

Customer Reference Story – Hillsdale College Campus Connectivity

→ Situation/Sponsor

This project was designed and installed through a collaborative effort between FiberPlex (Manufacturer), AVI Systems (Integrator), and Hillsdale College.

→ Critical Issue

Hillsdale and AVI Systems have been contemplating a solution over the last 5 years for campus wide broadcasting capabilities at Hillsdale College. The solution that they came to was going to be extremely costly and demanding of a lot of time to install and bring online. Not to mention the challenges it would create around campus during the trenching process.

→ Problem

Until this latest infrastructure upgrade with FiberPlex WDMs, the process for capturing, editing, and delivering an event entailed the Technical Media Department taking the entire studio and production process mobile (cameras, mixing/switching, routers, preview displays, etc...). Literally loading up vehicles, traveling to the remote campus location, setting up, and then breaking down and returning all equipment.

The next step that had been determined would be necessary was going to be trenching up the campus and running new fiber optic cable, for Broadcast use only, back to a control room from several remote locations that are commonly used for events. They did extensive research and determined a cost. Donations were made in the amount of \$500K to accomplish this task, and plans were about to move forward..... then they were introduced to the FiberPlex WDM16 and WDM8a active wave division multiplexers.

→ FiberPlex Provided

8 WDM units in 8 remote locations. Allowing for; bidirectional transport of 16 (WDM16) or 8 (WDM8a) data/media systems (audio, video, control), up to 3GB bandwidth per system (equivalent to an uncompressed 1080P video feed), over individual pairs (2 strands) of singlemode fiber that were already in place from each remote location to the control room.

In the control room are 8 WDM units representing the companion WDMs located in each of the 8 remote locations. These WDMs receive the single pair of singlemode fiber, and separate the 16 or 8 data/media systems back out to electrical signals for control, capture, and playback locally in the control room.

At the end of the day, we converted 8 pair (16 strands) of singlemode fiber, into 128 pair (256 strands) of multimode OR singlemode fibers.



→ Result

- Over \$300K in savings versus trenching and running new fiber optic cable.
- High Bandwidth transport capability utilizing previously installed fiber that was being under-utilized.
- Ease of setup for production and broadcast events all around campus.
- Open ports on all WDMs provide for future expandability.
- Now, the Technical Media Team shows up to the remote location with their HD Video Cameras, plug them in to the local WDM, and they are ready for the event to begin.

→ End User Contact Information

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→ Period of Performance

Design consulting beginning Q3-2013 to present

Product sales and support starting December 2013 with follow on orders continuing to present.

→ Support Documentation

See Attached

