The rise of 4G in the First State

Users cite limits on faster Internet service

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When it comes to high-speed Internet, now you can take it with you.

But you'll have to live with the limits of the nascent technology that wireless-phone carriers are calling "4G," or fourth generation.

In recent years, major wireless carriers have made it possible for consumers to travel from place to place and stay connected to the Internet, without being tethered to more localized Wi-Fi connections.

Yet even with the 3G technology, there's that wait, that hesitation, as web pages load and e-mails send.

The hesitation-less next generation of mobile Internet service is rolling out in pockets of the country, and Wilmington is seeing some of the early opportunities to connect, at speeds nearly as fast as one might find with a hard-wired home computer.

To get 4G service on a smart phone, Wilmingtonians have just one option today: Sprint. The wireless provider was first out of the gate, offering the service starting in September 2008. It began service in the Wilmington area in August.

Verizon Wireless plans to introduce a 4G phone network in Delaware by summer, and AT&T also plans one.

The technology offers download speeds of up to 10 megabits, with an average of 3-6 Mbps, with upload speeds of up to 3.1 Mbps.

"There's literally a handful of phones that can even harness 4G right now," said Nick Mokey, associate editor of Digital Trends, an online tech and lifestyle magazine in Portland, Ore. "It's in its very, very early stages."

On Sprint, those devices are the HTC Evo 4G and the Samsung Epic 4G. Users of those two devices pay a $10 monthly surcharge beyond what they would pay for 3G service.

Brenda Ledesma of Wilmington called her HTC Evo smart phone "the best Christmas gift I purchased for myself."

The Sprint-enabled device allows her to use Facebook, e-mail, Moviefone, GPS, Tango video chat and other applications on the go. She said she plans to end her Comcast high-speed Internet service at home, noting that her cell phone serves as a hot spot that her laptop can use to connect to the Internet.

Robert Cooper of Middletown said he has a Sprint 4G data card for his laptop, but in order to get those speeds, he needs to travel to more northerly areas of the state. In the meantime, he's slogging through with 3G speeds, which he said can feel as slow as dial-up. "I'm locked in for two years, and I hate it," Cooper said.

Jasmine Raulston of New Castle went in a different direction. She said she uses My Touch 4G on the T-
Mobile network. She called it "very slow," and not much better than her earlier 3G device.

This may be because T-Mobile doesn't offer 4G in Delaware, although it's adding the service gradually throughout the nation.

Comcast, a business partner of Sprint, offers the same service through its own brand.

There is, however, another option in Wilmington for getting 4G service using a laptop.

Verizon Wireless turned on its 4G network earlier this month, promising download speeds of from 5 to 12 Mbps, and upload speeds of 2 to 5 Mbps. The company sells two USB devices that make 4G service possible in Wilmington and at the New Castle Airport.

Erik Reebenaker, manager of advanced technologies for Verizon Wireless, said the company expects to have a 4G smart phone available by summer.

Ninety percent of the country will be 4G-enabled by 2013, he said. "This is a generational change for our network," Reebenaker said.

On both the Sprint and Verizon networks, customers automatically shift back to 3G when they leave 4G-enabled areas.

AT&T, on whose service the iPhone runs, is working on its own 4G network but has not announced any rollout plans, in Delaware or anywhere else.

What qualifies as a 4G device has been a matter of some debate. In October, the International Telecommunication Union took a stringent line on what can be called 4G technology, a definition that no commercially available service could meet.

But earlier this month, the organization relaxed that definition to include the technologies that the major carriers were either using or about to use.

Sprint uses the technology WiMax and Verizon uses LTE. Mokey said LTE has a slight edge in speed.

T-Mobile uses HSPA+, which Mokey described as "a very evolved form of the same 3G tech we've been using for years."

Mokey's publication put Sprint and T-Mobile 4G devices to the test in various spots in Portland. "They both dragged 3G through the mud," he said, but added, "they're very, very inconsistent."

"It can be really impressive, but move a few blocks, and it drops to a tenth of that," Mokey said.

Mokey said he has experienced similar problems in other cities. This could be frustrating to a business traveler, although over time, the network will get built out, and there will be more consistency, he said.

Stephanie Vinge Walsh, spokeswoman for Sprint, said consumers are now more interested in video on the go. A more robust network will help people get what they want, she said.

"It's less what it's called, 3G, 4G, 20G. It's really about what it does for people," she said.