

CHAPTER 5

Population



Chapter Contents

5.1	Introduction	3
5.2	Population & Demographic Trends	3
5.2.1	Population Trends.....	3
5.2.2	Growth Pattern.....	4
5.2.3	Population Distribution.....	5
5.2.4	Demographic Trends.....	6
	<i>Gender and Ethnic Distribution</i>	6
	<i>Age and Household Distribution</i>	7
	<i>Economic Distribution</i>	9
	Figures	
5.2-1	County & Regional Population Trends.....	4
5.2-2	Population Distribution by Community.....	5
5.2-3	Storey County Gender & Ethnic Distribution 2000 and 2010.....	6
5.2-4	Median Age Trends.....	8
5.2-5	Age Distribution.....	8
5.2-6	School Enrollment 2003-2013.....	9
5.2-7	Household Distribution.....	9
5.2-8	Comparative Economic Measures.....	10
5.3	Population & Demographic Forecasts	10
5.3.1	State Demographer & Historic Growth Rate Forecasts.....	10
5.3.2	Key Elements Influencing Population Change.....	12
	<i>Economic Development</i>	12
	<i>Housing</i>	13
	<i>Interconnectivity</i>	13
	<i>Water</i>	14
	<i>County Aging Demographics</i>	14
	Figures	
5.3-1	Population Projections.....	11

5.1 Introduction

This chapter examines population and demographic trends and forecasts population changes that may affect land uses supported by this Master Plan through the year 2032. It will enable the county to develop policies and take action through which the needs of existing and future populations will be met. It will also provide a base from which other elements of this Master Plan, such housing and economic development, may be formulated.

Many changes have taken place in Storey County since adoption of its 1994 Master Plan. Its past industries including brothels, mining, and tourism are now shadowed by massive growth in manufacturing, distribution, and associated commercial enterprise. While Storey County remains rural, it has become a major economic player in the State of Nevada and in the western United States.

Economic expansion in Storey County and western Nevada over the past two decades resulted in substantial population growth in the county. Shifts in population distribution and demographics in the county have also occurred. Once concentrated in Gold Hill and Virginia City, the county's population is now distributed almost equally throughout half of its land mass.

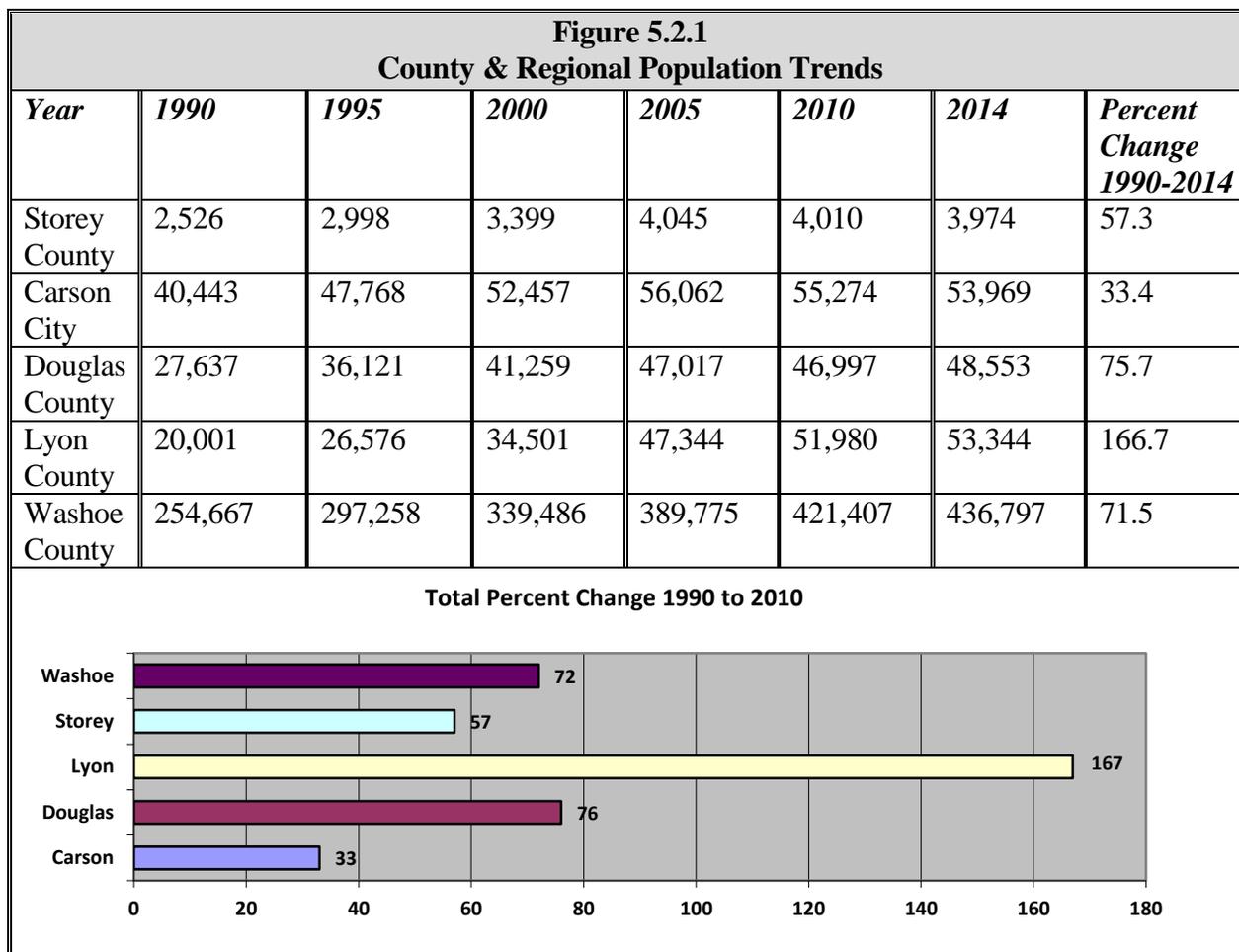
Population and demographic trends identified in the past two decades are expected to continue. However, as economic growth and employment opportunities increase, the potential for deviation in past trends may become a growing element affecting land use planning. Regardless of trend changes that may occur, economic, social, and ecological responsibility and sustainability will remain forefront in determining the rate and pattern of population growth in the county.

5.2 Population & Demographic Trends

5.2.1 Population Trends

Similar to other “boom-and-bust” mining towns in Nevada, Storey County's early history was marked by volatile population swings. Following the mining bonanza in the late 19th and early 20th centuries, the county's population steadily declined. Between the 1920s and 1940s, nearly half of its population was lost, and by 1960 it had decreased to a mere 568 residents (U.S. Census Bureau, 1960). This trend continued through most of the 1970s.

By the 1980s, the county population stabilized and began to trend upward. Consistent positive growth was seen in the 1990s. From 1980 to 2000, the county's population grew 126 percent from 1,503 to 3,399 residents. Substantial growth was also seen in the following decade, especially between 2004 and 2007 when western Nevada during the “housing-boom,” experienced an influx of new residents arriving from out-of-state. Figure 5.2.1 shows the upward population trend and illustrates the outlier that represents the upsurge. Between 2000 and 2010, the county grew 18 percent from 3,399 to 4,010 residents. Following the downturn of the national economy beginning in 2007, the county's rate of population decreased from the brief peak period. Between 2005 and 2014, the Nevada State Demographer estimates a loss of 71 people.



Source: U.S. Census Bureau, 1990 and 2010, Nevada State Demographer 2014
 Note: The U.S. Census estimates the Storey County population at 3,896 in 2011.

5.2.2 Growth Pattern

Substantial residential growth occurred in Storey County over the past two decades. Through good land use planning policy and practices, conformance with the 1994 Mater Plan, and strong leadership, Storey County allowed sustainable residential and commercial development to occur while preventing encroachment of suburban sprawl from its growing neighbors.

Between 1990 and 2014, Storey County’s population increased 57 percent. This increase was three percent lower than the combined average increase of neighboring Carson City and Washoe and Douglas Counties. Lyon County was the outlier in the region with the addition of approximately 33,000 residents between 1990 and 2014; the increase was 107 percent higher than the combined average increase of said neighbors including Storey County.

Storey County recognizes the need to maintain a sustainable future for its residents, employees, businesses, and natural environment. When forecasting potential residential growth, the availability of water, geographic constraints, transportation interconnection, the level of public services the county can provide in relation to its population, and local and regional sustainability will be forefront in planning policy and decision making. Conforming to best development practices will ensure a sustainable future and enhance services and quality of life in the county’s existing towns and population centers.

5.2.3 Population Distribution

Table 5.2.2 shows U.S. Census Bureau and Nevada State Demographer's Office reported population trends for Storey County and its two unincorporated towns Gold Hill and Virginia City. Population estimates for the county's remaining communities were derived by multiplying the number of dwellings therein by the average county household size. The average household size in the county between 2007 and 2011 was 2.27 and 2.1 in 2014 as indicated in the master plan Housing chapter.

Most growth between 1994¹ and 2014 occurred as in-fill within the county's existing communities. Lockwood had the highest percentage growth in the county between 1994 and 2005. This trend dropped off sharply after 2005 with build-out of the Rainbow Bend residential planned unit development. Substantial growth was seen in the Highlands between 1994 and 2014. Virginia City, Lockwood and Mark Twain grew at a negative rate during this period with an estimated loss of about 280 people.

	<i>1994*</i>	<i>1995</i>	<i>2000</i>	<i>2005</i>	<i>2010</i>	<i>2014</i>	<i>Total Change</i>	<i>Percent of Total Change</i>
Storey County	2,526**	2,998	3,399	4,045	4,010	3,974	1,448	+57.3
Gold Hill	193	193	198	200	222	201	8	+4.1
Virginia City	921	931	988	1,012	1,049	832	-89	-9.7
Highlands	1,116	1,128	1,192	1,205	1,233	1,398	282	+25.3
Lockwood/ River	1,145	1,159	1,171	1,283	1,289	979	-166	-14.5
Mark Twain	714	721	750	742	742	689	-25	-3.5
<i>Household Size</i>	2.38	2.38	2.38	2.27	2.27	2.1	-	-

Sources: Storey County Assessor's Office; U.S. Census Bureau 2000 and 2010; Nevada State Demographer 1994-2010, 2014 Certified Population Estimates.

*Assessor's Office earliest available housing data from which community estimates were based.

**U.S. Census 1990 population data.

Population growth in each community is constrained by local geography, lack of public services and infrastructure, and limited availability of water. These constraining factors make each community in the county incapable of accommodating sudden large population growth. Residential development that occurs outside of existing population centers and areas not identified in this master plan as appropriate for such development are considered to have a substantially negative impact on the county's existing land uses, natural resources, sustainability, existing quality of life, and potential for future economic development.

¹ 1994 is the earliest available housing data from the Assessor's Office from which community estimates were based.

5.2.4 Demographic Trends

Gender and Ethnic Distribution

In 1990 and 2013, the disparity between males and females was approximately 1.5 percent. Females outnumbered males in 1990 and 2013 with the inverse occurring in 2000 and 2010 by 1.5 percent. The trend shows no sustaining pattern in which females or males were predominant.

Whites were the predominant population in 2013 at 93.4 percent. Non-Whites that year accounted for 6.6 percent of the total county population. The population gap between White and non-Whites narrowed slightly between 1990 and 2010 then widened slightly in 2013. Hispanics at 2.2 percent of the overall county population in 2013 were the largest minority group. The county's remaining minority populations were between 0.5 and 1.4 percent of the overall population. Their percentages are skewed by low number; thus, the data is not considered as portraying substantial demographic shifts in the county.

The U.S. Census Bureau estimates that 16 percent of Storey County's American Indian population lives on Pyramid Lake Paiute Tribal lands adjacent to Wadsworth. Tribal lands are of a sovereign nation in the United States, of which Storey County and this master plan has no legal jurisdiction. However, Storey County will continue to maintain its close relationship with the Tribe and coordinate with its membership on local and regional land use matters.

Figure 5.2.3					
Storey County Gender & Ethnic Distribution 2000 and 2010					
	<i>1990</i>	<i>2000</i>	<i>2010</i>	<i>2013</i>	<i>Change in Percent of Pop. 1990-2013</i>
Total Pop.	2,526	3,399	4,010	3,981	+57.6% (total)
<i>Gender Distribution</i>					
Male	1,250 (49.4%)	1,762 (51.8%)	2,044 (51.0%)	1,917 (48.2%)	-2.4%
Female	1,276 (50.5%)	1,637 (48.2%)	1,966 (49.0%)	2,064 (51.8%)	+2.6%
<i>Ethnic Distribution</i>					
White	2,390 (94.6%)	3,161 (97.6%)	3,693 (92.1%)	3,720 (93.4%)	-1.3%
Hispanic	96 (3.8%)	174 (5.1%)	228 (5.7%)	87 (2.2%)	-42.1%
Black	8 (0.3%)	10 (0.3)	40 (1.0%)	20 (0.5%)	+66.7%
Asian	29 (1.1%)	34 (1.0%)	66 (1.6%)	56 (1.4%)	+27.3%
American Indian	51 (2.0%)	49 (1.4%)	64 (1.6%)	26 (0.7%)	-65.0%
Hawaii/Pacific Is.	*	5 (0.1%)	15 (0.4%)	34 (0.9%)	+800.0% **
Other	48 (1.9%)	7 (0.2%)	45 (1.1%)	38 (1.0%)	-47.4%

Source: U.S. Census Bureau and Bureau of American County Survey 1990, 2000, 2010, and 2013

Note: 2.1 percent (87 persons) in 2010 identified themselves as two or more races.

*Insufficient data

**Average determined using 2000 and 2013 data

Age and Household Distribution

Storey County's aging population trend is similar to that of its neighboring counties and the State of Nevada. Between 1990 and 2010, Storey County's median age increased nearly 34 percent from 38 to 50 years old. By 2010, its median age was second only to Esmeralda County which had median age of 53, and by 2013, Storey was the oldest county in the state by an average age of over 4 years. Storey County's 65-and-older group was 23 percent of the county's total population in 2013 [and expanding while](#) the under 18 population is declining.

While Storey County's senior population is increasing, its school-aged population is decreasing. Between 1990 and 2010, Storey County School District reported an 11.3 percent drop in school enrollment. This downward trend is consistent for each school-year and across primary and secondary grades. The U.S. Census [Bureau and Nevada](#) State Demographer estimates concur with the downward trend. Between 1990 and 2013, the percentage of school-age children to overall county population decreased 27 percent while that of the senior population grew 118 percent.

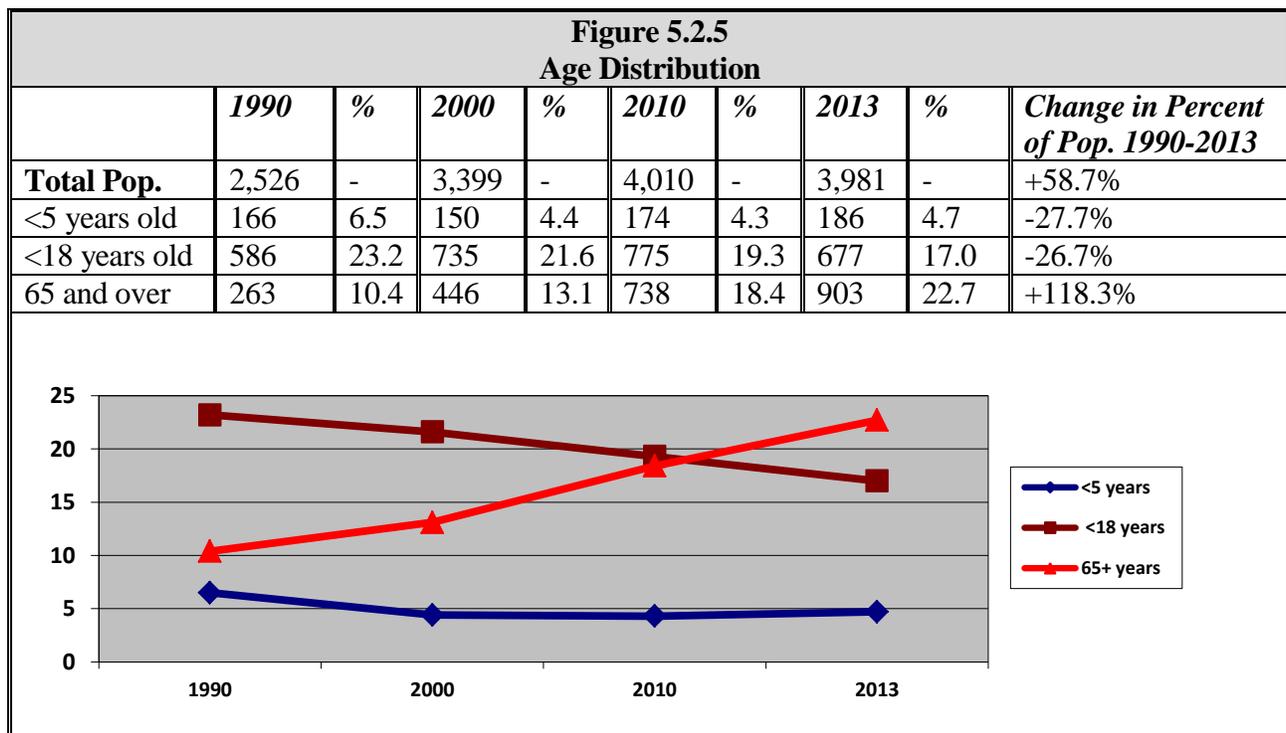
Household trends during this period are consistent with the county's aging demographic pattern. The average household size decreased from 2.4 [persons-per-household](#) to 2.1 persons-per-household in the [23 year period](#). Family households with children increased 21 percent while those without children increased 107 percent. Non-family households showed a similar pattern with those having children growing only 18 percent and those without children increasing 122 percent.

The aging pattern seen in Storey County and [throughout the State of Nevada](#) is partially due to "baby-boomers" entering retirement age, stabilizing birth rates, longer life expectancy, and younger generations tending to have fewer children. The county's relative close proximity to surrounding metropolitan areas and health care facilities, as well as the State of California, also attracts out-of-state retirees. The U.S. Census [Bureau](#) estimates 44 percent of Nevada's non-born residents originate from the State of California. The ageing trend is exacerbated by the county's challenging geography and climate, and relatively few amenities which have a tendency to discourage young families with children.

**Figure 5.2.4
Median Age Trends**

	1990	2000	2010	2013	Percent Change 1990-2013
United States	32.9	35.3	37.2	37.3	+13.4
Nevada	33.3	35.3	36.3	36.6	+9.9
Elko	29.4	31.2	33.4	33.3	+13.3
Lincoln	33.4 (μ)	33.4	39.9	35.7	+6.9
Humboldt	30.6	33.4	36.2	35.7	+16.7
Clark	33.1	34.4	35.5	35.8	+8.2
Washoe	33.6	35.6	37.0	37.2	+10.7
Lander	28.7	28.7	37.1	37.3	+30.0
Eureka	33.3	38.3	42.4	38.3	+15.0
Churchill	33.0	34.7	39.0	39.2	+18.8
Pershing	31.7	34.4	41.0	40.4 (μ)	+27.4
White Pine	33.8	37.7 (μ)	40.8	40.9	+21.0
Lyon	36.4	38.2	40.9 (μ)	41.6	+14.3
Carson City	36.4	38.7	41.7	41.9	+15.1
Esmeralda	35.8	45.1	52.9	47.9	+33.8
Douglas	36.2	41.7	47.4	47.9	+32.3
Nye	36.5	42.9	48.4	49.7	+36.2
Mineral	33.9	42.9	49.2	50.1	+47.8
Storey	37.6	44.5	50.4	54.4	+44.7

Source: U.S. Department of Commerce, "U.S. Census Bureau, 2000, 2010 and 2013 Redistricting Data
Mu (μ) indicates the mean average age in each county category.



Source: U.S. Census 1990, 2000, 2010 and 2013

Figure 5.2.6							
School Enrollment 2003-2013							
	2003-04	2004-05	2005-06	2006-07	2011-12	2012-13	Percent Change 03/04 – 12/13
District	468	478	450	454	408	415	-11.3
VCHS	137	152	150	155	133	132	-3.6
VCMS	122	118	114	117	93	92	-24.6
HGES	143	140	127	123	131	139	-2.8
HES	66	68	59	59	51	52	-21.2

Source: 2003-2013 Storey County School District (Second enrollment month of each year)

Figure 5.2.7					
Household Distribution					
Year	1990	2000	2010	2013	Percent Change 1990-2010
Total household	1,006	1,462	1,742	1843	+83.2
Family Households	691	969	1,141	1161	+68.0
<i>With children <18</i>	316	319	346	385	+21.8
<i>Without children <18</i>	375	650	795	776	+106.9
Non-Family Households	315	493	601	682	+116.5
<i>With children <18</i>	*	105	106	124	+18.1**
<i>Without children <18</i>	251	374	453	558	+122.3
Average Household Size	2.44	2.32	2.30	2.14	-12.3

Source: U.S. Census Bureau 1990 - 2013

*Insufficient or unreliable data

**Result based on 2000 and 2013 figures

Economic Distribution

Economic development and job creation influences local population trends by attracting working-age (19 to 55 [years of age](#)) people. Areas with strong employment typically have higher average household size, lower median age, and a higher percentage of family households. Storey County on the other hand has a high level of employment relative to its population size, but shows some demographic trends that are similar to counties with older populations and less employment opportunities.

Storey County's employee-to-population rate in 2014 was 128 percent, well above the surrounding areas of Carson City and Douglas, Lyon, and Washoe counties. The Median Household Income was the fourth highest in the State at \$61,573. It was 17 percent higher than the combined percentage difference for Carson City and Douglas, Lyon and Washoe counties. Only Elko, Eureka, and Lander counties, each with a disproportionate number of high-wage mining jobs, have greater

median incomes. This demographic trend is partially a result of a decade of significant economic and employment growth in Storey County in relation its population.

	<i>Carson City</i>	<i>Douglas County</i>	<i>Lyon County</i>	<i>Storey County</i>	<i>Washoe County</i>
Median Household Income 2009-2013	\$51,957	\$60,100	\$46,137	\$61,573	\$53,040
Per Capita Income 2013	\$26,264	\$34,123	\$21,757	\$33,472	\$28,670
Average Weekly Wage 2014	\$890/wk.	\$792/wk.	\$759/wk.	\$794/wk.	\$854/wk.
Number of Employees 2014	27,846	18,382	12,396	5,066	196,641
Percent of Employees to Population 2014	51.6%	37.9%	23.2%	127.5%	45.0%
Avg. Persons Per Household 2007-2011	2.50	2.40	2.65	2.14	2.57

Sources: Bureau of Labor Statistics; Nevada Department of Employment and Rehabilitation; U.S. Census, U.S. Bureau Department of Housing and Urban Development.

5.3 Population & Demographic Forecasts

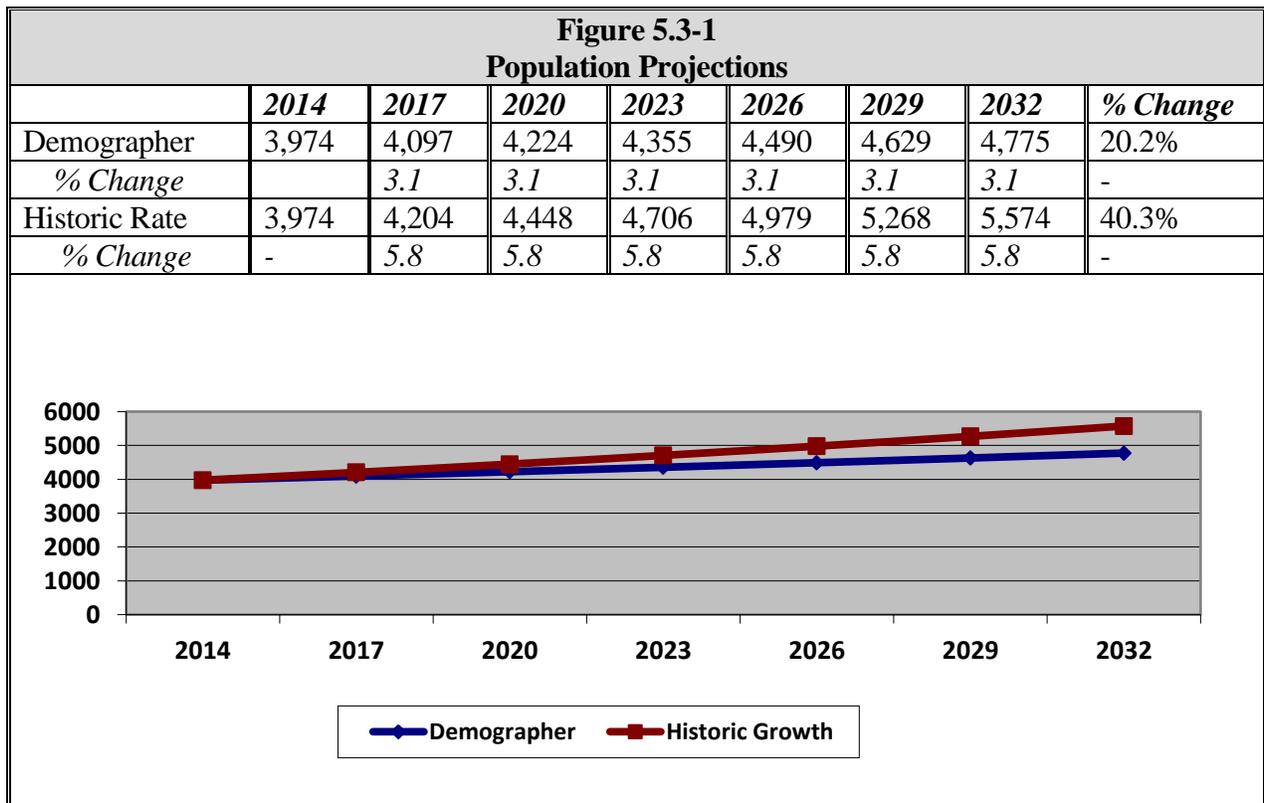
This section uses past and current population, economic, workforce, and other data to estimate potential changes in the county population over the next twenty year period. It will also forecast potential population changes that are expected to occur in each of its existing population centers. Potential factors that may result in deviations from the forecast will also be summarized.

The population forecast is based on analyses of quantitative and qualitative data. Information was obtained from the U.S. Census Bureau and Nevada State Demographer's Office; County Assessor and Clerk's Office; Storey County School District; regional and state employment and economic development agencies, and other sources. It includes population counts, estimated population projection, property owner information, school enrolment counts, and economic and employment data. Community growth patterns, known services and infrastructures, and findings from community workshops were also used in formulating the data-driven and ground-based model from which realistic estimates of change may be determined.

5.3.1 State Demographer & Historic Growth Rate Forecasts

Forecast information from the Nevada State Demographer is provided in Figure 5.3.1. It shows projected population growth in the county between 2014 and 2032. It was developed using the Regional Economics Model, Inc. estimation model. The Demographer's forecast includes Nevada's 17 counties and studies 23 economic sectors to estimate future population trends. It relates the economic and demographic characteristics of Nevada's counties to each other and the nation (Nevada State Demographer, 2012). Figure 5.3.1 also provides the flat historic growth rate in the county and compares it to the Demographer's forecast. The flat rate includes the average annual growth rate of 1.9 percent during the eighteen year period mentioned.

The Nevada State Demographer’s projection shows population growth in the county over the next eighteen year period to be similar to earlier trends. An approximate increase from 3,974 persons in 2014 (the U.S. Census Bureau reports 3,912 persons) to 4,775 by the year 2031 is expected. The projected growth is consistent with the pattern estimated by the demographer between 1990 and 2013, which was approximately 58 percent growth. The flat historic rate shows a slightly higher rate of increase. From the base 3,974 population reported by the demographer in 2014, the flat historic growth rate shows an estimated population of 5,574 by the end of the 18 year period. The difference between the demographer’s projections and the flat historic growth rate is approximately 17 percent with the demographer’s model lagging by 800 people at the end of the forecast period.



Source: “Demographer” based on Nevada State Demographer’s Office, Nevada County Population Projections for 2014 to 2033. Annual growth rate is 1.025% from 2014 to 2032.

“Historic Rate” based on 1.9 percent growth between 1990 and 2014 reported by the U.S. Census and the Nevada State Demographer.

Note: Population percent increases are the sum of three year increments.

5.3.2 Key Elements Influencing Population Change

The rate at which the state and county grows economically and in population is influenced by economic, social, and geographic factors. The availability of jobs, education opportunities, and qualified persons to fill local employment needs influence population growth. Local and regional infrastructure capacity such as roads, public transportation, and utilities, and the availability of water and other natural resources will also affect the area's ability to diversify its citizen base and attract business.

The following elements were evident in Storey County over the past two decades and are expected to remain influential factors over the next 20 year period:

Factors Limiting Potential Growth

- Available water
- Transportation/connectivity
- Capacity for public services
- Access to higher education and training
- Limited low-cost housing
- Declining family households w. children

Factors Contributing to Potential Growth

- Overall job growth
- Growing economic diversification
- Local quality of life
- Positive State and local tax climate
- Proximity to large metro/industrial areas
- Continued in-migration of retirees

Economic Development

Storey County's population has grown at a rate somewhat slower than its neighboring counties. Like other counties in western Nevada, however, a significant portion of its growth was from retirees arriving from out-of-state. Disproportionate growth by this sector limits available workforce and other human resources needed by existing and prospective businesses. This trend also causes lower career opportunities for new working-age families and young generations desiring to remain living in their home-county.

Changing this demographic trend will depend largely upon the ability of the county to attract and retain business. Over the past decade the county has endeavored to diversify its economy, provide education and training opportunities, and work collaboratively with regional entities to improve economic conditions in the county and Nevada. Its efforts have yielded success. Between 2000 and 2014, Storey County attracted over 100 large businesses, including many Fortune 500 companies, and created a diversified commercial and industrial employment base for about 5,000 people with several thousand more being hired in the next couple years. Most of these companies are located at the Tahoe-Reno Industrial Center in McCarran.

Economic trends in Virginia City remain centered on tourism and hospitality and promote mostly seasonal, part-time, and low-wage jobs. Mining, however, in the past few years has become a substantial contributor to medium- and high-wage jobs on the Comstock and nearby communities. Approximately 150 jobs in 2013 were provided by mining and aggregate business in Storey County. Because the success of mining, particularly precious metal mining, is strongly linked to the commodities market, it is not clear how long this sector will remain influential in the local economy and population trends.

Housing

Economic and employment growth and the availability of housing will affect the rate at which the county's projected population may deviate from the Demographer's eighteen-year forecast. Between 2000 and 2010, the county enacted land use policy decisions on in-fill residential development and two large-scale planned unit development proposals. The county's actions to provide for residential growth conformed to the 1994 master plan and are indicative of the pattern of growth that may be permitted over the forecasted period of this master plan.

Between 2000 and 2010, the county issued 192 residential building permits, resulting in an 11 percent expansion in countywide housing availability. With exception of several special use permits issued for single-family residents in remote parts of the county (one per 40 acres with special use permit as allowable by zoning and the master plan) all were issued for in-fill development in existing population centers. Storey County's treatment of two proposals for planned unit developments in 2006 and 2007 also exemplify its position on balancing housing and population needs with policy and sustainability.

In 2006, a zone change for the Painted Rock mixed-use development was approved. The tentative proposal included a wide-range of residential and commercial uses combined into one cohesive mixed-use development. The location, scale, and design of the proposal were key elements in determining its conformance with the 1994 master plan and the potential positive and negative impacts that it may have on the county.

The opposite occurred in 2007, however, when the county denied a master plan amendment request for a 17,000 home development – named “Cordevista” – approximately two miles north of the Highlands. The planning commission's findings for denial cited the proposal's non-compliance with the master plan and zoning ordinance, inadequate evidence of available water for the development, and the potential for population growth beyond the county's ability to provide necessary services. The county prevailed in litigation against it by the developer in the District Court and the Nevada Supreme Court.

Interconnectivity

Geographic barriers and the interrelationship between each community in the county and its employment centers is an important factor in determining population forecasts. Distance, time, and geographic barriers between most communities in the county currently separate job opportunities from most of its residents.

Most of the county's employment growth in the past decade took place at McCarran. Lockwood is the primary residential center for this area with the remaining River District providing a much lesser degree of housing opportunities for workers. While some housing opportunities currently appear available, including availability of affordable housing, job growth at McCarran may ultimately exceed housing availability in the River District.

Challenging and remote geography and long drive distances separate the county's other population centers from the jobs provided at McCarran. Mixed-use residential and commercial development that may occur at Painted Rock is considered a potential factor that may contribute to increased working-age families in the county and a resultant deviation from countywide population forecasts. Countywide transportation improvements such as completion of USA Parkway may also contribute

to population growth in the county by providing interconnection between McCarran and other population centers in the county.

Water

The availability of water is a critical determinate in the rate at which population may expand and to the extent to which the growth rate in the county may deviate from the Nevada State Demographer's projections. As discussed in Chapter 10, the patterns of success and failure of groundwater development and limitations on other water sources in Storey County imply that new development, especially residential development—should be approached very carefully. In 2008, Storey County voters passed Advisory Questions 1 and 2 advising the county to require all future applicants for master plan amendments, zone map amendments, planned unit developments, and other applications involving residential development to identify and obtain permits for water resources prior to application.

The availability of water is just as important for the county's existing residential communities – particularly the Highlands and Mark Twain, as it is for potential new developments. Because of inadequate groundwater resources for these communities, full build-out of the Highlands and Mark Twain is not likely possible without importing water from other basins and developing municipal water systems to serve new residents.

County Aging Demographics

With the average age in the county approaching 55 years of age, and shrinking family size and school enrollment, the county might put special attention to attracting a younger demographic. The younger demographic should increase birthrates in the county and increase school enrollment per capita. The Painted Rock potential mixed-use development should help address this issue in part of the county. Further policy consideration should be entertained for the rest of the county.

There are a few ideas to help increase the appeal of Storey County to a younger demographic while not adversely impacting the existing communities of the county. The use of “in-law” quarters is an acceptable practice in the county right now. It should be encouraged and expanded to allow family members to share land and housing. This should help younger generations to establish themselves in the county. Other ideas include affordable cell coverage and internet access, convenient access to good paying jobs, and cultural and recreational opportunities. As opportunities are presented to implement these ideas, the county should encourage them.