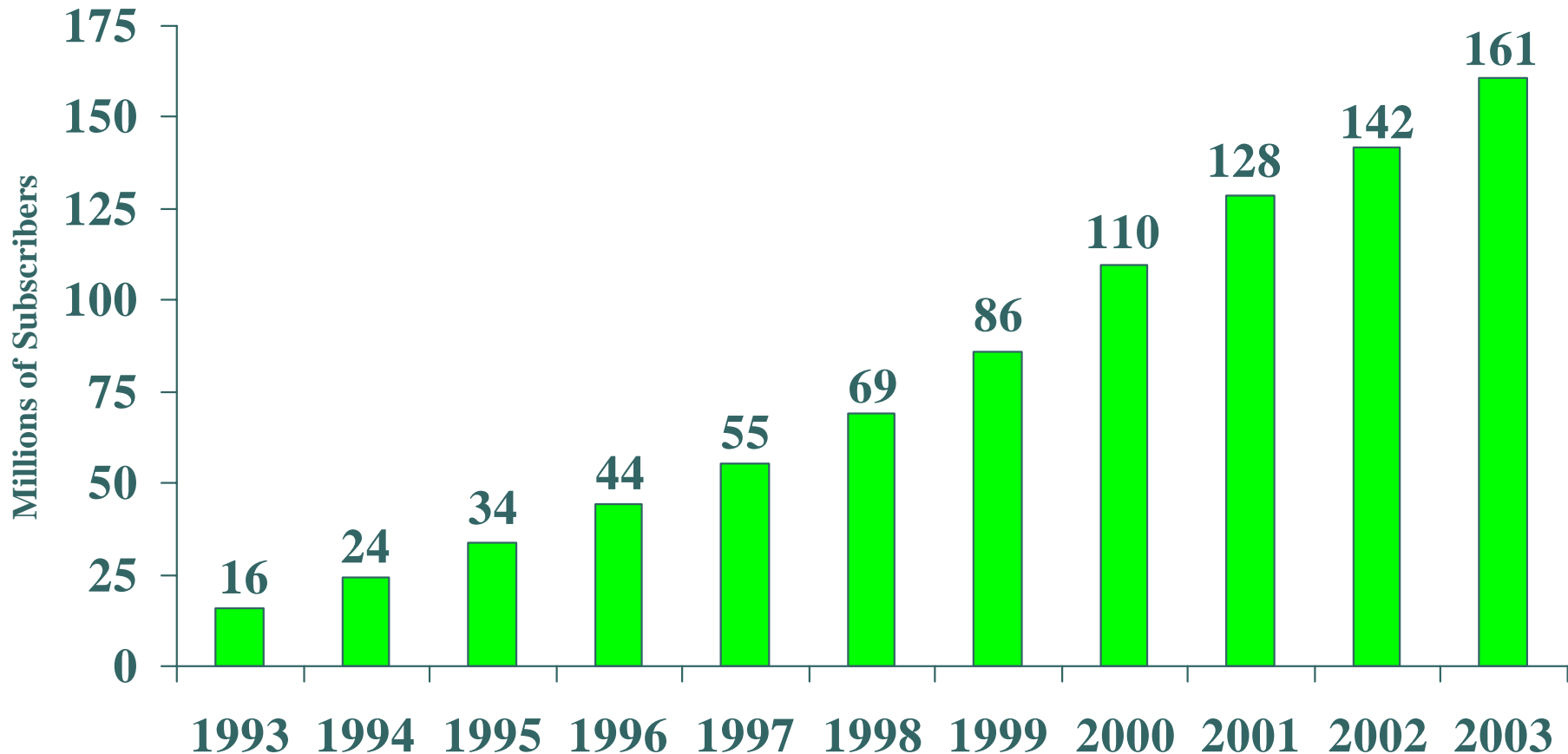


Wireless and Broadband: Trends and Challenges

Dow Lohnes-Comm Daily Speaker Series
Washington, D.C.

October 15, 2004

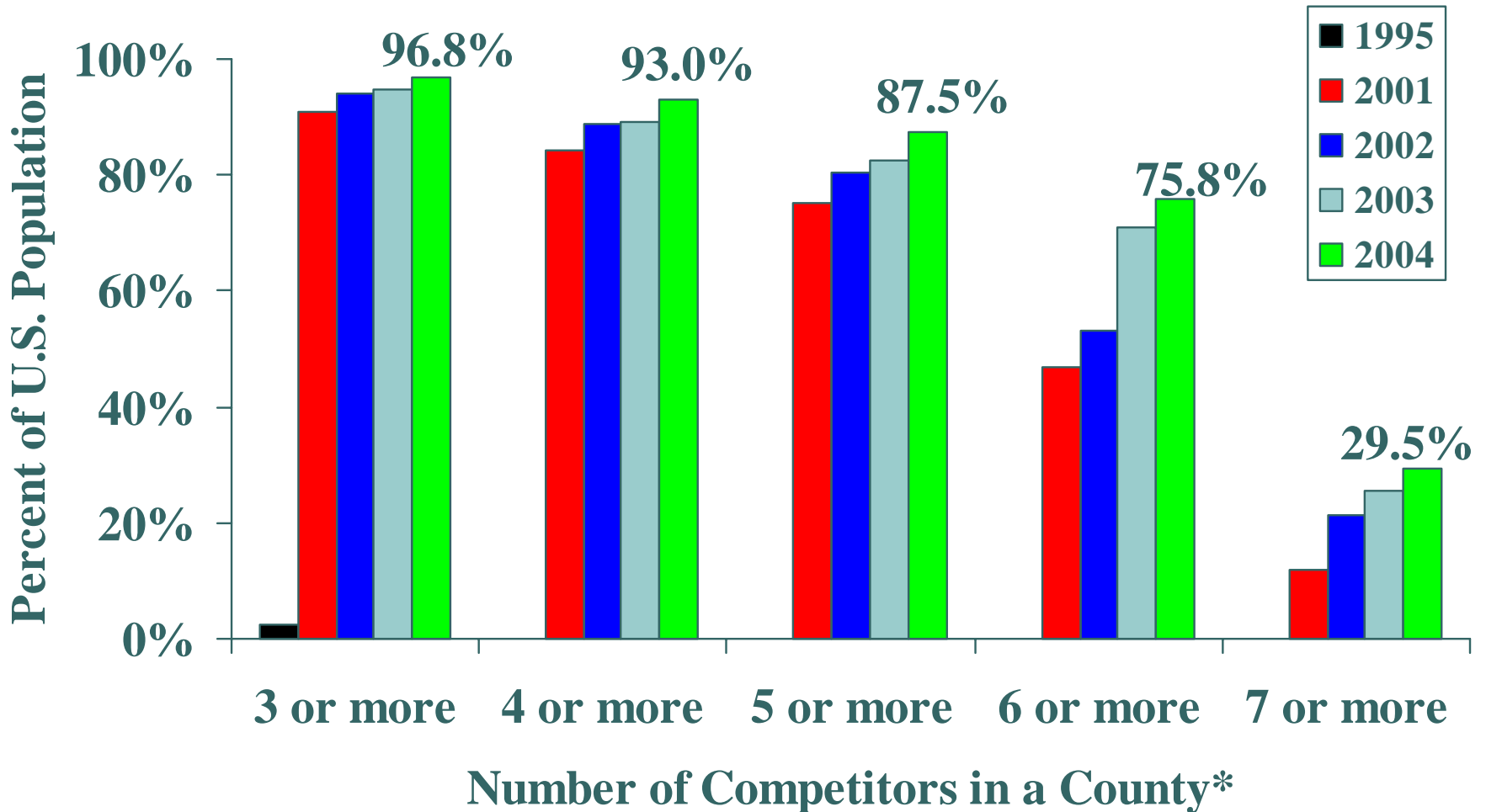
Total US Mobile Telephone Wireless Subscribers



Wireless Use Today

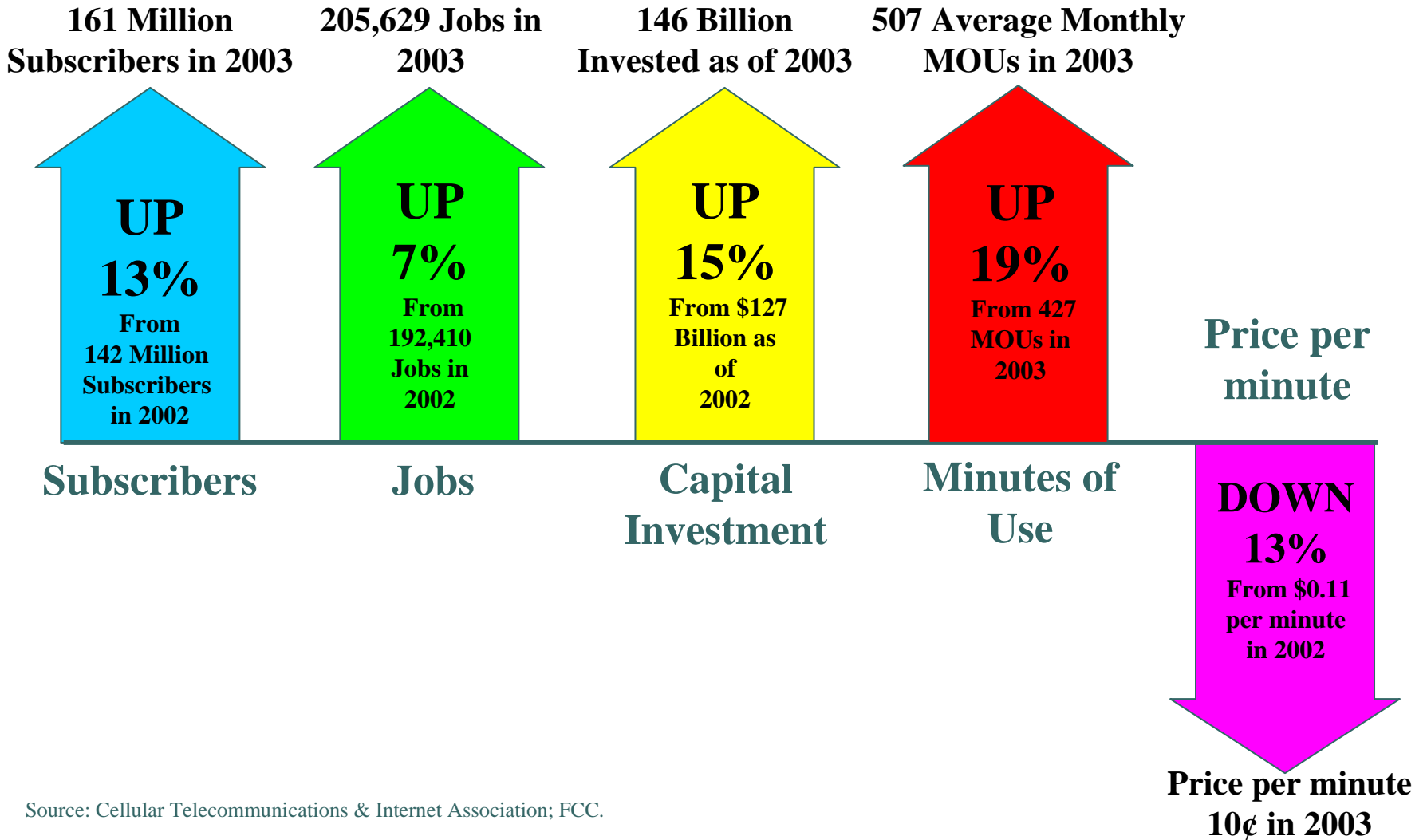
- **2 Billion messages per month**
(doubled between 2002 to 2003)
- **25% of users send text messages**
- **Advanced applications**
 - ↑ **Picture messaging:** Verizon users alone share 7 Million pictures per month
 - ↑ **Ring tones:** \$2.5 Billion industry worldwide (2003)
 - ↑ **Games:** 12.2 million Americans (2003)
 - ↑ **Web browsing**

Mobile Telephone Competition

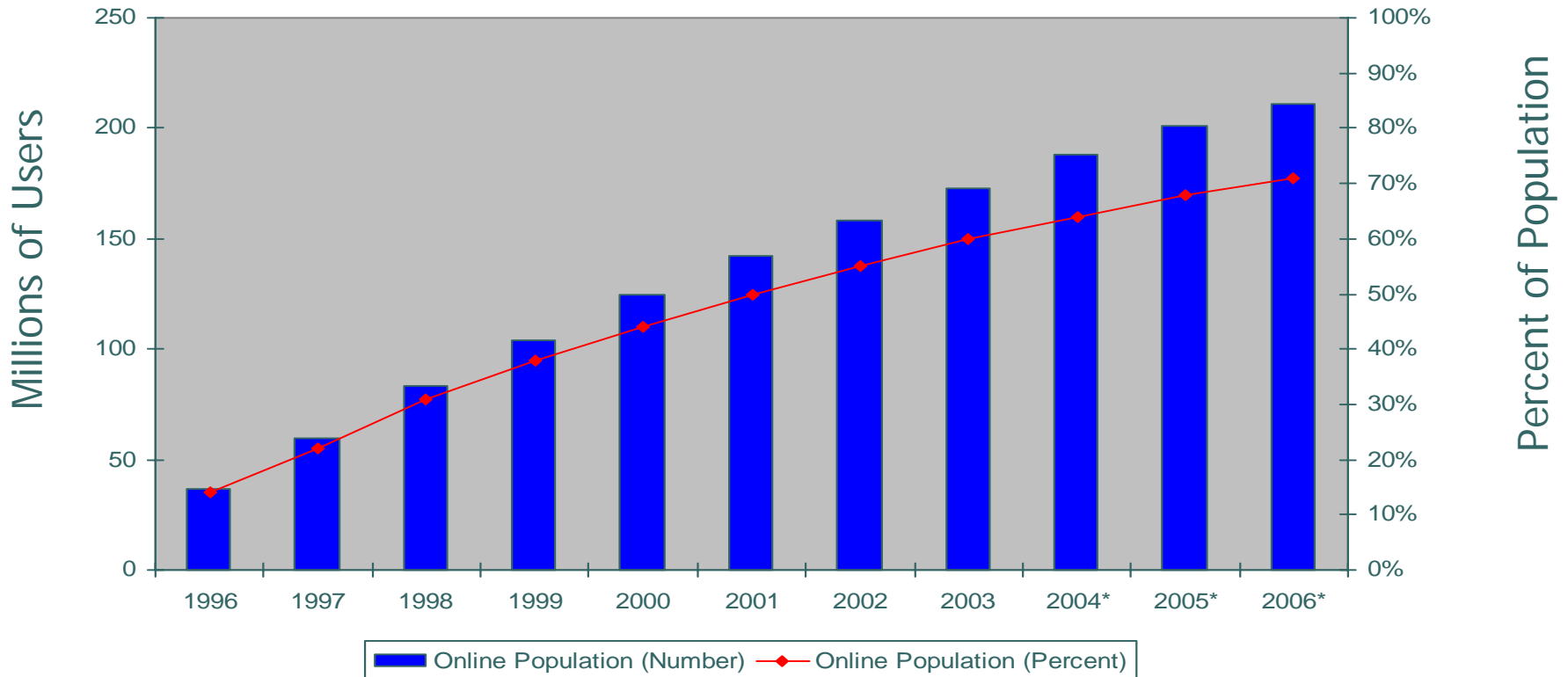


*Facilities-based competitors

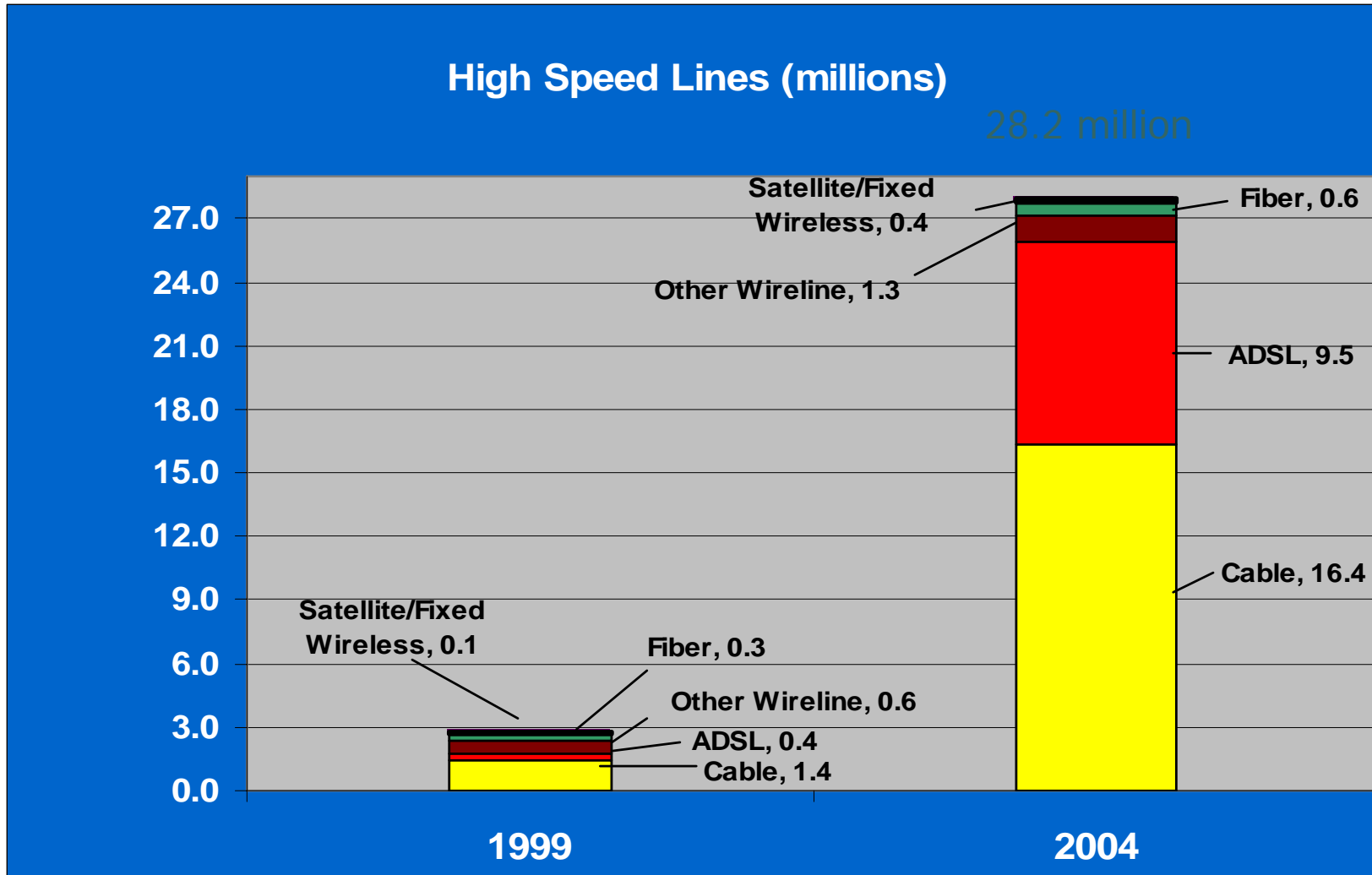
Growth in the Mobile Telephone Industry (YE2002-YE2003)



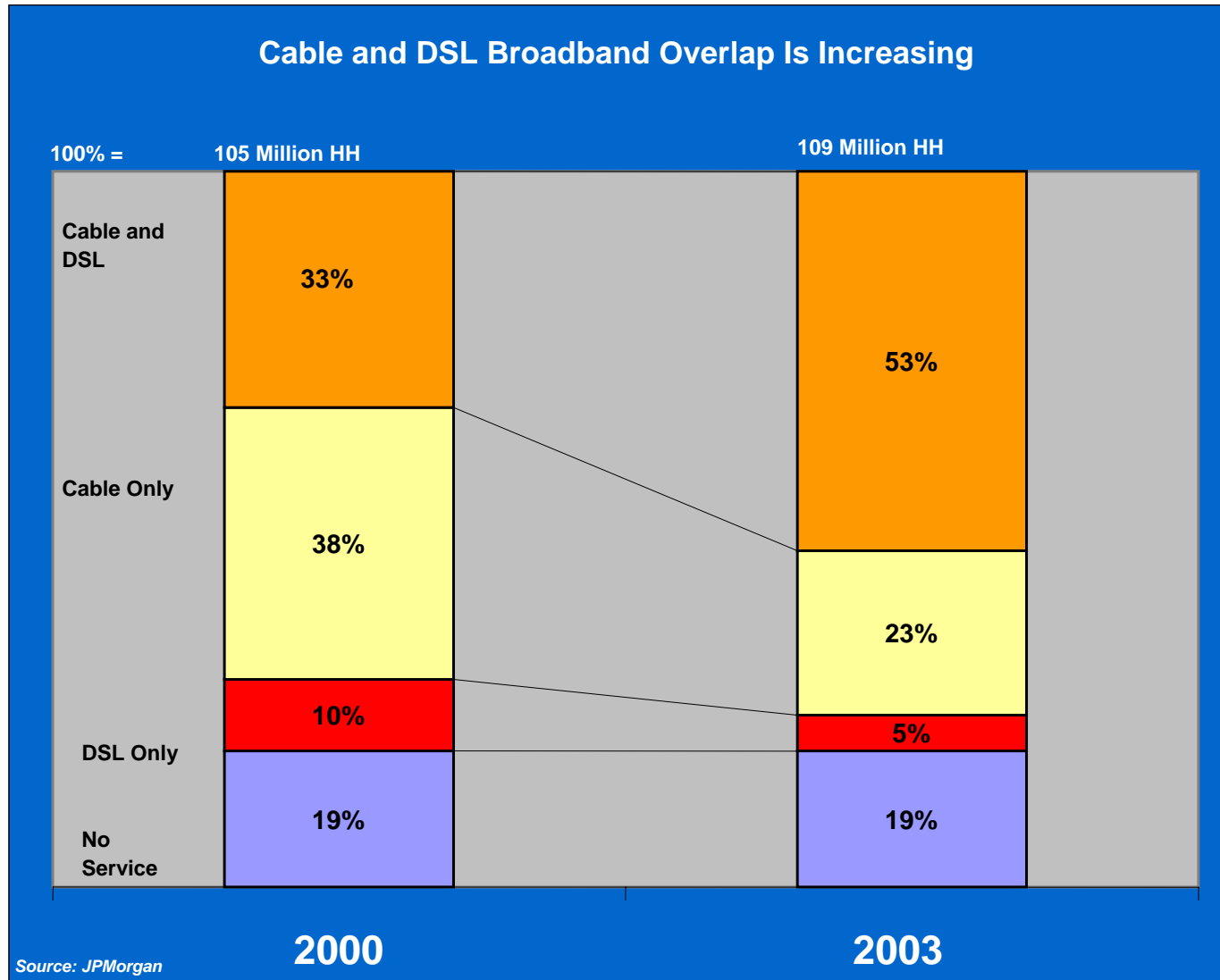
Internet Growth—US Households Online



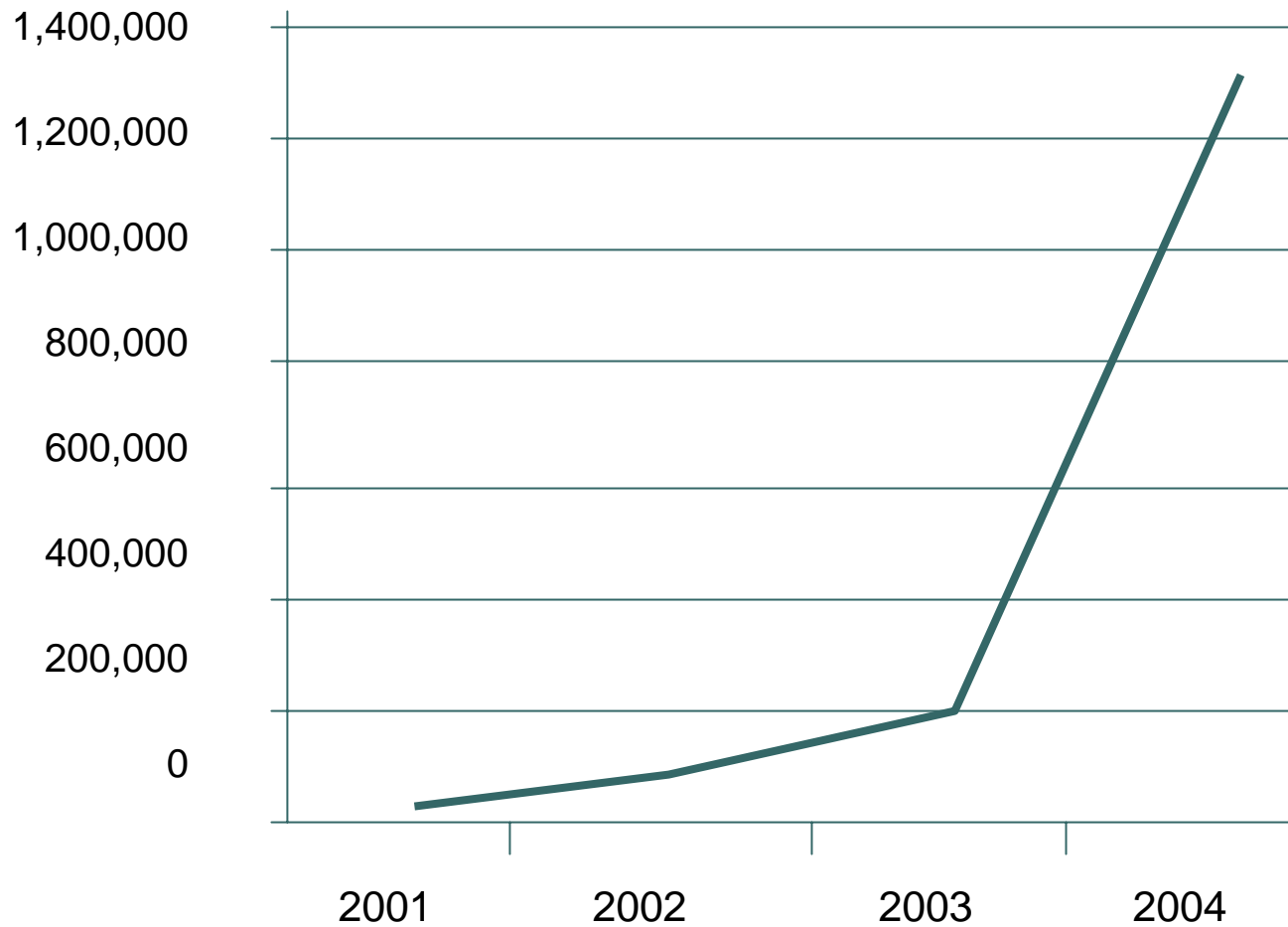
High Speed Line Growth 1999-2004



Cable/DSL Availability Overlap



FTTH Homes Passed



COMMON CHALLENGES

- Seen by government as revenue opportunity
- Local vs. National service

UNIQUE CHALLENGES

- **Wireless:**
Interference Temperature
- **Broadband:**
Defining the Mass Market