**DRAFT Report**

# City of Lakewood Housing Study

*The Economics of Land Use*

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City of Lakewood
Economic Development Department

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with

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# 1. EXECUTIVE SUMMARY

## Introduction and Background

The metro area is quite fortunate to be surrounded by such an attractive natural environment, offering high quality of life, ideal climate, and a multitude of recreational opportunities. Because of these natural assets, the economy is strong and growing with little unemployment. Local and regional investments in major transportation infrastructure have contributed to making it a desirable place to live. These patterns of demand have most recognizably benefitted downtown Denver, but demand and revitalization pressures are pushing their way quickly into the first ring cities like Lakewood, Aurora, Arvada, and Wheat Ridge.

Housing is a critical component of not only the built environment, but of our regional economic infrastructure; that is, housing is not just an aesthetic but an economic concern. It is a critical component of individual and household investment, where nearly 50 percent of nationwide capital is tied to housing. Optimally located housing supply supports workforce mobility and productivity, whereas under-supply leads to increased transportation costs, decreased worker productivity and lower quality of life. Over-spending on housing, for example, leads to cost-burden, leading to lower quality of life. And because housing also supports workforce mobility, if housing is spread too far apart, or not available in sufficient supply to meet demand, workers and residents spend more of their income on transportation just to commute to work or for ordinary purposes (shopping, dining, etc.) One or both of these set of conditions can easily lead to diminished quality of life and negatively impact economic development efforts.

### Purpose

The overarching question of this study is whether or not Lakewood's housing supply is meeting the demands of its current residents and whether or not it is likely to meet the demands of future residents.

This analysis, led by Economic & Planning Systems' (EPS) with RRC Associates, has attempted to illustrate that housing is defined much more than by its physical features, but defined rather (and more appropriately) by its context – neighborhoods, transit access, and the larger community. The analysis has also sought to underscore the connection between economic development efforts, the growth in the City's economy, and the availability of a diversity of housing options in amenitized and transit-proximate neighborhoods for all spectrums of the workforce and population. That is, meeting demand means more than building houses, it means creating a sense of place for a range of residents and workers throughout their different life stages.

Whereas housing supply facilitates workforce availability and thus economic development, transportation access facilitates both quality of life and workforce productivity. The following report is intended to piece together the narrative formed by pieces of analysis. Guiding the analysis are a series of objectives and questions:

***Study Questions***

The underlying questions are both objective and subjective. Answers are intended to come neither fully from the analysis nor fully from the consultant; rather, answers to objective questions are intended to come from the analysis and answers to subjective questions are intended to come from a combination of EPS's interpretations and perspectives as well as the perspectives of City's leaders.

- What role does variety of housing stock play in economic development?
- How adequate is the city's mix of housing for changing demand?
  - What are the potential impacts of a homogeneous housing stock?
- Is the supply situated in desirable neighborhoods?
- What are households looking for in housing, neighborhoods, and community?
- What does it mean to have a vibrant community with respect to housing?
  - Does it include infrastructure investment?
  - Does it allow for aging in place?
  - Does it make room for all generations?
- What is a city's purview with respect to these issues/questions?
- Is there enough development capacity remaining to meet demand yet to come?

## Summary of Findings

This summary highlights the major findings of the research, analysis, and process that address the questions at the heart of the City's relevant housing questions, as outlined previously in the Introduction section. The findings are also delineated by chapter for clarity: Demand-Side Analysis, Supply-Side Analysis, and Stated Preferences.

### Chapter 2: Demand-Side Analysis

Housing market growth typically responds to a variety of conditions, primarily employment and/or net-positive population growth (or household formation). At the heart of employment growth is the effort made by a city to attract, retain, and grow its business community. In an environment like the Denver MSA, however, there is also demand from population growth that sometimes continues without an underlying economic engine, as described below.

The question guiding the analysis of demand conditions and influences is "where is demand coming from?" The findings below represent highlights of the findings that are intended to shed light on the different angles from which this question can be interpreted: Is there demand at all? What is the demographic composition of it? That is, from what types of households?

***1. The MSA is growing…***

Trends indicate that the MSA has been experiencing high rates of employment and population growth. Between 2000 and 2015, the MSA added more than 260,000 jobs (see the discussion of **Figure 1** on page 14) and more than 660,000 people (see the discussion for **Figure 10** on page 27). From a historic perspective, this is strong growth. Over the past 45 years, average annual employment growth has been approximately 23,200 jobs, whereas over the past seven years growth has averaged nearly 45,000 jobs per year. In terms of

population, the MSA has historically (over the past 45 years) added approximately 40,400 people per year (see **Figure 8** on page 25), and in the last seven years it has averaged 60,700 per year. A further illustration of this attractiveness—during the two years following the Great Recession (2009 and 2010), the MSA endured a job loss of approximately 78,000 (see **Figure 3** on page 16), but still added 39,000 people (see **Figure 10** on page 27). Moreover, Colorado has gained national attention for its encouragement of entrepreneurial, high-tech, and professional and technical industries (see the Business-Friendly Environment section on page 21), and job growth in the professional and technical services industry is emblematic of this success (**Table 1** on page 17).

…***so, what does this mean?*** This means that the MSA is experiencing historically high employment growth right now, a positive sign for the economic health of the region, good for existing and new businesses. Good because existing businesses (e.g. retailers) have a growing demand base either from business-to-business transactions or from individuals demanding their products and services. Good for those entering the workforce, because unlike some other parts of the country (or even state), job growth and business expansion means economic opportunity. Good for the provision of City services (e.g. police, fire, schools, parks, etc.), because it means that there are users to pay fees and property owners and households to pay property and sales taxes. In general, it is a sign of positivity, strength, and economic health that residents should applaud, because it means that the "system" can run smoothly and there are enough people "paying the way".

***2. …but Lakewood is not growing proportionately.***

On one hand, Lakewood's employment growth is strong, but its population and housing growth has not been proportional. On the positive side, Lakewood's employment has been growing relatively strong compared to the MSA (see discussion around **Figure 2** on page 15), accounting for an average of 5 percent of the MSA's overall employment growth (see discussion around **Figure 4** on page 16). In total, the City has added nearly 15,900 jobs between 2001 and 2016. The City's top-performing industries have been educational services, manufacturing, health care, retail, professional/technical services, and accommodations, which have collectively added 15,200 jobs, or 85 percent of all the City's positive growth (see Industry Mix discussion beginning on page 17). On the other hand, the City's population grew by just 8,600 people between 2000 and 2015 (see discussion around **Figure 9** on page 26), accounting for an average of just 1 percent of the MSA's average annual population increase (see the discussion around **Figure 11** on page 27).

…***so, what does this mean?*** It means that Lakewood has only been a beneficiary of one side of the regional economic growth. On one side are the direct benefits of this growth, i.e. the earnings and wages, income, property and sales taxes[1] that are generated by these businesses. On the other side, i.e. the side of the population, where a vast majority of the household expenditure potential from these new wages is not taking place in Lakewood (i.e. a daytime population does spend on eating out and a portion may be stopping for groceries

[1] Not all industries generate direct sales taxes. For example, retail and accommodations generate sales taxes directly, but educational services, management, or professional/technical services do not typically generate sales taxes. There are some industries, such as those in Lakewood that are its top-performing sectors, such as manufacturing, that may only generate sales taxes indirectly, i.e. after selling their products to a wholesaler, they are then sold to a consumer (business or individual) who pays sales taxes at the point of sale, which may or may not be Lakewood.

or other general merchandise on their commute to or from work, but a study of Denver's retail sales conditions in 2013 documented that just 10 percent of all retail sales taxes collected by the City were generated by its workers)[2], and the property taxes they pay for their homes also is not benefitting Lakewood.

3. ***While a majority of net new job-holders and population in the MSA and City have been Millennials and those born after 2001, there are significant increases in the population of those over 55.***

   There are two ways to interpret this shift: one is from a "generational" perspective and the other is from a perspective of purely age categories. From the generational perspective, in terms of employment at the MSA level (data with this level of granularity were not available for the City), 90 percent of the net positive increase in jobs were taken by Millennials (see **Figure 5** on page 19). In terms of population change, approximately 25 percent (at the MSA and City levels) of the net positive increase came from Millennials. From a purely age perspective, approximately 45 percent of the MSA's new population was between the ages of 50 and 70. In Lakewood, nearly 55 percent of the net positive population change came from the same age group.

   …***so, what does this mean?*** Data indicate that, as households age, they spend less on typical taxable retail items. If households age in place and, thus, spend less, they generate less sales tax for Lakewood. Without bringing in more households, sales tax revenues to Lakewood increase more slowly and eventually stagnate. Beyond this, an elderly population demands infrastructure and access to services that may not be in place, e.g. lower maintenance housing (e.g. townhome or condominium living that doesn't involve yard work, etc.), home healthcare, social assistance, etc.

4. ***A larger portion of the City's workforce is commuting than it was more than 10 years ago, and many of those imported jobs are in the City's six top-performing industries.***

   An analysis of employment, population, and commuting patterns indicates that a larger portion of the jobs in the City are being filled by in-commuters compared to more than a decade earlier (see the discussion of **Figure 7** on page 24). In 2002, there were approximately 5,200 jobs being filled by workers living outside of Lakewood; but by 2014, that number had increased to more than 12,900, an increase of more than 7,700 more in-commuters (i.e. imported labor). From the perspective of the City's top-performing industries, referenced above, not one of the six industries had net in-commuting in 2002, but by 2014, net in-commuting for these six top-performing industries had increased to 7,300 jobs.

   …***so, what does this mean?*** As pointed out in **Finding 2**, this means that the City's sales tax base is not benefitting from most of the household expenditure potential related to the 7,700 jobs that the City's business community brings in every day. Moreover, analysis shows that shows that household spending peaks during primary working-age years of 45 to 54 (**Table 16** on page 114) and falls 15 percent in each of the three subsequent age categories.

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[2] See http://www.denverretailscene.com/images/uploads/PDFs/Denver_Retail_Study.pdf

## Chapter 3: Supply-Side Analysis

As mentioned above, housing market growth typically responds to a variety of conditions, such as employment or population growth. As shown, Lakewood's employment base has been growing, but its population has not been growing proportionally. At the heart of supply growth are a variety of capacity factors, such as land availability, developable land or parcels, construction capacity, adequate infrastructure including roads, water, sewer, electricity, and public services to accommodate growth. Also key to growth in supply are external factors, such as neighborhood or community "infrastructure" that can channel growth. Again, in an environment such as the Denver MSA, many of the aspects of neighborhood and community infrastructure, such as parks, recreation, schools, shops, entertainment, etc., are nearly ubiquitous.

The questions guiding this part of the analysis are first of all, whether Lakewood's inventory of housing has been growing to meet demands (such as from employment), and whether the supply is sufficient to meet the current and future demands in a market of changing demographics, thus preferences. Second of all, questions guiding this analysis also revolve around whether the City's supply of housing is located in appropriate proximity to an adequate array of neighborhood and community amenities.

### *5. The City added relatively little housing between 2000 and 2015.*

For the 15,900 jobs added in the City of Lakewood, there were relatively few new housing units added between 2000 and 2015. Between 2000 and 2015, approximately 5,100 units were added to the inventory (see discussion of **Figure 12** on page 31). An analysis of residential construction trends also indicates that the City's growth diverged (i.e. dropped) from the trajectory of the MSA's growth/construction activity just before 2000 (see discussion of **Figure 24** on page 46).

…***so, what does this mean?*** All else being equal, when demand is constant and supply is constrained, the price of housing is pushed higher. If Lakewood adds less supply than there is demand for housing (which has been the case for 15 years), housing price pressures will grow. From the perspective of the existing housing stock, this means that property values (and therefore taxes) will increase, creating existing resident affordability issues. From the perspective of an expanding MSA economy, the neighborhoods that have desirable proximity to the major employment centers will face revitalization pressures, as evidenced by the West Colfax neighborhood on Lakewood's eastern boundary and south of Sloan's Lake. In these areas of redevelopment pressure, a single family home can be replaced with another much more expense single family home or duplex. If such a trend continues, it means that the City's workforce, and particularly those in essential community functions (such as police, fire, and emergency services) cannot afford to live near their jobs.

### *6. The City only added one housing unit for every three jobs it created between 2000 and 2015.*

Between 2000 and 2015, the 5-county MSA (Adams, Arapahoe, Denver, Douglas, and Jefferson counties) collectively added nearly one housing unit for every one job that was created, a signal of a somewhat balanced market. Lakewood, on the other hand (see discussion of **Table 8** on page 41), added only one occupied housing unit for every three jobs it created.

…***so, what does this mean?*** Again, the supply constraint will eventually cause prices to escalate beyond a point where, not only is there not enough inventory for a reasonable portion of its workforce, but the price-points have escalated beyond affordability for its essential community workers. In fact, in 2015 the median home price in Lakewood was an estimated $66,000 and $98,000 more than a starting City police officer or West Metro firefighter could afford on a single salary, respectively. By 2016, the gaps between what a police officer and firefighter could afford had grown to $107,000 and $139,000, respectively.

***7. The City did, however, facilitate its growth in areas that align well with its public policy objectives.***

Analysis of the location of residential building permit activity indicates that between 2000 and 2016, a considerable portion of higher-density residential construction activity occurred in areas (**Figure 26** on page 47) that aligned with the Growth Areas identified in its Comprehensive Plan, which was adopted in April 2015 (**Figure 27** on page 48).

…***so, what does this mean?*** It means that the City has been successful in approving development in different parts of its community that are appropriate to the objectives laid out in the adopted Comprehensive Plan. For example, most of the multifamily residential development occurred in areas designated in the Comprehensive Plan as Growth Areas, whereas single family development occurred in other parts of the city where preservation of existing densities is important.

***8. The City's vacancy rate in 2015 was the same as in 2000.***

Though not a significant finding of the research in itself, the fact that the overall owner and rental housing vacancy rate was 3.0 percent in 2000 and 2.8 percent in 2015 (see discussion of **Figure 19** on page 40) means that the City was not utilizing its inventory any more efficiently in 2015 than it was in 2000 in order to accommodate the additional jobs it had created. Another aspect of housing availability is the rate of inventory turnover (the portion of units sold during a year). In 2015, Lakewood's housing inventory turnover was approximately 7 percent, with some areas higher and lower than others. This compares to turnover at the MSA level of 8.0 percent for 2015.

…***so, what does this mean?*** On one hand, this points to a stability of the local resident population. On the other hand, it means that supply-side constraints are not just limited to new construction, they are also somewhat a product of a relatively constrained existing home resale market. Again, this means decreased opportunity for new residents to establish households and homes in Lakewood.

***9. The City has limited areas to facilitate additional growth, except for infill sites, redevelopment opportunities, and a few areas for new development.***

Part of the limitation to housing growth is that the City doesn't have much land (if any) left to be developed in the manner in which it has been historically accustomed, i.e. greenfield development. The series of graphics illustrating during what periods of time the City's housing supply was built (see Age of Structure section beginning on page 42) illustrates a general northeast to southwest development pattern, where 93 percent of the City's housing inventory was built before 2000.

…***so, what does this mean?*** This means that the prospect of adding more housing inventory is going to be much more challenging than it has historically been for the City. It means looking inward at redevelopment or revitalization opportunities. Specifically, it means looking at revitalization and redevelopment opportunities in commercial corridors, where adding housing inventory in a mixed-use context does not typically encounter neighborhood opposition in the same way it would if additional inventory (or denser housing) neighboring single family areas might.

***10. The City's housing inventory is not entirely homogeneous.***

Two different analyses of the City's housing inventory point to relatively different conclusions. On one hand, an analysis of the gross densities of residential development (see discussion of **Figure 13** on page 33) illustrates that a vast majority of Census tracts fall between a gross density of 2 to 4 units per acre (a statistic which includes roads, right of way, parks, etc.). On the other hand, an analysis of housing units by number of units in structure indicates that Lakewood has a higher proportion of single family detached units than Denver, but a lower proportion than Adams, Arapahoe, Douglas, and Jefferson counties. In the discussion of **Table 7** on page 34, it appears that Lakewood's proportion of housing in buildings with 2 to 49 units is 35 percent or 10 percent higher than the rest of the MSA, but its inventory of housing in buildings with 50 or more units is 3 percent less than the MSA but still a higher than Adams, Douglas, and Jefferson counties.

…***so, what does this mean?*** Even with a larger portion of buildings with 2 to 49 units in them, the City's average gross density still ranges between a low 2 to 4 units per acre. This is not to suggest at all that Lakewood's overall (i.e. citywide) gross density should be much higher, but that even in areas where additional density may be appropriate, such as along commercial corridors or the West Line, current densities are low. For example, gross densities in most filings of Stapleton ranged between 5 and 6 gross units per acre. It does, however, mean that Lakewood could increase its density in appropriate areas, as designated by the Comprehensive Plan, and not disturb or even significantly alter the character of its community.

## Chapter 4: Stated Preferences

The preferences for physical, neighborhood, and community features articulated by a sample of Lakewood's workforce are summarized by the following findings. For the most part, they characterize elements of housing demand for the City and illuminate where and possibly to what extent its supply of housing is adequate or deficient to meet demands over time. In essence, they provide a bridge for interpreting the demand- and supply-side analyses of the other two chapters.

As such, questions guiding this part of the analysis included nuances of previous questions, such as "how well does the City's housing supply align with its workforce's preference?" "How many people would like to live in the West Denver Metro Area?" What are the next generation of homeowners looking for? That is, what are first-time homebuyers looking for, as well as what are current homeowners looking for in their next move, e.g. larger, smaller home or lot, lower maintenance, closer to schools or shops, etc. Digging deeper, the analysis also builds a profile of what each of the study's age groups are looking for now and in the next five years.

***11. Among the physical features of a home, cost and the quality of construction are the top two considerations for the City's workforce in choosing where to live.***

The analysis of physical features as factors of housing choice begins on page 61, and shows that 61 percent of those surveyed see housing cost as "very important" to their decision, followed by 50 percent saying that quality of construction is "very important". Privacy between homes is third, followed by the size of a home, its historic character and low maintenance living. When asked how these considerations would change in the next five years, slightly larger portions of all respondents indicated that nearly the same ranking of considerations would be "very important".

…***so, what does this mean?*** As a basic finding, this simply reaffirms the notion that buyers in the market are and continue to be cost and quality conscious.

***12. The under 35 group is most cost-conscious of all age groups, mindful of safety and security, but less so than the others, and more driven to live near parks, shops, and transit.***

When it comes to the physical features of a home, under 35s are generally most concerned with cost. Nearly seven out of 10 say that it's very important to their decision of where to live. As for quality of construction, which ranks second, just 39 percent feel it's very important, followed by general indifference toward greater privacy between homes, home size, historic character, and low maintenance. A marginally lower proportion of this group says that a sense of safety and security is very important while their preferences for well-designed sidewalks ranks just about the same as the other age groups. Currently, a larger portion of this group is unconcerned about a sense of privacy than the others and much more concerned with living in proximity to parks and open space, shops and restaurants, as well as walking distance to rail stations or bus stops. As for their housing choices five years from now, the under 35s seem to be anticipating changes that make quality public schools and walking to them, home size, privacy between homes, sidewalks, quality construction, and a sense of safety more important.

…***so, what does this mean?*** This means that, if Lakewood wants to attract under 35s or those who will be under 35 in the future, it needs to have a supply of housing available that is in proximity to parks and open space, shops and restaurants, as well as walking distance to rail stations or bus stops. The overlap of amenities indicates that just 9 percent (less than 5,900 units) of the City's housing stock is within walking distance to even retail, employment centers, and grocery (excluding parks and rail stations or bus stops). Between 2000 and 2015, when the change in employment was nearly 16,000, assuming the same proportionality of jobs by age group at the MSA (see Finding 3), this would indicate that approximately 14,400 Millennials took new jobs in the City of Lakewood. But the analysis of the City's population shows that the city only gained 10,200 new Millennials (who were all under 35 in 2015). Another part of the analysis showed that approximately 12 percent (8,500 units) of the City's inventory in proximity to rail stations. If in 2015, there were 37,200 persons between the age of 20 and 34 in Lakewood (as representative of early home-buying years), this could equate conservatively to roughly 14,800 households. If, as indicated in the survey responses, 35 percent indicate that this will be very important to them in the future, that would equate to a maximum demand of more than 5,200 units in proximity to rail stations just due to 20 to 34 year-olds.

***13. The 35 to 54 group is generally focused on aspects of housing that facilitate an efficient and safe home and work life, where cost is less important than either of the other age groups, but historic character, schools, and a short commute to work are more important.***

While cost is still a very important consideration to 58 percent of this group, construction quality, privacy between homes, home size, and historic character are more important than for the under 35s. As for neighborhood features, sense of safety and security is very important to 75 percent of them, and a sense of privacy as well as a range of housing types in the neighborhood are more important to them than the under 35s. When it comes to community features, a short commute is very important to 51 percent of them, and having quality public schools in addition to being able to walk to them are much more important than to under 35s or the over 55s, but being able to walk to parks or rail stations/bus stops is much less important. As for their housing choices five years from now, the 35 to 54s seem to be anticipating changes, though not the same kind as the under 35s. They seem more interested in home size, quality construction, lower maintenance, walkability to rail or bus, schools, and parks, as well as safety and privacy.

…***so, what does this mean?*** This age group, while not currently concerned with walkability to rail stations or bus stops, is likely to become increasingly interested in such. While bus stops are slightly more ubiquitous than rail stations in the city, the analysis shows that approximately 12 percent (8,500 units) of the inventory in proximity to housing. In 2015, there were 37,500 persons between the age of 35 and 54 in Lakewood, equating to roughly 15,000 households. If 29 percent indicate that this is very important to them in the future, that would equate to a maximum demand for more than 4,300 units in proximity to rail stations just due to 35 to 54 year-olds.

***14. For those over 55, physical and neighborhood features become much more important to this group's considerations.***

Again, cost ranks highest on their list for physical feature considerations, but there are much larger proportions of this group saying that quality of construction, privacy between homes, home size, historic character, and low maintenance are very important. And while a sense of safety and security, like the other groups, is also the top neighborhood feature consideration, the over 55s are much more conscious of a sense of privacy, well-designed sidewalks, and a range of housing types in the neighborhood than the other groups. When it comes to the community features, however, this group is less interested in a short commute to work or proximities to parks, schools, shops, and transit. As for the over 55s, they seem to be anticipating changes also of a different type. The biggest change in their preferences is for lower maintenance living, being able to walk to shops and restaurants, walkability to rail or bus, as well as parks, housing cost and quality construction.

…***so, what does this mean?*** Like the 35 to 54s, the Over 55s are not currently concerned with walkability to rail stations or bus stops, but likely to become increasingly interested. The same analysis would show that if there were 45,000 persons 55 or over in Lakewood, equating to roughly 18,000 households, and if 31 percent indicate that this will be very important to them in the future, that could equate to a maximum demand for nearly 5,600 units in proximity to rail stations just due to the Over 55s.

***15. If those who work but don't live in the city wanted to live in the city in areas with amenities they have stated as "very important", the City would be undersupplied.***

The analysis of half-mile areas surrounding employment centers, retail, restaurants, and transportation indicates that the portion of the City's housing inventory is generally lower than the portion of those surveyed who state that living within walkable distance of these amenities is very important in considering where to live (see **Figure 57** through **Figure 60** beginning on page 77).

…***so, what does this mean?*** This implies that not only could the City allow for an expansion of supply in neighborhoods designated as Growth Areas, but that these Growth Areas are also appropriate for commercial reinvestment as well. Another implication, and one that extends into economic development and fiscal impacts, is that while it may be true that residential development on its own generally has a slightly net negative fiscal impact to City finances, it is also true that as households age, they spend less money on activities that generate the critical sales taxes that Lakewood relies upon. As such, it is vitally important that supplies of housing are simply available to a balanced distribution of age groups.

## Conclusions

In EPS's opinion, key to understanding what these patterns, trends, and conditions mean for Lakewood are addressed by bringing together some of the analysis under the light of a different set of questions that identify issues potentially more deeply rooted in fundamental drivers, such as opportunities or willingness.

As mentioned earlier, key among the findings is that the City's housing supply has not been growing in proportion to its economic base for the past decade and a half, on average. At the root of such a pattern are a set of questions about opportunity and willingness. Has the "opportunity" to invest (i.e. buy a home) in Lakewood changed over the past 15 years; if so, how? More fundamentally, is the problem that the people who have taken jobs in the city (but commute in) don't want to live in Lakewood, or that they are choosing to live elsewhere because there is something wrong either with the City's housing supply, including all physical, neighborhood, and community aspects of it?

***16. What role does housing play in economic development?***

From the standpoint of strictly job creation (the demand side), it has been pointed out that Colorado is known for its encouragement of entrepreneurial and high-tech industries, which employ predominately younger workers, and that the MSA has been the primary beneficiary of this pattern (**Finding 1**). It has been pointed out that a vast majority of new job-holders were Millennials (**Finding 3**), and that imported labor makes up a larger portion of the workforce than it did more than a decade ago (**Finding 4**). But it would appear that the City has not been growing its housing inventory to accommodate either this age group in either sufficient quantity (**Finding 6**) or in terms of location (**Finding 12** and **Finding 15**), in spite of the development magnitudes that have occurred in Growth Areas (**Finding 7**).

***…so, what does this mean?*** Economic development isn't just about recruiting jobs, it means developing the economy in general – i.e. all types of infrastructure. **Finding 12** pointed out that a larger portion of Under 35s, while cost-conscious, are very interested in proximities to shops and restaurants, transit, and walking and biking to work. Even when

considering changes that they'll likely experience in needs over the next five years, they still intend to choose their next house based on proximity to parks and recreation, schools, shops and restaurants, and transit, and that they are more willing to pay for this access than other age groups. So, this means offering resident housing mobility through different life stages, which encourages community investment. It means developing activity centers, i.e. areas with shopping, dining, entertainment, and transportation access. It means developing areas around employment centers and commercial activity with housing options that offer opportunities for some portion of residents and would-be residents to live. A full-time resident-worker population means not only community vibrancy, but has implications for long-term community-building.

### *17. How adequate is the City's mix of housing for changing demand?*

Based on the findings of the stated preference survey and the overlap of the City's housing supply with the various amenities, it would appear (excluding the qualitative adjustments that need to be made to ascertain quality, for example, of the retail centers or restaurants) the portion of housing supply aligning with various amenities is slightly insufficient. Finding 10 pointed out that the City's housing mix is not entirely homogeneous, but weighs much more heavily on the low-rise attached structures, such as buildings with 5 to 49 units, than the MSA on a whole. This is not to suggest that the City needs more high-rise projects, or even just projects with more than 50 units in the structure, but that the City does in fact have supply (whether it is adequate in terms of quality is a separate issue and the assessment of which is beyond the resources available for this study) that can meet various price-point demands.

***…so, what does this mean?*** It means that the City doesn't need to work very hard to attract the type of residents who are looking for traditional suburban living. It does mean that the City can encourage more development (both residential and commercial) in its designated Growth Areas to attract not only the generation of would-be residents who have accounted for the largest share of new job-holders in the city, but also portions of residents who may be living (and potentially) working in Lakewood who are contemplating retirement and lower maintenance living with proximity to amenities.

### *18. Is the supply situated in desirable neighborhoods?*

Many of Lakewood's neighborhoods meet the needs of its residents looking for safety and security, privacy between homes, a sense of privacy, and other general physical characteristics, such as home size or price, as described in **Finding 11**. There is, however, a limited inventory of housing that meets the demands, for example, of having a quality dining, entertainment, shopping, or a rail station in walking distance. On the other hand, it is likely that a more comprehensive and qualitative assessment of the City's retail (shopping, dining, entertainment) might demonstrate that the targeted Growth Areas could benefit from revitalized commercial offerings (**Finding 15**).

…***so, what does this mean?*** As an example, the calculations from above indicate that there could be demand for a maximum of 15,000 units in walking distance to rail stations versus the current inventory of 8,500.

### *19. What does it mean to have a vibrant community with respect to housing?*

Concerning Lakewood's future, a vibrant community with respect to housing will likely mean: the availability of housing that meets needs for all life stages (younger working households looking for the good proximity to open space that Lakewood offers; working households with children looking for quality schools and decent proximity to them; and retired households wanting to age in place). This means that the housing stock facilitates movement not just to respond to the different stage of life and the demands that they bring, but also facilitates movement within its supply for a variety of price-bands to accommodate the spectrum of Lakewood's workforce wages.

# 2. DEMAND-SIDE ANALYSIS

## Overview

This chapter focuses on housing demand—its origins and characteristics—in objective, as well as subjective terms. The analysis is devoted to quantitatively detailing the origins and characteristics of demand in terms of economic and employment growth, commuting patterns, and population growth. It was guided by a series of questions that encapsulates the demand side of the narrative for this study, a few of which blend considerations of supply and are discussed in the following chapter on Findings: 1) Where does demand come from? 2) How well does the City's housing stock align to its workforce preferences? 3) How many of those workers live in, or contemplate living in Lakewood? 4) As younger generations move through life and different household type stages, what will they be looking for? 5) And generally, what are households of different age categories looking for in housing?

There are numerous factors that influence, or drive, demand for housing. Although the scope of this study is not to delve into the details of all of these demand drivers, the analysis does detail several of the major housing demand drivers, specifically: employment growth, including a contextual discussion of what employers are looking for; commuting patterns; and population growth.

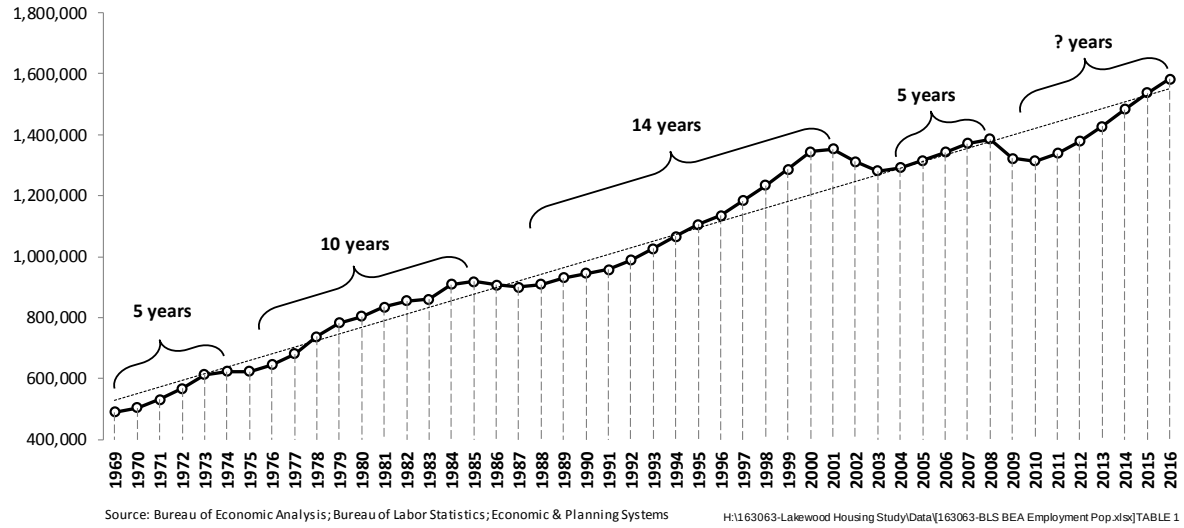
## Employment Trends

One of the most fundamental drivers of housing demand is economic growth, evidenced through the growth of the jobs market. Questions that have guided this section of the demand drivers analysis are: 1) What industries have grown or declined at the MSA and City levels? 2) How has the industry distribution at the City level changed with respect to the MSA? 3) What are the demographic components of employment change at the MSA and City levels? 4) More subjectively, what are employers looking for when they hire new employees as their markets and business grow?

### Employment

**Figure 1**, using Bureau of Economic Analysis and Bureau of Labor Statistics data, illustrates when the MSA has experienced either above- or below-average population growth during the past 46 years. As noted in the narrative of following graphics, this depicts average annual employment growth of approximately 23,200 jobs per year, factoring in expansions and contraction of the regional economy. The brackets indicate periods of continuous expansion, followed by periods of contraction, which have generally lasted approximately two years.

**Figure 1**
**Employment in the 7-County Denver MSA, 1969-2016**




Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Economic & Planning Systems H:\163063-Lakewood Housing Study\Data\[163063-BLS BEA Employment Pop.xlsx]TABLE 1

## Cycles of Economic Activity

Compared to the U.S. economy, the Denver region has experienced fewer market contractions and longer periods of market expansion. While numerous definitions of what constitutes a "cycle" of economic activity exist, EPS has modeled directly from the National Bureau of Economic Research (NBER) Business Cycle Dating Committee definition of a cycle. It states that cycle of economic activity contains both a market expansion and contraction. A contraction begins at the peak and ends at the trough of economic activity, and an expansion begins at the trough and ends at the peak of economic activity.[3] By this definition, the country has experienced seven cycles of economic activity (contraction and expansion) since 1969, whereas the Denver region has only experienced four complete cycles and is in the midst of a fifth:

- 1969 to 1975: 5 years of job gains, followed by 1 year of job losses
- 1976 to 1987: 10 years of job gains, followed by 2 years of job losses
- 1988 to 2003: 14 years of job gains, followed by 2 years of job losses
- 2004 to 2010: 5 years of job gains, followed by 2 years of job losses
- 2011 to present: 6 years of job gains

Employment at the City level, however, has been comparatively strong. **Figure 2** illustrates how City employment levels have grown at proportionally higher rates than at the MSA level. Using available Quarterly Census of Employment and Wages (QCEW) data from the Colorado Department of Labor and Employment (CDLE), the trends have been normalized to the year 2001 (the most historic point from which Lakewood employment data were available).

[3] See http://www.nber.org/cycles/cyclesmain.html The Business Cycle Dating Committee does not have a fixed definition of "economic activity"; rather, it is determined from broad collection of measures including Gross Domestic Product (GDP), employment, and real income.

Specifically, it illustrates employment for the MSA and the City by year as a percent of employment levels in 2001. In 2002, the City of Lakewood's employment dropped 6 percent below its 2001 level when economic activity contracted following the dot-com bubble. At the MSA level, employment levels dropped 3 percent. In 2008, following six years of market expansion, employment in the City was 16 percent above its 2001 levels, whereas employment at the MSA level increased to just 102 percent of 2001 levels. In the wake of the recession (which dated 2007 to 2009), while employment at the MSA level dropped back to 97 percent of its 2001 level, the City's employment dropped 4 percent but still 12 percent above 2001. Since then, the City's economy has continued to expand with employment growing to 26 percent above 2001.

**Figure 2**
**MSA and Lakewood Employment, 1969-2016**

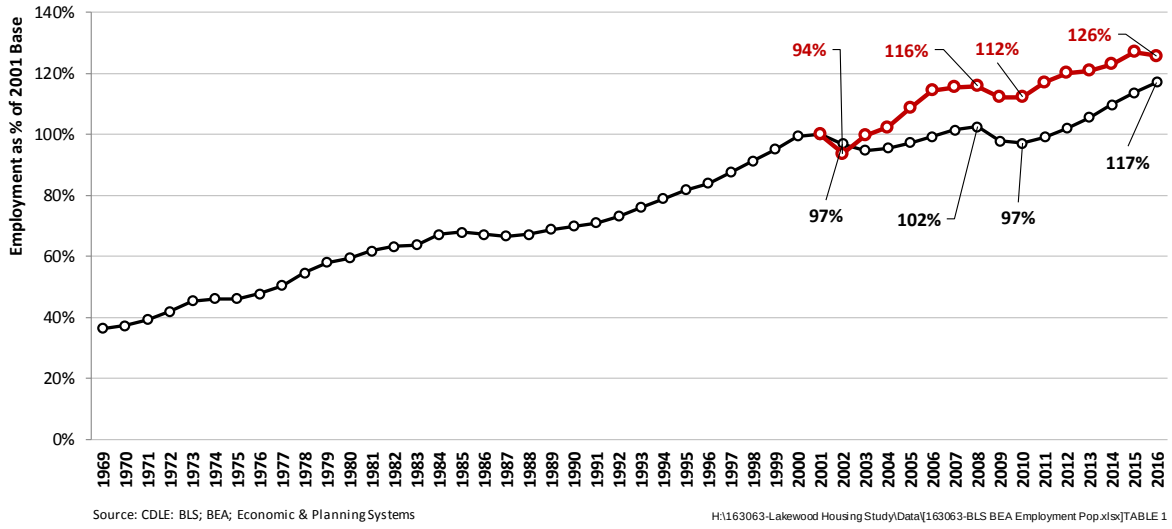
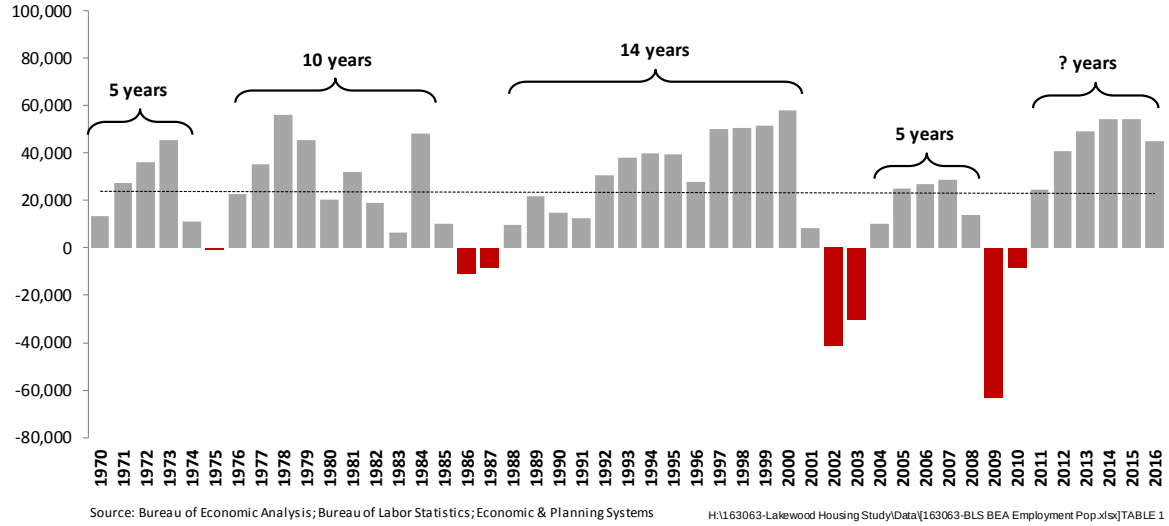



**Figure 3** illustrates the magnitude of annual employment changes over this period of time. An observation that characterizes a general concern regarding increasing economic instability is that during the previous two periods of job losses (which coincide with NBER's designations of contractions in economic activity), the job losses have generally been larger relative to previous economic contractions.

For example, between 1969 and 1975, employment increased by approximately 22,000; it grew by annual averages of approximately 23,000 between 1976 and 1987, 23,800 between 1988 and 2003, and 4,700 between 2004 and 2010; employment is currently growing by approximately 44,700 per year.

**Figure 3**
**Annual Changes in 7-County Denver MSA Employment, 1970-2016**

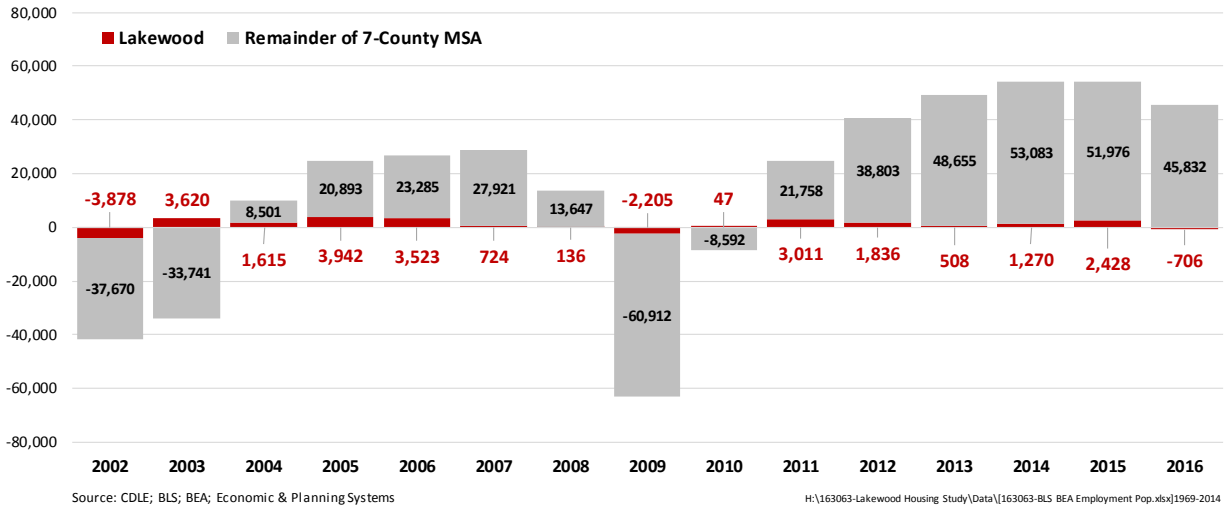



Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-BLS BEA Employment Pop.xlsx]TABLE 1

During the years for which data on the City were available, **Figure 4** illustrates the magnitude of annual employment change in the City relative to the MSA. As indicated earlier, the City's economy has grown proportionally more than the MSA's during this time. For example, in 2003 when the MSA was still losing jobs, Lakewood saw a net gain of 3,600 jobs. And during 2010, when the number of jobs continued to decline in the MSA, Lakewood saw a small, but net positive gain. Overall, the City's annual employment growth has accounted for an average of 5 percent of MSA employment growth. Between 2004 and 2006, as well as 2011, Lakewood captured an average of 14 percent the MSA's net job growth.

**Figure 4**
**Annual Lakewood Employment Change as % of MSA**




Source: CDLE; BLS; BEA; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-BLS BEA Employment Pop.xlsx]1969-2014

## Industry Mix

Another important detail of employment shifts in the City is the distribution by industry. **Table 1** illustrates the shift in distribution of jobs by industry at the MSA and City levels between 2001 and 2016.

**Table 1**
**Distribution of Employment by Industry, 2001 and 2016**

| | | | | 2001-2016 | | | Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | 2001 | 2016 | Total Δ | Ann. Δ | Ann. % | 2001 | 2016 |
| **11-County MSA** | | | | | | | | |
| 11 | Agriculture, forestry, fishing and hunting | 5,871 | 7,147 | 1,276 | 85 | 1.32% | 0.4% | 0.5% |
| 21 | Mining, quarrying, and oil and gas extraction | 6,810 | 14,841 | 8,031 | 535 | 5.33% | 0.5% | 0.9% |
| 22 | Utilities | 4,450 | 4,698 | 248 | 17 | 0.36% | 0.3% | 0.3% |
| 23 | Construction | 105,937 | 101,182 | -4,755 | -317 | -0.31% | 7.8% | 6.4% |
| 31-33 | Manufacturing | 119,031 | 100,073 | -18,958 | -1,264 | -1.15% | 8.8% | 6.3% |
| 42 | Wholesale trade | 77,509 | 80,858 | 3,349 | 223 | 0.28% | 5.7% | 5.1% |
| 44-45 | Retail trade | 150,004 | 163,821 | 13,817 | 921 | 0.59% | 11.0% | 10.3% |
| 48-49 | Transportation and warehousing | 62,244 | 59,983 | -2,261 | -151 | -0.25% | 4.6% | 3.8% |
| 51 | Information | 83,697 | 55,222 | -28,475 | -1,898 | -2.73% | 6.2% | 3.5% |
| 52 | Finance and insurance | 77,145 | 81,864 | 4,719 | 315 | 0.40% | 5.7% | 5.2% |
| 53 | Real estate and rental and leasing | 30,067 | 31,207 | 1,140 | 76 | 0.25% | 2.2% | 2.0% |
| 54 | Professional and technical services | 114,954 | 158,355 | 43,401 | 2,893 | 2.16% | 8.5% | 10.0% |
| 55 | Management of companies and enterprises | 15,048 | 32,866 | 17,818 | 1,188 | 5.35% | 1.1% | 2.1% |
| 56 | Administrative and waste services | 98,261 | 108,813 | 10,552 | 703 | 0.68% | 7.2% | 6.9% |
| 61 | Educational services | 51,427 | 78,931 | 27,504 | 1,834 | 2.90% | 3.8% | 5.0% |
| 62 | Health care and social assistance | 117,838 | 190,586 | 72,748 | 4,850 | 3.26% | 8.7% | 12.0% |
| 71 | Arts, entertainment, and recreation | 23,037 | 29,916 | 6,879 | 459 | 1.76% | 1.7% | 1.9% |
| 72 | Accommodation and food services | 114,676 | 161,605 | 46,929 | 3,129 | 2.31% | 8.4% | 10.2% |
| 81 | Other services, except public administration | 42,423 | 51,439 | 9,016 | 601 | 1.29% | 3.1% | 3.2% |
| 92 | Public administration | 58,662 | 71,744 | 13,082 | 872 | 1.35% | 4.3% | 4.5% |
| **Total** | **Total, all industries** | **1,359,091** | **1,585,150** | **226,059** | **15,071** | **1.03%** | **100.0%** | **100.0%** |
| **City of Lakewood** | | | | | | | | |
| 11 | Agriculture, forestry, fishing and hunting | 1 | 84 | 83 | 6 | 31.79% | 0.0% | 0.1% |
| 21 | Mining, quarrying, and oil and gas extraction | 69 | 129 | 60 | 4 | 4.26% | 0.1% | 0.2% |
| 22 | Utilities | 122 | 285 | 163 | 11 | 5.83% | 0.2% | 0.4% |
| 23 | Construction | 3,325 | 3,518 | 193 | 13 | 0.38% | 5.4% | 4.5% |
| 31-33 | Manufacturing | 1,944 | 3,423 | 1,480 | 99 | 3.85% | 3.2% | 4.4% |
| 42 | Wholesale trade | 1,265 | 1,113 | -152 | -10 | -0.85% | 2.1% | 1.4% |
| 44-45 | Retail trade | 8,636 | 10,290 | 1,654 | 110 | 1.18% | 14.0% | 13.3% |
| 48-49 | Transportation and warehousing | 748 | 1,036 | 288 | 19 | 2.19% | 1.2% | 1.3% |
| 51 | Information | 2,058 | 1,534 | -524 | -35 | -1.94% | 3.3% | 2.0% |
| 52 | Finance and insurance | 4,057 | 2,870 | -1,188 | -79 | -2.28% | 6.6% | 3.7% |
| 53 | Real estate and rental and leasing | 1,319 | 1,326 | 7 | 0 | 0.04% | 2.1% | 1.7% |
| 54 | Professional and technical services | 6,304 | 7,898 | 1,594 | 106 | 1.51% | 10.2% | 10.2% |
| 55 | Management of companies and enterprises | 720 | 1,116 | 396 | 26 | 2.96% | 1.2% | 1.4% |
| 56 | Administrative and waste services | 6,171 | 6,874 | 704 | 47 | 0.72% | 10.0% | 8.9% |
| 61 | Educational services | 845 | 2,729 | 1,884 | 126 | 8.13% | 1.4% | 3.5% |
| 62 | Health care and social assistance | 5,665 | 12,593 | 6,928 | 462 | 5.47% | 9.2% | 16.3% |
| 71 | Arts, entertainment, and recreation | 807 | 727 | -80 | -5 | -0.69% | 1.3% | 0.9% |
| 72 | Accommodation and food services | 6,840 | 8,521 | 1,681 | 112 | 1.48% | 11.1% | 11.0% |
| 81 | Other services, except public administration | 1,935 | 2,170 | 236 | 16 | 0.77% | 3.1% | 2.8% |
| 92 | Public administration | 8,782 | 9,239 | 457 | 30 | 0.34% | 14.3% | 11.9% |
| **Total** | **Total, all industries** | **61,613** | **77,476** | **15,863** | **1,058** | **1.54%** | **100.0%** | **100.0%** |

Source: BLS; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-Lakewood Employment growth.xlsx]TABLE a.2 - Lakewood MSA (2)

Using the industry growth trends, **Table 2** summarizes the shifts by industry in the City of Lakewood relative to the changes at the MSA level. The results present the average annual employment change between 2001 and 2016, changes in location quotients (LQ)[4], as well as a reference to the average annual growth rate at the metro level. This analysis delves deeper by dividing industries into four categories of change: 1) where the industry grew in Lakewood by a greater proportion than the MSA; 2) where the industry shrank at the City level, but did not lose jobs in proportion to job losses at the MSA; 3) where the industry grew at the City level, but did not grow in proportion to jobs at the MSA; and 4) where the industry shrank at the City level, and lost proportionally more than the MSA.

In general, the analysis reveals that the City has eight top-performing industries based on rates of growth: utilities, educational services, manufacturing, health care, agriculture, transportation, construction, and retail. Other industries that grew in Lakewood, although not proportionally to the MSA include mining, administrative services, real estate, professional and technical services, accommodations, management, and public administration (which include public school jobs, federal, state and local government jobs). These data are also utilized in a below to calculate location quotients.

**Table 2**
**Summary of Industry Shift Metrics, 2001-2016**

| | Annual Employment Δ (2001-2016) | Location Quotient (2001) | Location Quotient (2016) | MSA Annual % Δ |
|---|---|---|---|---|
| Industry in Lakewood grew, and grew by greater proportion than MSA | | | | |
| Utilities | 163 | 0.60 | 1.24 | 0.36% |
| Educational services | 1,884 | 0.36 | 0.71 | 2.90% |
| Manufacturing | 1,480 | 0.36 | 0.70 | -1.15% |
| Health care and social assistance | 6,928 | 1.06 | 1.35 | 3.26% |
| Agriculture, forestry, fishing and hunting | 83 | 0.01 | 0.24 | 1.32% |
| Transportation and warehousing | 288 | 0.27 | 0.35 | -0.25% |
| Construction | 193 | 0.69 | 0.71 | -0.31% |
| Retail trade | 1,654 | 1.27 | 1.29 | 0.59% |
| Industry in Lakewood shrank, but didn't lose proportionaly as much as MSA | | | | |
| Information | -524 | 0.54 | 0.57 | -2.73% |
| Industry in Lakewood grew, but didn't grow proportionaly to the MSA | | | | |
| Mining, quarrying, oil and gas extraction | 60 | 0.22 | 0.18 | 5.33% |
| Administrative and waste services | 704 | 1.39 | 1.29 | 0.68% |
| Real estate, rental and leasing | 7 | 0.97 | 0.87 | 0.25% |
| Other services, except public administration | 236 | 1.01 | 0.86 | 1.29% |
| Professional and technical services | 1,594 | 1.21 | 1.02 | 2.16% |
| Accommodation and food services | 1,681 | 1.32 | 1.08 | 2.31% |
| Management of companies and enterprises | 396 | 1.06 | 0.69 | 5.35% |
| Public administration | 457 | 3.30 | 2.63 | 1.35% |
| Industry in Lakewood shrank, and lost proportionaly more than the MSA | | | | |
| Wholesale trade | -152 | 0.36 | 0.28 | 0.28% |
| Arts, entertainment, and recreation | -80 | 0.77 | 0.50 | 1.76% |
| Finance and insurance | -1,188 | 1.16 | 0.72 | 0.40% |

Source: BLS; CDLE; Economic & Planning Systems

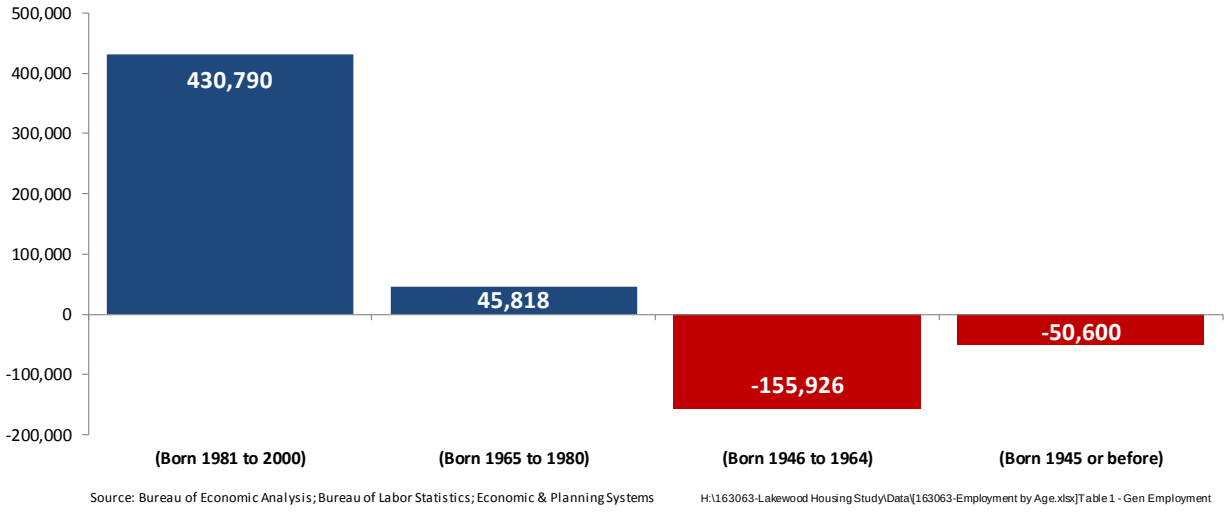
H:\163063- Lakewood Housing Study\Data\[163063- Lakewood Employment growth.xlsx]TABLE a. 4 - Summary Table

[4] Location quotients reflect a ratio of the portion of one industry at the local level divided by the portion of the same industry at a regional level. For example, if 10 percent of all jobs are in one industry at the local level and 10 percent of all jobs are in the same industry at the regional level, the location quotient would be 1.0. If, on the other hand, 5 percent of all jobs are in one industry at the local level and that industry accounts for 10 percent at the regional level, the location quotient will be 0.5.

## Demographic Composition of Jobs

Another aspect of shifts in economic activity is the demographic composition of those shifts. Not only has industry predominance shifted within the region and City, but the workforce composition has also shifted. **Figure 5** illustrates this shift at the highest level by generational category – i.e. Millenials are those born between 1981 and 2000, Generation X are those born between 1965 and 1980, Baby Boomers are those born between 1946 and 1964, and the Silent Generation are those born before 1945. The graphic represents a net growth of approximately 270,000 jobs between 2005 and 2015 (when these data were available from the U.S. Census American Community Survey). It also illustrates that Millenials accounted for 90 percent of the positive employment change, while Generation X accounted for the remaining 10 percent of positive employment change. Of those exiting the workforce, Baby Boomers accounted for 75 percent while the Silent Generation accounted for 25 percent of those exiting.

**Figure 5**
**Employment Change by Generational Category, 2005-2015**




Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Economic & Planning Systems H:\163063-Lakewood Housing Study\Data\[163063-Employment by Age.xlsx]Table 1 - Gen Employment

A breakdown of the details at the MSA level are shown in **Table 3**, which also reports the detail of employment by age category. Shown by age category, the trend reveals that, as a portion of those working, some of the younger and older age cohorts have become a larger part of the workforce, and those between 30 and 55 have become smaller portions. For example, those aged 25 to 29 accounted for 12 percent of all jobs in 2005 and 13 percent in 2015. At the other end of the spectrum, those age 55 to 59 accounted for 9 percent in 2015 (versus 8 percent in 2005); those age 60 and 61 made up more than 3 percent (compared to less than 2 percent in 2005); and those age 62 to 64 represented 3.5 percent of all jobs (compared to 2.1 percent in 2005).

**Table 3**
**Distribution of MSA Employment by Age, 2005 and 2015**

| | | | | 2005-2015 | | | Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | 2005 | 2015 | Total Δ | Ann. Δ | Ann. % | 2005 | 2015 |
| **Age Category** | | | | | | | | |
| 16 to 19 years | | 46,636 | 55,060 | 8,424 | 842 | 1.67% | 3.7% | 3.6% |
| 20 and 21 years | | 42,266 | 50,117 | 7,851 | 785 | 1.72% | 3.3% | 3.3% |
| 22 to 24 years | | 79,439 | 95,453 | 16,014 | 1,601 | 1.85% | 6.3% | 6.2% |
| 25 to 29 years | | 150,864 | 201,045 | 50,181 | 5,018 | 2.91% | 12.0% | 13.1% |
| 30 to 34 years | | 167,726 | 197,456 | 29,730 | 2,973 | 1.65% | 13.3% | 12.9% |
| 35 to 44 years | | 322,109 | 358,088 | 35,979 | 3,598 | 1.06% | 25.5% | 23.4% |
| 45 to 54 years | | 297,993 | 332,643 | 34,650 | 3,465 | 1.11% | 23.6% | 21.7% |
| 55 to 59 years | | 104,289 | 138,218 | 33,929 | 3,393 | 2.86% | 8.3% | 9.0% |
| 60 and 61 years | | 23,870 | 50,269 | 26,399 | 2,640 | 7.73% | 1.9% | 3.3% |
| 62 to 64 years | | 26,730 | 53,655 | 26,925 | 2,693 | 7.22% | 2.1% | 3.5% |
| **Total** [Note 1] | | **1,261,922** | **1,532,004** | **270,082** | **27,008** | **1.96%** | **100.0%** | **100.0%** |
| **Generational Category** | | | | | | | | |
| Generation Z | (Born 2001 or later) | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Millenials | (Born 1981 to 2000) | 168,341 | 599,131 | 430,790 | 43,079 | 13.54% | 13.3% | 39.1% |
| Generation X | (Born 1965 to 1980) | 511,855 | 557,674 | 45,818 | 4,582 | 0.86% | 40.6% | 36.4% |
| Baby Boomers | (Born 1946 to 1964) | 531,126 | 375,199 | -155,926 | -15,593 | -3.42% | 42.1% | 24.5% |
| Silents or before | (Born 1945 or before) | 50,600 | 0 | -50,600 | -5,060 | -100.00% | 4.0% | 0.0% |
| **Total** | | **1,261,922** | **1,532,004** | **270,082** | **27,008** | **1.96%** | **100.0%** | **100.0%** |

[**Note 1**]: These data represent an average of survey data collected by the U.S. Census American Community Survey over a 5-year period of time and do not, therefore, equate directly to actual counts of employment reported by the CDLE, BLS, or BEA.

Source: U.S. Census ACS 5-year estimates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- Employment by Age.xlsx]Table 1- Gen Employment

## Employer Demands

Employers consider a variety of factors in business development decisions, chief among them market, financial, and competitive factors, as well as considerations for a business-friendly environment, a growing market, and access to labor. Although the following is devoted to outlining these considerations, it is the latter that concerns this study primarily. Access to labor means that a city's housing supply needs to facilitate it.

As defined by the International Economic Development Council (IEDC), a brief list of what businesses and economic developers look for in evaluating business development prospects includes:

- Business and income taxes
- Labor availability
- Energy costs
- Market size
- Quality of services
- Cost of living
- Quality of life
- Environmental regulation
- Permitting, licensing, and reporting regulations
- Real estate (housing) costs and availability
- Infrastructure
- Access to capital
- Incentives

### *Business-Friendly Environment*

According to a 2015 report by the U.S. Chamber of Commerce, "Colorado has attained top-tier status for its support of innovation, entrepreneurship, talent pipeline, and overall economic activity."[5] The report cites numerous examples of the programs the state has developed to foster innovation and encourage entrepreneurship. Evidence of these efforts is apparent in the composition and commitments made by the State's Office of Economic Development and International Trade (OEDIT). OEDIT's strategies include: 1) building a business-friendly environment; 2) retaining, growing, and recruiting companies; 3) increasing access to capital; 4) creating and marketing a strong Colorado brand; 5) educating and training the workforce of the future; and 6) cultivating innovation and technology.[6]

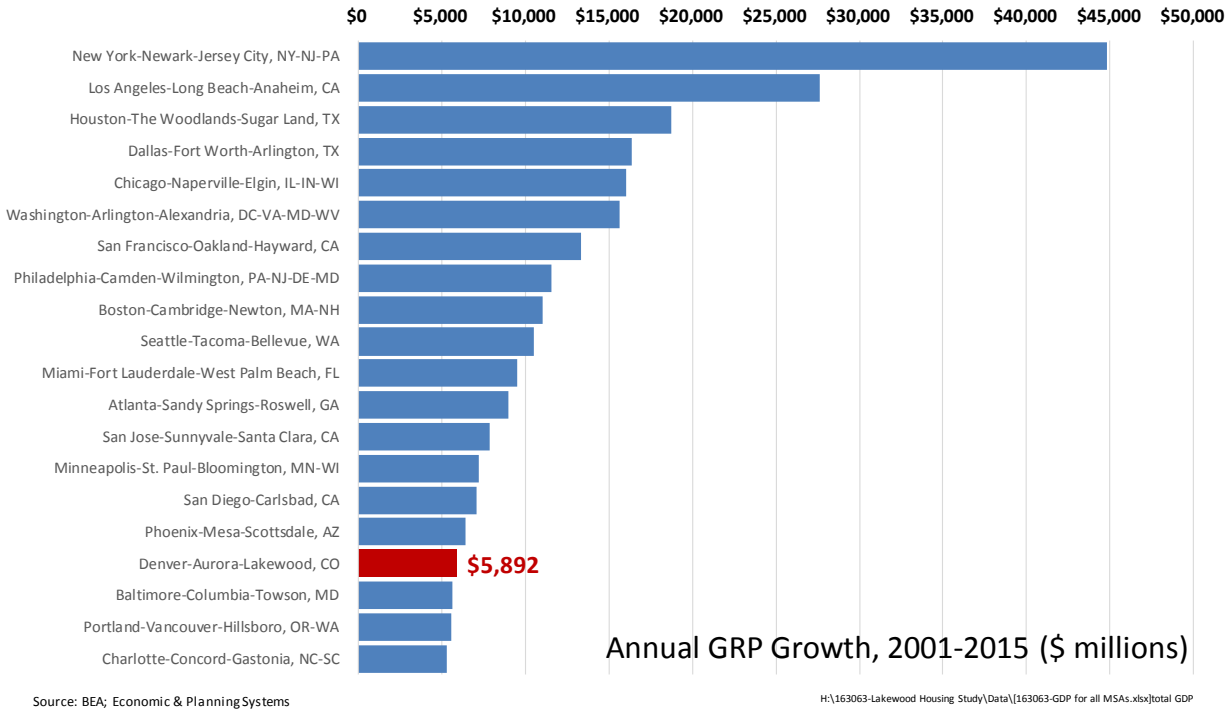
**5** See https://www.uschamberfoundation.org/enterprisingstates/#CO

**6** See https://choosecolorado.com/wp-content/uploads/2016/07/2015-OEDITAnnualReport_rgb.pdf

### *Growing Market*

A growing market means expanding and growing opportunities. As the employment trends make apparent, the metro area continues to grow. One of the more commonly cited metrics for identifying economic and market growth is Gross Domestic Product (GDP) or Gross Regional Product (GRP). GRP is defined as the total value of income generated from production, employee compensation, payments to government (taxes), and measures of profit or return on investment. It is one of the more frequently cited economic contribution metrics in economic analysis because it characterizes the amount of "value" created by the regional economic activity. As illustrated in **Figure 6**, GRP in the metro area has grown at $5.9 billion per year. And while the metro area ranks 17th by annual growth in GRP, this rate of growth is larger than the bottom 68 MSAs combined.

**Figure 6**
**Annual Gross Regional Product Growth by MSA, 2001-2015**




Source: BEA; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-GDP for all MSAs.xlsx]total GDP

Another commonly cited metric of economic growth is personal consumption. Because it accounts for 69 percent of U.S. GDP, business is attracted to environments where the driver of demand is strong and growing. **Table 4** illustrates a comparison of PCE to GDP for the U.S. as well as Colorado, where between 2000 and 2015, Colorado's PCE rose 4.2 percent per year on average. And as cited above, Colorado's PCE accounts for 71 percent of GRP versus 69 percent of GDP at the national level.[7]

**Table 4**
**Personal Consumption Expenditure and GDP, 2000-2015**

| | | | 2000-2015 | | |
|---|---|---|---|---|---|
| | 2000 | 2015 | Total Δ | Ann. Δ | Ann. % |
| **Personal Consumption Expenditure** | | | | | |
| U.S. ($ millions) | $6,789,177 | $12,278,861 | $5,489,684 | $365,979 | 4.0% |
| Colorado ($ millions) | $119,329 | $221,708 | $102,379 | $6,825 | 4.2% |
| **Gross Domestic (Regional) Product** | | | | | |
| U.S. ($ millions) | $10,219,801 | $17,925,143 | $7,705,342 | $513,689 | 3.8% |
| Colorado ($ millions) | $181,488 | $313,329 | $131,841 | $8,789 | 3.7% |
| **PCE as % of GDP/GRP** | | | | | |
| U.S. | 66.4% | 68.5% | --- | --- | --- |
| Colorado | 65.8% | 70.8% | --- | --- | --- |

Source: BEA; Economic & Planning Systems

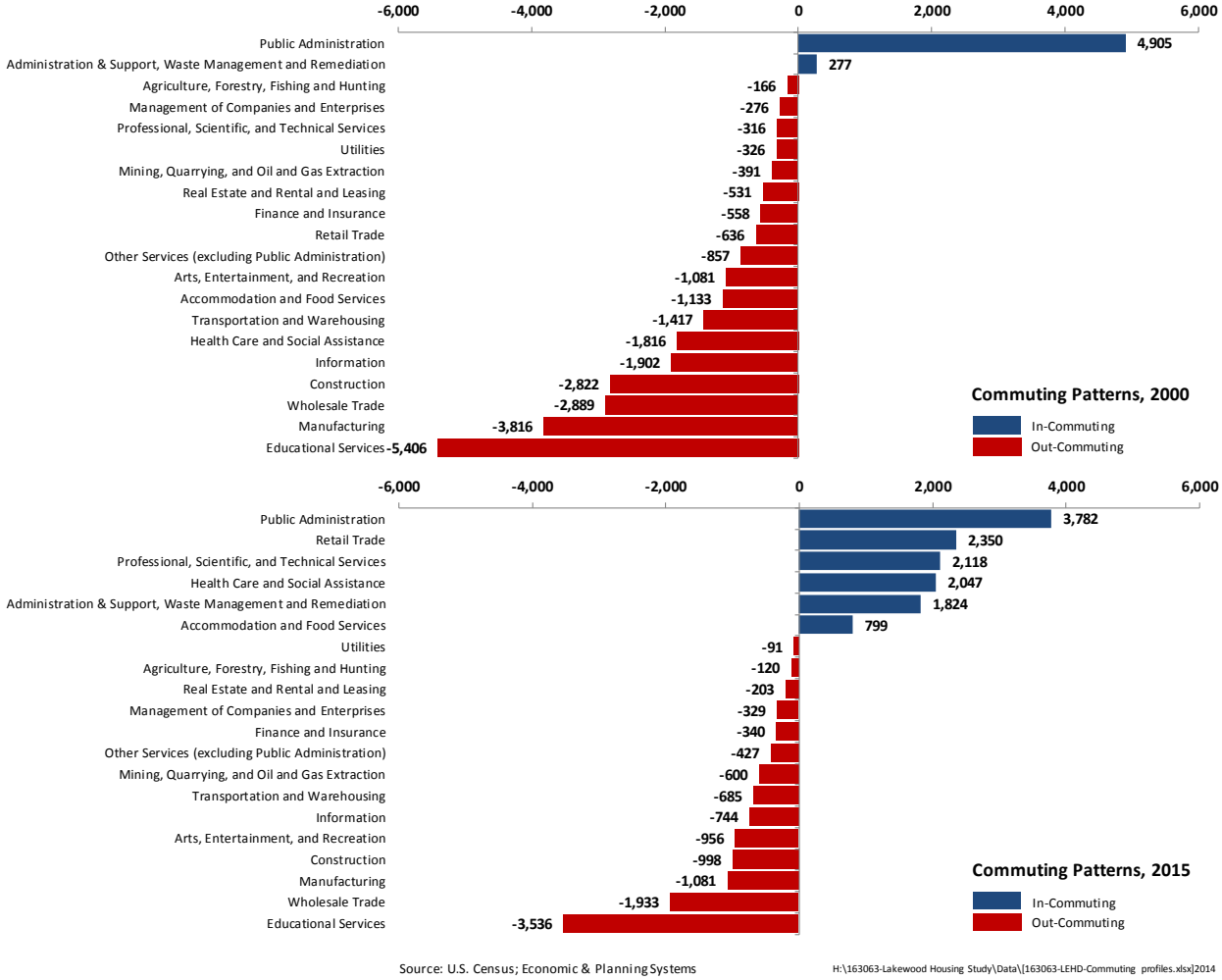
H:\163063- Lakewood Housing Study\Data\[163063- GDP and PCE.xlsx]TABLE 1- Summary

[7] See also Appendix B. As illustrated in Figure 106, the rate of change in PCE in Colorado is strong by comparison to other states.

## Commuting Patterns

Also chief among business considerations is access to labor. In metropolitan contexts, the dynamics of where residents live and where they work are complex. Communities often fall on a spectrum of purely employment center at one end and purely residential community on the other end. In reality, no one fits either description, but somewhere between. In such environments, some residents live and work in the same community, while many others choose (or are forced because of high housing prices) to live in one place and work in another. **Figure 7** illustrates the patterns of in- and out-commuting among Lakewood's workforce in 2002 and 2014. In 2002, approximately 9 percent of Lakewood's workforce commuted in and approximately 46 percent of its job-holding residents commuted out to work. By 2014, Lakewood businesses were importing 17 percent of their labor from outside the city and only 16 percent of the job-holding residents were commuting out to work.

**Figure 7**
**Commuting Patterns, 2002-2014**




Source: U.S. Census; Economic & Planning Systems

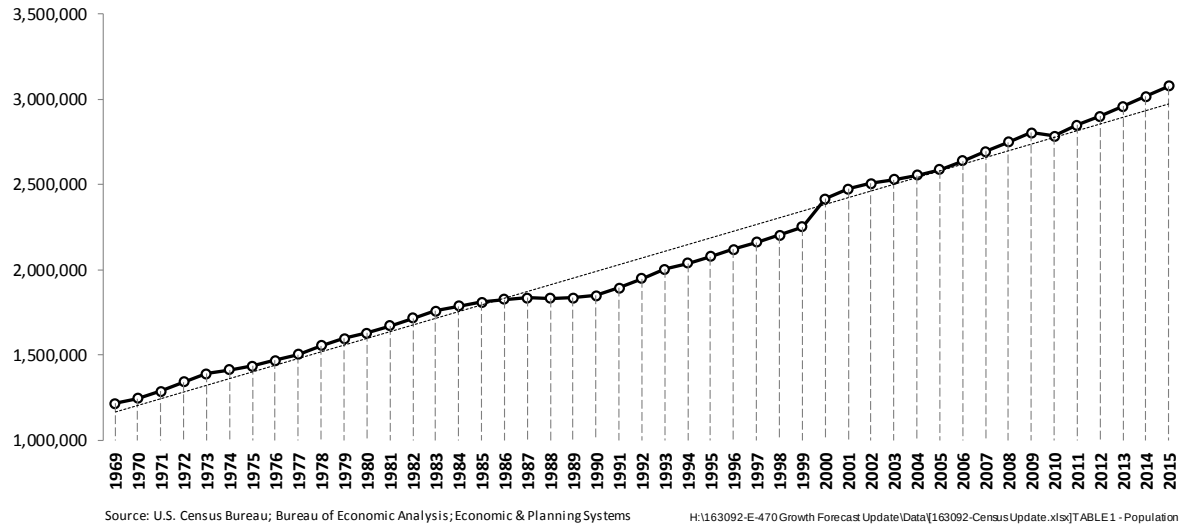
H:\163063-Lakewood Housing Study\Data\[163063-LEHD-Commuting profiles.xlsx]2014

## Population

Population growth, along with employment and economic growth, are among the fundamental housing demand drivers. Natural population growth fuels demand for different housing products - and especially relevant to the Denver MSA, in-migration to an attractive living and working environment driving housing demand. This portion of the demand drivers section is intended to identify what age and generational cohorts have changed within the City and MSA over time to begin to frame an understanding of which demographic groups have been and will be driving housing demand.

As illustrated in **Figure 8**, the 7-county Denver MSA has added an average of 40,400 persons per year since 1969. This graphic using U.S. Census data also illustrates when the MSA has experienced either above- or below-average population growth. For example, since 2011 (inclusive), the region has added approximately 60,700 people per year, well above the historical average since 1969.

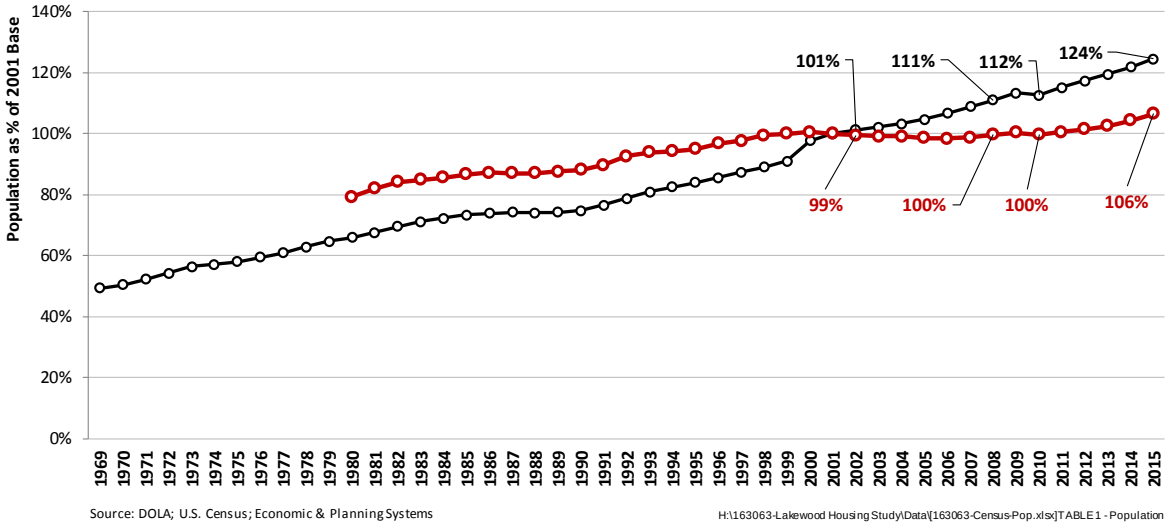
**Figure 8**
**MSA Population, 1969-2016**




The City's population growth, however, has not been comparatively strong. **Figure 9** illustrates in the same manner in which **Figure 2** on page 15 illustrated City employment levels compared to the MSA level. Using U.S. Census and State Demographer Office data, the trends have been normalized to the year 2001 (for the purpose of direct comparison to the findings of **Figure 2**). In general, it shows how population growth in the City paralleled the MSA in its upward growth trajectory through the 80s, but diverged in the 90s as the City approached buildout—a conclusion reached as a part of the Supply-Side analysis (refer to Age of Structure section of Chapter 2, beginning on page 42) that determined that a combined 93 percent of all housing in Lakewood had been built before 2000.

Just as with employment, in 2002, the City of Lakewood's employment dropped but only by 1 percent below its 2001 level following the dot-com bubble. In 2008, following six years of market expansion, population in the City was still at the same level as 2001, whereas the population at the MSA level had increased another 11 percent over 2001. Only since the end of the market's contraction (2010) has the City's population grown again reaching just 6 percent above its 2001 level, whereas the MSA has reached a level of 24 percent above 2001.

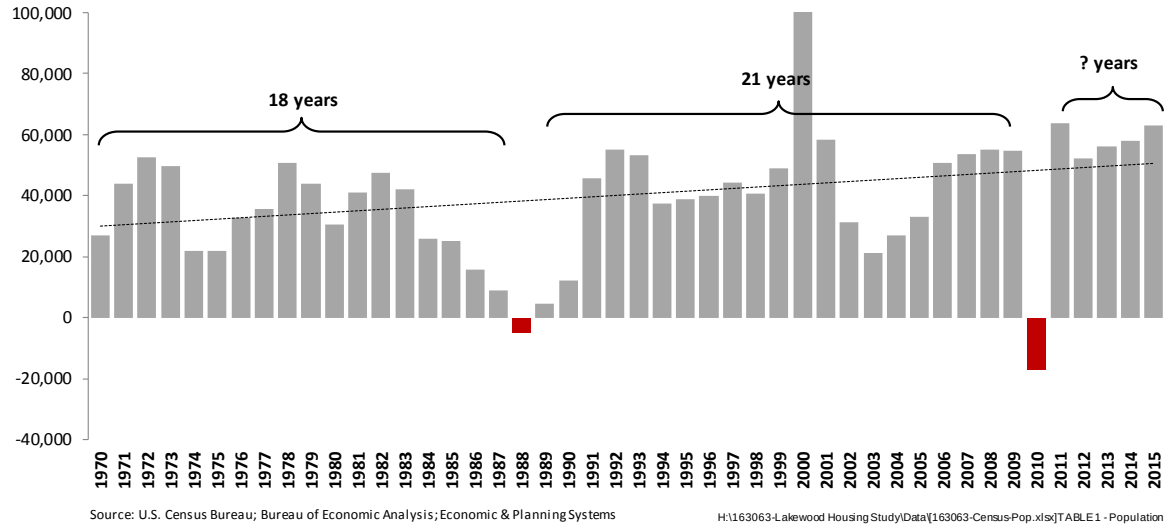
**Figure 9**
**MSA and Lakewood Population, 1969-2016**




**As indicated** above, the Metro Area lost population only twice in the past 46 years, approximately 4,700 in 1988 and approximately 17,000 in 2010. For example, between 1969 and 1975, population increased by approximately 36,200; between 1976 and 1987, population grew by an annual average of approximately 33,300; an annual average of approximately 43,200 between 1988 and 2003; an annual average of 36,700 between 2004 and 2010, and is currently growing by an annual average of approximately 58,600 per year.

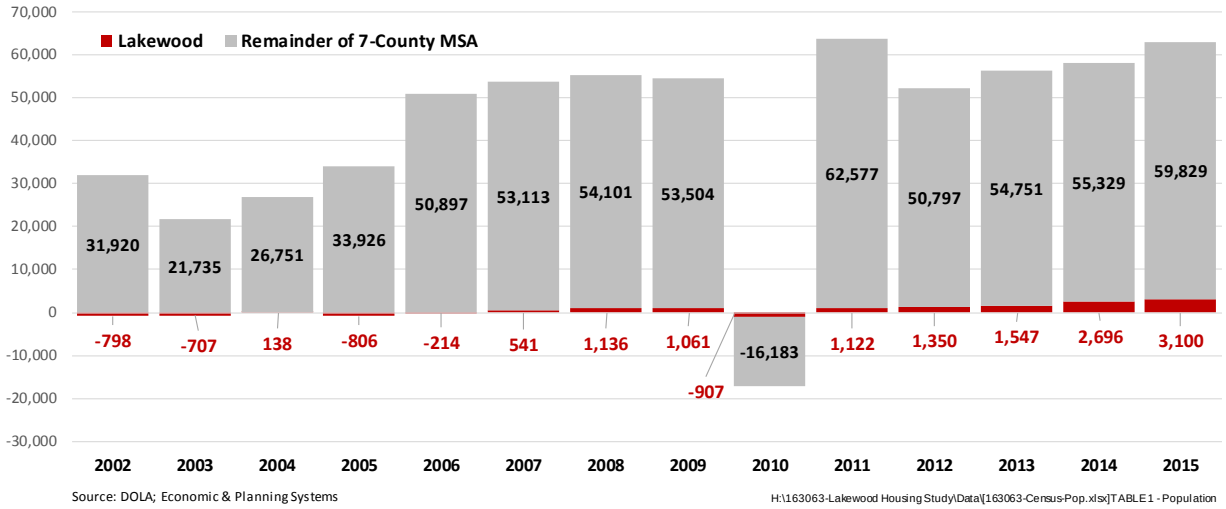
Figure 10 illustrates the magnitude of annual population changes over this period of time. As indicated above, the Metro Area lost population only twice in the past 46 years, approximately 4,700 in 1988 and approximately 17,000 in 2010. For example, between 1969 and 1975, population increased by approximately 36,200; between 1976 and 1987, population grew by an annual average of approximately 33,300; an annual average of approximately 43,200 between 1988 and 2003; an annual average of 36,700 between 2004 and 2010, and is currently growing by an annual average of approximately 58,600 per year.

**Figure 10**
**Annual Changes in 7-County Denver MSA Population, 1970-2016**




During the years for which data on the City were available, **Figure 4** illustrates the magnitude of annual population change in the City relative to the MSA. As indicated earlier, the City's economy has grown proportionally more than the MSA's during this time, but the City's population has not. Although not illustrated here, using data from **Figure 9**, between 1980 and 1992 Lakewood captured an average of 6 percent of the MSA's population growth. Since then, Lakewood has only accounted for an average of 2 percent of the MSA's population growth (compared to an average of 5 percent employment capture).

**Figure 11**
**Annual Lakewood Population Change as % of MSA**



## Age Categories

Another aspect of shifts in demographic change is the composition of those shifts. **Table 5** illustrates this shift by age and generational categories at the MSA. In total, the population of the MSA grew by just over 675,000 between 2000 and 2015. The results are that those born after 2001 accounted for nearly 598,000 of that net new population, or 67 percent of positive population change. Millenials accounted for 24 percent or nearly 216,000 of the positive population change, and the Generation X accounted for 9 percent of positive population change (approximately 85,000). On the other end of the spectrum, the population of Baby Boomers in the MSA has dropped by more than 61,000 since 2000, accounting for 28 percent of the overall population losses. Also, the population of Silents has also declined by more than 161,000 since 2000, accounting for 72 percent of the overall population loss.

From the perspective of age categories, however, nearly 60 percent of the growth in population has come from persons over the age of 50 versus approximately 40 percent of population growth is due to influx of those under 50.

**Table 5**
**MSA Population Change by Age, 2000-2015**

| | | | | 2000-2015 | | | Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | 2000 | 2015 | Total Δ | Ann. Δ | Ann. % | 2000 | 2015 |
| **Age Category** | | | | | | | | |
| Under 5 years | | 168,113 | 190,721 | 22,608 | 1,507 | 0.84% | 7.0% | 6.2% |
| 5 to 9 years | | 173,448 | 204,822 | 31,374 | 2,092 | 1.11% | 7.2% | 6.7% |
| 10 to 14 years | | 170,704 | 202,115 | 31,411 | 2,094 | 1.13% | 7.1% | 6.6% |
| 15 to 19 years | | 160,052 | 191,811 | 31,759 | 2,117 | 1.21% | 6.7% | 6.2% |
| 20 to 24 years | | 163,980 | 205,139 | 41,159 | 2,744 | 1.50% | 6.8% | 6.7% |
| 25 to 29 years | | 199,150 | 246,166 | 47,016 | 3,134 | 1.42% | 8.3% | 8.0% |
| 30 to 34 years | | 199,404 | 244,847 | 45,443 | 3,030 | 1.38% | 8.3% | 8.0% |
| 35 to 39 years | | 213,806 | 223,722 | 9,916 | 661 | 0.30% | 8.9% | 7.3% |
| 40 to 44 years | | 212,699 | 219,639 | 6,940 | 463 | 0.21% | 8.9% | 7.1% |
| 45 to 49 years | | 189,063 | 206,111 | 17,048 | 1,137 | 0.58% | 7.9% | 6.7% |
| 50 to 54 years | | 154,961 | 203,977 | 49,016 | 3,268 | 1.85% | 6.5% | 6.6% |
| 55 to 59 years | | 106,712 | 191,909 | 85,197 | 5,680 | 3.99% | 4.4% | 6.2% |
| 60 to 64 years | | 75,061 | 177,535 | 102,474 | 6,832 | 5.91% | 3.1% | 5.8% |
| 65 to 69 years | | 62,191 | 133,553 | 71,362 | 4,757 | 5.23% | 2.6% | 4.3% |
| 70 to 74 years | | 54,053 | 91,252 | 37,199 | 2,480 | 3.55% | 2.3% | 3.0% |
| 75 to 79 years | | 44,103 | 57,025 | 12,922 | 861 | 1.73% | 1.8% | 1.9% |
| 80 to 84 years | | 28,967 | 39,936 | 10,969 | 731 | 2.16% | 1.2% | 1.3% |
| 85 years and over | | 24,103 | 45,389 | 21,286 | 1,419 | 4.31% | 1.0% | 1.5% |
| **Total** | | **2,400,570** | **3,075,671** | **675,101** | **45,007** | **1.67%** | **100.0%** | **100.0%** |
| **Generational Category** | | | | | | | | |
| Generation Z | (Born 2001 or later) | 0 | 597,658 | 597,658 | 39,844 | n/a | 0.0% | 19.4% |
| Millenials | (Born 1981 to 2000) | 672,317 | 887,964 | 215,647 | 14,376 | 1.87% | 28.0% | 28.9% |
| Generation X | (Born 1965 to 1980) | 605,295 | 690,268 | 84,973 | 5,665 | 0.88% | 25.2% | 22.4% |
| Baby Boomers | (Born 1946 to 1964) | 727,768 | 666,179 | -61,589 | -4,106 | -0.59% | 30.3% | 21.7% |
| Silents or before | (Born 1945 or before) | 395,190 | 233,602 | -161,588 | -10,773 | -3.44% | 16.5% | 7.6% |
| **Total** | | **2,400,570** | **3,075,671** | **675,101** | **45,007** | **1.67%** | **100.0%** | **100.0%** |

Source: U.S. Census, ACS; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- Population by Age.xlsx]Table 2 - MSA Gen Growth

**Table 6** illustrates this shift by age and generational categories for the City. In total, the City grew by just over 8,500 between 2000 and 2015. The results are that those born after 2001 accounted for nearly 24,400 of that net new population, or 70 percent of positive population change. Millenials accounted for 30 percent or nearly 10,200 of the positive population change. Unlike the MSA, the City lost nearly 5,300 Generation X'ers, which accounted for 20 percent of population loss. Also, the population of Baby Boomers dropped by 5,600, and the population of Silents also declined by more than 15,000 since 2000.

From the perspective of age categories, whereas the MSA added population in all age categories, the City has lost population in 7 of the 10 age categories under 50, accounting for a net loss of 5,400 persons under the age of 50. On the other hand, the population of those over 50 increased by nearly 14,000.

**Table 6**
**Lakewood Population Change by Age, 2000-2015**

| | | | | 2000-2015 | | | Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | 2000 | 2015 | Total Δ | Ann. Δ | Ann. % | 2000 | 2015 |
| **Age Category** | | | | | | | | |
| Under 5 years | | 8,685 | 8,392 | -293 | -20 | -0.23% | 6.0% | 5.5% |
| 5 to 9 years | | 9,164 | 7,324 | -1,840 | -123 | -1.48% | 6.4% | 4.8% |
| 10 to 14 years | | 8,718 | 8,698 | -20 | -1 | -0.02% | 6.1% | 5.7% |
| 15 to 19 years | | 8,826 | 8,392 | -434 | -29 | -0.34% | 6.1% | 5.5% |
| 20 to 24 years | | 10,527 | 11,749 | 1,222 | 81 | 0.74% | 7.3% | 7.7% |
| 25 to 29 years | | 11,592 | 14,038 | 2,446 | 163 | 1.28% | 8.0% | 9.2% |
| 30 to 34 years | | 10,652 | 11,444 | 792 | 53 | 0.48% | 7.4% | 7.5% |
| 35 to 39 years | | 11,781 | 10,376 | -1,405 | -94 | -0.84% | 8.2% | 6.8% |
| 40 to 44 years | | 12,193 | 9,155 | -3,038 | -203 | -1.89% | 8.5% | 6.0% |
| 45 to 49 years | | 11,275 | 8,392 | -2,883 | -192 | -1.95% | 7.8% | 5.5% |
| 50 to 54 years | | 9,562 | 9,613 | 51 | 3 | 0.04% | 6.6% | 6.3% |
| 55 to 59 years | | 7,478 | 11,749 | 4,271 | 285 | 3.06% | 5.2% | 7.7% |
| 60 to 64 years | | 6,149 | 9,766 | 3,617 | 241 | 3.13% | 4.3% | 6.4% |
| 65 to 69 years | | 5,572 | 7,629 | 2,057 | 137 | 2.12% | 3.9% | 5.0% |
| 70 to 74 years | | 4,142 | 5,341 | 1,199 | 80 | 1.71% | 2.9% | 3.5% |
| 75 to 79 years | | 3,362 | 3,510 | 148 | 10 | 0.29% | 2.3% | 2.3% |
| 80 to 84 years | | 2,305 | 3,357 | 1,052 | 70 | 2.54% | 1.6% | 2.2% |
| 85 years and over | | 2,106 | 3,662 | 1,556 | 104 | 3.76% | 1.5% | 2.4% |
| **Total** | | **144,089** | **152,589** | **8,500** | **567** | **0.38%** | **100.0%** | **100.0%** |
| **Generational Category** | | | | | | | | |
| Generation Z | (Born 2001 or later) | 0 | 24,414 | 24,414 | 1,628 | n/a | 0.0% | 16.0% |
| Millenials | (Born 1981 to 2000) | 35,393 | 45,624 | 10,231 | 682 | 1.71% | 24.6% | 29.9% |
| Generation X | (Born 1965 to 1980) | 35,127 | 29,846 | -5,281 | -352 | -1.08% | 24.4% | 19.6% |
| Baby Boomers | (Born 1946 to 1964) | 42,455 | 36,835 | -5,620 | -375 | -0.94% | 29.5% | 24.1% |
| Silents or before | (Born 1945 or before) | 31,114 | 15,869 | -15,245 | -1,016 | -4.39% | 21.6% | 10.4% |
| **Total** | | **144,089** | **152,589** | **8,500** | **567** | **0.38%** | **100.0%** | **100.0%** |

Source: U.S. Census, ACS; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-Population by Age.xlsx]Table 3 - Lakewood Gen Grow

# 3. SUPPLY-SIDE ANALYSIS

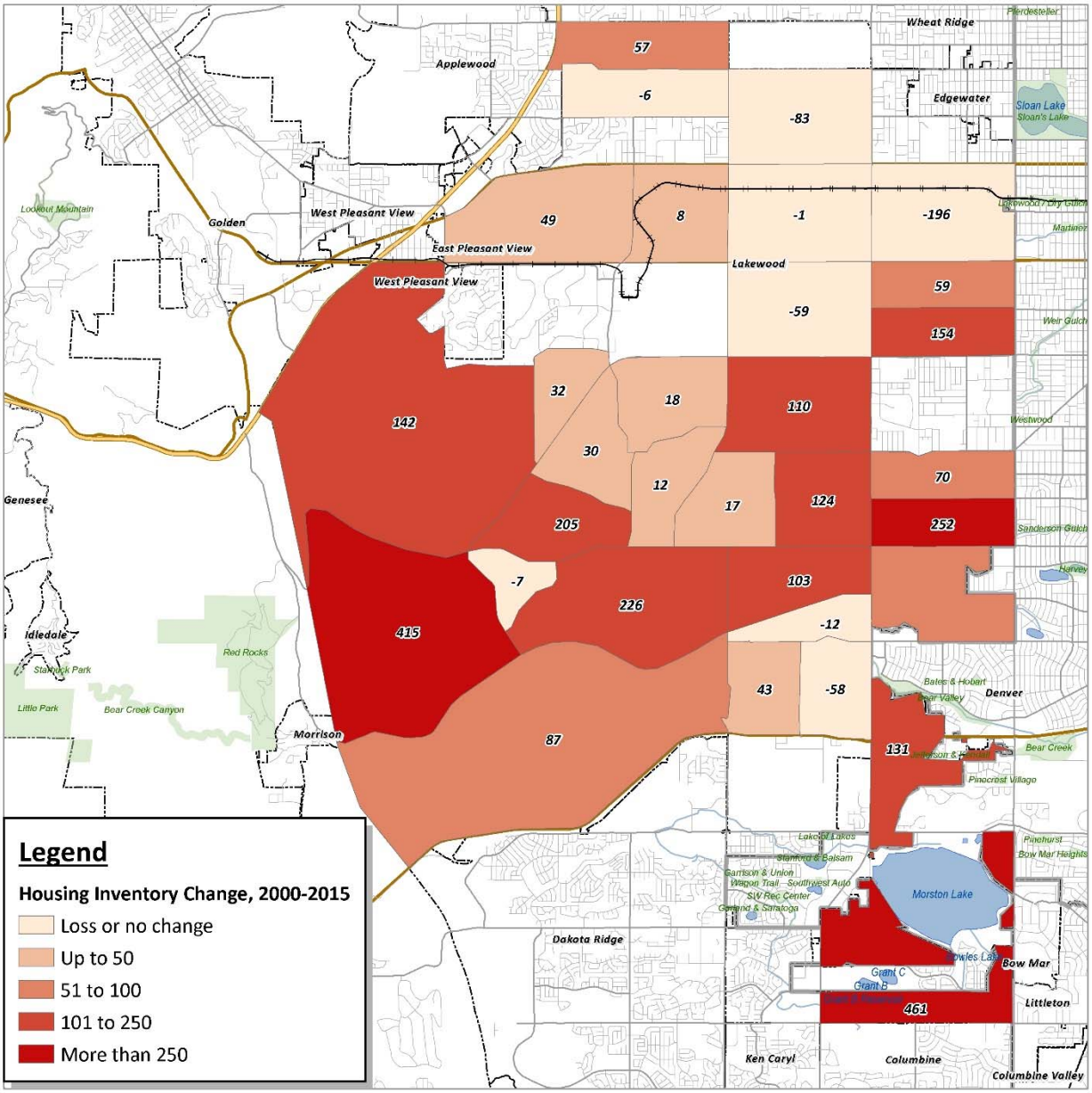
This chapter describes supply-side data for the City of Lakewood, including housing inventory, residential development densities, occupancy and vacancy levels, age of the City's inventory by year built, residential construction trends, existing home sales, and rental market trends. Much of the analysis of these data is completed using GIS. In order to show the cyclical nature of certain trends, many of the trends in these data series are also provided with points of geographic (such as the U.S., State, or MSA levels) or historical comparisons where data are available. Data sources used for this analysis include: U.S. Census, American Community Survey, City of Lakewood Building Department, Genesis Group MLS data, Costar/Apartments.com, the State and Metro Area Apartment Vacancy and Rent Surveys, as well as the Federal Housing Finance Agency (FHFA).

In general, the analysis points to a stable housing supply in the City. This stability is described both in terms of general occupancy and vacancy levels, tenure shift, as well as rates of ownership housing turnover. Other findings, such as the pace of residential construction activity in the City versus recent increases in magnitude of construction activity in the remainder of the MSA, point toward a challenge inherent in this stability. In other terms, an analysis of age of structure built illustrates that a predominance of the City's housing inventory was built before 2000, confirmed by the trends in residential construction from the Building Department. While these recent increases in construction magnitude are pointing toward cyclical highs in the State and MSA's inventory growth (facilitating population growth), the relative "build out" of the City (with the exception of areas identified for redevelopment) is preventing it from growing at a similar pace. These findings and their implications will be explored further as to what is contributing to these patterns, in an analysis of the regulatory context.

## Housing Inventory

Between 2000 and 2015, the City of Lakewood's total inventory of occupied and vacant housing grew by approximately 5,100 units (from 62,422 to 67,523 units). **Figure 12** illustrates the increase in housing inventory between 2000 and 2015 by Census tract. It should be noted that 14 Census tracts within Jefferson County were recoded between 2000 and the following decennial Census, replaced by 13 tracts of different coding and geographic areas, 12 of which are in the City, making a complete comparison of all areas within the City impossible. For tracts that did not change, however, it can be seen that the inventory of the central, west-central, and southeast areas generally gained the most housing while a few tracts in the northeast and south-central had net losses. Data from the City's Building Department confirm these losses with a total of approximately 580 demolition permits (single-family detached and attached, duplexes, three- and four-plexes, as well as apartment buildings).

**Figure 12**
**Housing Inventory Change, 2000-2015**

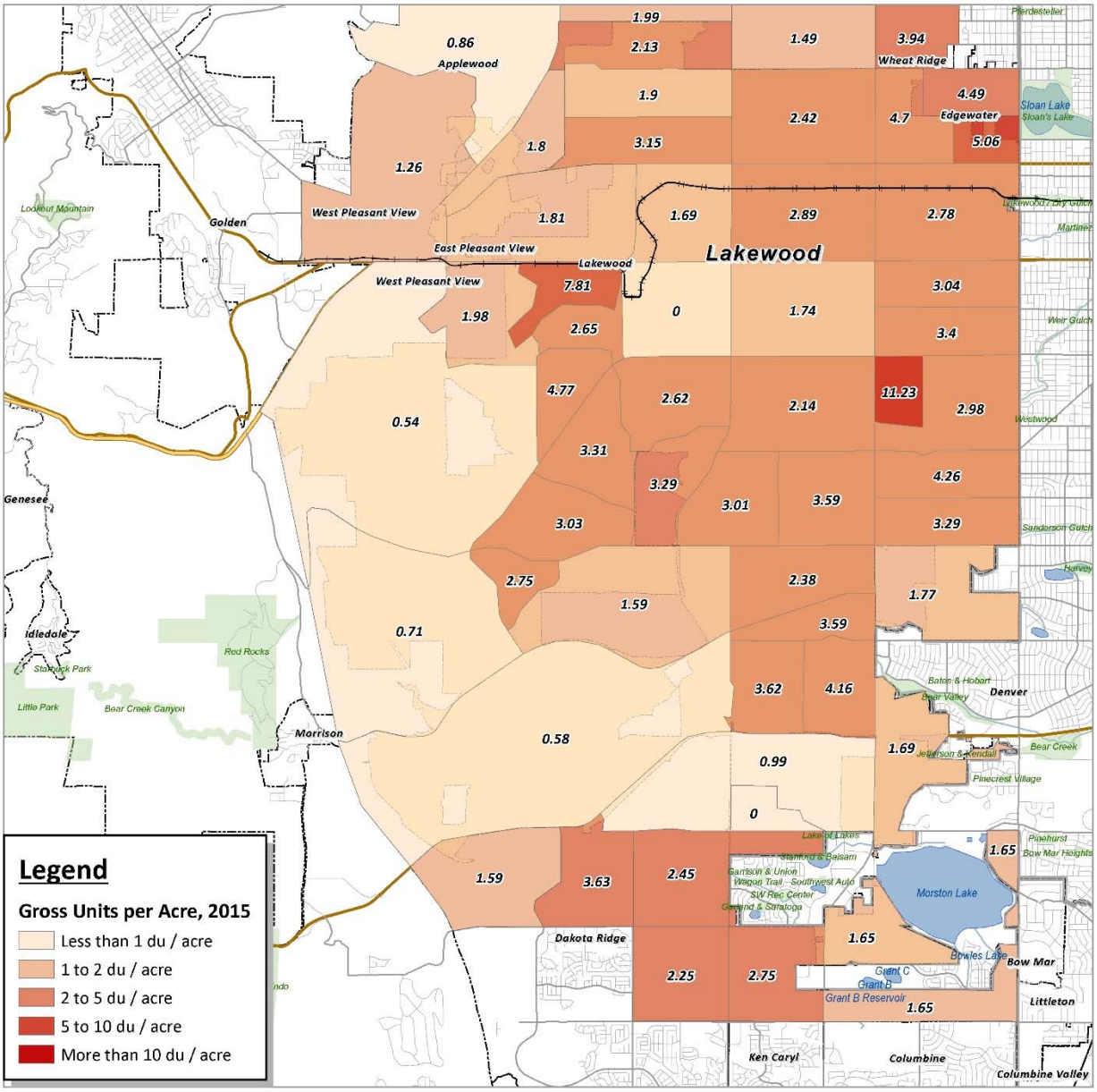


## Housing Densities

One way to assess the homogeneity or diversity of the City's housing supply is to identify its general densities. On a geographic basis, the presumption is that a homogeneous housing supply will be evidenced by relatively consistent densities throughout the city. On the other end of the spectrum, a diverse housing supply would be evidenced by inconsistent and widely ranging residential densities throughout the City. **Figure 13** illustrates the assessment of gross densities throughout Lakewood using Census tract level data on total housing inventory and the total acreage contained within each tract.

The analysis does not reveal a clear finding of strict homogeneity or diversity of housing supply. A majority of tracts have gross densities that are relatively low, falling between 2 to 4 dwelling units per acre, but there are also tracts with much higher and much lower gross densities, ranging between less than one unit per acre up to more than 11 units per acre. It should be noted that gross density is calculated as the total number of housing units divided by the total acreage for each Census Tract. Total acreage includes streets, open space, and non-residential development. For example, some tracts close to Denver, along Highway 6, and along Colfax Avenue have higher densities while tracts near open space to the southwest and more recently-development parts of the southwest have lower densities.

**Figure 13**
**Gross Housing Density per Acre, 2015**



## Housing Types

Another way to assess the homogeneity or diversity of housing is to look at the inventory of units by the number of units in structures, as illustrated in **Table 7**. Using data representative of 2015 from the U.S. Census, the analysis shows that 50 percent of Lakewood's housing inventory falls into the single-family detached category with another 10 percent single-family attached (which can be interpreted as duplexes, triplexes or quads in the same way that 2-unit, and 3-/4-units in structure can also be interpreted). In total, Lakewood seems to have approximately 60 percent single-family housing (including what might be considered single-family detached as well as duplexes) while the MSA seems to have approximately 68 percent.

The differences in housing type, however, appear when calculated the portion of housing classified as buildings with 2 or more "apartments"[8]. In total, 35 percent of the City's housing stock falls into the categories of housing units in buildings with 2 to 49 apartments, while 25 percent of the MSA's inventory falls into this category. At the other end of the spectrum, an estimated 5 percent of Lakewood's inventory is classified as housing in buildings with 50 or more apartments, while 8 percent of the MSA's inventory falls into this category.

**Table 7**
**Units in Structure by County, 2015**

| | 2015 (units in structure) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SFD | SFA | 2-units | 3-unit / 4-unit | 5 to 9 units | 10 to 19 | 20 to 49 | 50 or more units | Total |
| **Units by Type** | | | | | | | | | |
| Adams | 101,544 | 12,573 | 1,149 | 4,174 | 7,380 | 13,110 | 9,501 | 5,147 | 154,578 |
| Arapahoe | 138,208 | 23,839 | 1,873 | 6,711 | 14,756 | 23,471 | 19,003 | 13,816 | 241,677 |
| Denver | 138,561 | 23,457 | 6,876 | 10,427 | 13,789 | 28,377 | 33,025 | 48,941 | 303,453 |
| Douglas | 92,844 | 8,736 | 135 | 1,749 | 4,597 | 5,403 | 3,529 | 3,558 | 120,551 |
| Jefferson | 153,971 | 21,479 | 2,553 | 7,625 | 12,426 | 14,746 | 12,005 | 8,163 | 232,968 |
| **Total** | **625,128** | **90,084** | **12,586** | **30,686** | **52,948** | **85,107** | **77,063** | **79,625** | **1,053,227** |
| **Lakewood** | **33,286** | **6,805** | **1,445** | **3,332** | **5,798** | **7,422** | **5,672** | **3,020** | **66,780** |
| **Units as % of Total** | | | | | | | | | |
| Adams | 66% | 8% | 1% | 3% | 5% | 8% | 6% | 3% | 100% |
| Arapahoe | 57% | 10% | 1% | 3% | 6% | 10% | 8% | 6% | 100% |
| Denver | 46% | 8% | 2% | 3% | 5% | 9% | 11% | 16% | 100% |
| Douglas | 77% | 7% | 0% | 1% | 4% | 4% | 3% | 3% | 100% |
| Jefferson | 66% | 9% | 1% | 3% | 5% | 6% | 5% | 4% | 100% |
| **Total** | **59%** | **9%** | **1%** | **3%** | **5%** | **8%** | **7%** | **8%** | **100%** |
| **Lakewood** | **50%** | **10%** | **2%** | **5%** | **9%** | **11%** | **8%** | **5%** | **100%** |
| as % difference from MSA | -10% | 2% | 1% | 2% | 4% | 3% | 1% | -3% | |

Source: U.S. Census; Economic & Planning Systems

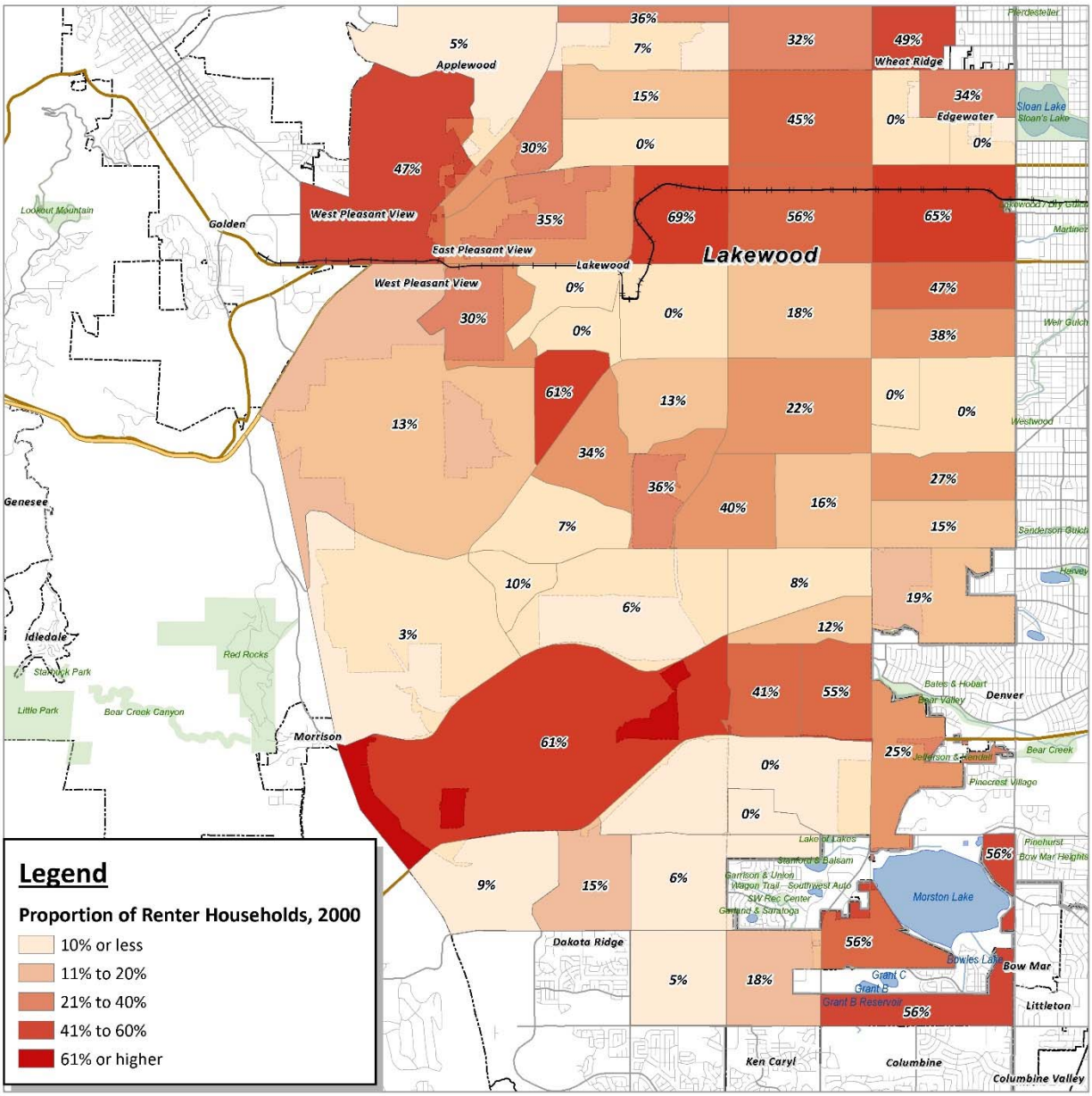
H:\163063- Lakewood Housing Study\Data\[163063- ESRI BA Housing Pop Geo Comparison.xlsx]TABLE 1- Comparisons by County

[8] The U.S. Census asks survey takers to indicate the type of housing they live in by the following terms: "a one-family house detached from any other house, a one-family house attached to one or more houses, a building with 2 apartments, a building with 3 or 4 apartments, a building with 5 to 9 apartments, a building with 10 to 19 apartments, a building with 20 to 49 apartments, and a building with more than 50 apartments."

## Tenure

In 2000, 39 percent of households were renters and 61 percent were owner households. As illustrated by **Figure 14**, some parts of the City had higher proportions of renter households than other parts, such as many throughout the northern area of the City as well as a few tracts through the southern area.

**Figure 14**
**Renter Household Proportions by Tract, 2000**



While not a significant shift, by 2015 the overall proportion of renter households had increased to 41 percent with the owner household share at 59 percent. **Figure 15** illustrates how renter household proportions changed by Census tract. Many of the tracts in the City's north had average renter household proportions well above the cityide average, ranging generally between 50 and 72 percent. The west-central parts of the City, which are newer residential areas, indicate very low renter household proportions, i.e., where ownership households are in the majority.

**Figure 15**
**Renter Household Proportions by Tract, 2015**

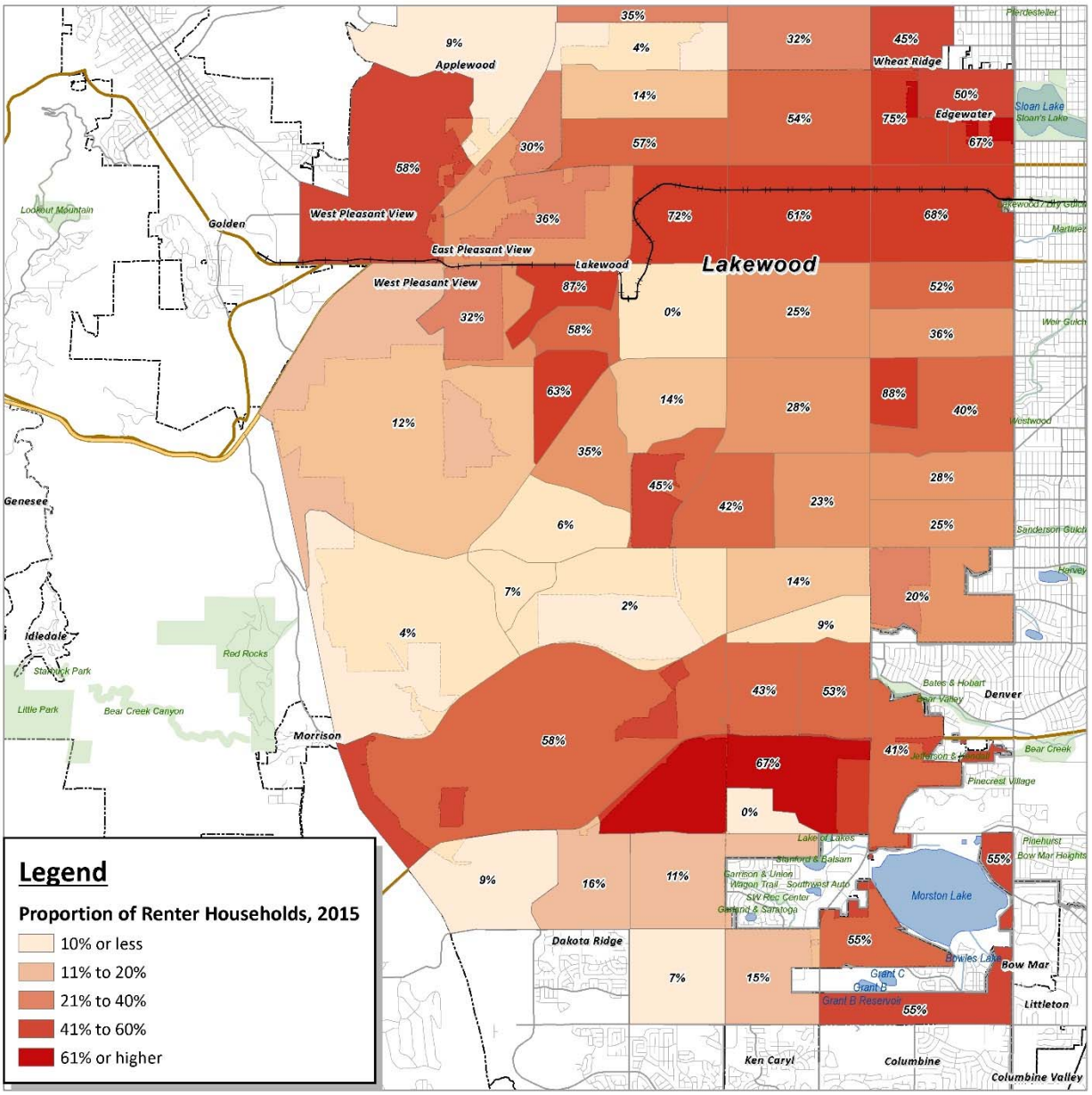
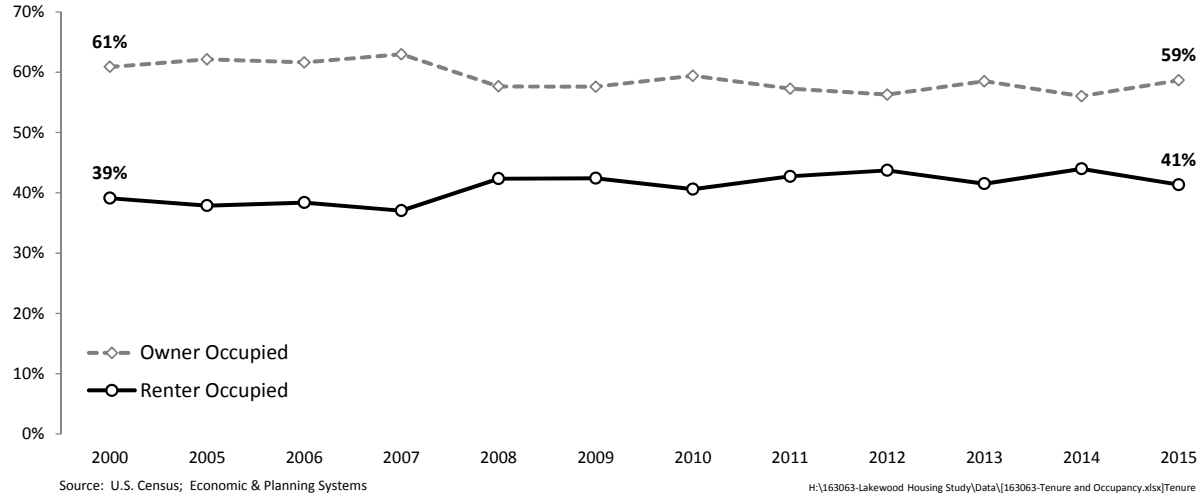


**Figure 16** illustrates that tenure in the City has remained relatively stable since 2000. Minor shifts up and down have contributed to a narrow swing in ownership rates between 56 percent (2012 and 2014) and 63 percent (2007), a finding consistent with household experience at the high point of the housing bubble and generally the low point of the recovery.

**Figure 16**
**Historic Tenure Shifts, 1980-2015**




Source: U.S. Census; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-Tenure and Occupancy.xlsx]Tenure

## Housing Vacancy

**Figure 17** illustrates the shifts in vacancy rates by Census tract between 2000 and 2015. Positive percentages indicate an increase in the vacancy rate among the housing inventory, and negative percentages indicate a decrease in the vacancy rate (increase in the occupancy rates). Vacancy levels were most stable in the Census tracts along Colfax east to west as well as north to south between Kipling and Sheridan.

**Figure 17**
**Vacancy Rate Shifts by Tract, 2000-2015**

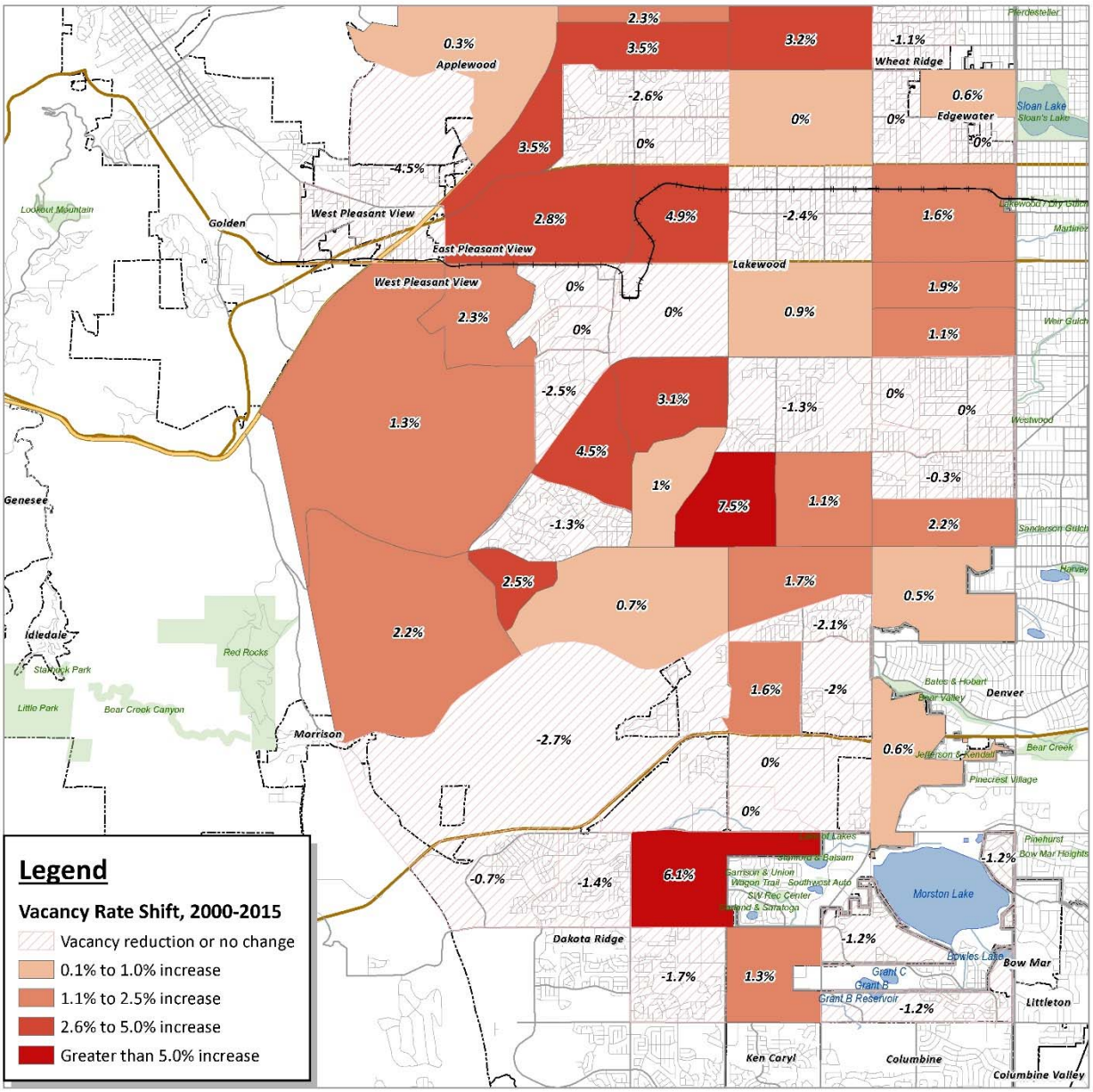
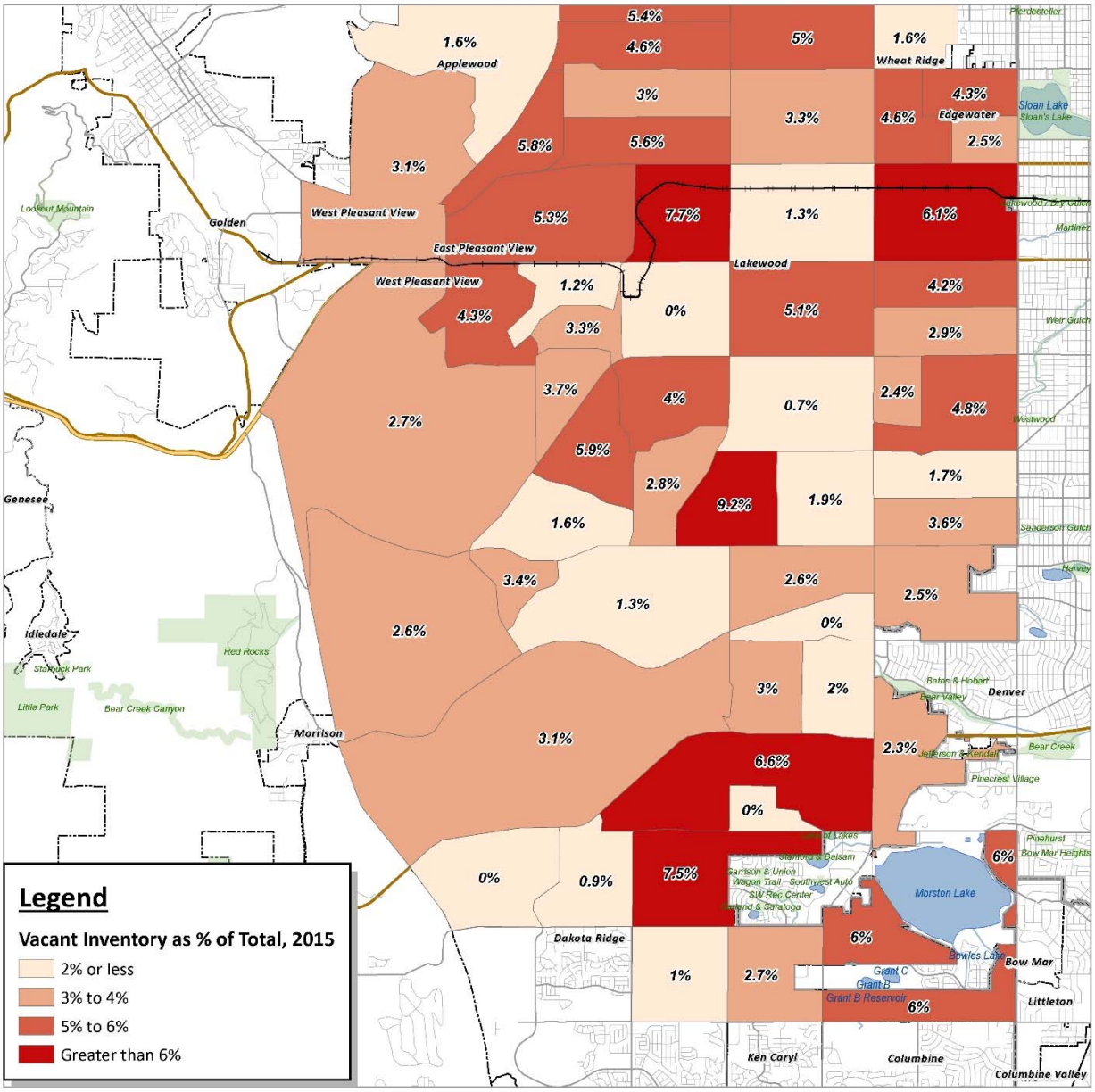


**Figure 18** illustrates the portion of housing inventory that is vacant by Census tract among the existing inventory as of 2015. Vacancy rates are generally higher in the northern parts of the City, with the exception of a few Census tracts in the south that also have relatively high vacancy rates. Overall, the City's vacancy rate in 2015 was 2.8 percent, equating to approximately 1,900 vacant units.

**Figure 18**
**Vacancy Rates by Tract, 2015**



As noted in the discussion of **Figure 12** on page 31, the City's total inventory of occupied and vacant housing increased by 5,100 units between 2000 and 2015. **Figure 19** illustrates that the housing vacancy rate between 2000 and 2015 started at 3.0 percent in 2000 and ended at 2.8 percent in 2015. By comparison, the most current (2015) vacancy rate in Jefferson County is 3.7 percent, whereas the 7-county Denver MSA's vacancy rate is 4.5 percent. (Boulder County's vacancy rate is the highest at 5.9 percent, but the City and County of Denver's inventory of vacant housing is the highest at 16,900 units.)

While fluctuating up and down between approximately 4.0 and 6.4 percent, the fact that the City began and ended this period of analysis with effectively the same vacant rate means that the increase in number of total and occupied housing units were approximately the same. According to the analysis, the inventory of occupied housing increased by 5,115 units (by comparison to the overall increase in housing of 5,100 units).

**Figure 19**
**Housing Inventory and Vacancy Rates, 2000-2015**


Source: U.S. Census; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-Tenure and Occupancy.xlsx]Occupancy

## Jobs to Housing

The significance of this vacancy rate trend is not that the findings are important in themselves, but interpreted simultaneously with the growth of jobs and total housing inventory, they indicate that Lakewood's jobs to housing ratio has changed to a greater degree than any other part of the MSA, as illustrated in **Table 8**. Between 2000 and 2015, the MSA, as defined by just five counties as shown, added 186,200 jobs and nearly 200,600 occupied housing units, representing a ratio of nearly 1 job per 1 housing unit. Lakewood, on the other hand, added nearly 16,600 jobs and only 5,100 occupied housing units, a ratio of more than 3 jobs to 1 housing units. Adding to this consideration the fact that the vacancy rate is not any lower than it is means that the City has not utilized its existing inventory any more efficiently than it was in 2000.

**Table 8**
**Jobs to Housing Trends, 2000-2015**

| | 2000 | | | 2015 | | | 2000-2015 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Jobs | Housing | Jobs to Housing | Jobs | Housing | Jobs to Housing | Jobs | Housing | Jobs to Housing |
| **County** | | | | | | | | | |
| Adams | 152,653 | 128,156 | 1.2 | 206,324 | 159,313 | 1.3 | 53,671 | 31,157 | 1.7 |
| Arapahoe | 299,585 | 190,909 | 1.6 | 337,023 | 233,937 | 1.4 | 37,438 | 43,028 | 0.9 |
| Denver | 496,361 | 239,235 | 2.1 | 509,483 | 287,074 | 1.8 | 13,122 | 47,839 | 0.3 |
| Douglas | 61,114 | 60,924 | 1.0 | 122,621 | 118,613 | 1.0 | 61,507 | 57,689 | 1.1 |
| Jefferson | 222,859 | 206,067 | 1.1 | 243,321 | 226,920 | 1.1 | 20,462 | 20,853 | 1.0 |
| **Total** | **1,232,572** | **825,291** | **1.5** | **1,418,773** | **1,025,857** | **1.4** | **186,201** | **200,566** | **0.9** |
| **Lakewood** [Note 1] | **61,614** | **60,531** | **1.0** | **78,190** | **65,646** | **1.2** | **16,576** | **5,115** | **3.2** |

[**Note 1**]: Jobs shown for 2000 are actually the total for 2001;

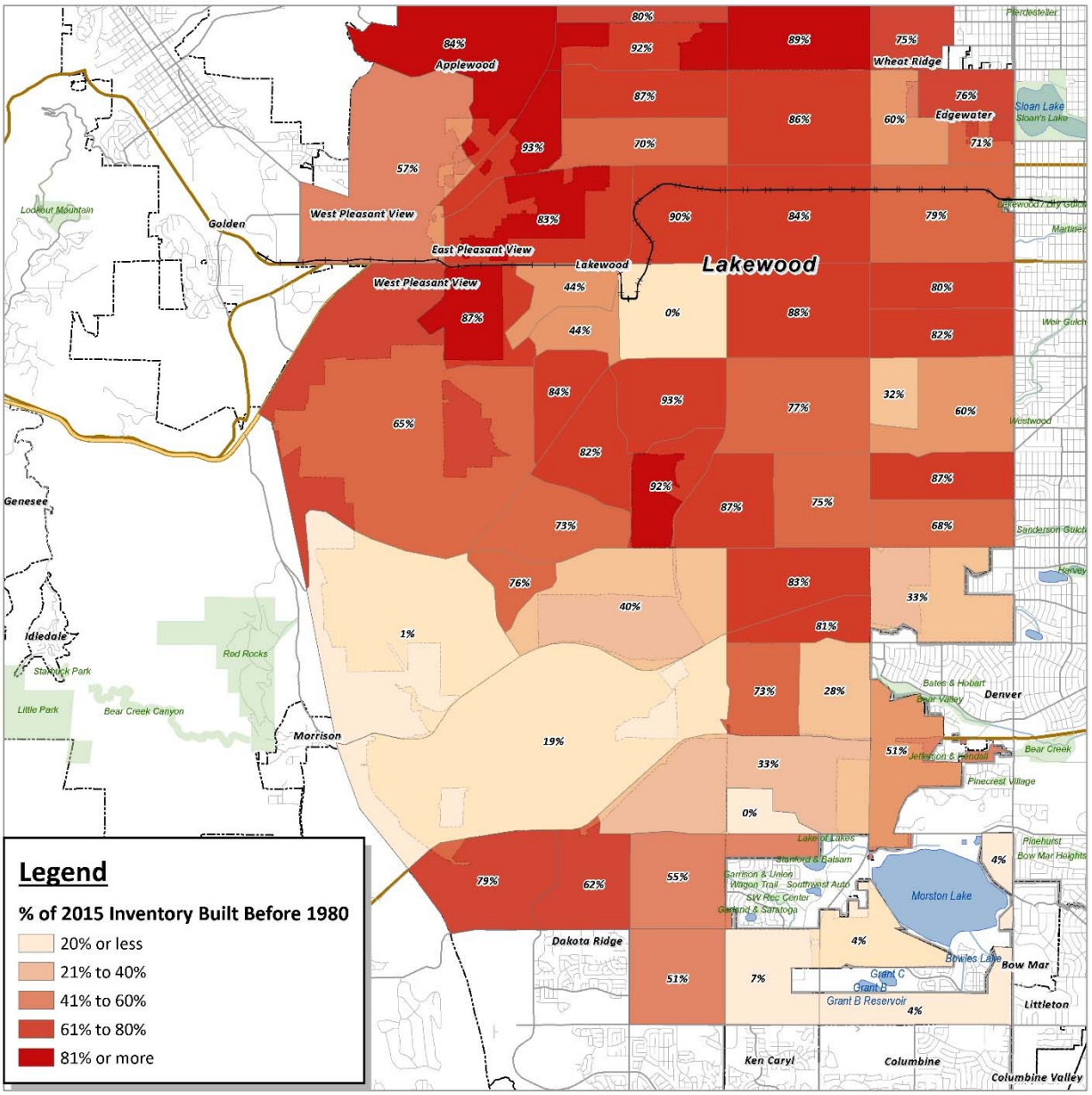
Source: U.S. Census; BLS; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-Tenure and Occupancy.xlsx]TABLE 2 - Jobs to Housing

## Age of Structure

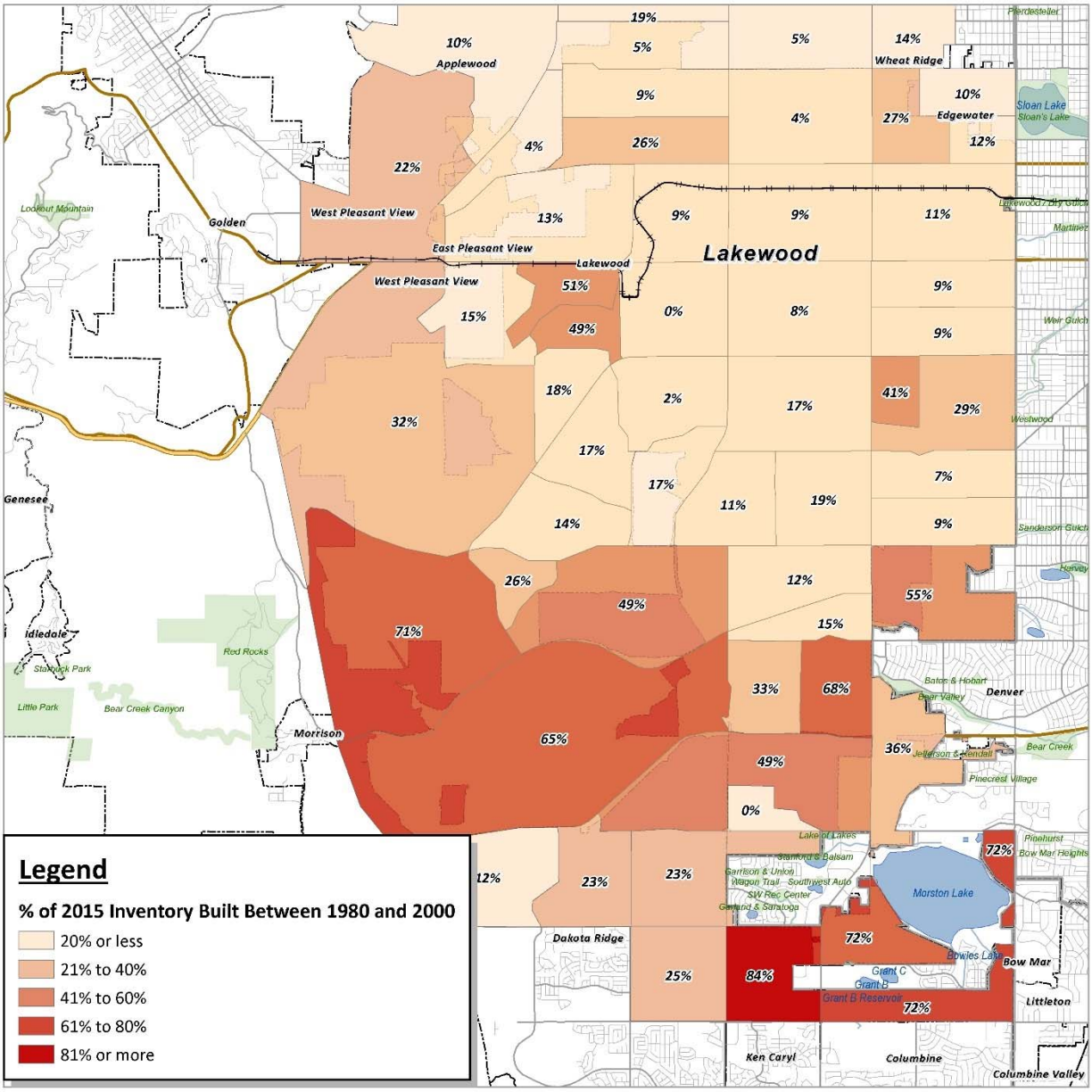
**Figure 20** illustrates by Census tract the portion of all (owner and renter) inventory built before 1980. In total, approximately 72 percent of the City's inventory was built before 1980. For tracts located closer to the core of the Metro Area, up to 93 percent of the existing inventory was built before this time. For tracts located to the southwest, less than half to almost none of the existing inventory was built before this time.

**Figure 20**
**Percent of Existing Inventory Built Before 1980**



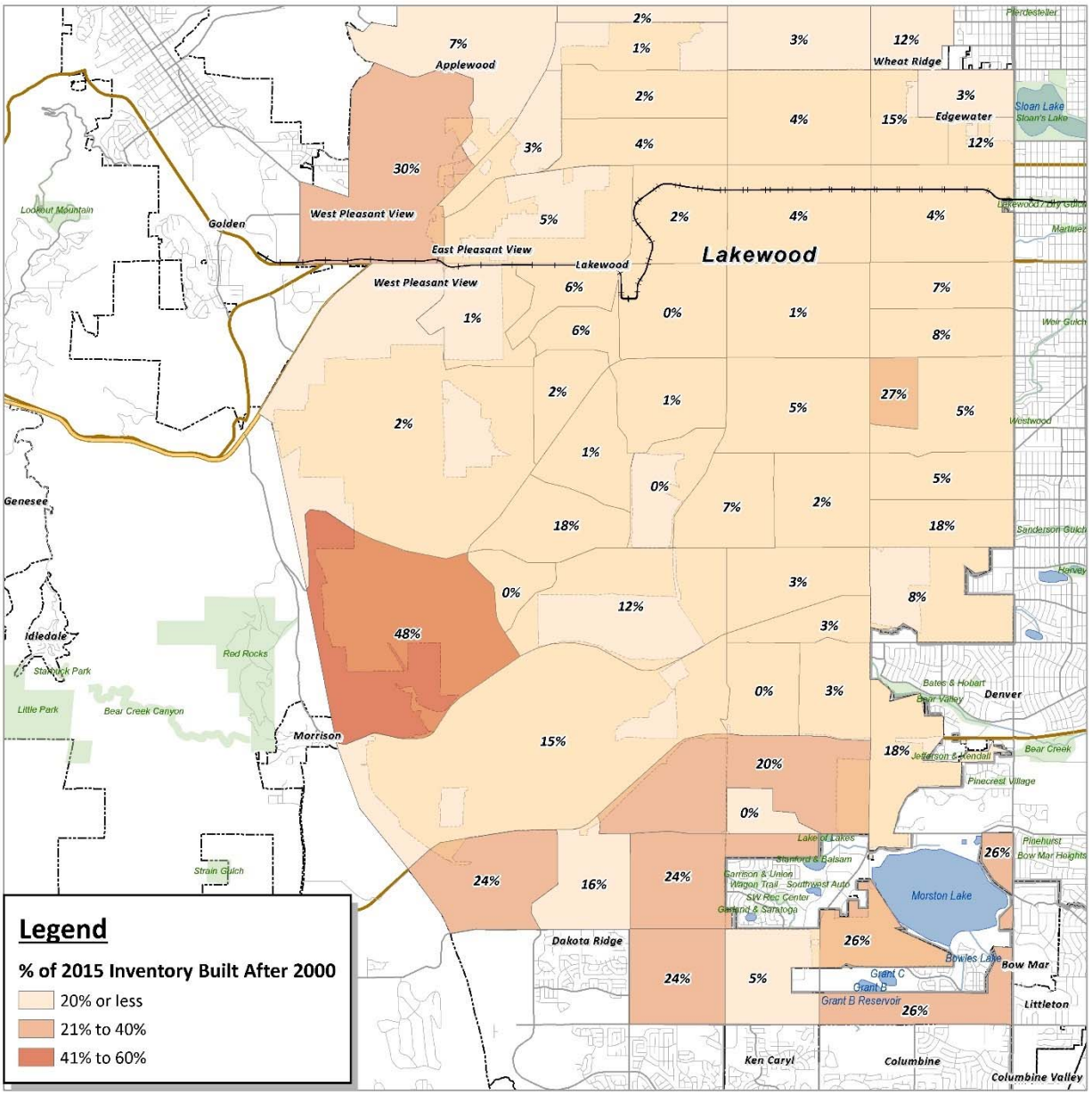
Another composite of the inventory data is illustrated in **Figure 21**, which shows the portion of existing inventory by tract built between 1980 and 2000. In total, approximately 21 percent of the City's inventory was built during this period. In the older parts of the City, generally less than 10 percent of existing inventory was built during this time, but in newer parts more than 50 percent was built.

**Figure 21**
**Percent of Existing Inventory Built Between 1980 and 2000**



As a final component of this data series, **Figure 22** illustrates the portion of existing inventory built since 2000. In total, only 7 percent (fewer than 4,700 units) of the City's existing inventory was built during the previous 15 years. With the exception of a few Census tracts, the purpose of this is to visualize the finding that only a very small portion of the City's existing inventory was built during this time. This is also apparent in the following analysis of building permit data.

**Figure 22**
**Percent of Existing Inventory Built After 2000**



## Residential Construction Activity

**Figure 23** illustrates the location of residential development activity in the City between 2000 and 2016 (through the end of September). In the south, approximately one-third of all permits were issued in the Rooney Valley and Summit Glen subdivisions north of Morrison Road and east of C-470. Other areas of concentrated development occurred in the Illiff Ridge along Kipling south of Jewell Avenue, as well as along Jewell between Sheridan and Wadsworth. Much of the multifamily construction activity occurred in Belmar, which accounts for more than 10 percent of permit activity.

**Figure 23**
**Location of Lakewood Building Permits, 2000-2016**

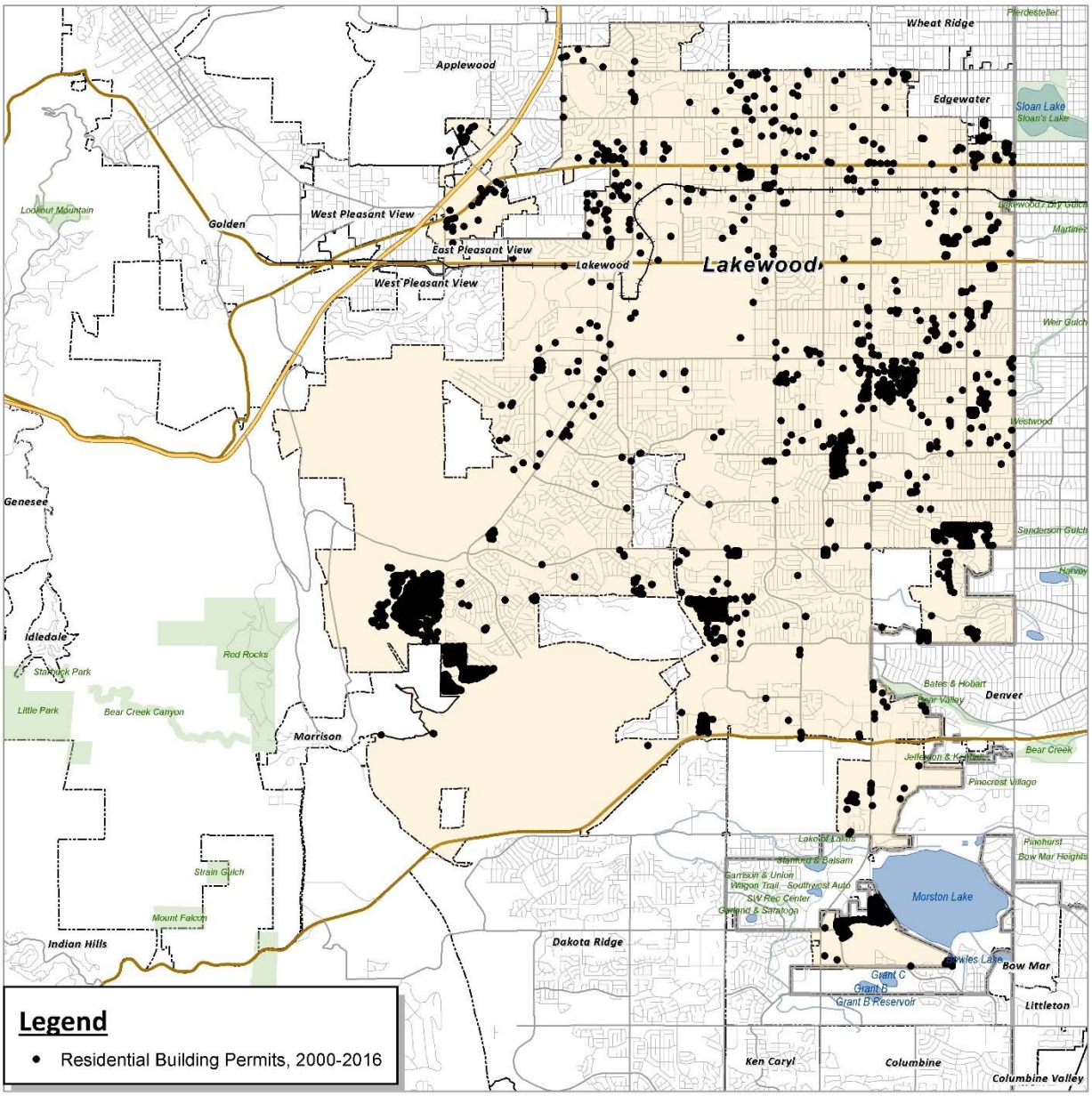
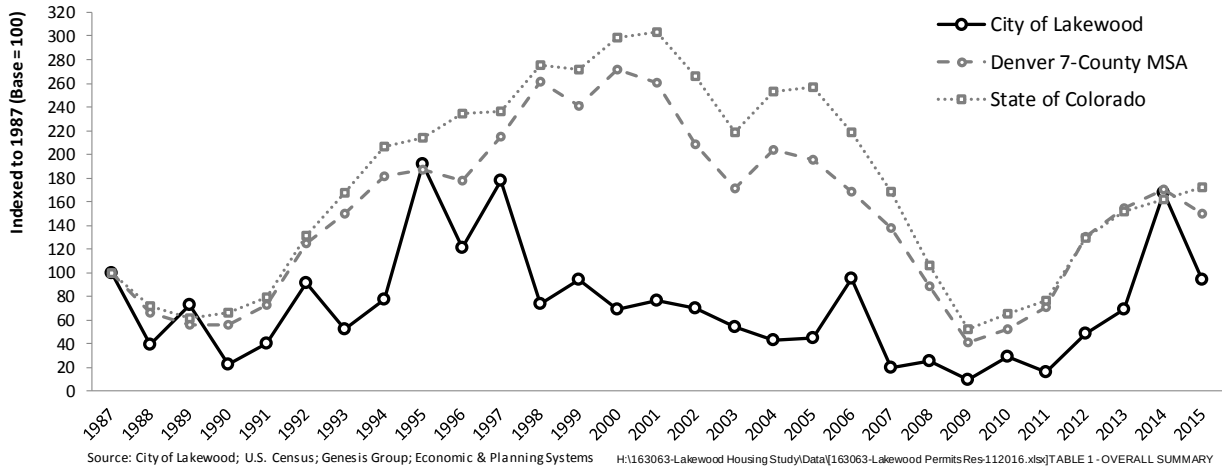


**Figure 24** illustrates a longer-term perspective on residential construction between 1987 and 2015 in Colorado. During this time, there have been two general cycles, one of which is documented entirely by this chart (1989 to 2009), the other of which has yet to peak. The graph illustrates a normalization of each trend with annual activity as an index of 1987 activity. It illustrates how similar the high and low points of the cycles are for the MSA and State, where activity generally peaked at approximately 260 to 300 percent of 1987 levels in 2000 and fell to approximately 30 percent of 1987 levels in 2009 and 2010.

**Figure 24**
**State, MSA, and Lakewood Residential Construction Activity, 1987-2015**




In terms of actual construction, **Figure 25** illustrates total units permitted, averaging 520 units per year. Except for the previous two to three years, the trend visualizes that the City has not experienced magnitudes of residential construction like it did in 2014 since before 2000.

**Figure 25**
**Lakewood Residential Construction Activity, 1987-2015**

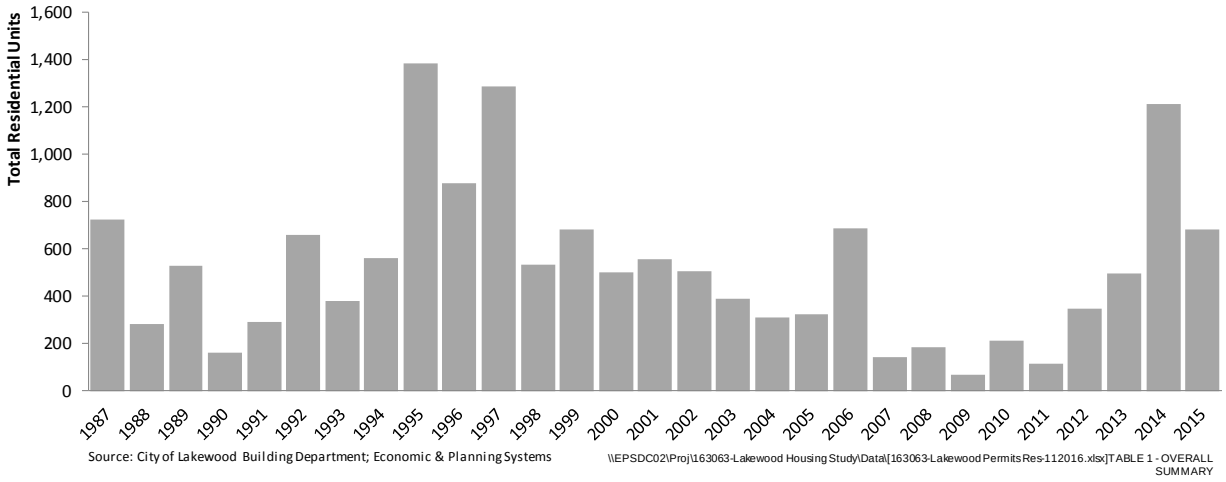


**Figure 26** illustrates the location of building permits in the City during the last 16 years. The permits are illustrated also by type, distinguishing between single-family detached housing (small black dots), single-family attached (small orange dots), duplexes (blue dots), triplexes and quads (purple squares), and other multi-family buildings with five or more units (red squares).

**Figure 26**
**Location of Building Permits by Type, 2000-2016**

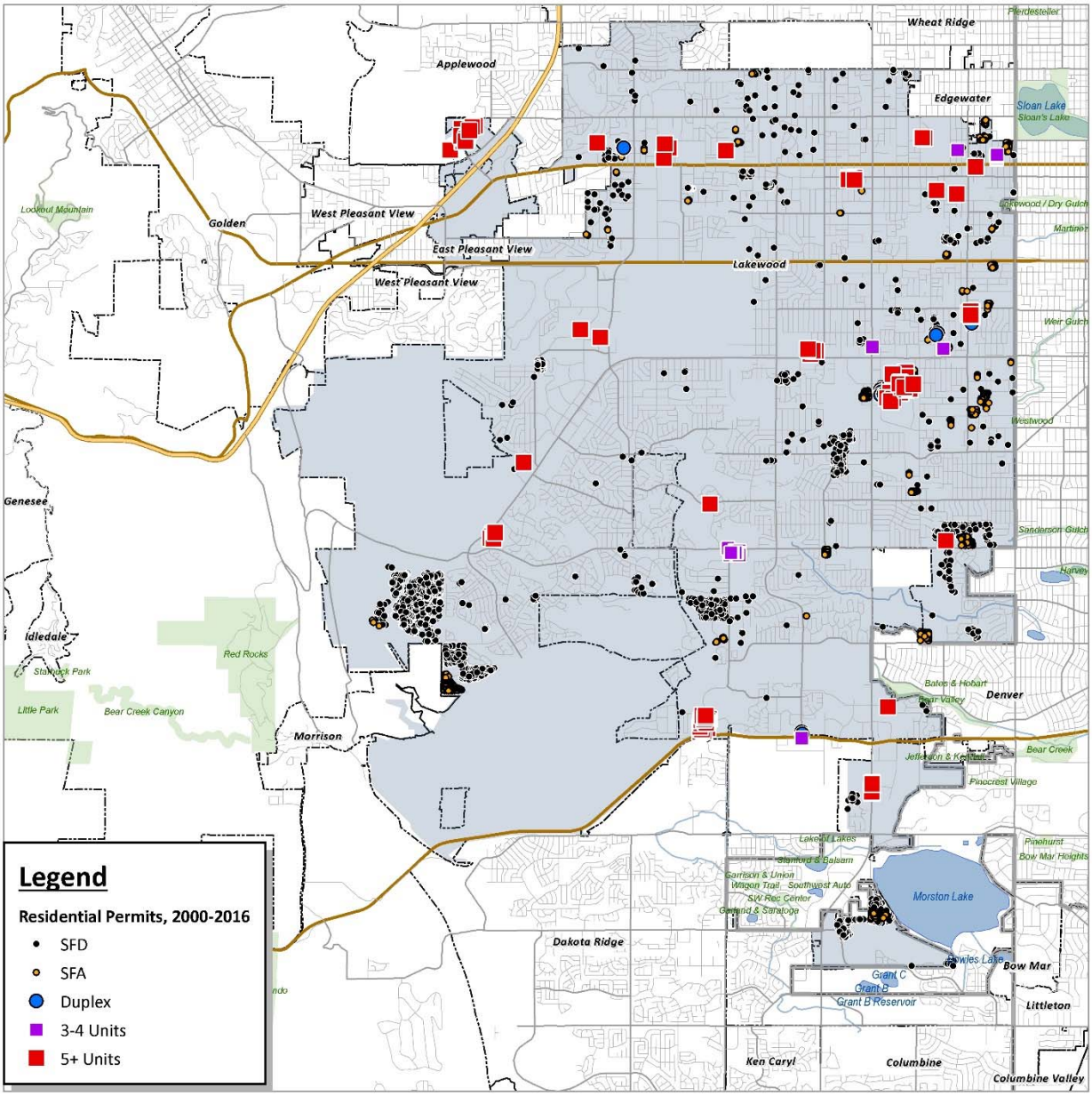
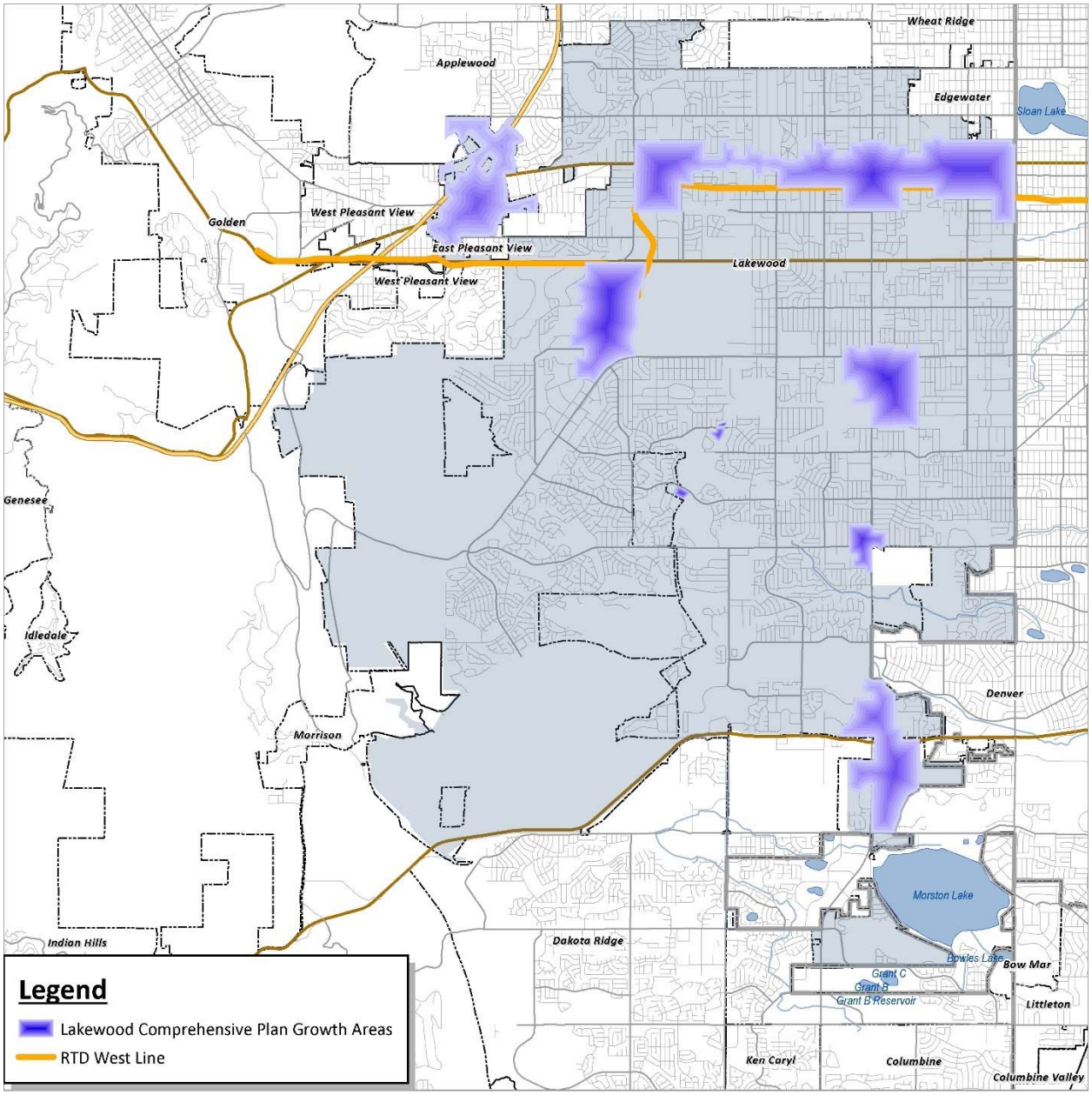


**Figure 27** illustrates targeted growth areas identified in Chapter 5 of the City's Comprehensive Plan. Even though the growth areas were identified through a process and plan that was completed recently in 2015, there is considerable alignment between concentrations of building activity and the growth areas.

**Figure 27**
**Comprehensive Plan Growth Areas**



## Residential Sales Activity

**Figure 28** illustrates the location of all sales of new and existing homes (attached single-family, detached single-family, and multifamily) between 2000 and 2016, a sample of 36,707 sales.

**Figure 28**
**Home Sales, 2000-2016**

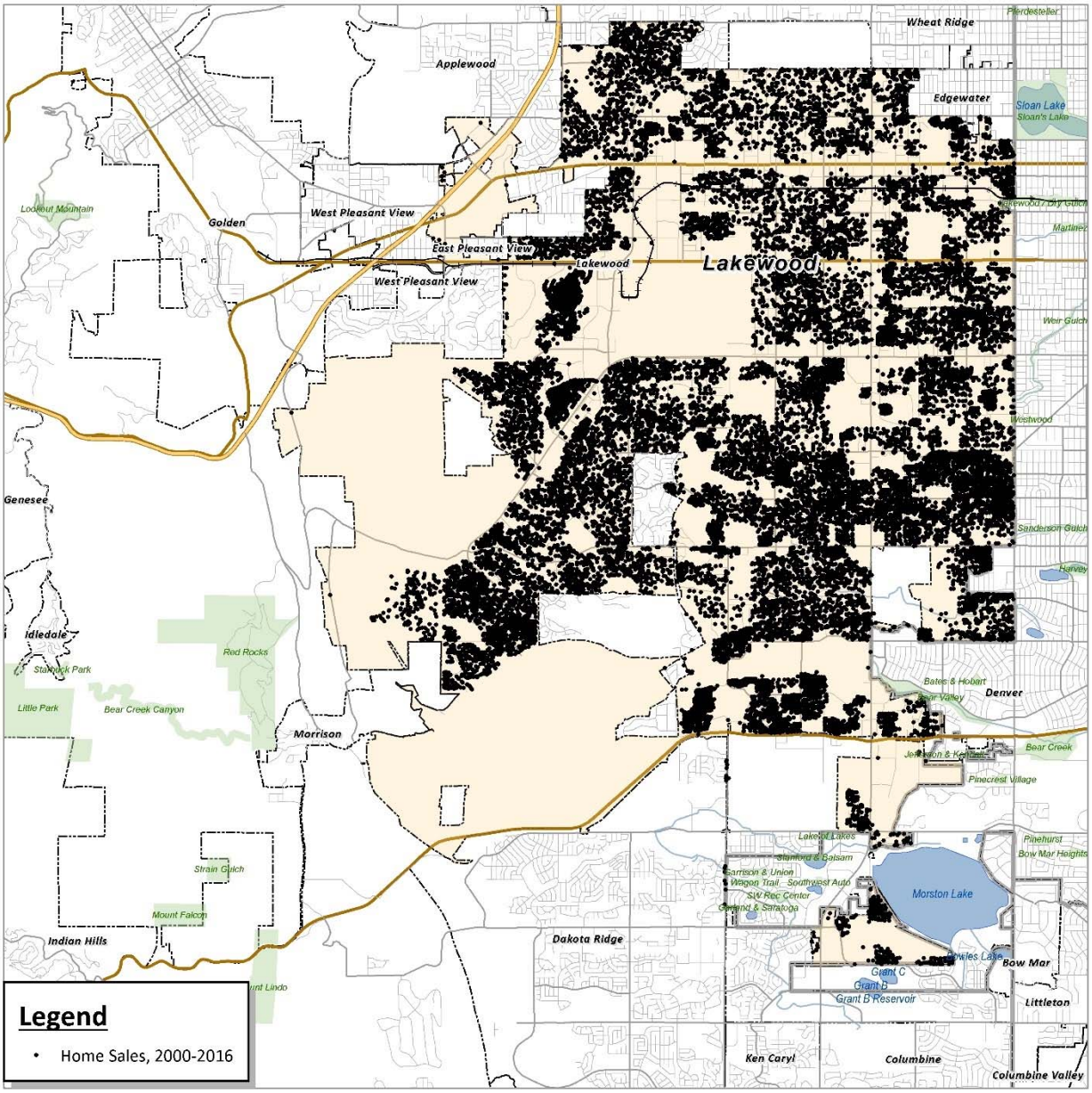


**Figure 29** illustrates the average sales price of homes sold in the City by Census Tract in 2000. Citywide, the average price of a home was approximately $185,700 ($127 per square-foot for an average 1,460 square-foot home). The average price of an attached home (including townhome, duplexes, or condominiums) was approximately $126,900 with an average size of 1,100 square feet. The average price of a single-family detached home was approximately $227,200 with an average size of 1,700 square feet.

**Figure 29**
**Average Sales Prices, 2000**

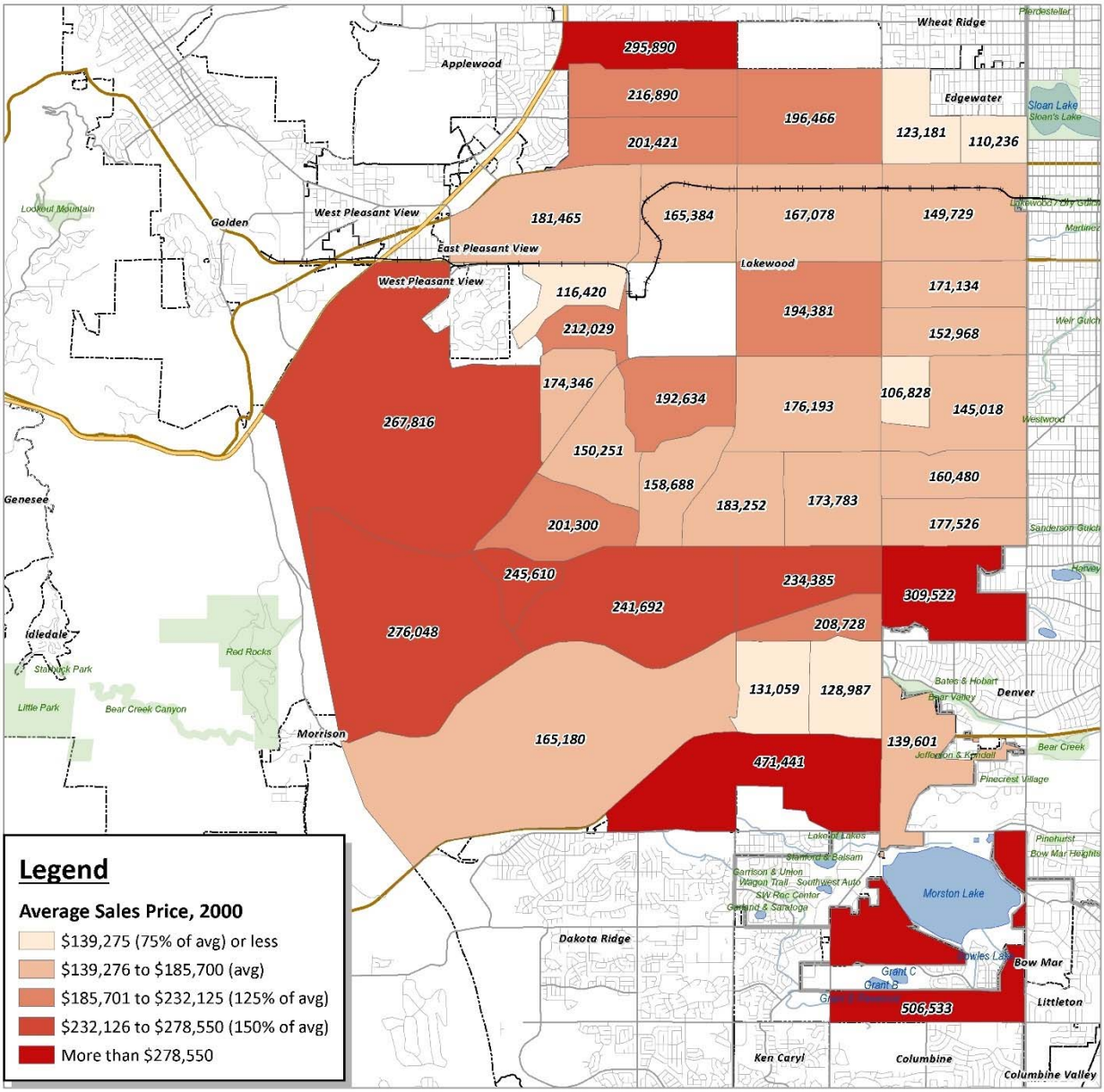
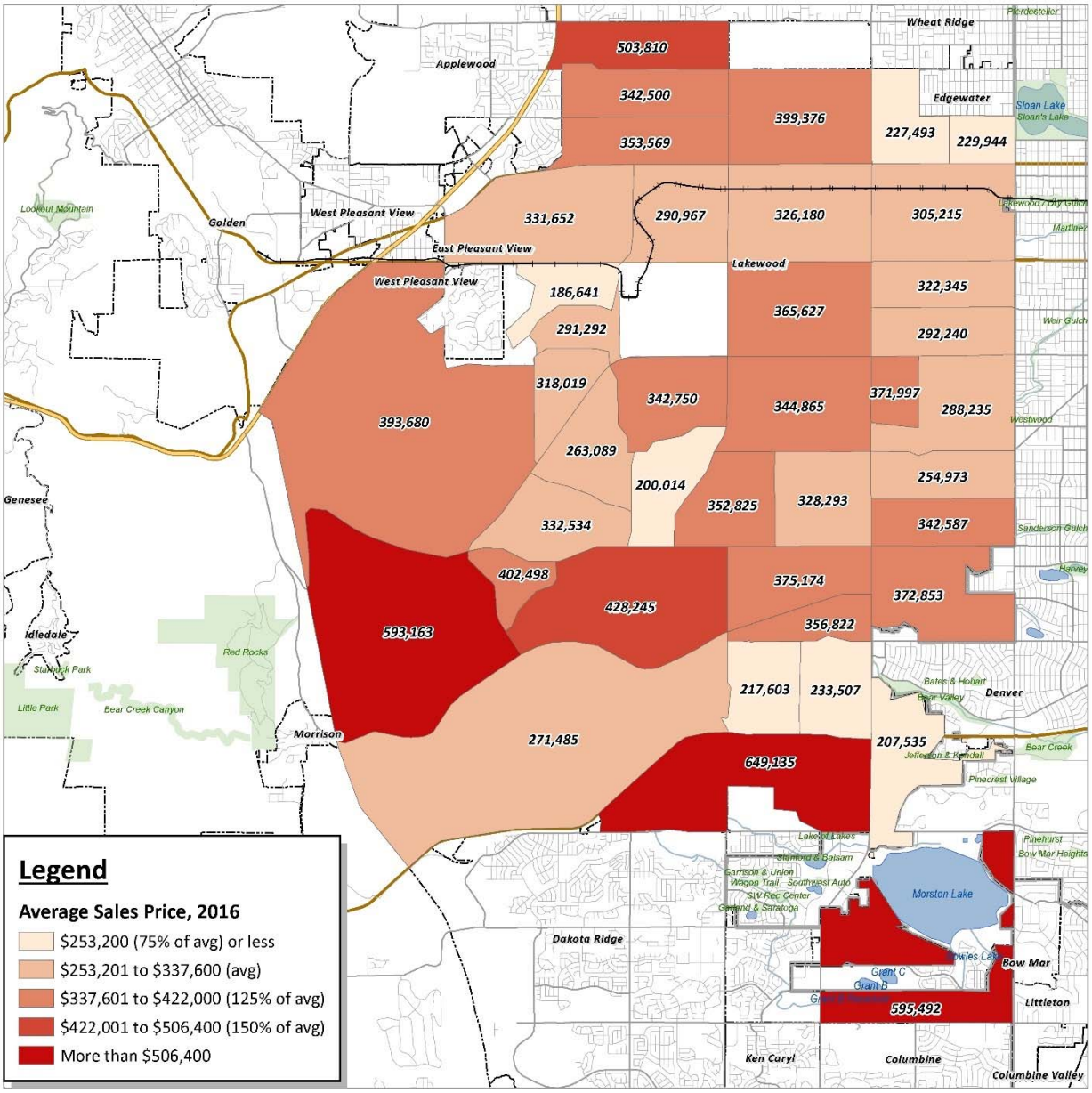


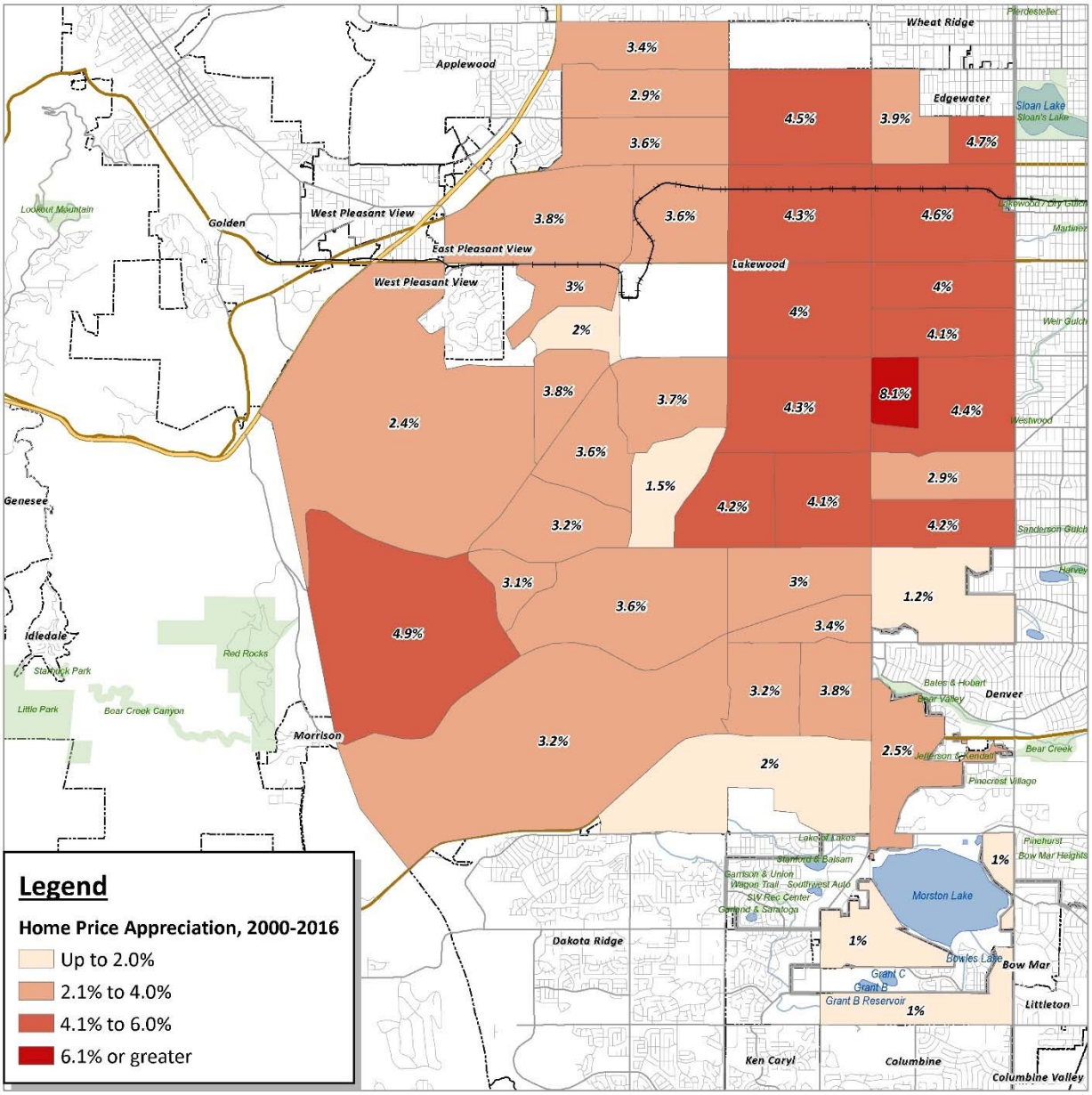
**Figure 30** illustrates how the average sales prices by Census tract increased considerably throughout the City. Overall, the average price of a home nearly doubled at an increase of 82 percent to approximately $337,600. This equates to $159 per square foot for a 2,100 square-foot home (nearly 700 square feet larger than the average home sold in 2000). By 2016, the average 1,400 square-foot attached home sold for approximately $228,800, and the average single-family 2,600 square-foot detached home sold for approximately $405,500.

**Figure 30**
**Average Sales Prices, 2016**



Using datasets from the previous two charts, **Figure 31** illustrates the average price appreciation in home sales by Census Tract between 2000 and 2016. At the City level, home prices appreciated 3.8 percent per year, attached homes appreciated at 3.8 percent, and single-family detached homes appreciated at 3.7 percent. Areas with generally the highest overall price appreciation were those closest to Denver east of Kipling and north of Jewell.

**Figure 31**
**Sales Price Appreciation, 2000-2016**



But during the 16-year timeframe, housing prices have risen, fallen, and risen again. To separate the cycle in the first part of the 2000s, **Figure 31** illustrates the average price appreciation in home sales by Census Tract between 2011 and 2016. Citywide, home prices appreciated at 10.5 percent per year, attached home prices appreciated at 13.4 percent, and single-family detached home prices appreciated at 10.1 percent. In general, the highest rates of housing price appreciation occurred in areas closest to Denver, with many of the highest increases near Sloan's Lake north of Colfax.

**Figure 32**
**Sales Price Appreciation, 2011-2016**

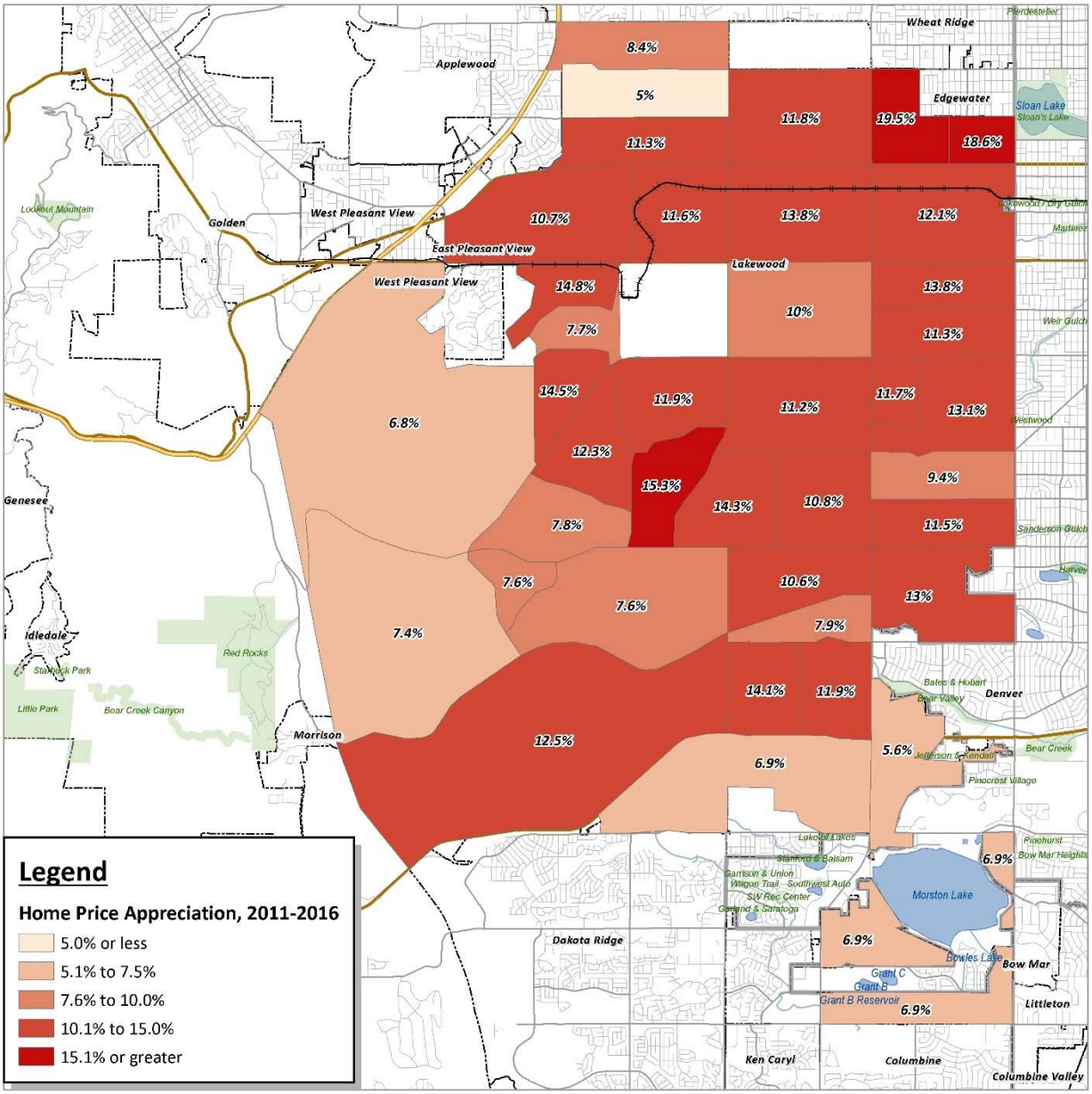
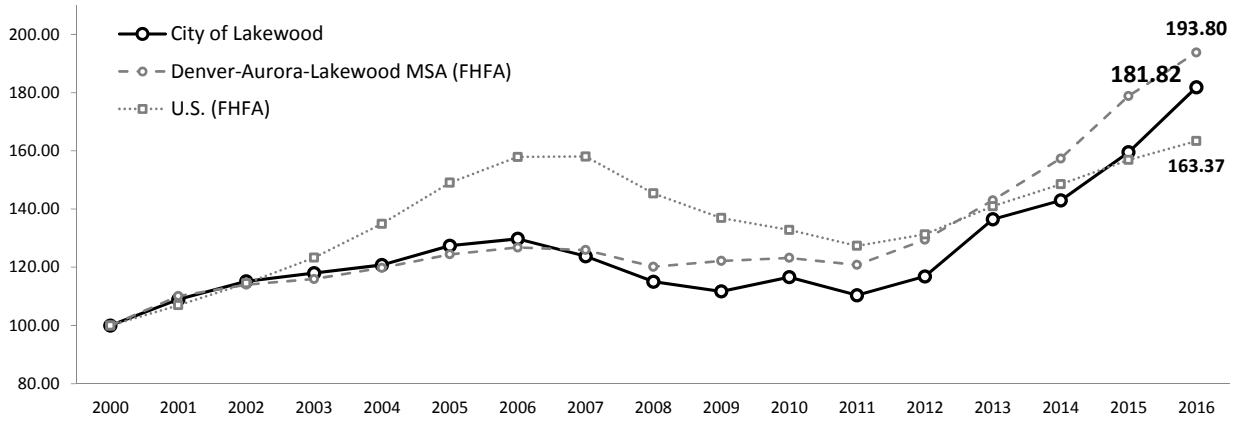


**Figure 33** illustrates how home sales prices in the City of Lakewood, the Denver MSA, and the U.S. appreciated between 2000 and 2016 Most notable is how differently the Metro Area and the nation experienced the national housing bubble. While the average home price nationwide was escalating at 7.9 percent annually between 2000 and 2006, the average home price in Lakewood and the MSA was escalating at just 4.4 percent annually.

As a result, the market's correction (decline in average sales prices) in the subsequent four to five years was not as pronounced as at the national level. National average prices dropped a total of 19 percent between 2006 and 2011 (accounting for the national economic recession of 2007 through 2009 and two years of stagnant economic conditions), while average prices in the City dropped only 15 percent, and at the MSA level prices dropped only 5 percent.

Following the recovery, the City and MSA have experienced housing price escalation at considerably higher rates than the country. Nationally, housing prices have risen 5.1 percent annually since 2011, but in the City they have increased by 10.5 percent annually, as indicated previously, and 9.9 percent annually at the MSA level.

**Figure 33**
**Indexed Home Price Escalation, 2000-2016**




Source: Genesis Group; FHFA; Economic & Planning Systems

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**Figure 34** illustrates that the average sales price of a home in Lakewood has increased to approximately $338,000 from $186,000 in 2000, an 82 percent increase. Between 2000 and 2006, housing sales price appreciation averaged 4.4 percent per year rising to nearly $241,000 in 2006. Between 2006 and 2011, the average price of a resale dropped to approximately $205,000, reflecting an average annual decline of 3.2 percent. Since 2011, however, and like the rest of the Denver MSA, average prices have escalated by substantial rates. The average price climbed to nearly $338,000 by 2016, reflecting an annual price appreciation of 10.5 percent. It should be noted that 2016 volume numbers reflect a partial year of data (only through September).

**Figure 34**
**Home Price Escalation, 2000-2016**

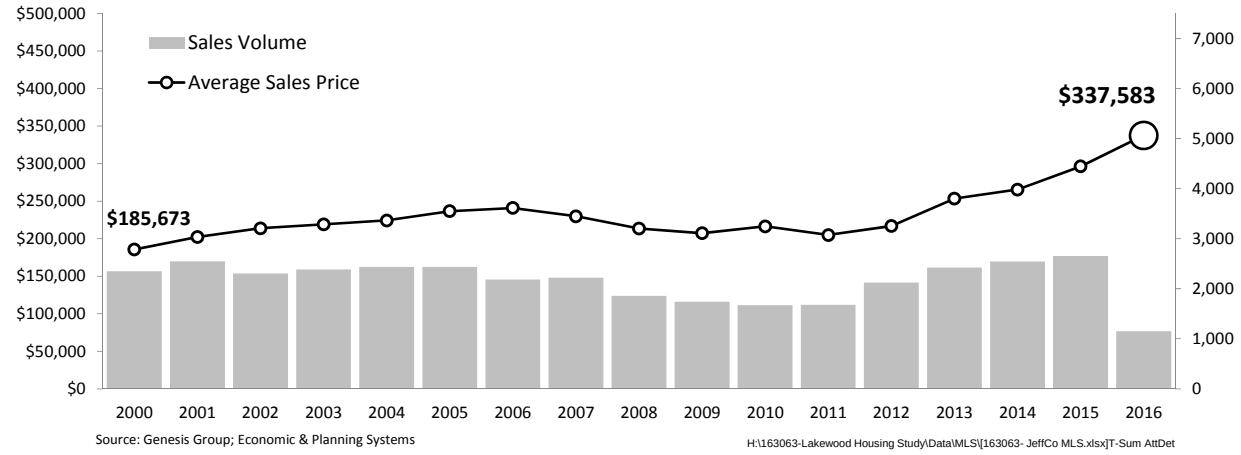
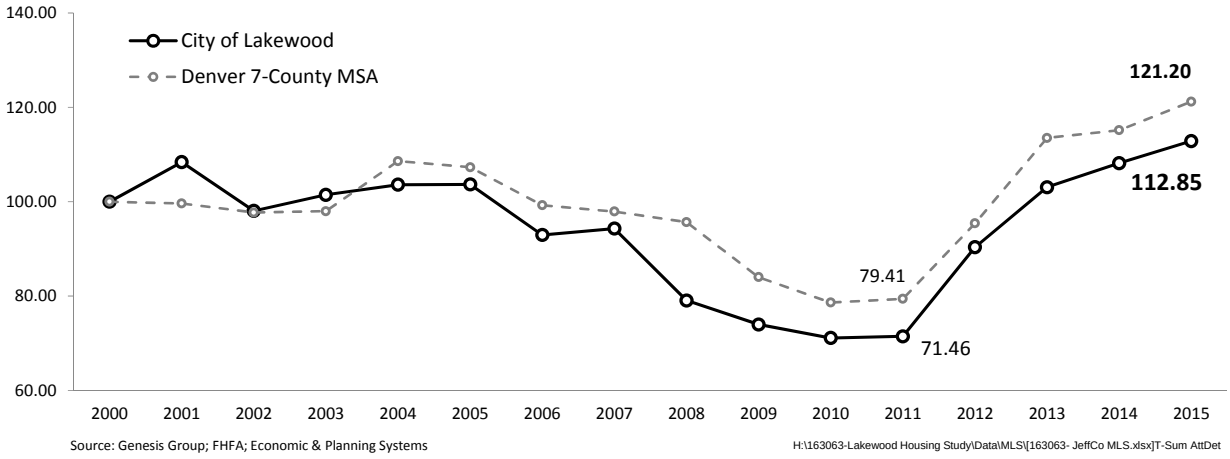



**Figure 35** illustrates how the volume of sales in the City has returned to a general magnitude on par with units sold during the early 2000s.

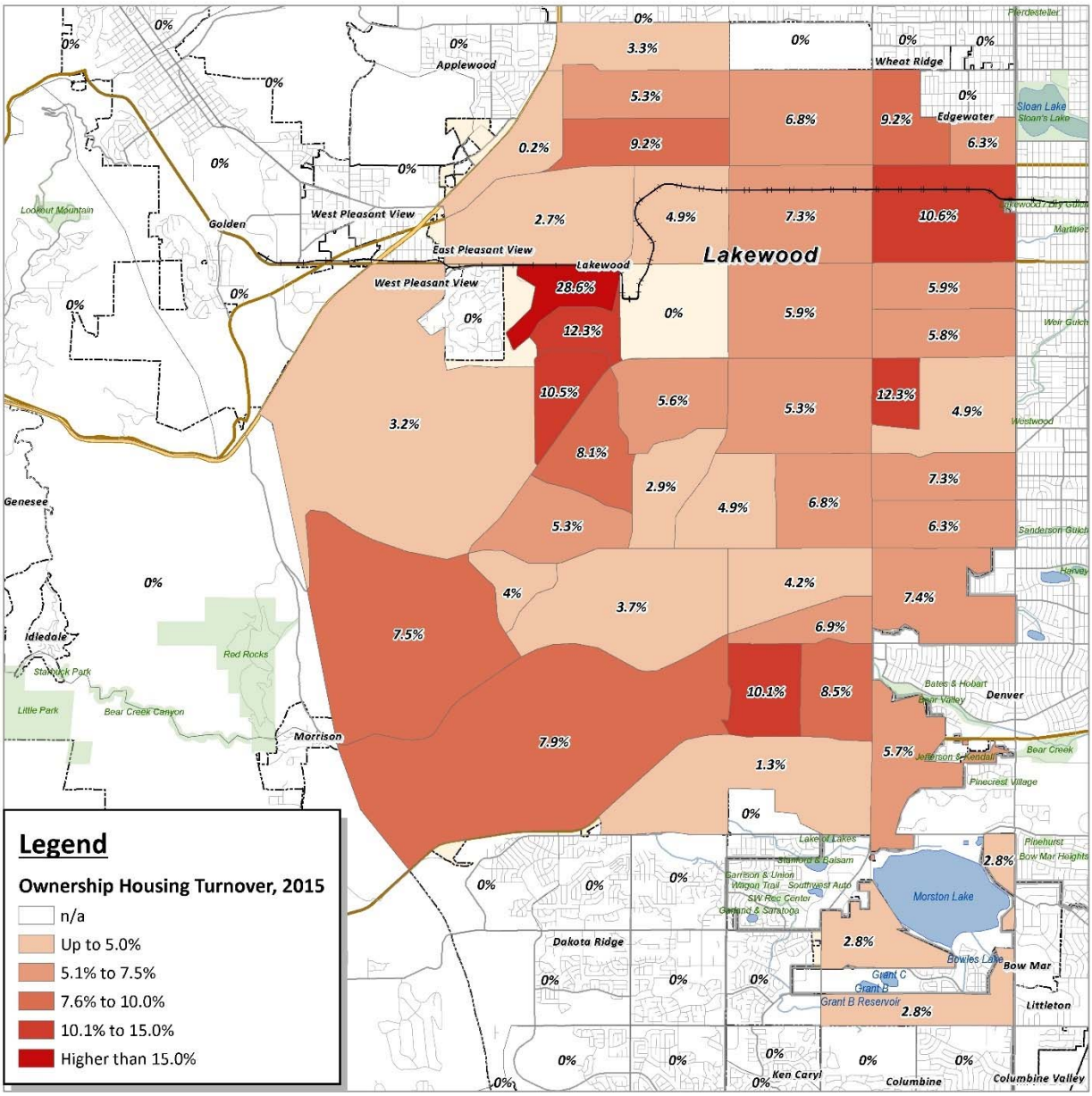
**Figure 35**
**Sales Volume, 2000-2015**



## Ownership Housing Turnover

**Figure 36** illustrates the portion of existing ownership housing that was sold (called turnover) in 2015 by Census tract. In total, 5 percent of the City's ownership housing sold during the year. Lower rates would tend to indicate areas of greater stability, while areas with higher rates would indicate areas of more rapid change demographically or socio-economically.

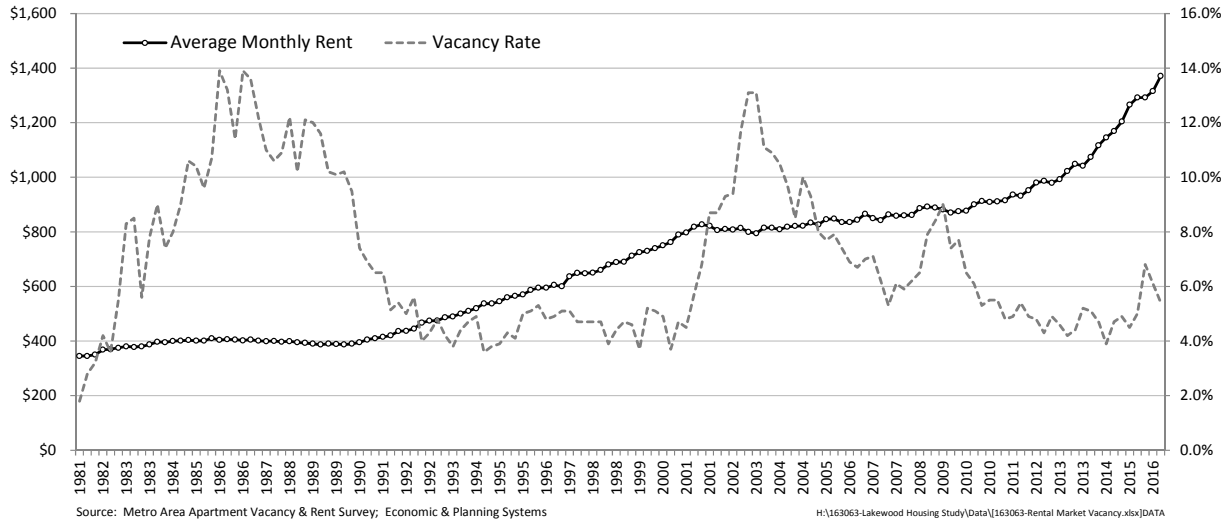
**Figure 36**
**Ownership Housing Inventory Turnover, 2015**



## Rental Market Activity

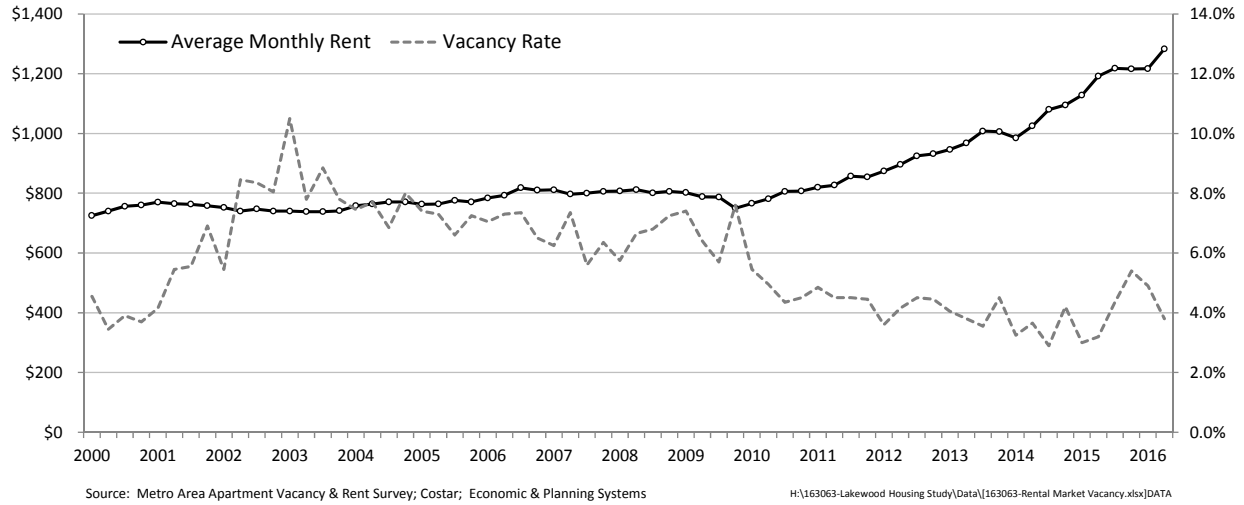
**Figure 37** illustrates the long-term patterns of the rental market's monthly rental rates and vacancy rates for the Denver MSA. One of the noteworthy findings of this pattern is the ten-year cycle of these two trends. Between 1981 and 1990, following a major boom in apartment construction, vacancy rates shot up to 14 percent, while average monthly rents increased at 1.3 percent per year for 10 years. As occupancy levels increased with increased population growth to 1990, vacancy rates remained around 5 percent or lower for the following 10-year period, during which average rents increased at 7.4 percent annually. In early 2001, also following a massive boom in apartment construction (typically stimulated by sub-5 percent vacancies), MSA vacancy rates jumped to 13 percent. Between 2001 and 2010 when demand began to increase, occupancies and the vacancy rate dropped and average rents increased at 1.1 percent per year. But in 2010 following the Great Recession, vacancy rates fell below 5 percent, which has stimulated the most recent spike in multifamily construction activity and led to an escalation in monthly rents of 8.1 percent per year; this has continued for the past six years.

**Figure 37**
**Denver MSA Vacancy and Rent Trends, 1981-2016**



Although data are not available going back as far, **Figure 38** illustrates the rental market trends of the past 16 years. As previously visualized, MSA vacancies in 2001 had been relatively low for the previous 10 years, which led to a boom in apartment construction. Rents had also been on a rapid uphill climb since 1990. In 2001, however, vacancy rates increased rapidly at the MSA level and to nearly 11 percent in the City of Lakewood followed by a 10-year stretch of stagnating rents (0.0 percent change on an annual basis). In 2010, vacancy rates began to dip below 5 percent at the MSA and City levels, stimulating construction as well as rapid price escalation. In the City, average rents have escalated at 9.7 percent since 2010. Also as illustrated in the previous chart, vacancy rates continue to fluctuate in and around the 5 percent mark, indicating a continuation of the current construction cycle.

**Figure 38**
**Lakewood Vacancy and Rent Trends, 2000-2016**




Source: Metro Area Apartment Vacancy & Rent Survey; Costar; Economic & Planning Systems

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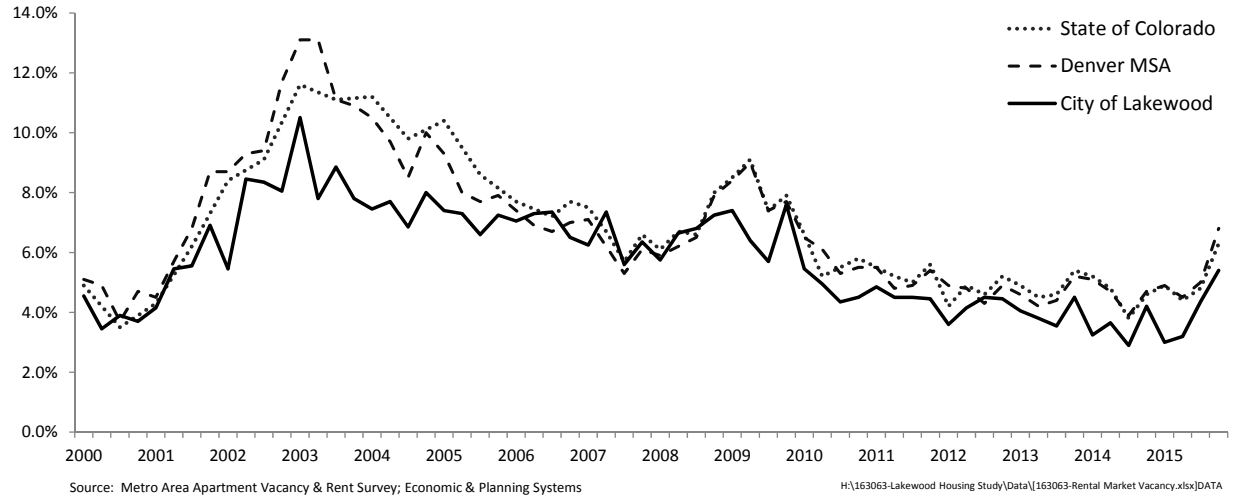
To illustrate how similarly the City's apartment market has behaved, **Figure 39** illustrates a comparison of vacancy rates to the Denver MSA and State of Colorado. Paralleling the State and MSA, the fluctuation in the City's vacancy rate has been slightly less pronounced.

**Figure 39**
**Vacancy Rate Trends, 2000-2015**




Source: Metro Area Apartment Vacancy & Rent Survey; Economic & Planning Systems

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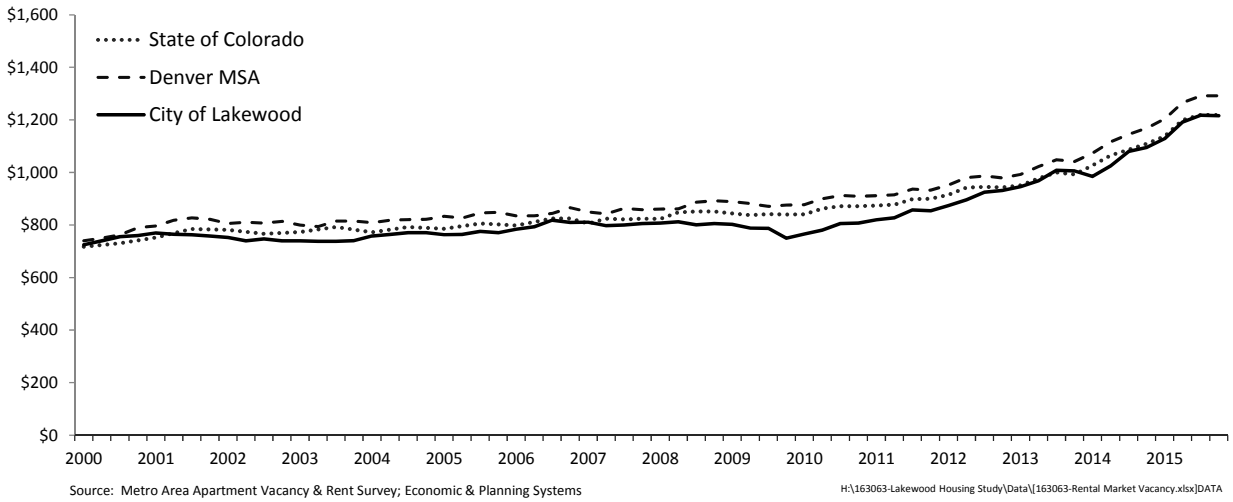
In regards to how similarly rental rates in the City have paralleled the State and MSA, **Figure 40** illustrates not only how closely aligned the stagnation of average rates was between 2000 and 2010, but also how homogenous the rental rates are throughout the State. (The City's average monthly rent has historically been 7 percent below the MSA average since 2000.)

**Figure 40**
**Rental Rate Trends, 2000-2015**




Source: Metro Area Apartment Vacancy & Rent Survey; Economic & Planning Systems

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# 4. STATED PREFERENCES

This chapter details the findings of the Lakewood workforce survey. The findings reveal useful patterns of choice, or stated preference, by age level, such that can be juxtaposed against a backdrop of housing supply, community assets and amenities. Demographic and socioeconomic characteristics of the survey respondents were noted to ensure alignment with the City of Lakewood's population – i.e. that the results of the survey are statistically valid.

The survey was fielded between the beginning of December 2016 and March 2017. Additional time in leaving the survey "in the field" was granted for this project because it was fielded through the human resources departments at various major City of Lakewood employers. As such, time was allowed for coordination of this effort to ensure that the results represented the City's major employers. These efforts yielded a total of 1,344 survey responses, approximately 490 of whom were both residents and workers in the City.

As with any stated preference survey, it should be noted that any such survey is subject to interpretation of results and that they are not scientific or completely reliable indications of what will happen in the future. They are, as intended for use and consideration in this study, best applied as guides to understanding the preferences of individuals and households regarding what is driving their decisions now and understanding what may guide their decisions in the future.

## Characteristics of Choice

This section is devoted to detailing the different findings of how Lakewood's workforce, represented by survey respondents, choose where to live. Considerable national research has been devoted to this subject, and EPS's approach has been guided by an interest in bringing information to the City of Lakewood that is most relevant given current local and national political interests and discourse.

Housing choices are made based on a wide variety of factors from stage-of-life needs, physical characteristics, as well as neighborhood and community characteristics. Some of these over-arching components are more important at different stages of life (e.g. consideration of housing price for first-time homebuyers), and others are consistently important to households (e.g. a sense of safety and security in their home). Each section below details the respective categories of housing choice and summarizes the findings of the survey.

### Stage of Life Needs

An individual's or household's stage of life drives housing choice to a degree. Singles tend not to be interested in a large house on a large lot, because their lifestyle and household type don't demand it. A family with numerous children, however, does have a greater need for a larger home and lot. Yet, as many singles become couples building families, their considerations change.

In this regard, stage-of-life needs are a way to interpret the results here. To do so, each section presents information across the age spectrum as well as by current versus their stated future housing choice preferences. The intent is to gain a deeper understanding of how Lakewood's

workforce identifies factors that are and will likely be most important to them as they anticipate (at the very least) life stage changes in the next five years.

As will be shown throughout this section, the answer to that question is predominately that most of the considerations, for example, such as interest in higher-density housing types that, a willingness to endure relatively less privacy between housing units, and a desire to live in close proximity to amenities are largely stage-of-life driven. And while the focus of national discourse tends to focus on Millenials and their desires (which are driving many of today's highly-amenitized luxury apartment projects), attention should also be placed on the needs of the population that is approaching retirement. As such, the results for each of the features depicted are broken down by age category: under 35s, those 35 to 54, and those 55 and older.

## Physical Features

Among the most direct choices made in choosing where to live, the following series of charts display how respondents rate the following types of physical home features, including the type of unit, its size, energy efficiency, historic character, and construction quality, as well as price, factor into the workforce's decisions. Displayed below illustrate the ranking of highest to lowest relative importance based on the portion of respondents that indicated various factors were "very important" to their current (**Figure 41**) and future (**Figure 42**) housing choices.

**Figure 41**
**Importance of Physical Features Choice Factors**

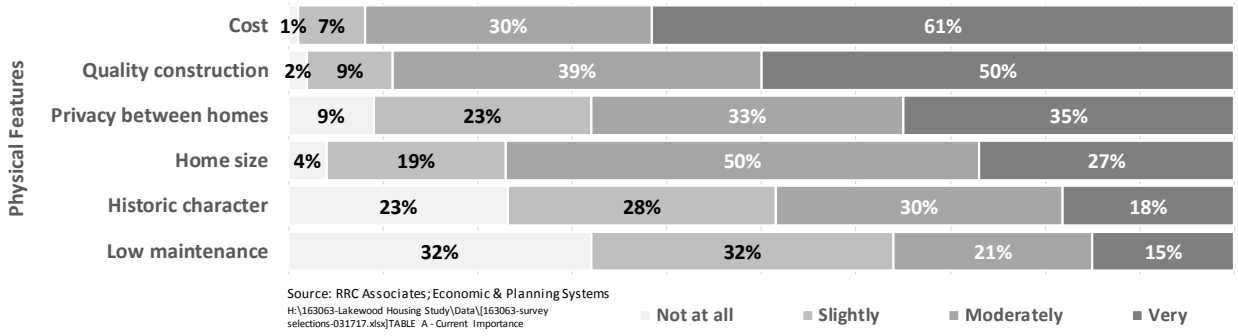
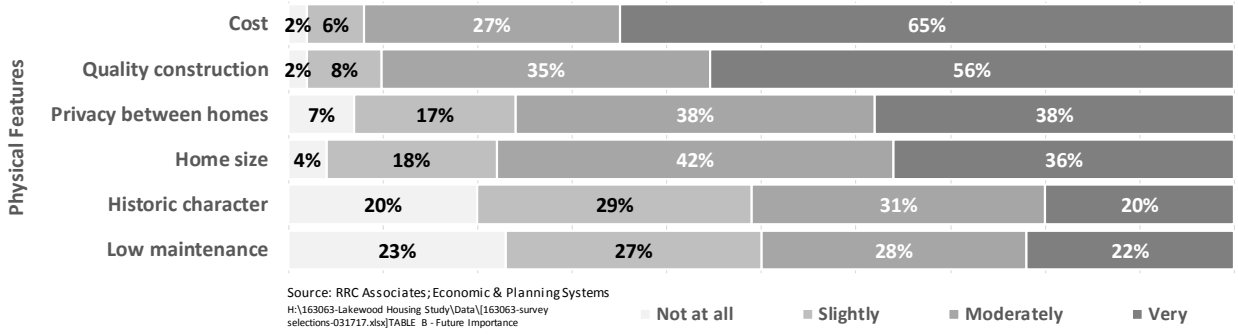


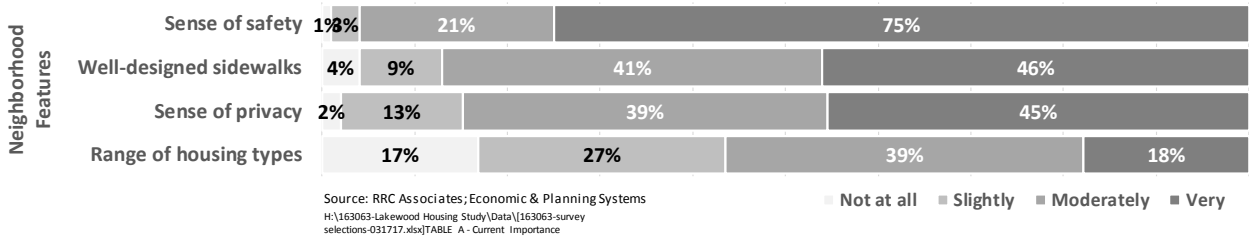

**Figure 42**
**Importance of Physical Features to Future Choice Factors**



## Neighborhood Features

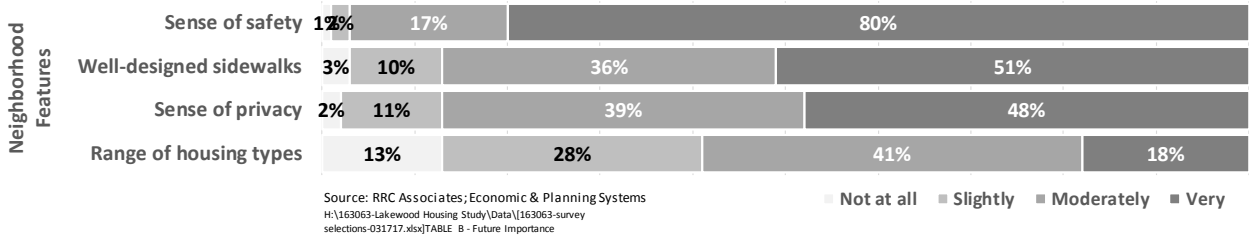
This section presents respondent preferences regarding neighborhood characteristics or more broadly, elements of the immediate surroundings that impact one's sense of neighborhood, such as sense of safety and security, privacy, the presence of parks, trails and open space, sidewalks, streetscaping.

**Figure 43**
**Importance of Neighborhood Features Choice Factors**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE A - Current Importance

**Figure 44**
**Importance of Neighborhood Features to Future Choice Factors**

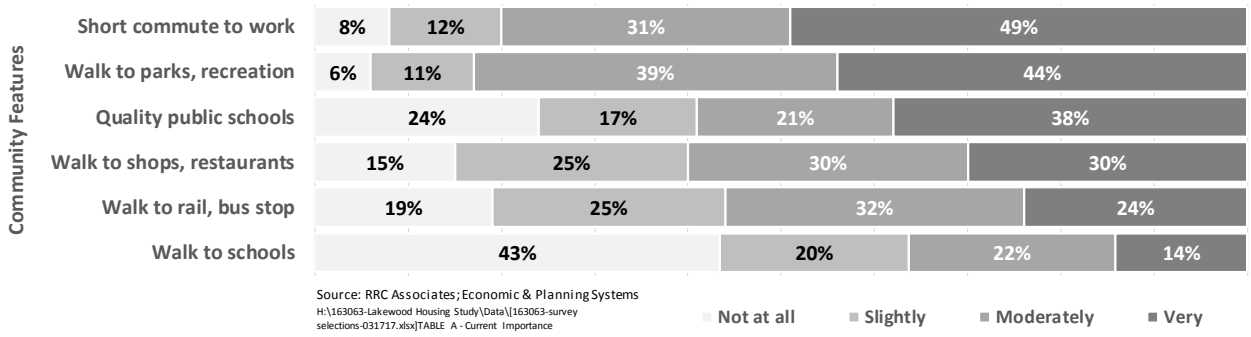



Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE B - Future Importance

## Community Features

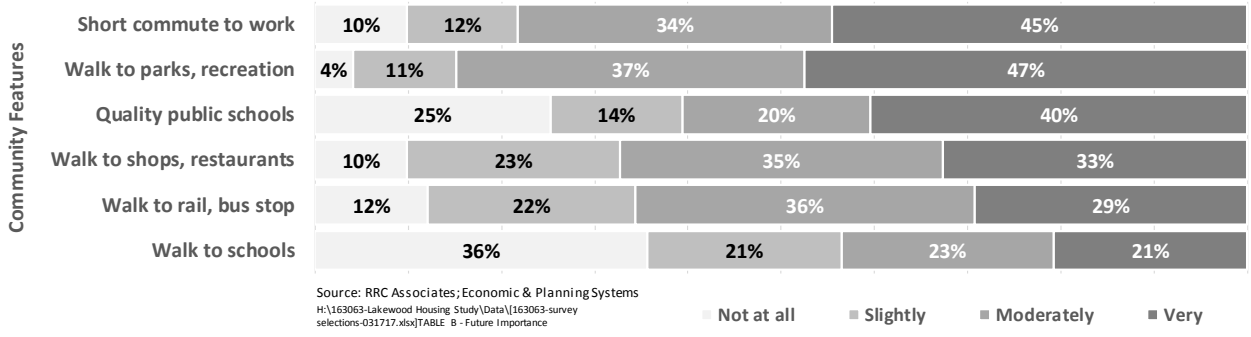
In some ways, neighborhood and community characteristics are identical. Neighborhood amenities, such as restaurants, shopping, and entertainment may be in walking distance and lend themselves toward a "sense of community" or "place". As such, this section details preferences for living in proximity to various types of amenities, such as in walking distance to shops, restaurants, and entertainment or transit options. It also details the preferences for living in proximity to work, which mode of transportation they prefer to use for their commute, and how they view these preferences changing in the future.

**Figure 45**
**Importance of Community Features to Choice Factors**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE A - Current Importance

**Figure 46**
**Importance of Community Features to Future Choice Factors**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE B - Future Importance

# Distinctions by Age Group

The purpose of this section is to present the same data in a way that reveals distinctions between how each age group considers various factors affecting their current and future housing choice.

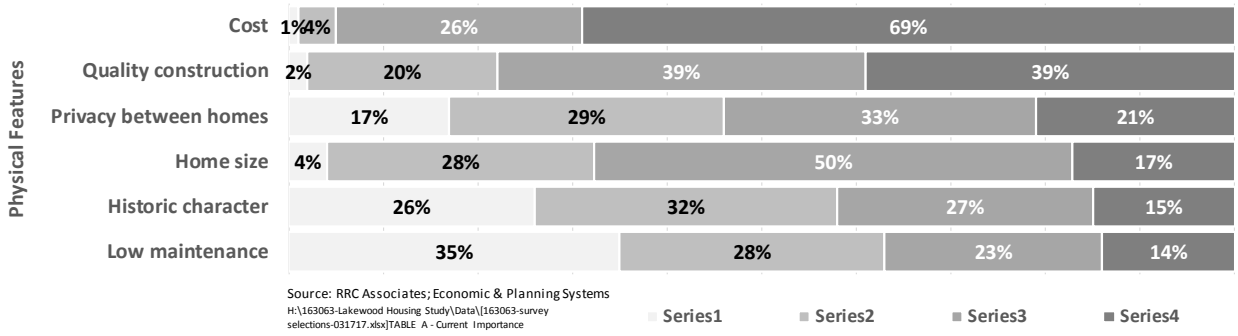
## Under 35s

### *Current Considerations*

The following **Figure 47** through **Figure 49** illustrate how this age groups currently sees the various aspects of physical, neighborhood, and community features important to their consideration of where to live. Each element is listed within its respective graphic according to the overall ranking given by all age groups; thus revealing where there are any distinctions between the priority order given to it in general and by the specific age group.

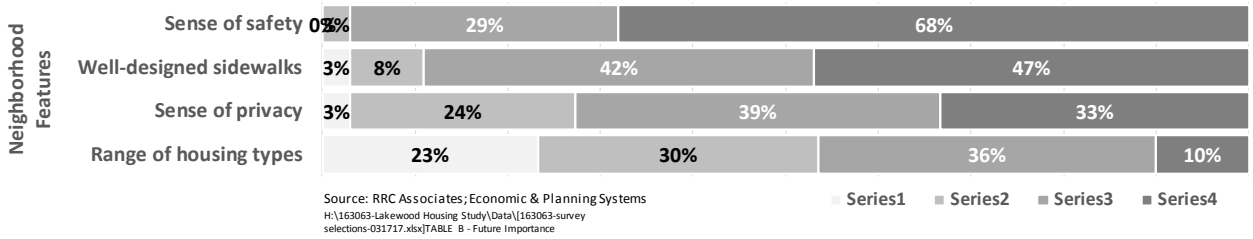
**Figure 47** shows that, like everyone else, housing cost is the primary consideration of physical features with approximately 7 out of 10 saying that it's very important. The second characteristic, however, only garners 39 percent who say that quality of construction is very important. In fact, when interpreted relative to the other age groups, it appears that this age group is rather indifferent to the following five characteristics (quality of construction, privacy between homes, home size, etc.).

**Figure 47**
**Importance of Physical Features for Under 35s**



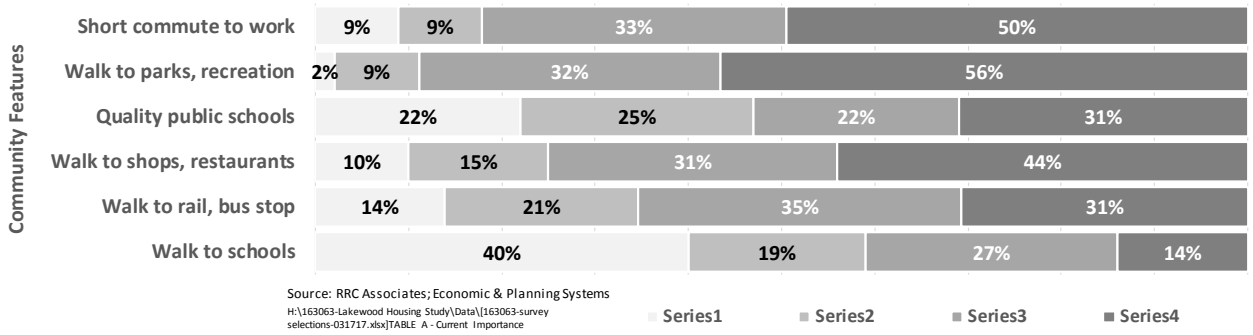
When considering neighborhood features, as with the other age groups, the sense of safety is very important to nearly 7 out of 10 under 35s, as shown in **Figure 48**. Well-designed sidewalks are very important to nearly half of this age group, but a sense of privacy seems to be very important to only a third of them. As for a range of housing types in the neighborhood, only 10 percent indicated that it was very important with 66 percent saying it was either slightly or moderately important.

**Figure 48**
**Importance of Neighborhood Features for Under 35s**




In the two previous charts, the priority order of this age group's considerations has been the same as for the larger whole, but in **Figure 49**, several of the considerations change priority order. For example, instead of a short commute to work being very important to the largest portion of this age group, it is being able to walk to parks and recreation. A short commute to work is the second, followed by being able to walk to shops, restaurants. And indicative of their household types (which are predominately single-person households), quality of schools is only as important as being able to walk to a rail station or bus stop. Being able to walk to schools is the least important to this group.

**Figure 49**
**Importance of Community Features for Under 35s**



Delving specifically into how this age group differs from the others, **Table 9** illustrates the difference between the Under 35s and each other age group that sees the various features as very important. The positive percentages indicate which feature is more important to the Under 35s than other age groups, and the negative percentages indicate which features are relatively less important to the Under 35s.

As for physical considerations, the Under 35s are much more cost conscious than the other age groups, but less concerned with each of the other considerations. As for the neighborhood considerations, Under 35s seem generally less concerned with any of these aspects than the other age groups except for the slightly higher portion that sees well-designed sidewalks as very important by comparison to the 35 to 54s. And as for community features, the Under 35s are much more concerned with being able to walk to parks and recreation, shops and restaurants, as well as walking to rail stations or bus stops than the other groups. They are more interested in having a short commute to work than the Over 55s (though less so than 35 to 54s), and more interested in being able to walk to schools than the Over 55s (also less so than the 35 to 54s). As indicated earlier, their interest in quality public schools is relatively less than either of the other age groups.

**Table 9**
**How Under 35s Differ in Their "Very Important" Ratings Currently**

| | % Difference From "Under 35s" Saying Each Feature is "Very Important" | |
|---|---|---|
| | 35 to 54s | over 55s |
| **Physical Features** | | |
| Cost | 11% | 7% |
| Quality construction | -9% | -18% |
| Privacy between homes | -14% | -20% |
| Home size | -11% | -14% |
| Historic character | -7% | -5% |
| Low maintenance | 4% | -11% |
| **Neighborhood Features** | | |
| Sense of safety | -7% | -12% |
| Well-designed sidewalks | 3% | -4% |
| Sense of privacy | -6% | -25% |
| Range of housing types | -8% | -15% |
| **Community Features** | | |
| Short commute to work | -1% | 2% |
| Walk to parks, recreation | 13% | 14% |
| Quality public schools | -10% | -3% |
| Walk to shops, restaurants | 11% | 22% |
| Walk to rail, bus stop | 7% | 8% |
| Walk to schools | -2% | 1% |

Source: RRC Associates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE A3 - under 35 current

### *Future Considerations*

**Table 10** illustrates the difference between the portion of Under 35s that rated each housing feature a "very important" by comparison to three of metrics: 1) compared to how Under 35s said each element was "very important" to them currently; 2) compared to the portion of 35 to 54s that said each element would be "very important" to them in the next five years; and 3) compared to the portion of Over 55s that said each element would be "very important" to them in the next five years.

First of all, the left column of percentages illustrate that much larger portions of this age group anticipate quality of construction, privacy between homes, and home size to be more important in choosing where to live five years from now than it said of their decisions today. Much larger portions of them also said that all of the neighborhood features would be more important to them in the next five years, as well as all but one of the community features. Most notably are the significantly larger portion of this age group that thinks quality public schools and being able to walk to them will be very important.

Interesting also are how these portions of Under 35s view each element as very important in the next five years by comparison to how the other age groups view each element as very important in the next five years. By comparison to the 35 to 54s, cost, privacy between homes, and home size will all by marginally more important, as will well-designed sidewalks and a sense of privacy. By comparison to the Over 55s, privacy between homes and home size will also be marginally more important in their next move, as with well-designed sidewalks. But as for all of the community features, the Under 35s seem to rate all of the elements as "very important" in larger proportion than the other age groups.

**Table 10**
**How Under 35s Differ in Their "Very Important" Ratings in 5 Years**

| | % Difference in Saying CURRENTLY "Very Important" | % Difference Other Age Groups Saying "Very Important" | |
|---|---|---|---|
| | | 35 to 54s | over 55s |
| **Physical Features** | | | |
| Cost | -1% | 7% | -1% |
| Quality construction | 16% | 0% | -5% |
| Privacy between homes | 21% | 5% | 8% |
| Home size | 35% | 16% | 20% |
| Historic character | -1% | -9% | -7% |
| Low maintenance | -5% | -7% | -29% |
| **Neighborhood Features** | | | |
| Sense of safety | 10% | -2% | -3% |
| Well-designed sidewalks | 17% | 17% | 11% |
| Sense of privacy | 15% | 5% | -5% |
| Range of housing types | 3% | -5% | -9% |
| **Community Features** | | | |
| Short commute to work | 3% | 7% | 13% |
| Walk to parks, recreation | 5% | 15% | 16% |
| Quality public schools | 37% | 28% | 42% |
| Walk to shops, restaurants | -8% | 1% | 4% |
| Walk to rail, bus stop | 4% | 6% | 4% |
| Walk to schools | 27% | 20% | 29% |

Source: RRC Associates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE B3 - under 35 future

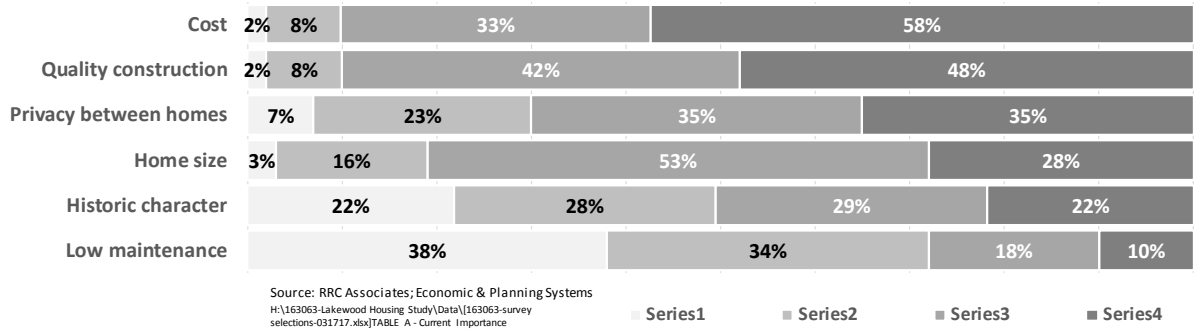
## 35 to 54s

### *Current Considerations*

The following **Figure 50** through **Figure 52** illustrate how this age groups currently sees the various aspects of physical, neighborhood, and community features important to their consideration of where to live.

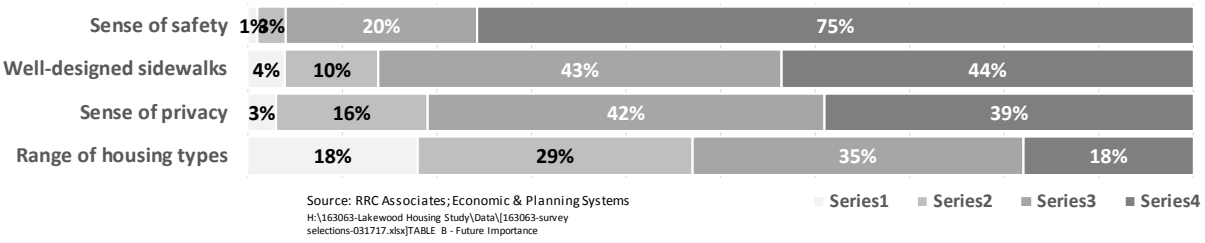
**Figure 50** shows that, like everyone else, housing cost is the primary consideration of physical features with approximately 7 out of 10 saying that it's very important. The other elements follow with incrementally lower portions of this age group viewing each characteristic as very important. The only break in the pattern is that nearly half of this age group indicated that home size was moderately important.

**Figure 50**
**Importance of Physical Features for 35 to 54s**



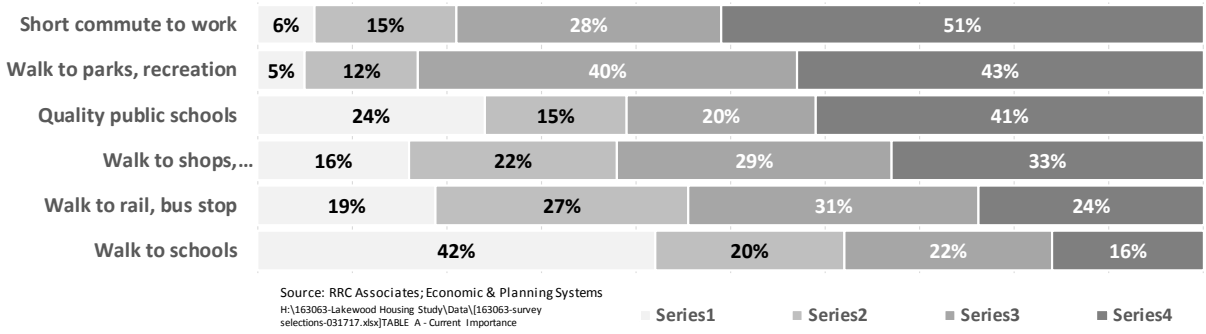

When considering neighborhood features, as with the other age groups, the sense of safety is very important to nearly 8 out of 10 of this age group, as shown in **Figure 51**. Each of the other considerations have lower portions of them indicating they are very important, and as for range of housing types, this age group is also somewhat indifferent.

**Figure 51**
**Importance of Neighborhood Features for 35 to 54s**



The priority order of the community features, as shown in **Figure 52**, follows the same rank order as with the combined results. Having a short commute to work is very important to half of this age group, followed by being able to walk to parks and recreation and having quality public schools. Being able to walk to shops is very important to 3 out of 10, and being able to walk to a rail station or bus stop is very important to 1 out of 4. Being able to walk to schools, however, is only very important to less than 1 in 5.

**Figure 52**
**Importance of Community Features for 35 to 54s**



In terms of how this age group differs from the others, **Table 11** illustrates the difference between the 35 to 54s and each other age group. As for physical considerations, this age group is less concerned with housing cost or low maintenance than either of the other age groups. They are more concerned with quality construction, privacy between homes, home size, and historic character than the Under 35s, but less concerned about those elements than the Over 55s (with the exception of historic character).

As for the neighborhood considerations, they are more concerned about sense of safety, privacy, and a range of housing types than the younger age group, but they are marginally less concerned about all these neighborhood features than the Over 55s.

This age group is also largely focused on what they need, in terms of community features, for getting to work and getting children to school. Higher proportions of them indicated that a short commute to work was very important than the other age groups, as well as quality public schools and being able to walk to them. They are more concerned about all these features than the Over 55s are, but less concerned about walking to parks and recreation, shops and restaurants, as well as train stations or bus stops than the Under 35s.

**Table 11**
**How 35 to 54s Differ in Their "Very Important" Ratings Currently**

| | Difference between "very important" | |
|---|---|---|
| | under 35s | over 55s |
| **Physical Features** | | |
| Cost | -11% | -4% |
| Quality construction | 9% | -9% |
| Privacy between homes | 14% | -6% |
| Home size | 11% | -3% |
| Historic character | 7% | 2% |
| Low maintenance | -4% | -15% |
| **Neighborhood Features** | | |
| Sense of safety | 7% | -5% |
| Well-designed sidewalks | -3% | -7% |
| Sense of privacy | 6% | -19% |
| Range of housing types | 8% | -7% |
| **Community Features** | | |
| Short commute to work | 1% | 3% |
| Walk to parks, recreation | -13% | 1% |
| Quality public schools | 10% | 7% |
| Walk to shops, restaurants | -11% | 11% |
| Walk to rail, bus stop | -7% | 1% |
| Walk to schools | 2% | 3% |

Source: RRC Associates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE A2 - 35 54 current

***Future Considerations***

**Table 12** illustrates the difference between the portion of 35 to 54s that rated each housing feature a "very important" by comparison to three of metrics: 1) compared to how they said each element was "very important" to them currently; 2) compared to the portion of Under 35s that said each element would be "very important" to them in the next five years; and 3) compared to the portion of Over 55s that said each element would be "very important" to them in the next five years.

Compared to the Under 35s, this age group sees housing cost, privacy between homes, and home size as marginally less important. It should be noted that substantial portions of this group already had indicated that these physical features were very important to their housing decisions, so the relative differences here do not indicate that they are viewed any less importantly. On the other hand, historic character and low maintenance living will be slightly more important to them in the next five years than to the Under 35s. Compared to the Over 55s, privacy between homes, home size, and historic character will be slightly more important, but not cost or lower maintenance.

As for community features, this age group sees all of them as less important than the Under 35s, but generally more important to their housing choice in the next five years than the Over 55s.

**Table 12**
**How 35 to 54s Differ in Their "Very Important" Ratings in 5 Years**

| | % Difference in Saying CURRENTLY "Very Important" | % Difference Other Age Groups Saying "Very Important" | |
|---|---|---|---|
| | | Under 35s | over 55s |
| **Physical Features** | | | |
| Cost | 3% | -7% | -8% |
| Quality construction | 7% | 0% | -5% |
| Privacy between homes | 2% | -5% | 3% |
| Home size | 8% | -16% | 4% |
| Historic character | 1% | 9% | 2% |
| Low maintenance | 6% | 7% | -22% |
| **Neighborhood Features** | | | |
| Sense of safety | 5% | 2% | -1% |
| Well-designed sidewalks | 3% | -17% | -6% |
| Sense of privacy | 4% | -5% | -10% |
| Range of housing types | 0% | 5% | -4% |
| **Community Features** | | | |
| Short commute to work | -5% | -7% | 6% |
| Walk to parks, recreation | 3% | -15% | 1% |
| Quality public schools | -1% | -28% | 14% |
| Walk to shops, restaurants | 2% | -1% | 3% |
| Walk to rail, bus stop | 5% | -6% | -2% |
| Walk to schools | 5% | -20% | 9% |

Source: RRC Associates; Economic & Planning Systems

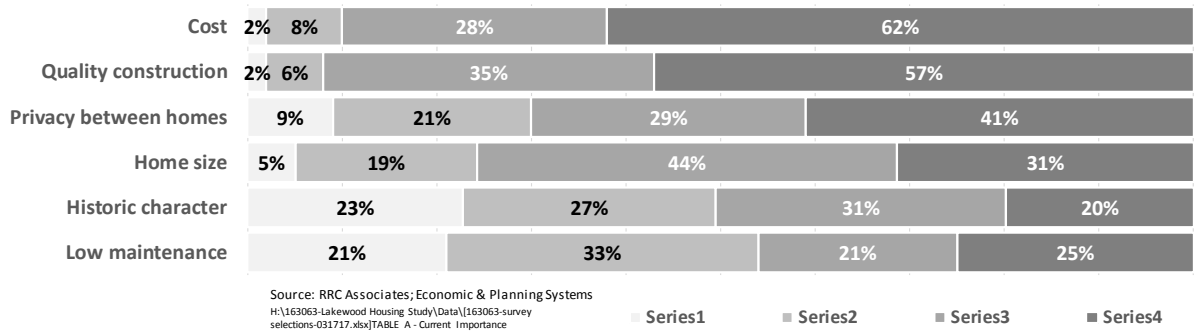
H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE B2 - 35 54 future

## Over 55s

### *Current Considerations*

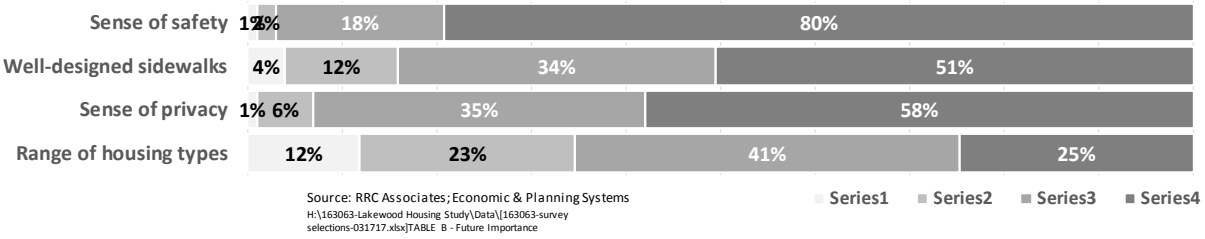
The following **Figure 53** through **Figure 55** illustrate how this age groups currently sees the various aspects of physical, neighborhood, and community features important to their consideration of where to live. **Figure 53** shows a rank order of physical feature considerations that looks very similar to the other two age groups, except that one a larger portion of them value low maintenance.

**Figure 53**
**Importance of Physical Features for Over 55s**




When considering neighborhood features, as with the other age groups, the sense of safety is very important to 8 out of 10 of this age group, as shown in **Figure 54**, but unlike the others, they value privacy to a greater degree.

**Figure 54**
**Importance of Neighborhood Features for Over 55s**



This age group prioritizes their community features much like everyone else, as shown in **Figure 55**, except for being able to walk to a rail station or bus stop, which ranks on par with being able to walk to shops and restaurants.

**Figure 55**
**Importance of Community Features for Over 55s**

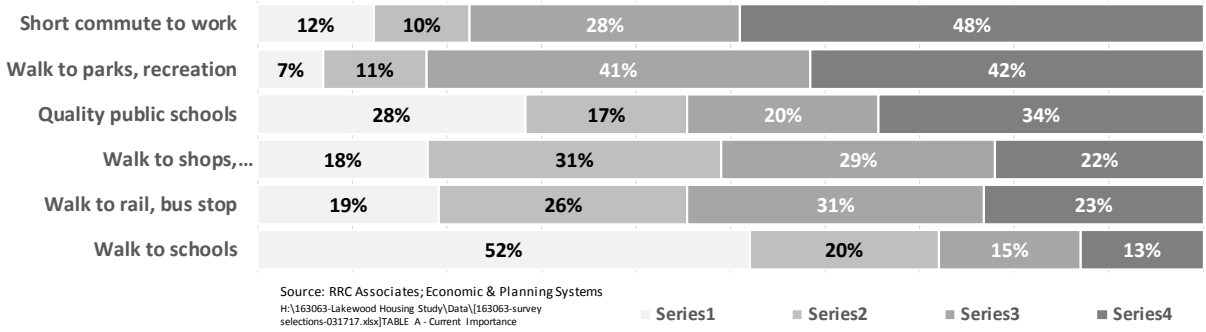



**Table 13** illustrates that this age group generally views the physical and neighborhood features more importantly, except for housing cost compared to Under 35s and historic character compared to the 35 to 54s. On the other hand, they generally view the community features as less important than the others, except for seeing quality public schools more favorably than the Under 35s.

**Table 13**
**How Over 55s Differ in Their "Very Important" Ratings Currently**

| | % Difference Other Age Groups Saying "Very Important" | |
|---|---|---|
| | under 35s | 35 to 54s |
| **Physical Features** | | |
| Cost | -7% | 4% |
| Quality construction | 18% | 9% |
| Privacy between homes | 20% | 6% |
| Home size | 14% | 3% |
| Historic character | 5% | -2% |
| Low maintenance | 11% | 15% |
| **Neighborhood Features** | | |
| Sense of safety | 12% | 5% |
| Well-designed sidewalks | 4% | 7% |
| Sense of privacy | 25% | 19% |
| Range of housing types | 15% | 7% |
| **Community Features** | | |
| Short commute to work | -2% | -3% |
| Walk to parks, recreation | -14% | -1% |
| Quality public schools | 3% | -7% |
| Walk to shops, restaurants | -22% | -11% |
| Walk to rail, bus stop | -8% | -1% |
| Walk to schools | -1% | -3% |

Source: RRC Associates; Economic & Planning Systems

H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE A1- over 55 current

***Future Considerations***

As with the other comparison, **Table 14** illustrates the difference between the portion of this age group that rated each housing feature a "very important" by comparison to how they said each element was "very important" currently, as well as compared to the other age groups looking five years from now.

By comparison to what is important to their current housing choices, they seem to be concerned about lower maintenance and cost, a sense of safety and well-designed sidewalks. Interestingly, though, they state that they are slightly more interested in being able to walk to parks and recreation, but significantly more interested in being able to walk to shops and restaurants and rail stations and bus stops.

By comparison to the other age groups, the portion of them that say low maintenance will be very important is 29 percent and 22 percent larger than the Under 35s and 35 to 54s, respectively. As for the neighborhood features, there are larger portions of this age group that view each element as more important (except for well-designed sidewalks among Under 35s). And for the community features, while the portion of them that say being able to walk to parks and recreation is not as large as those Under 35 or even 35 to 54, the portion of them saying they would like to be able to walk to shops and restaurants as well as rail stations or bus stops is very close to the magnitude of Under 35s and 35 to 54s.

**Table 14**
**How Over 55s Differ in Their "Very Important" Ratings in 5 Years**

| | % Difference in Saying CURRENTLY "Very Important" | % Difference Other Age Groups Saying "Very Important" | |
|---|---|---|---|
| | | Under 35s | 35 to 54s |
| **Physical Features** | | | |
| Cost | 7% | 1% | 8% |
| Quality construction | 3% | 5% | 5% |
| Privacy between homes | -7% | -8% | -3% |
| Home size | 1% | -20% | -4% |
| Historic character | 1% | 7% | -2% |
| Low maintenance | 13% | 29% | 22% |
| **Neighborhood Features** | | | |
| Sense of safety | 1% | 3% | 1% |
| Well-designed sidewalks | 2% | -11% | 6% |
| Sense of privacy | -5% | 5% | 10% |
| Range of housing types | -3% | 9% | 4% |
| **Community Features** | | | |
| Short commute to work | -8% | -13% | -6% |
| Walk to parks, recreation | 3% | -16% | -1% |
| Quality public schools | -8% | -42% | -14% |
| Walk to shops, restaurants | 10% | -4% | -3% |
| Walk to rail, bus stop | 8% | -4% | 2% |
| Walk to schools | -1% | -29% | -9% |

Source: RRC Associates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE B1- over 55 future

# Supply-Demand Synthesis

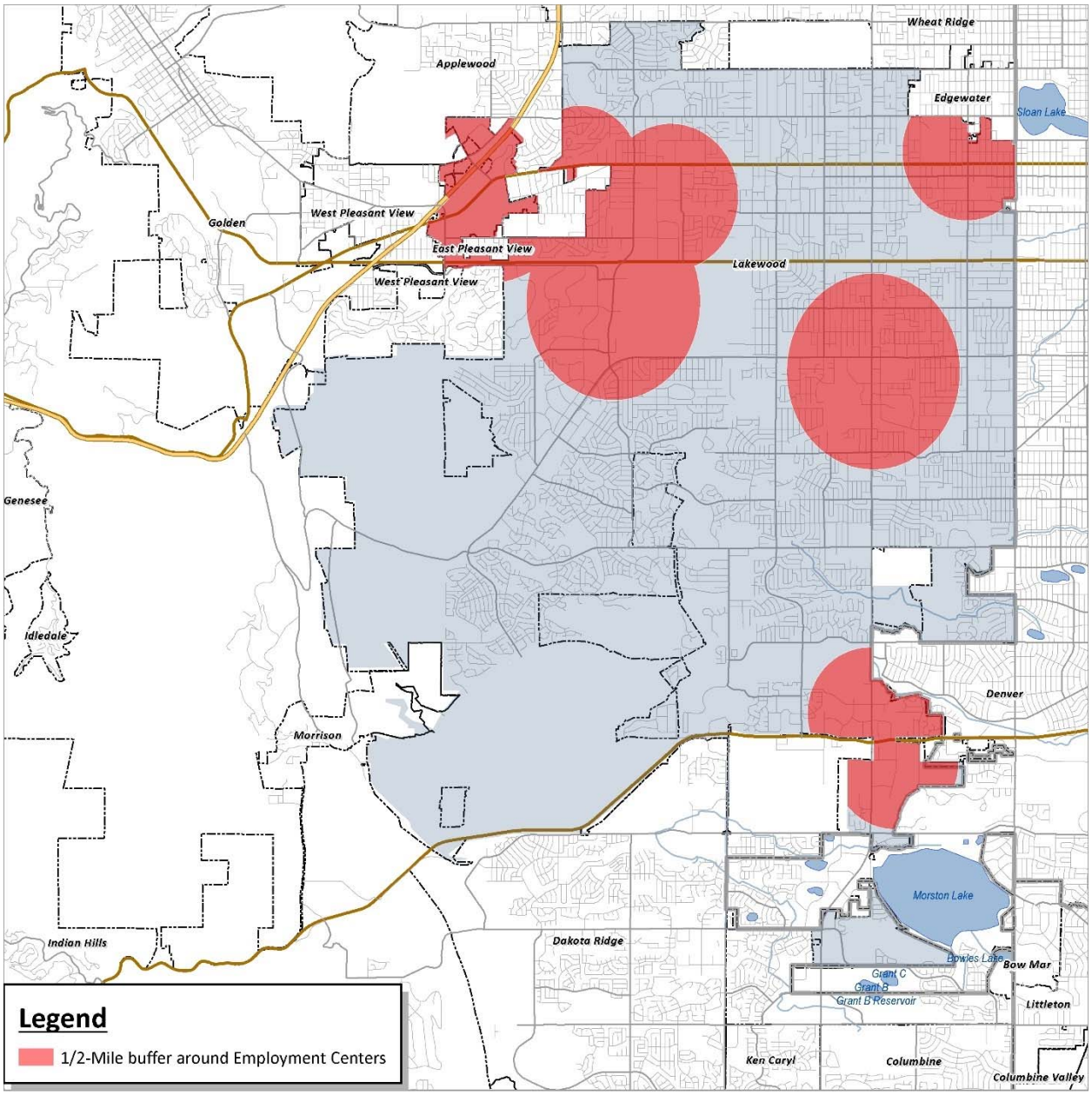
## Supply in Proximity

The following series of graphics illustrate and quantify the overlap of various community features that figured prominently in the stated preference analysis. The percent of housing supply that is within walking distance, defined as a quarter-mile in any direction, is calculated for each amenity. The purpose is to illustrate the extent to which the City's housing supply aligns with the stated demands of its workforce and residents.

### *Employment Centers*

**Figure 56** illustrates a quarter-mile walking distance surrounding the boundaries of employment centers throughout the city. Data analyzed from the CDLE were utilized to determine the boundaries of these areas. The findings of this analysis show that 34 percent of the City's housing stock falls within these boundaries compared to approximately 50 percent of those surveyed who said it was "very important" to have a short commute to work.

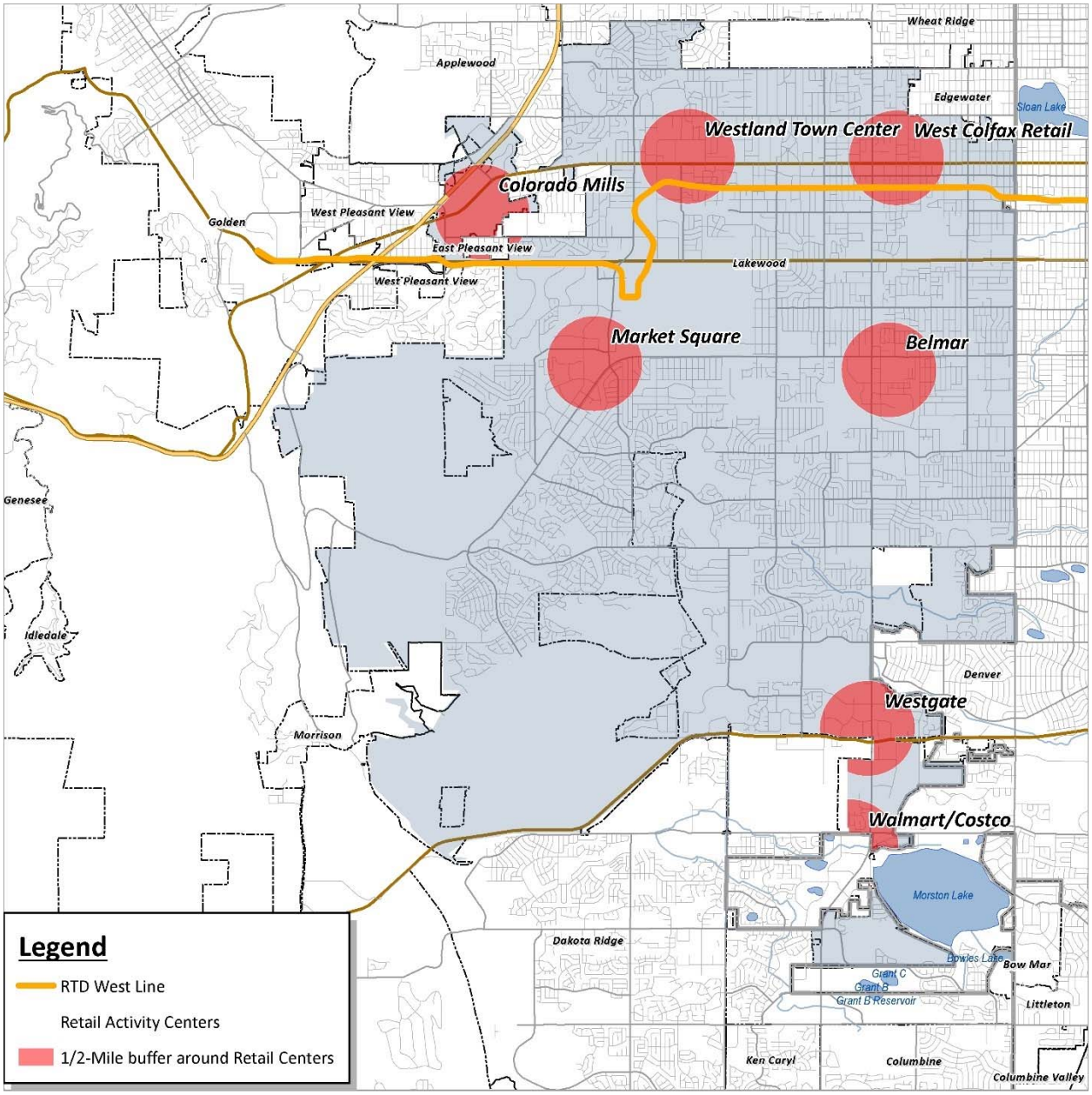
**Figure 56**
**Supply in Walking Distance to Employment Centers**



### *Walking Distance to Retail and Retail Redevelopment Areas*

Using Costar designations, **Figure 57** illustrates walking distance surrounding various areas of retail and retail redevelopment potential. The analysis finds that 18 percent of the City's housing stock is within walking distance of these retail areas compared to 30 percent of those surveyed who said it was currently very important to be in walking distance of retail (and 33 percent who said it would be very important in the next five years). It should be noted that Costar's data includes all sizes, types and mix, and although it was beyond the scope of the study, better data would have looked at typologies, such as neighborhood level retail.

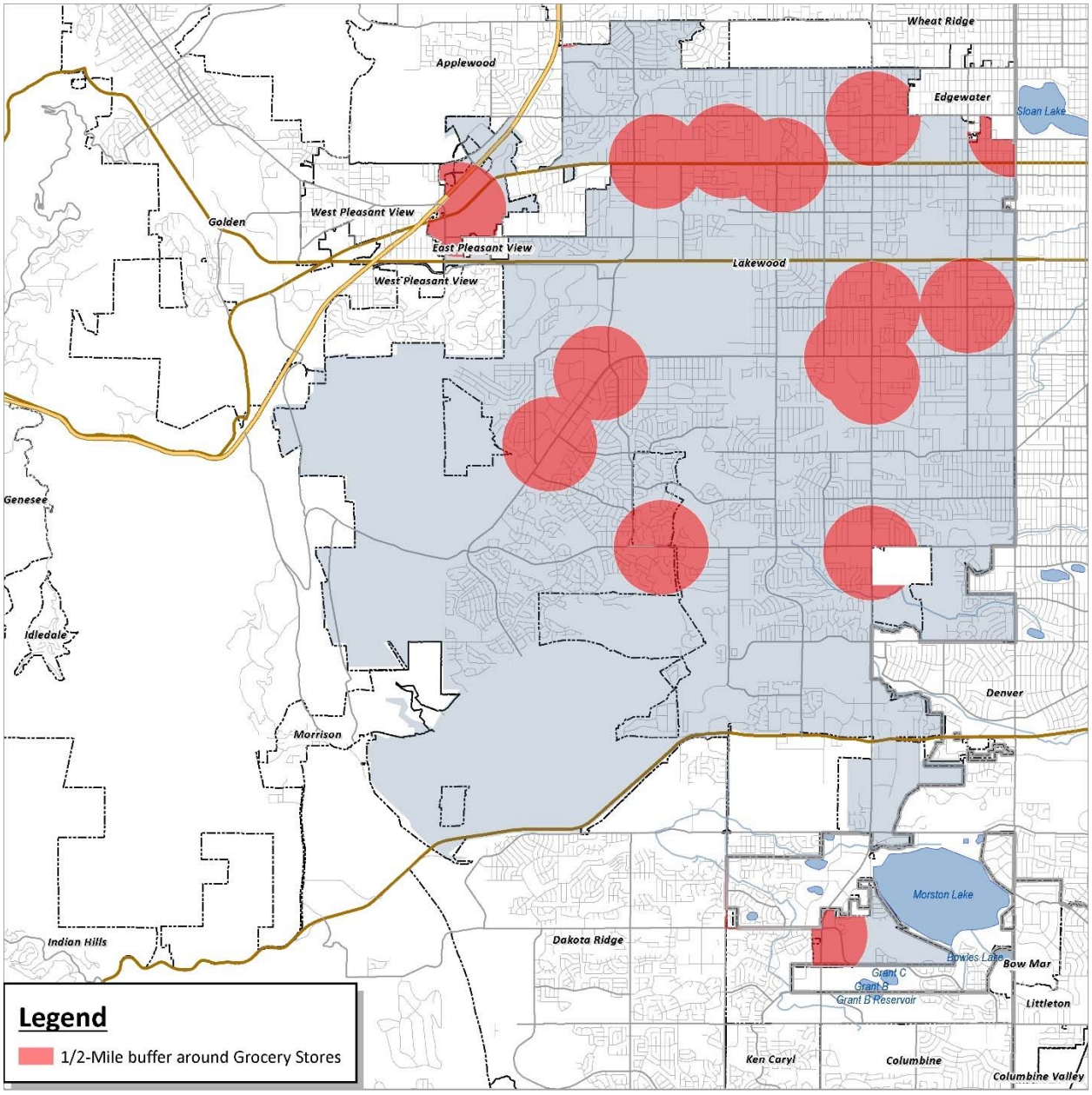
**Figure 57**
**Walking Distance to Retail and Retail Redevelopment Areas**



### *Walking Distance to Grocery*

**Figure 58** illustrates walking distances from each of the grocery stores that serve the City, including those that lie outside of the City's incorporated boundaries. The analysis finds a good alignment of these amenities and the housing stock, where 28 percent of the housing inventory falls within these areas and 30 percent of those surveyed indicated that it was very important to their current considerations in choosing where to live.

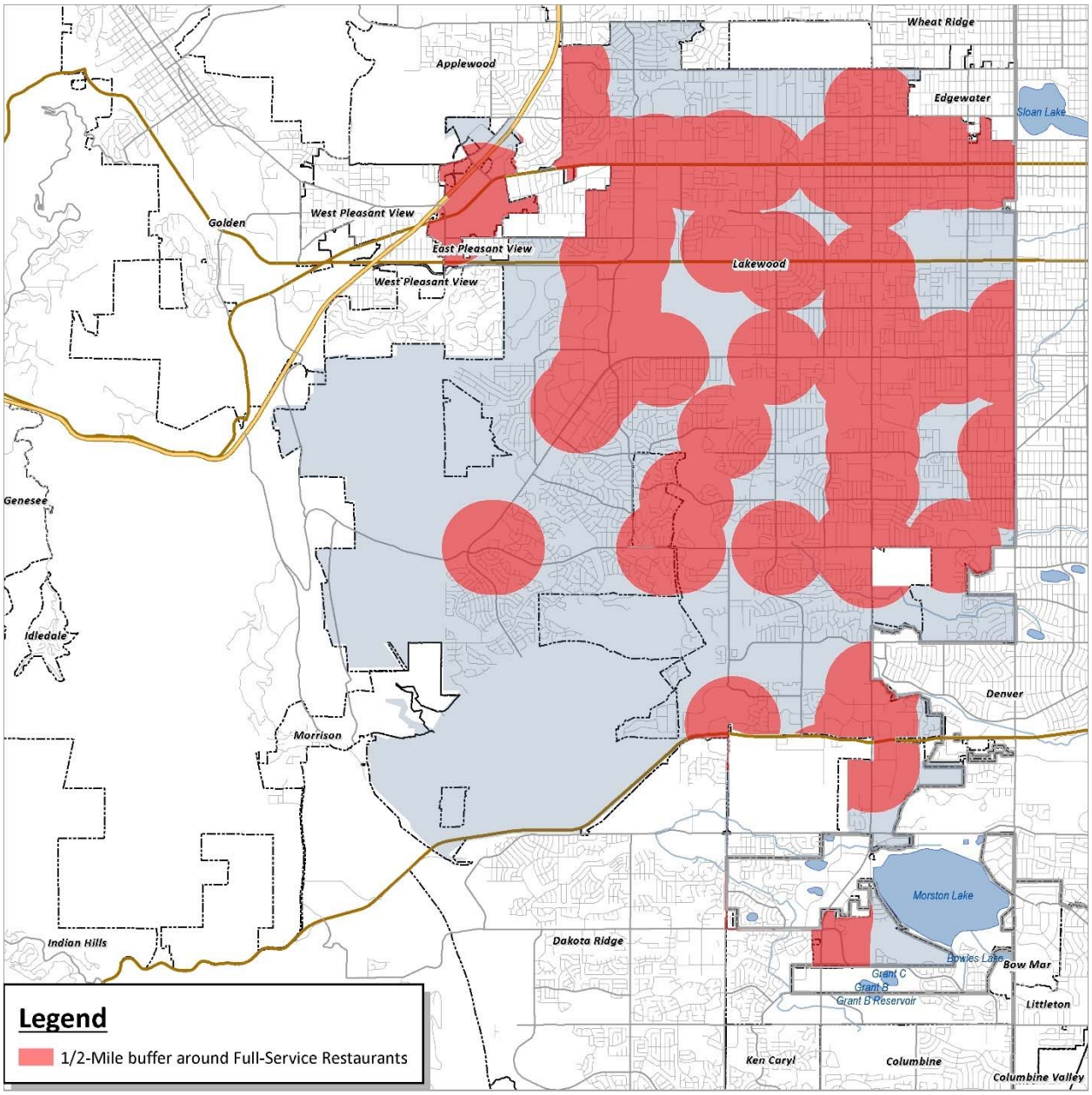
**Figure 58**
**Walking Distance to Grocery Stores**



### *Walking Distance to Restaurants*

**Figure 59** illustrates another element of the stated preference elements, i.e. being able to walk to shops and restaurants. But as with the geographic analysis of retail centers, this uses data on all types and varieties of restaurants throughout the City, from fast-food to quick-casuals, etc. As such, the analysis finds that 69 percent of the City's housing stock falls within walking distance to restaurants, whereas as mentioned previously, 30 percent of those surveyed indicated that it was very important to be in walking distance.

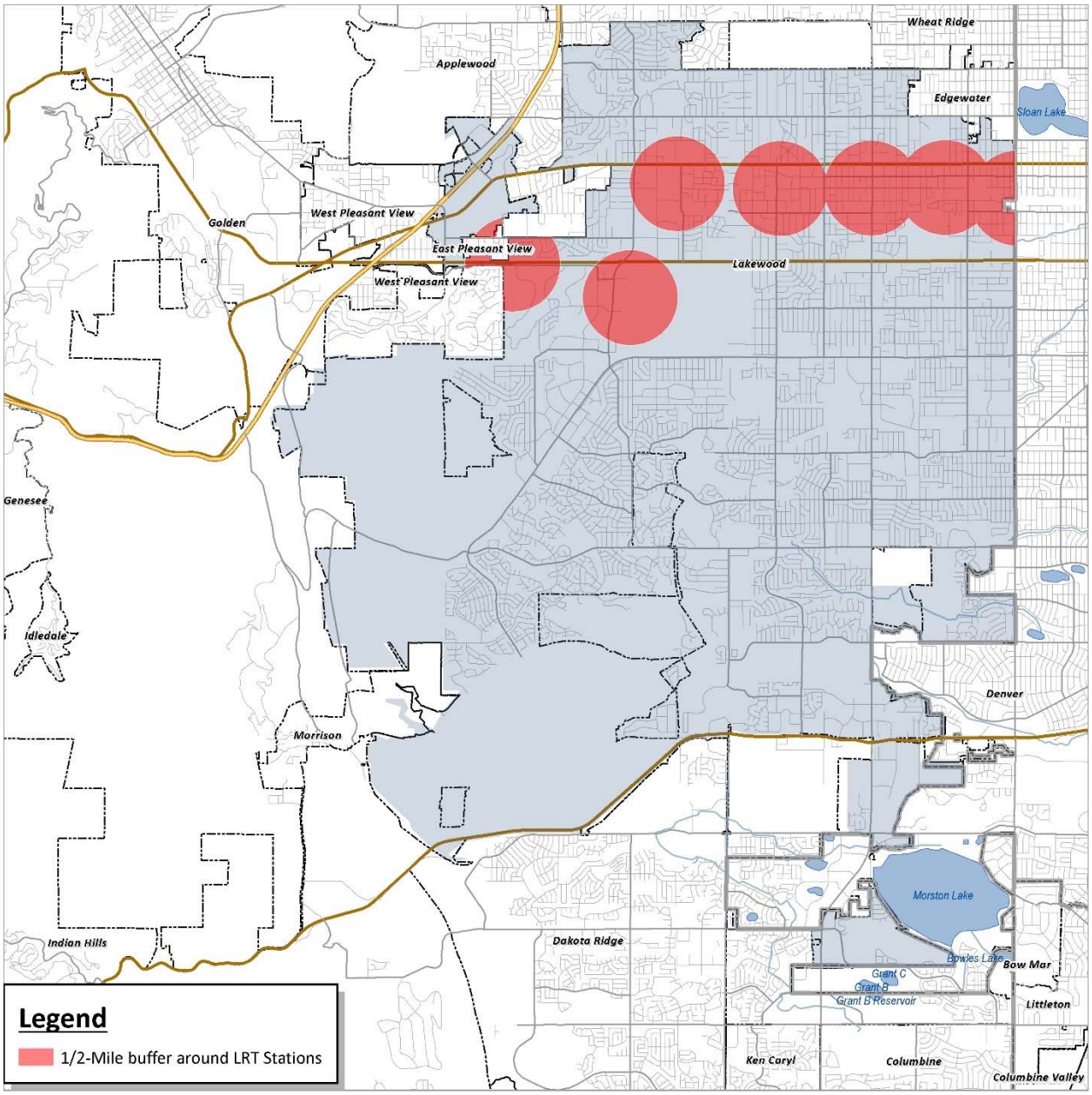
**Figure 59**
**Walking Distance to Restaurants**



### *Walking Distance to Rail Stations*

**Figure 60** illustrates walking distances to the rail stations of the West Line, which collectively intersect with 12 percent of the City's housing supply. This compares to 24 percent of those surveyed who said it is very important to be in walking distance, versus 29 percent who said it would be very important in the next five years.

**Figure 60**
**Walking Distance to Rail Stations**



## Propensity to Move

Implicit in all of the considerations above are trade-offs. Housing demand has always been characterized by the presence of them, but the survey findings indicate that some segments of Lakewood's workforce will shift away from historic trade-offs who favored bigger houses and greater sense of privacy but often fewer locational amenities and toward trade-offs that favors a smaller house or a smaller lot with locational amenities, such as centers of activity with retail, restaurants, entertainment, and employment.

One key difference between these two types of trade-offs is the cost associated with travelling to centers of activity. In the historical example, a household that favors a larger house with more privacy located further from the city drives farther and more frequently to shops, restaurants, entertainment, and work, whereas the household in the latter example doesn't. As indicated in the following results, households are willing to pay more for housing with walkability, because they can capitalize the cost of transportation into the house.

### *Willingness to Pay 10% More in Housing*

**Table 15** presents the findings of respondents' willingness to pay by age for various amenities. Overall, the findings show that 1 in 5 are willing to pay 10 percent more on housing to have higher quality schools, but 2 in 5 are not at all interested in doing so. And 15 percent of respondents are also willing to pay 10 percent more on their housing to cut their commute time in half, have the ability to walk or bike to shops or work. Though living in walking distance of a rail station or bus stop garnered a slightly smaller portion of respondents who said it was very important, there were generally fewer people very opposed to the idea. On the other hand, only a very small portion of those surveyed were interested in paying 10 percent more to live close to day care facilities.

On the basis of age, the responses reveal a general pattern of the Under 35s higher willingness to pay for the array of amenities than the other age groups. As noted by their considerations for housing choice five years from now, the findings also show that approximately 3 in 10 of the Under 35s would be willing to pay 10 percent more on housing to have higher quality public schools. Combined with those who saying they would be moderately willing, nearly 60 percent indicate so. As for being able to have a shorter commute and walk or bike to shops and work, approximately one quarter of this age group would be very willing to pay 10 percent more on housing.

As for the 35 to 54s, their responses indicate slightly more restraint or enthusiasm. As anticipated, nearly one quarter of them indicate a willingness to pay 10 percent more on housing to have higher quality public schools, but even adding to them those would said they would be moderately willing, the portion only reaches 38 percent – a substantial difference between the Under 35s.

The Over 55s are the most restrained in terms of their enthusiasm for paying 10 percent more on housing to achieve any of the following. Also as anticipated, they are far more opposed to paying 10 percent more on their housing to have higher quality public schools.

**Table 15**
**Willingness to Pay by Age**

| | Willingness to Pay | | | | |
|---|---|---|---|---|---|
| | Not at all | Slightly | Somewhat likely | Moderately | Very |
| **Overall** | | | | | |
| Cut commute time in half | 32% | 13% | 26% | 14% | 15% |
| Ability to walk / bike to shops, etc. | 27% | 15% | 25% | 17% | 15% |
| Ability to walk / bike to work | 30% | 15% | 22% | 17% | 15% |
| Have higher quality schools | 40% | 11% | 14% | 14% | 20% |
| Live within walking distance to rail station | 29% | 17% | 25% | 16% | 13% |
| Live within walking distance to day care | 66% | 13% | 12% | 6% | 4% |
| **Under 35s** | | | | | |
| Cut commute time in half | 16% | 11% | 30% | 21% | 22% |
| Ability to walk / bike to shops, etc. | 18% | 14% | 21% | 23% | 24% |
| Ability to walk / bike to work | 15% | 16% | 24% | 22% | 23% |
| Have higher quality schools | 17% | 8% | 16% | 28% | 31% |
| Live within walking distance to rail station | 13% | 17% | 29% | 24% | 16% |
| Live within walking distance to day care | 32% | 21% | 23% | 15% | 9% |
| **35 to 54s** | | | | | |
| Cut commute time in half | 28% | 14% | 28% | 14% | 16% |
| Ability to walk / bike to shops, etc. | 26% | 16% | 27% | 16% | 16% |
| Ability to walk / bike to work | 28% | 17% | 23% | 18% | 15% |
| Have higher quality schools | 36% | 12% | 14% | 15% | 23% |
| Live within walking distance to rail station | 29% | 17% | 27% | 13% | 13% |
| Live within walking distance to day care | 65% | 13% | 12% | 5% | 4% |
| **Over 55s** | | | | | |
| Cut commute time in half | 49% | 13% | 19% | 9% | 10% |
| Ability to walk / bike to shops, etc. | 35% | 14% | 24% | 15% | 12% |
| Ability to walk / bike to work | 45% | 11% | 18% | 13% | 13% |
| Have higher quality schools | 63% | 12% | 12% | 5% | 8% |
| Live within walking distance to rail station | 38% | 17% | 21% | 12% | 12% |
| Live within walking distance to day care | 90% | 6% | 3% | 0% | 1% |

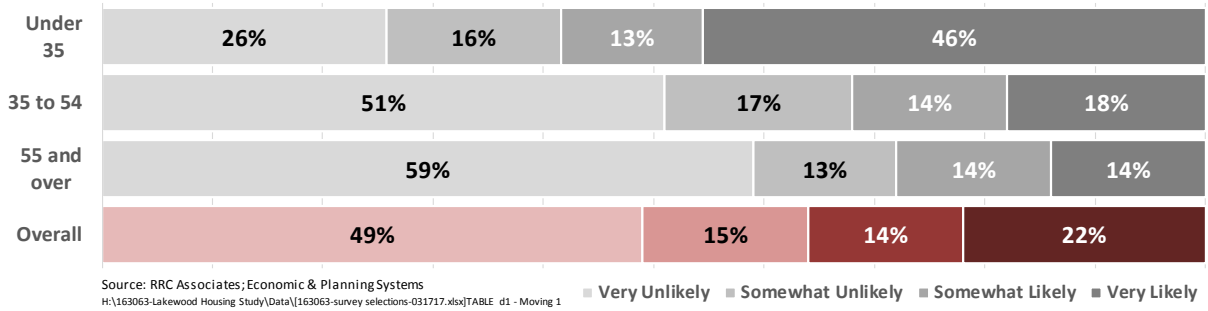
Source: RRC Associates; Economic & Planning Systems

H:\163063- Lakewood Housing Study\Data\[163063- survey selections- 031717.xlsx]TABLE E - Willingness to Pay

***Next Move***

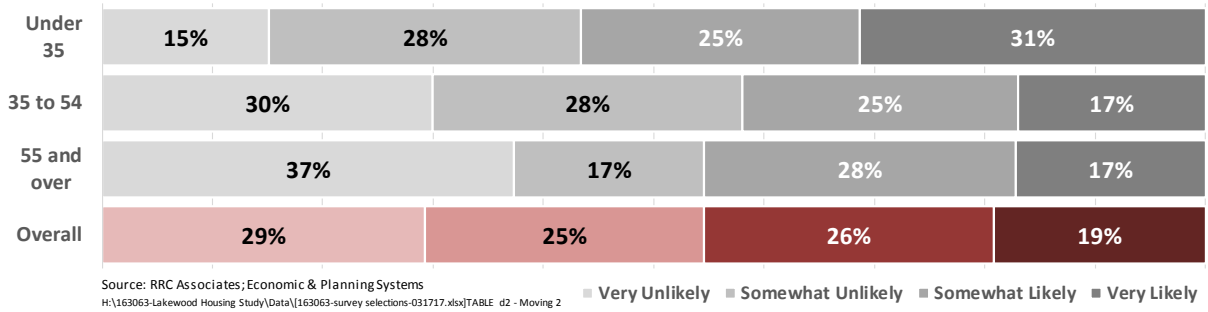
The following series of graphics illustrate the portions of those surveyed that have expressed likelihoods of moving in the next 1 to 5 or 6 to 10 years, and where they think they are likely to move. **Figure 61** illustrates that 1 out of 5 are very likely to move in the next 1 to 5 years, with a slightly smaller portion indicating they are very likely to move in the next 6 to 10 years, as illustrated in **Figure 62**.

**Figure 61**
**Likeliness of Moving in 1 to 5 Years by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE d1 - Moving 1

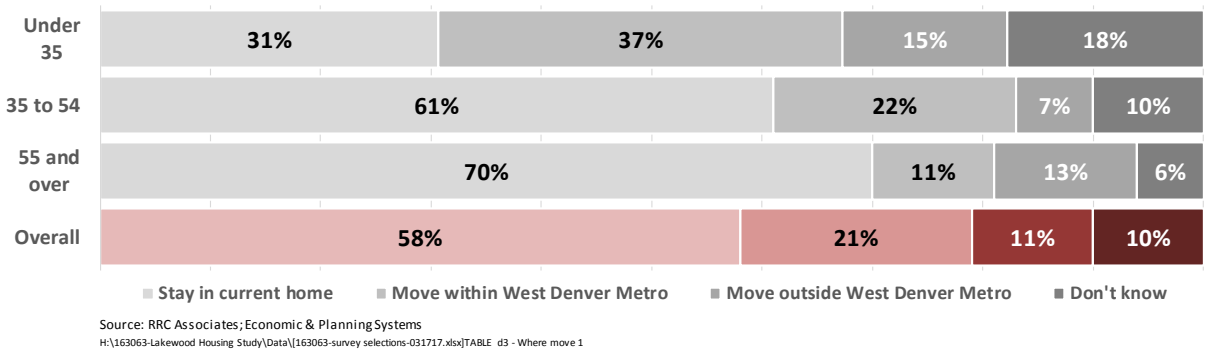
**Figure 62**
**Likeliness of Moving in 6 to 10 Years by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE d2 - Moving 2

**Figure 63** and **Figure 64** illustrate where respondents indicate they are likely to move in the next 10 years. As to be expected, there is greater uncertainty surrounding this question. The choices given where: 1) stay in current home; 2) move within the West Denver Metro area; 3) move outside the West Denver Metro area; or 4) don't know. The results show that nearly 3 out of 5 people intend to stay in their current home in the next five years, 1 out of 5 plan to move within the West Denver Metro area, and approximately 1 in 10 intend to leave it. As for the level of uncertainty, 10 percent overall don't know what they'll be doing, and that portion fluctuates higher for the lower age groups than for the higher age groups.

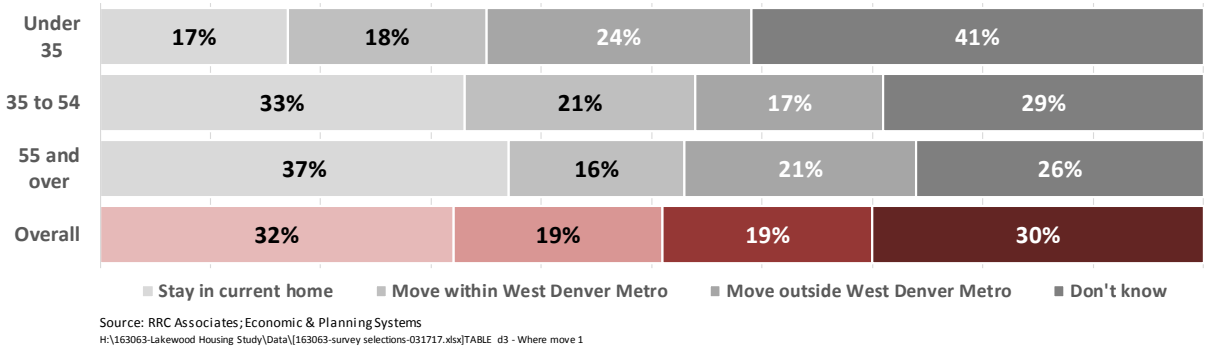
**Figure 63**
**Where Likely to Move in 1 to 5 Years by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE d3 - Where move 1

As for looking a bit further into the future, the level of uncertainty rises, compressing the portion of those who intend to stay in their current homes down to less than one third. The portion of those indicating they'll move within the West Denver Metro area stays roughly the same at 20 percent, but the portion that anticipates leaving the West Denver Metro area increases from 11 to 19 percent.

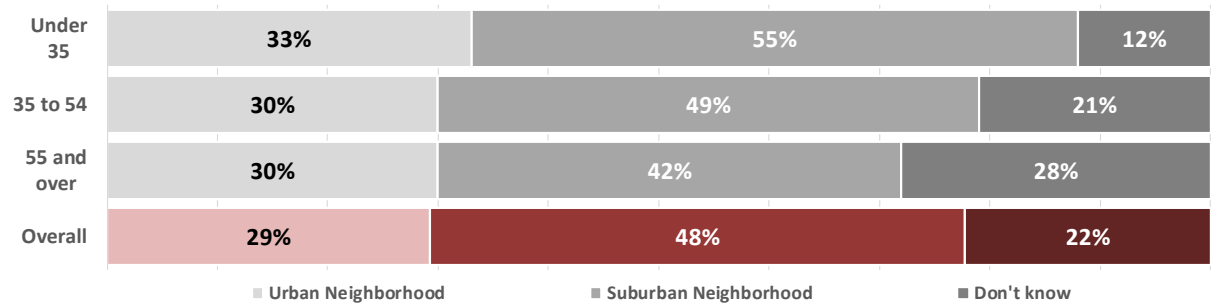
**Figure 64**
**Where Likely to Move in 6 to 10 Years by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE d3 - Where move 1

And finally, as for the type of neighborhood Lakewood's workforce anticipates moving to in the future, **Figure 65** illustrates that nearly half of those surveyed anticipate moving to a suburban type of neighborhood in their next move and approximately 3 out of 10 will move to an urban neighborhood. Interestingly, the portion of those interested in moving to an urban neighborhood is roughly the same for each age group, whereas the portion of the Under 35s that indicate they'll move to a suburban neighborhood is 55 percent compared to 49 percent for the 35 to 54s and 42 percent for the Over 55s.

**Figure 65**
**Type of Future Neighborhood Preference by Age**




Source: RRC Associates; Economic & Planning Systems
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# 5. POLICIES, STRATEGIES, & INCENTIVES

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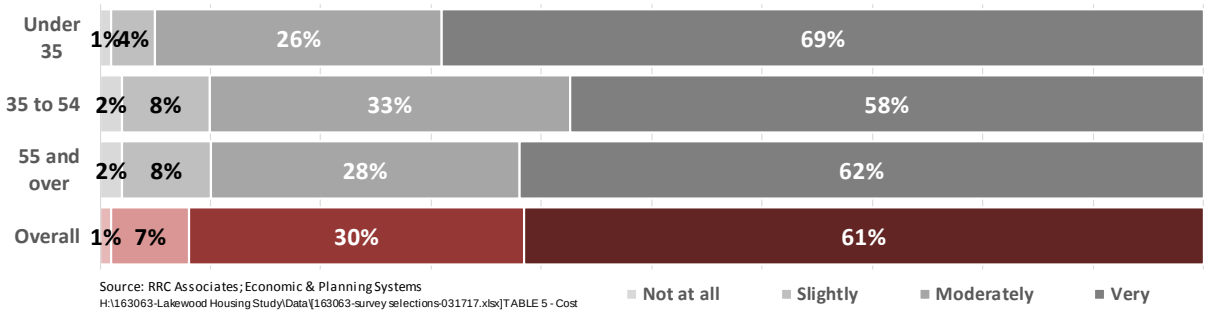
# *APPENDIX A:*
# *STATED PREFERENCE DETAILS BY AGE GROUP*

## Housing Cost

The most important current consideration for choosing where to live for Lakewood's survey respondents is housing cost, as illustrated in **Figure 66**. Approximately 3 out of 5 respondents rated it as very important with another 30 percent rating it moderately important. For respondents under 35, it nearly 70 percent described it as a very important consideration, followed by 62 percent of those 55 and over, and then 58 percent of those 35 to 54.

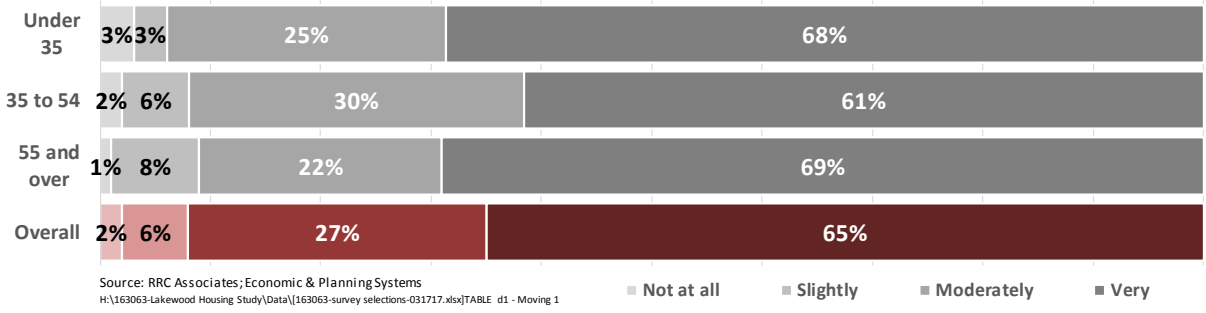
Asked about the importance of this consideration five years from now, **Figure 67** illustrates that a slightly larger portion of all respondents indicated that housing costs were very important. By age cohort, the results appeared to maintain similar relationships to current considerations.

**Figure 66**
**Importance of Housing Cost by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE 5 - Cost

**Figure 67**
**Future Importance of Housing Cost by Age**




Source: RRC Associates; Economic & Planning Systems
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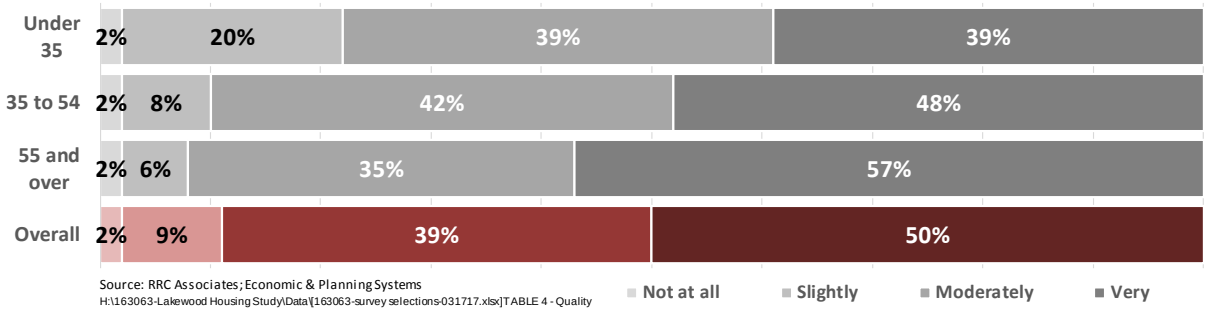
## Quality of Residence

The second most important physical characteristic is the quality of the construction, illustrated in **Figure 68**. Half of all respondents said it was very important followed by another 39 percent saying it was moderately important. By age, this consideration is incrementally more important for older age groups, with more than half of respondents over 55 indicating that it is very important compared to 48 percent of 35 to 54 year-olds and 39 percent of under 35s.

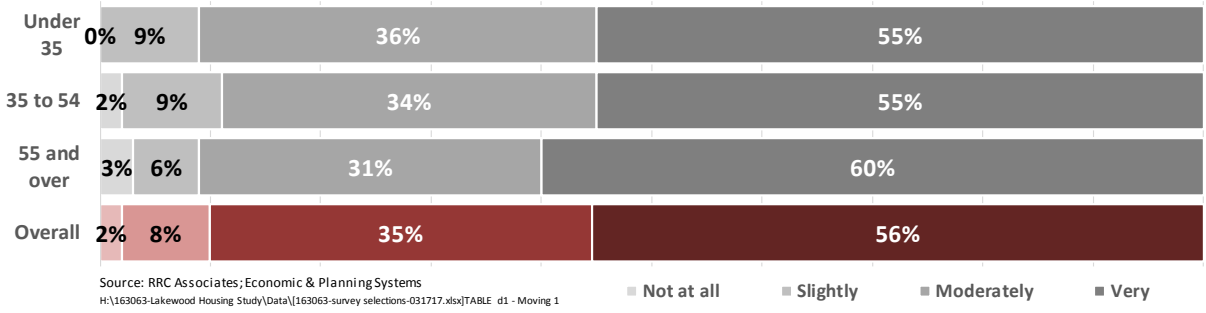
As with the cost of housing playing a very important role in choosing where to live five years from now, the importance of construction quality also appears to rank very importantly to a slightly larger portion of the workforce for choosing where to live five years from now than it does today, illustrated in **Figure 69**. Interesting about this distribution, the portion of under 35s that rate it very important is equal to those currently 35 to 54, as opposed to being a relatively smaller portion – as in their current considerations. One interpretation of the results is that consideration for the quality of a residence increases with anticipated life stage changes.

**Figure 68**
**Importance of Quality of Residence by Age**




Source: RRC Associates; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-survey selections-031717.xlsx]TABLE 4 - Quality

**Figure 69**
**Future Importance of Quality of Residence by Age**




Source: RRC Associates; Economic & Planning Systems
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## Greater Privacy Between Homes

While greater privacy between homes (**Figure 70**) can be interpreted as a neighborhood characteristic as well as a feature of the home itself (in terms of side-yard setbacks and distance between neighboring homes), 35 percent of the workforce views this as a very important consideration, followed by another third of respondents indicating it as moderately important. As with the quality of residential construction, this consideration seems to be increasingly important with older age cohorts, where just 21 percent of under 35s consider it very important versus 41 percent of those over 55.

Looking five years from now, respondent answers regarding how important greater privacy between homes is when choosing where to live seems to reverse the pattern of current considerations across the age spectrum. While the overall trend still shows slightly less than 2 out of 5 see it as a very important consideration, the under 35s rate very important to a greater extent than the other age cohorts do – a complete inversion of the current consideration results. One interpretation is that as the under 35s perceive how they will be living and how their life stage may be changing in the next five years, privacy will become as important to them as it is currently to those 35 to 54 or over 55. Interestingly, though, is that while the portion of those 35 to 54 who say it's very important appears not to have changed significantly, the portion of those over 55 has decreased from 41 percent to 34 percent.

**Figure 70**
**Importance of Greater Privacy Between Homes by Age**

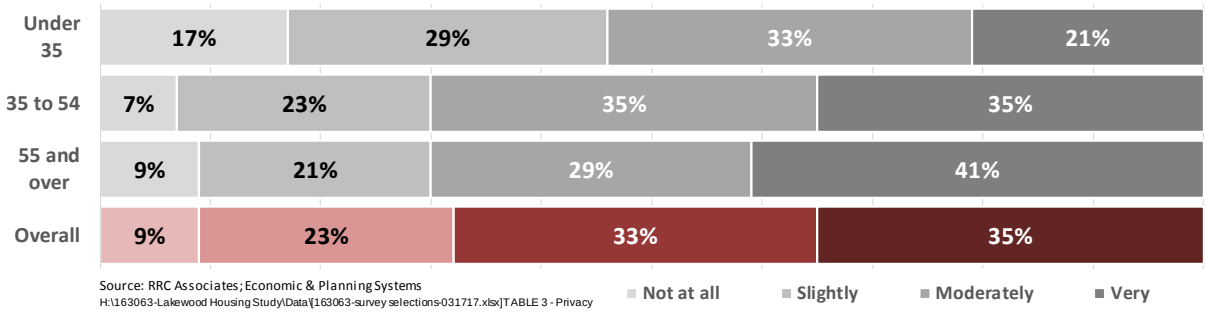
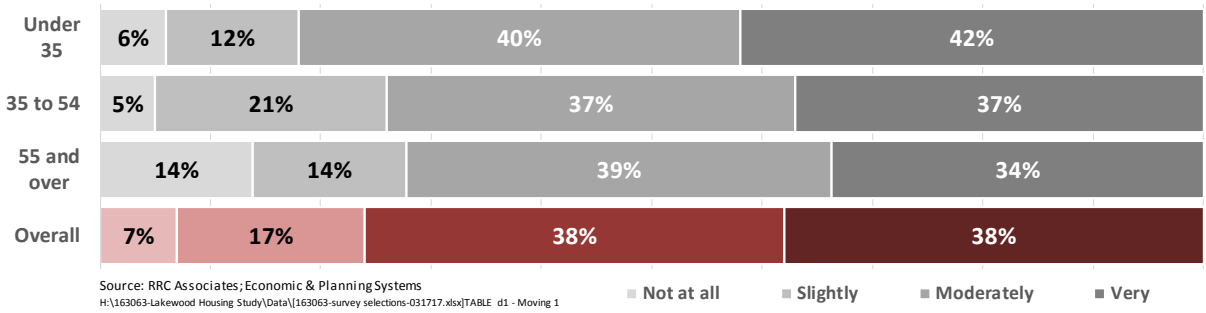



**Figure 71**
**Future Importance of Greater Privacy Between Homes by Age**



## Home Size

When asked how important the size of a home is (**Figure 72**) in considering where to live, nearly 30 percent of all respondents indicate that it is very important with another 50 percent stating that it is moderately important. Broken down by the three age categories reveals that, for those who state this element is "very important" seems to increase with age, where only 17 percent of those under 35 considered it very important versus 28 percent of 35 to 54 year-olds and 31 percent of over 55s.

In five years, however, home size seems to be very important to nearly 10 percent more of the respondents than it does currently. Most significant is the portion of under 35s who see it as very important to their considerations. Whereas 17 percent viewed it as significant today, more than half said it was very important, anticipating changes in their household type or life stage.

**Figure 72**
**Importance of Home Size by Age**

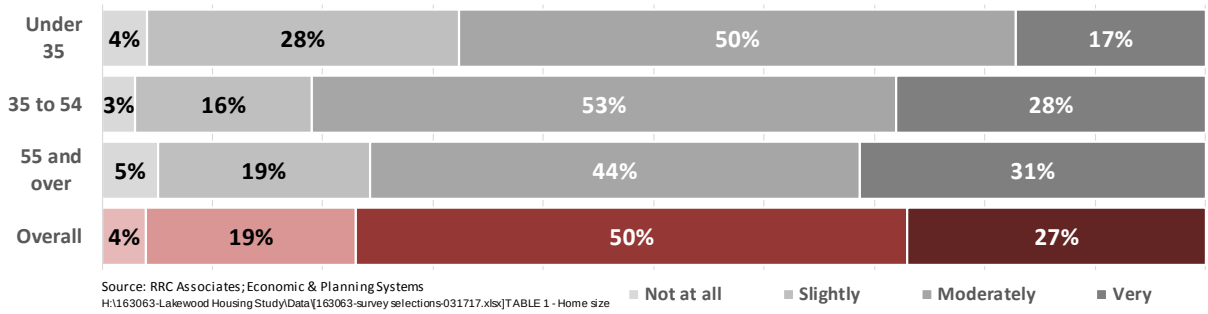
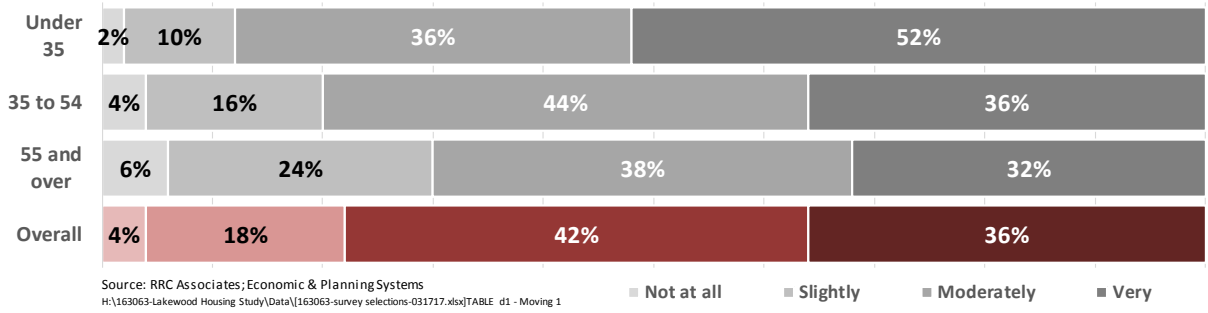



**Figure 73**
**Future Importance of Home Size by Age**

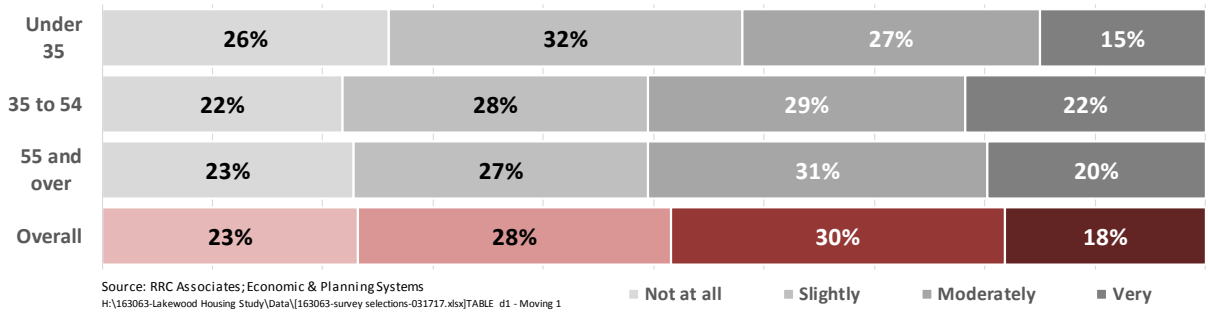


## Historic Character

Among the physical characteristics that are relatively less important when considering where to live, historic character or architectural significance (**Figure 74**) was only very important to 18 percent of respondents with another 30 percent indicating it moderately important. By age, the results do not reveal a pattern of increasing or decreasing importance across the age spectrum.

This was also the only consideration that did not change substantially when respondents considered how it would factor into their future housing choice (**Figure 75**), where still approximately 1 in 5 felt it was very important, followed by similar proportions in the moderately important, slightly important, and not at all important ratings.

**Figure 74**
**Importance of Historic Character by Age**




Source: RRC Associates; Economic & Planning Systems
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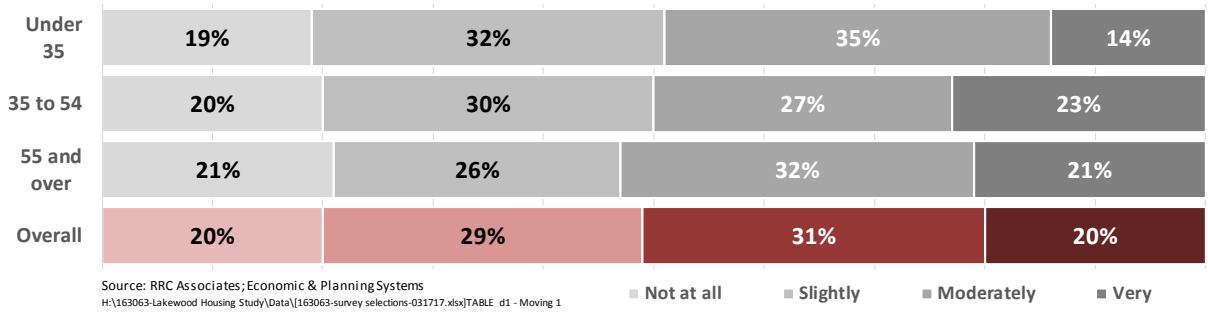
**Figure 75**
**Future Importance of Historic Character by Age**




Source: RRC Associates; Economic & Planning Systems
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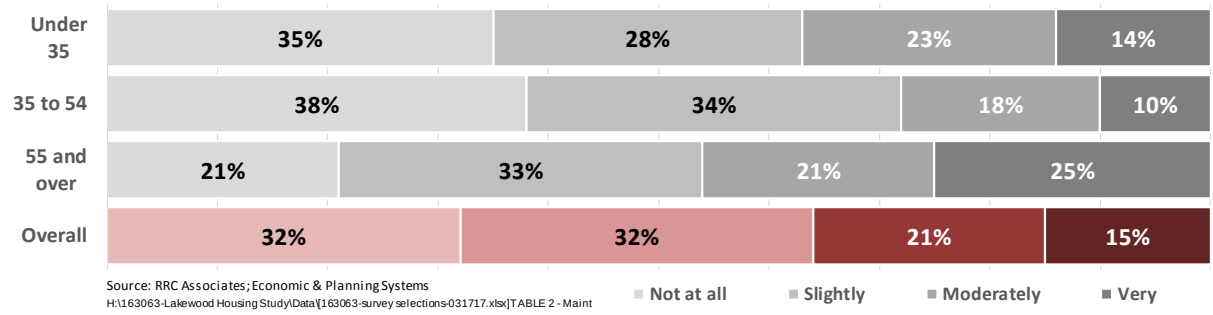
## Low Maintenance Living

When asked how important lower maintenance living is, just 15 percent of respondents considered it very important, as illustrated by **Figure 76**. Viewed across the age spectrum, however, reveals that this is relatively more important to those 55 and over. Questions were not specifically asked of survey takers as to their ideal components of lower maintenance living. Examples of condominiums and townhomes were given, however, which typically contain common areas and open space that are maintained by a homeowners association – a representation of physical characteristics, such as yard work, etc. that do not have to be done by the homeowner.

As for how this consideration factors into future housing choice (**Figure 77**), a portion of respondents seven percent larger indicated in general that it would be very important, driven largely by the increased proportion of those over 55 that saw it as very important (which increased to 38 percent versus 25 percent today).

**Figure 76**
**Importance of Lower Maintenance Living by Age**




Source: RRC Associates; Economic & Planning Systems
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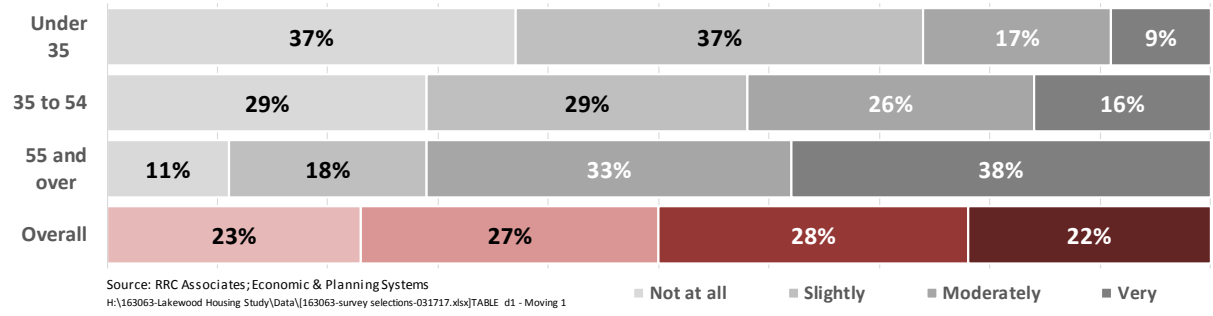
**Figure 77**
**Future Importance of Lower Maintenance Living by Age**




Source: RRC Associates; Economic & Planning Systems
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## Sense of Safety and Security

The most important neighborhood characteristic, and in fact the most important consideration overall, in considering where to live is a sense of safety and security, illustrated in **Figure 78**. Three out of four people surveyed view this as a very important consideration, followed by another 20 percent who rate it moderately important. The results also show a moderate increase in the importance of this consideration across the age spectrum with 68 percent of under 35s defining it very important increasing to 80 percent of those over 55.

When thinking about housing choice five years from now, a slightly larger portion of all respondents indicated that it would be very important – 4 out of 5 (**Figure 79**). And while the magnitudes of those between 35 and 54, as well as those over 55 appeared to have stayed the same, the portion of those currently under 35 who said it would be very important in five years increased from 68 to 78 percent.

**Figure 78**
**Importance of Sense of Safety and Security by Age**

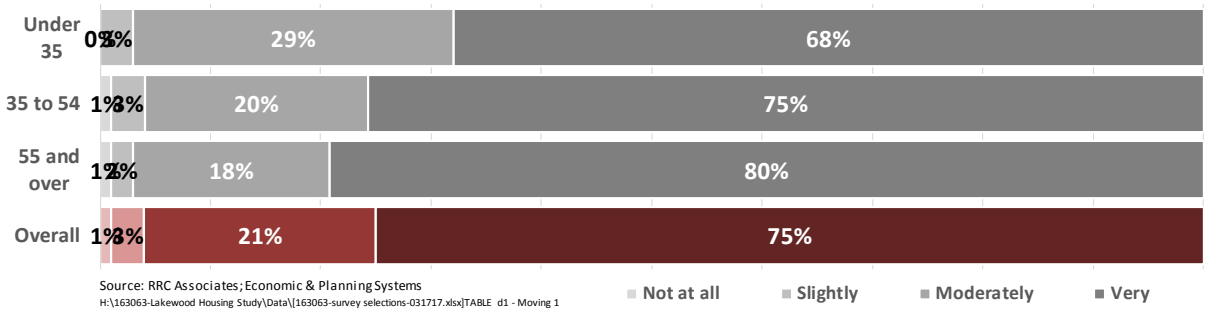
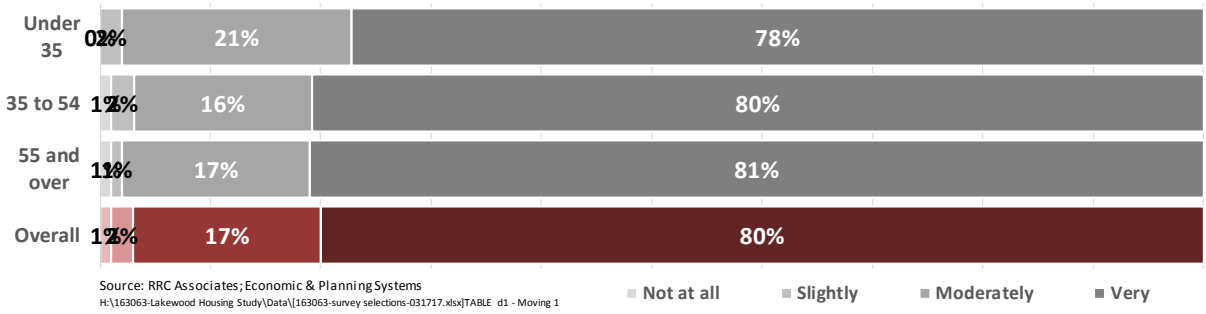



**Figure 79**
**Future Importance of Sense of Safety and Security by Age**

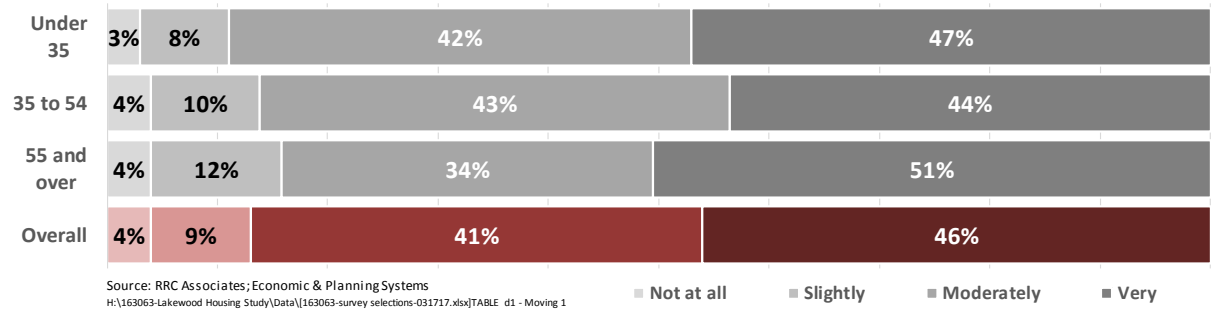


## Well-Designed Sidewalks

The second most important neighborhood consideration is that it have well-designed sidewalks, with 46 percent defining it as very important. Although a distinction was not made in a following question, the interpretation of these results could leave open whether or not responses imply that sidewalks should be "designed" well or that there actually be sidewalks (as opposed to none at all). The findings of these responses across the age spectrum, unlike greater privacy between homes (**Figure 70** on page 90) or a sense of safety and security (**Figure 78**), these responses do not illustrate a clear pattern of incrementally increasing or decreasing important across the age spectrum.

As a future consideration, however, the findings appear to indicate that the overall increase in portion of those who say it will be very important is driven by those under 35, illustrated in **Figure 81**. More than 3 out of 5 currently under 35s think that it will be very important to them in the future, versus slightly less than half today.

**Figure 80**
**Importance of Well-Designed Sidewalks by Age**




Source: RRC Associates; Economic & Planning Systems
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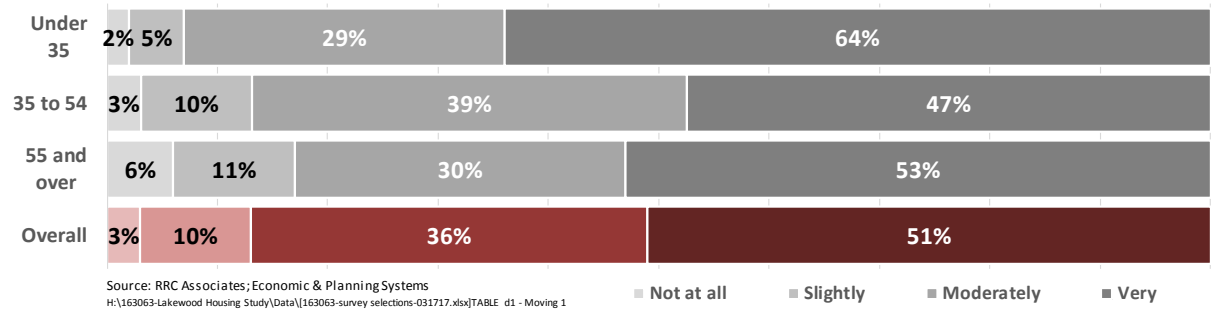
**Figure 81**
**Future Importance of Well-Designed Sidewalks by Age**




Source: RRC Associates; Economic & Planning Systems
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## Sense of Privacy

A question of nuance as to the importance of privacy, respondents were asked how important the general sense of privacy was in considering where to live, illustrated by **Figure 82**. Here, 45 percent of respondents define it as very important with another 39 percent indicating it as moderately important. And, as with the counterpart question regarding "greater privacy between homes", this consideration becomes increasingly important across the age spectrum. In this case, however, the difference between the portion of respondents over 55 and those 35 to 54 is much larger than the incrementally different magnitudes illustrated in **Figure 70**.

Again, as a future consideration, the shift in the overall proportion of those who think it will be very important seems to be driven by the increase in the portion of those under 35 (**Figure 83**), although a slightly portion of the overall increase may be attributed also to the small increase in portion of those between 35 and 54.

**Figure 82**
**Importance of Sense of Privacy by Age**

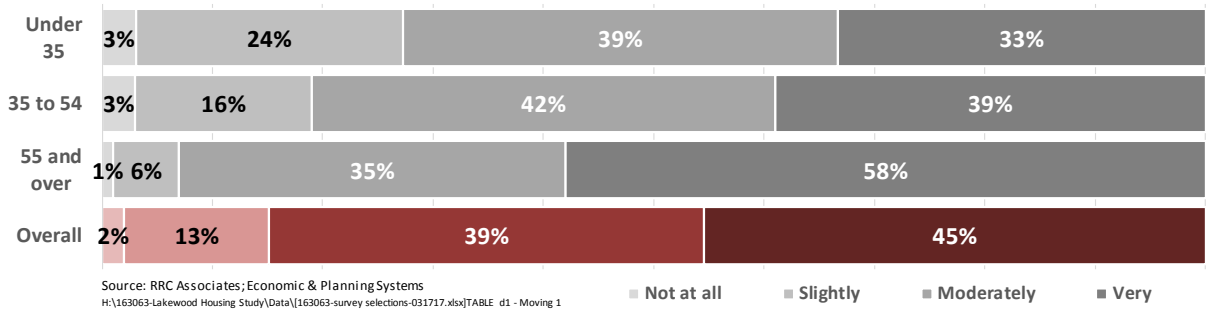
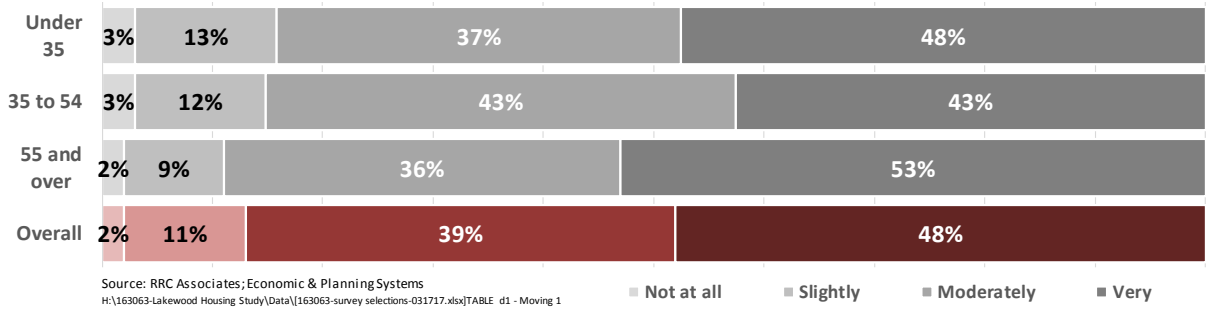



**Figure 83**
**Future Importance of Sense of Privacy by Age**



## Range of Housing Types

Having a range of housing types in the neighborhood was only very important to approximately 1 in 5 respondents, a nearly equal portion to those respondents that indicated it was not at all important, as shown in **Figure 84**. In these responses, it is also interesting to note that increasing portions of respondents describe this as very important across the age spectrum, where only 10 percent of under 35s indicate so, versus 18 percent of 35 to 54 year-olds and 25 percent of over 55s.

As with the consideration for historic character (**Figure 74** and **Figure 75** on page 92), the distribution of respondents who feel that having a range of housing types in the neighborhood will be very important does not seem to have changed significantly. And across the age spectrum, the sentiments seem to be maintained.

**Figure 84**
**Importance of a Range of Housing Types in Neighborhood by Age**

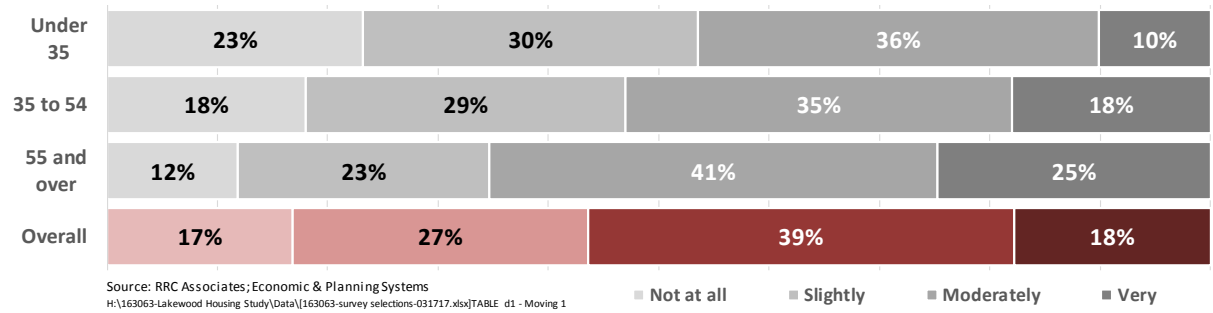
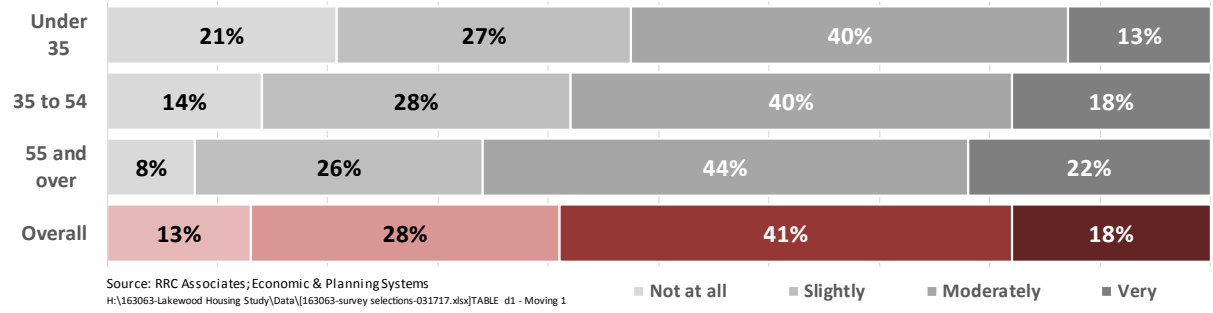



**Figure 85**
**Future Importance of a Range of Housing Types in Neighborhood by Age**



## Short Commute to Work

Among the community characteristics that are important in choosing where to live, having a short commute to work garners nearly 50 percent of respondents stating that it's very important, illustrated in **Figure 86**. The results by age category also do not differ, revealing that this consideration holds constant across life stages. Such a finding also reflects on the importance of having an adequate transportation network to facilitate a mobile workforce.

When asked how important this consideration would be in five years, however, a slightly smaller portion indicated it would be very important (**Figure 87**). The significant changes appeared in the under 35s, where a slightly higher proportion agreed that it would be very important, and in the over 55s, where a smaller portion said it would be very important, possibly because they would be anticipating retirement and not as concerned about living in closer proximity to work.

**Figure 86**
**Importance of a Short Commute to Work by Age**

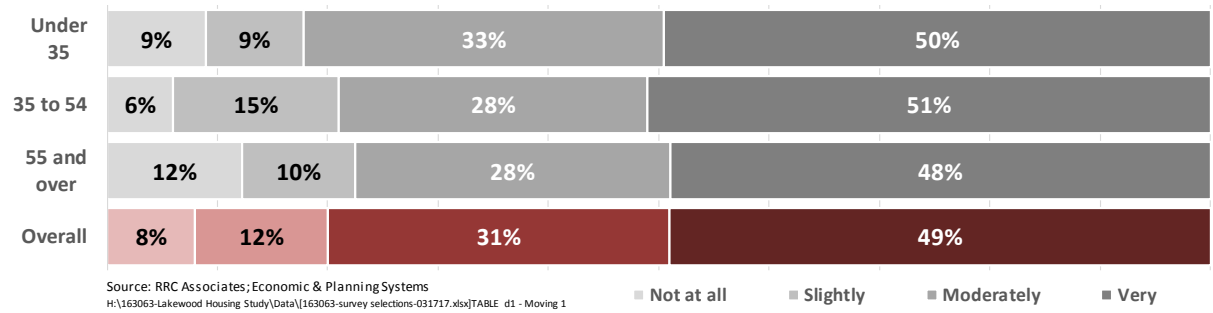
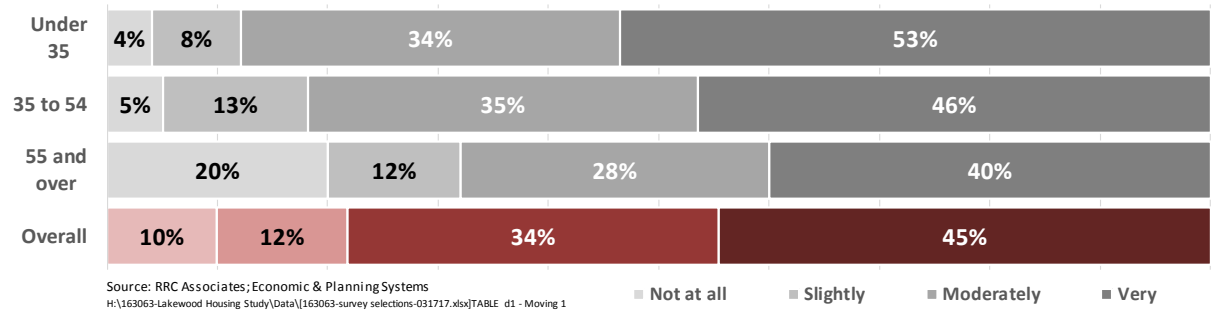



**Figure 87**
**Future Importance of a Short Commute to Work by Age**



## Walking Distance to Parks, Recreation, Trails

The second most important community characteristic consideration is to be in walking distance to parks, recreation, and trails, illustrated in **Figure 88**. Not surprising for a population living in such an outdoor recreation-rich environment, the findings also show that while more than 2 out of 5 respondents between 35 and 54 and those over 55 view it as very important, nearly 3 out of 5 respondents under 35 see this as very important. This finding is also key for the City of Lakewood, as it sits in very close proximity to the Foothills and significant open space and hiking trails.

As with several of the questions (historic character and range of housing types in the neighborhood), walking distance to parks, recreation, and trails (**Figure 89**) seems to factor into people's decisions with the same degree of influence for future housing choice as it does today.

**Figure 88**
**Importance of Walking Distance to Parks, Recreation, Trails by Age**

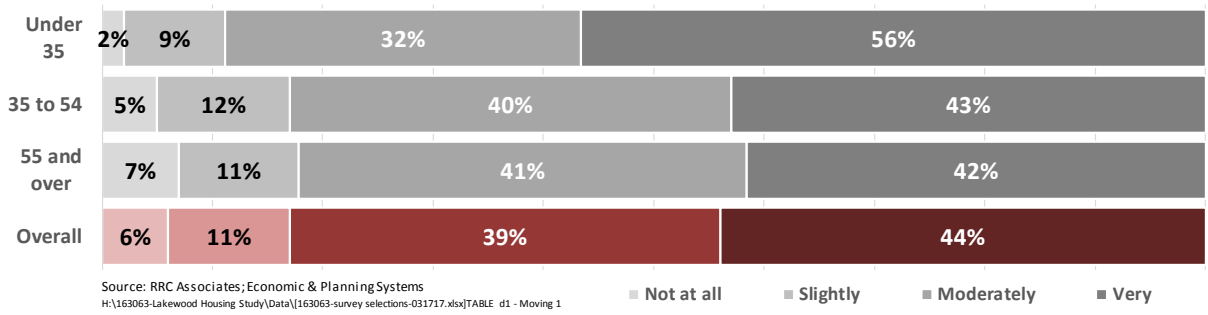
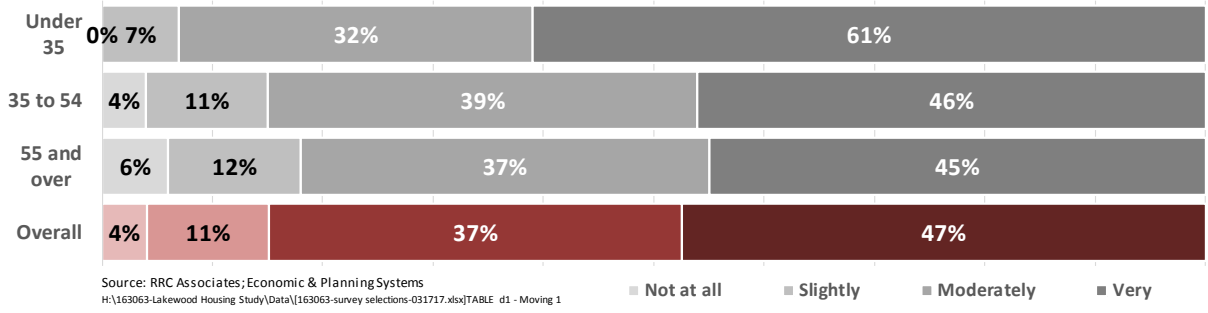



**Figure 89**
**Future Importance of Walking Distance to Parks, Recreation, Trails by Age**



## Quality Public Schools

Having quality public schools is very important to nearly 2 out of 5 respondents, as shown in **Figure 90**. Also not surprisingly, the pattern by age category reveals that a slightly larger portion of respondents in the typical family-raising ages (35 to 54) view this consideration as very important, while smaller portions of those under 35 and over 55 view it as such.

And while the overall proportion of respondents remained roughly the same when asked how this consideration would factor into future housing choice, **Figure 91** illustrates very significantly how the under 35s in the workforce are anticipating the needs of their own children. In fact, this difference is the most significant of all the differences between current and future housing choice results.

**Figure 90**
**Importance of Quality Public Schools by Age**

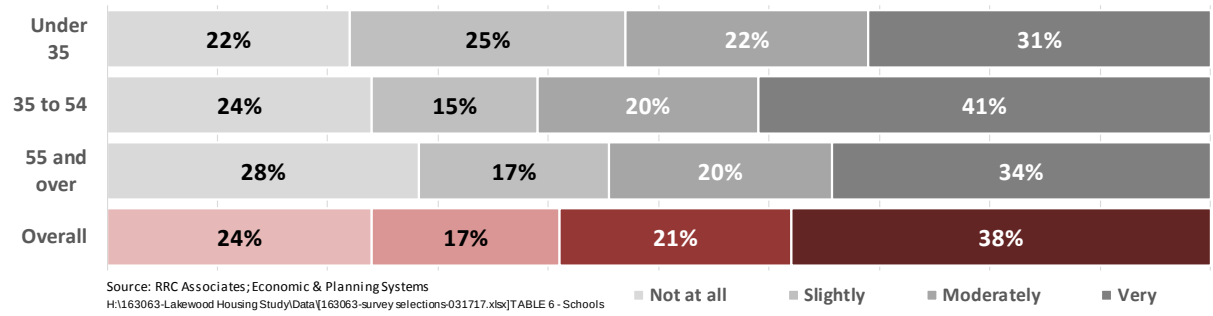
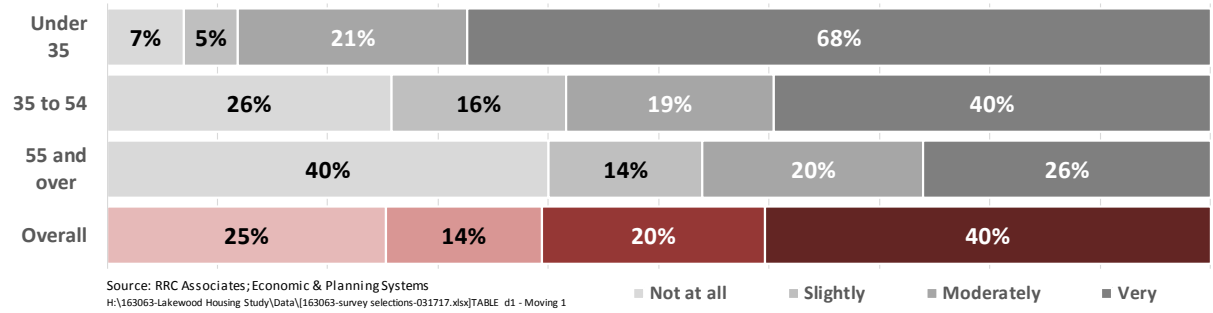



**Figure 91**
**Future Importance of Quality Public Schools by Age**



## Walking Distance to Shops, Restaurants

Walking distance to shops, restaurants and entertainment appears to be very important to 30 percent of all respondents, followed by another 30 percent indicating it as moderately important, illustrated in **Figure 92**. The findings across the age spectrum reveal a pattern, among others, that frequently receive anecdotal attention. More than 2 out of 5 respondents under 35 see this as a very important consideration, whereas one third of those 35 to 54 do, and only 1 out of 5 over 55 state it to be very important.

Though not quite the inversion of attitudes as illustrated by **Figure 70** and **Figure 71** on page 90, **Figure 93** illustrates that a smaller portion of currently under 35s identified this as very important in choosing where to live five years from now, and a larger portion of the over 55s viewed it as very important (32 percent versus 22 percent).

**Figure 92**
**Importance of Walking Distance to Shops, Restaurants by Age**

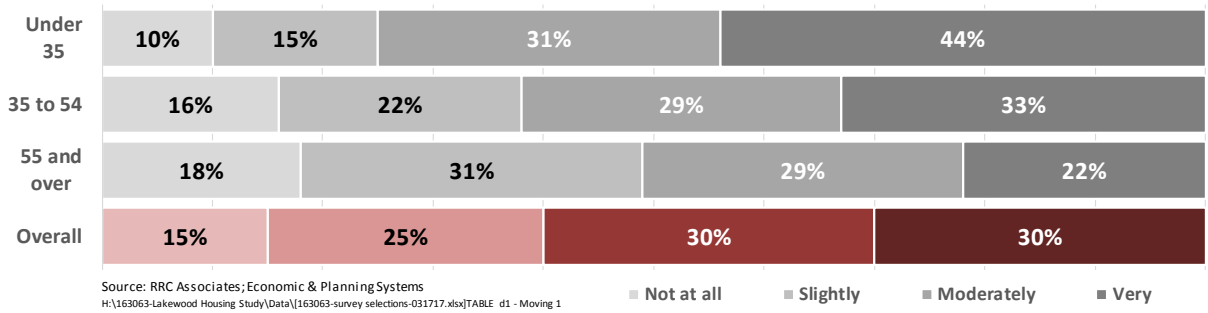
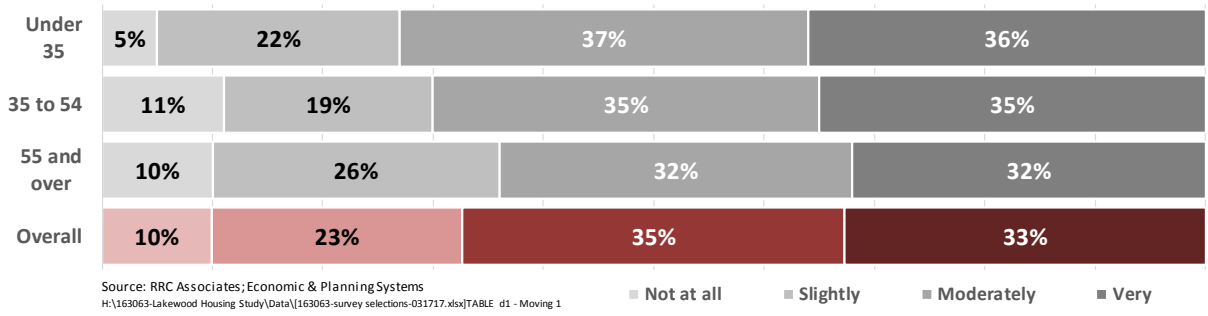



**Figure 93**
**Future Importance of Walking Distance to Shops, Restaurants by Age**



## Walking Distance to Rail Station or Bus Stop

Just 1 in 4 respondents indicated that being able to walk to a rail station or bus stop was very important, followed by about 1 in 3 saying that it was moderately important in choosing where to live. **Figure 94** illustrates that there is a slightly larger portion of those under 35 that view this as very important, whereas, the results indicate very little difference between those between 35 and 54 and those over 55.

As for how this consideration will factor into future housing choice, walking distance to a rail station or bus stop is the only finding that increased consistently across the age spectrum, illustrated in **Figure 95**. Four percent more respondents under 35 identified it as very important, 5 percent more respondents between 35 and 54 identified it as very important, and 8 percent more in the over 55 category identified it as such.

**Figure 94**
**Importance of Walking Distance to Rail or Bus by Age**

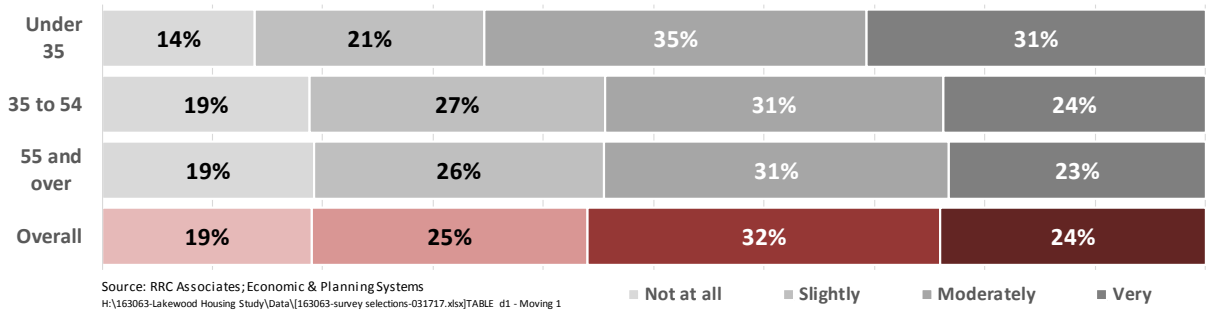
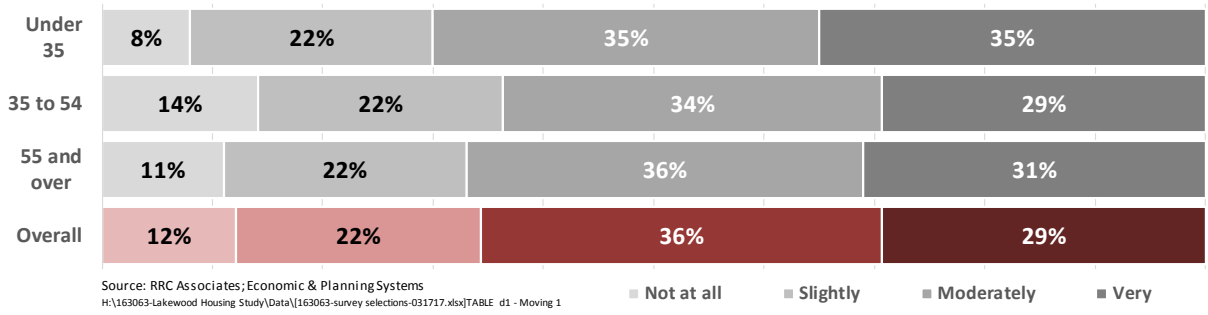



**Figure 95**
**Future Importance of Walking Distance to Rail or Bus by Age**

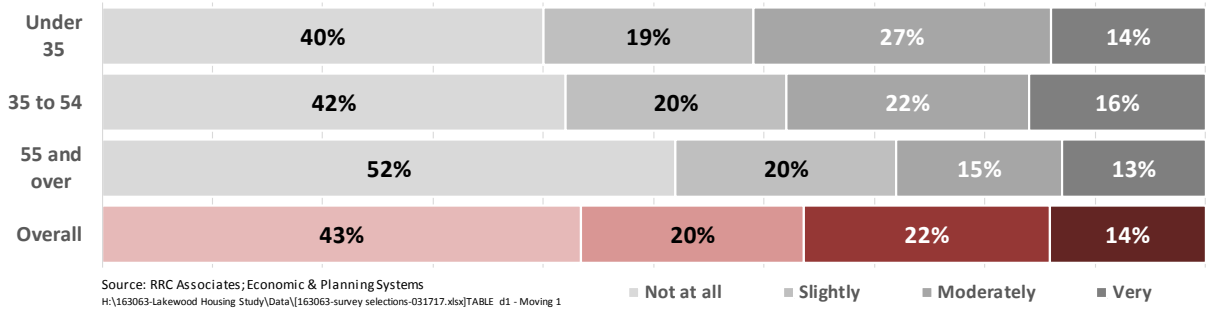


## Walking Distance to Schools

While approximately 2 out of 5 respondents indicating that having quality public schools was very important (**Figure 90**), **Figure 96** indicates that only 1 out of 7 view being able to walk to schools is very important. Although there are slight differences among the age cohorts, there seem to be slightly larger portions of the younger cohorts that view this community characteristic as moderately important (i.e. 27 percent of under 35s say it is moderately important, compared to 22 percent and 15 percent for those between 35 and 54 and those over 55, respectively).

Again, as a matter of future housing choice, **Figure 97** illustrates that 41 percent of the under 35s see it as very important to their future housing choice considerations versus 14 percent of them who do for their choices today. The changes in sentiment among the other age groups indicates, as with the importance of quality of public schools (**Figure 90** and **Figure 91** on page 100), that its importance remains relatively the same as it was for today's housing choices.

**Figure 96**
**Importance of Walking Distance to Schools by Age**




Source: RRC Associates; Economic & Planning Systems
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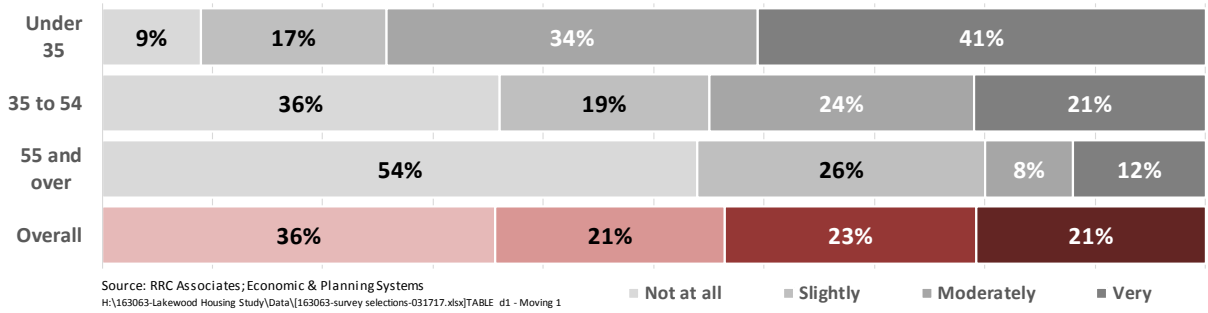
**Figure 97**
**Future Importance of Walking Distance to Schools by Age**




Source: RRC Associates; Economic & Planning Systems
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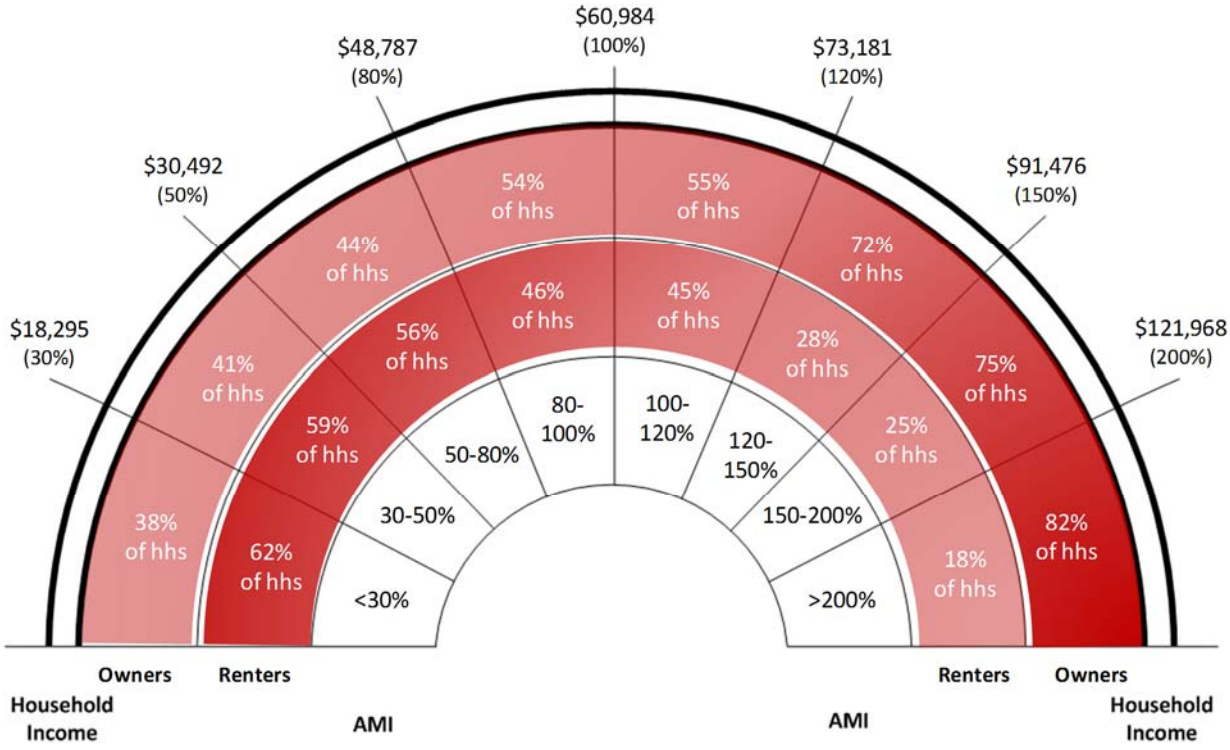
# APPENDIX B:
# MISCELLANEOUS ANALYSIS

# Housing Price Attainability

## Categories

**Figure 98** illustrates a spectrum of income categories for owners and renters in Lakewood, classified by increments of Area Median Income (AMI). The data represent the proportion of owners and renters by AMI category for 2015. Generally, renters often account for a majority of households in lower income categories, and owners often account for a majority of households in higher income categories, whereas toward the middle or slightly below the middle of the spectrum (i.e. around the median income), it is common for these proportions to be somewhat balanced. As shown, households earning less than 80 percent of AMI, or $49,000, is this point in the spectrum. Between 50 and 80 percent AMI, more than half of Lakewood's households are renters and slightly less are owners. At 80 to 100 percent AMI, the distribution reverses, where more than half of households are owners and less than half are renters. The proportion of owners increases to slightly more than 80 percent at the highest income level, and the proportion of renters increases to slightly more than 60 percent at the lowest income levels.

**Figure 98**
**Household Income Levels by Tenure**

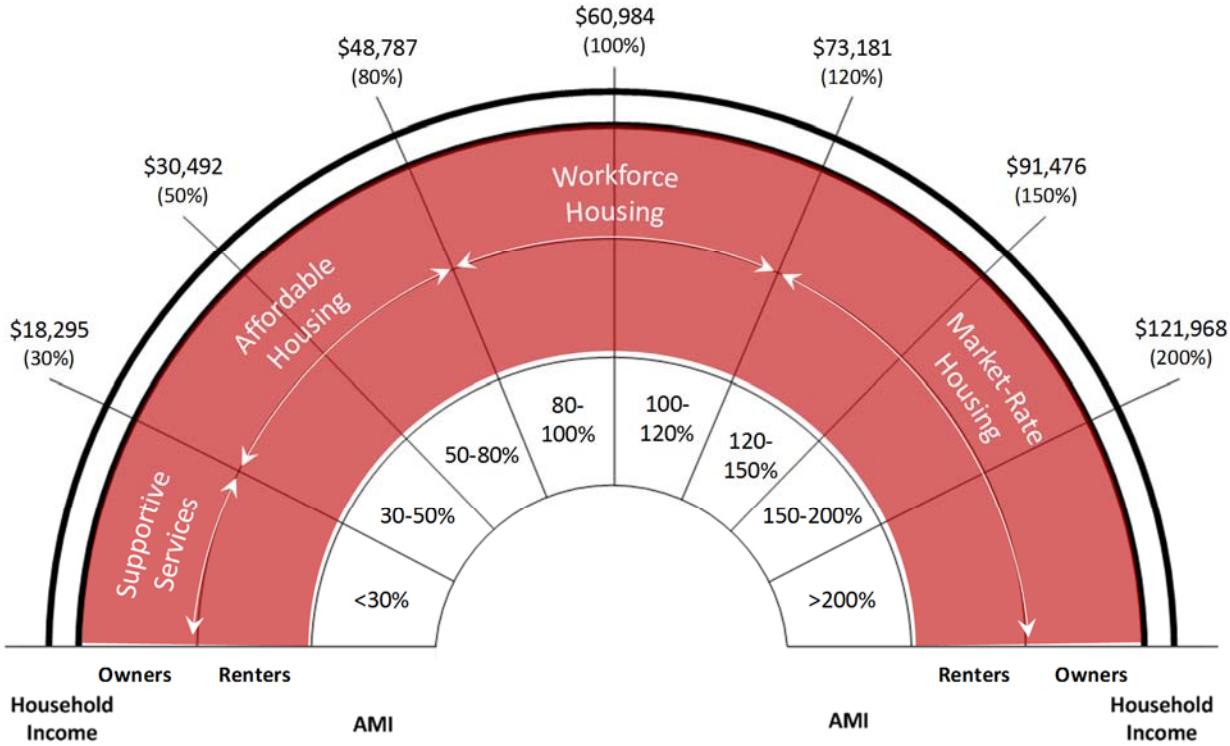


For the purposes of policy discussion, broad categories of housing used to characterize different levels of demand are illustrated in **Figure 99**. On the spectrum, supportive services are often associated with social assistance, e.g. mental health, substance abuse services. Deeply subsidized rental housing are frequently needed to remedy problems associated with populations of special needs, homelessness or at-risk of homelessness.[9] These are not the only types of households in this category – there are also, for example, owner households on a fixed-incomes, e.g. a pension, who may fall into this category, but not require such services.

Affordable housing is often a term used to describe the next category of housing demand, including the 30 to 80 percent AMI levels. Households in the category of 30 to 50 percent AMI may also need supportive services, but they are more frequently associated with special needs populations or employed households struggling with very low-paying jobs. The 50 to 80 percent AMI is much more frequently the focus of communities struggling with supply-side shortages of rental housing for its service workforce (a common problem in resort settings), e.g. retail, accommodations, etc. that are necessary to keep a heavily service-sector economy functioning.

In similar contexts where issues of supply are concerned, the term workforce housing is frequently used to describe a segment of the housing inventory that meets the demands of a community's essential workforce, including teachers, city government, police, fire, and emergency personnel, etc. This category is also synonymous with today's discussions about "missing middle" housing. It is a segment of the market that is also overlooked by federal, state, and often local forms of subsidy, as well as market-rate development activity.

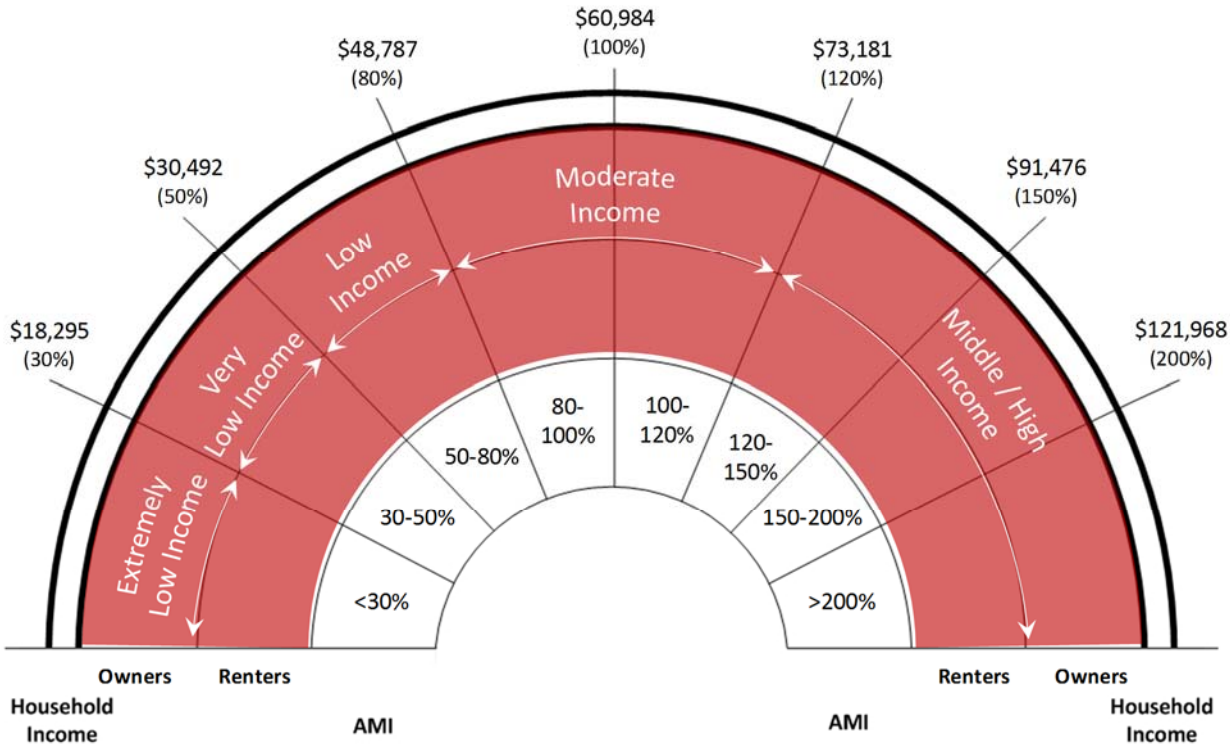
**Figure 99**
**Household Income Levels with Typical Policy Terminology**




[9] See https://www.hudexchange.info/resource/1975/criteria-for-definition-of-at-risk-of-homelessness/

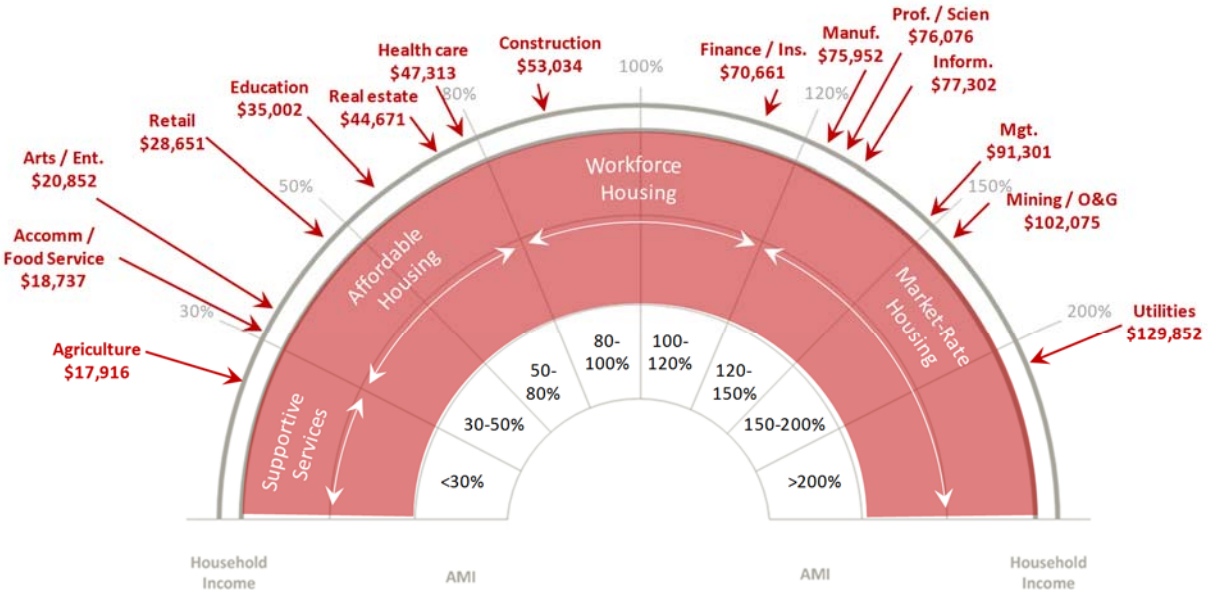
Another series of categories frequently associated with different income levels, and illustrated in **Figure 100** with Lakewood's median income metrics for 2015, the most recent year for which this information is available and representative of the population. Extremely low income is used to characterize households with less than 30 percent AMI, very low income for households between 30 and 50 percent AMI, low income for households between 50 and 80 percent AMI, moderate income for households in the workforce housing category, and middle to high income for those in the market-rate categories of housing as described previously.

**Figure 100**
**Household Income Levels with Income Terminology**



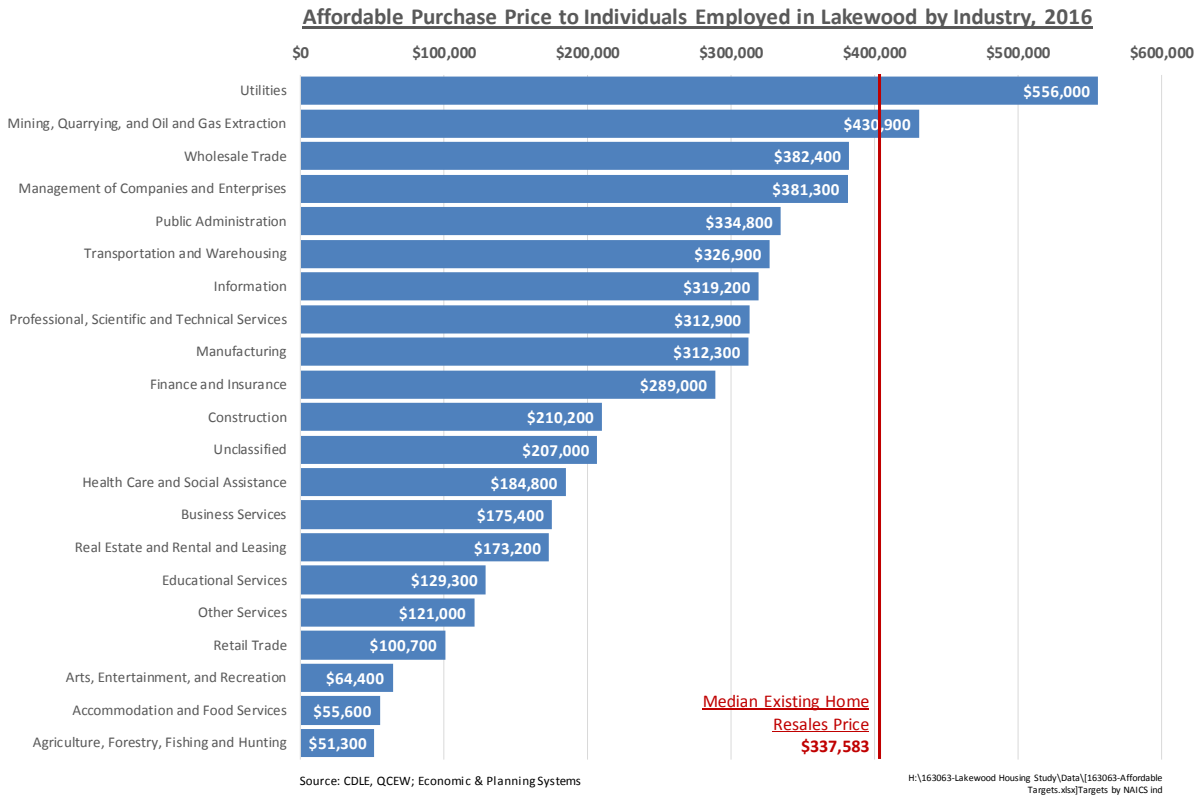
Another way to look at the distribution of household incomes is to make an association with average wages of different industries. **Figure 101** shows the same income spectrum with the average wages for Lakewood's industries categorized at the 2-digit NAICS level. It should be noted that this illustrates *individual* wages along a *household* income spectrum, which would assume that a household has a single wage-earner.

**Figure 101**
**Household Income Levels with Individual Wage Associations**



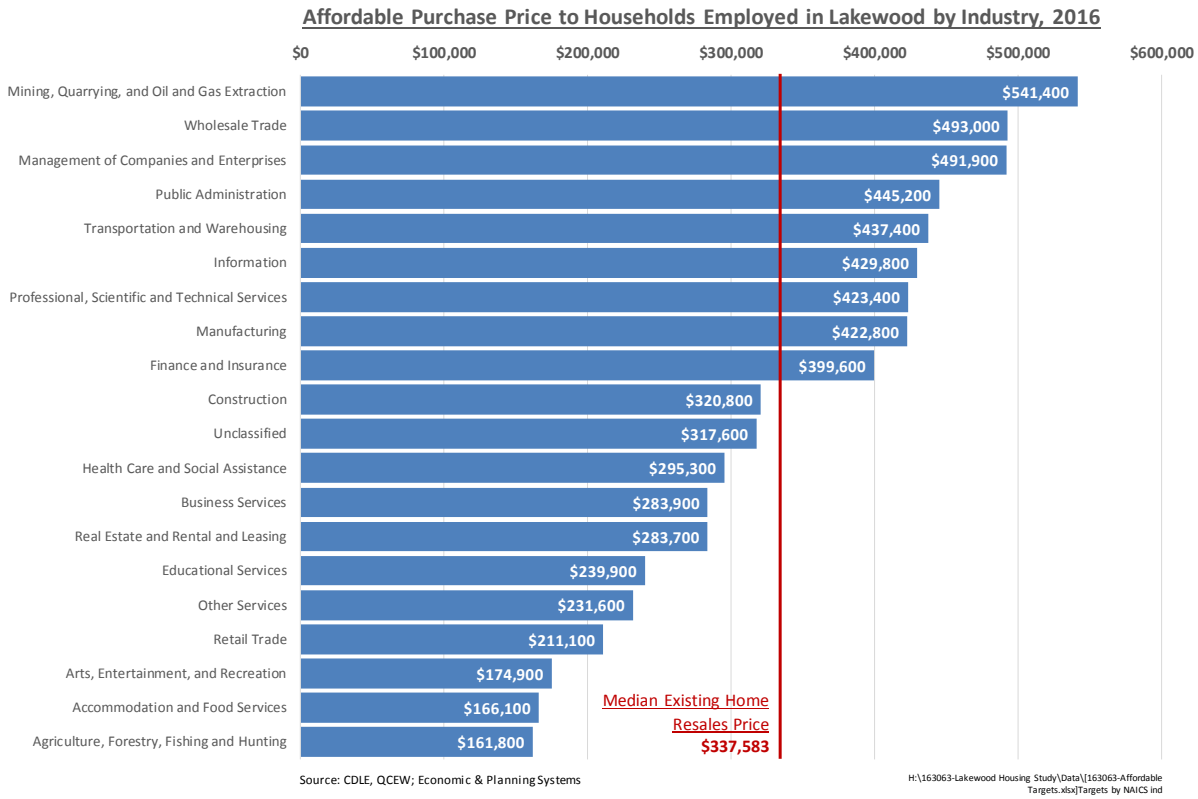
Using the wage levels identified above, **Figure 102** illustrates the target purchase prices for those individuals compared to the average resale price of housing sold in Lakewood during 2016. As such, workers in just two fields would have been available to afford the average-priced home in 2016.

**Figure 102**
**Estimated Target Purchase Price for Individuals by Industry, 2016**



To expand on the conversation of attainability, **Figure 103** illustrates the target purchase price for households by industry, assuming that the primary wage-earner workers in the respective field. To appropriately estimate these figures, the analysis used the average wages by industry and added approximately 70 percent of overall average wages to each household so that the weighted average salary of resulting households by industry equaled the *average* household income of households with earnings for Lakewood as observed by the U.S. Census ($78,064 in 2015). As such, households in nine industries from Finance & Insurance to Mining were able to afford the average-priced house in Lakewood.

**Figure 103**
**Estimated Target Purchase Price for Households by Industry, 2016**

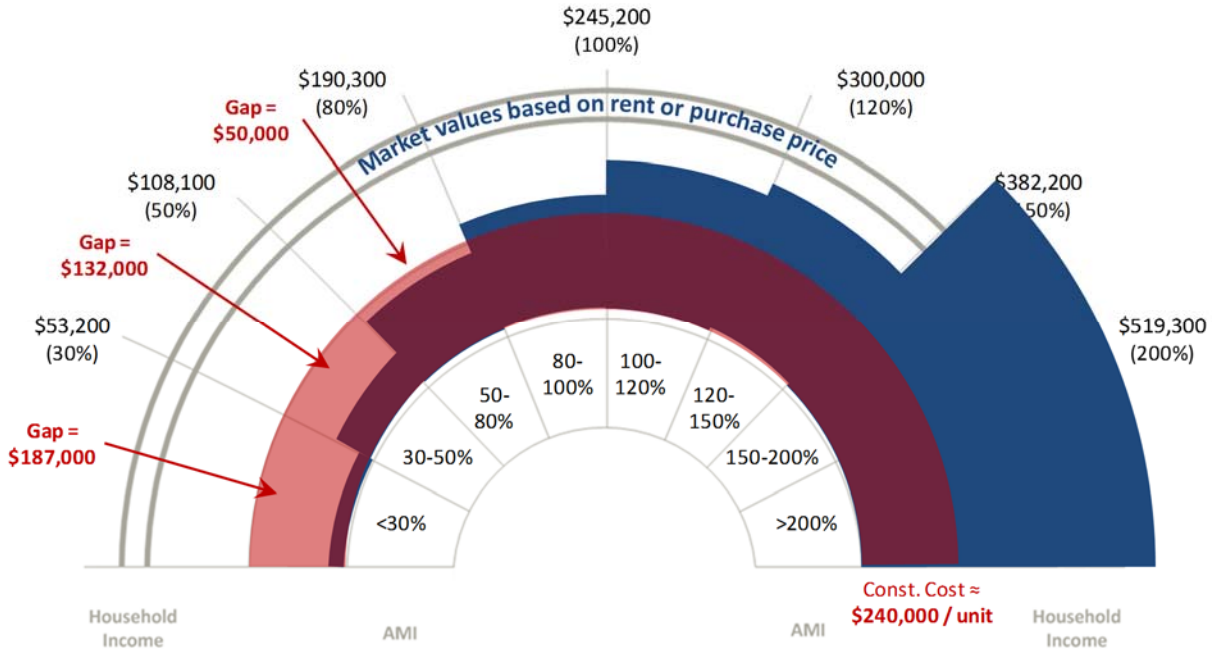


## Construction of Subsidized Housing

**Figure 104** illustrates magnitudes of target purchase prices in each of these AMI categories with a visual overlay of the current average cost ($240,000) of building an ownership or rental housing unit in the market (rental units currently cost approximately $210,000 and ownership units currently cost approximately $270,000). The purpose is to illustrate the difficulties of and the level of subsidy required to building housing at the lowest levels of need. It should be noted that the gaps represent the difference between what a household could afford to pay in 2015 (i.e. a target purchase price) and the approximately average cost to construct a housing unit. It should also be noted that while ownership housing units would typically not be constructed for at incomes lower than 100 or 120 percent AMI in a typical market, the illustration presents the target purchase price for uniformity of calculation.

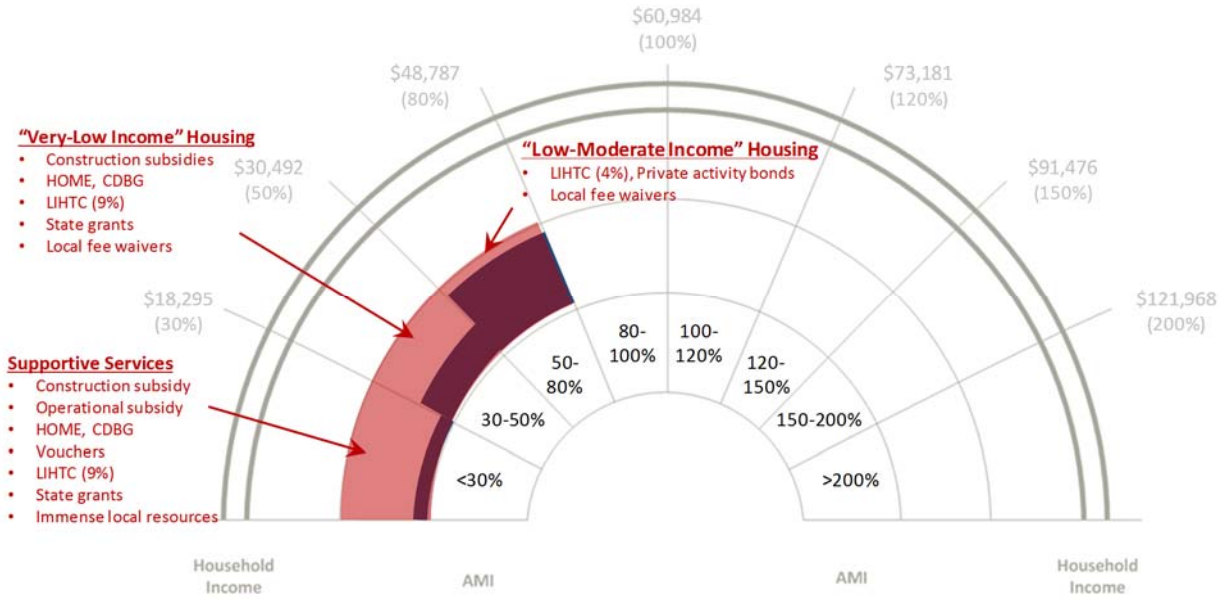
At under 30 percent AMI, where household incomes are under $18,000 (as shown previously), an affordable purchase price is estimated to be $53,200, leaving a construction financing gap of $187,000. A unit priced at 50 percent AMI would have a gap of $132,000, and a unit priced at 80 percent AMI would have a gap of $50,000. For rental units that cost approximately $210,000 to build, however, those gaps might be smaller – e.g. at 30 percent AMI, that gap would be approximately $156,000; at 50 percent AMI, the gap would be an estimated $74,000; and the gap at 80 percent AMI would be an estimated $20,000.

**Figure 104**
**Household Income Levels with Price to Cost Gaps**



Clearly, the lower the AMI level, the more subsidy required, which is what **Figure 105** illustrates. In today's market of conventional resources, units built for the purpose of meeting extremely low income, special needs, homelessness, supportive services require immense resource – combining federal, state, and considerable local resources. Units built to meet the demands of very low income housing also use substantial federal and state resources, but don't require the immense local subsidy – often requiring additional gap financing in the form of fee waivers (e.g. building permit fees, etc.). Units built for the low income housing spectrum require typically much less intense local resource, including private activity bonds (such as 4 percent low-income housing tax credits) as well as local fee waivers.

**Figure 105**
**Household Income Levels with Typical Gap Closure**

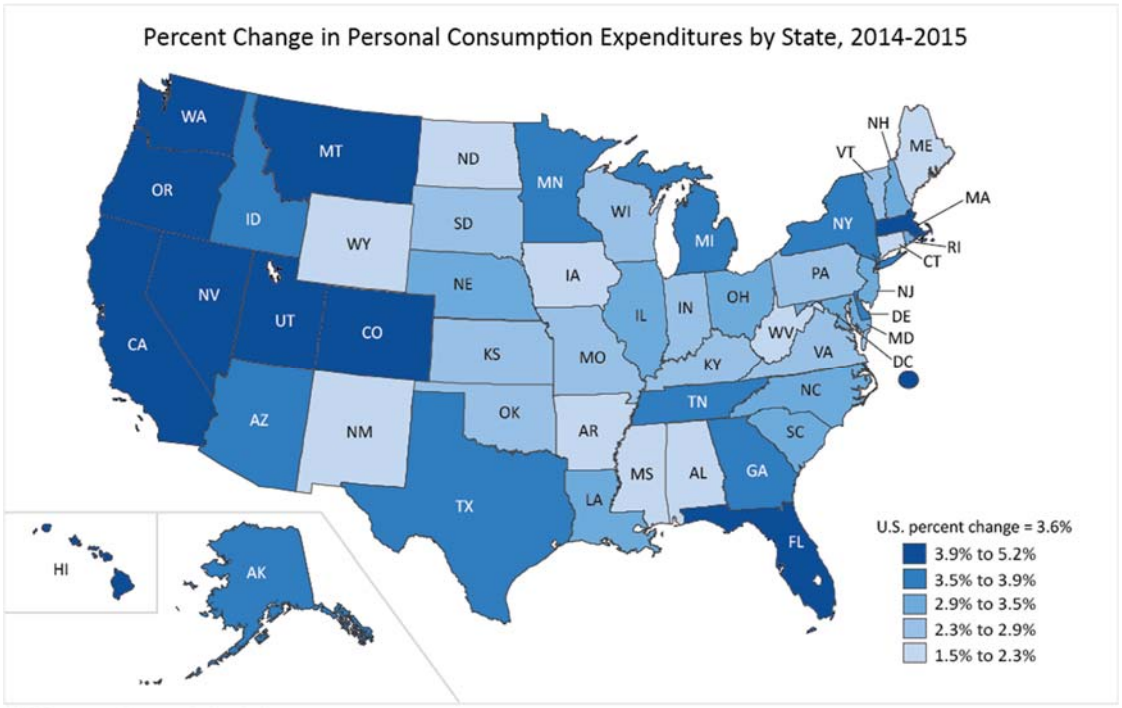


# Miscellaneous

## Consumer Expenditures

By comparison to other states, Colorado ranks in the top category for rate of growth in personal consumption expenditure, illustrated in **Figure 106**.

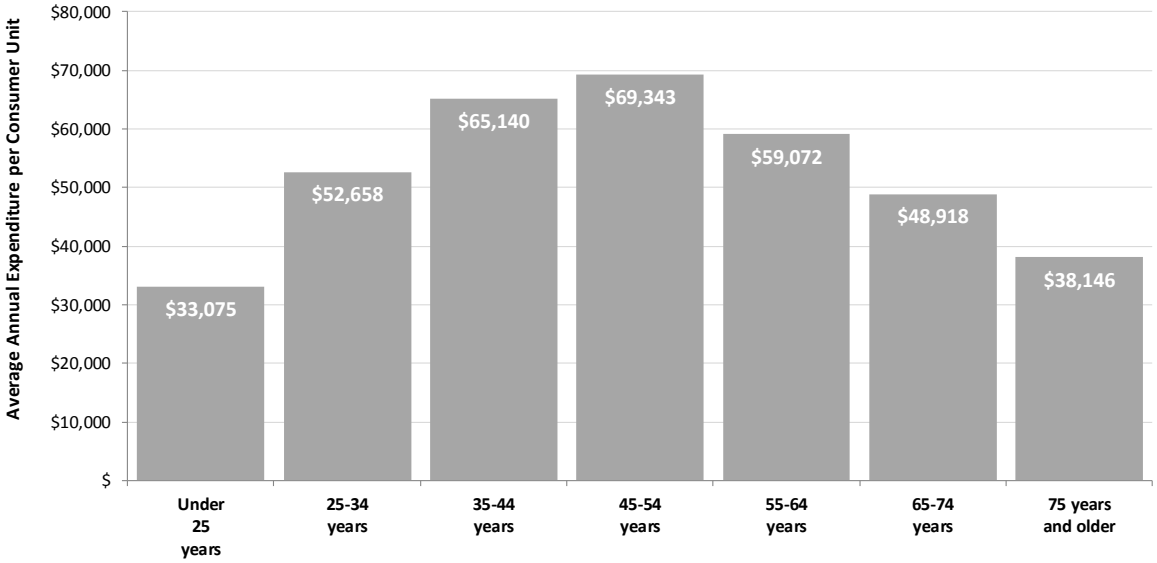
**Figure 106**
**Percent Change in U.S. Personal Consumption Expenditure, 2014-2015**




U.S. Bureau of Economic Analysis

By age, personal expenditure on consumption increases to primary working years (45 to 54) and decreases in age categories following

**Figure 107**
**Personal Consumption Expenditure by Age, 2015**




Source: U.S. Census ACS; ESRI Business Analyst; Economic & Planning Systems
H:\163063-Lakewood Housing Study\Data\[163063-BLS CES by Age.xlsx]Table 1300

**Table 16** illustrates consumer expenditure data by age and by type of expenditure in 2015. The largest differences in expenditure by age are attributable to housing and transportation costs, which account to more than 40 percent of the difference between households in the 45 to 54 category and all other older households.

**Table 16**
**Personal Consumption Expenditure by Age by Category, 2015**

| | Under 25 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65 years and older | 65-74 years | 75 years and older |
|---|---|---|---|---|---|---|---|---|
| Food | $5,328 | $6,855 | $8,664 | $8,131 | $7,102 | $5,350 | $5,973 | $4,494 |
| Food away from home | $2,536 | $3,193 | $3,837 | $3,595 | $2,834 | $2,060 | $2,314 | $1,681 |
| Housing | $11,502 | $18,334 | $22,197 | $21,153 | $18,254 | $15,466 | $16,364 | $14,233 |
| Household furnishings and equipment | $1,135 | $1,743 | $2,050 | $2,040 | $2,083 | $1,472 | $1,763 | $1,072 |
| Apparel and services | $1,370 | $1,926 | $2,542 | $2,529 | $1,622 | $1,035 | $1,284 | $694 |
| Transportation | $6,418 | $9,812 | $10,947 | $11,723 | $10,030 | $6,802 | $7,954 | $5,220 |
| Healthcare | $953 | $2,786 | $3,862 | $4,668 | $5,116 | $5,751 | $5,693 | $5,831 |
| Entertainment | $1,391 | $2,500 | $3,171 | $3,295 | $3,332 | $2,448 | $2,967 | $1,734 |
| Education | $2,575 | $1,125 | $1,177 | $2,659 | $1,163 | $259 | $292 | $227 |
| Miscellaneous | $206 | $633 | $1,139 | $1,038 | $850 | $896 | $981 | $780 |
| Other | -$340 | $3,752 | $5,555 | $8,513 | $6,686 | $2,839 | $3,332 | $2,179 |
| **Annual aggregate expenditures** | **$33,075** | **$52,658** | **$65,140** | **$69,343** | **$59,072** | **$44,378** | **$48,918** | **$38,146** |

Source: BLS CES; Economic & Planning Systems
H:\163063- Lakewood Housing Study\Data\[163063- BLS CES by Age.xlsx]TABLE 1- Summary