



## Where Can I Get My Internet?

*The difference between dark fiber, lit internet service, and who can use it.*



## About ECC Technologies

- Leader in rural broadband development for over 15 years
- Work with government and private sector to create partnerships to enable broadband
- Work with regional and local networks to monetize investments in infrastructure and enable broadband
- Example projects:
  - Regional telecommunication studies and need assessment
  - Broadband Adoption and Aggregation Studies (BAAT)
  - Fiber and wireless network business plan development
  - Design and constructing management services to build fiber and wireless networks
  - Fiber sales and marketing to generate revenue from fiber investment

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## Fun Facts About The Internet:

- Approximately 204 million emails are sent per minute. Over 250 billion per day. 70% of those are spam.
- The first ever email was sent in 1971 by Ray Tomlinson.
- A single Google query uses 1,000 computers and takes 0.2 seconds to retrieve an answer.
- 16% to 20% of searches Google gets per day have never been Googled before.
- The music video for the song 'Gangnam Style' is the most viewed video on the internet with over 2.8 billion views.

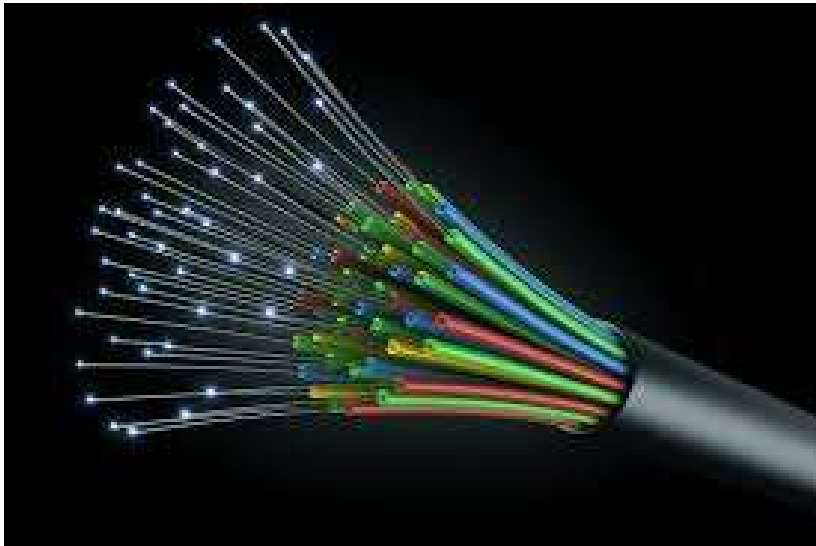
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## Fiber – How it Works



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# Dark Fiber and Open Access

- What is Dark Fiber
  - Dark fiber is just the unused strands in the fiber cable – A highway with no cars
  - A customer purchasing dark fiber will use their own electronics to transmit their own data

Dark Fiber



30 Megabits



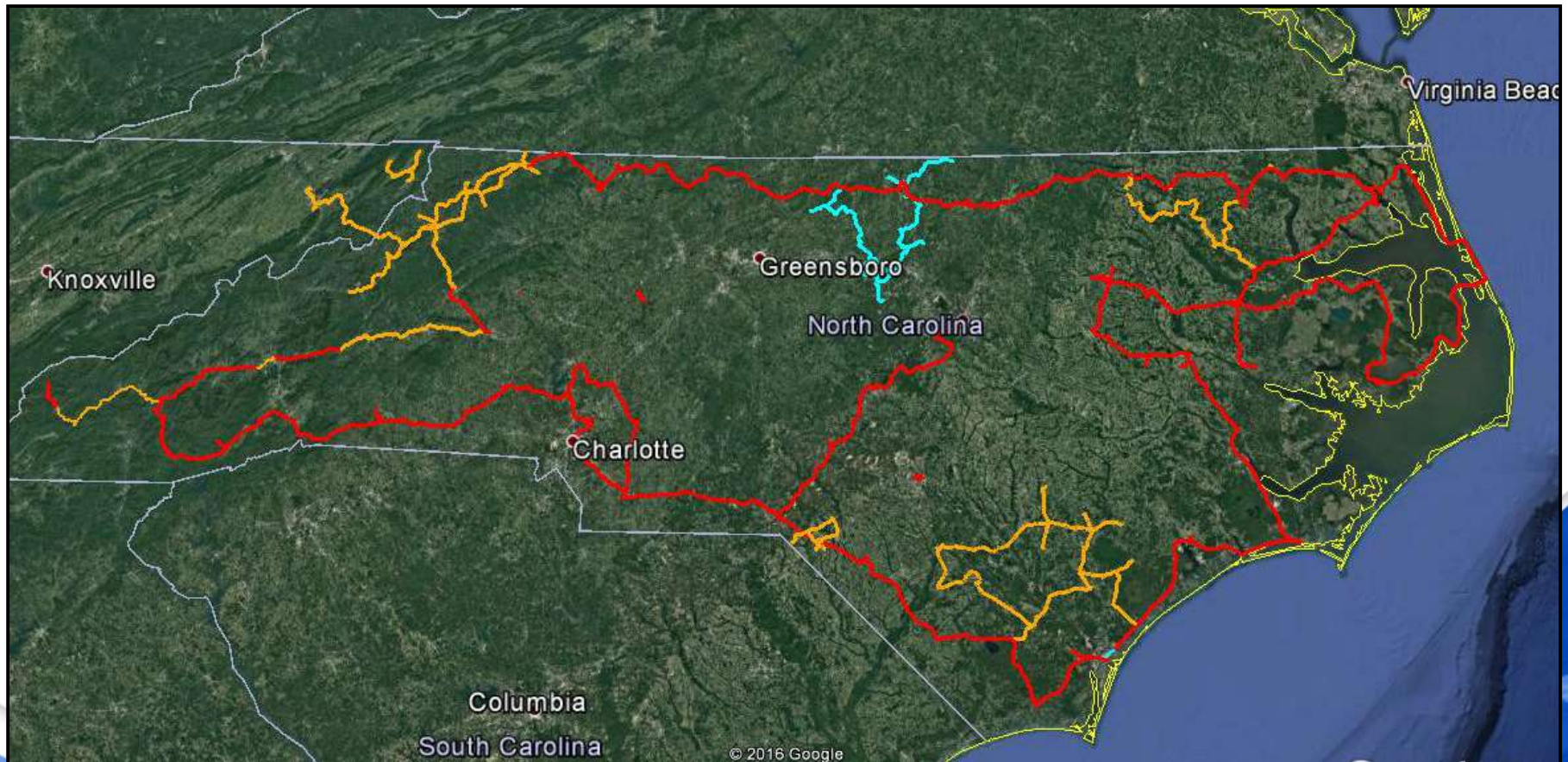
1 Gigabit



- Open Access Networks
  - A network that allows easy access for others to use their dark fiber to develop their own networks
  - There are many different options for how fiber can be made available and what entities it can be made available to

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## Open Access Fiber Networks in North Carolina



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## Customers- Dark Fiber vs. Lit Service

- Dark Fiber
  - Service Providers (cable, internet, telephone, cell phone)
  - Government
  - Healthcare
  - Education
  - Utilities
  - Businesses (typically multiple location)
- Lit Service
  - All of the above plus
  - Businesses (majority)
  - Residents

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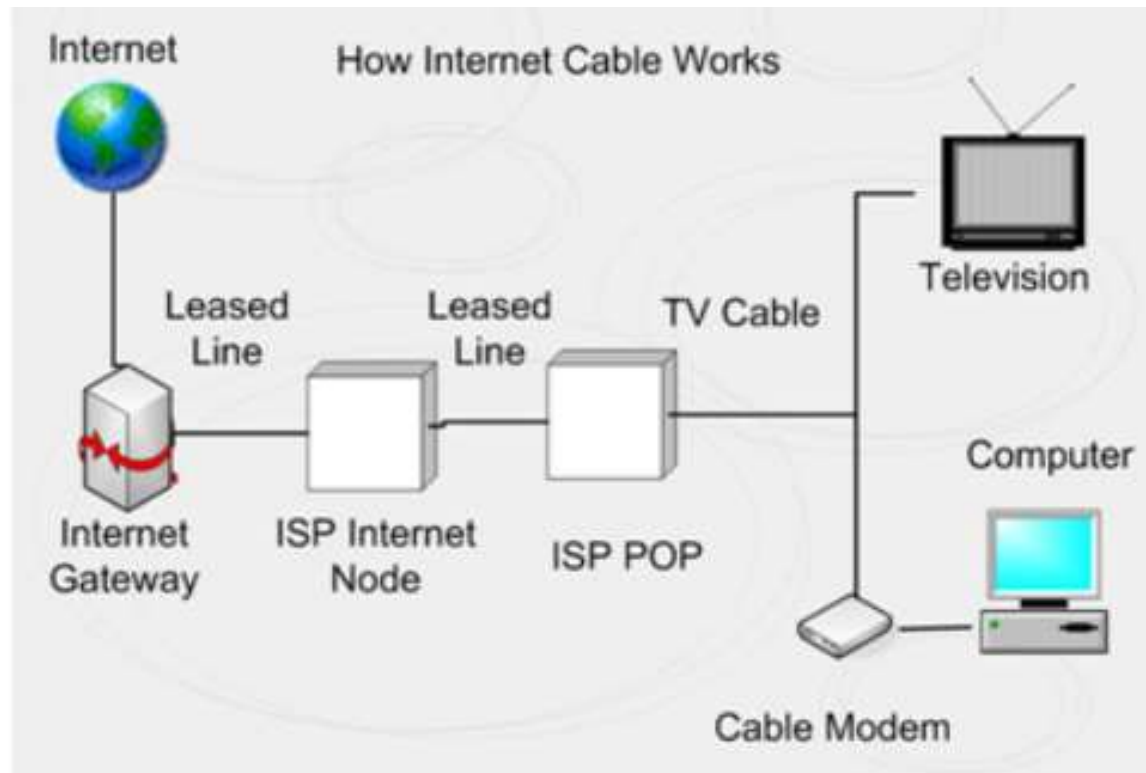


## Fun Facts About The Internet:

- One million babies have been born from people who met on Match.com
- 2.58 million people still pay for AOL
- Facebook Currently has 1.86 billion users, which if it were a country would make it the most populated country on earth.
- Almost 80% of online users around the world use Facebook.
- Netflix accounts for about 36% of the bandwidth used daily around the world
- You Tube has over 1 billion users and accounts for one-third of all people on the internet. Viewers watch 6 billion hours of video each month, the vast majority of which is American top 10 song videos. Interestingly over 80% of You Tube users are outside of the US.

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# How the Internet Works





## Fun Facts About The Internet:

- 78% of Americans use the internet
- 47% of the global population uses the internet
- There are 1.59 billion households worldwide with a television, but already over 2 billion people access the internet from a handheld device.
- The internet took just 4 years to reach its first 50 million users. Television took 13 years. The radio took 38 years to reach the same amount of viewers.

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For questions please contact:

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