

**MINUTES OF THE MEETING OF THE
ECONOMIC FORUM
(NRS 353.225 – NRS 353-229)
October 13, 2022**

The meeting of the Economic Forum (created by Senate Bill 23, 1993 Legislative Session) was called to order by Chair Linda Rosenthal at 8:41 a.m. on October 13, 2022, online and in Room 4401 of the Grant Sawyer Office Building, 555 East Washington Avenue, Las Vegas, Nevada. The meeting was videoconferenced to Room 4100 of the Legislative Building, 401 South Carson Street, Carson City, Nevada.

ECONOMIC FORUM MEMBERS PRESENT:

Linda Rosenthal, Chair
Jennifer Lewis, Vice Chair
Michael Crome
Marvin Leavitt
Vincent Zahn

STAFF:

Russell Guindon, Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB
Michael Nakamoto, Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB
Susanna Powers, Deputy Fiscal Analyst, Fiscal Analysis Division, LCB
Christian Thauer, Deputy Fiscal Analyst, Fiscal Analysis Division, LCB
Anna Freeman, Committee Secretary, Fiscal Analysis Division, LCB
Jason Gortari, Executive Branch Economist, Governor's Office of Finance

EXHIBITS:

[Exhibit A:](#) Meeting Packet and Agenda
[Exhibit B:](#) Agenda Item VII – Southern Nevada Real Estate Update, Applied Analysis
[Exhibit C:](#) Agenda Item VIII – Reno-Sparks Economic Outlook, University Center for Economic Development
[Exhibit D:](#) Agenda Item IX – Tourism Trend Update, Las Vegas Convention and Visitors Authority
[Exhibit E:](#) Agenda Item IX – Reno-Sparks Convention and Visitors Authority
[Exhibit F:](#) Agenda Item XIII – Report on the Forecast Accuracy of the Economic Forum for Selected Revenues, Fiscal Analysis Division

I. ROLL CALL.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB), called roll. All members were present.

II. OPENING REMARKS.

CHAIR ROSENTHAL made housekeeping remarks.

III. PUBLIC COMMENT.

There was no public comment.

IV. APPROVAL OF THE MINUTES OF THE JUNE 9, 2022, MEETING.

MR. CROME MOVED TO APPROVE THE MINUTES OF THE JUNE 9, 2022, MEETING.

MS. LEWIS SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

V. PRESENTATION ON THE STATE EMPLOYMENT OUTLOOK.

DAVID SCHMIDT (Chief Economist, Research and Analysis Bureau, Department of Employment, Training and Rehabilitation):

Employment has fully recovered. February 2020 employment levels were surpassed in June 2022 as shown on page 30 of the meeting packet ([Exhibit A](#)). There was strong employment growth in June and July, but August employment growth was lower. That volatility is typical when comparing month-to-month changes, especially after months of strong growth.

Overall, Nevada is 11,000 jobs ahead of February 2020 levels. The pace of the recovery has been rapid compared to either the 2001 or 2007 recession. Even after the initial surge in unemployment due to the closure of nonessential businesses, jobs were added at a rapid pace. Over the last year and a half, Nevada has been in the top two states for job growth.

Employment is above February 2020 levels for most industries (page 31, [Exhibit A](#)). The casino hotel industry is a major exception. Employment for the leisure and hospitality and accommodation and food services industries is still down by approximately 30,000 jobs. When considered separately, the food services industry is approximately 10% above its February 2020 employment level. The accommodations industry is at approximately 82% of its February 2020 employment level.

The following major areas of the economy have not recovered and are still below their February 2020 levels:

- Administrative and waste services, including temporary health workers.
- Other services, which is typically strongly tied to the leisure and hospitality industry, particularly in Las Vegas.
- State and local government.

Growth in the transportation, warehousing, and utilities sectors is far above where it had been. There has been significant growth in all goods-producing industries including mining, construction, and manufacturing; professional and technical services; and healthcare.

The chart on page 32 shows all employment industries in the state as of August 2022 ([Exhibit A](#)). The color of each box indicates the level of recovery in that industry. Areas that are darker red are less recovered, and areas that are brighter green are more recovered. The average weekly wage in 2021 is shown for each industry. Many of the industries showing recovery are paying above-average wages, such as the financial, manufacturing, wholesale trade, construction, and health care industries. Even transportation, warehousing, and utilities, for which pay is slightly less than average, pay considerably more than the accommodation industry's \$840 per week. For comparison, the average weekly wage in 2021 was approximately \$1,140.

There are some exceptions: food services pay is a little under \$500 per week and government, an area that has not recovered, tends to pay above-average wages of \$1,450 per week. On average, the areas that are growing are also areas that tend to pay more, which impacts the average wage in the state.

MR. ZAHN:

Does this information include both full-time and part-time employees?

MR. SCHMIDT:

Yes. This data comes from the U.S. Bureau of Labor Statistics' Quarterly Census on Employment and Wages. The average wage is calculated by taking all wages paid in an industry, divided by average employment in a quarter, which is then divided by 13. There is no assumption about the number of hours worked. The data includes an employee who may have worked five weeks rather than eight weeks, because that employee would have hours in more than one quarter.

The casino hotel industry experienced strong recovery at the end of 2021 and the beginning of 2022, but the trend has since flattened for both the Reno and Las Vegas areas (page 33, [Exhibit A](#)). Of all employment estimates, this is the most suspicious. The U.S. Department of Labor has reported estimates will be revised upward; however, these are currently our best monthly estimates.

Transportation, warehousing, and utilities experienced stronger increases in the Las Vegas area than the Reno area (page 34, [Exhibit A](#)). There has been real growth in this industry, which is driven by activities in the Las Vegas area.

Manufacturing employment has increased steadily in both Las Vegas and Reno and is at an all-time high in both areas (page 35, [Exhibit A](#)). Total employment in each of these areas is approximately 30,000 workers. Construction-driven manufacturing of gypsum drywall and cabinets in the Las Vegas area was impacted more by the Great Recession; until recently, Las Vegas was below the peak employment in this sector prior to the Great Recession but has now surpassed that total employment.

Construction employment is above pre-pandemic levels in both Las Vegas and Reno, but below Great Recession levels. It is encouraging that there has not been the same rapid acceleration and boom in construction employment that was experienced before the Great Recession. Nevada's current economy does not have an overweighted emphasis on the construction industry, which means the state is less exposed now than it was during the Great Recession.

Unemployment is low, currently 4.4%, but 0.7% higher than the U.S. as a whole (page 37, [Exhibit A](#)). Unemployment in Nevada is relatively high compared to other states, but this is good news for the overall health of the state's economy. States like Minnesota, New Hampshire, Utah, and Nebraska with approximately 2% unemployment have a very tight labor market with a low number of people transitioning between jobs. That will likely drive wage pressure and create challenges in recruiting and finding workers (page 38, [Exhibit A](#)). Nevada unemployment is below 5%, which is a low historical unemployment rate.

Nevada's labor force participation rate remains low (page 39, [Exhibit A](#)). The gray ribbon on the chart shows the 20th to 80th percentile; Nevada is near the lower end of the middle range, with overall labor force participation of approximately 60%.

There has been a long-term decline in employment among all states, which is driven by long-term demographic shifts. That has been a steady trend rather than a sudden shift due to specific impacts of the pandemic.

The charts on pages 40-42 show pieces of the total average weekly wages. The chart on page 40 is a monthly estimate of wages using current employment statistics ([Exhibit A](#)). Weekly wages are estimated using average hours worked and average hourly wage. This data excludes government employment. The average weekly wage in Nevada is \$996, which is ranked 32nd among the states, but it has been growing at a relatively rapid pace of 6.7%, which is ranked 6th among the states as of August 2022.

The number of hours worked in Nevada has declined 1% over the year, which is right in the middle of the experience of all states (page 41, [Exhibit A](#)). Most states have experienced a decline, which is likely driven in part by the rising hourly wage. Nevada's hourly wage has been increasing at a relatively rapid pace of 7.8%, which ranked 4th among the states for all private sector workers.

Interest rates have been rising rapidly. The chart on page 43 shows the effective federal funds rate over the last 40 years ([Exhibit A](#)). As interest rates have risen, the yield curve is inverted; short-term rates are higher than long-term rates (page 44). This is often seen as a potential indicator of a recession. Some of the more dramatic recent headlines predicting a recession are shown on page 45.

In contrast, unemployment claims in Nevada are low (page 46, [Exhibit A](#)). The left axis of this chart is logarithmic; each line is a doubling, and each label is a quadrupling in the level of unemployment claims. These are new unemployment claims filed compared to total employment in the state. The impact of the pandemic is evident. Approximately 64 claims per 1,000 workers were filed per week. This is several orders of magnitude larger than even the Great Recession or the effects of September 11, 2001. Currently, Nevada has approximately 1.3 claims per 1,000 workers filed per week. Through the 1990s, this measure hovered at approximately 3 claims per 1,000 workers per week. Nevada's unemployment claims are approximately half of what they were during the decade-long economic boom. Relative to the number of workers in the economy, there are a very small number of people filing claims in any given week.

Page 47 shows several different measures from the unemployment insurance program ([Exhibit A](#)). For many of these measures, the August 2022 numbers and the 12-month average are close. This indicates that over the past year, unemployment insurance activity has been stable, without huge spikes or drop-offs. The level of initial claims is a few hundred higher, and the total level of weeks paid is a few hundred lower. The total dollar amount paid is a little higher, but that is in part because the average benefit amount has risen. The most dramatic number is the exhaustion rate, which is the share of unemployed workers who used all their benefits prior to exiting the program. Typically, this has been approximately 30%, even in good times. An exhaustion rate of approximately 21% is incredibly low by historical standards. This indicates there are many opportunities for people to find work.

Page 48 shows quit rates provided by the U.S. Bureau of Labor Statistics ([Exhibit A](#)). Quits as a share of total separations show separations that are voluntary versus layoffs and discharges. That indicator is the highest it has been in the history of the unemployment insurance program, both in Nevada, and in the U.S. That shows workers feel a great deal of confidence about leaving work to either retire or seek other work.

The chart on page 49 compares hire rates and job opening rates over the past year, which, in many industries appears to be sliding ([Exhibit A](#)). This is also true of the quit rate shown on page 51. The level of quit is still high as a share of total separation, but it appears to be shrinking a bit.

Employment is shifting from rapid recovery to slower economic growth based on underlying trends such as population size and normal factors that drive employment, as opposed to the recovery of the jobs lost during the pandemic. The level of unemployment is normal and consistent with prior periods of economic strength. Unemployment claims are low and quit rates are high. The labor market is tight, though it does appear to be loosening a bit. National hiring rates and job opening levels are coming down a bit.

The labor market is still strong. There appears to be a bit of softening, but there are no imminent signs of rapid deterioration in the economy at this point.

MR. LEAVITT:

In two months, the Economic Forum will estimate the amount of revenue collections for the next two and a half years to determine the state's budget. Given everything you have seen, what do you expect to happen over that period?

MR. SCHMIDT:

I tend to be an optimistic person with a "glass half full" perspective. Obviously, the rate of inflation is concerning. The Federal Reserve is trying to slow down the very rapid pace of economic activity. Nevada is still in a strong place. It is possible for unemployment to be too low, and the job market to be too tight, which would create an overall burden on economic activity. Nevada is in a better spot in that regard than a number of other states.

I recently prepared projections for unemployment benefits and that impact to the Unemployment Trust Fund for a two-year period. I did not include factors indicating a recession or expectations that the rate of benefit payments would rise. I expect to see rising costs in terms of total wages. Average wages and benefits would rise due to increases in wages over the next two years, but a major downward shift is not expected. The rate of inflation and the pace of wage increases are expected to slow but will still affect the economy for at least the next year.

There is a difference between loosening conditions and going into a decline in overall economic activity. For the next few years, I expect loosening with continuing trend growth rather than rapid growth. For example, I expect 2% employment growth over the next several years instead of the current 5% growth rate. I expect slower employment growth at a more stable and sustainable pace that is not recessionary or overly accelerated.

CHAIR ROSENTHAL:

Page 31 of the meeting packet shows the pace of recovery for different industries ([Exhibit A](#)). Both the leisure and hospitality and accommodation and food service industries still have quite a way to recovery. Do you have insight as to why those businesses are recovering more slowly? Are those industries slow to hire, or can they truly not find the workers?

MR. SCHMIDT:

There is a little of both taking place. There have been structural changes in these industries over the last two years that reduced the level of staff needed to maintain operations. I do not expect a return to previous employment levels. There is a very high level of job openings and hiring taking place in the leisure and hospitality industry. Data is not available at the state level, but national data can be used to set expectations locally. It is likely that there is still a desire to hire people. Gaming properties are posting job openings and attempting to recruit at job fairs. There is a struggle to attract and maintain workers because there are high levels of openings, hires, and quits in that industry.

Even if there were an infinite number of available workers, the industry would not return to pre-pandemic levels of employment due to changes adopted by employers during the pandemic shutdown, and since worked into their regular business practices, which reduced the overall demand for employees. Casino hotel industry hiring in Las Vegas peaked in 2006 and in Reno and Sparks in 1997. There has been a flat trend in terms of employment in those industries. Because of the shift, I would not expect hiring to return to where it was, but it will probably settle at a lower level in the long term. Our long-term projections are for accommodations to increase to pre-pandemic levels by 2030, but over the next few years it will remain well below the February 2020 level.

There was no further discussion on this agenda item.

VI. PRESENTATION ON THE STATE POPULATION OUTLOOK.

MATTHEW LAWTON (State Demographer, Department of Taxation):

This presentation will cover the components of population change as they relate to Nevada, some of the state's demographic characteristics, and a brief overview of the most recent population projections.

Population growth is estimated by adding natural increase (total births minus total deaths for the period) and net migration (immigration minus emigration for the same period) to the previous population level (page 58, [Exhibit A](#)).

Headlines earlier this year reported that the U.S. birth rate increased for the first time since 2014 (page 59, [Exhibit A](#)). The increase ended a seven-year slide, but it was only 1%.

The fertility rate nationally has been on a steady decline with a small bump just prior to the Great Recession. Table 1 on page 60 shows total births in the U.S. and the fertility rate, which is births per 1,000 women of childbearing age ([Exhibit A](#)). Both show a gradual decline. The trend shows women are waiting longer to have fewer babies. Figure 2 on page 60 shows that since 1990 women have delayed births into their late 20s and 30s, and overall are giving birth to fewer children. The trend in Nevada over the last two decades mirrors the national trend; normalized for the population of women of childbearing age, there is a steady decline in Nevada's fertility rate.

The top chart on page 64 shows total deaths annually in Nevada over the last decade ([Exhibit A](#)). Normalized for population, over the last decade Nevada had around 8 deaths per 1,000 people, until the COVID-19 pandemic. The lower chart shows the impact of the pandemic on total deaths over the last two years.

The picture becomes clear when then number of deaths is subtracted from the number of births to derive the natural change (page 65, [Exhibit A](#)). In 2019, eight counties in Nevada were already reporting a negative natural change (more deaths than births) with one reporting a single digit increase in net births. By 2020 the number had increased to nine counties with zero or negative natural change, and two with single-digit birth

increases. As of 2021, 13 counties have negative natural change with one reporting single-digit net births. Only Clark, Elko, and Washoe Counties have significant births over deaths. Obviously COVID has impacted the last two years, but the pre-pandemic trend shows an obvious decline in natural growth in our state.

Domestic migration (population shifts within the U.S.) has been the primary driver for population growth in Nevada for the past several decades (page 66, [Exhibit A](#)). There is no direct measure of these shifts. However, the Internal Revenue Service publishes data based on tax returns, which tends to lag by a couple of years. The latest dataset published in May 2020 shows migration patterns based on returns filed between 2019 and 2020. Although this data does have its issues, it offers a glimpse of domestic migration patterns. Most counties in the state showed net population gains from 2019 to 2020; however, compared to the previous period from 2018 to 2019, there was nearly a 10% decline in net inflow to the state year-to-year.

The declining trend in domestic migration must be considered within the context of the pandemic; however, the decline is also supported by other subjective measures. One of the more interesting sources are the annual movers' studies published by various moving companies. For example, U-Haul's latest figures indicate Nevada dropped from #8 for inbound moves in 2020 to #29 in 2021. United Van Lines has consistently shown Nevada slipping since 2018, down to #31 nationally for inbound moves in 2021. North American Van Lines reports that in 2021 outbound moves have overtaken inbound moves in Nevada for the first time since 2012.

Another part of the migration formula is international migration, or population moving in and out of Nevada from other countries. The U.S. Census Bureau provides an estimate of net international migration for the U.S. in its annual population estimates. The estimates are allocated as a share for each state. Toward the end of the last decade the estimates showed a significant decline overall in international migration, which is reflected in the chart on page 68 ([Exhibit A](#)). However, there are indications the decline may have been overestimated. Due to pandemic delays and other administrative issues, the U.S. Census Bureau has not yet published its final intercensal series of population estimates for 2010 to 2020.

The current international migration picture is incomplete. The 2020 and 2021 figures shown on page 68 ([Exhibit A](#)) are from the U.S. Census Bureau's 2021 Vintage population estimates, which use a different population base derived from the 2020 Census. This data series should be taken with a grain of salt, since the years highlighted in yellow are not derived from the same estimate base as 2020 and 2021. By this time next year, the intercensal estimates should be available to provide a better idea of international migration trends over the last decade.

To summarize the components of population change, fertility rates continue to decline both nationally and in Nevada. Women are waiting longer to have fewer babies. Nevada's natural increase continues to decline, which was accelerated by the pandemic. Indications are that domestic migration to Nevada is slowing, although more

post-pandemic data is needed to really understand what is happening. The international migration picture is unclear due to delays in the U.S. Census Bureau's intercensal estimates.

The demographic characteristics of the state show that Nevada is getting older (page 71, [Exhibit A](#)). Comparing the 2010 Decennial Census to the latest 2021 Vintage Census estimates, the median age for Nevada increased to 38.7 years old, which is nearly equal to the national median age.

Between 2010 and 2021 most Nevada counties' median age increased, two held steady, and one dropped. Statewide the median age increased by 2.4 years, which was faster than the national increase.

Page 73 illustrates the changing composition of race in Nevada ([Exhibit A](#)). The donut chart compares the racial and ethnic distribution in the Nevada population in the 2010 Census Estimate Base, shown in the inner ring, and the latest 2021 Vintage Census Estimate, shown in the outer ring. The bar chart shows the proportional increase for each racial and ethnic group, except for the "White Alone" category, which decreased during that period.

That is also illustrated in the chart on the right which visualizes each category by the rate of change. The largest increase was reported in the "Two or More Races" category, followed by "Black or African American", "Asian", and "Native Hawaiian and "Pacific Islander."

Last, I will share a summary of the latest population projections that I published on October 1, 2022. These projections are based primarily on an independent econometric model produced by Regional Economic Models Incorporated (REMI). This model has been used by the State Demographer for over 20 years. REMI is a well-regarded model that has existed since the 1980s and is used by various state and local governments and academic institutions. The latest release used for these projections was published in June. It was updated to include sector employment data through the 2021 second quarter. The model also uses employment forecasts for upcoming economic development projects, as provided by the Governor's Office of Economic Development and the regional development authorities.

Overall, the model showed a cumulative population increase of more than half a million over the course of the next 20 years. It projected a general slowing of the population growth rate statewide during that period. Although growth is projected, it is not expected to be at the pace seen in recent decades.

The model showed a gradual decline in growth for the two most populous counties in the state over the next 20 years, while the rural counties showed a fairly steady rate of growth.

Dividing the projections by region, the southern and northwestern counties mirror a declining growth rate. The central counties show a fairly steady growth rate through the time series, while the northeastern and north central counties (Humboldt and Pershing Counties) show slight increases in growth rate toward the middle of the series.

These projections should be viewed in the context of a 20-year series, especially considering the pandemic's impacts on economic indicators. There are several risks to these projections. The employment recovery coming out of the pandemic was stronger than predicted in the baseline model, which could inflate population growth, especially in the earlier years of the projections. Housing availability is a potential limiting factor that is not considered in the model; therefore, growth projections may not be realistic if counties do not have the housing to support that population. The model may not completely predict employee commuting patterns, which can affect population distribution among neighboring counties, especially in rural areas. The model attempts to forecast international migration, which is greatly dependent on policy set at the national level. Likewise, fluctuations in domestic migration patterns should be considered when interpreting these projections. Factors that are not yet understood, like the lingering impacts of the pandemic, threat of global conflict, resource limitations, and economic volatility will have impacts to long-term population forecasting.

There was no further discussion on this agenda item.

VII. PRESENTATION ON THE SOUTHERN NEVADA ECONOMIC AND CONSTRUCTION OUTLOOK.

BRIAN GORDON (Principal, Applied Analysis):

Applied Analysis was requested to discuss the broader economy and job market. The presentation by David Schmidt, Chief Economist, Research and Analysis Bureau, DETR was very informative, so this presentation will not dwell on that topic. Although the presentation will include information on the residential market, the commercial real estate market is the primary objective as it relates to construction activity, property taxes and other factors the Economic Forum is evaluating in its revenue projection process. Information about major investments in Southern Nevada indicate a potential expansion of the property tax base and other broader investments in the local economy.

Page 8 of the Southern Nevada Real Estate Update ([Exhibit B](#)) shows how different industries have performed relative to prior economic peaks. Southern Nevada is essentially back to its November 2019 pre-pandemic peak level. There has been some shifting and reshuffling within the economy. Trade, transportation and utilities, warehousing, and retail positions have experienced the bulk of the growth.

Steve Hill of the Las Vegas Convention and Visitors Authority will discuss the leisure and hospitality industry. Those indicators are performing relatively well and recovering at a relatively robust pace, but not all of the jobs have come back.

Regarding employment rates, nationally there are about 1.8 job openings for every person actively seeking work. That ratio is a little lower in Nevada.

Page 10 shows a trend chart on job openings. A question has arisen: If a position has been open for a year without being filled, is that position really open? A number of employers are suggesting that their workers are doing more with less. It is a relatively tight labor market, but it is starting to settle into a more stabilized pace of overall employment growth ([Exhibit B](#)).

There is a lot of interest in the housing market in Southern Nevada and expectations going forward. The information on pages 17 and 18 show robust price appreciation across the board in the resale market, and elevated price points in the new construction market ([Exhibit B](#)). Development activities, such as land, labor, and materials are causing elevated price points. There has been a dramatic shift in the last few months. The recent increases in mortgage interest rates and the federal funds rate are flowing through the economy. Those increases are playing a significant role in the housing market, for which demand has slowed dramatically.

Price points had been up significantly. Lots of wealth was generated and equity has been gained by homeowners. Some of that may come into public revenues. There have been sharp increases, then settling of home prices. The Economic Forum members understand how the assessment process works; there is a lag in the timing. Over the next year or two there may be some increase in revenue, but that may be offset by the softness after the increase.

Mr. Lawton spoke earlier about population growth. More people coming through Southern Nevada translates into more demand for housing. Page 14 shows year-over-year changes in the official metrics that were presented to the Economic Forum ([Exhibit B](#)). Nevada ranks number 8 in terms of overall population growth (page 15). It is expected that people will continue to move to Southern Nevada specifically. Near-term indicators, such as out-of-state driver license surrenders to the DMV in exchange for a local ID, are tracked month by month. Approximately 78,000 people over the last 12 months exchanged an out-of-state ID for a local ID. That indicates people are still moving here in significant numbers. Historically, numbers are at, or above levels seen for more than a decade.

Other monthly indicators, such as the number of homes that are connected to the local power grid, indicate the number of people that live here, and the expansion taking place in the residential market.

Four out of ten are migrating in from California. Nevada is benefiting from California's higher cost of living. There was migration at the onset of the pandemic due to remote work becoming more commonplace. Historically about one-third of those migrating from Southern Nevada would be expected to come from California. Those trends are continuing. From that standpoint, there is a steady influx of folks. For the first time in history, California has reported net out-migration for the past two years. Given Nevada's proximity and relatively low cost of living, the state is benefiting from some of that migration activity.

The map on page 16 demonstrates how the Las Vegas Valley market has built out over time ([Exhibit B](#)). All of the growth is taking place at the periphery of the valley. There are higher land costs for the master planned community developments along the Interstate 215 Beltway. Premiums related to the underlying real estate translate to higher costs for residential development activity, which is ultimately borne by the homebuyers in the new construction market.

The heat map on page 17 shows where development is taking place in the larger subdivisions actively selling homes today ([Exhibit B](#)). The bulk of the new construction activity is taking place around the Interstate 215 Beltway in the Valley Vista Master Planned Community, the Sky Canyon Community, Summerlin, North Las Vegas and Henderson.

Home price trends have skyrocketed as of late. There is a significant amount of demand. Page 18 shows data from the Las Vegas REALTORS ([Exhibit B](#)). Resale transactions of single-family attached homes such as condos and townhouses have increased dramatically, approximately 11% year-over-year. Home prices slipped month-to-month for about three months in June, July, and August, then flattened out in September. Prices for single-family homes had been up dramatically since the onset of the pandemic in March 2020 by about 40%, and 70% from about five years ago. Homeowners gained lots of equity over the last several years. If prices soften over the next years, the majority of homeowners will probably still be above their relative equity position.

A massive fallout from the housing market, such as what occurred during the 2008, 2009 and 2010 timeframe of the global financial crisis, is not expected. That environment was very different. Borrowers were much more leveraged and had little equity in their properties. Today's environment is much more stable as it relates to individual consumers and the equity in their homes.

Mortgage interest rates are driving today's residential housing environment (page 19, [Exhibit B](#)). The latest weekly data suggests that the 30-year fixed mortgage rate is about 6.7%. Mortgage rates have nearly doubled from a low of 3.5% over the past year. The chart on page 20 shows the pace at which mortgage interest rates have increased. Rising interest rates are creating concern in the market.

A buyer looking for a \$500,000 mortgage today would pay about \$1,000 more per month than they would have one year ago. That is a significant jump. At the same time, someone looking for a home a year ago would need to borrow \$500,000, but for the same property today, their buying power would be diminished. Inversely, to keep that mortgage payment the same amount, they would only be able to afford about two-thirds of the price of the house relative to one year ago.

Broader economic uncertainty is also playing into buyers' decision making. Sales activity has dropped by half in recent months. New construction is slowing, the number of sales is slowing, and there are increased rates of cancellations.

Resale home closings are starting to slow (page 21, [Exhibit B](#)). Listing activity and inventory levels have risen significantly (page 22). The number of available units on the Multiple Listing Service (MLS) in Southern Nevada is hovering around 10,000, which is much higher than it has been recently.

Many homeowners are tied to their houses by low interest rate mortgages of 3%, 3.5% or even 4%. It is unlikely that these homeowners will sell their house to buy another house with a mortgage interest rate of 6%, 7% or higher. Therefore, there will be less movement and fewer homes coming onto the market. That lack of movement provides an opportunity for increased stability, as opposed to what occurred during the prior boom/bust cycle of the mid-2000s.

There are about four months of effective inventory. That is derived by comparing the number of sales to the number of homes on the market. Page 23 shows the pandemic period in early 2020 compared to the 2019 timeframe ([Exhibit B](#)). The numbers are not that unusual, but it looks different because the number of homes on the market is so low.

Lower-priced homes are in higher demand (page 24, [Exhibit B](#)). Homeowners are in a much stronger position than they were before (page 27). Very few folks are upside down on their mortgages, which provides some room for loss if prices should continue to adjust.

In the mid to late 2000s approximately 40% of home loans were adjustable-rate mortgages. Today adjustable-rate mortgages make up about 1% of home loans. Longer term fixed-rate mortgages provide more stability. Nationally, about 75% of all mortgage loans are under 4% interest rate. Assuming folks continue to have jobs and be gainfully employed, there is modest risk of fallout as it relates to the housing market (page 28, [Exhibit B](#)).

Mortgage defaults are at the lowest level in a couple of decades (page 30, [Exhibit B](#)). The housing opportunity index, which measures affordability, indicates that about 22% of typical households in Southern Nevada can afford the median home price. In the last quarter, this was dramatically affected by mortgage interest rates, which is shown on the chart as a steep decline. If home prices adjust, and mortgage rates decline, that should come back up a bit. In the prior cycle, about 13% of families could afford the median home price.

Investments in the apartment market will continue (page 32, [Exhibit B](#)). Multifamily housing has been in high demand, and rents are high. It is expected that about 12,000 units will be built over the next five years in Southern Nevada.

MR. LEAVITT:

The Economic Forum is responsible for providing a revenue estimate for the Real Property Transfer Tax (RPTT), which is largely governed by the residential real estate market. The commercial real estate market has ways to avoid payment of the RPTT. Prices are rising, interest rates are rising, and the market is diminished. What do you expect will happen in the next two and a half years in Nevada's residential real estate market?

MR. GORDON

As it relates to the RPTT, some level of slowdown can be expected for a couple of reasons, one being higher mortgage interest rates. In addition, at the onset of the COVID pandemic, many homeowners that had been sitting at home all day and all night decided now was the time to upgrade to new housing. People needed more space or did not like the finishes in their current homes.

Low mortgage interest rates caused people with future plans to move to advance their homebuying decision quicker. Maybe they planned to look for a new home in the next three to five years, but due to being hunkered down, and having their buying power increase due to the lower mortgage interest rates, they purchased a home in the next 6 to 12 months instead.

Now those buyers are in their new homes, mortgage interest rates are up, and they are locked in at a lower cost of borrowing. The likelihood of them moving again is probably limited. Three-quarters of homeowners have a mortgage interest rate under 4%. Much of that demand was moved forward, and there will not be turnover of properties at a level that would cause the RPTT revenue to increase. It is more likely to slow than increase.

MS. LEWIS:

Developers have been pulling their building permits and transferring them to build-for-rent versus offering them on the market for sale. The state will not collect the RPTT on those rental properties. Do you see the change to building residences for rentals taking up a larger share of the market?

MR. GORDON:

Permit cancellation rates are increasing. Builders with a pipeline of work in progress are becoming much more creative in keeping their businesses moving forward. A number of builders nationally have said they are pursuing that approach. It has been reported anecdotally that local builders are exploring those options. I am not sure in what numbers that is happening, but it is a viable path for builders, which would limit the number of homes transferring title that are subject to the tax.

MS. LEWIS:

Lots of apartment buildings changed hands over the last two years. Those large transactions were subject to the RPTT. Do you expect those kinds of transactions to continue?

MR. GORDON:

Much of that type of property has traded hands. Although rents are still high, cap rates are being adjusted and price points are coming down. It has been reported anecdotally that deals have seen price adjustments while under contract in the escrow period. Buyers and sellers are becoming more creative to get deals done. The volume that has taken place historically is likely to slow.

To answer Mr. Leavitt's question, there is some potential for slowdown on the RPTT collections.

CHAIR ROSENTHAL:

You talked about big housing developments planned in the suburban areas along the Interstate 215 Beltway. The map of development is spread out over the Las Vegas Valley. I am curious about the opportunities to expand for new home builders. It looks like there is unlimited land in Nevada, but much of it is owned by the federal government. Is there a geographic barrier to new housing projects in Southern Nevada?

MR. GORDON:

There is a de facto boundary around the urban Las Vegas Valley that has the potential to limit development activity over the long term. Within the Economic Forum's forecasting horizon, it is probably less of an issue, but there is a limitation to the amount of land that exists. Applied Analysis has worked with the Southern Nevada Home Builders Association to determine how the valley has built out historically and how much vacant lands exist within the urban valley. It was determined that there are about 11 years of effective inventory of available land if the Las Vegas Valley was built out at the expectation for population growth.

Federal lands bills and other measures have attempted to expand that boundary. In the absence of legislative change, the limit to available space to build will be reached at some point.

Next, I will present a handful of the key statistics related to the office market, the industrial market, and the retail real estate market. Trend charts provide a sense of how the commercial real estate market has been performing (page 36, [Exhibit B](#)). Investments continue in each segment. The chart also shows the millions of square feet in inventory in each of those segments.

The bulk of the investment and demand is in the industrial market for warehousing and distribution activities. The pandemic has generated significant demand for warehousing and distribution types of commercial real estate. Vacancy rates have been down across the board, and demand is outpacing new supply, (page 37, [Exhibit B](#)). Lease rates continue to escalate. The average asking rate for the available product has continued to increase 2% to 3% per year on average depending on the mix of the product. Absorption is the net demand that takes place each year (page 39). The industrial market has demanded over 9 million square feet of product in the last 12 months alone. There have been a significant number of net move-ins into industrial products. The number of completions, or new industrial product coming to the market, was about 7 million square feet in the past 12 months (page 40). Over ten million square feet of industrial product being constructed today will come on to the market over the next 12 to 24 months (page 41, [Exhibit B](#)).

Growth in the office and retail markets has been much more modest with only a couple hundred thousand square feet coming onto the market in the last year. Retail growth is relatively stable. The office market comprises only about one million square feet. I do not sense that the office market is being overbuilt by any significant amount.

MR. LEAVITT:

There have been changes in the business make-up in Clark and Washoe Counties. Warehouses have become a significant part of the economy. If there were a recession in the next year or two, how would Nevada's real estate market respond compared to the rest of the country based on what is happening here now?

MR. GORDON:

That question involves two ends of the state. Northern Nevada has a much more diversified economic base than Southern Nevada. Northern Nevada benefited from that diversity during the pandemic. Significant investments in manufacturing in Northern Nevada have been driving lots of the economic growth in the northern portion of the state. Northern Nevada is less dependent on tourism.

The tourism industry has been a phenomenal driver of the economy in Southern Nevada. One in four jobs is tied directly to the tourism industry. The industry is somewhat dependent on discretionary spending. An economic slowdown, nationally and internationally, would have the potential to affect Southern Nevada's economy more dramatically than Northern Nevada. Southern Nevada is a little more insulated now than during previous cycles. There has been diversification within the tourism industry with the addition of special events and sporting related activities. To the extent that the economy is or will be in a recession, it is likely to be much shallower and short-lived than the Great Recession, which gives a bit of comfort.

MR. CROME:

My question is similar to the previous question about the residential housing market. With the diversification of the economy in Southern Nevada, are there constraints on the space available to build commercial properties? I am particularly interested in industrial commercial real estate because that is where there is lots of growth.

MR. GORDON:

The 11 years' supply of land applies to both residential and non-residential development activities. In the industrial market, there are some pockets of potential development areas. Apex Industrial Park to the north of North Las Vegas is making massive investments in infrastructure. There is some capacity to develop in that area. A potential corridor is being opened south of Las Vegas. There are additional expansion opportunities in west Henderson. Pockets in the Southern Nevada market would allow non-residential development activity to continue. For the current forecast period, there is capacity for building.

MR. CROME:

As the industrial sector increases its share of the commercial real estate market, will there be a difference in wage rates between office, industrial and retail environments?

MR. GORDON:

It is a national phenomenon that wages are rising dramatically. Similar trends are happening in Nevada. There is demand for employees and a shortage of workers. That imbalance has driven wages up, specifically within the office, industrial and retail sectors, where a faster pace of wage growth has been seen. This is particularly true for the industrial sector. Nine million square feet of space was available and immediately leased. There are employees occupying those buildings. Filling those jobs has been challenging. Applied Analysis is tracking approximately \$27 billion worth of major projects in the development pipeline (page 43, [Exhibit B](#)). Approximately \$11 billion to \$12 billion of that development is actively under construction today. These projects are tourism-related, non-tourism-related, infrastructure, manufacturing, and warehouses. Clearly the tourism industry is making massive investments in Southern Nevada. Major venues are being constructed, such as the MSG Sphere and the Fontainebleau Las Vegas. There are also major events coming, like Formula 1, which is making significant investments. The continuing investment in Las Vegas provides some comfort that there will be stability in the economy going forward.

There was no further discussion on this agenda item.

VIII. PRESENTATION ON THE NORTHERN NEVADA ECONOMIC AND HOUSING OUTLOOK.

FRED STEINMANN (Director, University Center for Economic Development, University of Nevada, Reno [UNR]):

Brian Bonnenfant, Project Manager, UNR University Center for Regional Studies, could not be in attendance. I will present an overview and economic outlook for the Northern Nevada economy, with particular focus on Washoe County and the Reno-Sparks Metropolitan Statistical Area (MSA) (Reno-Sparks Economic Outlook, [Exhibit C](#)).

Over the last couple of years, employment growth for the Reno-Sparks MSA has been driven by individual industry sectors at the top wage range. Manufacturing, transportation, warehousing, utilities, construction and professional business services, which pay wages that are significantly greater than the average wage for the entire region, experienced the strongest gains in terms of total employment growth. Lingering impacts of the pandemic continue to depress employment, specifically in the leisure and hospitality sectors, as well as the wholesale trade and government sectors. The impacts to government sector budgets as a result of decreased economic activity over the course of the pandemic have continued to push local governments and various public sector agencies to reduce total employment.

Relative to the Las Vegas MSA and the U.S. as a whole, total unemployment for the Reno-Sparks MSA tends to be significantly lower and is certainly well below the high unemployment rates of the early months of the pandemic (page 3, [Exhibit C](#)). Even though the average monthly unemployment rate for Washoe County and the Reno-Sparks MSA was 3.4% in August 2022, it is still ahead of where unemployment was

pre-pandemic at 2.9%. With unemployment being relatively low, a major challenge to economic growth and continued expansion of the Northern Nevada region is the availability of a workforce. Most individuals who can be employed are currently employed, or a switching between jobs.

A significant factor driving economic growth and population growth throughout the Northern Nevada area, and Washoe County in particular, is net in-migration of individuals moving from other parts of the state or parts of California. About 25% of the net in-migration to Washoe County over the last couple of years has been driven by individuals between the ages of 20 and 29, which is ideal to support the industry sectors that have become major drivers of economic activity within the region (page 5, [Exhibit C](#)).

Those workers are approaching the age range for people to make their first major home purchase. As more individuals between the ages of 20 and 29 continue to move into the Washoe County area, that will likely continue to fuel demand for rental properties and single-family resident owner-occupied housing. Most of that in-migration into Washoe County over the last couple of years has been from Clark County, Lyon County, and Carson City (page 6, [Exhibit C](#)). Northern Nevada's ties to the Bay Area and parts of California such as the Central Valley, the Sierra Nevada region, and counties along the Interstate 80 corridor, continue to be major drivers of in-migration into Washoe County and other parts of Northern Nevada.

Between 2000 and 2010, the Washoe County area grew at an average annual rate of 2.2% (page 7, [Exhibit C](#)). That growth rate has decreased to an average of about 1.4% between 2010 and 2020. The relatively high paying industry sectors in Washoe County, neighboring Storey County, and other parts of the Northwestern Nevada region will likely continue to encourage and support population growth of about 1.5% per year over the next five years. Washoe County could potentially cross the total population milestone of 500,000 permanent residents sometime between now and the end of 2023.

Continued growth of the residential market is important to the Northern Nevada economy and Nevada's economy as a whole. The chart on page 8 shows the overall change in new single-family home sales activity in Washoe County, as well as the median new home sale price for each year of the last five years ([Exhibit C](#)). Over the course of the pandemic in 2020 and 2021, new home sales continued the year-over-year increase as the area continued recovery from the Great Recession. However, in the last year, particularly over the last couple of months, prices have begun to decline. The relatively high median new home sale price in Washoe County began to decline as well.

A number of factors are contributing to that decline. Obviously, the increase in interest rates, and subsequent increase in mortgage rates is starting to depress demand for new home sale activity. As a result, the median new home sale price declined. In the ten-year period prior to the Great Recession, single-family residential (SFR) units were the driver of new residential supply to the Washoe County housing market. New multifamily units represented a relatively small percentage.

In the post-Great Recession period, new multifamily units have become a significant driver of new residential units coming to the market in Washoe County (page 9, [Exhibit C](#)). That is likely, in part, due to a shift in the demand pattern as a result of a different population demographic moving into the area. The 20-29 age demographic is probably more inclined to rent than to buy, at least in their early to mid-twenties.

Developers may be tentative about building SFR units due to the impacts of the Great Recession on the housing market in Northwestern Nevada and other parts of the U.S., and therefore shifted investment to the development of multifamily properties. That trend is likely to continue in the foreseeable future for Washoe County and Northwestern Nevada, largely because of the continued increase in average rents, and the relative stability in overall vacancy rates. The chart on page 10 shows continued increases in average rents as well as continued stability and relatively low vacancy rates among apartments and other types of rental properties ([Exhibit C](#)). That will likely continue to fuel demand for and increase supply of additional apartment and similar residential projects in our region.

Page 11 shows where development is planned for Washoe County and the Reno-Sparks area ([Exhibit C](#)). Over the next year or so, a significant number of the nearly 32,000 approved unbuilt units of both single-family and multifamily housing is expected to hit the market. Moving forward, lots of that growth and development will be concentrated in the north valleys of Reno, the northern part of the City of Sparks and unincorporated Washoe County, the south valley area, and the Verdi area near the California border.

New listings, days to contract and active listings for Washoe County are shown on page 12 ([Exhibit C](#)). The middle green and red curves represent the two years of the pandemic. The data are fairly noisy. New listings and active listings are returning to pre-pandemic levels in the existing home sales inventory market, with days to contract starting to increase. That is probably being impacted by availability of supply as well as increased uncertainty in interest rates and mortgage rates.

Existing home sales followed a similar trend to new home sales for the Washoe County area over the last couple of years (page 13, [Exhibit C](#)). Over the course of the pandemic in 2020 and 2021, there was a continued trend of recovery and growth in both the residential and industrial markets in Northern Nevada. Supply of new homes started to decline in the last year from the previous years' highs. Median prices of existing home sales started to decline over the last several months as well. Again, a combination of factors, including inflationary pressures, rising interest rates, and rising mortgage rates may be starting to chill demand for existing home sales to a certain degree. As a result, there is a decrease in the median home price for existing home sales as well.

Information from the Washoe County Assessor's Office indicates the number of single-family homes with non-primary residence tax rates continued to remain stable over the last several quarters and years (page 14, [Exhibit C](#)).

A significant portion of new job creation and employment is being fueled by relatively high wages in industry sectors like manufacturing, transportation and logistics, which has helped diversify the Northern Nevada economy (page 15, [Exhibit C](#)). There has been significant growth over the last several years in terms of median household income, median family income, and per capita income. Those trends are likely to continue, given the relative importance of those emerging and diversified industry sectors, not only for the entire Nevada economy, but their contributions to national and even international shifts in emerging industry sectors.

Annual taxable sales for Washoe County, Storey County and the Reno-Sparks MSA have continued to increase at fairly robust rates over the last several years, reaching highs in 2020 and 2021 (page 16, [Exhibit C](#)). That is not a surprise, given patterns in individual consumer behavior moving toward big-ticket purchases like home improvement.

That increase is continuing into 2022 but may start to back off a little as people allocate more and more of their household income to experiential consumption like travel and resuming patterns that existed prior to the pandemic. That can be seen in a small month-to-month change in the monthly taxable sales for Washoe County. Again, taxable sales are remaining relatively robust over each month of 2022, but will probably fall off a bit to stabilize as individuals and households begin to return to a more balanced portfolio of consumption, which includes not only taxable items and goods, but also items related to travel outside the Washoe County area.

Over the last number of years, despite the dip in employment from 2020 to 2021 in Washoe County, very strong growth is expected in total employment for both Washoe County and the Tahoe-Reno Industrial Center in neighboring Storey County.

Wages remain relatively high. Washoe County's 2021 fourth quarter average was just under \$33 per hour. The Tahoe-Reno Industrial Center's 2021 fourth quarter average was just under \$46 per hour. Those high wages will continue to support economic growth and diversification throughout the region.

A growing area of concern in Northwestern Nevada, and Washoe County in particular, is home price affordability. Page 19 shows the home price affordability index for households with 1.8 income earners compared to single income earners by industry sector ([Exhibit C](#)).

The continued increase in rents and home prices over the last couple of years has resulted in fewer individuals and households being able to afford more expensive housing types. Only those individuals working in certain industries sectors like information and financial activities can still afford to purchase a new or existing single-family home based upon prevailing median sales prices. Some households with 1.8 or more earners can still afford a more diverse set of owner-occupied products, but single earners are almost completely priced out, and are only able to afford ownership of new townhomes or condo projects.

There is a similar trend on the rental side of the market (page 20, [Exhibit C](#)). Year-over-year, and by individual industry sector, it is becoming increasingly difficult for households with multiple earners, 1.8 or greater, to afford a wide variety of product in the rental market. More and more individuals are essentially being priced out of the rental market.

Those trends may begin to change over the next couple of years based upon a model provided by Mr. Bonnenfant through the University Center for Regional Studies. Page 21 shows an overlay of two models assuming a 6% annual average appreciation in home sale prices versus 4% ([Exhibit C](#)). Over the last several years, prices were in that range. In the last year or so, the median price for the greater Reno-Sparks area exceeded that model range, resulting in affordability questions for both owner-occupied and renter-occupied homes. Over the last few quarters median home prices began to decline, which will likely improve affordability indices for the next several years.

Generally speaking, based upon the analysis from the University Center for Regional Studies, the market is expected to return to a normal range of less than 5,000 jobs added per year within the region, with wage increases of less than 6% per year, and relatively low inventory between 6% and 4% appreciation.

Given increasing concerns over inflationary pressures and subsequent rises in interest and mortgage rates, stagflation could cause inflationary pressures to trigger low job growth rates. That could potentially make the product out of reach of the individuals moving into the area, as well as those already living in the area.

It is important to keep in mind that economic activity performance in Washoe County is part of a much larger economic picture. Diversification of the Northwestern Nevada region is continuing, especially in growing and emerging industry sectors such as lithium production and value-added processing. This growth is happening beyond the Tahoe Reno Industrial Center, moving further east along the Interstate 80 corridor, the Highway 50 corridor to Humboldt and Churchill Counties, further south into Carson City and along the Highway 50 corridor in the Dayton area of Lyon County.

Again, the emergence of these new primary industry sectors such as lithium production, value added processing, electric vehicles, battery production, or renewable energy production will likely continue to insulate the Northwestern Nevada region from some of the economic concerns emerging at the state level and potentially the national and international levels.

With this infrastructure and industry in place, the Northwestern Nevada economy is particularly well-suited to take advantage of the trend in continued growth of electric vehicles, both domestically and across the world. New priorities of the current federal administration focus on ensuring the protection of the domestic supply chain production, especially as it relates to rare earth value-added processing, battery manufacturing, and recycling. Again, these priorities take advantage of the existing strengths of the Northwestern Nevada economy.

Nevada as a whole, but certainly the northwestern and central parts of the state, is strategically well positioned to take advantage of growth in additional green energy, specifically geothermal, but also solar and wind.

To summarize, first and foremost, increasing mortgage rates for our region will likely continue to depress home sales volume over the next several years, bringing the market back to a more normal range. New homebuilders will likely continue their deep freeze in the provision of single-family owner-occupied units in favor of rental or multifamily construction. That is a factor of the changing sociodemographic profile of the in-migration to the region of the 20-29 age demographic, as well as the type of industries that are driving growth in the region. The northwestern and central region of the state is particularly well-suited to take advantage of various national and global economic fundamentals, especially the shift toward rare earth metal production, value-added processing, recycling, as well as the growth of renewable energy industry and related industry sectors.

One potential barrier to this kind of economic transformation to the region and other non-metro parts of the state is growing concerns over the availability of a workforce. The University Center for Economic Development works closely with various regional development authorities (RDA) throughout the state, such as the Northeastern Nevada RDA, Southwest Central RDA, and the Lincoln County RDA. These entities note that both new businesses from outside the area and existing businesses are potentially delaying expansion simply because there is no workforce to support those activities. The major barriers to the development of workforce in those areas is a lack of housing necessary to support in-migration from other parts of Nevada or other parts of the western U.S.

In addition to a lack of housing, there is also a lack of access to health care and educational services. Those three issues are becoming significant barriers to additional workforce development, especially in non-metro parts of the state. This is a canary in a coal mine for concerns that may emerge in metro parts of the state, especially in the Northwestern Nevada Region.

There were no further questions on this agenda item.

IX. PRESENTATION ON THE CURRENT STATUS AND OUTLOOK FOR THE TOURIST AND CONVENTION/TRADE SHOW MARKET IN NEVADA.

STEVE HILL (Chief Executive Officer/President, Las Vegas Convention and Visitors Authority):

This presentation will include background economic information on the tourism industry in Southern Nevada, which will provide a foundation of information for the current status and the outlook for future recovery.

Visitor volume has not fully recovered. Visitation is down approximately 10% over the past three months. The decrease is largely due to convention, meeting and trade show attendance, as well as international attendance. Those two types of visitors are related. For example, the Consumer Electronic Show attendance is typically made up of 25% to 30% international visitors. There is overlap between the meeting industry not recovering fully and international visitation not recovering fully.

Convention attendance over the last several years is shown on page 3 of the Tourism Trend Update presentation ([Exhibit D](#)). Convention attendance is now about 70% of the 2019 level. The Las Vegas Convention and Visitors Authority (LVCVA) projects that, from a same-show standpoint, on average, convention attendance will recover about 90%, depending on the industry of the tradeshow.

Southern Nevada will have 57 trade shows in calendar year 2022, with a little over 800,000 attendees (page 4, [Exhibit D](#)). Calendar year 2023 will be similar, but estimated attendance will recover to 1.4 million in 2024.

Hotel occupancy, which mirrors visitation, is down approximately the same percentage. On the other hand, the average daily rate (ADR) has been very strong, up 21% year-to-date over 2019. The combination of ADR and occupancy produces a revenue per available room (RevPAR) of about 5% over 2019 levels (page 6, [Exhibit D](#)). The city and the tourism industry are setting financial records, but not visitation records at this point.

Gaming revenue has been significantly higher than prior to the pandemic. The chart on page 7 shows that trend in a stark way ([Exhibit D](#)). Visitors now have a bigger gaming budget than at any time in the past, by as much as 50% more at its peak. That increase is starting to moderate somewhat.

Gaming revenue per room night is down 10% (page 8, [Exhibit D](#)). The spend per visitor level is approaching the past mean. This reflects the end of visitors' federal stimulus money and pent-up demand. During the pandemic, gaming was one of a limited set of choices for spending discretionary dollars. Now those options are not as limited.

The gaming revenue per room night occupied is expected to revert toward the mean over time, and full occupancy of 88% to 90% is expected to return over the next couple of years. Higher occupancy and lower spend per visitor may cancel each other out.

Page 9 shows 2022 tourism recovery compared to 2019. Gaming revenue and ADR are the big numbers. RevPAR is 105% of the 2019 level. Air passenger numbers have virtually recovered. The number of airline seats coming into Las Vegas on a monthly or annual basis is virtually identical to 2019.

There was a surge in the Interstate 15 drive market in 2021, but that has reduced, probably due to a combination of increase in fuel price and the bad driving experience on Interstate 15. That driving experience needs to be improved, and that will continue to be worked on.

The lower occupancy numbers shown on the chart on page 9 can be seen as opportunities ([Exhibit D](#)). The LVCVA believes the meeting industry will recover, which will increase occupancy to at least 100% of pre-pandemic levels. Approximately 6,000 to 7,000 rooms were added during the pandemic. The recovery of the meeting industry and the increase in the number of rooms is expected to result in record visitor volume.

Page 11 shows August 2022 year-to-date indicators in comparison to 2019 for international visitation to the U.S., not specifically Las Vegas ([Exhibit D](#)). This snapshot of international visitation to the U.S. can be used as a proxy for Las Vegas visitation, which tends to be within 5% to 7% of those numbers.

The LVCVA receives intermittent visitor information directly related to Las Vegas. That information only includes visitors who land at Harry Reid International Airport directly from an international destination. If the international visitor is connecting through a domestic airport like Los Angeles or San Francisco, they are not included.

The LVCVA has concerns going forward. Bill Hornbuckle, the CEO of MGM, on CNBC yesterday, summed up very well what the industry's future looks like. Right this minute, the industry seems to be in a soft landing, but the actions of the Federal Reserve may have more of an impact in the future than what is apparent now.

An LVCVA survey shows increased interest in travel, but there is concern about a potential recession, inflation, and staffing and service challenges. Mr. Gordon of Applied Analysis reported that industry staffing numbers were down 17,000 workers. That decrease is matched by a decline in occupancy. The employee-to-room occupied ratio is a little better than it was in 2019. Gas prices, global political stability, and international policies regarding COVID-19 continue to be issues. Right now, those concerns do not seem to be having a real impact on the tourism industry.

There are positive trends:

- Travel intent remains strong; it is stronger through the holidays than it has been in some time.
- Convention bookings continue to increase.
- The ADR has remained strong.
- There is strong visitor spending; the visitors are spending more than they have in the past.
- International travel is recovering.

The LVCVA sees opportunities in the occupancy rate. The 10% gap is expected to close fully moving forward, even with 6,000 or 7,000 more rooms on the market.

Las Vegas went into the pandemic with 11.5 million square feet of net meeting space. During the pandemic, about 3 million square feet was added. Currently there are about 14.5 million net leasable square feet. The Fontainebleau Las Vegas property will come online, adding nearly 500,000 square feet. That will bring Las Vegas leasable square feet to over 15 million.

Las Vegas has added 30% to 35% to its meeting space, and 4% or 5% to its room count. That allows lots of capacity to more than recover the number of meeting visitors. Southern Nevada will pass the 2019 meeting visitor number of 6.6 million people. The goal of the LVCVA is to have 8.3 million meeting visitors by 2026.

The LVCVA sees big opportunities around sports and events, which relates to the Economic Forum's projections for the Live Entertainment Tax (LET). There are two huge events in the first year of the next biennium. Formula 1 will take place November 16-18, 2023, and the Super Bowl will follow on February 11, 2024. The Formula 1 event is currently a three-year deal, which is anticipated to become a permanent annual event. Both events will produce eye-opening ticket sales and LET revenue.

The LVCVA projects Formula 1 ticket sales of between 110,000 and 130,000. The Formula 1 event will involve event ticket sales in addition to a package of hospitality food and beverage, and other entertainment. The LET calculation is not clear. Formula 1 representatives will meet with Department of Taxation staff to discuss what the LET will be applied to.

The Super Bowl is a much easier calculation. There will be a little over 60,000 tickets sold. LVCVA's projections for LET revenue just for the Super Bowl is between \$17 million and \$20 million. Formula 1 LET revenue will also be in that general range. A 25% increase in LET revenue for FY 2024 could be possible.

CHAIR ROSENTHAL:

Has show attendance fully recovered to 2019 levels?

MR. HILL:

Show attendance is mirroring occupancy. Show attendance is probably back 90% but has not yet recovered to 2019 levels.

The addition of major sporting events has broadened the entertainment opportunities for visitors. That may have a cannibalistic effect on attendance for shows that existed prior to the major sporting events becoming available.

MR. LEAVITT:

Has there been an increase in international visitor volume since the pandemic has receded a little bit?

MR. HILL:

International visitor volume continues to increase. Canada and Mexico make up 50% of Las Vegas's international visitors. It is easy to travel to Las Vegas from Canada and Mexico. Visitor volume from the United Kingdom has returned strongly. The current value of the dollar is a concern. It feels more expensive to visit the U.S. to international visitors. International air capacity is between 80% and 85% of former levels. It is a strong recovery.

China's pandemic lockdown policies do not allow a recovery in international travel. Visitors from China typically are not huge in number - about 250,000. However, the impact of the spend to gaming revenue is meaningful. Right now, that is absent.

MR. LEAVITT:

I am amazed at how well gaming revenue has done. It is much beyond what I would have expected, even under normal circumstances.

MR. HILL:

I would have anticipated that it would have been more of a spike, then a fall off. The fall off has been very gradual.

MR. LEAVITT:

It will be interesting to see how deep the potential recession will be. There are many conflicting signs. The stock market is all over the place, but mostly down.

MS. LEWIS:

Do you expect more new live events, such as concerts?

MR. HILL:

The Allegiant Stadium has performed exceptionally well; even better than the LVCVA models projected. It is close to absolute capacity.

MS. LEWIS:

When will MSG Sphere open?

MR. HILL:

MSG Sphere plans to open around September 2023. This project will generate lots of ticket sales. Formula 1 has entered into an agreement with MSG Sphere to sell tickets to a spectacular event inside the sphere during the race.

VINCENT ZAHN:

The number of trade shows at the new facility appears to be somewhat static. What is driving the projected jump in attendance? Will there be more attendees per group?

MR. HILL:

The expected increase in attendance is largely due to continued recovery. It assumes COVID will not reduce the number of visitors in January and February, which is right in the heart of convention season. The Consumer Electronics Show (CES) in January 2022 had about 40,000 attendees. In its biggest years, attendance was in the 180,000 range. January and February 2022 show attendance was impacted by Omicron. The LVCVA anticipates significant recovery and an increase in attendance for those shows, and overall continued improvement in the number of meeting visitors in general.

I recently attended a meeting of global trade show organizers in Asia, which included many of our biggest customers. It was noted that the U.S. is doing significantly better than Asia in meeting recovery. That is expected to give the U.S. an advantage in upcoming years. In-person meetings are re-engaging trade show clients with customers. During the pandemic, there was heavy employee turnover in every industry. The customers of these trade show clients are not the same people, and they are meeting in-person for the first time. The second and third iteration of these big trade shows will allow for a full recovery. There will be real progress in 2023.

CHARLES HARRIS (Chief Executive Officer/President, Reno-Sparks Convention and Visitors Authority):

The Reno-Sparks Convention and Visitors Authority (RSCVA) presentation is very similar to the LVCVA presentation. Northern Nevada is in the process of recovery with tax collections of over \$457 million, which is its best year ever. The increased revenue is due to the leisure sector more than meetings and conventions. Meeting and conventions continue to recover. Northern Nevada has performed better than trends in the rest of the U.S. Recovery to former levels is expected in 2024 or 2025.

The RSCVA recently finished a three-year strategic plan update, which was approved unanimously by the RSCVA Board. The strategic plan helped to focus on updating the RSCVA's missions and vision statements, as well as establishing core values for the RSCVA for the very first time. At its core, the RSCVA is authentic in selling this destination, which is focused on outdoor activities, gaming and special events.

Visitor volume for the biennium peaked over the summer of 2020 (page 4, [Exhibit E](#)). November 2020 was the low point for visitor volume. Visitor volume is down around 9% to 10% overall, but ADR has carried Northern Nevada, much like in Southern Nevada, and allowed the region to set record revenues. Nine of the past 12 months were record setting for those particular months, which resulted in \$457 million in collections.

Cash occupied room nights have recovered (page 5, [Exhibit E](#)). The summer season of June and July has been phenomenal. Northern Nevada was impacted by the fires in California in August and September 2021 and 2022, but because the ADRs were so strong, the region has maintained its record-setting pace. The ADR for individual hotels continued to increase from the low of \$104 during the pandemic to \$154 through the end of FY 2022 (page 6, [Exhibit E](#)). The ADRs are returning to seasonal changes. While the number of visitors decreased by 10%, the ADR increased, which allowed Northern Nevada to generate revenue.

Taxable room revenue peaked in June 2021, generating more than \$50 million in a single month for the first time ever (page 7, [Exhibit E](#)). That has now occurred twice.

The chart on page 8 compares Northern Nevada scheduled air service departures in 2019, 2021, and 2022 ([Exhibit E](#)). During the pandemic, Northern Nevada was able to take advantage of reallocation of flights through Reno. Airlines continue to shift their fleets and it is now a challenge to get direct flights from the East Coast due to staffing shortages. Monthly seat capacity is down a bit compared to the last two years.

Air passenger service is heavy (page 9, [Exhibit E](#)). The Reno-Tahoe International Airport held a press conference today about its plans to expand and modernize its facilities.

Goals for meetings and conventions room night booking is shown on page 10 ([Exhibit E](#)). FY 2021 bookings were projected to be 206,500 but exceeded that number at 215,795. The goal of the RSCVA was to return to pre-pandemic numbers. The region has exceeded the room night goal the last two fiscal years.

Northern Nevada has about 1.1 million square feet of meeting space between the convention center and the five big box properties. At a recent IMEX America meeting in Las Vegas, there was lots of interest in places like Reno and Northern Nevada due to the opportunity for outdoor activities. Many of the meeting organizers are looking away from the big cities.

Short-term vacation rentals in Northern Nevada, specifically Washoe County and Incline Village, has remained very strong (page 11, [Exhibit E](#)). Both relocation and vacation activity during the pandemic have generated a fair amount of income for Northern Nevada.

Vacation rental occupied room nights is performing very well (page 12, [Exhibit E](#)). The seasonality was due to fires in August 2021, which specifically impacted the Lake Tahoe area.

Page 13 shows national travel highlights provided by Tourism Economics and the U.S. Travel Association ([Exhibit E](#)). Overall spending is still below the August 2019 level, but Nevada is trending better than the U.S. overall. Passenger volume levels have improved slightly. Meeting planners are very optimistic. Recent data indicates inflation is cutting into travel spending going into the holiday season; 79% of people are looking to change their travel plans.

Northern Nevada continues to have workforce challenges, specifically in the leisure and hospitality sector, which is losing workers to technology sector jobs. Affordable housing for the workforce is another issue for Northern Nevada and across the country as well.

Tourism is still strong, but compared to 2019, Northern Nevada is still in a recovery phase in terms of overall visitor volume numbers. The number of leisure and hospitality jobs is down, and overall private sector employment is nearly flat. Travel spending is still a little bit down compared to 2019. International travel is not expected to fully recover until 2024 or 2025.

Meetings and convention bookings in Reno and Lake Tahoe remain strong. The RSCVA's goal for FY 2023 was 215,000 group and convention room nights. For the first three months of FY 2023, room nights are about 102% of this goal. Meetings and conventions are moving away from the hybrid form of virtual meeting. Virtual meeting was very strong during the pandemic, but there is nothing like meeting in person for business relationships, and in-person meetings are gaining momentum.

CHAIR ROSENTHAL:

Is the Reno-Tahoe International Airport expansion expected to increase capacity? When will the region begin to benefit from the increases in travel statistics?

MR. HARRIS:

The expansion is starting right away. The head of the airport estimates the number of airlines and flights will increase in a few years. There will be some pain in terms of parking, but after the expansion there will be opportunities for more flights to come through the Reno-Tahoe International Airport.

It is important for meetings and convention planners that attendees are able to fly to Reno from the East Coast with a limited number of connections. For example, airlines were made partners with the airport to accommodate about 25,000 people who flew into the area for Burning Man.

CHAIR ROSENTHAL:

Will the benefits of the expansion happen outside of the forecast horizon?

MR. HARRIS:

Yes.

CHAIR ROSENTHAL:

Is there anything new and exciting coming to Reno that would draw additional visitation?

MR. HARRIS:

The RSCVA has doubled its annual budget to \$1 million to attract new special events. The RSCVA is examining how to add special events to the 100+ events already in Northern Nevada. In the short-term, the RSCVA has signed two extensions. One involves extending the bowling stadium contract to 2032, which will include a couple of different open sports events. A bowling stadium event in March 2023 is looking very strong. The Miss USA Pageant has entered a three-year contract, which in its first year has resulted in thousands of rooms and millions of dollars in international publicity for the destination.

MS. LEWIS:

Will there be additional rooms added in Northern Nevada?

MR. HARRIS:

There are select-service hotels opening in Reno at the end of 2022. Kimpton Hotels has broken ground on what is probably the largest new property. The Element Reno Experience District hotel is ready to open. Other select-service hotel properties are slated for The Summit Reno and Tamarack Junction Casino areas. The current five big box properties remain important partners in special events.

BRENDA SCOLARI (Director, Department of Tourism and Cultural Affairs):

My presentation will touch on a few points about our economic outlook for the biennium (page 84, [Exhibit A](#)). The Economic Forum has heard lots about national economic trends from the other presenters, so I will not dwell too much on those.

I will start with influences to travel choices in rural Nevada. Throughout the height of the pandemic, travelers indicated that activities in which they could be away from crowds were the safest.

The information shown on page 86 is from a Destination Analysts State of the American Traveler July 2020 survey ([Exhibit A](#)). The chart shows that travelers felt outdoor recreation opportunities and road trips were the safest activities during COVID.

Because travelers felt that activities such as outdoor recreation and road trips offered in rural parts of the country were safer, rural destinations tended to recover faster than urban destinations. The chart on page 87 shows that room tax collections in rural Nevada reached pre-pandemic levels at a much faster rate than the urban areas of the state ([Exhibit A](#)). Although urban areas still represent the majority of room tax collections during this period, rural Nevada recovered more quickly than Clark and Washoe Counties.

Like room tax collections, room nights occupied in rural Nevada tended to recover much quicker than in the urban parts of the state during the height of the pandemic. Again, although the urban areas still accounted for the majority of visitation to the state during this time, rural areas approached pre-pandemic levels more quickly (page 88, [Exhibit A](#)).

Although rural Nevada as a whole has recovered well after the initial effects of the pandemic, some counties have fared particularly well. Douglas, Humboldt, and White Pine Counties have seen large gains in room tax collections when compared with 2019, particularly after the start of 2021. This is due to a quick recovery in visitation along with higher room rates throughout the state (page 89, [Exhibit A](#)).

One travel trend that is not unique to rural Nevada is high prices. Page 91 shows the average daily rate (ADR) of hotels throughout different areas of the state compared to 2019 ([Exhibit A](#)). Across all areas, ADR has surpassed 2019 levels, usually by a wide margin. Again, high prices are not unique to the travel industry at the moment but are very evident in room rates and air fare.

Consumers are aware of the rise in the cost of travel. In the Destination Analysts survey, when asked what has kept travelers from traveling more than they otherwise would over the past six months, the top four reasons cited were related to finances (page 92, [Exhibit A](#)). The fifth most cited answer was safety concerns related to COVID, which was the most cited response related to health and safety. It should also be noted that 16% indicated the possibility of flight cancellations has been a deterrent.

Another trend across the travel industry is a lack of workers. In the May Survey of the American Traveler, over 65% of respondents indicated it was likely that tourism businesses will continue to have problems finding employees (page 93, [Exhibit A](#)). This was cited as a deterrent to travel by more people than health safety concerns such as COVID. It is unclear what effect this will have on total travel demand, but the labor shortage is noticed by travelers.

Related to the labor shortage and ability of the travel industry to fulfill expectations, issues with flights have been noticed by travelers (page 94, [Exhibit A](#)). Almost three-quarters of respondents mentioned that they were aware of flight cancellations, delays and long lines for air travel according to the State of the American Traveler survey. Again, it is hard to know if this will impact travel demand, but this is an issue that is at least noticeable from the traveler's perspective.

When asked about the overall value for money spent on their most recent overnight trip, over 70% of respondents indicated that they agreed that they were satisfied while less than 10% disagreed (page 95, [Exhibit A](#)). This means that although travelers are aware of issues in the travel industry, travel is still valued by people, which is a good sign for future demand.

On another positive note, COVID continues to be less of a concern for travelers over time. The impact of COVID on the ability to have meaningful travel experiences has been on a downward trend. Recently, fewer than 30% said they were more than moderately impacted by COVID (page 96, [Exhibit A](#)).

When asked what domestic destinations are the most desired to visit in the next 12 months, Las Vegas consistently ranked near the top of the list (page 97, [Exhibit A](#)). This means Las Vegas has remained as a destination that is top-of-mind for travelers after the pandemic, which positions both Las Vegas and the state nicely for future travel demand.

Knowing that higher levels of employment is a good indication for travel, the labor market is a good place to look for signs as to how travel may perform. This is weighed against consumer spending remaining high, increased inflation and increased interest rates (pages 99-103, [Exhibit A](#)).

Traveler financial sentiment is trending lower (page 104, [Exhibit A](#)). Sentiment around traveler finances has been on a recent downward trend according to a Destination Analysts survey. That decline is generally due to rising prices. The number saying it is a good time to spend money on travel has fallen from around 41% early in 2022, to around 27% in August 2022. Expectations for traveling more for leisure has also fallen throughout 2022 but has ticked up recently.

To recap some of what was reviewed today regarding rural trends, travel trends and economic trends, although urban areas of the state make up a larger majority of room nights and room tax collections, rural Nevada recovered much quicker after the initial effects of the pandemic. People were drawn to outdoor opportunities in the rural areas, which were viewed as safer.

High prices and the labor shortage are seen as potential pain points. However, travelers indicate that they are still receiving value from travel experiences.

Rising prices and expectations of interest rate hikes are top-of-mind for people, which is creating fears of potential increases in unemployment. However, the short-term outlook for travel looks positive at the moment. As mentioned previously, the labor market is strong, and spending remains high which is a good indicator for travel. Also, COVID impacts continue to be less of a concern for travelers.

The mid-term outlook is a little less certain. Consumer sentiment levels are at relative low points. This could be impactful because it could lead to a self-fulfilling prophecy where lower expectations lead to lower spending which could impact the economy negatively.

Further, with inflation remaining high, the Federal Reserve is expected to keep raising interest rates. This could lead to lower demand for goods and services as consumers and businesses have less money to spend freely. Expectations are for a bit of an increase in unemployment around 2023, though this is not expected to be drastic.

Because of this assumption, our forecast calls for a bit of a softening in room demand around the middle of 2023, and an upward trajectory in 2024. Our forecast anticipates room demand to eclipse FY 2019 levels sometime in FY 2025.

CHAIR ROSENTHAL:

Lake Tahoe ADR experienced a decline but was above pre-pandemic levels at the end of the year. That end-of-year change mirrored prior years (page 91, [Exhibit A](#)). Is the effect of the annual calendar of events in Lake Tahoe driving that annual change?

Ms. SCOLARI:

Yes, I would also make that assumption.

There was no further discussion on this agenda item.

X. PRESENTATION ON NEVADA INSURANCE MARKETS.

NICK STOSIC (Deputy Commissioner, Division of Insurance, Department of Business and Industry):

Although Insurance Premium Tax collections are reported on a fiscal year basis, the written premium information provided today comes from insurance carriers reporting to the National Association of Insurance Commissioners (NAIC), which reports data by calendar year.

There are numerous lines of insurance business written in Nevada, all of which are categorized by the NAIC into one of three types: health insurance, which accounts for 40% of the written premiums; life, accident and limited health, which makes up 28% of the written premiums; and property and casualty, which makes up the remaining 32% (page 112, [Exhibit A](#)).

JEREMEY GLADSTONE (Assistant Chief Insurance Examiner, Division of Insurance, Department of Business and Industry):

My presentation will focus on the life and health insurance markets. The chart on page 113 shows historical written premiums for life, annuities, accident and limited health products ([Exhibit A](#)). The premiums collected on these products experienced consistent growth for the last eight years, with the exception of 2016. These products have averaged 7.1% growth over the last five years.

The bar chart on page 114 shows premiums and deposits for life insurance in Nevada ([Exhibit A](#)). The figures represent both life and annuity products. Over this period, premiums and deposits increased 63.8%. Since the declines in 2016 and 2017, life insurance premiums and deposits have experienced consistent growth, with 2021 experiencing growth of 14.5%, and average growth over the period 2018 to 2021 of 9.2%. While the division cannot specifically pinpoint the cause of this growth, it may be related to the pandemic, and an increased demand for life insurance and annuities. In addition, carriers are streamlining the process for purchasing life insurance products, which allows for faster turnaround.

The pie chart on page 115 provides a snapshot of Nevada's healthcare results by coverage category ([Exhibit A](#)). The data is estimated based on information obtained from state, federal and private sources. Not all health plans sold in Nevada are required to pay Insurance Premium Tax. There has been a shift in the number of covered lives in the self-funded group market in Nevada. Previous estimates allocated 32% of Nevadans to this market; the latest estimates show an increase of 9%, to 41%. Given that self-funded group plans do not pay premium taxes, this shift could result in a decrease in taxable premiums.

Another potential shift in covered lives is likely to occur with the end of the federal public health emergency, which will cause some Nevadans to lose Medicaid eligibility. The Silver State Health Insurance Exchange (SSHIX) is working closely with the Department of Health and Human Services (DHHS), Department of Health Care Financing and Policy to engage individuals that lose Medicaid eligibility and assist them in enrolling in an Affordable Care Act (ACA) plan through the SSHIX.

Medicaid and individual market carriers both pay Insurance Premium Tax, so the shift and resulting impact could be negligible, depending on the number of Nevadans that enroll in individual plans.

The table on page 116 shows health insurance business written in the state, and details membership and premiums written by line of business ([Exhibit A](#)). Medicare, Medicaid and group comprehensive insurance remain the top three lines of business in Nevada based on written premiums. These three lines make up 86% of the written premiums in 2021. In 2020, Nevada was dealing with the potential impacts of COVID, and the division projected a loss of Insurance Premium Tax revenue due to an anticipated decrease in health premiums. This decrease was never realized. While some lines of business experienced minor decreases in 2020, overall health business premiums increased.

Furthermore, compared to 2020, written premiums for 2021 have increased for all lines of business. Premiums are up over 20% compared to pre-pandemic levels.

Turning the discussion specifically to the ACA health insurance markets (page 117, [Exhibit A](#)), the trends followed closely with the data reported on the previous slide (page 116). In 2020, total premiums saw a slight decline compared to 2019, with a decrease of 1.12%. This was driven by a 5.29% drop in individual premiums, and relatively no growth – less than 1% - in the group market.

For 2021, the market grew as a whole by 7.6%, with double-digit growth of 18% in the individual market, 8.81% for small groups and 2.81% in the large group. The growth in the individual market is partly attributable to the special enrollment period related to COVID, as well as expanded access to affordable health care through additional subsidies available to Nevadans through the American Rescue Plan Act (ARPA). Those subsidies were scheduled to expire December 31, 2022, but were extended through the end of 2025 by the Inflation Reduction Act (IRA).

The overall price of healthcare under the ACA has stabilized in recent years and is well below the rate increases that Nevada's individual ACA market experienced in 2018 (page 118, [Exhibit A](#)). The higher overall rate change for plan year 2023 is skewed by one carrier's higher rate change. When that outlier is removed, the overall rate increase is 5.6% for the individual market. For the small group market, rates increased over the last five years, and are nearing the high of 7.91% approved in 2018. The increase in both markets in recent years is due to a variety of factors, one being the continued increase in medical costs.

The average monthly premium for a 40-year-old in Nevada by rating area is shown on page 119 ([Exhibit A](#)). This data illustrates stabilization in recent years and a steep increase in 2018. For the remainder of Nevada counties which represents a large portion of rural Nevada, premiums peaked in 2020 and declined over the last two years. For plan year 2023, this trend has continued with average premiums down \$30 over prior year rates.

For rating area 3 (Carson, Lyon, Storey and Douglas Counties) premiums spiked in 2018 and 2019, leveled out in 2021, and have been steadily increasing for plan years 2022 and 2023. Premiums in rating areas 1 and 2 (Clark, Nye, and Washoe Counties) have remained relatively flat since the larger increases in 2018 and 2019.

With the stability of pricing, carriers have returned to the individual market. In 2018, Nevada's individual exchange market was on the verge of being without plan offerings in rating area 4; only two carriers in rating areas 1 and 2; and one carrier in rating area 3 and 4. Since that time, more carriers have entered the Nevada market and for plan year 2023, there are six carriers offering individual health plans in rating areas 1 and 2, four carriers with offerings in rating areas 3, and three carriers in rating area 4.

MR. STOSIC:

The balance of the presentation will be about the property and casualty market and the overall market in the state. The slide on page 120 reflects the numerous lines of insurance that make up the property and casualty market ([Exhibit A](#)). The largest segment is automobile insurance, which accounts for over 50% of the property and casualty direct written premiums in Nevada. Other significant lines of business are homeowners' insurance, commercial non-auto coverages, workers compensation, surety, mortgage guaranty, and medical malpractice insurance.

Property and casualty insurance direct written premiums have grown each year in the past nine years, from \$4 billion in 2013 to over \$7 billion of annual written premiums in calendar year 2021 (page 121, [Exhibit A](#)). During this nine-year period there was steady growth in homeowner and commercial insurance premiums, while medical malpractice insurance experienced a slight decline in written premiums each year from 2012 through 2018. Medical malpractice insurance rebounded from a low of \$65 million in written premiums in 2018 to \$94 million in 2021.

Automobile premiums made up 89% of personal auto lines, such as cars, private passenger trucks, motorcycles and recreational vehicles, while the other 11% are for vehicles in the state's commercial markets. Nevada's automobile written premiums experienced significant increases from 2016 through 2019, with annual increases of 9.6%, 11.6%, 14.6% and 9.4% (page 122, [Exhibit A](#)).

While most lines of insurance experience increased written premiums in 2020 and 2021, automobile insurance decreased by 2.5% in 2020 to \$3.265 billion. The pandemic significantly reduced driving during the period of stay-at-home restrictions and many of Nevada's carriers provided refunds or premium credits to their automobile customers. Automobile written premiums rebounded and grew by 9% in 2021 to \$3.56 billion.

Nevada's written premiums reduced three straight years during the Great Recession, from 2008 to 2010; fortunately, that level of decrease did not occur during the pandemic. During the Great Recession, premiums reduced by 0.5% in 2008, 5.2% in 2009, and 0.1% in 2010. That is the last time a downturn showed what the potential impact on premiums might be. Total written premiums increased by 5.2% in 2020 to \$19.8 billion, then grew by 11.8% in 2021 to just under \$22 billion (page 123, [Exhibit A](#)).

Overall, insurance written premiums in Nevada have experienced resiliency and continued growth over the past 10 years. The state's written premiums have almost doubled during that period, from \$11.5 billion in 2012 to just under \$22 billion in 2021 (page 123, [Exhibit A](#)).

Factors impacting insurance costs in the U.S. include supply-chain disruption, which has increased the cost of building materials and automobile parts; increased severe weather events, including wildfire risks due to drought conditions and increased temperatures; and high levels of inflation. These factors are expected to increase insurance pricing soon. The division is currently experiencing higher requested rate filings than in the past couple of years.

The last slide reflects the state's Insurance Premium Tax collections over the past six years, which have closely followed the calendar year written premiums reported by the NAIC (page 124, [Exhibit A](#)). In FY 2020 there was an increase of 6.3% in Insurance Premium Tax collections; FY 2021 increased 8.2%; and FY 2022 increased 5.1%. The Insurance Premium Tax continues to be a relatively stable source of revenue to the state.

RYAN HIGH (Executive Director, SSHIX):

The SSHIX mission statement is shown on page 127 ([Exhibit A](#)). The main part of the SSHIX's mission is to "increase the number of insured Nevadans," and its values are to be consumer focused and innovative, and to provide diversity in terms of engaging and enrolling a wide range of stakeholders, and to be business friendly.

The SSHIX operates the online marketplace, Nevada Health Link, which connects Nevadans who are not insured by their employer, Medicaid, or Medicare to comprehensive health insurance coverage. Individuals can purchase ACA Certified Qualified Health Plans or Qualified Dental Plans through the Exchange. The SSHIX also promotes a vision product, which is a recent change.

If eligible, consumers can receive subsidy assistance to offset monthly premium costs through advance premium tax credits (APTC). NevadaHealthLink.com is the only site where Nevadans can get access to financial assistance for insurance through the federal government. The division is solely self-funded – no state General Funds, and only limited federal funds are used to support operations.

The map on page 129 shows enrollment by county ([Exhibit A](#)). Clark County is obviously the largest population of enrollees, followed by Washoe County.

Page 130 shows "metal" levels under which consumers purchased plans ([Exhibit A](#)). Consumers received APTC and cost sharing reductions (CSR) for the silver plan, which is the metal level with the largest percentage of enrollment.

Almost 9 out of 10 consumers that shop on the exchange receive some financial benefit; 88% of enrollees receive subsidies. Almost half of our customers pay \$100 or less for their monthly premium.

The chart on page 131 ([Exhibit A](#)) shows year-over-year enrollment. For the current plan year 2022, the SSHIX enrolled a little over 101,000, which is approximately 24% over the previous year. That growth is attributed to the American Rescue Plan Act (ARPA) expanding subsidies and increasing the amount of subsidies and tax credits, including for those making more than 400% of the federal poverty level. The recently passed Inflation Reduction Act (IRA) will extend that expansion for another three years through plan year 2025.

Of the 101,000 consumers enrolled last year, about half are male and half are female. The largest age group is between 35 and 50 years old.

Page 134 shows statistics for both pre- and post- ARPA ([Exhibit A](#)). In pre-ARPA plan year 2020, a little over 85% of our consumers received subsidies. In post-ARPA, this increased to about 90%, which was about a 5% increase. The statewide average monthly pre-ARPA premium was \$366, which reduced to \$293 post-ARPA, for a savings of about \$72 per month.

Page 135 shows specific examples of how ARPA affected Nevadans ([Exhibit A](#)). For example, the monthly premium for a family of four in Las Vegas went from \$348 to zero dollars. The monthly premium for a family of five in Elko County went from over \$3,600 to \$483. The monthly premium for a 29-year-old in Las Vegas went from \$320 to \$39. These are concrete examples of how the ARPA, and subsequently the IRA, are reducing health care costs for exchange consumers.

For plan year 2023, there are a total 163 qualified health plan (QHP) offerings across seven carriers. The last time the SSHIX presented to the Economic Forum in 2020, there were only 27 QHPs over three carriers. Currently, for plan year 2022, there are 128 plans over seven carriers.

The final average rate on the Exchange increased by 9.2%. Consumers will not feel the increase as much, because subsidies will increase as well. There will be seven navigator grantees, which are community-based organizations that help consumers enroll. There will be seven broker grantees throughout the state. The SSHIX has a healthy and robust partnership with over 800 brokers that are trained and certified with the Exchange, but the seven broker grantees receive grants to increase their presence in the community. For example, a broker grantee may increase marketing, or open a pop-up office in a mall during open enrollment.

The IRA extended ARPA subsidies for another three years. The National Academy for State Health Policy (NASHP) estimates that Nevada consumers between 250% and 400% of the federal poverty level (FPL) experienced an approximate 50% decrease in out-of-pocket premiums. Nevada consumers who are up to 150% of the FPL can get silver plans for zero premiums in reduced deductibles.

One point of note is the “Family Glitch.” Consumers that receive Employer-Sponsored Insurance (ESI) offers which are deemed unaffordable can shop on the Exchange. Until now, the Internal Revenue Service has only deemed affordability based on the individual employee, not the remaining members of the family. Now, if a family’s insurance is deemed to be unaffordable based on the totality of the family, the other three family members can shop on the Exchange and receive subsidies.

The federal government declared a public health emergency due to COVID on January 31, 2020. The public health emergency helps low-income families and children receive preventive and primary care during the pandemic without a disruption in coverage. The public health emergency required states to keep Medicaid enrollees continuously covered. The public health emergency is now unwinding. Until now, with the public health emergency still in effect, consumers that are on Medicaid have not been

redetermined. If they had been determined ineligible, for example, for having too much income, they would have been directed to the Exchange, which would be the next step in providing coverage options. Since the public health emergency has been in effect, these redeterminations have not been made. The Centers for Medicare and Medicaid Services (CMS), and U.S. Department of Health and Human Services has promised to provide a 60-day notice before the public health emergency ends. The SSHIX is working closely with CMS and the DHHS Division of Welfare and Supportive Services to coordinate messaging, coordinate account transfers, and determine the most efficient way to serve Nevadans that may be determined ineligible for Medicaid.

CHAIR ROSENTHAL:

I was surprised to hear that the largest age group of Exchange consumers was between 35 and 50 years old. What are the broad categories of people who choose to use the Exchange? For example, are they independent contractors, or retirees?

MR. HIGH:

They are independent contractors. The SSHIX's marketing campaign targets gig workers, such as an Uber, Lyft or DoorDash driver. An independent contractor could be a real estate agent who is part of a real estate firm but does not have health insurance through that company. The SSHIX is also targeting service workers, such as restaurant employees who may not have employer-sponsored healthcare.

CHAIR ROSENTHAL:

The Economic Forum will be forecasting the Insurance Premium Tax. Does that include premiums paid, either under the Nevada Health Link or other insurance carriers?

MR. HIGH:

Yes, the Insurance Premium Tax includes those paid premiums.

There was no further discussion on this agenda item.

XI. REPORT AND DISCUSSION OF FY 2022 ACTUAL COLLECTIONS COMPARED TO THE ECONOMIC FORUM MAY 4, 2021, FORECAST, ADJUSTED FOR LEGISLATIVE ACTIONS APPROVED DURING THE 2021 SESSION AND COURT DECISIONS.

Chair Rosenthal called a recess at 12:00 p.m. The Economic Forum returned from recess at 12:16 p.m.

MICHAEL NAKAMOTO (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): Table 1 on page 141 is a comparison of actual collections versus the December 3, 2020, and May 4, 2021, forecasts for both FY 2021 and FY 2022, for the Economic Forum, and each of the forecasters that presented a forecast to the Economic Forum at the respective meetings ([Exhibit A](#)).

The forecasts for all taxes and fees were provided by the agency responsible for administering or collecting the tax revenue, the LCB Fiscal Analysis Division, and the Budget Division of the Governor's Office of Finance. Moody's Analytics will provide forecasts for the Sales and Use Tax and Percentage Fees Tax, which will be the continuing process into the November and December forecasts for this cycle.

The table shows forecasts for FYs 2021 and 2022. In her opening remarks, Chair Rosenthal used the word "uncertainty" to describe the forecasting environment. Looking back on this forecasting cycle, there was lots of uncertainty in our world in December 2020. It was unknown when the federal stimulus funds would be available, or how much it would be. It was also unknown whether a vaccine would be available; whether there would be future waves of the coronavirus that would impact the day-to-day lives of ordinary Nevadans and ordinary Americans; or whether the pandemic would necessitate another round of closures of businesses and schools.

More specifically, in December of 2020 there was less information about actual revenues. For FY 2021, limited information was available as to actual collections. The first quarter of the MBT, Insurance Premium Tax, and RPTT collections had just become available. There was three months of information for the Sales and Use Tax and LET Non-Gaming; four months for LET Gaming; and five months for the Gaming Percentage Fee.

In May 2021 an additional five months of information was available for everything except the MBT, the Insurance Premium Tax, and the RPTT, for which only the second quarter was available. The third quarter information would not be available until the end of May.

Looking through FY 2021 actuals for each of the revenues listed on the table, the difference between the forecast and the actual amounts decreased, with a couple of exceptions, the Insurance Premium Tax being one (page 141, [Exhibit A](#)). The forecasters did not expect much impact from the pandemic with respect to Insurance Premium Tax collections.

More information became available to the forecasters about the timing and availability of vaccines and stimulus funds. By May 2021, the forecasts were getting closer to actual collections for both FYs 2021 and 2022.

The table on page 141 shows all the forecasts for the Sales and Use Tax, Gaming Percentage Fee, the Insurance Premium Tax, and two of the three pieces of the MBT ([Exhibit A](#)). Page 142 shows MBT Mining, LET, the RPTT, Commerce Tax, as well as the total for all these major revenue sources. Page 143 shows "major/minor" revenue sources the Economic Forum delegated to its Technical Advisory Committee on Future State Revenues (TAC) to review and forecast for its consideration.

Actual gross collections for the State General Fund in FY 2021 totaled \$4,529,322,702. The Economic Forum's forecast was \$4,308,848,000, approximately \$220,475,000 less than actual collections. In FY 2022, total gross General Fund collections were \$5,524,470,795. The Economic Forum's gross forecast for FY 2022 made in May 2021 was \$4,513,938,000, a difference of approximately \$1,010,532,000.

The TAC also forecasts tax credits that reduce the amount of General Fund revenue collected. Those forecasts are shown on pages 145 and 146 ([Exhibit A](#)). Commerce Tax credits allow a taxpayer to deduct up to 50% of their Commerce Tax liability from their Modified Business Tax. The table also shows film tax credits; the Nevada New Markets Job Act tax credits, which are specifically credited against the Insurance Premium Tax; Education Choice Scholarship tax credits, which are credited against the MBT; Catalyst Account tax credits, which can be used against the MBT, the Insurance Premium Tax or the Gaming Percentage Fee. The College Savings Plan tax credits can be used against the MBT, and the Affordable Housing Transferable tax credits can be used against the MBT, the Insurance Premium Tax or the Gaming Percentage Fee.

The total forecast by the Economic Forum for all other tax credits was higher than actual tax credits taken. The credits are subtracted to arrive at the amount of additional money that is available for the state to spend.

Collections were approximately \$226.2 million above the forecast in FY 2021. The Economic Forum's forecast of \$4,425,925,000 was approximately \$1,013,410,000 net above actual net collections for the State General Fund, which in FY 2022 was \$5,439,335,105.

Table 2, which is a modification of Table 1, shows actual versus forecast comparison of the December 3, 2020, and May 4, 2021, forecasts adjusted for measures approved during the 2021 Legislative Session as well as court actions that affected the Modified Business Tax revenue for FY 2022 (page 148, [Exhibit A](#)). Every single revenue source on the Economic Forum tables is listed here, including the forecasts approved by this body at each of those meetings, the actual collections, and how those compared.

The bottom line on page 152 shows the same total for the May forecast, where actual collections net all tax credits are again \$1,013,410,290 above the Economic Forum's May 4, 2021, forecast for FY 2022 ([Exhibit A](#)).

MR. LEAVITT:

It appears the Economic Forum estimated low based on growth coming out of the pandemic. Is there any item that seems to be out of line with the rest that could improve our future forecasts?

Gaming revenues have rebounded much more than I expected. Room occupancy is 89%, but gaming revenue is way above that.

MR. NAKAMOTO:

Not many of the forecasters could have anticipated in December 2020 or May 2021 that there would be consecutive months of gaming win above \$1 billion, that taxable sales would grow by double digits, or that there would be an increased rate of inflation. There were a few exceptions in which the forecasts were relatively close, such as the Insurance Premium Tax. Otherwise, all the forecasts were low, which is borne out by the individual forecasts on Table 1.

The forecasters and the Economic Forum based their projections on what were realistic assumptions. There was not enough information to indicate what has transpired since May 2021.

MR. LEAVITT:

Based on the information available at the time of the forecast in May 2021, I do not know the forecasts would have been changed. Speaking practically, I would much rather have the forecast be high than low, as there are different consequences to the state budget.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): The tables presented by Mr. Nakamoto show that the forecasters missed the 2021 forecast, but it was not that bad for forecasting in a pandemic, considering the information set available at the time. The forecasters tried to figure out how vaccine availability and the federal stimulus funds would affect the forecast. The forecasters used employment data and wage data from the federal Bureau of Economic Analysis and Bureau of Labor Statistics. After the Economic Forum's forecast was completed in May 2021, those agencies increased employment numbers significantly. If the forecasters had those revised numbers, the forecast probably would have been higher. It was a very difficult time.

To address Mr. Leavitt's question, there is uniformity across the revenues and how they behave. Our economy and tax revenue are tied to visitor numbers. Fiscal staff have been watching the indicators to find out what is driving this.

At the June 2022 meeting of the Economic Forum, Fiscal staff reported revenue of \$800 million, and thought the forecast would be higher. It ended up being in the billion-dollar range. I do not see anything anomalous, but it seems everything behaved better than expected, because everything actually was better than expected.

March 2021 gaming revenue was a record billion dollars. If any of the forecasters had predicted that every month since then would be a billion dollars, with only a couple below pre-pandemic levels, the Economic Forum members probably would not have given that forecaster much credibility.

Our information set was limited. There was uncertainty about the federal stimulus dollars. At that time, it was not known that the Child Tax Credit would be given. That has a role, as it would expand people's disposable income. Child Tax Credit funds were accelerated in that they were given as checks rather than claimed as deductions when filing income tax returns.

Clearly, the current Economic Forum forecast for FY 2023 is \$4.7 billion. For FYs 2024 and 2025, I do not know.

Under the statutory provisions, 40% of any ending fund balance over 7% must go to the Rainy Day Fund, formally known as the Account to Stabilize the Operation of the State Government; that amounts to approximately \$400 million. That is not a bad thing to have happen due to the Economic Forum over forecasting. There will be an additional opportunity to restore or add to the amount in the Rainy Day Fund. This is especially important with the Federal Reserve trying to orchestrate a soft landing. I offer this as additional context - there is a downstream benefit of the over forecast in that it helped other parts of the state's budget by increasing the Rainy Day Fund.

There was no further discussion on this agenda item.

XII. MODIFIED BUSINESS TAX RATE REDUCTION PROVISIONS IN NRS 360.203.

This agenda item was taken out of order.

ERICA SCOTT (Economist, Department of Taxation):

Per *Nevada Revised Statutes* (NRS) 360.203, by September 30 of each even-numbered year, the Department of Taxation must evaluate whether an adjustment to the Modified Business Tax (MBT) rate is necessary based upon the amounts collected for the MBT, the Commerce Tax and the Branch Bank Excise Tax in the previous fiscal year.

To do this, the amount of MBT, Commerce Tax and the Branch Bank Excise Tax collected for the previous fiscal year - in this case FY 2022 - are totaled and compared to the amounts forecasted by the Economic Forum.

If the collected amount exceeds the forecasted amount by more than 4%, the MBT rate reduction is triggered. The MBT rate must be decreased proportionally for general business, financial institutions, and mining, so that the combined collected amount would have been only 4% higher than the forecasted amount. The reduced MBT rate then becomes effective for the upcoming fiscal year, in this case July 1, 2023, or the start of FY 2024. The Branch Bank Excise Tax and Commerce Tax rates are not affected.

In FY 2022, the MBT rates were 1.378% for general business and 1.853% for financial institutions and mining. A simplified table on page 159 shows the collected amounts for FY 2022 for the MBT, Commerce Tax and Bank Branch Excise Tax, which is net any Commerce Tax credit and any other tax credit taken that year ([Exhibit A](#)). The department collected \$1.039 billion, while the forecast was for collections of \$880 million. Collections exceeded the forecast by a little over 18%.

The 4% over-forecast threshold would have allowed for collections of \$915.75 million, meaning the new MBT rates had to be calculated such that they would have resulted in that amount, keeping Commerce Tax and Branch Bank Excise Tax collections constant. When factoring in this reduced MBT rate in the upcoming forecasts, the collections in this area will be reduced potentially by around \$124 million.

The new reduced MBT rate for FY 2024, as calculated pursuant to NRS 360.203, is 1.170% for general business and 1.554% for financial institutions and mining.

The actual calculated MBT reduced rates based on the reduction calculation methodology used since 2016 were 1.169% for general business and 1.553% for financial institutions and mining. However, to comply statutorily with the intent of NRS 360.203, subsection 4, the rate must not be below 1.17%. Therefore, the new MBT rates will be 1.170% for general business and 1.554% for financial institutions and mining to maintain the proportional consistency of the MBT rate reduction calculation.

In addition, the MBT rate reduction calculation will not need to be made again according to NRS 360.203, subsection 4(a). Because the MBT rate has reached the statutory rate of 1.17%, the department is no longer required to make this determination.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): The current MBT rate reduction means that the forecasters from the Department of Taxation, GFO and Fiscal Analysis Division will produce forecasts for FY 2023 using current rates, and for FY 2024 and FY 2025 using the lower rates.

To make it easier for the Economic Forum members to compare the three forecasts, a separate agenda item will be added to the November and December meetings to include a table showing what the forecast would have been for all three years at the higher rates.

CHAIR ROSENTHAL:
That would be very helpful.

There was no further discussion on this agenda item.

XIII. REPORT ON FORECAST ACCURACY BY FORECASTER FOR SELECTED REVENUES.

CHRISTIAN THAUER (Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): The Report on the Forecast Accuracy of the Economic Forum for Selected Revenues is regularly presented to the Economic Forum at its October meeting in even-numbered years ([Exhibit F](#)). The report provides information on historical average forecast errors for selected major revenues: State 2% Sales Tax; Gaming Percentage Fee; Insurance Premium Tax; Casino/Live Entertainment Tax; Cigarette Tax; and total General Fund revenues. The report tracks forecast errors for those revenue sources to the 1995-97 biennium.

The report also includes information on the Modified Business Tax, Nonfinancial, Financial, Mining, and total MBT combined; RPTT; and Commerce Tax. The report tracks forecast errors for these revenues back to the 2005-07 biennium.

A summary table showing the average and absolute average percent forecast error over the biennium can be found on page 2 ([Exhibit F](#)). The more relevant measure is arguably the absolute average percent forecast error, which measures the average distance of forecast to actual revenues, without allowing positive and negative forecast errors to cancel each other out.

The absolute average percent forecast error for the State 2% Sales Tax is 5.5%; Gaming Percentage Fee, 6.7%; and total General Fund revenue, 5.3%. It is of note that these numbers do not yet include what Mr. Nakamoto presented for FY 2022 regarding deviation between actual and forecast. We are still in the 2021-23 biennium, so those numbers are not yet included in this table.

The expectation is that once these numbers are included, the absolute average percent forecast error for the total General Fund revenues and for many of the select major revenue sources featured in the report, would increase for the reasons Mr. Nakamoto and Mr. Guindon mentioned. In that context it would be interesting to ask, what would the absolute average percent forecast error look like over time if outliers were removed? For example, the 2019-21 biennium when the coronavirus came upon the economy and lockdowns brought the economy to a partial standstill, or the 2007-09 biennium when a financial crisis caused the Great Recession.

Fiscal staff has also provided an analysis of how the absolute average percent forecast error would look if the 2019-21 biennium and the Great Recession in the 2007-09 biennium were removed. The result is that the absolute average percent forecast error is significantly lower under these normal conditions without the outliers. For example, the absolute average percent forecast error for the State 2% Sales Tax is 5.5% (page 2, [Exhibit F](#)). If the Great Recession and the 2019-21 biennium are removed, the absolute average percent forecast error goes down to 4%.

The same is true for total General Fund revenue, which, including the Great Recession and the impact of the coronavirus is 5.3%. With those factors removed from the calculation, the absolute average percent forecast error decreases to 4%. The Gaming Percentage Fees absolute average percent forecast error was 6.7%, but with those factors removed from the calculation, the absolute average percent forecast error decreases to 3.75%.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): Removing the outliers moves the forecast by about one percent. That might not seem like much, but, as a forecaster, if you are going to miss by 4% or 5%, that one percent matters. It will be very interesting to see the difference for the 2021-23 biennium when it is added to the metrics, and then backed out.

Everyone would like for the forecast error to be zero percent. Interestingly enough, when the positives and negatives of the Great Recession and the pandemic balance each other out, the total General Fund forecast error is basically zero. That implies that the Economic Forum is not biased in its forecast nor is it consistently over forecasting.

These forecast errors are for the two-year biennium period. The total General Fund forecast error was 5%, or about \$500 million of the \$10 billion biennial budget. That does not allow much wiggle room in the state budget.

The Executive Budget and the legislatively approved budget include a 5% ending fund balance. It is interesting that the state is attempting to keep 5% a year in the state budget, and the absolute error is now around 5%, without these two anomalous events.

CHAIR ROSENTHAL:

Thank you for that perspective. It is helpful to keep these things in mind. Also, it provides background information for the new members of the Economic Forum about how this body has performed through the years.

There was no further discussion on this agenda item.

XIV. PRESENTATION ON PERSONAL INCOME AND WAGES IN RELATION TO POPULATION, EMPLOYMENT, AND INFLATION ON A NATIONAL LEVEL AND IN THE STATE OF NEVADA.

SUSANNA POWERS (Deputy Fiscal Analyst, Fiscal Analysis Division, LCB):

Since Mr. Schmidt (DETR) presented a comprehensive overview of the job market, I will skip through the slides related to employment (page 166, [Exhibit A](#)). The State Demographer presented population trends and outlooks, so I will not present information related to population growth rates (page 170).

Page 171 shows the Consumer Price Index (CPI) and selected CPI components ([Exhibit A](#)). Inflation had been barely noticeable for decades but is now suddenly a top concern. The state's economy has seen a robust recovery by many economic metrics, but the state's economy is not doing as well on inflation-adjusted terms, because inflation has eroded purchasing power.

The slides on pages 172 and 173 provide detail about what is driving the inflation rate ([Exhibit A](#)). Page 172 shows the CPI, which is the headline inflation indicator for all items, was up 8.6% year-over-year in the second quarter. If today's inflation report is added, CPI measured year-over-year is down a little bit to 8.3%. Core inflation does not include the volatile food and energy components. Based on this measure, inflation was 6% compared to one year ago in the second quarter. With the new update, the core inflation rate year-over-year actually rose 6.3% if the third quarter is included.

The slide on page 173 shows that the energy component has been the largest contributor to change in the CPI ([Exhibit A](#)). Energy prices rose 35.4% year-over-year in the second quarter and declined considerably to the 25% range for the third quarter. Food prices rose as well. In the second quarter food prices rose 10% year-over-year and increased 11.2% in the third quarter.

Personal income includes all earnings, including salaries and wages, investments, and other sources. The slide on page 174 shows the components and their respective shares of total personal income for the U.S. The largest share of personal income is wages and salaries. Prior to the pandemic, that share was about 50% of all personal income. That share is now slightly higher than what it had been before the pandemic.

Government transfer payments in the form of money income and in-kind benefits accounted for about 17% of total personal income prior to the pandemic response by the federal government (page 174, [Exhibit A](#)). That is almost back to pre-pandemic levels. The chart shows the magnitude of the impact the government's transfer payments played in 2020 and 2021 in response to the lost wages and salaries due to the pandemic. Interestingly, the share of government transfers did not increase as much in response to the fiscal stimulus enacted during the Great Recession as it did in response to the pandemic-related federal programs.

The slide on page 175 tells a similar story, except that the drop in share of wages and salaries as a percent of total personal income was larger for Nevada than for the U.S. ([Exhibit A](#)). The increase in the share of transfer payments as a percent of total personal income in 2020 and 2021 was more pronounced for Nevada than for the U.S.

Shifting to U.S. total personal income and total wages and salaries, the two spikes on the chart coincide with federal stimulus and other programs in FYs 2020 and 2021 (page 176, [Exhibit A](#)). As a result, there is not a typical peak-to-trough and recovery pattern that is usually associated with economic downturns. The chart shows the recovery as a peak-to-peak and back to trend line. When compared to the first quarter of 2020, which is the last period before the pandemic started, personal income was up 13.7%. Wages and salaries show a more typical pattern of the peak, then trough, and subsequent recovery. When compared to FY 2020 first quarter, wages and salaries are up 15.5%.

For Nevada, the narrative is very similar. When compared to the first quarter of 2020, personal income is up 14.4% and wages and salaries are up 15.5% (page 177, [Exhibit A](#)).

The chart on page 178 shows the growth rate for personal income, comparing Nevada to the U.S. ([Exhibit A](#)). Since the onset of the pandemic, Nevada's personal income grew an average 6.7% compared to 5.9% for the U.S.

The growth rate for wages and salaries comparing Nevada to the U.S. is shown on page 179 ([Exhibit A](#)). During normal times, Nevada's wage and salary growth rate tends to outpace the U.S. When looking at the recent shocks to the economic system, the magnitude of the decline in wage and salary growth were deeper for Nevada than for the U.S. Since the second quarter of 2020, Nevada has outpaced the U.S. with a growth rate of 7.7% compared to 6.4%.

Page 180 shows per capita personal income for the U.S. ([Exhibit A](#)). Compared to the quarter preceding the start of the pandemic, per capita personal income is up 12.6% in the U.S. However, when adjusted for inflation, it is down 0.2% during that period. In nominal terms, Nevada per capita personal income is up 11.3% since the first quarter of 2020, but when adjusted for inflation, it is down 1.5% during that period.

Growth rates for per capita personal income comparing Nevada to the U.S. from the first quarter of 2020 to the most recent quarter are shown on page 181 ([Exhibit A](#)). The percent change is 12.6% for the U.S. versus 11.2% for Nevada. When adjusted for inflation, the U.S. per capita personal income percent change is -0.2% versus -1.5% for Nevada.

Per capita personal income growth rates since the onset of the pandemic are shown on page 184 ([Exhibit A](#)). In terms of per capita personal income growth rates, Nevada is very comparable to the U.S. For the last two years, the U.S. per capita personal income growth has averaged 5.5% compared to 5.3% for Nevada. Inflation adjusted, per capita personal income growth is only 1.4% for the U.S. and 1.2% for Nevada (page 185, [Exhibit A](#)).

Shifting to wages and salaries on a per-employee basis for the U.S., when the pandemic hit, there was a large decline in lower-wage jobs leading to a sharp increase in wages and salaries per employee. This is because the cost of the pandemic-induced recession was disproportionately borne by lower wage workers as they experienced a bigger share of job and wage losses than those with higher incomes. As employment has recovered, there has been robust growth in employee wages and salaries.

When compared to the quarter that preceded the start of the pandemic, U.S. wages and salaries per employee increased 15.7%, yet, when adjusted for inflation, wages and salaries rose only 2.6% during that period (page 186, [Exhibit A](#)).

That same pattern of a sudden upward movement can be seen in wages and salaries per employee in Nevada in response to large losses of jobs associated with lower-wage sectors such as leisure and hospitality (page 187, [Exhibit A](#)). In nominal terms, Nevada wages and salaries per employee are up 15.2% since the first quarter of 2020; however, when adjusted for the effects of inflation, wages and salaries on a per-employee basis are only up 2.1% for that period.

The slide on page 188 shows the percent change in wages and salaries per employee for the U.S. and Nevada in nominal terms from the first quarter 2020 to the second quarter 2022 ([Exhibit A](#)). It is interesting that the widening gap between the U.S. and Nevada that occurred after the Great Recession has never narrowed.

Page 189 summarizes the last two slides showing the percent change in wages and salaries per employee on inflation adjusted terms from the first quarter 2020 to the second quarter 2022 for the U.S. and Nevada ([Exhibit A](#)).

Page 190 shows that Nevada is very comparable to the U.S. in terms of wages and salaries per employee growth rates. Over the last two years, the U.S. averaged a growth rate of 6.9% compared to 7.2% for Nevada. On an inflation-adjusted basis, wages and salaries grew only 2.7% for the U.S., and 3% for Nevada (page 191, [Exhibit A](#)).

Prior to the Great Recession, Nevada's median household income exceeded that of the U.S., but has remained below the U.S. since (page 192). This trend was briefly reversed in 2019 but Nevada fell below the U.S. at the onset of the pandemic. Between 2019 and 2021, the median household income rose by 3% for the U.S. but declined 9.3% for Nevada. Nevada's median household income has not recovered from the impact of the pandemic. When adjusted for inflation, the U.S. median household income fell 2.8% between 2019 and 2021, while Nevada's median household income fell 14.4% (page 193, [Exhibit A](#)).

The slide on page 194 summarizes U.S. versus Nevada in terms of nominal growth rates ([Exhibit A](#)). The slide on page 195 compares the U.S. to Nevada in terms of those inflation adjusted growth rates.

Page 196 compares Nevada General Fund revenue per \$1,000 of Nevada personal income and shows the change over time ([Exhibit A](#)).

Page 197 shows how the General Fund and personal income growth rates have performed over time ([Exhibit A](#)). The first observation is that the trend between the two series tends to move together. The second observation is that while the state has seen record tax revenues, the recent peak in the General Fund growth rate has not surpassed the peak of FY 2004 that followed major tax changes during the 2003 Legislative Session.

MR. GUINDON:

The chart on page 196 shows Nevada General Fund revenue per \$1,000 of Nevada personal income. It is interesting that there is a big increase in revenue from FY 2003 to FY 2004 ([Exhibit A](#)). That was due to a significant change made during the 2003 Legislative Session and 20th Special Session to generate more General Fund revenue.

Revenue remained at the same level until the Great Recession. Revenue bounced back in FYs 2010 and 2011, because the Legislature and the Governor worked together to take action to increase General Fund revenue to keep the budget intact.

Those actions were transitory for FY 2010 and 2011. Revenue started to fall when those actions were no longer in effect. Again, in 2015, the Commerce Tax was put in place, and the MBT rates were increased, as well as a few other measures. Revenue increased in 2016, but immediately started to decline.

The big fall was expected for FY 2020. The big jump in FY 2022 was close to the effect of FY 2003 legislative actions, but it was not due to actions of the Governor or the Legislature, rather, due to the economy coming out of the pandemic. The chart shows that nobody could have expected this type of recovery.

XV. PRESENTATION OF HISTORICAL TAXABLE SALES, GAMING MARKET, AND COMMERCE TAX STATISTICS.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): I recommend that the Economic Forum members look at the charts and tables linked to this meeting on the Economic Forum's webpage on the Nevada Legislature website ([October 13 Economic Forum Meeting](#)). Forecasters will use information in the tables regarding wages, personal income, and employment to develop their forecasts.

In several categories, the charts that show taxable sales by fiscal year do not reflect that there was a pandemic going on. For Washoe County and several of the rural areas there was no decrease in taxable sales in FY 2021.

A bill was passed during the 2017 Legislative Session allowing sales tax to be collected for online purchases. During the pandemic, there were lots more people making online purchases. The negative economic event of the pandemic was possibly offset by revenue generated by purchases made online and delivered to a buyer's doorstep. If it had not been for that change in taxing online sales, that revenue would have been lost during the pandemic event.

The information sets and charts for February and March 2021 on the Economic Forum's webpage detail what forecasters would have known for gaming win and taxable sales at that time. Nothing appeared too extraordinary, but many changes occurred. There is a lot of variances in the monthly and quarterly data. A lot of the monthly charts have the 12-month moving average and the quarterly charts have the four-quarter moving average, which will smooth out. The gaming and taxable sales charts display year-over-year data. When forecasting, I look to see if there is an inflection point in the moving average data and to determine if revenue will flatten out now that the data is year-over-year. I am not saying there will not be growth, but I am curious if the phenomena that we have been seeing is annualizing.

Commerce Tax data is shown across 26 different business categories. Forecasters can look at the individual pieces standing behind the tax. The Commerce Tax revenue for FY 2022 was expected to be well over forecast, because taxable sales were well over forecast. Taxable sales are retail, which is part of the Commerce Tax. Wholesale is also part of the Commerce Tax. Transportation and warehousing are also involved in retail and wholesale sales. It is not clear whether there is a signal there that can help forecasting, or whether it is more noise.

Those tables will be updated for the Economic Forum's November 2022 meeting.

There was no further discussion on this agenda item.

XVI. INSTRUCTIONS TO THE TECHNICAL ADVISORY COMMITTEE ON FUTURE STATE REVENUES (NRS 353.229) CONCERNING THE GENERAL FUND REVENUE FORECASTS.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): At its June 2022 meeting, the Economic Forum provided direction as to which revenues would be considered major revenues to be discussed and forecast by the Economic Forum, and which revenues would be assigned to the Technical Advisory Committee (TAC) to prepare a forecast for its consideration.

This is an opportunity for the Economic Forum to make changes to the direction that was provided to the TAC and Fiscal staff.

CHAIR ROSENTHAL:

Are any of the Economic Forum members inclined to change the instructions given to the TAC or Fiscal staff at the last meeting?

None of the Economic Forum members requested changes to the instructions.

MR. GUINDON:

Fiscal staff will work on the table for the MBT. That will make it easier for the members to follow.

There was no further discussion on this agenda item.

XVII. SCHEDULING OF FUTURE ECONOMIC FORUM MEETINGS.

RUSSELL GUINDON (Chief Principal Deputy Fiscal Analyst, Fiscal Analysis Division, LCB): Fiscal staff worked with Chair Rosenthal and the Economic Forum members to set the schedule of future meetings. The next meetings of the Economic Forum are scheduled for Monday, November 14, 2022; and Monday, December 5, 2022. Chair Rosenthal intends for those meetings to be attended at the meeting location in the Legislative Building in Carson City and the Grant Sawyer State Office Building in Las Vegas, but with all five members attending in Carson City. It is easier to have all five members sitting at the dais, and most of the presenters are in Carson City, but the Zoom platform will be available if it is needed.

Moody's Analytics will present on the U.S. and regional economies to the Economic Forum at its November 14, 2022, meeting. Fiscal staff will work with Chair Rosenthal regarding other presentations for that agenda.

There was no further discussion on this agenda item.

XVIII. PUBLIC COMMENT.

There was no public comment.

XIX. ADJOURNMENT.

Chair Rosenthal adjourned the meeting at 1:21 p.m.

Respectfully submitted,

Becky Lowe, Secretary for the Minutes

APPROVED:

Linda Rosenthal, Chair

Date

Copies of exhibits mentioned in these minutes are on file in the Fiscal Analysis Division at the Legislative Counsel Bureau, Carson City, Nevada. The division may be contacted at (775) 684-6821.