

WiFi vs Cellular: Carrier Cost Impact



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I am often asked to explain the difference between using a mobile device such as an iPad or an iPhone on a WiFi network versus on a cellular network, so I thought I would cover this topic in this month's newsletter.

One aspect of this comparison is speed, which is a whole topic unto itself and one that I will defer to a future newsletter.

Most of you are familiar with text messaging. Typically when you sign up with a carrier, you purchase a specific number of text messages and pay a fixed amount each month for your text messaging service plus an additional amount should you exceed the number of text messages. Both sending and receiving text messages count toward your monthly text message total. Some carrier plans now offer unlimited text messaging. Except for some special circumstances, you must have a carrier plan in order to send and receive text messages and this functionality is not available on a WiFi network.

Apple created an application called iMessage to provide the functionality of text messaging without the cost. Other applications such as Skype provide the same functionality. These applications use the vendor's servers instead of the carrier's servers to transfer the data (which is how they avoid text message charges). iMessage also synchronizes conversations across multiple iOS and Mac OS X devices, so you can start an iMessage conversation on one device and see it or continue it on other devices. This does require an Apple iCloud account (which is free). These "messaging apps" are free when used on WiFi, but do count toward your carrier's data plan when not connected to WiFi. Again in the case of iMessage, when you are in an iMessage-to-iMessage conversation, the messages are blue; otherwise they are green and count toward your text message plan. Occasionally, the messaging app vendor's servers will be unavailable, in which case messages may be converted to text messages.

In addition to the category of messaging applications, there are a whole lot of other applications that send and receive data. These include web browsers, email applications, information display apps (such as apps that display stock quotes,

weather, news, etc), mapping apps, shopping apps, music and video streaming apps, multiplayer games, etc. When you purchase a smartphone the carrier requires you to purchase some kind of data plan in addition to your voice plan. With this data plan you have to decide how much data you may need to transfer every month, and much as is the case with text messaging, if you exceed the monthly amount, you will pay more. Some carriers do offer unlimited data plans at a premium. The good news is that when you are connected to WiFi, all of the traffic generated by these data apps is free!

The table below summarizes what has been described in this newsletter:

<i>Type of Data</i>	<i>WiFi</i>	<i>Carrier</i>
<i>Text messages</i>	-----	Text messaging plan
<i>Messaging app messages (e.g. iMessage)</i>	Free	Data plan
<i>App data (e.g., web browsers, email)</i>	Free	Data plan

As always, I hope you have found this information useful. If you do not wish to receive these emails in the future, let me know.

This newsletter, as well as all past newsletters, can be found on my web site (<http://steve.gimnicher.com>).