

# Residential Infill Survey Results

Final Report

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DECEMBER 2019

## Purpose of the Survey

In August 2019, the City of Raleigh Planning Department launched a study to gather information and make recommendations regarding the construction of new residential houses within existing neighborhoods, a process known as “infill development.” The purpose of this study is to offer guidance and recommendations for possible changes to Raleigh’s Unified Development Ordinance (UDO). An important part of this study is to learn community perspectives on residential infill; the Residential Infill Development survey served as an initial step in the engagement process to achieve that goal.

## Survey Administration

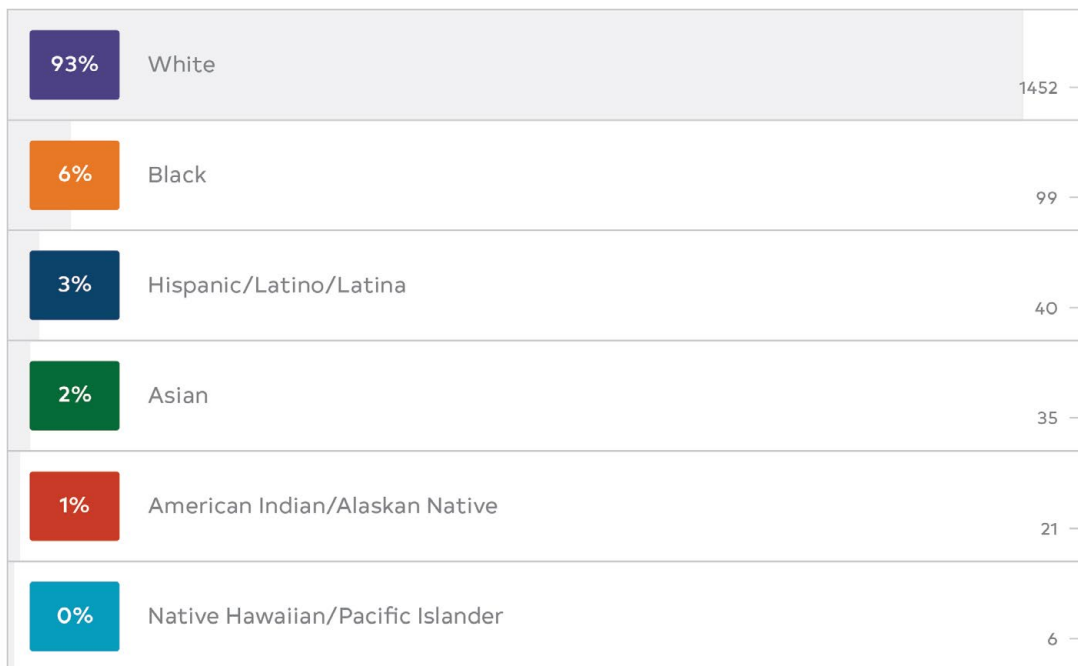
The survey went live on publicinput.com on August 14, 2019 and remained open until 5:00 p.m. on September 30, 2019. The survey was advertised through several avenues, including GovDelivery email blasts, social media posts, and flyer distribution. Attendees at the Residential Infill Open House meeting held on September 17, 2019, were also encouraged to complete the survey, as were viewers who saw coverage of the study on WRAL.

## Survey Participants<sup>1</sup>

There were 3,147 people who answered at least one question on the survey, resulting in 62,891 total responses from 26 total questions and 10,170 individual comments. Based on an estimate of Raleigh’s population at 465,000, this sample is statistically significant at a 95% confidence level and a margin of error at 2%.\*

Given that the demographic questions were optional, some respondents did not provide their personal information.<sup>2</sup> Based on self-reported demographic information, the breakdowns by racial identity, age, and income are as follows:

What is your racial identity? (Select all that apply.)

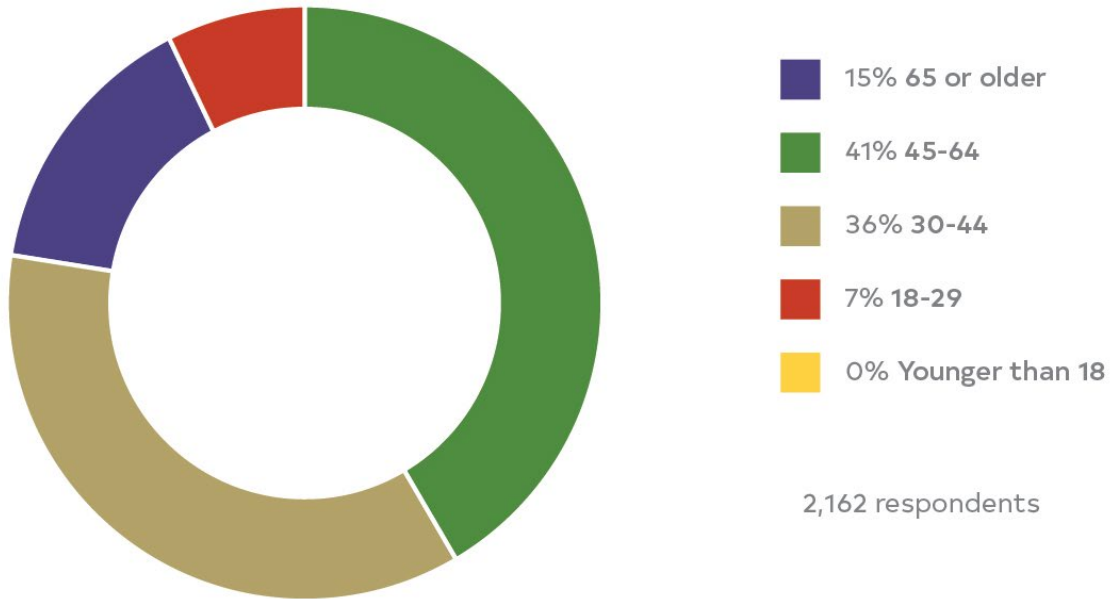


<sup>1</sup> These numbers reflect the survey at the moment it closed. The current survey site numbers are slightly higher because some responses were entered after it closed. Some of the comments submitted late may be reflected here due to the timing of the analysis, but they are not included in the official counts.

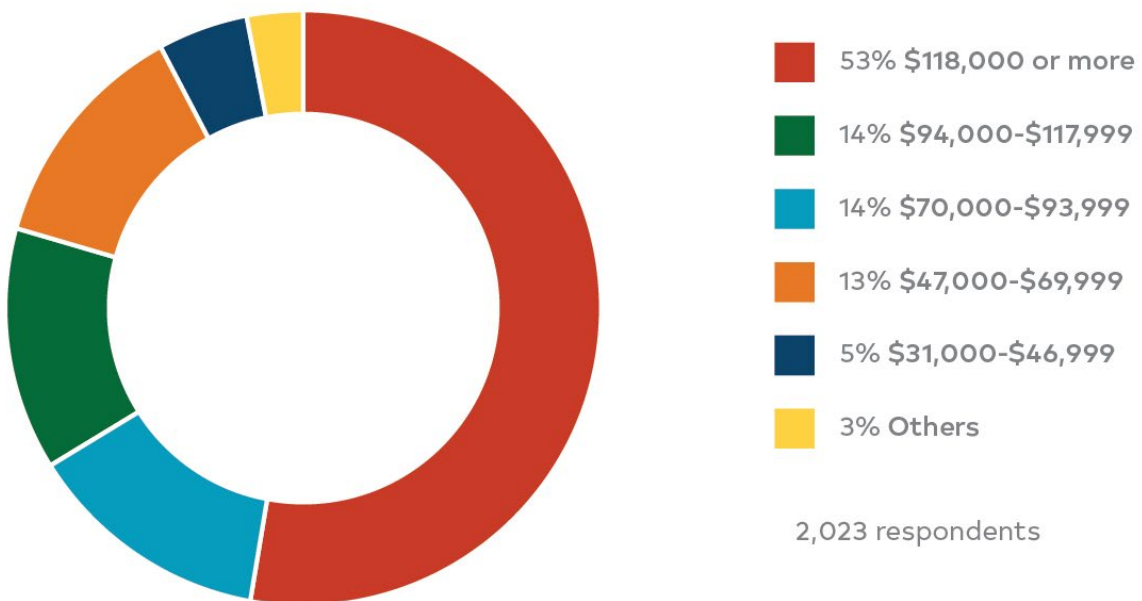
<sup>2</sup> The margin of error reflects the range, measured as a percentage, that our population’s responses may deviate from the sample. The confidence level is the probability that our sample accurately reflects the attitudes of the population.

<sup>3</sup> For an explanation as to why we ask demographic questions in this survey and other City initiatives, please see the Appendix.

How old are you?



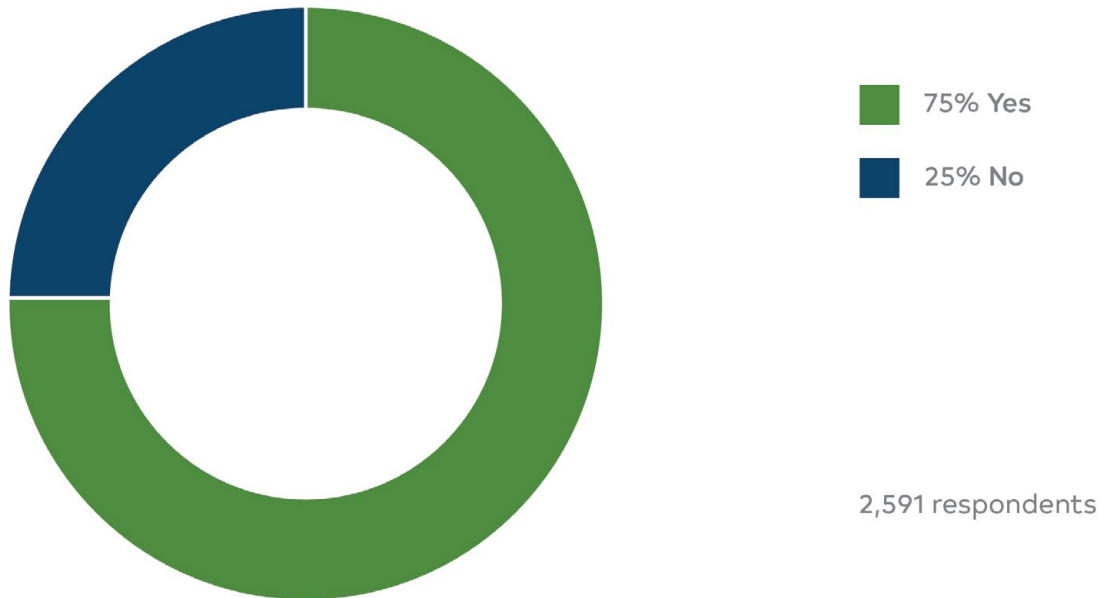
What is your approximate annual household income?



## Survey Results

This report contains the results of the Residential Infill Development Survey. It does not include the assessment made by Raleigh’s City Planning staff concerning infill development. The final report is available for download on the Residential Infill Development Study project page.

Do you have any concerns about residential infill development in Raleigh?



In general, most respondents reported being concerned about residential infill development in Raleigh (75% Yes to 25% No). A review of the qualitative data reveals that these concerns fall into three general categories.

For some respondents, the very existence of infill development is problematic because of how it is transforming communities.

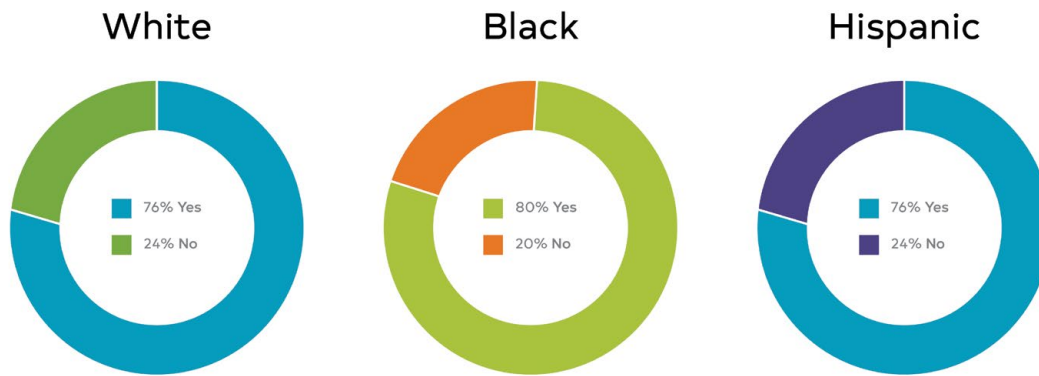
- “Building huge houses on postage stamp size lots is detrimental to the established neighbors bc of runoff, clearing of mature trees, blocking of the sun, not fitting in with the neighborhood in general...these houses look ridiculous and reduce the charm of our city and its areas.” (ellipses in original comment)
- “The rate of infill is almost unbelievable. Saying nothing about the additional strain on roads, sewage and power, it is forever changing the character of Raleigh’s neighborhoods.”
- “The traditional downtown neighborhoods are being homogenized and are losing their affordability and character. I live in a historic house—almost 100 years old. We bought the house and moved into a neighborhood of artists, teachers, recovering addicts, widows, young families, gay couples—now becoming a neighborhood of wealthy families. My friends who are renters are worried they will have to move—some already have been priced out of the neighborhoods.”

Others suggested that it isn't infill itself that concerns them; rather, it is the type of infill development taking place (or not taking place) in Raleigh that needs to be addressed.

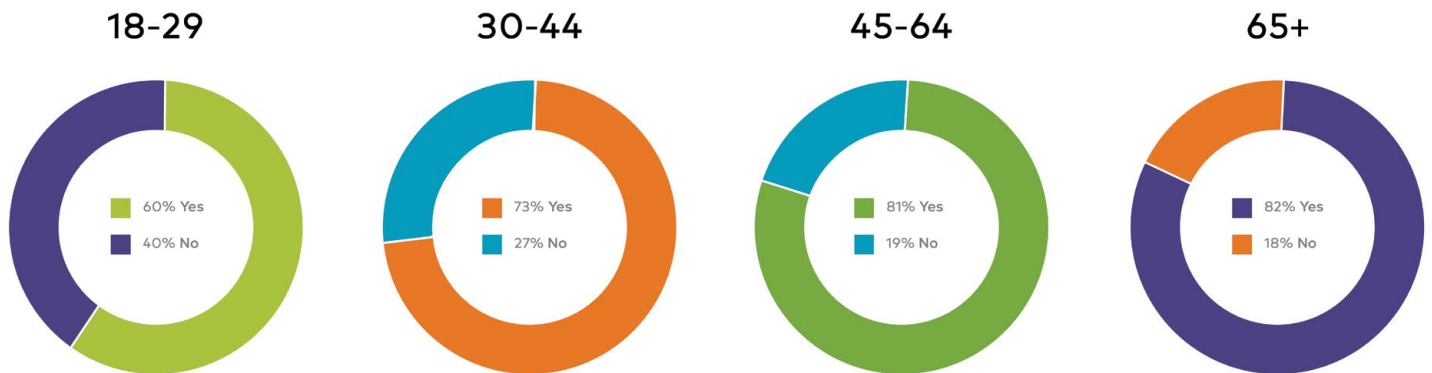
- "I am a supporter of greater density around certain hubs such as downtown, North Hills, etc., in the form of apartments and condos so that Raleigh can grow MODERATELY—and for better mass transit. These buildings can contain a certain percentage of lower priced residences. But tearing down a moderately priced home to build 2+ uber-expensive ones contributes nothing constructive to Raleigh's community."
- "Strongly agree [that neighborhoods should be allowed to significantly change with changing preferences and market conditions] if that means adding more dense/small/modernist/affordable housing. Strongly disagree if that means tearing down existing houses and building bigger/blander housing or McMansions."
- "Infill promotes affordable housing and the sustainable use of land and resources. The more we spread out, the more streets, water lines, sewer lines, etc. we need and the more impact the environment. Allowing "granny flats" and gentle density (duplexes, townhomes, etc.) in and around single-family neighborhoods can help us grow responsibly. We are going to grow, it's just a matter of how we grow."

Yet others expressed the need for more infill development, and they are concerned that overregulation will hinder it.

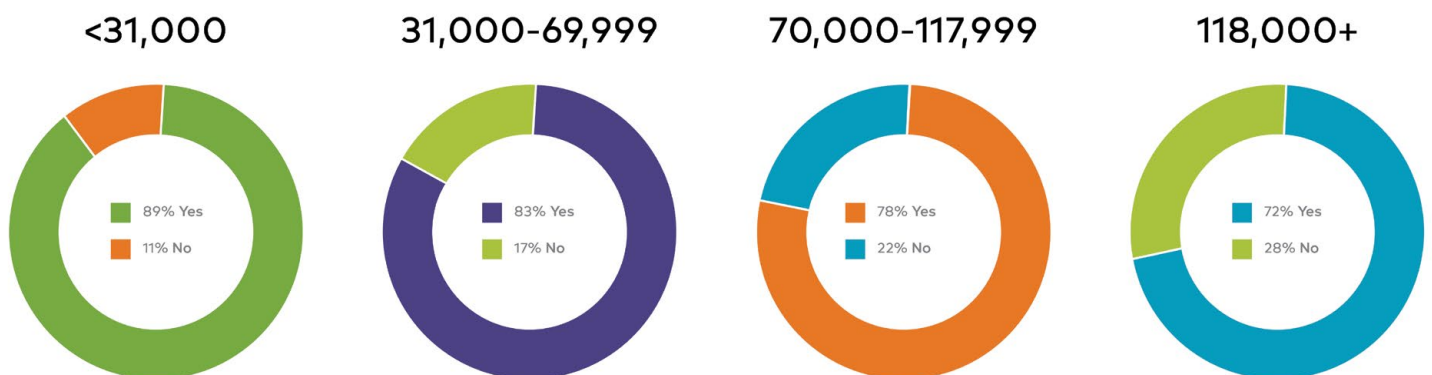
- "The regulations represent a gross overstep and limitation on development. They seem geared toward largely restricting development not balancing growth and neighborhood balance and structure."
- "There's not enough of it [infill development]. We need quads, triplexes, and duplexes. We need more incentive to create more housing in existing spaces. Reduce setback regulations on townhomes. Upzone neighborhoods. Worry less about parking, especially near transit."
- "I have concerns about how we don't have enough infill, that there are too many regulations [and] poor zoning rules."



Black respondents were slightly more likely than others to express concerns about infill development. Seventy-six percent (76%) of white and Hispanic respondents indicated that they are concerned in some way about infill development; this is true for 80% of black respondents.



Regardless of age, at least 60% of respondents reported being concerned with infill development. However, this concern was more evident among those 45 and older and was less so among those under 30. Eighty-one percent (81%) of respondents aged 45-64 years and 82% of those 65 or older said they had infill concerns, while this was true for only 60% of those 18-29 and 73% of those 30-44.



Categorizing respondents by income also underscores disparity in self-reported concern about infill development. Nearly 90% of respondents with household incomes less than \$31,000 per year said that they have infill-based concerns. The percentage of respondents concerned with infill drops as household income increases, with those reporting \$118,000 or more in annual household income being the least concerned income group (72%).

What potential aspects of residential infill development are of concern to you? Please rank the following from the most pressing concern to the least. If it is not a concern to you, you don't have to rank it.

59%	Neighborhoods are becoming less affordable	Rank: 3.11	1069
57%	Green spaces and tree canopy are being lost	Rank: 3.11	1046
48%	Existing viable homes are being demolished	Rank: 3.45	883
50%	Stormwater runoff impacts	Rank: 4.05	910
40%	Houses are too big	Rank: 4.37	737
39%	Houses are too close together	Rank: 4.46	720
17%	Other (please specify in the comments)	Rank: 4.70	318
33%	New houses are built on lots that are narrower than nearby lots	Rank: 5.10	608
30%	New houses with modern designs do not have the same look or feel of nearby houses	Rank: 5.14	557
33%	Additional homes are reducing available on-street parking and increasing traffic	Rank: 5.44	599
30%	Houses are too tall	Rank: 5.65	545
30%	Personal impacts (noise, light, privacy, etc.)	Rank: 6.11	553
29%	Construction disruption and impacts	Rank: 6.48	525

NOTE: The percentages noted here are based on respondents who listed any concerns at all. They are not based on the total number of respondents. For example, 58% of respondents who answered this question ranked the affordability of housing as a concern as part of their list. This equates to 1069 respondents.

For ranking questions, there are three data points of interest: the number of respondents who selected the option, the percentage of respondents who selected the option, and the overall rank of the option. The closer the rank is to 1.00 for an option, the higher the option ranks on the list.

Overall, the highest-ranking concerns among survey respondents were:

- Neighborhoods becoming less affordable (n=1069; 59%; r=3.11)
- Green spaces and tree canopy are being lost (n=1046; 57%; r=3.11)
- Existing viable homes being demolished (n=883; 48%; r=3.45)
- Stormwater runoff impacts (n=910; 50%; r=4.05)

Concerns that consistently ranked the lowest among respondents were:

- Construction disruption and impacts (n=525; 29%; r=6.48)
- Personal impacts, like noise, light, and privacy (n=553; 30%; r=6.11)
- Houses are too tall (n=545; 30%; r=5.65)
- Additional homes are reducing on-street parking and increasing traffic (n=599; 33%; r=5.44)

Racial analyses highlight some consistencies in concerns across racial groups. The loss of tree canopy and green spaces, the diminishing affordability of homes, and the demolition of viable houses were high-ranking concerns regardless of racial identity. However, the degree to which these were concerns, varied. Black respondents not only ranked "neighborhoods are becoming less affordable" as a concern more often than other respondents, they were also more likely to rank it as their primary concern. Seventy-two percent (72%) of black respondents who listed their concerns said that they were concerned with housing affordability, compared to 61% of whites and 60% of Hispanics. White and Hispanic respondents, though expressing concern about housing affordability, reported more concern for greenery loss and the demolition of viable homes, respectively. Moreover, there was less consensus among white and Hispanic respondents about which aspect of infill was of primary concern.

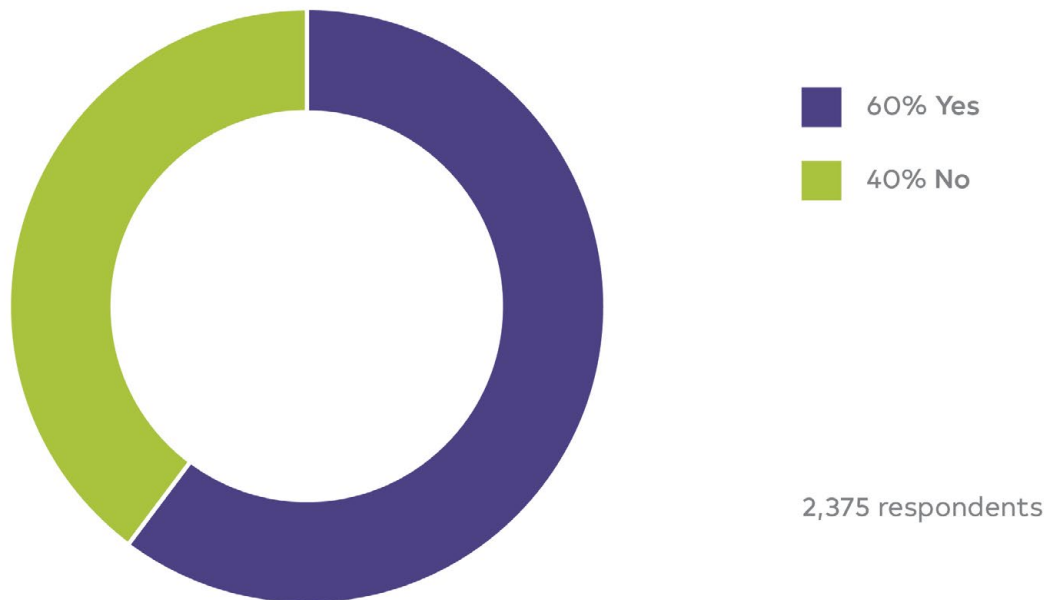
Common infill concerns were also disparate across age groups. Younger respondents (specifically, those aged under 45) were more likely to highlight the relative affordability of housing as problematic, while older respondents (those 45 and older) were more likely to express concern about the loss of green space. There was more consensus among those 18-29 that housing affordability is a primary concern than there was among other groups (69% said it was a concern). In other words, respondents older than 29 were more likely to show disagreement among themselves as to what is most concerning about infill development.

Among those making less than \$31,000, the demolition of viable homes was the highest-ranking concern, but the loss of housing affordability was listed as a concern more often (78% listed it as a concern compared to 68% who listed housing demolition). This finding suggests that, though the decline of housing affordability is a more wide-spread concern among this group, the demolition of existing homes is more pressing.



Those reporting annual household incomes between \$31,000 and \$117,999 listed housing affordability as a concern more consistently than any other concerns, but—unlike those with higher incomes—they were more likely to rank this concern as highest on the list. For those making \$118,000 or more a year, concern shifted to the loss of green spaces and tree canopy. This group listed it more consistently both as a concern in general and as their primary concern.

Is it important for new houses to fit in with nearby houses?

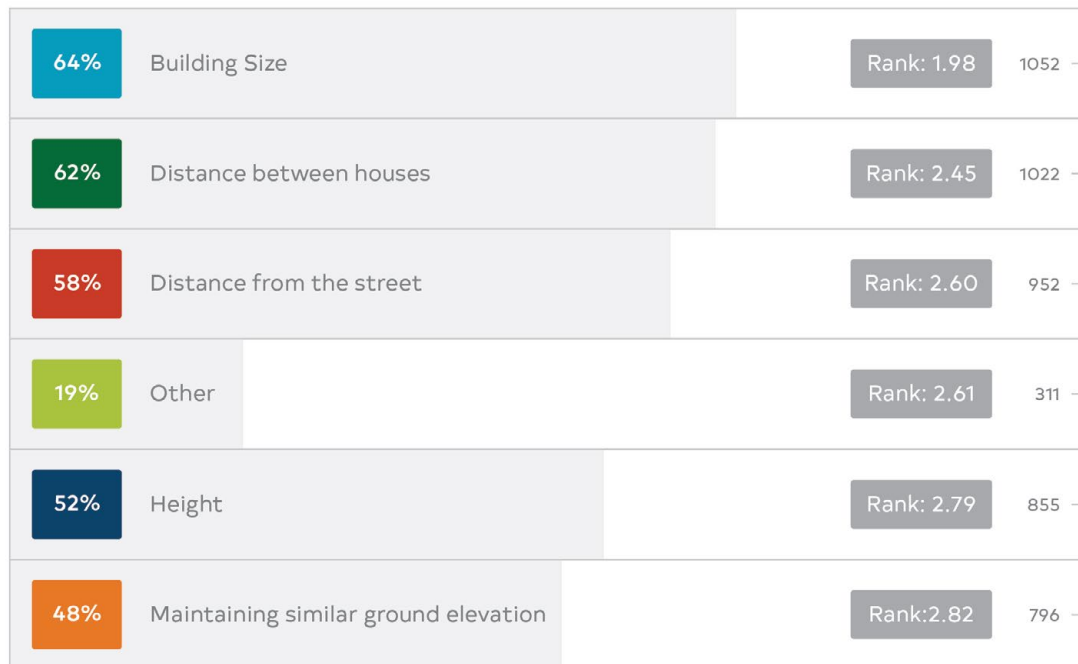


In general, a majority of respondents believed that it is important for houses to fit in with the houses around them (60%). This trend holds across all racial groups with no significant difference among them.

Unlike the racial analyses, the age analyses for this question reveal that it is more important to older respondents that houses fit in with those around them. Specifically, 72% of respondents aged 65 and older said that fitting in is important, while this was true for only 63% of those aged 45-64 and 54% of those aged 18-44.

While we see a positive correlation between age and the belief that houses should fit in with those nearby, the opposite is true for income: as income increases, the belief that houses need to fit in wanes. Those with the highest annual household incomes were the least likely to place importance on houses fitting in (54%) while the respondents most likely to stress the importance make less than \$31,000 per year (79%).

Which of the following characteristics make a new house fit in with nearby houses?  
Please rank the following from most important for fit to least important.  
If a characteristic isn't important, you don't have to rank it.



NOTE: The percentages noted here are based on respondents who listed any concerns at all. They are not based on the total number of respondents.

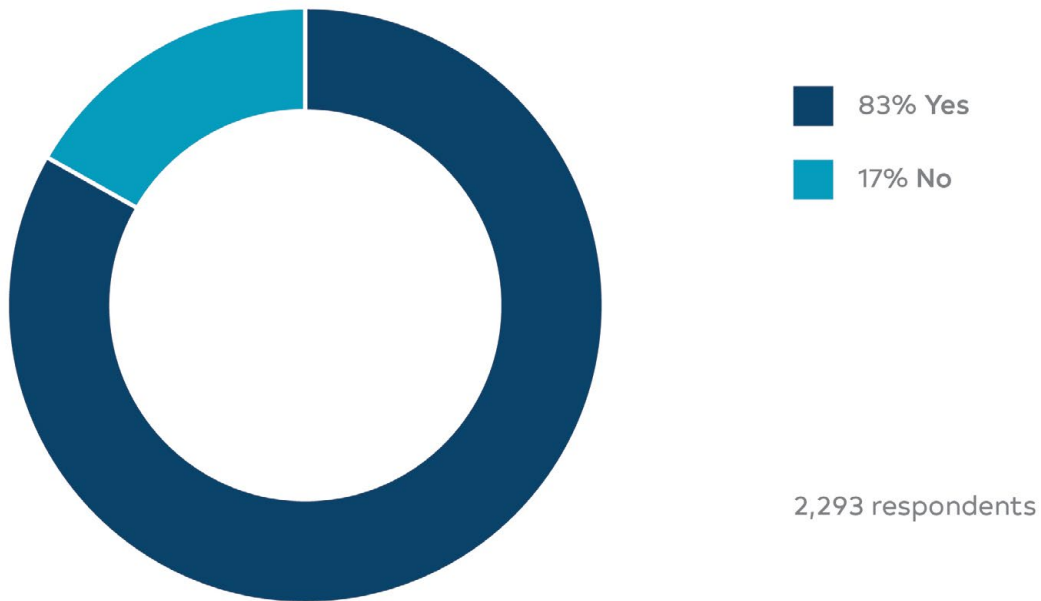
When asked to consider the factors that influence whether a house fits in with those nearby, respondents consistently said building size was important (64%; n=1052) and ranked it higher than other factors, on average (r=1.98.) Of least concern for fit were building height (52%; n=855; r=2.79) and maintaining similar ground elevation (48%; n=796; r=2.82), as both were mentioned less often and ranked lower than other factors.

Building size was among the most important characteristics for fit for respondents of all racial identities. Racial differences are clearer when considering the percentage of respondents who listed a characteristic as important for fit at all: White respondents were far more likely to say building height was important for fitting in (52%) than other groups (38-39%). Black and Hispanic respondents were more likely to mention the distance between houses as critical for fit (71% and 62%, respectively) compared to their white counterparts (59%).

The highest-ranked fit characteristic for all age groups was building size, though younger respondents were less likely to rank it as important (55%) than older respondents (60%+).

Building size was important for fit among all income groups as well, though those making \$31,000 or less in annual household income ranked the distance between houses nearly as important. Among the least important for all groups were maintaining similar ground elevation and building height. While over half of respondents listed height as a characteristic important for fit, it was not ranked as highly as the other factors for any group.

Are there any benefits to residential infill development?



While the majority of survey respondents expressed some kind of concern with infill (75%), a higher percentage acknowledged potential benefits associated with it (83%).

Compared to white and Hispanic respondents, black survey-takers were less likely to say that infill development is beneficial (72% compared to 85% for whites and 87% for Hispanics).

Those younger than 65 were more likely to say there are benefits (84-86%) compared to those older than 65 (79%).

Respondents with annual household incomes \$70,000 and higher were more likely (83-88%) than other respondents (63-78%) to say that there are benefits to infill development. Those with annual household incomes below \$31,000 were the least likely to acknowledge benefits associated with infill (63%).

What potential benefits of residential infill development are of most interest to you?  
 Please rank the following from the most interesting to the least.  
 If something doesn't interest you, you don't have to rank it.



NOTE: The percentages noted here are based on respondents who listed any concerns at all. They are not based on the total number of respondents.

The two most commonly cited — and highest-ranking — benefits of infill were the minimization of sprawl (78%; n=1426; r=1.49) and the potential that new homes bring new families and vibrancy to existing neighborhoods (59%; n=1071; r=1.97.)

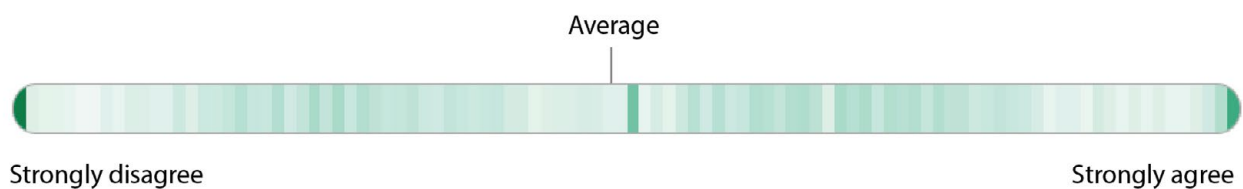
Although there was some disagreement across racial groups about the extent to which infill offers benefits, there was consensus as to what benefits there are. All groups ranked the minimization of sprawl as a benefit more often than the other options; 81% of white respondents, 70% of black respondents, and 75% of Hispanic respondents acknowledged this potential benefit. Further, all racial groups ranked this as the primary benefit associated with infill development.

Regardless of age, respondents were more likely to say that of all potential benefits, minimizing sprawl is the benefit of infill that interests them most (72%-80%), though this was most evident among those younger than 65.

For most income groups, those who listed benefits of infill ranked the minimization of sprawl as the most interesting benefit of all. However, this is not the case for those living in households with annual incomes less than \$31,000, who said that the benefit of most interest to them is the vibrancy brought by new homes and new families in existing neighborhoods. This is not to say that lower income respondents did not recognize the minimization of sprawl as a benefit. In fact, they — just like other income groups — listed it as a benefit more often than other options; they were just less likely to rank it as the most important benefit.

For the next set of survey questions, respondents were asked to indicate the degree to which they agree or disagree with a set of statements along a continuum between strongly disagree and strongly agree. There are two data points for each question: the average score reported out of 100 and the color-coded continuum chart. The closer the average score is to 100, the more strongly respondents agreed; the closer the score is to 50, the more neutral the responses; and the closer to 0, the more strongly respondents disagreed. Each tint along the continuum indicates the number of responses that fell in that spot between strongly disagree and strongly agree: the brighter the green, the more responses on that point along the continuum.

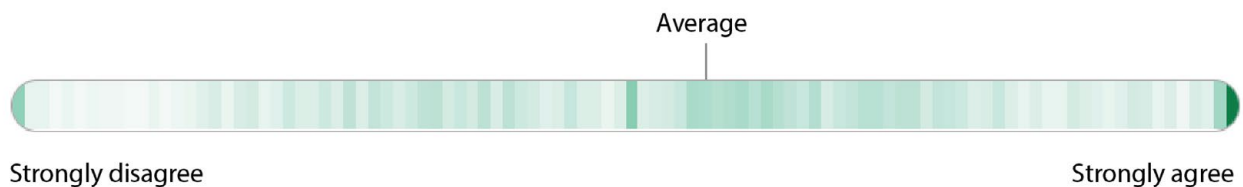
Neighborhoods should maintain a consistent look and feel over time.



The average slider score for this question was 49/100, which indicates that the averaging of responses results in near neutrality. The bright green spots at the extremes of the continuum show that respondents felt strongly in both their agreement and disagreement that neighborhoods should have consistency in look and feel over time, pulling the average to neutral.

Neighborhoods maintaining a consistent look and feel over time was more important for certain respondents, particularly those identifying as black, those over 45 years old, and those with lower incomes.

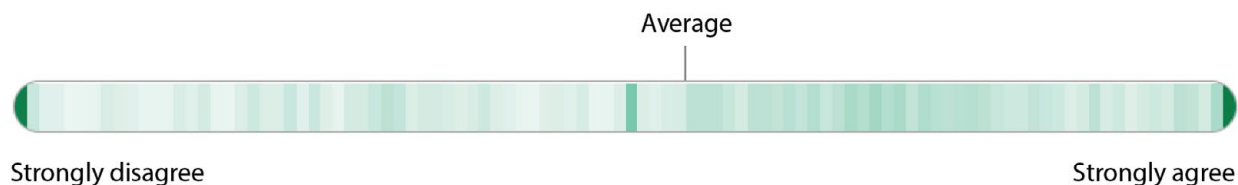
Neighborhoods should be allowed to significantly change with changing preferences and market conditions.



The average slider score for this question suggests that, on average, respondents slightly agreed that neighborhoods should be able to change significantly with changing preferences and market conditions. The brightest green spot at 'strongly agree' indicates there were more responses on that end than other places along the continuum. Also of note are the illuminated spots around 'strongly disagree' and neutral.

White and Hispanic respondents, younger respondents, and those making \$70,000 a year or more, were all more likely to agree with this sentiment than other survey-takers.

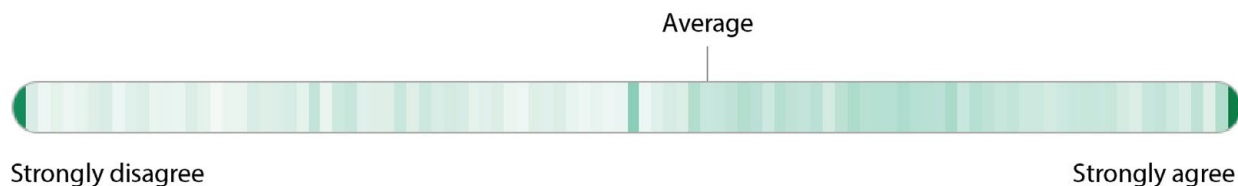
New housing should be similar in *overall size* to the existing houses in the neighborhood.



The average slider score for this question was 55/100, leaning toward slightly agree. Bright green spots on both sides of the continuum suggest this score is a balance between those who strongly agreed and those who strongly disagreed that new housing should be consistent in overall size with houses around them, with slightly more respondents on the side of agree.

On average, white and black respondents were more likely to slightly agree that houses should be similar in overall size to those nearby, whereas Hispanic respondents were more likely to slightly disagree. The likelihood of agreeing with this sentiment increases steadily with age, with those 65 or older being the most likely to agree. Conversely, the likelihood of agreeing decreases as income goes up; this sentiment is especially strong among those making less than \$31,000 in annual household income.

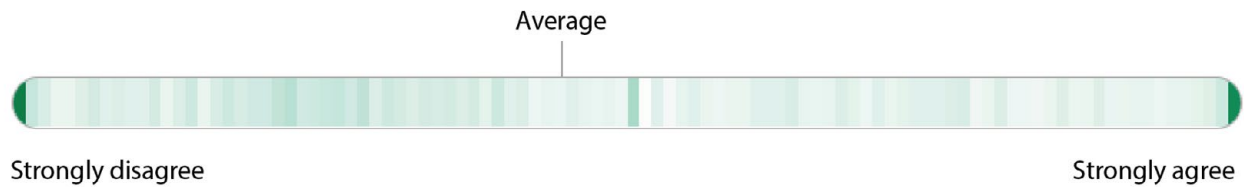
New housing should be similar in *height size* to the existing house in the neighborhood.



The score on this question averaged 57/100, suggesting that height is — in general — more important to respondents than size when considering the strength of respondents’ opinions. As is the case with many instances above, this score largely reflects the balance of scores at the extremes, though slightly more respondents agreed with this statement than disagreed.

White and black respondents were more likely than their Hispanic counterparts to agree that houses in a neighborhood should be of a similar height. Generally, Hispanic respondents slightly disagreed with this statement. Older respondents agreed far more strongly than younger ones; the youngest respondents (aged 18-29), on average, slightly disagreed with the notion that houses should be similar in height. Support for consistent height was strongest among those making less than \$118,000 in annual household income, with those in the highest income group averaging a neutral score for this sentiment.

New housing should be of any size or height as long as it meets current regulations.

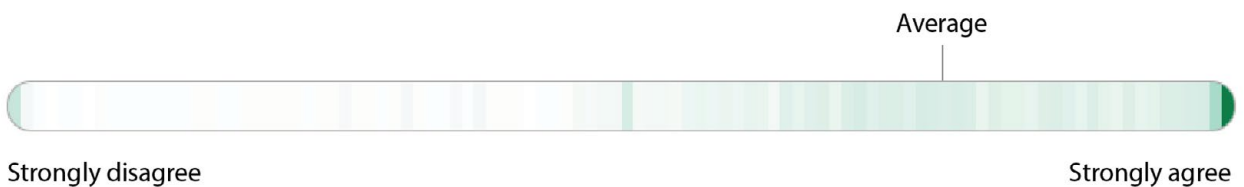


When asked if new housing should be of any size or height as long as it aligned with current regulations, respondents — on average — said “no.” The average score of 45/100 indicates more general disagreement with this notion that houses be of any size or height but, again, scores at both extremes illustrate that there was no consensus.

In line with the overall average, white and black respondents generally disagreed with housing being of any size or height within the bounds of the code. On the other hand, Hispanic respondents agreed with this statement to a small degree.

Younger respondents were far more likely to think new housing should be of any height or size while older respondents strongly disagreed. This was one of the most polarizing topics of the survey with a 26-point difference in the average scores for those aged 18-29 (60/100) and those aged 65 or older (34/100). Except for those making \$118,000 or more per year in household income (who averaged neutral), respondents in other income groups disagreed moderately with this statement.

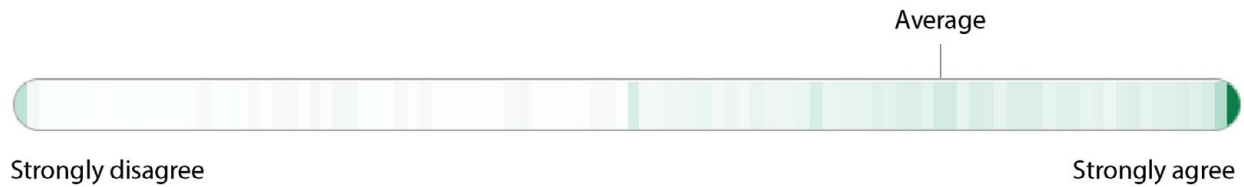
Water runoff is a concern *during* construction so current regulations should be evaluated for effectiveness.



On average, respondents solidly agreed that current regulations should be evaluated to deal with issues of water runoff during construction (76/100). Very few respondents disagreed with this sentiment at all.

This pattern held for all demographic breakdowns. That is, respondents generally agreed with evaluating regulations concerning water runoff during construction regardless of race, age, or income; although agreement was most pronounced among older respondents and those with lower incomes.

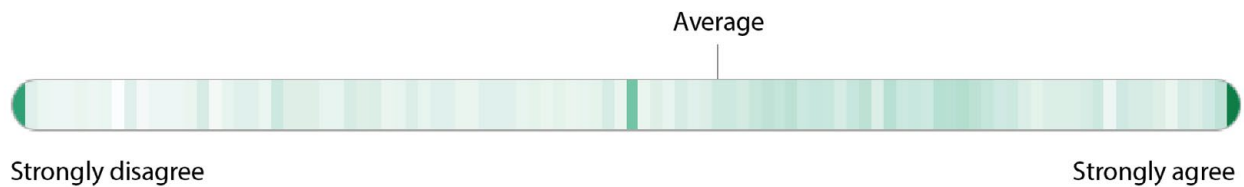
Water runoff is a concern *after* construction so regulations should be evaluated for effectiveness.



Water runoff is a concern for respondents after construction as well. The average score (76/100) is the same as the average for stormwater being a concern during construction and the shading of the continuum chart is essentially replicated, with more responses leaning toward agree and strongly agree.

Generally, water runoff is a concern for respondents after construction, though black respondents and those of higher income were less likely to express concern than others. The most concerned were residents aged 65 or older and those reporting less than \$70,000 in annual household income.

When redeveloping residential lots in existing neighborhoods, only minor changes to the existing ground elevation should be permitted.

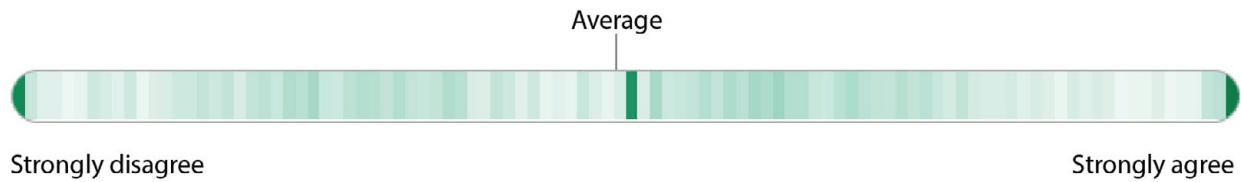


Averaging between the extremes, with slightly more responses for 'strongly agree', results in a slider score of 57/100. This means that, in general, respondents slightly agreed that only minor changes to the existing ground elevation should be allowed.

Respondents from all racial categories were likely to slightly agree with this sentiment and there were no significant differences among them. Younger respondents were more accepting of changes to ground elevation than other age groups; those aged 18-29 were the only group to disagree (albeit slightly) that only minor changes to existing ground elevation should be permitted. On average, higher income respondents were more neutral about elevation changes while lower income respondents were more likely to agree that only slight elevation changes should be allowed.



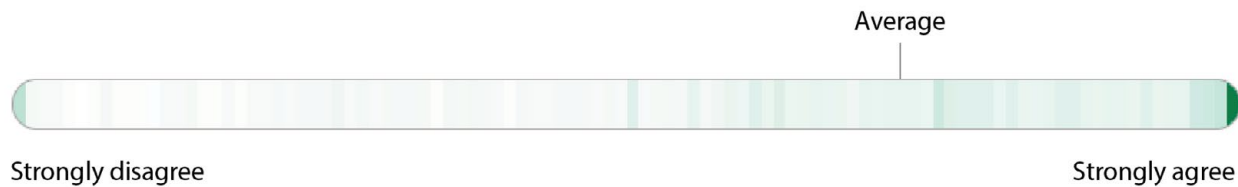
When redeveloping residential lots in existing neighborhoods, foundation or retaining walls should be permitted to change the ground elevation of the building site.



The average score of 49/100 (near neutrality) results from the balancing of responses at the extremes.

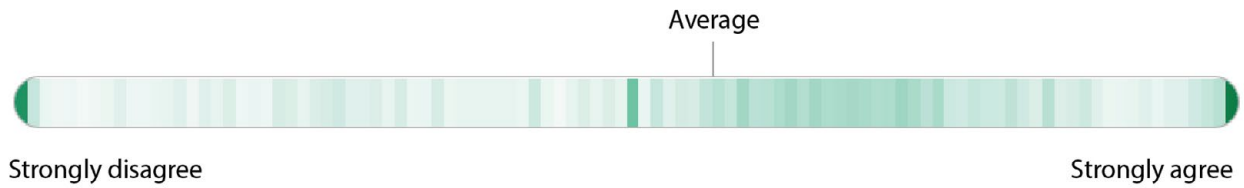
Average scores for all respondents, regardless of race, hovered near neutral as to whether foundation or retaining walls should be permitted. Younger respondents were significantly more likely to accept the use of foundation and retaining walls (61/100) than older respondents, especially those aged 65 or older (38/100). Support for retaining or foundation wall-use declines with income; those with lower incomes were less likely to agree with the sentiment than others.

It is important to preserve the existing trees on residential infill lots.



When it comes to preserving trees, there was more consensus among respondents than we see in any other part of the survey. With a score of 72/100 and the brightest green marker located at one extreme, this sentiment received the most support. Regardless of race, age, or income, respondents generally supported the preservation of trees on infill lots.

Exceptions to current regulations (like building height) should be available in exchange for saving existing trees on an infill lot.



While there was a degree of consensus about tree preservation, the same was not true for using exceptions to current regulations to preserve them, which only leans toward slightly agree (57/100).

Regardless of race, respondents were — on average — neutral about allowing building exceptions for those who preserve existing trees. Younger respondents were significantly more likely to agree to the use of exceptions as a preservation mechanism than other age groups. Those with highest household incomes (\$118,000 or more per year) were significantly more likely to agree to offering building exceptions for tree preservation than other income groups.

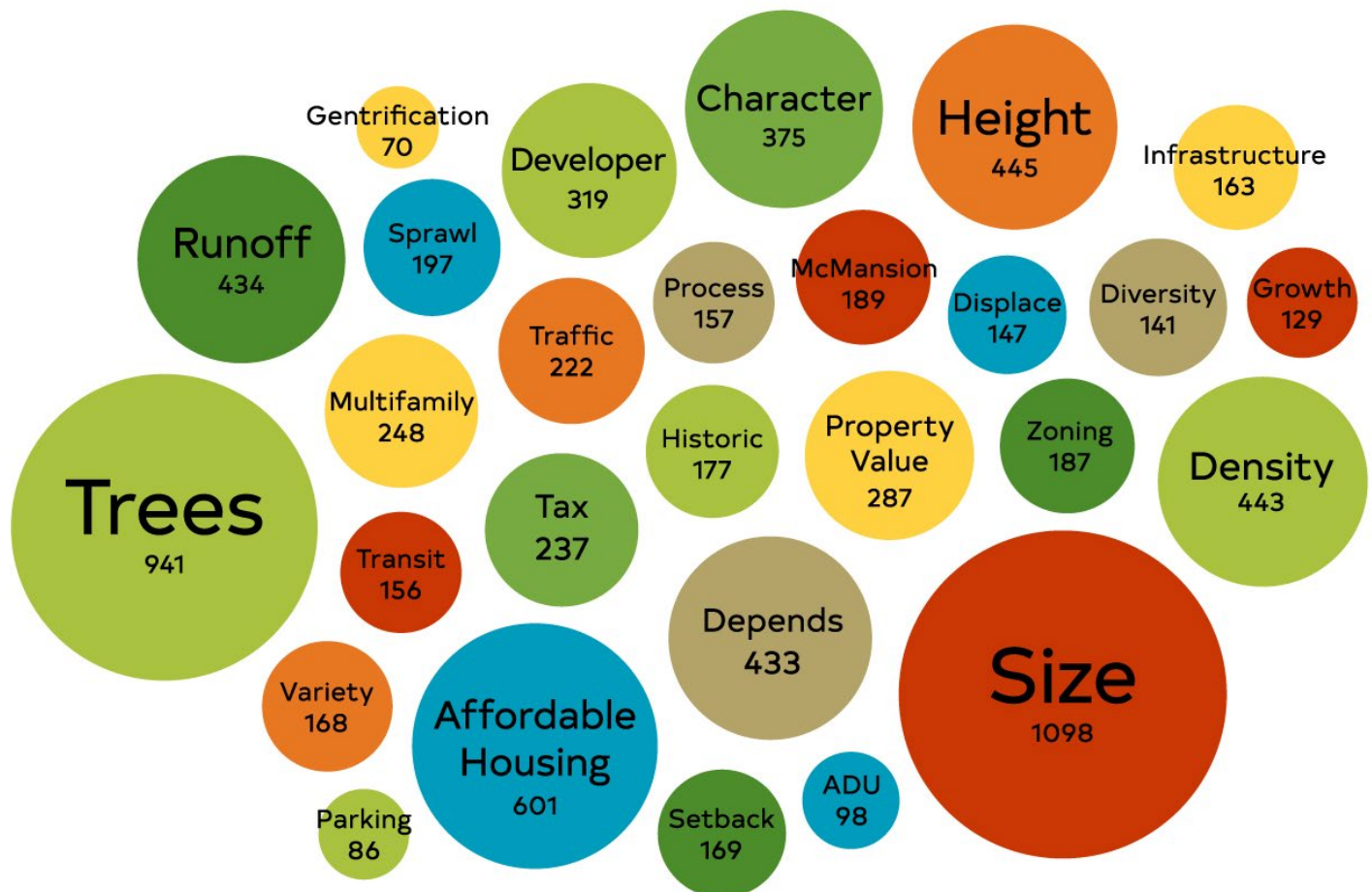


## Qualitative Data: A Summary of Comments

The Residential Infill Development Survey received over 10,000 unique comments. Using an inductive approach, staff coded each comment based on key words, themes, and general sentiment of the comment. Below is a review of these comments. Please note that the comments quoted here are provided as an example of a general theme or perspective expressed in the survey. Not all comments are included in this report, but they can be found in full at: <https://publicinput.com/Report/f0sv2efweib>

The most mentioned concepts in the comments, in order, were:

- Size (n=1098)
- Height (n=445)
- Character (n=375)
- Affordable Housing/ Housing Affordability (n=601)
- Density (n=443)
- Runoff (n=434)
- Character (n=375)



A sentiment analysis reveals little consensus among respondents about their feelings toward infill development. Comments generally positive toward infill development or those indicating a desire for less regulation are represented with green, while comments critical of infill or those indicating a desire for more restrictions are represented with red. Any comments that were irrelevant or contained both positive and negative sentiments are represented in grey. As the bar below shows, infill development is a divisive topic among survey respondents, with a balance between positive and negative and a majority expressing neutrality.

All comments for Residential Infill Development Survey



Sentiments among respondents largely depended on what they associated with infill development.

For example, those who believe that infill results in more affordable housing had a more positive view than those who view infill as a driver of gentrification or a way to cater to housing preferences of the wealthy. Those interested in the expansion of mass transit services shared more favorable views of infill development than those with concerns of increased traffic and limited on-street parking. For those interested in protecting single-family zoning, infill development evoked more negative reactions than for those who advocate for more multifamily housing options. Belief that property values increase as a result of infill was associated with more positive sentiments about infill, whereas fears that property value increases lead to displacement through their effects on taxes resulted in negative feelings about infill development. Respondents emphasizing the need to avoid urban sprawl saw infill in a more positive light than those who blame infill development on the loss of tree canopy and green space in Raleigh.

WORD ASSOCIATION SENTIMENT ANALYSIS

INFILL POSITIVE SENTIMENT	INFILL NEGATIVE SENTIMENT
<p><b>Affordable Housing</b>                      "Infill promotes affordable housing and sustainable use of land and resources."</p>	<p><b>Gentrification</b>                      "Infill is tied to affordable housing; there is 'affordable' housing in Raleigh, but it's being replaced by developers of luxury homes and apartments. The homes affordable by young people or moderate income families are torn down for luxury million dollar+ homes. Many can't afford to live (in homes or apartments) and work in Raleigh, so they live in small towns of Wake County and commute, creating other problems including traffic. I'm not sure if city government has the will to allow affordable housing to remain and not be replaced by gentrification and infill. It takes guts to say no to constant development."</p>
<p><b>Mass Transit Services</b>                      "To be a city of the future, we need to get cars out of Raleigh and make it a people-centric place. This means infilling fast and everywhere."</p>	<p><b>Increased Traffic/Decreased Parking</b>                      "I don't see a problem with infill development, unless it starts to affect parking our keeping our streets too crowded. If you build a bigger house after tearing down a smaller one oh, you tend to get extra residential cars parking on the street at said residence. Some neighborhoods have houses with three and four cars. If everyone parks on the street, I worry about the safety factor of getting a fire truck through."</p>
<p><b>Multifamily Housing Options</b>                      "I'm in full support of infill, but Raleigh needs to allow more missing middle development in existing neighborhoods and encourage infill with these types of properties. Replacing a small single family home on a large lot with a massive single family home drives the cost of housing up. Replacing a small single family home on a large lot with a duplex or four-unit building adds density and a housing component that is largely missing from many areas of the city. This is just one small step in keeping housing affordable across the city for a diverse community. "</p>	<p><b>Single-Family Housing</b>                      "Infill development within an existing residential neighborhood should be like for like. So one existing single family home must be replaced only by one single family home. It can be bigger or smaller as long as it reflects and maintains the character and quality of the neighborhood. So an upscale, respectable, quiet neighborhood remains upscale, respectable and quiet, attracting residents with similar values to those who already live there."</p>
<p><b>Property Values Increase</b>                      "Improvements are always welcome in my neighborhood. A rising tide lifts all boats. ALL of our property values rise as older outdated homes are replaced with attractive, energy efficient homes incorporating sustainable building materials."</p>	<p><b>Property Tax Increase/Displacement</b>                      "Property taxes on existing homes dramatically increasing due to much more expensive infill homes. I am afraid I will be priced out of my own home."</p>
<p><b>Less Urban Sprawl</b>                      "I like the idea of 'infill' because it's certainly better than urban sprawl which means devastating natural areas and circling Raleigh yet again with a beltline."</p>	<p><b>Loss of Tree Canopy and Green Space</b>                      "I've been really disappointed to see so many trees torn down in our older neighborhood-also to see so many large houses crammed onto what used to be single lots They are changing the nature of this area."</p>

Another factor influencing perspectives about infill development is where in Raleigh such development is occurring. Respondents were generally adamant that historic districts should be safe from extensive infill and should have the most restrictive regulations; while they were more open to infill development in areas without historic distinction.<sup>4</sup>

- "With the exception of designated historic districts, I do not believe, however, that 'modern' homes or homes of varying style, which are of appropriate scale, and which involve thoughtful, well-executed design are a problem. Variety of housing types should not be discouraged and can actually add to the vibrancy and character of a neighborhood."
- "Unless there's a historic designation of a structure, I am more inclined to see neighborhoods as living entities."
- "We don't live in a historic district, so property should reflect what the owners want to build."

Excluding historic districts, infill development was also deemed more acceptable in the vicinity of downtown than in other areas.

- "Re-development of the center city with taller buildings is fine. Outside of the downtown area should not be forced to accept backyard homes or buildings taller than 45 feet."
- "When you buy downtown you are buying into something that is living and changing all the time. That is why you choose city life over suburbia."
- "Depends on the neighborhood. Cameron Village's changes completely changed the character of the neighborhoods, while newer construction closer to downtown is aesthetically acceptable (height-wise, at least) because those areas frequently already had an urban, not suburban, "feel" to them."

Respondents were also more critical of certain types of infill than others. "McMansions" were consistently mentioned as a negative consequence of infill activity, demonstrating a general concern for the size of new homes.

- "Nothing looks more ridiculous or destroys the character and feel of a neighborhood than someone who knocks down a smaller home and builds a new McMansion."
- "Infill with massive McMansions is counterproductive. This continues to exacerbate the increasing rich-poor divide in the city, where only wealthy people can enjoy the benefits of city living."
- "Our neighborhood has been dramatically changed by the influx of residential infill. The most disappointing part is that the large, new, "McMansions" are not only pushing out the history and environmental infrastructure, but limiting the diversity of people [in] the areas."

The development of smaller homes, accessory dwelling units (ADUs), and multifamily structures as sources of affordable housing garnered more support than large, single-family structures.

- "There should be more flexibility, especially near downtown, for efficient infill opportunities. ADUs and smaller lots for cottages should be allowed by right to improve the density and walkability of our downtown neighborhoods."

<sup>4</sup> Please note that the quotations included in this report are used as examples for sentiments expressed. We have not included all comments as there were over 10,000 of them. All comments are public and available at <http://publicinput.com/infill>.

- “We need density/infill but only if it makes housing more affordable for all, and only if preserving trees and existing houses is prioritized. Instead many neighborhoods are going backwards—demolishing duplexes and quadraplexes to build single-family McMansions.”
- “Seems that smaller lot sizes for tall thin houses isn’t as practical as a bit larger lot that is allowed to be a duplex, triplex, or quad. I’d happily live in one or next door to one over some massive house crammed into a postage stamped sized lot.”

Infill created by private citizens, regardless of type and size, was considered more acceptable than infill driven by developers.

- “Developers should not be able to tear down 600 s.f. houses and put up 4,000 s.f. houses, but if people are buying lots for themselves for their own residences, they should be able to do what they want.”
- “For me it [whether neighborhoods should be allowed to change significantly with preferences and market conditions] depends on whose preferences are reflected in the neighborhood. Is it a developer who is working quickly to build a structure that will turn a profit, or is it an architect or a current resident who is remodeling or updating their home?”
- “Who is this [market preference] decided by? If it is by existing residents, great! If it is by outside developers that are just looking to profit, NO!”

In a related vein, some respondents questioned the role of government in regulating infill development and expressed concern that more restrictions would threaten private property rights.

- “I think this question is a slippery slope. On one hand, I don’t think the government should be able to tell you what your house should look like beyond the basics. On the other, houses that are wildly out of the local aesthetic stick out and are an eyesore. I guess it depends on where the line is drawn.”
- “My personal preference is for the homes to maintain the character of the neighborhood, but I am not in favor of the city regulating these things. I think the approval process of permits should take into consideration the established rules of the neighborhood and I think maintaining the property rights of the individual owners should take precedence over city regulations. If there is a question, neighbors should be notified of anything that may affect their property values.”
- “If I buy a piece of property that is not a historic home the city council should not be telling me what I can and cannot do with it.”

Respondents — even those generally opposed to more regulatory interference — were more open to regulations concerning stormwater runoff and tree preservation.

- “I have a hard time separating my own personal preferences and aesthetic sensibilities from what I think would be good for the city. For instance, I personally don’t like the look of infill developed areas (big houses, closely spaced) and would prefer to live in different neighborhoods. But I see the benefits of increased density and wouldn’t want that form of development to be prohibited because I personally don’t like it. The loss of greenery and infrastructure impacts are the only major, justifiable policy concerns that I can think of.”



- "Current properties should not have to deal with water runoff problems due to new construction."
- "Why are developers allowed to clear the entire parcel to put up a stick-built home? Removing vegetation and trees negatively effects drainage and runoff. AFTER construction runoff is also critical...all of the top soil is removed, so water just sheets off the compacted subsoil...it might as well be concrete. DEMAND that builders put back the top soil removed during grading so trees, shrubs, and to some extent turf, have a chance to rebuild the soil so it drains better."
- "Raleigh claims to be the 'city of oaks' and a 'tree city usa' yet how many old historic trees/oaks have been cut down in the name of progress. We either need to rebrand or stop being so hypocritical."
- "There more trees preserved the better for our climate. Removing every tree from acreage just to give more lot spaces, then planting small tree/shrubs as replacement is in my opinion ridiculous. Preserve as much existing forestry as possible to aid nature's help with climate control, erosion and help us breathe better."

Despite some popularity among respondents, the proposition that incentives be offered for preserving trees on infill lots also had its dissenters.

- "I see there is an attempt to build higher if the trees are saved, what is wrong with building the same footprint and keep the height to something that will fit rather than clear cut? I see the 'City of Oaks' is just a phrase when it comes to development."
- "Trees and other regulations should never be tied together. There will be unintended consequences if you start adding exceptions and tradeoffs. Someone will game the system and most will just lose. The new tall house will be built to save the stupid tree and then the tree will 'die.' See how that works??"
- "Making exceptions simply creates a new set of problems, such as overtaxed infrastructure. Look we saved the trees! Unfortunately, the sewer system and roads are overloaded."



## Other Insights

This survey has provided invaluable data to Raleigh's City Planning department as we consider the best approach to residential infill development in our city. It has also sparked conversations about topics outside of the survey's scope but tangentially related to infill development. Drawing on the qualitative data, staff has identified several themes for future exploration.

### State of Infill Development in Raleigh

Key takeaways from this survey is that respondents generally hold very polarized views of residential infill development and the disparity is largely rooted in a disagreement about what this type of development means for Raleigh's social and economic landscapes. The sentiment analyses — assigning values to comments indicating whether the comment was positive, negative, or neutral — reveal that opinions of infill development depend largely on what respondents associate with it. Further, there is no consensus as to what the consequences of infill development have been.

One such area of contention among respondents of housing costs and the role of infill development in shaping these costs. Although the residential infill survey did not specifically delve into issues related to affordable housing or housing affordability<sup>5</sup>, they were mentioned in some way over 600 times in the comments sections. Overwhelmingly, respondents reported a strong desire to increase the availability of affordable housing in Raleigh and to keep current properties affordable.

Fear that infill development was leading to impossibly high property values, potentially resulting in imminent or eventual displacement, was frequently expressed in the comments. Some felt that their housing situation was becoming unstable as infill development nearby drove up property values. Others said that they feared that their children—when grown—would not be able to stay in Raleigh as a result of increasing housing costs.

Other respondents claimed that infill development has been key to keeping housing costs low, or at least slowing the trajectory of rising costs, by diversifying the housing market. Many of the 250 mentions of multi-family housing reflected a belief that infill development in Raleigh has translated or will eventually translate into more duplexes, triplexes, and accessory dwelling units (ADUs). However, the relationships among housing diversification, housing affordability, and infill development remain unclear.

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<sup>5</sup> Affordable housing generally refers to government-subsidized housing to assist those of lower income (based on AMI, or area median income). Housing affordability refers to the relative costs of housing in an area.

### Tree Preservation

The loss of green space and tree canopy was one of the most pressing concerns among respondents about infill development, scoring marginally second to concerns over housing affordability. Many respondents agreed that the City of Raleigh should offer incentives for tree preservation (like exceptions to current building regulations), though a thorough review of the comments reveals that these attitudes are nuanced. While in support of green space preservation in general, respondents disagreed about what tree preservation entails and where we should concentrate our preservation efforts. Three questions for future discussion emerged:

1. Should our focus on tree preservation be concentrated specifically on infill lots or should we take a more holistic approach to preservation?
2. Should tree preservation be rooted in a desire to keep existing trees or should emphasis be on ensuring tree canopy is a large part of the Raleigh landscape, even if those trees are newly planted?
3. Should tree preservation be prioritized over other goals Raleigh has for its neighborhoods?

### Process improvements

Another topic not directly addressed in the survey but mentioned often by respondents is the process through which infill development occurs or is approved. Many expressed frustrations with the complexity of the permitting process, noting that it is difficult to navigate and is costly in both time and money. Some specifically attributed these permitting delays to constantly evolving regulations and an arduous review process that seems unnecessarily complicated and long. Others argued that the permitting process has become too bureaucratic, leaving no room for staff discretion. Survey respondents were also critical of staff with whom they have worked during the permitting and review processes; they voiced concerns that staff lack the proper training and the power to enforce rules laid out in Raleigh's Unified Development Ordinance (UDO).

## Survey Evaluation

This survey gave me a good opportunity to share my perspective.



- 59% Agree
- 26% Strongly Agree
- 11% Neither Agree nor Disagree
- 4% Strongly Disagree/Disagree

2,169 respondents

# Infill Survey Report Appendix

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# Demographic Data

Raleigh's City Planning Department is committed to engaging our community in inclusive and authentic ways. This means working diligently to actively involve all members of the community by strengthening relationships, improving communications, and removing barriers to public participation. Research shows that certain demographic groups are consistently underrepresented in the City's engagement efforts, including younger residents, those of lower income, and people of color. In our effort to address this gap, we collect information about racial identity, age, and income in all of our online surveys so that we can:

- \*Continue to monitor engagement levels by groups;
- \*Track changes in engagement by group over time;
- \*Shape engagement efforts to better reach underrepresented groups;
- \*Evaluate the success of these targeted engagement efforts; and
- \*Assess to what extent perceptions, opinions, needs, and/or outcomes differ across groups.

Demographic data are always reported in aggregate form, so individual respondent information is kept confidential. The findings broken down by demographic group cited throughout this survey report are available using the links below.

## A Note About the Data:

The statistics provided in this report reflect the survey numbers at the moment it closed. You may see slightly higher numbers in the reports linked below because some responses were entered after the survey closed. This is likely the result of someone having the survey open but not submitting their responses until after the deadline.

## Racial Identity

- Respondents identifying as white: <https://publicinput.com/Report/uklcdb2c3lm>
- Respondents identifying as black/African American: <https://publicinput.com/Report/mzaiu20rkx3>
- Respondents identifying as Hispanic/Latinx: <https://publicinput.com/Report/grl3uu3jq21>

## Age

- Respondents aged 18-29: <https://publicinput.com/Report/gjqzm2gppiv>
- Respondents aged 30-44: <https://publicinput.com/Report/vj2ldrja4qs>
- Respondents aged 45-64: <https://publicinput.com/Report/Ocddd2t13wl>
- Respondents aged 65+: <https://publicinput.com/Report/pnikw3hfmlt>

## Annual Household Income

- Respondents reporting <\$31,000: <https://publicinput.com/Report/j25iurs0obr>
- Respondents reporting \$31,000-\$69,999: <https://publicinput.com/Report/hp3rffrbfjr>
- Respondents reporting \$70,000-\$117,999: <https://publicinput.com/Report/xahukmy5tpv>
- Respondents reporting \$118,000+: <https://publicinput.com/Report/ocr3bbo24uh>

