

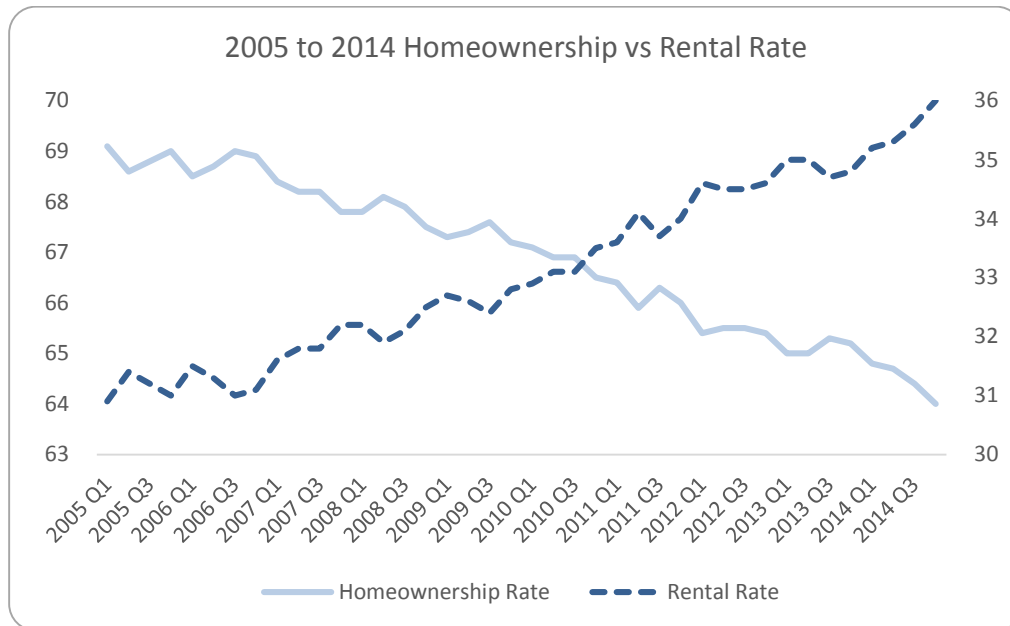
2015 APARTMENT LIST RENTER CONFIDENCE SURVEY: METHODOLOGY & ANALYSIS

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I. INTRODUCTION

The US renter population has reached its highest rate in 20 years. In Q4 of 2014, the Census announced that there are over 43 million renter households, representing 36% of the population.¹ Correspondingly, homeownership is at the lowest rate since 1994.



Rental rates by age cohorts show increases in every group. From 2004 to 2014, the percentage of Americans who rent under age 35 grew by 17% while those age 35 to 64 increased by 33%.²

The Census reports that renters move homes nearly 5x more frequently than homeowners, with 24.5% living elsewhere one-year prior. Additionally, younger Americans aged 18 to 34 are over 3x more likely to move than average.³

What we see today is a renter population at its highest in the past 20 years, who have a strong propensity to move on an annual basis, particularly among younger renters. Amidst these changes to our social landscape, there has never been a more important time to understand what matters most to renters when choosing a place to live.

The Apartment List Renter Confidence Survey (RCS) is designed to provide the media, researchers, public policy experts, business leaders, and the public at large with a better understanding of American renters – their confidence in the economy, plans for homeownership, and their criteria in choosing the states and cities they move to. In addition, we take a close look at millennials (respondents age 18 to 34) as a cohort, to better understand the preferences of this important demographic. This information can be

¹ U.S. Census. "Residential Vacancies and Homeownership in the Fourth Quarter 2014." January 29, 2015, <http://www.census.gov/housing/hvs/files/currenthvspress.pdf>

² U.S. Census. "Housing Vacancies and Homeownership." <http://www.census.gov/housing/hvs/data/histtabs.html>

³ U.S. Census. "Young Adult Migration: 2007-2009 to 2010-2012." March 2015, <http://www.census.gov/content/dam/Census/library/publications/2015/acs/acs-31.pdf>

used by employers, researchers, and state and local governments to determine how they can shape their communities to attract today's American renters.

II. OVERVIEW OF SURVEY

Data for the [Apartment List Renter Confidence Survey](#) (the "RCS" or the "Survey") were collected over a period of three months in from October through December 2014.⁴ The Survey was distributed via email to users of [ApartmentList.com](#) with a link to complete online (a copy is provided in Appendix A).

The Survey gathered three types of data on renter attitudes and preferences:

- Confidence in the national and local economy
- Plans for future homeownership
- Satisfaction with current cities

We captured this data, along with detailed demographics, for more than 18,000 respondents. To our knowledge, no other organization captures this volume of information focused on renters, due to the cost and complexity associated with large scale consumer data collection. As a result, the attitudes and preferences of this large and important demographic have been largely ignored due to a lack of data and quality analysis.

There are a number of consumer studies that shed light on aspects of American's attitudes on economic topics. The most notable surveys include the U.S. Census American Housing Survey (AHS), Fannie Mae's National Housing Survey (NHS), University of Michigan's Survey of Consumers (SOC), and The Conference Board's Consumer Confidence Survey (CCS). While each of these sheds light on important economic indicators, none provides a detailed view of renters' attitudes and preferences.

The following table illustrates the primary differences between the Apartment List RCS and the surveys listed above:

⁴ The results were gathered from October 27, 2014 to December 29, 2014.

Table 1: Comparison of Survey Attributes & Content					
Attributes	Apartment List RCS	Census / HUD AHS	Fannie Mae NHS	University of Michigan SOC	The Conference Board CCS
Data collection frequency	Annually	Biennially	Monthly	Monthly	Monthly
Sample size	18,000	76,000	1,000	1,000	3,000
Data collection method	Online survey	Telephone interviews	Telephone interviews (incl 25% cell phone only sample)	Telephone interviews	Mailed questionnaire
Focused on renters	Yes	No	No	No	No
State level detail	Yes	No	No	No	No
City level detail	Yes	Yes	No	No	No
Content	Apartment List RCS	Census / HUD AHS	Fannie Mae NHS	University of Michigan SOC	The Conference Board CCS
Confidence in economy	Yes	No	Yes	Yes	Yes
Plans for homeownership	Yes	No	Yes	No	No
Criteria on choosing where to live	Yes	No	No	No	No

In total, 18,675 respondents completed portions of the Survey and 11,703 respondents completed the full survey which spanned 28 questions. Each response is mapped to a state and zip code. We excluded states that did not have at least 30 responses, which eliminated Alaska, Delaware, Hawaii, Montana, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming.

This dataset allows us to provide analyses on 41 states and 100 cities, making it the most locally relevant report of its kind. In addition, this survey is the only of its kind that focuses exclusively on renters and obtains data on why people choose the states, cities, and neighborhoods in which they live.

Renters who completed the Apartment List RCS largely match the demographics of renters nationwide with a few differences. The following table provides a comparison of key demographic metrics:

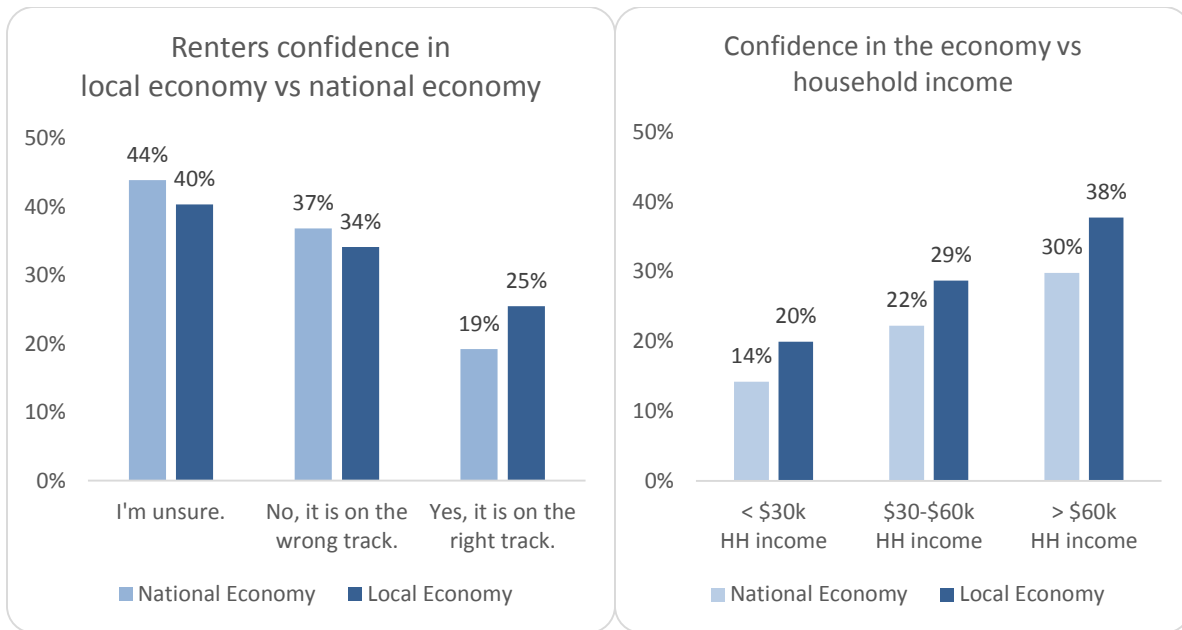
Table 2: Respondent Overview			
Attributes	Apartment List RCS Respondents	Census - Renters	Census - Homeowners
Age			
Under 35	50%	38%	12%
35 to 65	34%	49%	60%
Over 65	15%	13%	29%
Income			
Under \$30,000	52%	48%	24%
\$30,000 to \$60,000	34%	29%	25%
Over \$60,000	15%	23%	51%
Education			
High School Degree	96%	83%	90%
4 Year Degree	30%	24%	36%
Graduate Degree	10%	8%	14%

As noted above, the RCS dataset skews younger, more highly educated, and slightly lower income compared to Census data on renters. Lower income correlates to the younger population. The fact that the survey was delivered online likely drives the higher proportion of respondents under 35 who are more internet-savvy.

III. RENTER CONFIDENCE IN THE ECONOMY

In general, renters did not express high levels of optimism about the economy: only 19% of respondents say the national economy is on the right track, while 37% say it is on the wrong track and 44% say they are unsure (question 13). By contrast, 25% of respondents indicated the local economy is on the right track compared to 34% who say it is on the wrong track (question 14).

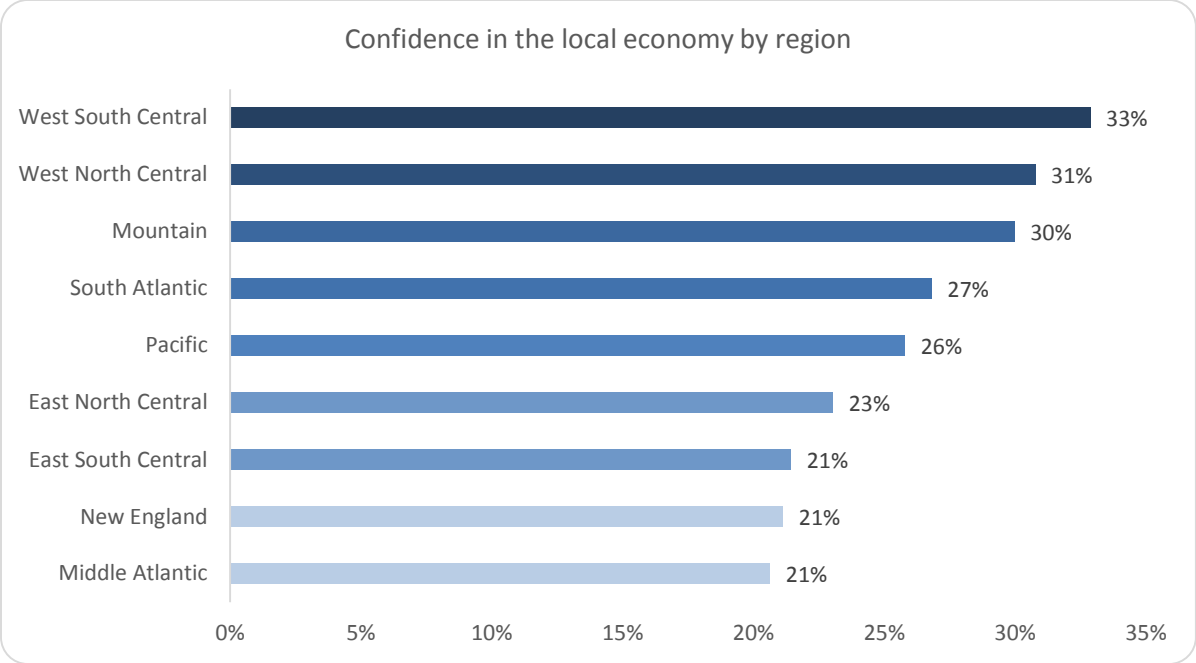
Confidence in the local economy is strongly correlated with household income. 38% of renters with household income above \$60,000 annually say that the local economy is on the right track. This proportion is nearly twice the rate of those earning under \$30,000 (20%).



Similarly, 35% of respondents with a four year college degree say the economy is on the right track, compared to 21% of those without degrees. Although part of this disparity is explained by differences in income, we found that even after adjusting for income, four year degree holders are 10% more likely to say the economy is on the right track.

Interestingly, the data suggests fairly sizable regional differences with regards to confidence in the local economy. The Middle Atlantic and New England divisions, both part of the Northeast Region as defined by the Census, rank last in the country, with only 20.6% and 21.1% of respondents expressing confidence in the local economy, respectively. West South Central and West North Central states ranked at the top, with 32.9% and 30.8% saying the local economy is on the right track, respectively.⁵

⁵ Census defines New England as CT, ME, MA, NH, RI, and VT; Middle Atlantic as NJ, NY, PA; East North Central as IL, IN, MI, OH, WI; West North Central as IA, KS, MN, MO, NE, ND, SD; South Atlantic as DE, DC, FL, GA, MD, NC, SC, VA, WVA; East South Central as AL, KY, MS, TN; West South Central as AR, LA, OK, TX; Mountain as AZ, CO, ID, MT, NV, NM, UT, WY; and Pacific as AK, CA, HI, OR, WA.

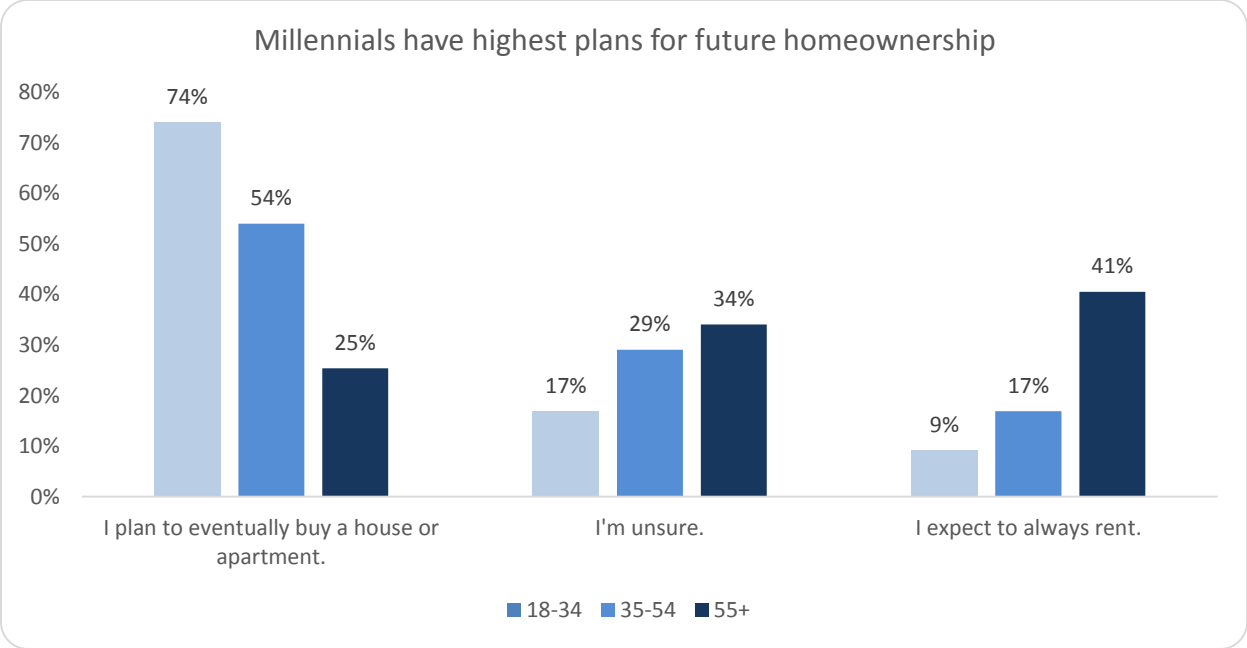


IV. RENTER PLANS FOR HOMEOWNERSHIP

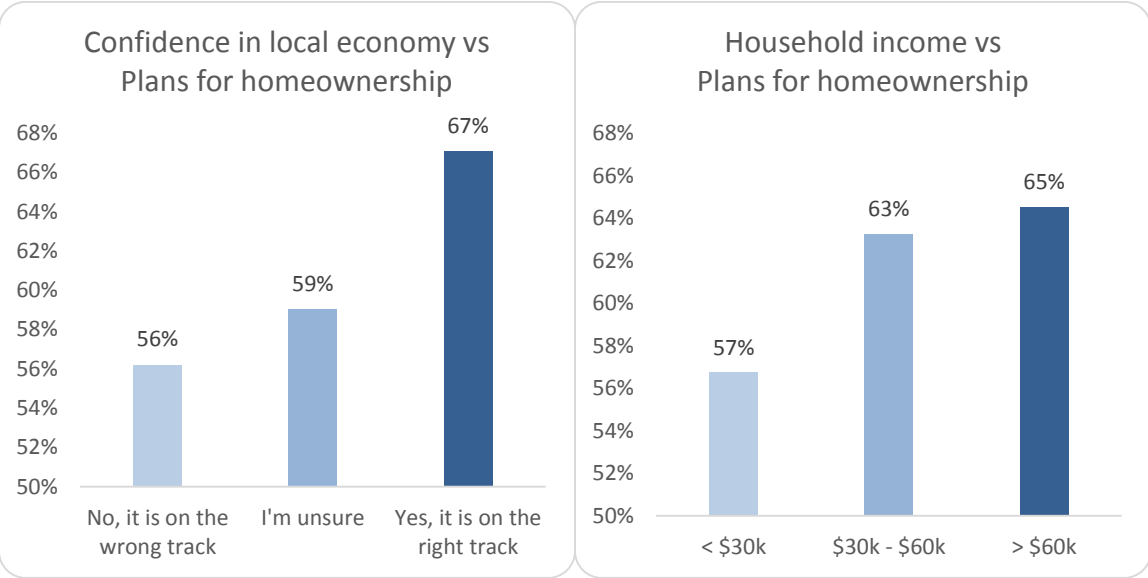
Homeownership has long been considered a core component of the American Dream. In the wake of the Great Recession and subsequent decline in homeownership, there has been growing concern about whether average Americans feel they are able to participate in this aspect of the American Dream.

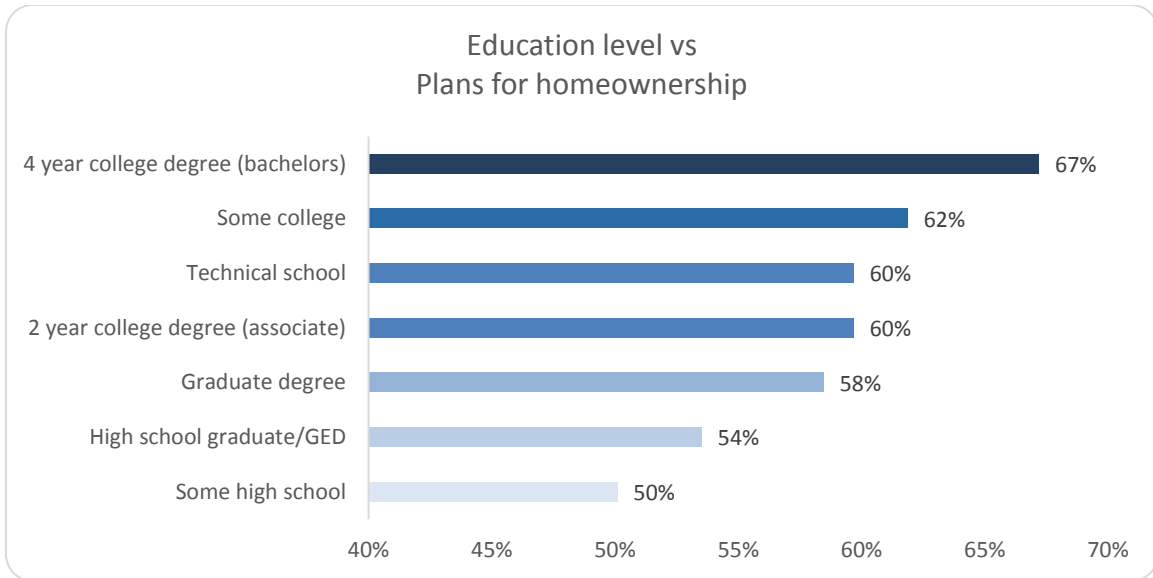
To understand renter attitudes about homeownership, we asked respondents whether they plan to buy a house or apartment in the future (question 11) and when they expected to make a purchase (question 12).

We found that 60% of renters plan to purchase a home in the future while 20% are unsure and 20% expect to always rent. Plans to purchase vary significantly by age group: 74% of renters under the age of 35 (millennials) plan to buy a home in the future, while just 25% of renters over the age of 55 say the same.



In addition to age, we saw fairly significant correlations between a number of demographic categories and plans for homeownership, including confidence in the local economy, household income, and education level:





As illustrated above, confidence in the local economy is a strong predictor of plans for future homeownership, with 67% of those expressing confidence planning to purchase a home. By contrast, only 56% who believe the economy is on the wrong track planned to purchase.

Higher education levels correlate with plans to buy a home: 65% of college graduates plan to purchase a home in the future compared to 59% of high school graduates and just 50% of those without a high school degree. Interestingly, only 58% of respondents with Graduate Degrees plan to purchase a home, which may be related to academic loans limiting their future plans.

There was a similar link to income levels: 65% of renters making over \$60,000 and 63% of those making over \$30,000 plan to purchase a home, compared to 56% of those earning under \$30,000. Finally, renters with children are more likely to plan to buy a home, with 65% saying they expect to, compared to 57% of renters without children.

V. RENTER SATISFACTION WITH THEIR CITIES

With Americans renting at the highest rate of the past 20 years and moving five times as often as homeowners, one objective of the RCS is to understand how satisfied (or dissatisfied) renters are with their current locale, as well as provide insight into their preferences when choosing a place to live. We believe this analysis can help local stakeholders understand how their states and cities deliver on meeting the needs of renters.

In order to understand renter satisfaction, we asked how likely a respondent would be to recommend where he/she lives to a friend or family member on a scale of 1 to 10 (see question 3). Asking renters if they would recommend their city to others allows us to capture the entirety of their experience while adjusting for anything about their experience that they recognize as idiosyncratic. We distilled these responses into a single City Satisfaction score for each city by subtracting the percentage of respondents who gave between a 1 and 6 from the percentage of respondents who gave a 9 or a 10. See below for a

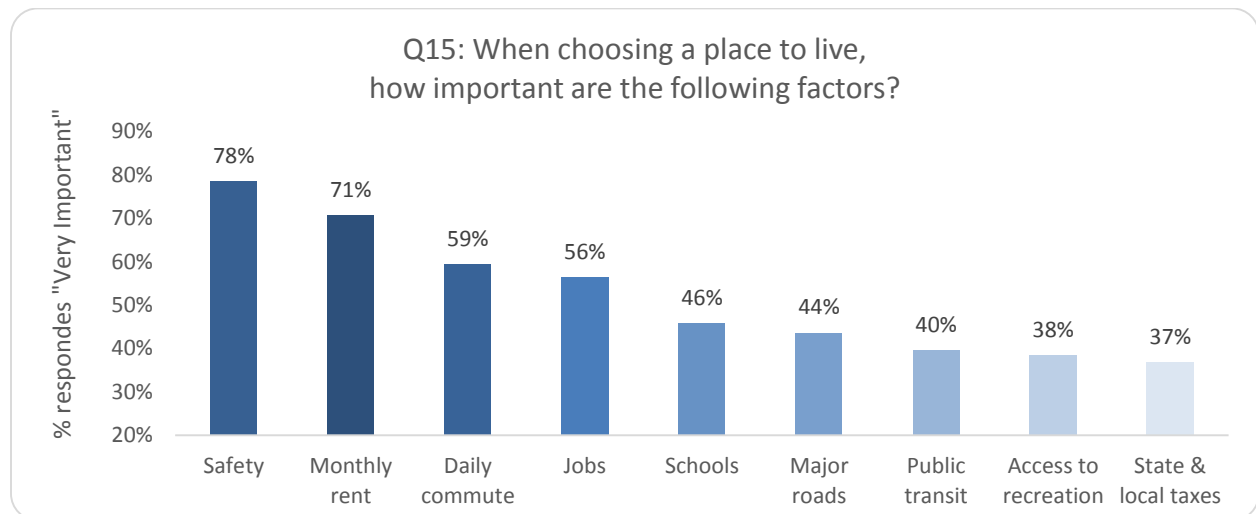
table of top 10 and bottom 10 cities and Exhibit B for a full ranking of cities and states by Overall Satisfaction Score.

Overall Satisfaction Score			Overall Satisfaction Score		
Rank	City, State	Top 10: Overall Satisfaction Score	Rank	City, State	Bottom 10: Overall Satisfaction Score
1	Plano, TX	48.1	91	Joliet, IL	(35.3)
2	Boston, MA	38.1	92	Saint Petersburg, FL	(35.3)
3	Arlington, VA	37.9	93	Detroit, MI	(37.7)
4	Austin, TX	33.3	94	Bronx, NY	(38.8)
5	Torrance, CA	29.4	95	Columbia, SC	(40.0)
6	San Francisco, CA	28.8	96	San Bernardino, CA	(40.0)
7	Washington, DC	27.9	97	Hartford, CT	(41.2)
8	Grand Rapids, MI	27.6	98	Bridgeport, CT	(46.2)
9	Orlando, FL	25.5	99	New Haven, CT	(50.0)
10	Minneapolis, MN	25.2	100	Newark, NJ	(70.0)

Next, we were interested in determining which features or amenities of a city predicted overall satisfaction. To accomplish this, we took two approaches. First, we asked renters to rate the importance of the following factors on a five point scale, from Very Unimportant to Very Important (question 15):

1. Local job and career prospects
2. Safety and crime rate
3. Daily commute time
4. State and local taxes
5. Quality of local schools
6. Housing affordability
7. Access to parks, community activities, and nightlife

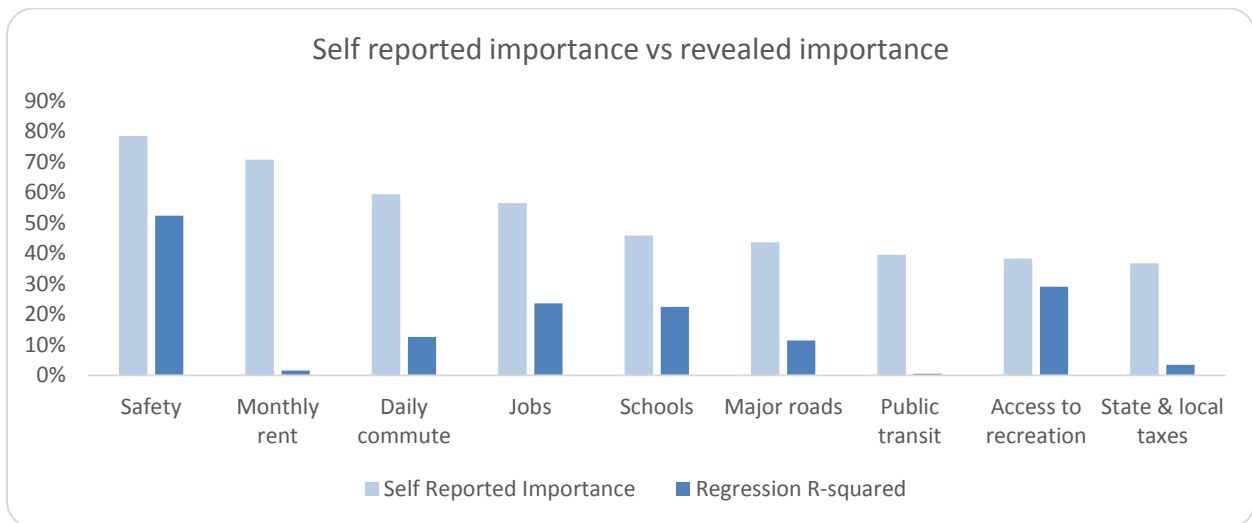
Next, we calculated the percentage of respondents who selected “Very Important”:



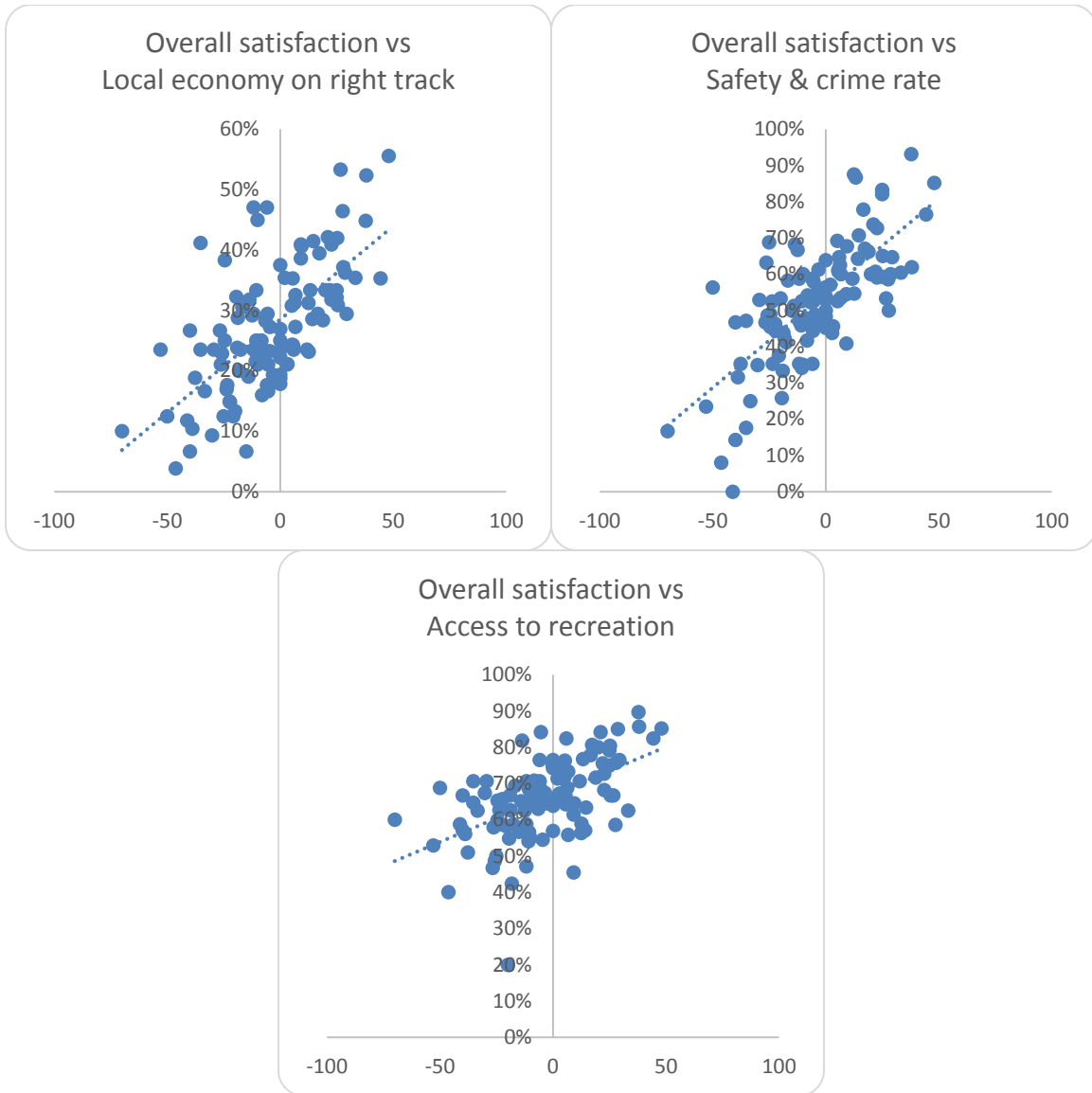
According to renters, safety is the most important factor when deciding where to live, with 78% of respondents identifying it as “Very Important”. Cost of rent is the second most important factor (70%) followed by commute length (59%) and availability of jobs (54%).

We considered these responses incomplete for two reasons. First, self-reported preferences frequently diverge from revealed preferences. Second, we wanted to understand the factors at a city wide level that lead to renter satisfaction. For instance, while monthly rent is clearly important to individual renters, we hypothesized that cities with high average rents may still have high degrees of renter satisfaction.

To address these concerns, we asked renters how satisfied they were with their current neighborhood or city with the same attributes listed above (Question 16) and calculated the percentage of renters who were “Satisfied” or “Very Satisfied” with each factor. We then ran single variable regressions of self-reported satisfaction with each factor against the Overall Satisfaction Score and calculated the R^2 value for each variable. What we found is that the self-reported importance of factors diverges from revealed preferences:



This regression analysis reveals that “safety and crime rate” is by far the most important factor ($R^2=.517$) which matches the self-reported importance. However, the second highest R^2 came from “Access to parks, community activities, and nightlife” (recreation) which was self-reported as the second least important factor. Although correlation is not causation, we believe that renters understate the actual importance of access to recreational activities. On the other hand, at the city level, satisfaction with rents does not predict overall satisfaction. This is apparent both from the regression and from anecdote: San Francisco has the third lowest satisfaction with rent of the 100 cities in our sample, but it also achieved one of the highest Overall Satisfaction scores.



We also modeled renter satisfaction using multivariable linear regression. After extensive experimentation, we found that a three factor model allowed us to account for nearly two thirds of the variance between cities. Specifically, we modeled overall satisfaction as a function of satisfaction with safety, access to recreation opportunities, and the percent of respondents who believe that the local economy is on the right track (question 14). This model had adjusted R^2 of .626. The coefficients suggested that of the three factors, an increase in optimism about the local economy has the largest positive impact on Overall Satisfaction, followed by safety, and then access to recreation.

We conclude that those are the three most important factors to renters, in that order. You can see the output of our multivariate regression analysis in Exhibit D.

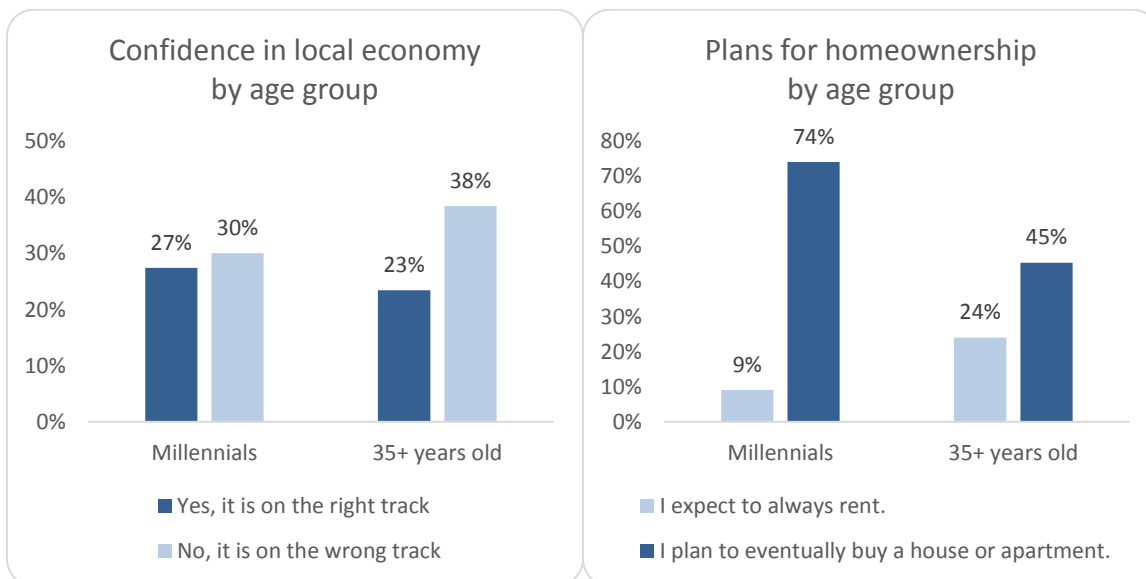
VI. MILLENNIAL RENTERS

First time home buyers were at a 30 year low according to the Wall Street Journal, representing only 33% of home buyers in 2014, down from the norm of 40%. With interest rates at historic lows, economists conjecture that weak demand driven by stagnant wages, student debt, and lack of confidence in the economy is a bigger impediment to homeownership than access to credit.⁶ Another common narrative is that millennials value the flexibility of renting and have been scarred by the Great Recession, leading to reduced interest in home ownership.

To better understand millennial renters, we analyzed data for millennials versus those over age 35 across our primary categories – confidence in the local economy, plans for homeownership, and overall satisfaction. What we found was striking.

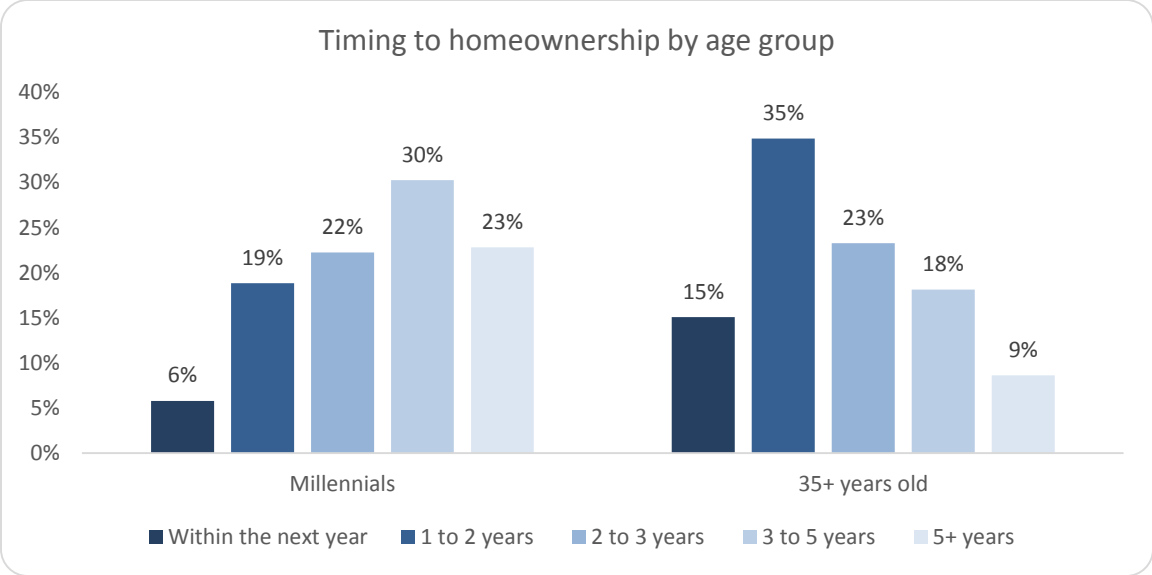
Millennials are more optimistic about their local economies than those over 35, with 27% reporting confidence versus 23%, respectively. In addition, only 30% believe the local economy is on the wrong track whereas 38% of those over 35 think things are going in the wrong direction.

Contrary to popular narratives about an attitudinal change towards homeownership and possibly buoyed by bullishness towards the economy, 74% of millennials in our survey plan to buy a home, while only 9% say that they plan to always rent. By contrast, only 45% of renters over age 35 plan to purchase while 24% plan to always rent.

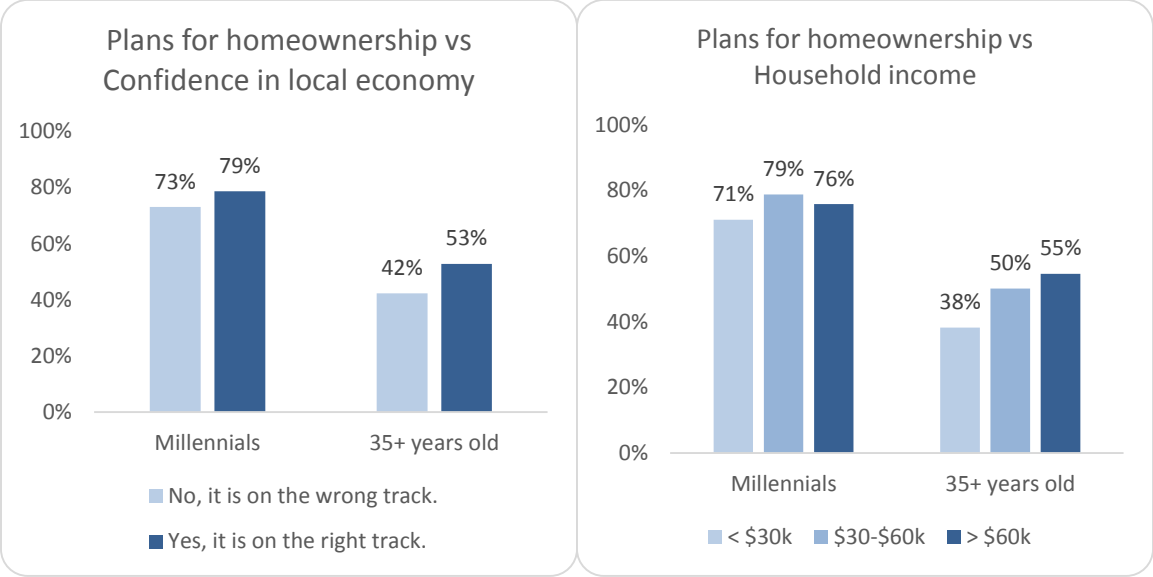


An important distinction that we found is that millennials plan to purchase homes in the mid- to long-term, whereas renters over 35 years old plan to purchase soon. Exactly 50% of renters over the age of 35 who plan to buy hope to do so within the next 2 years. By contrast, only 25% of millennials plan to purchase in the same timeframe. This suggests that while millennials plan to purchase, a significant portion do not have a near-term plan for doing so.

⁶ Joe Light, "First-Time Home Buyers Fade Further." The Wall Street Journal, November 3, 2014. <http://www.wsj.com/articles/first-time-home-buyers-decline-in-u-s-1415036020>

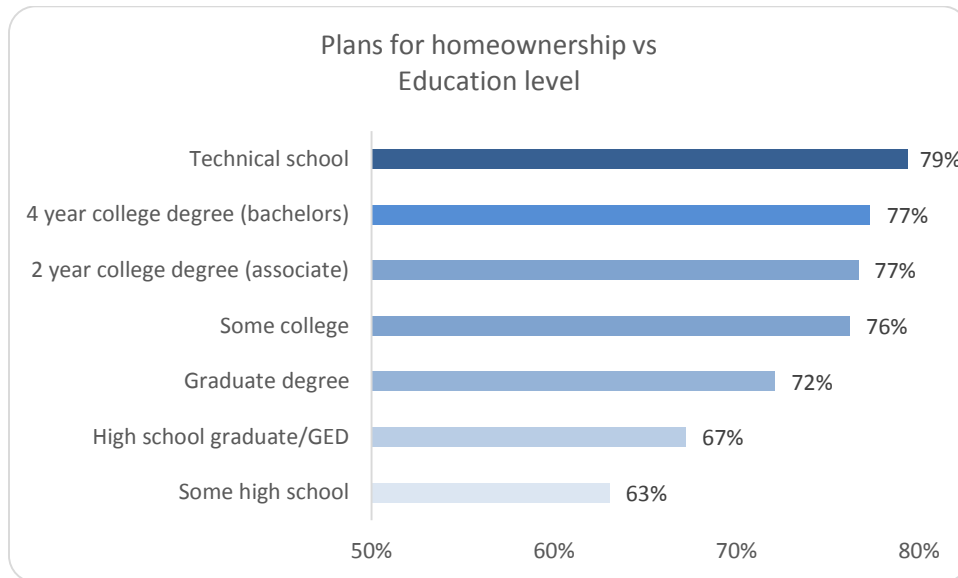


In addition, we had previously seen intuitive patterns showing higher intent to purchase with higher confidence in the economy and higher income. When we look by age group, however, these same patterns are not as pronounced for millennials, while they remain consistent for those over 35. For instance, millennials who are confident in the economy are more likely to purchase than those are not confident, but the spread is far narrower than for those over 35. Similarly, millennials making \$30-\$60K in household income have the highest intent to purchase, while those making over \$60K lead the pack for the older cohort:



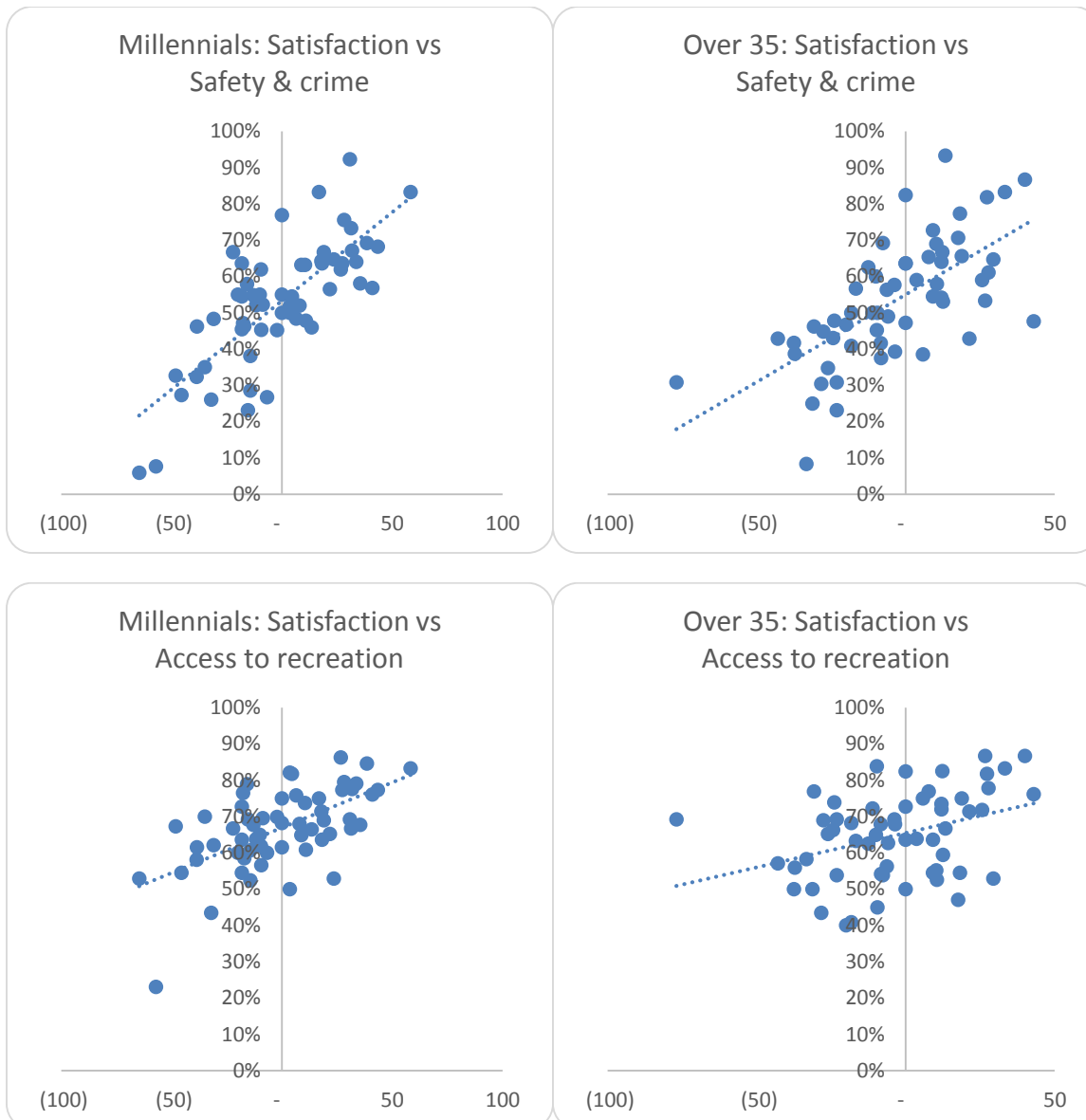
We also explored the narrative that high levels of student debt discourages millennials from homeownership. Our data show that millennials with post-secondary degrees are far more likely to plan to purchase than those with high school only. However, unlike the general population, millennials with technical degrees are at the high end of the scale with 79% saying they plan to buy. Similar to the general population, respondents with graduate degrees are lower than those with four year degrees (72% versus

77%). This might be explained by higher student loans given less time to pay down debts at a younger age.



Perhaps the most interesting pattern we found in the data was determining which factors contributed the most to how millennials evaluated overall satisfaction with their cities. Similar to our analysis for the total population, we individually regressed overall satisfaction against key amenities including satisfaction with safety, confidence in the local economy, and access to recreation opportunities. We discovered that confidence in the local economy has a far higher R^2 value for millennials (.565) than it does for those over 35 years old (.118). Similarly, access to recreation was far more predictive of overall satisfaction for millennials ($R^2 = .369$) than for those over 35 ($R^2 = .136$). Only satisfaction with safety showed similar predictive power across both age groups with an R^2 of .586 for millennials and an R^2 of .449 for over 35.





We also ran multivariable linear regressions using the three factors described above – confidence in the local economy, satisfaction with safety, and access to recreation. We found that the three factor model allowed us to account for more than two thirds of the variance between cities within the millennial population (R^2 of 0.698). However, the same three factors explained less than 50% of the variance within the over 35 population (R^2 of 0.480).

We conclude that satisfaction with safety is important to overall satisfaction for all age groups, and millennials are more attuned to performance of the local economy and access to recreation to be truly satisfied with the cities in which they choose to live.

VII. Ranking Cities and States

We ranked all cities and states along the three primary categories in our study: confidence in the economy, plans for homeownership and overall satisfaction. In addition, we ranked states and cities across the most important sub-categories for overall satisfaction as follows:

1. Confidence in the economy
2. Plans for homeownership
3. Overall satisfaction
 - a. Safety and crime rate
 - b. Access to recreational activities
 - c. Quality of local schools
 - d. State and local taxes
 - e. Quality of daily commute

To grade each of the cities and states in our survey, we converted the responses we received into numerical scores for each question and averaged those scores within each individual category to create a numerical score for each city or state. Cities and states were then ranked across each category based on this average score, and then assigned a letter grade of A+ through F depending on its rank in that category. Each category was evaluated on its own without weighting.

In total, 18,675 respondents completed portions of the Survey and 11,703 respondents completed the full survey which spanned 28 questions. Each respondent provided their state and zip code which were then coded to a city. We excluded states that did not have at least 30 responses which eliminated Alaska, Delaware, Hawaii, Montana, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming. This dataset allows us to provide analyses on 41 states and 100 cities, providing valuable insights and rankings to a broad swath of states and cities across the nation.

The following three tables show the top 10 cities and states ranked by overall satisfaction, confidence in the local economy, and plans for homeownership. You can find our full data and rankings across all categories in Exhibit B.

1. Overall Satisfaction Score

Top 10: Overall Satisfaction Score		Bottom 10: Overall Satisfaction Score	
Rank	City, State	Rank	City, State
1	Plano, TX	91	Joliet, IL
2	Boston, MA	92	Saint Petersburg, FL
3	Arlington, VA	93	Detroit, MI
4	Austin, TX	94	Bronx, NY
5	Torrance, CA	95	Columbia, SC
6	San Francisco, CA	96	San Bernardino, CA
7	Washington, DC	97	Hartford, CT
8	Grand Rapids, MI	98	Bridgeport, CT
9	Orlando, FL	99	New Haven, CT
10	Minneapolis, MN	100	Newark, NJ

2. Confidence in the Local Economy

Top 10: Confidence in Economy		
Rank	City, State	Economy
1	Plano, TX	56%
2	Boston, MA	52%
3	Providence, RI	47%
3	Santa Rosa, CA	47%
5	Grand Rapids, MI	46%
6	Arvada, CO	45%
7	Arlington, VA	45%
8	Salt Lake City, UT	42%
9	Minneapolis, MN	42%
10	Fort Worth, TX	41%

Bottom 10: Confidence in Economy		
Rank	City, State	Economy
91	Tucson, AZ	13%
91	Toledo, OH	13%
91	New Haven, CT	13%
94	Hartford, CT	12%
95	Bronx, NY	10%
96	Newark, NJ	10%
97	Baltimore, MD	9%
98	Milwaukee, WI	7%
98	San Bernardino, CA	7%
100	Bridgeport, CT	4%

3. Plans for Homeownership

Top 10: Plans for Homeownership		
Rank	City, State	Homeownership
1	Marietta, GA	88%
2	Hollywood, FL	81%
3	Joliet, IL	76%
4	Rochester, NY	76%
5	Arlington, VA	76%
6	Fort Worth, TX	76%
7	Durham, NC	74%
8	Columbia, SC	73%
9	San Antonio, TX	73%
10	Austin, TX	71%

Bottom 10: Plans for Homeownership		
Rank	City, State	Homeownership
91	Phoenix, AZ	45%
92	Saint Louis, MO	44%
93	Raleigh, NC	43%
94	Hayward, CA	42%
95	Omaha, NE	41%
96	Albuquerque, NM	39%
97	Bridgeport, CT	38%
98	Toledo, OH	38%
99	Lansing, MI	36%
100	Tucson, AZ	33%

VIII. CONCLUSION

The Apartment List RCS provides unparalleled insight into the attitudes and preferences of American renters at a 20-year high in total renter households nationwide. We find that renters are attuned to the local economy and important amenities such as safety and access to recreation when it comes to their overall satisfaction. We also find that millennials have high hopes for participating in the American Dream of homeownership and that they too are particularly sensitive to the economy.

In this context, it is extremely important that states, cities, policymakers, employers, and other stakeholders understand what they can offer to renters as they make their location, employment and homeownership decisions.

Specifically, states and cities that provide confidence in the local economy, high satisfaction for safety and access to recreation opportunities can attract and retain renters who have higher plans for homeownership. In addition, these renters are more likely to recommend their cities and neighborhoods to their friends and family, potentially leading to a virtuous cycle of population growth.

For more information on any of the findings in this report or to learn more about Apartment List, please contact Andrew Tam (Andrew@ApartmentList.com) or Max Rosett (Max@ApartmentList.com).

Exhibit A: Apartment List American Community Survey

1. Do you rent your home?

Answer Options

Yes, I rent.
No, I own my home.
No, other.

2. Where do you live?

Answer Options

State:
ZIP:

3. On a scale of 1 to 10, how likely are you to recommend your current city or neighborhood to a friend or family member, with 1 being extremely unlikely and 10 being extremely likely?

Answer Options

[Scale from 1-10]

4. Do you feel like you're getting a good deal on your home?

Answer Options

Yes
No

5. How big is your home?

Answer Options

Studio
1 Bedroom
2 Bedrooms
3+ Bedrooms

6. What is your current total monthly rent?

Answer Options

Under \$400
[100 dollar increments to \$4,000]
Over \$4,000

7. Including you, how many people live in your house or apartment?

Answer Options

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 or more

8. How many residents of your home are non-family members who also contribute to the monthly rent (e.g. roommates)?

Answer Options

- 0
- 1
- 2
- 3
- 4
- More than 5

9. How long have you lived in your current residence?

Years

Month

10. Do you intend to move in the next 12 months?

Answer Options

- Yes
- No

11. In the future, which of the following is closest to your plans?

Answer Options

I expect to always rent.
 I plan to eventually buy a house or apartment.
 I'm unsure.

12. Based on your personal situation, how soon do you expect to be buying a home?

Answer Options

Within the next year.
 Between 1 and 2 years from now.
 Between 2 and 3 years from now.
 Between 3 and 5 years from now
 More than 5 years from now.
 Never.

13. Do you feel that the national economy is on the right track?

Answer Options

Yes, it is on the right track.
 No, it is on the wrong track.
 I'm unsure.

14. Do you feel that your local economy is on the right track?

Answer Options

Yes, it is on the right track.
 No, it is on the wrong track.
 I'm unsure.

15. When choosing a place to live, how important are the following factors?

Answer Options	Unimportant	Of low importance	Somewhat important	Important	Very important	N/A
Local job and career opportunities						
Safety and low crime rates						
Commute time to work or school						
State and local taxes						
Quality of local schools						
Affordability / low monthly rent						
Access to public transit						
Access to major roads and highways						

Access to parks, community activities,
and nightlife
Pet friendly

16. How satisfied are you with your current city or neighborhood in each of these categories?

Answer Options	Unimportant	Of low importance	Somewhat important	Important	Very important	N/A
Local job and career opportunities						
Safety and low crime rates						
Distance to work or school						
State and local taxes						
Quality of local schools						
Affordability / low monthly rent						
Access to public transit						
Access to major roads and highways						
Access to parks, community activities, and nightlife						
Pet friendly						

17. How long (in minutes) is your commute to work or school each day?

Answer Options
Under 5 minutes
5-9 minutes
10-14 minutes
15-19 minutes
20-24 minutes
25-29 minutes
30-34 minutes
35-39 minutes
40-44 minutes
45-49 minutes
50-54 minutes
55-59 minutes
60-64 minutes
65-69 minutes
70-74 minutes
75-79 minutes
80-84 minutes
85-89 minutes
Over 90 minutes

18. What is the primary mode of transportation for your commute?

Answer Options

Walk
Bike
Car - self
Car - carpool
Bus
Subway
Train
Multiple modes
Other

19. How important are the following factors when choosing a building to live in?

Answer Options	Unimportant	Of low importance	Somewhat important	Important	Very important
Monthly rent					
Move in costs					
Paid utilities					
Pet friendliness					
Washer and dryer in unit					
Modern kitchen appliances					
Dishwasher					
Hardwood floors					
Walk in closets					
Parking					
Doorman / lobby concierge					

20. Please describe what you're looking for in an apartment in two sentences or less.

21. How old are you?

Answer Options

18-24
25-34
35-44
45-54
55-64
65+

22. What is your annual household income?

Answer Options

Under \$5,000
\$5,000-\$9,999
\$10,000-\$14,999
\$15,000-\$19,999
\$20,000-\$29,999
\$30,000-\$39,999
\$40,000-\$49,999
\$50,000-\$59,999
\$60,000-\$69,999
\$70,000-\$79,999
\$80,000-\$99,999
\$100,000+

23. What gender are you?

Answer Options

Male
Female

24. Are you married or in a long-term committed relationship?

Answer Options

Yes
No

25. How many children under the age of 18 do you have living with you?

Answer Options

0
1
2
3
4 or more

26. What is your highest level of education?

Answer Options

Some high school
High school graduate/GED
Some college
Technical school

2 year college degree (associate)
4 year college degree (bachelors)
Graduate degree

28. In politics, do you consider yourself a Democrat, a Republican, or an independent?

Answer Options

Republican
Democrat
Independent

Exhibit B: Renter Satisfaction Grades & Rank by City and State

(i) Ranked Cities

City	City satisfaction		Confidence in the local economy		Plans for home-ownership		Safety and crime rate		Satisfaction with daily commute		Quality of schools		Access to recreational activities		State and local taxes	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Albany, NY	39	B+	57	C+	77	C-	50	B-	13	A	89	D	62	C+	98	F
Albuquerque, NM	74	C-	75	C-	96	F	80	D	99	F	78	C-	100	F	56	C+
Alexandria, VA	35	B+	36	B+	86	D	10	A	27	A-	44	B	20	A	73	C-
Anaheim, CA	61	C+	71	C-	31	B+	89	D	89	D	27	A-	61	C+	100	F
Arlington, TX	25	A-	14	A	17	A	13	A	59	C+	85	D	50	B	14	A
Arlington, VA	3	A+	7	A+	5	A+	1	A+	1	A+	22	A-	4	A+	31	A-
Arvada, CO	61	C+	6	A+	50	B	30	A-	57	C+	72	C-	75	C-	15	A
Atlanta, GA	32	B+	55	B-	31	B+	27	A-	61	C+	43	B	56	B-	34	B+
Aurora, CO	83	D	50	B	68	C	60	C+	54	B-	64	C	79	C-	49	B
Austin, TX	4	A+	21	A-	10	A+	29	A-	68	C	34	B+	25	A-	36	B+
Baltimore, MD	89	D	97	F	72	C-	90	D	41	B	64	C	40	B+	52	B-
Boston, MA	2	A+	2	A+	25	A-	24	A-	2	A+	78	C-	5	A+	90	F
Bridgeport, CT	98	F	100	F	97	F	99	F	100	F	99	F	75	C-	96	F
Brockton, MA	39	B+	50	B	42	B	57	C+	19	A	5	A+	42	B+	3	A+
Bronx, NY	94	F	95	F	61	C+	93	F	87	D	95	F	83	D	77	C-
Brooklyn, NY	36	B+	70	C	50	B	73	C-	24	A-	70	C-	49	B	64	C
Buffalo, NY	59	C+	50	B	56	C+	81	D	30	A-	86	D	92	F	64	C
Charlotte, NC	28	A-	45	B	79	C-	49	B	88	D	58	C+	73	C-	82	D
Chicago, IL	37	B+	74	C-	44	B	79	C-	45	B	69	C-	59	C+	88	D
Cincinnati, OH	72	C-	37	B+	64	C+	38	B+	35	B+	22	A-	70	C	6	A+
Cleveland, OH	47	B	76	C-	69	C	25	A-	59	C+	41	B	35	B+	29	A-
Colorado Springs, CO	60	C+	68	C	30	A-	64	C	55	C+	58	C+	94	F	74	C-
Columbia, SC	95	F	48	B	8	A+	68	C	46	B	78	C-	10	A+	5	A+
Columbus, OH	26	A-	16	A	14	A	45	B	71	C-	76	C-	11	A+	15	A
Dallas, TX	75	C-	41	B	71	C-	78	C-	67	C	52	B-	60	C+	28	A-
Denver, CO	15	A	24	A-	33	B+	27	A-	18	A	52	B-	41	B+	47	B
Detroit, MI	93	F	79	C-	49	B	85	D	93	F	76	C-	84	D	85	D
Durham, NC	87	D	71	C-	7	A+	22	A-	80	C-	16	A	14	A	35	B+
Englewood, CO	33	B+	23	A-	64	C+	26	A-	46	B	7	A+	16	A	83	D
Evanston, IL	54	B-	83	D	34	B+	85	D	13	A	25	A-	8	A+	91	F
Fort Lauderdale, FL	86	D	66	C	18	A	62	C+	95	F	64	C	91	D	62	C+
Fort Worth, TX	19	A	10	A+	6	A+	9	A+	63	C+	27	A-	15	A	26	A-
Fresno, CA	73	C-	57	C+	11	A	82	D	75	C-	7	A+	95	F	59	C+
Grand Rapids, MI	8	A+	5	A+	16	A	37	B+	78	C-	44	B	67	C+	72	C-

Greensboro, NC	69	C	31	B+	20	A	12	A	8	A+	34	B+	1	A+	27	A-
Hartford, CT	97	F	94	F	11	A	100	F	75	C-	93	F	88	D	98	F
Hayward, CA	63	C+	24	A-	94	F	51	B-	38	B+	34	B+	66	C+	93	F
Hollywood, FL	39	B+	47	B	2	A+	48	B	53	B-	19	A	20	A	7	A+
Houston, TX	83	D	17	A	22	A-	74	C-	73	C-	54	C+	51	B	36	B+
Hyattsville, MD	58	C+	88	D	39	B+	47	B	46	B	19	A	12	A	3	A+
Indianapolis, IN	56	C+	65	C+	75	C-	64	C	41	B	27	A-	57	C+	48	B
Irving, TX	11	A	30	A-	38	B+	6	A+	19	A	1	A+	2	A+	1	A+
Jacksonville, FL	39	B+	76	C-	69	C	75	C-	23	A-	47	B	27	A-	29	A-
Jersey City, NJ	79	C-	90	D	87	D	76	C-	64	C+	93	F	9	A+	22	A-
Joliet, IL	91	F	11	A	3	A+	96	F	58	C+	99	F	95	F	59	C+
Kansas City, MO	65	C+	69	C	52	B-	72	C-	92	F	83	D	29	A-	33	B+
Lansing, MI	49	B	45	B	99	F	45	B	91	D	16	A	31	A-	86	D
Las Vegas, NV	63	C+	50	B	67	C	91	F	85	D	62	C+	90	D	12	A
Long Beach, CA	70	C	78	C-	63	C+	56	C+	56	C+	54	C+	73	C-	75	C-
Los Angeles, CA	48	B	81	D	29	A-	70	C-	41	B	90	F	39	B+	83	D
Louisville, KY	11	A	24	A-	25	A-	5	A+	11	A	6	A+	12	A	15	A
Marietta, GA	68	C	40	B+	1	A+	15	A	68	C	34	B+	86	D	50	B-
Memphis, TN	51	B-	86	D	19	A	51	B-	38	B+	11	A	45	B	23	A-
Mesa, AZ	26	A-	12	A	20	A	83	D	98	F	16	A	85	D	15	A
Miami, FL	82	D	85	D	62	C+	54	C+	66	C	32	B+	58	C+	8	A+
Milwaukee, WI	71	C-	98	F	73	C-	57	C+	84	D	63	C+	68	C	76	C-
Minneapolis, MN	10	A+	9	A+	28	A-	17	A	10	A+	13	A	17	A	42	B
Modesto, CA	88	D	48	B	88	D	68	C	97	F	27	A-	99	F	43	B
Nashville, TN	51	B-	71	C-	41	B	39	B+	5	A+	70	C-	45	B	53	B-
New Haven, CT	99	F	91	F	81	D	41	B	36	B+	67	C	25	A-	87	D
New Orleans, LA	53	B-	38	B+	25	A-	76	C-	46	B	25	A-	53	B	15	A
New York, NY	18	A	15	A	45	B	14	A	9	A+	57	C+	18	A	89	D
Newark, NJ	100	F	96	F	81	D	97	F	72	C-	88	D	81	C-	43	B
Newport News, VA	13	A	31	B+	90	D	8	A+	26	A-	44	B	48	B	11	A+
Oakland, CA	77	C-	29	A-	47	B	94	F	90	D	74	C-	97	F	80	D
Omaha, NE	13	A	12	A	95	F	34	B+	40	B	4	A+	65	C+	56	C+
Orlando, FL	9	A+	35	B+	23	A-	33	B+	46	B	21	A-	37	B+	9	A+
Philadelphia, PA	80	C-	89	D	24	A-	71	C-	52	B-	91	F	52	B	62	C+
Phoenix, AZ	39	B+	82	D	91	F	63	C+	83	D	27	A-	87	D	38	B+
Pittsburgh, PA	31	B+	57	C+	77	C-	18	A	7	A+	96	F	77	C-	39	B+
Plano, TX	1	A+	1	A+	64	C+	4	A+	3	A+	1	A+	37	B+	2	A+
Portland, OR	39	B+	67	C	81	D	21	A-	62	C+	33	B+	70	C	32	B+
Providence, RI	54	B-	3	A+	53	B-	35	B+	31	B+	47	B	3	A+	78	C-
Raleigh, NC	20	A	42	B	93	F	20	A	81	D	14	A	79	C-	69	C-
Renton, WA	39	B+	80	C-	60	C+	41	B	19	A	78	C-	98	F	71	C-

Richmond, VA	34	B+	54	B-	48	B	51	B-	16	A	72	C-	45	B	53	B-
Rochester, NY	76	C-	56	C+	4	A+	92	F	46	B	96	F	53	B	64	C
Sacramento, CA	29	A-	28	A-	88	D	30	A-	24	A-	11	A	34	B+	43	B
Saint Louis, MO	50	B	63	C+	92	F	61	C+	41	B	51	B-	22	A	21	A-
Saint Paul, MN	22	A-	64	C+	46	B	44	B	74	C-	41	B	70	C	68	C-
Saint Petersburg, FL	91	F	57	C+	34	B+	66	C	31	B+	78	C-	23	A-	39	B+
Salt Lake City, UT	16	A	8	A+	58	C+	7	A+	5	A+	1	A+	6	A+	70	C-
San Antonio, TX	30	A-	33	B+	9	A+	23	A-	36	B+	40	B	30	A-	13	A
San Bernardino, CA	95	F	98	F	73	C-	98	F	81	D	96	F	92	F	81	D
San Diego, CA	17	A	43	B	40	B+	16	A	28	A-	50	B-	33	A-	55	C+
San Francisco, CA	6	A+	20	A	42	B	30	A-	4	A+	22	A-	28	A-	97	F
San Jose, CA	38	B+	21	A-	76	C-	40	B	29	A-	86	D	69	C	95	F
Santa Rosa, CA	66	C	3	A+	11	A	66	C	31	B+	14	A	62	C+	78	C-
Seattle, WA	39	B+	18	A	81	D	41	B	19	A	92	F	42	B+	46	B
Silver Spring, MD	21	A-	24	A-	59	C+	3	A+	12	A	7	A+	7	A+	25	A-
Tacoma, WA	81	D	83	D	34	B+	85	D	75	C-	47	B	88	D	91	F
Tampa, FL	56	C+	44	B	80	C-	55	C+	64	C+	56	C+	32	A-	15	A
Toledo, OH	85	D	91	F	98	F	11	A	94	F	58	C+	82	D	50	B-
Torrance, CA	5	A+	38	B+	53	B-	18	A	13	A	34	B+	23	A-	39	B+
Tucson, AZ	78	C-	91	F	100	F	84	D	79	C-	67	C	53	B	64	C
Vallejo, CA	66	C	57	C+	34	B+	85	D	96	F	58	C+	77	C-	24	A-
Virginia Beach, VA	24	A-	57	C+	53	B-	35	B+	31	B+	34	B+	62	C+	59	C+
Washington, DC	7	A+	19	A	15	A	57	C+	17	A	84	D	18	A	58	C+
West Palm Beach, FL	23	A-	33	B+	81	D	2	A+	86	D	10	A+	42	B+	10	A+
Yonkers, NY	90	D	86	D	56	C+	95	F	68	C	74	C-	36	B+	94	F

(ii) **Ranked States**

State	City Satisfaction		Confidence in the local economy		Plans for home-ownership		Safety and crime rate		Satisfaction with daily commute		Quality of schools		Access to recreational activities		State and local taxes	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	15	B+	38	D	5	A	9	A-	4	A	24	C+	32	C-	4	A
Arizona	13	B+	19	B	39	D	32	C-	37	D	22	B-	35	C-	15	B+
Arkansas	34	C-	11	A-	9	A-	6	A	25	C+	3	A+	39	D	14	B+
California	9	A-	24	C+	20	B-	22	B-	23	B-	14	B+	7	A	34	C-
Colorado	4	A	3	A+	16	B	17	B	27	C+	26	C+	3	A+	31	C
Connecticut	37	D	41	F	37	D	38	D	27	C+	38	D	28	C	40	F
Florida	18	B	18	B	24	C+	23	B-	24	C+	17	B	11	A-	9	A-
Georgia	30	C	21	B-	7	A	15	B+	32	C-	11	A-	30	C	12	B+

Idaho	2	A+	40	F	1	A+	2	A+	2	A+	10	A-	15	B+	16	B
Illinois	17	B	33	C-	15	B+	28	C	14	B+	29	C	5	A	37	D
Indiana	21	B-	29	C	28	C	24	C+	25	C+	7	A	13	B+	26	C+
Iowa	33	C-	2	A+	14	B+	3	A+	9	A-	19	B	1	A+	7	A
Kansas	10	A-	15	B+	11	A-	5	A	1	A+	9	A-	2	A+	19	B
Kentucky	7	A	36	D	12	B+	4	A	13	B+	23	B-	8	A-	23	B-
Louisiana	32	C-	16	B	6	A	8	A-	18	B	5	A	29	C	6	A
Maine	40	F	25	C+	18	B	41	F	40	F	41	F	40	F	41	F
Maryland	24	C+	26	C+	13	B+	25	C+	6	A	24	C+	19	B	17	B
Massachusetts	22	B-	30	C	29	C	21	B-	30	C	30	C	14	B+	30	C
Michigan	20	B-	12	B+	26	C+	19	B	15	B+	20	B-	26	C+	21	B-
Minnesota	3	A+	7	A	19	B	18	B	18	B	4	A	6	A	32	C-
Mississippi	35	C-	8	A-	4	A	37	D	39	D	6	A	37	D	5	A
Missouri	28	C	23	B-	27	C+	33	C-	11	A-	31	C	33	C-	19	B
Nebraska	12	B+	5	A	38	D	11	A-	12	B+	1	A+	22	B-	33	C-
Nevada	16	B	13	B+	35	C-	39	D	38	D	34	C-	18	B	1	A+
New Hampshire	38	D	9	A-	40	F	35	C-	3	A+	37	D	37	D	3	A+
New Jersey	39	D	39	D	33	C-	29	C	21	B-	33	C-	21	B-	36	D
New Mexico	23	B-	27	C+	40	F	40	F	41	F	40	F	41	F	24	C+
New York	29	C	31	C	22	B-	31	C	21	B-	39	D	10	A-	38	D
North Carolina	14	B+	17	B	21	B-	16	B	17	B	15	B+	27	C+	27	C+
Ohio	19	B	20	B-	25	C+	12	B+	18	B	20	B-	16	B	10	A-
Oklahoma	5	A	4	A	34	C-	27	C+	32	C-	12	B+	31	C	35	C-
Oregon	25	C+	22	B-	32	C-	13	B+	35	C-	8	A-	24	C+	13	B+
Pennsylvania	36	D	35	C-	17	B	29	C	36	D	35	C-	20	B-	25	C+
Rhode Island	8	A-	32	C-	30	C	10	A-	7	A	28	C	36	D	39	D
South Carolina	41	F	34	C-	2	A+	36	D	34	C-	31	C	34	C-	2	A+
Tennessee	31	C	37	D	10	A-	26	C+	16	B	27	C+	23	B-	11	A-
Texas	27	C+	6	A	8	A-	20	B-	8	A-	15	B+	12	B+	8	A-
Utah	1	A+	1	A+	3	A+	1	A+	5	A	2	A+	9	A-	18	B
Virginia	6	A	10	A-	23	B-	7	A	9	A-	18	B	4	A	22	B-
Washington	26	C+	14	B+	30	C	33	C-	29	C	35	C-	17	B	29	C
Wisconsin	11	A-	28	C	36	D	14	B+	30	C	13	B+	24	C+	27	C+

Exhibit C: Selected Survey Data

Question 11: In the future, which of the following is closest to your plans?

Age	I plan to eventually buy a house or apartment.	I'm unsure.	I expect to always rent.
18-34	4,342 (74%)	988 (17%)	535 (9%)
35-54	2,093 (54%)	1,128 (29%)	655 (17%)
55+	430 (25%)	577 (34%)	687 (41%)
Total	6,865 (60%)	2,693 (24%)	1,877 (16%)

Income	I plan to eventually buy a house or apartment.	I'm unsure.	I expect to always rent.
Under \$30,000	3,327 (57%)	1,411 (24%)	1,124 (19%)
\$30,000-\$60,000	2,429 (63%)	386 (23%)	208 (12%)
Over \$60,000	1,076 (64%)	878 (23%)	530 (14%)
Total	6,832 (60%)	2,675 (24%)	1,862 (16%)

Question 14: Do you believe that the local economy is on the right track?

Age	I'm unsure.	No, it is on the wrong track.	Yes, it is on the right track.
18-34	2,480 (42%)	1,756 (30%)	1600 (27%)
35-54	1,489 (39%)	1,488 (39%)	882 (23%)
55+	621 (37%)	638 (38%)	415 (25%)
Total	4,590 (40%)	3,882 (34%)	2,897 (25%)

Income	I'm unsure.	No, it is on the wrong track.	Yes, it is on the right track.
Under \$30,000	2,490 (42%)	2,205 (38%)	1,167 (20%)
\$30,000-\$60,000	1,501 (39%)	1,234 (32%)	1,102 (29%)
Over \$60,000	599 (36%)	443 (27%)	628 (38%)
Total	4,590 (40%)	3,882 (34%)	2,897 (25%)

Exhibit D: Multivariate Regression Results

Table 1: Overall city renter satisfaction

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.798
R Square	0.634
Adjusted R Square	0.626
Standard Error	13.31
Observations	100

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	29869	9956	56	4.77E-21
Residual	96	17024	177		
Total	99	46893			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-77.5	8.9	-8.7	0.000	-95.2	-59.7
Local Economy	72.2	15.4	4.7	0.000	41.6	102.8
Safety	60.0	10.6	5.7	0.000	39.0	81.0
Recreation	33.7	15.9	2.1	0.037	2.1	65.3

Exhibit D: Multivariate Regression Results (continued)

Table 2: Millennials City Satisfaction

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.845
R Square	0.714
Adjusted R Square	0.698
Standard Error	14.74
Observations	58

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	29335	9778	45	1.03606E-14
Residual	54	11736	217		
Total	57	41071			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-86.90	12.06	7.21	0.000	-111.07	-62.73
Local Economy	84.98	20.58	4.13	0.000	43.71	126.25
Safety	61.07	16.58	3.68	0.001	27.84	94.31
Recreation	44.21	22.08	2.00	0.050	-0.07	88.48

Exhibit D: Multivariate Regression Results (continued)

Table 3: Over age 35 City Satisfaction

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.712
R Square	0.507
Adjusted R Square	0.480
Standard Error	16.73
Observations	58

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	15543	5181	19	2.19E-08
Residual	54	15117	280		
Total	57	30660			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-77.21	13.09	5.90	0.000	-103.46	-50.96
Local Economy	37.77	22.06	1.71	0.093	-6.46	82.00
Safety	79.31	14.35	5.53	0.000	50.54	108.09
Recreation	34.61	19.43	1.78	0.080	-4.33	73.56