Internet junkies, rejoice: Silicon Valley homes can finally get a fast connection to the Internet.

Comcast is launching a new service today in most of its Bay Area territory that will hook computers into the Internet at 16 megabits per second - double the top speed previously available.

The cable-modem service, called Blast, will cost $67 a month by itself, $53 if you also have Comcast cable TV or $10 if you get any of the Philadelphia company's Triple Play TV-Internet-phone packages. Subscribers who already pay the full, non-discounted price for 8 mbps will get the faster speed as a free upgrade.

The boost is long overdue for the valley, home of Google, Yahoo, Cisco Systems, Sun Microsystems and hundreds of smaller companies that actually create the Internet as we know it.

While Los Angeles, San Diego and much of the East Coast got connections of 15 mbps or more during the past few years, the Bay Area has limped along with a top speed of 8 mbps from Comcast, the dominant cable provider, and 6 mbps from AT&T, which offers DSL service over its phone lines. (Small pockets of the Bay Area recently got access to 10 mbps Internet connections as part of AT&T's U-verse service, although that requires spending at least $100 a month for a combo TV and Internet package.)

Valley consumers will now have a clear choice: Pay a premium for Comcast's speedier connections, or opt for AT&T's cheaper but slower DSL, which can cost as little as $10 a month for 768 kbps (less than 1/20 the speed of Blast).

Comcast says it has spent $663 million upgrading the Bay Area network since buying it from AT&T in 2002, and customers are reaping the benefits. "This is a game-changer for us as far as our competition," said Comcast spokesman Andrew Johnson.

Fast access means the most to people who use the Internet for video. Streaming movies flow faster and more smoothly, which means you can enlarge those postcard-size playback windows to full screen without losing any resolution. Downloads are also a lot easier.

As higher speeds become more common, they are also likely to spur Silicon Valley's inventors to come up with new services, from interactive gaming to new forms of shopping.

"We have people here who are developing the tools to take advantage of this broadband," said Seth Fearey, chief operating officer of Joint Venture: Silicon Valley Network, a consortium of government agencies and private companies that has lobbied for faster broadband.

But AT&T argues that the need for speed is overhyped and most customers don't want to pay for it. "What we found is that value is important to people, particularly people making the switch from dial-up," said AT&T spokesman John Britton.

As people take their laptops, iPhones and other mobile devices to more places, AT&T figures they want mobile access more than a fast, fixed connection at home. The phone giant recently started offering 10 million of its DSL customers free access to its network of 10,000 WiFi hot spots.

Based on the e-mails I get every time I write about broadband, I'm with Comcast: I think a whole lot of Bay Area residents want the fastest connection possible and are willing to pay the price.