

Perceptions of Livability in Oregon: What is the role of transportation and land use?

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Abstract

Despite the widespread use of the term livability in policy and planning, the concept remains loosely-defined and relatively unmeasured. There seems to be a general understanding that livable communities are ones where people want to live. But what are the characteristics of the built environment—land use, urban design, and transportation—that make a place livable? While planners advocate for certain characteristics like bicycle networks, density, and mixed use, as a field, we have little knowledge about how those characteristics are reflected in resident’s perceptions of livability.

Livability has emerged as key focus for integrating transportation and land use planning throughout the United States. Livability principles were the backbone of the federal Partnership for Sustainable Communities Program, which highlighted six principles including: providing transportation choices, expanding housing location, improving economic competitiveness, improving existing communities, aligning federal policy, and enhancing unique characteristics of communities.

Few studies have asked citizens about their understanding of, or preferences for, livability. A 2014 AARP study examined what livability means to people ages 50 and older by conducting focus groups, administering surveys, and conducting in-depth interviews (Harrell et al., 2014a). The survey included basic demographics and questions about aging in place, personal safety, social interactions, desired proximity to amenities and disamenities, and desirable policy responses. A recent study focused on preferences for livability and transportation among a different demographic group by conducting a nationwide phone survey (Dill & Morris, 2015). In a related project, Clifton et al. (2015) asked Oregon citizens about neighborhood and housing preferences shaping the residential location process using a visualization of neighborhood typologies to understand citizen preferences for neighborhoods, housing, and transportation.

In Oregon, the state’s long range transportation plan (Oregon Transportation Plan) identifies “enhancing livability” as a key outcome. Regional transportation plans and local comprehensive plans reflect this practice too. Further, efficiency and livability are cornerstones of Oregon’s Statewide Planning Program, which relies on Urban Growth Boundaries to increase land use efficiency while conserving farm and forestland—policies that are intended to enhance livability.

As government and academic research have not yet tackled citizen perceptions of how these planning efforts contribute to livability, we examine: “how do residence understand the connection between transportation and land use planning, and its association with livability?”

This research builds on two key data sets. The first is a geographic information system (GIS) parcel database assembled as part of the authors for the Oregon Department of Land Conservation and Development (DLCD).¹ The second is a mixed mode survey of households in three Oregon MPOs.

¹ The simplified UGB process is codified in Oregon Administrative Rule 600-038.

The GIS database includes parcel and neighborhood characteristics from multiple sources. The parcel level includes 2013 tax assessor information for parcels for all three MPOs this study and includes indicators of parcel size, property classification, and value. Additionally, distances to transit stops, bicycle facilities, grocery stores, retail, parks, and the Central Business District were computed for each parcel. Data was obtained from the Oregon Employment Department, Oregon Department of Transportation, MPOs, and cities. Additionally, similar data were aggregated to Traffic Analysis Zone (TAZ) level as a proxy for neighborhood. Finally, American Community Survey (ACS) data at the tract level was obtained for various demographic characteristics including: population, percent non-white, average household size, percent college educated, median household income, percent renter v. owner, percent single family housing, and median gross rent.

Draft

Introduction

Despite the widespread use of the term livability in policy and planning, the concept remains loosely-defined and relatively unmeasured. There seems to be a general understanding that livable communities are ones where people want to live. But what are the characteristics of the built environment—land use, urban design, and transportation—that make a place livable? While planners advocate for certain characteristics like higher residential densities, mixed use, and bicycle networks, as a field we have little knowledge about how those characteristics are reflected in residents' perceptions of livability.

Livability has emerged as key focus for integrating transportation and land use planning throughout the United States. Livability principles were the backbone of the federal Partnership for Sustainable Communities Program² which highlighted six principles including: providing transportation choices, expanding housing location, improving economic competitiveness, improving existing communities, aligning federal policy, and enhancing unique characteristics of communities.

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As government and academic research have not yet tackled citizen perceptions of how these planning efforts contribute to livability, we examine: "how do residents in small metropolitan areas of Oregon perceive livability and view the contribution of transportation and land use planning to perceptions of livability?"

This study relies on a survey administered to registered voters, living in neighborhoods of various housing densities within three Metropolitan Planning Organizations (MPOs) in Oregon. Using the survey results, we use regression modeling to understand how residents perceive livability. The Portland Metropolitan region was excluded as this study focuses on smaller metropolitan areas—areas that have mostly been overlooked in previous studies. A recently constructed statewide parcel database and spatial data on transportation investments, overlaid with survey responses, compared residential perceptions to land use and transportation metrics in existing neighborhoods. This information will

² Including the U.S. Departments of Transportation, Housing and Urban Development, and Environmental Protection Agency

provide valuable insight into how cities and state agencies justify investments in transportation infrastructure, which have long-term benefits of creating livable communities.

This paper proceeds as follows: the authors start by discussing the understanding of livability as discussed in the literature, then discuss the study's methods. Key findings from the household survey follow with the intent of framing regression models which are discussed in the next section. The paper concludes with a discussion of the implications of the findings and opportunities for further research.

Literature Review

Livability is subject to a variety of interpretations and the concept is unique to each individual. This section starts with an examination of various uses for, and understandings of, the term livability. It first discusses the ambiguity of livability as a concept and the way in which it commonly measured. After grounding the discussion in the understanding of livability, the authors summarize literature on key components of livability.

Like the terms “sustainability” and “resilience,” livability is somewhat of a buzzword. Public agencies and academics use the term extensively with many assumed connotations (Vanzerr, 2011; USDOT, 2012). Yet, as is the case with many buzzwords, the actual definition of livability is unclear (Ferrell, 2016). There seems to be a general understanding that livable communities are ones that people want to live in. Moreover, livability relates to quality of life—a term that is even more common in planning documents. Beyond this rather obvious fact lies a hazy area where no clear or concrete distinctions are drawn.

As livability becomes an increasingly important term in planning theory and practice, a clear interpretation of the term is ever more urgent. Operationalizing the concept of livability is necessary if communities want to work toward common goals and when evaluating whether they are getting closer to those goals. In short, livability is a concept that is largely undefined by state and federal agencies and literature does not suggest any consensus about how to measure it. Left unmeasured, there are no set indicators that serve to classify communities into categories based on merit (livable, somewhat livable, and not livable). However, this does not mean that people, organizations, and governments do not try.

Several federal agencies (U.S. DOT, HUD, and EPA) have proposed dimensions (key principles) that seek to create or enhance livability. Moreover, organizations such as American Association of Retired Persons (AARP) or livability.com have developed methodologies and indices that rank places by their livability. In fact, the AARP contextualizes livability stating that “A livable community is one that has affordable and appropriate housing, supportive community features and services, and adequate mobility options, which together facilitate personal independence and the engagement of residents in civic and social life” (Kihl et al., 2005). Finally, individuals and groups tend to have their own notions of what makes a place livable based on tastes and preferences.

Accordingly, while the concept of livability can be multi-dimensional, the term invokes common themes or metrics. Indices such as AARP's or those developed by livability.com perhaps have some of the more robust methodologies for measuring these themes as they operate on mass scale to compare the quality of place at different geographic scales (neighborhood, city, country, etc.). Well-used by individuals and mimicking policies geared toward creating livable places, these methodological approaches use both traditional, neoclassical measures subjective measures to rate, score, or prioritize communities based on

tangible and intangible elements of place. In view of this, while these indices do not pose an official definition, they do offer an interesting approach to operationalizing the concept.

Appleyard et al. observed the danger of having one definition to apply to all circumstances involving livability: “livability in a just society requires all individuals be assured equal access to such opportunities. Rather than one, monolithic definition of livability, there is a need for a theoretical moral basis to measure, understand and judge activity toward livability achievement through a set of clear, concise and easily applicable livability ethics” (Appleyard et al., 2014). The ethics discussed by Appleyard et al. are similar to the livability principles outlined by the Partnership for Sustainable Communities (see <https://www.sustainablecommunities.gov/mission/livability-principles>).

Still, the term’s use in a planning context affects important aspects of people’s lives and thus warrants operationalization. For example, local, state, and federal governments allocate public funding to projects and initiatives under the guise of promoting “livable communities.” It is this hazy understanding of livability that prompts researchers in the planning and public policy fields to ask: *how do people make determinations of a livable community? Why do certain places feel more, or less, livable to certain people? Do different individuals experience livability in the same way?* Answering these questions could help generate metrics and criteria, allowing for a better allocation of funding and improved planning practices in general.

Accordingly, because livability is undefined and rather nebulous, the authors examined existing studies to help in contextualizing the term. The following section examines relevant literature on the topic.

Dimensions of Livability

As policies and community plans begin to incorporate livability into their goals and objectives, it becomes important to understand the components that make up a livable community. The research team searched databases for mentions of the term “livability.” From this process, several thematic categories emerged including (1) housing, (2) community features or attributes, (3) infrastructure, (4) natural environment, and (5) transportation. Each of these thematic categories include one or more potential metrics.

Housing affordability consistently emerged as one of the most important components in deeming a location livable. As mentioned by Baker and Biton, housing cost continues to grow faster than household income; therefore, it is imperative that communities begin to offer housing at higher rates of affordability (2015). Baker and Biton also detail the formation of the Partnership for Sustainable Communities (a federal, interagency initiative that promotes livability), in which an essential objective of formation was to generate greater access to affordable housing. According to a study by Harrell et al., renters identified funding for affordable housing programs as the most important local government investment (2014).

Moreover, *housing density* directly affects livability, especially within urban neighborhoods (consider Smart Growth and New Urbanism principles). As discussed by Chapman and Lund (2004) regarding Portland’s expansion, dense housing near amenities (sometimes referred to as community features) provides for more livable communities. While livability and density are most often correlated with urban settings, suburban locations are also seeing a push toward densification.

Research into livability frequently cites *community features* as being important. Community features such as lighted bike paths along a river, a covered bus stop shelter along a street, or drinking fountains in a downtown neighborhood are becoming the norm for livable places. In fact, livable places are often judged by the amount and diversity of community features (amenities) they have (Balas, 2004). Not just quantity, but quality of community features is important. For instance, citizens accustomed to historic architecture and intimate living and working spaces have vastly different notions of livability than those with more modernistic, grungy, or simple design preferences (Poiani and Stead, 2014). Accordingly, communities need to consider the features they employ: “adopt a narrative that resonates by leveraging historic, cultural or other unique attributes of your community that tend to unite people” (Guzman and Douglas, 2015).

Natural landscapes are of importance within the realm of livability. Jim (2003) found that legislators are committed to implementing and protecting trees and other environmental pieces, along with these individuals using greenspaces as a sign of livable communities. Planning literature does need to be aware of stressing the importance of particular features too heavily, however. While community features and amenities are important, weighing these too heavily on a single feature can come at the detriment of the community, especially if community members are not able to voice their preferences (Lewis and Donald, 2010).

Transportation is frequently associated with livability; either through mention of traffic congestion, safer streets, transportation alternatives and modal choices, or even the impact new technology could have on transportation systems into the future. Appleyard, et al. write that, “... livability has been identified as an important outcome of strategies to promote transportation and land use integration, but little guidance exists on what livability actually is, how to measure it, or how transportation and land use integration strategies can promote it” (Appleyard, et al. 2017). Appleyard, et al. did a multi-year study on livability literature, theory and practice, followed by an extensive study of quantitative and qualitative methods of over 350 transit corridors to conclude, “... livability can be seen as an organizing principle for determining when and how to deploy integrated transportation and land use planning strategies.” Livability opportunities are quality-of-life outcomes, particularly around transit.

A gap in the literature is how people perceive livability and the relative contributions of the elements above to perceptions of livability. Better understanding these relationships will lead to a better understanding of livability, allowing policy makers and planners to develop better strategies for the formation and maintenance of high valued, “livable” places.

Data and Methods

This research builds on two key data sets. The first is a geographic information system (GIS) parcel database assembled as part of the authors for the Oregon Department of Land Conservation and Development (DLCD).³ The second is a mixed mode survey of households in three Oregon MPOs.

The GIS database includes parcel and neighborhood characteristics from multiple sources. The parcel level includes 2013 tax assessor information for parcels for all three MPOs this study and includes indicators of parcel size, property classification, and value. Additionally, distances to transit stops, bicycle facilities, grocery stores, retail, parks, and the Central Business District were computed for each

³ The simplified UGB process is codified in Oregon Administrative Rule 600-038.

parcel. Data was obtained from the Oregon Employment Department, Oregon Department of Transportation, MPOs, and cities. Additionally, similar data were aggregated to Traffic Analysis Zone (TAZ) level as a proxy for neighborhood. Finally, American Community Survey (ACS) data at the tract level was obtained for various demographic characteristics including: population, percent non-white, average household size, percent college educated, median household income, percent renter v. owner, percent single family housing, and median gross rent.

The purpose of the survey was to understand how elements of the built environment affect residents' perceptions of livability. The survey addressed what respondents thought livability is, how transportation and land use influence their perception of livability at the neighborhood level, their preferences of livability as it relates to their residence and neighborhood, and their perceptions about transportation options. Respondents were asked demographic questions to learn who was responding to the survey, and to see if there were statistical differences between factors such as age groups, income levels, or what types of housing they lived in or transportation they used.

The survey was administered to 3,100 registered voters in Albany, Central Lane, and Rogue Valley MPO using a mixed-mode method. Of the Oregon population aged 18 or older, 87% is registered to vote.⁴⁵ Potential respondents were selected using a cluster sampling methodology. We received a total of 573 completed surveys, yielding a response rate of 18.3%. Each of the responses was geocoded to link the survey data to the GIS data. The database was then supplemented to include key socio-economic, land use, and transportation variables using additional GIS analysis and ACS data.

Exhibit 1 shows response rates by MPO and sample frame. Survey respondents were relatively, equally dispersed across each of our three study areas.

Exhibit 1. Response Rates by MPO

Region	Sample Distribution	Responses	Response Rate
Albany MPO	1,037	185	17.8%
Lane MPO	1,099	192	17.5%
Rogue Valley MPO	1,000	175	17.5%
No Geographic Identifier	--	21	na
Total	3,136	573	18.3%

The survey used a cluster sampling approach based on place types mapped by the Oregon Department of Transportation (ODOT) using methods developed by Ewing and Cervero.⁶ ODOT developed place

⁴ Oregon State Elections Division (2017-01-09). "Voter Registration by County"(PDF). Oregon.gov. Oregon Secretary of State. Retrieved 2017-08-28.

⁵ Bureau, US Census. "Data." Selected Characteristics of the Citizen, 18 and Older Population. October 28, 2016. Accessed August 28, 2017. <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/electorate-profiles-2016.html>.

⁶ Ewing R, and Cervero R (2010). Travel and the Built Environment, Journal of the American Planning Association Vol. 76 , Issue 3, 2010.

types for the study area MPOs. Place types build from five variables: destination accessibility, density, design, diversity, and transit service. In ODOT's methodology Place Types are defined as:

$$\text{AREA TYPE} + \text{DEVELOPMENT TYPE} = \text{PlaceType}$$

Where Area Type describes inter-dependencies of each geographic unit (MPO-defined Transportation Analysis Zones – TAZs) compared to the rest of the region. The Area Type is measured by two indicators: accessibility to Destinations (measured by jobs accessible from TAZ), and Density (measured by jobs and households per acre). Development Type describes the physical characteristics of each neighborhood in isolation using three indicators: Design (measured by multi-modal network links), land-use Diversity (measured by the ratio of jobs to households), and presence of Transit (measured by service level) within each neighborhood district.⁷

In selecting the sample, the authors concluded the development types were not diverse enough. This is largely due to the suburban nature of the MPOs under study. To ensure the sample represented the spectrum of density ranges in the study MPOs, the authors weighted the sample selection in five density classes (<1 du/a, 1-3 du/ac; 3-6 du/ac, 6-12 du/ac, and 12+ du/ac).

Survey Findings

This section presents a descriptive analysis of the household survey. The descriptive analysis primarily relies on frequency distributions. To test relationships between key characteristics, the authors conducted cross-tabulations and calculated chi-square statistics. Future analysis will include regression models that explore linkages between land use and transportation elements and respondent perceptions of neighborhood livability.

This discussion is organized in three sections: (1) perceptions of livability; (2) respondent rating of factors that affect livability; and (3) respondent preferences of land use and transportation elements in their ideal community.

Perceptions of Livability

The survey started by asking respondents a series of questions about satisfaction with the place they live. Exhibit 2 shows that most respondents are satisfied with where they live. Residents are most satisfied with their house/home (86%) followed by their state (82%). The percentage of respondents who indicated they were extremely dissatisfied for any category never exceeded 3%. Only 15% of respondents were somewhat or extremely dissatisfied with their neighborhood and city.

⁷ Place Types Flyer, Oregon Department of Transportation and Oregon Department of Land Conservation and Development, nd.

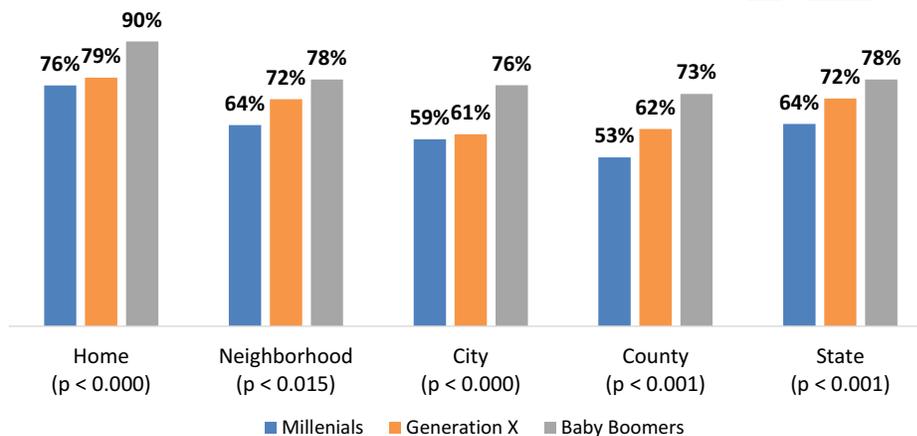
Exhibit 2. Respondent satisfaction with house/home, neighborhood, city, county, and state

Area	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied or Dissatisfied	Somewhat Dissatisfied	Extremely dissatisfied	n
House/Home	48%	38%	5%	6%	3%	557
Neighborhood	36%	38%	9%	13%	3%	550
City	25%	45%	14%	13%	3%	550
County	24%	44%	19%	11%	2%	549
State (Oregon)	49%	33%	7%	7%	3%	550

Source: Oregon Livability Survey, Q1, 2017.

Age (as grouped by generation) significantly influenced respondents' satisfaction for home, neighborhood, city, county, and state (Exhibit 3). Millennials were less satisfied with each geographic place than Generation X respondents, and Generation X respondents less than Baby Boomers. While 90% of Baby Boomers were somewhat or very satisfied with their homes, this same level of satisfaction was only held by 79% of Generation X respondents and 76% of Millennials.

Exhibit 3. Satisfaction with Residence and Location by Generation



Source: Oregon Livability Survey, Q1, 2017.

Note: percentage of respondents who were somewhat or extremely satisfied in each place

The survey asked respondents about their perceptions of livability for various geographies. Exhibit 4 shows that 66% of respondents perceive the livability of their house/home, neighborhood, city, region, and state as “good” or “excellent”. Respondents were mostly likely to say their house/home was excellent (46%).

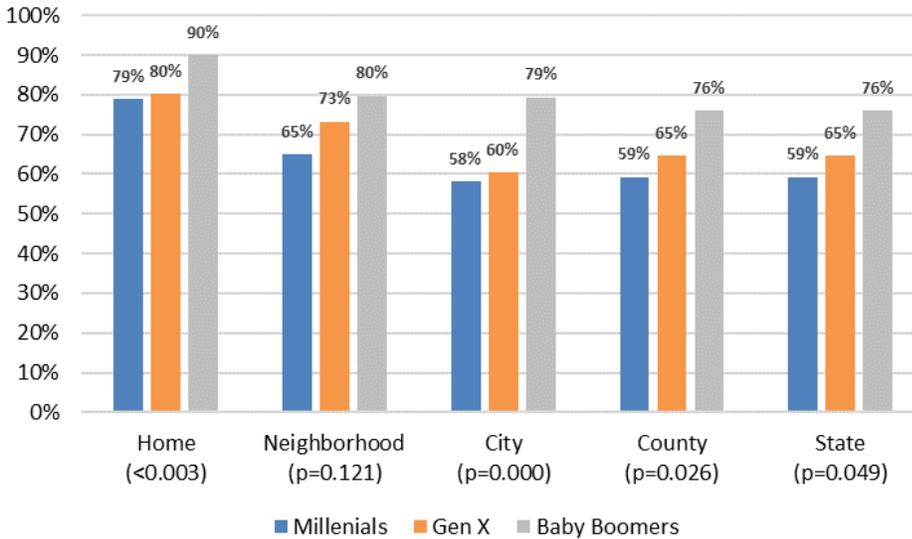
Exhibit 4. Respondent Perceptions of the Livability of Current Home, Neighborhood, City, Region, and State

Geographic Level	Excellent	Good	Fair	Poor	n
House/Home	46%	40%	12%	2%	542
Your Neighborhood	36%	40%	21%	3%	542
Your City	19%	52%	23%	5%	542
Your County	18%	52%	26%	4%	543
State (Oregon)	43%	39%	14%	4%	539

Source: Oregon Livability Survey, Q5, 2017.

Age (as grouped by generation) significantly influenced respondents' perception of livability for home, city, county, and state (Exhibit 5). Notably, perception of livability at the neighborhood level was not statistically significant. As a general observation, Millennials were perceived of each geographic place less livable than Generation X respondents, and Generation X respondents less livable than Baby Boomers. Moreover, perceptions of livability decreased as geographic area broadened.

Exhibit 5. Rating of Livability of Residence and Location by Generation



Factors that Affect Livability

The survey included several questions about respondent perceptions of the importance of livability factors identified in the literature review. Exhibit 6 shows the importance of factors to respondents for selecting their current home or neighborhood. The most important factors were affordability and crime levels; over 90% of respondents rated these factors as extremely or somewhat important. Dwelling characteristics (84%) and proximity to parks and open space (81%) were also important to respondents. Notably, neighborhood characteristics were rated by respondents as less important than many other factors.

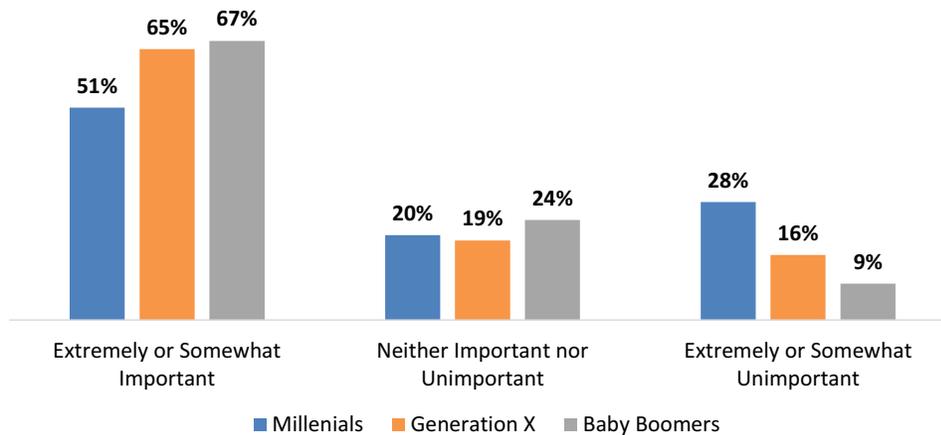
Exhibit 6. Respondent Rating of Importance of Factors for Selecting Current Home or Neighborhood

Factor	Extremely Important	Somewhat Important	Neither Important nor Unimportant	Somewhat Unimportant	Extremely Unimportant	n
Affordability	72%	23%	3%	1%	1%	500
Crime Levels	66%	27%	5%	2%	1%	499
House Characteristics	41%	43%	13%	3%	1%	499
Proximity to Parks/Open Space	32%	49%	15%	3%	1%	497
Distance to Retail/Services	21%	54%	18%	5%	1%	494
Proximity to Neighbors	22%	49%	22%	5%	3%	499
Access to Transportation Options	32%	34%	19%	11%	4%	501
Proximity to Work/School	27%	38%	23%	6%	6%	496
School Quality	39%	24%	23%	4%	9%	481
Neighborhood Characteristics	18%	45%	26%	6%	5%	496
Proximity to Family Members	21%	30%	29%	10%	10%	497

Source: Oregon Livability Survey, Q2, 2017.

The survey asked respondents about the importance of proximity to shops and services. Exhibit 7 shows that Boomers and Gen Xers rated proximity to shops and services significantly more important than millennials. This comparison between these groups resulted in a difference that was statistically significant ($p = .00$).

Exhibit 7. Importance of Living with a 20-Minute Walk to Shops and Services, by Generation

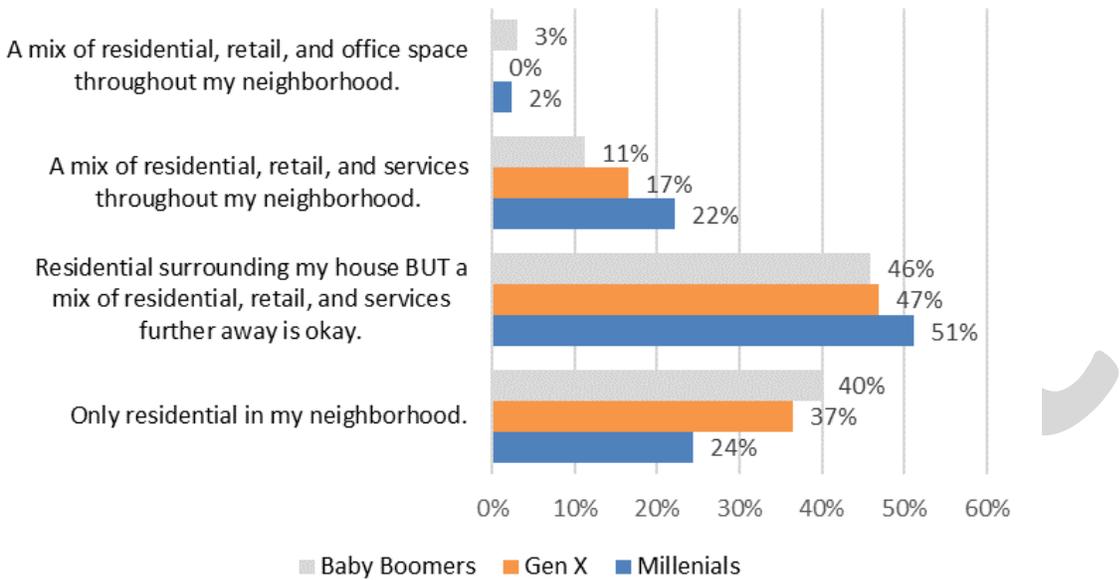


Source: Oregon Livability Survey, Q9, 2017.

Planners have promoted mixed-use as a livability strategy for two or more decades. The survey asked respondents what mixture of land uses they would most prefer in their ideal neighborhood. Forty-six percent of respondents preferred land use pattern around respondents' *ideal* neighborhood was residential in the immediate vicinity with a mix of uses further away. About 37% preferred a land use pattern was a strictly residential neighborhood and the least most popular pattern was a mixed-use neighborhood.

Figure shows that Baby Boomers desire purely residential neighborhoods (40%), or neighborhoods with a mix of uses further away (46%). By contrast, less than a quarter of Millennials reported preferring only residential uses, and 22% preferred a mix of residential, retail, and services in their neighborhood.

Exhibit 8. Desired Mix of Land Uses in Respondents’ Ideal Neighborhood

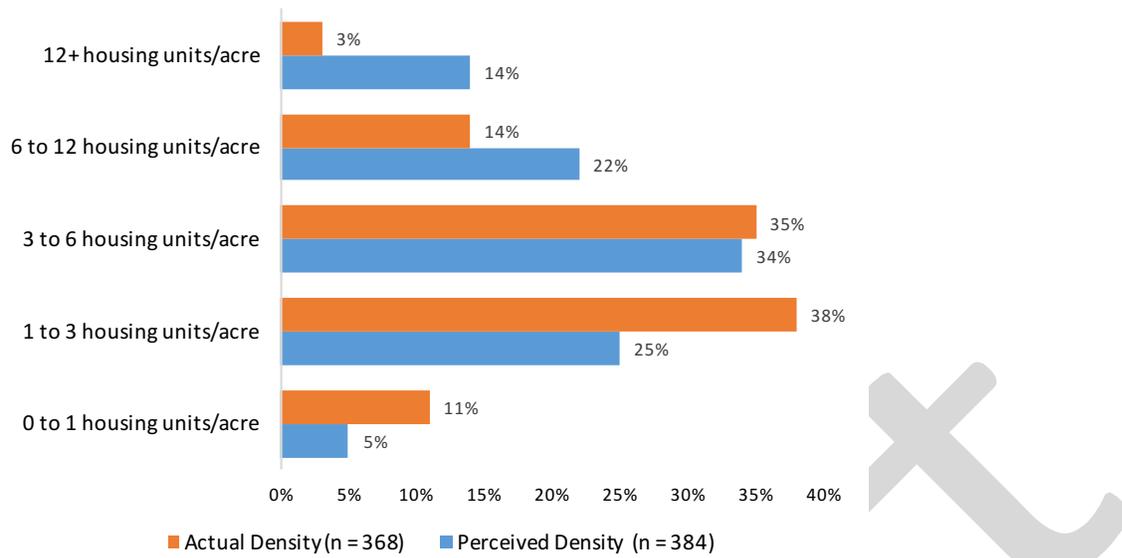


Source: Oregon Livability Survey, Q11, 2017. P=0.024

The survey also asked a series of questions about density. The first asked if the respondent perceived their current neighborhood as too dense. Seventy-three percent of the respondents indicated they did not, 21% thought their neighborhood was too dense, and 6% didn’t know. Notably, 43% of the respondents that indicated their neighborhood was too dense lived in neighborhoods with housing densities of less than four dwelling units per acre.

Exhibit 9 compares respondents’ perceptions of the density of their neighborhood with the actual density. As a general observation, the data show that respondents believe that their neighborhood is more dense than it actually is. For example, 36% of respondents think they live in neighborhoods with six or more dwelling units per acre; while data indicate that 17% actually live in neighborhoods with six or more dwelling units per acre.

Exhibit 9. Perceived Neighborhood Density Compared to Actual Neighborhood Density



Preferred Land Use and Transportation Elements

This section discusses respondent perceptions of the relationship between land use transportation elements. The authors were interested in how important proximity to various amenities within a 20-minute walking distance was to respondents. Exhibit 10 shows that most respondents rated living within a 20-minute walk of a broad range of amenities to be important. The most important amenities were parks and open space, grocery stores, and public services. Living close to work or religious/cultural facilities were rated important by the fewest respondents.

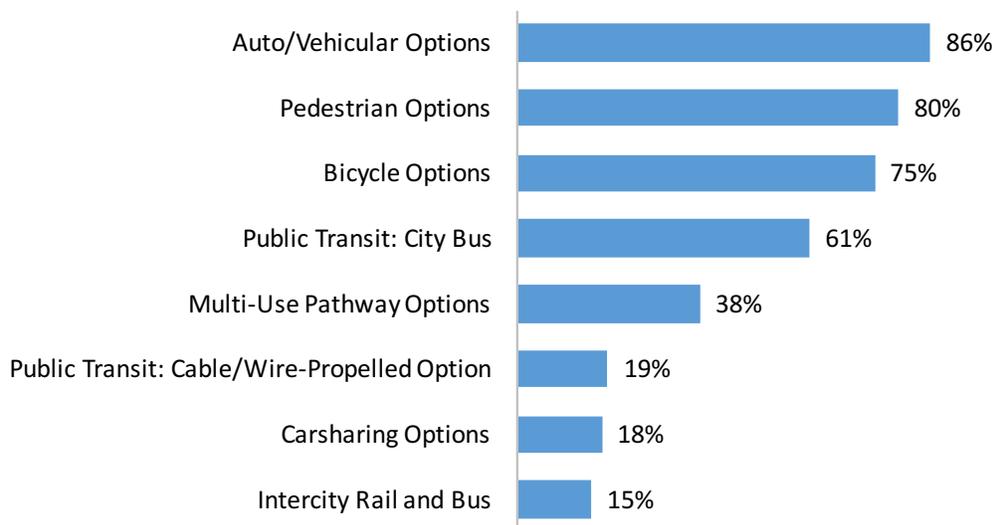
Exhibit 10. Importance of Living Within a 20-Minute Walk of Specific Amenities

Amenities	Extremely Important	Somewhat Important	Neither Important nor Unimportant	Somewhat Unimportant	Extremely Unimportant	n
Parks and Public/Open Space	42%	37%	14%	4%	2%	545
Grocery Store	35%	38%	17%	6%	3%	548
Public Services	21%	44%	24%	8%	3%	548
Shops and Services	21%	43%	23%	9%	4%	536
Medical Services	21%	42%	27%	7%	3%	547
Transit Station / Bus Stops	24%	32%	27%	8%	8%	546
Restaurants and Entertainment	16%	39%	29%	11%	5%	546
School or Children's School	23%	27%	29%	8%	13%	539
Other	29%	16%	33%	7%	15%	55
Work	15%	25%	37%	10%	13%	534
Religious or Cultural Services	9%	28%	36%	14%	13%	547

Source: Oregon Livability Survey, Q9, 2017.

Exhibit 11 shows that most respondents want a variety of transportation options in their neighborhood. The most frequently selected transportation options were auto/vehicular options (22%), pedestrian options (20%), and bicycle options (19%). Notably, 48% of respondents indicated they would prefer to walk or bicycle.

Exhibit 11. Transportation Options Respondents Want in their Ideal Neighborhood

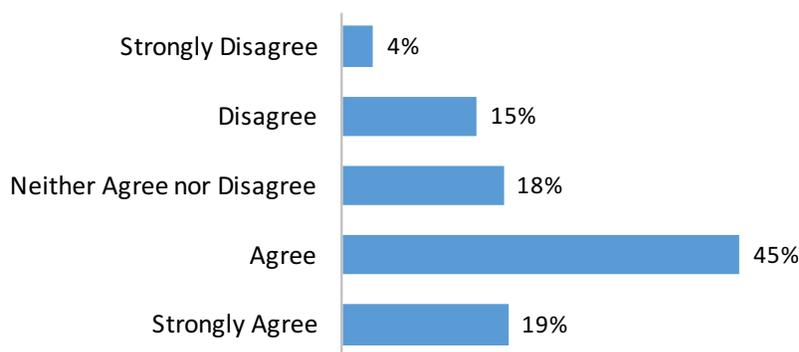


Source: Oregon Livability Survey, Q22, 2017.

While a majority of respondents use automobiles as their primary mode of transportation, it is not the preferred mode for many respondents. When asked about transportation their most preferred transportation mode, 52% of respondents most preferred auto/vehicular option, while 32% preferred to walk, and 16% preferred cycling.

Exhibit 12 shows that 64% of respondents agree or strongly agree that their neighborhood accommodates all the transportation options they would want to take, though about 20% disagree or strongly disagree with that statement “My neighborhood accommodates all the transportation options I want.”

Exhibit 12. Respondent Perceptions Whether Their Neighborhood Accommodates all the Transportation Options They Want



Source: Oregon Livability Survey, Q25, 2017.

Discussion

The survey results present some interesting results—some of which challenge conventional wisdom among planners. Following is a summary of our preliminary findings.

- **Residents within the study’s sample group are generally satisfied with where they live.** Overall, the majority of respondents in the Oregon Livability survey indicated they were satisfied with their home, neighborhood, city, county, and state. Age tended to influence satisfaction, in which older generations were more content with where they live.
- **Residents value housing affordability and safety.** More than 90% of survey respondents indicated affordability and crime levels are important factors for selecting their home or neighborhood. Respondents in the Central Lane focus group commented that current housing prices make it very difficult for younger generations to own a home. Literature analyzed supports this sentiment with insight from Baker and Biton stating: “the cost for housing continues to grow faster than household income; therefore, it is imperative that housing is offered at higher rates of affordability.”
- **Detached, single-family dwellings were identified as the most desirable housing type to see in livable neighborhoods.** Eighty-eight percent of survey respondents preferred detached, single-family housing. Sixty-four percent desired at least a medium-size yard or larger. The preference

for single-family units with yards was in line with where most respondents currently live. Survey and focus group data indicate that respondents prefer at least a small yard rather than no yard. Respondents in our focus groups also mentioned that quality landscaping improves small yards, while sun access is necessary regardless of yard size.

- **Access to transportation options are important to livable neighborhoods.** Existing availability of alternative modes of transportation is not enough to meet residents' current needs and desires. While a staggering majority of respondents indicated they use cars to get to their everyday destinations, a proportional amount of people indicated desire to bike or walk as much as drive.
- **Millennials are both less satisfied with where they live as well as perceiving their communities as less livable than Gen-Xers and Boomers.** Survey results show that Millennials were less satisfied with each geographic place than Generation X respondents, and Generation X respondents less than Baby Boomers. While 90% of Baby Boomers were somewhat or very satisfied with their homes, this same level of satisfaction was only held by 79% of Generation X respondents and 76% of Millennials. Millennials were perceived of each geographic place less livable than Generation X respondents, and Generation X respondents less livable than Baby Boomers. Moreover, perceptions of livability decreased as geographic area broadened.
- **Millennials appear to place less importance on walkable/bikable neighborhoods than Gen-Xers or Boomers.** Boomers and Gen Xers rated proximity to shops and services significantly more important than millennials. This comparison between these groups resulted in a difference that was statistically significant ($p = .00$). Responses to a question about whether respondents wanted their neighborhood to be more bicycle and pedestrian friendly did not show significant differences by generation. This could suggest that Millennials value walking and biking less, or that they are accustomed to walking and biking in the existing built environment.

Future Work

One of the objectives of this study is to develop regression models that explain the relative contribution of different factors to neighborhood livability. The authors have conducted preliminary analysis using logistic regression to examine the how respondent demographics, parcel characteristics, and neighborhood characteristics affect perceptions of livability. But the analysis to date has produced insignificant results. In this section, we describe our hypotheses about how demographics, parcel characteristics and neighborhood characteristics will affect perceptions of livability and describe future work.

Dependent Variable

Neighborhood Livability. The survey asked respondents to rate the livability of their home, neighborhood, city, region, and state as "excellent, good, fair, or poor." To conduct logistic regression analysis, we consider "excellent and good" as livable (1) and "fair or poor" as non livable (0).

Independent Variables

Demographic Characteristics. Survey respondents were asked several questions that corresponded to demographic information including: age, race, gender, income, and household size. We hypothesize that older, white, wealthier individuals will have higher perceptions of livability.

Housing and Travel Characteristics: Survey respondents provided response and desire for foot traffic, type of existing housing unit, perceived density, commute mode, and whether transportation options are accommodated.

Parcel Characteristics. GIS analysis of individual parcels allowed us to examine the distance of an individual parcel to the nearest residence, grocery, retail, transit stop, bike lane and central business district.

Neighborhood Form Characteristics. GIS data provides several characteristics to distinguish land use and transportation characteristics of neighborhoods including: density, percent residential, number of parks, and average housing value.

Neighborhood Demographics: American Community Survey data provides several characteristics of interest including: single family, gross rent, owner occupancy, mode choice, and commute choice at the neighborhood level.

Regression Models

Initial analysis has used a logit model by which we estimated variables independently and as sets of variables as reported below. Preliminary models have been a poor fit for the data, and authors are further exploring regression models. After examining these models, we intend to employ multilevel logit modeling to examine the individual and neighborhood.

Model 1: Livability of Neighborhood = f(demographic characteristics)

Model 2: Livability of Neighborhood = f(parcel characteristics + demographic characteristics)

Model 3: Livability of Neighborhood = f(neighborhood characteristics + parcel characteristics + demographic characteristics)

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Appendix A: Survey Instrument

The Oregon Livability survey



Dear Community Member,

You've been selected to participate in the Oregon Livability Survey! The Oregon Livability Survey is intended to measure citizen perceptions of and preferences for livability.

The term "livability" is frequently used and promoted by communities across the United States. In Oregon, various local communities, including some state agencies, seek to improve livability. **But what is it?** The Community Service Center at the University of Oregon wants to know what you think livability is, specifically as it relates to transportation and land use patterns in your neighborhood. This survey will help Oregon governments and organizations better understand your community's needs and preferences.

This survey should take you about 15 to 30 minutes to complete. As an incentive, we will randomly select four participants to win \$50 gift cards. **To enter to win, provide your contact information on the last page of the survey.** You do not have to complete the survey to enter the raffle.

There are two ways to provide feedback; choose the survey method that is most convenient to you.

1) Paper Mailer Survey Instructions:

- This questionnaire should be filled out by the individual in which this survey was addressed to.
- Carefully read each question and mark your responses.
- We will not publish or share any personally identifying information that you share with us.*
- **Please complete the survey and return by mail using the provided envelope by March 27, 2017.**

Please record your survey code located on the front on your envelope above your address here:

(This will allow us to take your name off our mailing list after you complete the survey)

– OR –

2) Online Survey Instructions:



- Visit <https://goo.gl/Xedb5C> or use the QR Code:
- This questionnaire should be filled out by the individual in which this survey was addressed to.
- Carefully read each question and mark your responses.
- We will not publish or share any of the personally identifying information that you share with us.*
- **Please complete the online survey by March 27, 2017.**

**This survey was developed by the University of Oregon's Community Service Center (CSC) in partnership with the University of Oregon and funded through the National Institute of Transportation and Communities. Your answers are and will be completely confidential. Any personally identifying information will not be tied to any product this research produces. We will not share or sell your personally identifying information. By completing and returning this survey you provide consent in allowing the CSC to use these findings for research. You may choose not to participate in this survey without penalty. If you have any questions, please contact Robert Parker, Community Service Center Director (541.346.3801 or rgp@uoregon.edu).*



First, we would like to know what you think LIVABILITY is.

There are no official definitions of livability. One of the goals of this survey is to gain an understanding of resident perceptions of livability. In this survey, we ask questions about your IDEAL neighborhood and about your CURRENT neighborhood. Your IDEAL neighborhood is where you would like to live and your CURRENT neighborhood is where you currently live. For some respondents, your IDEAL neighborhood and CURRENT neighborhood may be the same. A neighborhood is defined as anything within a 20-minute walk of your home.

Q1 How SATISFIED or DISSATISFIED are you with your current house/home, neighborhood, city, region, and state?

Consider “neighborhood” as everything within a 20 minute walk of your home. Note that the average person can walk about one mile in 20 minutes.

Geographic Levels:	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied
House/Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your neighborhood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your city	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your county	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q2 Rate the following factors in level of importance for selecting your current home or neighborhood.

Characteristics:	Extremely important	Somewhat important	Neither important nor unimportant	Somewhat unimportant	Extremely unimportant
Proximity to neighbors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity to parks or open space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity to family members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distance to work or school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distance to retail/services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affordability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to transportation options (i.e. ability to walk, bike or take the bus to destinations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crime levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neighborhood characteristics (i.e. homes of a similar style v. variety of types, historic homes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
House characteristics (i.e. number of bedrooms, accessibility, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Q3 If you had to describe your **IDEAL LIVABLE NEIGHBORHOOD** in three words, what would they be? Please write them in the space provided below.

1: _____

2: _____

3: _____

Q4 Would the words you listed in Q3 be the same words you would use to describe your **IDEAL LIVABLE CITY**?

- Yes
- No, they would differ slightly
- No, they would differ completely

Q5 In your opinion, how **LIVABLE** is your current house/home, neighborhood, city, region, and state?

Geographic Levels:	Excellent	Good	Fair	Poor
House/Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your neighborhood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your city	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your county	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oregon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Next, we would like to know how **TRANSPORTATION and **LAND USE** influences your perception of livability at the neighborhood level.**

Q6 What is the **IDEAL** level of foot traffic in your **IDEAL NEIGHBORHOOD**? (*the place you want to live*)

- Very little foot traffic. No activities with a 20-minute walk.
- Moderate foot traffic intermittently. Some activities within a 20-minute walk.
- Heavy foot traffic. Many activities available day and night.

Q7 Based on your response to Q6, what does your **CURRENT NEIGHBORHOOD** resemble?

- Very little foot traffic. No activities with a 20-minute walk.
- Moderate foot traffic intermittently. Some activities within a 20-minute walk.
- Heavy foot traffic. Many activities available day and night.

Q8 Where would you prefer to see parking in your **IDEAL NEIGHBORHOOD**? (check all that apply)

- Driveways
- Along the street
- Personal garage
- Behind the house
- Parking lots in front of buildings
- Parking lots on side of buildings
- Parking lots behind buildings
- Parking garage

Q9 Consider your IDEAL NEIGHBORHOOD. How important is living within a 20 MINUTE WALK of the following places listed below?

Access to Places:	Extremely important	Somewhat important	Neither important nor unimportant	Somewhat unimportant	Extremely unimportant
Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shops and Services (i.e. retail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grocery Store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants and Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks and Public/Open Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School or Children's School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Services (i.e. library, emergency/police station, post office)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Religious or Cultural Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transit Station/Bus Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q10 What characteristics of a street or intersection would you want in your IDEAL NEIGHBORHOOD? (check your top three elements)

- | | |
|---|---|
| <input type="checkbox"/> Traffic Lights | <input type="checkbox"/> Trees or greenery |
| <input type="checkbox"/> Traffic Signs (i.e. stop sign, slow traffic) | <input type="checkbox"/> Curb ramps |
| <input type="checkbox"/> Crosswalks | <input type="checkbox"/> Protected turn lanes (auto) |
| <input type="checkbox"/> Raised Crosswalks | <input type="checkbox"/> Dedicated bicycle facilities |
| <input type="checkbox"/> Extended curbs (sidewalk curbs bulge out) | <input type="checkbox"/> Sidewalks |
| | <input type="checkbox"/> Other: _____ |

Q11 What mix of land uses do you prefer in your IDEAL NEIGHBORHOOD?

- Only residential in my neighborhood.
- Residential surrounding my house BUT a mix of residential, retail, and services further away is okay.
- A mix of residential, retail, and services throughout my neighborhood.
- A mix of residential, retail, and office throughout my neighborhood.

Q12 What type of housing would you prefer to see in your IDEAL NEIGHBORHOOD? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Detached Single-Family Homes | <input type="checkbox"/> Secondary Dwelling (i.e. granny flat, backyard cottage, basement apt) |
| <input type="checkbox"/> Duplexes | <input type="checkbox"/> Tiny houses |
| <input type="checkbox"/> Apartments | <input type="checkbox"/> Live/Work Units (i.e. home + place of employment) |
| <input type="checkbox"/> Manufactured Homes | <input type="checkbox"/> Townhomes |
| <input type="checkbox"/> Temporary Housing | |

Q13 Consider your IDEAL NEIGHBORHOOD. How important is having/seeing the following elements within a 20 MINUTE WALK of your ideal home?

	Extremely important	Somewhat important	Neither important nor unimportant	Somewhat unimportant	Extremely unimportant
Presence of Building Diversity in Style/Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Buildings in a Similar Style/Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Building with Similar Heights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Buildings Setback at least 10 feet from Street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Quality Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Wide Roads/Streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Short Blocks (Length)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Street Layout on a Grid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Culs-de-sac	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Public spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Natural Features/Biodiversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Tree-Lined Streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Physical Boundary or Border in Neighborhood (e.g. river, park or arterial)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q14 How important is it that various elements (see examples in Q13) in your neighborhood are visually interesting? (i.e. that elements encompass design/architectural features)

- Extremely important
- Somewhat important
- Neither important nor unimportant
- Somewhat unimportant
- Extremely unimportant

Next, we would like to understand your preferences of livability as it relates to YOUR RESIDENCE AND NEIGHBORHOOD.

Q15 How would you describe your CURRENT home?

- No private outdoor space, possible shared space
- Small private courtyard, patio, or balcony
- Small private yard
- Medium sized private yard separating home from neighbor
- Large private yard
- Acreage
- Other: _____

Q16 How would you describe your IDEAL home?

- No private outdoor space, possible shared space
- Small private courtyard, patio, or balcony
- Small private yard
- Medium sized private yard separating home from neighbor
- Large private yard
- Acreage
- Other: _____

Q17 How would you classify the building in which you CURRENTLY live?

- Single-Family Detached Home
- Single-Family Attached Home(i.e. townhome or condo)
- Two to Four Apartments
- Five to Nine Apartments
- Ten or More Apartments
- Mobile Home or Other Type of Housing

Q18 How would you classify the building in which you would IDEALLY live?

- Single-Family Detached Home
- Single-Family Attached Home (i.e. townhome or condo)
- Two to Four Apartments
- Five to Nine Apartments
- Ten or More Apartments
- Mobile Home or Other Type of Housing
- No preference

Q19 In your opinion, would you characterize your CURRENT NEIGHBORHOOD as too dense?

- Yes
- No
- Don't Know

Q20 In your opinion, how dense is your CURRENT NEIGHBORHOOD compared to the rest of your city?

- High/Very Dense
- Medium/Moderately Dense
- Low/Not Dense

Q21 How dense do you think your CURRENT NEIGHBORHOOD is? (Note: an acre is about the size of a football field)

- 0 to 1 housing units/acre
- 1 to 3 housing units/acre
- 3 to 6 housing units/acre
- 6 to 12 housing units/acre
- 12+ housing units/acre

Please share your perceptions about transportation options.

Q22 What kind of transportation options would you want in your IDEAL NEIGHBORHOOD? (check all that apply)

- Auto/Vehicular Options
- Pedestrian Options
- Bicycle Options
- Carsharing Options (i.e. ZipCar)
- Public Transit: City Bus
- Public Transit: Cable/Wire-Propelled Option (light rail)
- Intercity Rail and Bus (i.e. Amtrak, Greyhound, etc.)
- Multi-Use Pathway Options (non-motorized, etc.)

Q23 Indicate the mode of transportation that you use **MOST FREQUENTLY** to get to the various places listed below **in a typical week.**

	Automobile / Carpool	Bicycle	Walk	Bus/Public Transit	Not Applicable
How do you get to work?	<input type="checkbox"/>				
How do you get to shopping centers?	<input type="checkbox"/>				
How do you get to the grocery store?	<input type="checkbox"/>				
How do you get to parks and open areas?	<input type="checkbox"/>				
How do you get your children to school?	<input type="checkbox"/>				

Q24 If the choice was yours (and you were not constrained by distance, time, or finances) what would be your **MOST PREFERRED** mode of transportation? (Select only one)

- Automobile Walking Bicycle

Q25 Please indicate your level of agreement or disagreement with this statement: “My neighborhood accommodates all of the transportation options I would like.”

- Strongly Agree
 Agree
 Neither Agree nor Disagree
 Disagree
 Strongly Disagree

Q26 Please indicate your level of agreement or disagreement with this statement: “I want my neighborhood to be more bicycle/pedestrian-friendly.”

- Strongly Agree
 Agree
 Neither Agree nor Disagree
 Disagree
 Strongly Disagree

Finally, we would like to know a little bit about you.

Q27 When was the last time you moved (year)? _____

Q28 What is your age?

- 18-19 years 45 to 54 years of age
 20 to 24 years of age 55 to 64 years of age
 25 to 34 years of age 65 years and over
 35 to 44 years of age

Q29 What was your annual household income in 2016?

- Less than \$15,000 \$50,000 to \$74,999
 \$15,000 to \$24,999 \$75,000 to \$149,999
 \$25,000 to \$34,999 \$150,000 to \$199,999
 \$35,000 to \$49,999 \$200,000 or more

Q30 What is your gender identity? _____ Prefer not to say

Q31 What is your race/ethnicity?

- | | |
|--|---|
| <input type="checkbox"/> Prefer not to say | <input type="checkbox"/> Latino/Hispanic |
| <input type="checkbox"/> White | <input type="checkbox"/> American Indian, Alaska Native |
| <input type="checkbox"/> Black, African American | <input type="checkbox"/> Asian |
| <input type="checkbox"/> Native Hawaiian, Other Pacific Islander | <input type="checkbox"/> Other: _____ |

Q32 What zip code do you live in? _____

Q33 What is the highest degree/level of school you have completed?

- | | |
|--|--|
| <input type="checkbox"/> Less than high school graduate | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> High school graduate (or equivalency) | <input type="checkbox"/> Graduate degree or higher |
| <input type="checkbox"/> Some college or associates degree | |

Q34 Indicate the number of people in your household.

_____ Number of individuals who are 17 years of age or younger
_____ Number of individuals who are 18 years of age or older

Q35 Do you rent or own the housing unit that you live in currently?

- Own Rent Occupy without Payment Prefer not to say

Q36 Finally, indicate the extent to which you agree or disagree with this statement: "My neighborhood is livable."

- Strongly Agree
 Agree
 Neither Agree nor Disagree
 Disagree
 Strongly Disagree

Q37 Is there anything else that you would like to share with us about the concept of livability or your community?

Q38 If you want to be eligible for the raffle or you like to participate in a focus group please provide your email address: _____

- Yes, I would like to be contacted to participate in a focus group.
 No, thank you.
 Not sure, please send me more information.

**Your email address, as well as any identifying information, will not be tied to your responses in any product that this research produces. We will not sell or share any personally identifying information.*

Thank you for participating!