

# How Will Millennials Impact Freight Flows in Texas? *Final Report*

PRC 16-63 F



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Texas A&M Transportation Institute

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## Table of Contents

<b>List of Figures</b> .....	<b>5</b>
<b>List of Tables</b> .....	<b>6</b>
<b>Executive Summary</b> .....	<b>7</b>
Millennials.....	7
Survey.....	7
Shopping.....	8
Online Shopping Is Not Replacing In-Store Shopping .....	8
Where Do Online Packages Go?.....	9
What Does This Mean for Freight? .....	9
<b>Introduction</b> .....	<b>11</b>
Definitions .....	11
Data .....	11
Literature Review .....	12
<b>Comparison of Baby Boomers and Millennials</b> .....	<b>13</b>
Population.....	13
Education and Income .....	14
Marriage Age.....	14
Employment and Living with Family .....	15
Homeownership .....	16
Driving .....	16
<b>Millennials’ Consumer Behavior and Expectations</b> .....	<b>18</b>
Shopping Behavior .....	18
Income and Expenditures .....	18
Education.....	19
Food.....	20
Eating Out.....	21
Vehicle Purchases .....	21
Mortgage and Rent .....	22
Health Care .....	23
Total Expenditures.....	24
<b>Results of Survey</b> .....	<b>27</b>
Demographics.....	27
Age .....	27
Location .....	27
Income .....	28
Debt .....	28
Shopping.....	29
Where Do Respondents Like to Shop? .....	29
Who Receives the Most Packages?.....	33
How Quickly Do Packages Arrive? .....	37
Who Has Amazon Prime?.....	39
Did Respondents Return Items?.....	41

Living Arrangements and Buying Homes.....	43
Currently Owning or Renting .....	43
Timeline for Buying a Home .....	43
Where Respondents Want to Buy a Home.....	44
<b>Conclusions.....</b>	<b>47</b>
<b>References.....</b>	<b>50</b>
<b>Appendix A: Literature Review .....</b>	<b>55</b>
<b>Appendix B: Data Analysis .....</b>	<b>71</b>
<b>Appendix C: Survey Questions.....</b>	<b>88</b>
<b>Appendix D: Survey Results .....</b>	<b>94</b>

## List of Figures

---

Figure 1. Typical Respondent.....	8
Figure 2. Where Respondents Like to Shop.....	9
Figure 3. Definition of Baby Boomers and Millennials.....	11
Figure 4. Population Aged 18 to 34.....	13
Figure 5. Median Earnings and Percentage of Bachelor’s Degrees.....	14
Figure 6. Living with Family and Employment.....	15
Figure 7. Home Ownership.....	16
Figure 8. Driver’s License.....	17
Figure 9. Income and Expenditures.....	19
Figure 10. Spending on Education.....	20
Figure 11. Spending on Food.....	20
Figure 12. Spending on Going Out to Eat.....	21
Figure 13. Spending on Vehicle Purchases.....	22
Figure 14. Spending on Mortgage and Rent.....	23
Figure 15. Spending on Health Care.....	24
Figure 16. Younger Households’ Total Expenditures.....	25
Figure 17. Older Households’ Total Expenditures.....	26
Figure 18. Age Distribution of Respondents.....	27
Figure 19. Location Distribution of Respondents.....	28
Figure 20. Income Distribution of Respondents.....	28
Figure 21. Where Participants Like to Shop.....	29
Figure 22. Types of Products.....	30
Figure 23. Store Visits per Week by Geographic Area.....	31
Figure 24. Store Visits per Week by Income.....	32
Figure 25. Store Visits per Week by Income and Geographic Area.....	32
Figure 26. Average Number of Store Visits by Number of Packages Received.....	33
Figure 27. Which Respondents Received an Online Order in the Previous Week.....	33
Figure 28. Number of Packages Received.....	34
Figure 29. Packages Received by Geographic Area.....	35
Figure 30. Packages Received by Income.....	36
Figure 31. Income by Geographic Location.....	36
Figure 32. Packages Received by Geographic Area and Income.....	37
Figure 33. Delivery Time.....	38
Figure 34. Delivery Time by Geographic Area.....	38
Figure 35. Delivery Time by Geographic Area and Income.....	39
Figure 36. Percentage of Amazon Prime Membership.....	40
Figure 37. Percentage of Amazon Prime Membership by Geographic Area.....	40
Figure 38. Delivery Times by Geographic Area for Amazon Prime Members.....	41
Figure 39. Percentage of Respondents Who Returned an Online Order.....	42

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Figure 40. Percentage of Respondents Who Bought Online and Picked Up In-Store.....	42
Figure 41. Percentage of Respondents Who Returned Something They Bought In-Store.....	42
Figure 42. Percentage of Respondents That Reported Owning or Renting Their Homes.....	43
Figure 43. Respondents’ Timeline for Buying a Home.....	44
Figure 44. Where Respondents Would Like to Buy a Home. ....	45

## List of Tables

---

Table 1. Types and Amount of Debt.....	29
Table 2. What Respondents Like about Shopping Online and In-Store. ....	31
Table 3. What Respondents Dislike about Shopping Online and In-Store.....	31
Table 4. Delivery Times by Income. ....	39
Table 5. Percentage of Respondents Who Received Their Last Package in Two Days or Less.....	41
Table 6. Where Respondents Would Like to Buy a Home Compared to Where They Currently Live.....	45
Table 7. Where Respondents Would Like to Buy a Home by Income.....	46

# Executive Summary

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## Millennials

As young adults, millennials (born between 1983 and 2000) are an important consumer demographic. Millennials represent approximately 25 percent of the U.S. population and make up more of the workforce than baby boomers (born between 1946 and 1964). Austin, Houston, and Dallas-Fort Worth are in the top 10 cities in the United States for highest concentration of millennials.

Purchasing drives much of freight—people demand goods, and those goods are shipped to a store where they can be purchased, or goods are shipped directly to a home in the case of online shopping. Because of this, millennials’ consumer behavior and expectations will impact the future of the freight transportation system in Texas.

The research team used U.S. Census data to compare today’s millennials to baby boomers when they were around the same age, in 1980.

Census data showed that compared to their baby boomer counterparts in 1980, today’s millennials are:

- Better educated (2).
- Save more money (3).
- Spend more on education, rent, and health care (3).
- Living with family as a dependent at a higher rate (author calculations based on U.S. Census Bureau data [4]).
- Have lower homeownership rates (5,6).

## Survey

The research team conducted a survey of 1,310 millennials living in Texas in order to gather more detailed information on purchasing. Figure 1 describes the typical respondent.

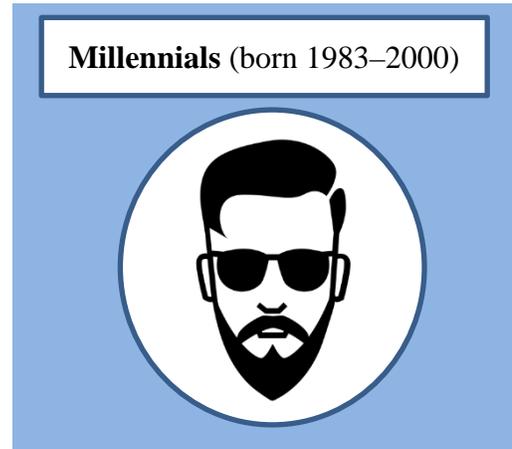


Image source: (1)

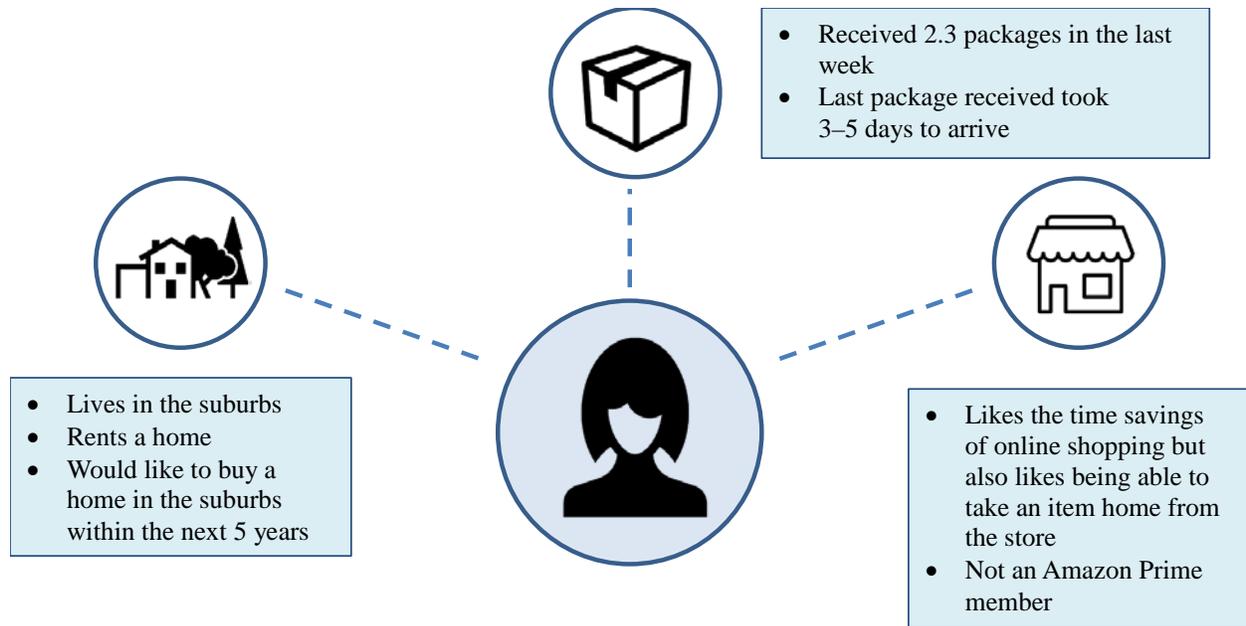


Image source: (7,8,9,10)

**Figure 1. Typical Respondent.**

## Shopping

### *Online Shopping Is Not Replacing In-Store Shopping*

Though most survey respondents shop online (68 percent of respondents received an online order in the previous week), it does not appear that online shopping will replace in-store shopping in the near future. Most respondents (75 percent) like to shop both online and in stores, and 95 percent of respondents had visited a store in the last week, as shown in Figure 2.

Of respondents who had received an online order, 70 percent received two or fewer packages in the previous week.

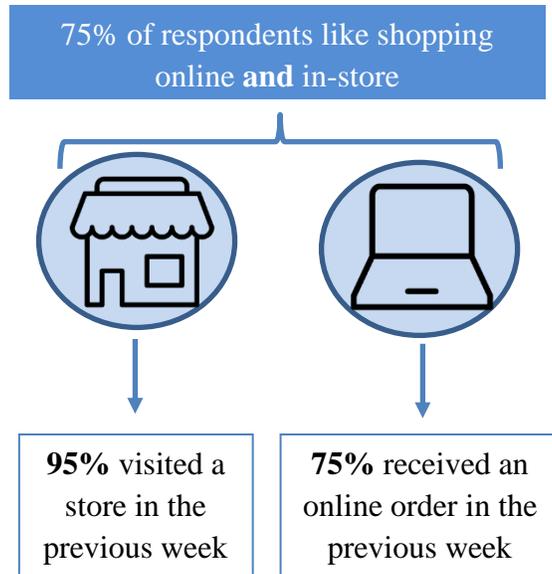


Image source: (10,11)

**Figure 2. Where Respondents Like to Shop.**

### Where Do Online Packages Go?

Among survey respondents, suburban residents (70 percent) were the most likely to have received a package in the previous week, compared to 68 percent of urban residents and 61 percent of rural residents.



Image source: (12)

Of those who received a package, high-income respondents (earning over \$50,000) received more packages (2.7) than low-income respondents (earning less than \$50,000) (2.1). High-income urban residents received the most packages and were more likely to receive a package in two days or less than low-income respondents.

High-income, urban residents received the most packages in the previous week.

Over half (54 percent) of high-income urban residents would like to buy a home in a suburban or rural area, which means they could shift demand for fast home delivery to a new geographic area if they moved.

### What Does This Mean for Freight?

The majority of millennials shop online, and online shopping presents unique challenges to freight. Logistics providers often carry less-than-truckload hauls for home delivery, as opposed to a fully loaded truck that drops off things at a distribution center. An additional issue with home delivery is failed first delivery attempts, which can be between 12 and 60 percent of deliveries (13).

Despite the prevalence of affordable delivery options for consumers, such as Amazon Prime, almost 75 percent of respondents received their most recent package in three days or more. Additionally, the current research shows that millennials have different shopping preferences for

different items. For example, respondents still predominantly buy food, home supplies, personal hygiene products, furniture, and major appliances in-store. Clothing, electronics, and books or newspapers were the top items bought online. With regard to store visits, it appears that online shopping will not replace in-store shopping for now. Most respondents reported liking shopping online and in-store, and 95 percent of respondents visited a store in the previous week, compared to 68 percent who received an online order. Therefore, the demands placed on the freight network by inventory deliveries to brick-and-mortar stores are not expected to change.

According to the survey of millennials, high-income urban residents received the most online orders. However, the largest proportion of respondents across all incomes would like to buy a



Image source: (14)

home in the suburbs. The number of package deliveries was most closely tied to income, so congestion due to this type of delivery may geographically follow high earners. Tracking the volume of online orders by location could help predict demand for freight in city centers—an already congested component of the urban transportation system—and the less congested suburbs.

## Introduction

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Millennials (born between 1983 and 2000) represent approximately 25 percent of the population in the United States and already outnumber baby boomers (born between 1946 and 1964) in the current population (15,16,17). As young adults, millennials are becoming an important consumer demographic.

Purchasing drives much of freight—people demand goods, and those goods are shipped to a store where they can be purchased, or goods are shipped directly to a home in the case of online shopping. Because purchasing drives freight, millennials’ consumer behavior and expectations will impact the future of the freight transportation system in Texas. This research attempts to understand how millennials differ from baby boomers when they were young adults.

Specifically, this research attempts to provide insight into millennial spending (e.g., types of purchases), purchasing behavior (e.g., frequency and online), and millennials’ expectations for the delivery of purchases.

## Definitions

Unless otherwise specified, this report uses the definitions in Figure 3.

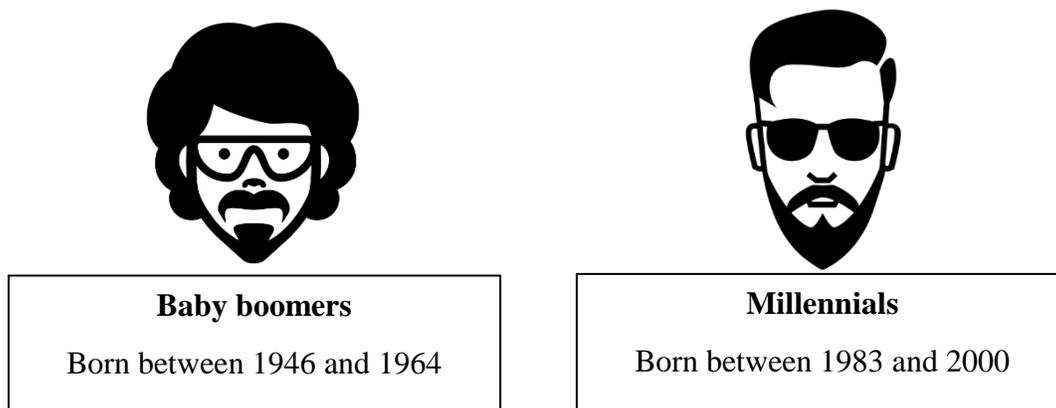


Image source: (18, 1)

**Figure 3. Definition of Baby Boomers and Millennials.**

## Data

The research team collected data for 18- to 34-year-olds for 1980 and data for the most recent year. This was to compare millennials to baby boomers when they were ages 18 to 34 (i.e., not at their current age).

The age range 18 to 34 corresponds with how the U.S. Census groups ages for many measures. The 18- to 34-year-old age range also captures most baby boomers in 1980 (baby boomers were 16 to 34 years old in 1980), captures many millennials in 2010 (millennials were 10 to 27 years old in 2010), and captures most millennials in 2015 (millennials were 15 to 32 years old in

2015). Although this age range does not capture all baby boomers and millennials, it is the most robust data available at this time.

## Literature Review

The literature revealed the following information about U.S. millennials compared to baby boomers when they were young adults:

- Millennials are better educated than baby boomers. The Pew Research Center recently conducted an analysis of 25- to 32-year-olds based on survey and census data. They found that 34 percent of millennials have at least a bachelor's degree, compared to 24 percent of baby boomers at a similar age (19).
- The same Pew Research Center study found that despite being better educated than baby boomers, millennials only earn about \$200 a year more than baby boomers did when they were young adults (2012 dollars) (19). Millennials with only a high school diploma are doing worse than baby boomers. The wage gap between millennials with a bachelor's degree and those with a high school diploma is greater than it was for baby boomers.
- Many millennials owe large amounts of student debt. The Pew Research Center stated that in 2010, 37 percent of young households owed money on student debt, up from 22 percent in 2001 (20).
- Millennials are getting married later in life than at any other time. In the United States, the average age of first marriage has been steadily increasing since the 1960s to reach 29.3 for men and 27 for women in 2015 (21).
- Millennials are more racially diverse than baby boomers. Forty-three percent of millennials are non-white, compared to 28 percent of baby boomers (22). Hispanics, the largest minority, make up 21 percent of millennials (22).

In 2013, 22 percent of those aged 25 to 32 with a high school diploma were living below the poverty line. Only 7 percent of baby boomers with high school diplomas were living in poverty at the same age.

Appendix A provides a detailed literature review.

## Comparison of Baby Boomers and Millennials

This section provides information about how Texas baby boomers and millennials compare based on available data for 18- to 34-year-olds in 1980 and in the most recent year available, unless otherwise specified.

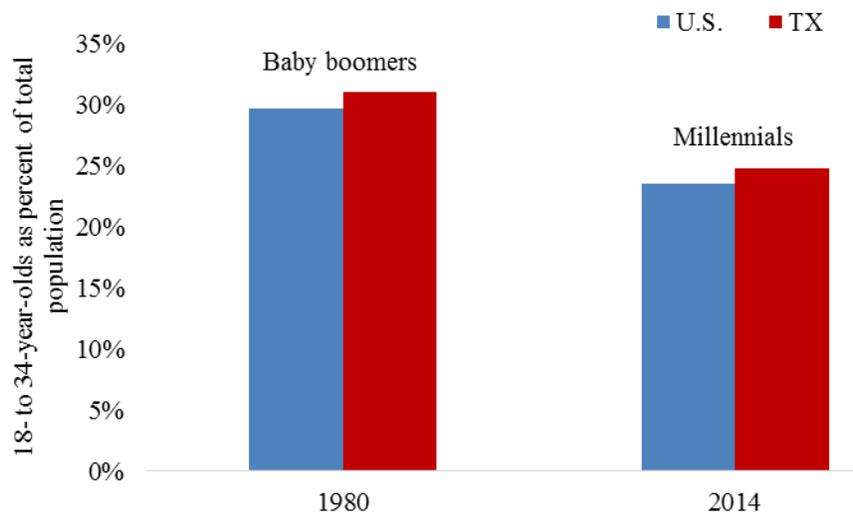
Appendix B provides a detailed analysis of the available sociodemographic and consumer spending data.



Image source: (23)

### Population

Figure 4 shows the percentage of the population aged 18 to 34 in 1980 (i.e., the baby boomers) and in 2014 (i.e., the millennials) (24). In both years, 18- to 34-year-olds were a larger share of Texas's population than that of the United States as a whole. Millennials, however, are a smaller percentage of the population than baby boomers were in 1980.



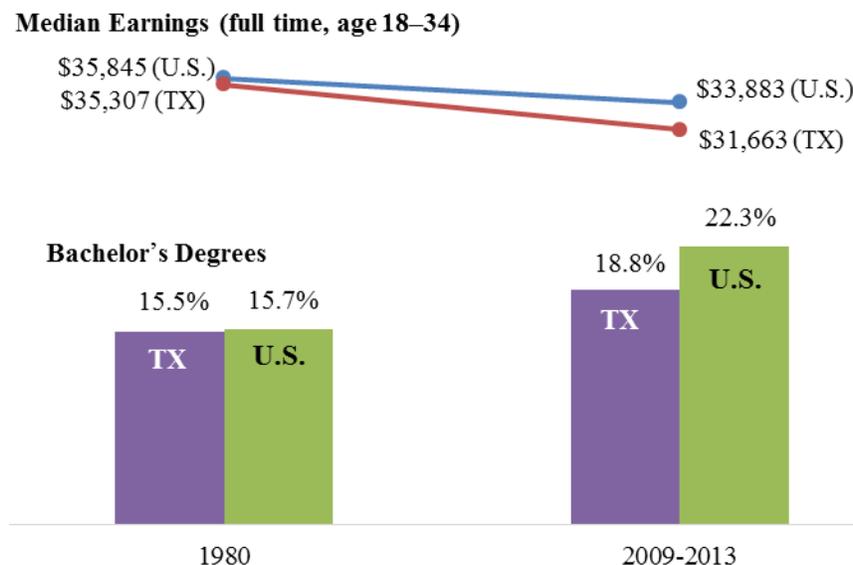
Source: (24)

**Figure 4. Population Aged 18 to 34.**

However, in 2014 in the total population, there were more millennials than baby boomers in both the United States and Texas (25, 15). In the United States in 2014, millennials made up 25 percent of the population, and baby boomers made up 24 percent. In Texas in 2014, however, millennials made up 26 percent of the population, and baby boomers made up 21 percent. This is reflected by the fact that in 2013, Austin, Houston, and Dallas-Fort Worth were all included in Nielsen's list of the top 10 highest concentrations of millennial populations in the United States (26).

## Education and Income

Figure 5 shows median earnings for full-time workers aged 18 to 34 and the percentage of that age group with bachelor's degrees, based on census data. Median earnings have decreased since 1980, despite the growing percentage of young people with bachelor's degrees (2).<sup>1</sup> More millennials have bachelor's degrees than baby boomers did at the same age, but their median earnings are lower than that of baby boomers. Median earnings, which are the middle of all reported earnings, are less affected by outliers than average earnings.



Source: (2)

**Figure 5. Median Earnings and Percentage of Bachelor's Degrees.**

Comparing Texas to the United States, a smaller percent of Texans aged 18 to 34 have at least a bachelor's degree than the same age group in the United States. Though the percentage of young Texans with bachelor's degrees has increased since 1980, Texas has fallen further behind the United States. For earnings, baby boomers in Texas in 1980 earned only slightly less than the United States as a whole (\$538 per year). Now, a larger gap exists between earnings for ages 18 to 34 in Texas and the United States. In 2009–2013, Texas millennials earned \$2,220 per year less than millennials in the United States.

## Marriage Age

For age of first marriage, Texas follows a similar pattern to the United States as a whole, with the age of first marriage steadily increasing since 2005 (28,29). Texans still marry slightly younger than Americans as a whole. In



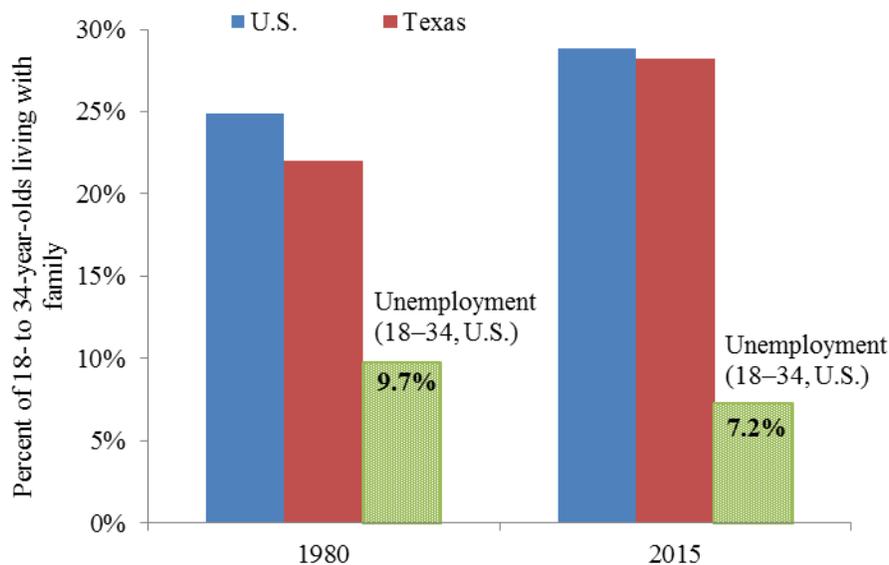
Image source:  
(27)

<sup>1</sup> An average for the years 2009–2013 was used to match U.S. Census reporting style. More information on the methodology is available at <https://census.socialexplorer.com/young-adults/#/methodology>.

2014, the median age of first marriage for Texas men was 28.2 (1.1 years younger than Americans as a whole) and 26.6 for Texas women (0.4 years younger than Americans as a whole).

## Employment and Living with Family

Figure 6 shows that the percentage of people aged 18 to 34 living with family members has increased since 1980 (author calculations based on U.S. Census Bureau data [4]). This is the case in Texas and the United States as a whole. Living as a dependent with family in this case means living with a parent, grandparent, sibling, or other relative (not including a spouse or partner) and not being the head of household.



Source: (author calculations based on U.S. Census Bureau data [4])

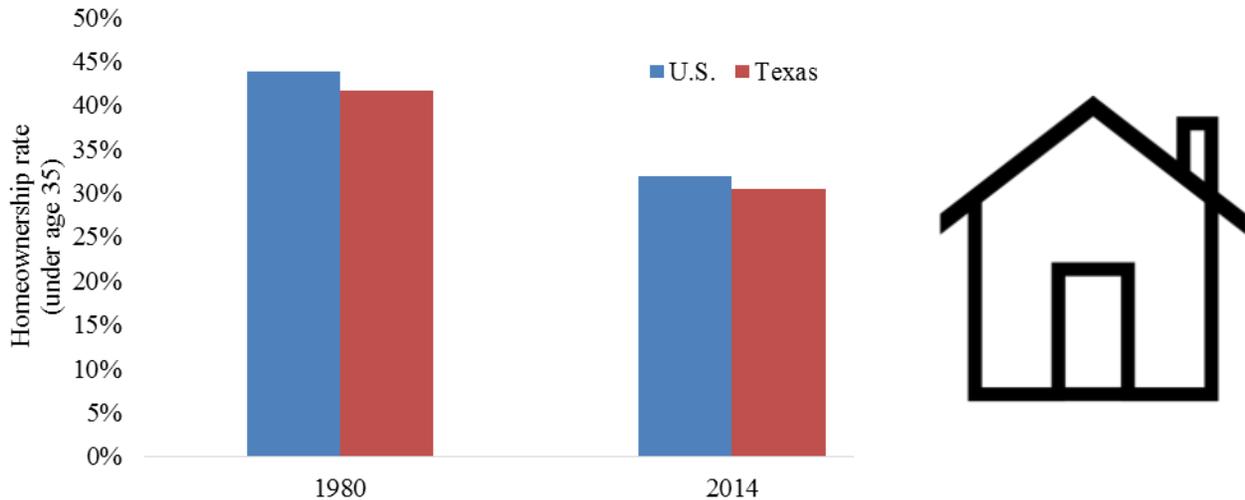
**Figure 6. Living with Family and Employment.**

In 1980, 25 percent of people in the United States aged 18 to 34 (baby boomers) lived as a dependent with family members. In Texas, 22 percent of baby boomers lived as a dependent with a family member. By 2015, this number had reached 29 percent for all millennials in the United States and 28 percent for millennials in Texas.

The increase in dependent living occurred despite a lower national unemployment rate for this age group (30). The unemployment rate for 18- to 34-year-olds decreased from 9.7 percent in 1980 to 7.2 percent in 2015. This suggests that factors unrelated to employment are leading millennials to live with family.

## Homeownership

Figure 7 shows homeownership rates for homeowners under age 35 (5,6).<sup>2</sup> Homeownership rates for millennials in 2014 were 31 percent in Texas, down from 42 percent for baby boomers in 1980. In the United States, the millennial homeownership rate was 32 percent in 2014, down from 44 percent for baby boomers in 1980. In both 1980 and 2014, Texans had slightly lower homeownership rates than the national average.



Source: (5,6)

Image source: (31)

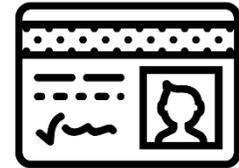
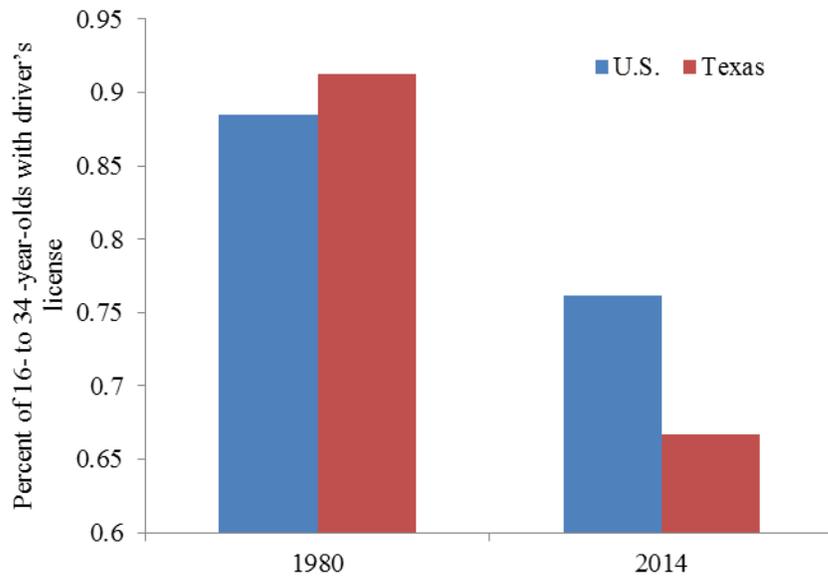
**Figure 7. Home Ownership.**

## Driving

Figure 8 shows a steady decrease in young people with driver's licenses since 1980. In 1980, a slightly higher percentage of Texas baby boomers (91 percent) had driver's licenses than the national average (89 percent). However, in 2014, the percentage of Texas millennials with a driver's license (67 percent) was almost 10 percentage points lower than that in the United States (76 percent).

---

<sup>2</sup> Data from 1980 are for ages under 35, and data from 2014 are for ages 15–34. This is due to differences in U.S. Census reporting styles. The difference between categories is not expected to bias results because of the low number of people under age 15 who may own homes.



Source: (32,33)  
 Image source: (34)

**Figure 8. Driver's License.**

# Millennials' Consumer Behavior and Expectations

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## Shopping Behavior

Millennials like shopping. A 2013 online survey of millennials reported that 85 percent said they either love or enjoy shopping (36). Though the youngest millennials are the first generation to grow up with the Internet, 82 percent of millennials report preferring shopping in a brick-and-mortar store than online (37).



Image source: (35)

Recent Nielsen reports gave some specific insights into millennial shoppers (38):

- Millennials and generation X shoppers prefer large superstores to smaller drug or grocery stores.
- Millennials take the fewest shopping trips but spend the most at each trip of any generation.

Despite being the first digital natives, millennials are not the most active age group in online shopping (39). Business Insider recently released a report claiming “a disproportionate share of middle-aged Americans shop online” (40). The report stated that people aged 34 to 54 make up a larger percentage of online shoppers than their percentage in the total population. However, 18- to 34-year-olds spend more in value than any other age group. Though more people aged 34 to 54 make online purchases, millennials spend more money when they shop online.

## Income and Expenditures

The information on income and expenditures in this section is for households, not individuals, because of the way the Consumer Expenditure Survey (CES) collects data. The numbers represent the spending by the entire household for households where someone under the age of 25 or aged 25 to 34 owns the home or is responsible for the rent.<sup>3</sup> Following the CES reporting format, young people are divided into two groups:

- Under age 25 (referred to as *younger* in this section).
- Aged 25 to 34 (referred to as *older* in this section).

All prices in this section have been adjusted to the 2015-dollar amount to account for inflation.<sup>4</sup>

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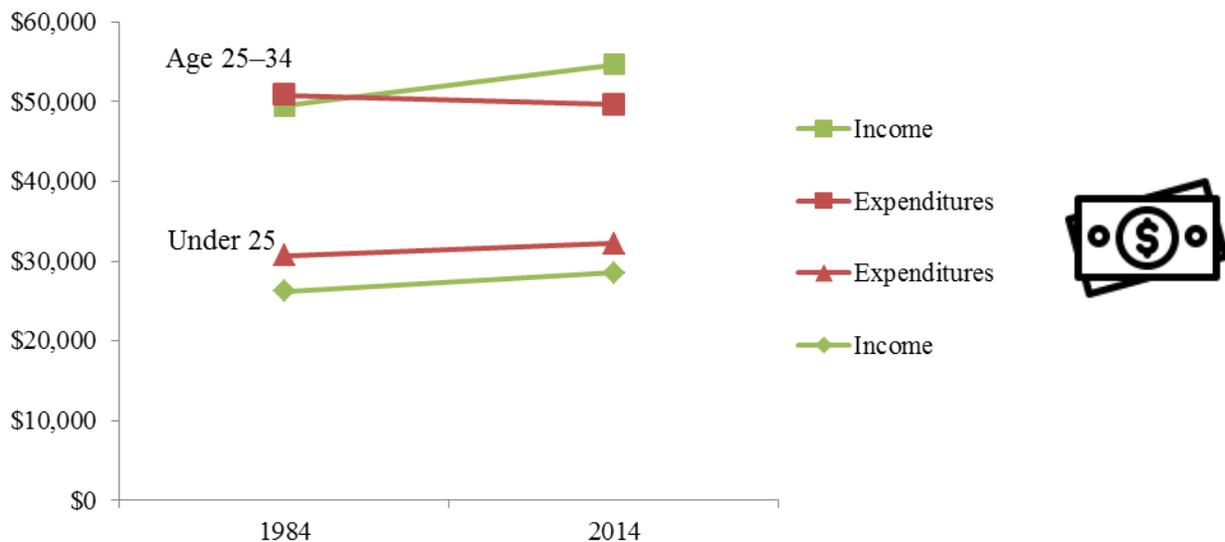
<sup>3</sup> The age ranges provided are for the reference person. When an interviewer gathers information as part of the CES, he or she asks who owns the home or is responsible for the rent. The reference person is “the first member mentioned by the respondent when asked to ‘Start with the name of the person or one of the persons who owns or rents the home.’” This means that data for each of these age groups are for households that have a reference person within this age range. Individual spending cannot be determined based on the census data.

More information is available at <http://www.bls.gov/cex/faq.htm#q4>.

<sup>4</sup> An inflation calculator is available at <http://data.bls.gov/cgi-bin/epicalc.pl>.

Figure 9 shows the total income and expenditures for households where the reference person was under 25 and households where the reference person was 25 to 34 years old (3):

- In 1984, baby boomer households in both groups spent more than they earned.
- Households in the younger group have continued to spend more than they earn. Though they still spend more than they earn, millennial households in the younger group have a higher income by \$2,325 than baby boomers, and they have tightened the gap between expenditures and income.
- For households in the older group, income after taxes is now higher than total expenditures. Baby boomer households in the older group spent almost \$1,400 more than they earned in 1984, whereas millennial households spent \$5,081 less than they earned in 2014.



Source: (3)

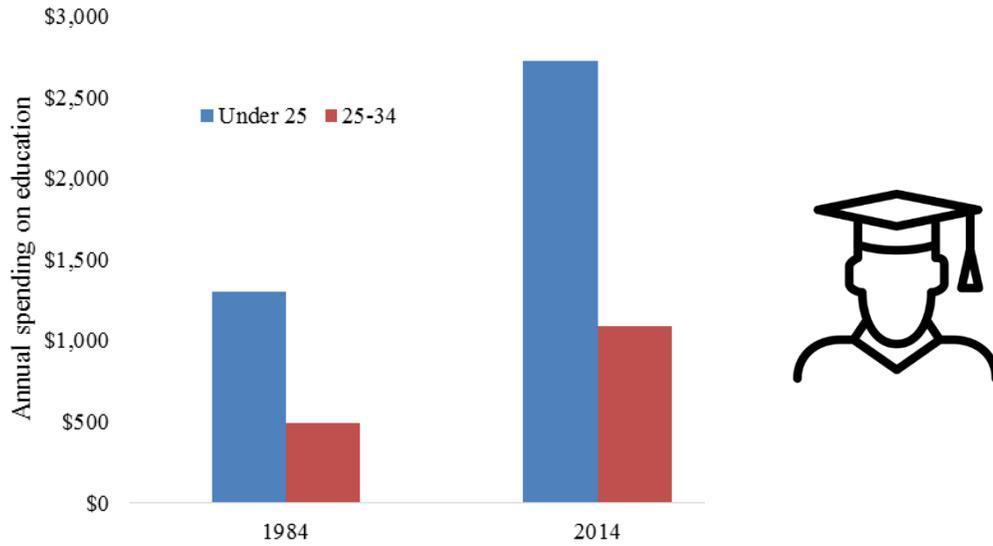
Image source: (41)

**Figure 9. Income and Expenditures.**

### Education

Figure 10 shows that annual spending on education has increased since 1984:

- In 2014, households with younger millennials spent more than twice as much on education as households with older millennials. Households with younger millennials also spent over \$800 more than households with younger baby boomers did (3).
- Younger baby boomers spent \$1,300 on education per year, whereas younger millennials spent \$2,724 per year.



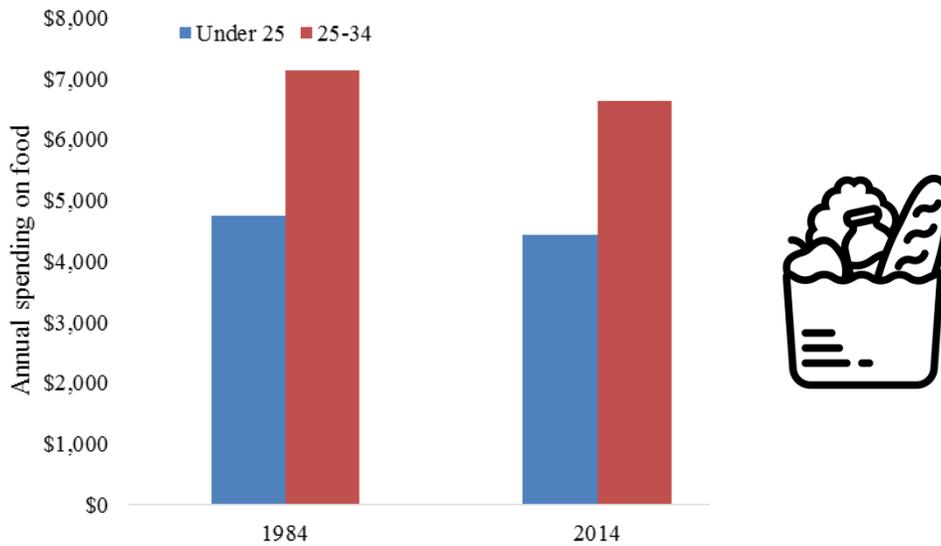
Source: (3)

Image source: (42)

**Figure 10. Spending on Education.**

### Food

Figure 11 shows that millennial households spent less on food than baby boomers did (3): Compared to baby boomers, younger millennial households spent \$331 less on food per year, and older millennial households spent \$505 less.



Source: (3)

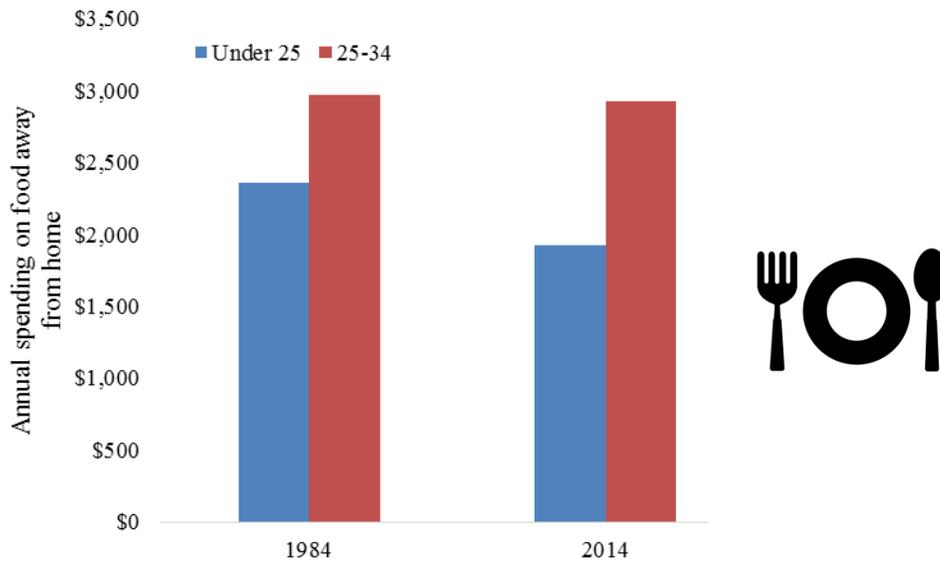
Image source: (43)

**Figure 11. Spending on Food.**

## Eating Out

Figure 12 shows that millennial households spent less on going out to eat than baby boomers:

- Spending in this category has changed more in the younger group than the older group (3).
- Compared to younger baby boomers, younger millennial households spent \$428 less per year on food away from home, and older millennial households spent \$46 less.



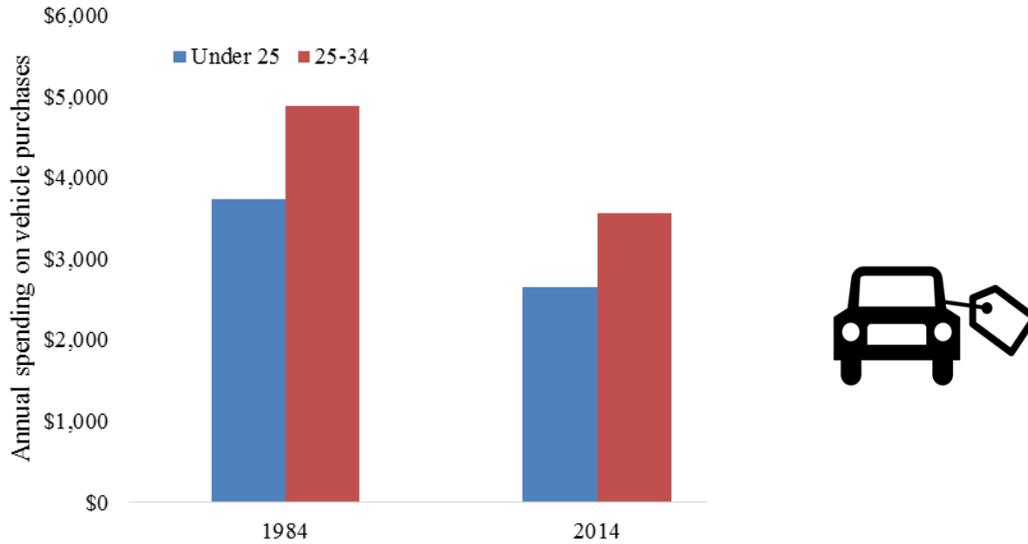
Source: (3)

Image source: (44)

**Figure 12. Spending on Going Out to Eat.**

## Vehicle Purchases

Figure 13 shows that millennial households spent less on vehicles than baby boomer households did in 1984 (3). Younger millennial households spent \$1,087 less than younger baby boomer households per year, and older millennial households spent \$1,322 less than older baby boomer households.



Source: (3)

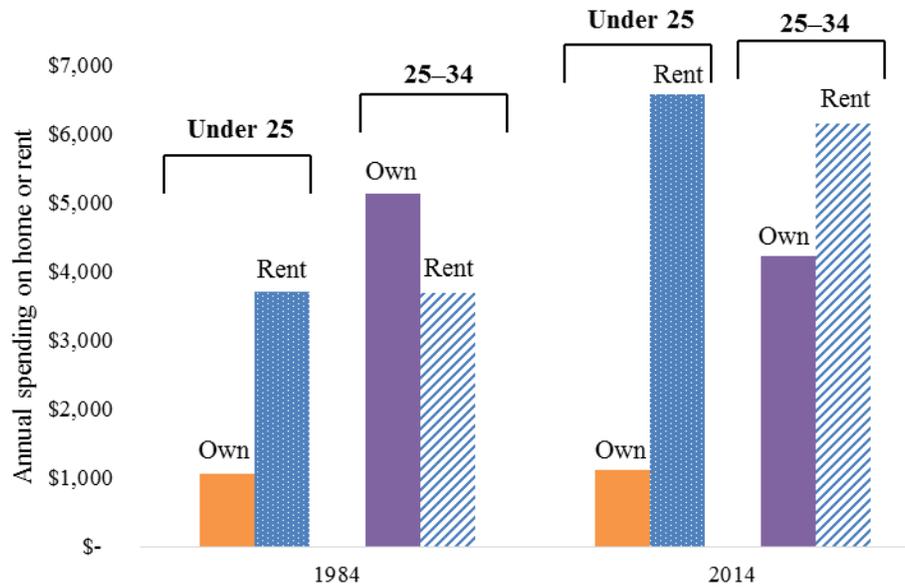
Image source: (45)

**Figure 13. Spending on Vehicle Purchases.**

### *Mortgage and Rent*

Figure 14 shows annual spending on an owed home or rent by age group in 1984 and 2014 (3):

- For homes they own, younger millennial households spent \$51 more per year than younger baby boomer households. Older millennial households spent \$950 less than older baby boomer households.
- Much larger increases are seen in rent expenditures. Younger millennial households spent almost \$2,869 more per year than baby boomer households. Older millennial households spent \$2,467 more.
- Older millennial households spent more on rent than on homes they own, whereas older baby boomer households spent more on homes they own than on rent.



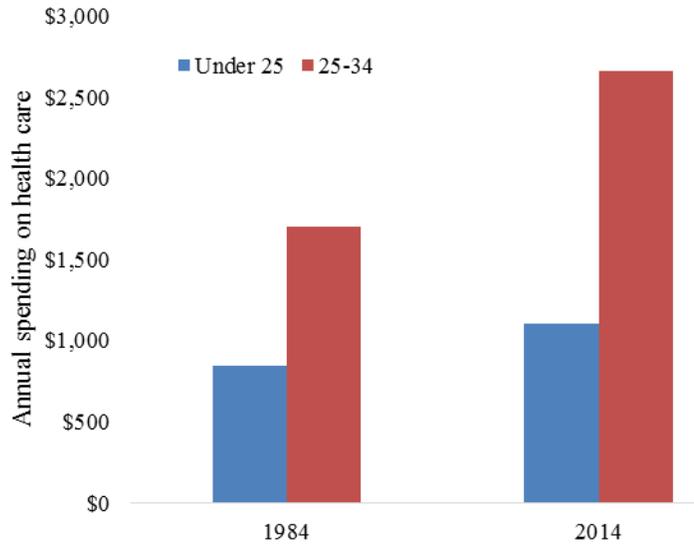
Source: (3)

**Figure 14. Spending on Mortgage and Rent.**

### Health Care

Figure 15 shows that older millennial households spent more on health care than older baby boomer households (3):

- Younger millennial households spent \$258 more than younger baby boomer households on health care per year.
- Older millennial households spent \$960 more than older baby boomer households on health care per year.



Source: (3)

Image source: (46)

**Figure 15. Spending on Health Care.**

### *Total Expenditures*

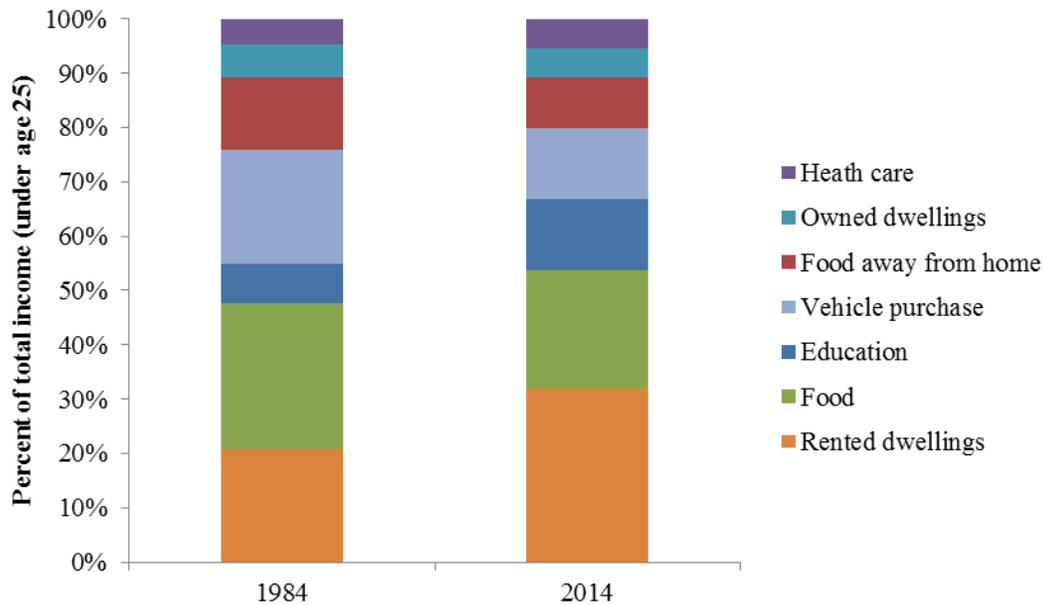
#### ***Younger Households***

Figure 16 shows that as a percentage of total expenditures, younger millennial households spent the most on:

- Rented dwellings (20 percent).
- Food (14 percent) (3).

Younger baby boomer households spent more on food (16 percent) than rent (12 percent). The largest difference between younger millennial households and younger baby boomer households is spending on rent.

Younger baby boomer households spent 12 percent of their total expenditures on vehicle purchases, whereas younger millennial households spent 20 percent.



Source: (3)

**Figure 16. Younger Households' Total Expenditures.**

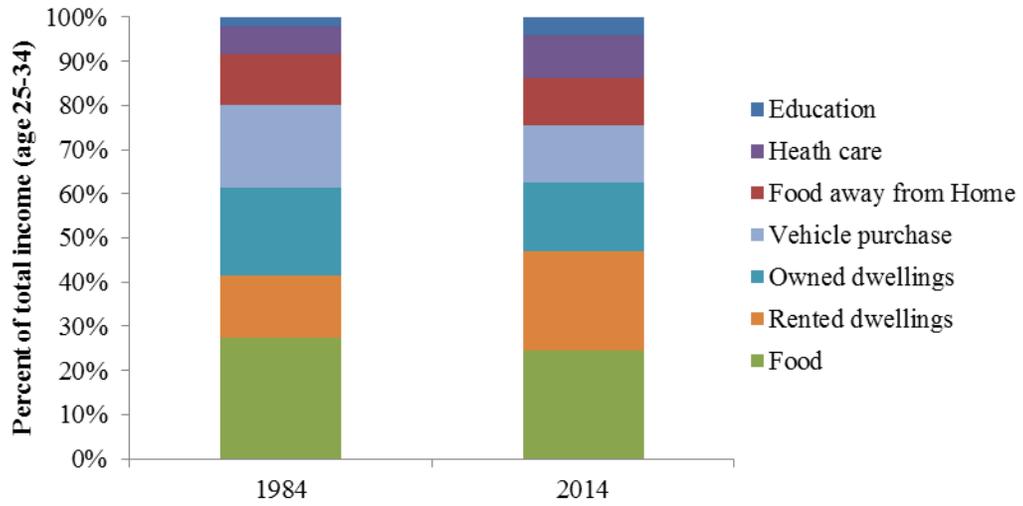
### ***Older Households***

Figure 17 shows that older millennial households in 2014 spent the largest percentage of their total expenditures on:

- Food (13 percent).
- Rented dwellings (12 percent).
- Owned dwellings (9 percent) (3).

Older millennial households spent more on rent (12 percent) than older baby boomer households (7 percent).

Older millennial households spent a lower proportion than older baby boomer households on vehicle purchases. Older millennial households spent 7 percent of their total expenditures on vehicle purchases, whereas older baby boomer households spent 10 percent.



Source: (3)

**Figure 17. Older Households' Total Expenditures.**

## Results of Survey

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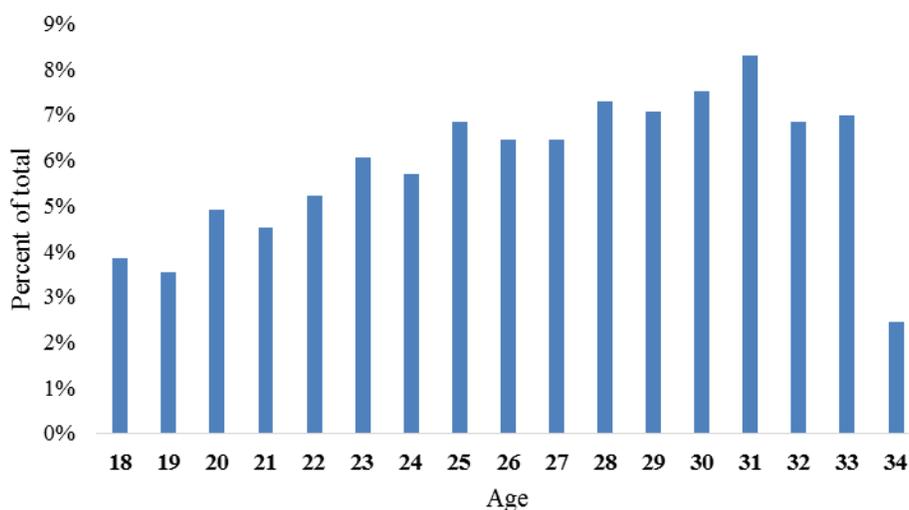
To gather more detailed information on purchasing and Texas millennials (i.e., where they live), researchers used an opt-in survey panel of participants aged 18 to 34 living in Texas. The survey included questions on basic demographic information, as well as shopping and spending habits. Researchers received 1,310 valid responses.

Appendix C contains the full survey questionnaire. Appendix D contains complete descriptive statistics for all survey questions.

### Demographics

#### Age

Figure 18 shows the percentage of each age represented in the survey responses. Most respondents (66 percent) were between 25 and 34 years old, and 34 percent of respondents were 18 to 24 years old.



(Number of respondents: 1,310)

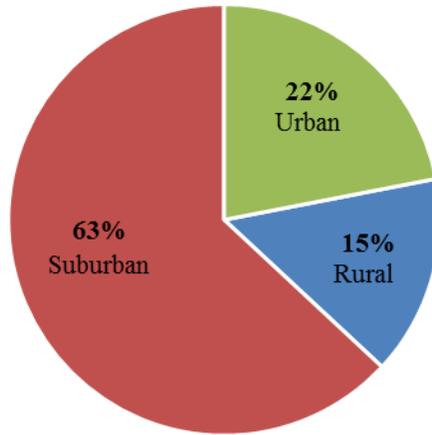
**Figure 18. Age Distribution of Respondents.**

#### Location

Figure 19 shows where respondents live. The distinction between urban, suburban, and rural was based on housing density data for the respondents' ZIP codes/ZIP code tabulation area codes.<sup>5</sup> Researchers used this methodology because the U.S. Census *Geographic Areas Reference Manual* includes no official definition of a suburban area (47).

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<sup>5</sup> A full explanation of the methodology is available at <http://jedkolko.com/wp-content/uploads/2015/05/Data-and-methodological-details-052715.pdf>.

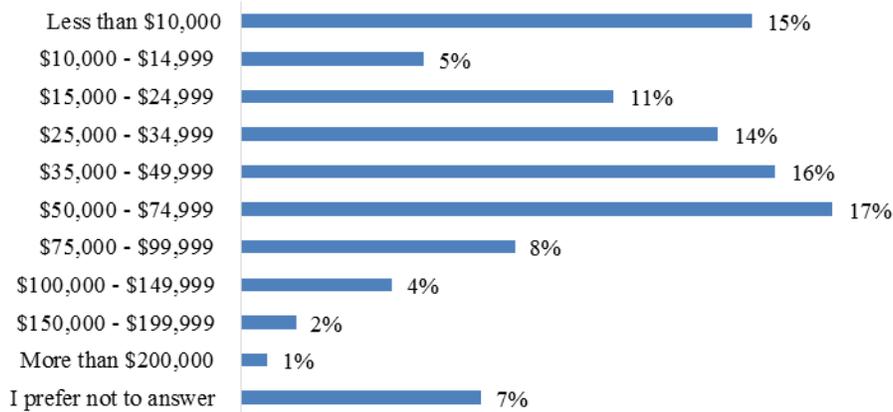


(Number of respondents: 1,307)

**Figure 19. Location Distribution of Respondents.**

*Income*

Figure 20 shows the income distribution of respondents. Respondents were asked to select a range for their income. The most frequent response (17 percent) was the income range of \$50,000–\$74,999.



(Number of respondents: 1,310)

**Figure 20. Income Distribution of Respondents.**

*Debt*

Table 1 shows the percentage of respondents who reported having each type of debt and the average amount still owed. The most common type of debt was credit card debt (43 percent). However, credit card debt had the lowest average amount still owed. The highest average amount owed was for student debt.

**Table 1. Types and Amount of Debt.**

Type of Debt	Percent of Respondents	Average Amount
Student debt	37%	\$25,875
Credit card debt	43%	\$4,566
Other debt	28%	\$19,762

## Shopping

### *Where Do Respondents Like to Shop?*

Figure 21 shows responses to the question “where do you like to shop?”

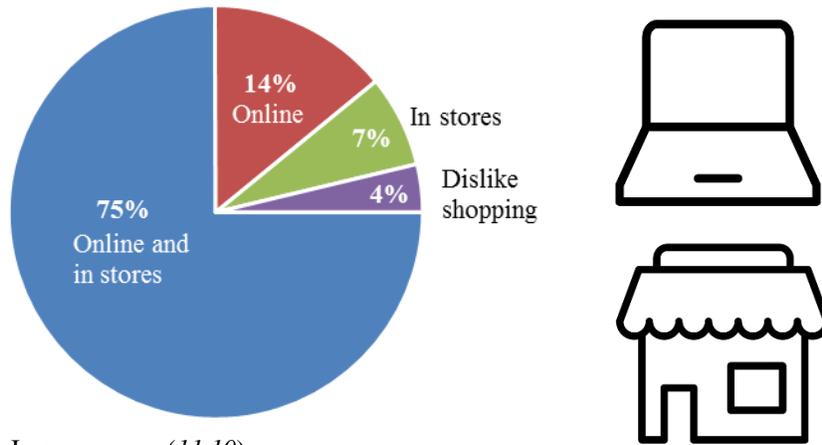


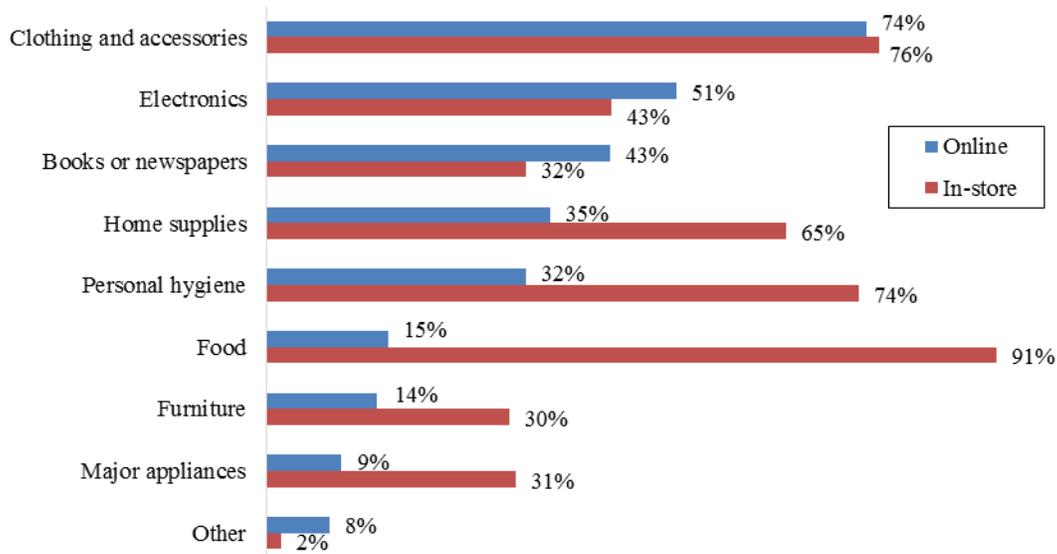
Image source: (11,10)

(Number of respondents: 1,310)

**Figure 21. Where Participants Like to Shop.**

### *Type of Products*

Figure 22 shows the type of products respondents reported buying online and in stores. The numbers are the percentage of respondents who report buying the item online or in-store. There are differences in the types of products being purchased online and in-store.



Percent of respondents who bought this item

**Figure 22. Types of Products.**

The figure shows that:

- Clothing and accessories were the most commonly bought product bought online (74 percent of respondents said they bought clothes online). Clothing was even more commonly bought in-store, however (76 percent).
- More respondents reported buying electronics and books or newspapers online than in stores.
- More respondents reported buying home supplies, personal hygiene products, food, furniture, and major appliances in stores than online.

### ***What They Like about Shopping***

Table 2 shows what respondents like about online shopping and in-store shopping:

- For online shopping, the most common response was time savings (selected by 70 percent of respondents).
- For in-store shopping, the most common response was taking the item home as soon as it was purchased (selected by 83 percent of respondents).



Image source: (48)

**Table 2. What Respondents Like about Shopping Online and In-Store.**

Online Shopping		Shopping In-Store	
Time savings	70%	Taking item home	83%
Delivery	66%	Being able to see the item	71%
Lower prices	63%	No delivery fee	64%
More options	60%	Easy returns	38%

Table 3 shows what respondents dislike about online shopping and in-store shopping:

- For online shopping, the most common response was delivery fees (selected by 66 percent of respondents).
- For in-store shopping, the most common response was traveling to the store (selected by 64 percent of respondents).

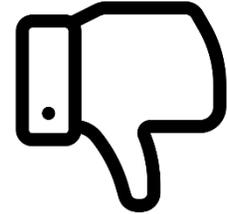


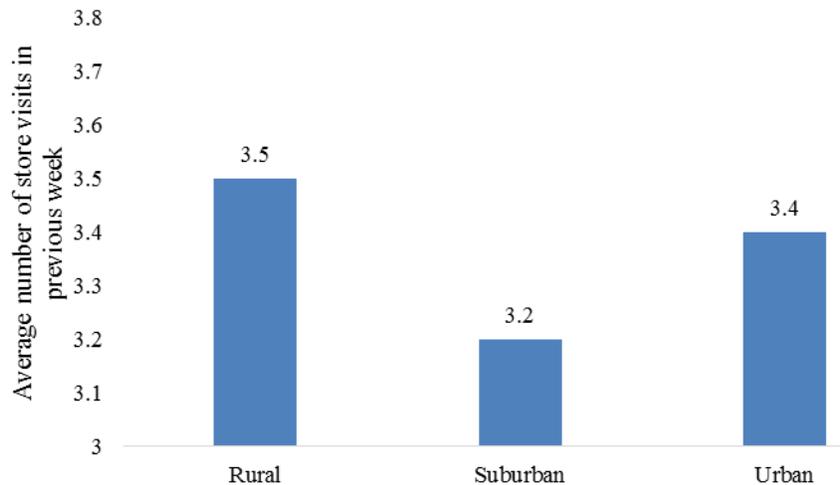
Image source: (49)

**Table 3. What Respondents Dislike about Shopping Online and In-Store.**

Online Shopping		Shopping In-Store	
Delivery fees	66%	Traveling to store	64%
Waiting for product	62%	Time spent in store	46%
Not able to see item in person	61%	Fewer options	39%
Difficulty of returns	38%	Higher prices	34%

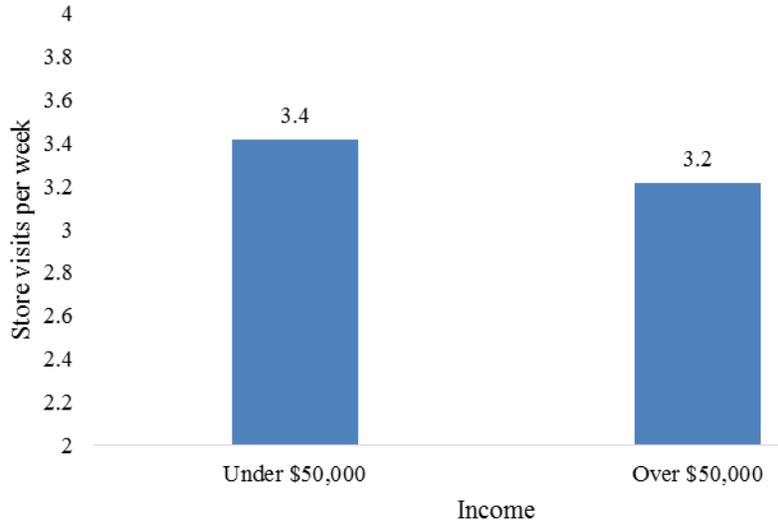
### *Number of Store Visits*

Figure 23 shows the number of store visits per week across geographic area. There is little variation.



**Figure 23. Store Visits per Week by Geographic Area.**

Figure 24 shows number of store visits per week across lower (under \$50,000 per year) and upper (over \$50,000 per year) income. Similar to geographic area, there is little variation.



**Figure 24. Store Visits per Week by Income.**

Figure 25 shows the average number of store visits per week by income level (under or over \$50,000) and geographic area. There does not appear to be a clear relationship between income level and geographic area and number of store visits. For example, low-income rural residents and high-income urban residents, potentially the two groups with the least in common, report the highest number of store visits per week, at 3.8.



**Figure 25. Store Visits per Week by Income and Geographic Area.**

Figure 26 shows the average number of store visits in the last week by number of packages received.<sup>6</sup> Respondents who received one package in the previous week reported the lowest number of store visits. Respondents who received eight packages in the previous week reported the highest number of store visits.

<sup>6</sup> For clarity, the number of packages received in the last week was limited to 10. This excluded only three observations: 20 packages, 25 packages, and 50 packages.



**Figure 26. Average Number of Store Visits by Number of Packages Received.**

### *Who Receives the Most Packages?*

Figure 27 shows whether or not respondents received a package in the previous week of something they ordered online.

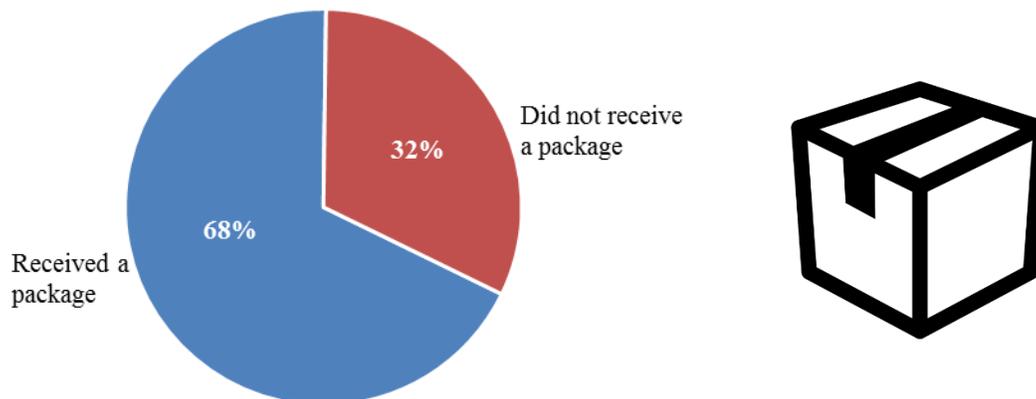


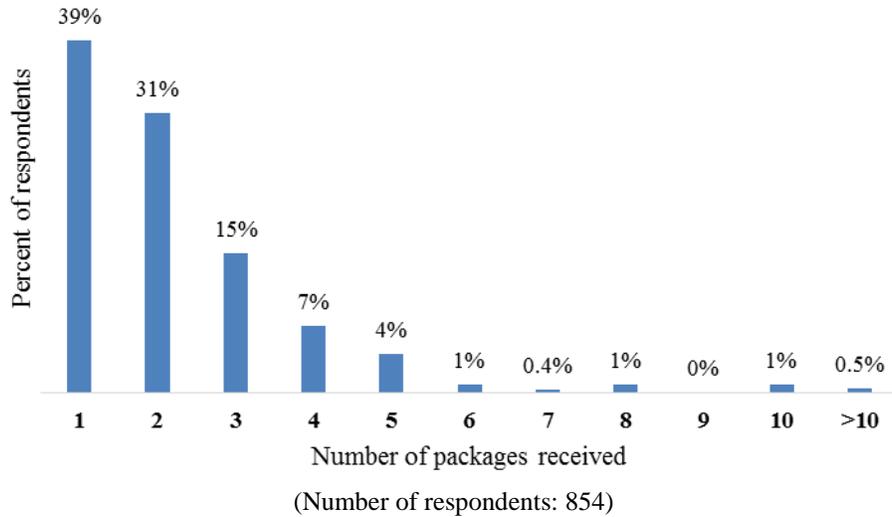
Image source: (8)

(Number of respondents: 1,309)

**Figure 27. Which Respondents Received an Online Order in the Previous Week.**

### *Number of Packages*

If respondents said that they had received a package from an online order in the previous week, they were asked how many packages they had received. Figure 28 shows the number of packages that respondents reported receiving in the previous week. Seventy percent of respondents received one or two packages in the previous week. This indicates that respondents are not dependent on online shopping for the majority of their goods, but it does seem that online shopping has become a regular part of how millennials purchase items.



**Figure 28. Number of Packages Received.**

### *Geographic Area*

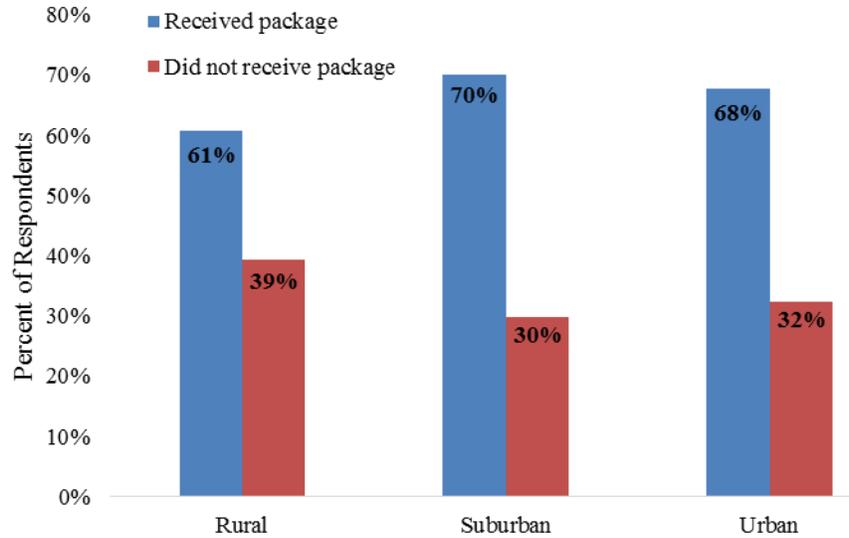
Figure 29 shows the percentage of respondents who received a package in the previous week, of something they ordered online, by geographic area. A slightly higher percentage of suburban residents received a package (70 percent). However, urban residents received slightly more packages (2.6 packages).

Fewer rural respondents received an online order in the previous week than suburban and urban respondents. However, the number of packages received by those who had received an online order varied little across rural, suburban, and urban area. This suggests that if people are ordering items online, they are receiving a similar number of packages regardless of their geographic area.

### **Geographic Area Did Not Affect Number of Packages**

There was very little difference in the average number of packages received across geographic areas. Of respondents who had received at least one package in the previous week, the average number of packages was:

- **Rural:** 2.4 packages.
- **Suburban:** 2.3 packages.
- **Urban:** 2.6 packages.



**Figure 29. Packages Received by Geographic Area.**

### *Income*

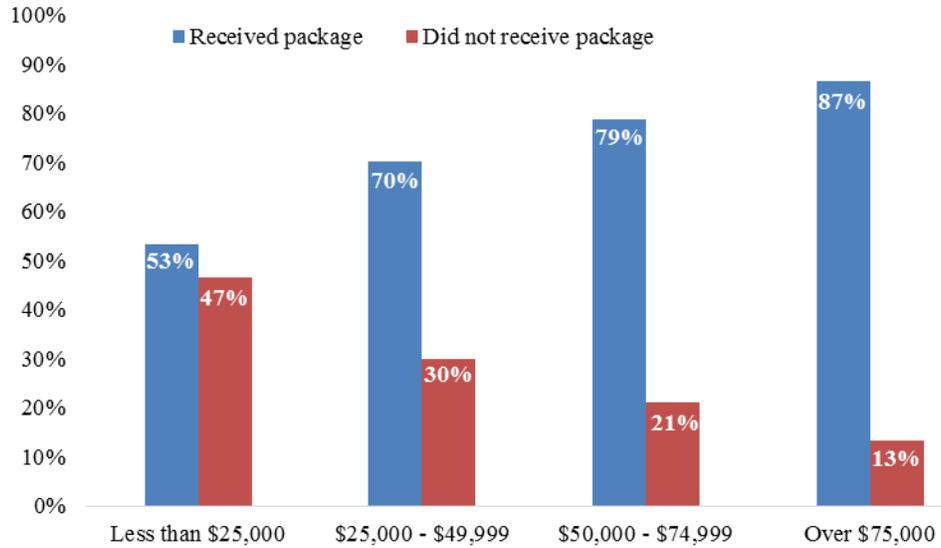
Figure 30 shows the percentage of respondents who received an online order by income level. As income level increases, so does the likelihood of having received a package in the previous week.

In the lowest income group (less than \$25,000), 53 percent of respondents had received a package in the previous week. The highest income groups received slightly more packages. Both the \$50,000–\$74,999 income group and the over \$75,000 income group received 2.7 packages per week.

### **Wealthiest Received the Most Packages**

Higher income was associated with more packages received. Of respondents who had received at least one package in the previous week, the average number of packages was:

- **Less than \$25,000:** 2 packages.
- **\$25,000–\$49,999:** 2.2 packages.
- **\$50,000–\$74,999:** 2.7 packages.
- **Over \$75,000:** 2.7 packages.

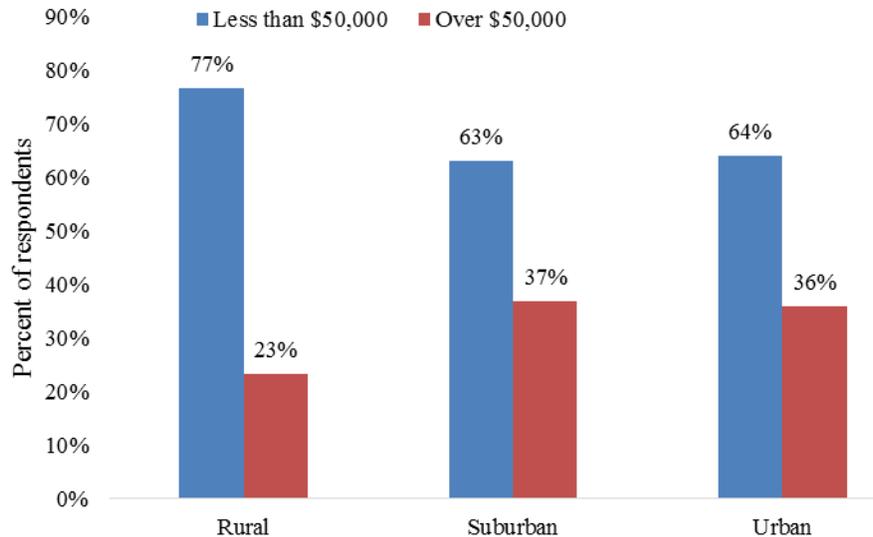


**Figure 30. Packages Received by Income.**

***Relationship between Geographic Area and Income***

To create a simple display for the relationship between income and geographic area, researchers combined income groups under \$50,000 and income groups over \$50,000.<sup>7</sup>

Figure 31 shows the percentage of respondents that earn under \$50,000 and over \$50,000 per year by geographic area. The highest percentage of rural residents (77 percent) earns under \$50,000. Suburban and urban areas have very similar percentages of residents earning under \$50,000.

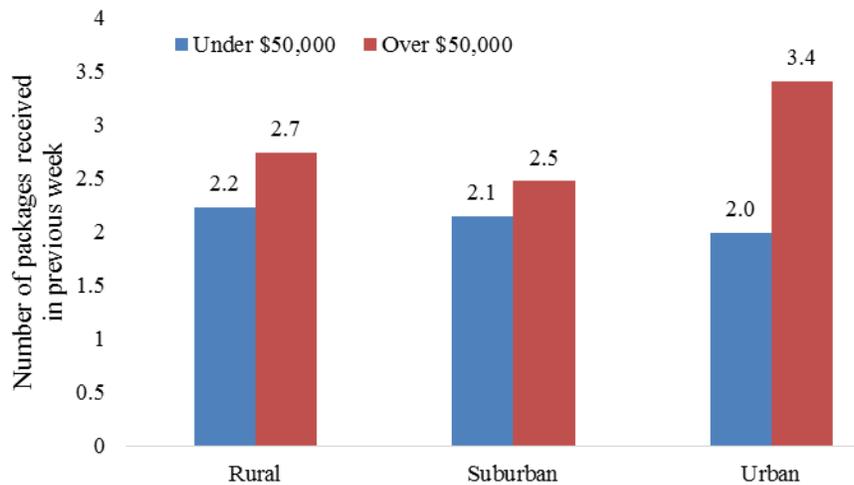


**Figure 31. Income by Geographic Location.**

<sup>7</sup> Income of under \$50,000 combines the first half of income ranges participants could choose and includes 61 percent of respondents. Income of over \$50,000 combines the second half of income ranges participants could choose and includes 39 percent of respondents.

Figure 32 shows the number of packages respondents reported receiving in the previous week. Respondents are grouped by geographic area and income (under \$50,000 and over \$50,000). In the under \$50,000 group, there is little variation across geographic area. For earners over \$50,000, however, urban residents received more packages on average than rural or suburban residents.

The number of packages received across geographic area varied only slightly. Income had a stronger relationship with the number of packages received, with the number of packages increasing as income increased. For lower earners, the number of packages received varies little across geographic area. For higher earners, urban residents received more packages than rural and suburban residents.



**Figure 32. Packages Received by Geographic Area and Income.**

### *How Quickly Do Packages Arrive?*

Figure 33 shows how long it took for the last package respondents received to arrive at their home. The most frequent response was three to five business days (48 percent).

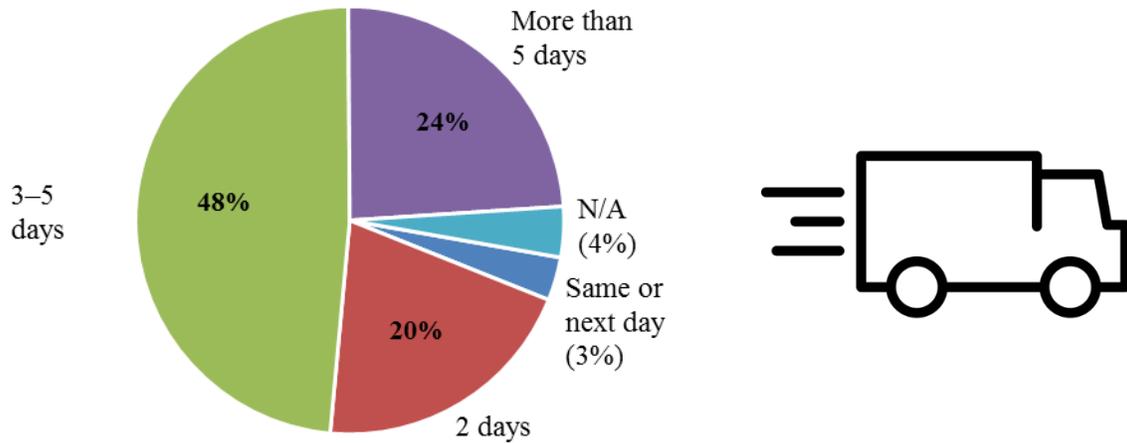


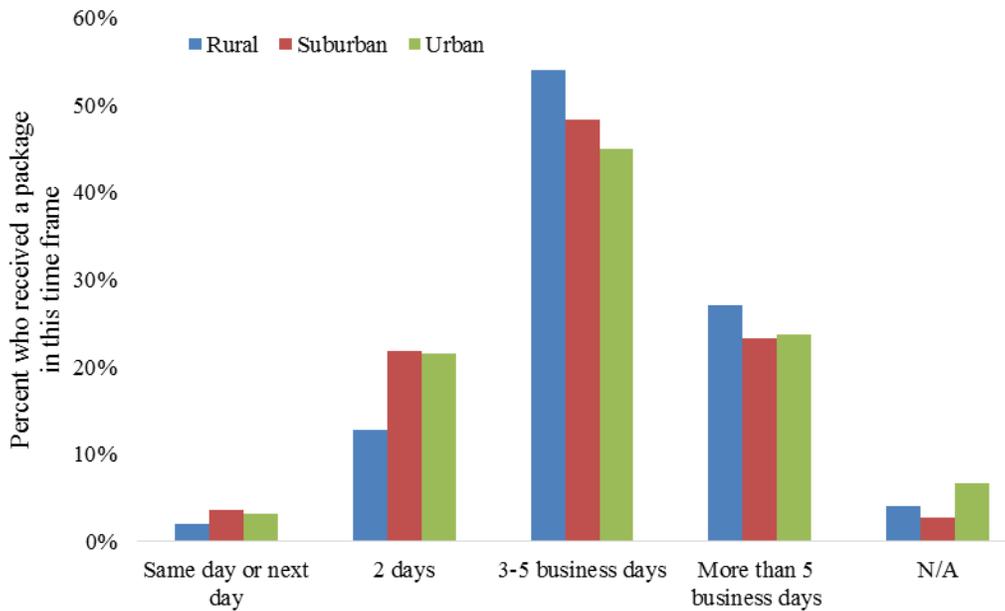
Image source: (50)

(Number of respondents: 1,309)

**Figure 33. Delivery Time.**

***Geographic Area***

Figure 34 shows how quickly respondents received their most recent package by geographic area. Less than 5 percent of respondents in all areas received their most recent package the same or next day. The most common delivery time was three to five business days for rural (54 percent), suburban (48 percent), and urban (45 percent) respondents.



**Figure 34. Delivery Time by Geographic Area.**

***Income***

Table 4 shows delivery time for the most recent package received by income. The percent of respondents who received their last package in two days or less increases with income. Over a

third of the highest earners (over \$75,000) received their last package in two days or less, compared to 16 percent of the lowest earners (under \$25,000).

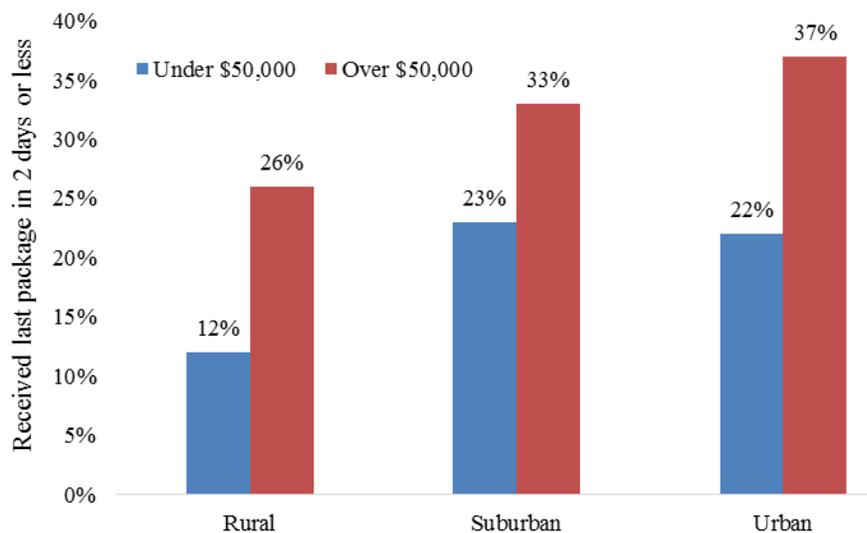
**Table 4. Delivery Times by Income.**

Income	2 Days or Less	Over 2 Days
Less than \$25,000	16%	78%
\$25,000–\$49,999	24%	73%
\$50,000–\$74,999	31%	68%
Over \$75,000	35%	62%

***Relationship between Geographic Area and Income***

Figure 35 shows the percentage of respondents who received their last package in two days or less by income, across geographic areas. A higher percentage of high earners (over \$50,000) received their packages within two days than lower earners in all geographic regions.

Urban and suburban residents, however, received packages faster than rural residents in both the low- and high-earner categories. The highest percentage of high-earning, urban residents received their last package within two days.



**Figure 35. Delivery Time by Geographic Area and Income.**

***Who Has Amazon Prime?***

Because Amazon Prime membership offers free two-day shipping<sup>8</sup> on many items and same-day delivery on some items, and currently has 54 million members, it is a potentially significant driver of quick home delivery (51). Survey respondents were asked whether or not they were Amazon Prime members.

Figure 36 shows the percentage of respondents who have an Amazon Prime membership.

<sup>8</sup> Amazon Prime has an annual membership fee of \$99.

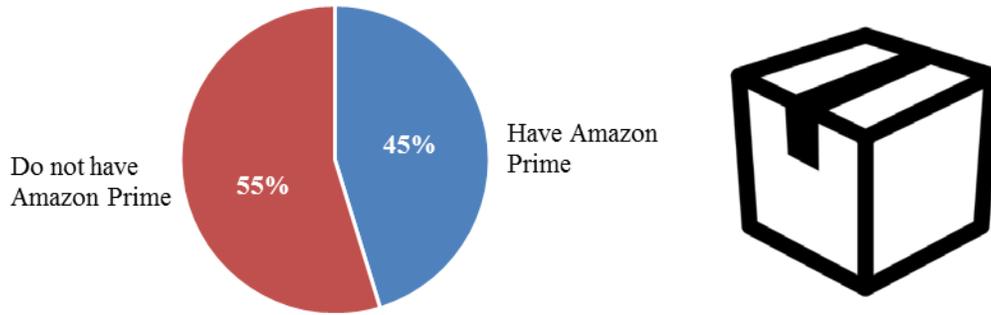
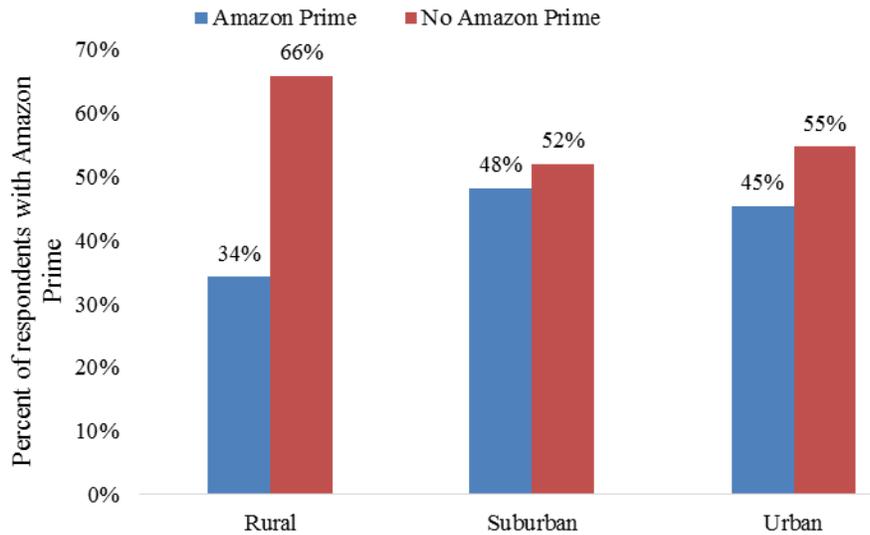


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(Number of respondents: 1,281)

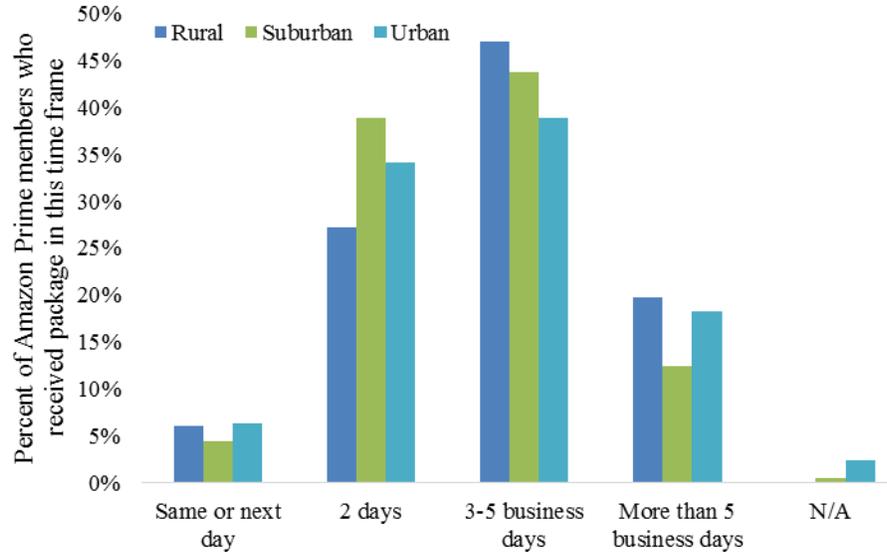
**Figure 36. Percentage of Amazon Prime Membership.**

Figure 37 shows the percentage of respondents who have Amazon Prime by geographic area. Suburban residents have the highest Amazon Prime membership rate, at 48 percent.



**Figure 37. Percentage of Amazon Prime Membership by Geographic Area.**

Figure 38 shows the delivery time for the last package Amazon Prime members received by geographic area. Less than 7 percent of Amazon Prime members in each area received packages the same or next day. The three to five business day time frame was the most common for the last package received for Amazon Prime members.



**Figure 38. Delivery Times by Geographic Area for Amazon Prime Members.**

Table 5 shows the percentage of respondents who received their last package in two days or less by geographic area and Amazon Prime membership. Combining the “two days” and “same or next day” categories provides the percentage of respondents who received their last package in two days or less.

**Table 5. Percentage of Respondents Who Received Their Last Package in Two Days or Less.**

Location	Amazon Prime Member	Non-member
Rural	33%	6%
Suburban	43%	9%
Urban	41%	13%

In all three geographic areas, a higher percentage of Amazon Prime members, compared to non-members, received their last package in two days or less. However, even for Amazon Prime members, less than half of respondents from all three geographic areas received their last package in two days or less.

This indicates that the majority of packages still travel more slowly than the speed offered by Amazon Prime, even among Amazon Prime members. This could be for a number of reasons, including that the most recent items respondents purchased were not purchased through Amazon or that the item did not qualify for Amazon’s two-day shipping.

#### *Did Respondents Return Items?*

If respondents received a package in the previous week of something they ordered online, they were asked if they had returned anything. Figure 39 shows that most respondents did not return anything.

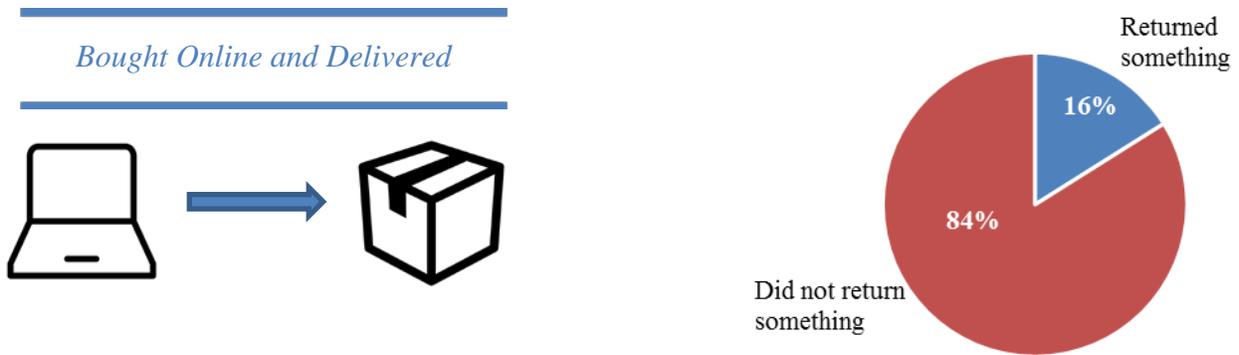


Image source: (11,8)

(Number of respondents: 890)

**Figure 39. Percentage of Respondents Who Returned an Online Order.**

Figure 40 shows that 26 percent of respondents who ordered something online and picked it up in a store returned an item.



Image source: (11,10)

(Number of respondents: 231)

**Figure 40. Percentage of Respondents Who Bought Online and Picked Up In-Store.**

Figure 41 shows that 14 percent of respondents returned something they had bought in a store.

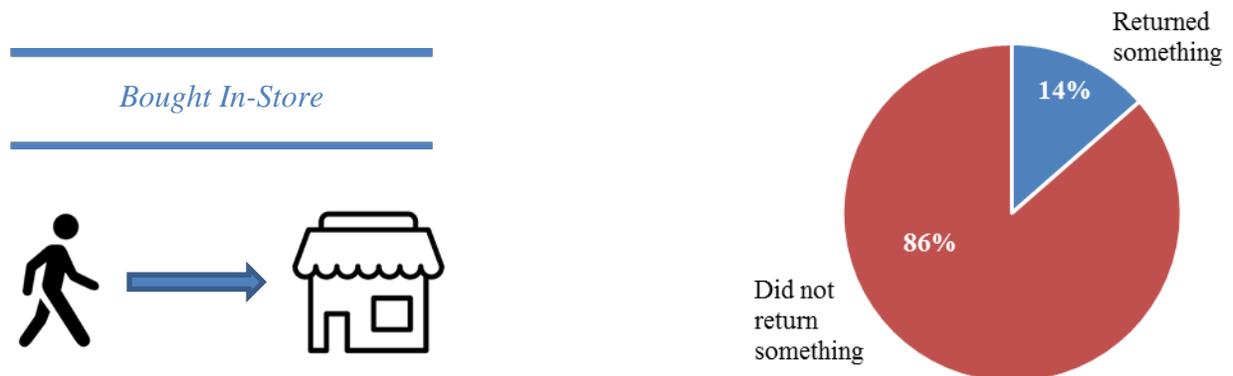


Image source: (52,10)

(Number of respondents: 1,305)

**Figure 41. Percentage of Respondents Who Returned Something They Bought In-Store.**

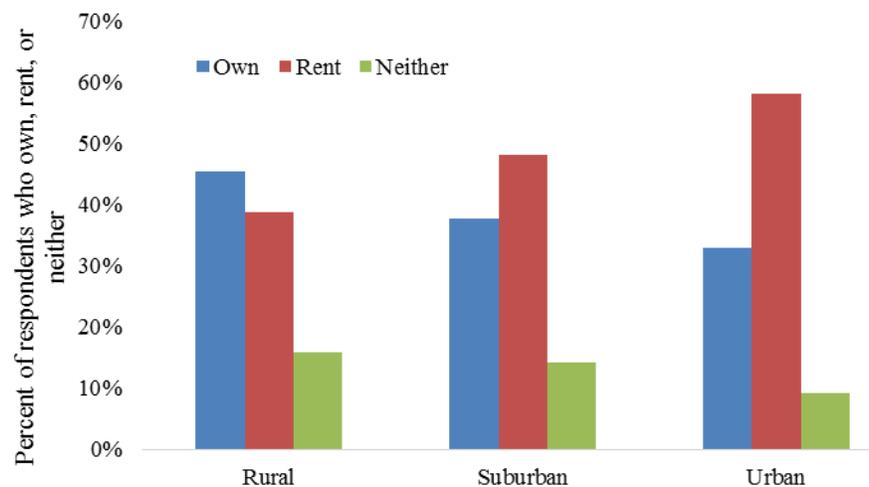
Of the three order options, the one that generated the most returns was buying online and picking up in-store, with 26 percent of respondents who ordered something in this way returning an item. This is followed by deliveries for online orders (16 percent) and buying in-store (14 percent).

## Living Arrangements and Buying Homes

Respondents were asked questions about their current living arrangements and their future plans for buying a home.

### *Currently Owning or Renting*

Figure 42 shows the percentage of rural, suburban, and urban residents that reported owning or renting their homes. Respondents could also reply “neither.” The tendency to own a home decreases as housing density increases (from rural to suburban to urban). The tendency to rent increases as housing density increases.

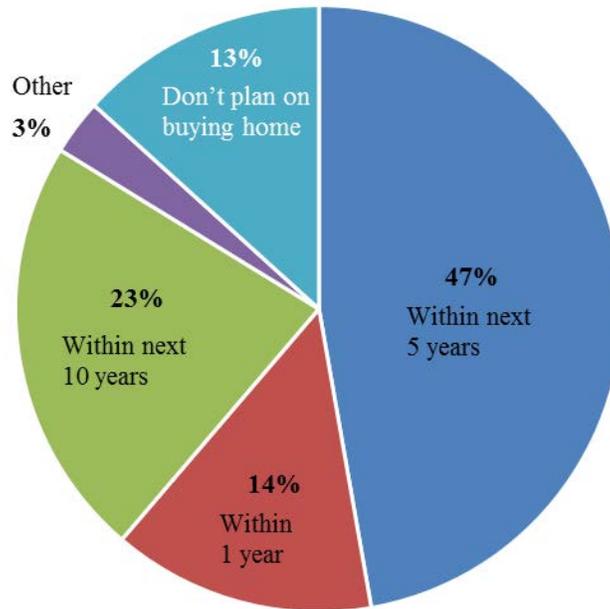


**Figure 42. Percentage of Respondents That Reported Owning or Renting Their Homes.**

The largest percentage of rural respondents (45 percent) reported owning their home. More suburban residents reported renting their home (48 percent). Urban residents rented at the highest rate (58 percent).

### *Timeline for Buying a Home*

Figure 43 shows the responses when respondents were asked what their timeline for buying a home was. Among the most frequent write-in responses for the “other” category were “in 20 years,” “in 15 years,” and “living with a spouse or inherited a home.”



(Number of respondents: 813)

**Figure 43. Respondents' Timeline for Buying a Home.**

#### *Where Respondents Want to Buy a Home*

Unless respondents indicated that they did not plan on buying a home, they were asked where they would like to buy a home. Figure 44 shows where respondents reported they would like to buy a home.<sup>9</sup> Some of the write-in answers for the “other” category included “in the countryside,” “near a city,” and “depends on quality of home and location of job.”

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<sup>9</sup> Participants were not provided with a definition of urban, suburban, or rural area. Therefore, the responses to this question reflect how participants themselves define those areas. Participants' perceptions of what an urban, suburban, or rural area is may differ from how the study team categorized zip codes as urban, suburban, or rural (based largely on housing density).

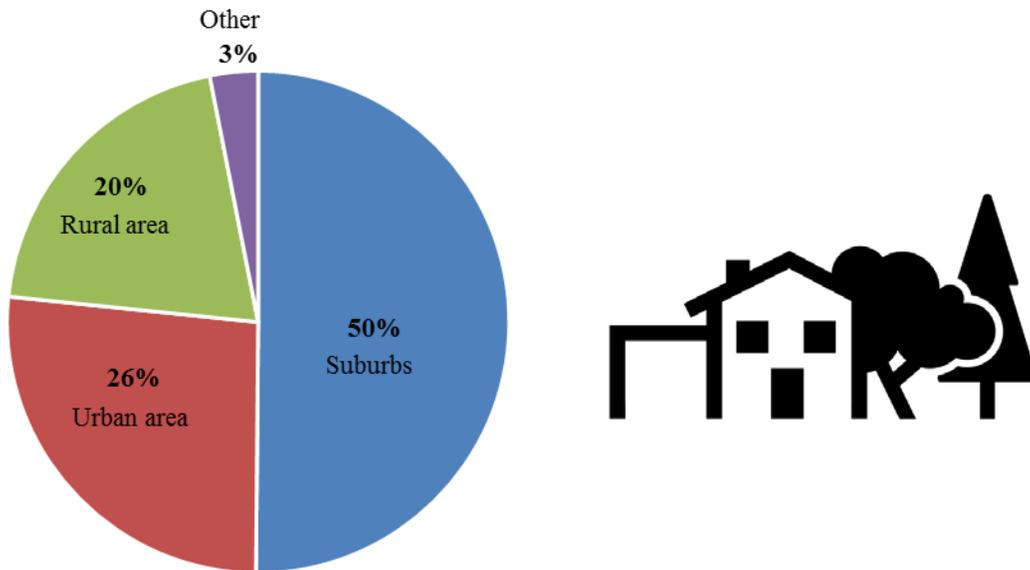


Image source: (7)

(Number of respondents: 716)

**Figure 44. Where Respondents Would Like to Buy a Home.**

Table 6 shows where respondents want to buy homes and where they currently live.<sup>10</sup> Bold and underlined numbers represent the percentage of respondents who want to buy a home in the same geographic area as they currently live. Most respondents tended to want to buy a home in the same type of geographic area where they currently live. However, urban residents are slightly different—the same percentage of urban residents reported wanting to buy a home in a suburban area as those wanting to stay in an urban area.

**Table 6. Where Respondents Would Like to Buy a Home Compared to Where They Currently Live.**

Current Location	Desired Location			
	Urban	Suburban	Rural	Other
Rural	6%	38%	<b><u>57%</u></b>	0%
Suburban	24%	<b><u>56%</u></b>	16%	3%
Urban	<b><u>42%</u></b>	42%	12%	4%

Table 7 shows where respondents would like to buy a home by their income level. For each income group, the highest percentage of respondents wanted to buy a home in the suburbs, represented by the bold and underlined numbers. The desire to buy a home in the suburbs is relatively stable across income levels, with around 50 percent of respondents reporting wanting to buy a home there.

<sup>10</sup> Participants were not provided with a definition of urban, suburban, or rural area. Therefore, the responses to this question reflect how participants themselves define those areas. Participants' perceptions of what an urban, suburban, or rural area is may differ from how the study team categorized zip codes as urban, suburban, or rural (based largely on housing density). Totals may not add to 100 because of rounding.

**Table 7. Where Respondents Would Like to Buy a Home by Income.**

Income	Desired Location			
	Urban	Suburban	Rural	Other
Less than \$25,000	25%	<u>50%</u>	21%	5%
\$25,000–\$49,999	25%	<u>52%</u>	21%	3%
\$50,000–\$74,999	30%	<u>48%</u>	22%	0%
Over \$75,000	33%	<u>51%</u>	16%	0%

As income increases, so does the percentage of respondents who want to buy a home in an urban area. The percentage of respondents who want to buy a home in an urban area is highest (33 percent) among those with incomes over \$75,000.

About 20 percent of respondents want to buy a home in a rural area, except for those with incomes over \$75,000. Among earners over \$75,000, 16 percent said they want to buy a home in a rural area.

## Conclusions

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This research focused on millennials because of their importance as consumers. As baby boomers get closer to becoming the oldest generation of Americans, millennials have taken their place as the largest generation. Millennials make up more of the total population and more of the workforce than baby boomers (16,53).

In some ways, millennials appear different than their baby boomer counterparts in 1980. Compared to baby boomers at the same age, national data show that millennials are better educated and save more money (2,3). They also spend more on education, rent, and health care than baby boomers did (3). Millennials live with family as dependents at a higher rate than baby boomers did and have lower homeownership rates (author calculations based on [4, 5]).

In other ways, millennials are not unique. They still like to shop in stores, and most would like to buy a home in the near future if they do not already own one.

Shopping behavior is the piece most directly related to freight. Purchasing drives much of freight—people demand goods, and those goods are shipped to a store where they can be purchased, or goods are shipped directly to a home in the case of online shopping. Because of this, millennials' consumer behavior and expectations will impact the future of the freight transportation system in Texas.

Much of the current analysis of millennials has focused on online shopping because of its newness compared to traditional in-store shopping. Though catalog shopping once contributed to home freight deliveries, no data are available on the number of catalog orders placed by baby boomers when they were the same age as millennials. Catalogs are still used by some retailers; however, the focus is on marketing, not mail order sales (54). Currently, most catalogs do not contain order forms. Instead, they encourage shoppers to visit their stores or shop online (55).

The traditional model of goods being purchased in-store is no longer the only option for consumers, and companies offering quick and inexpensive delivery may be shaping consumer behavior and demand. But the relationship between online shopping and individual shopping trips is unclear. The idea that online shopping replaces personal shopping trips and reduces travel has been discredited in various studies (56). Some research has even shown that online shopping is related to more personal shopping trips (57,58).

What is clear is that retailers are innovating to encourage online purchasing, and many are quickly gaining customers. Amazon Prime, which offers free two-day shipping to its members, currently has 54 million members and increased its membership by 35 percent in 2015 (51). In 2014, Amazon introduced Prime Now, which offers 1- to 2-hour delivery on certain items in over 20 cities (59). Other companies, such as Postmates, Deliv, Google Express, and UberRush, deliver food and other goods in the same day. Additionally, grocery delivery on a large scale is a recent development in online shopping. Instacart, an online grocery delivery service, topped the 2015 Forbes "America's Most Promising Companies" list (60). The company, which offers

services in 19 states, mostly in metro areas, is already turning a profit (61,62). Amazon's version, called AmazonFresh, is also available in a handful of metro areas (63).

In order to better understand Texas millennials, the research team surveyed 1,310 people aged 18 to 34 living in Texas. Participants were asked questions about basic demographic information and shopping behavior. Online shopping appears to have become a regular aspect of shopping for millennials, with 68 percent of the current survey respondents receiving an online order in the previous week. However, the study showed that respondents had different shopping preferences for different items. For example, respondents still predominantly buy food, home supplies, personal hygiene products, furniture, and major appliances in-store. They appear to prefer to buy electronics, books, and newspapers online.

Shopping preferences appear to vary by income, more so than by geographic area. Millennials living in rural, suburban, or urban areas reported receiving a similar number of packages. However, higher-income respondents received more packages than lower-income respondents. Higher-income respondents were also more likely to receive a package in two days or less than lower-income respondents.

High earners received more packages across all geographic areas, and high-earning urban residents received the most packages. Over half (55 percent) of high-earning urban residents would like to buy a home in a suburban or rural area, compared to 45 percent who would like to buy a home in an urban area. Because this is the group that reported receiving the most packages, this means that demand for fast home delivery could shift to a new geographic area if they moved.

With regard to store visits, it appears that online shopping will not replace in-store shopping for now. Most respondents reported liking shopping online and in-store, and 95 percent of respondents visited a store in the previous week, compared to 68 percent who received an online order. Of those who did receive orders, 70 percent receive two packages or less. This indicates that millennials are not dependent on online shopping for the majority of their goods, though it does seem that online shopping has become a regular part of how they purchase items. The number of store visits per week is similar across income and geographic areas, but it appears that online shopping may be a supplement to traditional in-store shopping for some groups. This is because online orders increase with income, whereas store visits do not. Online shopping as a supplement to traditional shopping seems most prevalent among high-income, urban millennials who report receiving the most packages in the fastest times.

The prevalence of affordable delivery options for consumers, such as Amazon Prime, may increase demand for fast delivery times in the future. Online shopping presents unique challenges to freight. Certain aspects of home delivery are inefficient compared to the typically full truck loads that drop goods off at warehouses or retail centers. Logistics providers often carry less-than-truckload hauls for home delivery, as opposed to a fully loaded truck that drops things off at a distribution center. An additional issue with home delivery is failed first delivery attempts,

which can be between 12 and 60 percent of deliveries (13). When an item cannot be delivered on the first attempt, not only is the delivery delayed, but the transportation and labor costs increase.

However, currently, millennials still like to shop in stores and do not receive the majority of their packages in two days or less. The survey showed that though online shopping is an important part of how millennials purchase goods, it has not replaced traditional shopping in stores.

Therefore, the demands placed on the freight network by inventory deliveries to brick-and-mortar stores are not expected to change. Online shopping, a more recent development, does appear to place unique demand on the freight network, with a high number of small package home deliveries. High-earning urban millennials received the most packages, and 45 percent reported wanting to buy a home in an urban area. However, 40 percent of high-earning urban millennials stated wanting to buy a home in a suburban area, and overall most participants say they plan to buy a home in a suburban area as well. The number of package deliveries was most closely tied to income, so congestion due to this type of delivery may geographically follow high earners. Increased deliveries to urban areas could add to already congested city centers, and increased deliveries to suburban areas could add congestion to areas where traffic is traditionally lighter.

## References

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- 1 Cutillo, Renato. Hipster. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 2 U.S. Census Bureau. Young Adults Then and Now. <https://census.socialexplorer.com/young-adults/#/report/quick/state/48/population-age-18-to-34>. Accessed April 2016.
- 3 Bureau of Labor Statistics. Consumer Expenditure Survey. <http://data.bls.gov/cgi-bin/dsrv?cx>. Accessed March 2016.
- 4 U.S. Census Bureau. Current Population Survey, Merged Outgoing Rotation Groups.
- 5 U.S. Census Bureau. Historical Census of Housing Tables. <https://www.census.gov/hhes/www/housing/census/historic/ownerchar.html>. Accessed May 2016.
- 6 U.S. Census Bureau. American Community Survey. American FactFinder. <https://www.census.gov/programs-surveys/acs/>. Accessed May 2016.
- 7 Fenton, James. House. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 8 Deane, Josh. Box. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 9 Creative Stall. Girl. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 10 Chameleon Design. Store. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 11 Creative Stall. Laptop. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 12 Bravo, Juan Pablo. Heavy Load. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 13 Song, L., T. Cherrett, F. McLeod, and W. Guan. Addressing the Last Mile Problem: Transport Impacts of Collection and Delivery Points. *Transportation Research Record*, No. 2097, 2009, pp. 9–18. <http://trjournalonline.trb.org/doi/pdf/10.3141/2097-02>. Accessed February 2016.
- 14 Truck. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 15 U.S. Census Bureau. Annual Estimates of the Resident Population by Single Year of Age and Sex. American FactFinder. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed August 2016.

- 16 U.S. Census Bureau. Millennials Outnumber Baby Boomers and Are Far More Diverse, Census Bureau Reports. June 25, 2015. <https://www.census.gov/newsroom/press-releases/2015/cb15-113.html>. Accessed March 2016.
- 17 Fry, R. Millennials Surpass Gen Xers as the Largest Generation in U.S. Labor Force. Pew Research Center, May 11, 2015. <http://www.pewresearch.org/fact-tank/2015/05/11/millennials-surpass-gen-xers-as-the-largest-generation-in-u-s-labor-force/>. Accessed March 2016.
- 18 Lakhwani, Gyan. Disco Guy. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 19 Pew Research Center. The Rising Cost of Not Going to College. February 11, 2014. <http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college>. Accessed January 2016.
- 20 Fry, Richard. Young Adults, Student Debt and Economic Well-being. Pew Research Center, May 14, 2014. [http://www.pewsocialtrends.org/files/2014/05/ST\\_2014.05.14\\_student-debt\\_complete-report.pdf](http://www.pewsocialtrends.org/files/2014/05/ST_2014.05.14_student-debt_complete-report.pdf). Accessed March 2016.
- 21 U.S. Census Bureau. Marital Status. <https://www.census.gov/hhes/families/data/marital.html>. Accessed February 2016.
- 22 Raphelson, Samantha. Amid the Stereotypes, Some Facts about Millennials. National Public Radio, November 18, 2014. <http://www.npr.org/2014/11/18/354196302/amid-the-stereotypes-some-facts-about-millennials>. Accessed January 2016.
- 23 Thompson, Michael. Texas. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 24 U.S. Census Bureau. Historical Data. <https://www.census.gov/popest/data/historical/index.html>. Accessed April 2016.
- 25 U.S. Census Bureau. Population Estimates. [https://www.census.gov/popest/data/state/asrh/1980s/80s\\_st\\_age\\_sex.html](https://www.census.gov/popest/data/state/asrh/1980s/80s_st_age_sex.html). Accessed March 2016.
- 26 Nielsen. Millennials Prefer Cities to Suburbs, Subways to Driveways. March 4, 2014. <http://www.nielsen.com/us/en/insights/news/2014/millennials-prefer-cities-to-suburbs-subways-to-driveways.html>. Accessed February 2016.
- 27 Alanis, Yazmin. Wedding. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 28 U.S. Census Bureau. Families and Living Arrangements. <https://www.census.gov/hhes/families/data/marital.html>. Accessed March 2016.

- 29 U.S. Census Bureau. Median Age at First Marriage. American FactFinder. <http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>. Accessed March 2016.
- 30 Bureau of Labor Statistics. Databases, Tables and Calculators by Subject: Unemployment, Labor Force Statistics Including the National Unemployment Rate. <http://www.bls.gov/data/#unemployment>. Accessed April 2016.
- 31 Linh, Pham Thi Dieu. House. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 32 Federal Highway Administration. *Highway Statistics 1980*. <http://isddc.dot.gov/OLPFiles/FHWA/013330.pdf>. Accessed August 2016.
- 33 Federal Highway Administration. Highway Statistics Series 2014. <https://www.fhwa.dot.gov/policyinformation/>. Accessed March 2016.
- 34 Stoian, Oliviu. Driver's License. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 35 Choi, Ryan. Shopping Cart. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 36 Lachman, M. L., and D. L. Brett. *Generation Y: Shopping and Entertainment in the Digital Age*. The Urban Land Institute, 2013. <http://uli.org/wp-content/uploads/ULI-Documents/Generation-Y-Shopping-and-Entertainment-in-the-Digital-Age.pdf>. Accessed February 2016.
- 37 Donnelly, C., and R. Scaff. Who Are the Millennial Shoppers? And What Do They Really Want? Accenture, 2013. <https://www.accenture.com/us-en/insight-outlook-who-are-millennial-shoppers-what-do-they-really-want-retail.aspx>, accessed February 2016.
- 38 Nielsen. Minding the U.S. Generation Gaps. March 4, 2010. <http://www.nielsen.com/us/en/insights/news/2010/mining-the-u-s-generation-gaps.html>. Accessed February 2016.
- 39 Hershatter, A., and M. Epstein. Millennials and the World of Work: An Organization and Management Perspective. *Journal of Business and Psychology*, Vol. 25, No. 2, June 2010. <http://link.springer.com/article/10.1007/s10869-010-9160-y#/page-1>. Accessed February 2016.
- 40 Smith, C. Gen X and Baby Boomers Present a Huge Opportunity for Online Retailers. April 27, 2015. <http://www.businessinsider.com/the-age-demographics-of-who-shops-online-and-on-mobile-2015-4>. Accessed February 2016.
- 41 Pictos, Joe. Money. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.

- 42 Iconsmind.com. Graduate. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 43 Stoian, Oliviu. Grocery Bag. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 44 Creative Stall. Plate. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 45 Prado, Luis. Car for Sale. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 46 Miller, Timothy. Health Insurance. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 47 U.S. Census Bureau. *Geographic Areas Reference Manual*. November 1994. <https://www.census.gov/geo/reference/garm.html>. Accessed June 2016.
- 48 Sergey, Shmidt. Like. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 49 Sergey, Shmidt. Dislike. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 50 Lipi. Delivery. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 51 Isidore, C. Amazon Prime Now Reaches Nearly Half of U.S. Households. CNN Money, January 26, 2016. <http://money.cnn.com/2016/01/26/technology/amazon-prime-memberships/>. Accessed March 2016.
- 52 Ahluwalia, Yamini. Person. The Noun Project. <https://thenounproject.com/>. Accessed April 2016.
- 53 Fry, R. Millennials Surpass Gen Xers as the Largest Generation in the U.S. Labor Force. Pew Research Center, May 11, 2015. <http://www.pewresearch.org/fact-tank/2015/05/11/millennials-surpass-gen-xers-as-the-largest-generation-in-u-s-labor-force/>. Accessed March 2016.
- 54 Ruiz, R. R. Catalogs, after Years of Decline, Are Revamped for Changing Times. *The New York Times*, January 25, 2015. [http://www.nytimes.com/2015/01/26/business/media/catalogs-after-years-of-decline-are-revamped-for-changing-times.html?\\_r=0](http://www.nytimes.com/2015/01/26/business/media/catalogs-after-years-of-decline-are-revamped-for-changing-times.html?_r=0). Accessed September 2015.
- 55 Yohn, D. L. Why the Print Catalog Is Back in Style. *The Harvard Business Review*, February 25, 2015. <https://hbr.org/2015/02/why-the-print-catalog-is-back-in-style>. Accessed September 2016.

- 56 Zhou, Y., and X. Wang. Explore the Relationship between Online Shopping and Shopping Trips: An Analysis with the 2009 NHTS Data. *Transportation Research Part A: Policy and Practice*, Vol. 70, December 2014, pp. 1–9.  
<http://www.sciencedirect.com/science/article/pii/S096585641400233X>. Accessed February 2016.
- 57 Andreev, P., I. Salomon, and N. Pliksin. Review: State of Teleactivities. *Transportation Research Part C*, Vol. 18, No. 1, February 2010, pp. 3–20.  
<http://www.sciencedirect.com/science/article/pii/S0968090X09000394>. Accessed February 2016.
- 58 Aguilera, A., C. Guillot, and A. Rallat. Mobile ICTs and Physical Mobility: Review and Research Agenda. *Transportation Research Part A: Policy and Practice*, Vol. 46, No. 4, May 2012, pp. 664–672.  
<http://www.sciencedirect.com/science/article/pii/S0965856412000067>. Accessed February 2016.
- 59 Del Rey, J. Prime Now Has Become Amazon’s Biggest Retail Bet. *Re/code*, December 14, 2015. <http://recode.net/2015/12/14/prime-now-has-become-amazons-biggest-retail-bet/>. Accessed March 2016.
- 60 Solomon, B. America’s Most Promising Company: Instacart, the \$2 Billion Grocery Delivery App. *Forbes*, January 21, 2015.  
<http://www.forbes.com/sites/briansolomon/2015/01/21/americas-most-promising-company-instacart-the-2-billion-grocery-delivery-app/#2fd02cfc4858>. Accessed March 2016.
- 61 Instacart. Service Areas. <https://www.instacart.com/locations>. Accessed March 2016.
- 62 Primack, D. Instacart Is...Generating Profits? *Fortune*, March 24, 2016.  
<http://fortune.com/2016/03/24/instacart-profits/>. Accessed March 2016.
- 63 Stewart, J. \$299 Fee Spoils Amazon Fresh Rollout for Some Customers. *Puget Sound Business Journal*, October 20, 2015.  
[http://www.bizjournals.com/seattle/morning\\_call/2015/10/299-fee-spoils-amazon-fresh-rollout-for-some.html](http://www.bizjournals.com/seattle/morning_call/2015/10/299-fee-spoils-amazon-fresh-rollout-for-some.html). Accessed March 2016.