MINUTES OF THE MEETING OF THE
ECONOMIC FORUM
(NRS 353.226 – NRS 353.229)
November 8, 2018

The meeting of the Economic Forum (created by Senate Bill 23, 1993) was held at 9:00 a.m. on Thursday, November 8, 2018, in Room 4100 of the Legislative Building, 401 South Carson Street, Carson City, Nevada, with videoconference to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada.

ECONOMIC FORUM MEMBERS PRESENT IN LAS VEGAS:
None.

ECONOMIC FORUM MEMBERS PRESENT IN CARSON CITY:
Linda Rosenthal, Chair
Craig Billings, Vice Chair
Frank Streshley
Marvin Leavitt
Jennifer Lewis

ECONOMIC FORUM MEMBERS ABSENT:
None

STAFF:
Russell Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division
Michael Nakamoto, Deputy Fiscal Analyst, Fiscal Analysis Division
Joe Reel, Deputy Fiscal Analyst, Fiscal Analysis Division
Judy Lyons, Committee Secretary, Fiscal Analysis Division
Susanna Powers, Economist, Governor's Finance Office

EXHIBITS:

(Exhibit A)	Meeting Packet and Agenda
(Exhibit B)	Revenue Outlook: State 2% Sales and Use Tax, Gaming Percentage Fees, Moody's Analytics
(Exhibit C)	Supplement – Employment, Wages and Projections, Department of Employment, Training and Rehabilitation
(Exhibit D)	MBT Forecasts – Without Rate Reduction in FY 2020 and FY 2021
(Exhibit E)	Gaming Control Board, Gaming Revenue Forecasts
(Exhibit F)	Executive Budget Office, Revenue Forecasts
(Exhibit G)	Fiscal Analysis Division Forecast Information Packet
(Exhibit H)	Department of Taxation, Major Revenue Forecasts
(Exhibit I)	Commerce Tax Actual and Estimates - Business Activity and Accounting Period Basis
(Exhibit J)	Commerce Tax and MBT Commerce Tax Credits - Tables 1 to 6

I. ROLL CALL.

The meeting of the Economic Forum (Forum) came to order at 9:08 a.m. and the secretary called roll. The members attended the meeting in Carson City.

II. OPENING REMARKS.

Chairwoman Rosenthal announced that the meeting agenda included presentations on current, national and state economic and demographic conditions, and preliminary forecasts (FY 2019, FY 2020, and FY 2021) for the major General Fund revenue sources, as well as minor General Fund revenue forecasts approved by the Technical Advisory Committee (TAC) at their October 31, 2018, meeting. She emphasized no action would be taken to approve the preliminary forecasts for any of the revenue sources at this meeting.

Chairwoman Rosenthal clarified that General Fund revenue forecasts will be presented to the Forum for consideration and approval at the Forum's December 3, 2018, meeting. The approved forecasts will be used by the Governor to develop the Executive Budget that will be presented to the Legislature in January of 2019.

III. PUBLIC COMMENT.

Chairwoman Rosenthal asked for public comment from attendees in Las Vegas and Carson City. There was no public comment at either location.

IV. PRESENTATION ON THE NATIONAL, REGIONAL AND STATE ECONOMIC OUTLOOK.

Daniel White, Director, Fiscal Policy and Research, Moody's Analytics

Mr. White acknowledged his tenth year presenting to the Economic Forum. He said since his last presentation on May 1, 2017, the U.S. economy has improved significantly and is probably in the best condition that a policymaker could want in terms of making budgeting decisions. With the business cycle nearing the top, he recognized the extensive amount of time and analysis that Moody's Analytics put into predicting the occurrence of the next recession, its magnitude, and its impact on tax revenues.

Mr. White voiced a disclaimer, stating that he is employed by Moody's Analytics (Moody's), which is a separate company from Moody's Investors Service, a credit rating agency. He emphasized that the information included in his presentation should not be misconstrued as having any bearing on past, current or future ratings actions.

Continuing, Mr. White conveyed that reports issued by CNBC and the Wall Street Journal imply a robust U.S. economy. He pointed out that the U.S. economy is entering its tenth year of expansion and has been recorded as the second-longest period of expansion in modern American history. If the expansion stretches to the end of FY 2019, which ends June 30, 2019, it will surpass the longest expansion period recorded in the 1990s.

Mr. White said Moody's May 1, 2017, forecast reflected continued expansion that steadily increased before leveling out in FY 2018. Moody's was optimistic in regard to receiving infrastructure spending and tax cuts, things that would increase economic growth over the near term; however, the amount of fiscal stimulus released by the federal government in the last two years influenced Moody's outlook significantly, and resulted in a slight change to their forecast to reflect a more cyclical downswing.

Mr. White referred the members to the stimulus chart on page 9 (Exhibit A). He focused on years 2018, 2019 and 2020, and explained that the bars highlighted in pink represented the estimated amount of fiscal stimulus that was expected as a result of the Trump era tax cuts. Some of the tax cuts and provisions expire over time, beginning in FY 2020, as the effects of those start to absorb into the economy. The bars highlighted in grey represented Trump spending as a result of the Budget Act of 2018, which was expected to provide a significant boost to the economy in calendar years 2018 and 2019 after money was infused into the economy. He noted that Nevada has a very strong labor market with rising wages, and with rising wages comes rising prices. The large amount of fiscal stimulus that was introduced into the U.S. economy portended a very strong calendar year 2019, which portended strong fiscal years in Nevada for FY 2019 and the early part of FY 2020.

Mr. White recognized the tight labor market in Nevada, stating it was the first time on record when the number of job openings exceeded the number of people looking for jobs. Nevada's unemployment rate was below 4.0%, and falling, and was expected to tighten in 2019. The Employment Cost Index (ECI), prepared by the Bureau of Labor Statistics (BLS), suggests faster-growing wages in 2019 compared to 2018. Mr. White stated wage growth has been the missing link in Nevada throughout most of the expansion period, which was attributed to slack in the labor market over the last two or three years when unemployment was between 5% and 6%. Due to the large number of people without jobs after the Great Recession, it took a while for people to re-enter the labor force, which caused wages to lag. In terms of the Phillips curve and the relationship between unemployment and wages, Mr. White indicated that Nevada's wage growth has met Moody's expectations at this point in the business cycle in terms of strong growth. However, a suppressed labor force that is unable to fill new jobs could have a detrimental effect on wage growth — wages need to increase further in order to entice more people to enter the labor force.

Compared to the national average, Nevada's labor force is growing much faster (page 19, Exhibit A). Mr. White reported large amounts of in-migration over the last two or more years. He said the labor force is not a limiting factor in Nevada, because with job openings exceeding those looking for jobs, hiring new people and creating new jobs can only be done at the pace new people are entering the state. Nevada has been successful with retaining people and drawing new people to the state, which mimics a trend seen in other fast-growing regions of the economy, including Denver, Utah and Idaho. The size and quality of Nevada's labor force has increased, as many of the new jobs associated with the diversification of industry pay higher wages than traditional gaming and retail jobs that pay less than the national average.

Mr. White stated increased demand for housing in the U.S., specifically in the western states, has inflated housing costs. He said, unlike in 2005 and 2006 when houses were built whether they were needed or not, builders are more hesitant to bring on new inventory for the following reasons:

- Prices for new home inventory range from $500,000 to $1,000,000 versus $100,000 to $300,000. Builders say there is high risk associated with today's construction; therefore, are leaning toward becoming high-margin contractors to ensure a good return, as well as to satisfy lender anxieties.

- The construction labor force is diluted and supplies are scarce; houses cannot be built as quickly as they had been 10 to 12 years ago. The labor market lacks skilled workers in specialty trades, such as plumbers, electricians and roofers, especially in the western part of the country. Because of this void, wages are growing very quickly in those trades, and workers are not having to relocate and follow demand. Mr. White explained that the slacking labor force in Nevada is a hangover from the Great Recession, because in the 2010 to 2012 timeframe, after so many construction jobs were lost, people were not lined up to begin a four- to six-year apprenticeship program to become a master plumber, master electrician, etc. He said today's skilled workforce are getting paid quite well, and could potentially push them into early retirement. Encouraging young people to pursue the skilled trades is vital to increasing overall construction, especially homebuilding.

- Commercial building is strong in Nevada and tends to pay higher wages than residential builders, which is commanding the construction work force and negatively impacting housing production. U.S. housing prices are growing over 6.0%, which is expected at the top of a business cycle in a strong economic environment, but is unsustainable over the long run. Mr. White emphasized that the price of housing in Carson City has increased more than 10% year over year, which makes him nervous and cautious based on similar trends in the past.

Mr. White conveyed that, for reasons stated, forecast revisions were made to reflect cyclical effects. He indicated Moody's forecast is strong in FY 2019, but runs out of steam by 2020. Nevada has a cyclical economy that is a product of the national outlook.

Mr. White said there are strong indications that the next recession in the U.S. will occur in the second half of calendar year 2020. Ten years have passed since the last recession. He said some type of imbalance or overheating in the economy needs to occur to cause a recession. Past recessions that occurred in the early 1980s, 1991, 2001 and the Great Recession were all self-inflicted. Mr. White stated that Moody's baseline forecast assumes a very vanilla business cycle consisting of upward and downward movement relative to the labor market, employment, wages, inflation and interest rates, and is followed by a mild growth recession in 2020 that is focused in the financial sector, similar to the 2001 recession. He referred the members to the chart on page 14 (Exhibit A) of the meeting packet, and explained the federal funds rate projections made by Moody's Analytics (green line), the Federal Reserve (red line) and the implied market (blue line) represented by the futures market. He pointed out the difference in projections, and voiced the repercussions that could occur. If Moody's projection is wrong, they make adjustments to their projection and move forward; however, if the market is wrong, and adjustments have to be made "on the fly" or over a short time period, the implications are much bigger and could create a tremendous amount of volatility, especially in the stock market, and could trigger the next recession. Mr. White noted that the stock market has shown signs of impact, which usually happens towards the top of the business cycle because it is very difficult for businesses to generate revenue growth at the same level as they did during the recovery. Referring back to the federal funds rate chart, he pointed out that the largest gap in assumptions occurs in 2020, at which time interest rates will most likely peak and large amounts of fiscal stimulus and tax cuts will fall off in terms of support from the economy (Trump spending), creating a potential stock market correction. If all of those events occurred simultaneously, it would create the perfect mix for a recession downturn in the economy. Mr. White clarified the term "growth recession," meaning the economy could continue to grow during the downturn, but the pace of growth in terms of real gross domestic product (GDP) will decline significantly. Currently, growth in terms of GDP measures between 3.5% and 4.0%, but if growth declines to 0.5% or 1.0%, most industries would feel an impact similar to the 2001 recession.

Mr. White elaborated on strong indications that a growth recession will likely occur in 2020.

1. Labor Market: The consensus among economists is that the full employment/unemployment rate is somewhere around 4.5% in the U.S, which was met in approximately mid-2017. Historically, within about three years of reaching the full employment/unemployment rate, another recession occurs. Based on that unemployment data, the next recession is expected to occur somewhere in the middle of 2020. Because of the labor market turbulence that occurred during the Great Recession, some economists believe the full employment/unemployment rate is closer to 4.0%, which would provide potential leeway to work with, but still portends a recession by 2021 or 2022 at the absolute latest.

2. Yield Curve: Discussions relating to the yield curve signifies reaching the top of the business cycle. The yield curve is the difference between the ten-year Treasury rate and the three-month Treasury rate, and historically has been the most accurate measure going back to World War II in terms of financial markets as it relates to profitability in the banking industry. Mr. White explained that banks borrow money from its depositor's accounts at a very near-term interest rate and lends that money to consumers at a very long-term interest rate. If the difference between the short-term and long-term rate is large, the banks make money. If the difference is narrow, the banks hesitate to lend money. When banks stop lending, the economy stops growing. When the yield curve drops below 100 basis points, which is more or less where it is today, it almost always inverts. Typically, within 18 months of the ten-year and three-month yield curve inverting, almost like clockwork, the next recession occurs. Mr. White reiterated that the yield curve is narrowing significantly, and Moody's Analytics expects it to invert sometime in 2019, which would portend a recession sometime in 2020. He said if the yield curve does not invert by the end of FY 2019, then there is some upside risk in the forecast that would allow a little more

time before the next national recession occurs. He suggested the members keep an eye on the yield curve as they set policy in terms of the revenue forecast.

Mr. White stated there are many risks associated with his baseline forecast. An upside risk would be if the yield curve did not invert, which would push the next recession into the 2021-23 biennium. He elaborated on the following downside risks to Moody's forecast:

- The negotiation of U.S. trade policies. The worst appears to be over in terms of the relationship between the U.S and Canada, and Mexico; however, outstanding trade policies still exist between the U.S. and China, which directly impacts Nevada since a lot of Nevada companies have relationships with Chinese markets. Mr. White used the idiom "bark is worse than bite" in regard to trade talks between China and the U.S. He said, as it stands, the effective tariff rate on U.S. imported goods is around 2.5% to 3.0%, which is similar to pre-North American Free Trade Agreement (NAFTA) days — not good, but would not single-handedly tank the economy. If all the threats associated with the trade talks fell into play, the effective tariff rate on U.S. imported goods would look more like 6.5% to 7.0%, similar to the Smoot-Hawley Tariff Act, formally United States Tariff Act of 1930. Mr. White warned that if the U.S. and China enters into a full-blown trade war, it could trigger a recession faster than Moody's expected and could be the catalyst that changes the impact of the next recession to a recession similar to what occurred in 1991 or the Great Recession versus the 2001 recession.

- Credit markets are looking very good and household balance sheets have never been stronger, even with today's student debt. There is no indication that credit markets will catapult the U.S. into its next recession. Mr. White stated we would be hard pressed to find a non-war period of time when the U.S. Federal debt was higher than it is today. State and local government debt is also up, especially with unfunded pension liabilities; however, it is viewed as a long-term threat and is not expected to fuel the oncome of the next recession.

- Business borrowing could cause exasperation in the next recession, especially if the next recession is a full-blown recession. Mr. White quoted an old saying in the banking industry, "if it is growing like a weed, it is a weed." He said leveraged loans in the U.S. have been growing like weeds for several years, which are the direct lending equivalent to junk bonds issued by high-leverage companies with relatively low credit worthiness and not a lot of collateral. Half of the market reflects very strong loans to highly capitalized and collateralized companies, and the other half is made up of leveraged loans with low-credit quality, which are usually adjustable rate loans that carry a high risk of default. Leveraged loans ballooned to approximately $1.2 trillion, which is about the size of the student loan market in the U.S. Mr. White said that in 2007 there were about 90 or so hedge funds or exchange-traded funds (ETFs) that were available to individual investors that specialized in leverage loans, whereas now there are over 230. Banks and lenders are packaging these loans into a product called collateralized loan obligations and selling them to other lenders and investors in the marketplace, which is very similar, if not identical, to what led to the mortgage market trouble in 2005 and 2006. On the upside, the leverage loan market is nowhere near as large or as important to the overall U.S. economy as the mortgage market was in 2005 and 2006, nor do the roots of this weed spread out as far. He said the ratings agencies, such as Moody's Investors Service, S&P Global, and Fitch Ratings, are well aware of the impact of negative leverage and have been actively speaking out, which has prompted investors to protect themselves better to avoid damaging consequences should another full-blown recession occur, as in 2007 and 2008. Mr. White repeated that this scenario should not cause another Great Recession, but it certainly is something that could exasperate the growth recession scenario he discussed should that market grow any further or get any more risky in terms of its overall scope.

Mr. Streshley acknowledged the labor market restraint in housing and asked if there were foreseen restraints in Nevada's economy that could further impair job growth.

Mr. White said the labor force in Nevada is driving Nevada's healthy job growth. Moody's anticipates that as U.S. economies start to shift, moving and migration patterns will be as such that people who live in states that are doing ok, but not as well as Nevada, will move to Nevada and overfill the labor force and subsequently cause an increase in Nevada's unemployment rate that otherwise would not have been. He indicated that potential jobs in Nevada, Colorado, Utah, and Idaho are ample, so those states should be able to absorb the higher labor force numbers with relative ease unless the U.S. recession is really bad.

Mr. Leavitt commented on the number of large construction projects taking place in Clark County, such as the Raiders Stadium and the Expo at Las Vegas Market convention center, which are contributing to sales tax revenue. He said those projects will be winding down around the same time Moody's is predicting the start of another recession. He asked how that would impact Nevada's sales tax.

Mr. White said it would depend on what degree of workforce could be repurposed to other building projects, especially in the housing market. He said currently there is a shortage of construction workers in regard to homebuilding; however, the demand might lessen because of changes in the national economic outlook, which explains a much softer State 2% Sales and Use forecast in the FY 2019-21 biennium compared to the current biennium.

Mr. Billings said wage pressures are more real now than they had been in the last ten years. He questioned the Forum's approach in regard to the flexibility of wages, given in-migration occurs as a side effect of the recession, recognizing that many wages in Nevada are sticky or unionized. He questioned if leveraged loans were a substitution for fixed rate debt or if they were being sold at a rising rate, and if Moody's conceived it as an existential threat or more of a problem if loans were to become structurally weaker from a covenant perspective.

Mr. White replied that wages in Las Vegas, Clark County, are sticky in low- and mid-wage jobs, but have more flexibility in the mid- and high-wage jobs, which are coming online faster in Northern Nevada. He thought there would be more flexibility in Northern Nevada than in Southern Nevada, which are the areas exhibiting the most growth. In terms of leveraged loans, Mr. White said they need to be watched, but is not included in Moody's baseline forecast and is considered more of a risk at this point. Leveraged loans have the potential to get very bad, very quickly. He said the leveraged loans in question contain loan covenants, which is one of the reasons why Moody's is less pessimistic about their potential harm to the economy in the next recession versus the situation that occurred in 2005/2006 with some of the mortgage loans.

Chair Rosenthal asked if there were federal regulations in place for leveraged loans that provide protection from the same damage that occurred with mortgage-linked investments leading into the Great Recession.

Mr. White confirmed that banks are federally regulated and are less concerning because they are required to keep a lot more collateral on their books, which is one reason why lending from large banks has not picked up to the extent that it did in previous expansions. He said issues occur when banks package collateralized loan obligations (CLOs) and resell them to companies that are not very well regulated, such as the TAC Finance Leasing Co., Ltd. Currently, it is not that concerning because financial technology (FinTech) is not as large a piece of the overall loan market and financial market yet, so if something goes wrong with one of those FinTech firms, it is not going to have the ripple effect throughout the entire financial market that occurred in 2008. He reiterated that half of the CLOs are not rated and were done in private placements or off-the-counter type markets, thus it is unknown as to where those loans are or whose balance sheets they are on. Additionally, the covenants are unknown, as well as what underlies them, and if that part of the market grows bigger, it could cause something scary to happen in the next recession or the recession after that.

Mr. White said his revenue forecasts are in line with his economic forecast, which is very strong in FY 2019 and slows down in FY 2020, and FY 2019's year-to-date data (two or three months of the first quarter) has been exceptionally strong. He said he has been advising all Moody's Analytics' clients who are policy makers and working on revenue forecasts to be extremely cautious going into FY 2020 and FY 2021 given the risks mentioned above and the likeliness of heading into the next recession. He cautioned now is the time to prepare for a recession, and emphasized that Moody's baseline forecast does not make adjustments for the Forum's risk tolerance; therefore, the Forum needed to consider all risks and include them in their baseline forecast.

Mr. White reported that sales tax collections in FY 2018 came in much weaker than expected at 4.8% (page 20, Exhibit A) compared to Moody's forecast of 6.0% to 7.0%. He said every time Moody's does a forecast, and prior to their next forecast, they back test to determine where they missed by running actual economic data through the models. He said Moody's is confident with their sales tax numbers and like their State 2% Sales Tax forecast, but was surprised by their underlying economic forecast for U.S. recreation services expenditures. He explained that the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce is the research arm that ultimately establishes the gross domestic product (GDP), and the producer of the national income and product accounts (NIPA), which is one of the main sources of data on general economic activity in the U.S. He said NIPA accounts for all money spent in the U.S. on recreation services. He said the NIPA report has a tremendous impact on the Nevada outlook, especially in Las Vegas, and is one of the main drivers in Moody's State 2% Sales Tax and Percentage

Fees forecast. He referred to the U.S. recreation services expenditure chart on page 18 (Exhibit A), and explained that the green line through 2018 is what Moody's based their previous forecast on; however, since that time, the BEA made major revisions based on the health of the overall economy. Subsequently, the BEA's estimate for recreation spending for the second half of 2017 did not occur, which made an impact on Moody's recreation services forecast, causing their 2018 forecast to appear more optimistic relative to actual spending. Mr. White said Moody's revisited their forecast and continue to feel comfortable with the underlying forecast relative to sales taxes, but are much more pessimistic relative to their forecast for recreation services spending, nationally, going forward. He said other main drivers used in Moody's State 2% Sales Tax forecast are U.S. wages and salaries and new vehicle registrations in Nevada. New vehicle registrations are a very useful proxy for overall large durable goods purchases. For example, if someone is buying a new car they are probably also buying a new refrigerator or a new boat or other large durable good. Mr. White reported a big lull in new vehicle registrations following the Great Recession; however, new vehicle registrations have grown stronger over the last two or three years. Moody's expects growth in sales tax revenue to slow down in FY 2020 due to the economic outlook and interest rates. He said interest rates are going to be a lot higher in 2020 and 2021, regardless of a recession, which will increase the cost of financing and cause some people to shy away from purchasing large durable goods.

Mr. White communicated that Moody's State 2% Sales Tax forecast suggests strong growth in FY 2019, pedestrian growth in FY 2020, and decreased growth in FY 2021, dropping to inflation level or below due to the impacts of the U.S. recession (page 20, Exhibit A).

In terms of the Gaming Percentage Fees Tax, outside of economic impacts, structural changes are playing a role in Moody's forecast. Mr. White explained that more people are spending a lot of money in Las Vegas and Nevada, but are spending less on gaming, which is driving weaker growth in Moody's gaming forecast compared to their sales and use tax forecast.

Mr. Streshley asked if Moody's forecast is specific to the quarter in which the next recession will occur or if it is based on a ballpark estimate in a specific year.

Mr. White replied that Moody's Gaming Percentage Fee and sales tax forecasts assume the next recession will hit in the third quarter of 2020. He noted that the federal government had released a lot of fiscal stimulus through the next two years, which could push that recession to the end of calendar year 2020 or early 2021.

Mr. Leavitt said visitor volume, particularly in Las Vegas, was down in 2018 compared to previous years, all in the face of a robust economy. He asked if the decline in visitation was an aberration relative to something other than economics in general, or if it was a sign of something to come that should be concerning to the Forum as they make forecasts for the 2019-21 biennium.

Mr. White said Moody's has been closely watching visitation and found it curious that Nevada's visitation numbers have declined while air arrivals have accelerated or leveled off in actual full deployments, meaning more people were flying in from overseas or far outside Nevada. He said that could be a positive sign over the near term, because that cohort of visitors historically have spent a lot more money than people crossing over the borders from Arizona, Utah or California. He attributed the decline in local tourism, compared to five or six years ago, to the high growth in recreation services as a whole, stating that it might be topping out and positive wage growth may impel more exotic vacations outside the U.S. In terms of long-term trend, Mr. White said neither of those movements have been occurring long enough to say with certainty that they portend something more nefarious than just a different relationship with the national forecast.

Mr. Billings observed that Chart 2 on page 1 (Exhibit C) collaborated with Mr. White's statement in regard to visitor volume and air arrivals. He relayed that additional costs implemented by gaming operators, such as parking fees, resort fees, etc., have consumed a lot more of the budget for those customers who used to drive to Las Vegas; therefore, air arrivals are increasing because driving arrivals are declining, creating a makeshift situation. He suggested the Forum consider this trend during the forecast process, because if the trend does not alleviate and a recession occurs, the economic proposition will become even worse for driving customers. He expected this trend to continue over the next few years.

V. PRESENTATION ON THE STATE EMPLOYMENT OUTLOOK.

David Schmidt, Chief Economist, Research and Analysis Bureau, Department of Employment, Training and Rehabilitation

Mr. Schmidt stated that Nevada is in good shape, and reported as of the third quarter of 2018, 282,000 jobs were regained of the 185,000 lost during the Great Recession; Nevada's private sector is ranked the fourth-fastest growing sector in the nation behind Idaho, Oregon, Utah and Arizona; 124,000 small business jobs were added, aiding in a record-high number of employers; average weekly wages climbed to a high of $977 per week; unemployment rate dropped to July 2007 levels; unemployment insurance numbers are down; and the unemployment trust fund reached an all-time high in straight dollar terms, as well as adjusting for a future recession. He noted that, even at current levels of employment and wages, Nevada's unemployment trust fund is more prepared than it was heading into the Great Recession with nearly $700 million more dollars in the bank (page 26, Exhibit A).

Relative to state employment, non-farm job levels are up 43,500 compared to September 2017, with 93 consecutive months of gains. Mr. Schmidt said that the Department of Employment, Training and Rehabilitation (DETR) has seen consistent gains in the 3.0% to 3.5% range with 3.2% gains in September of 2018. He said non-farm jobs are up 2,800 jobs over the month, which is slightly below the level needed to sustain the additional 35,000 to 40,000 jobs added annually over the last few years.

Year-to-date job growth in Nevada has been evident across all industry sectors with construction leading the way. From September of 2017 to September of 2018, construction has grown by 10%. Manufacturing is the second-fastest growing sector statewide, growing at approximately 15%, while durable goods manufacturing is growing at approximately 20%. Mr. Schmidt said he found it interesting that the Leisure and Hospitality sector, which has a very large overall number of jobs, did not rank in the top five for job growth by industry. Construction; Manufacturing; Education/Health Services; Trade, Transportation, and Utilities; Government; and Professional and Business Services are all growing faster. Currently, the Information industry is the only industry losing jobs, down 300 jobs year to date with 200 of those jobs being in the telecommunications industry within that sector.

Mr. Schmidt said DETR uses results from the Current Population Survey (CPS), performed by the U.S. Bureau of Labor Statistics (BLS), to determine the number of full-time jobs versus part-time jobs both statewide and by select industry. He referred to the chart on page 31 (Exhibit A) and, using Retail Trade as an example, he explained that 75% of people working in the retail industry are working enough hours to be considered full-time employment; however, some individuals have to work multiple jobs to obtain that criteria. He found it interesting that the shift in percentage points in the 12-month moving average only dropped from 80%, prior to the recession, to 75% in regard to full-time retail trade workers. He noted that Manufacturing experienced a big decline during the recession, but recovered quickly to pre-recession levels of 90% to 95%, similar to the Wholesale Trade sector.

Mr. Schmidt reported that Nevada's unemployment rate in September 2018 was 4.5%, down 9.0 percentage points from the recessionary peak and slightly above the unemployment rate of 3.8% in 2005/2006. Over the long term, Nevada's unemployment rate measured 0.8 percentage points higher than the U.S. between 1997 and 2018, which is where it stands today compared to the U.S. rate of 3.7%. Declines have been seen in the unemployment rate for both the U.S. and Nevada over the course of the last year; however, the pace of the declines in Nevada has slowed down with more months holding steady rather than dropping.

Long-term unemployment, meaning unemployment for 27 weeks or more, has significantly improved in Nevada. Mr. Schmidt explained that Nevada's long-term unemployment rate prior to the recession was in the 0.5% to 1.0% range, but during the recession it increased dramatically, partially due to extended tiers of unemployment benefits that increased from a maximum of 26 weeks to 99 weeks. After those extended benefits receded, there were still a high number of people who were unemployed for a considerable duration. He noted that Nevada's long-term unemployment rate has dropped below 1.0% over the last five months.

Mr. Schmidt said alternative measures of unemployment established by the BLS, specifically U-4 through U-6, include those who are unemployed; discouraged; marginally attached to the labor force due to other commitments that keep them from working, such as school or caregiving; and those who work part time, but prefer to be working full time. These alternative measures have been fairly steady over the last several years, but when added to the official unemployment rate (U-3), the rate adjusts upward 0.4 percentage points and is consistent with rates from 2003 (0.3%) and the 2008/2009 timeframe (0.4%). During the recession, the U-4 through U-6 measures added 1.0 percentage point to the official unemployment rate. Mr. Schmidt indicated that discouraged workers averaged approximately 5,600 people over the last 12 months compared to 16,000 people at the height of the recession. During the recession, total involuntary, part-time unemployed peaked at 104,000 and added about 7.7 percentage points to the U-3 unemployment rate. As of the third quarter of 2018, part-time unemployed fell to about 55,400 workers and added about 3.5 points to the U-3 unemployment rate. If all alternative measures are considered, the unemployment rate on average over the last year would be 9.4%, and the comparable number for U-3, which is most similar to the official unemployment rate, would be 4.6%.

Unemployment amongst Nevada's veterans over the last five or six years has been slightly higher than the U.S., 5.0% compared to 3.5%, respectively (page 35, Exhibit A). Relative to Nevada's unemployment rate by race group, each group has dropped about two-thirds from its previous peak, with Black Nevadans measuring the highest, followed by Hispanic and White Nevadans.

Mr. Schmidt stated Nevada's labor force participation has been very high going back to 1977 (page 37, Exhibit A). The gap in labor force participation between Nevada and the U.S. has narrowed considerably, with Nevada dropping below the U.S. in recent years. He noted the labor force participation rate by race has varied over the past several years.

Nevada's labor force has grown significantly and unemployment has fallen. Mr. Schmidt attributed this trend to many unemployed people finding jobs, as well as new entries to the labor force. Over the last year, total employment grew over 45,000 jobs, demonstrating enough growth to absorb the number of new entrants to the labor force, and at the same time lower Nevada's unemployment.

Initial claims for unemployment benefits are at a 20-year low in Nevada and a 50-year low nationally. Nevada's initial claims in September 2018 were comparable to initial claims in 1995, looking at a 12-month moving average from September to September, or any given month in 1998. Mr. Schmidt pointed out that today's labor force is much larger than what existed 20 years ago, but the volume of claims compared to the total number of jobs is at an all-time low. He said the number of people exhausting their unemployment benefits has also declined as, currently, an average of one-third of those who enter the system will exhaust their benefits (between 12 and 26 weeks) before exiting the program, and without finding long-term employment. Mr. Schmidt clarified that people are allowed to enter and exit the system as they intermittently get work, so it is possible for someone to receive unemployment compensation over a 40-week period, depending on their eligibility.

Mr. Schmidt indicated that personal income in Nevada on a per capita basis trails the U.S.; however, since 2014, Nevada's personal income growth overall has averaged about 6.0% compared to 4.4% in the U.S. (page 40, Exhibit A). He attributed the performance to Nevada's strong growth in employment and wages.

Mr. Schmidt stated the chart on page 41 (Exhibit A) was created to identify areas of wage pressures amongst Nevada's counties and industries. He explained that he made adjustments to accommodate varying results, particularly in small counties with small changes in small areas. For example, Storey County has seen real growth well over 15%; therefore, adjustments were made in the chart on page 41 (Exhibit A) for volatility (see footnote). When measuring total employment by industry in each of Nevada's 16 counties, Construction, Real Estate Rental & Leasing, and Transportation and Warehousing are the leading industries impacting the most counties. The leading counties seeing the largest number of industries with rapid wage and employment growth are Lyon, Nye, Douglas and Clark counties. Storey County would be higher, but growth is rapid in so many industries due to the Tahoe Regional Industrial Center (TRIC), and being such a small county, that adjustments are made for volatility. The chart on page 42 breaks down the top three industries and the top areas of employment and wage growth to identify the wage change that is driving the numbers. Mr. Schmidt offered to continue producing this level of detail for the Forum if the members thought it would be useful.

The Department of Employment, Training and Rehabilitation recently completed their ten-year occupation and industry projections ranging from 2016 to 2026. Mr. Schmidt explained that DETR produces two-year projections, which are short term and based on current trends, and ten-year projections, which are long term and incorporate an entire business cycle. The chart on page 43 illustrates the largest occupations that are adding the most jobs over that period, and the fastest-growing occupations. He explained that large industries are projected to add a large number of jobs in occupations such as retail sales, food prep, waiters/waitresses and janitors over the long term, while the smaller, faster-growing industries are projected to add positions such as electronic assemblers, mechanical engineers, electrical engineers, industrial engineers, software designers, and software developers. He noted approximately 67% of new jobs expected over the ten-year horizon are high paying with an average wage above $41 per hour.

Projections for industries, rather than occupations, (page 44), show food services and drinking places are expected to add a large number of jobs with an average pay of $400 per week. At the same time, industries such as electrical equipment, appliance and component manufacturing, which added about 13,000 jobs over the ten-year period, are projected to grow 28% due to large projects taking place in Northern Nevada.

Mr. Schmidt referenced the chart on page 45 (Exhibit A), an illustration showing employment diversification from 2010 to 2017. The vertical axis represents average employment growth seen across select industries from 2010 to 2017, and the horizontal axis represents average wages paid in 2017, specifically. Industries located in the upper right portion of the chart are growing at a faster pace than average, and in 2017, paid a higher wage than average. Industries shown at the lower left are growing slower than average, and paid below average wages in 2017. He said Accommodation and Food Services (lower left quadrant) makes up about 25% of the state's total job count, and is growing slower than average. Industries in the upper right are growing faster than average and pay above-average wages, so as those companies grow, they put upward pressure on wages. Industries in the lower left are growing slower than average and pay below-average wages, so as people leave those jobs and the lower paying share shrinks, the overall state average wage rises.

Applying that same analysis to DETR's ten-year projections from 2016 to 2026 (page 46, Exhibit A), Mr. Schmidt said DETR expects continued growth in Nevada's industries that currently pay above-average wages, such as Manufacturing, Construction, Health Care, and Professional and Technical Services, all driving wages. Similar to the employment diversification from 2010 to 2017, Transportation and Warehousing is on the cusp, growing faster than average and paying average wages. Accommodation and Food Services and Retail Trade are growing slower than average and pay below-average wages.

Mr. Schmidt summarized the following main points from his presentation:

- From 2010 to 2017, the high-paying, fast-growing industries added 73,000 jobs.
- From 2010 to 2017, the large, slow-growing industries paying below-average wages added 53,000 jobs.
- DETR projects that by 2026, about 90,000 more jobs will be added by industries that grow faster than average and pay above-average wages, and about 85,000 jobs will be added by large, established industries that grow slower than average and pay below-average wages.

Mr. Schmidt turned his focus to DETR's handout (Exhibit C) outside the packet that highlights specific industries and statistics relevant to annual employment, average weekly wages, and wage growth for jobs within the private sector, by county, from 2015 through 2017. Each page includes a smaller chart (bottom right corner) that tracks the history for that particular industry (blue line), statewide, as well as DETR's statewide projection (red line) going forward. Mr. Schmidt explained that, because this data includes county-level information, some of the information was suppressed to protect employer confidentiality, and resulted in a zero or blank entry. He clarified that the zero or blank did not indicate zero employment for that county, it meant the data was simply not stated.

The construction industry reported solid wage growth that exceeded the statewide average growth of 5% (page 6, Exhibit C). Construction wage growth in Washoe County, with its strong housing market, has grown approximately 5% or more over the last several years. Storey County grew from 457 jobs on average to over 1,500 jobs on average from 2015 to 2016, likely reflecting activity at TRIC. Mr. Schmidt expected competition between Storey County and Washoe County due to their close proximity; however, the average wage in the construction industry in Storey County is almost $1,700 per week compared to almost $1,000 per week in Washoe County. He noted wage growth in Storey County ranged from almost 14% in 2015 to almost 10% in 2016 and 25% in 2017.

Mr. Schmidt summarized that employment gains in DETR's short-term projections are based on current trend with adjustments made for known factors, such as potential construction projects, and does not account for the cyclical factors forecast by Moody's. He said at the Forum's June 8, 2018, meeting, he was asked if construction was driving the increase seen in average wages. He indicated there was broad wage growth in the state overall, while some industries were growing faster than average and others were not; however, the number of industries large enough to have steady levels of growth were shrinking. He said the information provided in the chart on page 6 was a sum of total wages earned in a particular quarter, divided by the average employment in that quarter, and then divided by the 13 counties representing construction employment.

The data used in the chart did not detail the average number of hours worked, meaning if someone worked more hours their hourly wage rate may not have increased, whereas their average weekly wage did. He said the data was retrieved from the unemployment insurance system, which is non-comprehensive data gathered from employers that breaks out employment and wages. Mr. Schmidt pointed out that the chart on page 6 only shows data through 2017, because the data source, when released, has a six-month lag; therefore, does not represent a full year-over-year comparison.

Mr. Billings stated that Mr. Schmidt implied DETR's short-term projections were business-cycle agnostic, and that the benefits observed from the diversification that he described had not really been experienced in an up cycle, because the policy strategy post-recession did not exist previously. He asked if DETR had any sense for potential forecast error or response to a correction in the business cycle and, if so, how those potential changes could impact the high-value job categories that were being added versus the more traditional, lower-wage jobs that were being added.

Mr. Schmidt said DETR's projections are based on the entire history of the data series, so DETR's short-term projection represents the current line and the long-term projection detects the dips in growth and incorporates the magnitude and the effect of those dips. He said the result reflects a fairly conservative annual forecast between 1.7% and 1.8% for total statewide job growth even though current growth is 3.0% to 3.5%. He reiterated that, for those new industries that lack historical data, DETR's projections are based on the estimated size of a project, with adjustments as needed. He said, DETR had nothing to substantiate how a recession would impact job growth in Nevada's new industries.

VI. PRESENTATION ON THE STATE POPULATION OUTLOOK.

Jeff Hardcastle, State Demographer, Department of Taxation

Mr. Hardcastle reported that his 20-year population projections were recently updated from his 2017 projections to include the most recent economic history. Nevada's statewide annualized population growth rate has risen to 490,000 compared to 333,000 from 2017. He said Nevada's growth rate has been quite volatile year to year, and long term projections show it trending to the national rate or below (page 52, Exhibit A). Rates can vary depending on the situation. For example, the Bureau of Economic Analysis (BEA) employment data versus the Quarterly Census of Employment and Wages (QCW) data, might show a communal change of 50 new construction employees in a specific county, which does not mean the overall growth rate in that employment was 50, but rather, one firm added 50 employees. He said, when added to a larger base, the results get distorted. Using this same history over the long term, Mr. Hardcastle pointed out that Nevada's population made up a fairly small share of the U.S. population in 1970; however, that share levels off in the outlying years of the forecast (2037). The chart on page 53 represents the impact of the recession to Nevada's share of U.S. population, with growth picking up from 2008 to 2010 and then leveling off.

When comparing 5-year and 20-year population projections made in 2017 versus 2016, both show an increase in population in Clark County and a decrease in Washoe County. Mr. Hardcastle attributed the growth in Clark County to its near-term (2 years) economic activity, performing as expected in relation to the national economy. He said Washoe County is underperforming in terms of total jobs, at about 8,000 jobs under, and is not quite trending as expected in the near term per the changes that were made in the Regional Economic Models, Inc. (REMI) model using local economic data in the Quarterly Census of Employment and Wages (QCEW) trends through the first quarter of 2016, 2017 and 2018. He noted that in the Northwest Region of the state, the strongest growth has been reported in the Warehouse and Transportation and Construction sectors, and Manufacturing growth is consistent with 2014 projections.

Mr. Hardcastle recalled attending a conference with the Census Bureau where the Chief of the Population Estimates branch pointed out that population changes other than births, deaths and migration are driven by push and pull factors. He acknowledged push factors as people leaving the state because of housing costs, recessions, job opportunities, education factors, etc., and pull factors being the opposite, such as affordable housing, better wages, better educational opportunities, and quality of life issues. He referred to the chart on page 57 (Exhibit A) and explained that the long-term trend, nationally (green line), represents the balance of the state for natural increase over time. A number of counties in Nevada are approaching natural decrease as opposed to natural increase due to an aging population. In some cases, such as in Douglas and Nye counties, people are retiring there or moving there as active seniors, but now are aging and potentially passing away. In Southern Rural Nevada, much of the aging population was born and raised in that region so the mortality rate can be driven by different factors. In Washoe County, deaths are decreasing and births are fairly flat over time.

In terms of migration, Nevada historically has seen steady in-migration, with overall net in-migration coming from California. Mr. Hardcastle stated the in-migration from California over time has offset out-migration to other parts of the country. He said over the long term, in-migration and out-migration converge over time (straight trend line), but they fluctuate quite a bit year to year.

Mr. Hardcastle said another way to look at migration is by place of birth, by current resident. The chart on page 59 (Exhibit A) highlights migration statistics, including the percentage change for Nevadans who were born in Nevada and either still live in Nevada (blue column) or migrated out of Nevada to another region (yellow column), as well as people who migrated to Nevada from another region (yellow column). He clarified that the Far West region identified on the chart represents those who live in Oregon, Washington State and other Western States who may have been born in Nevada, moved away, and since returned.

Data from the American Community Survey from 2005 and 2017 shows that in 2005, Nevada's population was slightly under the U.S. median age (page 60). Mr. Hardcastle reported that the median age of native-born Nevadans grew between those time periods; however, the median age is fairly young because of the low percentage of residents that were actually born in the state. He said in terms of Nevada residents who were born outside of Nevada and migrated to the state, the median age is growing older and becoming much closer to the national level of its population. The chart on page 61 shows year-to-year incremental change of foreign-born population for the U.S., Nevada, and Clark and Washoe counties. Nationally, going from 2015 to 2016 and 2016 to 2017, total foreign-born population revealed slight increases. Mr. Hardcastle reported increased growth in Nevada's foreign-born population in those same time periods; however, the growth from 2016 to 2017 was less. Washoe County data resulted in a slight loss in its foreign-born population. Mr. Hardcastle reported that roughly 20% of Nevada's population is foreign born, of which many migrated to the area prior to 1990. Recent migration patterns show a slowdown of international migration, both nationally and locally, which will have potential impact on births and the working population going forward.

Chairwoman Rosenthal questioned Mr. Hardcastle's population growth charts, stating they did not appear to reflect the apparent growth that was occurring, specifically in Northern Nevada, signified by the lack of housing, increased traffic congestion, and the amplified number of new jobs offered at TRIC and other companies that located to the area.

Mr. Hardcastle said he shared the same concern; however, near-term projections show Washoe County underperforming. He attributed increased traffic congestion in Reno to road construction, when certain times throughout the day traffic backs up, giving the perception of growth and change. Washoe County school enrollment preliminary population data reflected 1.0% growth by reason of the charter school system. Recent utility data for Washoe County reflected 3,000 new accounts and 1,200 or 1,700 inactive accounts just over the past year. He implied that growth perception can be miscommunicated by the media. For example, Mr. Hardcastle was approached by the Reno Gazette Journal (RGJ), inquiring about the large number of Californians moving to Nevada. The RGJ did not fully analyze the data from the assessor's office and were including homes purchased in Nevada by California investors as in-migrants, and misinterpreting the data as California migration. Additionally, the RGJ utilized the REDFIN real estate website to search for results showing Reno as a preferred destination, which produced many hits from the San Francisco area. Depending on the search criteria, the results can vary. He said when the destination criteria was entered for people who wished to leave the San Francisco area, Reno did not even show up. Mr. Hardcastle reiterated that his estimates show Nevada's population growth going forward will not be as substantial as it was in the past. He noted that from 2000 to 2017, total population growth for Washoe County was 120,000; however, 60,000 to 70,000 of that was population over 55 years of age, which can impact household size, available housing units and the area's transportation network, but does not necessarily translate into job numbers.

VII. PRESENTATION OF HISTORICAL TAXABLE SALES AND GAMING MARKET STATISTICS.

Mr. Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau, announced that the gaming and taxable sales charts that are routinely prepared for the Forum have been updated to include actual data through August 2018. The gaming charts are based on quarterly data with the exception of one chart that is based on monthly data and includes the first four months of FY 2019. He voiced that the gaming and taxable sales charts could be found on the Nevada Legislature's website, and can be accessed throughout the meeting, if needed.

VIII. REVIEW AND DISCUSSION OF PRELIMINARY FORECASTS OF MAJOR GENERAL FUND REVENUES FOR FY 2019, FY 2020, AND FY 2021.

A. Gaming Percentage Fee Tax
B. Live Entertainment Tax
- **Gaming**
- **Non-Gaming**

C. State 2% Sales Tax
D. Insurance Premium Tax
E. Modified Business Tax
- **Nonfinancial Institutions**
- **Financial Institutions**
- **Mining**

F. Real Property Transfer Tax
G. Commerce Tax

Mr. Guindon acknowledged the following meeting materials associated with this agenda item:

- Moody's Analytics revenue outlook for State 2% Sales and Use Tax and Gaming Percentage Fees (Exhibit B).
- Table 1 (page 63, Exhibit A), which shows the last four years of actual fiscal year history and through October 2018, year to date, for each revenue source — those revenue sources collected quarterly will not have data at this time, but will be available for the December 3, 2018, meeting.
- Table 3 (page 71, Exhibit A), which lists all the revenue sources that the Economic Forum considers along with its forecast by the Executive Branch agency responsible for administering and collecting that specific revenue source (Agency), the Fiscal Analysis Division (Fiscal) and the Governor's Finance Office, Budget Division (Budget), by fiscal year.
- Table 4 (page 79, Exhibit A), which was distributed on green paper, outside the packet, for convenience. Table 4 shows the forecast by forecaster for each major revenue source considered by the Forum for FY 2019, FY 2020 and FY 2021
- MBT Forecasts – Without Rate Reduction in FY 2020 and FY 2021, a supplement to Table 4 (Exhibit D), distributed on blue paper.
- Preliminary forecasts from the Gaming Control Board (GCB) (Exhibit E), Budget Office (Exhibit F), Fiscal (Exhibit G) and Taxation (Exhibit H).

A. Gaming Percentage Fee Tax

Michael Lawton, Senior Research Analyst, Nevada Gaming Control Board

Mr. Lawton explained that gaming win forecasts for 16 individual major markets (the Las Vegas Strip, Las Vegas Downtown, Las Vegas Locals, Reno, Elko, etc.) are used in his forecasting methodology to come up with the GCB's percentage fees collections forecast. The GCB looks at growth rates in those major markets, and in those models considers new property openings, property expansions, and anticipated property closings. Historical trends are reviewed, but more importantly, individual properties are interviewed in the 16 major markets to gather outlook information specific to economic activity. Mr. Lawton said the GCB obtains input from several Wall Street analysts as well as the Las Vegas Visitors and Convention Authority (LVCVA) to acquire convention and visitation information. He indicated that some of the individual market forecasts produce an estimate for total statewide gaming win, and within those markets, individual forecasts are generated for slot win and gaming table win.

Mr. Lawton referred the members to the chart on page 2 (Exhibit E), Baccarat's Percentage of Total Las Vegas Strip Win. The percentage of total Las Vegas Strip win from baccarat increased greatly from FY 2007 when it was 13.3%. Moving to the peak in FY 2014, baccarat hit $1.6 billion in win and represented 25.0% of statewide gaming win. In FY 2014, the Las Vegas Strip was 3.0% below its peak levels of gaming win compared to FY 2007, but baccarat was 80.0% above where it was in FY 2007. The chart showed that in three of the last four years, the percentage of total win from baccarat on the Las Vegas Strip decreased, and dropped to 18.8% in FY 2018. Currently, fiscal year to date, baccarat is down 12.5% and represents 16.1% of Las Vegas Strip win.

Measuring statewide baccarat volume from FY 2007 through FY 2018, volume peaked in FY 2014 at $11.9 billion, and has decreased in three of the last four fiscal years. Currently, fiscal year to date, through September 2018, baccarat volume is down 10.3% and has decreased in five consecutive months. The decreases in baccarat volume began in August of 2014 as a result of various government actions taken by China, primarily the anti-money laundering policies associated with Beijing's anti-graft campaign. Although volumes have appeared to stabilize, the growth trajectory with baccarat remains uncertain.

During baccarat's expansion period from FY 2010 through FY 2014, the ratio for taxable gaming revenue to win averaged 92.5%. Five years prior to the surge, the ratio was around 96.0%. At baccarat's peak in FY 2014, the ratio for taxable gaming revenue win sat at 91.8%, which was the lowest on record. Mr. Lawton stated that he theorized a relationship between those trends, as baccarat surge and gaming win came at a cost when compared to taxable gaming win and subsequent percentage fee collections. He attributed much of the loss in collections to credit play associated with baccarat as well as discounts and settlements offered to lure players to Las Vegas to gamble. To further support his theory, Mr. Lawton stated that, while baccarat declined in three of the last four years, taxable gaming revenue to win ratio increased in three of the last four years and averaged 95.3%. Currently, the ratio is at 97.1%, which is higher than it was in FY 2017 during the same time period, at 96.8%.

As baccarat volumes have decreased by approximately 21.0% and win by 22.2%, since its peak, taxable gaming revenue has increased by 10.8%, or $1.1 billion. Percentage Fee collections have escalated and are up 11.2%, or $76.1 million, since FY 2014. Mr. Lawton pointed out that the decreased amount of baccarat win and associated credit play did not negatively impact taxable gaming revenue and Percentage Fee collections.

Mr. Lawton stated the GCB is forecasting statewide taxable gaming win for FY 2019 to increase by 1.0% over the 3.0% increase in FY 2018, totaling $11.9 billion. Clark County is forecast to increase gaming win by 0.6% in FY 2019 over the 2.6% increase in FY 2018, and the Las Vegas Strip forecast shows a decrease in gaming win in FY 2019 of about -0.6% after a 1.7% increase in FY 2018. He indicated that the majority of growth in gaming win forecast for Clark County is expected to come from markets outside of the Las Vegas Strip, specifically the Las Vegas locals market, with 2.9% growth in FY 2019 compared to 4.0% in FY 2018. He said the GCB's assumptions are based on continued growth in many of Clark County's submarkets due to various positive economic indicators coming out of Southern Nevada in addition to several large projects in the area. Currently, Clark County gaming win is down 1.7% fiscal year to date due to the Las Vegas Strip, which is down 4.3% fiscal year to date. Mr. Lawton noted calendar year to-date trend in Clark County is better through nine months, with increased trend on the Las Vegas Strip, calendar year to-date, which makes the long-term trend look better. Relative to Northern Nevada, Washoe County taxable gaming win for FY 2019 is forecast to increase 3.5% over the 5.2% increase in FY 2018. Northern Nevada is also experiencing positive economic indicators, which is translating into gaming growth. He noted that Washoe County had 16 consecutive, monthly increases until a decrease last month due to a very difficult comparison.

Mr. Lawton summarized that statewide gaming win is down 0.8%, the Las Vegas Strip is down 4.3%, and facing a growth rate comparisons of 2.5% and 0.7%, respectively. He reported a disastrous third quarter in 2018, stating gaming win on the Las Vegas Strip was down 7.2%. Operators on the Las Vegas Strip agreed the decline in win was the result of a very difficult comparison to the third quarter in 2017, as no event in the past year has compared to the Mayweather versus McGregor super fight that drove so much business. He also relayed that, via discussions with the LVCVA, there is a perfect storm of conventions leaving and nothing coming in. He reiterated that he did not think there was a long-term shift in the growth pattern for the Las Vegas Strip; however, it has dug itself into a hole (-4.3% growth). The GCB expects the Las Vegas Strip to improve off its decline because of newly remodeled properties coming online, a positive convention calendar per the LVCVA, and a very easy comparison coming up, October through December of 2018, in wake of the October 1, 2017, mass shooting at the Route 91 Harvest music festival.

Moving on to FY 2020, the GCB forecasts statewide total gaming win to increase to 2.8% with $12.2 billion in win. A 2.6% increase is expected on the Las Vegas Strip, driven by the convention outlook for calendar year 2020, including the return of the CONEXPO-CON/AGG convention in March of 2020 that draws nearly 130,000 visitors, and the continued ramp-up of several remodeled projects, including Wynn Resorts' expansion project due to open in 2020. Mr. Lawton noted the GCB forecasts a growth rate of 2.8% in the locals market and 3.4% growth in Washoe County markets for FY 2020.

The GCB forecasts statewide gaming win to increase to 3.2% in FY 2021 with $12.6 billion in win. The increase is attributed to the Raider's stadium, completion of the Las Vegas Convention Center District Project, the opening of Caesar's Forum conference center in 2020, and the opening of Resorts World Las Vegas, which includes 3,300 hotel rooms, 1,300 slot machines and 170 table games. The resort projects an opening date at the end of calendar year 2020; however, the GCB forecast is based on opening in the early third quarter of FY 2021.

Mr. Lawton turned his focus to the GCB's separate forecasts for slot win and game and table win. Fiscal year to date, slot win is up 2.6% and is forecast to increase 2.4%, to $7.7 billion, in FY 2019; increase 2.6% to $7.9 billion in FY 2020; and increase 3.1% to $8.2 billion in FY 2021. He named North Shore and South Shore Lake Tahoe as the only two markets statewide that are not in positive territory, but are small decreases and are fairly manageable. Slot win is up 4.0%, so the comparisons are not easy. The long-term trend for slot win, calendar year to date, is up 2.4% with all markets statewide up in positive territory. The increases to slot win is driven by widespread slot volume statewide, up 1.7% fiscal year to date. Every market is in positive territory with the exception of downtown Las Vegas (down 0.3%) and South Shore Lake Tahoe (down 0.2%); however, both could be in positive territory by the end of FY 2019. The long-term trend for slot volume is up 2.0%, calendar year to date, and every market is in the positive area except downtown Las Vegas due to a property closure. Mr. Lawton said once that property is out of the comps, which is February 2019, the downtown Las Vegas market should be in positive territory again. Another positive factor for slot win is the increased trend of slot hold percentage. Slot hold is at 6.75%, up from 6.7% a year ago. Over the last 20 years, slot hold percentage has only decreased once with an average increase of about 1.5%. The GCB anticipates continued increase in the slot hold percentage at a rate of about 0.6% for the forecast period.

Relative to game and table win, Mr. Lawton stated that the 1.7% increase in FY 2018 was driven by sports betting. Sports betting was up $56.7 million, or 26.0%. However, game and table win is forecast to decrease by 1.6% with $4.2 billion in win in FY 2019; rebound 2.9% with $4.3 billion in win in FY 2020; and increase 3.5% with $4.4 billion in win in FY 2021. Fiscal year to date, game and table win is down 6.5%, or $92.2 million, and volumes are down 3.8%, or $377.4 million. The growth rate comparison is a decrease of 0.2% for the remainder of the fiscal year, and the comparison for volume is an increase of 2.3%.

Mr. Lawton communicated that to get an accurate account of game and table win, baccarat needs to be broken out separately. Baccarat is a significant reason why statewide win is down 12.4%, or $47.7 million, on volumes that are down 10.3%, or $325.2 million. The growth rate comparison from a year ago for baccarat is an increase of 3.2%, and 5% for volume.

Non-baccarat game and table win is down 4.3%, or $44.5 million, and volumes are down 0.8%, or $52.2 million. Fiscal year to date, the comparison for non-baccarat game and table win is a decrease of 1.6%, and volume comparison is an increase of 1.2%. Mr. Lawton said the GCB's forecast for game and table win is built on the assumption that baccarat will improve slightly; however, it still reflects a decrease in FY 2019 by about 7.0% or 8.0%, while non-baccarat game and table win is projected to move into positive territory. Blackjack (21) results were recognized as disastrous, down $39.4 million, or 9.7%, fiscal year to date. Again, the Mayweather versus McGregor fight in August of 2017 posed a tough comparison relative to volume and hold, and September posed a tough comparison relative to hold. He said although sports betting is relatively flat, down $1.6 million, or 1.7%, fiscal year to date, the fight drew a lot of activity in sports betting, so August dipped because there were no large events to bring it back up. Mr. Lawton reported that sports betting set a record in October 2018 for the most amount ever wagered in a month and the most amount ever won in sports betting; however, it is quite volatile, as in November 2018 the sports books lost $10.0 million in one weekend due to football.

Mr. Lawton moved to the GBC's Percentage Fee collections forecast on page 11 (Exhibit E). The GCB forecasts collections of $763.0 million in FY 2019, up 0.8%; $786.5 million in FY 2020, up 3.05%; and $814.0 million in FY 2021, up 3.5%. Currently, fiscal year to date with four months reported, percentage fees collections are down 3.8% or $9.6 million. The percentage fees growth rate comparison is an increase of 2.8%, and must grow 3.1% in order to achieve the GCB's forecast presented. He said the shortfall involves two factors, Percentage Fee collections on taxable gaming revenue, which is down 0.1%, and the estimated fee adjustment (EFA) collections, which is down 412.6% or $9.4 million. The Percentage Fee collections model used by the GCB is based on positive economic indicators occurring nationally and locally. The model reflects widespread growth in Percentage Fee collections, without total concentration on baccarat.

Mr. Leavitt commented on the recession projected by Moody's Analytics in FY 2021, and asked how a recession would impact the GCB's forecast.

Mr. Lawton stated that Moody's forecast appeared strong in FY 2019 and the GCB's forecast appeared strong in FY 2021, with both being close in FY 2020. He said he cannot predict when the recession is going to hit, but his projections are based on a lot of positive activity coming online in FY 2021. He noted that his models do not build in a recession in FY 2021.

Mr. Streshley referred to the GCB's game and table win forecast for FY 2019, FY 2020 and FY 2021, and asked if baccarat revenue was performing better than the other games, or at a lower rate.

Mr. Lawton replied he was more aggressive with non-baccarat game and table win growth rates than baccarat. His baccarat growth rate reflects a decrease in FY 2019 of about 8.0% and small growth rate increases for FY 2020 and FY 2021. He said sports betting could help drive non-baccarat game and table win, as some projections show sports betting win could reach $410 million by 2021. Mr. Lawton conferred with Mr. Chris Grove, gambling industry strategist, in regard to that sports betting win projection, and he suggested dialing back that forecast a lot, especially for State of Nevada forecasting purposes. However, Mr. Grove stated good reasons as to why the trajectory for sports betting could continue to increase and accentuate non-baccarat game and table win, including advanced phone technology; the different kind of bets being offered; and the nationwide acceptance of sports betting. Mr. Lawton noted that it would be nice to have another game act as a buffer to what baccarat can or cannot do. He reiterated his baccarat trajectory was more sideways, up a little, and non-baccarat game and table win was growing a little faster.

Mr. Streshley asked Mr. Lawton to identify the TGR ratio used in his forecast for the three-year forecast period

Mr. Lawton stated the TGR ratio for FY 2019 is 96.1%, and FY 2020 and FY 2021 are in the 96.1% to 96.2% range for the next two years; growing, but not as robustly as in FY 2016 through FY 2018.

Mr. Streshley remarked that sports book win was down 7.5% with a higher than average win percentage in the last quarter. He said his initial reaction to the decline was directed to the expansion of legalized betting outside of Nevada. He asked Mr. Lawton if he was under the assumption that Nevada would see continued tremendous growth in that revenue center.

Mr. Lawton concurred. He said he was initially concerned about how legalized sports betting was going to impact Nevada, but discussions with Nevada operators implied it would not tank Nevada's market. In fact, discussions with Mr. Grove imply growth in that revenue source. Mr. Lawton acknowledged September 2018 as being the single strongest month in the history of sports betting in Nevada for volume and win. He did not expect that growth to continue, but attributed the success to football wagering. He expressed confidence that the trajectory in Nevada's sports book win would continue, especially because sports betting has not been legalized in California or other surrounding states.

Mr. Streshley agreed that the Las Vegas locals market is a major contributor to the growth in statewide gaming win. He asked if the Las Vegas locals market accounted for 20% or higher of the state's total gaming win.

Mr. Lawton stated the Las Vegas locals market accounted for 19.5% of statewide gaming win in FY 2018, but did not have a calculation for FY 2019 year to date.

Mr. Streshley questioned Washoe County's current contribution to statewide gaming win, and if continued growth was expected due to increased population and wage growth.

Mr. Lawton stated he did not have Washoe County's percentage of total statewide gaming win in front of him, but offered to forward that information to the committee. He said the Washoe County market grew 5% last year; however, after discussions with operators in the Washoe County gaming market, no one said they were going to hold 5% for the next three years, but are confident in 3.0% to 3.5% growth based on all the positive economic indicators that they are receiving locally, including increased visitation.

Mr. Streshley clarified that he was referring to the Washoe County locals market, stating it was in in excess of Washoe County's total win.

Mr. Lawton did not have statistics available on hand that broke down the specific markets for Washoe County locals versus visitation on the gaming side for Washoe County, but offered to find out and report back to the committee. He explained that different casinos have different markets, as the downtown properties have more visitors versus a property such as the Peppermill that is frequented by more locals.

Susanna Powers, Economist, Executive Budget Office

Ms. Powers said her forecast heavily looks at year-over-year trends, such as key visitation and other tourism metrics, and the health of the U.S. and Nevada economies. Moody's national forecast was used as a resource to determine recreational spending, and adjustments were made as Ms. Powers deemed necessary. She said frequent discussions took place with Mr. Lawton, as gaming revenue can show volatility from month to month. She said visitation is at record levels, and those levels hold steady throughout the forecast period. Ms. Powers referred to pages 11 and 20 through 31 (Exhibit F) that portrayed her Las Vegas visitation outlook and employment and wage forecast

Ms. Powers explained that her slot win forecast methodology uses slot volume and slot win/drop ratio. The historical trend and win/drop ratio used in her calculations are shown on page 5 (Exhibit F). Ms. Powers noted slot win has steadily increased over time, so she used the trend in her calculations. Slot win is projected to increase over the forecast horizon.

Ms. Powers said that the games and tables volume chart on page 6 (Exhibit F) includes baccarat statistics; however, baccarat volume is separated during the forecast process. She explained that the chart creates an optical illusion, showing modest growth in volume (yellow columns) with ups and downs in year-over-year percent change in volume (red line), although relatively stable overall.

Games and tables win is projected to hold steady, which is determined using a fixed win/drop ratio. She noted the forecast table on page 8 summarizes historical volume and win, and shows the win/drop ratio that was used in her calculations.

Turning to page 9, Ms. Powers pointed out forecast results for total drop, total win, and taxable gross revenue, which is calculated using a TGR/Win ratio from actual collections in FY 2018. She said the average tax rate has been consistent for a decade, so she used that rate to figure out the percent fee due before applying the EFA and deriving to collections. She noted that she factored in the opening of a new Las Vegas property in FY 2021.

Russell Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Guindon stated that the Fiscal Analysis Division's Forecast Information Packet includes charts that reference key economic variables that were considered in preparing various revenue forecasts. He summarized the following comparisons of actual historical data and forecasts between Moody's and Fiscal for the following economic variables:

- Nevada Total Employment: Fiscal uses DETR's and Moody's employment forecasts as a reference, as well as researches several industries to get a comfort level for employment trends. Moody's forecast shows total employment declining and picking up again based on their projection of a national slowdown/recession in the later part of the 2019-21 biennium. Fiscal's forecast appears somewhat Pollyanna throughout the forecast period, without direct intent, due to the uncertainty related to a possible recession, and taking into consideration DETR'S employment forecast (page 2, Exhibit G).

- Nevada Average Wage per Employee: Moody's forecasts an increase in statewide average wage per employee attributed to the labor shortage. Fiscal forecasts a continuation of the current trend (page 4, Exhibit G).

- Nevada Total Wages: Moody's forecast for average wage per employee is stronger than Fiscal's total wages; however, at the end of the forecast horizon, Moody's and Fiscal's forecasts for total wages are in the same place in terms of dollar amounts, but used a different growth path (page 6, Exhibit G).

- Nevada Nonwage Component of Total Personal Income: Dividends, interest, transfer payments, etc, make up the nonwage component of personal income. Fiscal's forecast follows the trend and Moody's forecast cycles above and below the Fiscal forecast with only slight differences in comparison (page 8, Exhibit G).

- Nevada Total Personal Income: Because of Moody's wage forecast, Moody's forecast for personal income stays a little above the Fiscal forecast, drops slightly toward the end of the forecast horizon, and then continues on the same path as the Fiscal forecast (page 12, Exhibit G).

Mr. Guindon reiterated that Fiscal's forecasts for the above economic indicators do not include a turn in the business cycle, whereas Moody's forecasts do.

Mr. Guindon provided a summary of Fiscal's Gaming Percentage Fee forecast, which is illustrated on page 31 (Exhibit G). Mr. Guindon indicated that Fiscal communicates with Mr. Lawton from the GCB, who provides information to the extent he is able to share. In preparation of their forecast, Fiscal takes into consideration the information that Mr. Lawton extracts from operators and others in the gaming industry. He explained that Fiscal begins the Gaming Percentage Fee forecast process by breaking down the state into three markets, including Clark County, Washoe County and Balance of State, which subsequently gets broken down into slot win and games win within each of those three markets.

Mr. Guindon moved to page 35 (Exhibit G) and identified the headings in each column in TABLE 1A, including Slot Win, Games Win, Total Win, Taxable Gaming Revenue (TGR), Ratio: TGR to Win, and Average Tax Rate. The table also breaks the percentage fees into the component that comes from the TGR, the EFA and Total Percentage Fees. He reported that slot win is forecast to grow 2.7% in FY 2019, with games win falling -1.2% and total win growing 1.3%. Fiscal is assuming that the TGR/Win ratio will increase slightly in FY 2019, resulting in percentage fee TGR to grow slightly more than percentage fee total win at 1.4% versus 1.2%, respectively, due to the net impact of the EFA for FY 2019, compared to FY 2018, of approximately -$1.9 million. The forecast for slot win in FY 2020 and FY 2021 continues to grow in the 2.0% range, but increases at a decreasing rate. Games win is forecast to increase 1.0% in FY 2020 and 2.2% in FY 2021. Another percentage fee EFA net negative impact is forecast for FY 2020, with slight positive growth estimated in FY 2021.

Mr. Guindon turned to page 36 to provide context relative to the Gaming Percentage Fee Tax collections forecast and where it stood year to date (YTD) through the first four months of FY 2019. The bottom section of TABLE 1B shows growth measures needed to hit the forecast.

Relative to slot market statistics statewide, win per slot is derived from coin in per slot, hold percentage, and the number of devices, which is then multiplied by the number of devices to produce slot win (page 37).

The Fiscal Analysis Division includes baccarat in games win, and does not separate it out when forecasting games win. Mr. Guindon said it is easier, as the forecaster, to try and look at hitting games win versus trying to look at two pieces that have a lot of variation (pages 39 and 40).

Mr. Guindon said the following charts, beginning on page 41 (Exhibit G), are used to gut check his forecasts:

- CHART 1, Statewide Total Win, Slot Win, and Games Win per Las Vegas Visitor: Mr. Guindon said dividing statewide metrics by Las Vegas metrics allows him to look at those two pieces to see what historically has been going on. He reported that Las Vegas is flat through the forecast horizon, slot win per visitor continues to increase, but at the back end, slot win is increasing at a decreasing rate.

- CHART 2, Statewide Total Win, Slot Win, and Games Win per Statewide Employee: This chart represents statewide gaming metrics divided by statewide employees. Both slot win and games and tables win are relatively flat per employee.

- CHART 3, Clark County Total Win, and Games Win per Las Vegas Visitor: Games win is relatively flat with a slight upslope at the end of the forecast, and slot win per Las Vegas visitor increases over the forecast horizon.

- Chart 4, Clark County Total Win and Games Win per Statewide Employee:

- CHARTS 5A and 5B, Taxable Gaming Revenue to Win Ratio: These charts show figures by quarter (Chart 5A) and cumulative fiscal year to date (Chart 5B), which is beneficial when viewing this data series because of the variance that can occur in the gaming industry's business month to month, causing outliers that can influence the measures.

- Charts 6A and 6B, Effective Tax Rate for Taxable Gaming Revenue: These charts show figures by quarter (Chart 6A) and cumulative fiscal year to date (Chart 6B).

- <u>Charts 7A and 7B, Estimated Fee Adjustment</u>: These charts show figures by quarter (Chart 7A) and cumulative fiscal year to date (Chart 7B). The EFA can play more of a role depending on the market conditions. When a market does not have new properties coming online, the EFA ends up being the last three months of one fiscal year compared to the last three months of the last fiscal year, but it does not always work out that way when you try to forecast it. Chart 7B is the cumulative, which helps look at the behavior of this component of Gaming Percentage Fee Tax collections.

Mr. Guindon commented that the four independent forecasts for percentage fees collections shown on TABLE 4 (green sheet) are not that far apart, yet they are driven by somewhat different economic outlooks.

Mr. Streshley asked if the Resorts World Las Vegas project was driving growth in Fiscal's percentage fees forecast for FY 2021, or if it was driven by existing properties.

Mr. Guindon stated Resorts World Las Vegas somewhat cannibalizes the forecast in Fiscal's forecast assumption. He indicated that Fiscal's forecast has table games drop falling back a bit and coin in per slot not being able to support all the devices that were added to the market.

Mr. Lawton stated that his forecast's growth rate trajectory is also somewhat driven by Resorts World Las Vegas, starting from its projected opening in February of 2021.

Mr. Leavitt observed that the Las Vegas locals market is growing faster than the markets dependent on tourism. He asked how the locals market compared to the Las Vegas Strip during the Great Recession, and what to expect from the locals market if a recession occurred.

Mr. Guindon expressed that Moody's Analytics is forecasting a recession similar to the early 2000's recession, not a Great Recession; therefore, a comparison between the Las Vegas locals market and the Las Vegas Strip should be made going back to the 2000/2001 timeframe to avoid the wrong conclusion.

Mr. Lawton confirmed that, at the peak in FY 2007, total win statewide was up 3.86%, the Las Vegas Strip was up 4.5%, North Las Vegas was down 2.0%, Boulder Strip was down 0.45%; and the balance of Clark County was up almost 17%, which may have been the result of a new property opening. At that time, the Las Vegas Strip was driving growth more than the locals markets, at least two out of three of them.

Mr. Billings asked if Fiscal lumped together domestic and baccarat table games when performing their analysis.

Mr. Guindon clarified that Fiscal looks at total games win.

Mr. Billings asked if Fiscal considers non-local factors in their analysis, such as China trade tensions.

Mr. Guindon stated that he aggregates factors to reduce some of the variation, as well as receives information from Mr. Lawton and other sources. The adjustments cannot be specifically pinpointed in the forecast, but are included and contemplated when looking at drop per game and hold percentages. Additionally, historical data shows that scheduled events, fights, etc. have also made an impact on drop per game and hold percentages.

Mr. Billings said it felt as though baccarat was relatively weak on the Las Vegas Strip. He acknowledged baccarat as a global game; therefore, when baccarat is weak in Asia, it tends to be weak in the U.S. as well. He stated the California-driven market was also weak, comprised of slots and domestic table games players who are getting their pockets picked elsewhere in the form of parking fees, etc. Group business appears strong, which translates into strong local wages and strong local employment. Mr. Billings stated that even though the theoretical win on a group customer is around $10 per day, it stimulates jobs. He agreed that, barring a recession, there is more resilience in the locals market and a lot more risk on the Las Vegas Strip side given the current dynamics. He suspected baccarat would be flat, or down, over the forecast horizon and slot and domestic tables win on the Las Vegas Strip would be flat, while the locals market would be robust due to the transition occurring from gaming to nongaming, which would provide an employment backdrop that is supportive to the locals market.

Mr. Guindon referred to Chart 1, Statewide Total Win, Slot Win, and Game Win per Las Vegas Visitor (page 41, Exhibit G). He said, because his analysis used total win as the numerator and Las Vegas visitors as the denominator, there should probably be some growth in games win per visitor because the locals market will hold up the denominator in relation to the numerator.

Mr. Billings agreed, and stated the spikes in game win on CHART 1 correlate with Chinese New Year. He said Chinese New Year in 2019 will be interesting because it will give insight to the baccarat market for the next couple of years. Baccarat play has a very limited number of visitors with a very high win per visitor, which tend not to correlate unless compared to overall visitors. He assumed a stronger correlation would develop over time. He pointed out that the inherit risk that lies in certain portions of the Las Vegas Strip market, versus the locals market, would tend to be more resilient because it is driven by a lot more than just gaming win. He stated that general employment along the Las Vegas Strip, and in Las Vegas as a whole, seems much more diverse than it has ever been, which helps the locals market perform better.

Mr. Streshley commented that percentage fees were down -3.8% fiscal year to date. He asked what portion of that was a result of the EFA, because if the EFA is in positive territory by the end of the year, it will offset a large portion of the -3.8%.

Mr. Guindon stated that Fiscal's forecast (page 36, Exhibit F) shows the percentage fees from TGR in FY 2019 are flat at 0.0%, and the EFA is approximately -$7.2 million compared to approximately $2.2 million in FY 2018, thus total percentage fee collections are down -3.8% against 5.3% in FY 2018. He said to hit Fiscal's percentage fees collections forecast from TGR for FY 2019, collections would have to average 2.1% over the last eight months against 3.0% from a year ago (FY 2018), and average 3.6% against 3.0% a year ago (2018) to hit the total percentage fees forecast. He said the EFA amounted to $5.8 million for FY 2019; therefore, had to grow $13.0 million over the last eight months to hit the forecast. Down -$7.2 million year to date, we will be +$13.0 million over the rest of the fiscal year to end up at $5.8 million for the fiscal year, net.

Mr. Guindon announced that the GCB, Budget and Fiscal would provide preliminary forecasts for the gaming and non-gaming portion of the LET, and that Taxation would present a preliminary forecast for the non-gaming portion of the LET.

B. Live Entertainment Tax

- **Gaming**
- **Non-Gaming**

Michael Lawton, Senior Research Analyst, Nevada Gaming Control Board

Mr. Lawton explained that his LET-Gaming forecast is based on taxable casino entertainment activity. The forecast of taxable activity is centered on an examination of historical growth patterns and interviews with various properties, and incorporates expected increases in taxable activity due to the opening of new properties or changes associated with entertainment venues at existing properties. He said the LET is a difficult tax to forecast, as there is far less statistical data available than there is for gaming-related taxes. The LET forecast for FY 2018 showed a decrease of 1.4% in FY 2018 and a 0.8% decrease in FY 2019 with about $100 million in collections. Fiscal year to date, LET collections are down 2.6% with a 1.8% comparison for the remainder of the fiscal year. Mr. Lawton shared the following information, received from various licensees that weighed into his forecast.

- Several properties on the Las Vegas Strip are experiencing negative impacts with regards to attendance to their later production shows, which could possibly be the result of more compelling entertainment options that may or may not be paying LET. Mr. Lawton used Cirque du Soleil shows as an example, stating there are many variations of those shows in Las Vegas and the lack of attendance would certainly impact collections.

- Several nightclubs and bars have fewer nights in operation when they operate with taxable admissions.

- Speculation implies that concert residencies have been driving visitation to Las Vegas; however, based on collections, these residencies are not enough to lift collections on the LET gaming side. Discussions between the GCB and gaming operators indicate there is not much on the horizon to drive LET-Gaming collections, and the GCB is unaware of any new shows or venues. All of the top 20 venues are experiencing horizontal or downward LET-Gaming collections.

Mr. Lawton said collections from LET-Gaming in FY 2020 remain flat and are forecast to drop slightly to 0.3%, or $99.7 million, and increase slightly to 0.4%, or $100 million, in FY 2021. No adjustments were made for new venues; however, there has been a change with regard to a very large venue coming to the Strip. No details have been confirmed as to whether or not that venue will be paying gaming or nongaming LET. Mr. Lawton stated Resorts World Las Vegas was not considered in his LET forecast because plans for the showroom are still being formulated.

Ms. Lewis asked if sporting events were carving into LET revenue.

Mr. Lawton replied that the Las Vegas Knights and the Women's National Basketball Association probably drove a lot of people away from shows or other venues that collect LET. Additionally, many properties offer more entertainment options that leave less time for gambling or might be more compelling than what is currently on the Strip.

Ms. Lewis stated that with resident headliners such as Celine Dione and Elton John leaving the Las Vegas Strip, she questioned whether more compelling entertainment was hard to find and subsequently impacting LET collections.

Mr. Lawton confirmed that other exciting acts such as Lady Gaga, Aerosmith, and Gwen Stefani have established residencies in Las Vegas; however, a residency that performs several times a month compared to a show that plays twice a night, every night, for the majority of the month, is not going to be enough to lift LET collections.

Mr. Streshley asked if production shows still made up the largest percentage of LET-Gaming revenue, and specifically, how LET revenue from shows compared to that of day clubs, nightclubs, and residencies.

Mr. Lawton reported that the decline in production shows is the main contributor to the fall in LET revenue. He could not identify each component's share of collections, but stated the residency component was a lift to LET revenue. He noted that nightclubs have tapered their hours of operation as well.

Mr. Streshley asked if the largest percentage of LET revenue came from production shows, considering their decline.

Mr. Lawton concurred.

Hayley Owens, Economist, Department of Taxation

Ms. Owens stated her forecast was for LET-Nongaming revenue only, and referred to the historical time series of the tax going back to 2006 (page 3, Exhibit H). The long-term trend was reasonably stable at approximately $1 million per month, but after the approval of some legislative actions in the 2015 Legislative Session, this series both increased and became quite volatile. To piece out the seasonality in this series, Taxation researched the two largest annual events in Nevada, which are Burning Man (Northern Nevada) in August and the Electric Daisy Carnival (Southern Nevada) in May, and found the peak months in collections were not in August and May, but rather October and March when tickets went on sale for those events. Ms. Owens said she tried to do a simple correlation with visitor volume/passenger counts at McCarran International Airport but, similar to events, found that the tax on tickets is paid when the tickets are purchased versus the day of the flight.

Ms. Owens conveyed that Taxation's LET Non-gaming forecast is aggregated by fiscal year. She indicated that the series of data in the chart on page 4 showed approximately 28% growth in FY 2014, 10.5% growth in FY 2016, and a 9.0% decline in growth in FY 2018. She attributed the volatility in FY 2018 to the October 1, 2017, mass shooting on the Las Vegas Strip, and the birth of the Vegas Golden Knights hockey team. She speculated the substitution effect in consumer's budgets and the meteoric rise of the team's success has impacted LET revenue, because the team is exempt from the LET. She elaborated that the Vegas Golden Knights had 41 home games in FY 2018 with nearly 740,000 in attendance, so those 740,000 attendees could have potentially supported taxed events if the team did not exist in Las Vegas. Ms. Owens stated that Taxation is forecasting growth of 12.6% for FY 2019 and a similar trend in FY 2021. She noted the Raiders, who are also exempt from the LET, will play their first season in Las Vegas starting September 2020.

Susanna Powers, Economist, Executive Budget Office

Ms. Powers stated visitation is one of the main drivers for both the gaming and non-gaming side of the LET. She said because of the October 1, 2017, mass shooting tragedy at the Route 91 Harvest music festival on the Las Vegas Strip, it was difficult to interpret the year-over-year trend for FY 2019. She expected increased visitation in the fourth quarter of calendar year 2018, compared to the same period in 2017, as well as increased growth in the number of local residents who spend and attend shows because of the improved economy and growth in wages. The overall trend in Las Vegas visitation is holding steady, which is expected to continue as long as people have disposable income and consumer confidence remains high (page 11, Exhibit F).

Ms. Powers communicated that the new tax rate and structure for the LET became effective the second quarter of FY 2016. Non-gaming venues tend to attract high-revenue events, which can increase competition and perhaps cannibalize revenue from venues that are inside gaming facilities. Ms. Powers stated that her forecast does not factor in the number of events that are scheduled for each fiscal year; however, she tracks those events via the daily news. She justified that when one show leaves another show begins;

therefore, her LET-Gaming forecast holds steady throughout the forecast period (page 12, Exhibit F).

Ms. Powers explained that LET Non-gaming revenue is a function of ticket price inflation, visitation and demand by residents. Budget's forecast for FY 2019 shows growth due to a stronger economy and more disposable income. Ms. Powers noted that an additional month of data will be released in late November, which could trigger a revision to the forecast that she presents at the Forum's December 3, 2018, meeting.

Russell Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Guindon directed the Forum to Fiscal's LET-Gaming forecast on page 53 (Exhibit G), TABLE 1. He explained that his forecast might be slightly skewed by using Las Vegas visitors to forecast statewide LET collections; however, he did not expect vast distortion since the bulk of Nevada's visitation comes from Clark County and/or the Las Vegas Strip. To project LET collections from gaming establishments, Fiscal looks at inflation-adjusted LET collections per Las Vegas visitor. Las Vegas visitor volume is forecast to decline 0.1% in FY 2019 and increase in FY 2020 and FY 2021 by 1.2% and 1.0%, respectively. Fiscal assumes that inflation-adjusted LET collections per visitor will continue to fall, but at a lesser rate than in some previous years. Mr. Guindon stated he was not uncomfortable with the -0.3% decrease in LET-Gaming collections in FY 2019, as an average of 0.6% growth is needed over the next nine months of FY 2019 to hit the forecast compared to an average of -1.9% over the last month of FY 2018 — knowing that LET-Gaming is down 2.7% year to date from a decline of -0.2% a year ago. Mr. Guindon conveyed that decreases in LET-Gaming would have to hit a bottom at some point, and possibly come back a little as a result of growth in employment and wages. He also said he could be wrong and revenues from LET-Gaming could continue to decline based on statements made by the other forecasters.

Relative to LET collections from non-gaming establishments (TABLE 2), the same methodology is used to forecast this revenue source as with LET-Gaming, based on collections, because information regarding tickets sold or the average price paid per ticket is not available. In regard to the decline in LET Non-gaming collections in FY 2018, Mr. Guindon stated inflation-adjusted LET collections year to date were down 17.6% against 46.3%, and September of 2017 was up 47.8%. He predicted another fall in September 2018. He said to hit the -4.5% forecast in non-gaming collections for FY 2019, collections would need to decline an average of 1.1% over the remainder of the forecast, compared to -21.4% from a year ago (FY 2018). He said FY 2018 was influenced by the impact from the October 1, 2017, Route 91 Harvest Festival shooting as well as a non-adjustment made to the price of Burning Man tickets in 2018 compared to 2017. Mr. Guindon attributed the forecast growth to LET Non-gaming collections in FY 2020 and FY 2021 to ticket price increases for Burning Man and the Electric Daisy Carnival due to inflationary pressure.

TABLE 3 (page 54, Exhibit G) shows Fiscal's forecast for LET collections from gaming and non-gaming establishments combined for FY 2019, FY 2020, and FY 2021.

Mr. Billings asked what the inflation-adjusted figures were indexed to, and Mr. Guindon replied the 1982/1984 timeframe.

Mr. Billings asked what the top three events were in FY 2018 on the non-gaming side, and the percentage of LET collections they produced.

Mr. Guindon stated that information is not available to the Fiscal Analysis Division. He referred Mr. Billings to the Department of Taxation, as Taxation is the agency responsible for administering and collecting the LET for non-gaming establishments. Mr. Guindon noted it might be proprietary information; therefore, cannot be disclosed.

Mr. Billings referred to LET-Gaming and stated the average visitor to Las Vegas is somewhat burned out on Cirque du Soleil shows, as expressed by some of the properties regarding late shows. He remarked that Cirque-style shows were a strong trend for a period of time and drove a lot of incremental visitation on the margin, but attendance seemed to be weening. He noted the Cirque shows still attract older visitors, thus early show attendance is less impacted. He suggested the Forum be somewhat conservative on forecasting LET-Gaming.

Relative to the LET-Gaming forecasts, Mr. Streshley asked the forecasters if their forecasts included an impact from the new Raider's stadium. He conveyed the stadium is anticipated to host about 40 events per year. He said if you subtract the bowl game, UNLV football, and the Raiders home games, it would leave a balance of 17 to 20 events to take place at a 70,000 plus stadium.

Ms. Powers stated she did not factor fees or revenue from the Raiders stadium in her forecast, because the Raiders are a pro sports team and will be exempt from the LET. However, she communicated that visitation stemming from the Raiders games can trickle into other activities; therefore, that component was factored into her overall forecast. She implied that Raiders games may cannibalize over other events in terms of the entertainment people seek in Las Vegas, but in terms of dollars, did not factor that in.

Mr. Guindon stated the Raiders stadium does not explicitly or implicitly impact Fiscal's forecast. He voiced his awareness of the intent to host events other than football at the stadium; however, the lack of details in regard to the lineup and/or dates of events suppressed him from including such events in his forecast. Additionally, he questioned whether events at the stadium would cannibalize other concert-type events on the Las Vegas Strip or if they would add to the margin for LET.

Ms. Powers interjected and stated she was not aware of potential concerts at the Raiders stadium so did not account for them in her forecast.

Ms. Owens said she did not directly quantify an affect for concert-type events in her forecast model, and found Taxation's growth rate for FY 2021 appropriate.

Chair Rosenthal called for recess at 12:38 p.m.

The meeting convened at 12:42 p.m.

C. State 2% Sales Tax

Hayley Owens, Economist, Department of Taxation

Ms. Owens said Taxation considered the following indicators in its State 2% Sales Tax forecast (beginning on page 6, Exhibit H):

- Moody's Analytics' baseline forecast for Nevada's unemployment rate as of October 2018. Nevada's unemployment rate bottoms out toward the end of FY 2020 at 3.6% and increases to between 5.0% and 5.6% in late FY 2021.

- U.S. Consumer Price Index (CPI), which continues at an upward trend, but helps model that part of the series.

- Moody's Analytics' baseline forecast for Nevada's median home price, which shows slight increases leading into a leveling-off period.

- Taxable sales forecast that continues recent trends over the forecast period with no dramatic changes.

- Taxation's actual forecast of the General Fund 2% portion of the Sales and Use Tax by fiscal year. The forecast for FY 2019 reflects 9.7% growth attributed to the Wayfair ruling, which is anticipated to bring in significant tax collections from online sellers once those sellers get registered with Taxation and taxes are remitted. With two months of data, fiscal year to date, FY 2019 taxable sales are up 6.0% and the General Fund portion is up nearly 8.0%. When the Forum meets again in December 2018, Taxation will have another month of data to base their forecast on and make adjustments if necessary. Taxation's preliminary sales and use tax forecast becomes more in line with the other forecasters by FY 2021 as a result of modeling data from Moody's Analytics forecast that suggests a slowdown or mild recession around that time.

Chairwoman Rosenthal commented that Taxation's State 2% Sales Tax forecast was very high level, driven by three or four major inputs. The forecast did not include any details that related to specific portions of the tax that came from the sale of a particular product or industry.

Ms. Owens relayed that Taxation's forecast was not based on industry. She indicated their model fit the historical series really well, so they were confident in using it to forecast.

Mr. Streshley questioned the large difference between the growth rates for taxable sales versus actual collections.

Ms. Owens stated that the difference in growth rates is a result of technical specifics related to the disbursement of the sales and use tax and the associated abatements and assessments. She deferred the question to Mr. Kile Porter, Deputy Executive Director, Department of Taxation.

Mr. Streshley referred to a 2% difference between actual taxable sales and actual collections.

Mr. Porter said some portions of sales tax that derive from taxable sales are abatable and some are not. For example, the 2% portion is not abated but other portions, depending on the abatement program, may be abated, which accounts for the difference.

Ms. Owens said there is a portion of taxable sales that is abatable, which subsequently lowers the growth of taxable sales. The General Fund portion is not abatable.

Mr. Guindon provided clarification and stated, under the law, the 2% rate is not abated; however, for the Tesla Gigafactory, it is not abated, but it is also not distributed to the General Fund. It is remitted by Tesla and then reimbursed back to Tesla through an economic diversification district under the economic development incentive package that they were provided, thus the 2% rate is not collected and deposited in the State General Fund.

Mr. Billings asked if the State 2% Sales and Use Tax remitted by Tesla, and reimbursed back to Tesla, is actually accounted for.

In response, Mr. Guindon stated the 2% portion is collected, paid, and remitted to the Department of Taxation, and subsequently is distributed back to Tesla through the economic development diversification district. He clarified that an abatement means an entity never pays the tax; therefore, Taxation never sees it.

Mr. Billings sought clarification as to whether the remittance is accounted for in the numbers, or if it just gets returned through another mechanism.

Mr. Guindon said the remittance is included in the taxable sales numbers, but is not included in the State 2% Sales and Use Tax collection numbers. Sales tax revenue collections is deposited in the State General Fund, and is money available to be appropriated.

Susanna Powers, Economist, Executive Budget Office

Ms. Powers stated that she uses a regression model to forecast retail sales driven by variables such as visitation, employment, wages, and total gaming volume. The model assumes that Las Vegas visitors come with a fixed budget, so only a portion of that budget trickles into retail sales. Additional variables include residential permits, which is a proxy for the housing sector, and national retail sales statistics. Technical adjustments are made for any outliers, as well as “gut check” variations. Ms. Powers reported that over the last seven years, taxable retail sales has been at odds with key economic indicators and have yielded lower than expected results. This has become a nation-wide structural issue as a result of reduced spending on taxable goods and increased spending on services that are not captured by sales tax. She attributed the weaker-than-expected retail sales and sales tax collections to overall low inflation in sales prices, energy costs and wage inflation. A tightening labor market is adding upward pressure on wages, which is expected to boost consumer spending in the near term, but then decelerate throughout the forecast period. She said the strong economy should offer support for more business spending; therefore, she was optimistic in the near-term outlook for sales taxes. Ms. Powers stated that one more month of data will be released at the end of November 2018, which could trigger a revision to her forecast in December. Her preliminary forecast shows 6.8% growth in FY 2019; and a slight deceleration in FY 2020 and FY 2021 due to moderate employment and wage growth.

Russell Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Guindon communicated that the Fiscal Analysis Division's State 2% Sales Tax forecast uses a regression equation that looks at taxable sales per employee, with driving variables being visitors per employee, construction employment per employee, personal income per employee, and new car registrations per employee. After running the model, Mr. Guindon realized that the forecast needed some adjustments, primarily to the near-term forecast, because of the quarterly data used in the model. He said he knew July and August numbers, but had to forecast the September portion of the quarter after it came out of the equation. The unadjusted equation forecast for FY 2019 would have been 4.0%, but Mr. Guindon adjusted the forecast to 5.1% as shown in TABLE 1 (page 61, Exhibit G), because the model could not capture current activity with construction of all the major projects, especially in September. He said an inflection point has developed in Clark County over the last few months, and taxable sales has increased at an increasing rate primarily due to the Genting Group project (Resorts World Las Vegas), the stadium project, and all other construction in Clark County. The 5.1% growth in taxable sales for FY 2019 translates into 6.7% growth in sales tax collections. Mr. Guindon alerted the members to a $7.0 million refund that was processed in April 2018, which resulted in an adjustment to the State 2% Sales Tax collections for FY 2018, from 4.8% to 5.4%, and an adjustment from 6.1% to 6.7% in FY 2019 (TABLE). He noted the $7.0 million refund in FY 2018 is partially to blame for the other forecasters' high growth rates in sales and use tax collections for the forecast periods.

Flipping to page 62, TABLE 2 helps explain the gap between taxable sales and State 2% Sales Tax collections. The left-hand block represents taxable sales and 2% sales tax collections, including actual and forecast, and the right-hand block represents the imputed 2% state sales tax (taxable sales times the 2% tax rate). Mr. Guindon pointed out that in the second quarter of 2018 there was a -$12.9 million gap between taxable sales and sales tax collections, which included the $7.0 million refund. He explained that the gaps in previous years were primarily associated with Tesla, as well as a portion related to tourism improvement districts (75% of the state's 2% General Fund rate can be pledged for tourism improvement districts). TABLE 2 by fiscal year (bottom of page 62) shows a gap of -$33.2 million in FY 2018. Mr. Guindon expects the gap between taxable sales and collections to decrease in FY 2019 by approximately 50%, based on assumptions related to Tesla and the tourism improvement district, and to stabilize in FY 2020 and FY 2021 around the $15.0 million range.

Mr. Guindon clarified that Fiscal does not have the Moody's recession scenario built in to their state outlook that is driving taxable sales. He found it interesting that of the four independent forecasts for State 2% Sales Tax revenue, two forecasts included Moody's recession scenario while forecasts produced by Budget and Fiscal did not, yet they were all very close.

Mr. Leavitt cited two major projects that are under construction in Las Vegas, the Raiders stadium and the Las Vegas Convention and Visitors Authority expansion. He said both projects are expected to be completed around the same time, and once they end, part of the taxable sales base being computed now will be gone — adding a percentage to the base would be adding a percentage to something that did not exist. Additionally, adding a recession to the mix will likely have a direct effect on sales tax. He recognized the significance of Nevada's State 2% Sales Tax revenue source, and the large impact that a small percentage off the forecast can make to total State General Fund revenues. He hoped to get a better understanding of the driving forces behind this revenue source after the release of another month's data, prior to the Forum's forecast meeting in December. He expressed curiosity in the outcome of performing analysis by industry to see how much activity relates to construction. He stated if the negative gap between taxable sales and State 2% Sales Tax collections is related to construction, which might not last, then it should be factored into the forecast.

Mr. Guindon stated Moody's recession scenario was viable, especially when considering the economy and expansions. However, he questioned his level of comfort with running Moody's national outlook for Nevada and getting a dip in state employment when the state outlook reflects something different. Forecasters are not predicting a big recession, but rather more of a cooling at the national level that turns into a recession in Nevada, because Nevada is still very dependent upon visitors. Nevada is also more diversified than it was during the Great Recession. Mr. Guindon explained that the forecast that came out of his sales tax equation was for 4.6% growth in FY 2021, and the actual forecast growth for sales tax collections is slightly higher at 4.8% due to adjustment for factors that affect the gap between growth in taxable sales and sales tax collections. He stated that he feels comfortable with this growth even with the major construction projects winding down in FY 2021 and a potential economic slowdown in 2020. However, when he looks at projected growth rates of less than 2% in FY 2021, with inflation projected to be greater than 2%, the outcome infers negative real growth in sales tax collections and correlates with the recession scenario behind these forecasts.

Mr. Billings said he concurred with Mr. Leavitt, and stated that Nevada is highly leveraged to statewide visitors, particularly in Southern Nevada, so no matter how mild a recession may be, it would impact sales tax both directly and psychologically, as spending habits change. He said another irrefutable fact is that the business cycle is "long in the tooth". He agreed with Mr. White in that while nothing too tragic was expected on the horizon, based off of high-level information, a downward tick is presumed at some point. He communicated it did not feel right to teeter on whether a recession would occur within or outside the forecast scope, and that the Forum needed to commit to a forecast.

Chairwoman Rosenthal stated that the preliminary forecasts were very close, but there were timing differences as to when the revenues would be collected. She emphasized that, from a forecast perspective, the Forum will have to be conscious of those collection periods when they meet in December 2018, because it would likely impact legislative spending.

Mr. Billings asked the forecasters if their CPI assumptions were consistent across all their different forecasts, and if they were all using the same source.

Ms. Owens, Mr. Guindon and Ms. Powers stated they used Moody's baseline CPI scenario for all forecasts.

Ms. Powers commented that she was not surprised by Mr. White's presentation, and that she pays attention to the yield curve, as she believes it has some predictive power. She stated the consensus is that the yield curve may invert at some point in calendar year 2019, but it is debatable if/when a downturn will follow. She explained that her thinking through the forecast process was that an inversion would occur toward the end of 2019, with a slide starting approximately 1.5 years later, followed by a deceleration. Ms. Powers indicated that U.S. deficits affect the yield curve, and explained that the U.S. Treasury is selling a lot of bonds to finance deficits. For example, when short-term bonds are sold, and the price of those bonds fall, it increases short-term interest rates on a Treasury yield curve, which trickles down to other lending rates. She was unclear as to how all that played a factor in the yield curve and the timing of the inversion, and whether that required more attention or if the Treasury deficit angle should be considered a factor. She asked the Forum if it was unusual to have that amount of deficit in terms of the volume of bonds affecting the yield curve.

Chairwoman Rosenthal stated it depended on the composition of the bonds sold, because short-term bonds versus long-term bonds could change that whole differential.

Ms. Powers said she is researching information relative to the types of bonds being sold to finance deficits.

Mr. Guindon agreed with Mr. Billing's comment relative to forecasting and where to put a stake in the ground, as it was clear that the four different forecasters were putting stakes in the ground at different places. Every economic business cycle has a turning point; however, the indicators would lead some to believe more than others when that turning point will occur.

D. Insurance Premium Tax

Hayley Owens, Economist, Department of Taxation

Ms. Owens announced that direct health and medical insurance carriers accounted for large growth in Insurance Premium Tax (IPT) over the last five years, which is expected to continue (page 12, Exhibit H). She explained that population size and growth rates are relevant in her forecast model to project premiums.

Ms. Owens referred the Forum to Taxation's IPT forecast on page 14 (Exhibit H), and drew attention to the slowdown of recent trends. She pointed out that the growth rates in her forecast are lower than the other forecasters.

Susanna Powers, Economist, Executive Budget Office

Ms. Powers referred to the scatter plot on page 18 (Exhibit F) that showed the relationship between implied insurance premiums calculated from IPT collections, with adjustments made for the types of credits that can be applied to this tax, versus Nevada personal consumption expenditure for financial services and insurance using actual data from FY 1999 to FY 2018. She explained that the sideways data in the middle of the chart represented observations from the Great Recession. Ms. Powers said she got the idea to use personal consumption expenditure for finance and insurance from the State of Montana, which coincidently was a forecast that she was already using from Moody's to derive implied insurance premiums. Additionally, a "households" forecast, produced by Moody's Analytics, was also added into the regression model. Ms. Powers noted that the models are a great starting point, but technical adjustments are necessary to account for real-world activity.

Ms. Powers stated her preliminary revenue forecast for IPT in FY 2019, FY 2020 and FY 2021 could be found on page 19 (Exhibit F). Her forecast reflects a stable health insurance market in terms of participation and premiums, and non-healthcare premiums will benefit from robust economy and population growth. She noted the increase in minimum liability rates required for Nevada drivers has been factored in for FY 2019.

Michael Nakamoto, Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Nakamoto stated Fiscal's IPT forecast began on page 75 (Exhibit G) of Fiscal's forecast packet, but specific components that drive the forecast are illustrated on page 77. The categories listed in the "Category" column were developed by the Department of Taxation and the Division of Insurance (DOI) of the Department of Business and Industry. The IPT is a calendar year tax that is collected quarterly with an annual true up, listed as the "Annual Renewal," due on March 15. Mr. Nakamoto stated Fiscal's forecast uses a regression equation based on the quarter-ending categories, per Nevada employee, and looks at variables such as wage and nonwage components of personal income per employee, because they make up a significant majority of total collections (quarter-ending categories made up 96.2% of total IPT collections in FY 2018). Relative to the "Surplus Lines' category, Mr. Nakamoto explained that the marijuana industry has difficulty getting traditional insurance through standard means, so they have to go to surplus lines insurers outside the state. Collections in surplus lines is expected to grow as more marijuana establishments come on board, thus the 32.6% increase in collections in FY 2018, with forecasts of $13.3 million in FY 2019; $13.7 million in FY 2020; and just over $14.0 million in IPT collections in FY 2021.

Mr. Nakamoto clarified that the IPT table on page 75 did not include up-to-date information relative to the quarter-end categories; however, that data would be available and incorporated in Fiscal's forecast for the Forum's December 3, 2018, meeting. He said the equation relevant to the forecast for FY 2019 is largely intact with the exception of the fourth quarter (5.2%). The equation had a hard time picking up the 11.4% growth in the fourth quarter of FY 2018, which was believed to be a result of the change in the minimum liability for auto insurance, and bringing that forward into FY 2019. With the exception of the Great Recession, the IPT is somewhat recession-proof, because there will always be a need for insurance, whether it be for health, property, business, etc. Going back to FY 2011 and FY 2012, actual collections for the IPT grew 0.4% and 0.8%, respectively. Mr. Nakamoto explained that during the Great Recession, IPT collections were abnormal at -7.1% in FY 2009 and -1.9% in FY 2010, but going back to the previous recession in the early 2000s, collections were 5.6% in FY 2019; 10.6% in FY 2000; 13.6% in FY 2001 (heart of that recession); and 6.4% in FY 2002.

Mr. Nakamoto provided insight to Fiscal's IPT forecast stating that the 6.0% growth forecast in FY 2019 is similar to the growth seen in FY 2013 and FY 2014, before the Affordable Care Act (ACA) took full affect. He recalled the DOI's presentation made at the Forum's October 10, 2018, meeting when it was implied that insurance premiums for health care were going to be flat, which is a big driver for the insurance market in Nevada. Mr. Nakamoto said his forecast of 6.0% growth for FY 2019 is justified based on peoples' need to insure cars, houses, boats, personal property, health, life insurance, etc. The growth forecast falls to 5.2% in FY 2020, and jumps back to 6.3% growth in FY 2021. Referring back to the IPT chart on page 77, Mr. Nakamoto explained that the 10.0% growth forecast in the third quarter of FY 2021 reflects the elimination of the home office credit, effective January 1, 2021. As background, Legislators of the 28th (2014) Special Session passed Assembly Bill (A.B.) 3 which allowed insurance companies that have their home office or a regional home office in the State of Nevada to earn a tax credit. The credit was equal to 50% of their IPT plus 100% of their Property Tax in the previous year, not to exceed a total of 80% of their total premium tax. The Legislature limited the credit effective January 1, 2016, to a total of $5.0 million across all insurers with a complete repeal of the credit on January 1, 2021. Going back to the chart, the 10.0% increase in the third quarter of FY 2021 is a direct result of that legislatively approved change, as the bulk, if not all, of the filed tax returns took the credit in the first quarter of the calendar year or the third quarter of the fiscal year. He said there is a chance for spillover in the last quarter of FY 2021; however, the entire $5.0 million was added to the third quarter of FY 2021, resulting in 6.3% growth for FY 2021. If the $5.0 million is backed out, growth would have been equivalent to 5.2% for FY 2021.

Mr. Billings questioned the impact of recession on health care, ACA-related policies.

Mr. Nakamoto commented that the specter from the implementation of the ACA will exist as long as the current administration is in power. After a few years of double-digit (20% to 30%) increases in policy premium costs, the premium rates approved by the DOI have stabilized and are trending flat, and are estimated to remain flat or grow slightly, which will moderate the growth of the IPT going forward. Mr. Nakamoto stated his forecast might be considered conservative if health insurance premiums take off again; but otherwise considered reasonable if the health sector stays at a more stable pattern.

Mr. Billings clarified that he was speaking to the volume of policies versus price. He asked if ACA-related policies were inelastic relative to the general economic environment.

Mr. Nakamoto replied that a downturn in the economy could trigger reduced incomes or job losses, causing some people to slide out of coverage through the Exchange or through their employer and onto the Medicaid rolls. As this situation would result in a loss of premiums, natural demographic growth would add to premiums. He said much of the IPT is driven based off employment forecasts, and as people continue to be employed in the state, many would attain insurance coverage through their employer, generating premiums.

Chairwoman Rosenthal asked if the Budget and Agency forecasts accounted for the termination of the $5.0 million home office credit in FY 2020 and FY 2021.

Ms. Powers confirmed that the loss of credits for the IPT were factored into Budget's forecast.

Ms. Owens stated she did not directly apply that change to Agency's forecast.

Chairwoman Rosenthal called for a recess at 1:33 p.m.

The meeting convened at 1:41 p.m.

Modified Business Tax

Hayley Owens, Economist, Department of Taxation

MBT - Nonfinancial Institutions

Ms. Owens highlighted the following indicators used to produce her Modified Business Tax (MBT) forecast for nonfinancial institutions (pages 16 and 17, Exhibit H):

- U.S. Employment Cost Index (wages only): This index is released in two versions: total wages only and total benefits only. Taxation found the total wages only version to better fit their time series data. The output showed steady growth, similar to the CPI (page 16, Exhibit H).

- Nevada's Unemployment Rate: This forecast was produced by Moody's Analytics and was the same forecast used to produce Taxation's State 2% Sales Tax preliminary forecast.

Ms. Owens referred the committee to Taxation's MBT – Nonfinancial forecast on page 18, and explained the solid red line represented the forecast and the dotted red line represented the forecast without the rate change. On TABLE 4 (page 80, Exhibit A), she pointed out that Taxation's forecast of 1.9% growth for FY 2019 was much lower than the other forecasters. She said her model projected 3.0% growth for FY 2019, but the base year in the model was lower than the actual base year. She expected an upward revision in her December 2018 forecast based on increased inflation and wages. Ms. Owens noted that if she applied 3.0% growth to the actual base year, then her FY 2019 forecast would have been approximately $622.0 million versus $615.7 million.

MBT - Financial Institutions

Ms. Owens stated she used the same indicators, U.S. Employment Cost Index (wages only) and Nevada Unemployment Rate, to produce her MBT forecast for financial institutions (pages 20 and 21, Exhibit H).

Ms. Owens communicated the MBT-Financial forecast (page 22, Exhibit H) was incorrect, as there was an error in the color-coded lines. She said to ignore the chart and move to TABLE 4 (page 80, Exhibit A). Taxation's forecast reflects 6.6% growth in FY 2019, or $31.0 million; and due to the rate reductions that will go into effect in FY 2020, a decline of approximately 1.8% in FY 2020, or $30.4 million; and growth of 3.0% in FY 2021, or $31.3 million.

MBT - Mining

Ms. Owens conveyed that she could not find a model that was statistically relevant given the short history available for the mining component of the MBT; therefore, she applied the average growth rate of the past two years (1.6%) to all three years over the forecast period, and imputed the tax bases in order to recalculate the revenue for MBT-Mining, as a result of the rate change. Taxation forecasts 1.6% growth in FY 2019, a decline of -7.0% in FY 2020; and 1.6% growth in FY 2021.

Mr. Joe Reel, Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau, brought awareness to a handout labeled MBT Forecasts – Without Rate Reduction (Exhibit D), printed on blue paper, that lists the forecast, by forecaster, as if the rate reduction did not occur.

Susanna Powers, Economist, Executive Budget Office

MBT - Nonfinancial Institutions

Ms. Powers stated her general business (nonfinancial) employment forecast process includes discussions with the DETR's economist who forecasts employment to make sure nothing is left out. An industry-by-industry comparison of the two forecasts did not expose any major differences. She looks at employment trends, studies industries that are considered major drivers in Nevada, collects news, make notes, and pays close attention to activity throughout the different industries (page 21, Exhibit F).

Bureau of Economic Analysis (BEA) wage data is analyzed to predict movements in MBT wages, which is payroll data received from Taxation. Ms. Powers indicated wages are projected to improve over the forecast period. MBT collections for nonfinancial institutions are driven by gains in employment and wage forecasts (page 23, Exhibit F).

MBT - Financial Institutions

Ms. Powers conveyed Budget's financial employment outlook is stable with moderate increases expected over the forecast period. There is increasing demand for the type of skills needed to work in financial institutions. Ms. Powers referred the committee to Budget's MBT-Financial Institutions forecast on page 27 (Exhibit F).

MBT - Mining

Ms. Powers moved to the mining forecast, beginning on page 29 (Exhibit E), driven by metal or mining employment. She indicated that Newmont is developing a gold mine in Long Canyon, Elko County, which is presumed to have a positive impact in regard to production, employment and wages. Her MBT-Mining forecast on page 31 reflects the current tax rate for FY 2019, with technical adjustments made for the new tax rates for FY 2020 and FY 2021.

Ms. Powers noted that her MBT forecasts for Nonfinancial, Financial and Mining all include adjustments for the new tax rates in FY 2020 and FY 2021.

Joe Reel, Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

MBT - Nonfinancial Institutions

Mr. Reel conveyed the MBT forecast overview begins on page 85 (Exhibit G), but directed the Forum to page 93 (Exhibit G) to elaborate on the economic drivers behind Fiscal's MBT – Nonfinancial forecast. TABLE 2B shows total wage and salary disbursements that come out of BEA data as well as annual growth rates. Additionally, the chart illustrates actual and forecast employment based primarily on DETR's employment forecast, with minor adjustments made to some of the sectors. TABLE 2B shows a forecast of average annual wage per employee that drives wage growth. Mr. Reel reported strong wage growth over the last several years with 6.9% growth in FY 2017; 6.2% in FY 2018, and 6.3% in FY 2019, before falling slightly, increasing at a decreasing rate, of 5.3% in FY 2020 and 5.2% in FY 2021. Fiscal's employment forecast shows 3.2% growth in FY 2019, followed by 2.3% and 2.2% in FY 2020 and FY 2021, respectively. Fiscal assumes the average wage per employee will grow from 0.6% to 0.8% over the rate of inflation throughout the forecast period. The average wage per employee is forecast to increase 3.0% in FY 2019, and 2.9% each in FY 2020 and FY 2021, slightly above the rate of inflation for each year of the forecast.

MBT - Financial Institutions

Mr. Reel turned to page 104 (Exhibit G) to address Fiscal's MBT – Financial forecast for wages and employment. Wage and salary disbursement growth for FY 2019 is 5.3%, driven by the employment forecast of 2.7% growth and wage growth of 2.5% in FY 2019. Fiscal forecasts employment to grow 2.3% in both FY 2020 and FY 2021. Wages are forecast to grow 2.7% for each year, resulting in annual wage growth of 5.1% in both FY 2020 and FY 2021.

MBT-Financial wages are forecast to grow slightly above inflation by 0.1% in FY 2019; 0.5% in FY 2020; and 0.7% in FY 2021.

MBT - Mining

Mr. Reel reported the mining sector has significantly higher wage growth than most of the other sectors. Fiscal forecasts wage disbursements in the mining sector to grow 4.2% in FY 2019 and 3.3% in both FY 2020 and FY 2021. Mining employment is forecast to grow 0.7% all three years in the forecast period, and average wage per employee is forecast to grow 3.6% in FY 2019 and 2.6% in both FY 2020 and FY 2021. He said annual wages in the mining sector are forecast to grow above the rate of inflation 1.1% in FY 2019 and 0.4% and 0.5% in FY 2020 and FY 2021, respectively.

Mr. Reel stated Fiscal does not see a significant impact of the economic slowdown driving employment. He said wage growth over the last several years was driven by employment, whereas going forward, wage increases are driven by the increase in wage per employee as well as employment growth.

F. Real Property Transfer Tax

Hayley Owens, Economist, Department of Taxation

Ms. Owens identified two indicators used to forecast Real Property Transfer Tax (RPTT), including Nevada median home price and housing completions (pages 26 and 27, Exhibit H). She said Nevada's median home price is based on Moody's Analytics' baseline scenario through the end of FY 2021. After learning from the Great Recession, when the number of permits outweighed housing completions, Taxation decided to base their forecast on housing completions instead of permits.

Ms. Owens explained that Taxation's RPTT forecast is based on the average of two forecasts, high and low (page 28, Exhibit H). She noted the low forecast would have put Taxation's forecast within 0.5% of Fiscal's forecast for each year of the forecast period.

Susanna Powers, Economist, Executive Budget Office

Ms. Powers said Budget's approach to the RPTT forecast began with a review of new residential building permits for multi-family and single-family homes, by calendar year, from 2000 to September 2018, year to date (page 33, Exhibit F). She reported recent data showed weak permit results for Nevada single-family homes, and expressed that an upward revision by the end of calendar year 2018 would not surprise her. The next approach looked at tax collections, year to date, accessible through the state's financial system. Year-to-date collections in FY 2019 were flat compared to FY 2018. Ms. Powers explained that home prices were up, but information in regard to volume or type of transaction is not something Budget is privy to; however, she was confident that the bulk of activity generating RPTT came from the residential sector.

Ms. Powers looked at supply and demand of housing, and based on permits pulled calendar year 2018, year to date, new housing is low, but inventory has improved per Reno and Las Vegas residential reports. Relative to demand, rising interest rates are affecting affordability. She observed less sales volume, year over year, and more demand for lower priced homes like condos, duplexes and tiny homes, which could sway potential buyers to rent instead. Today's home price appreciation is not sustainable; therefore, Budget forecast revenue from RPTT to normalize in the 3.0% to 5.0% range that is comparable with economic fundamentals.

Michael Nakamoto, Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Nakamoto directed the members to page 18 of the Fiscal packet (Exhibit G) to walk through the drivers used for Fiscal's RPTT forecast. He said the only information available to Fiscal is RPTT collections by county with nothing that indicates what drives the tax in terms of sales, whether the property is residential, commercial, vacant, new, existing, single family, multi-family, etc. Fiscal uses residential sales, primarily single-family homes, as the principal driver of its RPTT forecast. Mr. Nakamoto summarized information relative to the following charts:

- CHART 9A (page 18) illustrates existing single-family home sales (seasonally adjusted annual rate). The blue line represents actual sales based on information obtained by Moody's from the National Association of Realtors through the fourth quarter of calendar year 2017. Mr. Nakamoto observed from statistics coming out of Clark County and Reno that single-family home sales in those areas had stabilized and then fell off a cliff, similar to activity that occurred in 2010 and 2012. He said sales dropped off the third quarter of 2018, and the tight market loosened from a one-month supply to two or three months of supply.

- CHART 10A (page 20) illustrates total single family home completions (seasonally adjusted annual rate). Data received through the second quarter of 2018 showed actual permits issued had fallen, which explained why Fiscal's October 2018 forecast (red line) showed a drop in completions (not enough permits to support growth in completions). Mr. Nakamoto said Fiscal forecasts single-family home completions to rebound slightly because homebuilders will continue to build irrespective of what the price level is. He expects the trend to become a little more representative of the trend going back five or six years ago.

- CHART 11A (page 22) compares the Case-Shiller Price House Price Index, which is used to measure Nevada's residential real estate prices, with forecasts from Moody's and Fiscal. Moody's Analytics is forecasting single-family home prices to ramp up and level off, whereas Fiscal forecasts prices to ramp up at a slower pace and level out sooner. Interest rates, supply, and home prices have reached a point where home affordability has become an issue. Home prices are not adjusting as quickly as expected, especially with new construction. Mr. Nakamoto indicated that the price of housing may continue to increase and not level out until more people move to the area who can afford to purchase because they sold a more expensive home somewhere else.

Mr. Nakamoto moved to Fiscal's forecast on page 125 of the Fiscal packet (Exhibit G). He acknowledged $27,037,000 was recorded in actual collections for the RPTT for the third quarter of 2018, first quarter of FY 2019. The RPTT is collected by the counties when there is a transfer of property and, subsequently, is remitted to the state on a quarterly or monthly basis, depending on the county. At the time of the forecast, 16 of Nevada's 17 counties, excluding Churchill County, had submitted their RPTT proceeds. The $27,037,000 in actual collections was a 0.2% increase from a year ago, and included an estimate for Churchill County. Mr. Nakamoto announced that Churchill County has since remitted their taxes, which will increase Fiscal's RPTT forecast by $34,000, to $27,071,000, and bump the growth since a year ago to 0.3% in collections for the first quarter of FY 2019. Driving the RPTT is the sales of existing single-family homes, which is down 10.6%. However, prices are up 12%, whereas quarter-to-quarter growth in new completions is nearly flat, going from 3.64% to 3.67%. Mr. Nakamoto indicated that Fiscal's model uses regression analysis to forecast the RPTT revenue source. Seasonally adjusted annual variables include existing single-family home sales, new completions, and the Case-Shiller index. The result of that equation was high, which was attributed to the previous six quarters of double-digit growth, year over year. After estimating actual collections for the third quarter of 2018, and incorporating technical adjustments, Fiscal pulled down the fourth quarter to $25,970,000, from approximately $28 million, based on remaining growth needed to meet the Fiscal forecast of close to 3.1%, or slightly higher, for FY 2019. Home prices and quantity drive the forecast for FY 2020 and FY 2021, reflecting 7.2% and 4.6% growth, respectively. Mr. Nakamoto said, as Fiscal reevaluates their RPTT forecast, the division will look at the price component to see if the market needs to stabilize sooner than FY 2020 to remain sustainable going forward. He noted the volatility in the RPTT revenue source as it was generating upwards of $150 million in the years leading into the Great Recession, and then dropped to $48 million in FY 2012.

Mr. Leavitt stated one would be considered lucky if they could estimate the RPTT, with any degree of accuracy, two and one-half years in advance.

Mr. Nakamoto agreed, and shared that in May of 2017, Fiscal forecast 9.2% growth in the RPTT for FY 2017 with three quarters of actual collections already accounted for. Actual collections for FY 2017 ended up at 10.8%. Fiscal's forecast for FY 2018 was 5.8% and actual collections were 23.1%.

Ms. Lewis stated a potential variable to consider going forward is product type. She implied, depending on 2019 legislation related to housing, residential product may change and become more multi-family as an answer to demand in the under $300,000 to $320,000 median price range. She said, although multi-family product is a more affordable option to homeownership, buyers in that price range are the most price sensitive so interest rates, tariffs and a variety of other fees are driving up the price.

Mr. Nakamoto agreed, and clarified that multi-family product consists of townhouses and condominiums, which are subject to the RPTT upon sales, as well as apartments, which may be subject to the RPTT when they are built, but many units become rentals and are not re-sold; therefore, drop from RPTT statistics going forward.

Ms. Lewis stated another variable is homes built specifically for rental property, where people build them and hold them indefinitely. She said apartment builders are flipping properties after they build them and become stabilized.

G. Commerce Tax

Russell Guindon, Principal Deputy Fiscal Analyst, Fiscal Analysis Division, Legislative Counsel Bureau

Mr. Guindon referred to two handouts titled TABLE 1 – Estimates Based on Fiscal Year Activity Period – November 2018 Estimates (Exhibit I) and TABLES 1 and 2 Commerce Tax and Commerce Tax Credits Against the MBT (Exhibit J). He asked the members to turn to page 5 (Exhibit J), TABLES 4 and 5, and place the two handouts side by side. He explained that a joint effort was made by Taxation, Budget and Fiscal to bring forward consensus estimates for Commerce Tax due under alternative scenarios based on different growth rate assumptions, at the request of the Forum, for consideration by the Forum.

TABLE 1 (Exhibit I) illustrates Commerce Tax due based on 12-month fiscal activity periods and the applicable collections had the money been deposited in that fiscal year activity period. TABLE 4 (Exhibit J) illustrates the accounting period when the Commerce Tax actually got paid and recorded by the Department of Taxation; and TABLE 5 (Exhibit J) illustrates collections reported on a fiscal year business activity tax period. He pointed out that actual total collections for FY 2016 and FY 2017 (TABLE 5) match the actual amounts in TABLE 1 (Exhibit I), $174,844,204 for the FY 2016 business activity period and $183,450,132 for the FY 2017 business activity period, whereas actual collections for FY 2018 (TABLES 4 and 5), totaling $186,563,875, was specific to collections deposited in FY 2018 for FY 2018. TABLE 5 shows $169,063,584 was deposited in FY 2017 for the FY 2017 business activity period, which was 92% of $183,450,132 total collections reported in FY 2017, FY 2018 and FY 2019 for the FY 2017 business activity period. Mr. Guindon explained that deposits have been made in FY 2019 for the FY 2018 business activity period; however, more deposits were expected. Fiscal assumed 95% of Commerce Tax revenue would be collected in the accounting period for the FY 2018 business activity period, which is how the consensus estimate

$196,383,000 ($186,563,875 divided by .95, rounded) was justified for FY 2018 shown on TABLE 1 (Exhibit I), based on business activity period, not accounting period, because the FY 2018 state accounting period was closed. After running the alternate growth rate scenarios (Exhibit I) at 4.0%, 4.5%, 5.0%, 5.5% and 6.0%, Fiscal, Taxation and Budget forecast selected growth rates of 5.5% in FY 2019; 5.0% in FY 2020; and 5.0% in FY 2021. The forecast was based on metrics, such as GDP, personal income, employment, inflation, and two observations of actual collections. Mr. Guindon reminded the Forum that the Commerce Tax base includes goods, gasoline, services, etc. He said, keeping in mind Moody's recession scenario, the forecast growth rates of 5.5%, 5.0% and 5.0% would not be unreasonable knowing that inflation would be around 2.0% to 2.2%. He referred the members to TABLE 3 (page 3, Exhibit I) that highlighted specific economic indicators considered in the consensus forecast.

Mr. Guindon moved from explaining the basis of forecasting on a fiscal year activity period to the forecast based on an accounting period basis, which is used to define the revenue used to build budgets within the Executive and Legislative Branches.

Actual collections shown on TABLE 2 (page 2, Exhibit I) for FY 2016, FY 2017 and FY 2018 match actual total collections recorded by the Department of Taxation and Controller's system, shown on TABLE 4 (page 5, Exhibit J), for those three fiscal year accounting periods. The 95% rule, taking 95% of the business year activity estimate, is placed in the accounting period, and 5.0% is applied based on the prior business activity period.

Mr. Guindon suggested adding a scenario for FY 2020 and FY 2021 under Moody's Analytics' recession scenario. Because the Commerce Tax is based on fiscal year, if the recession is anticipated to happen in possibly late 2020, the estimate would be based on the activity period from July 1, 2020, to June 30, 2021. He noted there could be some effect on the back end of this revenue source also in terms of the growth.

Mr. Guindon moved to TABLES 1 and 2 (page 1, Exhibit J) and TABLE 1 (Exhibit I). TABLES 1 and 2 (Exhibit J) show Commerce Tax and Commerce Tax Credits against the MBT based on fiscal year business activity period versus the fiscal year accounting, as well as MBT Commerce Tax Credit estimates. Based on information compiled by Taxation, and observations made for FY 2016 and FY 2017, and year-to-date data for FY 2018, the decision was made to look at fiscal year activity periods in TABLE 1 (Exhibit J) and forecast MBT Commerce Tax Credits for FY 2020 and FY 2021 based on 33.0% of the Commerce Tax.

TABLE 3 (page 2, Exhibit J) shows the Commerce Tax Actual due to date based on business activity period. Based on FY 2016 Actual Commerce Tax paid, actual total Commerce Tax Credits taken against FY 2017 MBT amounted to 32.3%. Actual Commerce Tax credits in FY 2017 taken against FY 2017 MBT was $43.7 million or 25.0% compared to 7.3% taken in FY 2018. Relative to FY 2017 Commerce Tax paid, $45.1 million or 24.6% of actual tax credits in FY 2018 were taken against FY 2018 MBT. Mr. Guindon stated that, based on the current actual data available regarding how the Commerce Tax credits are taken against the MBT, it appears approximately 25% of the credits are taken within the fiscal year accounting period they are to be taken against the

MBT, and somewhere around 8% are taken in future fiscal years. Thus, based on this information, staff from Taxation, Fiscal and Budget felt comfortable assuming that 33% of the Commerce Tax estimate from the preceding fiscal year will be taken as tax credits against the MBT for the current fiscal year, although this 33% amount may be actually taken against the MBT in different fiscal year accounting periods, 25% in the current fiscal year and 8% in the next fiscal year.

Mr. Guindon reiterated the tables were provided to show various Commerce Tax growth scenarios for the Forum to consider going forward. Additionally, the tables are structured showing how Commerce Tax and Commerce Tax credits against the MBT are split based on business activity and accounting period basis. He pointed out the substantial difference between the 50% allowable credit of Commerce Tax paid that could be applied to a MBT liability versus the 33% credit being taken. Mr. Guindon explained that discussions occurred before and after the Commerce Tax was approved in the 2015 Legislative Session relative to whether the 50% credit cap of Commerce Tax liability would be met or used against an MBT liability. He noted it was possible for out-of-state businesses to have a Commerce Tax liability but no MBT liability because of the lack of employees physically working in the state. The 50% cap protected the state from underestimating, but statistical information shows it is no longer a reasonable assumption, as 33% is probably more accurate for forecasting purposes.

Chairwoman Rosenthal asked staff to generate a scenario that reflects the recession in the second half of 2020 for forecasting purposes, and to present it to the Forum at their December 3, 2018, meeting.

Mr. Guindon acknowledged Chairwoman Rosenthal's request, and offered a couple of scenarios versus one. He said he would swap out the 5.5% and 6.0% growth scenarios that represented more optimistic estimates in exchange for scenarios showing FY 2020 and FY 2021 cycling down. He noted that changing the growth rates does not result in moving a lot of money. For example, the 5.5% scenario compared to the 4.0% scenario for FY 2019, FY 2020 and FY 2021 resulted in a difference of approximately $3.0 million, $5.0 million and $7.5 million, respectively, to the consensus estimate.

IX. REVIEW AND APPROVAL OF PRELIMINARY FORECASTS OF MINOR GENERAL FUND REVENUES AND TAX CREDITS FOR FY 2019, FY 2020, AND FY 2021 APPROVED BY THE TECHNICAL ADVISORY COMMITTEE ON FUTURE STATE REVENUES (NRS 353.229) AT ITS OCTOBER 31, 2018, MEETING.

Mr. Guindon directed the members to page 83 (Exhibit A) of the Economic Forum's meeting packet, TABLE 5. The selected revenue sources, also referred to as "major minor" revenue sources, are listed as well as the consensus forecast adopted by the Technical Advisory Committee (TAC) at their meeting on October 31, 2018, as well as each forecast by forecaster.

TABLE 6, page 85, shows the TAC's preliminary consensus forecast of minor General Fund revenue sources and tax credits that were approved by the TAC and brought forward for consideration by the Forum. TABLE 7 provides a summary of the TAC forecast for select General Fund revenue sources, as well as differences.

Mr. Guindon explained that Fiscal and Budget send out a request to Executive Branch agencies asking them to provide their forecast for FY 2019, FY 2020 and FY 2021, which represents the "Agency" forecast on TABLE 5. Staff from Budget and Fiscal review the forecasts for accuracy, compliance, etc., and contact the Agency with questions or concerns. Next, Fiscal and Budget prepare independent forecasts prior to them both meeting and agreeing upon a reasonable consensus to bring forward to the TAC for consideration. He noted that, generally, the consensus that is brought forward to the TAC is the average of all three forecasts; however, sometimes it might be an average primarily of the Fiscal and Budget forecasts.

Mr. Guindon stated the forecast for Net Proceeds of Minerals (NPM) tax is the one minor General Fund revenue source that gets missed the most in percentage terms. The NPM forecast is the average of the forecasts prepared by Taxation, Budget and Fiscal. To prepare the forecasts, assumptions are made relative to gold prices and gold production to achieve the gross revenue forecast. From that, the forecasters have to assume what portion will actually become net proceeds subject to the NPM tax, which is complicated because the rates are scaled based on the net to gross ratio. If a company has more than $4.0 million in gross net proceeds, it pays the maximum tax rate of 5.0%. Mr. Guindon explained that the General Fund portion is determined as the difference between the net proceeds tax rate and the property tax rate on the property. For example, if the property tax rate was 2.5%, and the gold mining company was paying 5.0%, the General Fund gets 2.5%. He indicated that, in FY 2018, the General Fund portion went down due to two negative impacts: (1) a mine that did very well in a county that had a very high combined rate, and (2) a mine that was in a county with a very low property tax rate did not have a very good year, net. Due to what the forecasters believed to be an anomalous event that drove FY 2018 NPM, all of the forecasters increased the General Fund's average effective tax rate for the forecasts for FY 2019, FY 2020 and FY 2021. Of those forecasts, the gold price assumptions were very similar, with slight differences in production. The TAC'S forecast is a result of averaging forecasts by Agency, Fiscal and Budget.

Mr. Guindon communicated that the Cigarette Tax (page 84, Exhibit A) used to be considered a major revenue source by the Forum, but it was moved to a minor revenue source at the request of the Forum. Again, the TAC's forecast is a result of averaging forecasts by Agency, Fiscal and Budget.

In reference to tax credit programs, Mr. Guindon referred to the shaded area at the bottom of page 89 (Exhibit A). Of the revenues, before tax credits, the TAC forecast for FY 2020 and FY 2021 was approximately $5.0 million less than the forecast for the current biennium, which is the actual for FY 2018 plus the revised forecast for FY 2019. He stated it is a much different story in regard to the tax credits programs.

Mr. Guindon provided summary of the following tax credit programs listed in TABLE 6 (page 89, Exhibit A):

- Film Transferrable Tax Credits: $10.0 million was forecast to be taken in FY 2018, but that did not occur. As a placeholder for the November forecast, $10.0 million was allocated to FY 2019, but a little over $5.0 million was awarded and will be taken in FY 2019. Further research will determine whether the forecast should be adjusted and brought forward to the TAC at their meeting at the end of November.

- Economic Development Transferrable Tax Credits: These transferrable tax credits are being provided to Tesla under an incentive program through the Governor's Office of Economic Development (GOED). Tesla took more credits in FY 2018 than forecasted. GOED reported that $42.3 million has been granted and taken in FY 2019 based on the number of jobs that will likely be revealed in the audit results (soon to be released) for quarter-ending June 2018. Tesla has reached the maximum tax credits that can be earned and taken for capital investment, $120 million. Tesla has $75.0 million in tax credits remaining that can be taken for qualified jobs, and so the $21,560,458 allocated to FY 2020 is the residual for qualified employees, and that will max out this tax credit program at $195.0 million. Mr. Guindon emphasized the scale of going from $115.0 million of credits in the current biennium to $22.0 million in the next biennium.

- Catalyst Account Transferrable Tax Credits: Any amount of credits that are not authorized to be issued in a fiscal year do not carry over to the next fiscal year. The amounts in TABLE 6 are based on information received from GOED. The statutory maximum amount of credits for FY 2019 is $2.0 million. Mr. Guindon stated that $475,000 was issued in FY 2018, but did not get taken, and will be taken in FY 2019. For forecasting purposes, the maximum statutory amount allowable for this tax credit program was allocated to FY 2019, but information leads staff to believe that amount will not be met. Mr. Guindon noted that GOED could easily designate these tax credits to companies looking to expand or relocate to Nevada and exhaust the statutory maximum.

- Nevada New Market Jobs Act Tax Credits: Insurance companies are eligible to receive a credit against the Insurance Premium Tax, only, when they make a qualified equity investment in a community development entity (CDE). The insurance companies can receive a credit of 58% of the total qualified amount, doled out as 12%, 12%, 12%, 11% and 11% over a five-year period. Mr. Guindon indicated he was comfortable with the FY 2019 tax credit forecast of $22.0 million for FY 2019, and indicated the amount listed in TABLE 6 for FY 2020 was the residual amount that will max out the total $116.0 million that was authorized for this program (58% of $200.0 million). He noted the Nevada New Market Jobs Act Tax Credit program will add money to the sheets in the next biennium compared to the current biennium.

- Education Choice Scholarship Tax Credits: This tax credit program received an additional $20.0 million in FY 2018 due to a one-time event based on 2017 law. Of the $26.0 million available to the program, about $16.0 million was awarded and taken in FY 2018, and the remaining was carried over along with the statutory amount of approximately $6.6 million to get to the $18.0 million allocation for FY 2019. Statutory maximum credits are listed in TABLE 6 for FY 2020 and FY 2021.

- College Savings Plan Tax Credits: The amounts listed in TABLE 6 were provided by the Treasurer's Office.

Total tax credits forecast by the TAC for the 2019-21 biennium, compared to the 2017-19 biennium, is approximately $135.0 million more, and total revenue sources forecast by the TAC (after credits) totals approximately $130.5 million higher for the 2019-21 biennium compared to the 2017-19 biennium.

Mr. Streshley asked, out of the $10.0 million in credits that could be taken against the Film Tax Transferrable Tax Credit program, if those credits would be identified by the Forum's December 3, 2018, meeting so they could be allocated to FY 2019. He assumed that approved film productions that qualify for tax incentives would be determined or in a pipeline by December 2018.

Mr. Guindon indicated the $10.0 million entry was a placeholder with the understanding that it would have to be modified. He noted, per GOED, there was the potential for $5.2 million in Film Tax credits to be taken shortly, but he had not read over the details. In order to receive a Film Tax Transferrable Tax Credit, an entity would have to apply, get approved, produce the film, and follow with an audit. Mr. Guindon expected to have a better idea of what film tax credits could be taken by June 2019 for FY 2019.

Mr. Streshley asked if the maximum allowable credits in FY 2020 would bump to $15.0 million if only $5.0 million in film tax credits were taken in FY 2019, or if the film tax credit would cap at $10.0 million annually.

Mr. Guindon stated that could occur, but probably would not occur, because the program was already having a hard time issuing $5.0 million in credits, so $10 million of $15 million would be even more difficult. He indicated the estimate for the Film Tax Transferrable Tax Credit program will likely get revised before the Forum's December 2018 forecast meeting.

Chairwoman Rosenthal asked if a motion was required to approve the forecasts, because the agenda item language included "review and approve." Mr. Guindon stated no motion was required as the agenda was designated "for possible action."

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

Mr. Guindon announced that this agenda item would address any change of instructions by the Forum to the TAC. He indicated that a recession scenario could influence some of the revenue sources forecast by the TAC, but not to a major extent. For example, a turning point could subject licensing fees to a decline as a result of entities giving up their business licenses, real estate licenses, etc. He said Budget and Fiscal will take another look at it, and since it was discussed at this meeting, it will probably be discussed at the TAC meeting as well.

Chairwoman Rosenthal provided instruction to have the TAC revisit their forecasts and bring any revisions to the Forum's December 2018 meeting.

XI. SCHEDULING OF FUTURE ECONOMIC FORUM MEETINGS.

Chairwoman Rosenthal announced that the forecasters will present their forecasts for approval by the Forum at the Forum's December 3, 2018, meeting.

Mr. Guindon confirmed the meeting is scheduled to begin at 9:00 am on December 3, 2018, and will be held in Carson City, Room 4100, with videoconference to Las Vegas. He reminded the Forum that an additional month and an additional quarter of data will not be released until after Thanksgiving, but the forecasters will work diligently to update their forecasts in time to meet print deadlines for the December 3, 2018, meeting. Mr. Guindon said meeting materials will be forwarded to the members and the public as they are finalized.

XII. PUBLIC COMMENT.

Chairwoman Rosenthal called for public comment in Las Vegas and Carson City. There was no public comment at either location.

Chairwoman Rosenthal thanked the presenters and staff for providing us the information that we will need to do our best as a Forum to set the forecasts for this cycle.

XIII. ADJOURNMENT.

The meeting adjourned at 2:54 p.m.

Respectfully submitted,

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Judy Lyons, Committee Secretary

APPROVED:

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Chairwoman Rosenthal

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.