

## 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.

### OPTICAL TRANSPORT

Single-mode fiber takes optical radio frequency signals from head end

### HEAD END

Houses network components that interface with wireless carriers' networks

### REMOTE HUBS

Take optical RF signals from head end, convert them to analog and send them to antennae

### BROADBAND ANTENNA

Supports multiple services, including cellular, WiFi, two-way radio and paging

