

# The Technologies Americans Use to Communicate

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# Plan for today

- Look at data on how people communicate ... by phone, using broadband networks
- Examine patterns in demographic groups
- Data:
  - Centers for Disease Control
  - Pew Internet 2012 survey
  - FCC 2011 Form 477 report (January 2013 WCB)
  - NTIA 2010 data
  - FCC 2009 survey

# High level overview of tech usage trends I

(business & residential)

- Mobile subscriptions:
  - 261m in 2008 → 298m in 2011
- Interconnected VoIP
  - 21.7m in 2008 → 36.7m in 2011
- Retail switched access lines:
  - 141m in 2008 → 107m in 2011

# High level overview of tech usage trends II

(among individuals)

	Cell Phone	Internet Use	Broadband at home	Smartphone
1998	37%	36%	n/a	n/a
2000	53	50	3	n/a
2003	65	61	16	n/a
2006	73	70	42	n/a
2009	82	74	63	17
2012	88	81	66	45

# Wireline at home

(End-user switched access & VoIP, residential, FCC 2011)

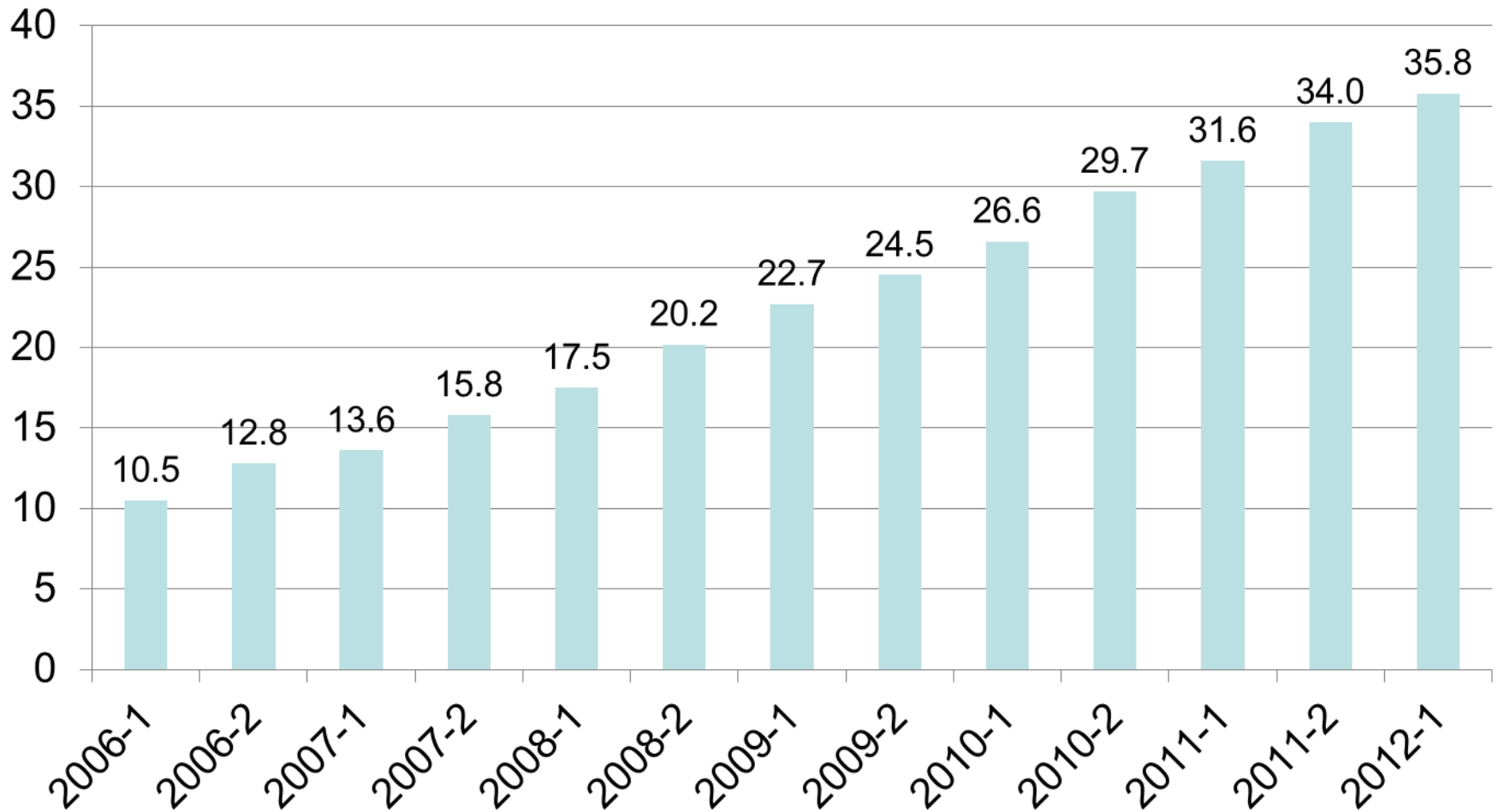
- 83m lines in 2011 vs 97.8m in 2008
  - 37.2% VoIP in 2011 vs 20.1% in 2008

	<b>End User Switched Access Lines (in millions)</b>	<b>VoIP Subscriptions (in millions)</b>
Dec 2008	78.2	19.7
June 2009	73.1	20.3
Dec 2009	68.6	22.8
June 2010	64.5	25.0
Dec 2010	60.0	27.0
June 2011	56.0	28.6
Dec 2011	52.1	30.9

- 86% of residential VoIP is non-ILEC in 2011

# Trends in “Cell Only” Households (Centers for Disease Control data)

**% HH with cell only**



# How Americans make phone calls

(CDC Jan 2012 data for households)

- 52.5% have landline and wireless
  - 58.5% in 2008
- 9.4% have landline only
  - 20.6% in 2008
- 35.8% are cell phone only
  - 17.5% in 2008

# “Cell only” by Race

Race	Avg=10.5% 2006-1	Avg=22.7% 2009-1	Avg=35.8% 2012-1
White (non-Hispanic)	9.0	19.7%	30.4%
Black (non-Hispanic)	10.5	21.3	37.7
Hispanic or Latino (any race)	11.2	28.2	46.5



# “Cell only” by Age

Age	Avg=10.5% 2006-1	Avg=22.7% 2009-1	Avg=35.8% 2012-1
18-24 years	22.6%	37.6%	49.5%
25-29 years	22.3	45.8	60.1
30-34 years	12.1	33.5	55.1
35-44 years	8.2	21.5	39.1
45-64 years	5.3	12.8	25.8
65 and over	1.3	5.4	10.5

# “Cell only” by Poverty Status

Status	Avg=10.5% 2006-1	Avg=22.7% 2009-1	Avg=35.8% 2012-1
Poor	15.8%	33.0%	51.8%
Near Poor	14.4	26.5	42.3
Not Poor	9.4	18.9	30.7

# Broadband Adoption Overview

## (NTIA 2010 Data)

- 68% of homes have broadband
- Connection types (% of all households):
  - 32% cable modem
  - 23% DSL
  - 9% Internet use outside the home
  - 6% mobile broadband only or with other internet services
  - 3% fiber optics
  - 3% dial-up
  - 2% satellite
  - 2% other broadband
  - 20% non-Internet users

# Broadband: Urban v. Rural

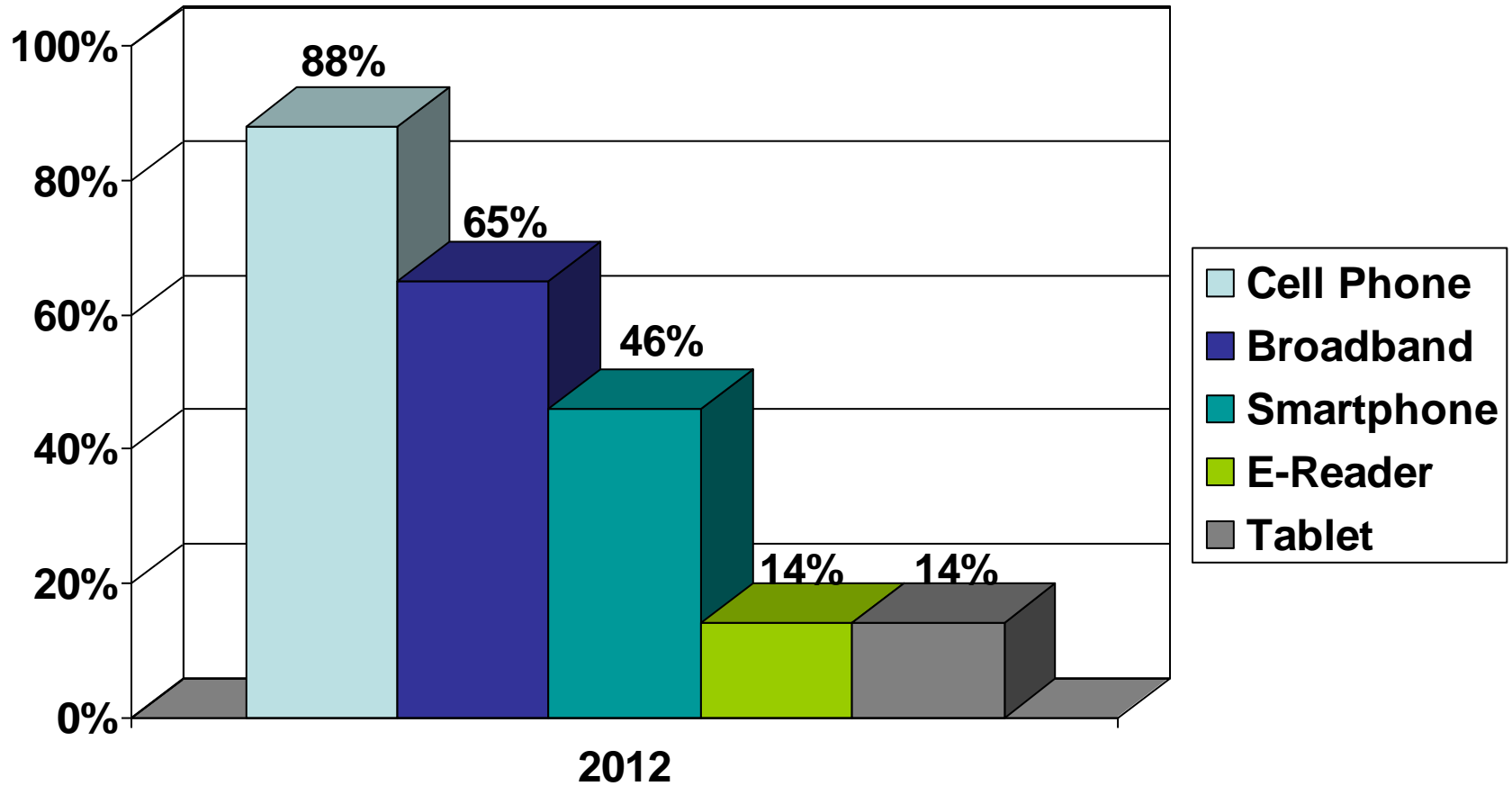
(NTIA 2010 Data)

- 70.3% urban households with broadband
- 60.2% of rural households with broadband

	Urban Connection Type	Rural Connection Type
Cable modem	35%	19%
DSL	23	27
Outside the home	9	11
Mobile only	7	6
Satellite	1	3
Other	2	1
Dial-up	2	5
Non-Internet HH	18	28

# Overview: Device & Service Use I

(All Adults – Pew 2012 data)

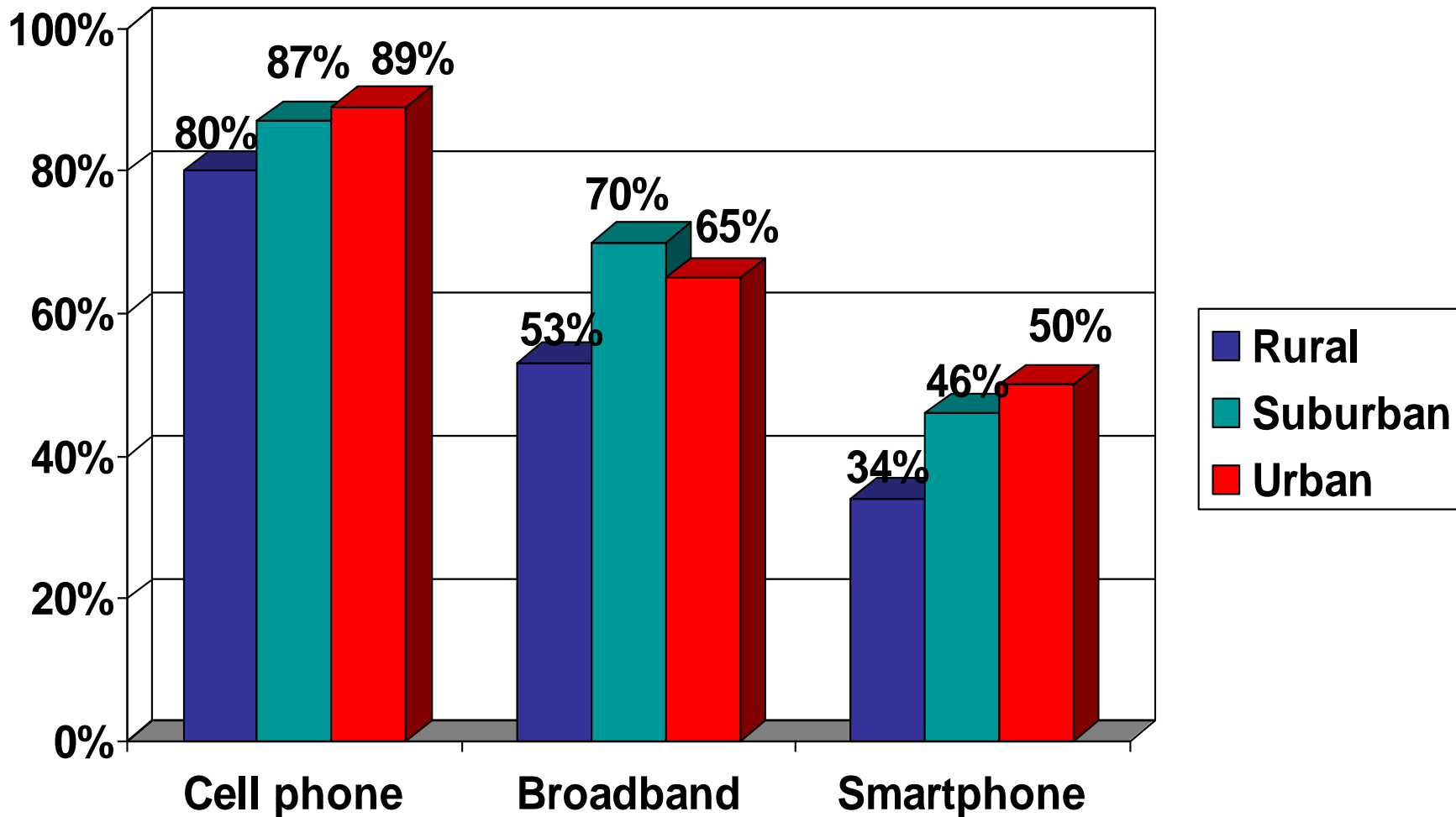


# Overview: Device & Service Use II

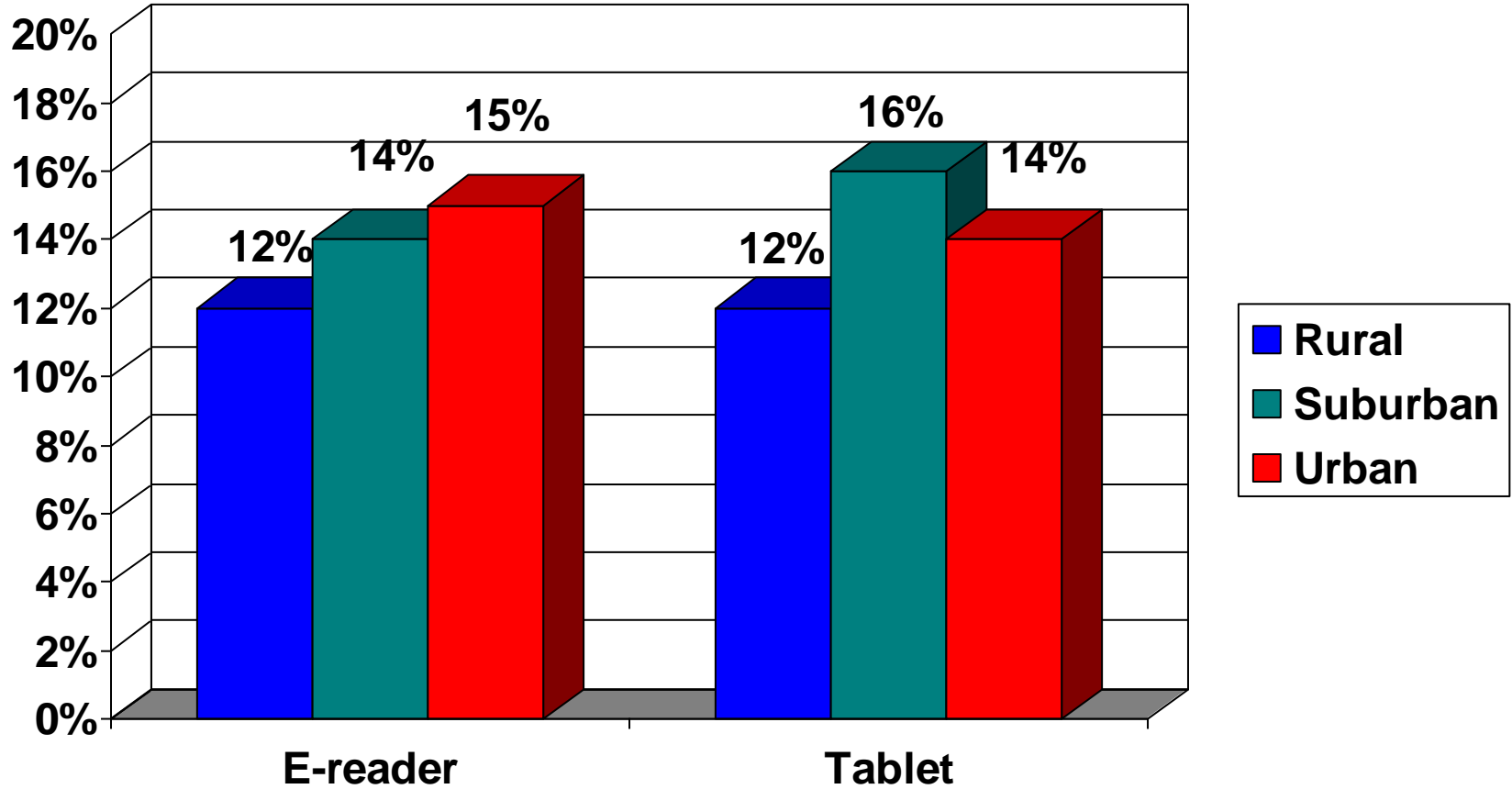
(Teens, age 12 to 17, Pew Sept 2012 data)

- 78% of teens have a cell phone
- 37% of teens have a smartphone
  - Up from 23% in 2011
- 23% of teens have a tablet computer
- On usage:
  - 93% have a computer or access to it
    - 71% share the computer they use with someone
  - 74% access the Internet on cell phones, tablets, or other mobile devices
  - 25% of teens are “cell-mostly” Internet users
    - 15% of adults are “cell-mostly” Internet users
    - Among teens with smartphones, half are “cell mostly” Internet users.

# Rural: Services

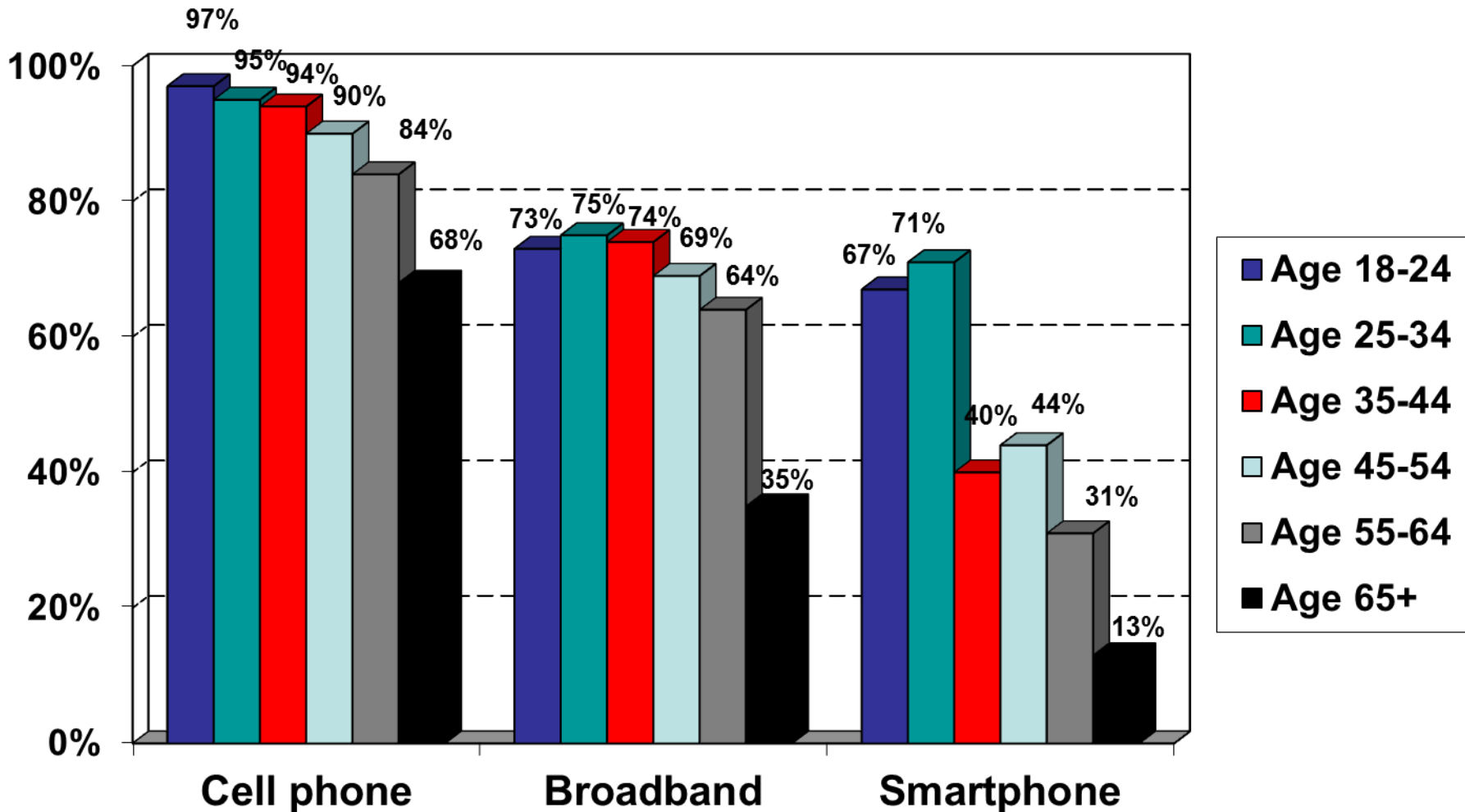


# Rural: Devices

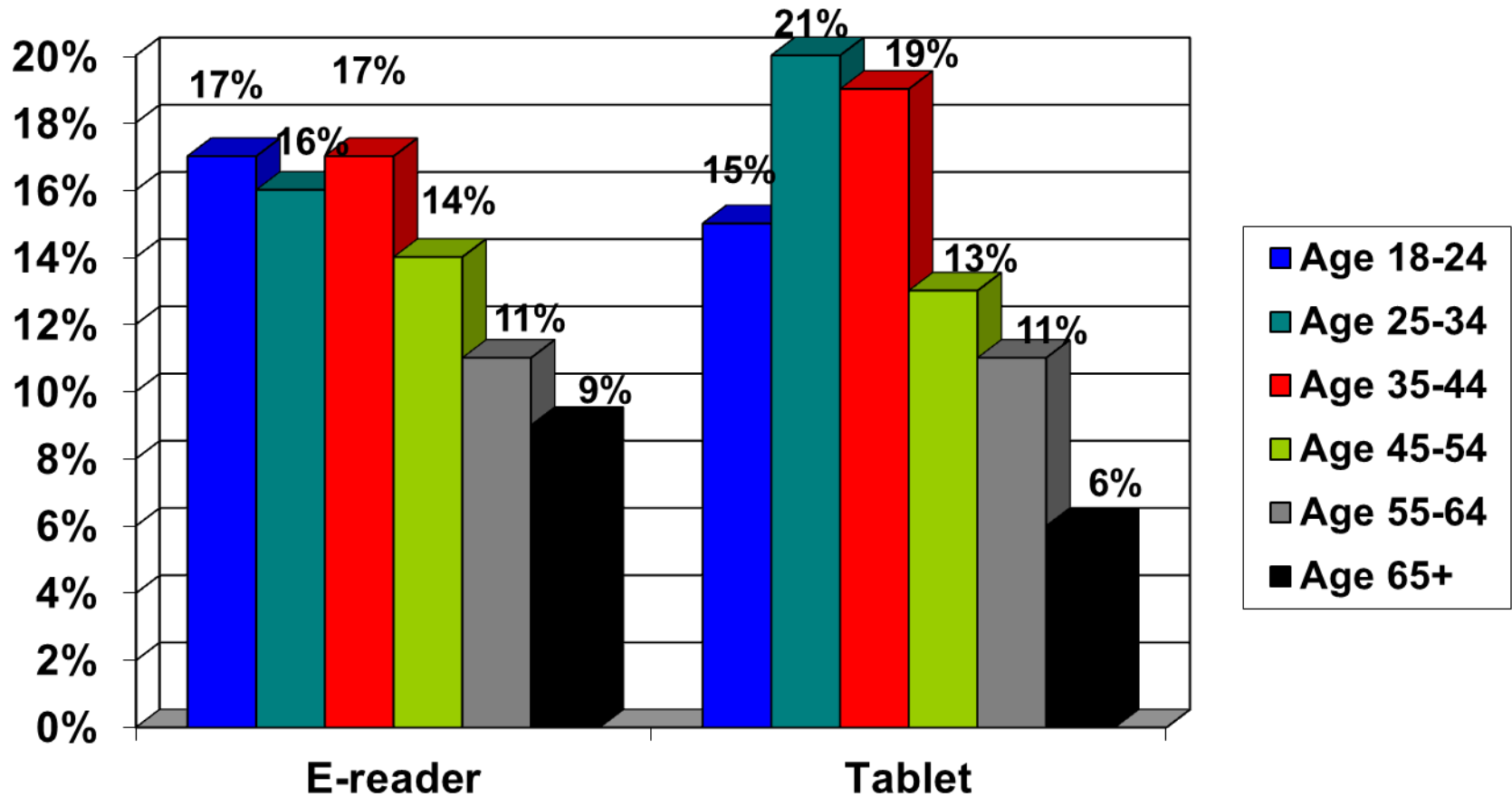




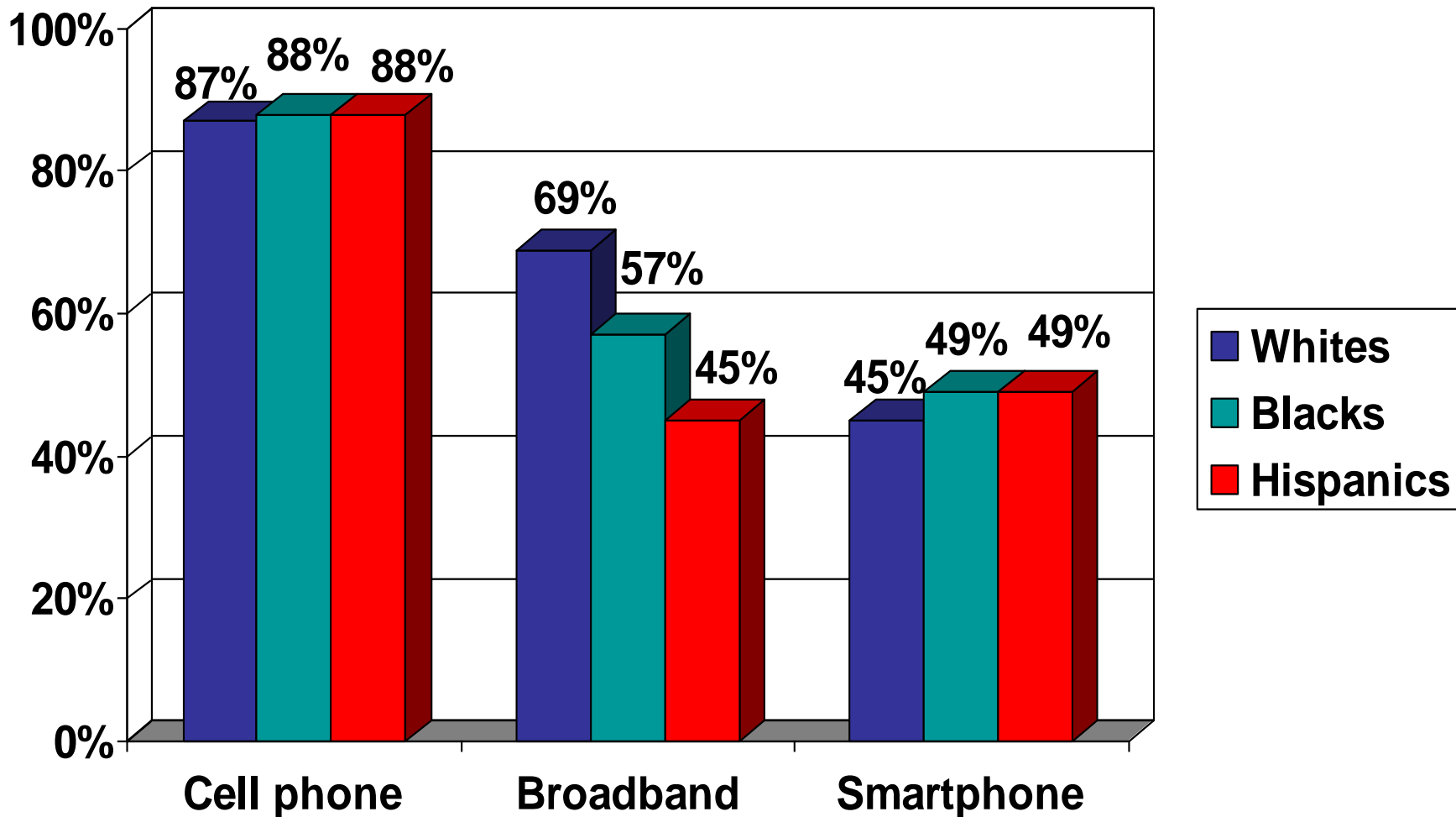
# Age: Services



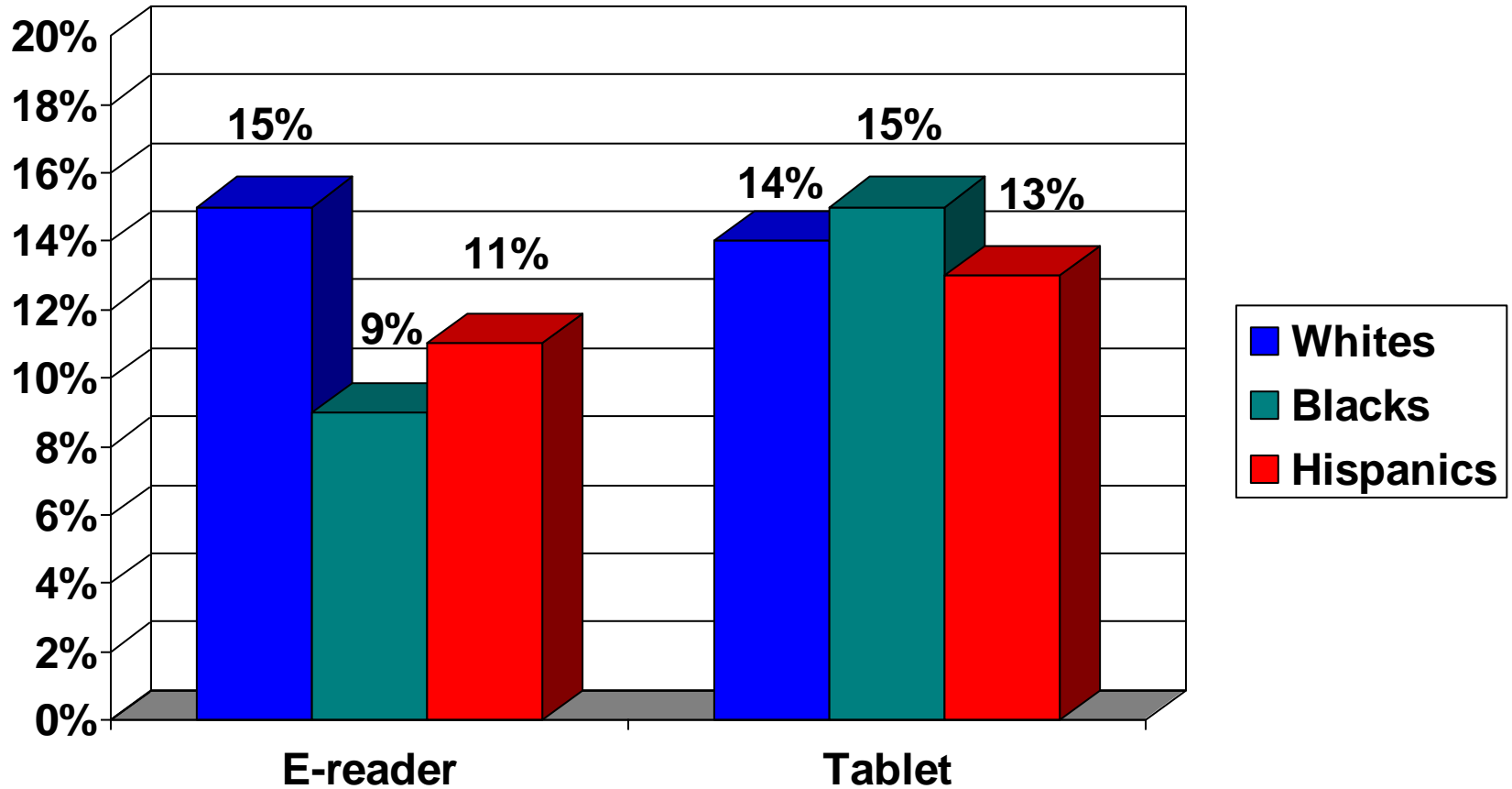
# Age: Devices



# By Race: Services

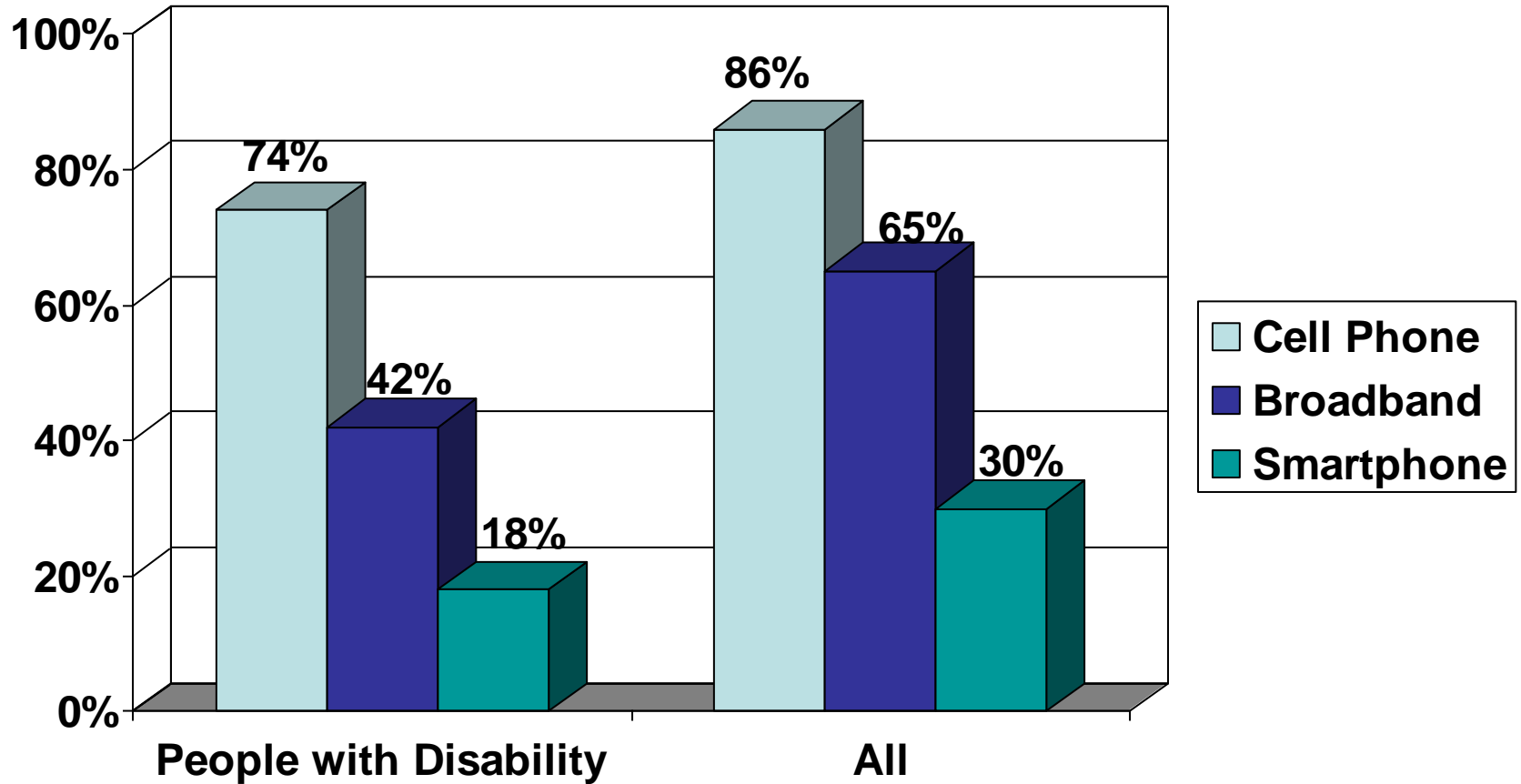


# By Race: Devices



# People with Disabilities

(2009 FCC Survey)



# Broadband at home by Disability Status (NTIA 2010)

- 37.5% of all people with disabilities have broadband at home

Type of Disability	% using broadband at home
Difficulty dressing/bathing	27.9%
Deaf/difficulty hearing	36.5
Blind/difficulty seeing	30.7
Difficulty doing errands	27.8
Difficulty walking or climbing stairs	33.7
Difficulty concentrating/remembering	35.3

# What about the relationship between Smartphones & Broadband?

(Pew Feb 2012 data)

- For those with broadband at home:
  - 83% have a Smartphone
  - 19% have an e-reader
  - 21% have a tablet
- For those without broadband at home:
  - 8% have a Smartphone
  - 4% have an e-reader
  - 2% have a tablet
- For blacks without broadband at home:
  - 13% have a Smartphone
- For Hispanics without broadband at home:
  - 19% have a Smartphone
- For seniors without broadband at home:
  - 4% have a Smartphone

# Overall wireless use:

63% of adults have gone online wirelessly using some device

- 88% of 18-29 year olds have connected wirelessly
  - 21% of 65+ have.
- 86% of those in over \$75K annual income households have connected wirelessly
  - For under \$30K HH, 50% have
- Race/ethnicity breakout:
  - 63% of whites have gone online wirelessly
  - 62% of blacks (non-Hispanics) have
  - 63% of Hispanics