Wireless and Satellite Internet Services

This is one of a series of articles provided by the Oakmont Technology Learning Center on the use of technology by seniors
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On Oct. 27 we covered "wireline" internet service in Oakmont, e.g. cables to your home that give you internet access from your Internet Service Provider (Comcast, AT&T, Sonic). Wireless is a more complicated topic and can get confusing - cellular phone/internet service, home internet wireless service, and satellite internet.

Cellular internet service. Technology advances have increased speed and reliability for wireless internet devices (cell phones and cellular-connected tablets). The technology is identified by its "generation," shortened to the letter "G." Third Generation (3G) technology has been superseded by later versions and is no longer supported. Fourth Generation (4G) is still supported, and there is a later version called 4G LTE ("long term evolution,") which is the most common version of 4G. The 5th Generation (5G) is the latest and greatest technology and is the current standard supported by most new devices. Most new cellular phones are 5G-capable but also will use 4G/LTE for years to come.

In general, cell phones require local cellular towers to communicate. In order to access the internet using your cell phone or tablet computer, you will need a "data plan" from your provider. The data plan defines how much internet data you can use before incurring additional costs. The costs can be excessive so it's important to monitor your usage with your cellular provider's tools.

Wireless <u>Home</u> Service. With the advent of 5G, internet service providers are now looking at using cellular data for your home internet, eliminating the need for wires and cables run to your house. Verizon, AT&T, and T-Mobile are currently offering this capability in certain areas, usually densely populated urban areas. 5G may be the future of home internet but it is likely some time before it is available in Oakmont, making wired service the standard here for years to come.

Satellite internet. This service has historically been considered "internet of last resort" when nothing else is available, usually in very rural areas. Viasat and HughesNet have been the big players in the past for satellite service. Given that Oakmont has "wireline" service with Comcast/xfinity, AT&T, and Sonic, most people don't even consider satellite. There are good reasons to not consider satellites: slow speeds, latency (delay) and data caps. These factors make it difficult to video conference or stream video and if you exceed your daily data limit, they slow you down so it's unusable.

However, Starlink is changing the game for satellite internet. It is a satellite internet service developed by Elon Musk's SpaceX company. Starlink can be as good as 100mbps download and 12mbps upload service, so it's better than the traditional satellite providers, but it is not competitive with traditional "wireline" internet providers in either speed or price.

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