

## Kutztown

### Fiber-To-The-Home Deployment

#### INTRODUCTION

The Borough of Kutztown, Pennsylvania, is an advanced community — home to more than 5,000 residents and strategically located between Allentown and Reading, Pennsylvania. The community of Kutztown is also a university town, with Kutztown University — one of the leading business schools in the Northeast — in close proximity.

As the Borough of Kutztown and the Kutztown Municipal Authority looked into the future, they realized the need to expand current utility services to provide advanced voice, video and data services to residential and commercial citizens within their community. These services include traditional voice services and 10-100 Mbps Internet connectivity, with a goal to also provide state-of-the-art video and music offerings (including both video-on-demand and interactive television) and virtual private networking. New services such as broadband community intranet, automated meter reading and other energy management services are currently being implemented.

#### GOALS

The Borough became so convinced of the value these services deliver to its citizens that it created a program called Hometown Utilicom to achieve the following goals:

1. Provide a one-stop shop, as well as consolidated billing and maintenance for all municipal and telecom services.
2. Offer a value-added services approach to the customer, including a full menu of services and diverse billing and payment options.
3. Enable the offering of future advanced services, such as wireless Internet services, smart appliance monitoring, home and business security services and data modeling/storage.



The Borough of Kutztown, PA

#### FIBER — THE BEST CHOICE

The Borough of Kutztown decided that fiber to the home (FTTH) was the best infrastructure solution to meet the needs of their citizens, both now and into the future. Faced with alternative technologies that could leverage traditional copper infrastructure, the Borough felt that copper-based solutions were not in the best position to meet the demands of today's services, and that a copper-based approach would ultimately restrict future network upgradability for the citizens of Kutztown. Copper-based solutions would also limit the Borough's ability to deliver enhanced community services, which would ultimately increase property value and differentiate the Borough of Kutztown from surrounding communities.

Furthermore, Kutztown discovered that a FTTH solution would compliment its existing municipal-owned electric system, enabling the Borough to make use of its utility pole ownership, right-of-way assignments and construction equipment, as well as its technically competent field staff for construction, service and maintenance, and its office staff for customer, marketing and billing services. With these services, Hometown Utilicom could become a resounding success.

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#### THE SOLUTION

After conducting a thorough technology survey and business case analysis, the Borough of Kutztown and the Kutztown Municipal Authority were looking for a firm to provide a turn-key, yet cost-effective FTTH solution. Leveraging its experience and expertise in the telecom industry, the Atlantic Engineering Group was able to offer the Borough the end-to-end solution it was looking for — combining FTTH electronics from Optical Solutions with all of the outside plant infrastructure from Corning Cable Systems.

Working together with Atlantic Engineering, Corning Cable Systems provided the Borough of Kutztown with a complete passive infrastructure solution for their FTTH deployment, including optical cable, splice closures and couplers and splitters.

“Part of our strategy in building a FTTH network is to construct a key physical asset that will be a source of continuous revenue generation,” says Frank Caruso, Director of Information Technology for the Borough of Kutztown. “This approach will enable us to keep telecom revenues within the Borough as well as to control the rates that our citizens have to pay. Furthermore, we believe that the construction of a cost-effective, but highly-reliable FTTH network will improve the borough’s credit rating and ability to borrow money for future projects.”



Atlantic Engineering FTTH Installation

#### CONCLUSION

With Kutztown’s aggressive FTTH deployment schedule, the benefits of working with Corning Cable Systems and Atlantic Engineering Group on a FTTH solution have become evident. The close working relationship between the two companies ensured that the FTTH network was designed for trouble-free performance and maximum reliability, without the concern of possible field integration or quality issues that could have resulted in a deployment delay or loss in performance.

“By working with an industry leader like Corning Cable Systems for the passive optical network infrastructure, we knew that we were providing the City of Kutztown with a very reliable solution — backed by more than 150 years of quality and the reputation of the Corning brand,” said James Salter, Chief Executive Officer for Atlantic Engineering Group.

Together, Corning Cable Systems and Atlantic Engineering are making the City of Kutztown’s vision a reality, providing their citizens with a cost-effective network that will support their needs both now and into the future and enabling them to benefit from life-enhancing services as they emerge.