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PRICES AND SPENDING
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## Are most Americans cutting the cord on landlines?

## By Brett Creech

Look around. It seems as though everyone-from very young children to older adults-is scrolling, talking, searching, ordering, video chatting, emailing, or playing on a cell phone. Cellular phone services accounted for an increasing share of spending on all telephone services every year from 2007 to 2017. This trend could be due to more U.S. consumers "cutting the cord" on residential phone services, as well as to the rise of smartphones. During the first half of 2018 , more than half of U.S. households had only wireless service. 1

Data from the U.S. Bureau of Labor Statistics (BLS) Consumer Expenditure Surveys (CE) show that, in 2017, the average consumer unit spent $\$ 1,118$ (approximately $\$ 94$ a month) on cellular phone service, accounting for 82 percent of total telephone spending, or almost 2 percent of total spending. $\frac{2}{}$ In comparison, in 2007, the average
consumer unit spent $\$ 608$ on cellular phone services, accounting for 55 percent of total telephone spending and 1.2 percent of total spending. The Consumer Price Index for wireless telephone services has fallen substantially over this period, while expenditures have increased.

This Beyond the Numbers article compares total cellular phone service spending in 2007 with that in 2017, by age group, income quintile, size of household, as well as by 2017 generational group, a new BLS demographic category.

Chart 1 shows the percentage allocation of average annual telephone service expenditures by its two components, cellular phone and residential phone services, at the national level from 2007 to 2017. Cellular phone service spending exhibited an increasing share of total telephone expenditures every year. Cellular phone service expenditures were more than 4 times greater than residential phone service expenditures in 2017 ( 82.4 percent versus 17.6 percent), compared with about 0.2 times greater in 2007 .


## Age groups

From 2007 to 2017, the oldest age group had the highest percent change in cellular phone service expenditures. (See table 1.) Cellular phone service expenditures for consumer units with a reference person 65 years or older increased by 154.5 percent from 2007 to 2017.- This percentage includes an increase of 185.8 percent for those households with a reference person age 75 years or older. However, that age group is the only one for which the share of cellular phone service expenditures to total telephone service expenditures was below 50 percent in both

2007 and 2017. Households with a reference person under 25 years of age had the highest percentage share allocated to expenditures on cellular phone services in both 2007 and 2017 ( 75.3 percent and 94.0 percent, respectively). However, their 29.5-percent increase, in average annual cellular phone service expenditures from 2007 to 2017 was the smallest percent increase of all the age groups. Over that period, spending on cellular phone services as a share of total telephone services consistently fell with increasing age: from 94.0 percent for the under- 25 age group to 49.4 percent for the 75 -and-older group. This trend is consistent with other research that shows the percentage of households with wireless-only service declining for similar age groups. ${ }^{4}$ At the same time, the percentage change in dollars spent on cellular phone services from 2007 to 2017 increased consistently by age group.

Table 1. Average annual expenditures on cellular phone service, as a share of telephone expenditures, by age group, 2007 and 2017

| Age group | 2007 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Expenditure | Percent share | Expenditure | Percent share |
| Under 25 years | \$560 | 75.3 | \$725 | 94.0 |
| 25-34 years | 728 | 66.5 | 1,139 | 92.8 |
| 35-44 years | 757 | 58.5 | 1,439 | 89.9 |
| 45-54 years | 753 | 56.6 | 1,492 | 86.5 |
| 55-64 years | 546 | 48.1 | 1,161 | 79.6 |
| 65 years and older | 264 | 32.8 | 672 | 63.2 |
| 65-74 years | 374 | 39.5 | 850 | 70.3 |
| 75 years and older | 148 | 22.5 | 423 | 49.4 |
| Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys. |  |  |  |  |

## Income quintile

Cellular phone service expenditures increased across all income quintiles from 2007 through 2017, ranging from 76.6 percent for the second income quintile to 88.0 percent for the highest income quintile. (See table 2 .) In terms of the share of overall phone service expenditures, the highest income quintile spent the largest share of telephone service expenditures on cellular phone service expenditures in both 2007 ( 58.9 percent) and 2017 ( 86.1 percent). The third income quintile had the highest increase in cellular phone share from 2007 to 2017 (28.4 percent). The table also shows that, in both 2007 and 2017, the share of cellular phone expenditures increased the higher the income quintile.

Table 2. Average annual expenditures on cellular phone service, as a share of telephone expenditures, by income quintile, 2007 and 2017

| Income quintile |  | 2007 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Expenditure | Percent share |  | Expenditure |
|  | $\$ 278$ | 43.4 | $\$ 503$ | 71.2 |
| Lowest 20 percent | 462 | 51.2 | 816 | 77.0 |
| Second 20 percent | 602 | 54.7 | 1,092 | 83.1 |
| Third 20 percent | 762 | 57.7 | 1,424 | 85.6 |
| Fourth 20 percent | 933 | 58.9 | 1,754 | 86.1 |
| Highest 20 percent |  |  |  |  |

[^0]Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys.

## Size of household

From 2007 to 2017, the increase in cellular phone expenditures ranged from 58.1 percent for one-person consumer units to 98.7 percent for consumer units of 5 or more people. One-person consumer units had the lowest share of cellular expenditures, compared with telephone service expenditures for all household size groups, but their share increased from 49.0 percent in 2007 to 73.2 percent in 2017. (See table 3.) Consumer units with four people had the highest share ( 58.8 percent) of telephone service expenditures on cellular phone services in 2007, but consumer units with five or more people had the highest share ( 89.6 percent) in 2017 . Consumer units with five or more people also had the highest increase ( 31.7 percent) in cellular phone share from 2007 to 2017.

Table 3. Average annual expenditures on cellular phone service, as a share of telephone expenditures, by size of household, 2007 and 2017

| Size of household | $\mathbf{2 0 0 7}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Expenditure | Percent share |  | Expenditure |
| One person | $\$ 346$ | 49.0 | $\$ 547$ | Percent share |
| Two or more people | 718 | 56.1 | 1,348 | 84.2 |
| Two people | 581 | 52.6 | 1,118 | 79.9 |
| Three people | 781 | 58.2 | 1,402 | 85.4 |
| Four people | 858 | 58.8 | 1,607 | 87.2 |
| Five or more people | 876 | 57.9 | 1,741 | 89.6 |
| Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys. |  |  |  |  |

## Generation of reference person

Spending on cellular phone services by the generational group of the reference person was highest $(\$ 1,494)$ for households with a reference person in generation X (born from 1965 to 1980). $\underline{5}$ This dollar amount accounted for 88.3 percent of the group's total telephone services in 2017. (See table 4.) Next was the baby-boom generation ( $\$ 1,117$ ), with households whose reference person was born anytime from 1946 to 1964. Households with a reference person in the millennial generation (people born 1981 or later) had the highest percentage share of cellular phone service expenditures: almost 93 percent of total telephone service expenditures. ${ }^{6}$ As the table shows, the percentage share of cellular phone service expenditures compared with total telephone service expenditure rises from the oldest to the youngest generation. Households with a reference person from either the "greatest" or silent generations (born 1927 or earlier or born anytime from 1928 to 1945) spent less on cellular phones services and had higher percentage shares of residential landline phone expenditures. $\underline{7}$

Table 4. Average annual expenditures and percent distribution of telephone expenditures, by generation of reference person, 2017

| Generation (year born) | Telephone services |  | Cellular phone service |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Expenditure | Total | Expenditure | Percent share |
| "Greatest" generation (1927 or earlier) | $\$ 687$ | 100.0 | $\$ 280$ | 40.8 |
| Silent (1928-45) | 935 | 100.0 | 511 | 54.7 |
| Baby boom (1946-64) | 1,424 | 100.0 | 1,117 | 78.4 |

[^1]Table 4. Average annual expenditures and percent distribution of telephone expenditures, by generation of reference person, 2017

| Generation (year born) | Telephone services |  | Cellular phone service |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Expenditure | Total | Expenditure | Percent share |
| Generation X (1965-80) | 1,692 | 100.0 | 1,494 | 88.3 |
| Millennial (1981 or later) -1$)$ | 1,145 | 100.0 | 1,062 | 92.8 |
| (1) |  |  |  |  |

Footnotes:
(1) In 2017, the oldest person in the post-Millennial generation, born after 1996, would have been 20 years old. Until there are enough data on post-Millennials forming their own consumer units, the CE definition includes every reference person born after 1980.
Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys.

## Conclusion

Cellular phone expenditures accounted for an increasing percentage of total telephone expenditures from 2007 to 2017, for all consumer units, age groups, income quintiles, and household sizes. The data show that consumer spending on residential phone services kept declining. The under-25 age group consistently had the highest cellular phone share among all age groups. Data by income quintile show that the share spent on cellular phone service increased as income quintile increased. Data by household size show that bigger households spent more on cellular phones and had the highest share among all households by size. Data by generational groups, show that the younger the generation, the higher the percentage share of cellular phone service expenditures.

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## RELATED <br> ARTICLES

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## NOTES

1 See Stephen J. Blumberg, and Julian V. Luke, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January-June 2018,"www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201812.pdf.
$\underline{2}$ Consumer units include families, single persons living alone or sharing a household with others but who are financially independent, or two or more unrelated persons living together who pool their income to make joint expenditure decisions.
$\underline{3}$ The reference person of the consumer unit is the first member mentioned by the respondent when asked "What are the names of all the persons living or staying here? Start with the name of the person or one of the persons who owns or rents the home." It is with respect to this person that the relationship of the other consumer unit members is determined.

4 Blumberg and Luke, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January-June 2018," www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201812.pdf.
$\underline{5}$ The CE program started publishing generational tables as part of its standard series with the release of 2016 data (www.bls.gov/ cex/csxcombined.htm). Experimental tables are available from 2014 through mid-2016 (www.bls.gov/cex/ csxresearchtables.htm\#generational). Data from 2007 are computable from CE public-use microdata (www.bls.gov/cex/pumd.htm).
$\underline{6}$ The reference person is based on the respondent's answer to whose name is first on the rental lease or mortgage. In 2017, the oldest person in the post-Millennial generation, born after 1996, would have been just 20 years old. There were not enough reference people born after 1996 in the 2017 CE data to create a post-millennial generation. However, the CE is just beginning to get enough data on post-Millennials forming their own consumer units with the 2019 data. Until that happens, the CE definition of Millennial includes every reference person born after 1980.
$\underline{7}$ For a more detailed analysis of expenditures by generation, including expenditures on cellular phones, see Geoffrey D. Paulin, "Fun facts about Millennials: comparing expenditure patterns from the latest through the Greatest generation," Monthly Labor Review, March 2018, www.bls.gov/opub/mlr/2018/article/fun-facts-about-millennials.htm.

## SUGGESTED

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[^0]:    See footnotes at end of table.

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