



August 27, 2014

Executive summary: Preliminary results of a residential preference study for the Portland region



Introduction

We all make choices when buying or renting a home. Some of the factors we weigh include price, proximity to work, size of the home, size of the yard, and the type of neighborhood. Understanding what’s important to residents of the metro area can inform local and regional policies, as well as public and private investment decisions.

In the spring of 2014, a partnership of public and private sector interests conducted an innovative residential preference study for the four-county Portland metropolitan area.¹ The study seeks to develop a better understanding of:

- Preferences for different housing, community, and location characteristics
- How factors such as income, number of household members, presence of kids, the age of the householder, and lifestyle relate to residential preferences

¹ Clackamas, Clark, Multnomah, and Washington counties

The project partners consider this a first effort at gaining a better understanding of a complex topic and intend to conduct this study periodically in the future to gauge whether and how preferences may be changing. This document summarizes the study's preliminary findings. The project partners have also identified possible topics for research and plan to continue investigating trends in the data. Additional detail about the partnership, survey methods, and survey results can be found in the full report.

Survey design

This study seeks to go beyond typical opinion survey methods in order to gain a better understanding of how people make choices when faced with real-life tradeoffs. The survey presented respondents with two types of preference questions. In the first type, respondents were asked straightforward questions about their preferences. In the second type, respondents were asked with words and images to make tradeoffs like those they would consider when choosing where to live. For this tradeoffs section, respondents were asked to choose one of two housing situations that differed by housing type, commute time, house size, renting vs. owning, neighborhood type, and price. Repetition of those choices by thousands of respondents allows us to understand how important each of these factors is for people from different market segments.

This study used an online survey tool. To ensure that the study produced valid results, the survey was completed by a managed representative panel of 800 respondents (200 respondents for each of the four counties – Clackamas, Clark, Multnomah, and Washington). In order to collect enough data for in-depth statistical analysis, the survey was also distributed via e-mail advertisement, including to Metro's Opt In panel, resulting in an additional 5,700 responses (the "public engagement panel"). In total, more than 6,500 people responded to the survey. For both panels, the survey responses were weighted by respondent county, age, and tenure (whether they currently rent or own) to ensure that the sample was representative of the region's population distributions as described in the 2010 U.S. Census.² A comparison of survey responses from the managed panel and the public engagement panel indicates that the demographic profile is comparable enough that the full data set can be used for analysis, but that there are some differences that warrant additional study.

For any survey, the phrasing of questions and selection of images play a critical role in producing meaningful results. The project partners brought diverse perspectives to this study and sought to use words and images in the survey that clearly describe different housing and neighborhood types without introducing bias. Over the course of about six months, the project partners worked together to refine those words and images to describe the following housing and neighborhoods types for use in the survey. A description of these housing and neighborhood types can be found in the full report.

Housing types

Three different housing types were described in the survey:

² For example, before weighting, both panels under-represent renters and don't reflect the proportions of people living in each of the four counties. Weighting techniques such as these are standard practices used on any sample, including the U.S. Census.

- Single-family detached
- Single-family attached
- Condo or apartment

Neighborhood types

Four different neighborhood types that illustrate a variety of activity and density levels were described in the survey:

- Urban central or downtown
- Urban neighborhood or town center
- Outer Portland or suburban
- Rural

Even with a deliberate effort to use clear text descriptions and images, people will understand these neighborhood types differently, perhaps more so than housing types. Additional work could be done to understand how differing interpretations may influence responses.

Preliminary results

Overall, most respondents live in and prefer single-family detached homes³

When asked simple questions about their preferences, most respondents live in and prefer single-family detached housing.

Single-family detached homes

65 percent of respondents currently live in a single-family detached home. 87 percent of the respondents living in a single-family detached home prefer this housing type. 80 percent of all respondents prefer this housing type.

Single-family attached homes

8 percent of respondents currently live in a single-family attached home. 11 percent of the respondents living in a single-family attached home prefer this housing type. 7 percent of all respondents prefer this housing type.

Key takeaways:
Most respondents live in a single-family detached home and this is the most preferred housing type, not just for those that live in this type of home, but also for respondents who currently live in single-family attached homes, condos and apartments.

³ Results for this section are reported for the managed panel only. See the full report for a description of survey results from public engagement.

Condos or apartments

28 percent of respondents currently live in a condo or apartment. 26 percent of the respondents living in a condo or apartment prefer this housing type. 13 percent of all respondents prefer this housing type.

Respondents typically live in their preferred neighborhood type⁴

When asked simple questions about preferences, most respondents prefer their current neighborhood type. Since the majority of respondents live in the *outer Portland or suburban* neighborhood type, this is the most preferred neighborhood type overall. However, current residents of *outer Portland or suburban neighborhoods* report the lowest level of satisfaction with their current neighborhood type, followed by residents of *urban central or downtown* neighborhoods. Residents of *rural* neighborhoods, followed by *urban neighborhood or town center* residents are most satisfied with their current neighborhoods.

- 11 percent of respondents currently live in an *urban central or downtown* neighborhood. 55 percent of the respondents living in this neighborhood type prefer this neighborhood type. 13 percent of all respondents prefer this neighborhood type.
- 25 percent of respondents currently live in an *urban neighborhood or town center*. 62 percent of the respondents living in this neighborhood type prefer this neighborhood type. 27 percent of all respondents prefer this neighborhood type.
- 56 percent of respondents live in an *outer Portland or suburban* neighborhood type. 51 percent of the respondents living in this neighborhood type prefer this neighborhood type. 34 percent of all respondents prefer this neighborhood type.
- 8 percent of respondents live in a *rural* neighborhood. 70 percent of the respondents living in this neighborhood type prefer this neighborhood type. 26 percent of all respondents prefer this neighborhood type.

Key takeaways:

Most respondents identified their neighborhood type as outer Portland or suburban and about half of those residents prefer this neighborhood type. Though a smaller share of respondents lives in urban central or downtown neighborhood types, about half of them prefer that neighborhood type.

Key takeaways:

Current residents of rural neighborhoods, which account for 8 percent of respondents, are most satisfied with their neighborhood.

⁴ Results for this section are reported for the managed panel only. See the full report for a description of survey results from public engagement.

Controlling for other factors such as commute time and price, people are most likely to choose their current neighborhood type

This survey went beyond typical questions about preferences to collect information about how various factors affect housing choices. The next section of the survey presented respondents with multiple housing option choice sets where factors such as price, commute time, housing type, neighborhood type, size of residence, and tenure (own vs. rent) varied. All 6,500 plus survey responses (weighted to match Census distributions) are used for reporting the results of these choice sets. The larger number of responses makes it possible to conduct more complex analysis.

To understand the importance of neighborhood type when people make housing choices, statistical analyses were conducted on the response data. Those analyses held all other factors such as price, commute time, and housing type constant. If respondents could pay the same price, have the same type of housing, same commute distance, etc. but in different neighborhood types, they are most likely to choose the neighborhood type that they currently live in. However, in no case is there a majority of respondents that would be likely to choose their current neighborhood type. Residents of *urban central or downtown* neighborhoods have the highest likelihood of choosing their current neighborhood type (44 percent probability) and residents of *outer Portland or suburban neighborhoods* have the lowest likelihood (31 percent probability). Controlling for other factors, residents of the *urban central or downtown* neighborhood type have a secondary likelihood (32 percent) that they will choose an *urban neighborhood or town center*. As a secondary choice, respondents living in *urban neighborhood or town center* locations were split on whether to choose more or less urban neighborhoods. As a secondary choice, those living in *outer Portland or suburban* neighborhoods were twice as likely to choose more urban as opposed to rural neighborhood types.

Key takeaways:
All other things being equal, people are most likely (though not a majority) to choose to live in their current neighborhood type. As a secondary choice, respondents living in urban neighborhood or town center locations are split on whether to choose more or less urban neighborhoods. As a secondary choice, those living in outer Portland or suburban neighborhoods are twice as likely to choose more urban as opposed to more rural neighborhood types.

Controlling for other factors, the importance of owning vs. renting varies by neighborhood choice

Respondents that choose *urban central or downtown* neighborhoods are more likely to prefer renting their home. Respondents that choose *rural* neighborhoods are more likely to prefer owning their home. These preferences are less clear for respondents that choose the other two neighborhood types, *urban neighborhood or town center* and *outer Portland or suburban* neighborhoods.

Some people's neighborhood choices change when they are asked to consider other factors

Though people are generally satisfied with their current housing and neighborhood types, some make different choices when they consider other factors. To understand how respondents make tradeoffs regarding neighborhoods, statistical techniques were used to test a series of "what if" scenarios. These "what if" scenarios are not intended to be policy recommendations. They are used for illustrative purposes only to help understand how people make housing choices. Different "what if" scenario assumptions would produce different results.

What if housing prices increase?

Some people may change their neighborhood choices if housing prices go up by one-third in their current neighborhood type. Current residents of the *outer Portland or suburban* neighborhood type are most sensitive to increased housing prices; 11 percent would choose different neighborhood types under this scenario. Of these suburban respondents that shift neighborhood choices based on price, the most common response is to shift to more urban neighborhoods, but a portion would also switch to a *rural* neighborhood (3 percent shift to *urban central or downtown*, 5 percent to *urban neighborhood or town center*, and 3 percent to *rural*).

What if ownership of single-family detached homes is more limited?

Some people may choose a different neighborhood type if they are unable to own a single-family detached home in their current neighborhood type. Current residents of *rural* neighborhoods place the most importance on owning a single-family detached home and there is a 27 percent probability that they will shift to a more urban neighborhood type to accommodate that housing preference. On the other hand, current residents of *urban central or downtown* neighborhoods place the least importance on owning a single-family detached home; most would rather choose a different housing type than

Key takeaways:

People are most likely to choose their current neighborhood type regardless of tradeoffs in price, commute time, square footage, and ownership.

Additional context:

Relatively small percentages of the region's population represent large numbers of people. Seemingly minor shifts in housing or neighborhood choices can thus have a large impact on housing demand and traffic. For perspective, there are likely to be about 820,000 households inside the urban growth boundary in 2035. Just five percent of that is 41,000 households.

Key takeaways:

Residents of rural neighborhoods feel strongly about owning a single-family detached home. Over a quarter of them would choose a more urban neighborhood type if that was their only option to own a single-family detached home.

leave their current neighborhood type. 6 percent would choose a different neighborhood type.

What if commute times increase?

Some people may choose a different type of neighborhood if commute times go up by ten minutes in their current neighborhood type.⁵ Current residents of the *urban neighborhood or town center* type are most sensitive to commute times. 7 percent of *urban neighborhood or town center* respondents would shift neighborhood choices based on increased commute time. 3 percent would choose an *urban central or downtown* neighborhood, 2 percent would choose an *outer Portland or suburban* neighborhood, and 1 percent would choose a *rural* neighborhood.⁶ Current residents of *rural* neighborhoods are least sensitive to increased commute times, with 3 percent shifting their neighborhood choice when faced with increased commute time.

Key takeaways:
Most respondents don't change their neighborhood preference when faced with longer commutes.

What if residences are smaller?

Some people may choose a different neighborhood type if the size of residences in their current neighborhood type decrease by 500 square feet.⁷ Current residents of the *urban central or downtown* neighborhood type are most sensitive to decreases in residence size. Making up the 12 percent of urban central respondents that shift neighborhood choices based on decreased home size, 7 percent choose an *urban neighborhood or town center*, 4 percent choose an *outer Portland or suburb*, and 2 percent would choose a *rural* neighborhood.⁸

Other factors that people consider when deciding where to live⁹

In addition to asking respondents to weigh potential tradeoffs, the survey also included traditional opinion polling to address other factors that may influence residential choices, but that are not possible to quantify to present as tradeoffs. Safety of neighborhoods and public school quality are two such factors that were addressed with more traditional survey techniques.

Respondents say that housing price, safety of the neighborhood, and characteristics of the house, in that order, are the most important factors when choosing a home.

- 44 percent rank housing price as their top influencer when choosing a home.

⁵ That increase is about a third of the average commute time.

⁶ Numbers don't add up to 7 percent because of rounding.

⁷ This would represent a decrease by about a third of average residence size.

⁸ Numbers don't add up to 12 percent because of rounding.

⁹ Results for this section are reported for the managed panel only. See the full report for a description of survey results from public engagement.

- Safety of the neighborhood (19 percent choose this as their top priority) and characteristics of the house (19 percent) are the next most influential factors.
- Quality of public schools was the number one influencer for just 3 percent of respondents and was ranked in the top three by 11 percent.

A majority of respondents prefer neighborhoods with a moderate amount of foot and vehicle traffic.

- 55 percent prefer moderate foot and vehicle traffic during the day with some activities within a 15 minute walk.
- Those living in Multnomah County were twice as likely to desire "heavy foot and vehicle traffic" than those in Clackamas, Clark, and Washington counties.

Key takeaways:
Most respondents want to live in neighborhoods where they can enjoy activities such as shopping and entertainment within a 15 minute walk

The largest share of respondents, though not a majority, prefer a medium-sized yard.

- 32 percent of respondents prefer a medium sized yard separating their home from a neighbor.
- Owners are more likely than renters to prefer a medium sized or large yard.
- Renters are more likely than owners to prefer no yard or little private outdoor space.

Next steps

This study provides initial insight into the complex topic of how people decide where to live. Together, we hope this work can inform public and private sector efforts, such as the upcoming regional growth management decision, to provide the diversity of housing and neighborhood choices that people desire. The project partners hope to improve upon and update this study to understand how preferences may change over time. The project partners have identified several topics that warrant additional research:

- Even with text descriptions and images, people may have different perceptions about what is meant by the various housing and neighborhood types. How might this affect survey responses? How might we improve the survey instrument?
- Every survey sample has limitations in its ability to represent the full population. This study attempts to account for that by weighting for housing tenure, age, and county of residence of the respondents. However, as with any sample, there are some variables that cannot be validated (for example, how to balance residents of different neighborhood types when there is no objective way to define neighborhood types).
- This study relies on different respondent sources. Are there significant differences in how respondents from the different panels make choices?
- What are the best methods for incorporating these survey results into forecast models?
- This study represents a snapshot of preferences today. How might they change in the future?



PREPARED FOR:

METRO

Residential Preference Study

May 2014

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1. | INTRODUCTION AND METHODOLOGY

Between April 18 and May 9, 2014, Davis, Hibbitts & Midghall, Inc. (DHM Research) conducted an online survey of respondents living in Clackamas, Multnomah, Washington and Clark counties about their current and preferred residential and neighborhood preferences. The objective of the survey was to assess general opinions and preferences around housing and neighborhood choices and factors that may influence those choices. Portland State University and Metro developed the questionnaire with input from DHM.

Research Methodology: The study was administered in two tracks. Track 1 consists of an online survey conducted with respondents through a managed panel. Enough surveys were completed in each of the four counties to permit statistically reliable analysis at the county level. The research design used quotas and statistical weighting based on the U.S. Census to ensure a representative sample within counties by age and tenure. The regions were then weighted proportionally by population per the U.S. Census to yield regional results. A total of 813 surveys were completed through Track 1.

Track 2 was a public involvement process; residents were invited to complete the survey from outreach partners including Home Builders Association of Metropolitan Portland, Northwest Natural, Portland Metropolitan Association of Realtors, Clackamas County, Washington County, City of Hillsboro, City of Portland, Metro, and Opt In. No quotas were set for the public involvement track. However, statistical weighting was applied to bring demographic variables in line with census data for the region. A total of 5,783 surveys were completed through the public involvement track.

Altogether, over 6,500 respondents participated in the Residential Preference Study.

Questionnaire design: The survey was primarily designed by Portland State University and Metro with input from DHM and included three sections:

- **Revealed Preference (RP)** – The revealed preference section of the survey focused on respondent's current housing and neighborhood decisions. Questions were asked to determine current neighborhood type, housing type, tenure, and home value. The combination of these variables was used to direct the respondent to the appropriate set of paired choices in the stated preference section of the questionnaire.
- **Stated Preference (SP)** – The stated preference section of the questionnaire presented respondents with 12 pairs of housing and neighborhood types. Statistical analysis of this data can be found in the complimentary document.
- **Attitudinal** – The third section of the survey presented respondents with a more traditional series of attitudinal questions, including their priorities and values.

This report contains analysis for the revealed preference and attitudinal sections of the questionnaire. All graphics and initial analysis is based on Track 1 sample with supporting analysis coming from Track 2.

Statement of Limitations: Any sampling of opinions or attitudes is subject to a margin of error. The margin of error is a standard statistical calculation that represents differences between the sample and total population at a confidence interval, or probability, calculated to be 95%. This means that there is a 95% probability that the sample taken for this study

would fall within the stated margins of error if compared with the results achieved from surveying the entire population.

For a sample size of 813, the margin of error would fall within +/-2.1% and +/-3.4% at the 95% confidence level. The reason for the difference lies in the fact that when response categories are relatively even in size, each is numerically smaller and thus slightly less able--on a statistical basis--to approximate the larger population.

DHM Research Background: DHM Research has been providing opinion research and consultation throughout the Pacific Northwest and other regions of the United States for over three decades. The firm is non-partisan and independent and specializes in research projects to support public policy making. www.dhmresearch.com

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2. | SUMMARY & OBSERVATIONS

A majority of respondents currently live in a single-family detached home, which is also the most preferred type of housing.

- 65% currently live in a single-family detached home and 80% prefer to live in a single-family detached home.
 - It should be noted that respondents were not asked to take any other variables into account when choosing their preferred housing type (i.e. commute time, price, etc.)
- 8% live in a single-family attached home and 7% prefer a single-family attached home.
- 28% live in a condo or apartment and 13% prefer a condo or apartment.

In general, respondents currently live in their preferred neighborhood type.

- 56% currently live in a suburban neighborhood.
 - 51% who currently live in a suburban area prefer this type of neighborhood.
 - Those who prefer suburban living tend to be from Clackamas and Washington counties, aged 35-54, and have a household income of \$150,000 or more.
- 25% currently live in an urban neighborhood or town center.
 - 62% who currently live in an urban neighborhood or town center prefer this type of area.
 - Those who prefer urban neighborhood living tend to be from Multnomah County, aged 18-34, and have a household income of \$25,000 to \$50,000.
- 11% currently live in an urban central or downtown neighborhood.
 - 59% who currently live in an urban central or downtown area prefer this type of neighborhood.
 - Those who prefer urban central living tend to be from Multnomah County and have a household income of less than \$25,000.
- 8% live in a rural neighborhood.
 - 70% who currently live in rural area prefer this type of neighborhood.
 - Those who prefer rural living tend to be from Clackamas and Clark counties, and have household incomes of between \$25,000 and \$50,000.

All other things being equal, people are most likely to choose to live in their current neighborhood type. To understand the importance of neighborhood type when people make housing choices, statistical analyses were conducted on the Stated Preference data. If respondents could pay the same price, have the same type of housing, same commute distance, etc. but in different neighborhood types, they are most likely to choose the neighborhood type that they currently live in.

- 44% who currently live in an urban central or downtown neighborhood are likely to choose that same type of area, all other factors held constant; the highest percentage of any neighborhood type.
- 39% who currently live in an urban neighborhood or town center are likely to choose that same type of area.
- 31% who currently live in a suburban neighborhood are likely to choose that same type of area; the lowest percentage of any neighborhood type.

- 38% who currently live in a rural neighborhood are likely to choose that same type of area.

People’s neighborhood type preferences can change when faced with making tradeoffs.

Generally, when faced with tradeoffs that prompt them to reconsider their neighborhood preferences, those living in urban neighborhood or town center locations are split on whether to go more towards more or less density. Those living in suburban neighborhoods are twice as likely to go towards more density rather than less as opposed to rural).

- Neighborhood preferences change for some based on an increase in current housing price.
 - Residents of outer Portland or suburban neighborhoods are most sensitive to increased housing prices.
 - Residents of rural neighborhoods are least sensitive to an increase in housing price.
- Neighborhood preferences change for some if commute times increase.
 - Residents of the urban neighborhood or town centers are most sensitive to an increase in commute times.
 - Residents of rural neighborhoods are least sensitive to increased commute times.
- Neighborhood preferences change for some if the size of the residence decreases.
 - Residents of the urban central or downtown neighborhoods are most sensitive to decreases in residence size. This is likely because they are already living in relatively smaller residences.

Aside from price, safety of the neighborhood and characteristics of the house have the largest influence on where respondents choose to live.

- 44% rank housing price as their top influencer when choosing a home.
- Safety of the neighborhood (19% choosing this as their top priority) and characteristics of the house (19%) are the next most influential factors.
 - Quality of public schools was the number one influencer for just 3% of respondents and was ranked in the top three by 11%.

Respondents prefer a moderate amount of foot and vehicle traffic in their preferred neighborhood and a medium sized yard for their home.

- 55% prefer moderate foot and vehicle traffic during the day with some activities within a 15 minute walk.
 - 27% prefer less traffic.
 - Those living in Clackamas, Clark, and Washington counties are more likely to prefer "very light foot and vehicle traffic," than those in Multnomah County.
 - 18% prefer more traffic.
 - Those living in Multnomah County were twice as likely to desire "heavy foot and vehicle traffic" than those in Clackamas, Clark, and Washington counties.

- 32% prefer a medium sized yard separating their home from a neighbor.
 - 39% prefer a smaller yard (small private yard: 22%; small private courtyard: 14%).
 - 29% prefer a larger yard (large private yard: 16%; acreage: 13%).

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3. | KEY FINDINGS

3.1 | Current/Preferred Housing Types

Respondents were given detailed descriptions and shown representative images of three different housing types.

Single Family Detached - These homes have a yard or patio, and do not share walls with other homes.



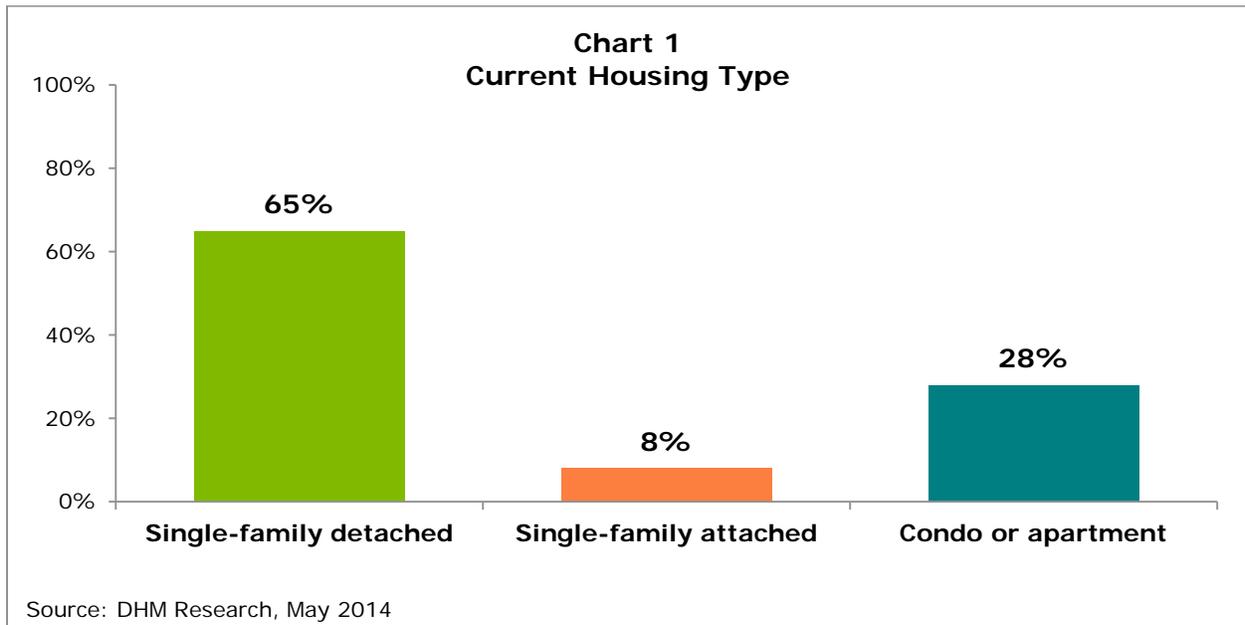
Single Family Attached - These homes share walls with other homes, but have their own private ground floor entrance. They are normally part of townhomes, row houses, duplexes, or triplexes and share a common yard or have a small private yard.



Condo or Apartment - These homes are in multiple story buildings with other units. There are often shared common areas and recreation facilities.



They were then asked what type of home they currently live in and what type of home they would prefer to live in.



Overall, two in three (65%) currently live in a single-family detached home. This is followed distantly by a condo or apartment (28%). Just one in ten currently live in a single family attached home (8%).

Demographic Differences: A majority of respondents in all four counties currently live in a single-family detached home. However, demographic differences in current housing type do exist.

Single-family detached home (65%)

- Clackamas County respondents (77%) vs. Multnomah (59%) and Washington (66%) counties
- Respondents age 35 and older (67-74%) vs. those younger (49%)
- Households making \$100K or more (88-93%) vs. lower income households (47-76%)

Condo or apartment (28%)

- Multnomah County respondents (35%) vs. Clackamas (19%), Washington (23%), and Clark counties (19%)
- Respondents age 18-34 (41%) vs. those older (20-26%)
- Households making \$50K or less (42-44%) vs. higher income households (7-25%)
- Renters (58%) vs. those who own their home (7%)

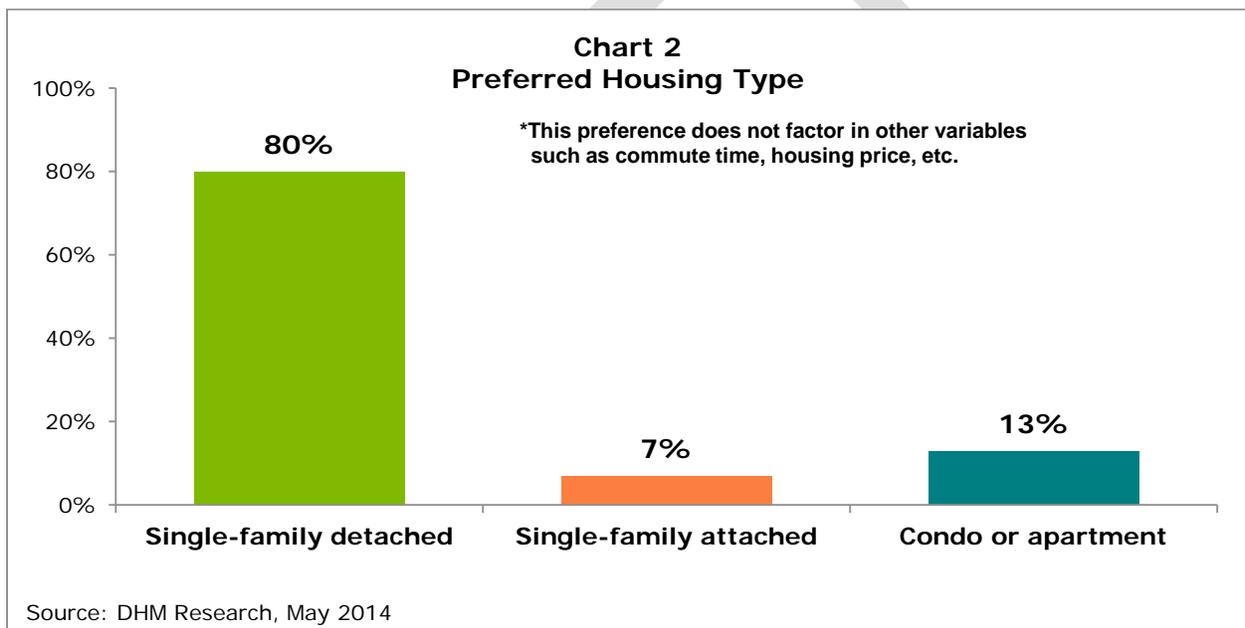
Single-family attached home (8%)

- Washington County respondents (11%) vs. Clackamas (4%) and Multnomah (6%) counties
- Renters (11%) vs. those who own their home (6%)

Public Engagement: Similar results are seen in terms of current housing type in the public engagement data. Seven in ten (68%) live in a single-family detached home; just under one in ten (7%) live in a single family attached home; and one in four (25%) live in a condo or apartment. Nearly all of the same demographic differences from the representative sample also exist.

3.2 | Preferred Housing

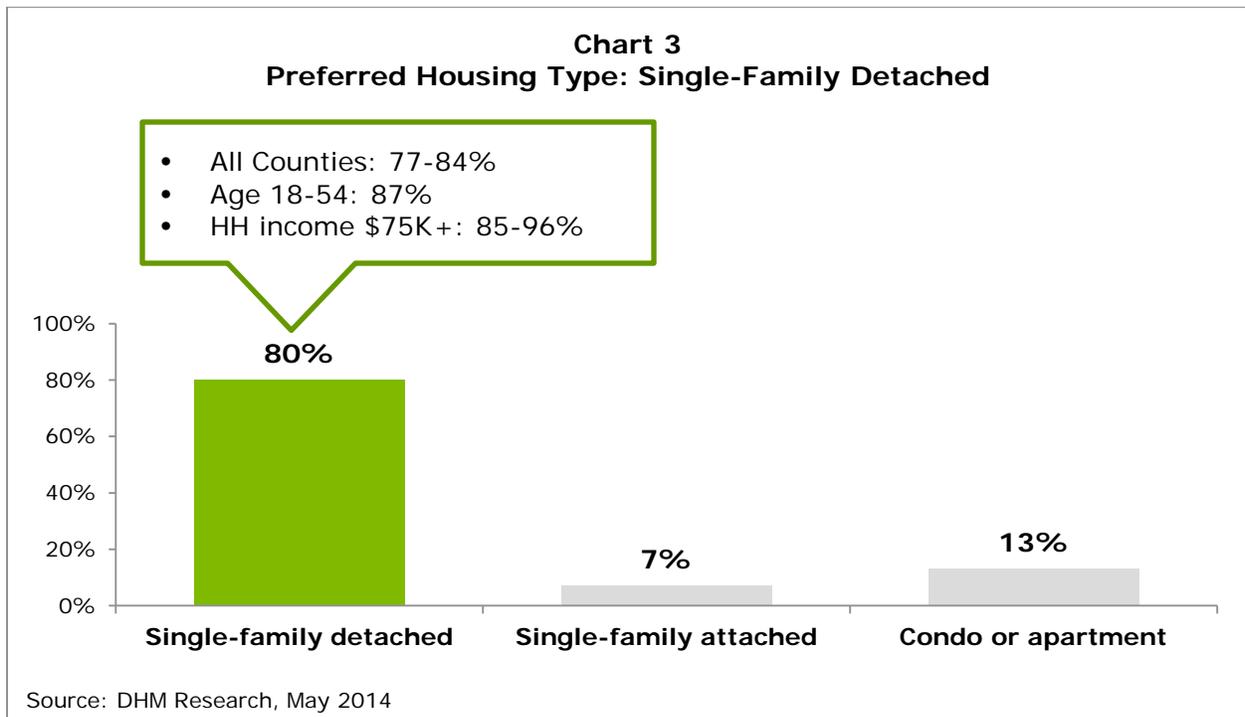
Not considering other variables, respondents were asked what their preferred housing type would be.



Overwhelmingly, the most preferred housing type among respondents is the single-family detached home (80%). This is followed distantly by a condo or apartment (13%) and a single-family attached home (7%). It should be noted that respondents were not asked to take any other variables into consideration such as price, neighborhood type, commute time, etc.

Single-family detached

A strong majority of all subgroups prefer single-family detached housing. Those most likely to prefer single-family detached housing include those under the age of 55 and higher income households.



Demographic Differences:

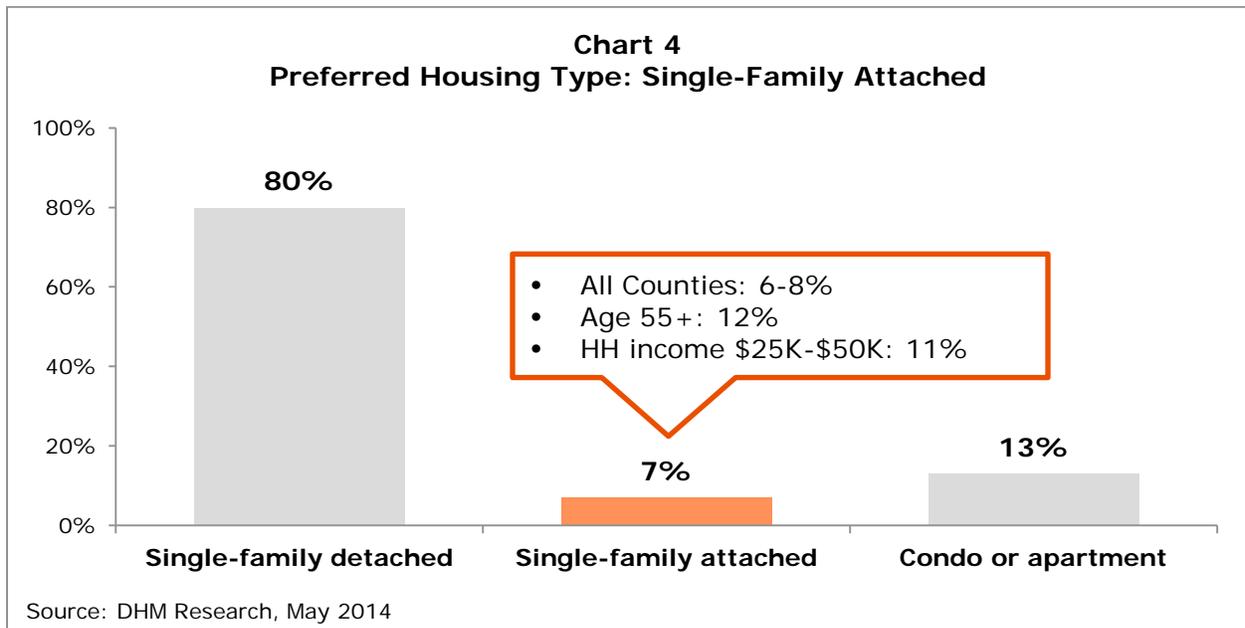
- Age 18-34 (88%) and 35-54 (87%) vs. age 55 and older (68%)
- Household income of \$100K to \$150K (87%) and \$150K and higher (96%) vs. households with incomes less than \$75K (73-75%)

Public Engagement: Similar preference is seen in the public engagement data. Eight in ten (81%) prefer a single-family detached home. This was the most preferred housing type across all counties, though some demographic differences do exist:

- Clackamas (88%), Washington (86%) and Clark counties (94%) vs. Multnomah County (73%)
- Household income of \$50K and higher (83-86%) vs. households making less than \$50K (70-74%)
- Those who own their home (87%) vs. renters (71%)

Single-family attached

Preference for single-family attached housing is fairly low across all subgroups, though there is higher preference among lower income and older respondents.



Demographic Differences:

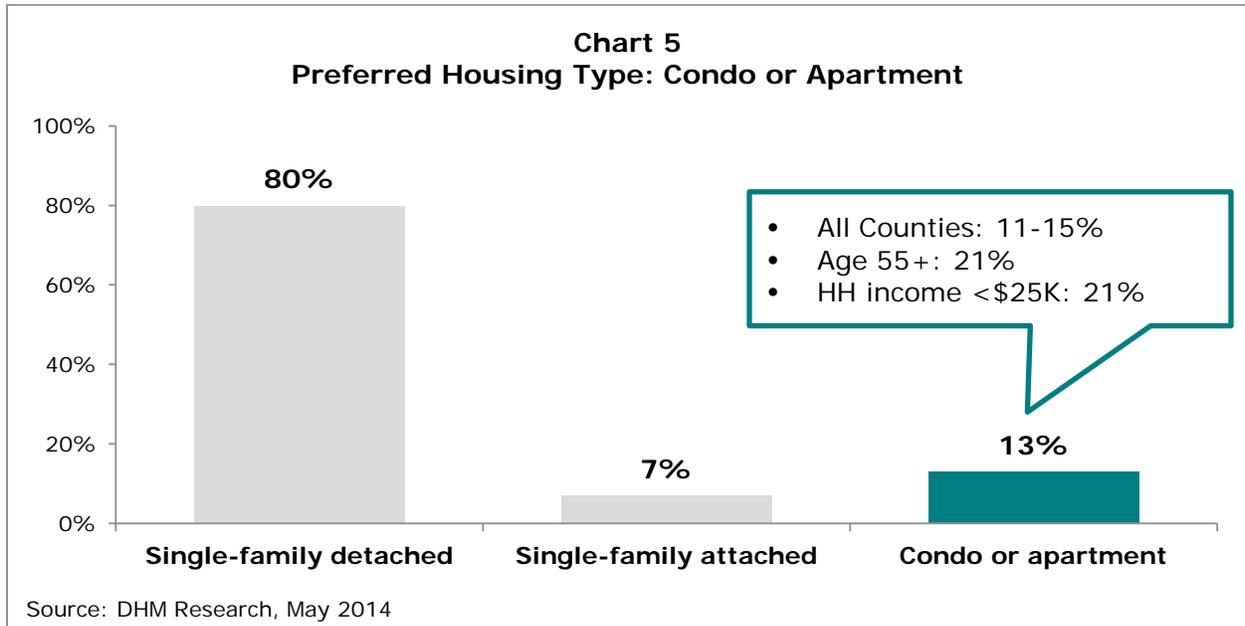
- Respondents age 55 and older (12%) vs. those younger (4%)

Public Engagement: Again, similar preference is seen in the public engagement data. One in ten (9%) prefer a single-family attached home. However, some different demographic differences emerge:

- Multnomah (11%) and Washington (8%) counties vs. Clackamas County (5%)
- Respondents age 18-34 (13%) vs. those older (6-9%)
- Households making \$25K-\$50K (13%) vs. higher income households (6-8%)
- Renters (12%) vs. those who own their home (6%)

Condo or apartment

Overall, about one in ten (13%) prefer to live in a condo or apartment. Higher preference for this type of housing is seen among older and lower income respondents.



Demographic Differences:

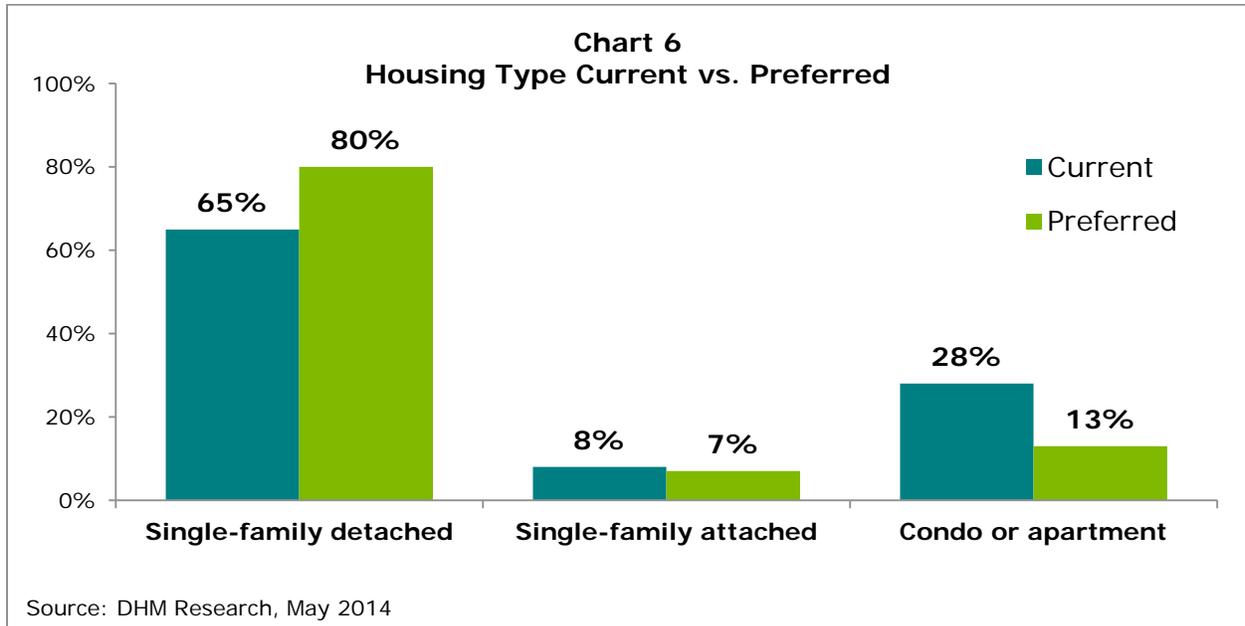
- Age 55 and older (21%) vs. those younger (8%)
- Household incomes of less than \$75K (15%) vs. households making \$150K or more (2%)

Public Engagement: Similar preference is also seen for living in a condo or apartment in the public engagement data. One in ten (11%) prefer a condo or apartment. However, some different demographic differences emerge:

- Multnomah County (15%) vs. Clackamas (7%) and Washington (6%) counties
- Age 55 and older (15%) vs. those younger (7-10%)
- Household incomes of less than \$25K (18%) vs. higher income households (8-13%)
- Renters (17%) vs. those who own their home (6%)

3.2 | Current vs. Preferred Housing

When looking at preferred housing, compared to current housing we see that not all respondents are currently living in the type of house that they would prefer to.



There is a 15 point gap between those who currently live in a single-family detached house (65%) and those who prefer to live in this type of house (80%). We also observe an opposite gap in the percentage of respondents that currently live in a condo or apartment (28%) compared to those who prefer to (13%).

Current: Single-family detached

Respondents who currently live in a single-family detached home largely prefer this type of housing. Less than one in ten would prefer to live in a single-family attached home or a condo or apartment. Preferred housing type among those currently living in a single-family detached home:

- **Single-family detached (87%)**
- Single-family attached (5%)
- Condo or apartment (8%)

Public Engagement: Similar to the representative sample, nearly all who currently live in a single-family detached home prefer this type of housing. Less than one in ten prefer to live in a single-family attached home or a condo or apartment.

- **Single-family detached (92%)**
- Single-family attached (5%)
- Condo or apartment (4%)

Current: Single-family attached

Respondents who currently live in a single-family attached home largely do not prefer this type of housing. Most would prefer to live in a single-family detached home. One in ten would prefer to live in their current type of housing or a condo or apartment. Preferred housing type among those currently living in a single-family attached home:

- Single-family detached (78%)
- **Single-family attached (11%)**
- Condo or apartment (11%)

Public Engagement: Again, similar to the representative sample, a majority who currently live in a single-family attached home prefer to live in a different type of housing. Nearly seven in ten prefer a single-family detached home; three in ten prefer a single-family attached home; and one in ten prefer a condo or apartment.

- Single-family detached (67%)
- **Single-family attached (28%)**
- Condo or apartment (8%)

Current: Condo or apartment

Respondents who currently live in a condo or apartment generally do not prefer this type of housing. A majority would prefer to live in a single-family detached home. One in ten would prefer to live in a single-family attached home, while one in four a condo or apartment. Preferred housing type among those currently living in a condo or apartment:

- Single-family detached (64%)
- Single-family attached (10%)
- **Condo or apartment (26%)**

Public Engagement: As was seen in the representative sample, a majority who currently live in a condo or apartment would prefer to live in a single-family detached home. Just over one in ten prefer a single-family attached home, and three in ten prefer their current type of housing, a condo or apartment.

- Single-family detached (56%)
- Single-family attached (14%)
- **Condo or apartment (30%)**

3.1 | Current/Preferred Neighborhood Types

Respondents were given detailed descriptions and shown representative images of four different neighborhood types.

Urban Central or Downtown - These are neighborhoods that have activity during the day and night. Restaurants, shops, parks, and transit are within a short walk. People mostly live in condos or apartment buildings that are five stories high or taller. These neighborhoods have continuous sidewalks, crosswalks, bicycle lanes, and crossing signals.



Urban Neighborhood or Town Center - These are neighborhoods that have activity during certain times. Restaurants, shops, parks, and transit are within a short walk. Most people live in single-family homes, but these neighborhoods also have condos and apartments mixed in, particularly along major streets and in commercial areas, where buildings are typically two to six stories high. These neighborhoods have continuous sidewalks, crosswalks, bicycle lanes, and crossing signals.



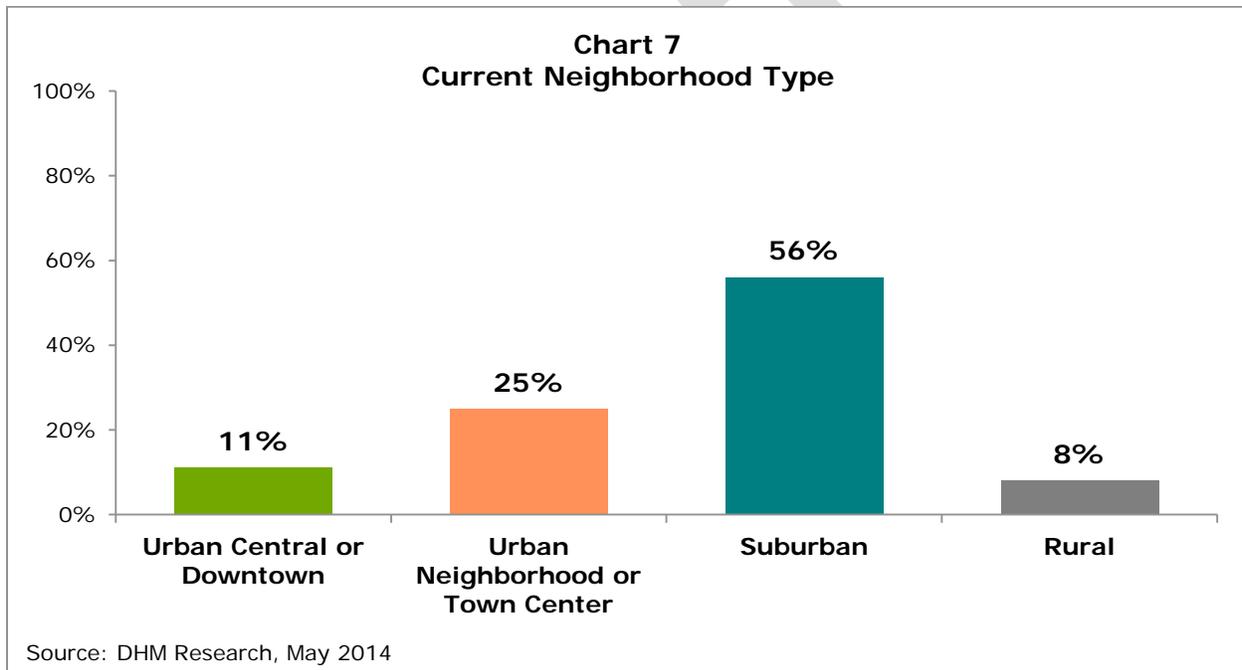
Outer Portland or Suburban - These neighborhoods may or may not have light activity during the day. Restaurants, shops, parks, and transit stops are generally not within walking distance and most people drive to get there. Most people live in single-family homes with yards, but some live in apartment buildings. The large majority of buildings in these neighborhoods are one or two-stories high. Sidewalks may or may not be present and crosswalks, bicycle lanes, and crossing signals are sparse.



Rural - These are quiet areas away from the city in agricultural or forest areas. People need to drive to get to restaurants, shops, parks, or transit. They mostly live in single-family homes on large lots or acreage and are further away from other homes. There are no sidewalks, crosswalks, bicycle lanes, or crossing signals.



They were then asked what type of neighborhood they currently live in and where they would prefer to live.



More than half (56%) live in a suburban neighborhood. This is followed distantly by an urban or town center neighborhood (25%). Just one in ten live in an urban central or downtown neighborhood (11%) or in a rural neighborhood (8%).

Demographic Differences: A majority of respondents in all four counties, with the exception of Multnomah, currently live in a suburban neighborhood. However, demographic differences in current neighborhood type do exist.

Suburban (56%)

- Washington County (81%) vs. Clackamas (71%), Multnomah (35%), and Clark (62%) counties
- Households with incomes of \$50K or more (59-69%) vs. lower income households (44-49%)
- Those who own their home (62%) vs. renter (46%)

Urban neighborhood or town center (25%)

- Multnomah County (41%) vs. Clackamas (11%), Washington (10%), and Clark (15%) counties
- Renters (31%) vs. those who own their home (22%)

Urban central of downtown (11%)

- Multnomah County (20%) vs. Clackamas (2%), Washington (3%), and Clark (3%) counties
- Households making less than \$25K (26%) vs. higher income households (6-10%)
- Renters (19%) vs. those who own their home (6%)

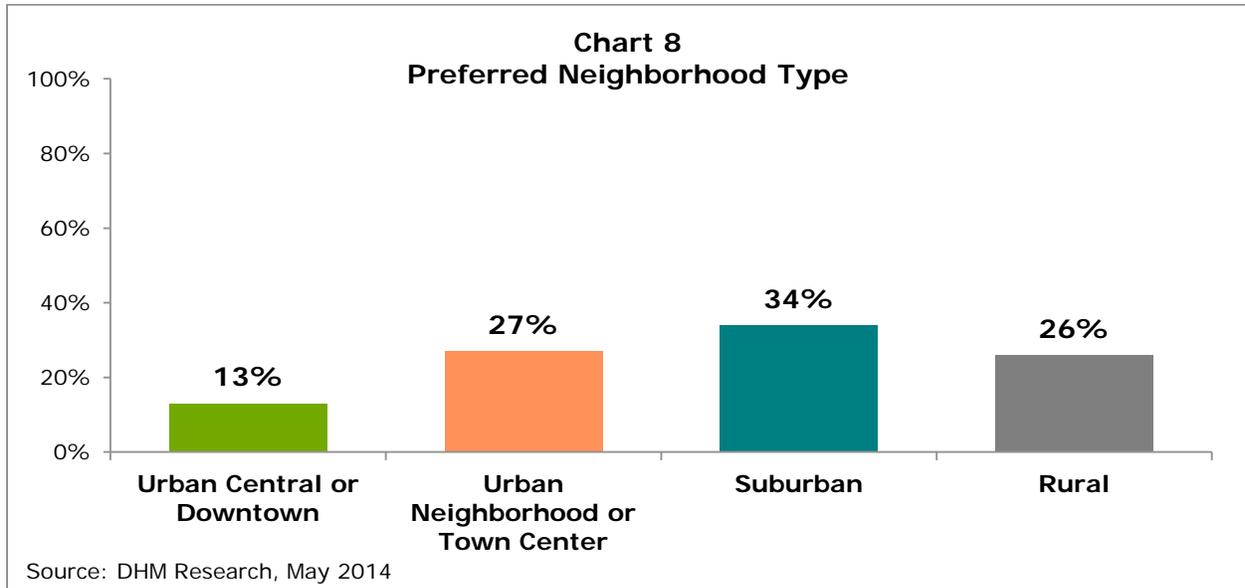
Rural (8%)

- Clackamas (15%) and Clark (20%) counties vs. Multnomah (3%) and Washington (7%) counties
- Those who own their home (10%) vs. renters (4%)

Public Engagement: The public engagement data differs slightly in terms of current neighborhood. Close to half (47%) live in a suburban neighborhood, nine points less than the representative sample. This is followed by an urban or town center neighborhood (39%), 14 points more than the representative sample. Similar to the representative sample, one in ten live in an urban central or downtown neighborhood (7%) or in a rural neighborhood (8%).

3.2 | Preferred Neighborhood

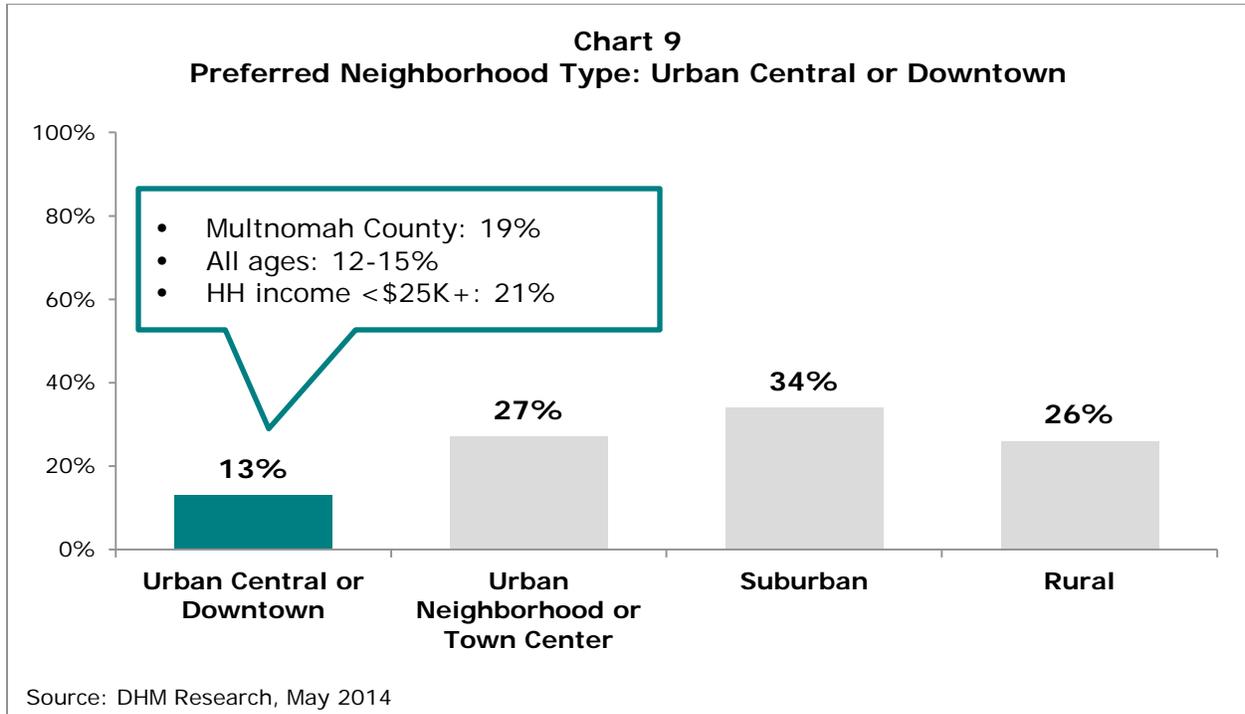
Not considering other variables, respondents were asked what their preferred neighborhood type would be.



Overall, respondents are fairly split on their neighborhood preferences. Four in ten would prefer to live in an urban neighborhood, either urban central or downtown (13%) or an urban town center (27%). One in three (34%) would prefer to live in a suburban neighborhood, while one in four (26%) would prefer to live in a rural neighborhood.

Urban central or downtown

One in ten would prefer to live in an urban central or downtown neighborhood. Respondents currently living in Multnomah County and those from lower income households are most likely to prefer this type of neighborhood.



Demographic Differences:

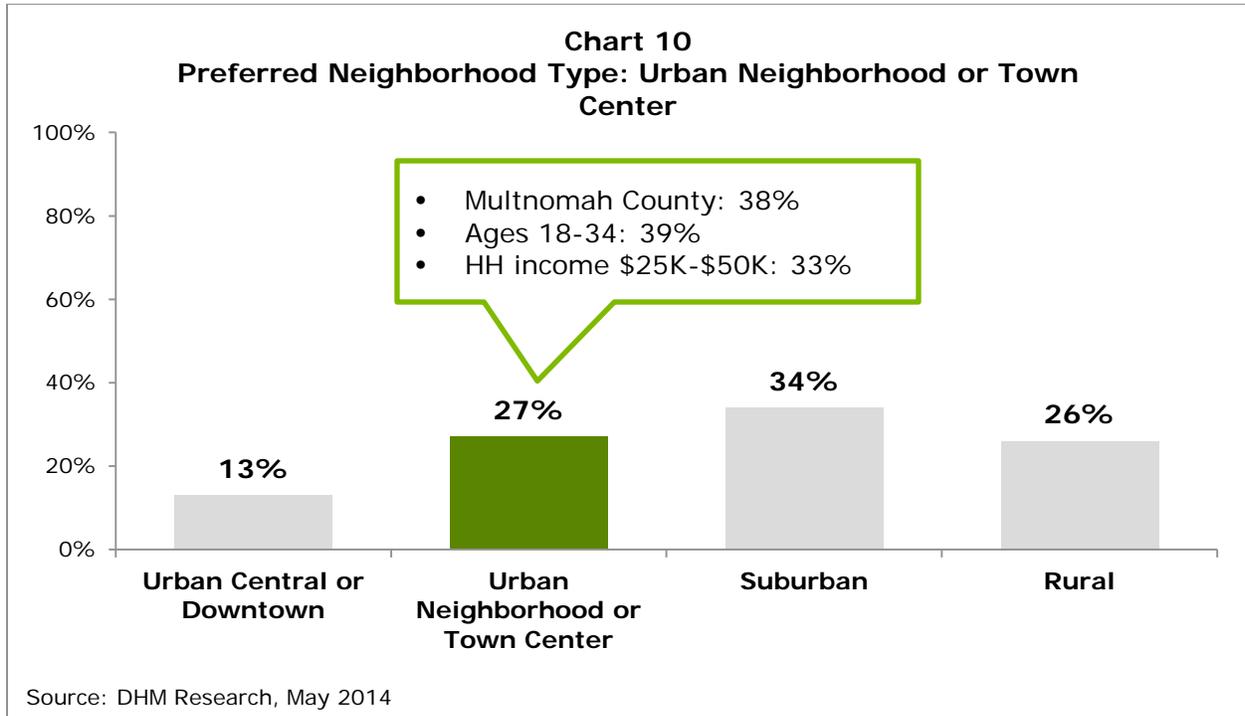
- Multnomah County (19%) vs. Clackamas (8%), Washington (7%), and Clark (11%) counties
- Renters (18%) vs. those who own their home (10%)

Public Engagement: Similar preference is given to living in an urban central or downtown neighborhood in the public engagement data. One in ten (10%) prefer to live in this type of neighborhood. Similar demographic differences were seen as well:

- Multnomah County (16%) vs. Clackamas (5%) and Washington (5%) counties
- Renters (14%) vs. those who own their home (7%)

Urban neighborhood or town center

One in four respondents would prefer to live in an urban neighborhood or town center. Respondents from Multnomah County as well as those who are younger are most likely to prefer this type of neighborhood.



Demographic Differences:

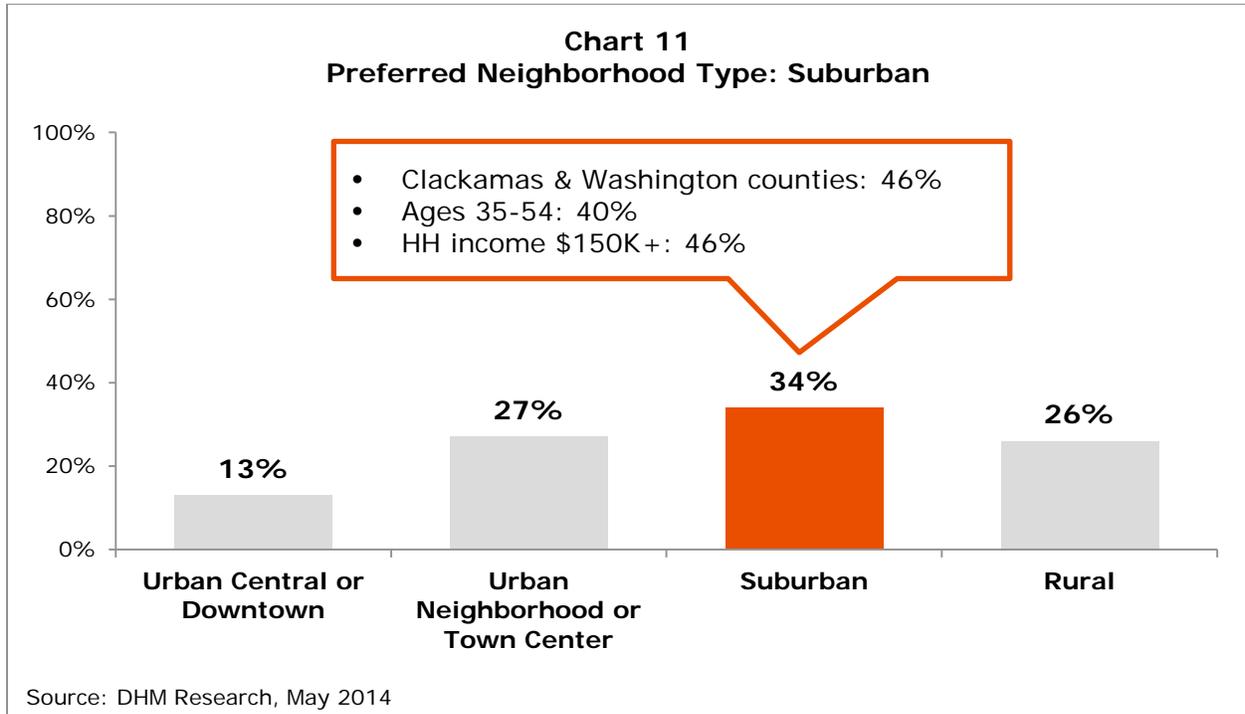
- Multnomah County (38%) vs. Clackamas (11%), Washington (18%), and Clark (19%) counties
- Age 18-34 (39%) vs. those older (22-24%)

Public Engagement: Respondents from the public engagement track are more likely than those from the representative sample to prefer an urban neighborhood or town center (48% vs. 27% respectively). However, demographic similarities exist:

- Multnomah County (65%) vs. Clackamas (28%) and Washington (37%) counties
- Age 18-34 (62%) vs. those older (41-49%)
- Renters (52%) vs. those who own their home (46%)

Suburban neighborhood

One in three respondents would prefer to live in a suburban neighborhood. Respondents most likely to prefer this type of neighborhood include those from Clackamas and Washington counties, age 35-54, and from higher income households.



Demographic Differences:

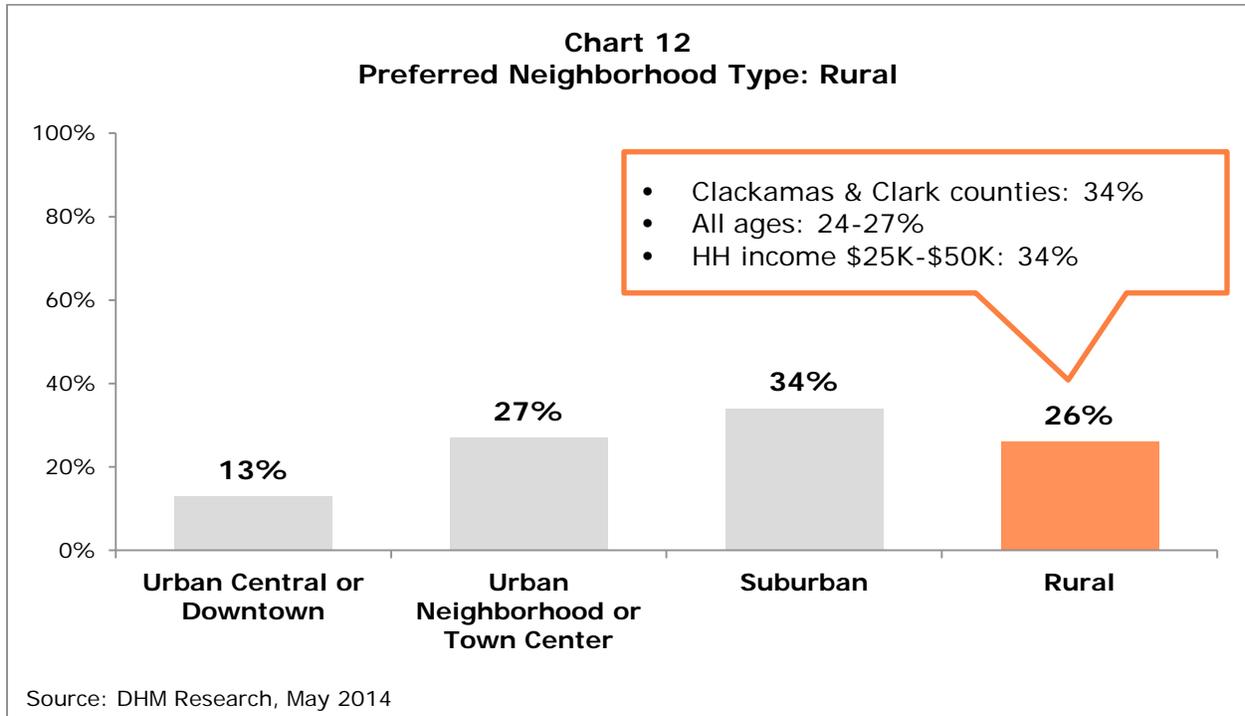
- Clackamas (47%), Washington (45%), and Clark (36%) counties vs. Multnomah County (23%)
- Household income of \$50K or more (35-46%) vs. lower income households (23-33%)
- Those who own their home (39%) vs. renters (26%)

Public Engagement: Respondents from the public engagement track are less likely than those from the representative sample to prefer a suburban neighborhood (22% vs. 34% respectively). However, there are demographic similarities:

- Clackamas (32%) and Washington (35%) counties vs. Multnomah County (10%)
- Household income of \$50K or more (23-26%) vs. lower income households (18-19%)
- Those who own their home (26%) vs. renters (17%)

Rural neighborhood

Overall, one in four respondents would prefer to live in a rural neighborhood. Those most likely to prefer this type of neighborhood currently live in Clackamas and Clark counties.



Demographic Differences:

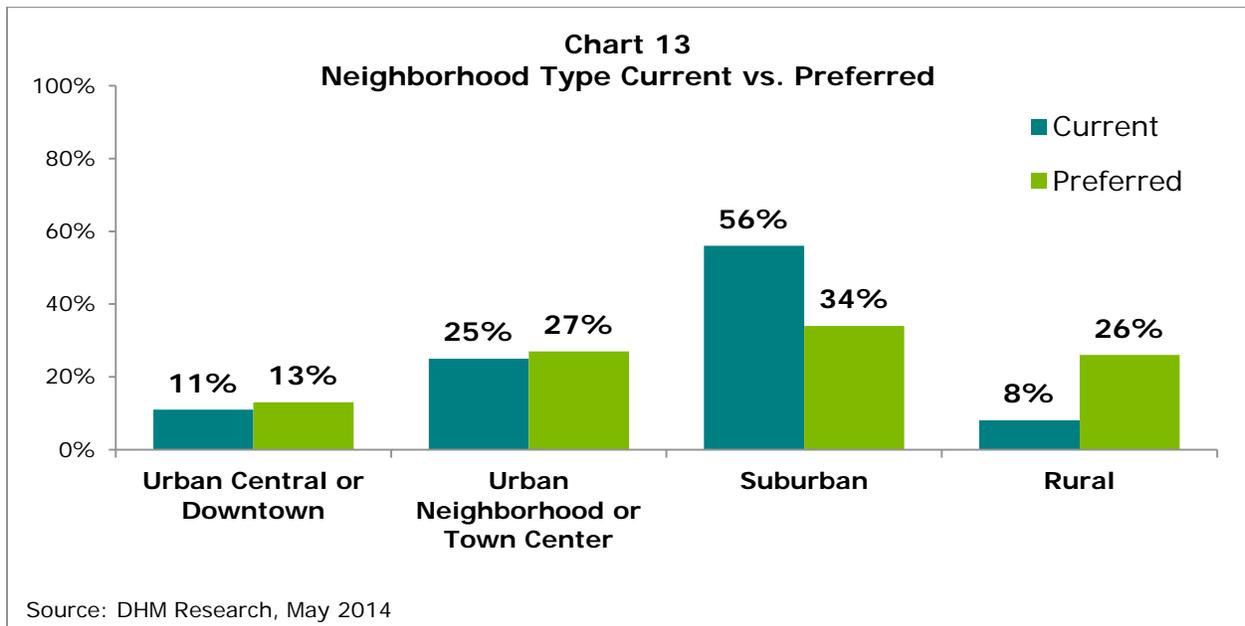
- Clackamas (34%), Washington (30%), and Clark (34%) counties vs. Multnomah County (20%)

Public Engagement: Respondents from the public engagement track are slightly less likely than those from the representative sample to prefer a rural neighborhood (19% vs. 26% respectively). However, there are some demographic similarities by area:

- Clackamas (35%), Washington (23%), and Clark (31%) counties vs. Multnomah County (9%)
- Age 35 and older (21%) vs. those younger (11%)
- Those who own their home (21%) vs. Renters (17%)

3.2 | Current vs. Preferred Neighborhood

When looking at preferred neighborhood compared to current neighborhood we see that largely, many respondents are currently living in the type of neighborhood that they would prefer to.



There is a 18 point gap between those who currently live in a rural neighborhood (8%) and those who prefer to live in this type of area (26%). We also see an opposite gap in the percentage of respondents that currently live in a suburban neighborhood (56%) compared to those who prefer to (34%).

Current: Urban central or downtown

A majority of respondents who currently live in an urban central or downtown neighborhood prefer to live in this area. One in ten would prefer to live in an urban neighborhood or town center or a rural neighborhood. Two in ten would prefer a suburban neighborhood. Preferred neighborhood among those currently living in an urban central or downtown neighborhood:

- **Urban central or downtown (55%)**
- Urban neighborhood or town center (13%)
- Suburban (17%)
- Rural (13%)

Public Engagement: Similar to results found in the representative sample, a majority of respondents who currently live in an urban central or downtown neighborhood prefer to live in this area. One in four would prefer to live in an urban neighborhood or town center. Two in ten would prefer a suburban or rural neighborhood.

Urban central or downtown (59%)

- **Urban central or downtown (59%)**
- Urban neighborhood or town center (24%)
- Suburban (10%)
- Rural (8%)

Current: Urban neighborhood or town center

A majority of respondents who currently live in an urban neighborhood or town center prefer to live in this area. One in ten would prefer to live in a central or downtown neighborhood or a suburban neighborhood. Two in ten would prefer a rural neighborhood. Preferred neighborhood among those currently living in an urban neighborhood or town center:

- Urban central or downtown (11%)
- **Urban neighborhood or town center (62%)**
- Suburban (8%)
- Rural (19%)

Public Engagement: As was seen in the representative sample, a majority of respondents who currently live in an urban neighborhood or town center prefer to live in this area. One in ten would prefer to live in a central or downtown neighborhood or a rural neighborhood. Just 4% would prefer a suburban neighborhood.

- Urban central or downtown (9%)
- **Urban neighborhood or town center (78%)**
- Suburban (4%)
- Rural (9%)

Current: Suburban

A majority of respondents who currently live in a suburban neighborhood prefer to live in this area. Two in ten would prefer to live in an urban neighborhood or town center or a suburban neighborhood. Less than one in ten would prefer an urban central or downtown neighborhood. Preferred neighborhood among those currently living in a suburban neighborhood:

- Urban central or downtown (6%)
- Urban neighborhood or town center (17%)
- **Suburban (51%)**
- Rural (26%)

Public Engagement: A plurality of respondents who currently live in a suburban neighborhood prefer to live in this area. However, there is some desire to live in other types of neighborhoods as well. One in three would prefer to live in an urban neighborhood or town center, and two in ten a rural neighborhood. Just 5% would prefer living in an urban central or downtown neighborhood.

- Urban central or downtown (5%)
- Urban neighborhood or town center (33%)
- **Suburban (41%)**
- Rural (20%)

Current: Rural

Again, a strong majority of respondents who currently live in a rural neighborhood prefer to live in this area. There is a small preference for living in an urban central or downtown neighborhood or suburban neighborhood. Very few who currently live in a rural neighborhood would prefer to live in an urban neighborhood or town center. Preferred neighborhood among those currently living in a rural neighborhood:

- Urban central or downtown (10%)
- Urban neighborhood or town center (3%)
- Suburban (16%)
- **Rural (70%)**

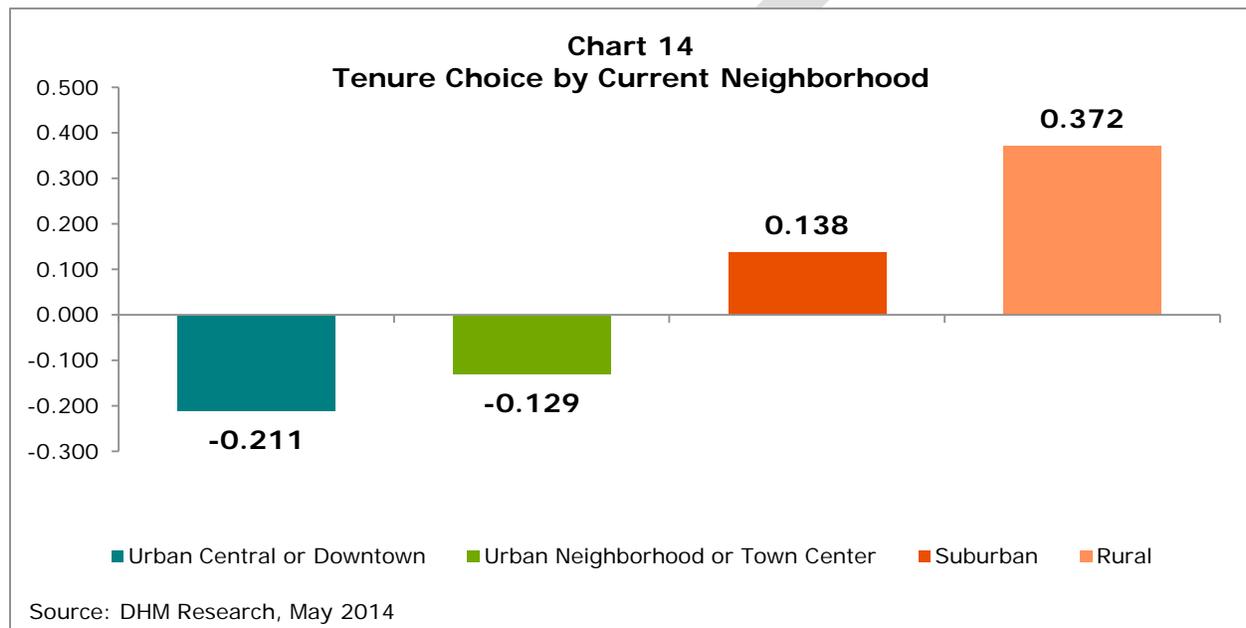
Public Engagement: Again, similar to the representative sample, a strong majority of respondents who currently live in a rural neighborhood prefer to live in this area. Just one in ten or fewer prefer to live in each of the other types of neighborhoods.

- Urban central or downtown (5%)
- Urban neighborhood or town center (11%)
- Suburban (7%)
- **Rural (76%)**

3.3 | Stated Preference Neighborhood Sensitivity

The following section contains initial findings of the stated preference data. Analysis was performed by Metro on a data file containing both managed panel and public engagement respondents combined. This was possible due to the similarities between the data files and allows for a larger sample size for statistical analysis.

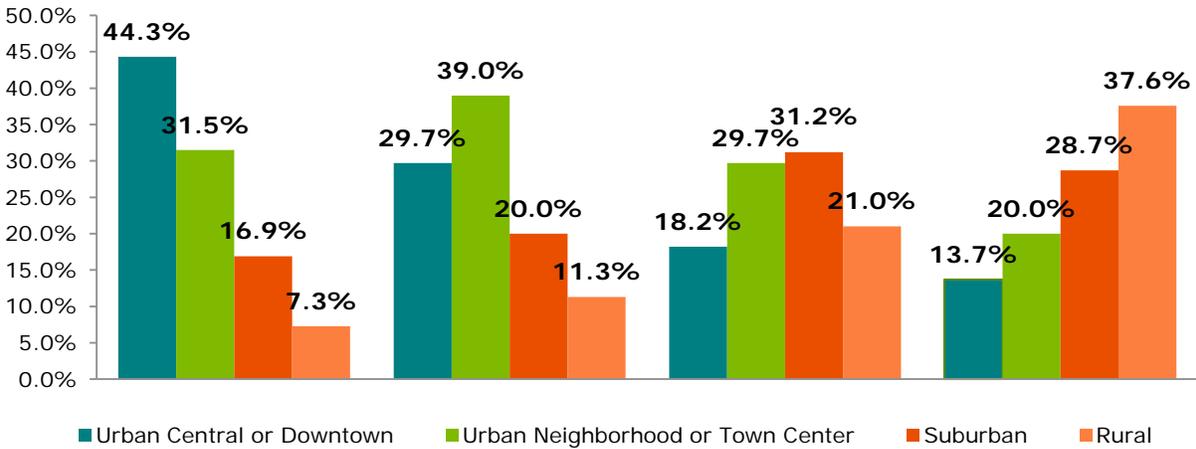
The chart below shows propensity to own a home by current neighborhood type. Negative own numbers mean that owning is less desirable than renting; while positive own numbers mean that owning is more desirable than renting. (Note that in the following chart, rent is always 0. Statistically we need to designate one state (own or rent) as the base state).



Residents living in urban central or downtown neighborhoods regard renting as preferable (slightly) over owning when housing type, size and price are held constant. This pattern also persists for residents of urban neighborhoods or town centers; though the difference between owning and renting is not statistically significant. In suburban and rural neighborhoods owning is predominant with the difference getting more pronounced as you move to rural.

The following chart displays the probability distribution, where the chances of choosing a neighborhood type is expressed as a percentage given that price, tenure, type, commute time, etc. are all the same between neighborhoods. Note that when all attributes are the same except the neighborhood of the respondent's choice; all choice alternatives could be selected.

Chart 15
Probability of Location by Market Segment - Baseline Conditions
Sensitivity Test

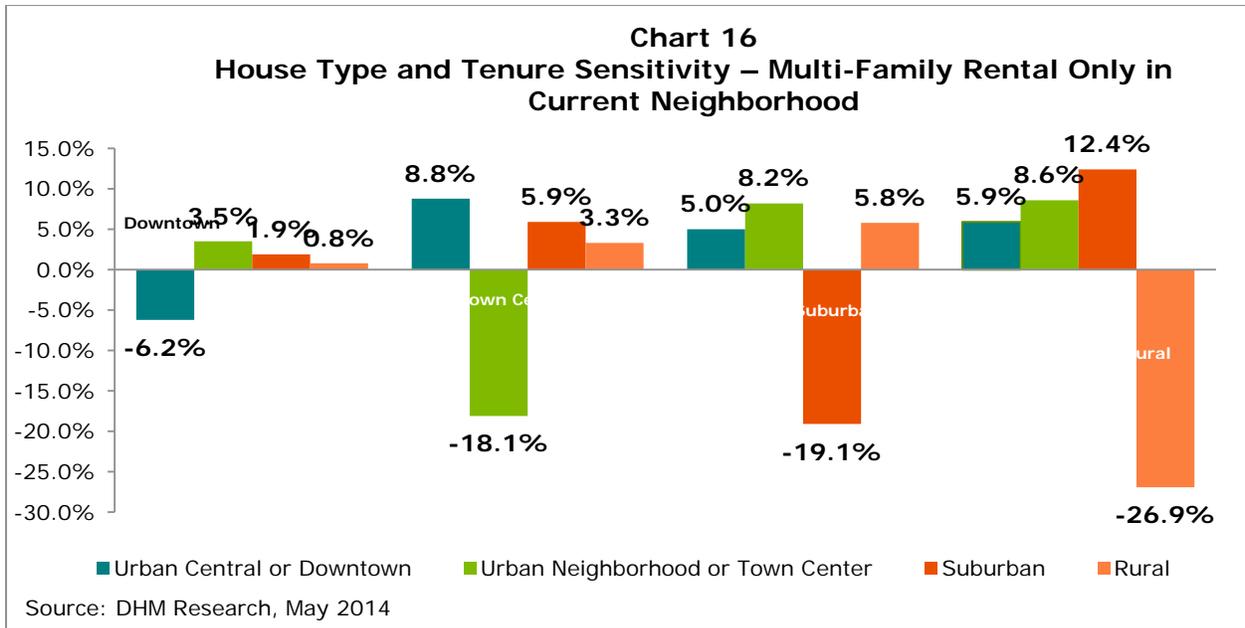


Source: DHM Research, May 2014

If respondents could pay the same price, have the same type of housing, same commute time, etc. but in different neighborhood types, they are most likely to choose the neighborhood type that they currently live in. However, in no case is there a majority of respondents that would be likely to choose their current neighborhood type. Residents of urban central or downtown neighborhoods have the highest likelihood of choosing their current neighborhood type (44%) and residents of suburban neighborhoods have the lowest likelihood (31%).

Of those whose neighborhood preference would change, respondents currently living in an urban central or downtown neighborhood are most likely to prefer an urban neighborhood or town center (31.5%); respondents in an urban neighborhood or town center are most likely to prefer an urban central or downtown neighborhood (29.7%); those in a suburban neighborhood prefer an urban neighborhood or town center (29.7%); and those in a rural neighborhood prefer suburban neighborhoods (28.7%).

In the following chart, tenure and type of housing is limited to rental and multi-family in respondent's current neighborhood. We then assess the probability of changing their neighborhood preference to a different type of neighborhood. Negative values indicate the percentage of respondents whose neighborhood preference would change based on the limited tenure and housing type. Positive values indicate neighborhood preference for those that would move.



Respondents in urban central or downtown neighborhoods are the least likely change their neighborhood preference when tenure and type of housing is limited to rental and multi-family in their current neighborhood, while those living in rural neighborhoods show the highest likelihood to change preference. Likelihood to change neighborhood preference is similar among those in both urban town center and suburban neighborhoods.

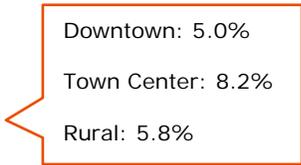
Six percent (6.2%) who currently live in an urban central or downtown neighborhood would prefer a different type of neighborhood if tenure and type of housing are limited to rental and multi-family in their current neighborhood; the least sensitive of all neighborhoods. Those whose neighborhood preference would change are most likely to change preference to an urban neighborhood or town center (3.5%). Fewer would prefer a suburban neighborhood (1.9%), while fewer still would prefer a rural neighborhood (0.8%).

Eighteen percent (18.1%) who currently live in an urban neighborhood or town center would prefer a different type of neighborhood if tenure and type of housing are limited to rental and multi-family in their current neighborhood. Those whose neighborhood preference would change are most likely to change preference to an urban central or downtown neighborhood (8.8%). Fewer would prefer a suburban neighborhood (5.9%), while fewer still would prefer a rural neighborhood (3.3%).

Downtown: 8.8%

Suburban: 5.9%

Rural: 3.3%

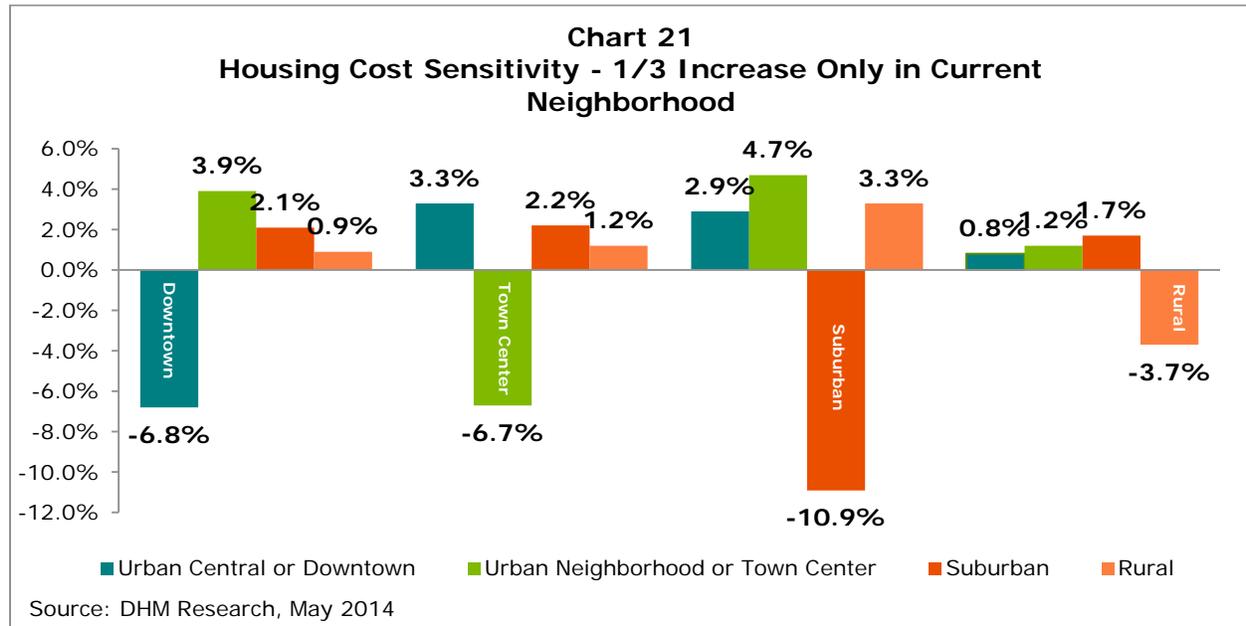


Downtown: 5.0%
Town Center: 8.2%
Rural: 5.8%

Nineteen percent (19.1%) of respondents who currently live in a suburban neighborhood would prefer a different type of neighborhood if tenure and type of housing is limited to rental and multi-family in their current neighborhood. Those whose neighborhood preference would change are most likely to change preference to an urban neighborhood or town center (8.2%). Fewer would prefer a rural neighborhood (5.8%) or an urban central or downtown neighborhood (5.0%).

More than one in four (26.9%) respondents currently living in rural neighborhoods would prefer a different type of neighborhood if tenure and type of housing is limited to rental and multi-family in their current neighborhood; the most sensitive of all neighborhoods. Of those whose neighborhood preference would change, they are most likely to change preference to a suburban neighborhood (12.4%) Fewer would prefer a town center (8.6%), while fewer still would prefer to an urban central or downtown neighborhood (5.9%).

In the following chart, the price of housing has increased in the selected neighborhood by 1/3. We then assess the probability of changing their neighborhood preference to a different type of neighborhood considering an identical house with identical commute time, etc. in a different neighborhood. Negative values indicate the percentage of respondents whose neighborhood preference would change based on the price increase in their current neighborhood. Positive values indicate neighborhood preference for those that would shift.



Respondents in rural neighborhoods are the least likely change their neighborhood preference when price increases, while those living in suburban neighborhoods show the highest likelihood to change preference. Likelihood to change neighborhood preference is fairly modest, and equal, among those in both urban central and those who currently live in urban town center neighborhoods.

Just under seven percent (6.8%) who currently live in an urban central or downtown neighborhood would prefer an identical house with identical commute time, etc. in a different neighborhood if the price of their home in their current neighborhood increased by 1/3. They are most likely to change preference to an urban neighborhood or town center (3.9%). Fewer would prefer a suburban neighborhood (2.9%), while fewer still would prefer a rural neighborhood (0.9%).

Just under seven percent (6.7%) who currently live in an urban neighborhood or town center would prefer an identical house with identical commute time, etc. in a different neighborhood if the price of their home in their current neighborhood increased by 1/3. They are most likely to change preference to an urban central or downtown neighborhood (3.3%). Fewer would prefer a suburban neighborhood (2.2%), while fewer still would prefer a rural neighborhood (1.2%).

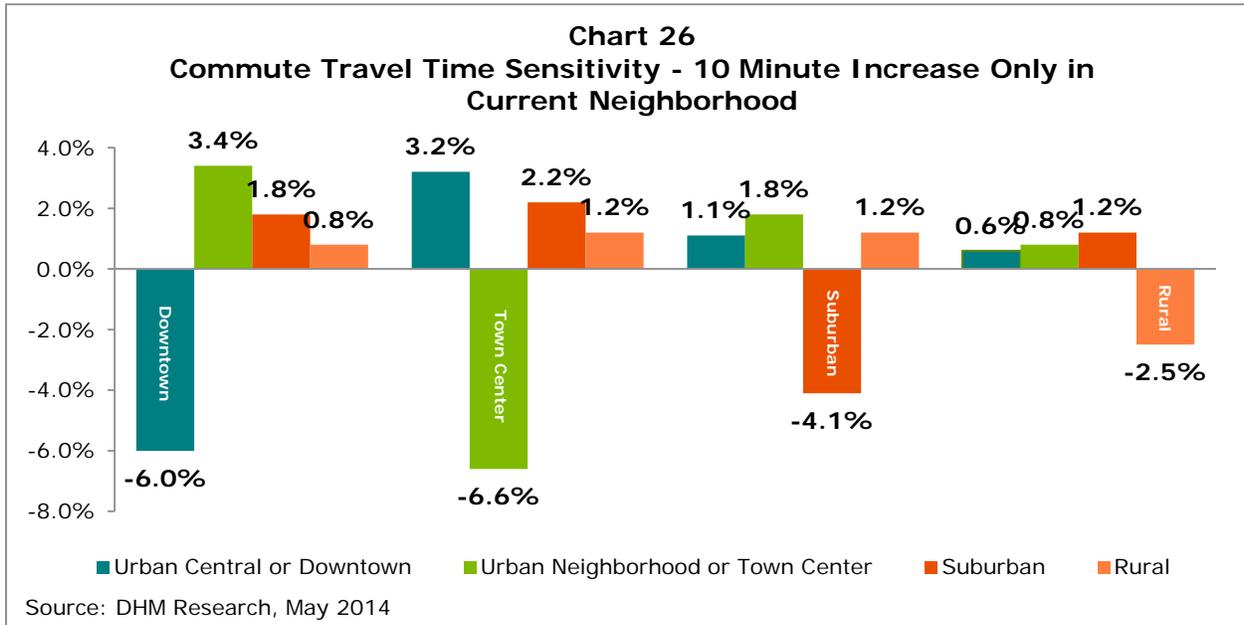
Downtown: 2.9%
Town Center: 4.7%
Rural: 3.3%

Eleven percent (10.9%) of respondents who currently live in a suburban neighborhood would prefer an identical house with identical commute time, etc. in a different neighborhood if the price of their home in their current neighborhood increased by 1/3; the most price sensitive of all neighborhoods. They are most likely to change preference to an urban neighborhood or town center (4.7%). Fewer would prefer a rural neighborhood (3.3%), while fewer still would prefer an urban central or downtown neighborhood (2.9%).

Nearly four percent (3.7%) of respondents currently living in rural neighborhoods would prefer an identical house with identical commute time, etc. in a different neighborhood if the price of their home in their current neighborhood increased by 1/3; the least price sensitive of all neighborhoods. They are most likely to change preference to a suburban neighborhood (1.7%) or town center (1.2%), while they are least likely to prefer an urban central or downtown neighborhood (0.8%).

Downtown: 0.8%
Town Center: 1.2%
Suburban: 1.7%

In the following chart, the commute time has increased in the selected neighborhood by 10 minutes. We then assess the probability changing their neighborhood preference to a different type of neighborhood considering an identical house with identical price, etc. in a different neighborhood. Negative values indicate the percentage of respondents whose neighborhood preference would change based on the increase in commute time in their current neighborhood. Positive values indicate neighborhood preference for those that would shift.



Respondents in rural neighborhoods are the least likely to change their neighborhood preference when commute time increases by 10 minutes, while those living in urban neighborhoods, both town centers and downtown, show the highest likelihood to change neighborhood preference. Likelihood to change preference is fairly modest among those living in suburban neighborhoods.

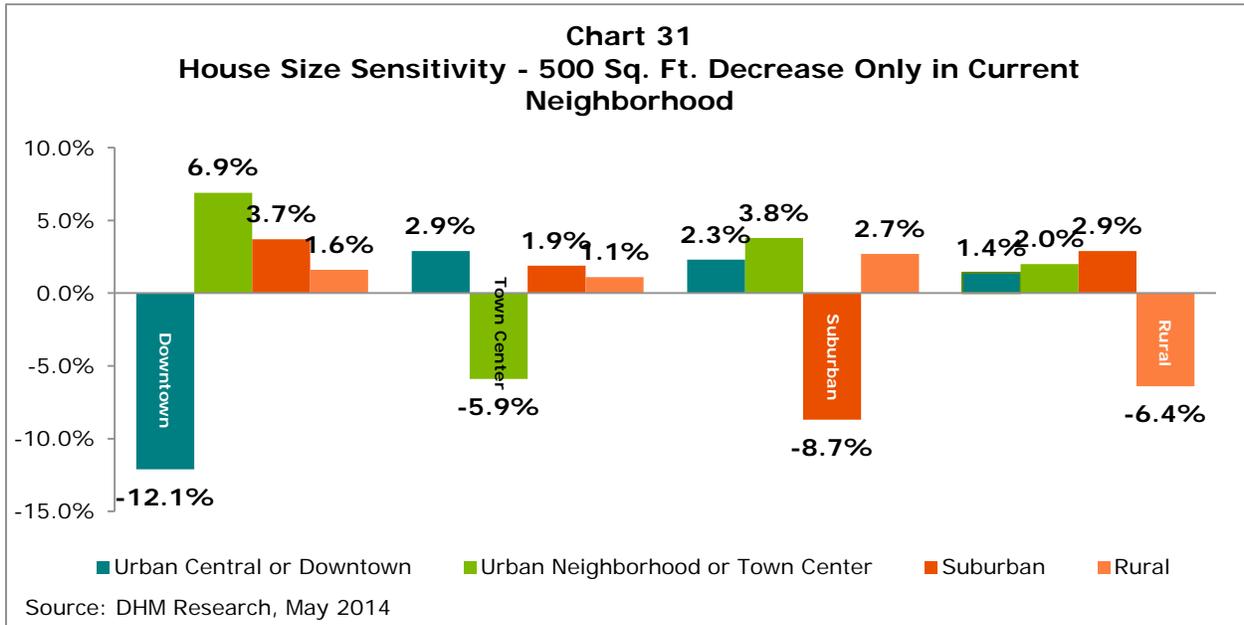
Six percent (6.0%) who currently live in an urban central or downtown neighborhood would prefer an identical house with identical price, etc. in a different neighborhood if commute time in their current neighborhood increased by 10 minutes. They are most likely to change preference to an urban neighborhood or town center (3.4%). Fewer would prefer a suburban neighborhood (1.8%), while fewer still would prefer a rural neighborhood (0.8%).

Under seven percent (6.6%) who currently live in an urban neighborhood or town center would prefer an identical house with identical price, etc. in a different neighborhood if commute time in their current neighborhood increased by 10 minutes; the most sensitive neighborhood to commute time. They are most likely to change preference to an urban central or downtown neighborhood (3.2%). Fewer would prefer a suburban neighborhood (2.2%), while fewer still would prefer a rural neighborhood (1.2%).

Four percent (4.1%) who currently live in suburban neighborhood would prefer an identical house with identical price, etc. in a different neighborhood if commute time in their current neighborhood increased by 10 minutes. They are most likely to change their preference to an urban neighborhood or town center (1.8%). Respondents currently living in a suburban neighborhood are equally likely to prefer an urban central or downtown neighborhood (1.1%) or a rural neighborhood (1.2%).

Under three percent (2.5%) of respondents who currently live in a rural neighborhood would prefer an identical house with identical price, etc. in a different neighborhood if commute time in their current neighborhood increased by 10 minutes (-2.5%); the least sensitive neighborhood to commute time. They are most likely to change preference to a suburban neighborhood (1.2%), while they are least likely to prefer an urban neighborhood or town center (0.8%) or an urban central or downtown neighborhood (0.6%).

In the following chart, the square footage of the house has been decreased in the selected neighborhood by 500 square feet. We then assessed the probability of changing their neighborhood preference to a different type of neighborhood considering an identical house with identical price, etc. in a different neighborhood. Negative values indicate the percentage of respondents whose neighborhood preference would change based on the price decrease in square footage in their current neighborhood. Positive value indicated neighborhood preference for those that would move.



Respondents in rural neighborhoods or town centers are the least likely change their neighborhood preference when square footage is decreased by 500 sq. ft., while those living in an urban central or downtown neighborhood show the highest likelihood to change neighborhood preference. Likelihood to change preference is fairly modest among those living in suburban neighborhoods, and even less among rural neighborhood respondents.

Twelve percent (12.1%) who currently live in an urban central or downtown neighborhood would prefer an identical house with identical price, etc. in a different neighborhood if square footage of the housing in their current neighborhood decreased by 500 sq. ft.; the most sensitive neighborhood to housing size. They are most likely to change their preference to an urban neighborhood or town center (6.9%). Fewer would prefer a suburban neighborhood (3.7%), while fewer still would prefer to a rural neighborhood (1.6%).

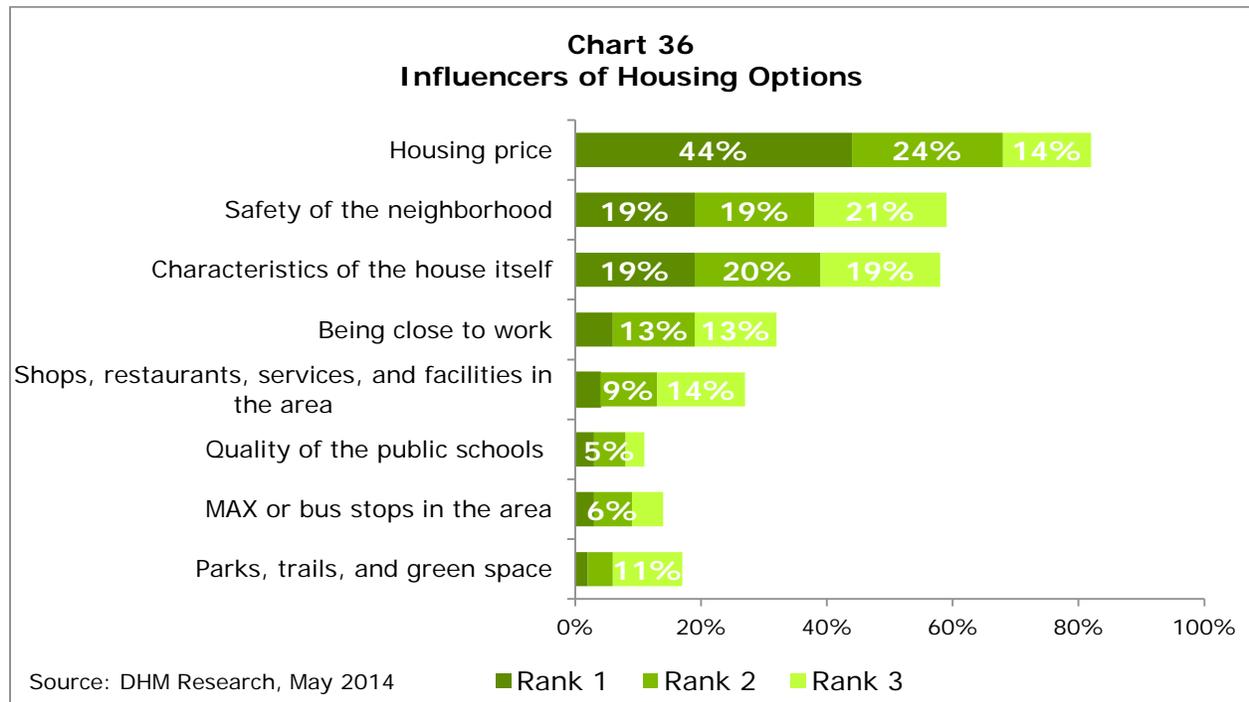
Six percent (5.9%) of respondents in an urban neighborhood or town center would prefer an identical house with identical price, etc. in a different neighborhood if square footage of the housing in their current neighborhood decreased by 500 sq. ft.; the least sensitive neighborhood to housing size. They are most likely to change their preference to an urban central or downtown neighborhood (2.9%). Fewer would prefer a suburban neighborhood (1.9%). While fewer still would prefer a rural neighborhood (1.1%).

Nearly nine percent (8.7%) who currently live in suburban neighborhood would prefer an identical house with identical price, etc. in a different neighborhood if square footage of the housing in their current neighborhood decreased by 500 sq. ft. They are most likely to change their neighborhood preference to an urban neighborhood or town center (3.8%), while they are less likely to prefer an urban central or downtown neighborhood (2.3%) or a rural neighborhood (2.7%).

More than six percent (6.4%) of those who currently live in rural neighborhoods would prefer an identical house with identical price, etc. in a different neighborhood if square footage of the housing in their current neighborhood decreased by 500 sq. ft. They are most likely to change their neighborhood preference to a suburban neighborhood (2.9%). Fewer would prefer an urban neighborhood or town center (2.0%), while fewer still would prefer an urban central or downtown neighborhood (1.4%).

3.4 | Attitudinal

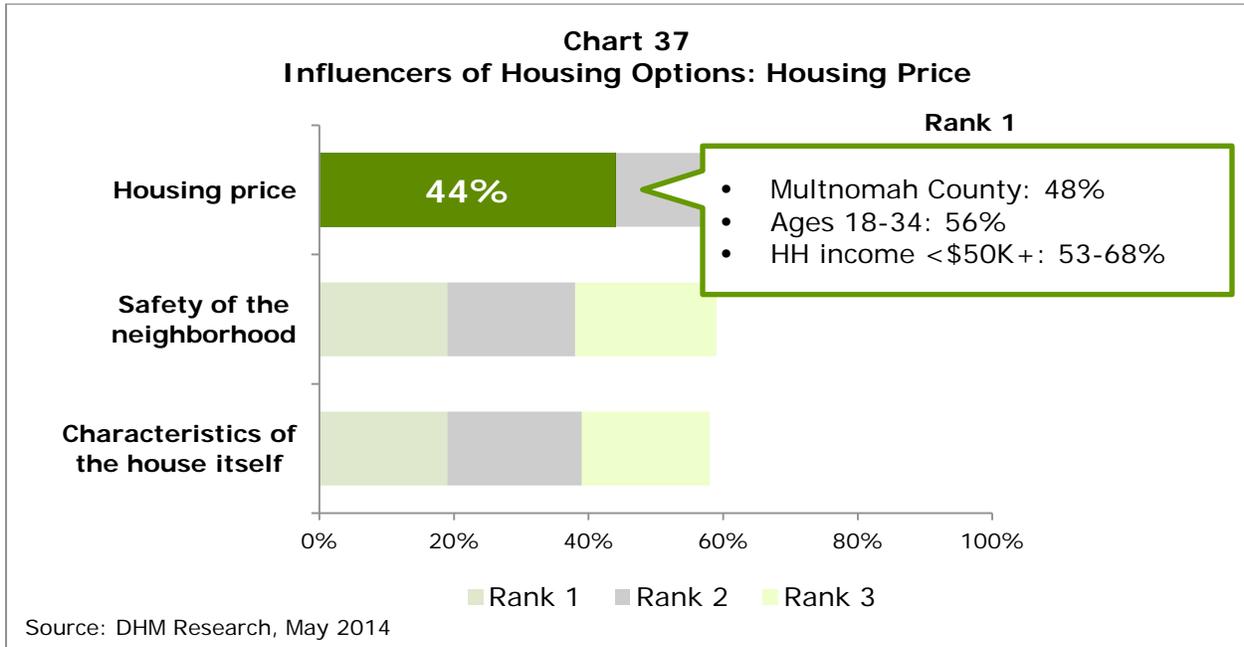
Respondents were asked to rank the top three items that had the largest influence on where they live.



Not surprisingly, housing price has the largest influence on respondent's housing decision (44%, rank 1). Safety of the neighborhood (19%) and characteristics of the house (19%) follow as top influencers. Interestingly, these prove to be larger influencers than proximity to work (6%), shops and restaurants in the area (4%), and quality of public schools (3%).

Housing price

Housing price is the most influential factor in respondent's housing decision, with more than four in ten (44%) ranking this as most influential. Those most likely to be influenced by price include Multnomah County respondents, those age 18-34, and lower household incomes.



Demographic Differences:

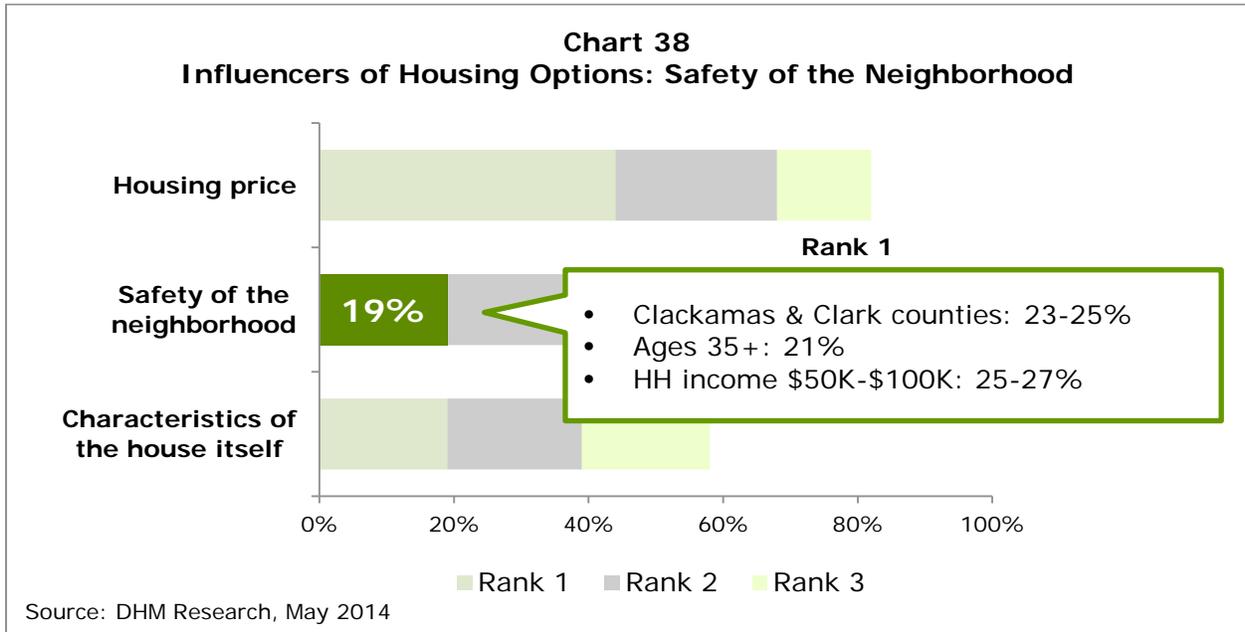
- No differences by county
- Age 18-34 (56%) and 55 and older (46%) vs. age 35-54 (34%)
- Household incomes of less than \$25K (68%) and \$25-50K (53%) vs. higher income households (29-39%)
- Renters (53%) vs. those who own their home (38%)

Public Engagement: Respondents from the public engagement track are slightly less likely than those from the representative sample to rank housing price as most influential (31% rank 1 vs. 44% respectively). Public engagement data shows some similar demographic differences:

- No differences by county
- Age 18-34 (40%) and 35-54 (32%) vs. age 55 and older (26%)
- Household incomes of less than \$25K (48%) and \$25-50K (46%) vs. higher income households (15-34%)
- Renters (42%) vs. those who own their home (24%)

Safety of the neighborhood

Two in ten are most influenced by safety of the neighborhood. Those most influenced by this are those living in Clackamas and Clark counties, over the age of 34, and household incomes of \$50-\$100K.



Demographic Differences:

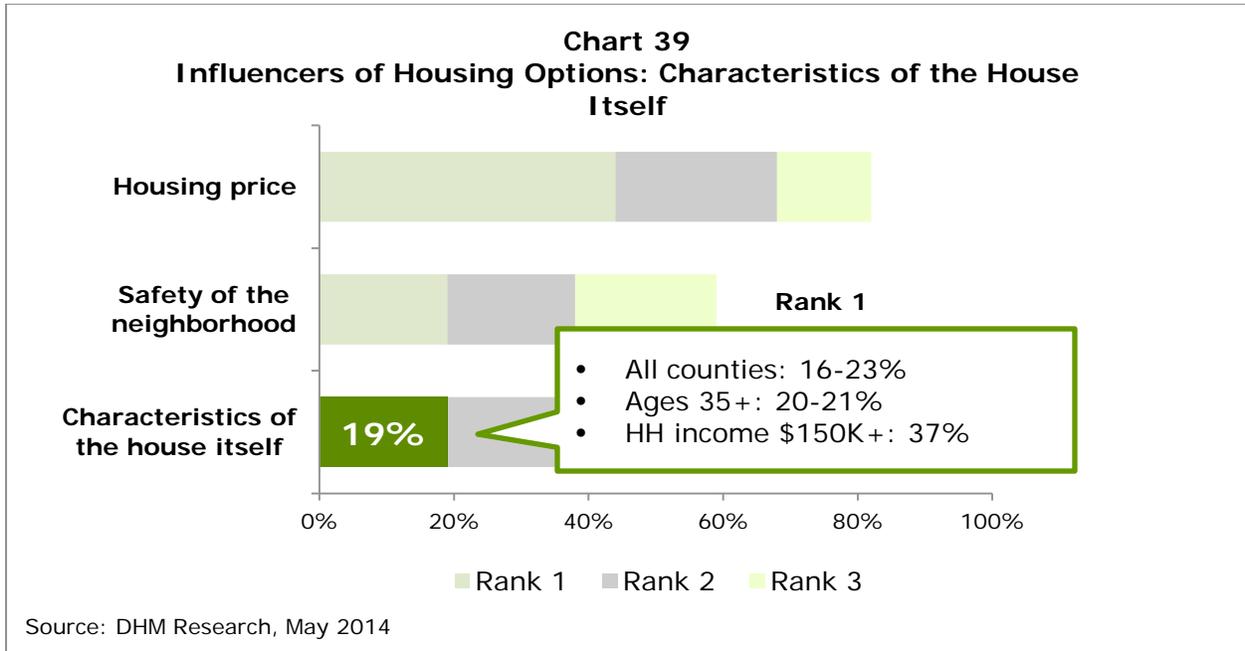
- Clackamas County (25%) vs. Multnomah County (16%)
- Those who own their home (22%) vs. renters (14%)

Public Engagement: Respondents from the public engagement track were slightly less likely than those from the representative sample to rank safety as a top influencer (14% vs. 19% respectively). Some similarities are seen between representative and public engagement samples:

- Clackamas (19%) and Washington (18%) counties vs. Multnomah County (9%)
- Age 55 and older (18%) vs. those younger (6-14%)
- Those who own their home (16%) vs. renters (11%)

Characteristics of the house

Two in ten are most influenced by characteristics of the house itself. Those most likely to be influenced by characteristics of the house are age 35 and older from households of \$150K or higher income.



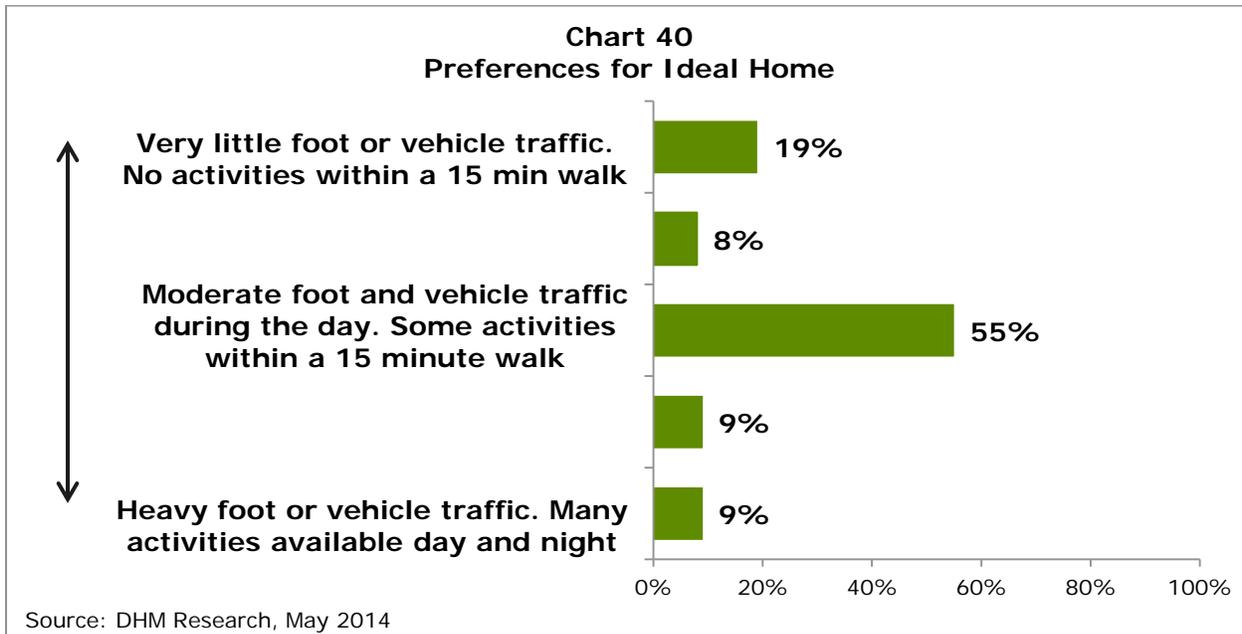
Demographic Differences:

- No differences by county
- Income of \$150K or more (37%) vs. income of less than \$75K (8-20%)
- Those who own their home (23%) vs. renters (12%)

Public Engagement: Respondents from the public engagement data showed similar preference to the representative sample in ranking characteristics of the house as a top influencer (20% vs. 19% respectively). However, some different demographic differences are observed.

- Clackamas (23%) and Washington (21%) counties vs. Multnomah County (17%)
- Age 55 and older (26%) vs. those younger (11-18%)
- Household income of \$75K or more (24-26%) vs. lower income households (8-19%)
- Those who own their home (25%) vs. renters (11%)

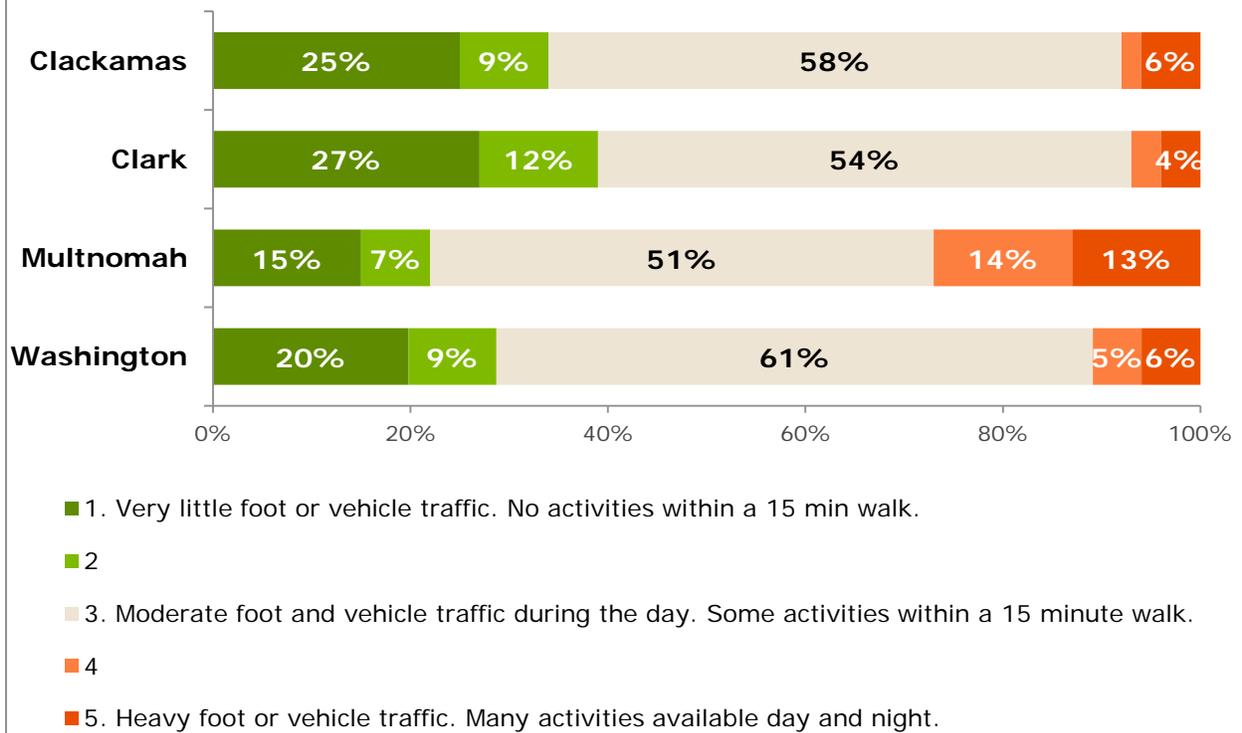
Respondents were asked to indicate their preference for level of activity in their ideal neighborhood on a scale ranging from very little foot or vehicle traffic to heavy foot or vehicle traffic.



Not surprisingly, a majority of respondents would prefer a moderate amount of foot or vehicle traffic during the day with some activities within a 15 minute walk (55%). Overall, 27% would prefer less activity in their neighborhood, while 18% would prefer more.

Demographic Differences: Moderate foot traffic was preferred in across all demographic subgroups. However, some differences in preference do exist. Respondents currently living in Clackamas and Clark counties are most likely to prefer less vehicle and foot traffic. Multnomah County respondents showed the highest preference for heavier foot and vehicle traffic.

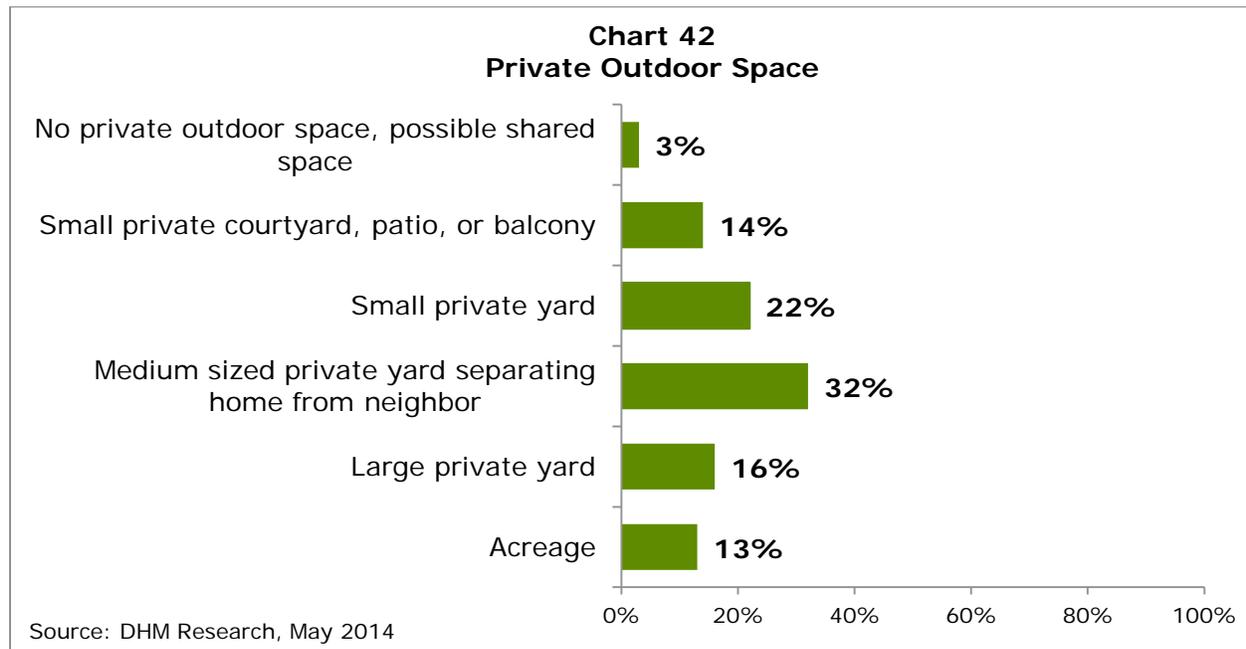
Chart 41
Preferences for Ideal Home by County



Source: DHM Research, May 2014

Public Engagement: Similar preferences were seen among the public engagement sample. A majority of respondents would prefer a moderate amount of foot or vehicle traffic during the day with some activities within a 15 minute walk (50%). Overall, 19% would prefer less activity in their neighborhood, while 31% would prefer more.

Respondents were asked to indicate their preferred outdoor space on a scale ranging from no private outdoor space to acreage.



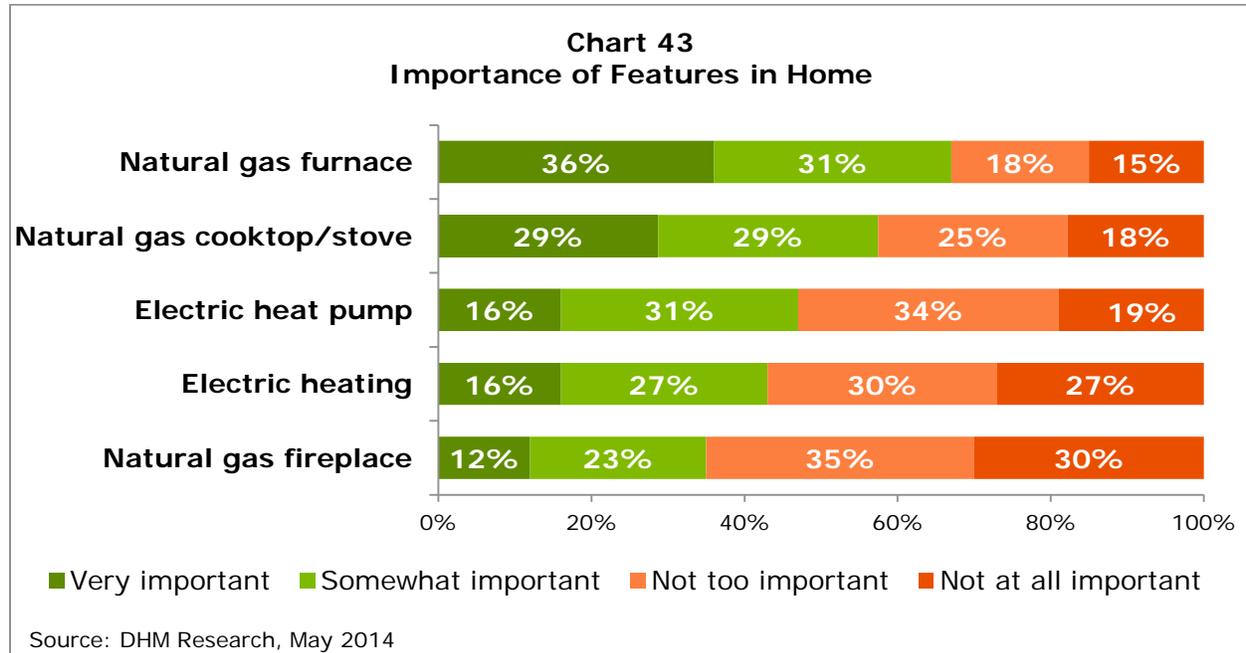
The most preferred private outdoor space is a medium sized yard which separates the home from the neighbor (32%). One in three (36%) would prefer a smaller yard (small private courtyard: 14%; small private yard: 22%) while three in ten (29%) would prefer a larger yard (large private yard: 16%; acreage: 13%). Just 3% do not prefer to have a private yard.

Demographic Differences: Preference for private outdoor space is fairly consistent across demographic subgroups. However, there are differences in preference among those who currently own their home and those who rent. Owners are more likely than renters to prefer a medium sized yard (Owners: 37% vs. Renters: 25%) and a large private yard (Owners: 19% vs. Renters: 11%). Renters are more likely than home owners to prefer no yard (Renters: 6% vs. Owners: 1%) and a small private courtyard (Renters: 20% vs. Owners: 9%).

Public Engagement: Similar preferences were seen among the public engagement sample. The most preferred private outdoor space is a medium sized yard, which separates the home from the neighbor (33%). One in three (36%) would prefer a smaller yard (small private courtyard: 14%; small private yard: 22%) while three in ten (30%) would prefer a larger yard (large private yard: 17%; acreage: 13%). Just 2% do not prefer to have a private yard.

3.5 | Importance of Utility Features in Home

Finally, respondents were asked to rate the importance of having several features in their homes.



Overall, a natural gas furnace (67% very/somewhat important) and a natural gas cook top (58%) are rated as the most important features. These are followed by electric alternatives. Less than a majority rate electric heat pump (47%) and electric heating (43%) as important. A natural gas fireplace (35%) was the least important feature tested.

Demographic Differences: Importance of home features was fairly consistent across demographic subgroups. However, some differences do exist.

Natural gas furnace: Respondents age 35 and older (69-73%) are more likely than those younger (55%) to find a natural gas furnace important. Those from households making \$150K or more (89%) are more likely than those from households with incomes of less than \$75K (53-64%) to find this feature important.

Natural gas cooktop: Respondents from households making \$150K or more (83%) are more likely than lower income households (51-68%) to find a natural gas cooktop or stove to be an important feature.

Electric heat pump: Importance is fairly consistent across demographic subgroups. No significant differences exist.

Electric heating: Respondents age 18-34 (58%) are more likely than those who are older (31-46%) to find electric heating important. Households with incomes of less than \$25K (61%) are also more likely than those from households making \$50K or more the find this important.

Natural gas fireplace: Respondents from households making \$75K or more (44-54%) are more likely than households with incomes of less than \$50K (15-30%) to find this to be an important feature. Owners (42%) were also more likely than renters (26%) to find a natural gas fireplace important.

DRAFT

APPENDIX A
Metro Residential Stated Preference Study
February/March 2014; N=800+; respondents ages 18+ in the Metro Region
DHM Research

INTRODUCTION

Thank you for taking time to participate in this survey.

We'd like to know about your housing and neighborhood preferences. It will help our regional government, developers and community partners in the region with ongoing planning for the Portland Metropolitan area. Your opinions will help shape these decisions.

For better visuals, this survey is best if completed on a computer versus a smartphone.

This survey should take no more than 10 minutes. Please know that your responses are completely confidential.

The following questions help ensure we have a representative sample. No personal information entered is used for anything other than this survey. The results are analyzed at the aggregate level only.

DEMOGRAPHIC INFORMATION NEEDED FOR STATED PREFERENCE LOGIC

These first few questions will help us to ask you the right mix of housing and neighborhood preferences.

1. How would you describe your current residence?

Response Category	Panel N=813	Public Engagement N=5,783
Single family detached home	65%	68%
Single family attached home	8%	7%
Condo or apartment	28%	25%

2. Do you own or rent your home?

Response Category	Panel N=813	Public Engagement N=5,783
Own	60%	59%
Rent	40%	41%

3A. (If own in Q2) What is the current square footage of your home? Do not include garages and/or unfinished spaces. Your best estimate is fine.

Response Category	Panel N=588	Public Engagement N=4,340
Less than 999 sq ft	6%	8%
1,000-1,499 sq ft	28%	24%
1,500-1,999 sq ft	31%	26%
2,000-2,499 sq ft	16%	19%
2,500-2,999 sq ft	11%	11%
3,000-3,499 sq ft	5%	6%
3,500 sq ft or more	3%	5%

3B. (If rent in Q2) What is the current square footage of your apartment or condo? Do not include garages and/or unfinished spaces. Your best estimate is fine.

Response Category	Panel N=225	Public Engagement N=1,444
Less than 600 sq ft	20%	11%
600-899 sq ft	45%	41%
900-1,249 sq ft	26%	37%
1,250-1,749 sq ft	7%	8%
1,750 sq ft or more	2%	2%

4A. (If own in Q2) Which category best represents the **current** sales value of your home and property? Your best estimate is fine.

Response Category	Panel N=485	Public Engagement N=3,421
Less than \$200,000	17%	9%
\$200,000-\$249,999	21%	14%
\$250,000-\$299,999	21%	16%
\$300,000-\$349,999	15%	16%
\$350,000-\$399,999	7%	12%
\$400,000-\$449,999	10%	15%
\$500,000 or more	10%	18%

4B. (If rent in Q2) Which category best represents your total monthly rent? Your best estimate is fine.

Response Category	Panel N=328	Public Engagement N=2,362
Less than \$500/month	10%	5%
\$500-\$649	13%	9%
\$650-\$799	22%	14%
\$800-\$999	18%	23%
\$1,000-\$1,499	27%	33%
\$1,500 or more	10%	15%

5. Including yourself, how many people currently live in your household? (RECORD NUMBER)

Response Category	Panel N=813	Public Engagement N=5,783
1	22%	19%
2	42%	42%
3	17%	17%
4	12%	15%
5 or more	7%	7%

6. (IF Q5>1) And how many are younger than 18? (RECORD NUMBER)

Response Category	Panel N=635	Public Engagement N=4,675
0	69%	64%
1	15%	15%
2	12%	16%
3	3%	3%
4 or more	2%	2%

7. For your MOST RECENT trip from home to work, school or main destination, what was your primary form of transportation?

Response Category	Panel N=813	Public Engagement N=5,783
Car	83%	69%
Carpool	1%	1%
Walk	5%	6%
Bike	1%	9%
Transit	8%	14%
Other	1%	1%

8. For your MOST RECENT trip from home to work, school or main destination, how many minutes did it take you to make a one-way trip?

Response Category	Panel N=813	Public Engagement N=5,783
Less than 10 minutes	26%	18%
10-19 minutes	36%	33%
20-29 minutes	22%	25%
30-44 minutes	11%	15%
49-59 minutes	4%	6%
60 minutes or more	1%	3%

Housing type preferred

Response Category	Panel N=813	Public Engagement N=5,783
Single family detached home	80%	81%
Single family attached home	7%	9%
Condo or apartment	13%	11%

Current Neighborhood Type

Response Category	Panel N=813	Public Engagement N=5,783
Urban or Central Downtown	11%	7%
Urban Neighborhood or Town Center	25%	39%
Outer Portland or Suburban	56%	47%
Rural	8%	8%

Preferred Neighborhood Type

Response Category	Panel N=813	Public Engagement N=5,783
Urban or Central Downtown	13%	10%
Urban Neighborhood or Town Center	27%	48%
Outer Portland or Suburban	34%	22%
Rural	26%	19%

STATED PREFERENCE EXERCISE

ATTITUDINAL QUESTIONS

We have just a few more questions that will help us evaluate your housing and neighborhood preferences. The survey is almost complete. Thank you for your continued participation.

Which of these has the most influence on your housing decision? Please rank the top 3, where 1=most influential 2=second most influential and 3=third most influential (randomize)

Response Category—Panel, N=795	1 st Choice	2 nd Choice	3 rd Choice
17. Safety of neighborhoods	19%	19%	21%
18. Quality of the public schools	3%	5%	3%
19. Parks, trails, green spaces, and recreational facilities in the area	2%	4%	11%
20. Shops, restaurants, services, social, religious, and civic facilities in the area	4%	9%	14%
21. MAX or bus stops in the area	3%	6%	5%
22. Being close to work	6%	13%	13%
23. Characteristics of the house itself	19%	20%	19%
24. Housing price	44%	24%	14%

Response Category—Public Engagement N=5,550	1 st Choice	2 nd Choice	3 rd Choice
25. Safety of neighborhoods	14%	13%	14%
26. Quality of the public schools	6%	6%	5%
27. Parks, trails, green spaces, and recreational facilities in the area	4%	8%	13%
28. Shops, restaurants, services, social, religious, and civic facilities in the area	12%	12%	16%
29. MAX or bus stops in the area	4%	7%	8%
30. Being close to work	9%	14%	13%
31. Characteristics of the house itself	20%	18%	16%
32. Housing price	31%	21%	15%

What would you prefer most in your ideal home?

33. Level of activity in neighborhood (walking, shopping, entertainment, etc.)

Response Category	Panel N=794	Public Engagement N=5,546
1—Very little foot traffic. No activities within a 15 minute walk	19%	14%
2	8%	6%
3—Moderate foot and vehicle traffic during the day. Some activities within a 15 minute walk	55%	50%
4	9%	15%
5—Heavy foot traffic. Many activities available day and night	9%	16%
Bottom 2 (1+2)	27%	19%
Top 2 (4+5)	18%	31%
Mean	2.8	3.1

34. Private outdoor space, property

Response Category	Panel N=794	Public Engagement N=5,569
No private outdoor space, possible shared space	3%	2%
Small private courtyard, patio, or balcony	14%	14%
Small private yard	22%	22%
Medium sized private yard separating home from neighbor	32%	33%
Large private yard	16%	17%
Acreage	13%	13%

NWN

Home appliances can be powered by different fuels, mostly electricity and natural gas in our region. We are going to ask your preferences for the following options, your answers will greatly help us plan for future utility needs in the region.

How important are the following features to you to have in your home? (Randomize)
 very important, somewhat important, not too important, not at all important*

Response Category, Panel N=794	Very	Smwt	Not too	Not at all
35. Natural gas fireplace	12%	23%	35%	30%
36. Natural gas cook top/stove	29%	29%	25%	18%
37. Natural gas furnace	36%	31%	18%	15%
38. Electric heating	16%	27%	30%	27%
39. Electric heat pump	16%	31%	34%	19%

Response Category, Public Engagement N=5,537	Very	Smwt	Not too	Not at all
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40. Natural gas fireplace	10%	22%	30%	38%
41. Natural gas cook top/stove	34%	29%	21%	15%
42. Natural gas furnace	38%	32%	17%	13%
43. Electric heating	7%	19%	31%	43%
44. Electric heat pump	10%	29%	34%	27%

DEMOGRAPHICS

45. In which year were you born? *

Response Category	Panel N=813	Public Engagement N=5,783
18-34	26%	19%
35-54	36%	42%
55+	38%	39%

46. How many years have you lived in the Portland Metropolitan region?

Response Category	Panel N=794	Public Engagement N=5,545
0-1 years	5%	2%
2-5 years	13%	11%
5-9 years	14%	14%
10-19 years	19%	23%
20 years or longer	49%	51%

47. How many years have you lived in your current residence?

Response Category	Panel N=794	Public Engagement N=5,545
0-1 years	18%	17%
2-5 years	29%	30%
5-9 years	15%	18%
10-19 years	22%	20%
20 years or longer	16%	15%

48. Is your ethnicity*

Response Category	Panel N= 794	Public Engagement N= 5,545
White/Caucasian	89%	91%
Black/African American	2%	1%
Hispanic/Latino	2%	3%
Asian/Pacific Islander	7%	2%
Native American	2%	3%
Other	0%	1%
Refused	1%	3%

49. What is your gender identity? (Select all that apply). *

Response Category	Panel N= 813	Public Engagement N= 5,752
Male	47%	40%
Female	52%	59%
Transgender	1%	0%
Refused	0%	0%

50. What is your annual household income before taxes in 2013?

Response Category	Panel N= 812	Public Engagement N= 5,728
Less than \$24,999	15%	11%
\$25,000-\$49,999	27%	20%
\$50,000-\$74,999	21%	22%
\$75,000-\$99,999	15%	16%
\$100,000-\$149,999	15%	19%
\$150,000 or more	6%	12%

51. Zip code *See Crosstabs*

52. In what county do you live?

Response Category	Panel N= 813	Public Engagement N= 5,783
Multnomah	47%	47%
Washington	30%	31%
Clark	11%	1%
Clackamas	12%	22%