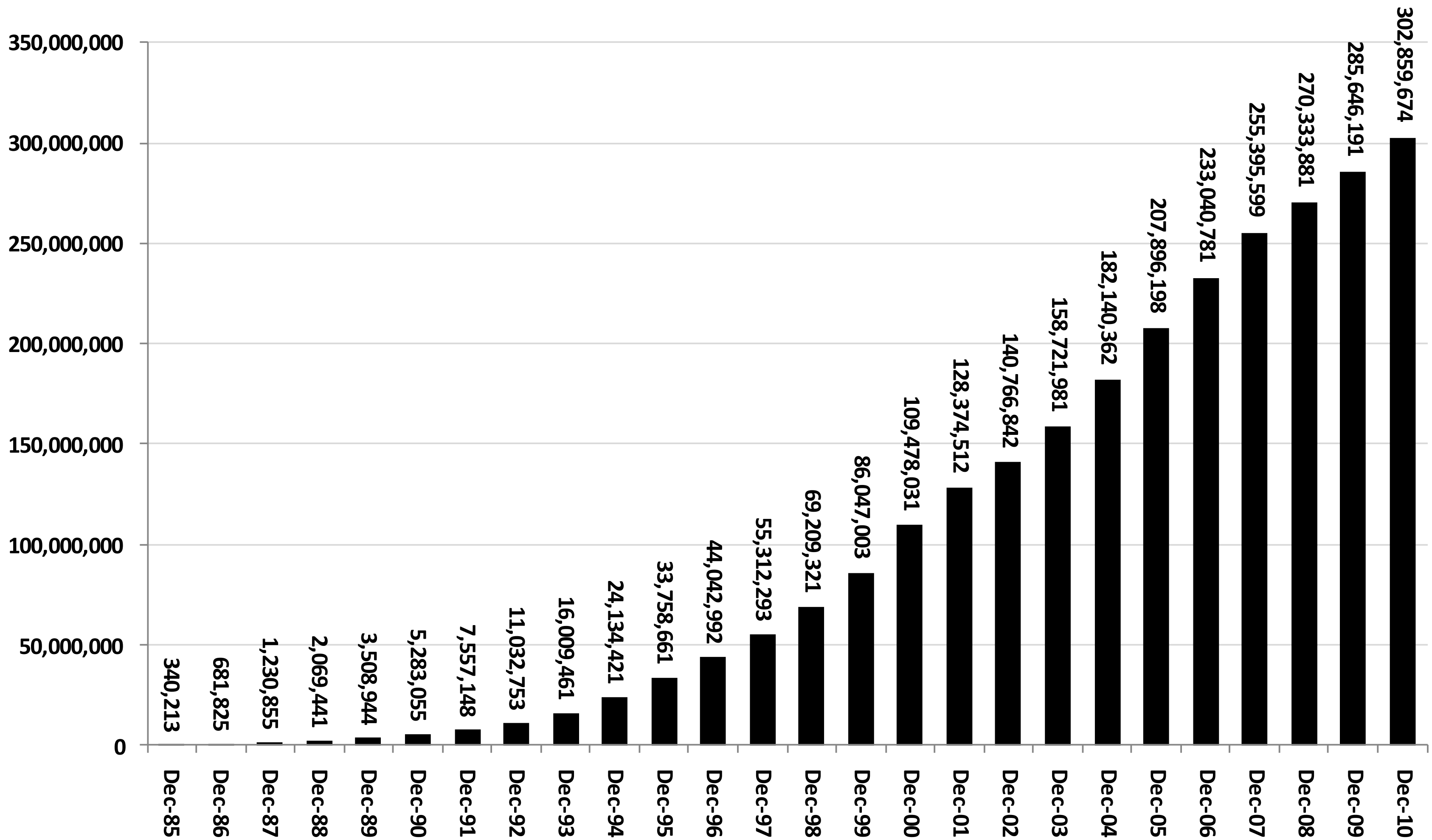
The State of Wireless

NCSL Spring Forum
21st Century Communications
April 14, 2011

Estimated Wireless Subscriber Connections Up More than 17 Million Year-Over-Year

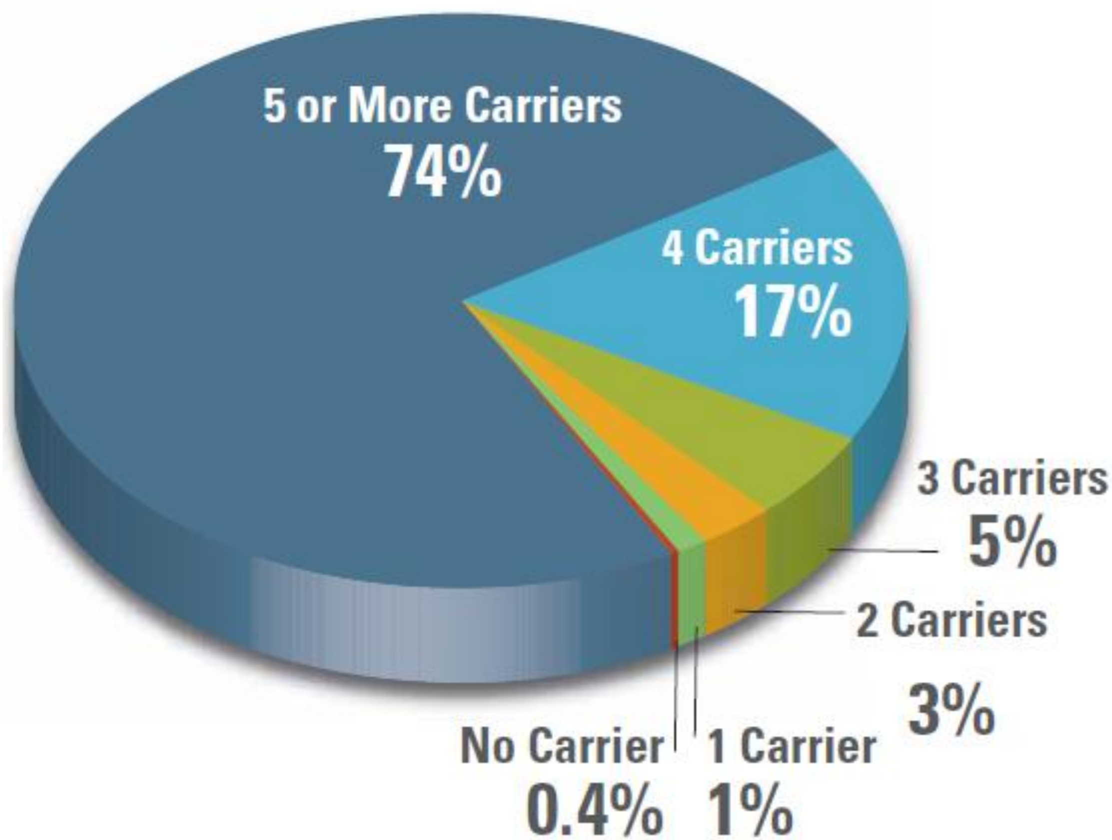
CTIA The Wireless Association®



Source: CTIA Semi-Annual Wireless Survey

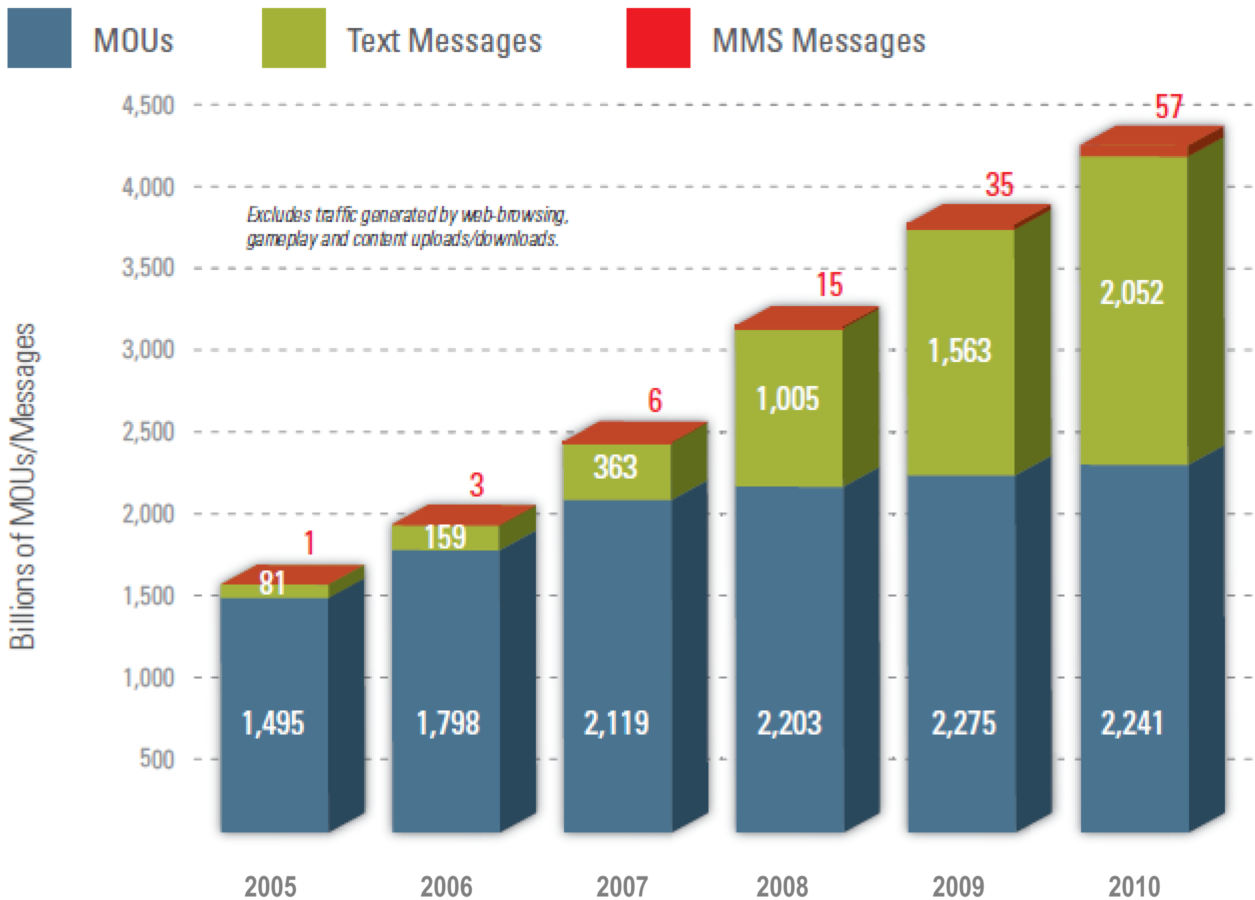
Wireless Has Delivered More Choices for More People

Nearly three-quarters of consumers have a choice of five or more wireless service providers.



Sources: FCC, American Roamer

Trillions of MOUs & Text Messages, and Billions of MMS



Minutes and messages as a measure of wireless usage.

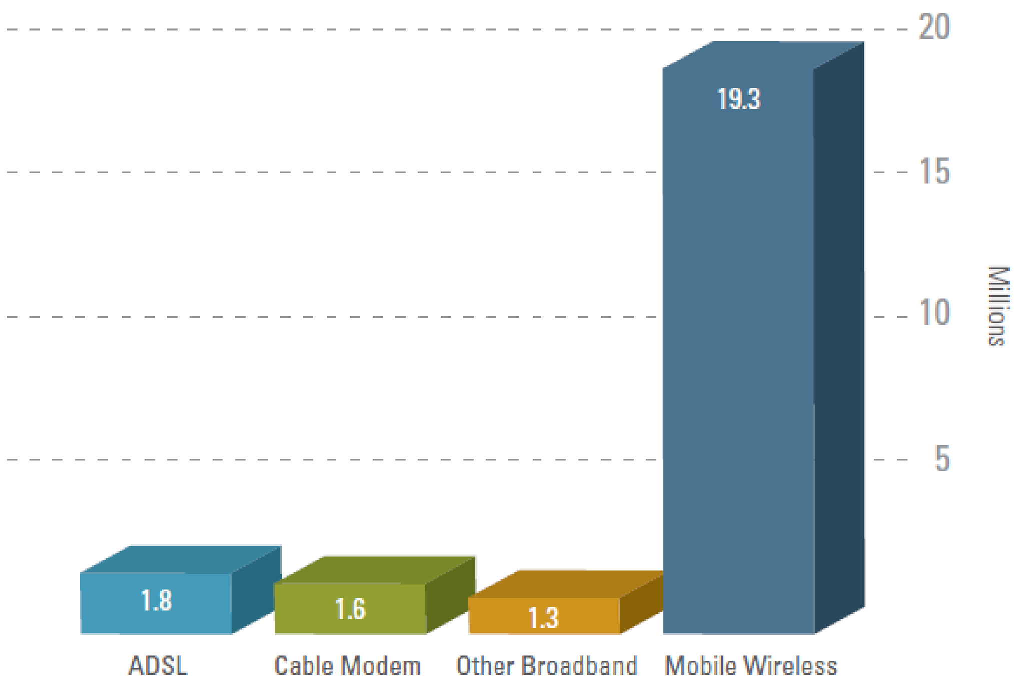
Source: CTIA Semi-Annual Wireless Industry Survey

Wireless is a Growing Means of High-Speed Internet Access

- From December 2008 to December 2009, high-speed lines offering speeds of 768 kbps or more down and >200 kpbs up grew 30.5%, from 78.8 million to 102.8 million lines. More than 80% of the high-speed adds were mobile wireless.

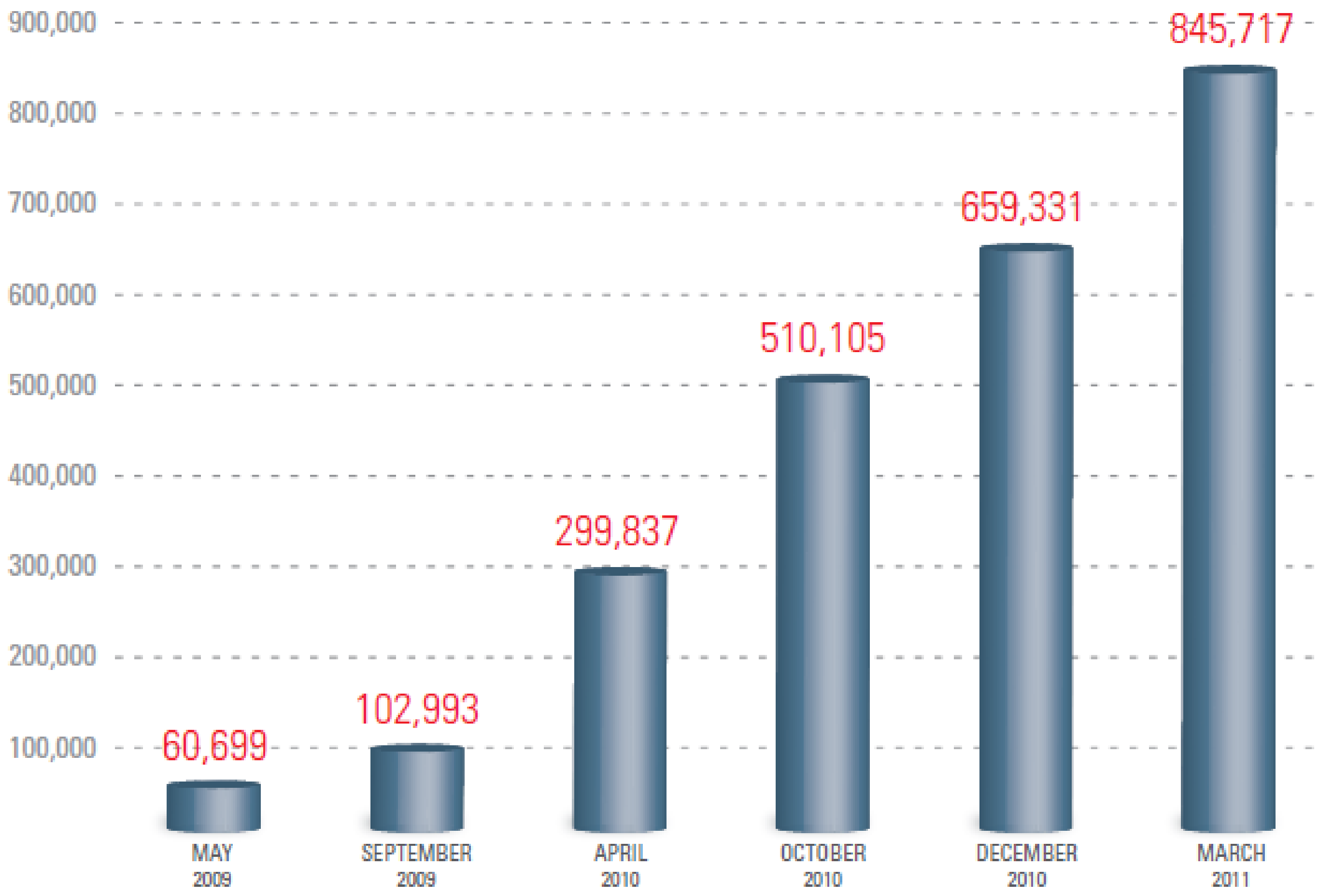
- From December 2008 to December 2009:

  – ADSL's share of total high-speed lines fell from 31.1% to 25.6%
  – Cable modem's share fell from 50.9% to 40.6%
  – Mobile wireless' share of total high-speed lines rose from 13% to 28.7%
  – The share of "other" forms of high-speed (including fixed wireless, satellite, fiber and broadband over power line rose to 5.1% of total high-speed lines.



Source: FCC Report, "High-Speed Services for Internet Access: Status as of Dec. 31, 2009," rel. Dec. 8, 2010

Count of App Store Offerings by Month



Sources: CTIA Research, Distimo, Androlib, App Stores, 148Apps.biz

Wireless: Continuing to Respond to Consumer Demands

- First adopted in 2003 - providing 10 provisions to ensure consumers are well informed about their wireless services

- Recent updates (Jan. 2011) incorporate provisions for wireless data plans and prepaid products to respond to demand changes in the wireless marketplace

CTIA

Consumer Code *for* Wireless Service

To provide consumers with information to help them make informed choices when selecting wireless service, the CTIA and the wireless carriers that are signatories below have developed the following Consumer Code. The carriers that are signatories to this Code have voluntarily adopted the principles, disclosures, and practices here for wireless service provided to individual consumers, including voice, messaging, and data services sold either on a postpaid or prepaid basis.

More Pro-Consumer Policies

- **Best Practice for Location Based Services**

  -Based on the information privacy best practices promoted by the FTC

- **Guidelines for App Content & Classification**

  -Call for self-certification of apps to by end of 2011

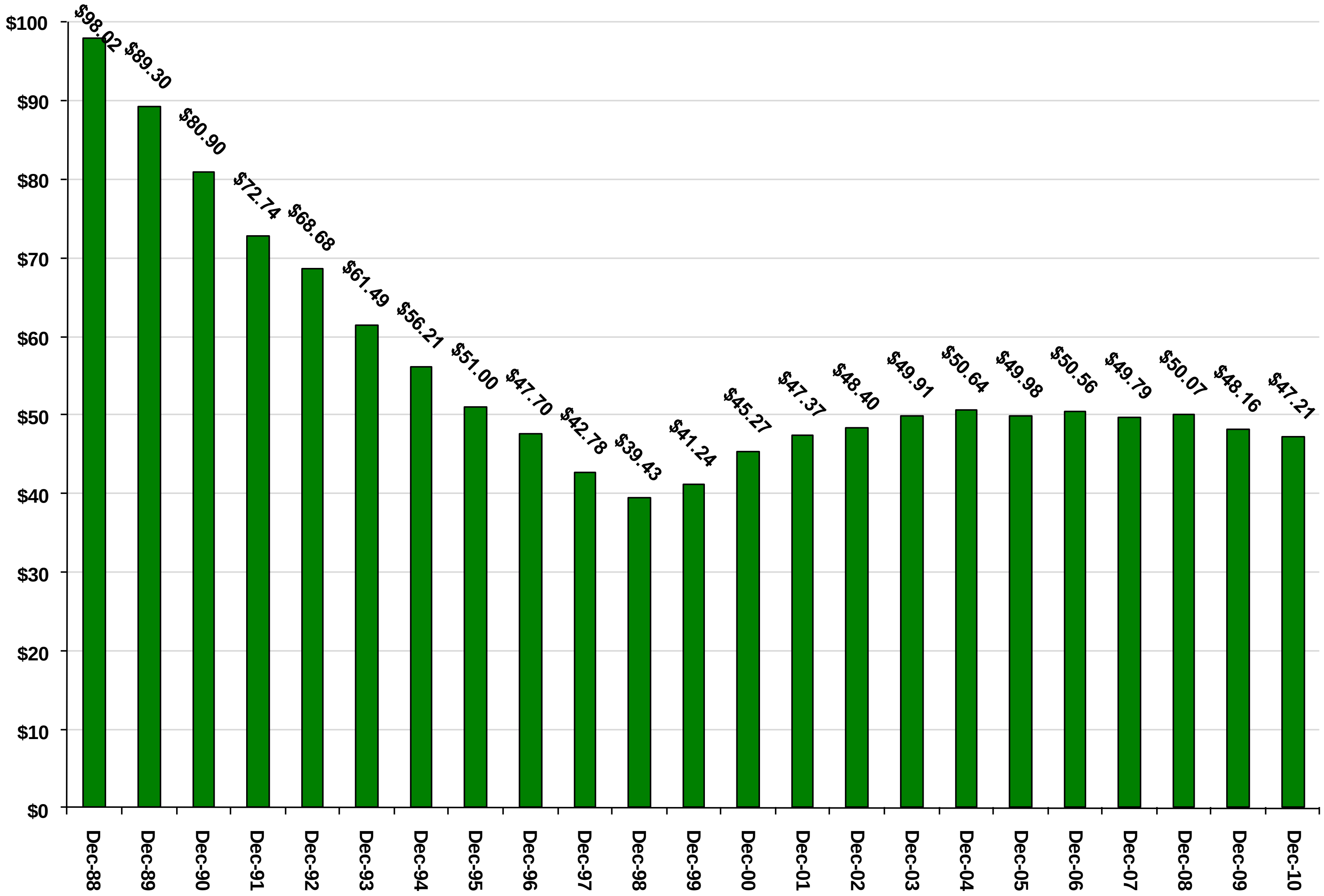
- **Guidelines for Carrier Content Classification and Internet Access**

  -To provide consumers with the information and tools they need to make informed choices when accessing content using a wireless handset

- **Wireless Consumer Checklist Initiative**

  -Guides offering consumers questions to ask customer representatives when choosing wireless service and plans

Average Local Monthly Bill Down 2% Year-to-Year



Source: CTIA Semi-Annual Wireless Survey

Taxes and Fees on Wireless Consumers

- Average state, local and federal imposition on general goods and services
  - 7.4 percent one time tax

- Average state, local and federal imposition on wireless consumers
  - 16.13 percent of a monthly bill

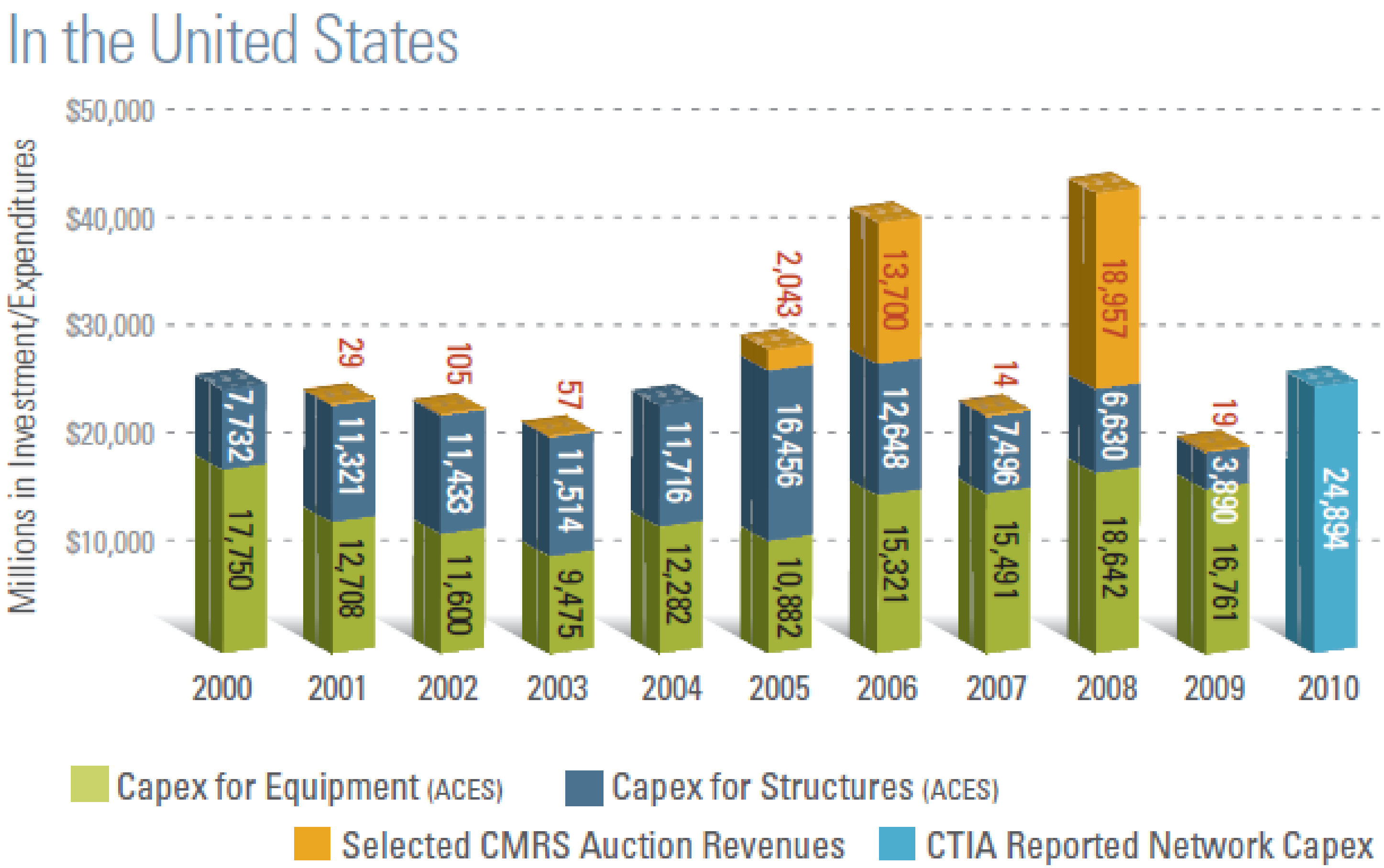
- 47 states and the District of Columbia impose taxes on wireless services at rates ***in excess*** of their general sales tax.

Does it Matter?

- Economist Greg Sidak found that for every ***1%*** decrease in the cost of wireless services the demand would increase by ***1.12 to 1.29%,*** indicating demand for such services is highly elastic.

Source: Scott Mackey, A Growing Burden: Taxes and Fees on Wireless Service, State Tax Notes, Feb 14, 2011 .

Investment in Infrastructure and Spectrum is On-Going



Sources: CTIA Research, U.S. Census “Annual Capital Expenditures Survey” (ACES), FCC

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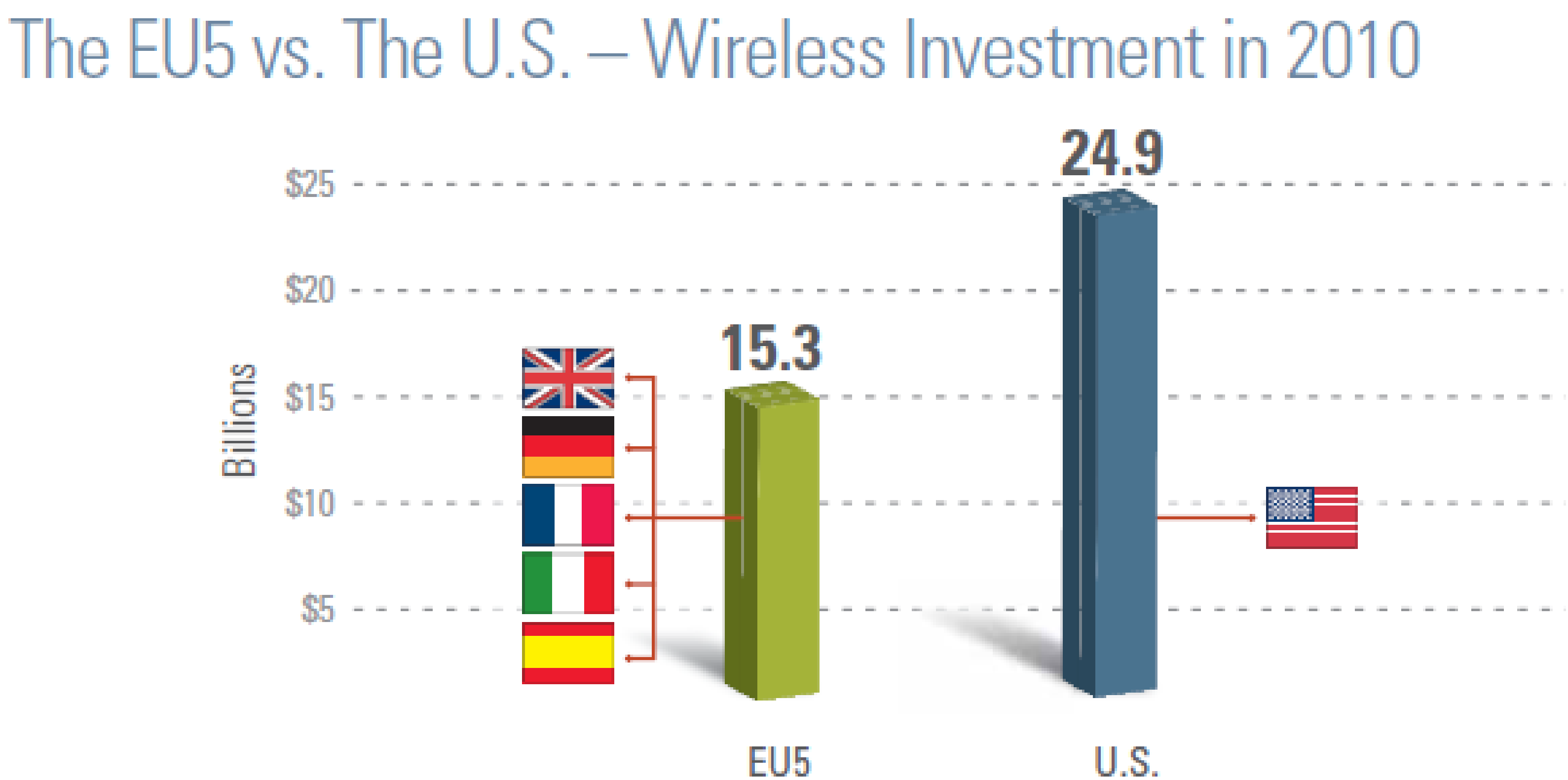
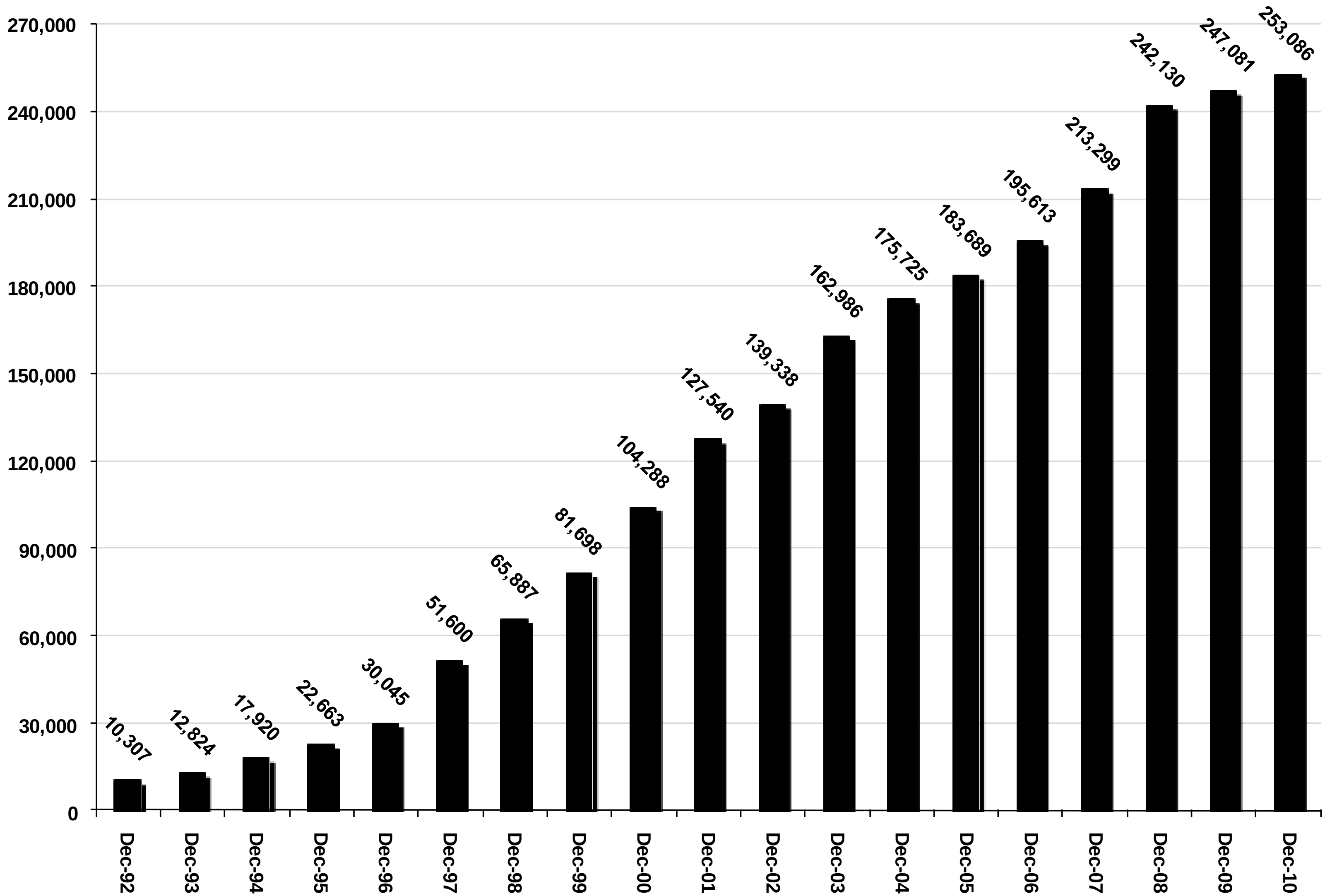


Sources: Bank of America Merrill Lynch Global Wireless Matrix, Dec. 2010; CTIA Research

Reported Cell Sites in Service Up 2 % Year-to-Year



Source: CTIA Semi-Annual Wireless Survey

U.S. vs. Other OECD Countries

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	USA	Japan	Germany	U.K.	France	Italy	Canada	Spain	S. Korea	Mexico
Subscribers**	297.3m	116.4m	107.1m	75.3m	61.5m	90.0m	24.3m	55.5m	50.2m	88.4m
Average Consumers' Minutes of Use per Month**	804	142	127	200	233	148	372	153	302	185
Average Revenue per Minute – A Measure of the Effective Price per Voice Minute**	$0.04	$0.22	$0.11	$0.10	$0.13	$0.12	$0.11	$0.16	$0.08	$0.05
Top Two Carriers Percentage of the Total Market**	62.5%	76.6%	65.9%	66.2%	82.6%	68.1%	66.5%	74.3%	82.2%	91.9%
Efficient Use of Spectrum -- Subscribers Served per MHz of Spectrum Allocated	726,095	335,556	174,150	213,387	161,732	298,507	118,298	154,913	173,103	420,800
Spectrum Assigned for Commercial Wireless Use	409.5 MHz*	347 MHz	615 MHz	352.8 MHz	380 MHz	301.4 MHz	205 MHz	358 MHz	290 MHz	210 MHz
Potentially Usable Spectrum/In the Pipeline***	50 MHz	400 MHz	Recently auctioned 350 MHz	355 MHz	250 MHz	262 MHz	260 MHz	262 MHz	140 MHz	30 MHz

**Figure includes AWS-1, 700 MHz spectrum not yet in use and 55.5 MHz of spectrum at 2.5 GHz.*

** *Glen* Campbell, et al., "Global Wireless Matrix 4Q10," Merrill Lynch, Dec. 23, 2010, at Tables 1-2.

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Mobile Broadband Networks:
The Present & Future

- Education
- Health Care
- Public Safety
- Smart Energy

Strategy for 21st Century America:
INVESTMENT and CERTAINTY

National Regulatory Framework

• Consistent national regulatory framework to allow for investment and certainty

Tax and Fee Reform

• Oppose Discriminatory Tax Treatment for Wireless Service
• Focus universal service support mechanisms on services that consumers demand (mobility and broadband)
• Curb traffic-pumping schemes, which inefficiently divert capital away from more productive uses like broadband deployment

More Spectrum for Wireless

• Voluntary Spectrum Auctions

More Wireless Infrastructure

• Streamlined Tower Siting Policies