How in-building wireless works

In-building wireless system providers effectively build hybrid networks inside government facilities to extend the reach of cellular services as well as establish WiFi coverage. The graphic shows a typical network topology as described by MobileAccess Inc. of Vienna, Va. MobileAccess has installed this type of converged in-building wireless network in Senate buildings in Washington.

**BROADBAND ANTENNA**
Supports multiple services, including cellular, WiFi, two-way radio and paging.

**REMOTE HUBS**
Take optical RF signals from head end, convert them to analog and send them to antennae.

**OPTICAL TRANSPORT**
Single-mode fiber takes optical radio frequency signals from head end.

**HEAD END**
Houses network components that interface with wireless carriers’ networks.