Broadband Delivery

DSL, Cable Modem, Cellular Service, Fiber Optics

Internet speeds are measured in megabits per second (mbps). The higher the number of mbps a network can transmit, the faster/better the connection.

**DSL (Digital Subscriber Line)**

A. Dedicated Bandwidth to your house but...

B. Speeds are slow and fluctuate (most often between 10 and 40 mbps) and...

C. Service only available to those who live close to the providers Central Office

![Diagram of Central Office, Telephone Poles, Cable Underground, DSL Line]

**Cable Modem**

A. Can provide service to areas further away from the central office but...

B. ...Does so with amplifiers mounted on telephone poles which draw power from the electrical grid, increasing its carbon footprint and complicating repairs during storms and/or electrical outages

C. Provides relatively fast speeds (300 mbps advertised), but...

D. ...Bandwidth is shared so the more people that use it in a neighborhood, the slower it gets, causing problems when people need it most (pandemic/storms/etc)

![Diagram of Central Office, Telephone Poles, Cable Underground, Cable Modem Line]
CELLULAR SERVICE

A. Provides service to wide areas via a cell tower which is connected to the landline network but...

B. Draws power from the electrical grid, increasing its carbon footprint and complicating repairs during storms/electrical outages

C. Provides relatively fast speeds (advertised as 4G/5G) but, the greater distance from the cell tower the less reliable the connection and...

D. ...bandwidth is shared by all users connected wirelessly to the cell tower...so speeds get slower as more people connect to that tower, causing problems when people need it most.

FIBER OPTICS TO THE HOME/BUSINESS

A. Provides the fastest speeds (1000 mbps) available to areas a great distance from the Central office and can handle even faster speeds in the future

B. Does not need amplifiers on telephone poles to transmit signal...reducing its carbon footprint and simplifying repairs during storms/electrical outages

C. Bandwidth is dedicated to the home/business, so thousands of people in a neighborhood could use simultaneously without speeds being affected, so...

D. ...speeds are maintained when needed most (pandemic, storms, etc)