

What Is the ‘Ammon Model’?

Ammon, Idaho, is treating fiber network infrastructure as a utility – to the benefit of residents, providers and the municipality itself. Is this small town demonstrating the future of broadband?

By Bruce Patterson / *City of Ammon, Idaho*

Ask four people familiar with the Ammon Model what it is, and you will get four different answers. Residents will tell you it is about cheap, reliable internet. Providers will tell you it is about commoditizing services. Municipalities will tell you it is a way to compete. Traditional wireline operators will tell you it is failing or impossible to replicate. Each of these varied perspectives reflects a viewpoint and some portion of the whole truth. However, as the Chinese philosopher Xun Zi once said, “In order to properly understand the big picture, everyone should fear becoming mentally clouded and obsessed with one small section of the truth.”

Ammon, Idaho, began building out its municipal fiber network in 2011, and residents in some parts of the city already are receiving services. Like several other cities, Ammon is using an open-access model – the city operates the infrastructure, and multiple providers offer services on the network. However, the Ammon Model has several unique twists. Describing the network from the viewpoints of all the various stakeholders will bring the big picture into focus.

RESIDENTS

The Ammon Model focuses first and foremost on the needs of local property owners. It starts with understanding their needs and desires. A simple survey process can easily determine how many properties use a wireline broadband connection, as well as the rates and speeds available. It also can measure the community’s

overall satisfaction. In standard business practice, this information would then be used to generate a feasibility study based on estimated take rates. This makes no sense with the Ammon Model as it is not a business but a municipal utility. It treats the fiber infrastructure as essential, just like sewer and water. It does not rely on achieving a specific take rate to break even, and it will never generate a profit. As a true utility, it relies on 100-percent participation to guarantee cost recovery for the installation and operation of the infrastructure. This requires the economic separation of installation, operation and services.

Ammon fiber utility members invest in their properties by adding fiber connectivity. The Ammon Model provides property owners with the mechanisms to build and own their wireline connectivity. In Idaho, this is accomplished through the creation of local improvement districts (LIDs). Other states might call them community improvement districts, assessment districts or even special assessment districts, but they all serve one purpose: They provide a group of property owners the ability to share in the cost of infrastructure improvements voluntarily.

An LID is created at the request of the property owners in the district with the express purpose and necessary authority to finance and oversee a fiber construction project. Property owners receive cost estimates, and participation is optional within the district. Once construction is complete, the total cost of the project is



An Ammon operator uses a directional drill to install a fiber drop through a private yard to the side of a home.

equally divided among the participating properties. The amount due then is attached to the property and paid for over 20 years at a low municipal bond rate. Alternatively, the property owner can pay the amount in full at any time. Using standard utility financing mechanisms results in annual payments of less than \$200 (less than \$17 per month) for properties receiving fiber. Additionally, 100-percent cost recovery for the project is guaranteed not by the city but by the participating properties.

Operational expenses are paid to the city as an additional line item on residents' monthly utility bills. Because the capital costs associated with installing the infrastructure are dealt with separately through a municipal bond attached to properties, the monthly utility fee in Ammon is \$16.50. Economic separation also allows property owners to avoid this nominal fee, if they desire, by suspending the service. Again, this is standard utility practice, as property owners can suspend water and sewer service for periods of time. The city uses these fiber optic utility fees to maintain the infrastructure that provides members with access to a virtual marketplace where they shop for services.

PROVIDERS

It's important to note that although the Ammon Model treats the infrastructure

as a utility by using cost-recovery frameworks, the services are market driven – open to both competition and innovation. Anyone can become a provider. All it requires is a service or product and some initial provisioning. Because there is no need for a provider to install its own equipment at the premises, there is really no investment required on the part of the provider beyond the initial setup. There also is no need for on-site support at the premises as all the services are in

software and the utility is responsible for the hardware.

Consider your experience using an application on a mobile device. You pay the cost to purchase a device, either up front or over time, thereby providing the infrastructure to connect. Then you pay a monthly fee for connectivity to access the store. Finally, you shop for an application that meets your needs and purchase it in the store. These three separate and distinct costs all are associated with achieving the desired

Final Assessment Calculations

FIBER OPTIC LOCAL IMPROVEMENT DISTRICT NO. 1

Total Principal Amount and Number of Participating Properties

Total Project Cost	\$	795,002.38	
Total Properties Passed		379	
Total Properties Connected		269	73%
Allocation of Costs			
Total Project Cost	\$	795,002.38	
Participating Properties		269	÷
	\$	2,955.40	per Property
Total Assessment per Property		\$ 2,955.40	



Installing fiber duct and underground vaults in a right-of-way in a residential neighborhood

end. The cost of the first two items represents your investment to access competitive choices in the store. This paradigm well illustrates the separations found in the Ammon Model.

The cumulative effect is the commoditization of services. Prices now naturally shift based on market conditions. Contracts no longer are necessary as there is really no “per subscriber” provider investment. New challenges are presented to traditional providers as they seek new ways to differentiate themselves within the marketplace.

THE MUNICIPALITY

In the Ammon Model, the municipality facilitates the financing and construction of the infrastructure and then takes on the responsibilities of maintenance and operation after construction. This is all done with the participation and support of the people served. It is a true public-private partnership, with the local property owners serving as the private partners.

The primary focus of the Ammon Model is to build a next-generation fiber optic utility infrastructure that will survive change and innovation. This is accomplished by the careful and deliberate unbundling of services

from infrastructure both economically and technically. The internet already has demonstrated this function; the Ammon Model perfects the form.



Completed installation showing the fiber storage enclosure on the outside of a home

CONCLUSION

A big-picture approach is required to understand the Ammon Model because it changes the ownership paradigm for residents, the investment paradigm for service providers and the economic paradigm for municipalities. These changes often appear counterintuitive to traditional operators because they won't fit within their current operational and business frameworks. This is the reason many of them will tell you that the Ammon Model is failing or impossible to replicate.

The Ammon Model is not for the faint of heart or those who need a victory that fits within the term limits of an election cycle. It is not necessarily the easiest path to cheaper internet or even municipal ownership. It is about democratizing critical infrastructure. It requires dedication, focus, cooperation, community engagement and hard work. But then, doesn't anything meaningful and worthwhile? The reward today in small-town Ammon is multiple 1 Gbps internet choices for less than \$60 with no contracts or data limits, delivered on a next-generation infrastructure built using rock-solid economic frameworks. The utility also is prepared for tomorrow because the infrastructure is not tied to an underlying service, either technically or economically. Therefore, the model embraces change and invites innovation.

There is nothing unique about Ammon or Idaho that makes the model difficult to replicate. Ammon was simply the first to assemble these traditional utility frameworks into a new broadband model for the benefit of its residents. In fact, numerous other communities already have started down this same path.

American inventor Thomas Edison said: “Opportunity is missed by most people because it comes dressed in overalls and looks like work.” If your community is tired of the status quo and members are not afraid of rolling up their sleeves together, then the Ammon Model could be just the ticket. ❖

Bruce Patterson (bpatterson@cityofammon.us) is the technology director for Ammon, Idaho.