up. As targets are reached, additional funding will be drawn down. The model assumes a total bonding of approximately \$62 million, drawn down in increments over five years.

Demand-based Deployment

In the past, the cities operated under the "build it and they will come" philosophy. UIA is addressing this issue by identifying areas with adequate customer demand to justify the cost of construction. Under the new five-year strategic growth plan, all construction will be demand based.

Critical Success Factor Index

The campaign will be launched, demand will be measured, and construction will begin, based on UIA's Critical Success Factor Index model (CSF). The CSF is similar to the Baldridge quality criteria or Balanced Scorecard approach; the CSF synthesizes the criteria to quantify demand and prioritize deployment – both in early stages and to analyze the model with the flexibility to respond to the market demand with maximum efficiency as UIA grows. In this sense, the plan is built from the bottom up; initial projections about areas that will receive more marketing and will likely be constructed first are based on measures that have been proven and achieved in

previous deployment models. Each city is divided into footprints of addresses, and each footprint is individually evaluated in the CSF based on factors including the mix of address types (business, residential, etc.), demographics, existing take rates, the area's existing available services, etc.

Incremental Draw Down of Funds

The plan's take rates, revenue objectives and construction costs have been vetted against CSF measures. This allows predetermined metrics to be met prior to drawing down addition bonding (after the initial draw). The UIA cities, collectively, hold the purse strings on additional borrowings; only upon successfully hitting targets will the UIA Board approve additional borrowing. Additionally, these subsequent borrowings will be smaller than the cities have made in the past; rather than bonding for all required funding in the five-year plan, smaller increments of funds will be taken as demand is proven and targets are reached, reducing interest costs and financial risk.

How will it launch in my city?

The Contractual Utility Enhancement (CUE) model

Customers will be able to sign up for much better speed and service, and the total cost for services and infrastructure will be available at a market-competitive price.

Under the CUE model, residents request to have fiber connected to their home. The UIA city then identifies (through their contract with the UTOPIA network) the cost to connect the customer – based on the penetration of demand in that resident's area, various financial factors, and the type of construction – and provides a mechanism for the customer to pay the entire cost upfront or pay over a number of years. The financing mechanism, bonds within UIA, will only be sold when cities determine there is enough demand to merit a bond (after the initial bond to kick-start network growth); for this reason, it is not anticipated that cities will have to cover any additional bonding.

These parameters, which affect the decision to build, also affect the total cost to the customer. As more people sign up after the cost for the build/bond has been determined, the increased number of people paying against a fixed shared-infrastructure cost will ultimately reduce everyone's payment, as they all pick up a piece. Under these circumstances, the CUE methodology creates the optimal environment for customers to connect to the fiber infrastructure. This cost to connect to the network is separated from the cost for services, which provides a level of transparency for city residents. Infrastructure costs are included in every telecommunications bill; the difference is: once the infrastructure cost is paid off on the cities' network, it goes away. Private networks hide the infrastructure fee in their monthly bill so they can continue to charge it, even after the investment has been recovered.

The CUE is a contract between the city and the homeowner that covers the installation of fiber to the property. The contract allows customers to pay for their connection to UTOPIA over a period of time, rather than paying the entire connection cost upfront. Upon joining the network, a customer has two contract options with the city: 1) to tie the contract to the property, which would be very typical of a home infrastructure project, with a notice of interest. The notice of interest simply allows the city and real estate professionals know the infrastructure has been installed in the event the homeowner sells their property and acts as a security against lengthy periods of non-payment. 2) to tie the contract to their person with a five-year, self-renewing contract until the cost of the infrastructure is paid in full. This creates a level of flexibility for customers that would like the infrastructure, but are long-time renters or would simply like to contract with the city as an individual, instead of with their property. Either way, the contract allows residents to finance the connection through small monthly payments on their utility bill and take advantage of the cities' favorable financing option.

What's involved in an awareness campaign?

UIA's awareness strategy is based on the concept of deploying an integrated marketing solution to the market. UIA must drive value – both with current applications and by implementing upcoming and new applications that benefit the community as they become – through the network in order to establish the network's key differentiators. Establishing this differentiation will allow us to attract users to the network and allow our service providers to innovate and market to the customers. UIA's awareness strategy is, essentially, a combination of marketing tactics combined with awareness advocates – teams of individuals who go door to door to represent the city and explain the network's value proposition (choice of service providers, dedicated fiber-to-the-home connections, better products and service at competitive rate and community benefits). Awareness advocates also facilitate the relationship between the city and the resident – collecting CUE contracts from resident that are interested in joining the network based on the apparent benefits. The awareness strategy is deployed in both the business and residential markets.

The tactics deployed to support the advocates are similar to a traditional marketing campaign with some modification to fit the UIA strategy. Primarily, we mix in a very high degree of grassroots efforts, because so many in the community feel strongly invested in the success of their cities' initiative. We want the community to understand their city had the foresight and vision to provide this needed infrastructure as a way to develop opportunities and that the cities own the network.

What are the goals of the model?

The UIA's strategy is intended to help the network get as many residents on the network as quickly as possible. This creates an appealing environment to support private-sector providers that use the network, allows more innovation and economic development opportunities within the communities, and covers the costs of the cities' additional investment. The goals of UIA are no different than those of the early visionaries and UIA leverages the lessons learned to make those goals a reality.

A Feasibility Study has been commissioned and the results of that study will be available shortly. And, as always, we invite any interested city council members or city staff to come into our offices to learn more about the details of the plan that are germane to their interests.

How does the stimulus award affect the network?

The Stimulus was awarded to the network under the Broadband Technologies Opportunity Program (BTOP), overseen by the Department of Commerce. The \$16 million dollar award is to be used to establish critical fiber infrastructure throughout eight member cities, specifically routed to nearly 400 anchor institutions. These institutions include, but are not limited to, schools, medical institutions, city first responders (Fire, Police and ambulatory), libraries, community colleges, city services, etc. The grant awards funds for "middle mile infrastructure," which means it will serve as the core fiber rings throughout the city. Middle mile fiber infrastructure is expensive and the ability to take a giant \$16 million bite of our future requirements is a major win for the cities. As has been reported, the cities will be required to match the \$16 million award with an \$8 million investment. The match from the cities will be derived from within the funding already detailed in the five-year plan.

Conclusion

The five-year plan was developed in conjunction with UIA and UTOPIA staff, the Executive Committee and UIA Board members, financial advisors, in-house counsel, bond council and independent feasibility study experts.

Staff and board members stand prepared to disseminate any additional information. Where there may be any additional need for clarification, it is critical that arrangements are made to meet at your earliest convenience.

Agency Response



July 26, 2012

John M. Schaff Auditor General Office of the Legislative Auditor General W315 Utah State Capitol Complex P.O. Box 145315 Salt Lake City, UT 84114

Dear Mr. Schaff:

We appreciate the opportunity to respond to the Performance Audit of Utah Telecommunications Open Infrastructure Agency (Report No. 2012-08).

We would like to begin by expressing our thanks to the Office of the Legislative Auditor General, particularly Rick Coleman, James Behunin and Matthew Harvey, for their professional and respectful demeanor while conducting this performance audit for the past 18 months.

We are also thankful for the opportunity to review this audit and respond to the four recommendations made by your team. We have already begun the process of implementing these recommendations to better serve our member cities, grow our state-of-the-art open-access fiber-optic network and meet our mission of providing critical advanced communications infrastructure to member communities' residents.

As your audit accurately points out, the cities of UTOPIA remain dedicated to providing its citizens the most advanced communications services available. Member cities see providing large bandwidth/ high-speed infrastructure as enabling critical 21st century substructure necessary to residents; prerequisites for economic development; first responder ambulatory, police and fire services; as well as other city services, facilitating parks, roads, and water and sewer facilities. The open-access nature of the network enables and encourages free market competition, offering alternatives to the private, closed networks of incumbent telecommunications providers. We are pleased you recognize the cities of UTOPIA are a pioneer in this industry.

In 2002, 11 Utah cities pledged sales tax revenue to form UTOPIA and bring enhanced telecommunications services to their residents because such advanced services were not forthcoming from the incumbent providers. Visionary efforts, as complex as extending new generation technology infrastructure, come with inherent learning curves. UTOPIA's board of directors, staff, member cities and other stakeholders fully acknowledge and understand that mistakes were made in the startup and operation of the network in those early years.



In 2008, the agency took a number of significant steps to address and correct mistakes and move the agency forward in a constructive direction. The majority of the Audit review focused on prior mistakes. Our response outlines positive strategic changes implemented over the last three years.

- The board put a new management team in place in mid-2008, terminated contracts with prior consultants and contractors and brought most of the day-to-day operations "in house." Previously, UTOPIA operated with a decentralized structure in which services were provided by member cities and outside contractors, sacrificing close oversight of day-to-day activities. Hiring a professional staff allowed for improved control over expenses, the direction of the agency and the execution of network deployment.
- New service and pricing models were developed, increasing average revenue per user (ARPU) 40
 percent over the past four years. In fact, ARPU is arguably a more-important metric than number of
 subscribers when it comes to measuring our financial success. UTOPIA's ARPU trend continues to be on
 the upswing.
- Measurements and metrics, including financial statements with comparisons to budgets, comparing actual subscriber growth and revenues to plans and budgets, and reviewing network performance statistic reporting processes, are continually improving.
- We formed committees to provide board members and other city officials the opportunity to be more involved and ensure more oversight of the agency.
- Highly advanced network redundancy and reliability significantly increased commerce from businessclass service providers. They trust UTOPIA and its 99.999 percent up time to be the most advanced and robust network of its kind in the state, and perhaps the nation.

Moving forward

The audit suggests there might be a lack of demand in the market for UTOPIA's fiber-to-the-home technology which your investigators point out features a near unlimited capacity for high-speed video, data and phone services—our experience clearly demonstrates otherwise. Over 10,000 inquiries this year from people interested in obtaining services over the network, with close to 2,500 of them coming from Orem alone, clearly indicate significant demand. Daily call volumes from residents living outside of our member cities wanting to know when the network will expand to their communities evidence broad interest and opportunity. Over 40 percent of the residents in Lindon utilize the network and 27 percent of single-family residences throughout our



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entire footprint receive services, even in areas where demographics would suggest a much lower subscription rate. A July 23, 2012, *Deseret News* editorial on Utah's extraordinary second-place ranking among states with the greatest Internet access points out, "One indelible fact about technology is the more we have it, the more we want it and, as a corollary, the more we find ways to use it."

The Cities of UTOPIA remain dedicated to meeting demand for next-generation technology infrastructure. Our future will be successful as continued network expansion meets demand and connects more subscribers. The network will provide the citizens of UTOPIA with the mix of services they want and need and a consistent, high-quality customer service experience. That's our focus. The Audit emphasizes past mistakes made in the agency's startup years and focuses less on the steps we have taken to improve the organization. Nonetheless, the Audit provides an opportunity to improve. We look forward to implementing the recommendations.

Here are our responses to the audit's four recommendations:

Recommendation #1 We recommend that UTOPIA's board of directors strengthen its management controls. Specifically, the agency should (1) draft a formal development plan to be reviewed and approved by the board, (2) formally adopt its new management practices as policies to be approved by the board, and (3) adopt a set of benchmarks with metrics to evaluate the agency's progress toward achieving its goals.

- UTOPIA does have a development plan in place, which was reviewed with the auditors and has been reviewed by members of our board of directors. Since this plan deals with proprietary commercial information, it has not been formally adopted by the board in an open meeting. To resolve this issue, we will draft a summary of the plan that protects commercial information and that can be reviewed and approved by the board.
- 2) We agree that management practices should be documented and approved as policies by the board.
- 3) Prior to this audit, UTOPIA adopted a series of benchmarks with metrics and reviews them on a regular basis. These include financial statements with actual-to-budget comparisons, comparisons of actual subscribers and revenues to plans and budgets, network statistics and other reports. We will continue to improve communications and provide information to our member cities, and work with the board and its committees to refine these reports, while recognizing that protecting commercial information must be balanced with the public interest.

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Recommendation #2 We recommend that the UTOPIA board adopt the financial controls required by the Uniform Fiscal Procedures Act for Cities and which are described in detail in the Uniform Accounting Manual.

While the Utah Code does not contain fiscal procedures that specifically apply to interlocal entities, it has always been UTOPIA's intent and practice to comply with the financial controls and other measures required by its member cities, which must follow the Uniform Fiscal Procedures Act for Cities. The audit report recalls an unintended instance in which the UTOPIA board was not asked to approve a revised budget when expenditures exceeded the original budget. We addressed this oversight and took necessary steps to ensure future compliance.

Recommendation #3 We recommend that the UTOPIA board of directors and its executive committee make sure that its business is always conducted in a manner consistent with the Utah Open and Public Meetings Act.

We believe that we have been operating in compliance with the letter and intent of the Open Meetings Act. We will continue to review our current management practices to ensure ongoing compliance.

Recommendation #4 We recommend that the board provide the agency with greater guidance and oversight by reactivating its three standing committees.

In 2008, UTOPIA staff recommended that the board create three ad hoc committees, each comprised of UTOPIA staff, council members and staff from member cities. Each of these committees has functioned periodically since then. Recently, we reorganized the finance committee and it now meets as needed to ensure proper financial oversight.

Thank you again for this opportunity to review and respond to the Legislative General Auditor's performance audit of UTOPIA.

Sincerely,

Kane Loader Board Chair UTOPIA Board of Directors

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