
COMPETITION, CONVERGENCE & CONSOLIDATION IN THE BROADBAND ECOSYSTEM

Steve Pociask

President

The American Consumer Institute

Center for Citizen Research

Washington, DC

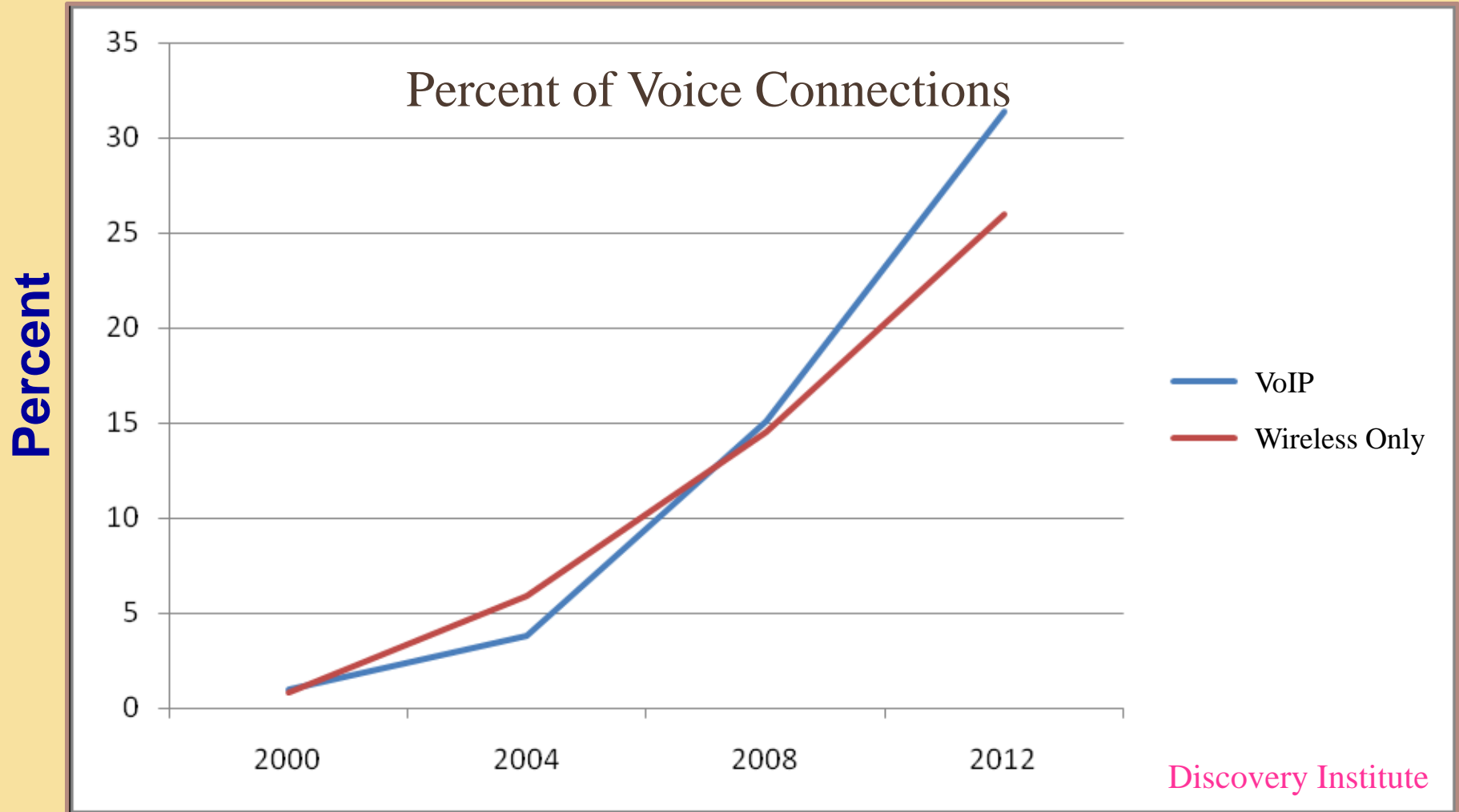
August 2, 2011



OUTLINE

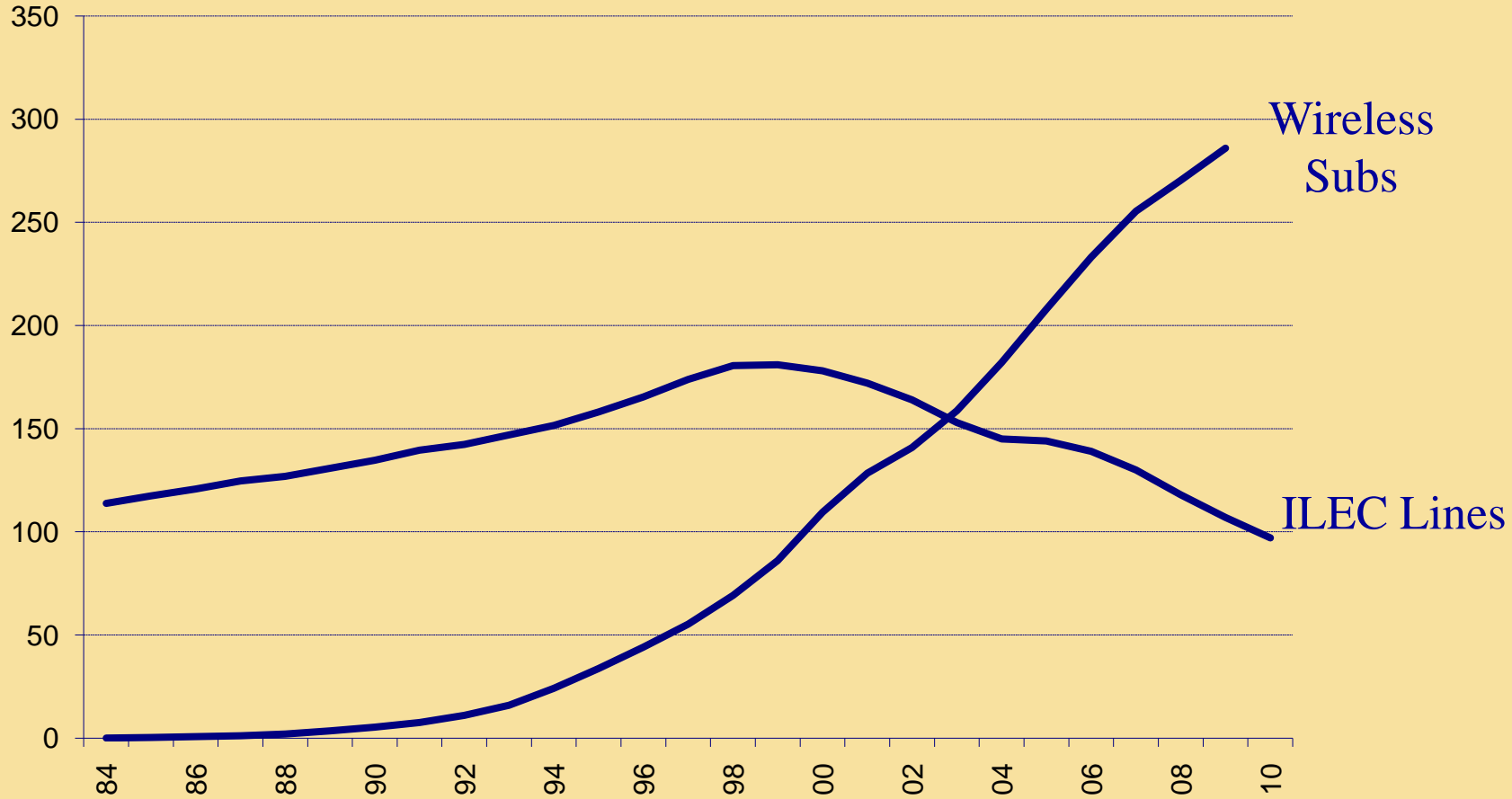
- × Competition and Concentration
 - + Intermodal rivalry
 - + Platform competition
- × Benefits
- × Threats

CHANGING COMMUNICATIONS ...



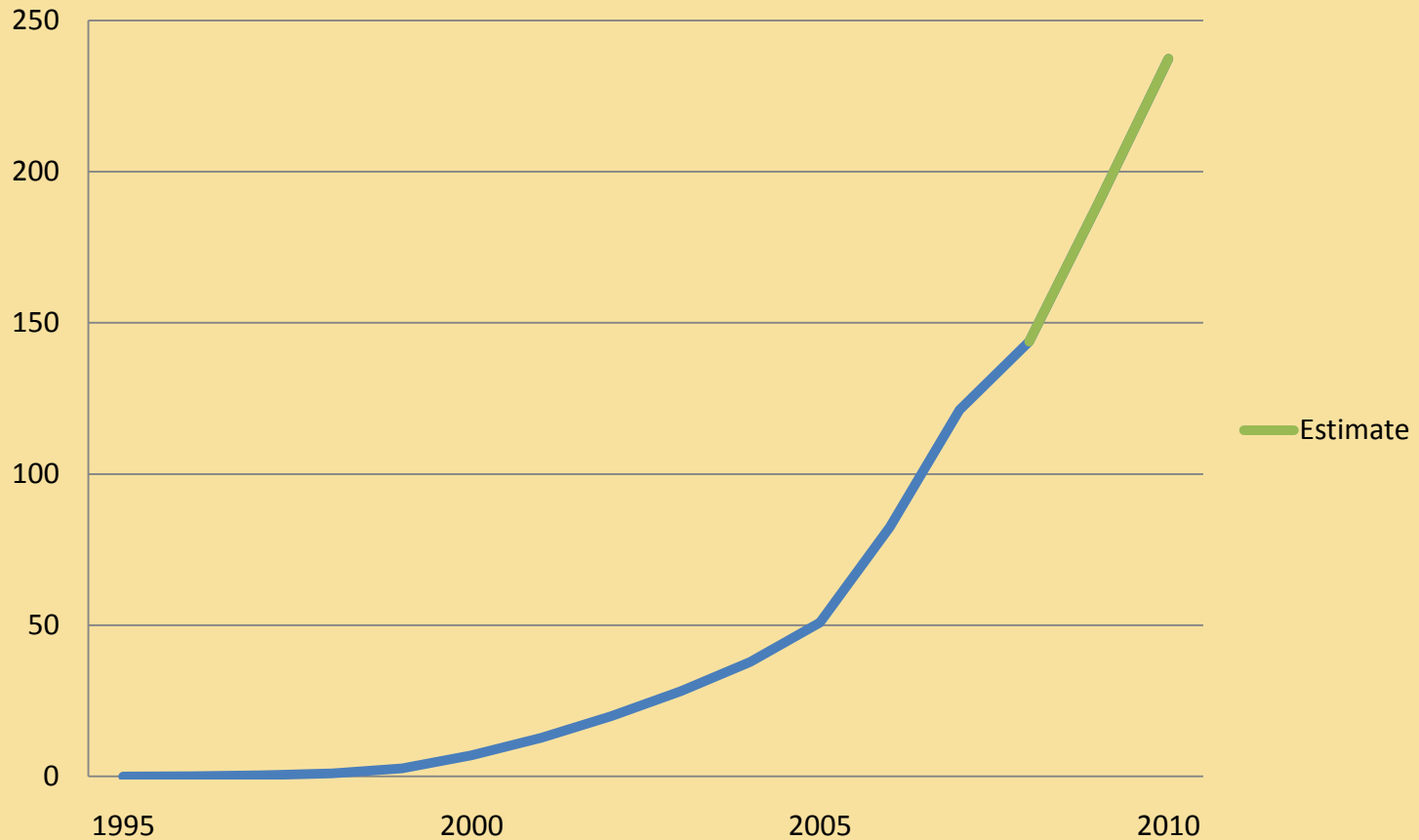
SUBSTITUTION: WIRELINE vs. WIRELESS

In Millions of Lines



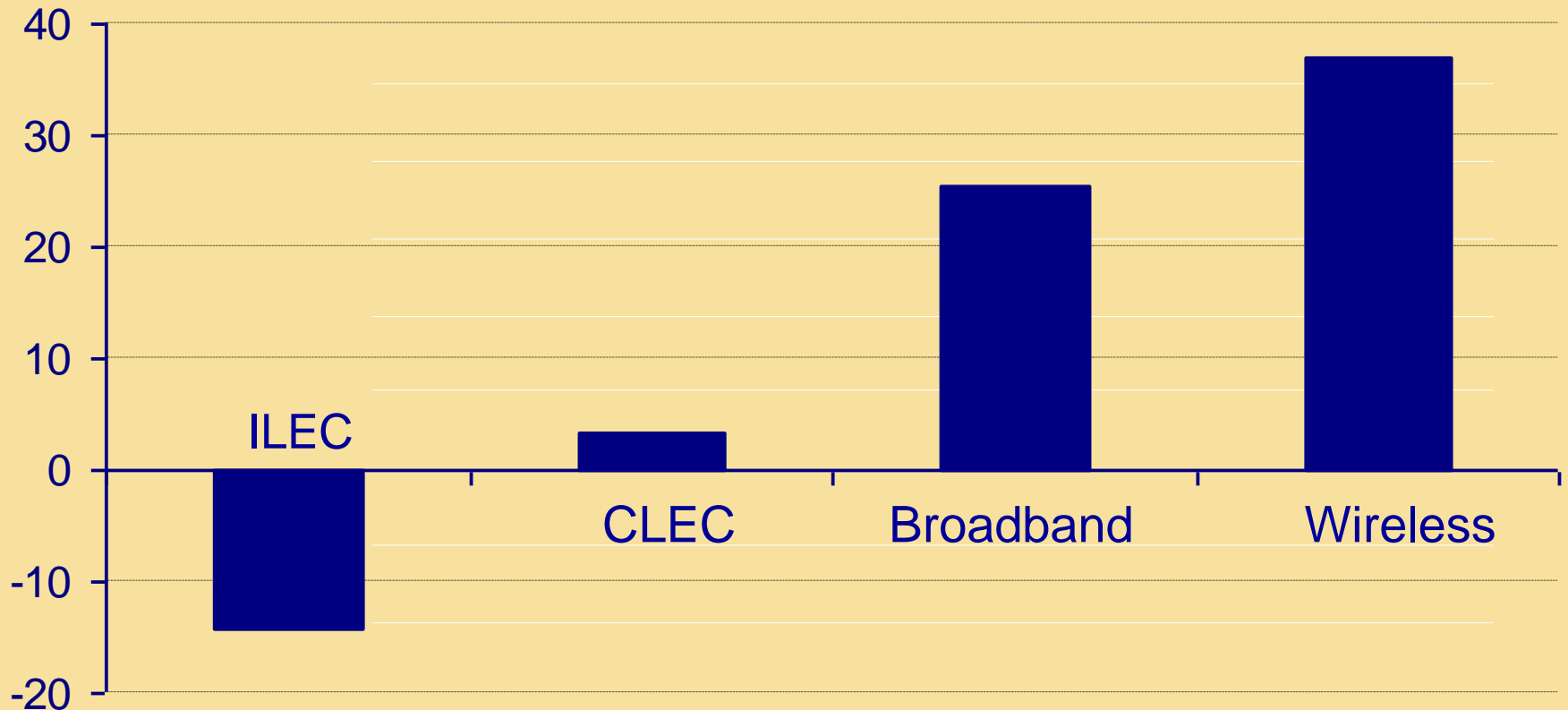
GROWING BROADBAND CONNECTIONS

In Millions of Lines and Online Devices



CONNECTIONS ADDED IN THE LAST TWO YEARS ...

Millions of Subscribed Connections – U.S.



INTERNET-BASED SERVICES

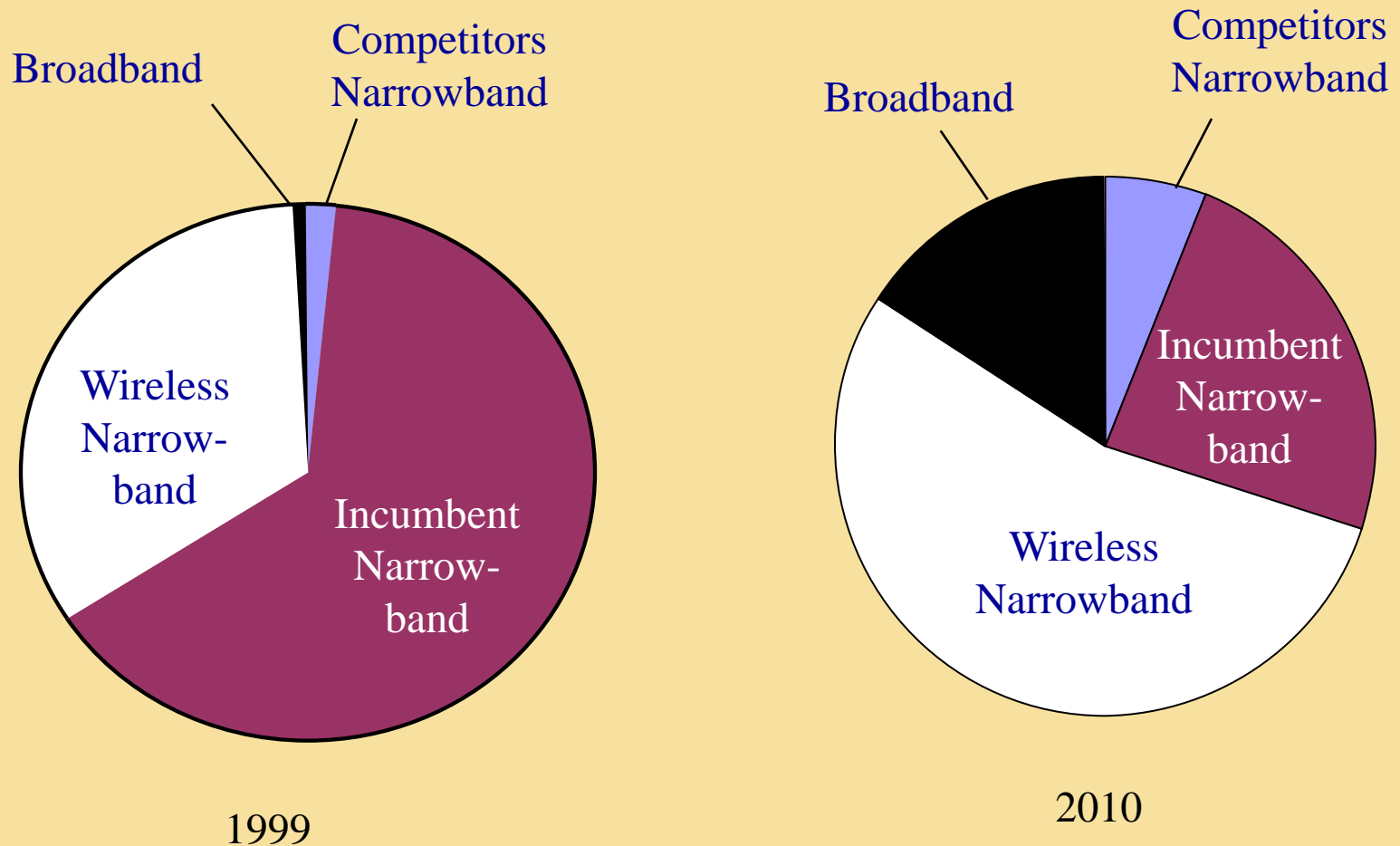
Traditional Services

- ✘ Local and LD telephony
- ✘ Second line service
- ✘ Message service
- ✘ Call waiting
- ✘ Voice mail
- ✘ Conference calling
- ✘ PBXs
- ✘ Call Forwarding
- ✘ Speed Calling
- ✘ Directory Assistance and Information

IP-Based Services (Examples)

- VOIP, Skype, Google Talk
- Virtual Second Phone Line
- Instant Message (AIM, ICQ)
- Internet call waiting (BuzMe)
- Voice mail (CallWave, Pagoo)
- Desktop IP conference (PalTalk)
- IP-based virtual PBXs
- Find Me-Follow Me
- Voice Activated Dialer, content and e-commerce
- 800-Goog-411

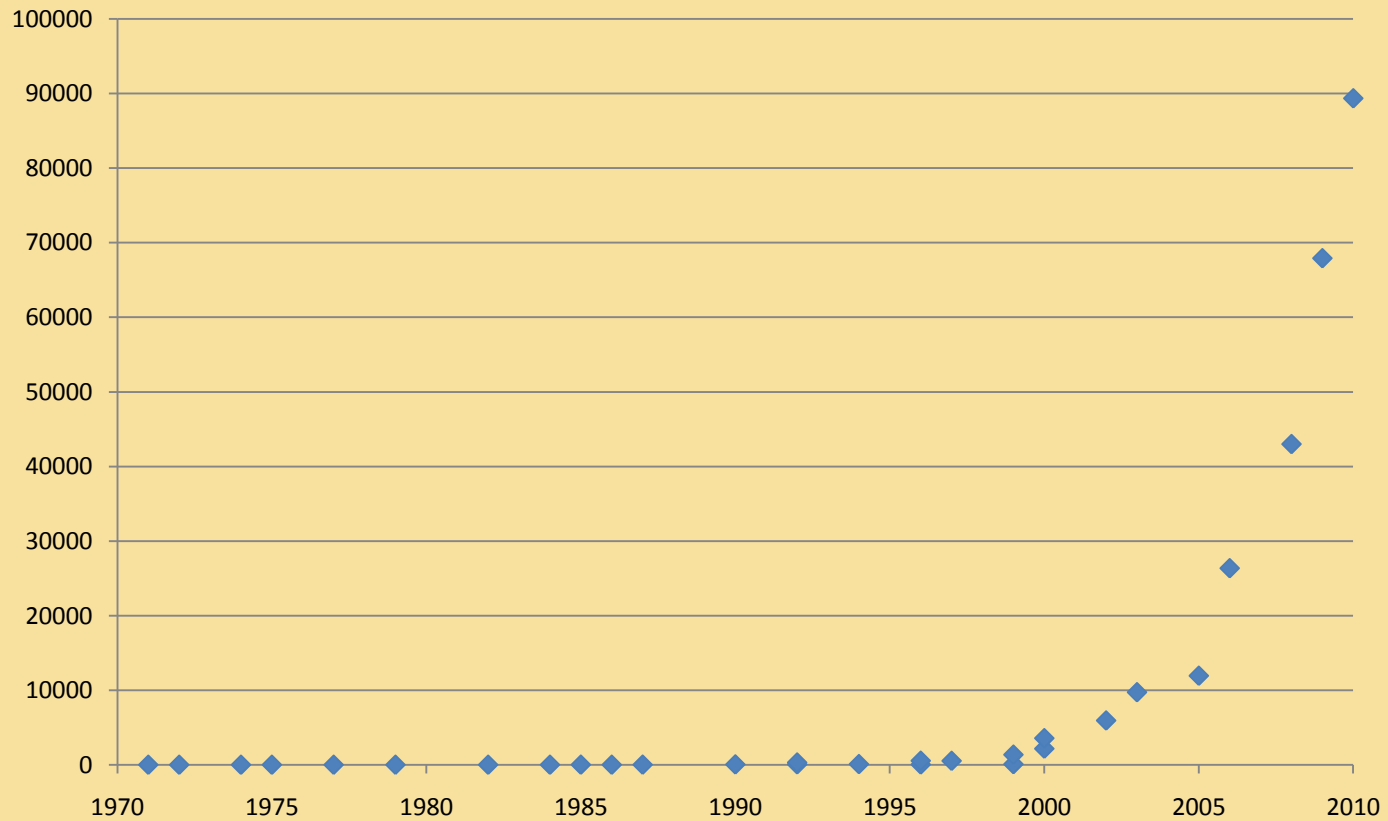
THE INCUMBENT'S NARROWBAND MARKET SHARE DWINDLES



Source: ACI, FCC and CTIA, subscribed connections

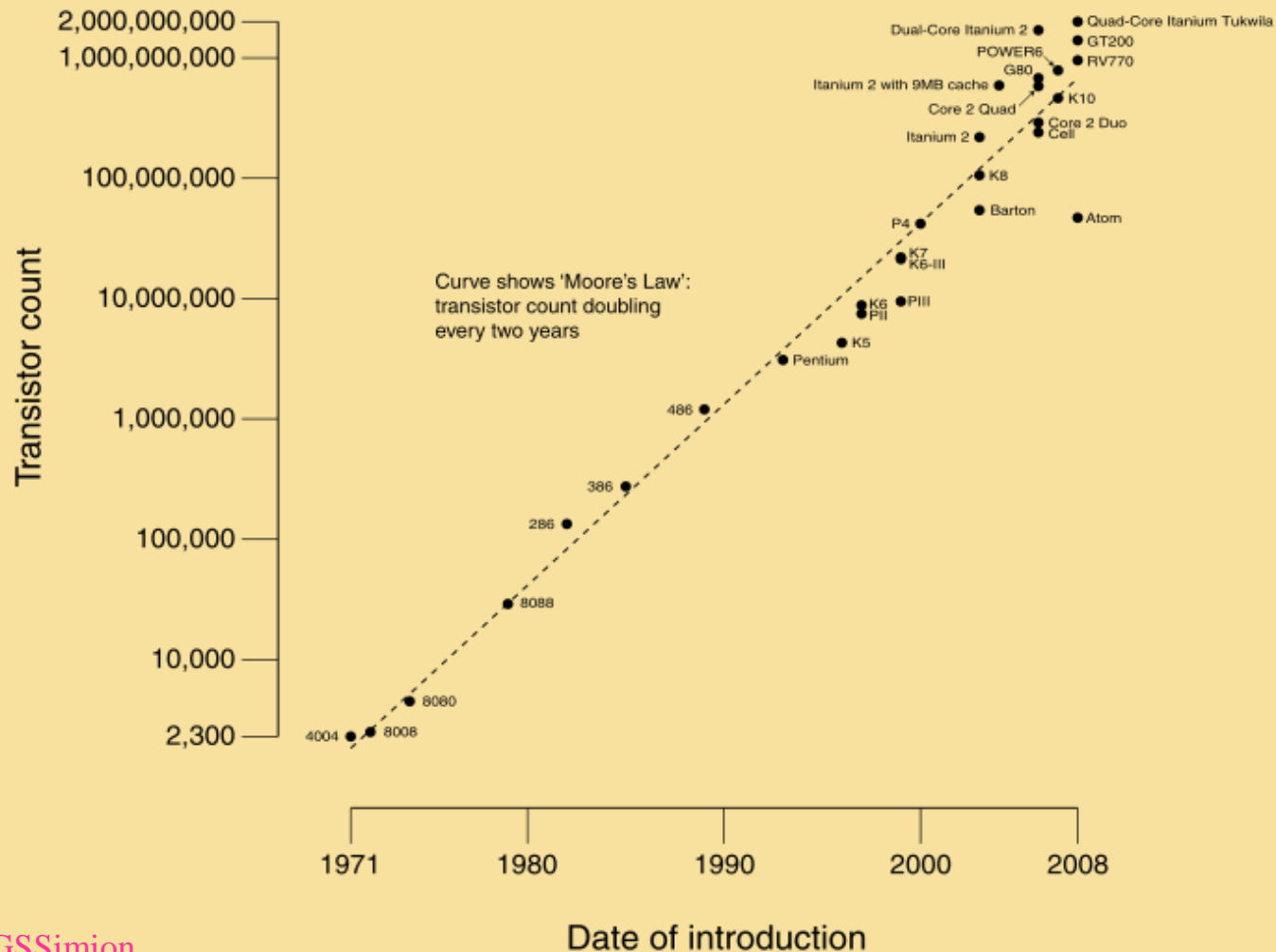
FASTER COMPUTING

Millions of Instructions Per Second

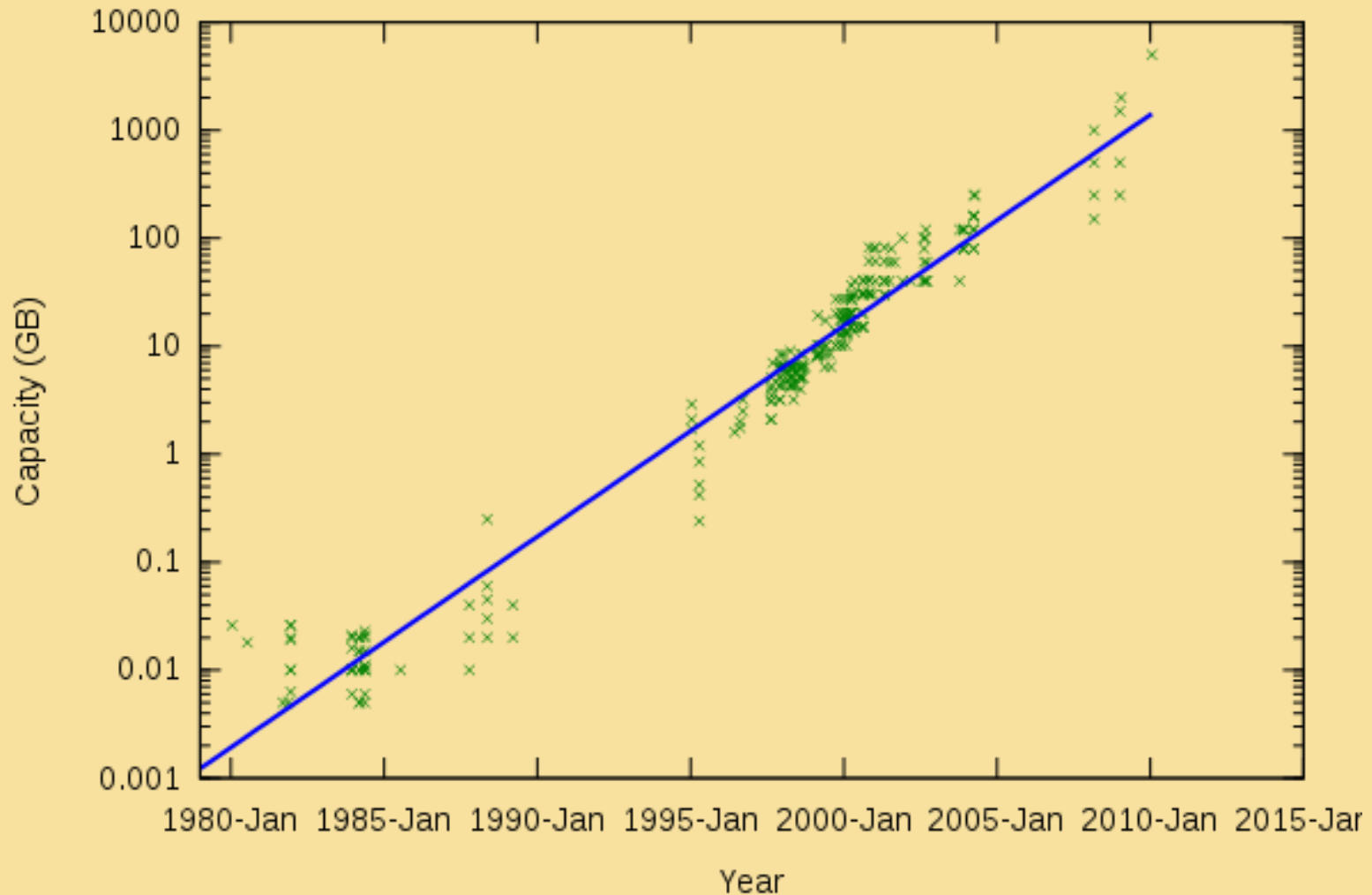


FASTER COMPUTING

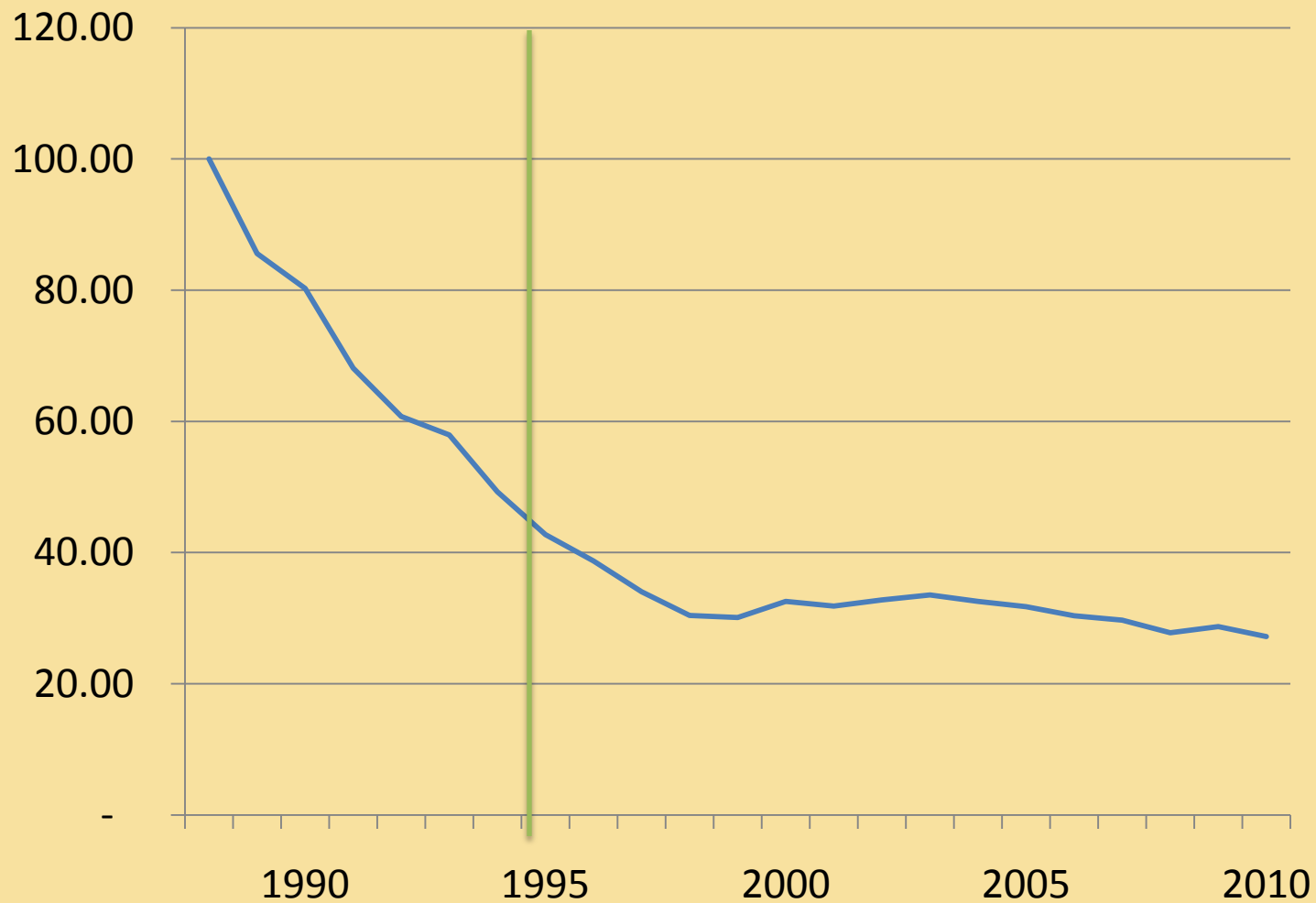
CPU Transistor Counts 1971-2008 & Moore's Law



INCREASING HARD DRIVE CAPACITY

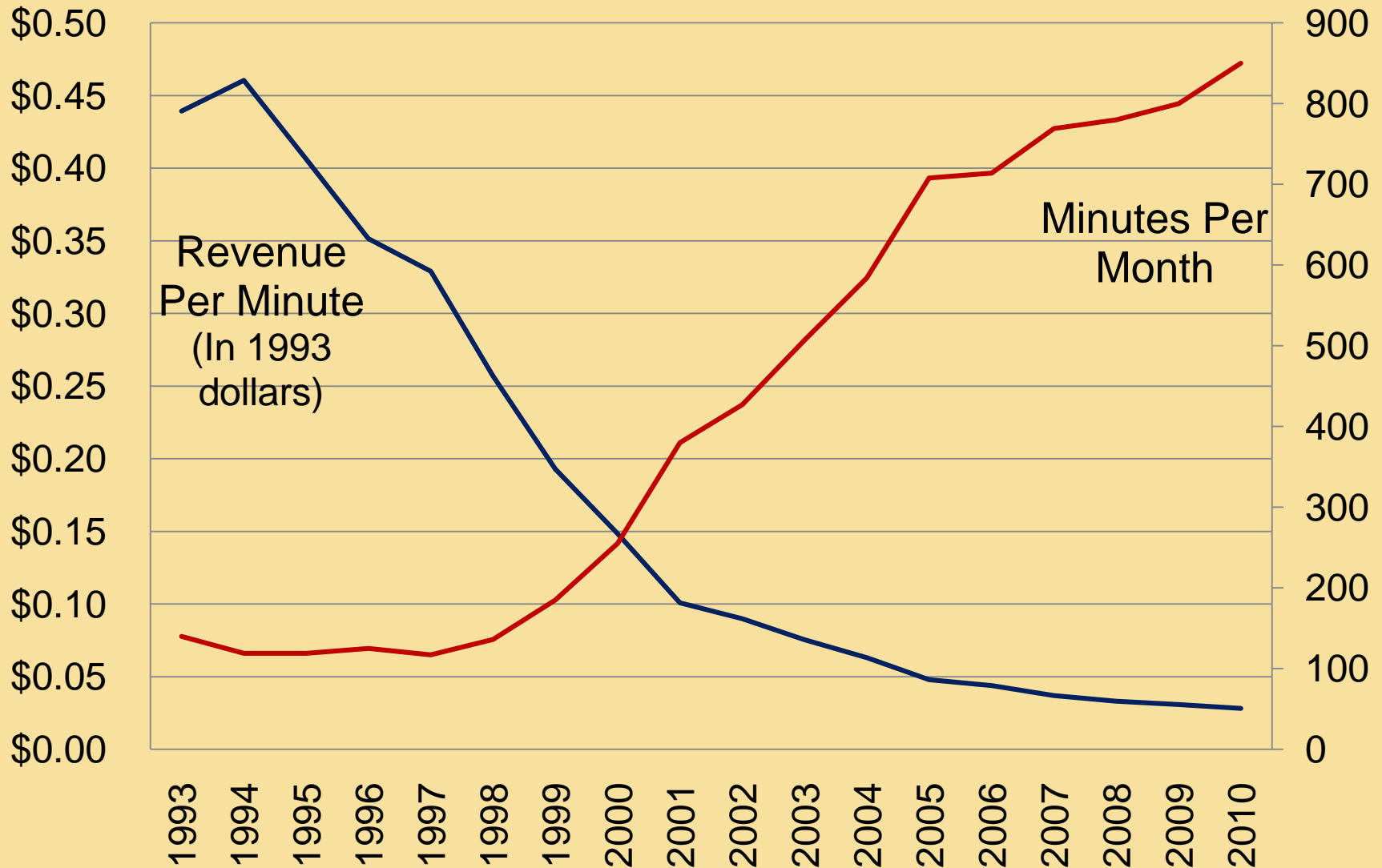


REAL WIRELESS LOCAL REVENUE PER SUB (INDEXED 1988=100)

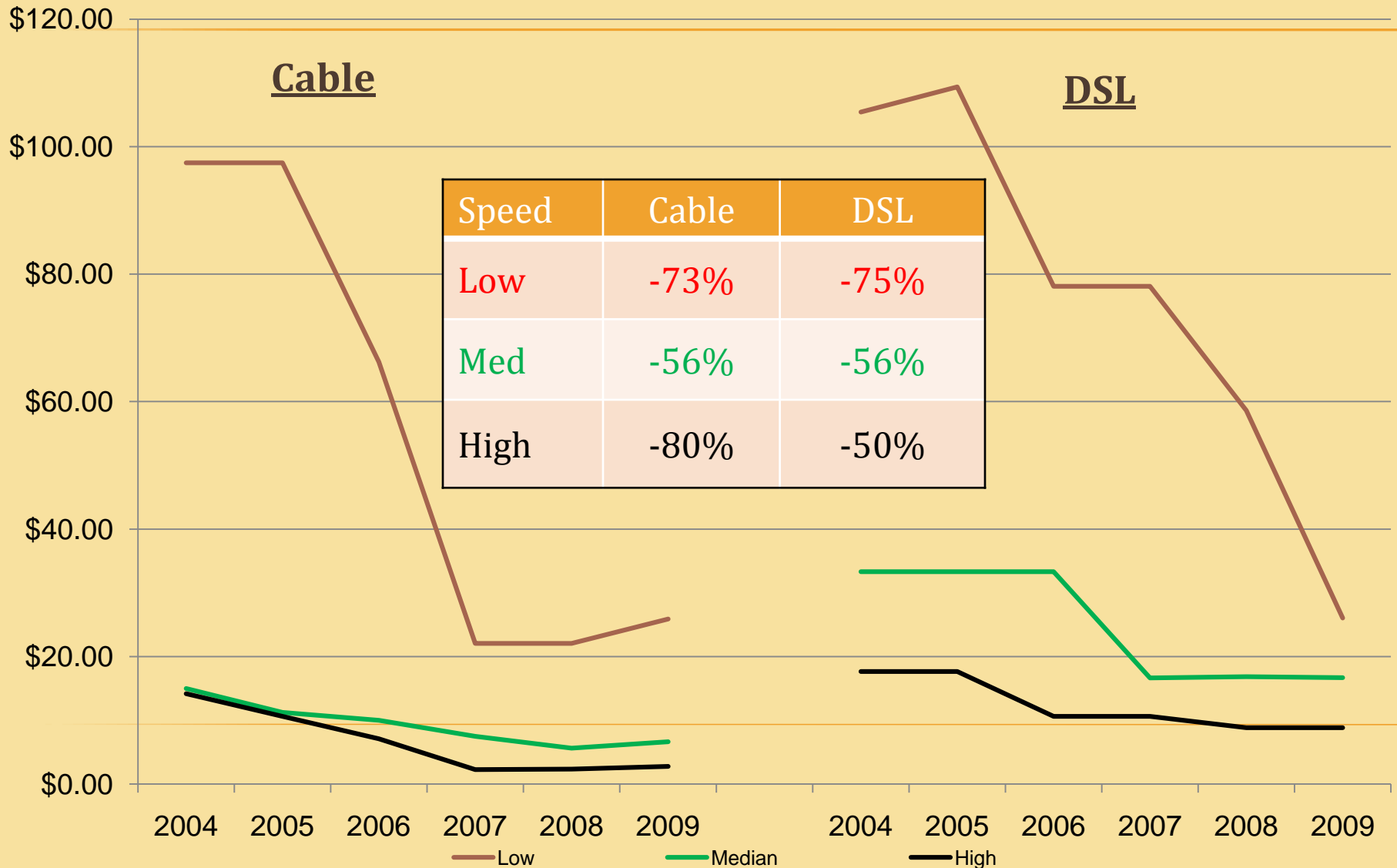


Source: CTIA, ACI

CONSUMERS TALKING MORE, PAYING LESS



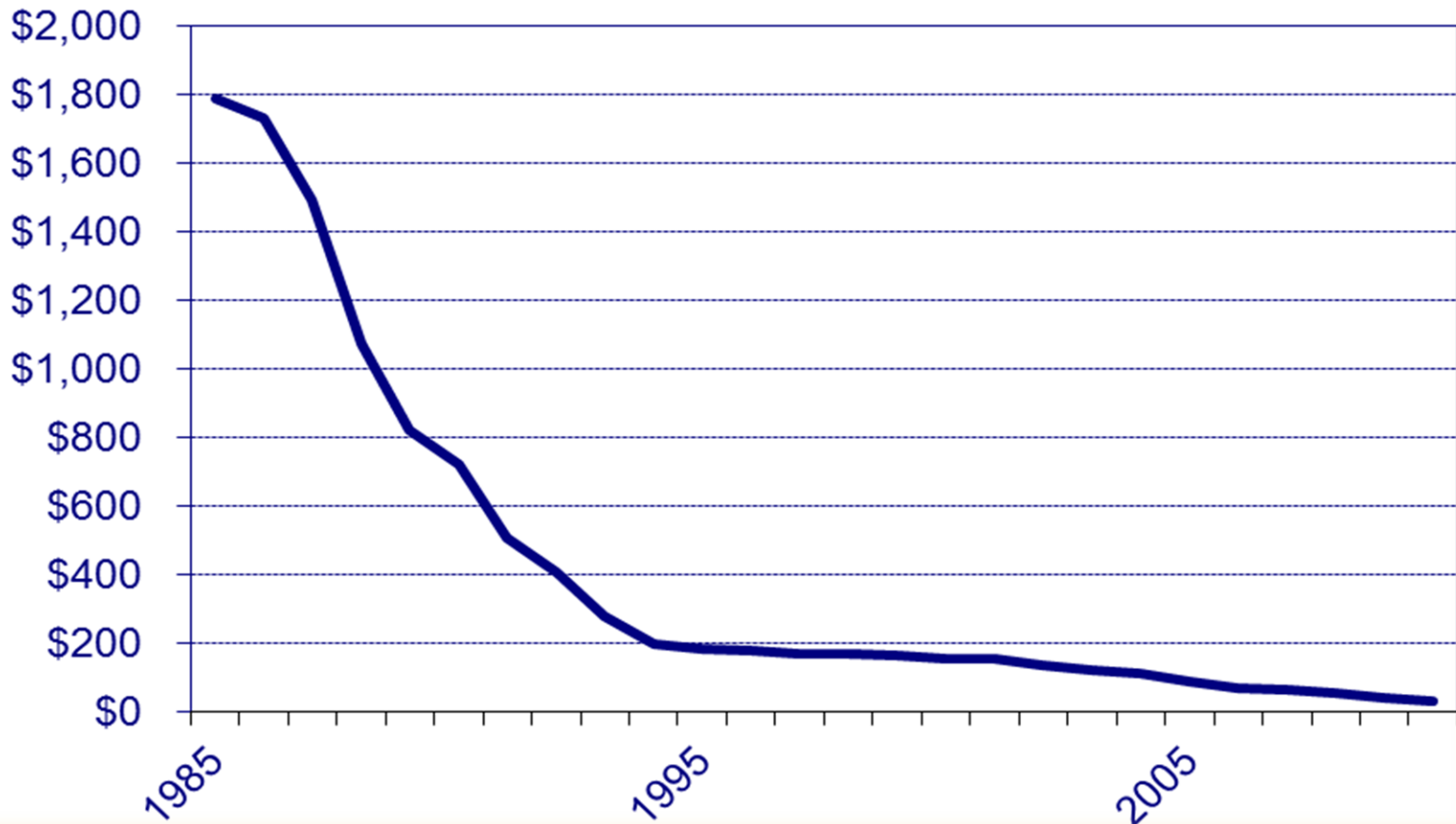
Broadband Prices, 2004-2009 (\$/Mbs/Month)



Source: Shane Greenstein and Ryan McDevitt, "Evidence of a Modest Decline in US Broadband Prices (Northwestern University, January 2010), Tables 3a, 3b."

DECLINING TRANSPORT COSTS

Special Access Rates in DS0 Equivalents



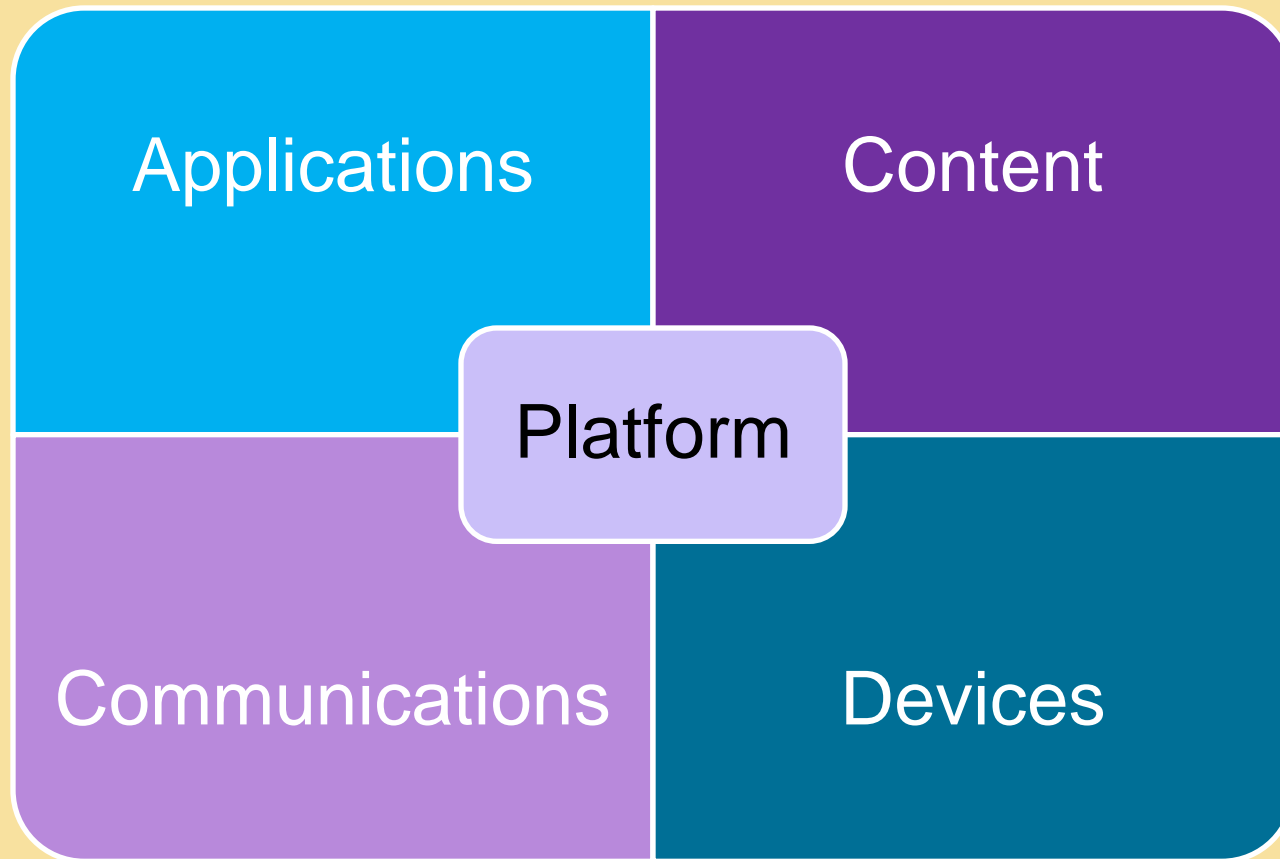
AGILITY, FLEXIBILITY AND SCALE



Cloud Computing:

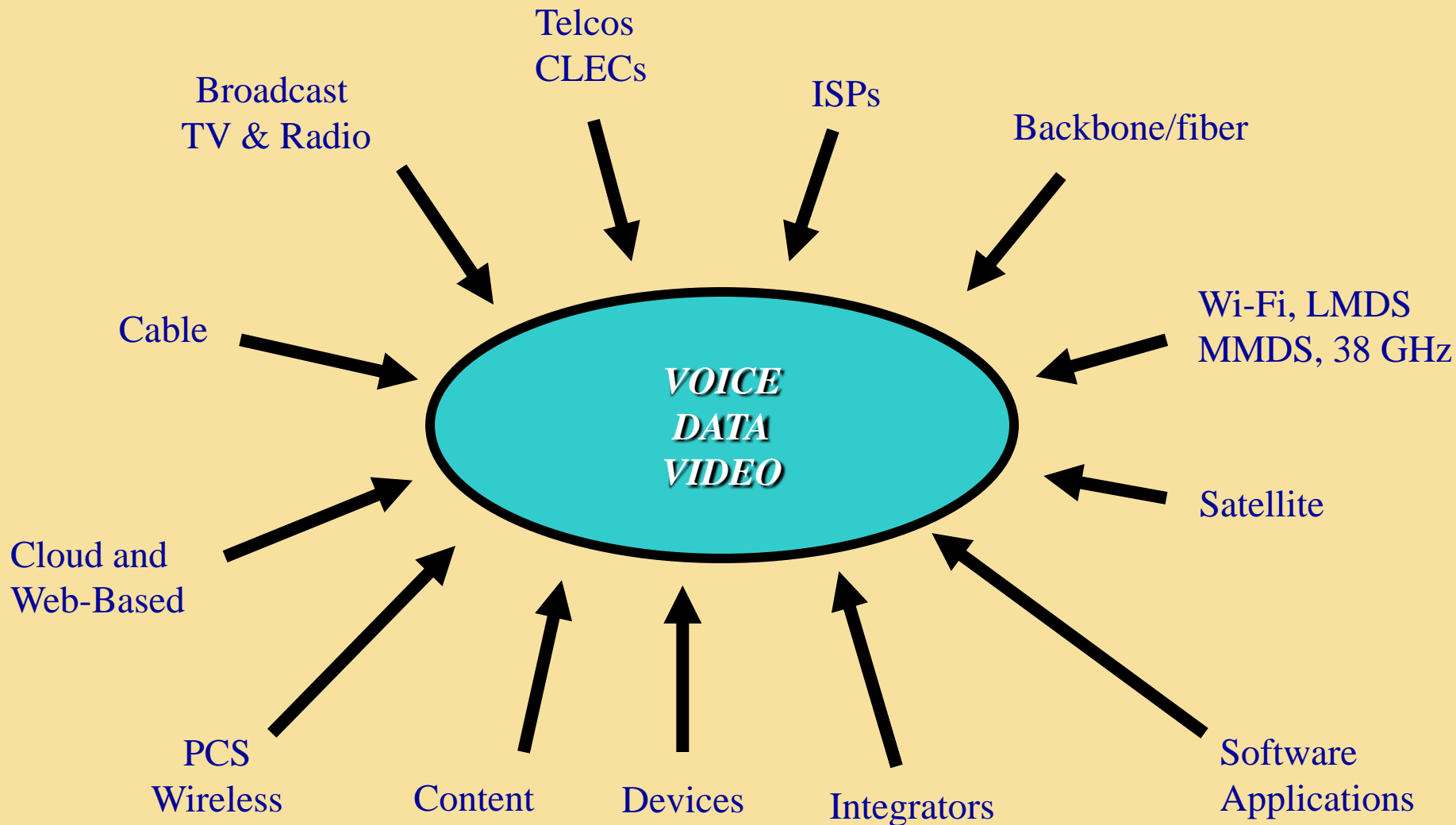
- **Public**
- **Private**
- **Hybrid**

THE INTERNET ECOSYSTEM PLATFORM



Source: J. Eisenach, June 2011

INTENSE INTER-INDUSTRY RIVALRY



THE IT SECTOR ...

- Capital-Intensive
- Economies of scale
- Economies of scope
- Falling prices
- Increasing demand
- Increasing investment
- Increasing innovation

Concentration is normal

BENEFITS OF THE BROADBAND ECOSYSTEM

ECONOMIC SITUATION

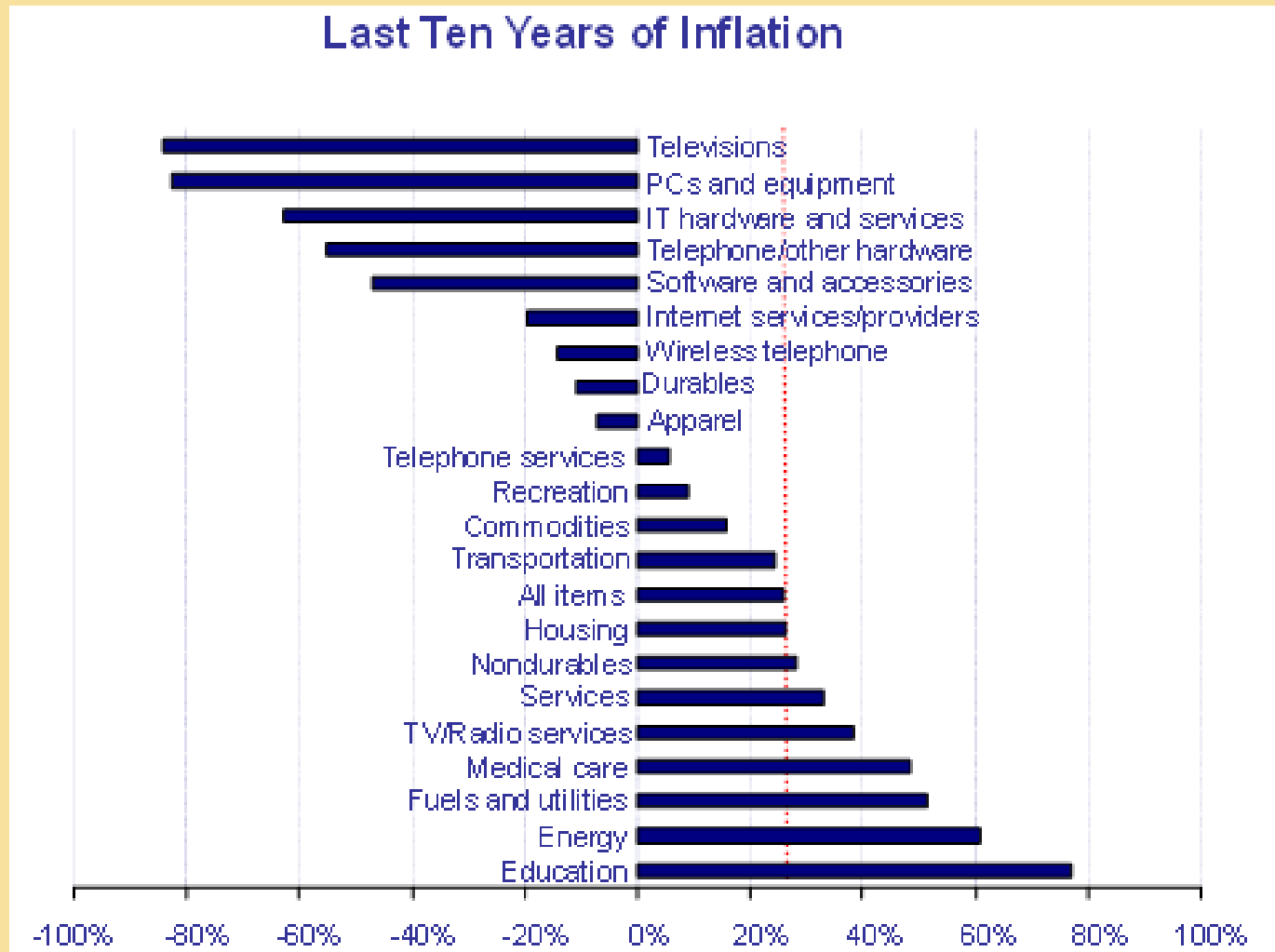
- ✘ Slower than normal GDP growth
- ✘ Job creation weak
- ✘ Investment mixed
- ✘ Energy Prices Rising
- ✘ Fiscal budget woes

THE LINK TO THE ECONOMY

- ✘ Stimulates economic growth
- ✘ Increases productivity
- ✘ Leads to business and consumer benefits
- ✘ Creates new, high-paying jobs
- ✘ Decreases inflation

Increasing IT investment increases jobs and consumer benefits

FALLING PRICES, INCREASED OUTPUT



EFFECTS OF INFORMATION TECHNOLOGIES

- × E-Commerce
- × E-materialization
- × Telemedicine
- × Teleconferencing
- × Distance Learning
- × Telecommuting

GREENHOUSE GAS REDUCTIONS

Cumulative 10-Year Forecast in Millions of US Tons

× E-Commerce: B2B and B2C	206.3
× Telecommuting: Direct and Indirect	588.2
× E-materialization	67.2
× Telemedicine	Not Measured
× Teleconferencing	199.8
× <u>Distance Learning</u>	<u>Not Measured</u>
TOTAL	> 1,000

POLICY IMPLICATIONS

- × Competition is intense
- × Concentration is normal
- × Economic Benefits
- × Policy Threats

THREATS TO THE INTERNET ECOSYSTEM

- × Taxation
- × Regulation
- × Subsidies

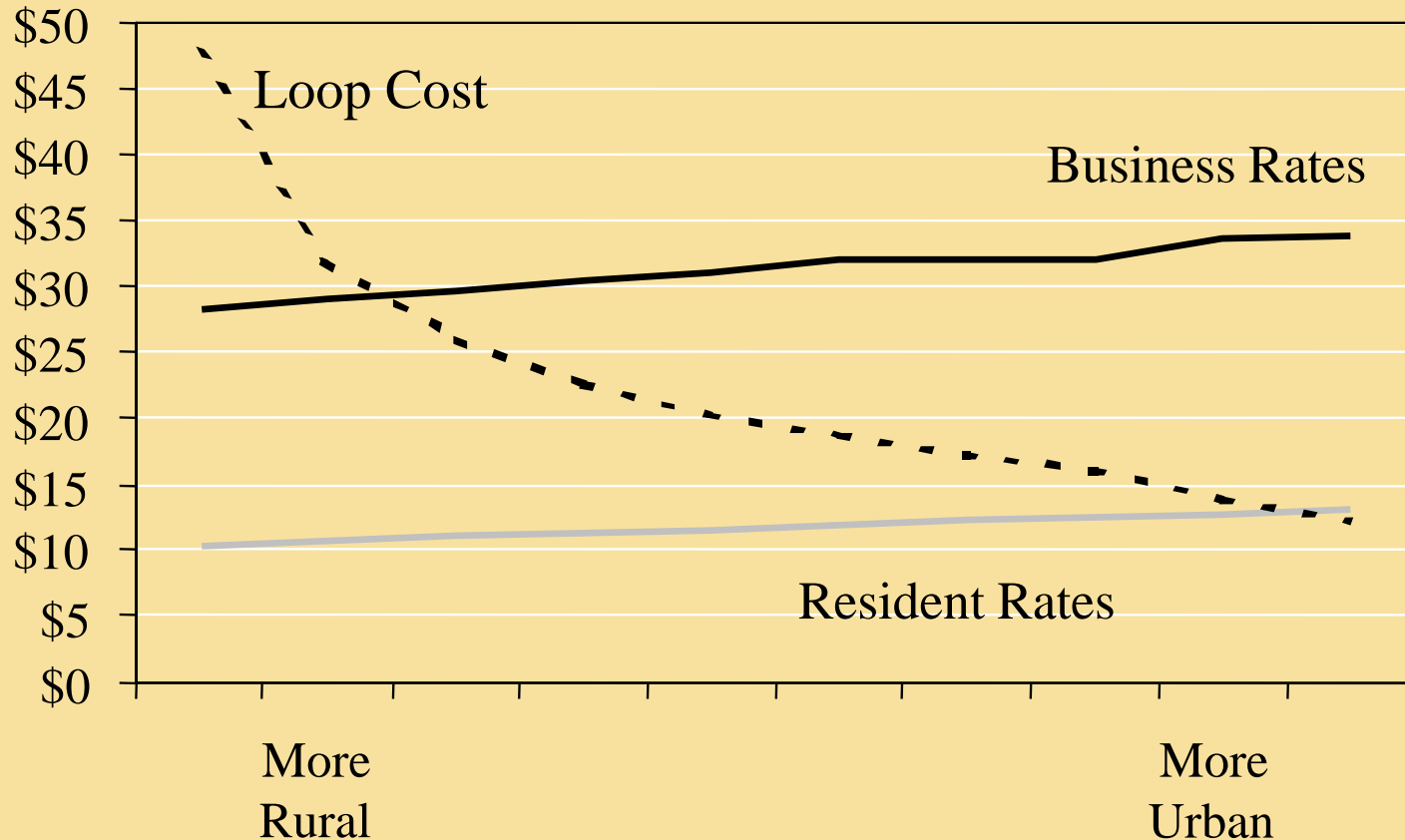
WHY TAX WHAT YOU WANT TO ENCOURAGE?

Service	Average Consumer Tax Rate
Retail Sales Tax Paid	6.38%
Cable TV	11.69%
Wireline Phone Service	17.23%
Wireless Phone Service	16.26%

THREATS TO THE INTERNET ECOSYSTEM

- × Taxation
- × Regulation
- × Subsidies

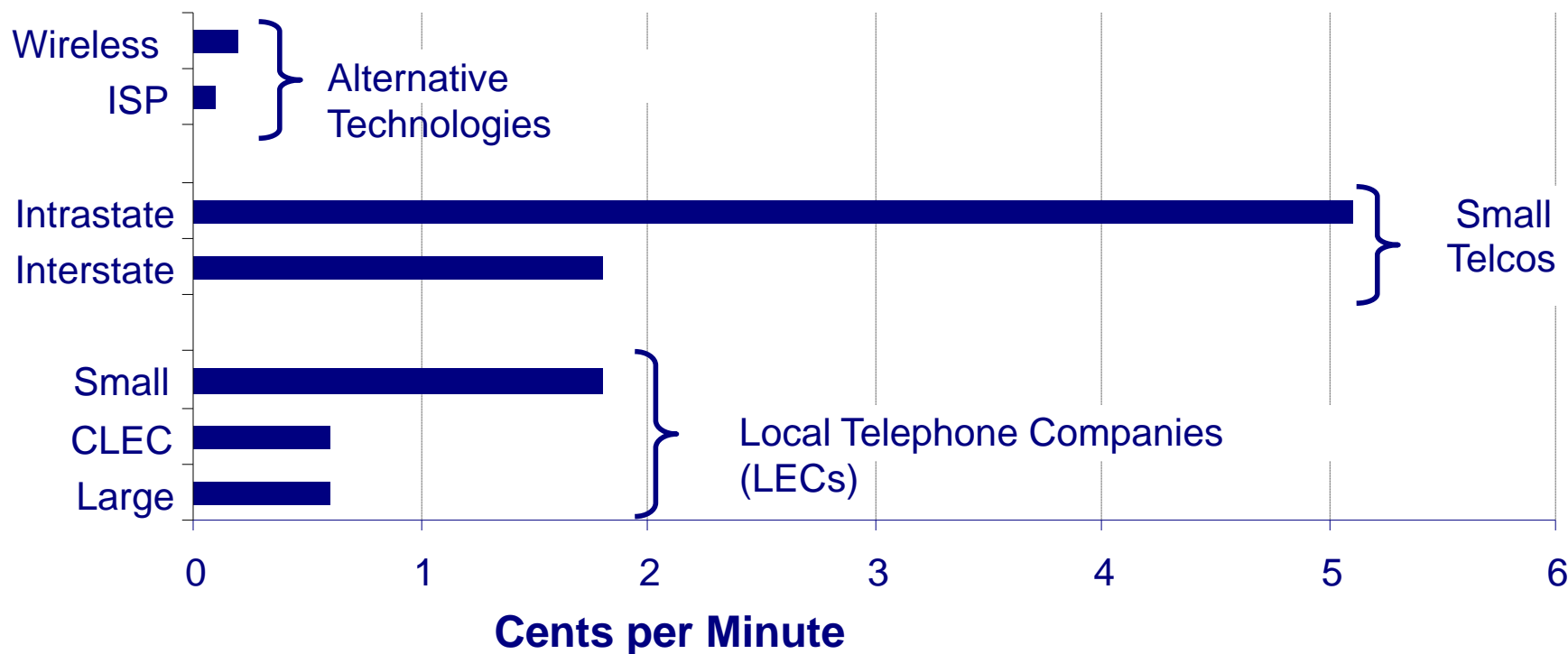
IMPLICIT SUBSIDIES NOT SUSTAINABLE



Source: This chart uses actual incumbent data. Costs are monthly incremental costs for voice grade 2-wire analog loops, plotted as percentiles. Prices are monthly recurring rates for the ten rate groups.

ACCESS CHARGES

Hidden Telephone Fees Terminating Fees per Minute



CONTACT INFORMATION

Steve Pociask
The American Consumer Institute
Center for Citizen Research
Steve@theAmericanConsumer.Org
(703) 471-3954

