

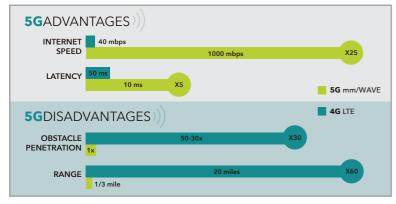
## 5G Hype

5G cellular technology has been on the horizon for a while now and with test cities popping up across the country giving first adopters incredible download speeds of over 1,000 mbps and near-instantaneous latency, it seems like it won't be long before 5G takes the world by storm.

However, this is a popular misconception that the media and carriers are slow to correct. The simple truth (which most people are unaware of) is that 5G cell signals, despite all their wonderful advantages over 4G, will be limited by range and penetration disadvantages which will make coast-to-coast adoption difficult if not impossible.

## **5G Problems**

Due to its natural propagation characteristics, today's 4G signals only cover about 60% of the USA's total area through the cell tower network. In comparison, 5G signal propagation will face even greater challenges as cell tower range and signal penetration could be diminished on a scale of up to 50x worse than 4G signals.



Figures are based on preliminary testing and can vary depending on conditions

With these signal propagation disadvantages, smaller 5G nodes will need to be on every block, greatly increasing the time, cost, and therefore limiting the extent of the 5G network.

Even worse, the higher frequency of 5G signals means that they will have much less penetration power, with reports of obstacles as insignificant as the water content in users' hands noticeably disrupting 5G signals. This means that there will need to be a 5G signal booster in every room of every building that wants to provide useable 5G signals within its walls.



## 4G is Here to Stay

Until carriers figure out how to overcome these 5G signal propagation challenges which prevent them from seeing widespread deployment, 4G will most likely stick around for a while. Even in affluent areas where 5G is released, users will still rely on 4G cellular data to perform functions throughout pockets of weak or nonexistent 5G coverage. We saw the same thing happen with the progression from 2G to 3G, and from 3G to 4G (LTE) technologies, and 5G will be no exception.

For More Information About 5G, visit our blog at https://blog.surecall.com/, or contact us at (888) 365-6283 or info@surecall.com.



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