



Internet core

At the 'core' of all of this, is access to global Internet connectivity, served by regional, national, and international long-haul network providers. In order for the Middle Mile facilities to gain access to the Internet core, they must be able to get to the facilities that house the network equipment, which is usually over 70 miles away – making access to affordable Internet services challenging, especially when there are few providers servicing a particular region.

The construction of Allied Fiber's new long haul dark fiber routes addresses several critical needs. It will establish diverse routes to ensure the redundancy necessary for public safety and national security. Access to dark fiber will create alternatives to "lit" transport services that are becoming increasingly concentrated in the hands of large, often vertically integrated companies that may also provide retail Internet access service. It will help ensure that sufficient capacity will be available to meet the vast increases in demand that will be driven by new applications and a growing population of broadband users. As with the need for colocation space for IXPs, dark fiber routes constructed with federal assistance should be carrier-neutral and open. Ideally, the dark fiber would be operated by an entity whose sole function will be leasing and maintaining dark fiber. The dark fiber provider should not be in the business of providing "lit" transport services.

Furthermore, the construction of new dark fiber routes offers the ability to establish colocation facilities in the buildings housing signal regeneration equipment. These locations could also be made available for the construction of wireless towers to terminate middle mile wireless transport services. Once constructed, the towers would have ready access to the long haul fiber needed for global connectivity. To maximize their value, Allied Fiber proposes that the newly constructed towers be operated on a carrier-neutral, open basis – providing a nation-wide 'all-access' network solution.