Fannie Mae National Housing Survey™

Consumer Attitudes about Getting a Mortgage Online and via Mobile Technology

Topic Analysis – October 2015

Executive Summary

- Homebuyers in increasing numbers are going online to get their mortgage

- The appetite for future mortgage shopping and application via a mobile device is more than twice the current usage

- College graduation, income, and age are strongly associated with recent borrowers' online and mobile mortgage shopping behaviors:

  - Borrowers who either have a college degree, higher income, or are younger are more likely to use online technology to get a mortgage quote

  - College grads are more likely to use mobile technology for obtaining mortgage quotes than non-college grads

  - Borrowers who either have a college degree, higher income, or are younger are more likely to apply for a mortgage online

  - Borrowers who are younger are more likely to apply for a mortgage via a mobile device

- While demand for online mortgage services is growing, results from a separate study show that consumers, particularly those who are lower income, older, or have not completed a college degree, still value an in-person presence when choosing a mortgage provider

- The greatest concern about applying for a mortgage online is related to security, particularly for those who have experience with the mortgage process, though those who have a college degree have fewer concerns

Sample Data

- From January through March 2015, Penn Schoen Berland conducted telephone interviews among the following audiences
  - The oversamples were gathered in addition to the General Population sample

Sample	Sample Size	Margin of Error
Owners: Individuals 18 years and older from the Jan – March 2015 general population sample who own their primary residence	1,864	+/- 2.27%
Recent Homebuyer Oversample: Individuals who took out purchase mortgage loans in **2014** and whose loans were acquired by Fannie Mae	1213	+/- 2.81
First Time Homebuyers: Recent homebuyers who confirmed that their current home is the first they've ever owned during survey	481	+/- 4.47%
Repeat Homebuyers: Recent Homebuyers who confirmed that their current home is NOT the first they've ever owned during survey	732	+/- 3.62%
Non-College Grads: Recent Homebuyers who selected grade school, some high school, high school graduate, some college, or technical school as the last grade they completed	364	+/- 5.14%
College Grads: Recent Homebuyers who have graduated from college or graduate school	824	+/- 3.41%

- A purchase mortgage loan is used only for the purchase of a home, not to refinance an existing mortgage or to take out a new loan on a home the borrower already owns
- Note that on each question, respondents had the option to answer "don't know" (volunteered), which is why in some cases, the total % may not equal 100
- The General Population data presented in this study has been weighted to make it reflective of the U.S. Census American Community Survey demographic statistics in terms of gender, age, race/ethnicity, income, education, and housing tenure
- The Oversample data has been weighted to make it reflective of all purchase loans originated in 2014 and acquired by Fannie Mae, in terms of first/repeat, age and income
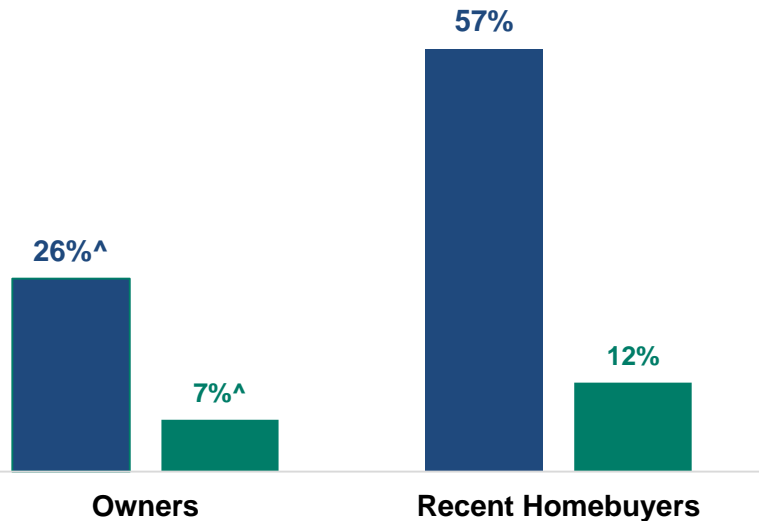
RESULTS

Homebuyers in increasing numbers are going online to get their mortgage quote; there is significant appetite for mobile mortgage shopping beyond current usage levels

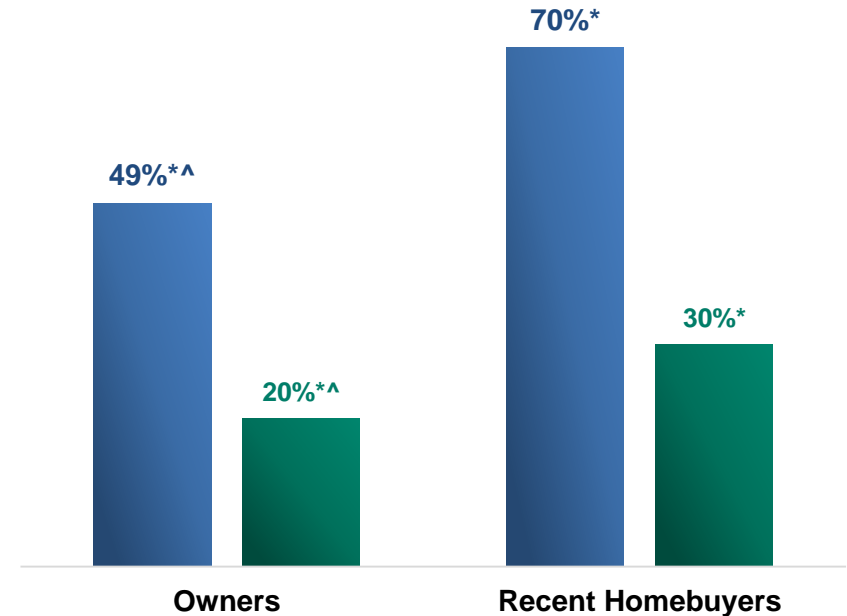**Have Obtained a Mortgage Quote Online**

Online   Mobile[1]

- Owners: 26%^ (Online), 7%^ (Mobile)
- Recent Homebuyers: 57% (Online), 12% (Mobile)

Would Like to Obtain a Mortgage Quote Online

Online   Mobile[1]

- Owners: 49%*^ (Online), 20%*^ (Mobile)
- Recent Homebuyers: 70%* (Online), 30%* (Mobile)

1. Mobile includes smart phone and tablet; Mobile is a subset of Online which also includes personal computer
* Denotes a statistically significant difference from those who have obtained a mortgage quote online at the 95% confidence level
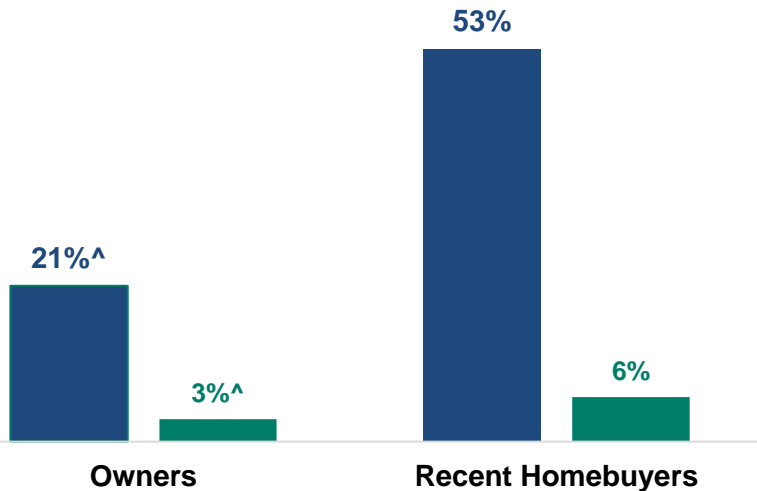^ Denotes a statistically significant difference between owners and recent homebuyers at the 95% confidence level

Online mortgage applications have increased and the appetite for mobile mortgage application is more than twice the current usage levels

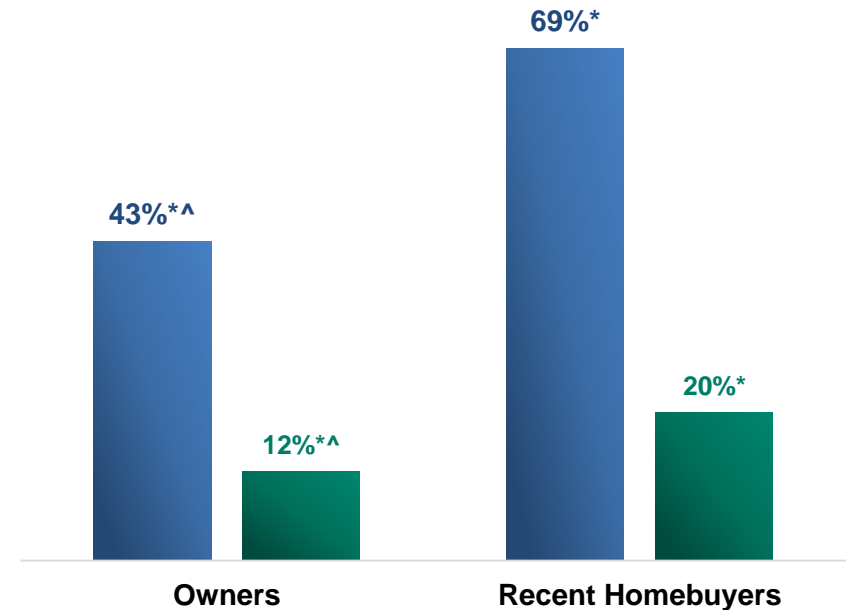

Have Filled Out a Mortgage Application Online

Online | Mobile

53%
21%^
3%^
6%

Owners | Recent Homebuyers

Would Like to Fill Out a Mortgage Application Online

Online | Mobile
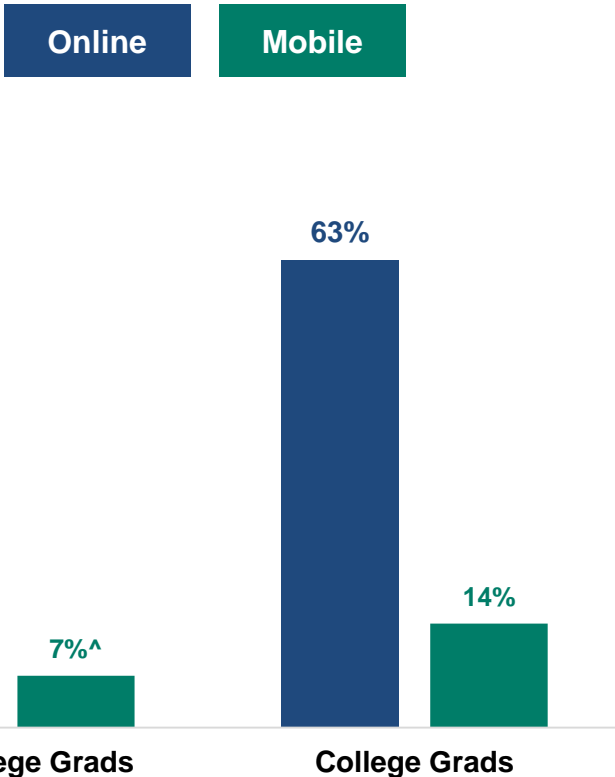
69%*
43%*^
12%*^
20%*

Owners | Recent Homebuyers

* Denotes a statistically significant difference from those who have filled out a mortgage application online at the 95% confidence level
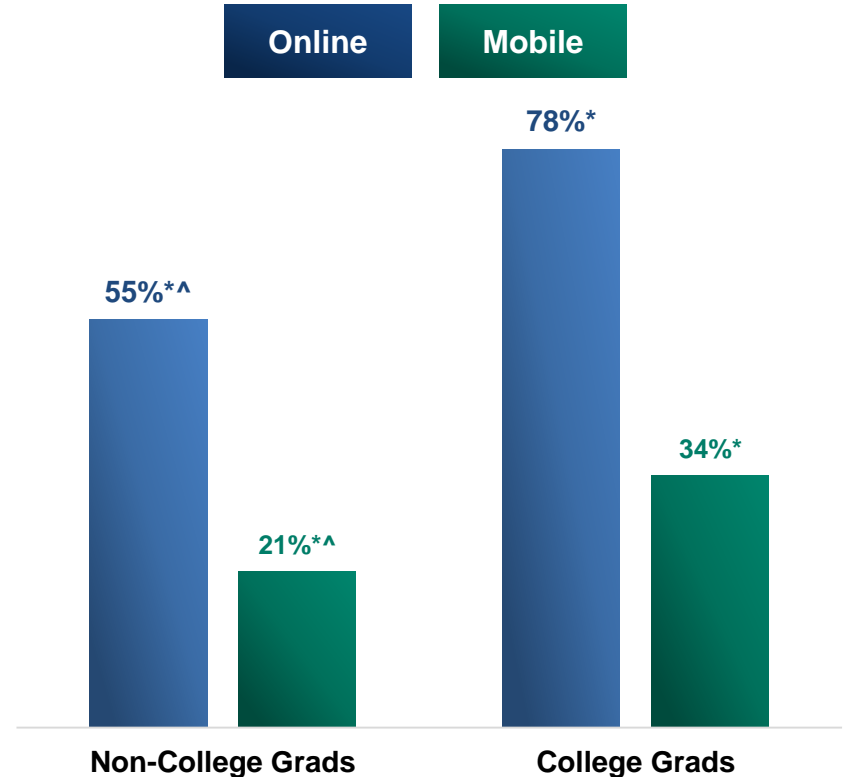^ Denotes a statistically significant difference between owners and recent homebuyers at the 95% confidence level

There is an education divide in terms of one's current usage and future interest in obtaining an online or mobile mortgage quote

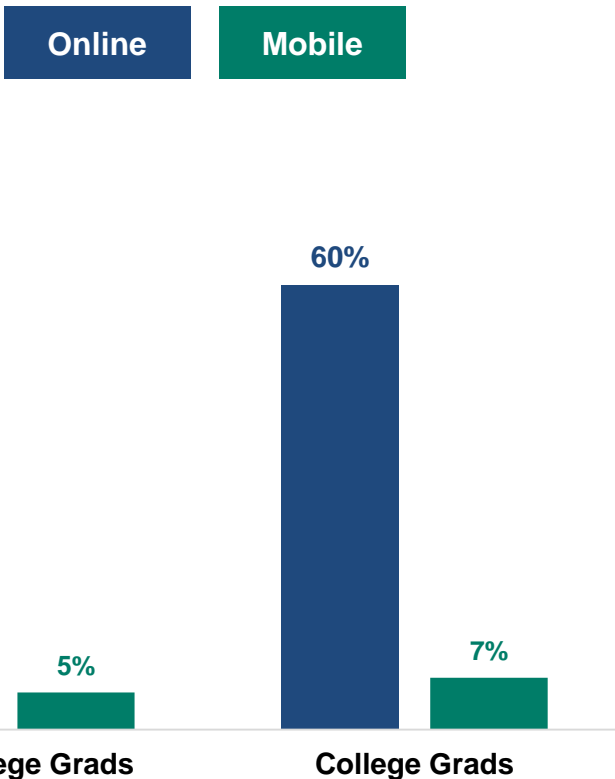**Have Obtained a Mortgage Quote Online**
(Among Recent Homebuyers)

Online | Mobile

Would Like to Obtain a Mortgage Quote Online
(Among Recent Homebuyers)

Online | Mobile

Left chart — Have Obtained a Mortgage Quote Online:
- Non-College Grads: Online 46%^, Mobile 7%^
- College Grads: Online 63%, Mobile 14%

Right chart — Would Like to Obtain a Mortgage Quote Online:
- Non-College Grads: Online 55%*^, Mobile 21%*^
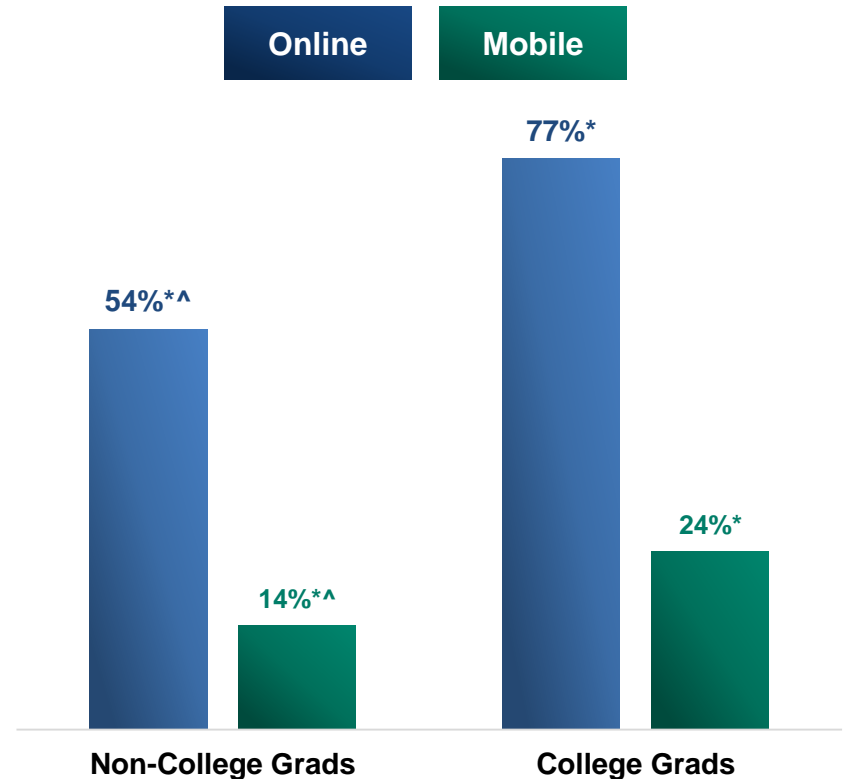- College Grads: Online 78%*, Mobile 34%*

* Denotes a statistically significant difference from those who have obtained a mortgage quote online at the 95% confidence level
^ Denotes a statistically significant difference between non-college grads and college grads at the 95% confidence level

The education divide also persists in terms of one's current usage of online mortgage application and future interest in mobile or online mortgage application

Have Filled Out a Mortgage Application Online
(Among Recent Homebuyers)

Online   Mobile

37%^   5%   60%   7%

Non-College Grads   College Grads

Would Like to Fill Out a Mortgage Application Online
(Among Recent Homebuyers)

Online   Mobile

77%*   54%*^   14%*^   24%*

Non-College Grads   College Grads

* Denotes a statistically significant difference from those who have filled out a mortgage application online at the 95% confidence level
^ Denotes a statistically significant difference between non-college grads and college grads at the 95% confidence level

Using logistic regression methods*, we tested associations between recent homebuyers' attributes and online and mobile mortgage shopping behaviors

Recent homebuyers are more likely to have done the following if they …

| Have Obtained a Mortgage Quote Online | 🎓 have graduated from college | $ have a higher income | 👥 are younger |

| Have Obtained a Mortgage Quote Using a Mobile Device | 🎓 have graduated from college | 🏠 have bought a house before | 👥 are younger |

| Have Filled Out a Mortgage Application Online | 🎓 have graduated from college | $ have a higher income | 👥 are younger |

| Have Filled Out a Mortgage Application Using a Mobile Device | | | 👥 are younger |

* More details on regression analysis in appendix

Using logistic regression methods*, we tested associations between recent homebuyers' attributes and online and mobile mortgage shopping preferences

Recent homebuyer are more likely to want to do the following if they …

| Would Like to Obtain a Mortgage Quote Online | have graduated from college | have a higher income | are younger |

| Would Like to Obtain a Mortgage Quote Using a Mobile Device | have graduated from college | have a higher income | |

| Would Like to Fill Out a Mortgage Application Online | have graduated from college | have a higher income | are younger |

| Would Like to Fill Out a Mortgage Application Using a Mobile Device | have graduated from college | | are younger |

* More details on regression analysis in appendix

Have Obtained a Mortgage Quote Online

Holding other characteristics the same, recent homebuyers are more likely to **have obtained a mortgage quote online** if they…

have a college degree

have a higher income

are younger

Probability of "Have Obtained a Mortgage Quote Online"
(Among Recent Homebuyers)

Probability increases about 14% with college education

48.0%

62.2%

Non-College Grad

College Grad

Probability increases about 1% for every $10,000 increase in income

69.2%

48.6%

≤20   50   80   110   140   170   200+

Income (Thousand$)

Probability decreases about 2% for every 5 year increase in age

64.2%

43.7%

<30   34   39   44   49   54   59   64   69   70+

Age

Have Obtained a Mortgage Quote Using a Mobile Device

Holding other characteristics the same, recent homebuyers are more likely to **have obtained a mortgage quote using a mobile device** if they…

have a college degree

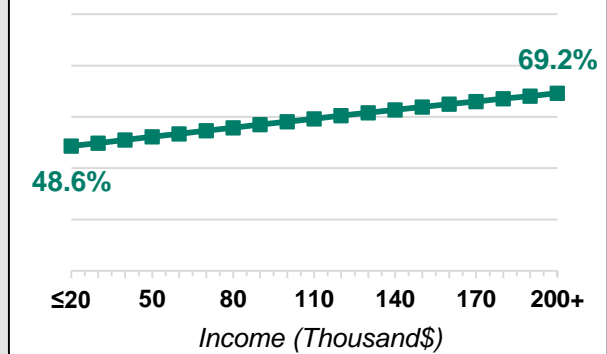**have bought a house before**

are younger

Probability of "Have Obtained a Mortgage Quote Using a Mobile Device"
(Among Recent Homebuyers)

Probability increases about 8% with college education

14.3% — College Grad

6.6% — Non-College Grad
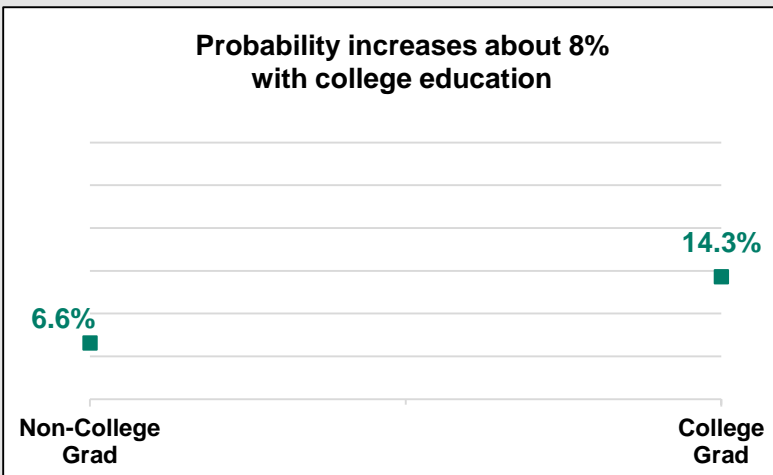
For every 5 year increase in age, probability decreases an average of 3% for repeat borrowers and 1% for first time borrowers

First Time Borrower   Repeat Borrower

27.6%

13.8%

6.1%

2.0%

Age: <30, 34, 39, 44, 49, 54, 59, 64, 69, 70+

Have Filled Out a Mortgage Application Online

Holding other characteristics the same, recent homebuyers are more likely to **have filled out a mortgage application online** if they…

have a college degree

have a higher income

are younger

Probability of "Have Filled Out a Mortgage Application Online"
(Among Recent Homebuyers)

Probability increases about 20% with college education

59.5%

39.4%

Non-College Grad

College Grad

Probability increases about 1% for every $10,000 increase in income

68.6%

41.4%

≤20   50   80   110   140   170   200+
Income (Thousand$)

Probability decreases about 2% for every 5 year increase in age

59.6%

39.9%

<30   34   39   44   49   54   59   64   69   70+
Age

Have Filled Out a Mortgage Application Using a Mobile Device

Holding other characteristics the same, recent homebuyers are more likely to **have filled out a mortgage application using a mobile device** if they…

are younger

Probability of "Have Filled Out a Mortgage Application Using a Mobile Device"
(Among Recent Homebuyers)

**Probability decreases an average of 1%
for every 5 year increase in age**

10.2%

1.8%

<30   34   39   44   49   54   59   64   69   70+

Age

Would Like to Obtain a Mortgage Quote Online

Holding other characteristics the same, recent homebuyers are more likely to **want to obtain a mortgage quote online** if they…
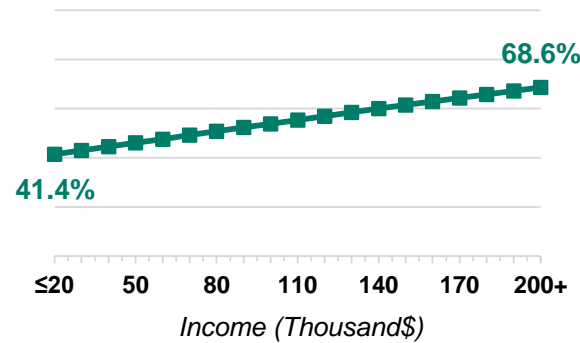
have a college degree

have a higher income

are younger

Probability of "Would Like to Obtain a Mortgage Quote Online"
(Among Recent Homebuyers)

Probability increases about 20% with college education

78.3%

58.5%

Non-College Grad

College Grad

Probability increases an average of 1% for every $10,000 increase in income

84.1%

59.2%

≤20 50 80 110 140 170 200+

Income (Thousand$)

Probability decreases an average of 4% for every 5 year increase in age
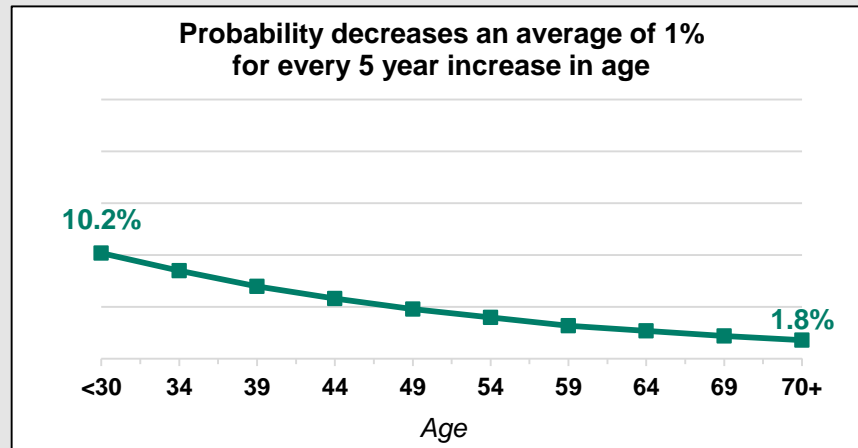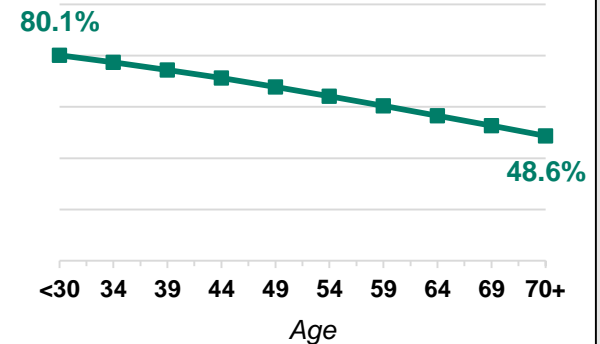
80.1%

48.6%

<30 34 39 44 49 54 59 64 69 70+

Age

Would Like to Obtain a Mortgage Quote Using a Mobile Device

Holding other characteristics the same, recent homebuyers are more likely to **want to obtain a mortgage quote using a mobile device** if they…

have a college degree
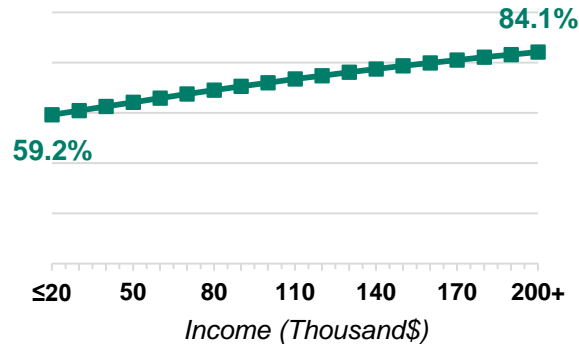
have a higher income

Probability of "Would Like to Obtain a Mortgage Quote Using a Mobile Device"
(Among Recent Homebuyers)

Probability increases about 10% with college education

22.5% — Non-College Grad

32.4% — College Grad

Probability increases about 1% for every $10,000 increase in income

43.8%

21.0%

Income (Thousand$): ≤20 40 60 80 100 120 140 160 180 200+

Would Like to Fill Out a Mortgage Application Online

Holding other characteristics the same, recent homebuyers are more likely to **want to fill out a mortgage application online** if they…

have a college degree

have a higher income

are younger

Probability of "Would Like to Fill Out a Mortgage Application Online"
(Among Recent Homebuyers)

Probability increases about 20% with college education

78.4%

58.8%

Non-College Grad

College Grad

Probability increases an average of 2% for every $10,000 increase in income

88.2%

52.6%

≤20 50 80 110 140 170 200+

Income (Thousand$)
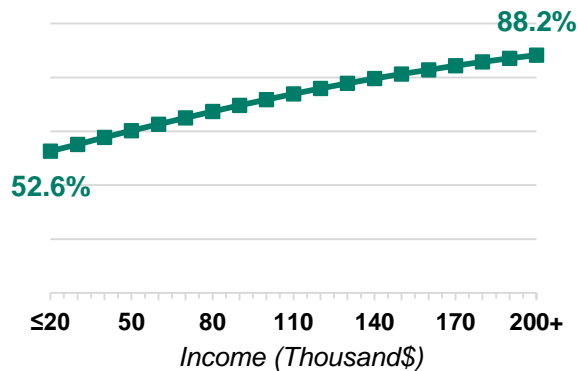
For every 5 year increase in age, probability decreases an average of 5% for grads and 1% for non-grads
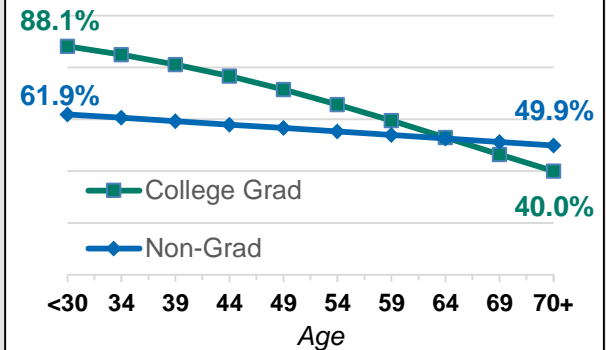
88.1%

61.9%

49.9%

College Grad

Non-Grad

40.0%

<30 34 39 44 49 54 59 64 69 70+

Age

Would Like to Fill Out a Mortgage Application Using a Mobile Device

Holding other characteristics the same, recent homebuyers are more likely to **want to fill out a mortgage application using a mobile device** if they…
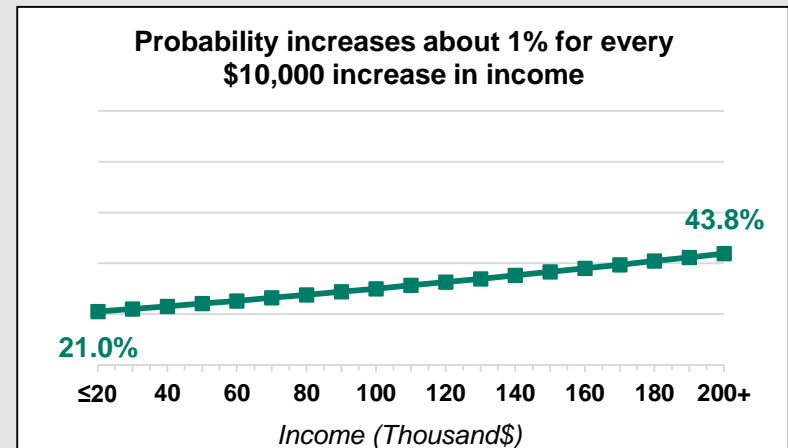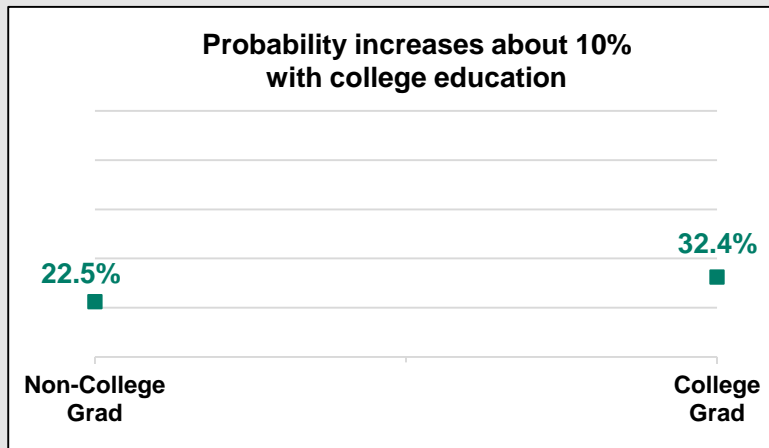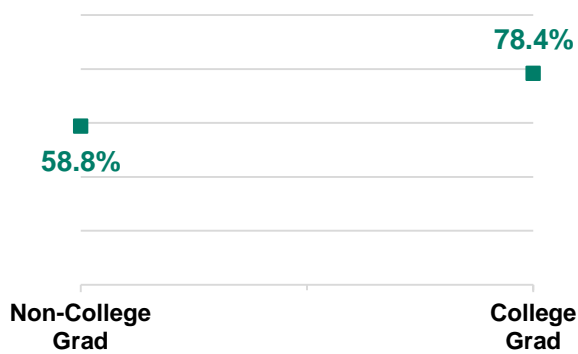
have a college degree

are younger

Probability of "Would Like to Fill Out a Mortgage Application Using a Mobile Device"
(Among Recent Homebuyers)

Probability increases about 8% with college education

13.7%   21.8%

Non-College Grad   College Grad

Probability decreases an average of 2% for every 5 year increase in age

29.1%   7.5%

<30 34 39 44 49 54 59 64 69 70+

Age
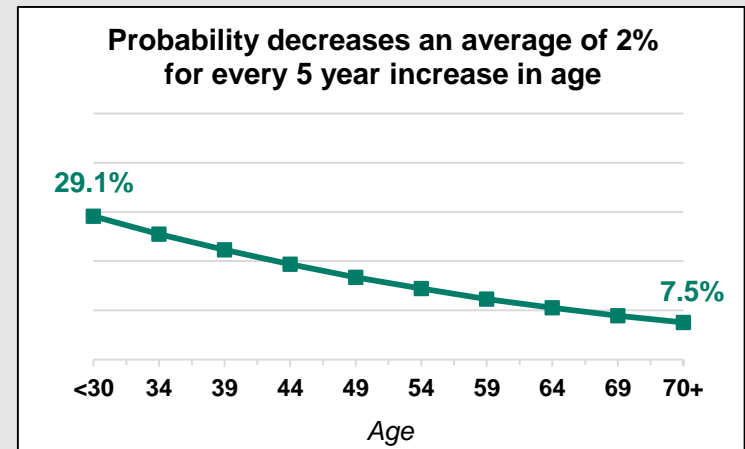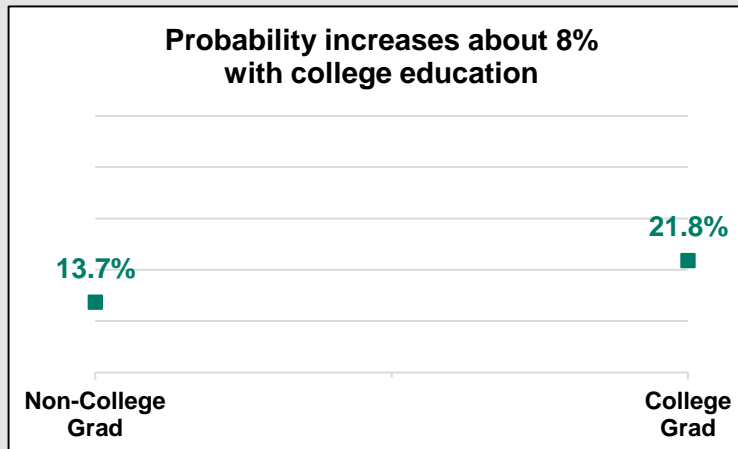
Results from a separate study show that consumers, particularly those who are lower income, older, or have not completed a college degree, still value an in-person presence when choosing a mortgage provider

Imagine that you are shopping for a mortgage for a home purchase or refinance today. When choosing a lender, and thinking about the lender itself, how important or unimportant is each of the following to your decision?
Showing % "Extremely Important"

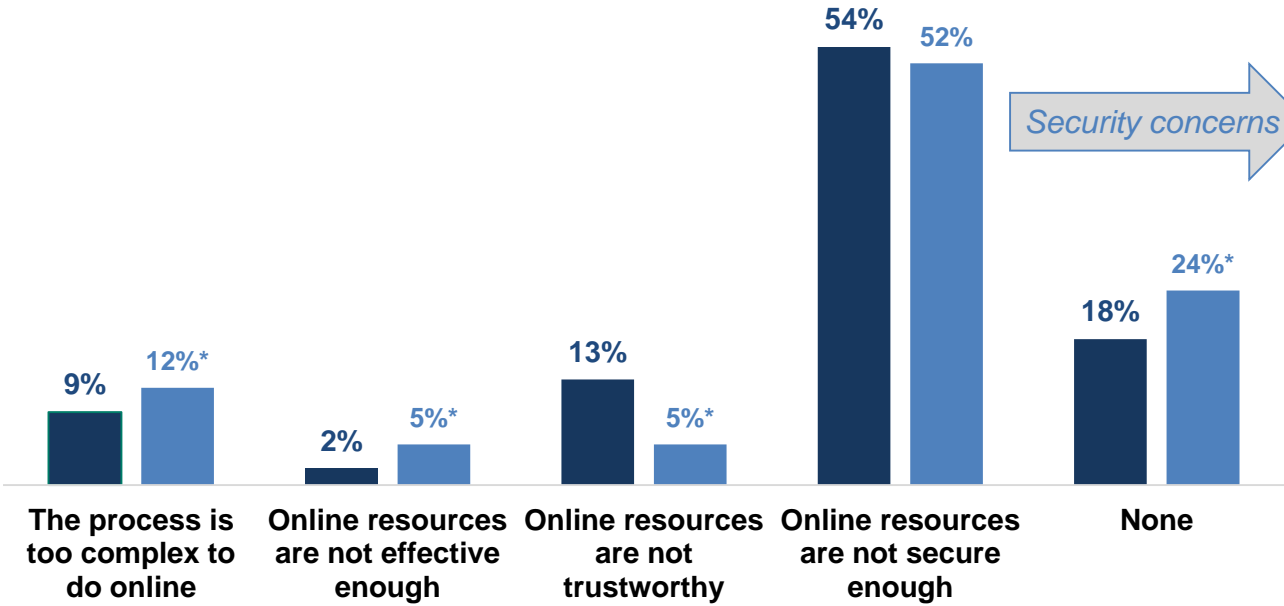|	Total	Income			Age				Education		
		HH Income: <$50K	HH Income: $50K-$99K	HH Income: $100K+	18-34	35-44	45-65	Age 65+	H.S./ Less	Some College	College/ Post Grad
Ability to meet face-to-face	35%	40%	34%	27%	33%	26%	35%	44%	39%	37%	28%
Dedicated loan consultant to help you	32%	35%	32%	28%	31%	30%	34%	33%	35%	36%	26%
Easy access to pros across multiple channels	22%	24%	22%	20%	23%	23%	21%	23%	24%	23%	19%

N=3868
Survey completed in July 2015
Green shading indicates subgroup is significantly higher than total; red shading indicates subgroup is significantly lower than total

19

Online security is the biggest concern related to applying for and closing a mortgage online in the future

What, if any, would be your primary concern about doing this online in the future?
Applying for and closing a mortgage online

Owners

Recent Homebuyers

Showing Recent Homebuyers

63%

48%^

Non-College Grads   **College Grads**

Security concerns

54%   **52%**

24%*

18%

13%

9%   **12%***

2%   **5%***   **5%***

The process is too complex to do online

Online resources are not effective enough

Online resources are not trustworthy

Online resources are not secure enough

None
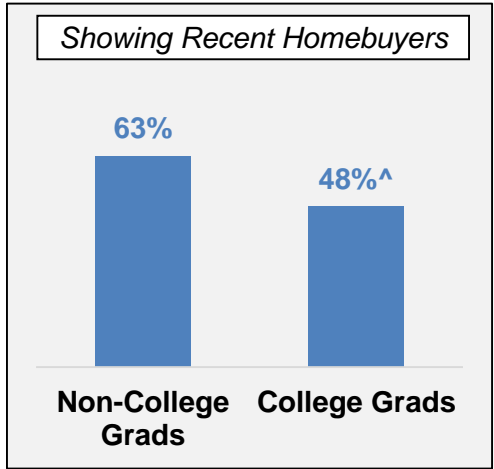
* Denotes a statistically significant difference from owners at the 95% confidence level
^ Denotes a statistically significant difference from non-college grads at the 95% confidence level

Security Concern Related to Online Mortgage Application and Closing

Holding other characteristics the same, recent homebuyers are more likely to **select "online resources are not secure enough" as the primary concern for applying for and closing a mortgage online in the future,** if they …

do not have a college degree

have bought a house before

Probability of selecting "online resources are not secure enough" as the primary concern for applying for and closing a mortgage online in the future
(Among Recent Homebuyers)
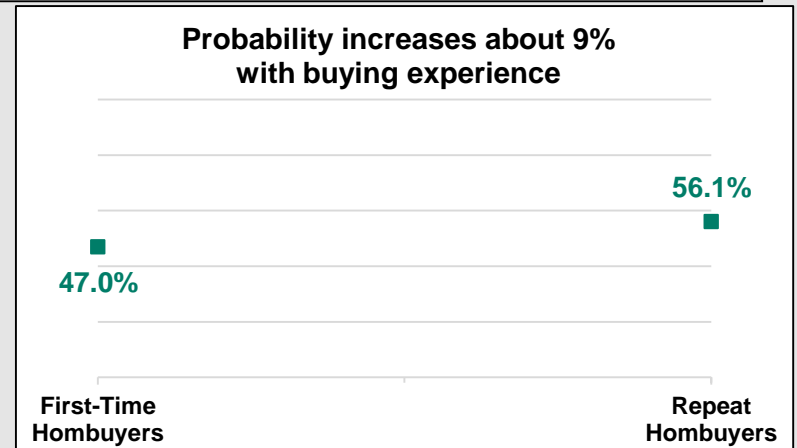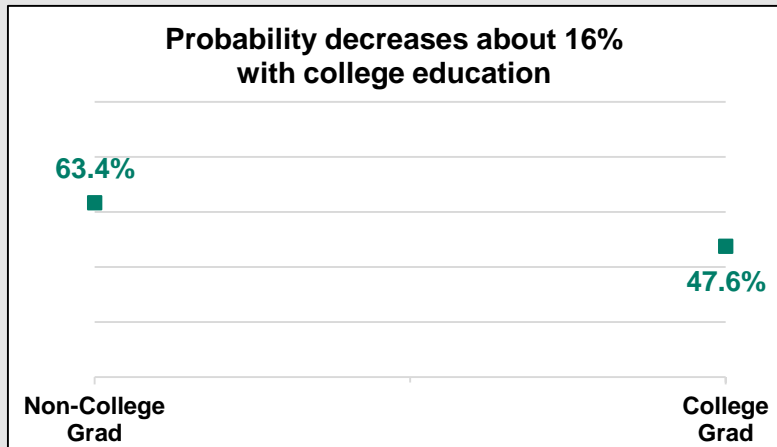
Probability decreases about 16% with college education

63.4%

47.6%

Non-College Grad

College Grad

Probability increases about 9% with buying experience

56.1%

47.0%

First-Time Hombuyers

Repeat Hombuyers

Recent homebuyers who borrowed from credit unions and other specialized lenders such as Housing Finance Agencies are more likely to have filled out an online mortgage application

Percent of Recent Homebuyers who Filled Out an Online Application

Lender Type				
	69% T	58% T	45%	63% T
	Credit Unions	**Mortgage Banks**	**Traditional Banks**	**Other***
	N=64	*N=513*	*N=527*	*N=108*
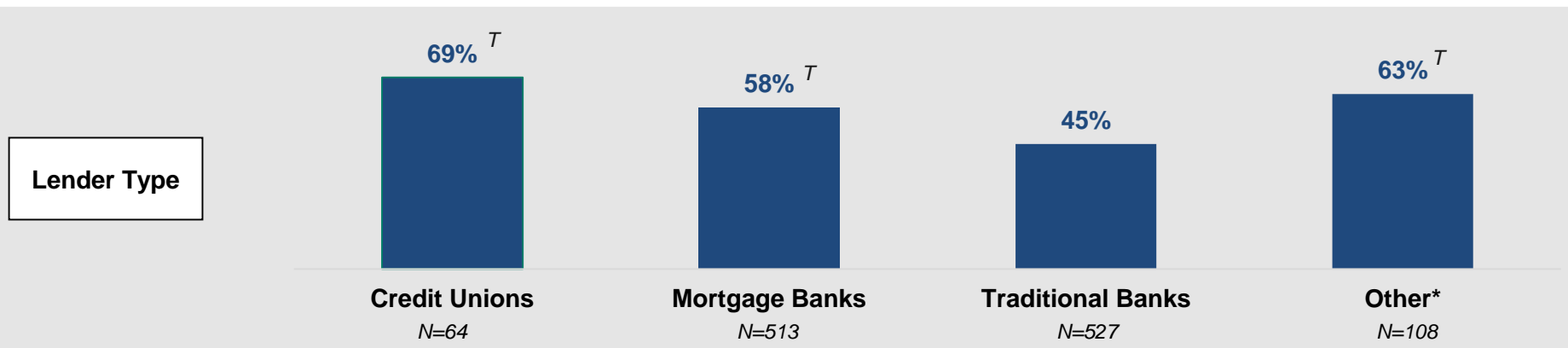
*Lenders that are not classified as mortgage banks, traditional banks, or credit unions are mostly made up of Housing Finance Agencies

T - Denote the % is significantly higher than traditional banks at the 95% confidence level
After controlling for Borrower characteristics (age, income, education, etc.) and lender size, the differences between lender types are still statistically significant

APPENDIX

Characteristics of Recent Homebuyers by Sources[1]

Variables (Showing medians for non-percent values)	Fannie Mae Recent Home Buyers	American Housing Survey (AHS) Recent Home Buyers[2]
Age	38	38
Annual Household Income	$88,500	$63,987
Percent with College Degree	69%	45%
Percent Minority	25%	23%
Percent Employed Full-Time[3]	75%	81%
Percent First Time Buyer[4]	40%	43%
Monthly Housing Cost	$1,588	$1,065
Purchase Price	$257,500	$164,800
Loan Amount	$213,750	$156,000
FICO Credit Score at Origination	765	N/A
Front-End DTI Ratio[5]	0.22	0.21
Original Loan-to-Value (LTV) Ratio[6]	0.80	0.85

[1] Sources: Fannie Mae National Housing Survey, samples are weighted to represent the new purchase loan population originated and acquired by Fannie Mae during **2014**; U.S. Census **2013** American Housing Survey (AHS)

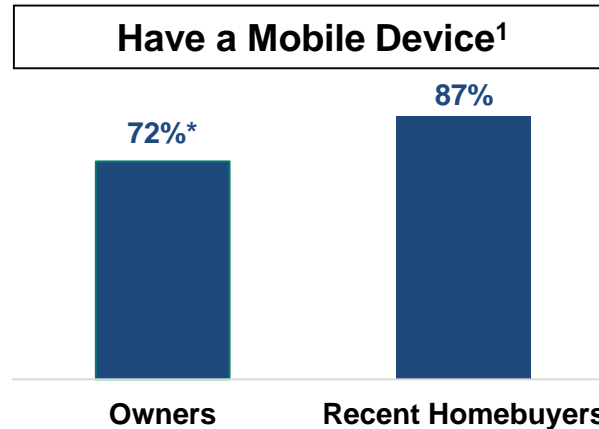[2] House bought/obtained/received in **2013**, with a mortgage

[3] AHS employment rate includes both full-time and part-time and can't be separated
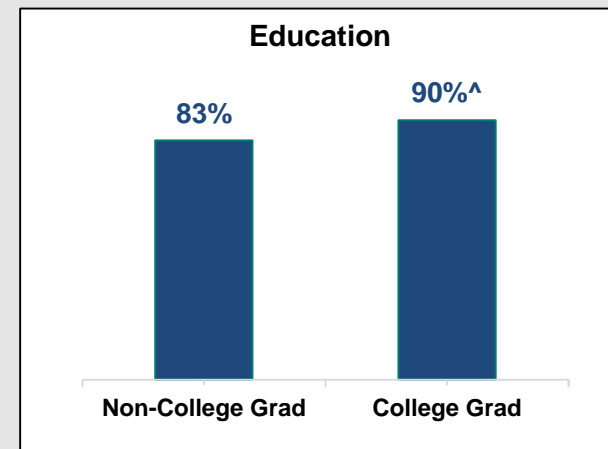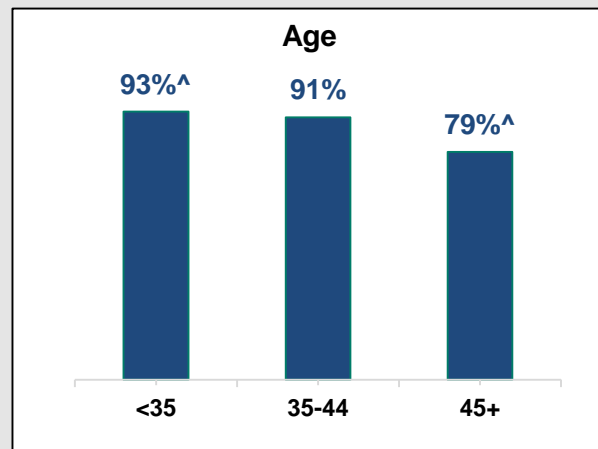
[4] Based on survey answers

[5] Calculated as the ratio of monthly housing cost over monthly household income

[6] Calculated as the ratio of the initial loan amount over purchase price

Recent homebuyers are significantly more likely to have a mobile device than owners; younger recent homebuyers with a college degree and higher incomes are most likely to have a mobile device

Have a Mobile Device[1]

Owners: 72%*
Recent Homebuyers: 87%

Have a Mobile Device[1]
Showing results among recent homebuyers

Income
<$50K: 88%
$50K-$100K: 79%^
$100K+: 95%^

Age
<35: 93%^
35-44: 91%
45+: 79%^

Education
Non-College Grad: 83%
College Grad: 90%^
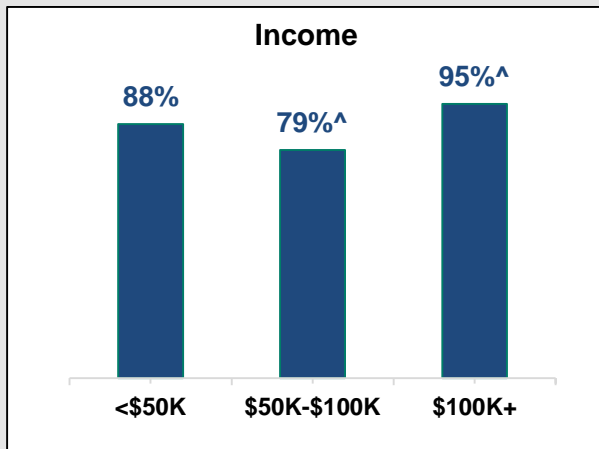
Mobile includes smartphone and tablet
* Denotes a statistically significant difference between owners and recent homebuyers at the 95% confidence level
^ Denotes a statistically significant difference from all recent homebuyers at the 95% confidence level

Regression Analysis Methodology

- A selected list of demographic variables were used as independent in the logistic regression models on recent homebuyers, where answers to online shopping questions were coded as binary dependent variables
- Model selection techniques used to determine model form that best fit the data
  - Goodness of fit test
  - Stepwise selections
  - Interactions and non-linear transformations

Variable Name	Data Type	Values
Education	Categorical	• College Grads • Non-College Grads
Experience	Categorical	• First Time Home Buyer • Repeat Borrower
Age	Ordinal	• 5 year groups • Values 1(Under 30),2(30-34),…,10(70 or older)
Income	Ordinal	• Rounded to nearest thousand$ • Values 20(Less than $20.5K),21($20.5-$21.4k),…,200($199.5K or More)
Credit Score	Ordinal	• Rounded to nearest 10 • Values 65(Less than 655),66(655-664),…,81(805 or More)

Regression Results – Online Mortgage Quotes

Have Obtained a Mortgage Quote Online
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
Repeat Borrower vs. First Timer	1.06	0.22	0.82
College Grads vs. Non-College Grads	1.79	2.58	0.01
Income ($10,000 increase)	1.05	1.95	0.05
Credit Score (10 points increase)	1.00	-0.14	0.89
Age (5 years increase)	0.91	-2.11	0.04

Would Like to Obtain a Mortgage Quote Online
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
Repeat Borrower vs. First Timer	0.99	-0.04	0.97
College Grads vs. Non-College Grads	2.57	3.78	0.00
Income ($10,000 increase)	1.08	2.33	0.02
Credit Score (10 points increase)	0.99	-0.43	0.67
Age (5 years increase)	0.84	-3.46	0.00

1.Odds Ratio (OR) measures ratio of odds of the outcome by borrower characteristics, e.g. for every $10,000 increase in income, odds of done online mortgage quotes increase by 5 percent (OR = 1.05)
2. The rows shaded above are statistically significant variables

Regression Results – Mobile Mortgage Quotes

Have Obtained a Mortgage Quote Using a Mobile Device
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
Repeat Borrower vs. First Timer	4.79	2.07	0.04
College Grads vs. Non-College Grads	2.37	2.65	0.01
Credit Score (10 points increase)	0.96	-1.22	0.22
Age (5 years increase)	0.90	-1.21	0.23
Experience and Age Interaction	0.80	-1.86	0.06

Would Like to Obtain a Mortgage Quote Using a Mobile Device
(Among Recent Homebuyers)

Borrower Characteristics	Odds Ratio[1]	Z statistics	P value
College Grads vs. No College Grads	1.66	1.96	0.05
Repeat Borrower vs. First Timer	0.76	-1.21	0.23
Income ($10,000 increase)	1.06	2.79	0.01
Credit Score (10 points increase)	0.99	-0.56	0.58
Age (5 years increase)	0.96	-0.91	0.36

1.Odds Ratio (OR) measures ratio of odds of the outcome by borrower characteristics, e.g. odds of done mobile mortgage quotes by College Grads is 2.37 times the odds by Non-College Grads (OR = 2.37)
2. The rows shaded above are statistically significant variables

Regression Results – Online Mortgage Applications

Have Filled Out a Mortgage Application Online (Among Recent Homebuyers)			
Homebuyer Characteristics	**Odds Ratio[1]**	**Z statistics**	**P value**
Repeat Borrower vs. First Timer	**1.12**	**0.43**	**0.67**
College Grads vs. Non-College Grads	**2.26**	**3.65**	**0.00**
Income ($10,000 increase)	**1.07**	**2.92**	**0.00**
Credit Score (10 points increase)	**0.99**	**-0.40**	**0.69**
Age (5 years increase)	**0.91**	**-1.96**	**0.05**

Would Like to Fill Out a Mortgage Application Online (Among Recent Homebuyers)			
Homebuyer Characteristics	**Odds Ratio[1]**	**Z statistics**	**P value**
College Grads vs. No College Grads	9.59	3.91	0.00
Income ($10,000 increase)	1.12	4.41	0.00
Age (5 years increase)	0.94	-0.94	0.35
Education and Age Interaction	0.80	-2.87	0.00

1.Odds Ratio (OR) measures ratio of odds of the outcome by borrower characteristics, e.g. for every $10,000 increase in income, odds of done online mortgage applications increase by 7 percent (OR = 1.07)
2. The rows shaded above are statistically significant variables

Regression Results – Mobile Mortgage Applications

Have Filled Out a Mortgage Application Using a Mobile Device
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
Repeat Borrower vs. First Timer	1.76	1.24	0.22
College Grads vs. No College Grads	1.60	1.00	0.32
Income ($10,000 increase)	0.99	-0.18	0.86
Credit Score (10 points increase)	0.98	-0.44	0.66
Age (5 years increase)	0.82	-2.01	0.05

Would Like to Fill Out a Mortgage Application Using a Mobile Device
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
College Grads vs. No College Grads	1.75	2.03	0.04
Income ($10,000 increase)	1.04	1.65	0.10
Age (5 years increase)	0.83	-3.53	0.00

1. Odds Ratio (OR) measures ratio of odds of the outcome by borrower characteristics, e.g. for every 5 years increase in age, odds of done online mortgage applications using a mobile device decrease by 18 percent (OR = 0.82)
2. The rows shaded above are statistically significant variables

Regression Results – Online Security Concerns

Security Would Be Primary Concern If Applying For and Closing a Mortgage Online
(Among Recent Homebuyers)

Homebuyer Characteristics	Odds Ratio[1]	Z statistics	P value
Repeat Borrower vs. First Timer	1.44	1.88	0.06
College Grads vs. No College Grads	0.52	-2.95	0.00
Credit Score (10 points increase)	1.03	1.50	0.13

1.Odds Ratio (OR) measures ratio of odds of the outcome by borrower characteristics, e.g. odds of have security concerns about applying and closing a mortgage online by Repeat Borrowers is 1.44 times the odds by First Timers (OR = 1.44)
2. The rows shaded above are statistically significant variables

National Housing Survey

Background

- The Fannie Mae National Housing Survey is a monthly attitudinal survey, which polls the adult general population of the United States to assess their attitudes toward owning and renting a home, home purchase and rental prices, homeownership distress, household finances, and overall confidence in the economy.

- Each respondent is asked more than 100 questions, making the Fannie Mae National Housing Survey the most detailed attitudinal survey of its kind. The survey is conducted on a monthly basis to track attitudinal shifts that occur among homeowners and renters in the United States.

Survey Methodology

- Each month, beginning in June 2010, approximately 1,000 live (not automated) telephone interviews (75 percent landline and 25 percent cell phone) with Americans age 18 and older are conducted by Penn Schoen Berland (PSB), in coordination with Fannie Mae. The margin of error for the total monthly sample is ±3.1 percent at the 95 percent confidence level and larger for sub-groups. Data collection occurs over the course of the first three weeks of each month although most occurs in the first two weeks of the month.

Monthly and Topic Analyses and Research Briefs

- Monthly reports provide a timely view of trends in consumers' attitudes using twelve key indicators.
  http://www.fanniemae.com/portal/research-and-analysis/housing-survey.html

- Topic analyses provide deeper insights into one or more issues based on the compilation of three monthly samples. The three monthly studies that make up any given topic analysis are identical in wording and placement of questions. Additionally, research briefs are occasional and rigorous research reports, conducted internally or by external partners such as academics, exploring attitudes and behaviors on key issues.
  http://www.fanniemae.com/portal/research-and-analysis/consumer-research-analysis.html

Disclaimer

Opinions, analyses, estimates, forecasts, and other views of Fannie Mae's Economic & Strategic Research (ESR) group or survey respondents included in these materials should not be construed as indicating Fannie Mae's business prospects or expected results, are based on a number of assumptions, and are subject to change without notice. How this information affects Fannie Mae will depend on many factors. Although the ESR group bases its opinions, analyses, estimates, forecasts, and other views on information it considers reliable, it does not guarantee that the information provided in these materials is accurate, current, or suitable for any particular purpose. Changes in the assumptions or the information underlying these views could produce materially different results. The analyses, opinions, estimates, forecasts, and other views published by the ESR group represent the views of that group or survey respondents as of the date indicated and do not necessarily represent the views of Fannie Mae or its management.