

# Schools & Universities



## AIR BLOWN FIBER- CASE STUDY

### Southern Methodist University- Dallas, TX



#### Overview:

Founded in 1911, SMU is a private, comprehensive university located in Dallas, Texas. The University, which enrolls more than 10,000 students, has a campus comprised of over 90 buildings. With an increasing need for additional facilities, SMU is constantly growing. The new Deadman Life Science Building was completed in Fall 2001 and several others are either under construction or in the planning phases. The Jerry R. Junkins Electrical Engineering Building will open in Spring 2002 and the Laura Lee Blanton Student Services Building, which will be a state of the art "one stop location" for all student services will open soon after.

#### Needs:

According to Rich Bull, Project Manager with the Information Technology Department, the new facilities and future growth plans created considerable network design opportunities and challenges. All new buildings had to be connected to the existing campus fiber network. SMU needed a fiber optic cabling system capable of providing flexibility to make moves, adds and changes easily and wanted to be able to expand on the fiber plant depending on future growth. Future proofing to meet the needs of a variety of different applications and users along with keeping installation costs low were also priorities.

#### Solution:

SMU decided on the FutureFLEX Air Blown Fiber System by Sumitomo Electric Lightwave Corp. This innovative system allows for easy installation of small fiber bundles that are simply blown through a network of tube cables. ABLe Communications, a certified FutureFLEX VAR did the initial installation and CSC (Communication Supply Corp.) handled distribution of the material. A 19-tube cable was installed from the main switch room in the Patterson Building to a TDU (Termination Distribution Unit) in the tunnel system. This allowed maximum flexibility to route fiber to a variety of different locations. A 7-cell tube cable was pulled in as a branch through the tunnel system to the North side of campus, from which 3-tubes were run directly into the new Deadman Building. Four tubes remain as spare to service future needs. The first three fiber runs from the switch room to the Deadman Building covered roughly 2000 feet point-to-point. ABLe installed (blew in) two 12-strands of multimode and one 12-strand of singlemode in under one hour. Connectorization was accomplished by using industry standard breakout kits with ST and SC connectors.

#### Benefit:

The FutureFlex Air Blown Fiber System enabled SMU to create a routing system for their fiber optic infrastructure. For future needs, they can blow in fiber quickly and cost effectively into spare tubes. To make moves or changes, fiber can be blown out and re-spooled to be reused. This significantly reduces their costs compared with rerouting or installing new conventional fiber cable. Also, their Air Blown Fiber network is future proofed without all the added costs of buying and installing conventional fiber before they need it. Rich Bull said "The FutureFLEX system gives us long-term cost savings plus the benefit of having a flexible system to meet future needs."