



Connect Ohio Residential Technology Assessment Results 2011

www.connectohio.org



2011 Technology Assessment of Ohio Residential Consumers Presentation Outline

Summary of Key Findings	5
Broadband Adoption and Usage	11
Computer Ownership and Internet Adoption	23
Download Speeds and Prices Paid by Ohio Internet Subscribers	35
Online Activities Among Ohio Internet Users	43
Mobile Technology Use	47
Teleworking and Working From Home Through an Internet Connection	59
Technology Adoption Barriers	63



2011 Technology Assessment of Ohio Residential Consumers Presentation Outline *(Continued)*

Residential Technology Assessments

Assessment by Age	69
Assessment by Annual Household Income	77
Assessment by Race/Ethnicity	85
Assessment by Urban/Rural Classification	93
Assessment by Gender	101
Assessment by Highest Educational Attainment	109
Assessment Among Households with Children	117
Assessment by Employment Status	125
Research Methodology	133



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Summary of Key Findings



2011 Key Findings

Key Technology Benchmarks, 2011:

- Households with broadband service: 66%
- Households with a computer: 80%
- Residents who access the Internet from home or someplace else: 82%
- Residents who subscribe to mobile broadband via laptop or cell phone/mobile device: 31%

Other Key Findings:

- Across Ohio, 66% of all residents subscribe to home broadband service; by comparison, a national survey shows that 63% of American households subscribe to home broadband service.
- Statewide, 80% of all residents own a home computer. This translates into over 1.8 million adults without a home computer. More than one-quarter (26%) of those without a computer say that a computer is too expensive.
- Statewide, 5% of Ohio residents report that broadband is not available where they live, 85% say with certainty that broadband is available, and 10% do not know whether broadband service is available. By comparison, Connect Ohio's provider-validated Broadband Service Inventory found that 1.7% of households do not have terrestrial fixed broadband service access.
- In rural Ohio, 8% of adults report that broadband service is not available where they live, 79% say with certainty that broadband is available, and 13% do not know whether broadband service is available where they live. By comparison, Connect Ohio's provider-validated Broadband Service Inventory reports that 3.7% of rural households do not have terrestrial fixed broadband access.



2011 Key Findings (Continued)

- While residents age 65 or older are still significantly less likely than the state average to own a computer or subscribe to home broadband service, computer ownership in this age group increased 26% between 2008 and 2011, while broadband adoption increased 42% in the same time period.
- Broadband adoption among rural residents (58%) is significantly lower than the state average. More than one-fifth (22%) of rural residents do not access the Internet at all (either at home or someplace else), which is also significantly higher than the state average. Rural residents without a home broadband connection are significantly more likely to report that broadband availability is a barrier to adoption.
- Statewide, 53% of Ohio broadband subscribers report that they have cable modem service at home, while 33% subscribe via DSL broadband. Satellite broadband, fixed wireless broadband, and fiber to the home service each account for 4% of home broadband subscribers in Ohio.
- On average, Ohio broadband subscribers pay \$43.41 per month for their home broadband. Among those who do not subscribe to home broadband service, 25% cite cost as a barrier to adoption.
- When asked to select the one main barrier to broadband adoption, more than one-half (58%) of Ohio residents who choose not to subscribe to home broadband and say it is because they do not need broadband service.
- Furthermore, over one-third of Ohio residents who do not subscribe to broadband (35%) cite the lack of a computer as a barrier to broadband adoption, while 13% don't know enough about broadband to feel comfortable going online.



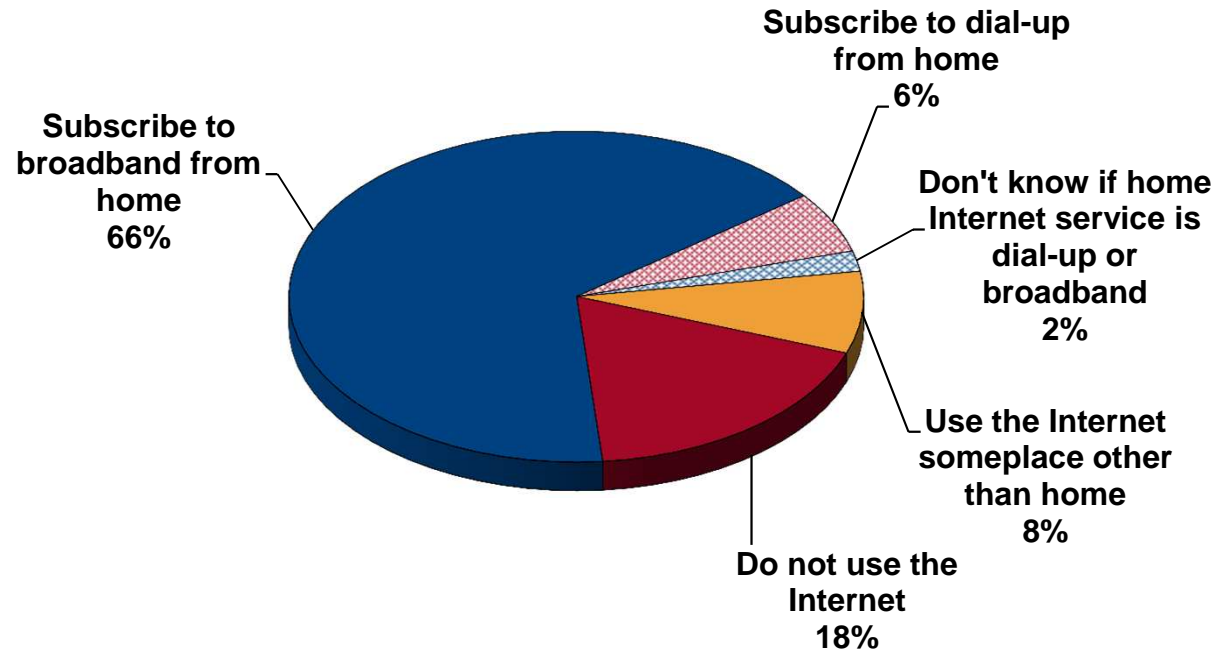
2011 Key Findings (Continued)

- The most reported online activity among Ohio home and mobile broadband subscribers is communicating through e-mail (90% and 81%, respectively).
- While nearly four out of five home broadband subscribers (79%) research or purchase goods online, only 36% of mobile subscribers conduct this activity via their cell phone.
- More than two-thirds of Ohio home broadband subscribers (68%) read the news online, compared to 46% of residents who subscribe to mobile broadband via their cell phone.
- Home broadband enables more than two-thirds of subscribers (68%) to bank and pay bills online. Just over one-quarter of mobile broadband subscribers (27%) report banking online.
- Nearly three out of five home broadband subscribers in Ohio (57%) search for medical information or communicate with healthcare professionals such as doctors on insurance offices online, while fewer than one-quarter of mobile broadband subscribers (22%) conduct this activity via their cell phones.
- More than one-third of Ohio home broadband subscribers (34%) go online to interact with government offices or elected officials, compared to 11% of mobile broadband subscribers.
- Statewide, 43% of Ohio home broadband subscribers search or apply for jobs online, while only 14% of mobile broadband subscribers report conducting this activity via their cell phone, highlighting the advantage of a fixed home broadband subscription.
- In Ohio, 14% of employed adults report that they telework. Teleworking could also provide an additional boost to the state's workforce, as 28% of non-working Ohio residents would likely join the labor force if empowered by telework.



Ohio Technology Adoption Summary

Percent of all Ohio residents



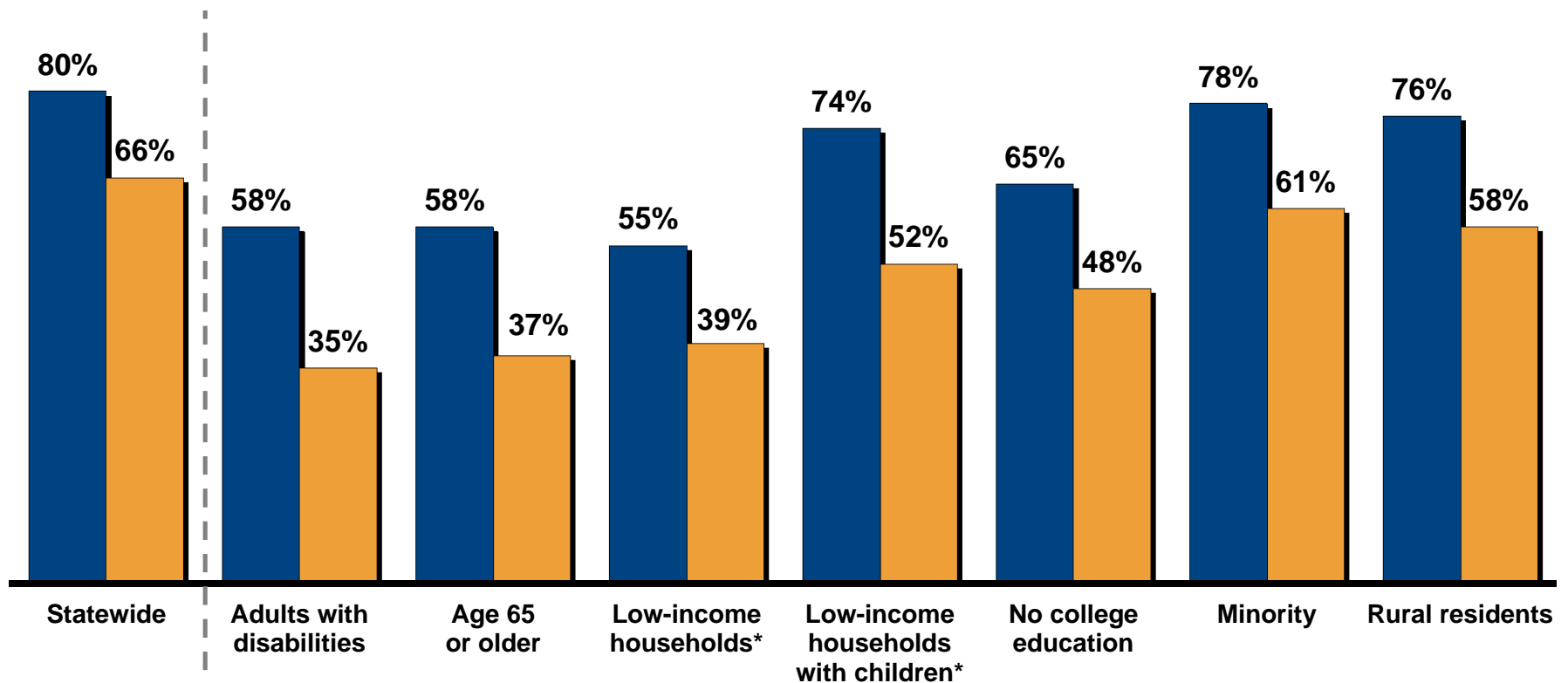
Q: Do you have an Internet connection at home?,
Q: Do you have access to the Internet from any locations outside of your own home? and
Q: Which of the following describe the type of Internet service you have at home?
(n=1,201 OH residents)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Technology Adoption by Demographic

■ Computer ownership ■ Broadband adoption



*Low-income=annual household income less than \$25,000

Q: Does your household have a computer? and

Q: Which of the following describe the type of Internet service you have at home?

(n=1,201 OH residents)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

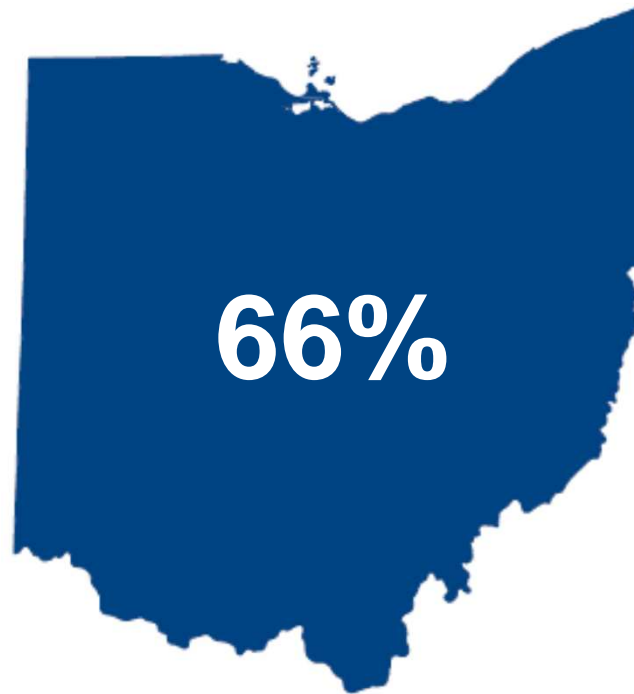


Broadband Adoption and Usage



Ohio Residents With Home Broadband Service

Percent of all Ohio residents who subscribe to home broadband service



Statewide, 66% of all Ohio residents subscribe to home broadband service. This translates to approximately 3 million adults without broadband service at home.

Q: Which of the following describe the type of Internet service you have at home?
(n=1,201 OH residents)

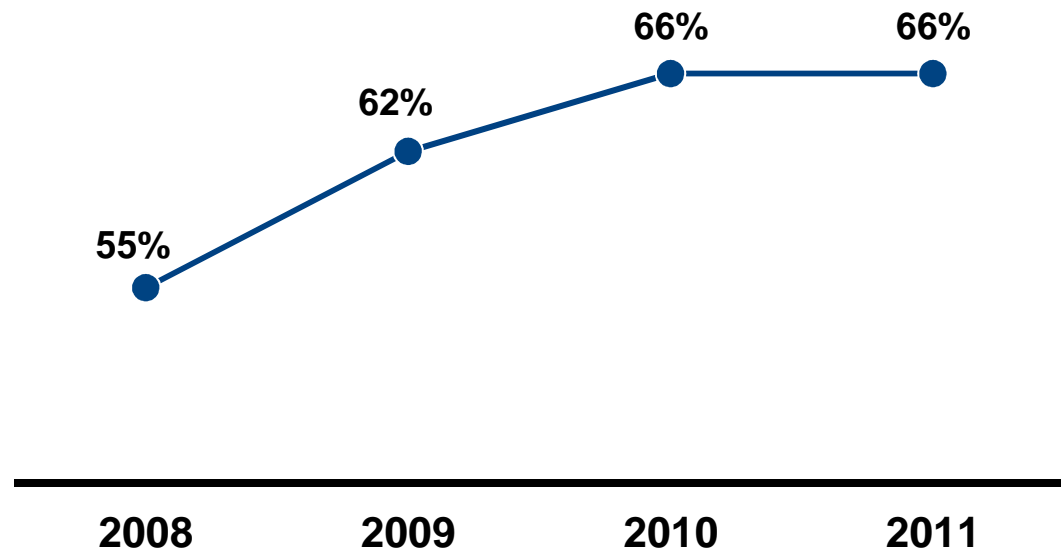
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Trends in Ohio Residential Broadband Adoption

Percent of all Ohio residents with broadband service at home

Statewide, home broadband adoption among Ohio residents increased 11 percentage points from 2008 to 2011.



Q: Which of the following describe the type of Internet service you have at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

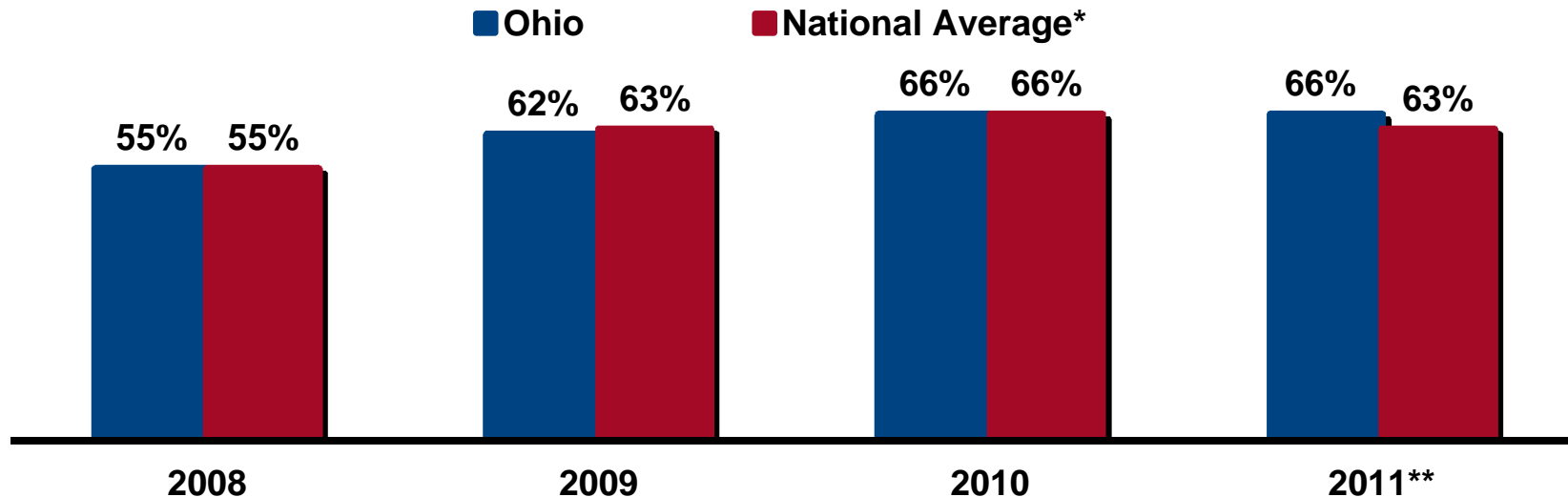
Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



State and National Trends in Residential Broadband Adoption

Home broadband adoption rates 2008 - 2011

From 2008 to 2011, Ohio experienced an 11 percentage points increment in broadband adoption, compared to national average increment of 8 percentage points.



*2008-2010 National Source: Smith, Aaron, Home Broadband 2010, Pew Internet & American Life Project, August 11, 2010, <http://pewinternet.org/Reports/2010/Home-Broadband-2010.aspx>

**2011 National Source: Federal Communications Commission, International Bureau. (2011). *International broadband data report* retrieved from http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0520/DA-11-732A1.pdf

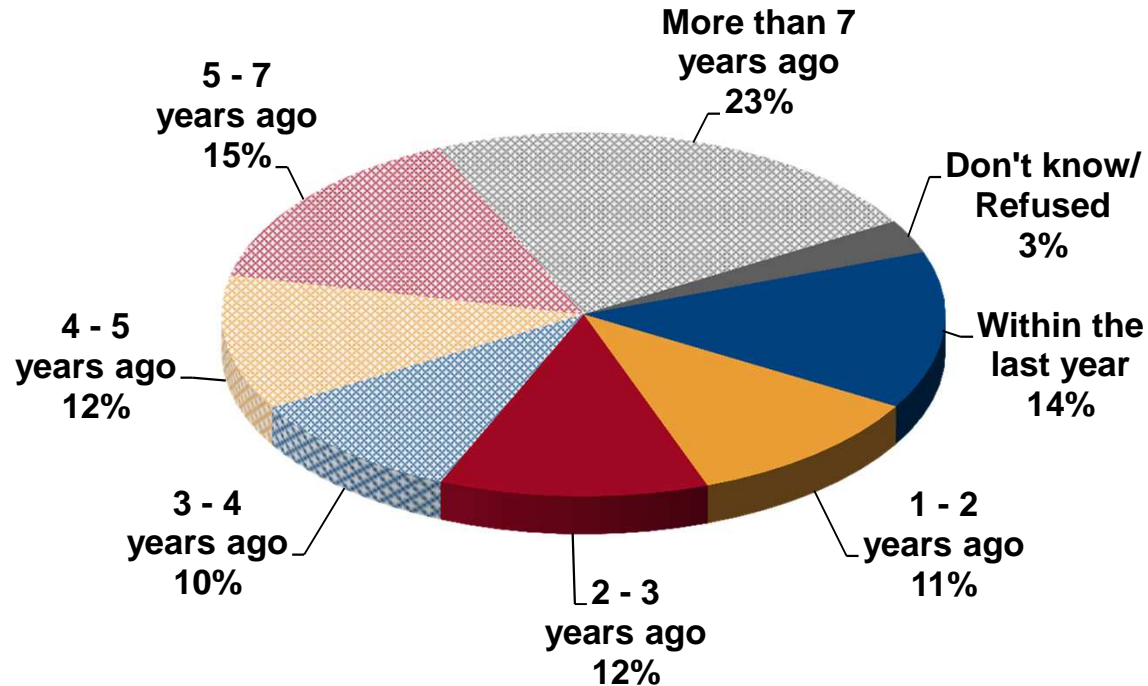
Q: Which of the following describe the type of Internet service you have at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

State Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



When Ohio Residents Subscribed to Broadband

Among Ohio residents with broadband service at home



Statewide, nearly two-fifths of Ohio residents (37%) say they first began subscribing to home broadband service since 2008; this translates into more than 2.1 million adults who say they have subscribed to broadband in the last three years.

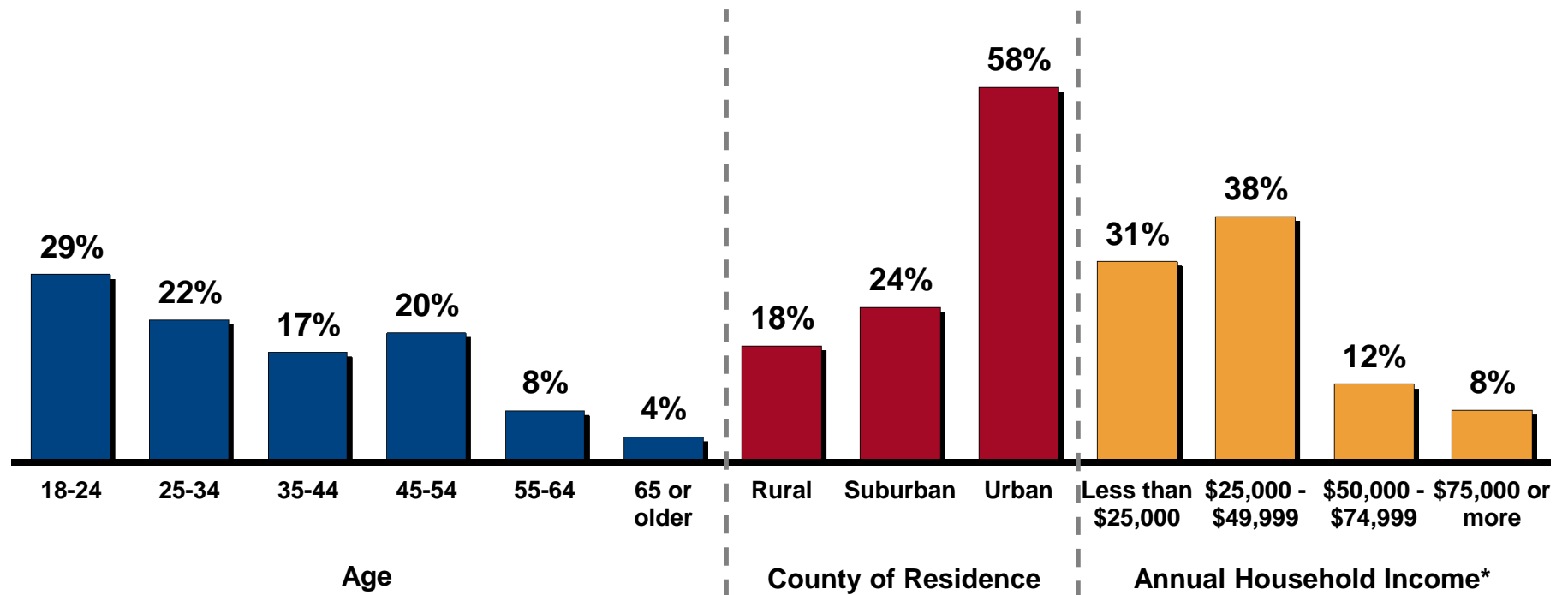
Q: When did you first begin subscribing to broadband service?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Profile of New Broadband Subscribers

Among Ohio residents who subscribed to home broadband service in the past year



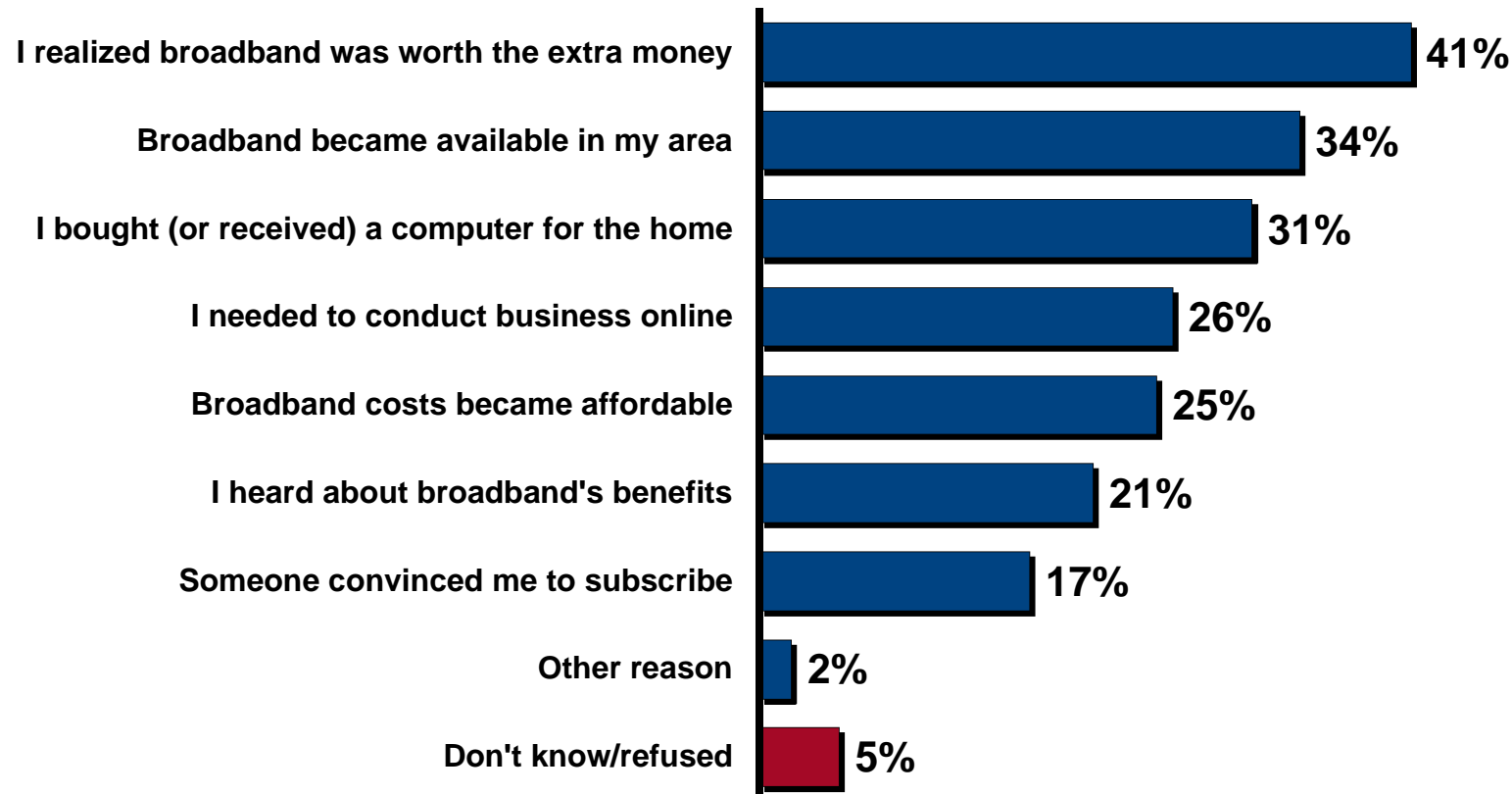
* 11% refused to indicate income
 Q: When did you first subscribing to broadband service?
 (n=107 OH residents who first subscribed to broadband service within past year)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Why Ohio Residents Subscribe to Broadband

Among Ohio residents with a broadband connection at home*



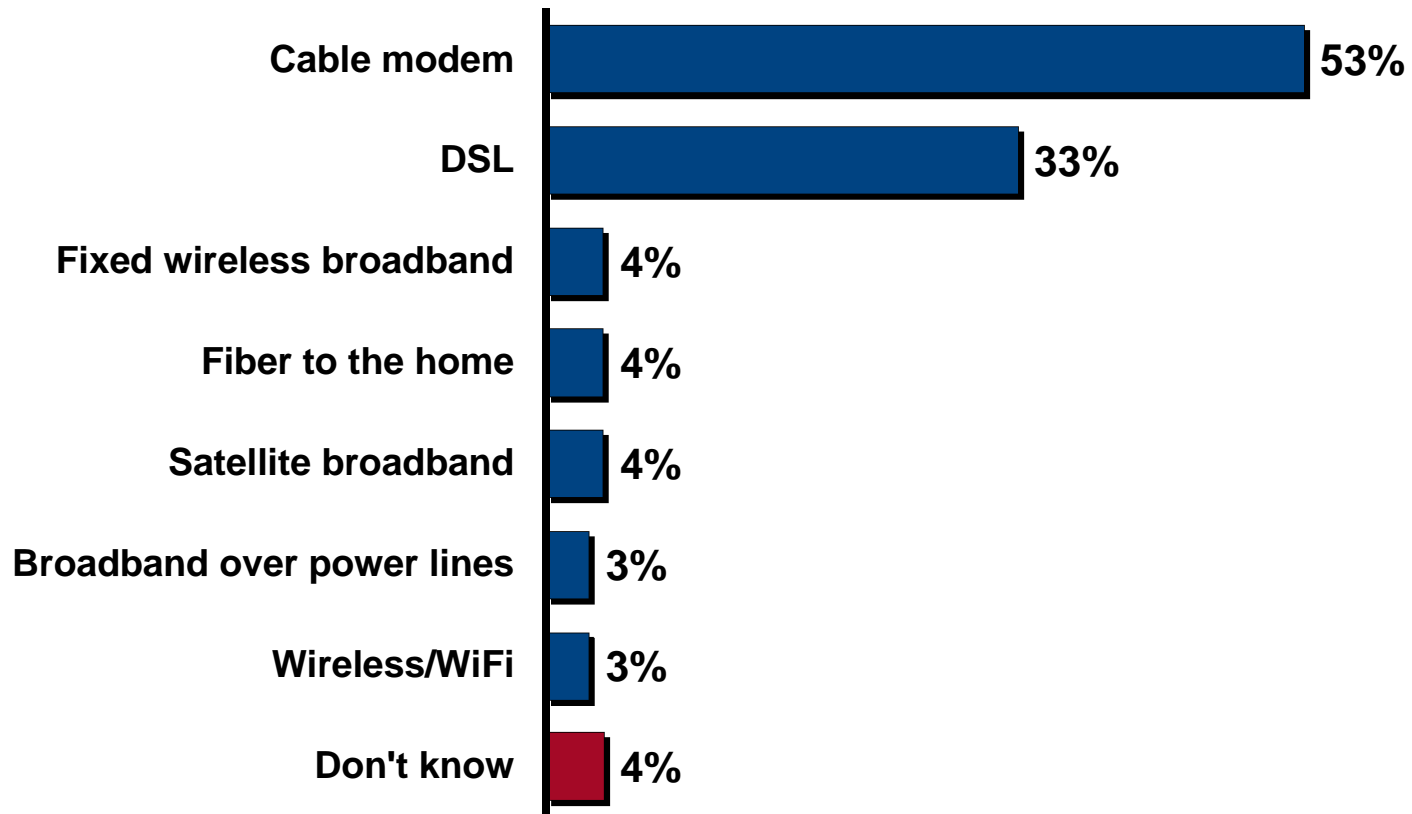
*Percentages do not add up to 100% because respondents could give multiple responses.
Q: Which of the following contributed to your decision to subscribe to broadband service?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Types of Broadband Service That Ohio Residents Use

Among Ohio residents with a broadband connection at home*



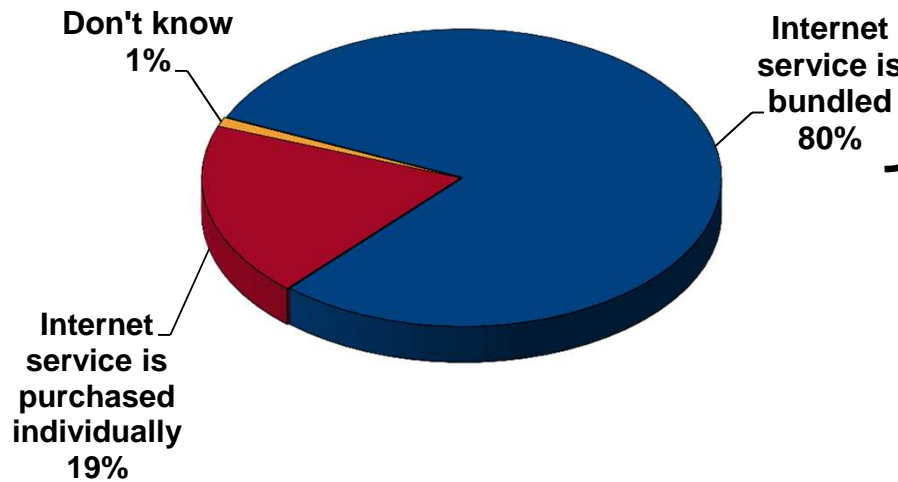
*Percentages do not add up to 100% because respondents could give multiple responses.
Q: Which of the following describes the broadband service you have at home?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

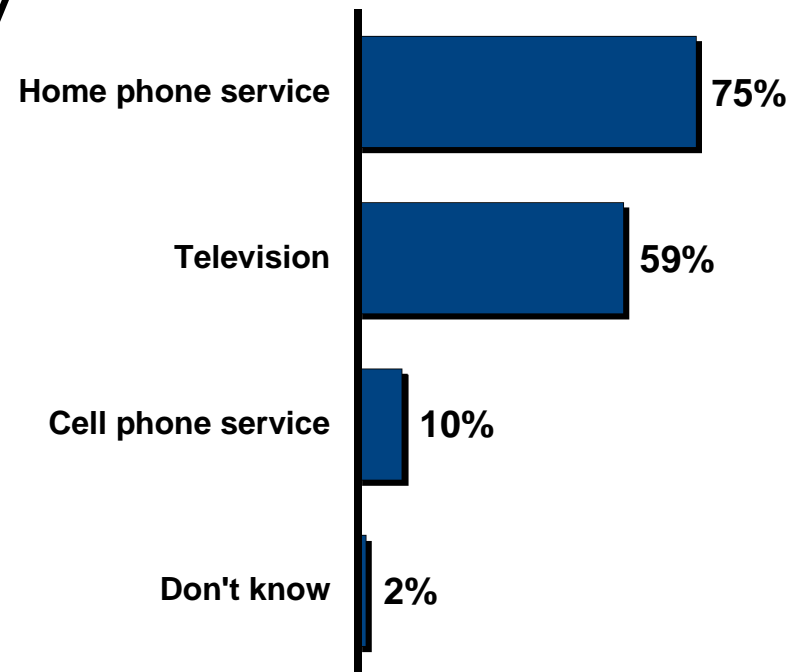


Bundling Services Offered by Internet Providers

Among Ohio residents with Internet access at home



Other services bundled with home Internet service



Q: Does your Internet provider also provide your home with other service, such as your telephone, cell phone service, or television? This is often called “bundling.” (n=881 OH residents with Internet service at home) and
Q: What other services are bundled with your home Internet service? (n=697 OH residents with bundled Internet access)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



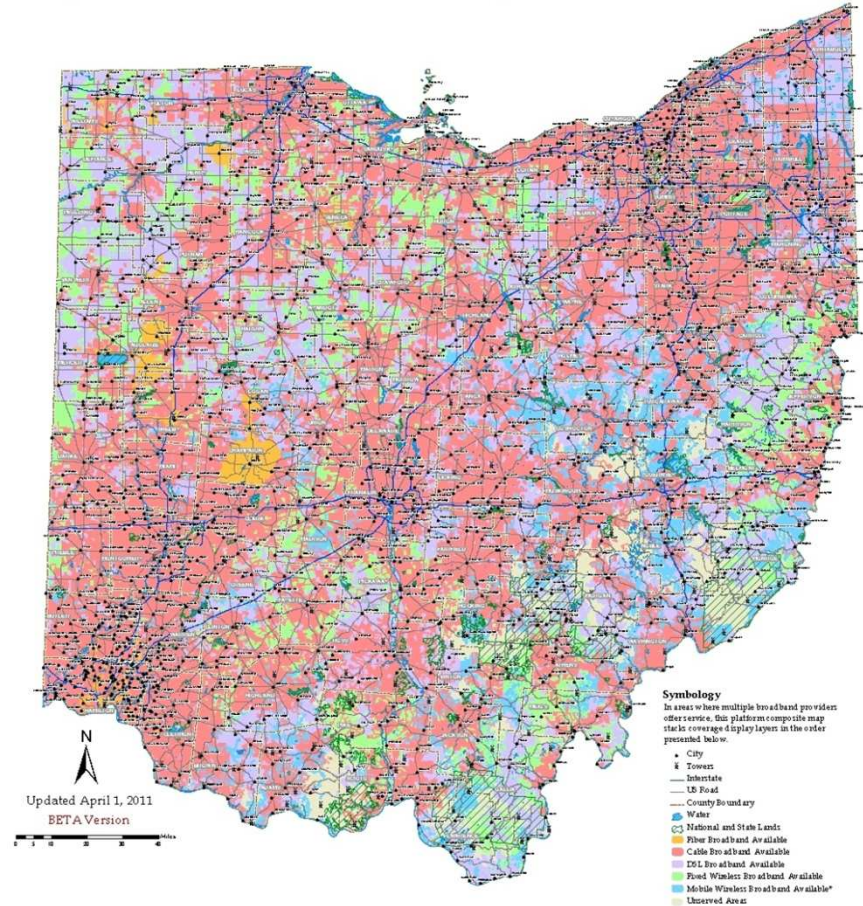
Ohio Broadband Availability

According to Connect Ohio's provider-validated Broadband Service Inventory, 1.7% of households do not have terrestrial fixed broadband service access.

*As required by the US Department of Commerce's State Broadband Data and Development Grant Program, if broadband service is available to at least one household in a census block, then for mapping purposes, that census block is reported to have some level of broadband availability. As such, broadband availability at an exact address location cannot be guaranteed. Providers supplying more specific data than census block are displayed as such.

This map represents area of broadband service availability determined by ongoing, in-depth technical analysis of provider networks and accommodations for the impact of external factors on service quality. Satellite broadband services may also be available.

Map users are encouraged to participate in improving broadband data granularity through data validation and field testing efforts. Learn more about this and other broadband mapping facts at www.connectohio.org



"This map is not a guarantee of coverage, contains areas with no service, and generally predicts where outdoor coverage is available. Equipment, topography and environment affect service.

Connect Ohio has worked with broadband providers throughout the State to identify the gaps in broadband service - the first step in a statewide effort to "fill the gaps" for 100% broadband availability.

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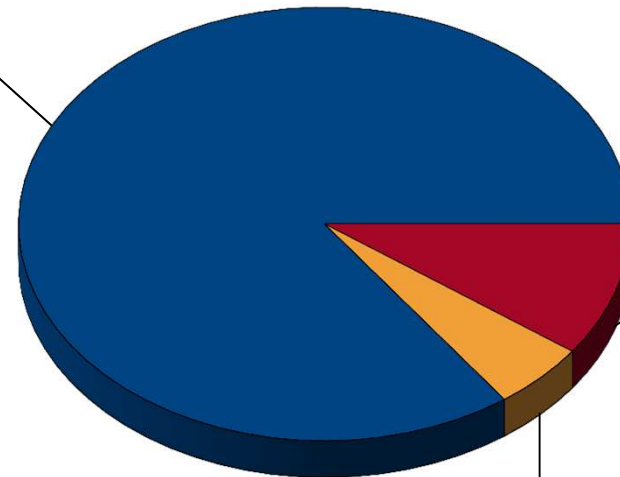
Perceptions of Broadband Availability in Ohio

Statewide, 5% of Ohio residents report that broadband service is not available where they live, and an additional 10% do not know whether broadband service is available.

According to Connect Ohio's provider-validated Broadband Service Inventory, 1.7% of households do not have terrestrial fixed broadband access.

Awareness of broadband availability among Ohio residents

Have broadband service, or say broadband is available where they live
85%



Don't know if broadband is available where they live
10%

Say broadband is not available where they live
5%

Q: To the best of your knowledge, is broadband or high-speed Internet service available in the area where you live?
(n=1,201 OH residents)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

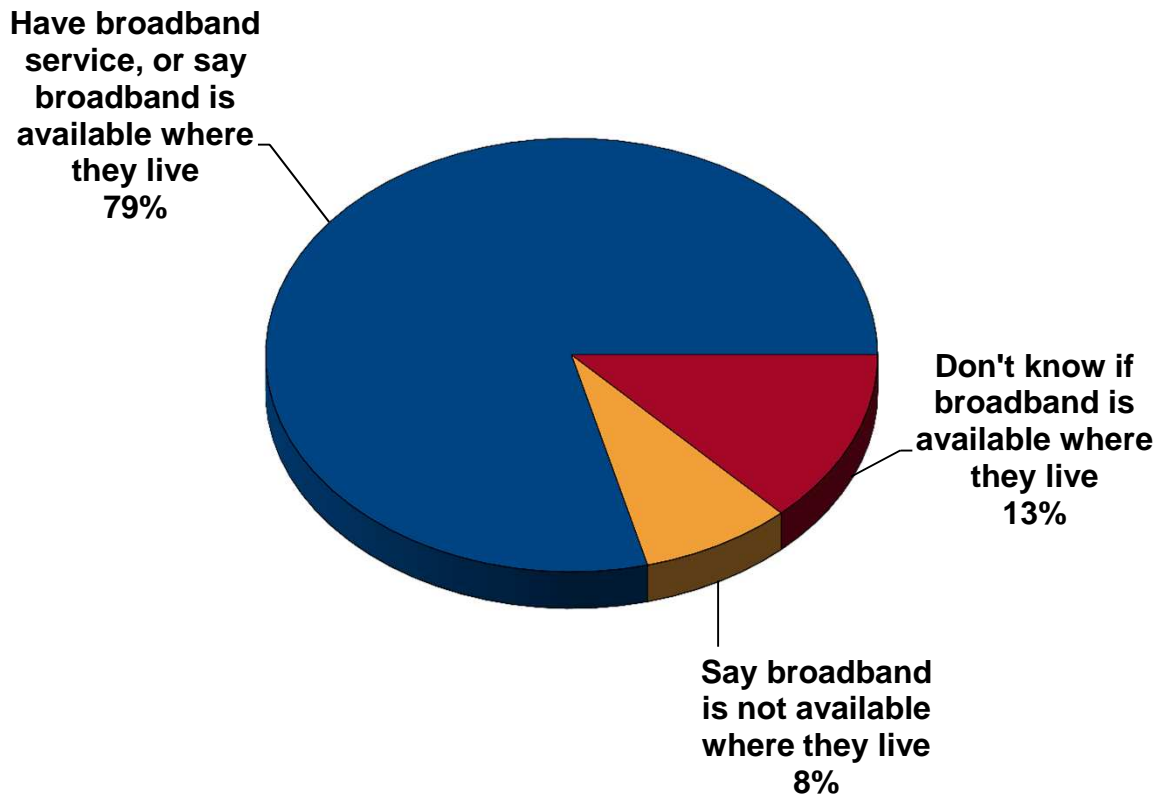


Perceptions of Broadband Availability in Rural Ohio

In rural Ohio, 8% of residents report that broadband service is not available where they live, and another 13% do not know whether broadband service is available.

According to Connect Ohio's provider-validated Broadband Service Inventory, 3.7% of rural households do not have terrestrial fixed broadband access.

Awareness of broadband availability among rural Ohio residents



Q: To the best of your knowledge, is broadband or high-speed Internet service available in the area where you live?
(n=401 rural OH residents)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Computer Ownership and Internet Adoption

www.connectohio.org



Ohio Residents With a Computer in Their Household

Percent of all Ohio residents who own a computer



**Statewide, 80% of all Ohio residents own a home computer.
This translates into nearly 1.8 million adults without a home computer.**

Q: Do you have a computer at home?
(n=1,201 OH residents)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org

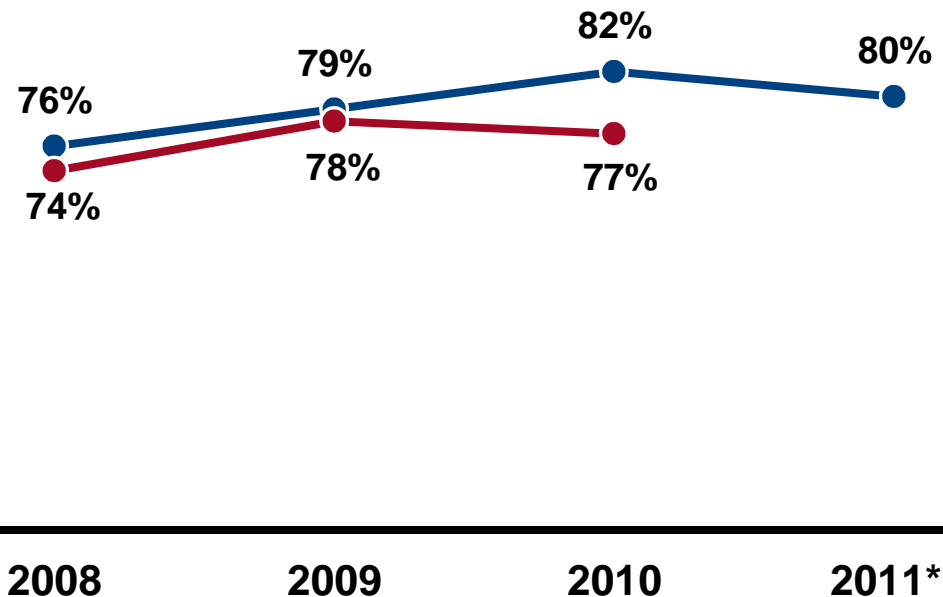


Ohio Residents With a Computer in Their Household

Percent of all Ohio residents who own a computer

—●—Ohio —●—National Average*

Statewide, computer ownership among Ohio residents has increased by 4 percentage points since 2008.



*2008-2010 National Source: Pew Internet & American Life Project, Usage Over Time, Computer Use, available at <http://www.pewinternet.org/Static-Pages/Trend-Data/Usage-Over-Time.aspx>

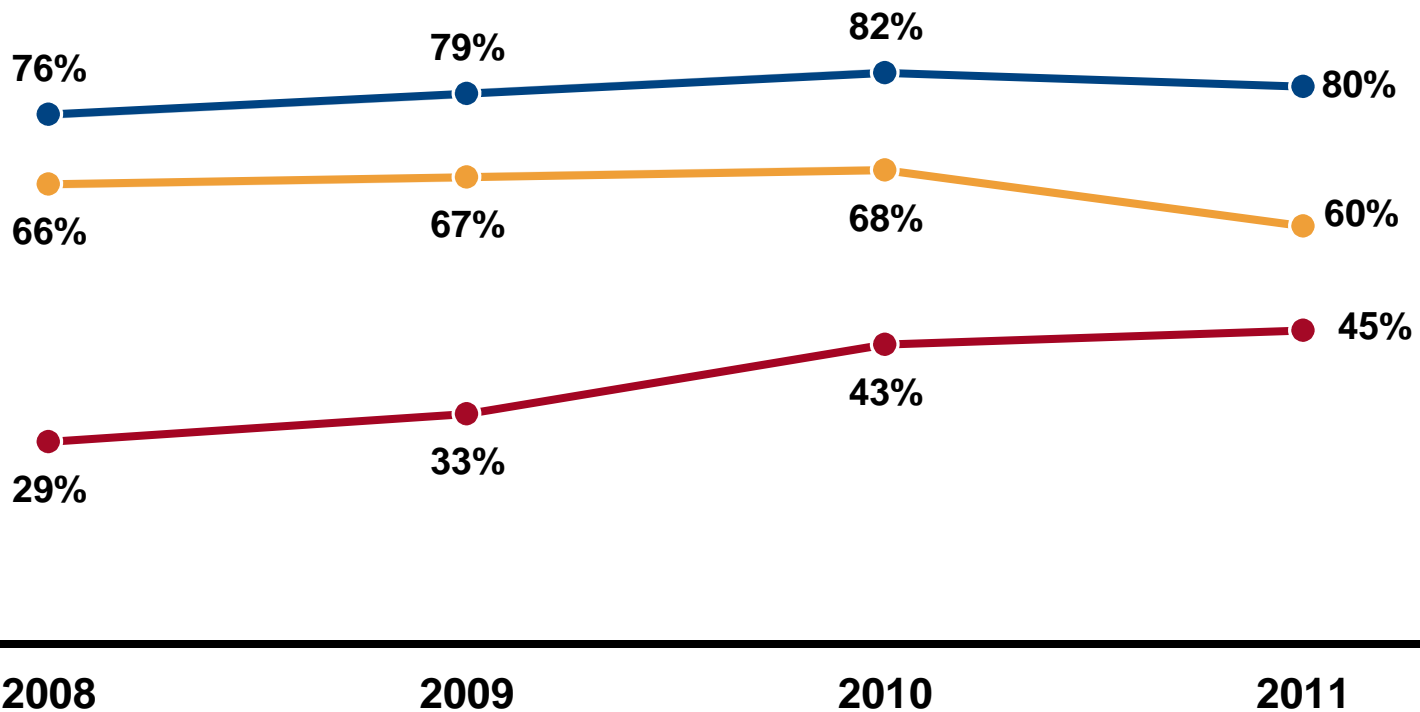
**2011 National Source: Not Available
State Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org

Q: Do you have a computer at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)



Computer Ownership Trends in Ohio

—●— Desktop computer ownership —●— Laptop computer ownership —●— Computer ownership (any)

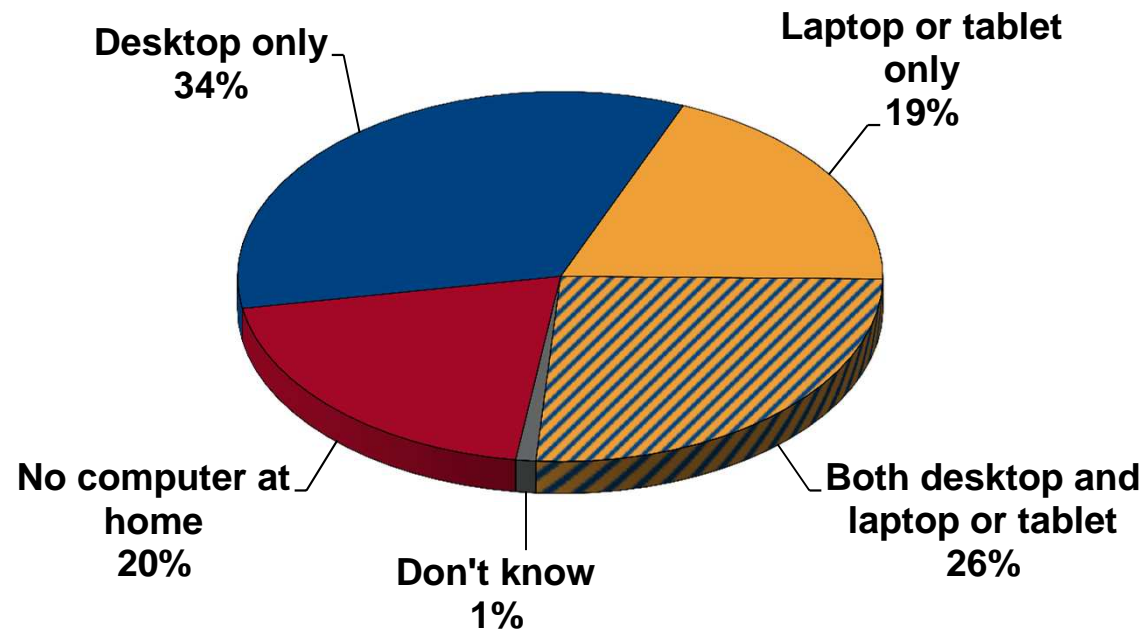


Q: Does your household have a computer? and
Q: What type of computer do you have at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org

Types of Computers Ohio Residents Have at Home

Computer ownership among Ohio residents



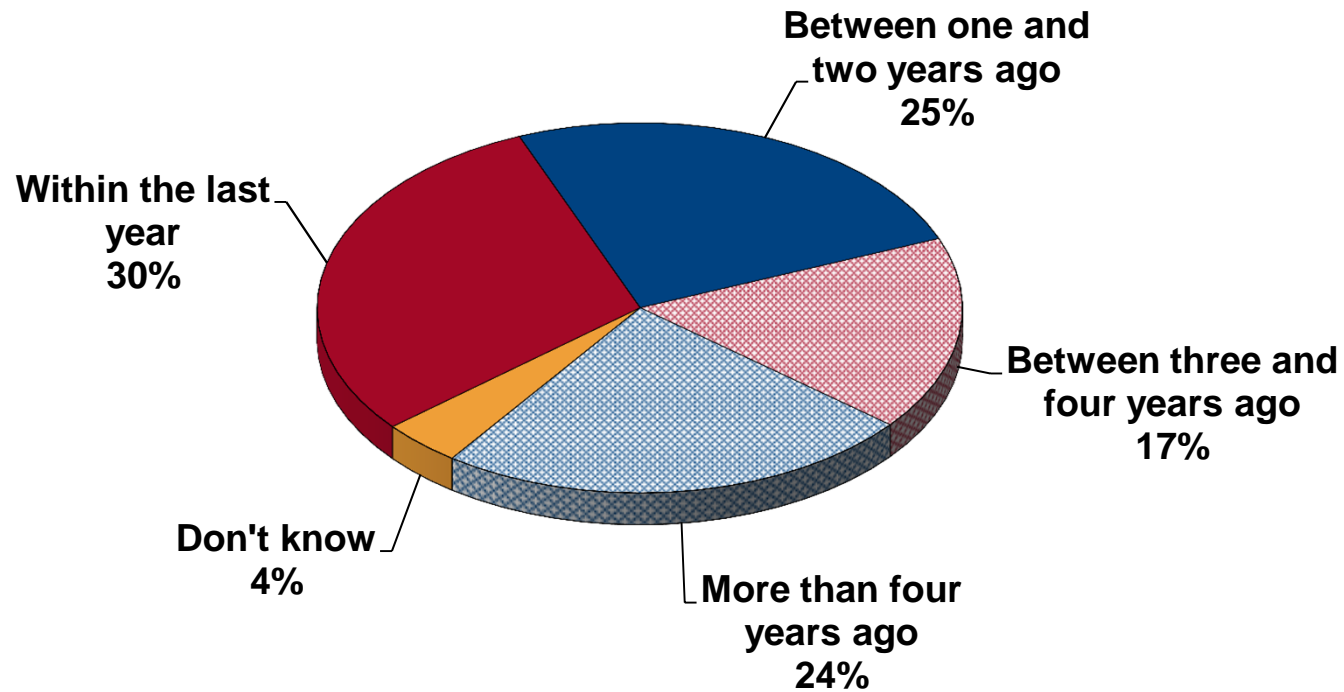
Q: What type of computer do you have at home?
(n=1,201 OH adult residents)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



When Residents Purchased Home Computers

When Ohio computer owners purchased their home computers



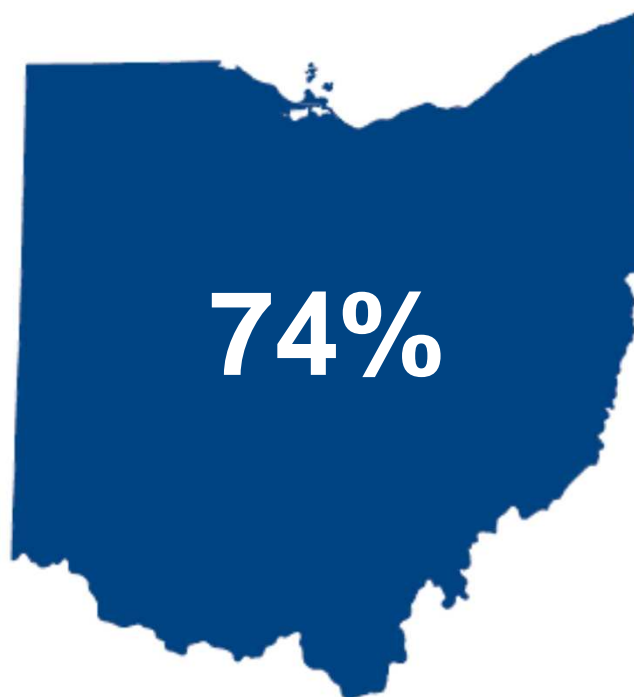
Q: When was the last time you purchased a home computer?
(n=954 OH residents with computers in their household)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Ohio Residents With Home Internet Service (Broadband or Dial-Up)

Percent of all Ohio residents who subscribe to either dial-up or broadband Internet service



**Statewide, 74% of all residents have home Internet access.
This translates into more than 2.2 million adults without home Internet access.**

Q: Do you subscribe to the Internet at home?
(n=1,201 OH residents)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org

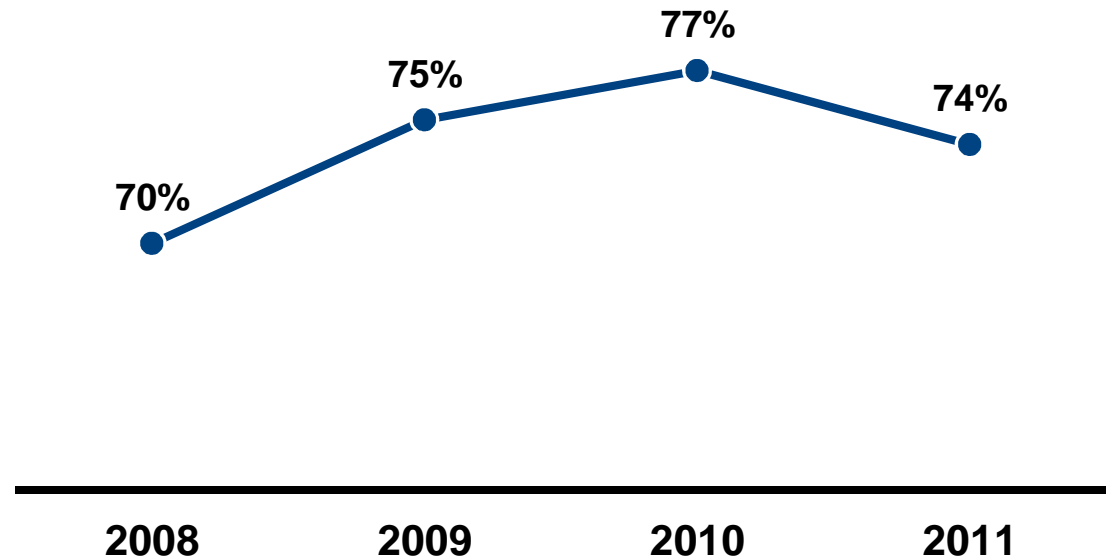


Trends in Home Internet Adoption in Ohio (Either Dial-Up or Broadband)

In Ohio, 74% of residents report that they subscribe to home Internet service.

Statewide, home Internet adoption (dial-up or broadband) among Ohio residents has grown by 4 percentage points since 2008.

Percent of all Ohio residents who subscribe to either dial-up or broadband Internet service



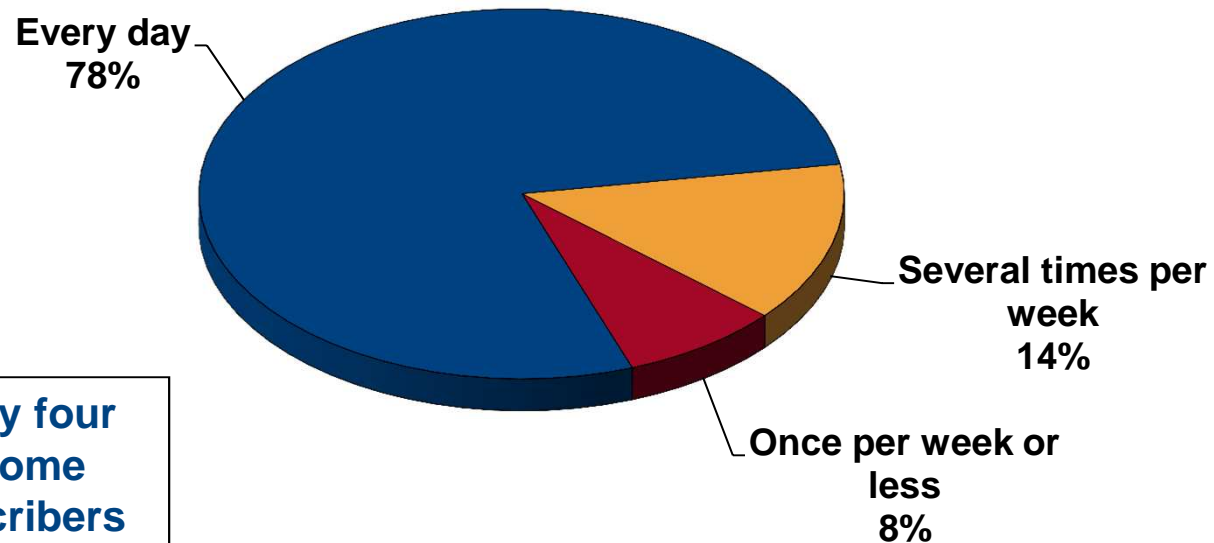
Q: Do you have an Internet connection at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Frequency of Home Internet Use

When Ohio residents with home Internet access go online



In Ohio, nearly four out of five home Internet subscribers (78%) access the Internet every day.

Q: How often, if ever, do you go online?
(n=881 OH residents with Internet service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

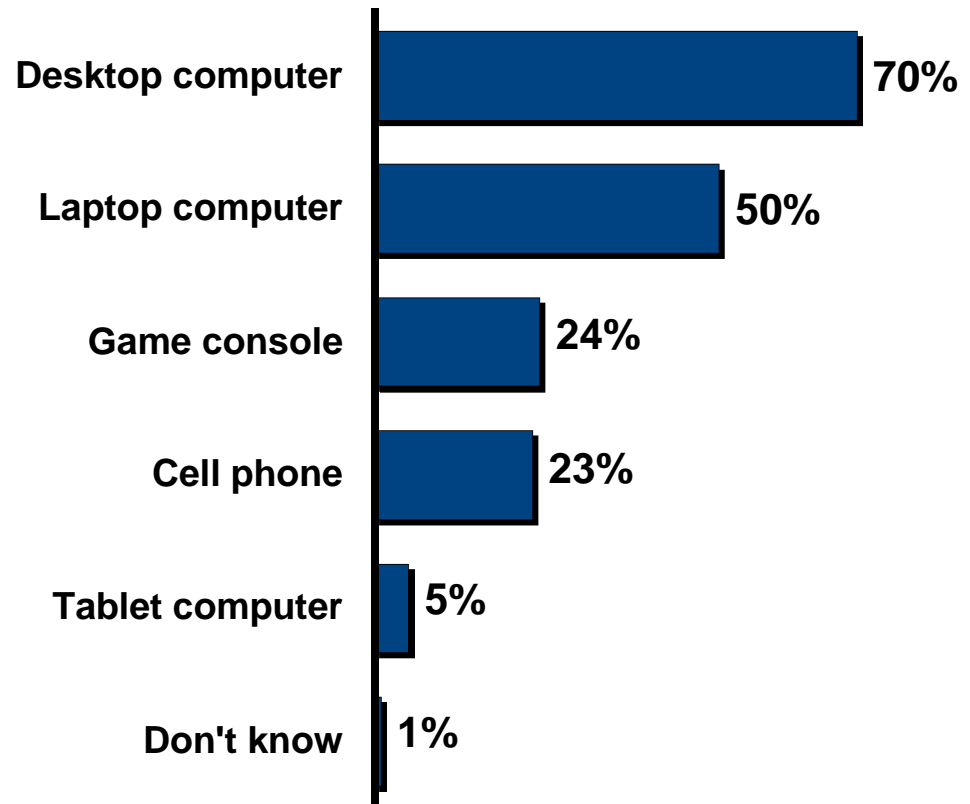


How Ohio Residents Access the Internet at Home

Among Ohio residents with home Internet service*

Seven out of ten Ohio residents with Internet service at home use a desktop computer to access the Internet.

Nearly a quarter of Ohio residents with Internet service at home use a cell phone or a gaming console to access the Internet.



*Respondents could provide more than one answer
Q: When you are at home, which of the following devices do you use to access the Internet?
(n=881 OH residents with Internet service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

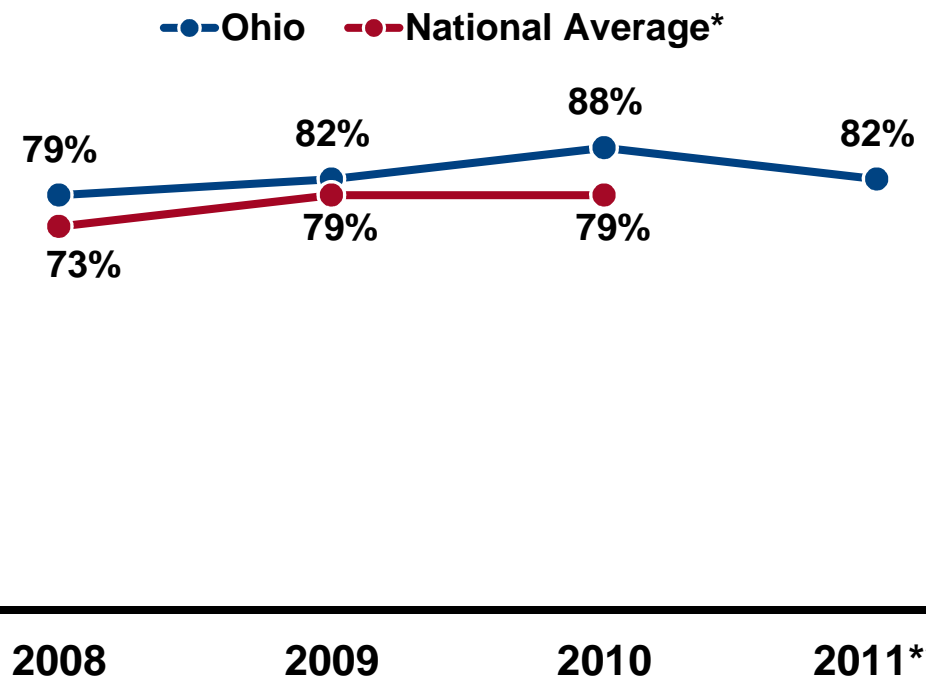


Trends in Internet Use

(Either At Home or Some Other Place)

Statewide, Internet use (at home or some other place) among Ohio residents has increased by three percentage points since 2008.

Ohio residents who access the Internet from home or some other place



Q: At what location do you have access to the Internet?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

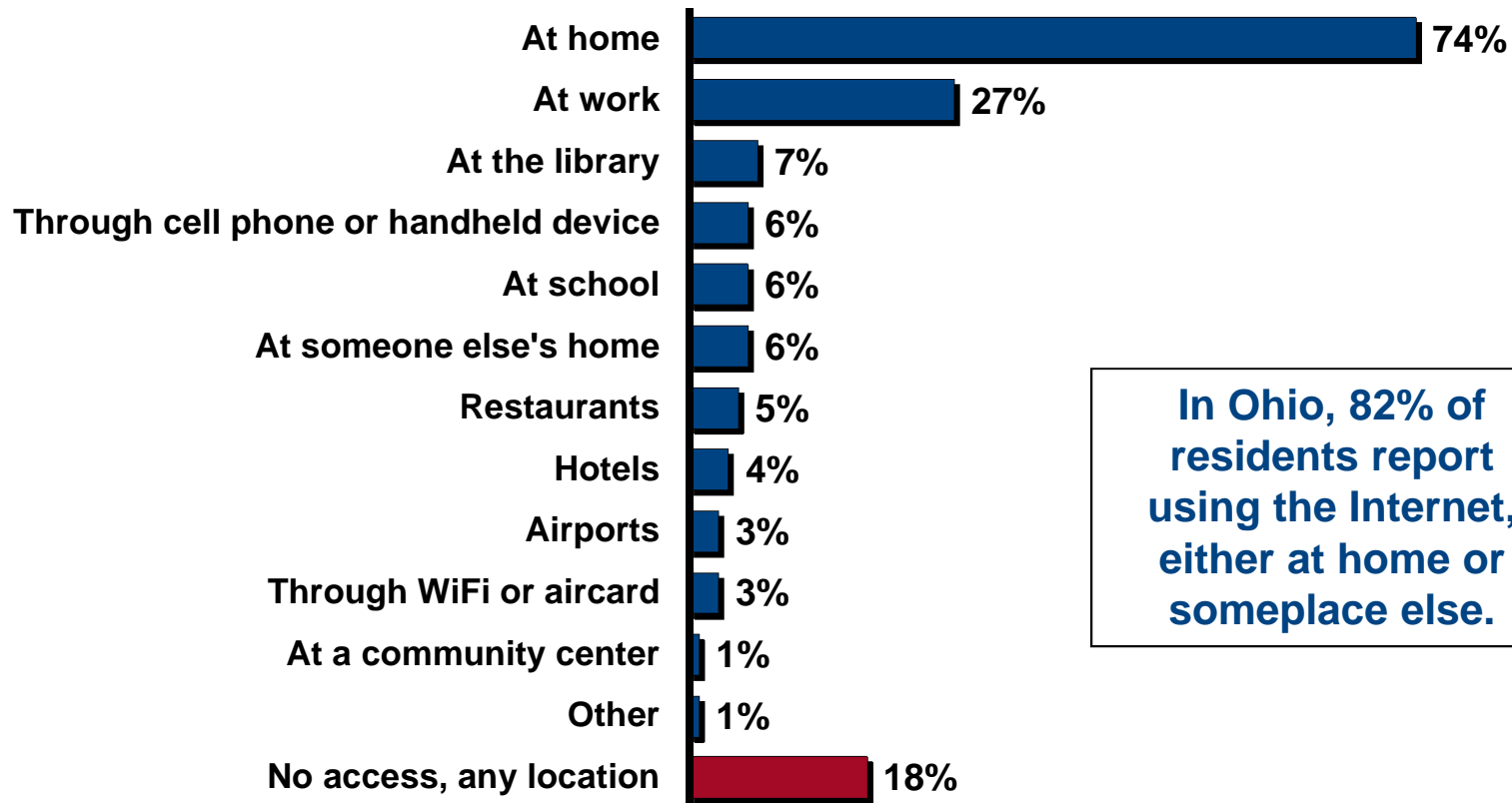
*2008-2010 National Source: Pew Internet & American Life Project, Usage Over Time, Internet Use, available at <http://www.pewinternet.org/Static-Pages/Trend-Data/Usage-Over-Time.aspx>

**2011 National Source: Not Available
State Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Where Ohio Residents Access the Internet

Where Ohio residents access the Internet



Q: At what locations do you have access to the Internet?
(n=1,201 OH residents)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Download Speeds and Prices Paid by Ohio Internet Subscribers

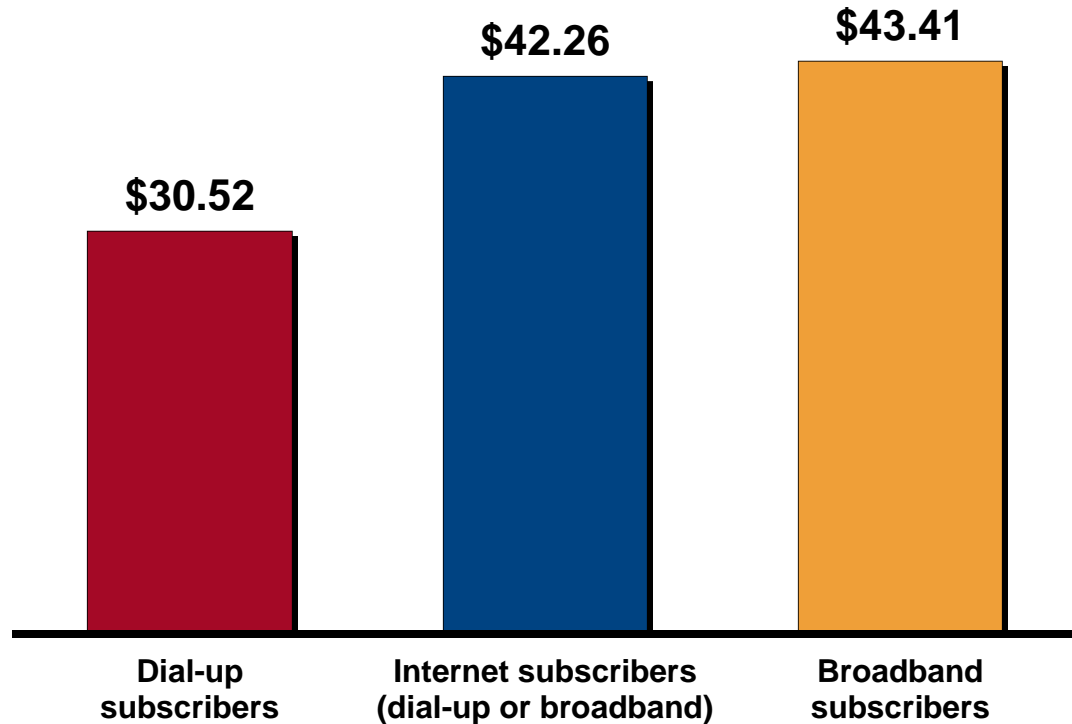
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Average Monthly Price Paid for Internet Service by Ohio Residents

Average price paid for home Internet service

Ohio broadband subscribers pay an average of \$43.41 per month for their home broadband service.



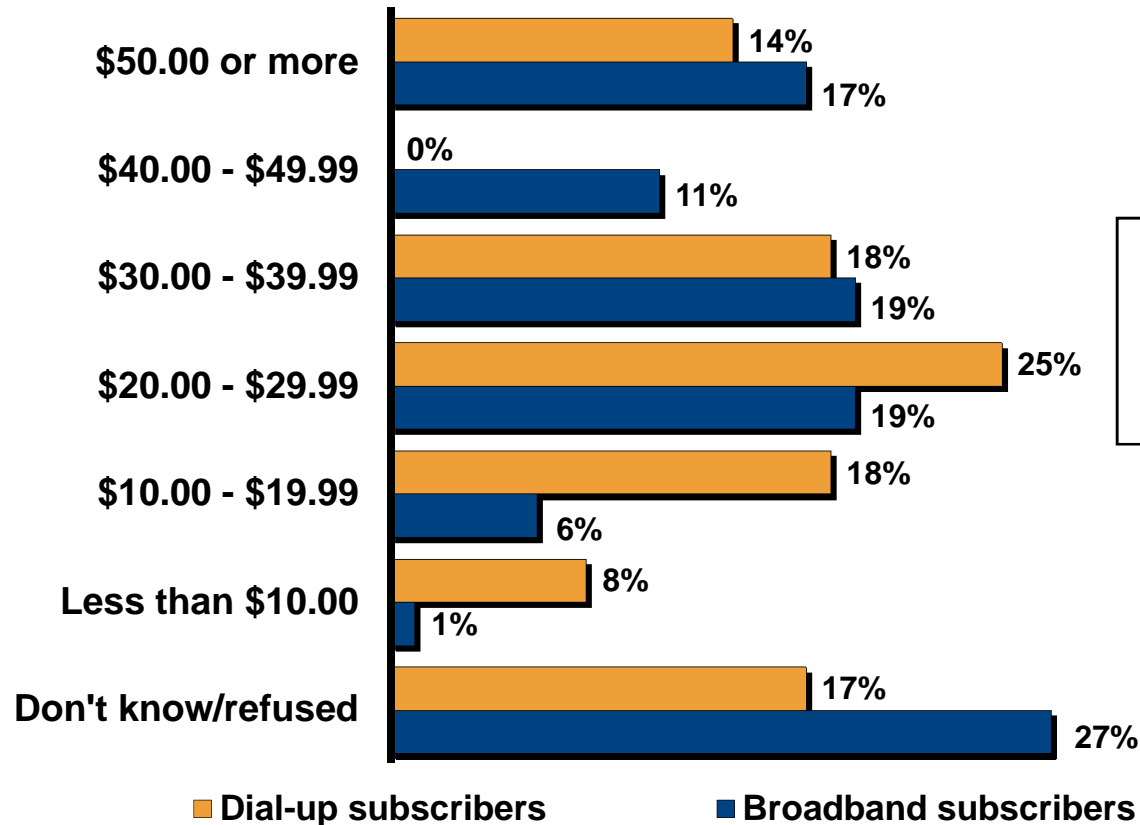
Q: What do you pay each month for your Internet service?
(n=881 OH residents with Internet service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Average Monthly Price Paid for Internet Service by Ohio Residents

Among Ohio residents with home Internet service



On average, Ohio residents pay \$30.52 monthly for dial up service.

Q: What do you pay each month for your Internet service?
(n=881 OH residents with Internet service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

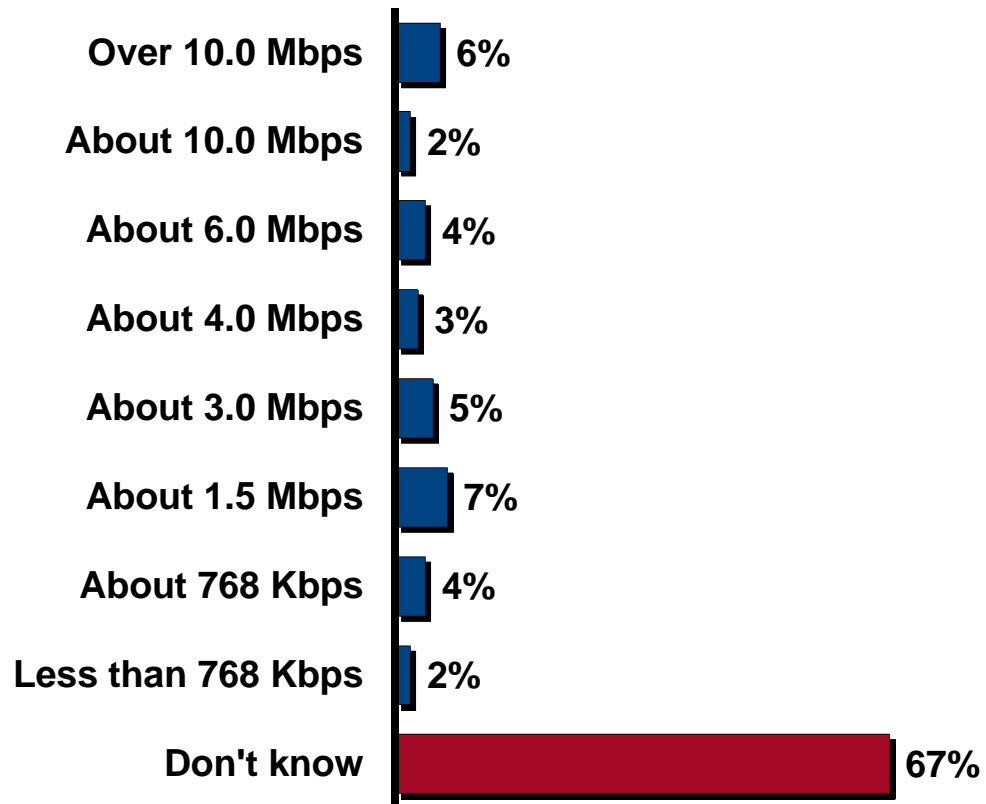


Broadband Download Speed

Among Ohio residents with home broadband service

Statewide, only 33% of broadband subscribers know their advertised download speeds.

The average download speed among broadband subscribers who know their approximate speed is 6.3 Mbps.



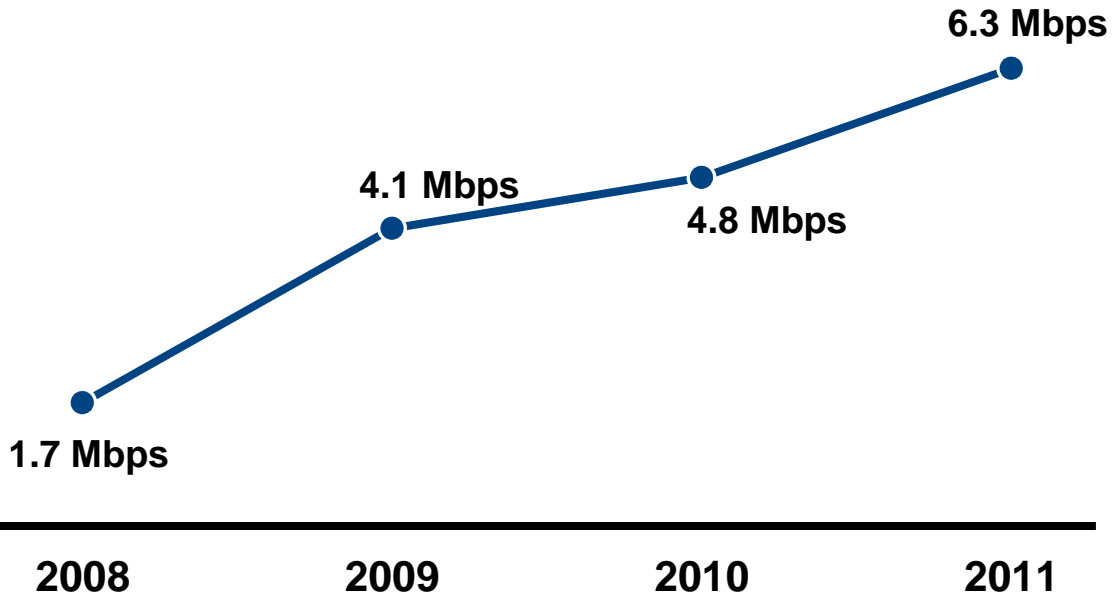
Q: To the best of your knowledge, what is the approximate download speed provided by your Internet service provider?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Trends in Broadband Download Speed

Average download speed (Mbps) among Ohio residents with home broadband service



By comparison, the average advertised download speed across the United States is 8.0 Mbps*

Q: To the best of your knowledge, what is the approximate download speed provided by your Internet service provider?
(n=658 Ohio residents in 2008; 733 Ohio residents in 2009; 758 Ohio residents in 2010; and 783 Ohio residents in 2011 with broadband service)

*Source: FCC's National Broadband Plan, <http://download.broadband.gov/plan/national-broadband-plan.pdf>
Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org

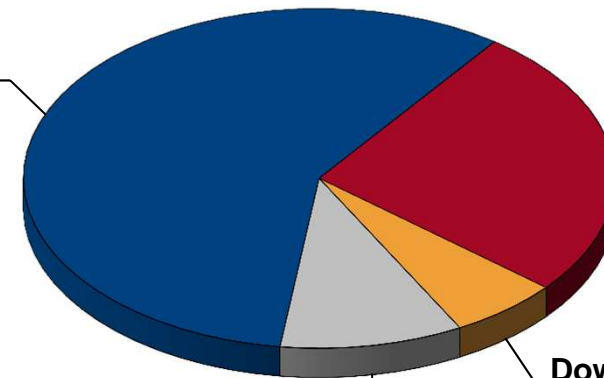
Actual Broadband Speeds vs. Advertised Speeds

Among Ohio residents with home broadband service

Nearly two-thirds of broadband subscribers (64%) say their download speed is the same or faster than what was advertised by their provider.

However, over one-quarter of broadband subscribers (26%, or approximately 1.5 million adults) say that their download speeds are slower than advertised.

Download speeds are about the same as advertised
58%



Download speeds are slower than advertised
26%

Don't know
10%

Download speeds are faster than advertised
6%

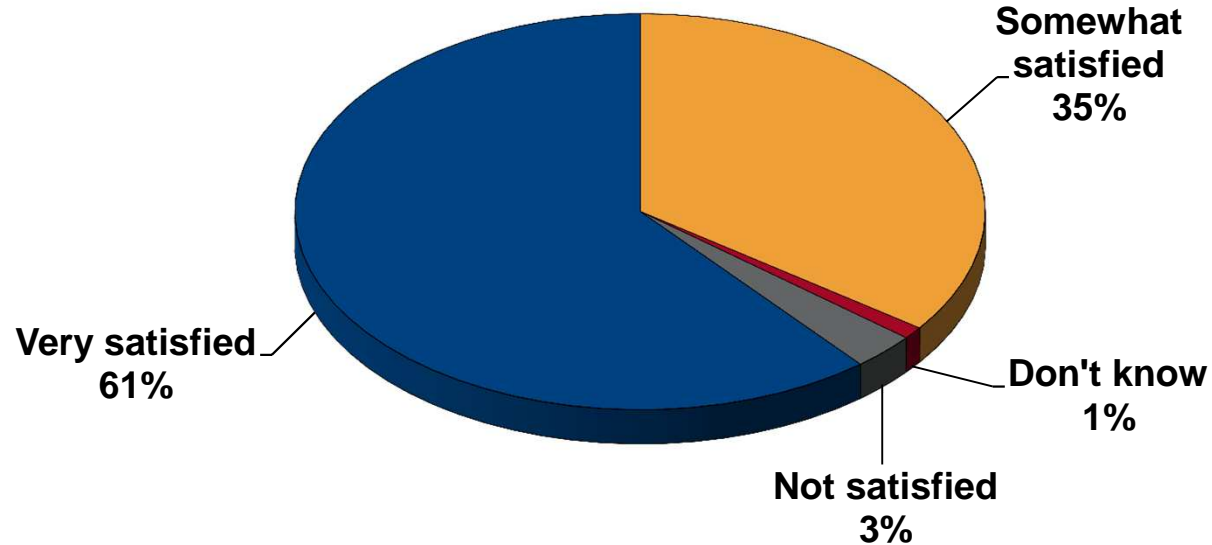
Q: To what extent would you say the actual speeds you receive compare to the speeds advertised by the Internet provider you use?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Satisfaction With Home Broadband Service

Among Ohio broadband subscribers



Overall, only 3% of Ohio broadband subscribers report being dissatisfied with their home broadband service.

Q: Overall, how satisfied are you with your broadband service?
(n=783 OH residents with broadband service at home)

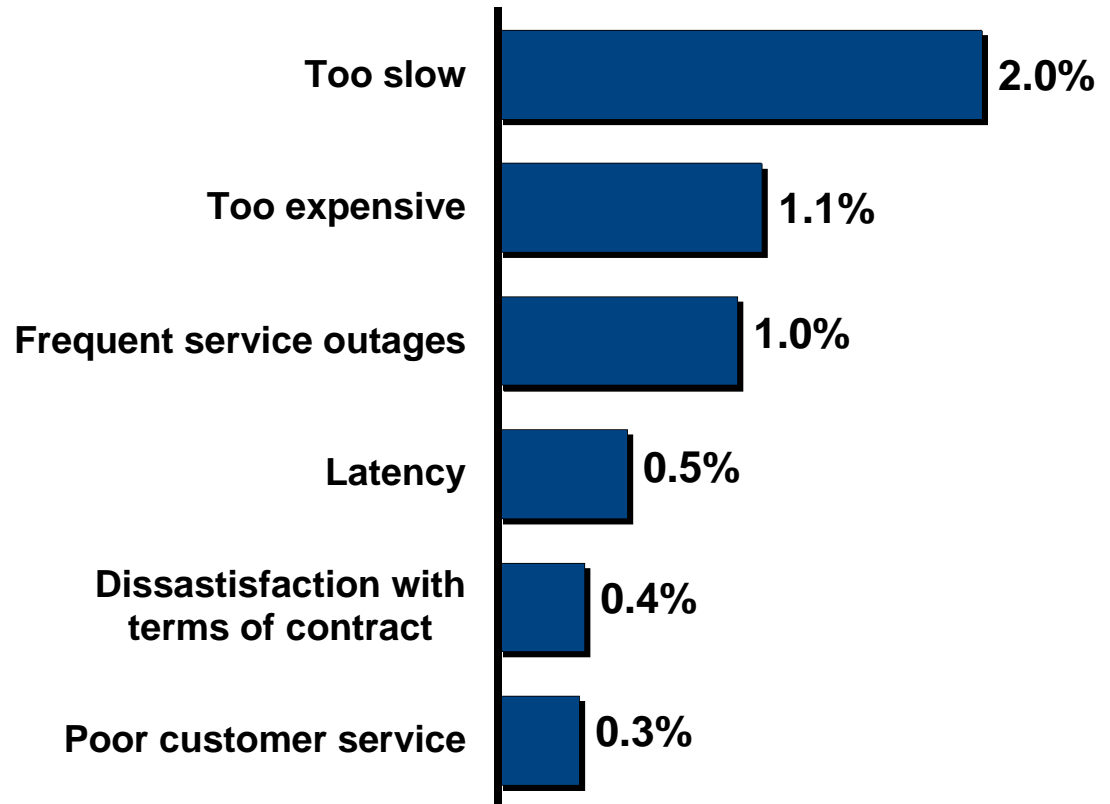
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Reason for Dissatisfaction With Broadband Service

Among Ohio residents with home broadband service*

Overall, 3% of Ohio broadband subscribers report that they are dissatisfied with their current service.



*Respondents could provide more than one answer
Q: What is it about your home broadband service that is not satisfactory?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



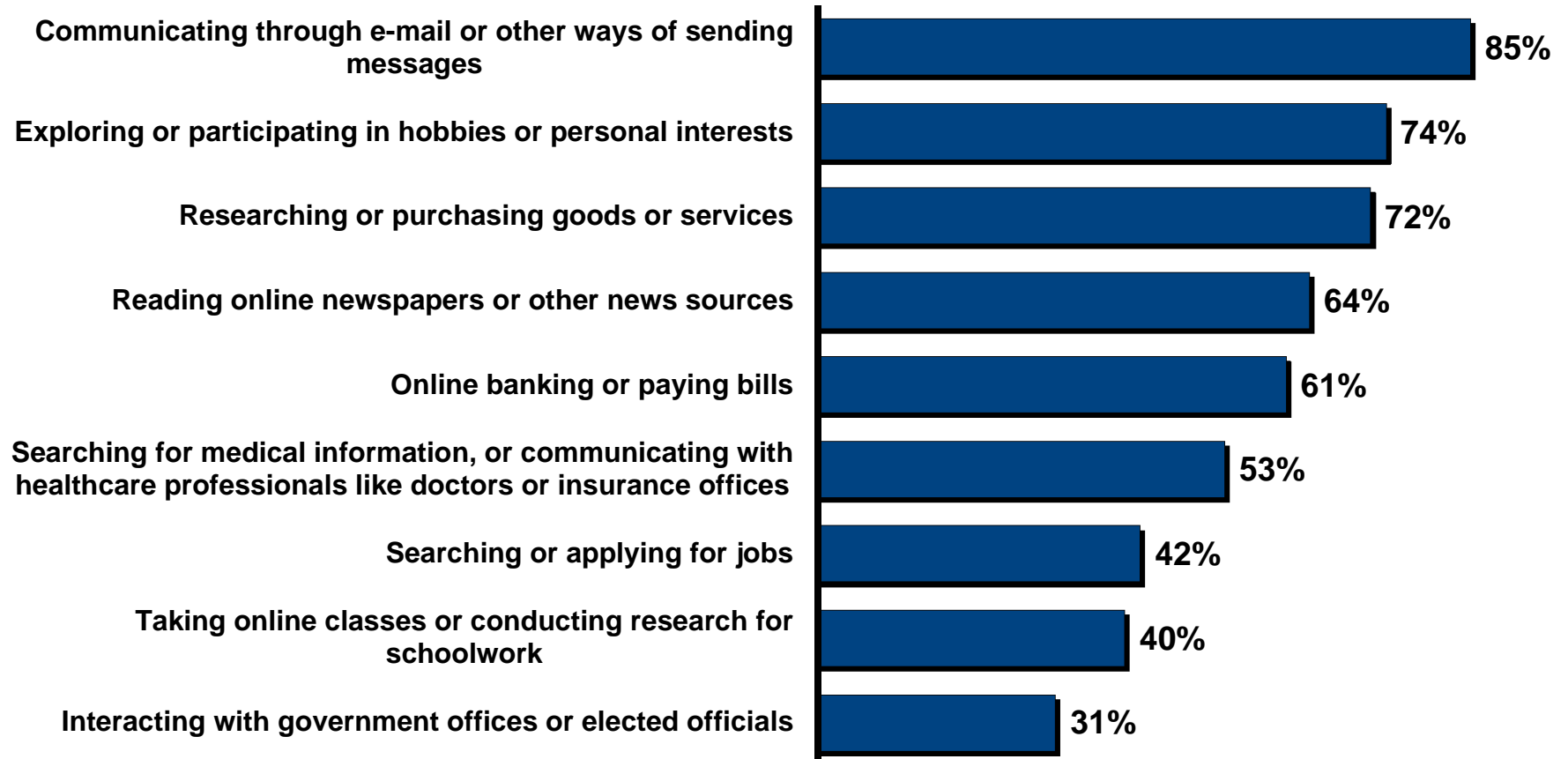
Online Activities Among Ohio Internet Users

www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct following activities online



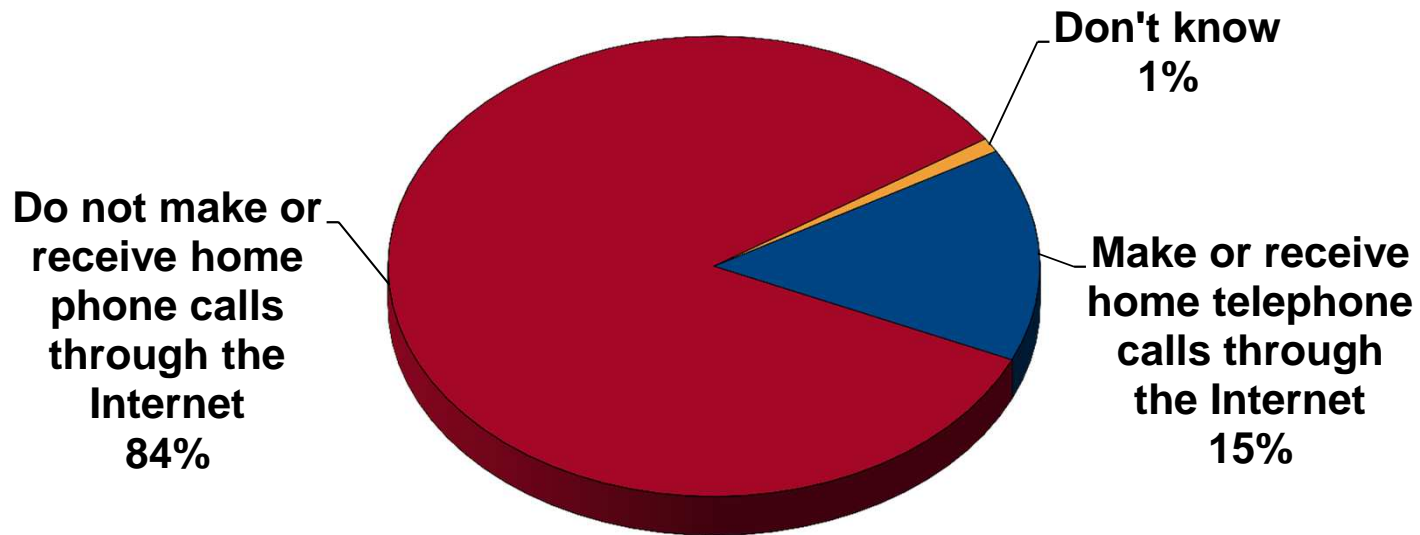
Q: Which of the following activities do you conduct using the Internet?
(n=970 OH Internet users)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Use of the Internet to Make or Receive Phone Calls

Among Ohio residents who have broadband service at home



Statewide, 15% of Ohio residents with broadband make or receive home telephone calls using their Internet connection.

Q: Do you make or receive home telephone calls through your Internet connection?
(n=783 OH residents with broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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Mobile Technology Use



Ohio Residents With a Cellular Phone

Percent of all Ohio residents who own a cellular phone



**Statewide, 80% of adults own a cellular phone.
This translates into approximately 7 million adults who own cellular phones.**

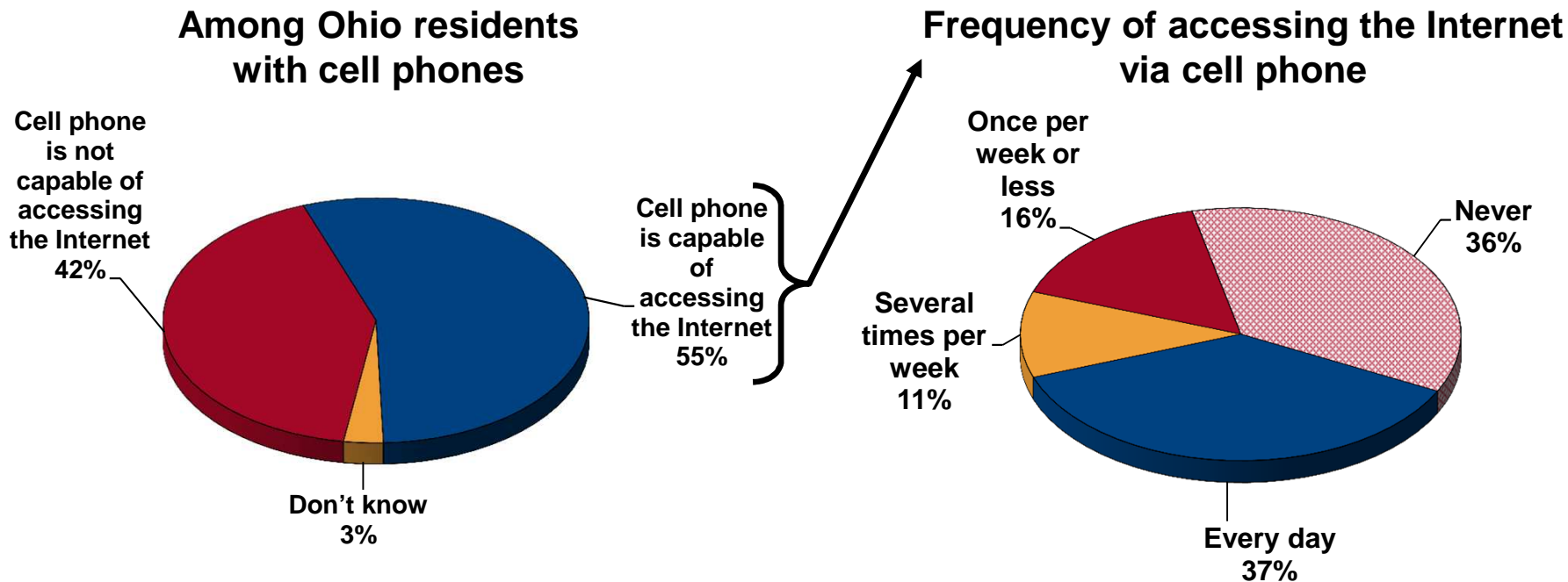
Q: Do you own a cellular phone?
(n=1,201 OH residents)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Mobile Wireless Broadband Use Among Cell Phone Owners

Statewide, 55% of cell phone owners can access the Internet via their cell phones, yet more than one-third of adults who can access the Internet on their cell phone say they never do so.



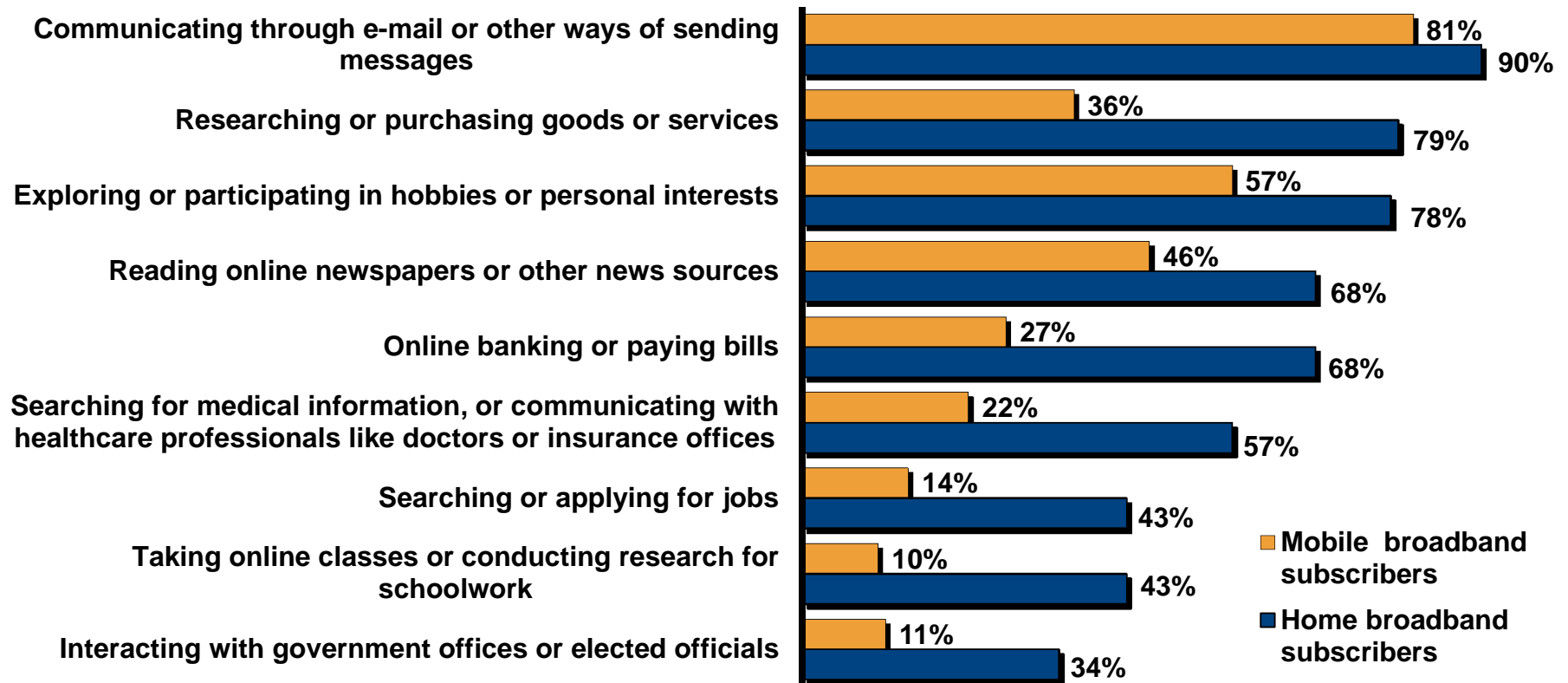
Q: Is your cell phone capable of access the Internet?
(n=945 OH residents with cell phones) and
Q: How often, if ever, do you go online using your cell phone?
(n=513 OH residents who can access the Internet via their cell phone)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Online Activities (Home vs. Mobile Broadband)

Percent of Ohio residents who conduct the following activities via home broadband service or their cell phone

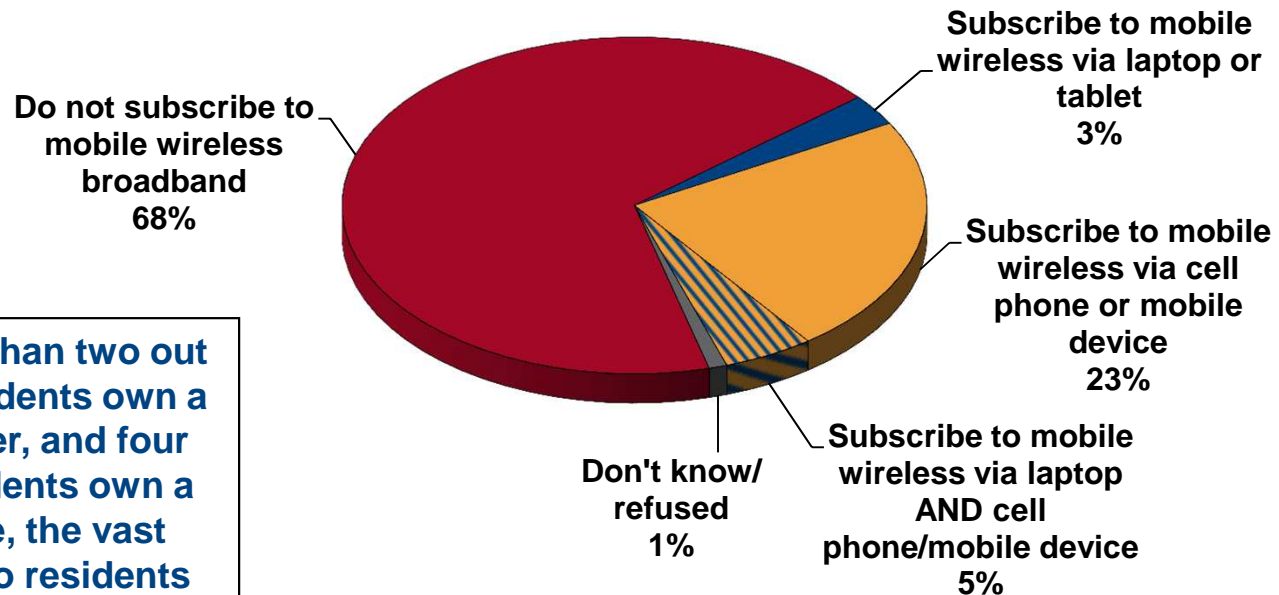


Q: Which of the following types of information do you use the Internet to look for online?
(n=783 OH residents with broadband service at home and n=318 who access the Internet via their cell phone)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

Mobile Wireless Broadband Adoption

Percent of all Ohio residents



Although more than two out of five Ohio residents own a laptop computer, and four out of five residents own a cellular phone, the vast majority of Ohio residents (68%) do not subscribe to mobile wireless broadband.

Q: On your laptop computer, do you subscribe to mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,201 OH residents)

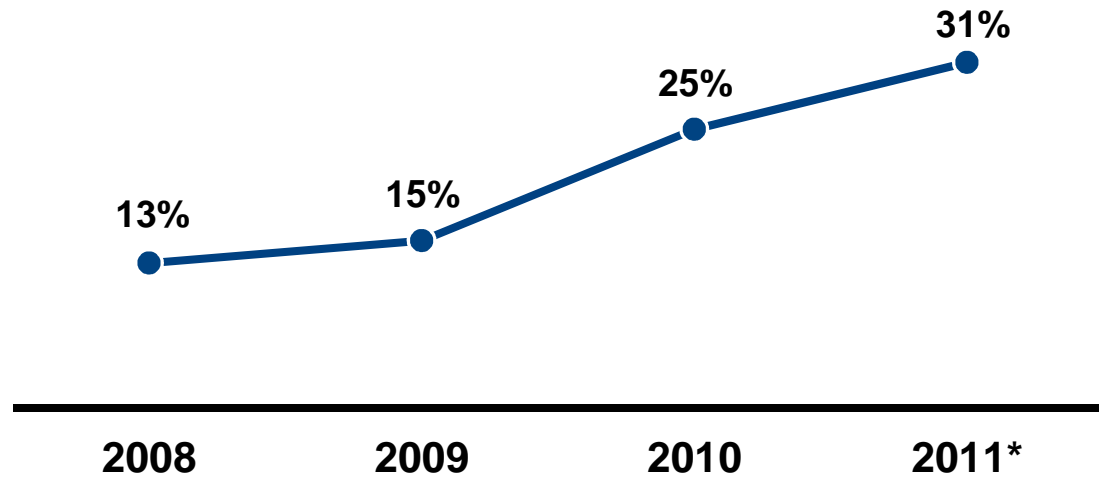
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Mobile Broadband Adoption Trends

Residents who access the Internet via a subscription to wireless broadband service

Since 2008, mobile broadband subscriptions in Ohio have increased from 13% to 31%, a 138% rate of growth.



*Question was asked differently in 2011 than in previous years.

Q: On your laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network?

Q: How often, if ever, do you go online using your cell phone? (2011) and

Q: Do you access the Internet through your cell phone? (2008-2010)

(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;

1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org

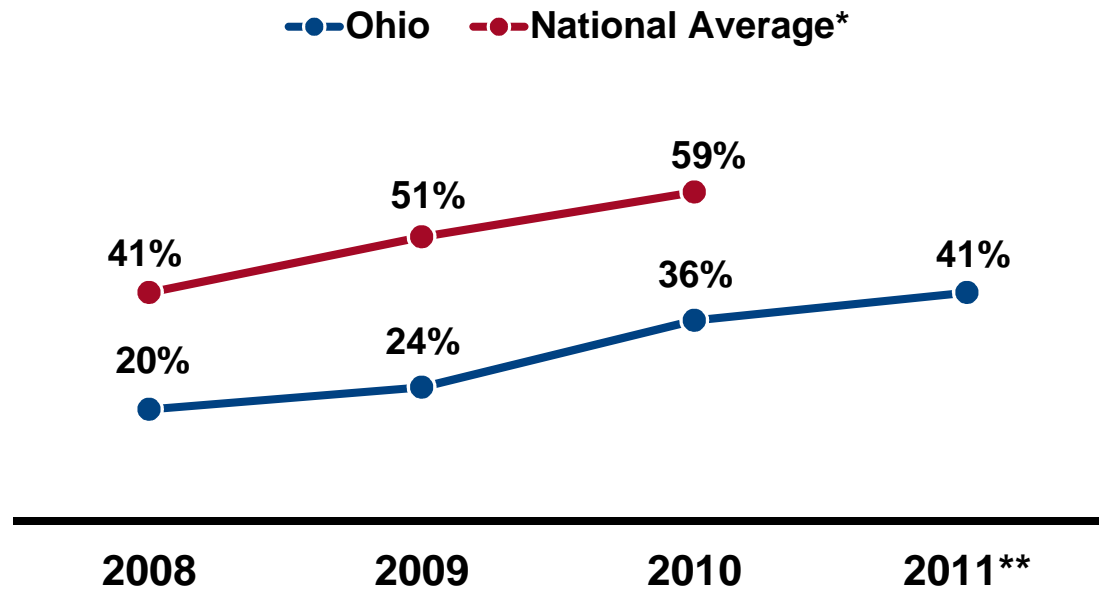


Mobile Broadband Usage Trends

Since 2008, mobile broadband usage (including accessing Wi-Fi “hot spots”) in Ohio has more than doubled.

Ohio’s lower usage of mobile broadband could in part be due to lower levels of laptop computer ownership (45% in Ohio compared to 55% nationwide).**

Residents who access the Internet via a subscription to wireless broadband service or a Wi-Fi connection



**Question was asked differently in 2011 than in previous years.

Q: On your laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network?;

Q: How often, if ever, do you go online using your cell phone? (2011) and

Q: Do you access the Internet through your cell phone? (2008-2010)

Q: Do you use Wi-Fi zones, sometimes called “hot spots,” to access the

Internet with your laptop? (2008-2011)

(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;

1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

*2008-2010 National Source: Pew Internet & American Life Project, Mobile Access 2010,

<http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx>

**2011 National Source: Not Available

State Source: 2008-2011 Connect Ohio

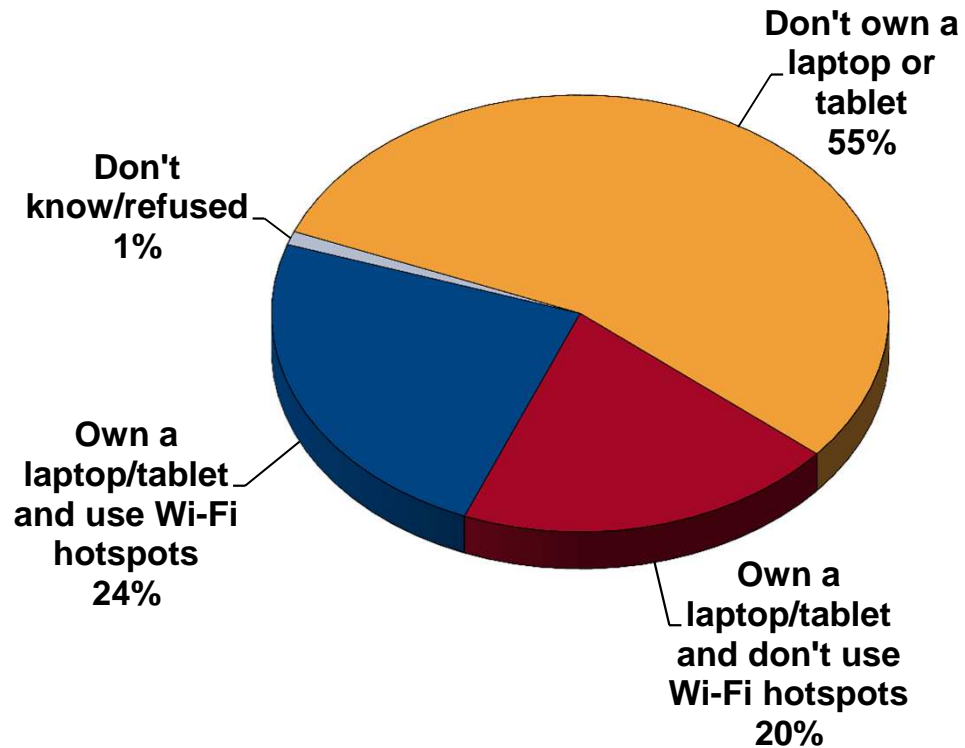
Residential Technology Assessments

www.connectohio.org

Internet Access via Wi-Fi Hotspots

Percent of all Ohio residents

Nearly one-fourth (24%) of Ohio residents go online using the Wi-Fi “hot spots” via their laptop or tablet.



Q: Do you use Wi-Fi zones, sometimes called “hotspots,” to access the Internet with your laptop?
(n=1,201 OH residents)

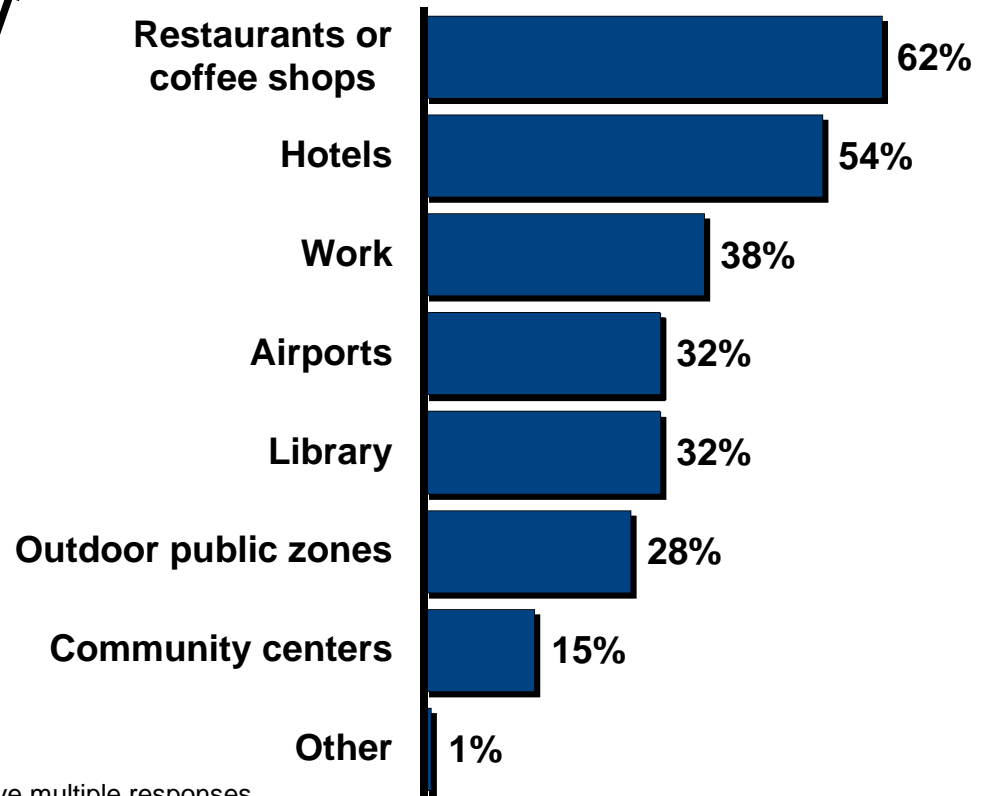
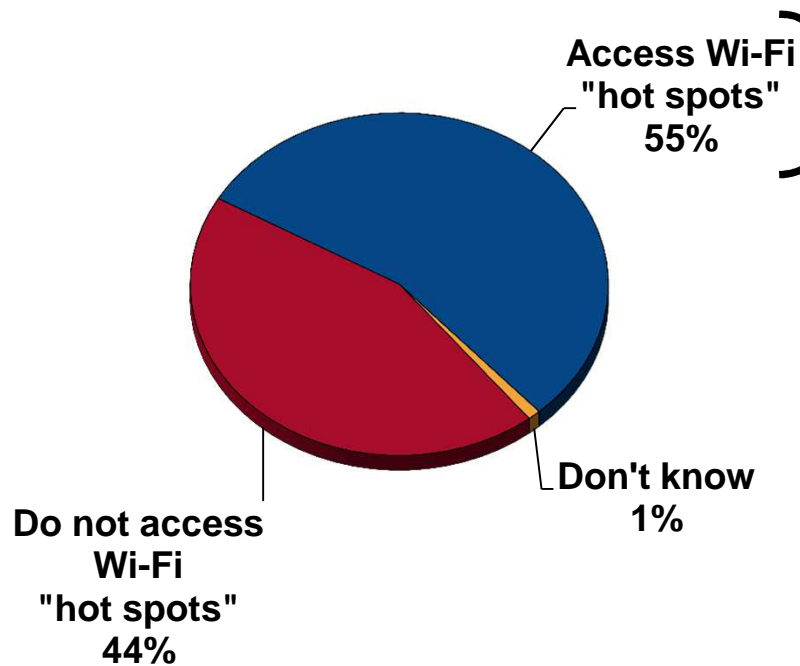
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Wi-Fi Zone (“Hot Spot”) Usage

Among Ohio residents with Internet access via laptop or tablet

Top Wi-Fi zones (among residents who use hot spots)*



*Percentages do not add up to 100% because respondents could give multiple responses.
 Q: Do you use Wi-Fi zones, sometimes called “hot spots,” to access the Internet? and
 Q: Do you regularly use hot spots at any of the following locations?
 (n=511 OH Internet users with laptops or tablets and n= 276 OH residents who use Wi-Fi hot spots)

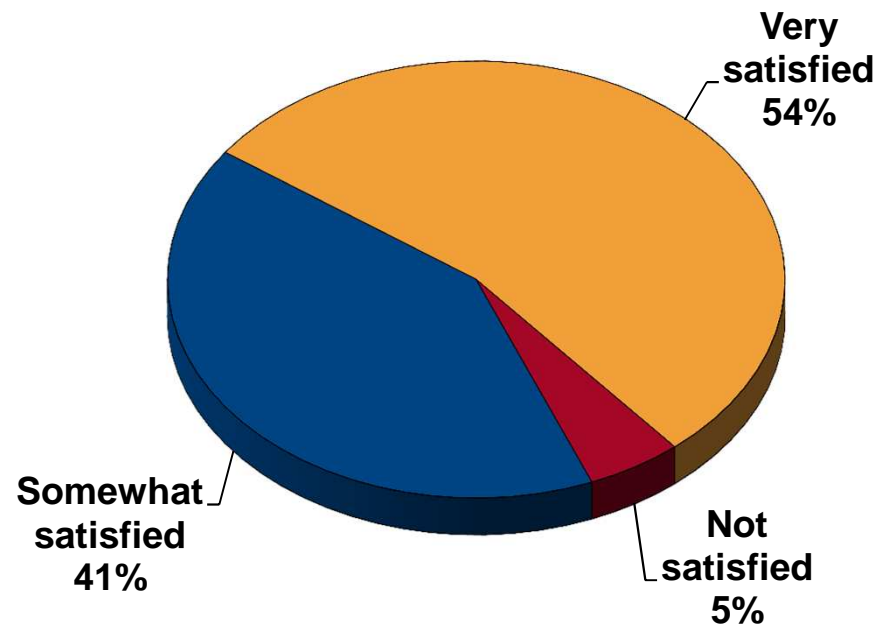
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Satisfaction With Mobile Broadband Service

Satisfaction among Ohio residents with their mobile broadband service on their cell phone

Only 5% of Ohio mobile broadband subscribers report being dissatisfied with the Internet service on their cell phone.



Q: Overall, how satisfied are you with the mobile broadband service on your cell phone?
(n=318 OH residents who access the Internet via their cell phone)

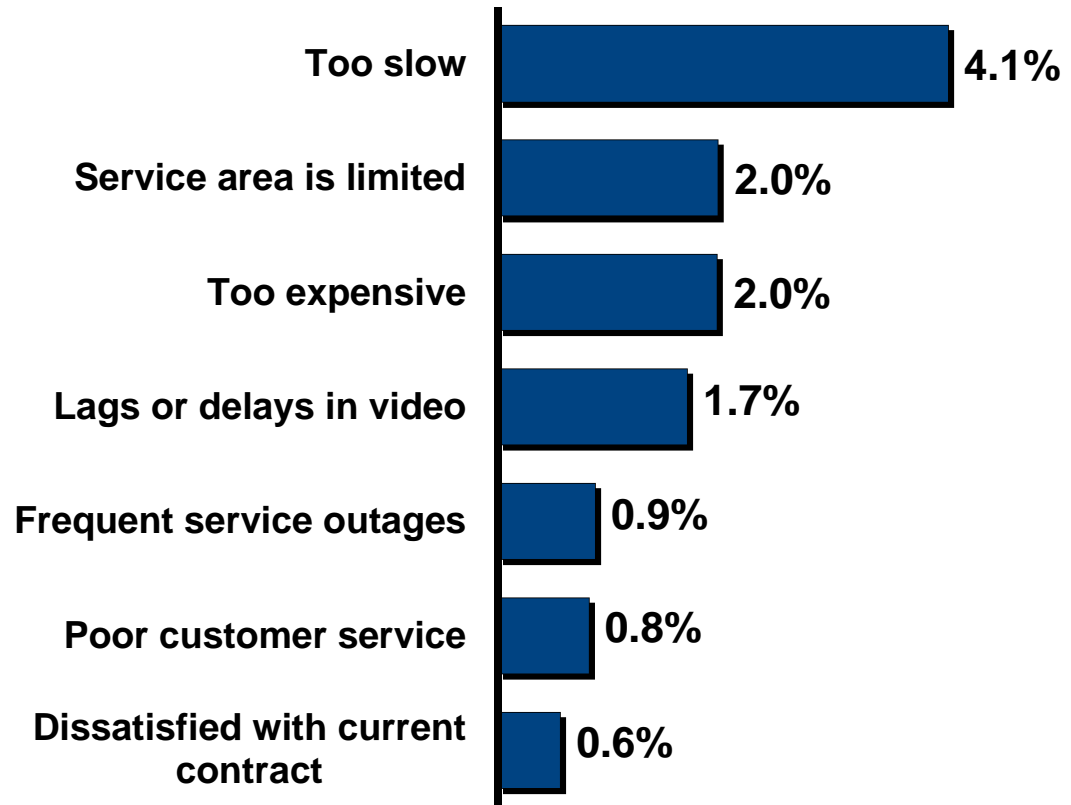
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Reason for Dissatisfaction with Mobile Broadband Service

Among Ohio residents who access the Internet via their cell phone*

Slow data transmission speeds contribute the most to mobile broadband service dissatisfaction among residents.



*Respondents could provide more than one answer
Q: What is it about the mobile broadband on your cell phone that is not satisfactory?
(n=318 OH residents who access the Internet via their cell phone)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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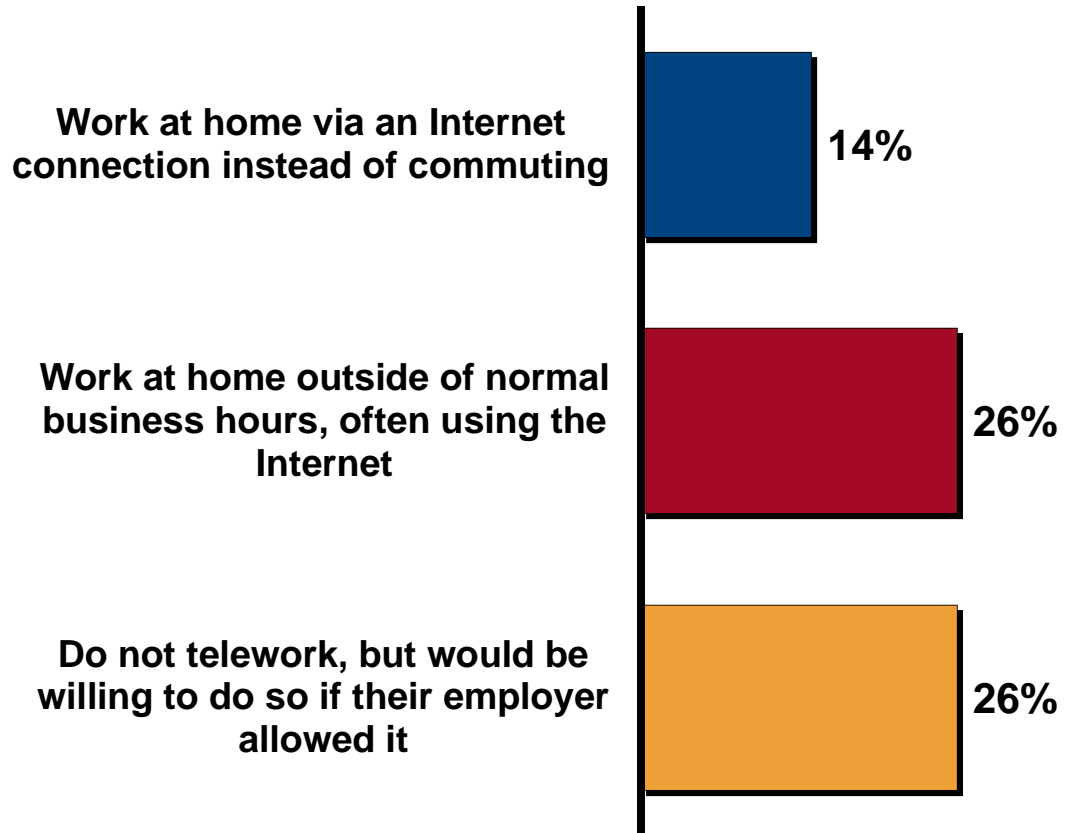


Teleworking and Working From Home Through an Internet Connection



Ohio Residents and Telework

Among Ohio residents employed full-time or part-time



Statewide, 14% of employed Ohio residents use their Internet connection to work from home instead of commuting to an office, while an additional 26% say they do not currently telework, but would be willing to do so if their employers allowed it.

Q: Which of the following describe the way you work from home, when you do so?
(n=656 OH residents employed full- or part-time)

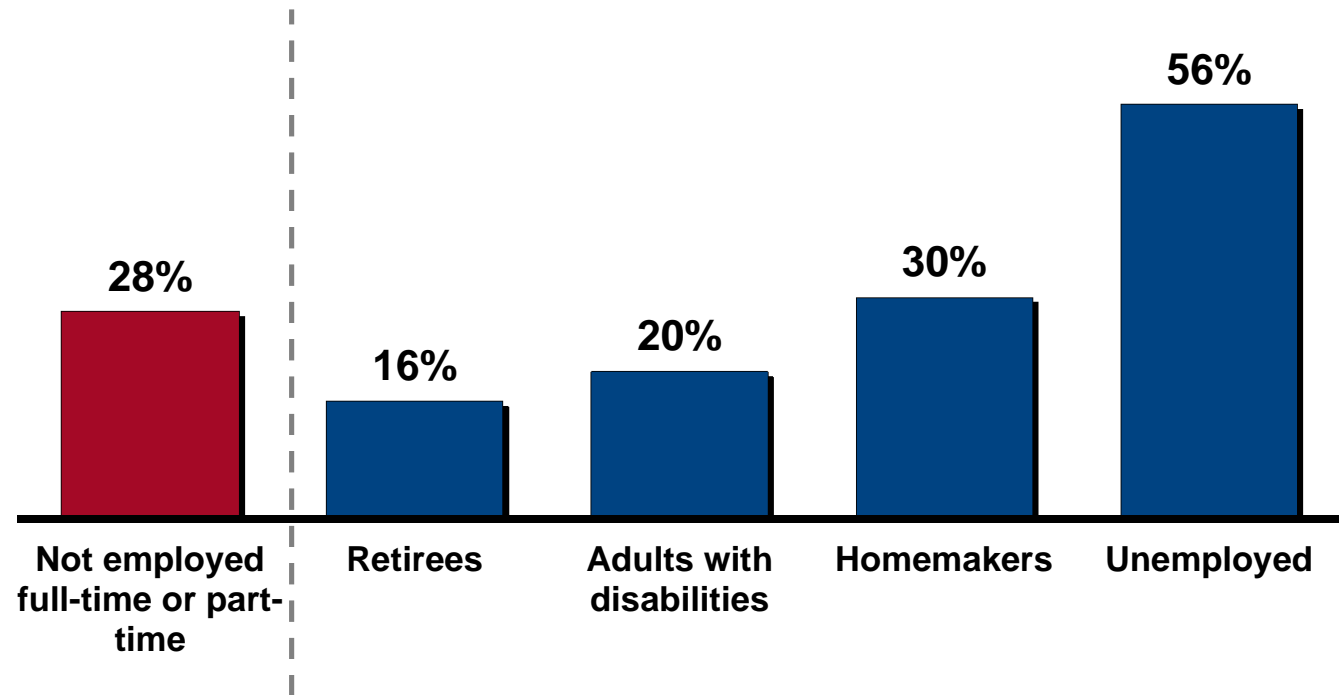
Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Telework's Potential Impact on the Labor Force

Percent of Ohio residents who are not currently employed, but would be likely to join the labor force if allowed to telework

Nearly three out of ten non-working Ohio residents (28%) would likely join the labor force if empowered to telework.



Q: If you were able to work from home through a broadband connection - commonly known as teleworking - how likely is it that you would work outside the home? (n=545 OH residents not employed full- or part-time)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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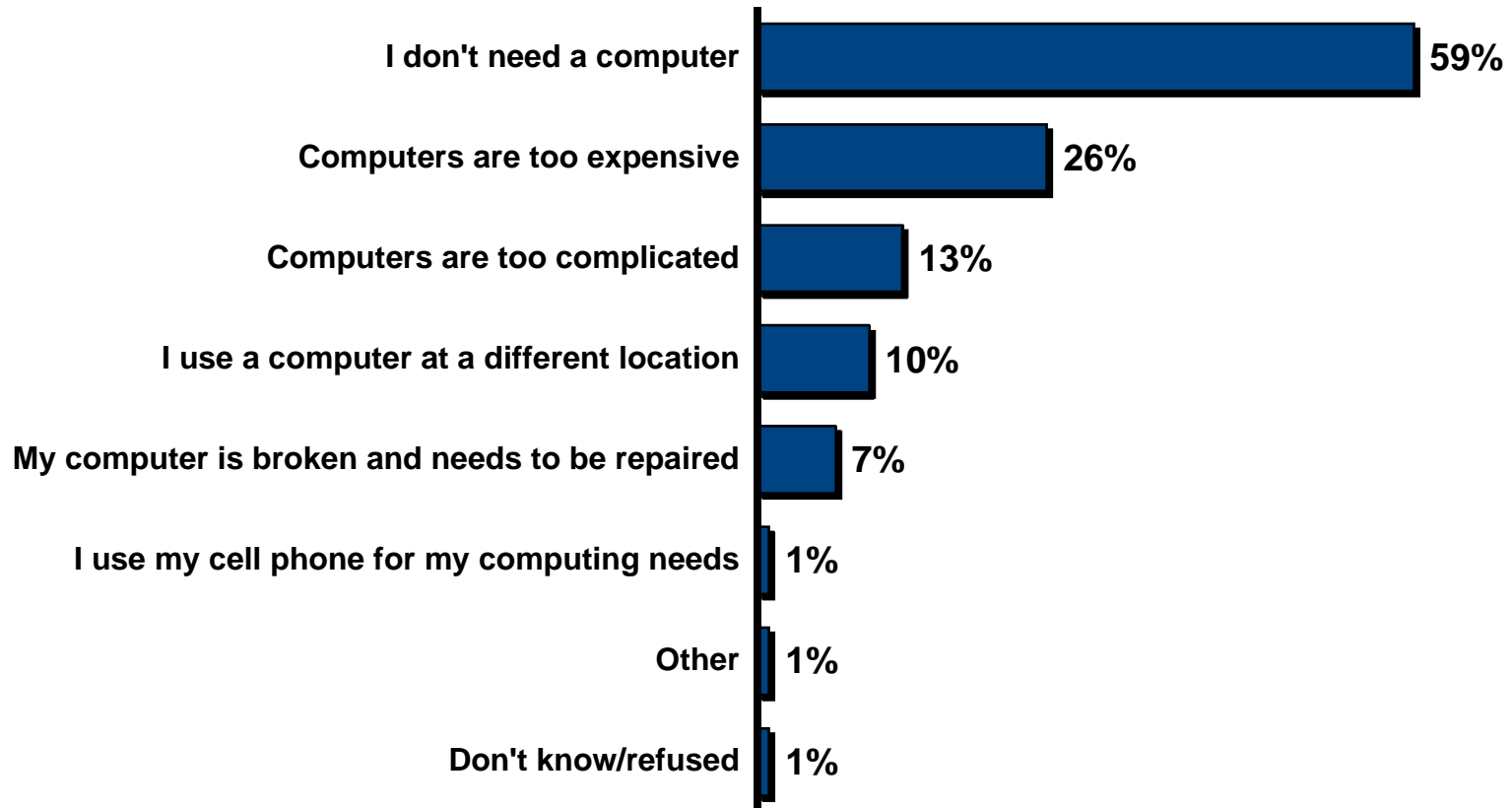


Technology Adoption Barriers



Barriers to Computer Ownership

Among residents who do not own a computer*



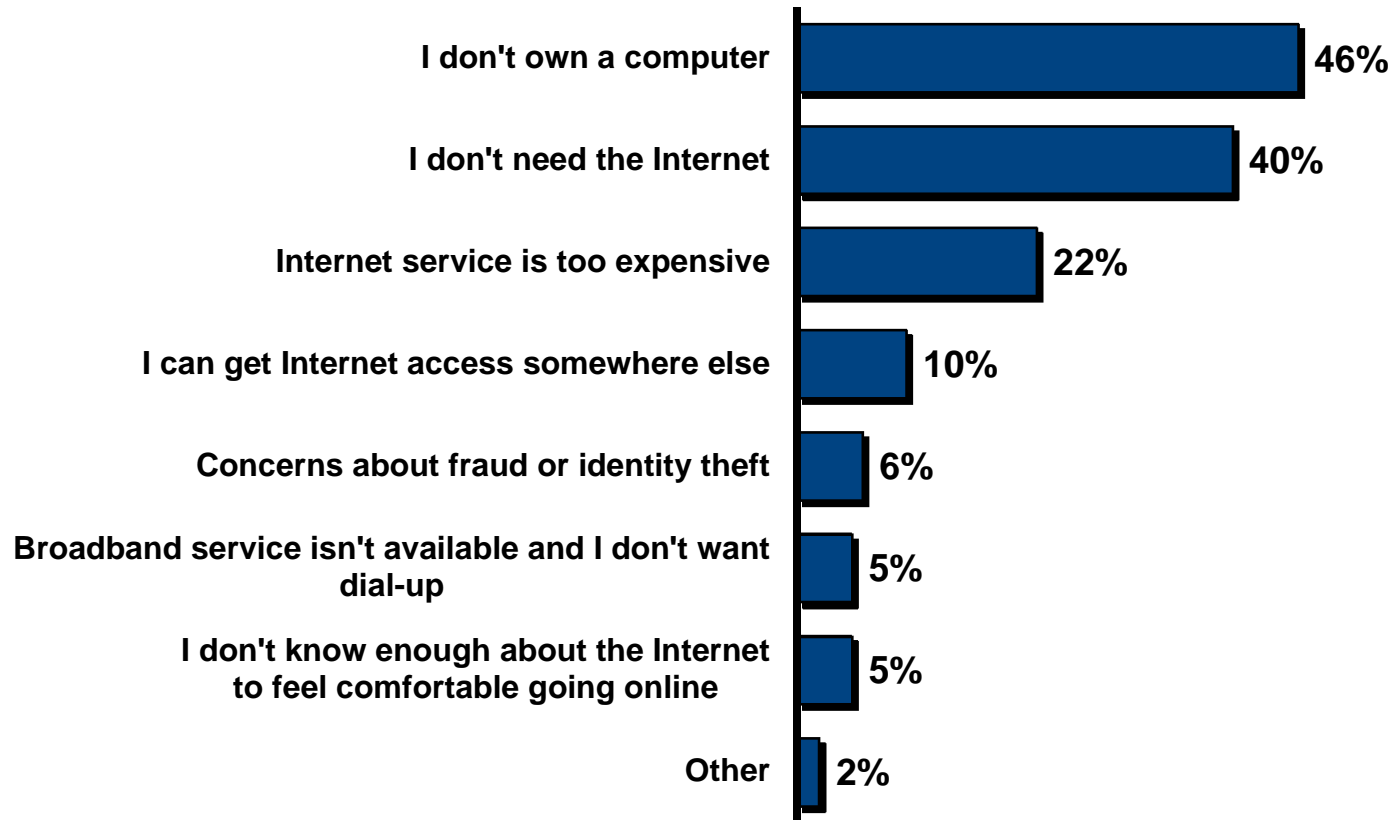
*Percentages do not add up to 100% because respondents could give multiple responses.
Q: Why don't you have a computer at home?
(n=247 OH residents with no computer at home)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Barriers to Internet Adoption

Among residents who do not subscribe to home Internet (dial-up or broadband) service*



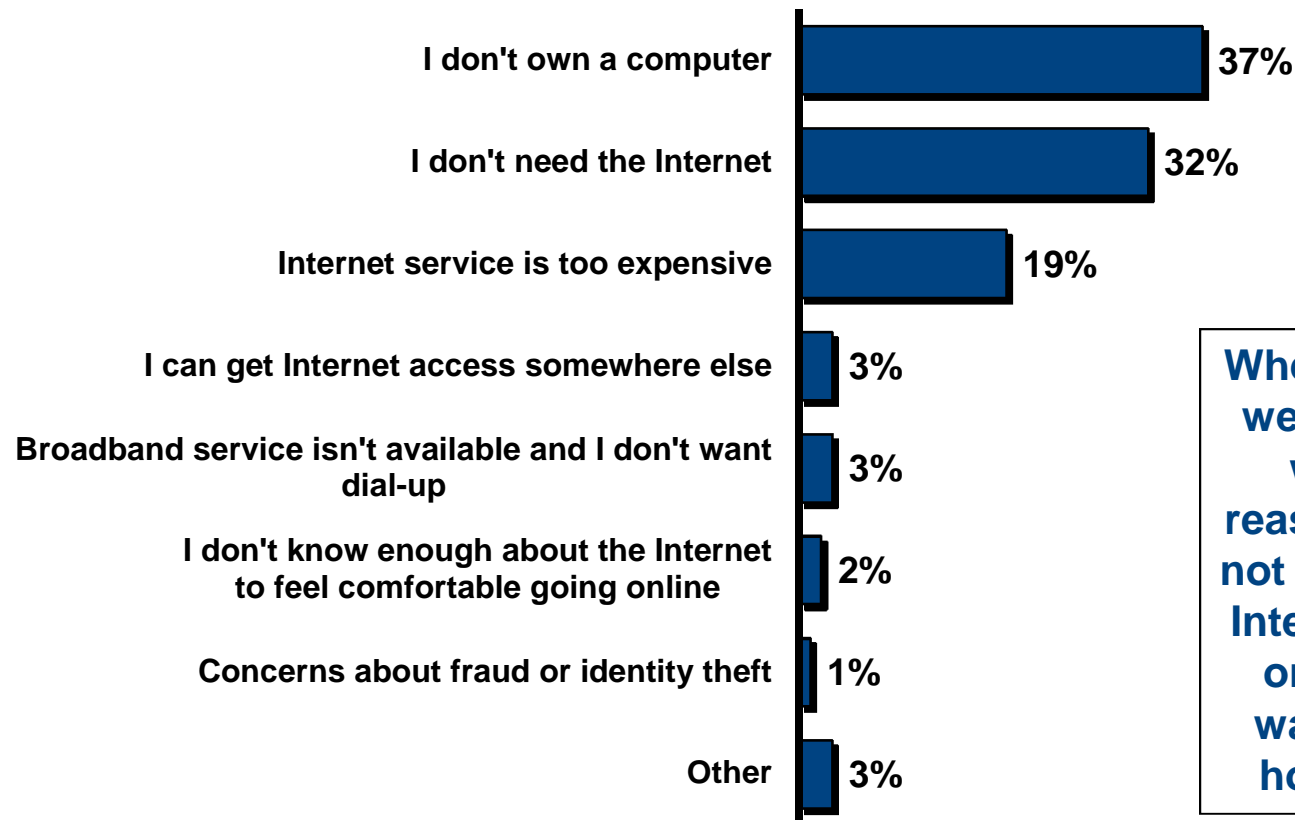
*Percentages do not add up to 100% because respondents could give multiple responses.
Q: Why don't you subscribe to the Internet at home?
(n=320 OH residents without home Internet service)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Reasons Given as the Main Barrier to Internet Adoption

Among residents who do not subscribe to home Internet service



When non-adopters were asked which was the *main* reason why they do not subscribe to the Internet, more than one-third said it was the lack of a home computer.

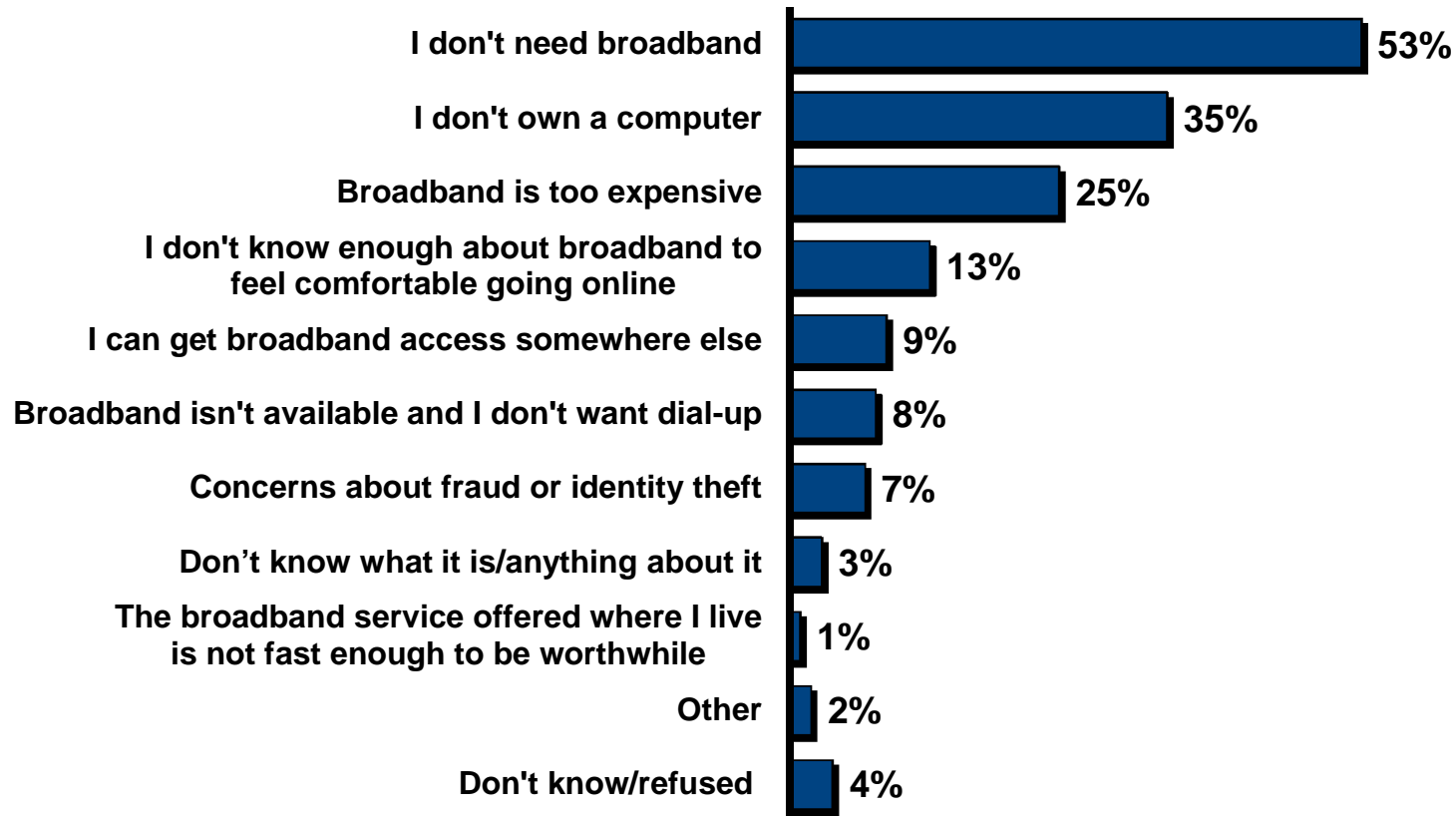
Q: Which one of these is the main reason why you do not subscribe to home Internet service?
(n=320 OH residents without home Internet service)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Barriers to Broadband Adoption

Among residents who do not subscribe to home broadband service*



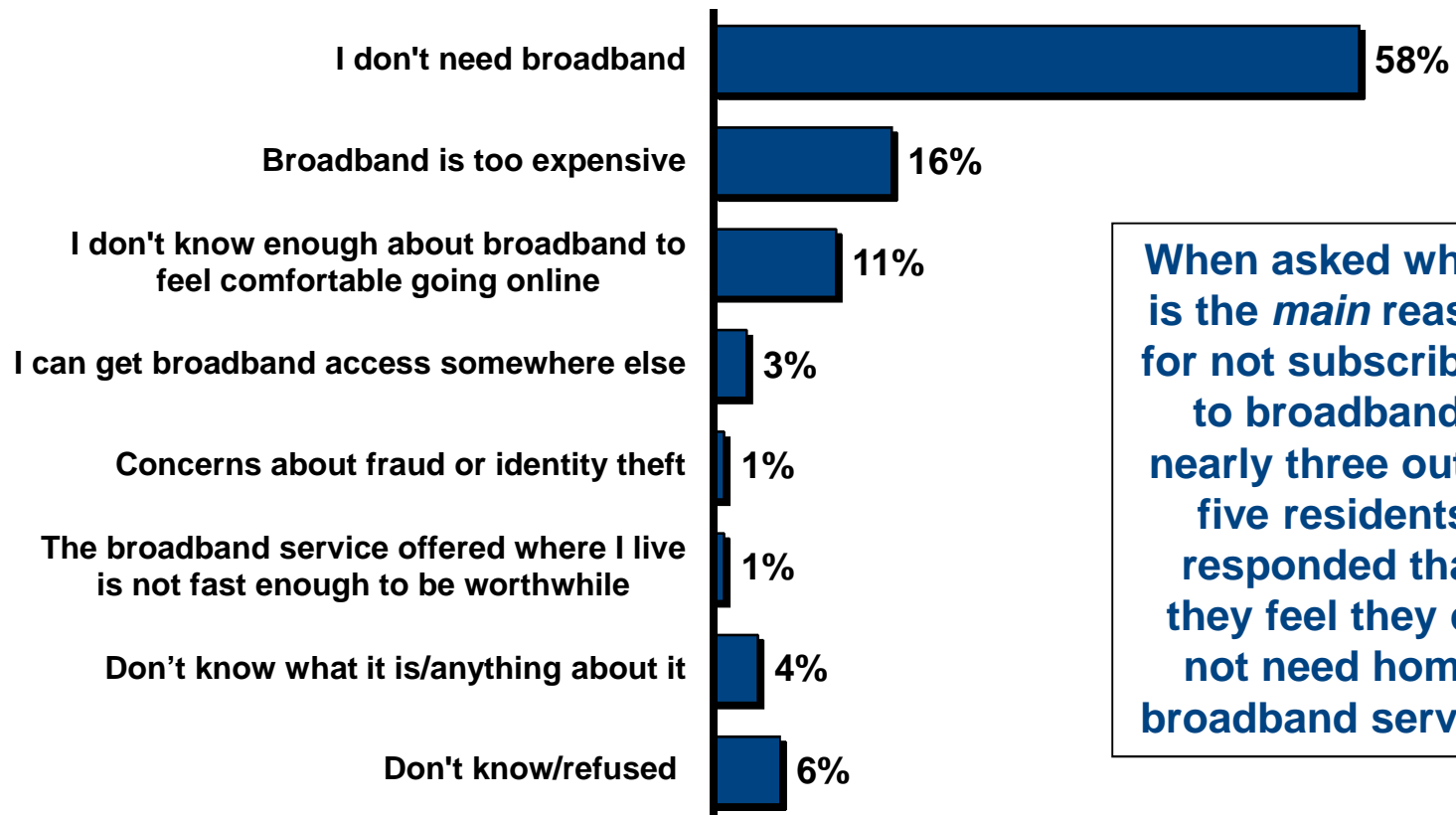
*Percentages do not add up to 100% because respondents could give multiple responses.
Q: Why don't you subscribe to broadband Internet service? Or if broadband is not available:
Q: Why wouldn't you subscribe to broadband Internet service?
(n=418 OH residents without broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Reasons Given as the Main Barrier to Home Broadband Adoption

Among residents who have chosen not to subscribe to home broadband service



When asked which is the *main* reason for not subscribing to broadband, nearly three out of five residents responded that they feel they do not need home broadband service.

Q: Which one of these is the main reason why you (do/would) not subscribe to home broadband service?
(n=292 OH residents who do not subscribe to broadband even though it is available, or say that they would not subscribe at any price)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

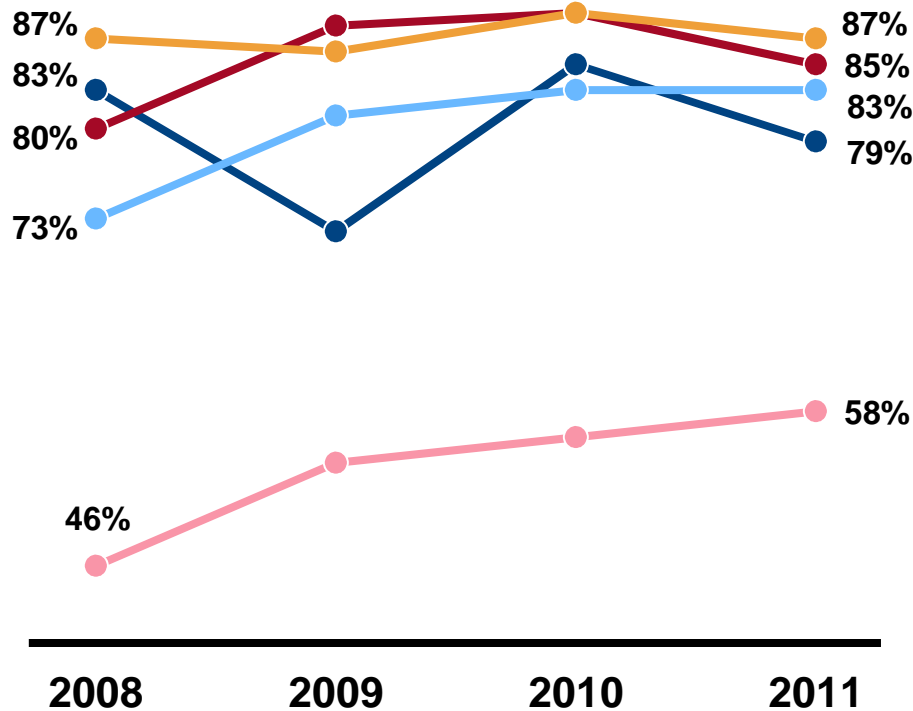


Residential Technology Assessment by Age



Trends in Computer Ownership by Respondent's Age

Percent of all Ohio residents who have a computer at home



Age	2008	2009	2010	2011
18 to 24	83%	72%	85%	79%
25 to 34	80%	88%	89%	85%
35 to 54	87%	86%	89%	87%
55 to 64	73%	81%	83%	83%
65 or older	46%	54%	56%	58%

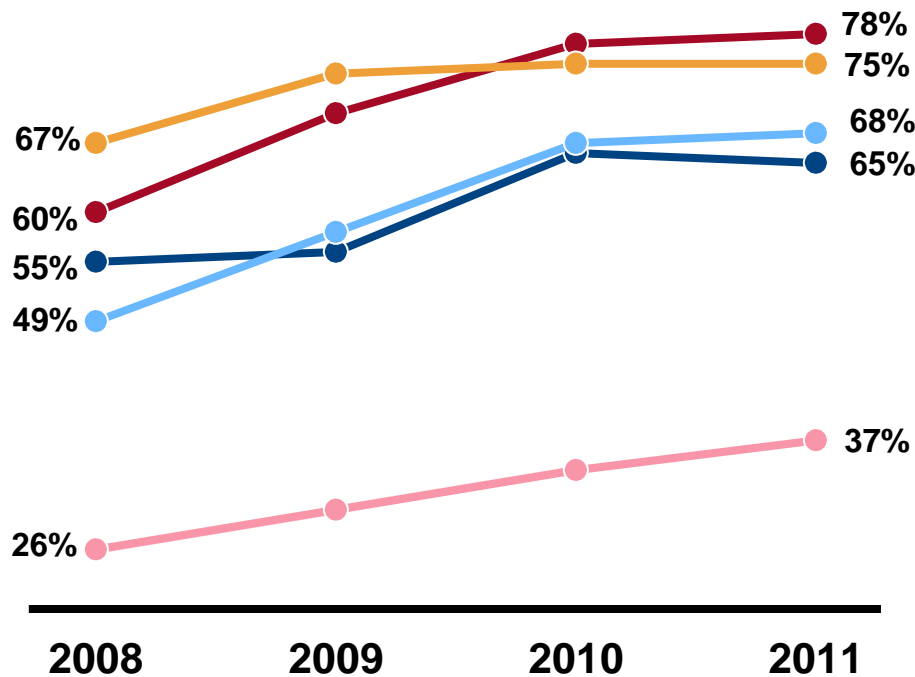
Q: Does your household have a computer?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org



Trends in Home Broadband Adoption by Respondent's Age

Percent of all Ohio residents who access broadband from home



Age	2008	2009	2010	2011
18 to 24	55%	56%	66%	65%
25 to 34	60%	70%	77%	78%
35 to 54	67%	74%	75%	75%
55 to 64	49%	58%	67%	68%
65 or older	26%	30%	34%	37%

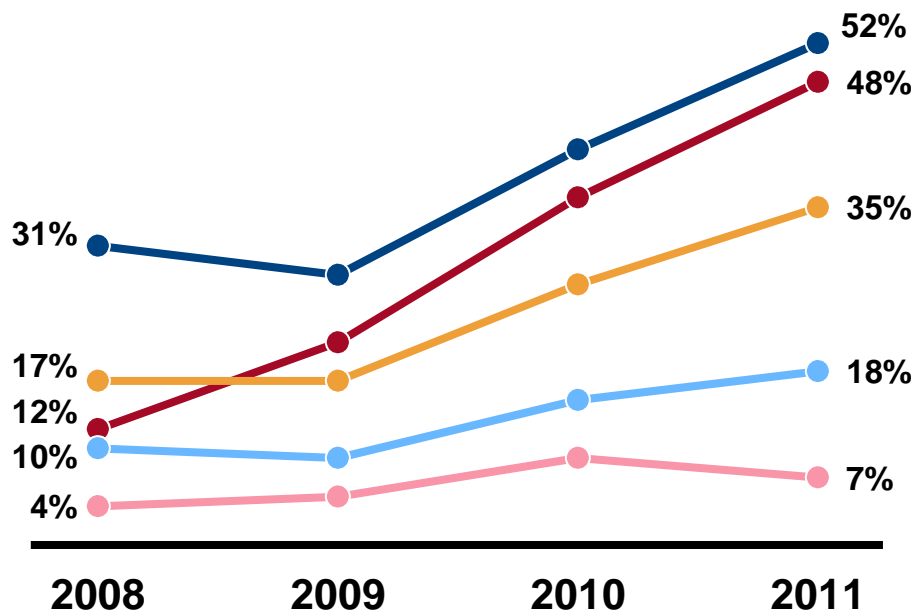
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Respondent's Age

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Age	2008	2009	2010	2011
18 to 24	31%	28%	41%	52%
25 to 34	12%	21%	36%	48%
35 to 54	17%	17%	27%	35%
55 to 64	10%	9%	15%	18%
65 or older	4%	5%	9%	7%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average: 	18 to 34	35 to 44	45 to 54	55 to 64	65 or older
Percentage is significantly* <i>lower</i> than the state average: 					
Communicating through e-mail or other ways of sending messages	86%	89%	83%	83%	84%
Interacting with government offices or elected officials	21%	34%	36%	37%	37%
Searching or applying for jobs	63%	47%	36%	25%	8%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	49%	58%	52%	55%	53%
Researching or purchasing goods or services	70%	80%	71%	72%	69%
Online banking or paying bills	63%	74%	58%	54%	45%
Reading online newspapers or other news sources	65%	71%	64%	57%	61%
Taking online classes or conducting research for schoolwork	53%	54%	37%	23%	10%
Exploring or participating in hobbies or personal interests	82%	75%	68%	74%	61%

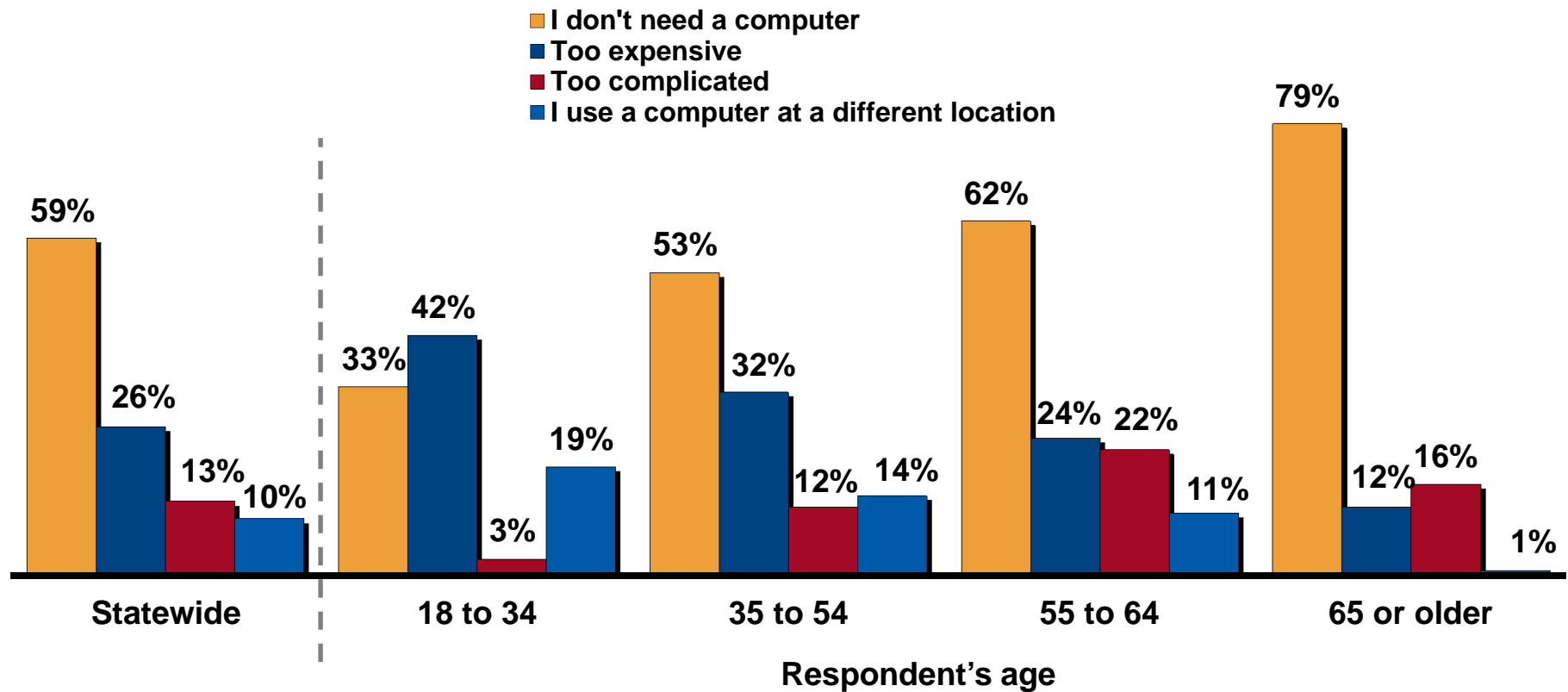
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



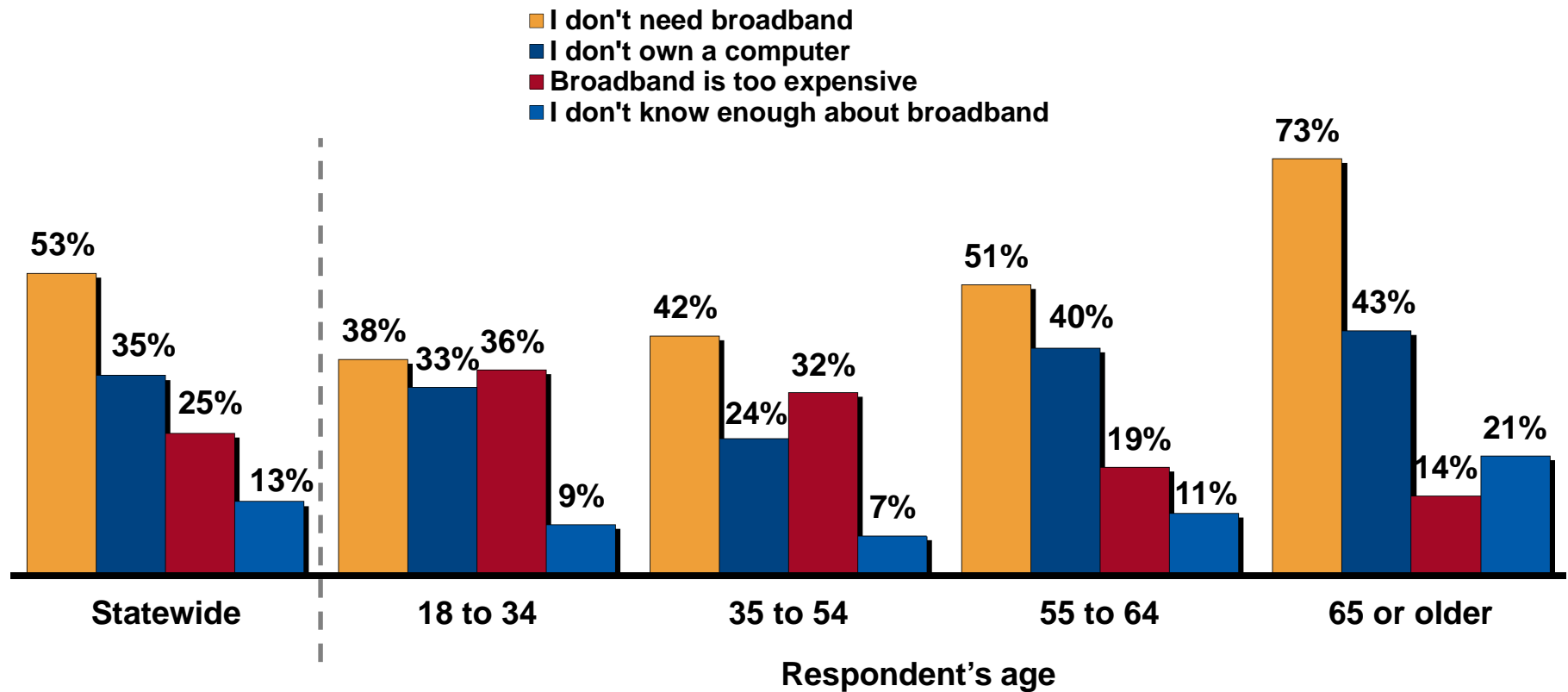
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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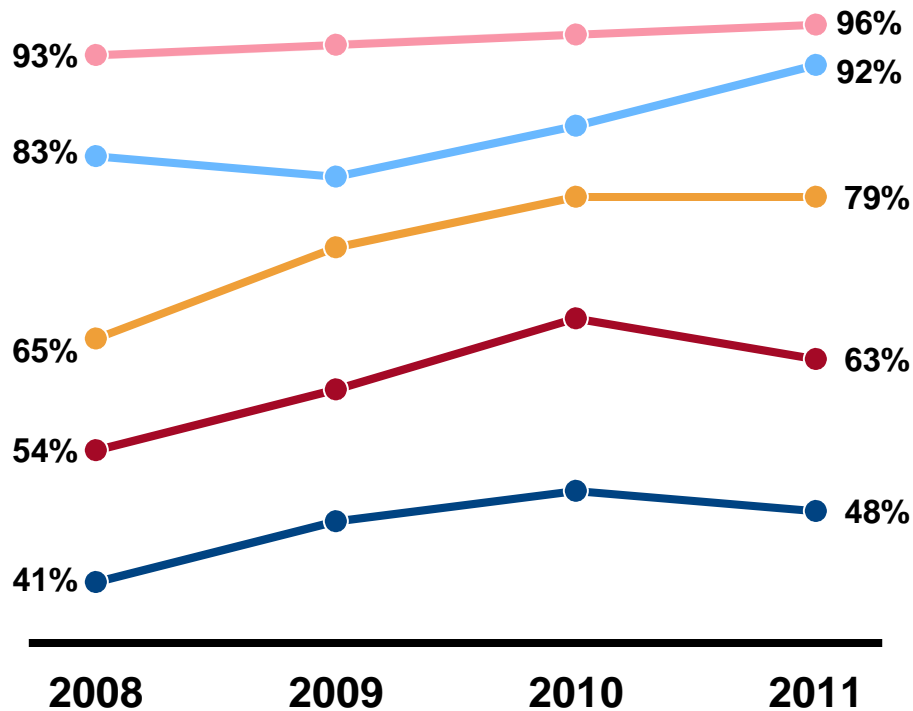


Residential Technology Assessment by Annual Household Income



Trends in Computer Ownership by Annual Household Income

Percent of all Ohio residents who have a computer at home



Annual Household Income	2008	2009	2010	2011
Less than \$15,000	41%	47%	50%	48%
\$15,000 to \$24,999	54%	60%	67%	63%
\$25,000 to \$34,999	65%	74%	79%	79%
\$35,000 to \$49,999	83%	81%	86%	92%
\$50,000 or more	93%	94%	95%	96%

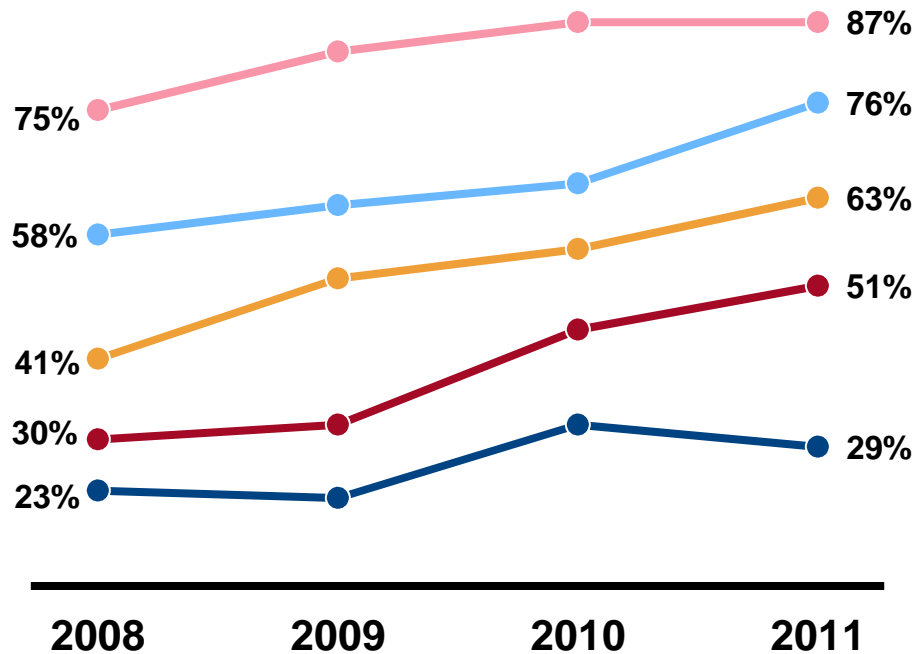
Q: Does your household have a computer?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Home Broadband Adoption by Annual Household Income

Percent of all Ohio residents who access broadband from home



Annual Household Income	2008	2009	2010	2011
Less than \$15,000	23%	22%	32%	29%
\$15,000 to \$24,999	30%	32%	45%	51%
\$25,000 to \$34,999	41%	52%	56%	63%
\$35,000 to \$49,999	58%	62%	65%	76%
\$50,000 or more	75%	83%	87%	87%

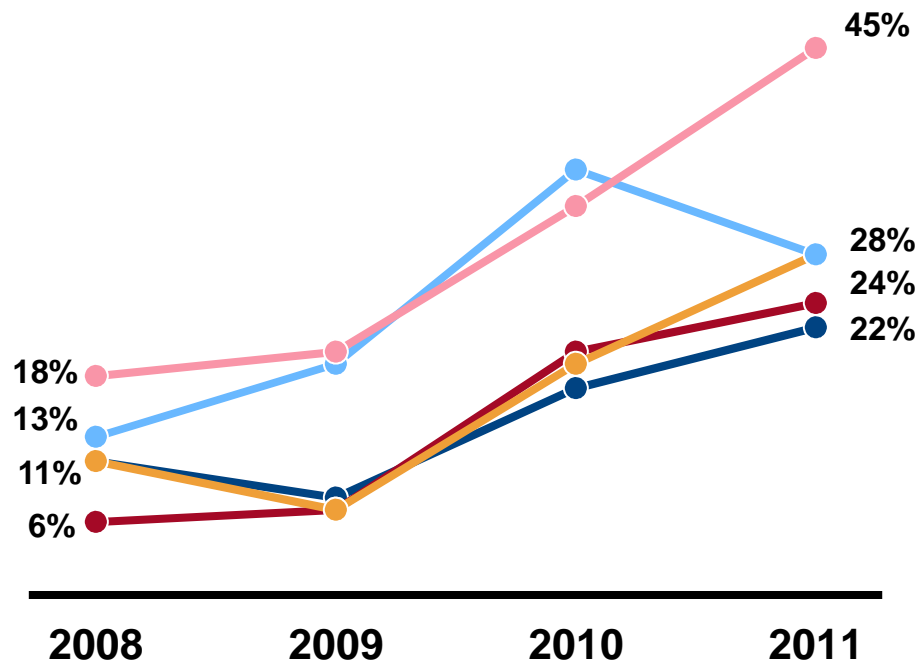
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Annual Household Income

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Annual Household Income	2008	2009	2010	2011
Less than \$15,000	11%	8%	17%	22%
\$15,000 to \$24,999	6%	7%	20%	24%
\$25,000 to \$34,999	11%	7%	19%	28%
\$35,000 to \$49,999	13%	19%	35%	28%
\$50,000 or more	18%	20%	32%	45%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average: 	Percentage is significantly* <i>lower</i> than the state average: 	Less than \$15,000	\$15,000 to less than \$25,000	\$25,000 to less than \$35,000	\$35,000 to less than \$50,000	\$50,000 to less than \$75,000	\$75,000 or more
Communicating through e-mail or other ways of sending messages		77%	84%	84%	84%	91%	87%
Interacting with government offices or elected officials		16%	18%	35%	24%	34%	42%
Searching or applying for jobs		57%	52%	46%	39%	36%	42%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices		38%	58%	50%	49%	53%	63%
Researching or purchasing goods or services		48%	63%	72%	70%	82%	87%
Online banking or paying bills		42%	56%	59%	52%	67%	75%
Reading online newspapers or other news sources		43%	66%	66%	62%	71%	73%
Taking online classes or conducting research for schoolwork		43%	36%	41%	43%	40%	49%
Exploring or participating in hobbies or personal interests		59%	76%	72%	76%	78%	78%

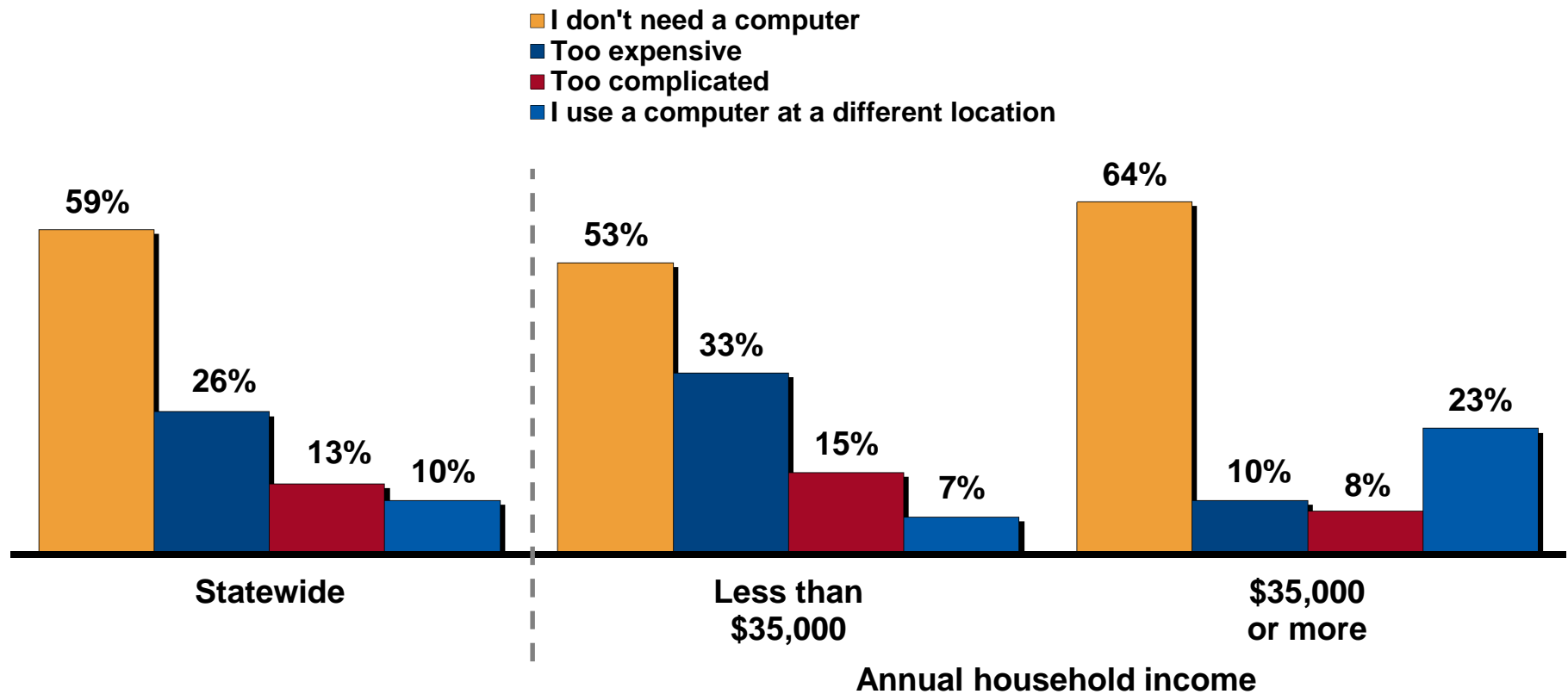
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

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Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



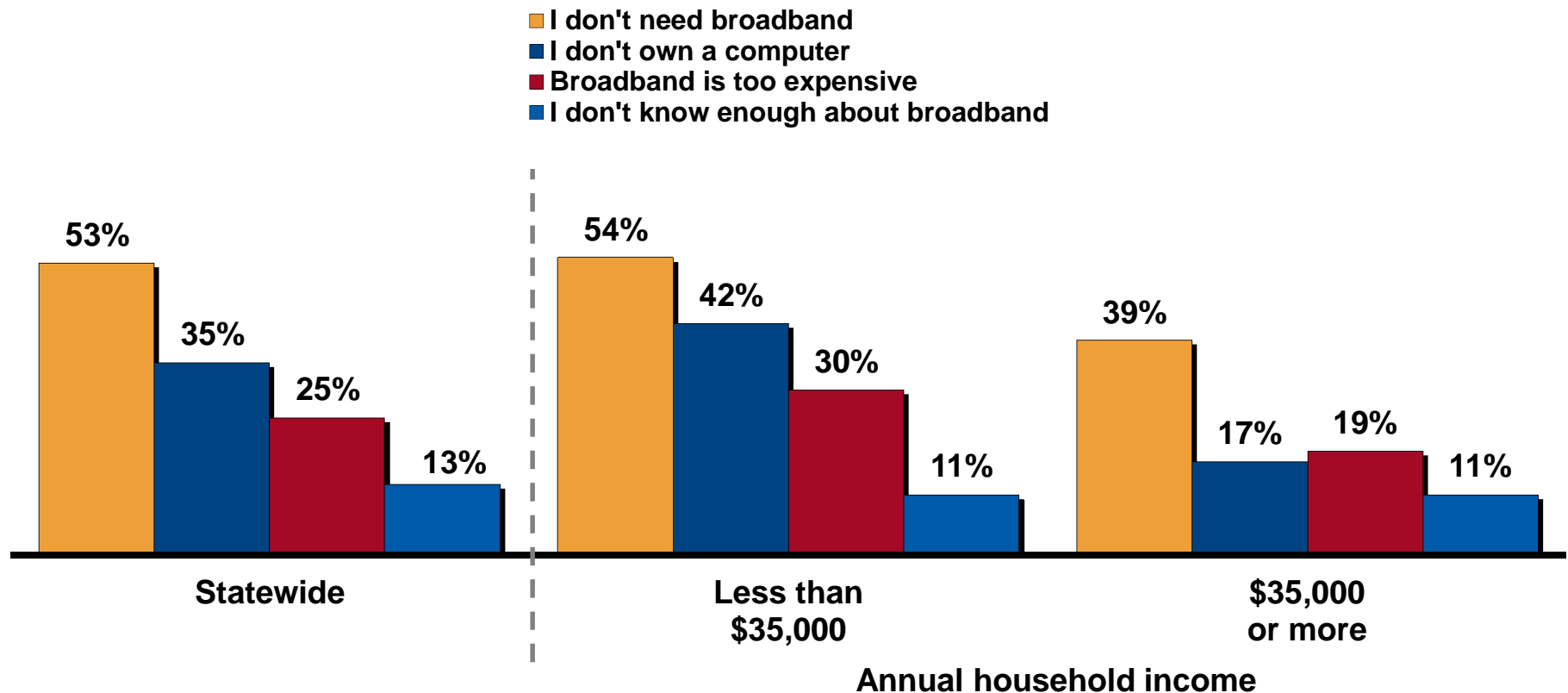
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(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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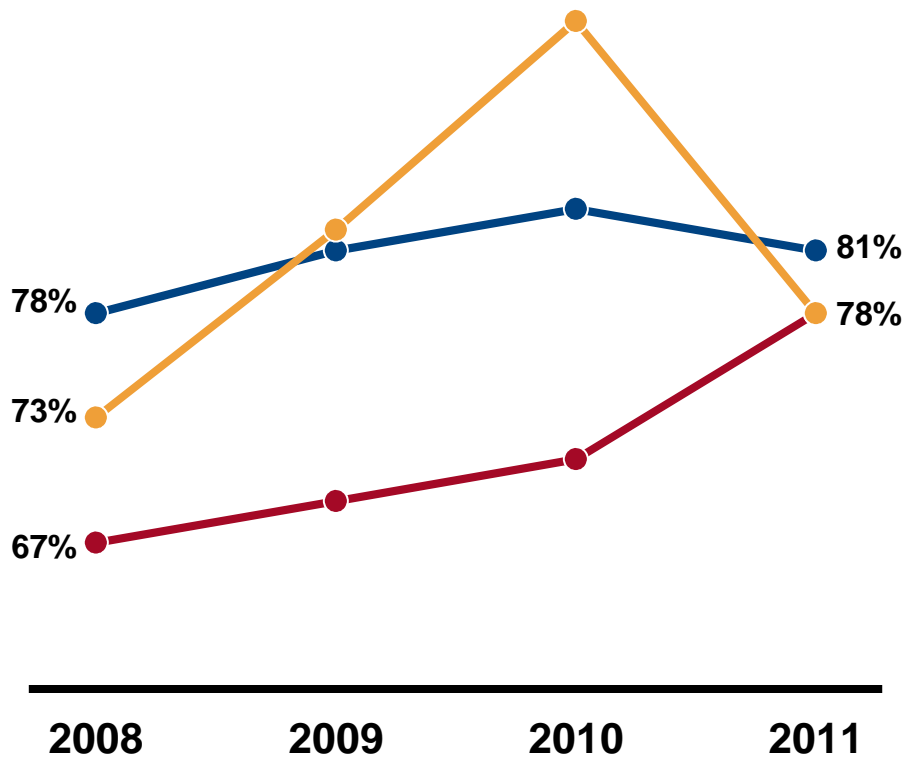


Residential Technology Assessment by Race/Ethnicity



Trends in Computer Ownership by Race/Ethnicity

Percent of all Ohio residents who have a computer at home



Race/Ethnicity	2008	2009	2010	2011
Caucasian	78%	81%	83%	81%
Black/African American	67%	69%	71%	78%
Other	73%	82%	92%	78%

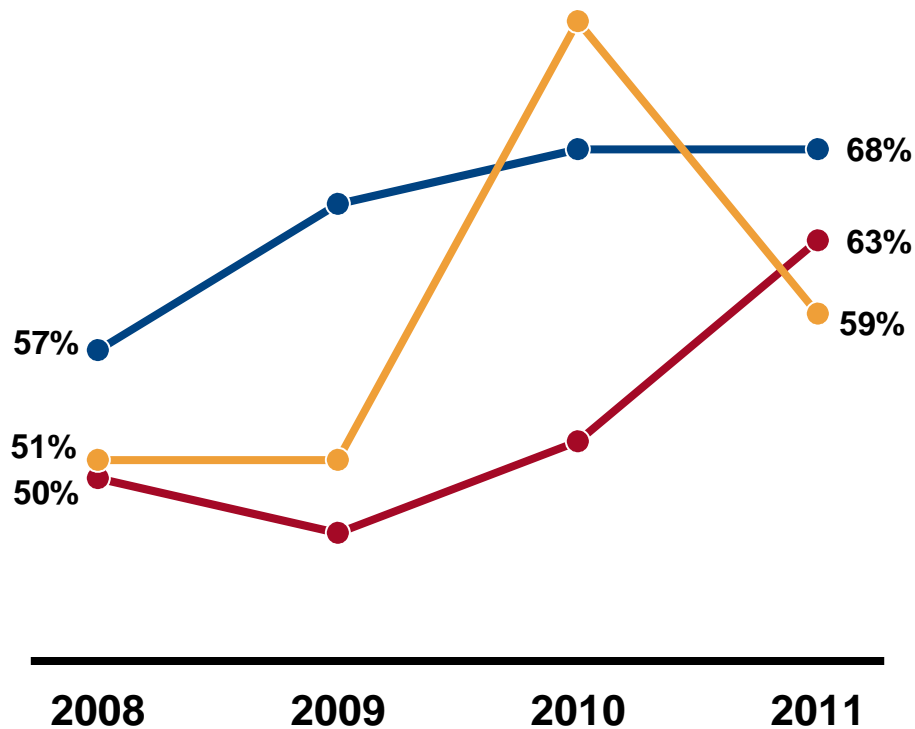
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 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Home Broadband Adoption by Race/Ethnicity

Percent of all Ohio residents who access broadband from home



Race/Ethnicity	2008	2009	2010	2011
Caucasian	57%	65%	68%	68%
Black/African American	50%	47%	52%	63%
Other	51%	51%	75%	59%

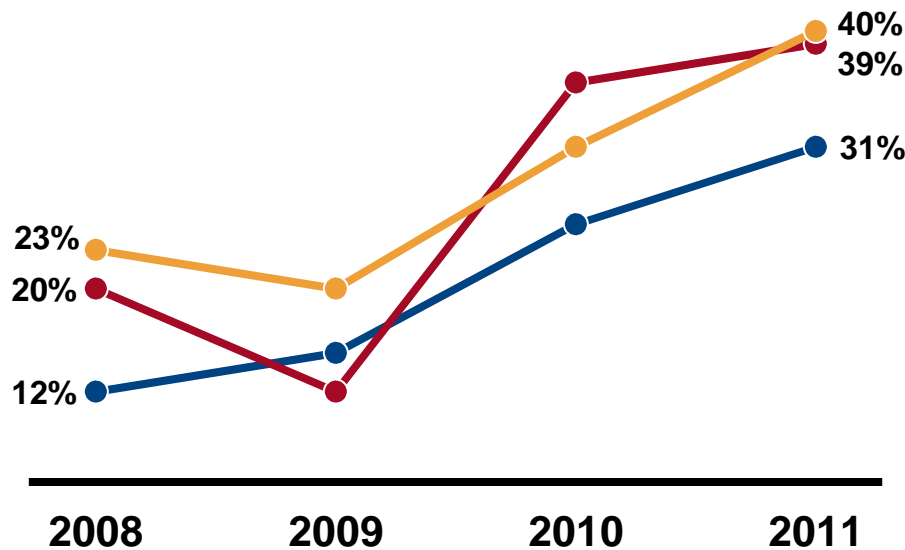
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Race/Ethnicity

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Race/Ethnicity	2008	2009	2010	2011
Caucasian	12%	15%	25%	31%
Black/African American	20%	12%	36%	39%
Other	23%	20%	31%	40%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average:  Percentage is significantly* <i>lower</i> than the state average: 	Caucasian	Black/ African American	Other
Communicating through e-mail or other ways of sending messages	87%	86%	78%
Interacting with government offices or elected officials	33%	21%	29%
Searching or applying for jobs	40%	62%	53%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	53%	47%	62%
Researching or purchasing goods or services	75%	65%	69%
Online banking or paying bills	62%	59%	68%
Reading online newspapers or other news sources	65%	58%	73%
Taking online classes or conducting research for schoolwork	39%	51%	50%
Exploring or participating in hobbies or personal interests	75%	65%	83%

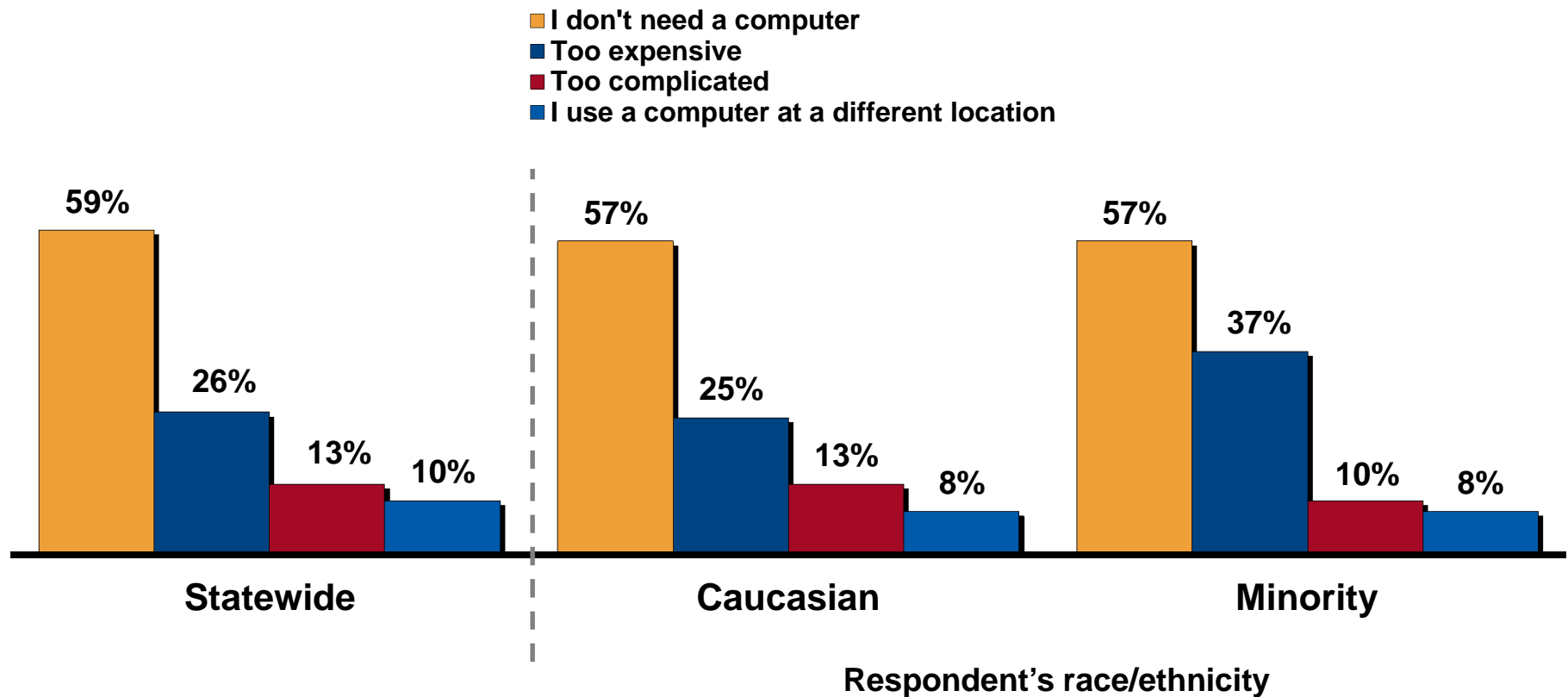
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



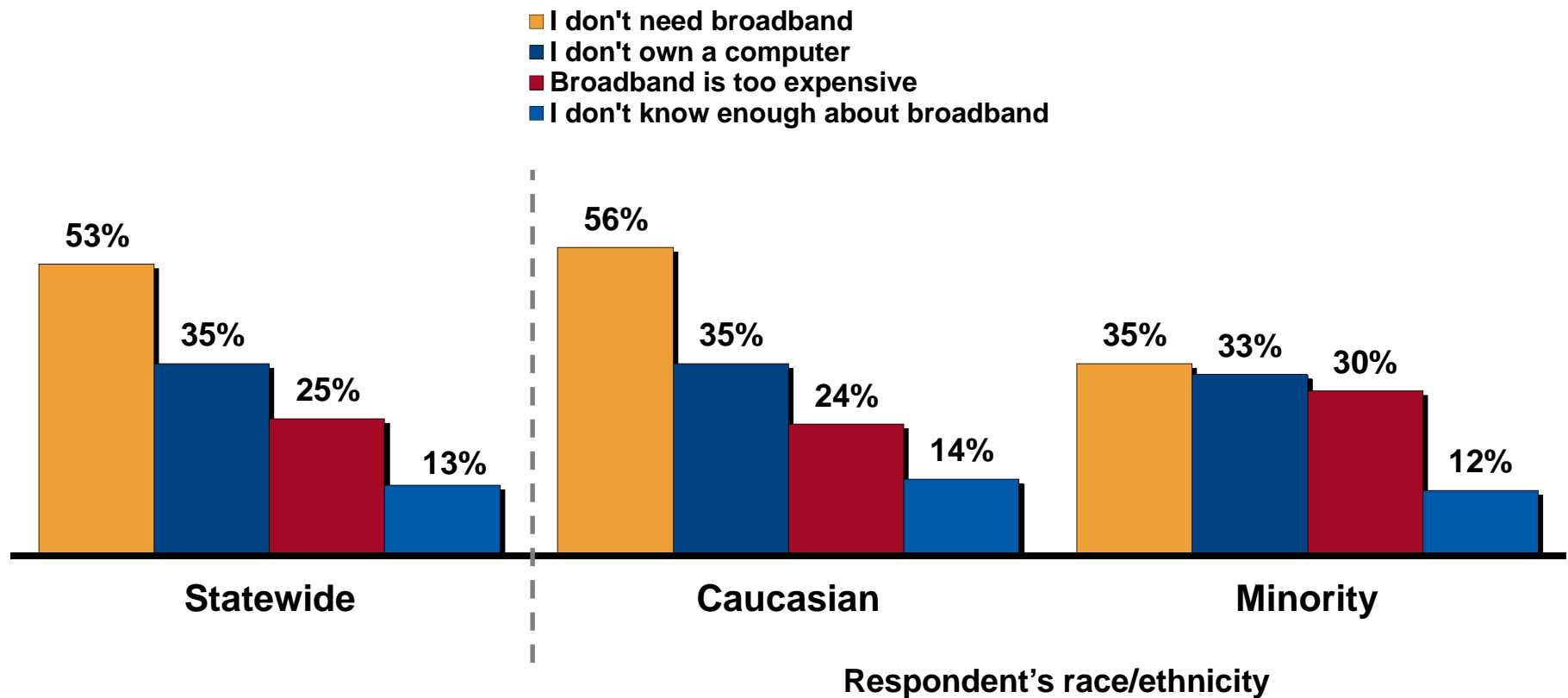
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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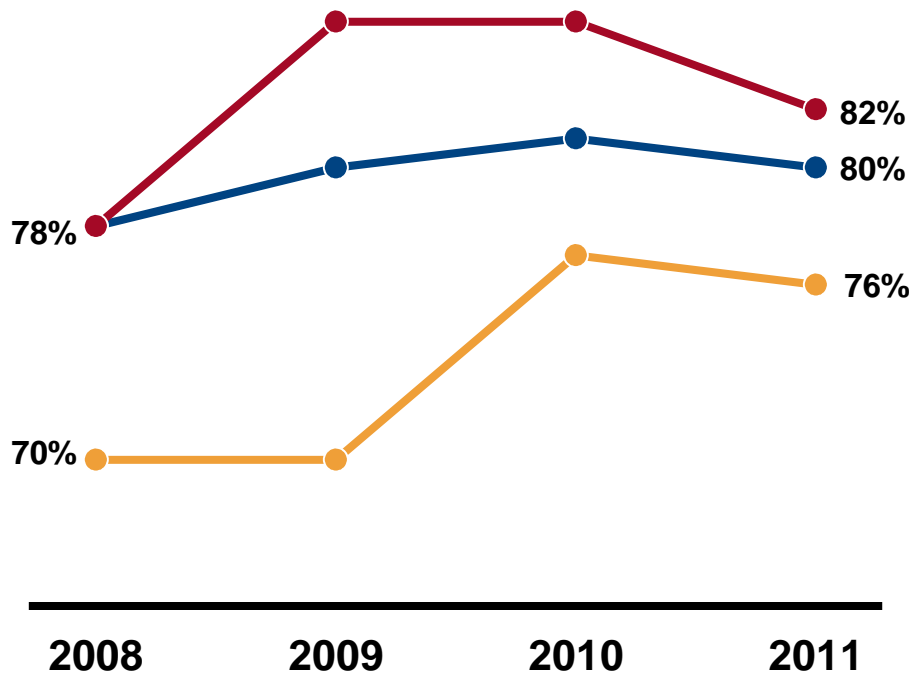


Residential Technology Assessment by Urban-Rural Classification



Trends in Computer Ownership by Urban-Rural Classification

Percent of all Ohio residents who have a computer at home



Urban-Rural Classification	2008	2009	2010	2011
Urban	78%	80%	81%	80%
Suburban	78%	85%	85%	82%
Rural	70%	70%	77%	76%

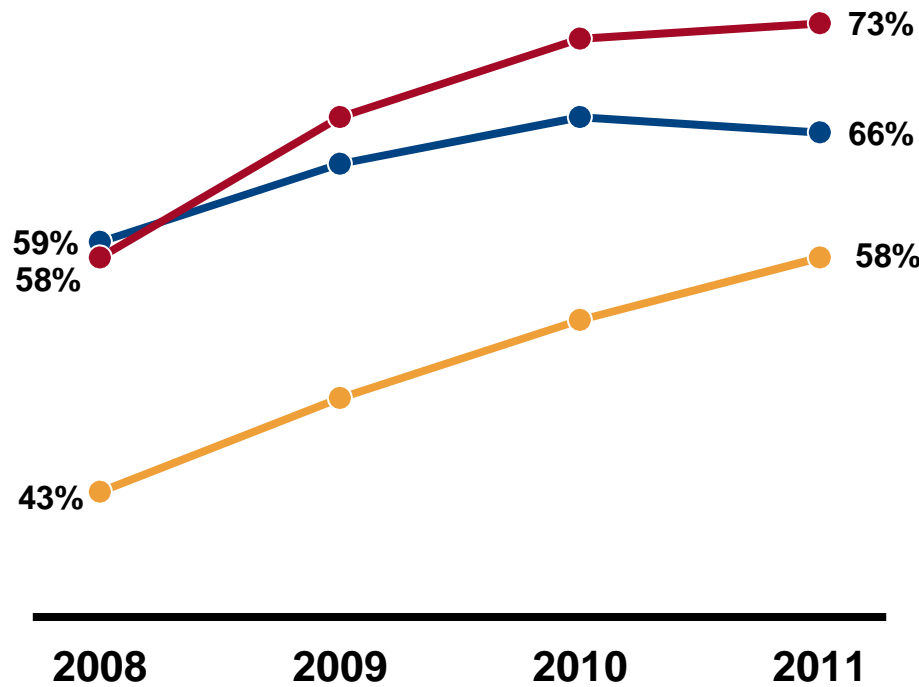
Q: Does your household have a computer?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Home Broadband Adoption by Urban-Rural Classification

Percent of all Ohio residents who access broadband from home



Urban-Rural Classification	2008	2009	2010	2011
Urban	59%	64%	67%	66%
Suburban	58%	67%	72%	73%
Rural	43%	49%	54%	58%

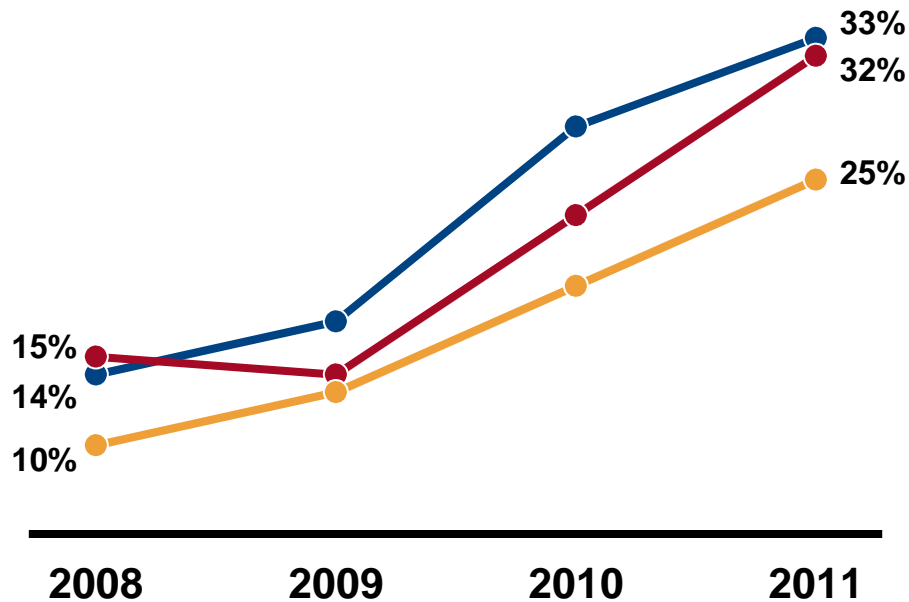
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Urban-Rural Classification

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Urban-Rural Classification	2008	2009	2010	2011
Urban	14%	17%	28%	33%
Suburban	15%	14%	23%	32%
Rural	10%	13%	19%	25%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average:  Percentage is significantly* <i>lower</i> than the state average: 	Urban	Suburban	Rural
Communicating through e-mail or other ways of sending messages	87%	85%	82%
Interacting with government offices or elected officials	31%	33%	28%
Searching or applying for jobs	47%	34%	40%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	52%	58%	48%
Researching or purchasing goods or services	73%	74%	68%
Online banking or paying bills	62%	63%	53%
Reading online newspapers or other news sources	67%	63%	58%
Taking online classes or conducting research for schoolwork	43%	40%	32%
Exploring or participating in hobbies or personal interests	75%	75%	70%

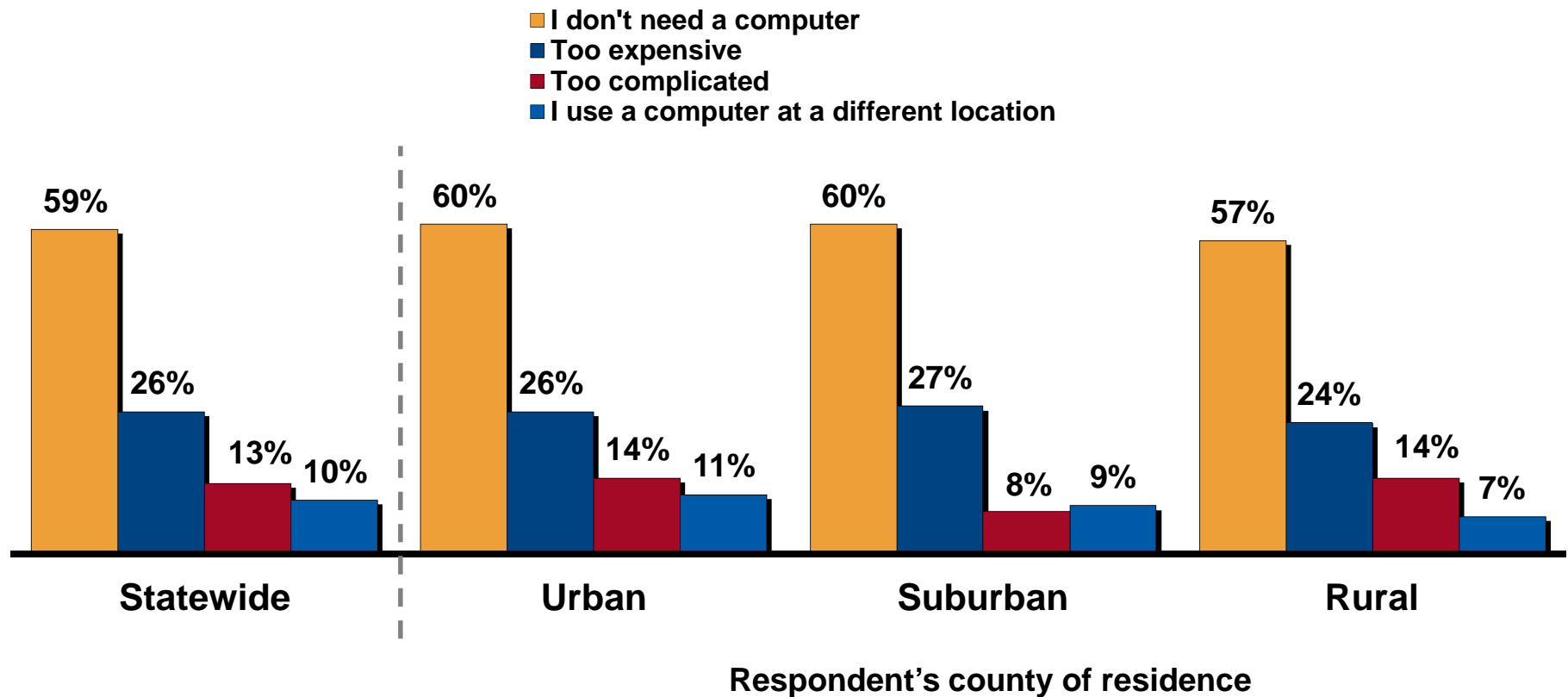
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



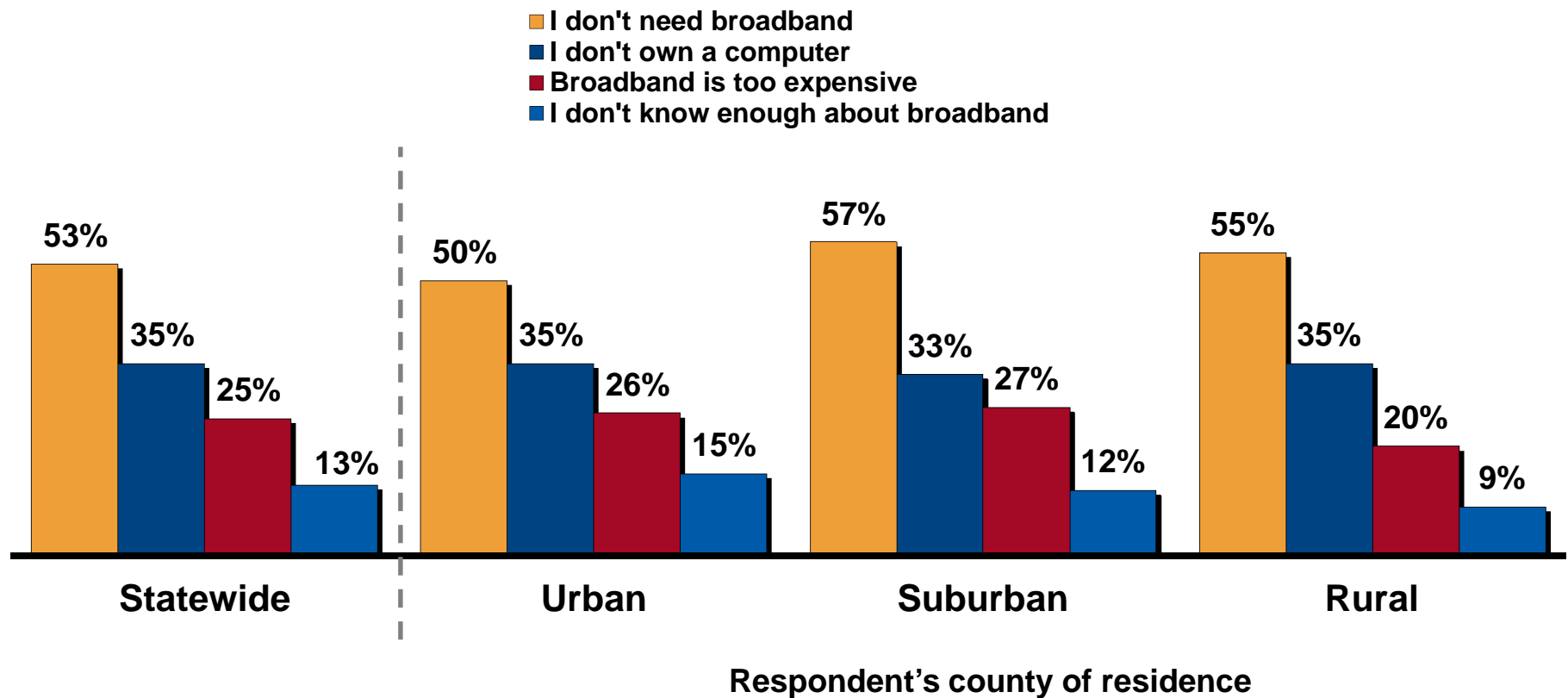
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



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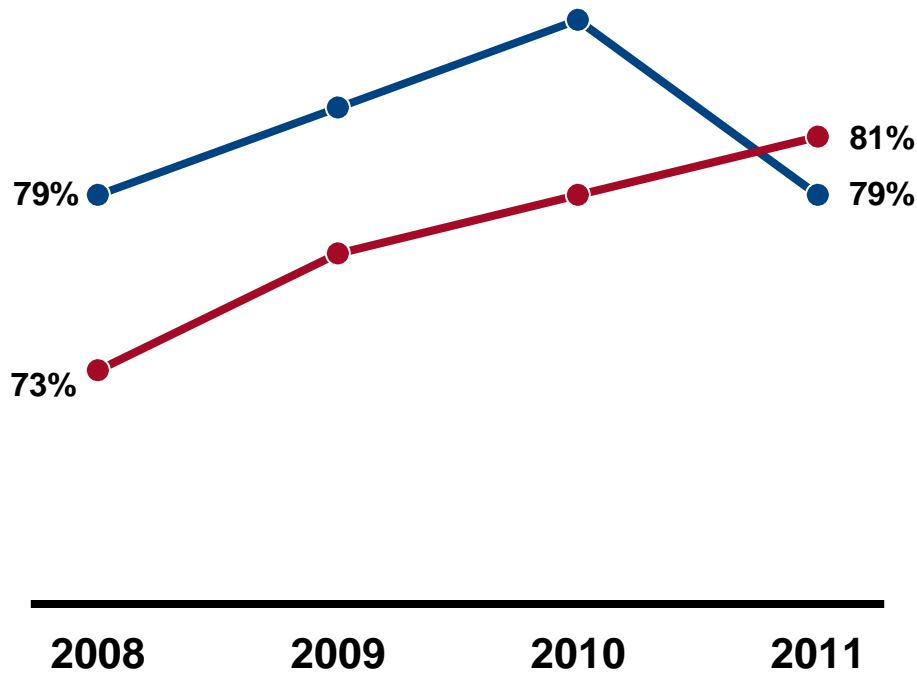


Residential Technology Assessment by Gender



Trends in Computer Ownership by Respondent's Gender

Percent of all Ohio residents who have a computer at home



Gender	2008	2009	2010	2011
Male	79%	82%	85%	79%
Female	73%	77%	79%	81%

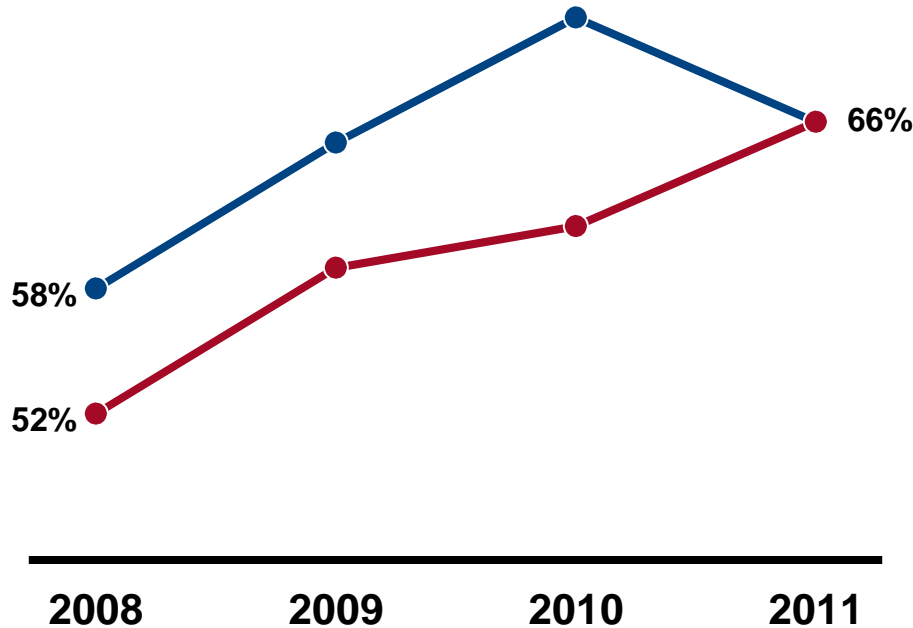
Q: Does your household have a computer?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org



Trends in Home Broadband Adoption by Respondent's Gender

Percent of all Ohio residents who access broadband from home



Gender	2008	2009	2010	2011
Male	58%	65%	71%	66%
Female	52%	59%	61%	66%

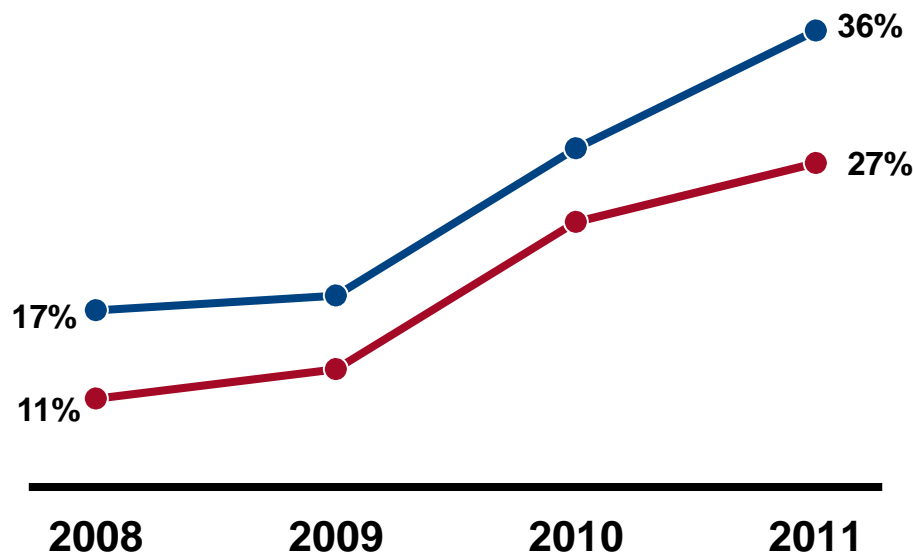
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Respondent's Gender

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Gender	2008	2009	2010	2011
Male	17%	18%	28%	36%
Female	11%	13%	23%	27%

Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average: Percentage is significantly* <i>lower</i> than the state average: 	Male	Female
Communicating through e-mail or other ways of sending messages	84%	87%
Interacting with government offices or elected officials	33%	30%
Searching or applying for jobs	45%	40%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	50%	55%
Researching or purchasing goods or services	74%	71%
Online banking or paying bills	59%	62%
Reading online newspapers or other news sources	66%	62%
Taking online classes or conducting research for schoolwork	39%	41%
Exploring or participating in hobbies or personal interests	76%	72%

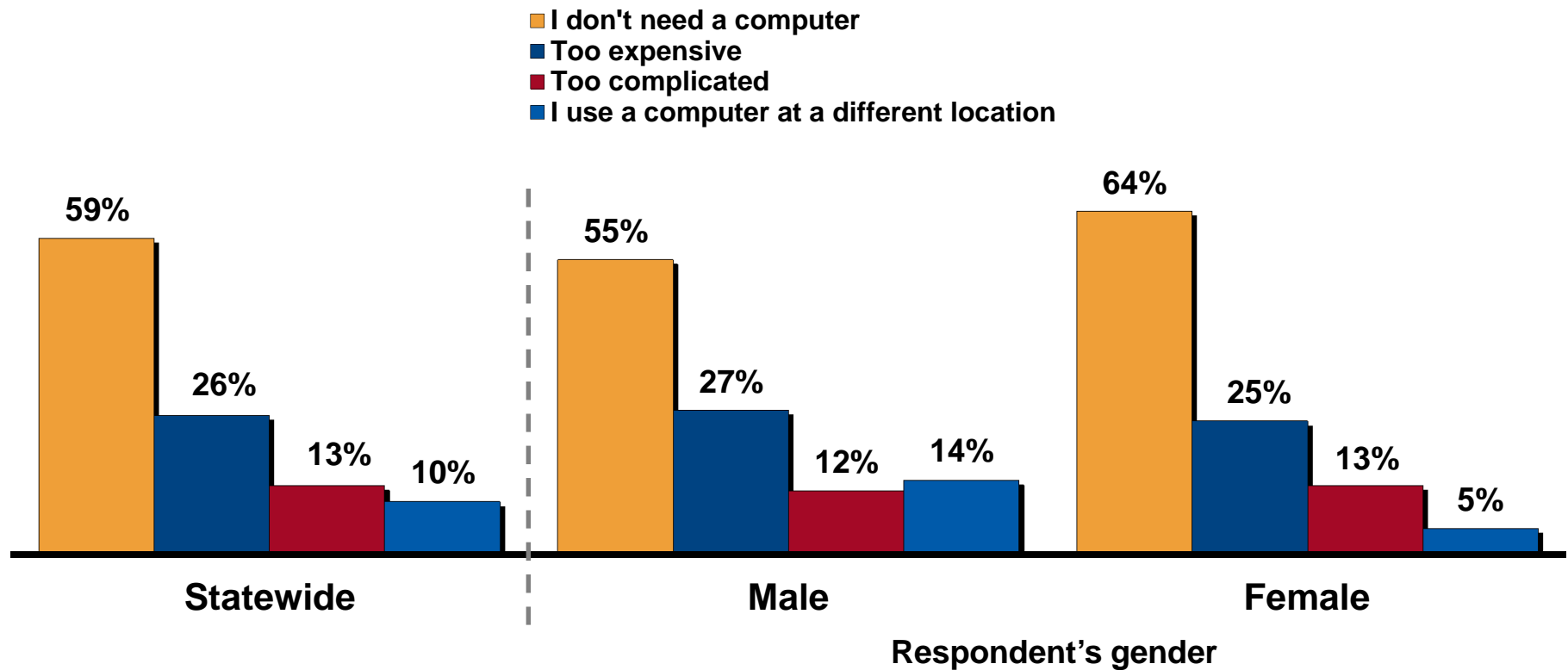
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



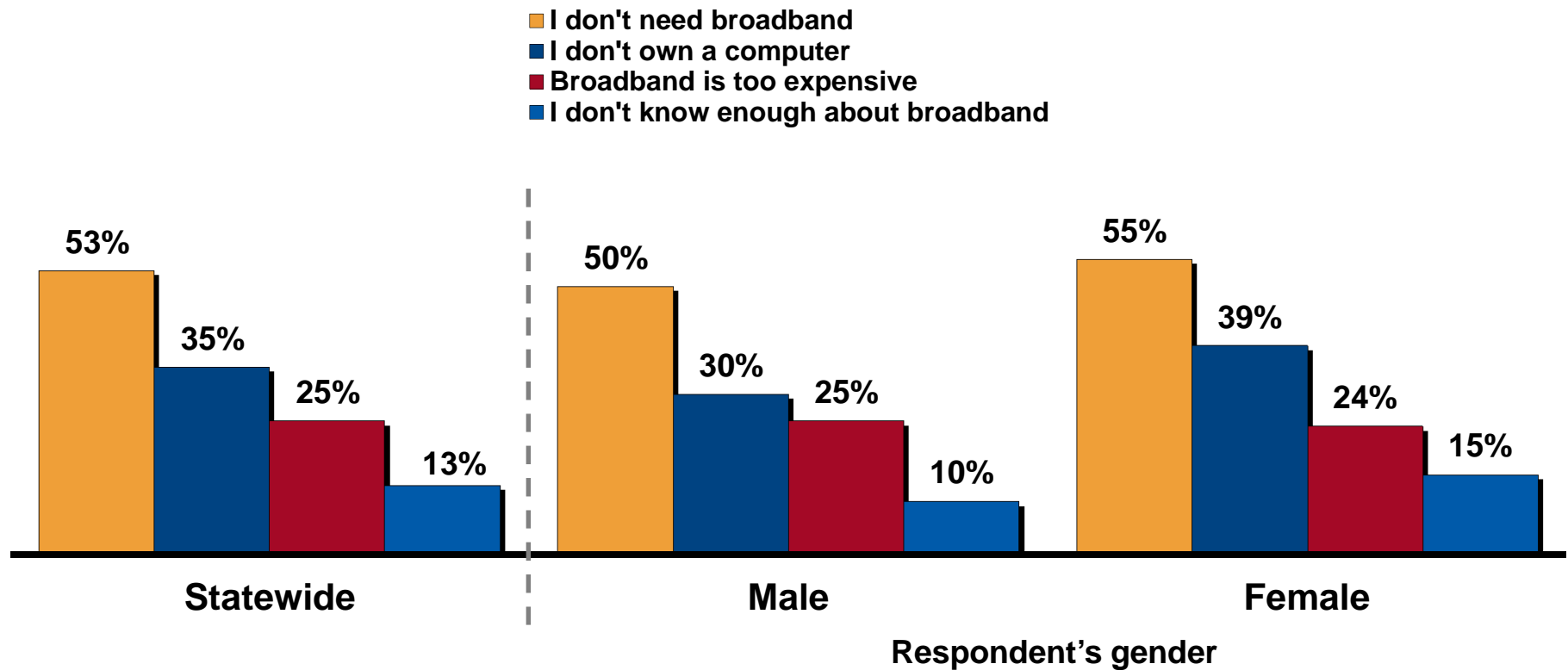
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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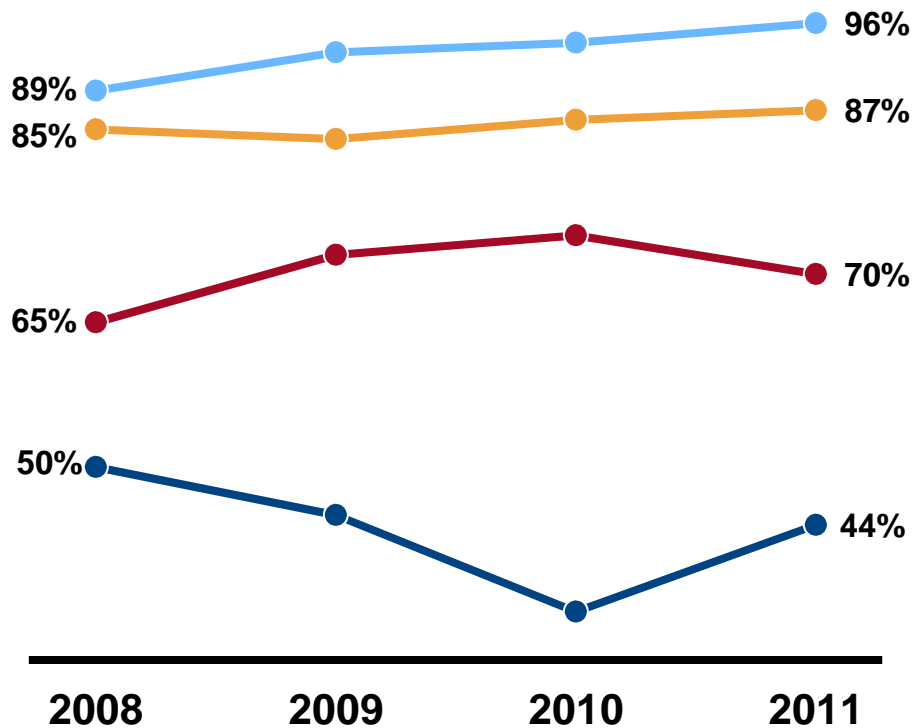


Residential Technology Assessment by Highest Educational Attainment



Trends in Computer Ownership by Highest Educational Attainment

Percent of all Ohio residents who have a computer at home



Educational Attainment	2008	2009	2010	2011
Less than high school diploma	50%	45%	35%	44%
High school diploma	65%	72%	74%	70%
Some college	85%	84%	86%	87%
College or advanced professional degree	89%	93%	94%	96%

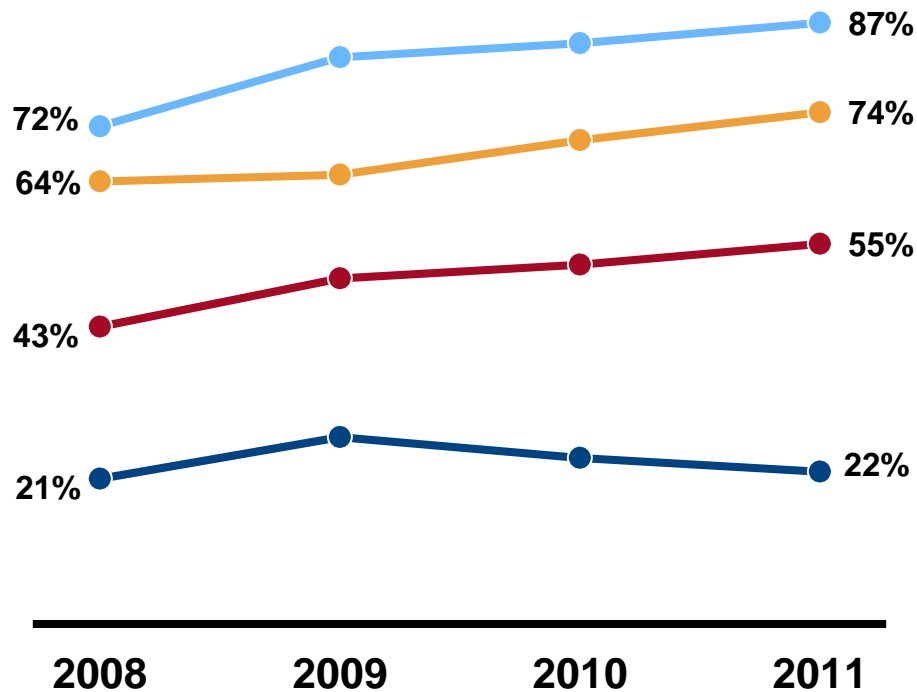
Q: Does your household have a computer?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org



Trends in Broadband Adoption by Highest Educational Attainment

Percent of all Ohio residents who access broadband from home



Educational Attainment	2008	2009	2010	2011
Less than high school diploma	21%	27%	24%	22%
High school diploma	43%	50%	52%	55%
Some college	64%	65%	70%	74%
College or advanced professional degree	72%	82%	84%	87%

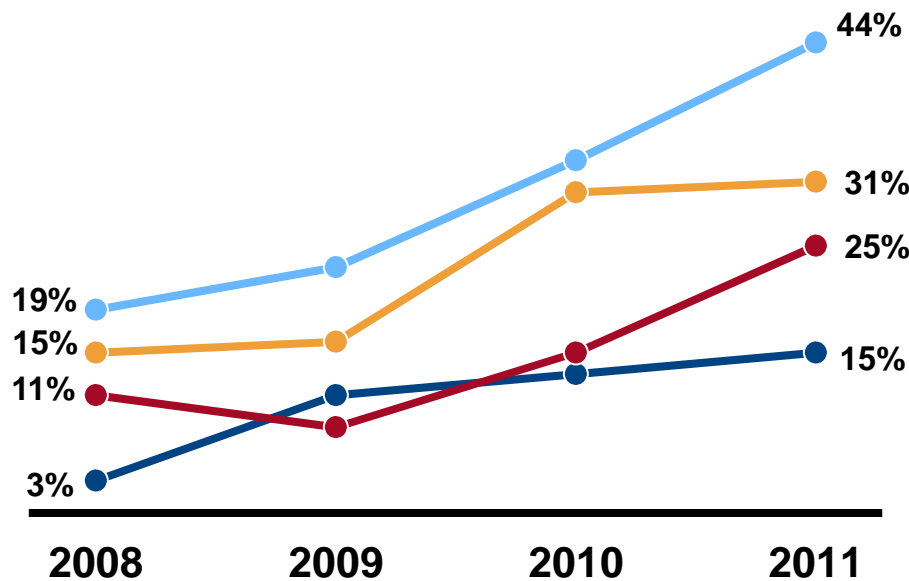
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Highest Educational Attainment

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Educational Attainment	2008	2009	2010	2011
Less than high school diploma	3%	11%	13%	15%
High school diploma	11%	8%	15%	25%
Some college	15%	16%	30%	31%
College or advanced professional degree	19%	23%	33%	44%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average:  Percentage is significantly* <i>lower</i> than the state average: 	Less than High School Diploma	High School Diploma	Some College	College Degree	Advanced or Professional Degree
Communicating through e-mail or other ways of sending messages	80%	77%	90%	91%	92%
Interacting with government offices or elected officials	8%	18%	35%	43%	45%
Searching or applying for jobs	50%	42%	41%	47%	37%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	29%	46%	57%	59%	61%
Researching or purchasing goods or services	43%	64%	77%	81%	84%
Online banking or paying bills	29%	49%	67%	73%	70%
Reading online newspapers or other news sources	42%	51%	71%	74%	74%
Taking online classes or conducting research for schoolwork	28%	30%	47%	45%	49%
Exploring or participating in hobbies or personal interests	56%	70%	78%	79%	75%

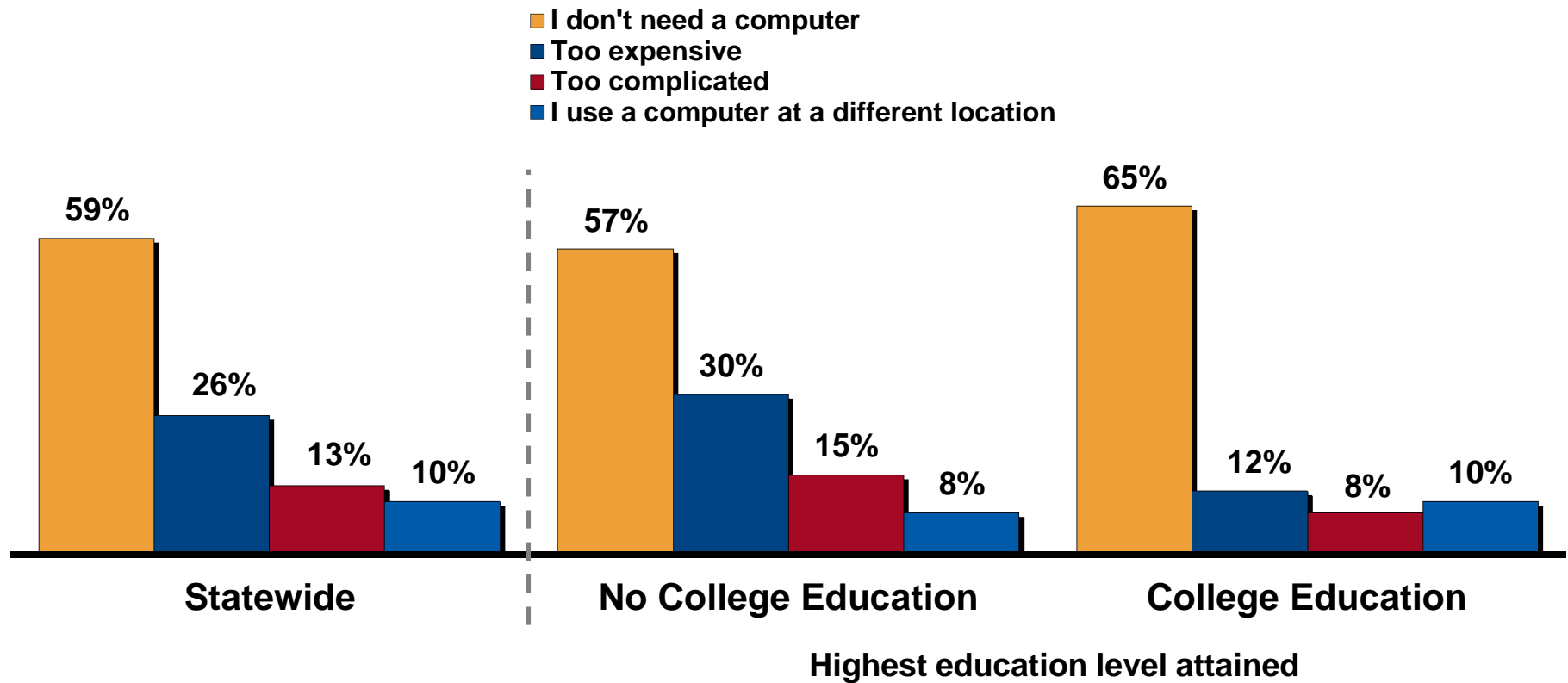
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



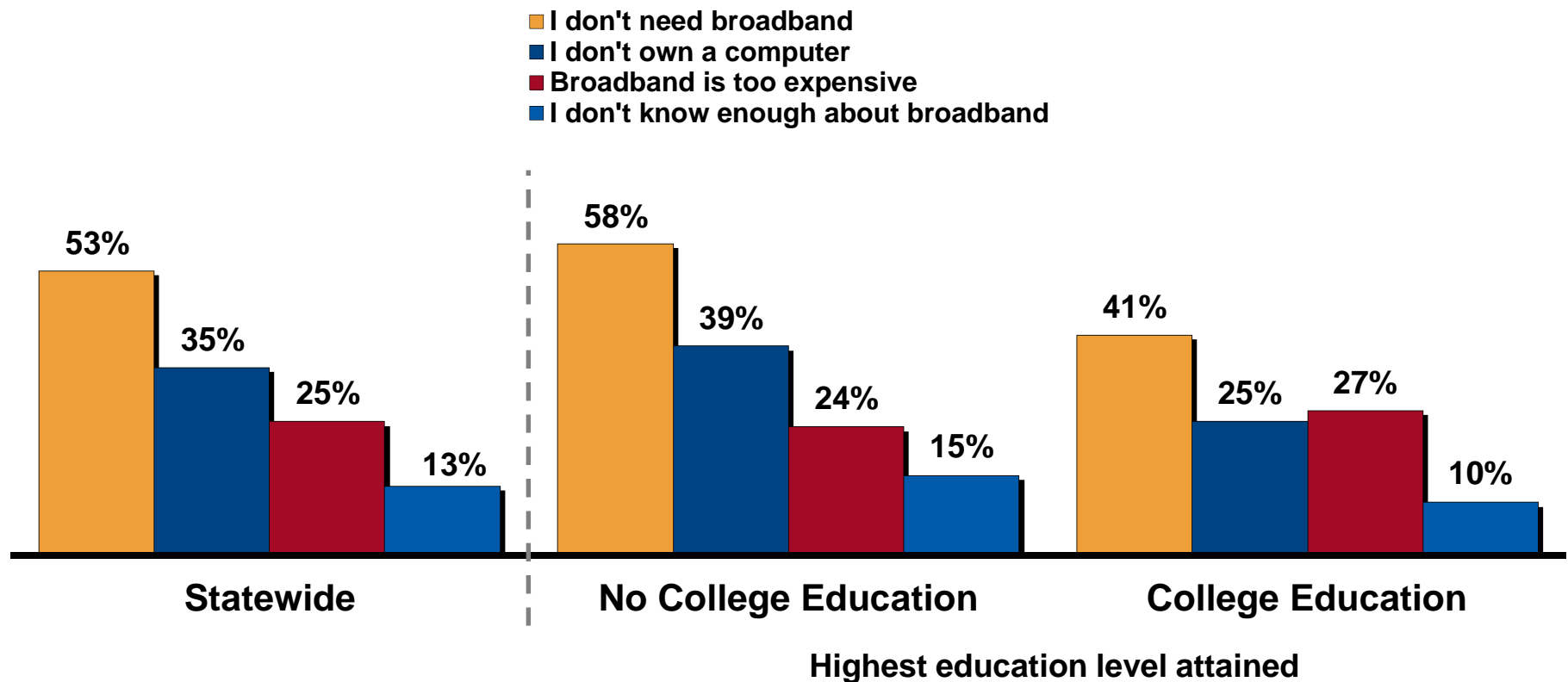
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



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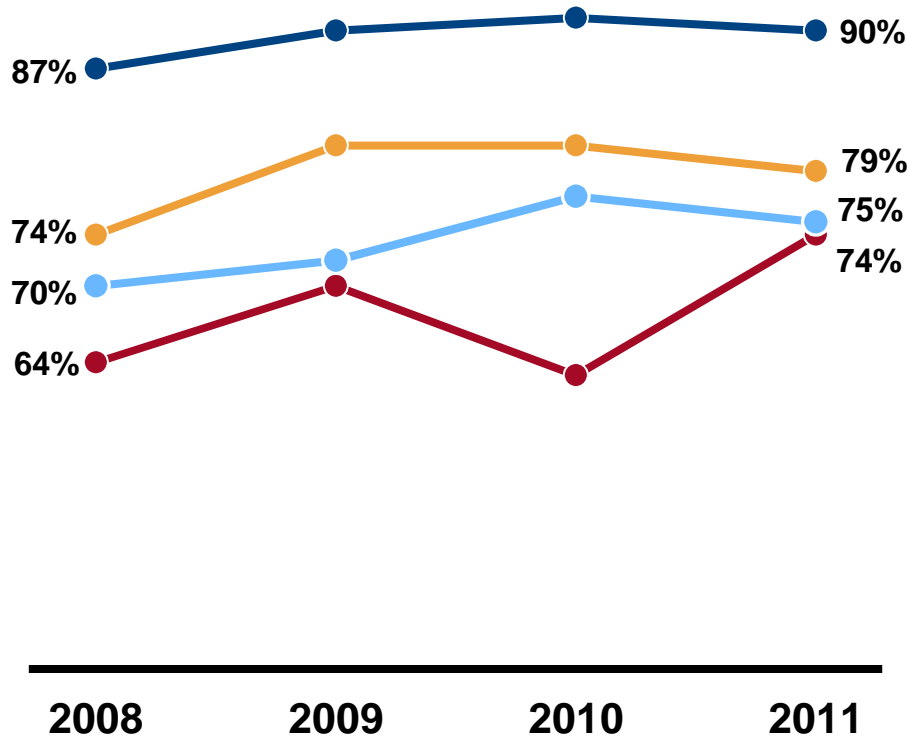


Residential Technology Assessment Among Households with Children



Trends in Computer Ownership by Presence of Children in the Household

Percent of all Ohio residents who have a computer at home



Presence of Children in the Household	2008	2009	2010	2011
Households with children	87%	90%	91%	90%
Low-income* households with children	64%	70%	63%	74%
Single-parent households	74%	81%	81%	79%
Households without children	70%	72%	77%	75%

*Low-income= household income less than \$25,000

Q: Does your household have a computer?

(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;

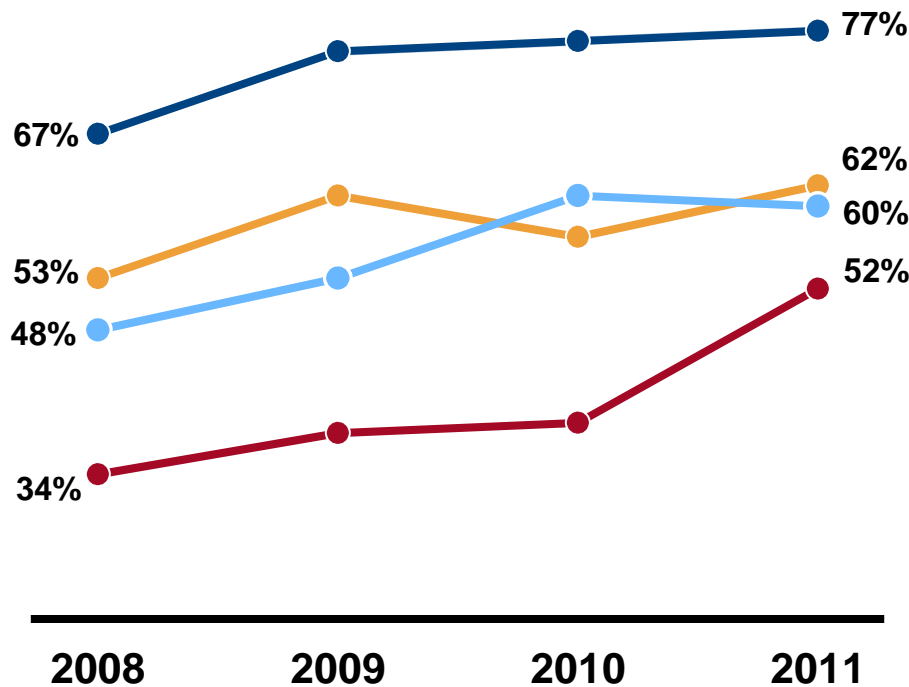
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Trends in Broadband Adoption by Presence of Children in the Household

Percent of all Ohio residents who access broadband from home



Presence of Children in the Household	2008	2009	2010	2011
Households with children	67%	75%	76%	77%
Low-income* households with children	34%	38%	39%	52%
Single-parent households	53%	61%	57%	62%
Households without children	48%	53%	61%	60%

*Low-income= household income less than \$25,000

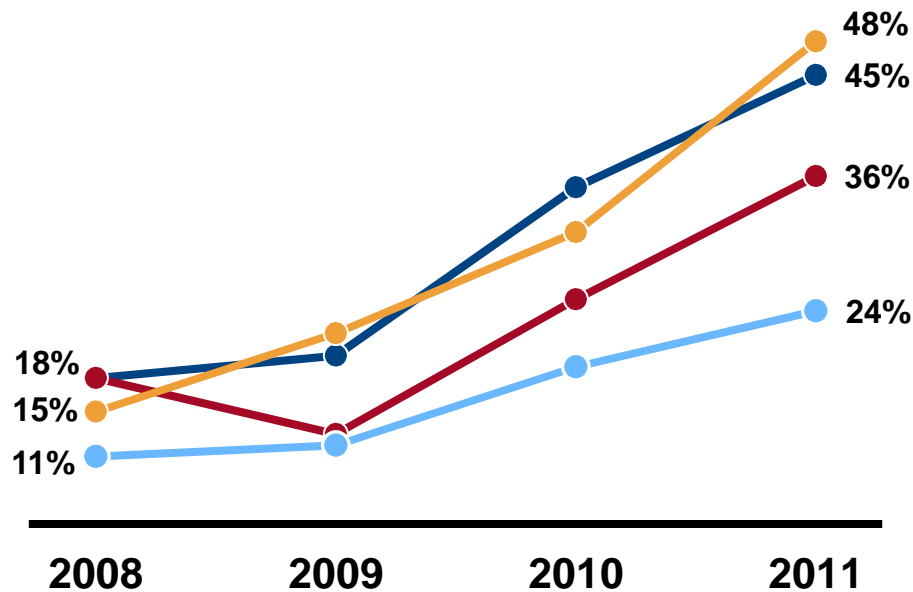
Q: Which of the following describe the type of Internet service you have at home?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Presence of Children in the Household

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Presence of Children in the Household	2008	2009	2010	2011
Households with children	18%	20%	35%	45%
Low-income* households with children	18%	13%	25%	36%
Single-parent households	15%	22%	31%	48%
Households without children	11%	12%	19%	24%

*Low-income= household income less than \$25,000

Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?



(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average:  Percentage is significantly* <i>lower</i> than the state average: 	Households with children	Households without children	Low-income** households with children	Single-parent households
Communicating through e-mail or other ways of sending messages	88%	84%	91%	86%
Interacting with government offices or elected officials	32%	31%	17%	27%
Searching or applying for jobs	54%	34%	75%	67%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	58%	49%	55%	55%
Researching or purchasing goods or services	77%	71%	59%	66%
Online banking or paying bills	68%	56%	57%	65%
Reading online newspapers or other news sources	67%	62%	61%	57%
Taking online classes or conducting research for schoolwork	55%	30%	53%	61%
Exploring or participating in hobbies or personal interests	77%	73%	68%	68%

**Low-income=annual household income less than \$25,000

*Significance measured at a 95% confidence level

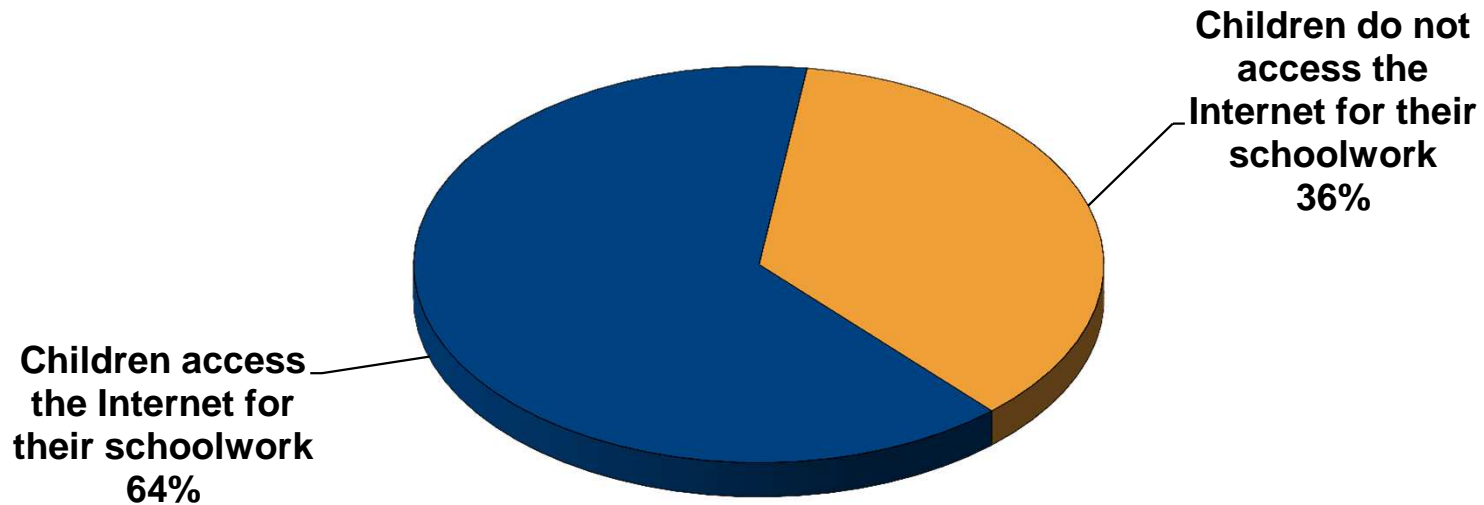
Q: Which of the following activities do you conduct using the Internet?
(n=970 OH Internet users)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Children who Access the Internet for Schoolwork

Among households with children that subscribe to the Internet



Nearly two out of three Internet-connected adults with children living at home say that the children use their home Internet service for their schoolwork.

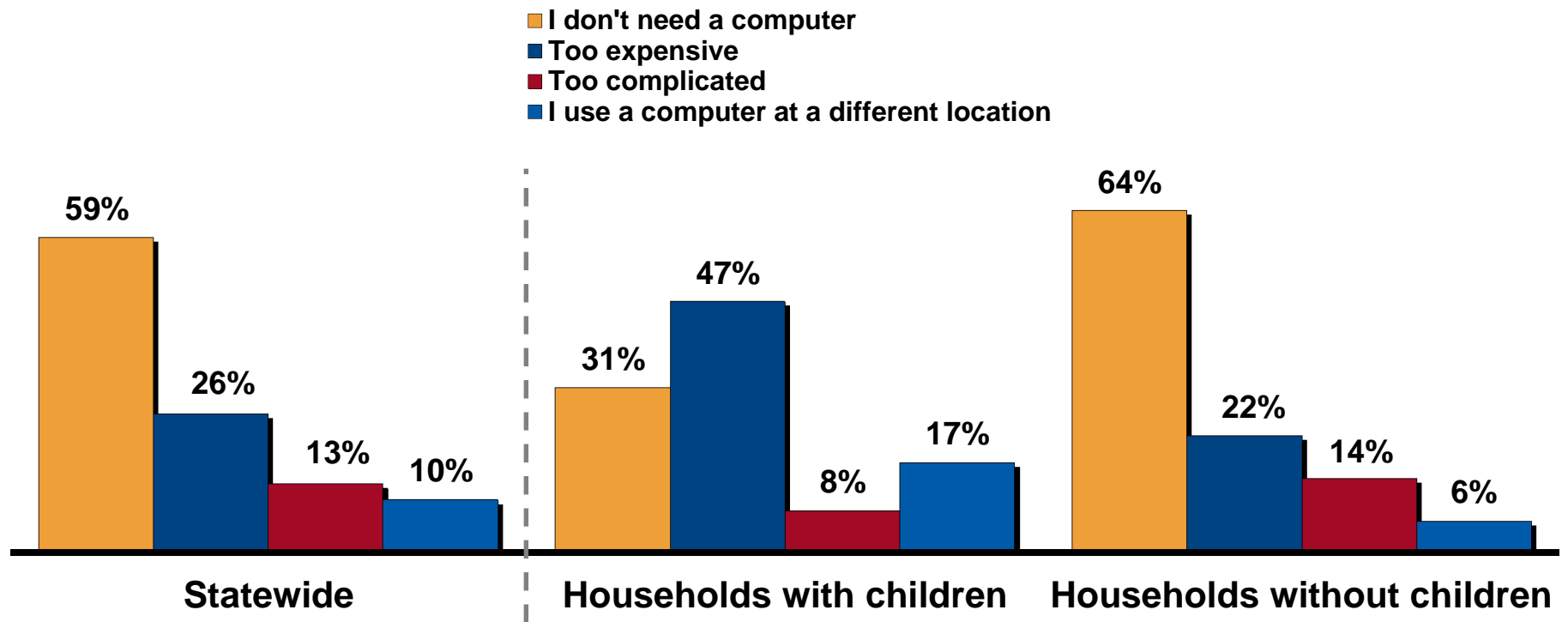
Q: Do those children use your home Internet service for any of their schoolwork?
(n=365 OH Internet subscribers living with children under the age of 18)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



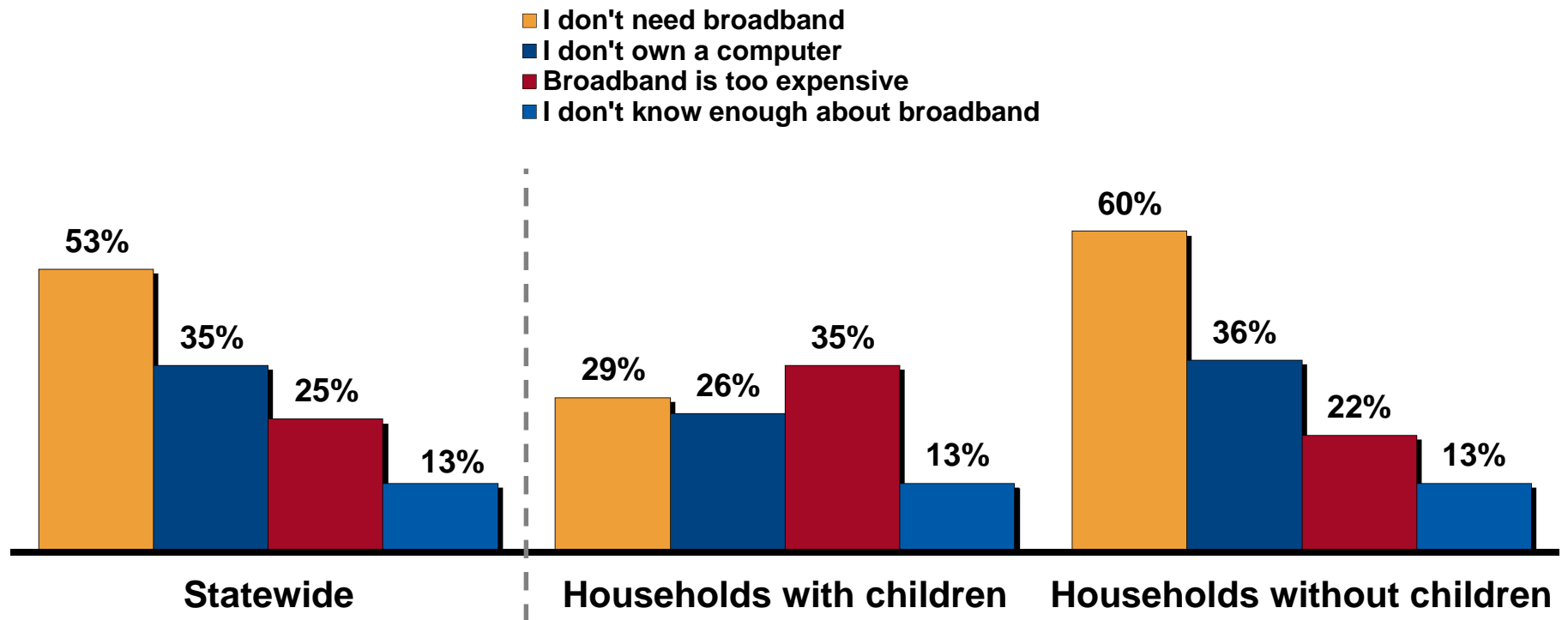
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio
Residential Technology Assessment
www.connectohio.org

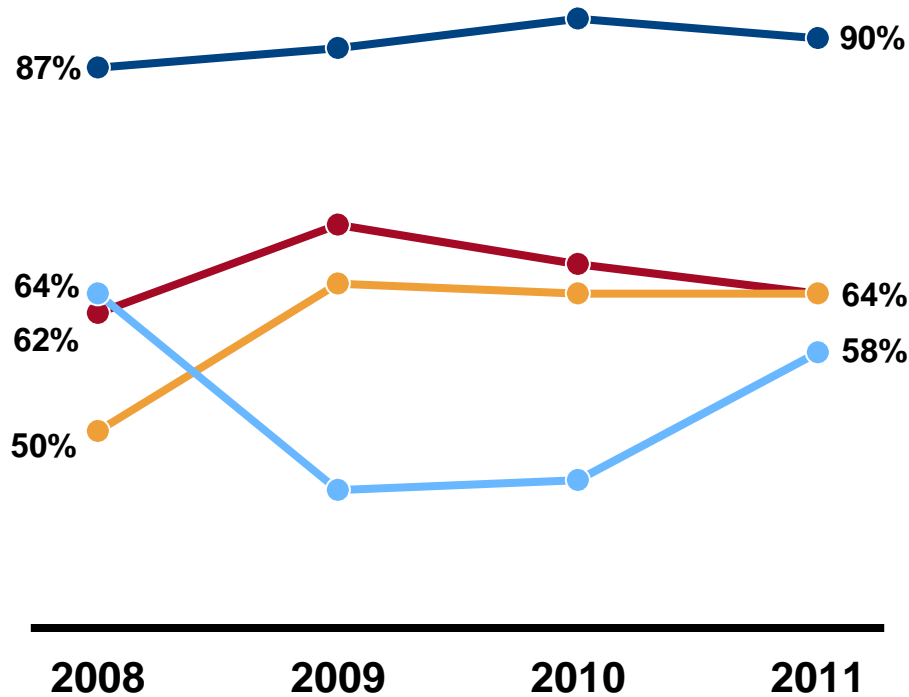


Residential Technology Assessment by Employment Status



Trends in Computer Ownership by Employment Status

Percent of all Ohio residents who have a computer at home



Employment Status	2008	2009	2010	2011
Employed	87%	89%	92%	90%
Unemployed	62%	71%	67%	64%
Retired	50%	65%	64%	64%
Adults with disabilities	64%	44%	45%	58%

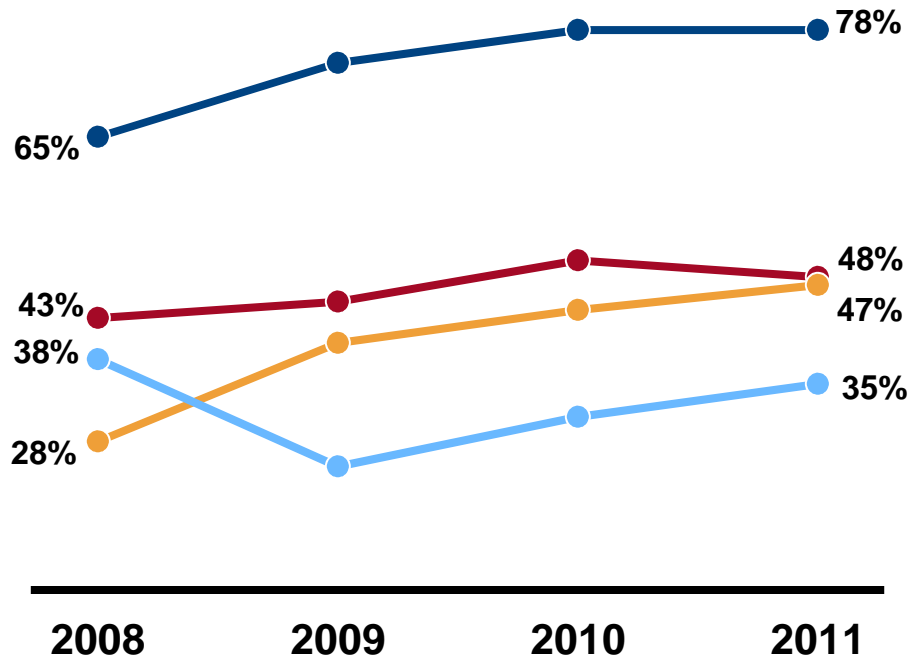
Q: Does your household have a computer?
(n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
Residential Technology Assessments
www.connectohio.org



Trends in Broadband Adoption by Employment Status

Percent of all Ohio residents who access broadband from home



Employment Status	2008	2009	2010	2011
Employed	65%	74%	78%	78%
Unemployed	43%	45%	50%	48%
Retired	28%	40%	44%	47%
Adults with disabilities	38%	25%	31%	35%

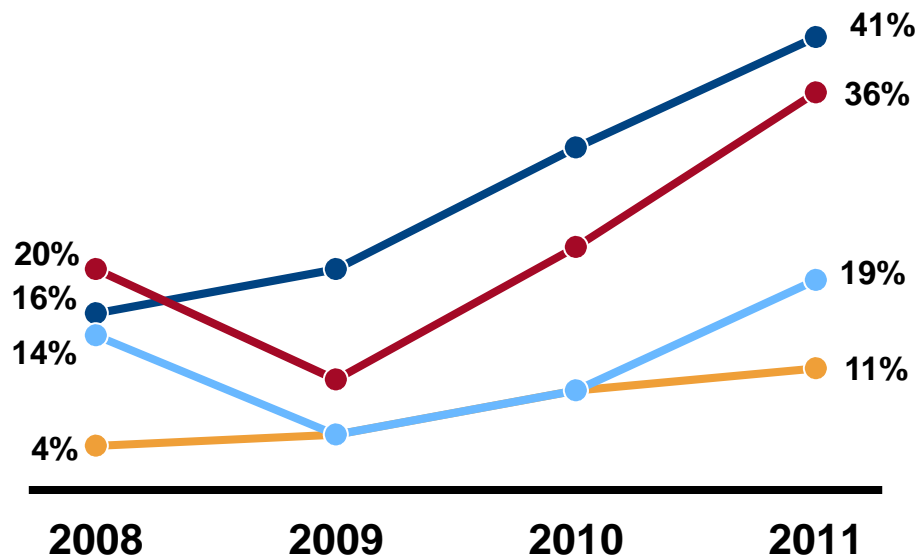
Q: Which of the following describe the type of Internet service you have at home?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009;
 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio
 Residential Technology Assessments
www.connectohio.org



Trends in Mobile Broadband Adoption by Employment Status

Percent of Ohio residents who access the Internet via a subscription to wireless broadband service



Employment Status	2008	2009	2010	2011
Employed	16%	20%	31%	41%
Unemployed	20%	10%	22%	36%
Retired	4%	5%	9%	11%
Adults with disabilities	14%	5%	9%	19%



Q: On you laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network? and
 Q: Do you access the Internet through your cell phone?
 (n=1,200 Ohio residents in 2008; 1,200 Ohio residents in 2009; 1,200 Ohio residents in 2010; and 1,201 Ohio residents in 2011)

Source: 2008-2011 Connect Ohio Residential Technology Assessments
www.connectohio.org



Online Activities

Percent of Ohio Internet users who conduct the following activities online

Percentage is significantly* <i>higher</i> than the state average:  Percentage is significantly* <i>lower</i> than the state average: 	Employed (Full- or Part-Time)	Retired	Other
Communicating through e-mail or other ways of sending messages	87%	82%	85%
Interacting with government offices or elected officials	31%	36%	28%
Searching or applying for jobs	45%	15%	55%
Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices	54%	57%	48%
Researching or purchasing goods or services	75%	70%	69%
Online banking or paying bills	66%	49%	56%
Reading online newspapers or other news sources	68%	56%	60%
Taking online classes or conducting research for schoolwork	43%	17%	48%
Exploring or participating in hobbies or personal interests	78%	65%	72%

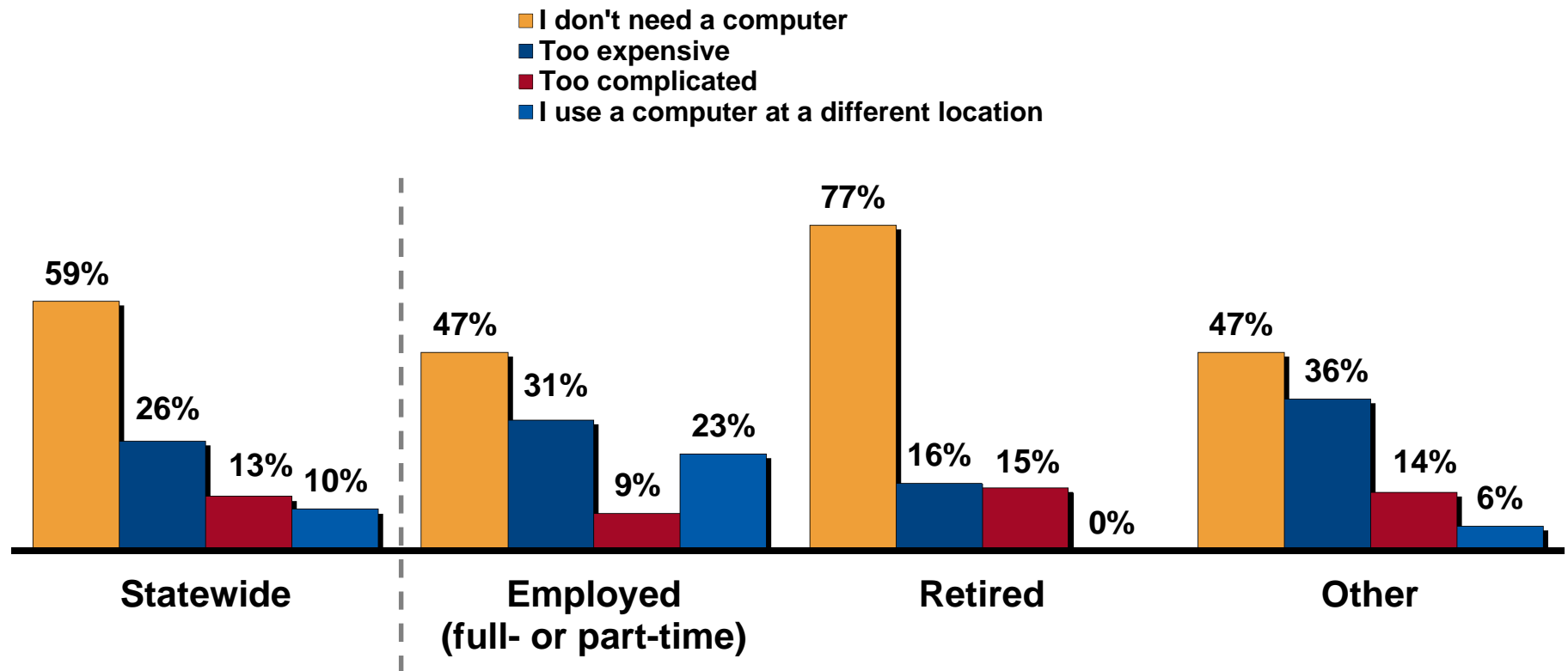
*Significance measured at a 95% confidence level
 Q: Which of the following activities do you conduct using the Internet?
 (n=970 OH Internet users)

Source: 2011 Connect Ohio
 Residential Technology Assessment
www.connectohio.org



Top Barriers to Computer Ownership

Among Ohio residents who do not own a home computer



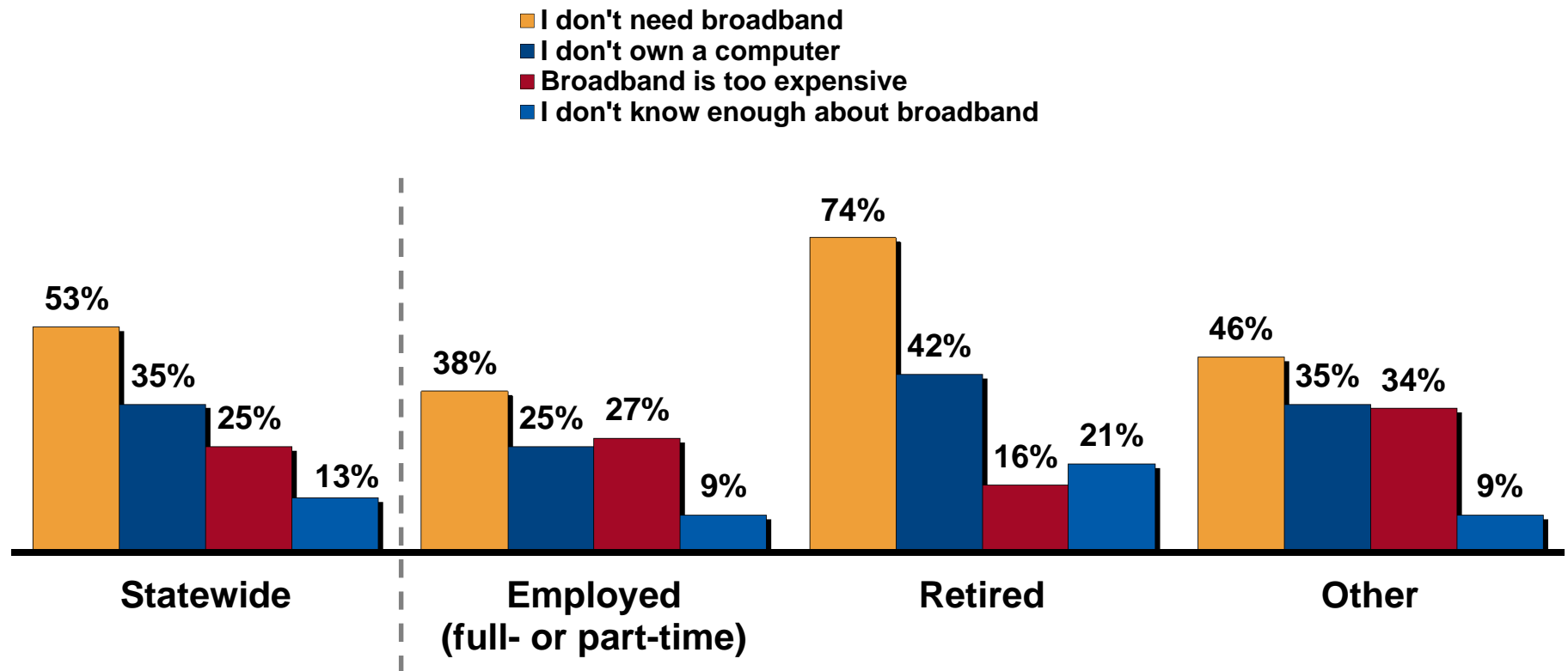
Q: Why don't you have a computer at home?
(n=247 OH residents with no home computer)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



Top Barriers to Broadband Adoption

Among Ohio residents without home broadband service



Q: Why don't you subscribe to broadband at home?
(n=418 OH residents who do not have broadband service at home)

Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org



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Research Methodology



Methodology

- **Data were collected by telephone through live computer-assisted interviews from a statewide random digit dial (RDD) sample of 1,201 households contacted between March 8 and March 29, 2011. On average, each survey took approximately 10 minutes to complete. Data were collected by Thoroughbred Research Group in Louisville, KY.**
 - This research was designed to measure technology adoption trends and the awareness of available broadband service.
- **The questionnaire screened to include only residents age 18 or older with quotas set by gender, age, and county of residence (urban, suburban, or rural) to ensure adequate representation of all residents in the state.**
- **Weights were applied to correct for minor variations and ensure that the sample matches the most recent U.S. Census estimates of the state's population by age, gender, and urban/rural classification of the respondent's county of residence. Weighting and research consultation were provided by Lucidity Research LLC.**
- **Sampling margin of error:**
 - Statewide, full sample (n=1,201): $\pm 3.0\%$ at the 95% level of confidence. This sample error accounts for sample weighting, using the effective sample size.



Urban-Rural Classifications Defined

- The U.S. Census Bureau uses an urban-rural classification based on Metropolitan Statistical Areas (MSAs), which are designated by the United States Office of Management and Budget to collect, tabulate and publish federal statistics.
- Metropolitan statistical areas contain a core urban area with a population of 50,000 or more. Each MSA also includes one or more counties that have a high degree of social and economic interaction with the urban core (further information on definitions for MSAs can be found at: www.census.gov/population/www/estimates/00-32997.pdf).
- When classifying urban, suburban and rural counties, we follow the Census Bureau definition whereby counties are categorized as “urban” if they contain the core city of an MSA. “Suburban” counties are MSA counties that do not contain a core city, and “rural” counties include all remaining counties that are not part of an MSA.
- Using these definitions, there are currently 14 urban, 26 suburban, and 48 rural counties in Ohio.



State Survey Sample (n=1,201 Adults)

Gender:		Employment Status:	
Male	48%	Employed full-time or part-time	55%
Female	52%	Retired	21%
Age:		Homemaker not employed outside home	6%
34 or younger	29%	Student not working for wages	3%
35 to 44	17%	Unemployed	8%
45 to 54	20%	Disabled, not employed outside the home	5%
55 to 64	16%	Other / no answer	2%
65 or older	18%	Educational Attainment:	
Mean age (years)	47	Less than high school	9%
Median age (years)	47	High school graduate	33%
Any children under age 18 in household	35%	Some college	25%
Race:		College graduate or higher	30%
White (non-Hispanic)	79%	Refused	3%
Black (non-Hispanic)	9%	Household Income:	
Any other (non-Hispanic)	2%	Under \$25,000	24%
Refused (non-Hispanic)	7%	\$25,000 to \$49,999	22%
Of Hispanic descent	3%	\$50,000 to \$74,999	14%
Marital Status:		\$75,000 or higher	20%
Single, never married	19%	No answer / refused	20%
Married or living in partnership	57%	Mean household income (\$000)	\$51
Widowed, separated or divorced	22%	Median household income (\$000)	\$43
Refused to say	2%	Average household size (# of persons)	2.8

Note: Sample profile shown here is after weighting to U.S. Census by age, gender and urban/suburban/rural county classification.