# Drivers, start your Internet connections

*by Kathryn Balint*

Information superhighway, meet the original superhighway.

We already shop on eBay from our desks at work, download the latest "Heroes" episode at home and watch music videos on our cell phones. Now, road warriors can keep surfing as cars - one of the last unplugged realms - are equipped with computers and high-speed Internet connections.

INTERNET CONNECTION - Terry Smith, who works for Geico insurance company's Poway, Calif., office, said he can't imagine doing his job without the wireless connection in his car. CNS Photo by John Gastaldo. "You'd think we'd have enough work to do at home and at work itself, but people want to be connected in the car as well," said Erwin Manlapaz, a Best Buy Geek Squad agent in San Diego.

Business travelers were among the first to use the Internet while on the go, bringing their laptops and high-speed cellular connections to check e-mail and map routes to the next sales call or conference.

Those cobbled-together systems are being replaced by computers and devices specifically designed to access the Internet from inside vehicles, despite worries about introducing more distractions to the nation's freeways.

In addition to the few companies already retrofitting cars with built-in computing systems, automakers such as Ford, Nissan and Volkswagen are working to include in-dash computers with wireless broadband Internet connections in new models, possibly as early as next year. The systems handle the connections differently: In some, the Internet can be accessed only while parked, while others stream content to rear-seat screens or read the screen content aloud.

The first commercial deployments of wireless access in vehicles were in law-enforcement cars and on

commuter shuttle buses.

Avis Rent A Car System offers a wireless Internet device for its rental vehicles in San Francisco for an extra $10.95 a day. The company plans to roll out the service to other cities this year.

Made by AutoNet Mobile, the device is about the size of a three-ring binder and plugs into a vehicle's cigarette lighter for power. It serves as a router by accessing the Internet via a cellular network and then beaming a WiFi connection throughout the vehicle. Any WiFi-enabled laptop can connect to it.

AutoNet Mobile, based in Marin County, Calif., plans to sell the $399 devices through dealerships this year. The service requires a monthly connection fee of $39 to $49.

AutoNet's chief executive, Sterling Pratz, a former race-car driver, said he saw the need for a simple in-car Internet solution while traveling two years ago with his niece, then 9. She had a Sony PlayStation Portable and a Web tablet in the back seat, but no WiFi connection to hook up to the Internet.

Pratz remembers thinking, "There are a lot of cars on the road, yet none of them have the Internet yet."

AutoNet Mobile was born.

"Your car becomes a mobile hot spot," said Susan McGowan, Avis' director of public relations. "It's a very nice application if you are a business traveler with a bunch of people in the back seat who want to check their agenda for the meeting. It's also a nice application for leisure travelers. We all know what it's like to keep your kids entertained in the back seat."

Promoters see a market in vacationing families, predicting that Web surfing and downloading music will replace license-plate bingo and back-seat bickering.

Other companies that have new automotive Internet products for sale or products in the works for private vehicles:

- WAAV, a Cambridge, Mass., company, sells a $499 wireless router designed to beam a high-speed Internet connection throughout a vehicle. A monthly fee, starting at $59.99, is required for cellular broadband Internet service.

- Dash Navigation, based in Mountain View, Calif., is developing an Internet-connected navigation system for vehicles.

- KVH Industries of Middletown, R.I., last year introduced the $1,995 TracNet 100 Mobile Internet System, which also works over a cellular broadband connection. The system is designed to provide high-speed Internet access in vehicles, such as sports utility vehicles, that already have built-in television screens. The monthly connection fee is $59.99 and up.

"It's an extension of the living room and the office for families who want to stay connected," said KVH spokesman Bob Ochsner, who recently demonstrated the system in San Diego aboard a GMC Yukon Denali SUV.

Just how many people are going online while in a car is unclear.

"I would say it's too new to have statistics for it," said Michael King, a research director for Gartner market research firm.

However, he said that sales of data networking cards for laptops made by Novatel Wireless and Canadian competitor Sierra Wireless have doubled year over year for the past two years.

Today, most Internet users hitting the road don't use any special or built-in equipment. They equip their laptops with data-networking cards and subscribe to cellular broadband service with Sprint Nextel, AT&T's wireless unit (formerly Cingular) or Verizon Wireless. The service generally costs $60 to $80 a month.

When retired Vice Adm. Walter R. Davis leaves San Diego to visit his mother in North Carolina, he plugs his laptop into the cigarette lighter of a rental car and hooks up to the Internet via his Verizon Wireless networking card.

"I have it all ready in case I want to find a restaurant or just Google for directions," Davis said.

Manlapaz, the Geek Squad employee, helped a real-estate agent set up a printer in the trunk of his car so he could print from his wireless-connected laptop. The agent uses the laptop and printer while at open houses.

Whether there is a technological advantage to a built-in system versus a laptop with cellular connection is open for debate.

Pratz, the AutoNet Mobile CEO, said his system was designed to keep an Internet connection up and running even while moving in a vehicle.

"It's built for cars," he said. "The secret sauce behind it is that cars can move between cellular towers and high- and low-speed networks. You never suffer from dropped-call syndrome with us."

Companies find that equipping employees who are on the road with laptops and wireless Internet connections saves time and money.

Terry Smith, who works for Geico insurance company's Poway, Calif., office, said he's had a wireless connection in his car for eight months - and now can't imagine doing his job without it.

"It would severely handicap me if I had to go back to the way I used to do business," Smith said.

He used to be "completely isolated" without an Internet connection and had to call the office to get updates. Now, the insurance adjuster accesses accident reports, towing histories and his schedule at the touch of a button from his car - but not while driving, Smith emphasized.

Safety is an increasing concern as more motorists are able to access the Internet. It's one thing for a passenger to surf the Web on a laptop in a car zipping down the freeway and quite another for the driver to do so.

In fact, some state vehicle codes prohibit video screens that are in the front seat or visible to the driver unless the screen displays only vehicle information, global position, maps or parking aids.

Driver distractions are involved in about 80 percent of auto accidents and 65 percent of near-crashes, according to a 2006 study.

In February, a 29-year-old man who might have been using his laptop while driving died when his car veered into an oncoming Hummer SUV near Yuba City in Northern California. The California Highway Patrol said the computer was plugged into the cigarette lighter of the man's Honda Accord and was still running, although the screen was shattered in the accident.

CHP Sgt. John Pettigrew said investigators were unable to determine whether the man had been using his laptop as he drove.

"Obviously, distracted driving is a concern," said Fran Clader, spokeswoman for the CHP in Sacramento. "We want drivers to pay attention to the road and the traffic around them."

Manufacturers of in-car Internet equipment say they are primarily marketing their products for passengers, not drivers.

"We don't support front-seat services," said Pratz of AutoNet Mobile. "We're focused on the back seat right now, providing in-car entertainment."

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