

HOW AT&T WIRELESS GOT DISCONNECTED

The once-dynamic cellular carrier – the nation’s most popular through 1999 – slipped to third place and has remained there through a combination of poor technology choice, customer-service snafus and failure to consolidate. Its declining stature made it a tempting takeover target, valuable for its network and spectrum licenses.

TECHNOLOGY OPTIONS

Older technology

TDMA (Time Division Multiple Access)
 ▶ Voice and text messaging capabilities

Newer technology

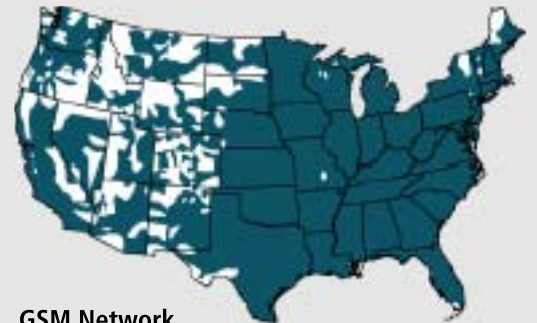
CDMA (Code Division Multiple Access)
GSM (Global System for Mobile Communications)
 ▶ Both networks have voice, high-speed Internet, text messaging and e-mail capabilities

AT&T WIRELESS

NETWORK COVERAGE

AT&T Wireless inherited a TDMA network from McCaw Cellular, then focused its energy on building it up rather than switching to a newer technology. In late 2000, when it did begin building its GSM network, it used a single frequency with limited range and penetrating power. By year’s end, more than half the company’s customers will be using GSM, the company says.

TDMA Network ■ Service area



GSM Network



VERIZON

NETWORK COVERAGE

Verizon Wireless built its network based on CDMA, a largely untested technology that proved capable of expanding to accommodate both digital data and many new subscribers.

CDMA Network ■ Service area



CINGULAR

NETWORK COVERAGE

Cingular Wireless began life with networks using both TDMA and GSM. In late 2001, it decided to move to 100 percent GSM, using two different frequencies. About 35 percent of its subscribers still use TDMA, and the company continues to maintain that network.

GSM Network ■ Service area



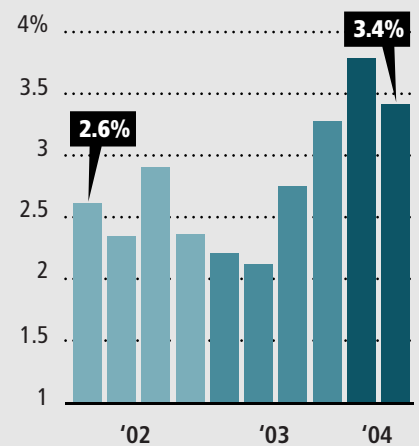
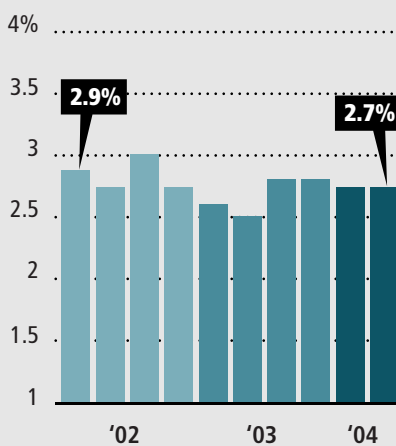
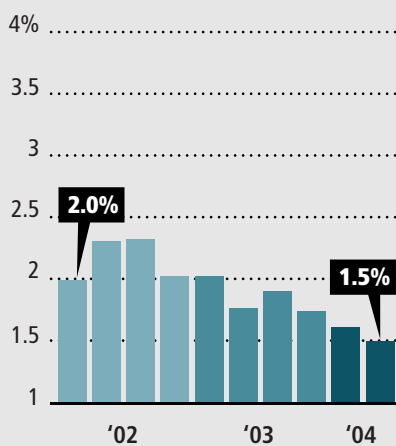
CUSTOMER COMPLAINTS PER 10,000 SUBSCRIBERS, 2003

0.76

1.33

3.39

CUSTOMERS ENDING SERVICE PERCENT OF TOTAL CUSTOMERS ENDING CELL SERVICE EACH QUARTER, 2002-PRESENT



CURRENT MARKET SHARE SHARE OF THE CELLULAR MARKET AS OF JUNE 30

23.8%

14.7%

12.8%