SNS Regional Housing Inventory Brief: Jobs-Housing Balance

Introduction

Southern Nevada has been among the nation's fastest growing regions for the better part of the last three decades and this trend is expected to continue well into the future. This rapid rate of growth brought prosperity and opportunity to many, but it also created many challenges, stretching fiscal and natural resources to the limit. Rapid growth led to unplanned and uncoordinated development, much of which occurred at the edges of the region. These land use patterns strain the fiscal resources of local jurisdictions and service providers and make access to amenities, services, and opportunities difficult without a car.

The SNS Regional Policy Plan seeks to better integrate housing, transportation, and jobs. Balance between these necessities will allow Southern Nevadans to earn more, keeping dollars local and, providing for reinvestment in education, jobs, health, and quality communities.

In response, the Southern Nevada Strong (SNS) Regional Policy Plan set forth a vision that includes creating "complete communities" throughout the region. The complete communities concept looks at locating jobs, housing, transportation options, and community amenities within a reasonable proximity of one another – meaning that everyone has access to housing, economic opportunity, and healthy resources, regardless of income or transportation choice. The vision calls upon the region to employ more resource-efficient land use and development practices and to ensure that the region's housing profile is well matched to meet the needs of the future population and economy.

As such, the regional planning team conducted a regional housing analysis, providing current data and insights into the state of Southern Nevada's housing profile. The assessment examined three key aspects of healthy housing markets: Jobs-housing balance, affordability, and type.

The analysis finds that problems of the past still exist in today's housing market. In fact, by many standards, Southern Nevada is experiencing a housing crisis. The influx of new residents, jobs, and businesses could intensify today's housing challenges unless the region comes together to address them. In recent years, housing development has failed to keep pace with the region's population gains, leading to growing affordability concerns and inequity throughout the region. Additionally, housing in Southern Nevada is limited in its diversity of type and there continues to be spatial mismatches between housing locations, employment hubs, public transit, and transportation choice. Well-functioning housing markets are widely understood to provide for the diverse needs and desires of a variety of workers and consider how access to jobs and necessary services establish quality of life and economic success for the region. Healthy housing markets also provide important benefits for the economic progress, stability, health, and well-being of individuals and families. Inaction on housing challenges can not only undermine the region's future economic growth and prosperity, but can worsen economic inequality and health disparities in the region.

Detailed findings of this analysis are documented in three briefs, providing information to better understand factors contributing to these outcomes. The briefs are intended to inform current and future planning efforts and policies in the region, and are the first phase in continuing research being performed by the Regional Transportation Commission's (RTC) regional planning team. This brief focuses on the current and forecasted jobs-housing balance in Southern Nevada and the implications of housing locations in the region.

What is jobs-housing balance (JHB)?

The location of housing is one of many factors affecting regional housing markets and quality of life. Research and data show that the location of housing developments can greatly impact personal and public transportation costs and strain the fiscal resources of local governments and service providers who provide infrastructure and services to the public. As such, many regions and local governments adopt priority development zones in an effort to promote more cost-efficient development patterns. Identifying preferred locations for housing is one such method and this is commonly accomplished through jobs-housing balance.

Jobs Housing Balance (JHB) = # of jobs / # of housing units

Jobs-housing balance (JHB) is the "distribution of employment relative to the distribution of workers in a given geographic area."[1] In other words, JHB is the ratio of workers living within a given area to the number of jobs that are available within that area. This ratio can help inform the overall housing needs of a region, providing information about the spatial relationships between jobs, housing, transportation, services, and amenities.

Assessing the JHB of a region is a customary method for forecasting housing needs and housing supply, primarily because it's a simple and quantitative way to define housing needs and goals (JHB = # of jobs/# of housing units).While the methodology is formulaic, the process for determining an appropriate JHB for any given area should go beyond this simple numeric calculation. Achieving real balance requires that workers' skills match with job opportunities as well as with a broad mix of housing types and prices that accommodate households with a broad mix of income ranges in various stages of life. Thus, a comprehensive understanding of community preferences as well as of the affordability and type of housing available is needed alongside an analysis and discussion about JHB. (See separate *SNS Regional Housing Inventory Briefs: Affordability* and *Type.*)

Why is jobs-housing balance important?

There are many reasons why considering housing location and JHB in a regional housing analysis are important. Research shows that regions with "good JHB" (definitions of good JHB vary by region and locality, and southern Nevada does not have an established target for JHB) are more economically competitive, more financially stable, and exhibit more satisfaction among quality of life indicators, such as community health and educational opportunity.

Well-balanced jobs and housing ratios have been shown to increase the economic competiveness of a region. Specifically, an Urban Institute (2019) study from the Washington, D.C. region finds that housing location challenges can undermine worker productivity, increase the difficulty businesses face in attracting and retaining employees, and discourage businesses from locating in housing-challenged regions. Employers need a diversity of talent to fill a variety of positions

Employee preference surveys can show how commute times affect quality of life and economic competitiveness of regions.

55%

of employees surveyed in the UK cite long commutes as reasons why they would leave a job (Wardrip, Williams, and Hague, 2011).

76%

of surveyed workers in the UK age 18-34 and 2/3 of low-wage workers (earning less than $50,000) would consider a lateral move if it would shorten their commute. The number is similar for higher-wage workers (more than $50,000) at 60%. (Wardrip et. al., 2011).

7 Days

A study of 34,000 workers found that those who commute under 30 minutes a day gain seven days of productivity a year compared to those who commute over an hour a day (Mercer, 2017).

[1] Wu, Q., Zhang, M., and Yang, D. (2015). Chapter 18 Jobs-housing balance: The right ratio for the right place. In Recent Developments in Chinese Urban Planning. Springer International Publishing, Switzerland.

(both low- and high-wage) and the ability to attract, retain, and develop such a workforce depends on the availability of housing within a reasonable proximity to jobs.[2] In a national survey of over 300 companies located in the United Kingdom, more than half (55 percent) of large companies acknowledged that employees cite long commutes as reasons why they leave the company.[3] Additionally, congested roads, a consequence of spatial mismatches between housing and jobs, can reduce the profitability of local businesses by increasing their operating costs and shrinking the area where businesses can expect to recruit workers and customers. Research also finds that spatial mismatches between housing and jobs can cause higher unemployment rates as well as longer periods of unemployment.[4] Consequently, regions that fail to provide an adequate balance between housing and jobs may find themselves lacking the competitive advantages of more balanced regions.

Moreover, communities that do not provide an adequate JHB are more likely to find themselves fiscally constrained and financially unstable in the future. As the region grows, local governments and service providers must provide for new roads, utility infrastructure, schools, and other services that are essential for housing and quality of life. Communities that prioritize housing location in accordance with JHB goals are more likely to see growth patterns that are less costly to develop, resulting in potentially millions of public dollars saved. According to the SNS Regional Plan, if housing development continues as it has in the past, more than 1,500 new miles of roads would be needed to service these areas, costing more than $7 billion.

Ultimately, development costs are shared by many players, including developers and home buyers, but taxpayers also share in these costs through the infrastructure and service costs needed for new development. The public sector has multiple obligations and must prioritize across their various responsibilities and services. Prioritizing housing infill and dense, mixed-use housing in underdeveloped areas and places with existing infrastructure in the region could provide a substantial savings on the costs needed to service new development. (See Table 2 for cost savings comparisons between existing development trends and more compact development.) Thus, establishing a healthy JHB to encourage denser, more compact development and determining priority locations for housing can go a long way towards reducing potential fiscal strains while simultaneously improving the quality of services, such as education, within the community.

Residents in communities with good JHB are also more likely to experience a higher quality of life. The core concept behind the SNS complete communities theme is to improve quality of life within the region by improving spatial alignment between jobs and housing (i.e. jobs-housing balance). Co-locating housing options, employment centers, and community amenities reduces sprawl and traffic congestion, improves resource availability and environmental quality, and provides for more diversity in the type and cost of available housing, alleviating stresses for cost burdened households. (See *SNS Regional Housing Inventory Briefs: Affordability* and *Type*.) All of these factors relate to important quality of life goals in the SNS Regional Plan.

In its simplest form, JHB describes the commuting patterns of a region. Benefits for regions that provide for a "good JHB" include shortening commute distances and travel times for workers, reducing vehicle miles traveled (VMT), and, in turn, reducing greenhouse gas emissions and other transportation-related pollutants. Additionally, areas that have balanced jobs and housing opportunities often see decreased instances of stress and improved health outcomes through increased opportunities for non-motorized transit, like walking and bicycling. Research finds that time scarcity due to longer commute times is a significant cause of stress, given that people with longer commutes experience higher rates of depression and financial concern.[5] Additionally, regions with healthy JHB tend to spend less on infrastructure and service costs, which may improve investments in education, climate adaptation, and publicly provided recreation, such as parks and community centers. Thus, investments in housing near jobs and activity centers can not only help regions meet their housing goals, but can also go a long way towards improving environmental, community health, and quality of life outcomes as well.

[2] Urban Institute. (2019). Meeting the Washington Region's Future Housing Needs. Urban Institute. Washington, D.C.

[3] Wardrip, K., Williams, L., and Hague, S. (January, 2011). The role of affordable housing in creating jobs and stimulating local economic development: A review of the literature. Center for Housing Policy.

[4] Urban Institute. (2019). Meeting the Washington Region's Future Housing Needs. Urban Institute. Washington, D.C.

[5] Ibid.

What is a good jobs-housing balance for Southern Nevada?

So, what is a "good" JHB? This is a difficult question to answer. There is no academic or professional consensus on what ratio is an appropriate jobs-housing balance, and there are many local factors to consider. What experts do agree on is that a regional jobs-housing balance ratio will likely need to be a range, accounting for regional differences in preferences and need.[6]

Generally, the closer the JHB ratio is to a value of 1, the more balanced the region. Values lower than 1 reflect that more housing than jobs are available in that area and values lower than .75 are typically characterized as bedroom communities. Values larger than 1 reflect that more jobs than housing are available and values larger than 1.25 may show that many residents are driving outside of their local community for work (i.e. commute times are longer). The typical JHB ratio that's considered appropriate for a region (meaning a large geographic area such as an urbanized county) is around 1.5 jobs/household.[7] This ratio reflects the fact that most households have more than one worker, so jobs and housing will necessarily be relatively dispersed within a region. However, there is some academic consensus around the idea that measuring jobs-housing ratios regionally is relatively meaningless, due to its inability to account for local conditions, preferences, and needs. Because regions are large areas, it is likely that cities and regions will appear balanced when measured by the numbers.[8]

Year	Housing Units	Jobs	Jobs-housing ratio	Housing surplus/shortage using JHB ratio of 1.5
2010	799292	1,056,986	1.32	94,282
2011	801,468	1,076,766	1.34	83,265
2012	804,221	1,092,996	1.36	75,193
2013	813,632	1,125,631	1.38	62,836
2014	816,939	1,168,817	1.43	37,338
2015	825,114	1,215,757	1.47	14,204
2016	829,236	1,263,139	1.52	(13,278)
2017	840,032	1,306,107	1.55	(31,141)
2018	853,541	1,350,621	1.58	*(47,323)*
2019	868,343	*1,357,000*	1.56	*(36,776)*
2020	*879,309*	*1,371,000*	1.56	*(35,148)*
2025	*922,239*	*1,406,000*	1.52	*(15,563)*
2030	*968,281*	*1,414,000*	1.46	*25,143*
2035	*1,003,265*	*1,448,000*	1.44	*37,449*
2040	*1,037,469*	*1,491,000*	1.44	*42,972*
2045	*1,068,393*	*1,533,000*	1.43	*45,882*
2050	*1,099,107*	*1,576,000*	1.43	*47,915*

Table 1 shows historic jobs-housing balance from 2010-2020 and predicted jobs-housing balance in 5-year increments for years 2025-2050. Housing unit data provided by RTC's Land Use Work Group. Employment data 2010-2018 is from U.S. Bureau of Economic Analysis (BEA) and 2019-2050 is from CBER forecasts for total employment.

Instead, experts find that analysis at a more localized level, such as near employment centers, neighborhoods, downtowns, and other planning subareas, is much more likely to reflect the true preferences and needs of communities. Suburban and rural neighborhoods may prefer to remain housing rich communities (JHB near .75) whereas employment centers and transit corridors likely need more balance between housing and jobs in order to see the kind of density and activity that make these areas succeed (JHB near 1.0). At the smaller local scale, the ratio between jobs and housing provides much more information about whether or not JHB is appropriate and what housing needs are for that area.

[6] Wu, Q., Zhang, M., and Yang, D. (2015) Chapter 18 Jobs-housing balance: The right ratio for the right place. In Recent Developments in Chinese Urban Planning. Springer International Publishing, Switzerland.

[7] Cervero, R. (1989). Jobs-housing balancing and regional mobility. Journal of the American Planning Association. 55:2 (136-150).

[8] Wu, Q., Zhang, M., and Yang, D. (2015) Chapter 18 Jobs-housing balance: The right ratio for the right place. In Recent Developments in Chinese Urban Planning. Springer International Publishing, Switzerland.

What does JHB in Southern Nevada look like today?

Currently, there are no regionally established targets for JHB in Southern Nevada, although local jurisdictions have recently established targets. Census data does, however, provide some insight into what the region's JHB looks like today and in the past. (See Table 1) Over the past decade, between 2010 and 2020, the regional JHB ratio has steadily increased from 1.32 to 1.56. This trend held true over the 5 years since adopting the SNS Regional Plan in 2015, and in 2018, Southern Nevada had a regional high JHB ratio of 1.58. In the future, the regional JHB is forecasted to fall slightly, settling at 1.43 by 2050.

While the differences between these ratios may not seem extreme, they tell very different stories about the state of housing and potential housing needs in the region. (See Figure 1) In the years 2010-2013, the region had a JHB ratio between 1.32 and 1.38. Using the standard ratio of 1.5 for regional jobs-housing balance, this means the region was slightly housing rich, evidenced by the housing surplus shown during these years (Table 1). However, as the JHB in the region began to increase, eventually hitting 1.58 in 2018, the region started to experience a slight housing shortage. By 2030, the region is forecast to start becoming more balanced again, however the regional JHB ratio will be higher than the previous decade at 1.46. The region is again forecast to have a surplus of housing, although the surplus will be less than earlier in the decade when the region had a lower JHB. If the region wanted to return to the balance it saw in 2010-2013, more housing than is currently predicted would need to be provided.

Transit accessibility in Southern Nevada

Not all Nevadans are able to afford and maintain a personal vehicle.

21st

Southern Nevada ranked 21st in the nation for transit accessibility (based on the number of jobs that are accessible within a 30-minute public transit ride) in 2019

77%

Southern Nevada has almost 77% less jobs accessible by transit than Los Angeles, 59% less than Denver, 40% less than Salt Lake City, and 13% less than Phoenix.

4.3%

In 2019, only 4.3% of work commutes were by alternative transportation options (transit/walk/bike).

Without further context and regionally established JHB goals, these numbers don't provide a lot of information on their own. When paired with transportation data, the JHB story becomes a little clearer. According to the Nevada Department of Transportation (NDOT), vehicle miles traveled (VMT) in Nevada are growing faster than the population.[9] In the years between 2010 and 2020, data shows that Nevadans are driving more and that average commute times for residents are increasing. In 2019, Southern Nevadans drove a combined 19.1 billion miles.[10] Per resident, VMT increased by 20 percent since 2009 and 11 percent since 2005.[11] Projections also

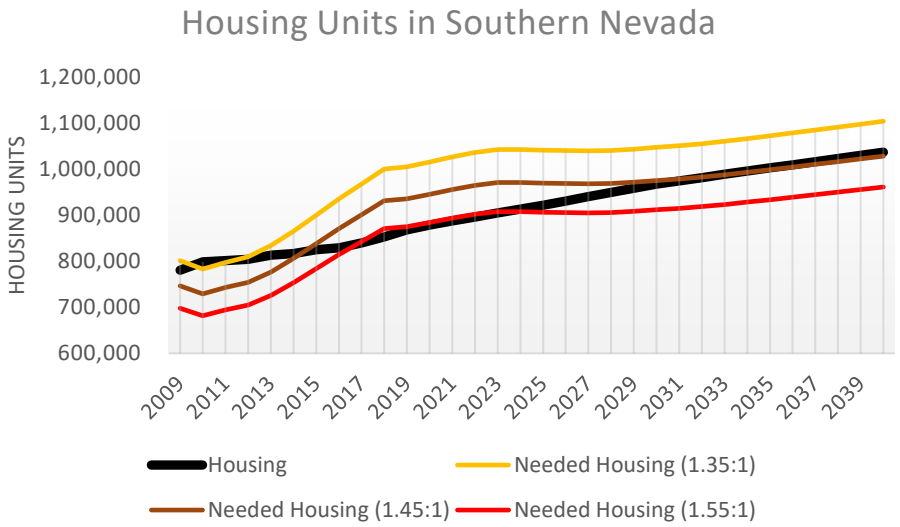


Figure 1 shows housing needs based on various jobs-housing ratios, ranging between 1.35-1.55. Different ratios show shortages and surpluses depending on the desired jobs-housing balance.

[9] State of Nevada. (2021). State of Nevada Climate Strategy. Department of Conservation and Natural Resources. Carson City, NV.

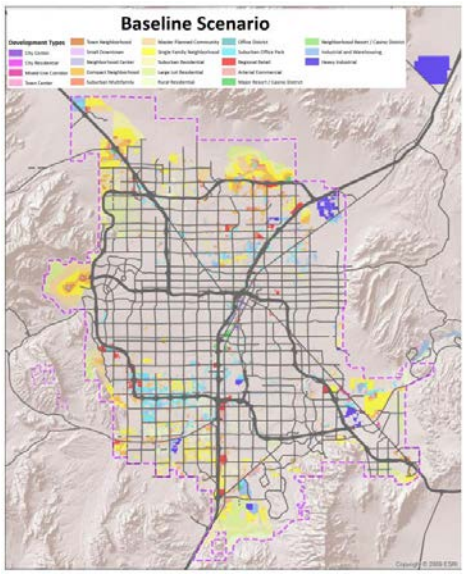
[10] State of Nevada. (2021). State of Nevada Climate Strategy. Department of Conservation and Natural Resources. Carson City, NV.

[11] Nevada Department of Transportation (NDOT). (2021). Annual Vehicle Miles of Travel: 2019 HPMS Data, Annual Vehicle Miles of Travel: 2009 HPMS Data, and Annual Vehicle Miles of Travel: 2005 HPMS Data. Carson City, NV.

indicate that over the next ten years, annual VMT across the state will increase by another 30 percent, fueled by a 14 percent increase in VMT per citizen.[12] Additionally, the mean travel time for the region increased by 4 percent between 2010 and 2019, from 24.3 minutes to 25.2 minutes respectively.[13] While this increase in commute time is fairly negligible now, the overall trend is concerning and, if development continues as it has the past, commute times are likely to worsen in the region.

Housing experts continue to make the case for including transportation costs in housing affordability. Transportation costs are typically a household's second-largest expenditure and these costs are largely a function of the neighborhood characteristics where households choose to live. Neighborhoods with characteristics that align with the SNS complete communities theme – compact development with access to jobs, housing, transit, and a wide variety of businesses – tend to have lower transportation costs, making them more affordable for a variety of residents overall. Currently, transportation costs make up an average of 24 percent of an average household's costs in southern Nevada and the region's compact neighborhood score (an index that assess the density and walkability of an area) is 1.6, meaning the region is very low density and most households require a vehicle in order to access jobs and services in the region.[14]

JHB can be used to capture these qualities as well. The further dispersed housing and jobs are (ratios that are greater than 1), the more likely it is that transportation costs will exceed reasonable levels for households, compounding other affordability issues (see *SNS Regional Housing Inventory: Affordability Brief*). As JHB increases in the region, historical trends suggest that residents need to travel farther and commute longer to reach their jobs, and they may be accruing increased transportation costs as well. The more time and money southern Nevadans spend on the road, the more time residents spend away from their homes and family, and the less time and money they have to spend on other activities that may positively affect their quality of life.



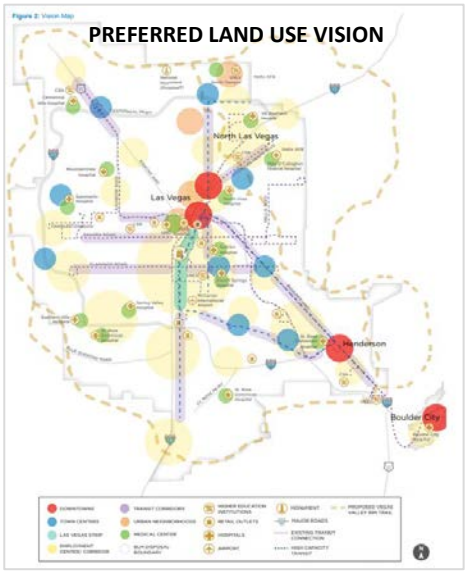


Figure 2 shows two future growth scenarios developed during the SNS regional planning effort. Scenarios include the baseline scenario and the preferred land use vision. (Click on maps for full size image.)

For further information on this scenario planning process, see the Southern Nevada Strong Regional Plan, Chapter 4.

[12] State of Nevada. (2021). State of Nevada Climate Strategy. Department of Conservation and Natural Resources. Carson City, NV.

[13] U.S. Census Bureau. (2021) 2019: ACS 5-Year Estimates Table S0801 and 2010: ACS 5-Year Estimates Table S0801.

[14] H+T Index. (2021) Housing and Transportation Affordability Index: Clark County. Center for Neighborhood Technology. Chicago. IL.

What do land use patterns say about JHB in Southern Nevada?

While the region does not have established JHB targets, planning for JHB is guided by local jurisdictions who, through adoption of the SNS Regional Plan, seek to build "complete communities" throughout the region that see more sustainable and compact development types such as mixed-use, mixed-income, and transit-oriented development, providing for housing near employment centers, service providers, shopping, public transportation, and recreational facilities. In order to promote this concept, the SNS Regional Plan used scenario-planning and community input to develop both a "baseline scenario" and a "preferred land use vision." The two scenarios present different growth patterns, both of which are realistic scenarios for the region and represent plausible future housing and job growth. They compare the advantages and opportunities for developing more complete communities and provide some insight for discussing where housing growth should occur and regional JHB goals.

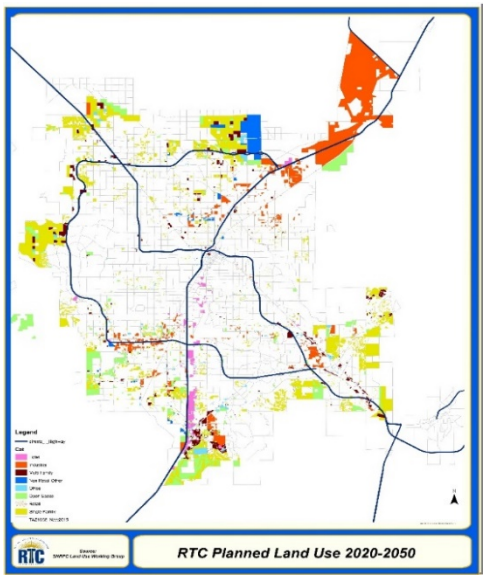


Figure 3 shows that future land use between years 2020-2050 closely matches that of the baseline scenario. (Click on map for full size image.)

The baseline scenario is similar to historical growth patterns for the region. In this scenario, 67,000 acres of new development is needed to accommodate future growth. The model (Fig. 2) shows that employment would continue to focus around current industry clusters and that new employment centers would likely grow on the edges of existing development. New housing, particularly higher-density housing, would also be developed on the outskirts of the region, and road congestion and commute times in the region would likely worsen as housing and jobs are not predicted to be located close together. Transportation and infrastructure investments would continue to be auto-oriented and the economic and health disparities within the region would likely continue and worsen.

In the preferred land use scenario (Fig. 2), only 55,000 acres of new development is needed to accommodate future growth. By adopting new planning practices and policies, the region would see an improvement in JHB near major employment and activity

Baseline Scenario Challenges	Preferred Land Use Benefits	Changes from the Baseline Scenario
Most of the growth is at the "fringe," in single-use development types	• Transportation costs decrease • New infrastructure costs are less • Land consumption decreases (-11K acres)	• 30% fewer housing units in suburban residential development types • 18% fewer jobs in single-use employment types • **Average annual household transportation costs are $3,000 less in central vs. fringe areas**
Few "mixed-use centers"	• Jobs/housing proximity improves • Transit supporting density increases • Pedestrian and bicycle access increases • Infill development increases (Increase of ~700 acres)	• 51% of new housing units in mixed-use areas *(Only 24% in base case)* • 19% of new jobs in mixed-use areas *(Only 8% in base case)* • 16% of new housing within a ¼ mile of high-capacity transit *(Only 9% in the base case)*
Low proximity of housing to existing schools and parks	• Better use of existing school facilities, potential to expand or build within existing neighborhoods • Support existing public amenities	• 26% more housing units within one mile of existing schools • 21% more housing units within a ¼ mile of existing parks
Fiscal efficiency	• Fewer road miles to build/maintain • Tax revenue increases (Higher property values for commercial land, more housing units)	• **$600,000,000 cost savings in roadway infrastructure** • Overall increase in fiscal efficiency
Environmental resource use	• Reduced emissions and resource usage	• 11% decrease in energy use • 11% decrease in carbon emissions • 21% decrease in water use

Table 2 was developed during the SNS regional planning process and provides insights into the benefits the region may experience if future growth and land use follow the patterns and policies modeled in the preferred land use vision. For further information on these benefits, see the Southern Nevada Strong Regional Plan, Chapter 4.

centers. Specifically, the preferred land use vision shows new housing growth occurring in existing neighborhoods, redevelopment of vacant and underused sites, and housing that is located closer to jobs. The region would also experience more investment and redevelopment within transit corridors, likely reducing the public investment needed in infrastructure and capital costs. The region's downtowns and town centers would provide for a variety of jobs, services, housing types, price ranges, and new employment and workforce development opportunities would also be created. Additionally, economic and health disparities would likely improve.

2019-2050 Land Use Forecasts

The location of housing and job growth is extremely important. New compact development provides conditions that support the development of new housing types in the region in locations that are likely less expensive to serve, supporting new economic growth within the region. Current conditions are the result of historic development trends and public policy choices. Future conditions will also be a result of these decisions and implementation of the preferred land use vision represents that the region prioritizes the well-being and quality of life for southern Nevadans while also prioritizing fiscal responsibility and economic vitality. This commitment was made in the adoption of the SNS Regional Policy Plan. The region may be on its way to achieving this vision (see note) but recent forecasts show the region is much more likely to achieve the baseline scenario (Fig. 3).

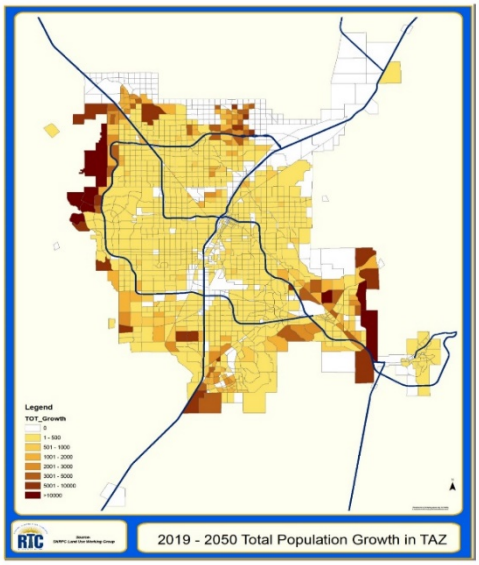


Figure 4 shows that population growth in the years 2020-2050 primarily occurs at the edges of the region. (Click on map for full size image.)

The RTC's Land Use Working Group (LUWG) provides forecasted land use data for the region and forecasts are done every four years in order to inform RTC's Regional Transportation Plan (RTP). Looking out to 2050, the forecast map that informs the 2021-2050 RTP (Fig. 3) shows future land use growth, for both housing and employment, closely matches that of the baseline scenario, with most new growth happening at the edges of the region.

Overall population growth (Fig. 4), shows that while new housing growth will occur throughout the region, the majority of this growth will occur on the periphery of the region in the northwest and southeast, with smaller pockets of growth happening in the north, south, and southwest as well. The population density projection (Fig. 5), also reveals that much of this housing growth is also projected to be lower-density development with very little higher-density development. Some higher density development occurs primarily at the edges in the north and south, and, to a lesser extent, in the northwest.

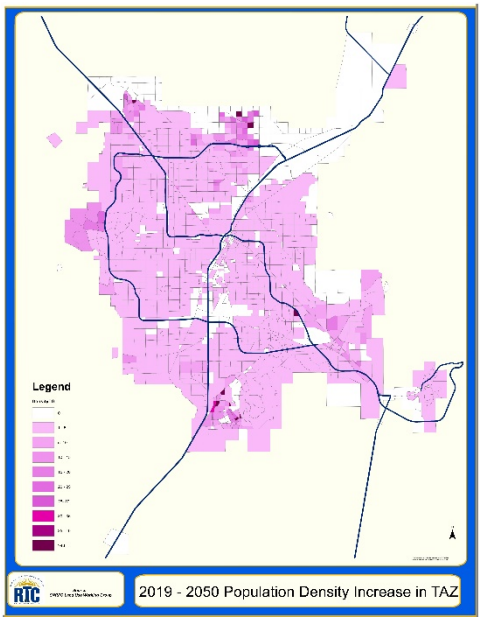


Figure 5 shows population density in the region between years 2020-2050 will remain low. Housing in the region will continue to be primarily low-density and dispersed throughout the region. (Click on map for full size image.)

These patterns are also true for future job growth (Fig. 6 and Fig. 7). In 2050, most of the job growth will occur at the edges of the region and in the resort corridor east of the I-15. The density of jobs will remain low throughout the region, with a higher-density of jobs occurring in the resort corridor. Some higher-density job availability will also emerge in the north and south in the future as well, but overall housing and jobs will continue to be dispersed across the region. Housing preferences in this scenario will include a willingness to commute and VMT and commute times will likely increase as NDOT

It's important to ***NOTE*** *that the forecast data used in this analysis represents where we are as a region* ***today****, and that the forecast may change in the future. Land use is slow to change and many of the region's jurisdictions have been working hard to update their land use policies, zoning, and development codes to better align with the complete community's vision in the SNS Regional Plan. As these new codes and policies are adopted, future forecasts will likely start to reflect patterns that move the region closer to the preferred land use vision. RTC updates its forecasts every four years, coinciding with updates to the Regional Transportation Plan (RTP).*

projects. Capital costs will be expensive both for development and maintenance, and residents will make housing and employment decisions that include trade-offs between quality of life due to the cost of housing and commuting.

What's next?

In order to drive more balance within the region, it might be beneficial for the region to look at establishing JHB goals. Establishing goals can help focus housing balance near priority development areas, such as employment and activity centers and along transit corridors. Additionally, JHB goals can also help regions plan for future growth, infrastructure, and services, helping local jurisdictions to be more financially stable and invest in more services and opportunities.

It's important to keep in mind that JHB only provides information about the relationship between housing and jobs, indicating an area's potential for greater balance, but this balance also depends on the share of jobs and housing available in the region as well as the match between worker's skills and job opportunities, and worker income and housing affordability. Alone, JHB does not solve for affordability or diversity in housing, but striving for more balance in certain areas in the region, such as near employment centers, activity centers, and transit corridors, can encourage more sustainable and compact development which may contribute positively towards these issues.

The region has already begun to identify priority areas for housing, job, and transit growth and a few local jurisdictions are also establishing JHB targets for certain areas within the region. The SNS Regional Policy Plan also identifies future activity centers in the preferred land use vision, and On Board, the region's mobility plan, identifies future corridors for high-capacity transit investments. Much of the groundwork has been laid to help inform where future housing development and job growth could occur and future forecasts can continue to provide insight on the progress the region is making on these goals.

As administrators of the SNS Regional Plan, RTC's regional planning team is poised to provide further research and technical assistance to help the region meet its housing goals.

Future research may include:

- Facilitate regional coordination around housing issues
    - Research best practices and outline how to facilitate this in the region
    - Develop regional consensus around housing and JHB goals
    - Seek to build housing priorities into regional documents such as the RTP and Comprehensive Economic Development Strategy (CEDS)
    - Develop preferred growth zones for the region
- Continue forecasting and scenario planning
    - The RTC may be able to adopt its forecasting process to help the region test new policies and to track progress on regional housing goals
    - Develop future housing scenarios

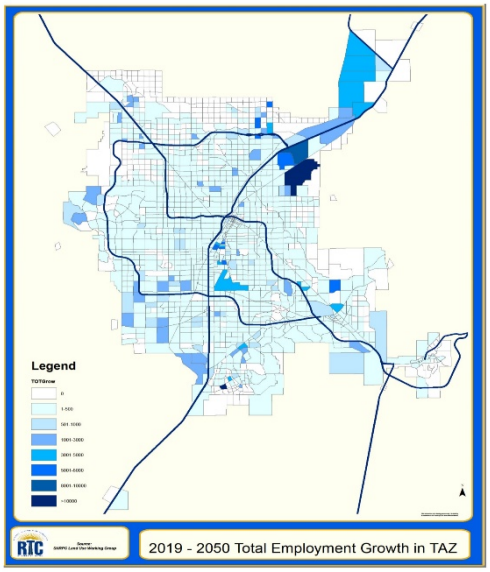


Figure 6 shows that employment growth between the years 2020 and 2050 will occur throughout the region, but primarily at the edges. (Click on map for full size image.)

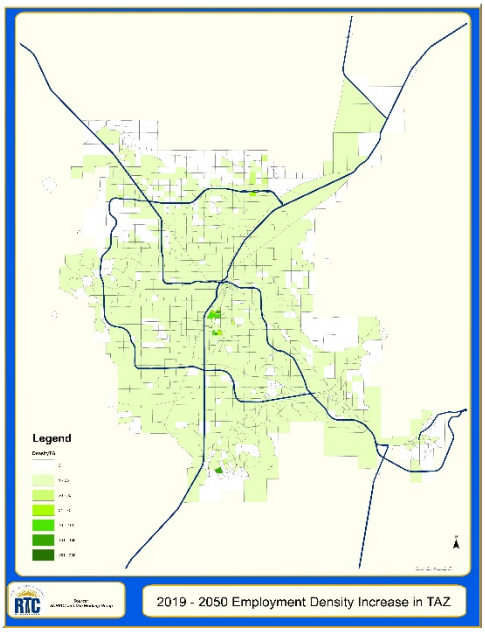


Figure 7 shows that employment density in the years 2020-2050 will remain dispersed throughout the region and that the Strip remains the only dense employment center within the region. (Click on map for full size image.)

    - Use spatial technology to identify possible infill/redevelopment opportunities and infrastructure investment options
- Research fiscal impacts of various development choices (sprawl v. compact development)
    - Infrastructure analysis to determine where existing infrastructure can support new development
    - Review tensions that prohibit compact development
- Develop a model or process for conducting fiscal feasibility analyses
    - Consider factors such as current zoning, market rate rents, and construction costs in the region and determine if desired development types are feasible
- Study linkages between transportation and housing in the region
    - Where is there efficiency of location
    - Research transportation costs and how they factor into housing costs and cost burdens in the region
- Research relationships between jobs-housing balance and housing market
    - Does jobs-housing balance have any relationship to housing costs or the housing opportunity index?

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