



DEPARTMENT OF TAXATION

Highlights of the 2019 Nevada Population Projections

Nevada Association of Counties

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Jeff Hardcastle
Nevada State Demographer
Nevada Department of Taxation

Topics I will be covering

- The highpoints from the October 1, 2019 Projections
- Underlying Assumptions
- Recent Historic Data
- Housing
- Risks to the projections

Senate Bill No. 150

1. Except as otherwise provided in subsection 3, a governing body shall develop and maintain a water resource plan that must include, without limitation:
 - (a) The identification of all known sources of surface water, groundwater and effluent that are physically and legally available for use in the community;
 - (b) An analysis of the:
 - (1) Existing demand for water in the community; and
 - (2) Expected demand for water in the community caused by projected growth; and**
 - (c) An analysis of whether the sources of water identified in paragraph (a) are of sufficient quality and quantity to satisfy the existing and expected demands described in paragraph (b).
 - (d) If the analysis required pursuant to paragraph (c) determines that the sources of water identified in paragraph (a) are not of sufficient quality or quantity to satisfy demands, a plan for obtaining additional water of sufficient quality and quantity.
2. **The governing body shall update the water resource plan at least once every 10 years**



Legislation and Governing Guidelines Regarding the Demographer

NRS 360.283 Annual determination of population of towns, townships, cities and counties; employment of demographer

- **Further Governance through Nevada Administrative Code**

NRS 360.289 Annual reports of projected population of counties.

- **2011 Legislation**
 - **Five year projections**
 - **20 year projections**
 - **age, sex, race and Hispanic origin estimates and projections.**

Key terms

- **Census** – Is an actual enumeration or counting of a group. Serves as benchmark to evaluate the estimates.
- **Estimate** - a statistic about a whole population for a previous reference period which is based on data
 - **Postcensal**
 - from the decennial census forward to the next census.
 - annual
 - **Intercensal** corrected estimates to account for most recent census, once a decade.
- **Projection** - statistic indicating what a value would be if the assumptions about future trends hold true (often drawing upon past movements in a population as a guide for the assumptions).

Nevada Jurisdictions Preparing Total Population Projections

State of Nevada – Annually

Southern Nevada Water Authority – Annually

In conjunction with –

- Clark County Comprehensive Planning**
- Regional Transportation Commission**

Truckee Meadows Water Authority (TMWA) – Annually

Used by Truckee Meadows Regional Planning Agency (TMRPA) in their biannual consensus forecast

Projection Methods

Both the Demographer and the Southern Nevada jurisdictions use the REMI (Regional Economic Models, Inc.) Model.

TMWA uses a regression model of population and water demand.

TMRPA averages the State Demographer, TMWA, Global Insight and Woods and Poole Projections

Nevada's REMI Model –

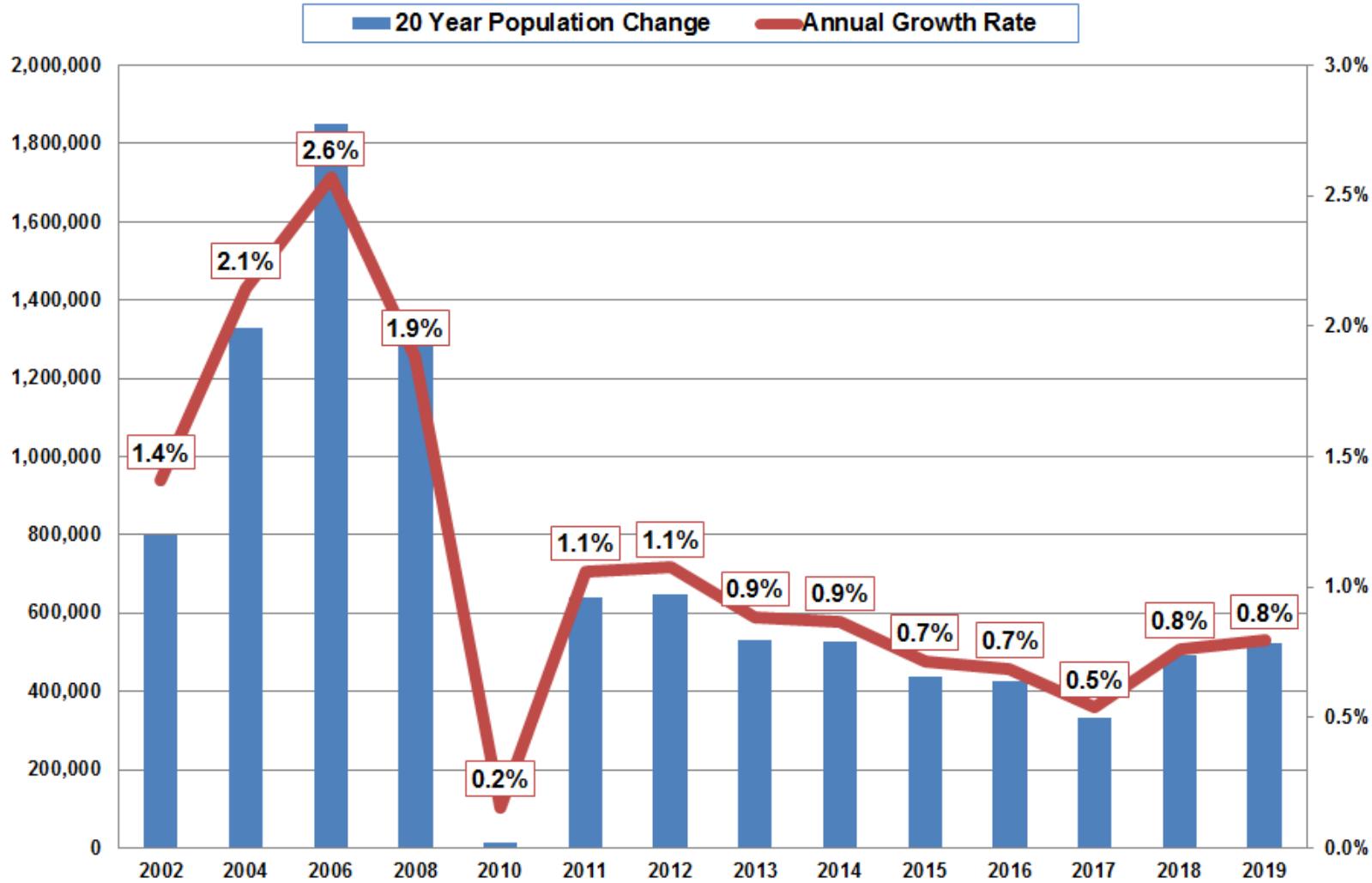
The REMI Model looks at:

The demographic and economic makeup of a county and how they interact.

The model also looks at how the counties in the model interact with each other and with the nation as a whole.

The data in model is based on national data sources primarily from the US Bureau of Economic Analysis and the Census Bureau

20 Year Population Projections for Nevada and Annualized Growth Rates Published From 2002 to 2019



2018 and 2019 Projections

- Both have a baseline forecast
 - Updated Employment
 - Assumed mining not dropping below historic average
 - Hotel growth as reported by LVCVA
- 2018
 - Tesla assumed to meet contracted employment of 6,500 by 2024 using model to account for construction and investment
 - Housing price shock in 2017
 - Clark – Relative housing price of 0.99 to the nation
 - Washoe – Relative Housing price of 1.28 to the nation
- 2019
 - No Housing Shock
 - Drops prices following shock that stimulates migration

Comparing the 2018 and 2019 20 Year Population Projections

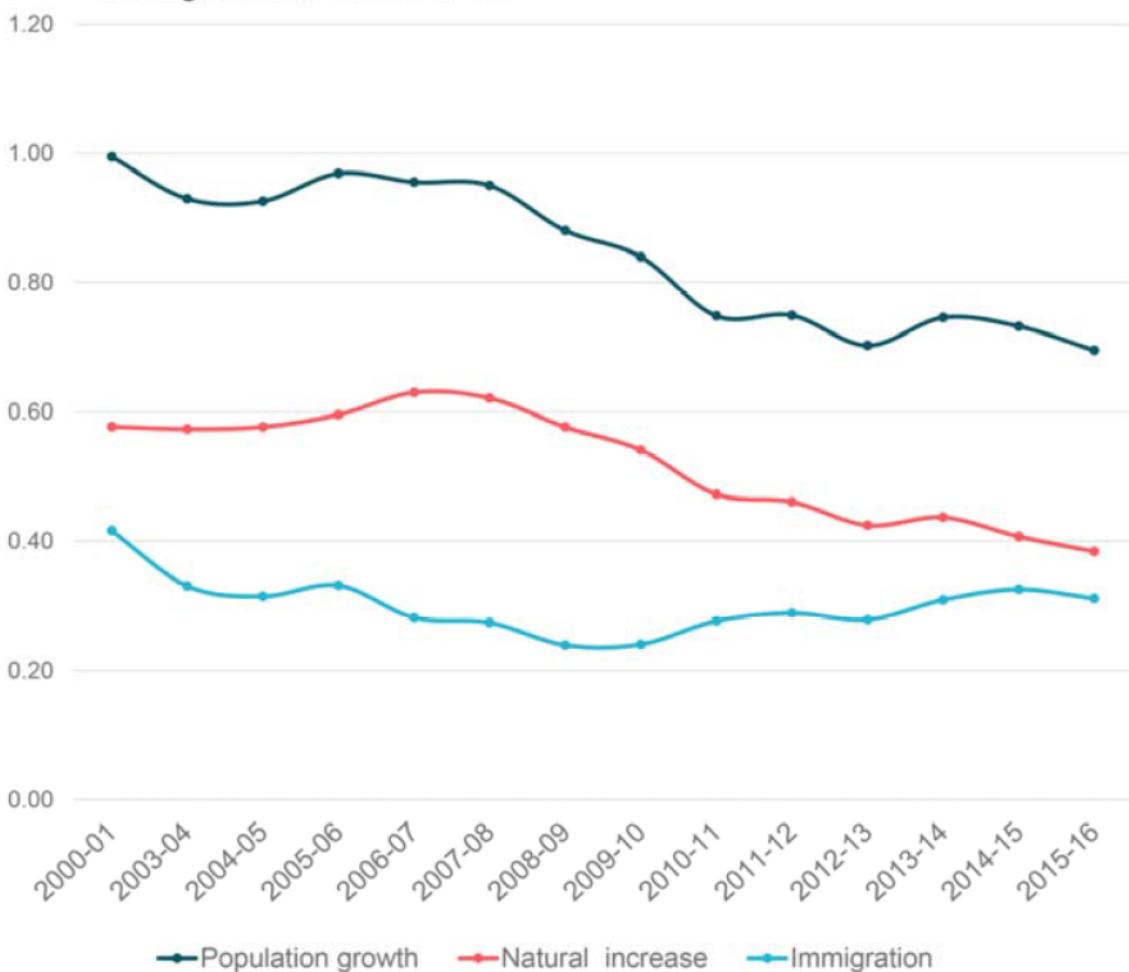
	2018 Projection	2019 Projection
Clark	409,189	395,572
Washoe	57,160	103,197
Carson City	8,056	1,418
Douglas	3,137	1,061
Lyon	1,158	12,376
Storey	1,648	2,338
Elko	3,281	1,323
Nye	4,559	7,127
Balance of State	2,803	95

There continues to be differences between the growth in population, school enrollment, NV Energy counts, GDP and Employment.

Nevada Rates of Change 2014 to 2018

	2014 to 15	2015 to 16	2016 to 17	2017 to 18	2014 to 2018 Average
Population Change	1.80%	1.80%	1.80%	2.10%	1.90%
School Enrollment	1.23%	1.30%	2.15%	0.30%	1.24%
NV Energy Premise Counts	2.00%	1.24%	1.81%	1.66%	1.68%
GDP Change	4.20%	2.40%	2.50%	3.20%	2.70%
Employment Change	3.40%	3.80%	2.90%	3.20%	3.30%

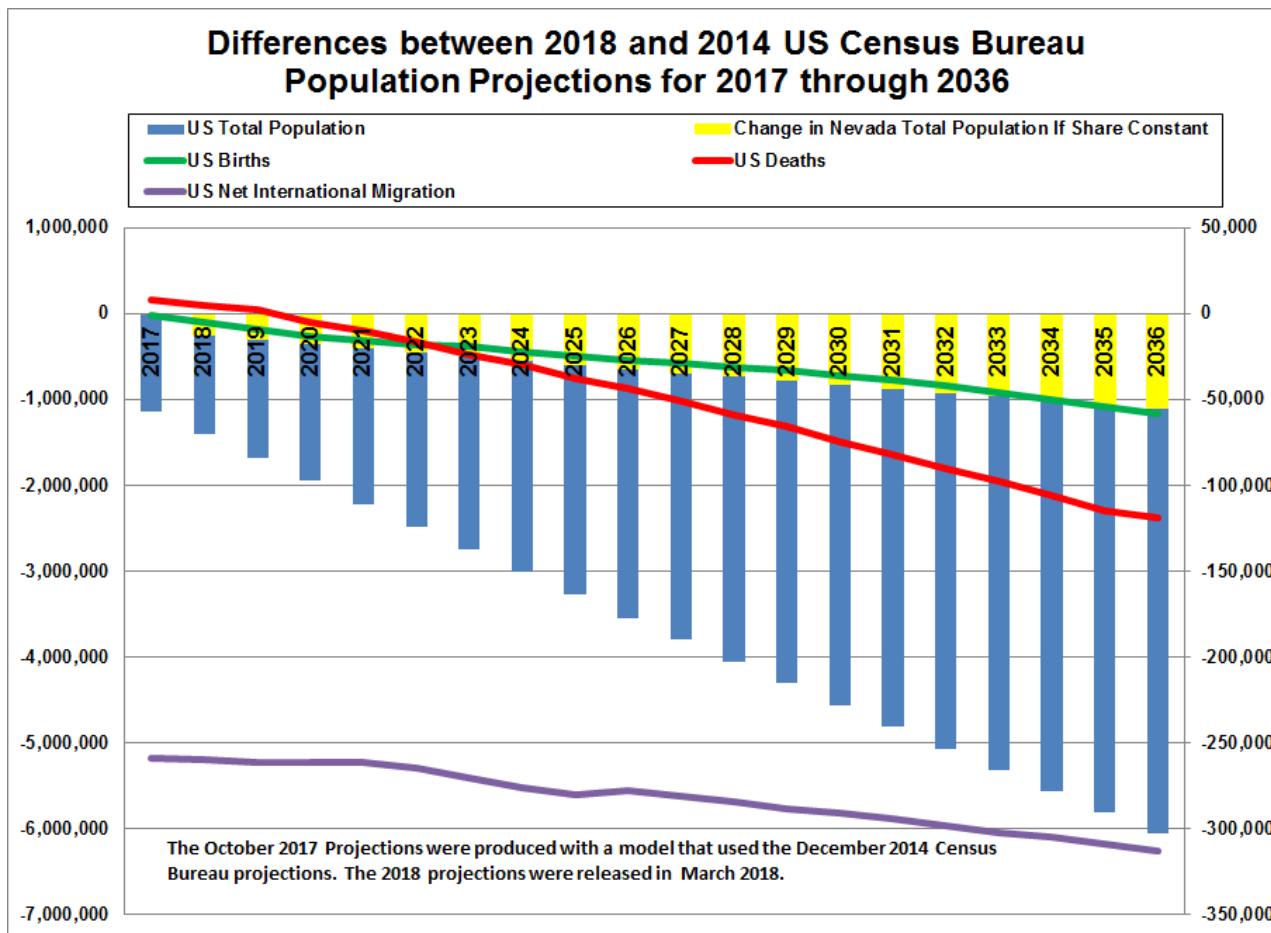
Figure 2. U.S. rates of annual growth, natural increase, and immigration, 2000-2016



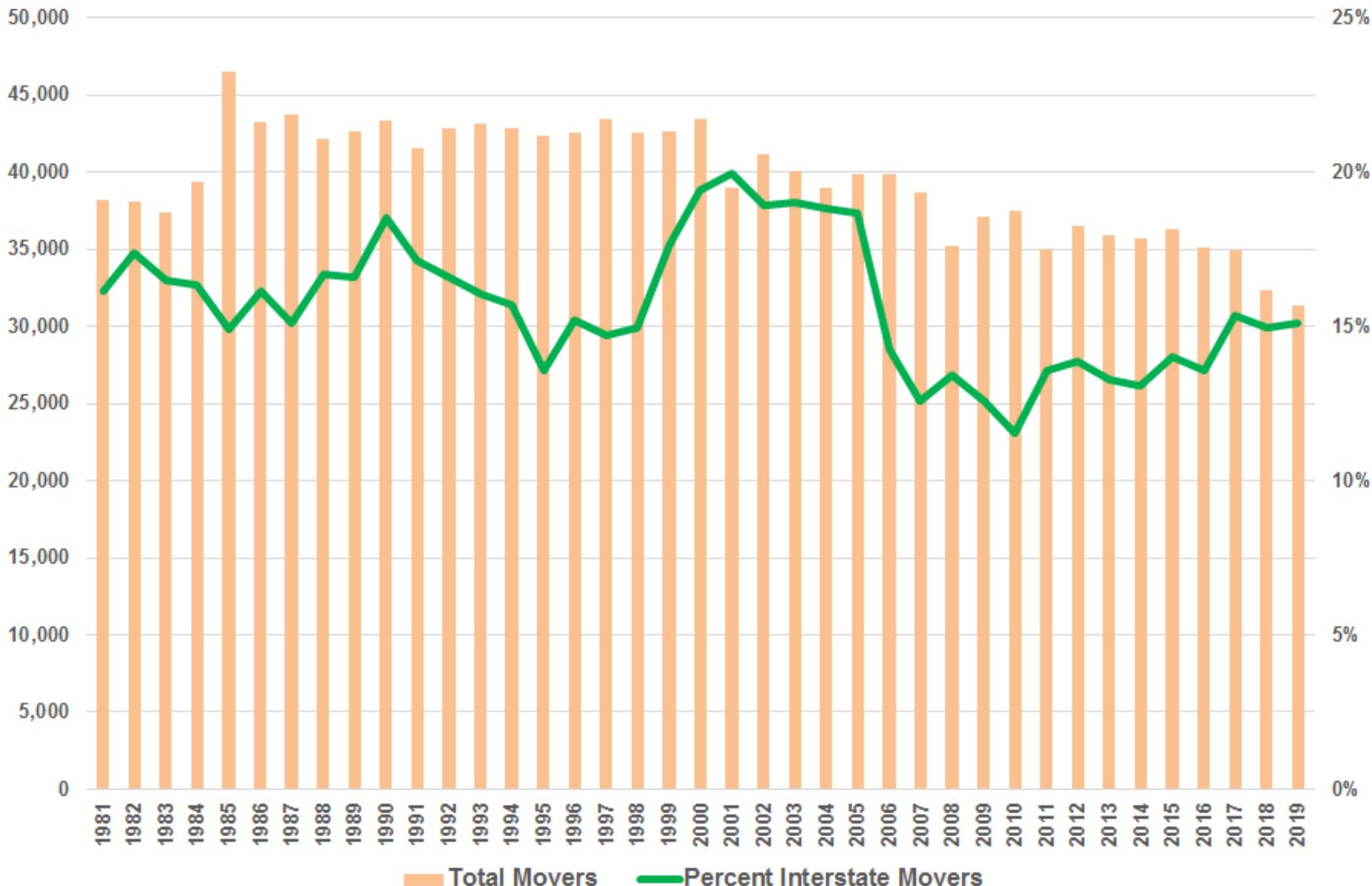
Source: William H Frey analysis of US Census Bureau estimates, 2000-2016

B | Metropolitan Policy Program
at BROOKINGS

Looking toward the 2018 20 Year Projections, the Census Bureau has issued a new set of national projections. This could impact Nevada projections depending on how and when they are incorporated into the REMI Model.



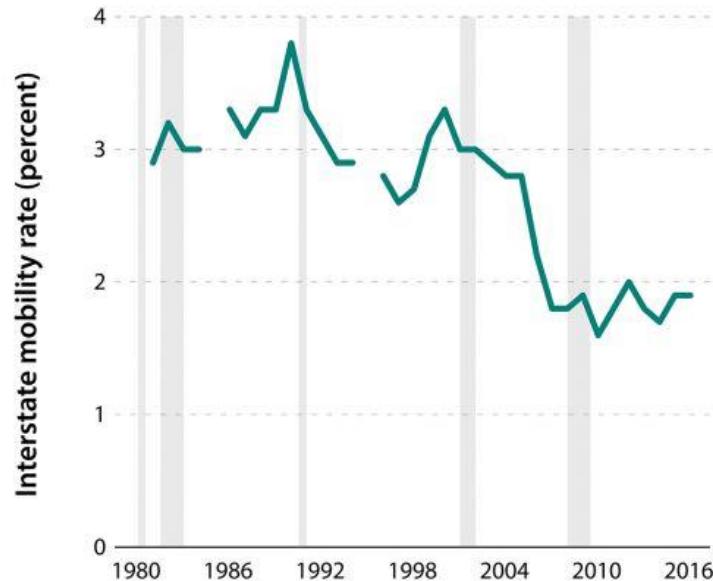
Current Population Survey Estimate of Total Movers (in 1,000's) 1981 to 2019 with Percentage of Interstate Movers



Interstate mobility and job change has slowed down over time.

Workers have become less likely to move to a new state or job.

Interstate Mobility Rate, 1980–2016



Source: Current Population Survey Annual Social and Economic Supplement, BLS (1980–2016); authors' calculations.

Note: Restricted to prime-age respondents, ages 25–54. Data were not available for 1985 and 1995. Shaded bars indicate recessions.

Worker Reallocation Rate, 1990–2013



Source: Davis and Haltiwanger (2014).

Note: The worker reallocation rate is defined as the quarterly sum of hires and separations as a share of employment. For more information, see Davis and Haltiwanger (2014). Shaded bars indicate recessions.

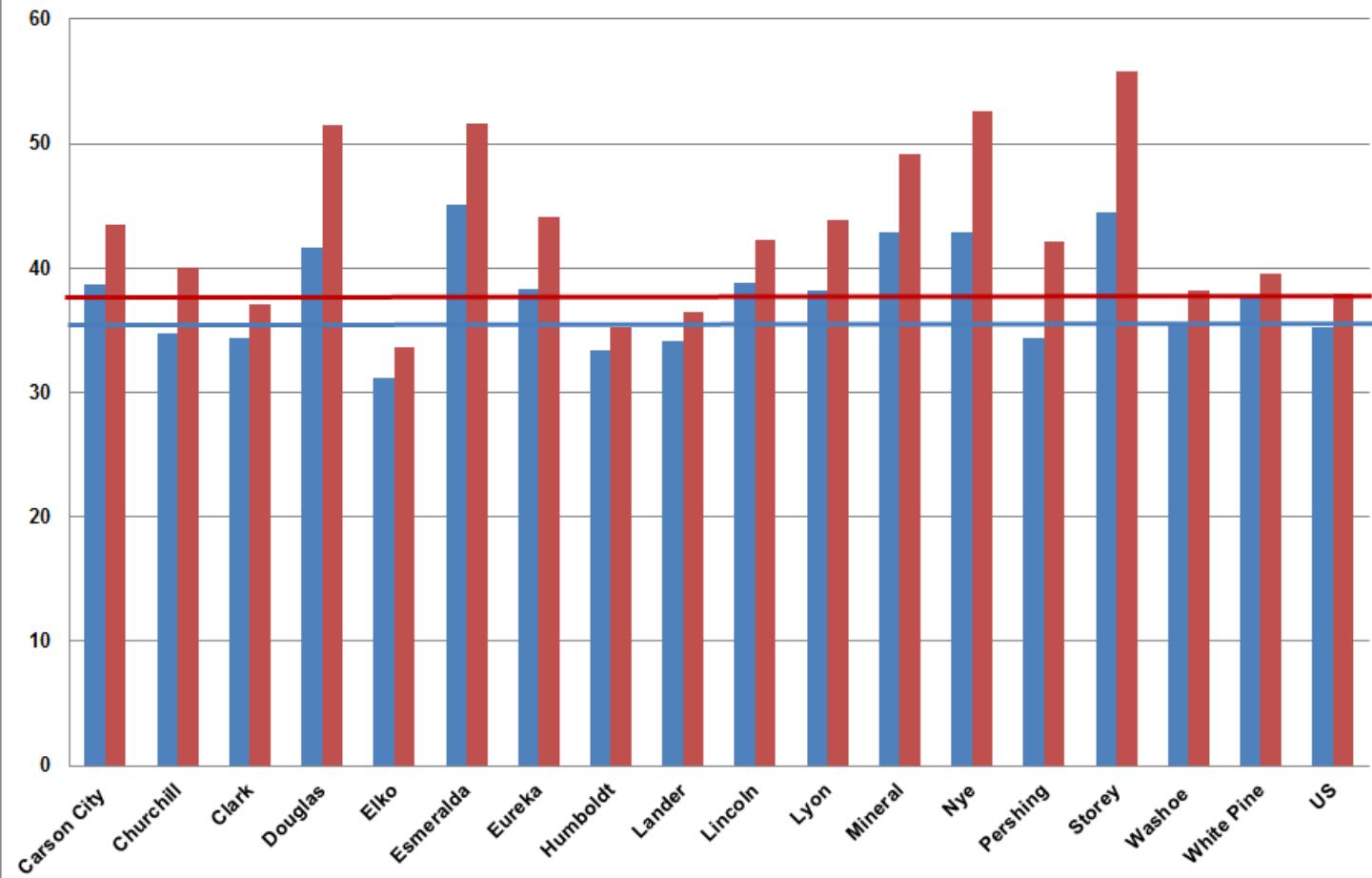
Change In Population By Selected Age Groups 2014 to 2018

	Nevada Total	Clark	Washoe
Under 19 years	30,982	29,681	2,710
20 to 24 years	-3,827	-2,009	-445
25 to 54 years	78,431	67,747	10,742
55 to 64 years	33,623	27,601	3,692
65 and over	76,171	54,364	12,543
Ratio of Population 55 and Over to Prime Working Years	1.4	1.2	1.5

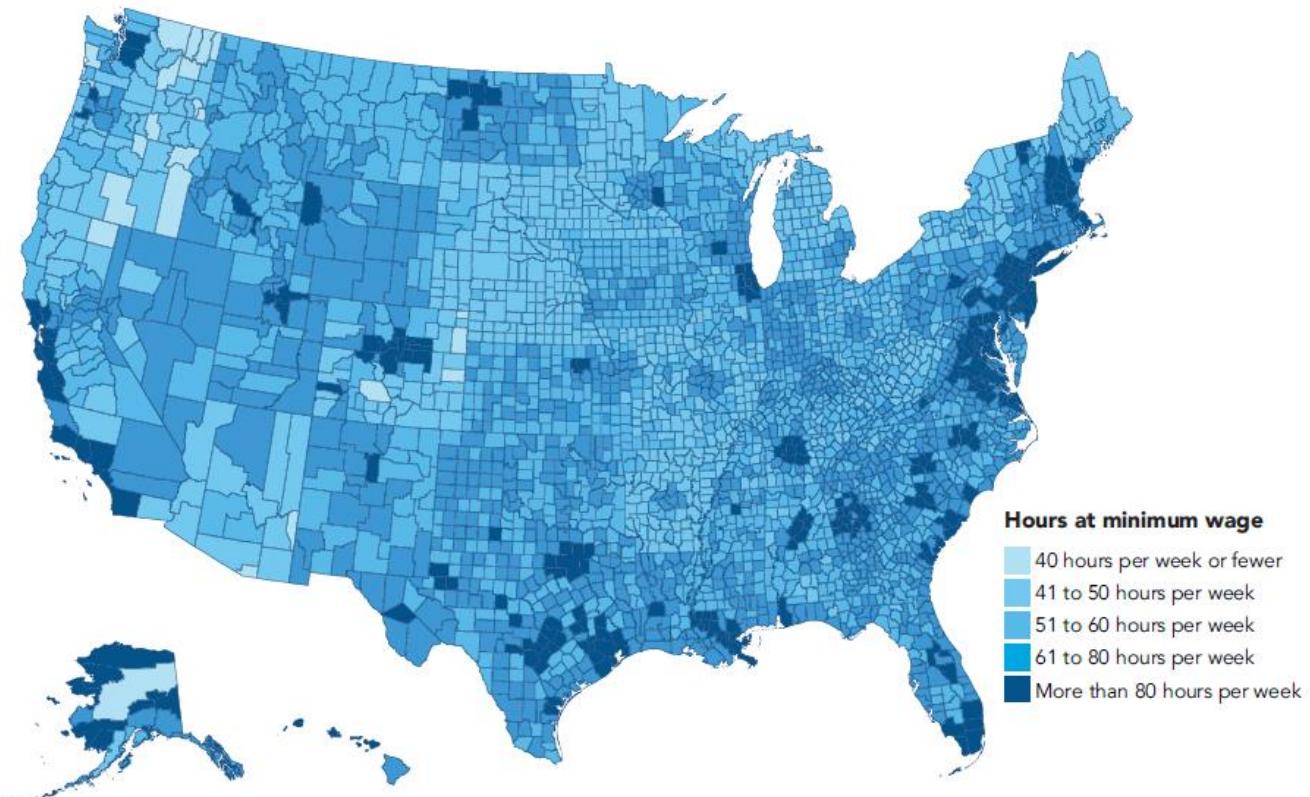


Median Age for 2000 and 2016 for Nevada Counties

■ 2000 ■ 2016



2018 HOURS AT MINIMUM WAGE NEEDED TO AFFORD A ONE-BEDROOM RENTAL HOME AT FAIR MARKET RENT



*Note: New England states are displayed with HUD Fair Market Rent Areas. All other states are displayed at the county level. This map does not account for the 37 localities with minimum wages higher than the standard state or federal minimum wage. No local minimum wages are sufficient to afford a one-bedroom rental home at the Fair Market Rent with a 40-hour work week. The geographic variation of Oregon and New York's state minimum wages are reflected at the county level. Puerto Rico is excluded due to wage comparability issues.

NEVADA

STATE
RANKING

#24*

In **Nevada**, the Fair Market Rent (FMR) for a two-bedroom apartment is **\$966**. In order to afford this level of rent and utilities — without paying more than 30% of income on housing — a household must earn **\$3,222** monthly or **\$38,660** annually. Assuming a 40-hour work week, 52 weeks per year, this level of income translates into an hourly Housing Wage of:

\$18.59
PER HOUR
STATE HOUSING WAGE

FACTS ABOUT NEVADA:

STATE FACTS

Minimum Wage	\$8.25
Average Renter Wage	\$16.84
2-Bedroom Housing Wage	\$18.59
Number of Renter Households	465,914
Percent Renters	45%

MOST EXPENSIVE AREAS

HOUSING WAGE

Lander County	\$19.98
Douglas County	\$19.50
Reno MSA	\$18.79
Las Vegas-Henderson-Paradise MSA	\$18.71
Humboldt County	\$18.15

MSA = Metropolitan Statistical Area; HMFA = HUD Metro FMR Area.

* Ranked from Highest to Lowest 2-Bedroom Housing Wage. Includes District of Columbia and Puerto Rico.

90

Work Hours Per Week At
Minimum Wage To Afford a 2-Bedroom
Rental Home (at FMR)

72

Work Hours Per Week At
Minimum Wage To Afford a 1-Bedroom
Rental Home (at FMR)

2.3

Number of Full-Time Jobs At
Minimum Wage To Afford a
2-Bedroom Rental Home (at FMR)

1.8

Number of Full-Time Jobs At
Minimum Wage To Afford a
1-Bedroom Rental Home (at FMR)

Two bedroom FMR

\$966

One bedroom FMR

\$772

Rent affordable at
area median income (AMI)

\$1,656

Rent affordable with full-time job paying
mean renter wage

\$876

Rent affordable at 30% of AMI

\$497

Rent affordable with full-time job
paying minimum wage

\$429

Rent affordable to SSI recipient

\$236

\$0 \$500 \$1,000 \$1,500 \$2,000



DEPARTMENT OF TAXATION

Questions?

**Jeff Hardcastle,
Nevada State Demographer
Nevada Department of Taxation
Reno Office: 4600 Kietzke Lane, Building L Suite 235 Reno, NV 89502
(Direct) (775) 687-9961
jhardcastle@tax.state.nv.us**