

# MIFFLIN COUNTY SCHOOL DISTRICT

201 Eighth Street - Highland Park

Lewistown, Pennsylvania 17044

TELEPHONE (717) 248-0148

FAX (717) 248-5345

---

## Information Systems

November 12, 2004

To Whom It May Concern:

I am writing this letter in appreciation of the work that Nittany Media performed for our School District. Last year Nittany Media completed the installation of a point-to-point single-mode fiber network connecting our Administration Building to seven schools and our Maintenance building. We are currently leasing the fiber from Nittany Media and we lit it with our own equipment and use it to provide gigabit Ethernet services.

This new physical network has afforded us the ability to do many new things, such as:

### **Creation of a District Data Center**

The new physical network has allowed us to create a true District-wide data center. Increasing the bandwidth between our buildings has eliminated the need to house expensive servers and routers in each location. We have been able to bring the servers back to a central and environmentally controlled area within our Administration Building. Further, we were able to consolidate the routers at the fiber-connected schools into one core router located at the Administration building. The core router gives us greater capacity and flexibility than any of the previous routers.

### **Reduction in Server Needs**

With the centralization of our servers we have been able to consolidate several servers. Since each school now has a gigabit connection to the data center we do not need separate servers to run certain network-wide services such as DNS, user authentication, and file storage. Going forward, we anticipate that further server consolidation will be possible.

### **Elimination of Data Bottlenecks**

The most immediate difference that the new fiber network made was in the elimination of certain network bottlenecks. Prior to our work with Nittany Media, we used a telecommunications company to provide frame-relay circuits to each of the eight buildings that are now serviced by fiber. These frame connections were very costly, yet only delivered a fraction of the speed we now have. On an average day the circuits connecting our high schools to the Administration building reached 80-95% saturation. Today, we don't even need to monitor the usage of the new gigabit connections.

### **Reduction in Overall Network Cost**

The fiber network also delivered immediate cost savings. Discontinuing our service with our prior telecommunications company and the consolidation of routers and servers has placed funds back into the classroom.

While it is easy to describe the technical benefits of the new fiber network, one must not forget that this work has an impact on the classroom as well. Students, staff, and faculty can hardly remember what it was like to have bottlenecks. Files can be accessed more quickly, applications no longer require a thin-client front-end, and the Internet is actually usable.

We greatly appreciate the work that a local company was able to do for us. Nittany Media is not only a local company but a responsible and giving member of the local community. Nittany Media is not a vendor, it is a community partner.

Sincerely,

Hunter French  
Interim Director of Information Systems  
and Network Administrator  
Mifflin County School District