

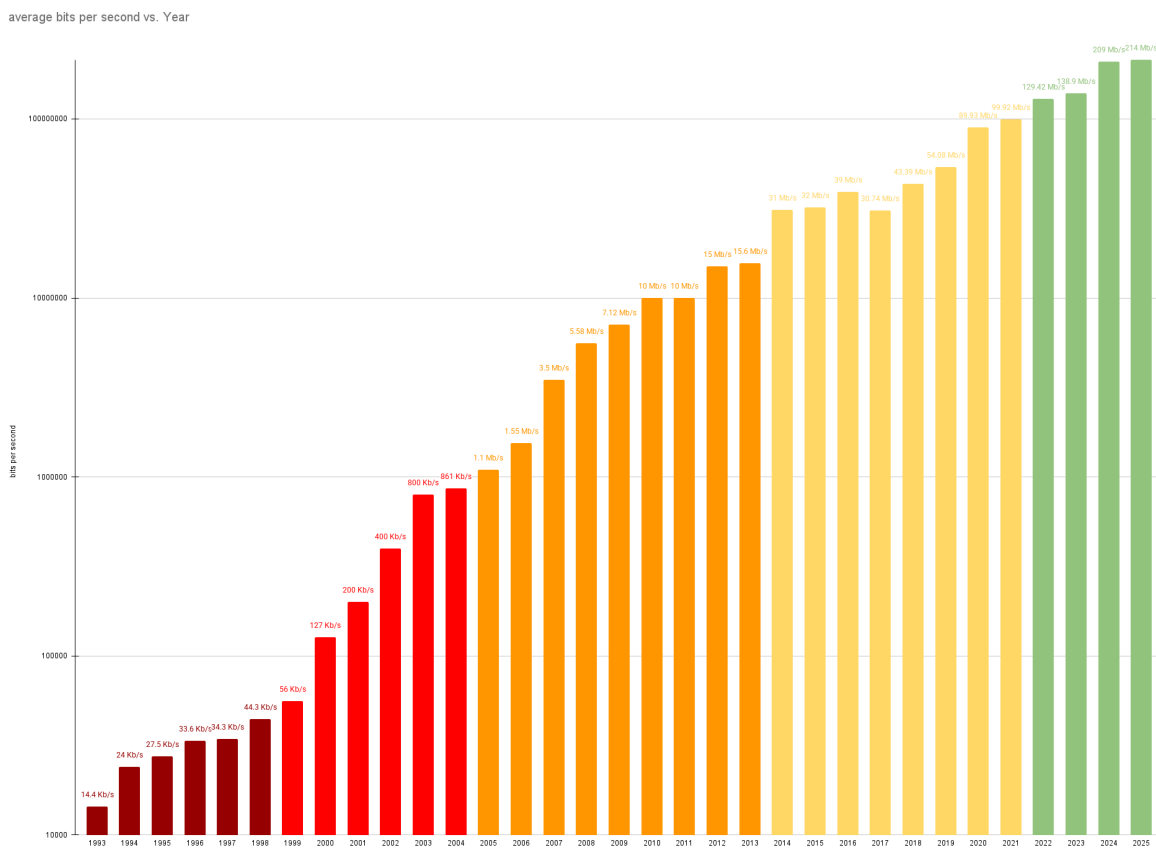
This is my own “cool guide” or should I say crude guide. I put this together because the other cool guide didn’t really give a sense of scale of just how large of a performance increase was achieved overall and I’ll explain how I did it and what the results mean.

Your feedback is appreciated, let me know if I made a mistake.

This is a link to the excel sheet so you can see the graphs and how I calculated the data:

<https://docs.google.com/spreadsheets/d/1DsJOCweK-60rFCqa6ultGxLUbuabDTx8rhqzSQBODoQ/edit?usp=sharing>

Long story short, I pulled each value from the original cool guide. Applied the appropriate magnitude (10^3 for Kb/s and 10^6 for Mb/s). Finally I graphed the results with a log scale because the numbers are that large. This graph is a bit hard to see so I suggest going to the link so you can see the labels. The graph shows a linear increase in speed which is true year to year, but overall, the actual value increase from 1993 to 2025 is exponential from 10,000 bits to 100,000,000+ bits.



This is the graph of the speed up (Newtime / Oldtime). Speedup identifies the performance increase (or decrease). A speedup of 1 means there was no change in performance while a speed up of 2 means the performance doubled. This one is a lot smaller and easier to see. A graph with a straight horizontal line shows that the speedup remains relatively the same from year to year. A fake example of what this suggests would be: “every year we consistently run a mile 25% times faster”. A graph that is very squiggly shows that the speedup constantly changed between years meaning some years we were running a lot faster times, some years our timings were not as fast as we were hoping. You’re still shaving off run time but the rate of seconds that you shave off year to year is what the speed up models.

Moving on, from the late 90s, the increase in speed was relatively decent. 2000s - mid 2010s speed is making leaps increasing by a factor of 1.5 or even doubling every year or so. From mid 2010s till 2025, the speed remains relatively sporadic within the +/- .5 range.

Average speedup is approximately 1.4. This means that since 1993, we’ve consistently made our internet run 40% faster per year. This is pretty good especially when you consider that 10 Kb/s speed was only enough to send a text message without HTML formatting.

speedup vs. Year

