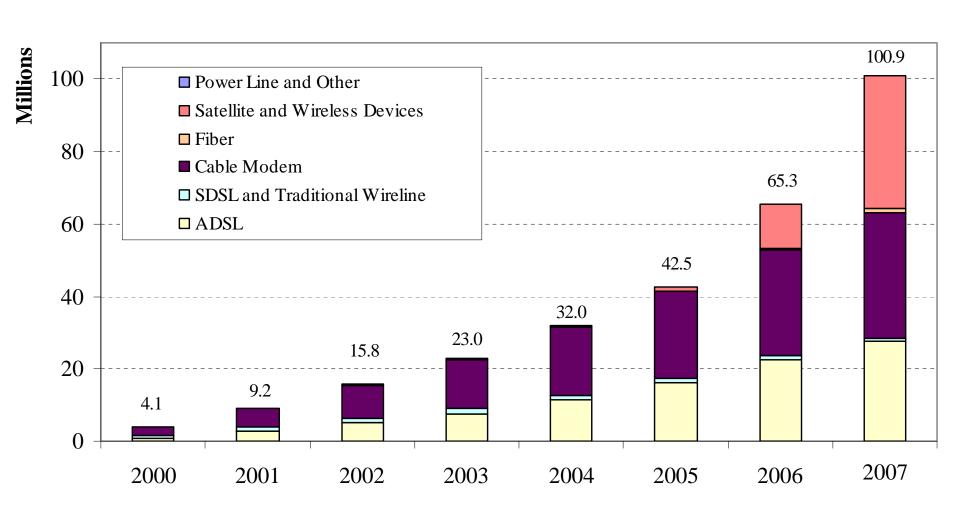




## Collaborative Convergence: User Empowerment in the Global Digital Economy October 2008



# High Speed Line Growth (2000 – 2007)\*

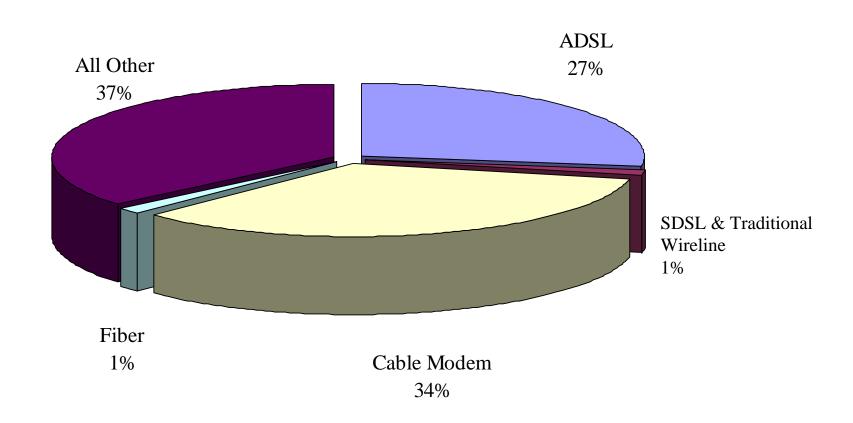


<sup>•</sup> All figures as of June 30th.

Source: FCC's High Speed Services for Internet Access Report, March 2008, at 6.



#### High-Speed Lines in the US by Technology as of June 30, 2007





#### **U.S. Investment in Fiber Networks**

- Telecommunications companies expect to make \$50 billion in capital expenditures in 2008-2009 regarding broadband investment.
- Verizon has said it expects to invest \$18 billion in net capital from 2004 -2010 in deploying their FiOS network.
- Spending by carriers on telecommunications equipment in 2008:
- Fiber: \$10.6 billion
- Industry-wide, spending on fiber-related telecommunications equipment is estimated to grow almost \$13.5 billion annually in the next three years.



#### Wireline Broadband Prices and Speeds

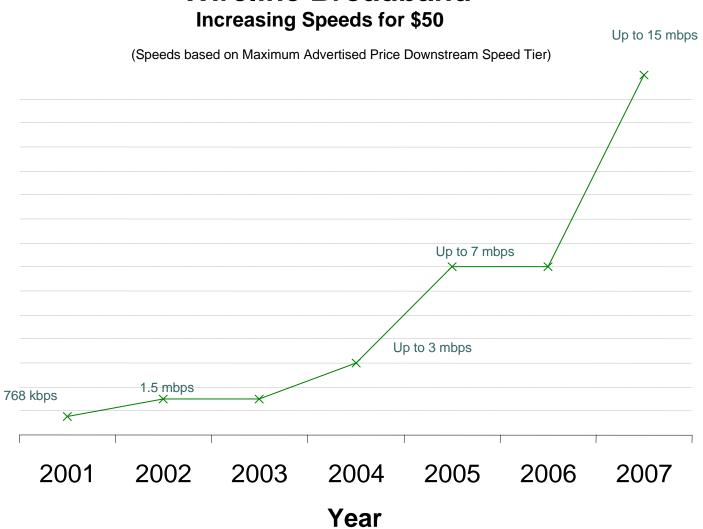


2007

2001



#### Wireline Broadband



Source: USTelecom: The Broadband Association, Wireline Broadband Pricing 2001-2007, June 2008



## Rural Health Care Pilot Program

- \$400 million to deploy broadband health networks
- Reaching over 6,000 health care centers across 42 states and 3 U.S. territories
- Robust connectivity to the Internet and a nationwide backbone



## Rural Health Care Pilot Program

- Enhanced funding to help public and non-profit health care providers deploy broadband
- Deployment of state- and region-wide broadband networks for telehealth and telemedicine
- Funds up to 85% of the costs of deploying those networks
- Funds up to 85% of connection costs to Internet2 or National LambdaRail (NLR) dedicated nationwide backbones and public Internet



### Rural Health Care Pilot Program

#### **Examples of Applications**

- Large-scale networks connecting hundreds of facilities over a multi-state region.
- Small-scale networks providing a critical advanced broadband link for several regional hospitals or clinics.
- Connections to insular areas and isolated regions.
- Networks in states with a severe shortage of health care professionals.



#### Benefits of a Broadband Healthcare Network

- Clinical care
- Consumer and professional health education
- Public health
- Health administration
- Research
- o Electronic health records



## **Promoting an Open Internet**

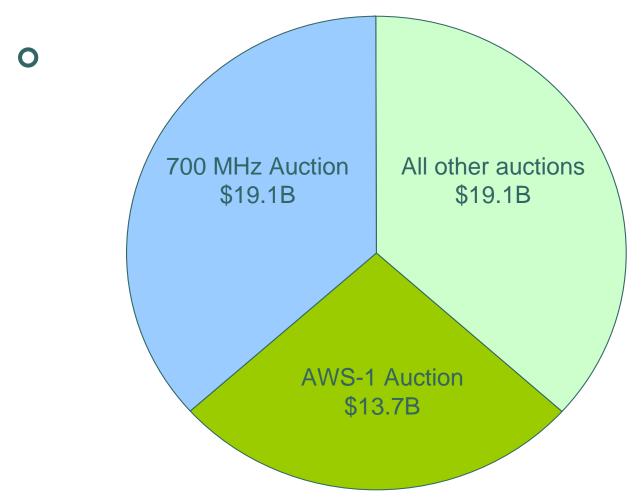
- In 2005, the Commission adopted an Internet Policy Statement that set forth four consumer-based principles:
  - Consumers are entitled to access the lawful Internet content of their choice;
  - Consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement;
  - Consumers are entitled to connect their choice of legal devices that do not harm the network; and
  - Consumers are entitled to competition among network providers, application and service providers, and content providers.



FCC Affirms Its Authority to Protect Vibrant and Open Internet **DEER CONTENT ISP #2 PEER CONTENT** All Internet Users Affected **ISP #1 USER/PEER** W/ CONTENT **PEER CONNECTIONS DEER CONTENT TERMINATED WITH** FALSE "RESET" MESSAGE **ISP** #3 **USER/PEER** W/ CONTENT



# Comparison of 700 MHz and AWS-1 Auction Revenues vs. All Others



Note: 700 MHz Auction revenues do not account for bidding credits. (FCC, April 2008)



## 700 MHz Auction: Openness Conditions

Consumers will be able to use the wireless device of their choice;

Consumers will be able to download the legal software they want;

Consumers will be able to download the applications they want.



### White Spaces

- "White spaces" are un-used portions of television airwaves and have the potential to deliver wireless broadband.
- This summer, the Commission conducted engineering tests that showed prototype white space devices could theoretically operate with minimal interference to TV broadcasters.
- In light of these findings and the potential for white spaces to provide lowcost broadband connections, I have proposed that the Commission consider a plan at our next Open Meeting on November 4.
  - Use of white spaces to provide broadband would occur after the United States' DTV transition from analog to digital in February 2009.



#### Free Broadband: AWS-3

- In the United States, there are people who are unable to subscribe to broadband today because of the cost.
- There is a social obligation in making sure everybody can participate in the next generation of broadband services.
- Proposed: that the Commission conduct its next spectrum auction (for AWS-3) with a requirement that the winner offer a life-line basic lower speed service for free.