

Idaho Economic Forecast

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Executive Office of the Governor

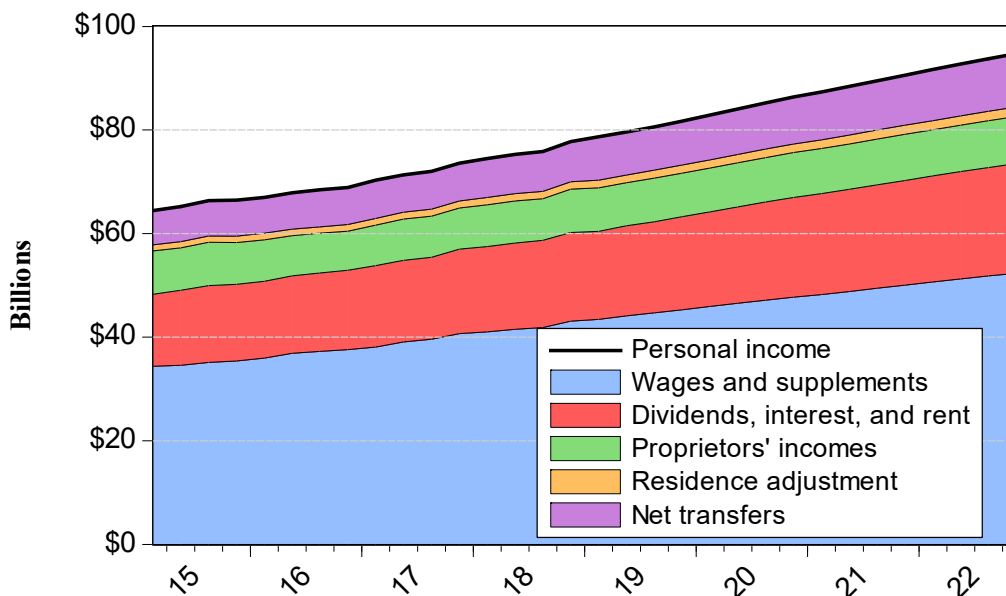
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- Forecast 2019–2022
- Why Is Wage Growth so Low?
- Alternative Forecasts

Idaho Personal Income Composition



**IDAHO
ECONOMIC
FORECAST
2019–2022**

State of Idaho
BRAD LITTLE
Governor

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INTRODUCTION

The national forecast presented in this publication is the June 2019 IHS Markit (IHS) baseline forecast of the US economy. The previous *Idaho Economic Forecast* was based on the March 2019 IHS baseline national forecast.

COVER

Wage growth is contributing to personal income growth within Idaho. While it may seem that dividends, interest, and rent are inordinately large, the third of these, rent, includes the rental value of homes which are owner occupied. Net transfers shows transfer payments less current contributions for social insurance. It adds things such as SNAP and total social security checks received while subtracting the payments current workers make into social security as well as the amount that federal workers contribute to their retirement plan. Across the displayed timeframe, personal income growth is 5.1% per year; wages and supplements, as well as dividends, interest, and rent grow 5.6% per year; proprietors' income grows 1.1% per year, and both the residence adjustment and the net transfers grow 5.9% per year.

FEATURE

In a capitalist economy, businesses seek to raise output to meet demand. When there is a surfeit of labor, it may be that hiring extra workers is the least expensive way of doing so. This can lower productivity if the new workers contribute output at a lower rate than established workers, or if they cause inefficiencies which affect established workers' performances. When labor is scarce, businesses may use additional capital to augment the productivity of the existing workers, or they may be more selective in who they hire. That selectivity often results in rising wages for those hired or retained.

Productivity is a measure of the ratio of output to input. When wages and productivity are discussed, labor is the primary consideration for the input. In other contexts, capital (machines or software or facilities) could be the primary consideration for the input. The recovery from the Great Recession has been characterized as a low raise environment as wages have not accelerated to the extent expected as the unemployment rate has fallen. Jun Nie, a researcher at the Kansas City Federal Reserve Bank, examines the interaction between productivity growth, wages, and the unemployment rate in the article "Why Is Wage Growth so Low?"

FORECAST

Alternative assumptions concerning future movements of key economic variables can lead to major variations in national and/or regional outlooks. IHS examines the effects of different economic scenarios, including the potential impacts of global economic conditions, higher inflation, and future Federal Reserve Board decisions. Alternative Idaho economic forecasts were developed under different policy and growth scenarios at the national level. Three of these forecasts are included in this report.

Historical and forecast data for Idaho and the United States are presented in the tables in the middle section of this report. Details are provided for every year from 2005 through 2022 and for every quarter from 2017

through 2022. The solution of the Idaho Economic Model (IEM) for this forecast begins with the second quarter of 2019.

CHANGES

The Idaho Department of Labor provides monthly historical employment data that are seasonally adjusted and converted to quarterly frequencies by the Idaho Division of Financial Management. The historical data through the fourth quarter of 2018 have been benchmarked by the Department of Labor.

Personal income estimates in this report were released by the US Bureau of Economic Analysis (BEA) on June 25, 2019. BEA included revisions in 2018 as well the first measurement for the first quarter of 2019. These were the most current data available.

In the April *Idaho Economic Forecast*, some history for Idaho's personal income was inadvertently copied to Idaho's nonfarm personal income. DFM has reviewed the implications for this and found there were no forecast impacts for personal income or for employment.

Descriptions of IHS's US Macroeconomic Model and the IEM are provided in the appendix. Equations of the IEM and variable definitions are listed in the last pages of this publication.

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EXECUTIVE SUMMARY

The national forecast no longer has the tailwind of synchronized global growth. Germany's is the largest economy which is flirting with mild contraction. Brexit is looming for the British economy. Other OECD economies (Organization for Economic Cooperation and Development, a grouping of the 35 largest economies) are facing slower growth in coming quarters than in the immediate past quarters.

Trade and certification uncertainties contribute to international slowing. That unease is also affecting businesses in the US. Alternating regimes in trade stance for steel is one of the realities facing US industry. Similarly, trade policy and environmental policy instability in the automotive sector is weighing on its decisions. Stricter emissions standards in Europe and greater emphasis on electric propulsion in China are in contrast with US efforts to rollback federal fuel economy standards. Four automotive manufacturers have entered into an agreement with California for less rollback, pushing against the US administrative effort. Boeing's woes with the 737-Max are beginning to ripple across the aerospace industry, from airlines and their planning to suppliers and their inventories.

IHS Markit has recognized that business investment is dropping from quite elevated levels to quite subdued levels. This is occurring for equipment, plant, and intellectual property (which includes items like software capable of being patented, copyrighted, or trademarked). The firm notes a roughly three-year window in which the benefits of capital investment by businesses brings accelerating productivity. The slowing in business investment thus slows the prospect for future real GDP growth. The housing sector is not as robust as the recently lower mortgage rates would suggest. Housing starts have been steady, and sales are constrained within the existing housing market. Prices are elevated, mitigating some of the benefit that the fall in mortgage rates has brought. Finally, hiring is expected to slow dramatically, falling from a familiar level of adding 2+ million jobs per year to 1.6 million this year, then falling further to adding about 0.86 million jobs per year in 2021 and 2022.

Despite these cross-currents, IHS maintains that the most likely scenario for the US economy is continued growth, though not as robust as in 2018. The baseline forecast is assigned a 55% likelihood with US real GDP growth close to 2% across each of the next few years. The actual path going forward is projected at 2.5% in 2019, and 1.7–1.8% in each of 2020–2022.

Some economic factors which have historically been challenging are not expected to be so. Inflation is expected to remain close to, but not meaningfully above, 2%. This is very familiar, as it has been the case throughout the recovery from the Great Recession. Oil prices are expected to be contained, particularly given US production and transportation coming out of the shale fields. Gasoline prices are expected to fluctuate less than 10%. Interest rates are also expected to be low and steady. This IHS forecast has the federal funds rate as steady at its current level through 2023. The stock market is expected to return 5.1% this year, 4.0% next year, and 3.2% in both 2021 and 2022.

The US economy is expected to weather the turbulence; the Idaho economy is even more likely to do so. While IHS also produces an optimistic and a pessimistic alternative to its baseline, and the pessimistic case shows contractions in the US jobs market in 2020 and 2021, the Idaho economy shows job growth

in all three scenarios, with employment gains of 2.9%, 2.6%, 2.4% and 2.2% across 2019–2022. Personal income in the state grows in all three cases as well, slowing from 5.7% annual growth to 4.8% annual growth in the baseline forecast. Housing shows little change across the three scenarios applied to the state as well. Starts are expected to increase from 16,000 per year to almost 19,000 per year in 2022.

IDAHO ECONOMIC FORECAST
EXECUTIVE SUMMARY
JULY 2019

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)											
Current \$	16,197	16,785	17,522	18,219	18,707	19,485	20,494	21,365	22,236	23,150	24,111
% Ch	4.2%	3.6%	4.4%	4.0%	2.7%	4.2%	5.2%	4.2%	4.1%	4.1%	4.1%
2009 Chain-Weighted	16,197	16,495	16,900	17,387	17,659	18,051	18,566	19,024	19,361	19,697	20,044
% Ch	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%	2.9%	2.5%	1.8%	1.7%	1.8%
PERSONAL INCOME - CURR \$											
Idaho (Millions)	56,112	58,236	61,616	65,611	68,055	71,813	75,849	80,142	84,634	88,954	93,225
% Ch	5.8%	3.8%	5.8%	6.5%	3.7%	5.5%	5.6%	5.7%	5.6%	5.1%	4.8%
Idaho Nonfarm (Millions)	54,107	55,951	59,244	63,385	66,110	69,836	74,066	78,347	82,772	86,952	91,139
% Ch	6.0%	3.4%	5.9%	7.0%	4.3%	5.6%	6.1%	5.8%	5.6%	5.0%	4.8%
U.S. (Billions)	14,010	14,181	14,992	15,720	16,125	16,831	17,570	18,261	19,096	19,950	20,820
% Ch	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.4%	3.9%	4.6%	4.5%	4.4%
PERSONAL INCOME - 2009 \$											
Idaho (Millions)	56,108	57,461	59,896	63,620	65,288	67,698	70,077	72,883	75,475	77,837	80,006
% Ch	3.8%	2.4%	4.2%	6.2%	2.6%	3.7%	3.5%	4.0%	3.6%	3.1%	2.8%
Idaho Nonfarm (Millions)	54,103	55,206	57,590	61,462	63,422	65,833	68,429	71,251	73,815	76,085	78,216
% Ch	4.0%	2.0%	4.3%	6.7%	3.2%	3.8%	3.9%	4.1%	3.6%	3.1%	2.8%
U.S. (Billions)	14,009	13,992	14,573	15,243	15,470	15,867	16,233	16,608	17,030	17,456	17,868
% Ch	3.2%	-0.1%	4.2%	4.6%	1.5%	2.6%	2.3%	2.3%	2.5%	2.5%	2.4%
HOUSING STARTS											
Idaho	7,124	9,053	9,807	10,273	12,412	14,039	16,234	16,048	17,264	18,161	18,938
% Ch	56.2%	27.1%	8.3%	4.8%	20.8%	13.1%	15.6%	-1.1%	7.6%	5.2%	4.3%
U.S. (Millions)	0.784	0.928	1.000	1.107	1.178	1.209	1.250	1.204	1.216	1.238	1.281
% Ch	28.1%	18.4%	7.8%	10.7%	6.4%	2.6%	3.4%	-3.6%	1.0%	1.8%	3.4%
TOTAL NONFARM EMPLOYMENT											
Idaho	621,235	637,025	653,292	671,399	693,910	715,180	738,647	760,215	779,628	798,073	815,510
% Ch	1.9%	2.5%	2.6%	2.8%	3.4%	3.1%	3.3%	2.9%	2.6%	2.4%	2.2%
U.S. (Thousands)	134,174	136,374	138,941	141,826	144,348	146,611	149,064	151,485	153,103	153,975	154,825
% Ch	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.7%	1.6%	1.1%	0.6%	0.6%
SELECTED INTEREST RATES											
Federal Funds	0.1%	0.1%	0.1%	0.1%	0.4%	1.0%	1.8%	2.4%	2.4%	2.4%	2.4%
Bank Prime	3.3%	3.3%	3.3%	3.3%	3.5%	4.1%	4.9%	5.5%	5.5%	5.5%	5.5%
Existing Home Mortgage	3.8%	4.0%	4.3%	4.0%	3.9%	4.2%	4.7%	4.4%	4.5%	4.7%	4.8%
INFLATION											
GDP Price Deflator	1.9%	1.8%	1.9%	1.0%	1.1%	1.9%	2.2%	1.8%	2.3%	2.3%	2.3%
Personal Cons Deflator	1.9%	1.3%	1.5%	0.3%	1.1%	1.8%	2.0%	1.6%	2.0%	1.9%	2.0%
Consumer Price Index	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.4%	2.0%	2.1%	2.0%	2.2%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

IDAHO ECONOMIC FORECAST
EXECUTIVE SUMMARY
JULY 2019

	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GDP (BILLIONS)												
Current \$	20,041	20,412	20,658	20,865	21,049	21,246	21,478	21,685	21,905	22,127	22,346	22,566
% Ch	4.3%	7.6%	4.9%	4.1%	3.6%	3.8%	4.4%	3.9%	4.1%	4.1%	4.0%	4.0%
2009 Chain-Weighted	18,324	18,512	18,665	18,765	18,908	18,979	19,059	19,148	19,236	19,322	19,403	19,485
% Ch	2.2%	4.2%	3.4%	2.2%	3.1%	1.5%	1.7%	1.9%	1.8%	1.8%	1.7%	1.7%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	74,495	75,282	75,861	77,757	78,693	79,600	80,577	81,698	82,887	84,066	85,231	86,350
% Ch	5.1%	4.3%	3.1%	10.4%	4.9%	4.7%	5.0%	5.7%	6.0%	5.8%	5.7%	5.4%
Idaho Nonfarm (Millions)	72,633	73,412	74,234	75,985	76,740	77,877	78,838	79,935	81,112	82,248	83,346	84,383
% Ch	5.5%	4.4%	4.6%	9.8%	4.0%	6.1%	5.0%	5.7%	6.0%	5.7%	5.4%	5.1%
U.S. (Billions)	17,319	17,467	17,657	17,835	17,979	18,166	18,350	18,550	18,775	18,996	19,206	19,406
% Ch	5.2%	3.5%	4.4%	4.1%	3.3%	4.2%	4.1%	4.4%	5.0%	4.8%	4.5%	4.2%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	69,282	69,672	69,934	71,419	72,211	72,600	73,038	73,685	74,406	75,148	75,831	76,514
% Ch	2.6%	2.3%	1.5%	8.8%	4.5%	2.2%	2.4%	3.6%	4.0%	4.0%	3.7%	3.7%
Idaho Nonfarm (Millions)	67,551	67,941	68,435	69,791	70,418	71,028	71,461	72,095	72,812	73,523	74,153	74,770
% Ch	3.0%	2.3%	2.9%	8.2%	3.6%	3.5%	2.5%	3.6%	4.0%	4.0%	3.5%	3.4%
U.S. (Billions)	16,107	16,165	16,278	16,381	16,498	16,569	16,633	16,730	16,854	16,981	17,087	17,195
% Ch	2.6%	1.4%	2.8%	2.6%	2.9%	1.7%	1.6%	2.4%	3.0%	3.0%	2.5%	2.6%
HOUSING STARTS												
Idaho	17,899	14,879	15,366	16,793	15,300	15,895	16,372	16,624	16,888	17,154	17,410	17,606
% Ch	48.8%	-52.2%	13.7%	42.7%	-31.1%	16.5%	12.5%	6.3%	6.5%	6.5%	6.1%	4.6%
U.S. (Millions)	1.321	1.260	1.233	1.185	1.203	1.209	1.201	1.204	1.209	1.206	1.218	1.231
% Ch	20.8%	-17.2%	-8.2%	-14.7%	6.1%	2.1%	-2.7%	1.1%	1.6%	-0.9%	3.9%	4.4%
TOTAL NONFARM EMPLOYMENT												
Idaho	731,318	735,702	739,920	747,650	752,480	757,993	762,781	767,605	772,341	777,533	781,998	786,641
% Ch	5.2%	2.4%	2.3%	4.2%	2.6%	3.0%	2.6%	2.6%	2.5%	2.7%	2.3%	2.4%
U.S. (Thousands)	148,048	148,742	149,409	150,058	150,687	151,285	151,780	152,187	152,615	153,171	153,243	153,384
% Ch	1.8%	1.9%	1.8%	1.7%	1.7%	1.6%	1.3%	1.1%	1.1%	1.5%	0.2%	0.4%
SELECTED INTEREST RATES												
Federal Funds	1.4%	1.7%	1.9%	2.2%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Bank Prime	4.5%	4.8%	5.0%	5.3%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Existing Home Mortgage	4.4%	4.7%	4.8%	5.0%	4.6%	4.3%	4.3%	4.3%	4.4%	4.4%	4.5%	4.6%
INFLATION												
GDP Price Deflator	2.0%	3.0%	1.8%	1.7%	0.8%	2.2%	2.7%	2.0%	2.2%	2.3%	2.3%	2.2%
Personal Cons Deflator	2.5%	2.0%	1.6%	1.5%	0.4%	2.5%	2.5%	2.0%	1.9%	1.7%	1.9%	1.6%
Consumer Price Index	3.2%	2.1%	2.0%	1.5%	0.9%	3.1%	2.9%	2.2%	1.9%	1.5%	2.0%	1.4%

NATIONAL FORECAST DESCRIPTION

The Forecast Period is the Second Quarter of 2019 through the Fourth Quarter of 2022

The US has sustained its longest economic expansion. The first release of spring GDP numbers shows that real GDP growth achieved a 2.1% annual rate in the second quarter. In its June forecast, IHS put second quarter real growth at the 1.5% annual rate, with the full year expected to register 2.5%. Capacity constraints are close by the firm's estimation. Excessive inventory building last year is part of the constraint. Tariffs have the slightest of direct effects towards slowing the economy. Customs duties amount to \$26 billion, which is right around one-tenth of one percent of the monetary value of the economy. Indirect effects from the tariff rollout appear to be more substantial. IHS cites market selloffs as sufficient to drop personal consumption expenditures (PCE) by 0.3 percentage points. PCE represents around two-thirds of the activity GDP captures.

Another indirect effect of the tariff actions in this forecast is a much flatter trajectory for the interest rate set by the Federal Reserve's Open Market Committee (FOMC). While the FOMC sets policy in view of many inputs, the tariff escalation has been cited by businesses as introducing hesitancy towards investment, and it has been cited as contributing to slowing growth in other economies. Both effects are closely monitored by the FOMC. The US bond market has been signaling that a rate reduction by the FOMC is expected with near certainty, and IHS has noticed that FOMC officials have not mounted a vigorous argument against this expectation. In the June IHS forecast, which was prepared as these developments were unfolding, IHS pushed back its expectation for another rate hike from late 2019 to 2023. Further, IHS has, in its commentary, indicated that its July forecast will include a 25-basis point reduction in the federal funds rate this month, to be reversed later in 2020.

The pivot in FOMC monetary policy outlook, which has been ongoing since March, is one of the larger developments in this IHS forecast. Other large drivers of the forecast are demographics and a projection for productivity improvements. Productivity growth is expected to roughly double from recent values towards measures typical of the prior decades. Low productivity has been one of the explaining factors for the slow recovery from the Great Recession. For demographics, IHS points out that US Census figures show that the working age population in the US has been growing by 0.9% yearly, but it is expected to slow to 0.8% yearly by 2022. Compounding this, there is expected to be a lower value for the labor force participation rate. Combined, these slow the growth in new employment. Another slowing, which is also demography related, comes about through lower household formation rates. This diminishes the demand for housing, to quite measurable effect, by 2023. Rather than a household formation rate of 1.4 million per year, by then the rate will be 1.2 million per year.

Looking at the numeric effects of the demographic slowdown, yearly jobs gains since 2013 have all been above 2 million, with 2014, 2015, and 2018 above 2.5 million. This year, the expectation is again for just above 2 million jobs. However, for 2020, the expectation is for 1.2 million jobs, with 0.9 million in 2021, and fewer still after that. Similarly, 2013, housing starts rose from roughly 0.9 million units per year in 2013 to 1.2 million units per year in 2017, roughly 75,000 extra units per year on average across

those four years. Between now and late 2023, IHS sees little substantial change in housing starts, with a single rise of about 75,000 units going into 2022 to be largely reversed as 2023 unfolds.

Business investment: This grew almost 7% last year, but it is expected to advance just 2.6% this year and to average 2.4% each year from 2020 to 2023. While some of the broad growth in 2018 could be attributed to tax law changes, the slowing is seen as primarily reflecting slowing output growth. This was 3.5% in 2018, should read 2.9% this year, and 1.9% on average across 2020–2023. Spending on equipment is expected to slow from 7.4% in 2018 to just 0.4% this year. Investment in structures reverses from 5% growth in 2018 to small declines in 2019–2020. Growth in intellectual property investment (for example, developing software) slows by a factor of three, from 7.5% to 2.5% by 2023.

Orders of capital goods peaked in the first two-thirds of 2018. There was a decline across the remainder of 2018, and thus far into 2019 the orders have rebounded only by half. Inventories are likely to be weighing on orders. Boeings difficulty with the 737-Max is also having an effect. Production of the plane has already been slowed by almost 20%, and the CEO just announced that further cuts are possible, as is a temporary shutdown of the line. Auto dealers are also dealing with accumulating inventories and this is leading to fewer orders to the factory. Each year of the forecast through 2022 shows fewer expected light vehicle sales than the preceding year. Even light trucks sales, which have generated most of the profits for the automakers, are expected to marginally decline.

IHS notes that there is a lagged effect to business investment. Singling out mechanical equipment investment, roughly 8% of the gain in output is contemporaneously realized, another 10% within three months, and similar further amounts until the 1.5-year mark, when the gains begin diminishing. At the 2.5-year mark, there is still a bit above 5% of the output gain left to realize, but by the end of year three, the equipment is essentially running at full speed. With a sharp slowing of business investment this year, output growth in the next few years can be expected to slow.

Another condition slowing business investment is the low unemployment rate. IHS comments that businesses have many open positions and are unable to fill them. The firm sees this problem persisting until the unemployment rate climbs to about 4.5%, roughly the natural rate of unemployment. This is not achieved within the baseline outlook until 2025. For firms involved in producing intermediate goods, orders may be restrained for the reasons already discussed, but also in part because their customers are constrained by the tight labor market as well. Overall, IHS sees manufacturing employment growth of only 1% this year and until 2024, less than half of the pace in 2018.

The prior year brought a dramatically different tax environment for US businesses through the Tax Cuts and Jobs Act (TCJA). The US Bureau of Economic Analysis has estimated that \$776.5 billion was repatriated in 2018, up sharply from \$155.1 billion in 2017. The first quarter of 2019 shows a moderated \$100.2 billion. The previous holiday for repatriation was in 2005, when earnings at roughly 3.5 times the prior year's repatriation were brought back. The subsequent year saw a reduction to one-third of that amount. The TCJA of late 2017 also allowed repatriation tax to be paid over eight years at the federal level. Not all states allowed such leeway.

Housing: IHS lowered housing starts across the forecast and it also lowered expected spending on residential home improvements. The first of these could be anticipated by a reader of monthly housing starts data. Housing permits for single-family dwellings fell for five straight months through April. This has occurred though 30-year mortgage rates have fallen by almost one hundred basis points since November. IHS discusses how each July the Bureau of Economic Analysis (BEA) brings in an estimate based on monthly construction reports to evaluate spending on residential remodeling. In this revision, the numbers the BEA will be using are “tanking” according to IHS. This leads to residential improvements being downgraded from 6.9% growth to 5.2% growth in 2019, slower growth still at 4.5% in 2020, and further slowing in both 2021 and 2020. This seems not to be seen by the retail figures. Results from Lowes’ and Home Depot first quarter were for 3.2–4.2% comparable sales growth over a year ago.

Home price gains are expected to moderate, but housing affordability is unlikely to change much beyond seasonal variability. Nationwide the price gain was 4.8% for the median home in 2018. In 2019 it is projected at 3.5%. Then annual gains near 3% to finish the forecast. For context, wage gains are seen at 2.9% this year, and then 3.3–3.4% through the forecast. The IHS projections for house price appreciation are in line with those of Freddie Mac, the government sponsored enterprise (GSE) involved in the mortgage market. It projects 3.6% appreciation for 2019 and 2.6% in 2020. The mortgage market is estimated to stay below \$1.7 trillion according to the GSE. In 2012 and 2016, marks of \$2.1 trillion were achieved. The GSE mentions that cash-out refinancing remains at much lower values than in the past: \$140.8 billion in equity was extracted in the second quarter of 2006, but just \$16.6 billion was extracted in the first quarter of 2019.

In terms of the monetary distribution of housing construction, the total value of single-family housing starts this year is expected to be 11.2% below the level of 2018, while multi-family housing starts are expected to be 6.7% over the 2018 level. The same directional changes are forecast for 2020, but with much smaller magnitudes: 1.9% contraction for single-family housing starts and 0.9% expansion for multi-family housing starts. By 2021 both housing types grow, again with tepid rates, to be followed with modest mid-3% increases in 2022, and then again tepid contractions in 2023. As for counts, the distribution is remarkably flat. Either 0.8 or 0.9 million single-family housing starts, and persistently 0.4 million multi-family housing starts are expected each year of the forecast.

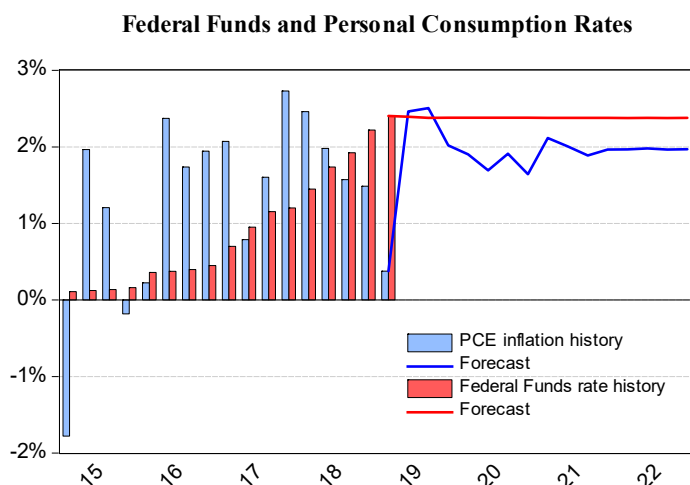
Employment: Monthly nonfarm employment gains seem to have peaked last July, and they are expected to drift lower in the remainder of this year. Longer term, labor force growth is expected to slow and the participation rate is expected to decline, bringing total labor force growth to under 0.5% by the mid-2020s. It was above 1.0% in 2018, and it is likely to nearly match that in IHS’s estimation in 2020 because of the temporary census hiring.

In the monthly “employment situation” readings from the Bureau of Labor Statistics (BLS), the unemployment rate hit a new low of 3.6% in April, down 0.2 percentage points over the prior month. Assisting that fall was a 263,000 initial jobs gain. The count of unemployed persons fell by 387,000 to 5.8 million people across the nation. Labor force participation declined by 0.2 percentage points to 62.8%, making up for the gap between the 263,000 jobs gain and the 387,000 drop in unemployed people. Average hourly earnings increased by six cents per hour to \$27.77. The next reading showed

3.6% unemployment being repeated, but just 75,000 new jobs being created in May. Average hourly earnings again advanced by six cents, and the average workweek held steady at 34.4 hours. Earlier readings on jobs gains (for both March and April) were revised downward by 75,000. By June, the employment situation showed a 3.7% unemployment rate, 224,000 new jobs, and 6.0 million unemployed people in the nation. Labor force participation rebounded by 0.1 percentage points to 62.9%. Revisions to April and May's new jobs counts dropped these by 11,000 jobs in total. Readings for average hourly earnings seems to have been revised upwards by three cents, and again six cents was the initial reading for hourly pay gains in June. All told, the quarter looks to have produced 171,000 new jobs per month on average. These three reports well illustrate which numbers are volatile (initial jobs figures) and which are fairly steady (particularly participation, but also hours and pay recently).

The employment situation report contains a wealth of information regarding segments of the workforce. Teenagers are participating at a rate quite close to one in three, and this has remained steady. Workers who hold multiple jobs account for one in twenty. That is up slightly from a year ago. Roughly one in five jobs is part time. Part time work is defined as fewer than 35 hours per week.

Total nonfarm employment is expected to cross 152.2 million going into 2020, having crossed the 150 million mark at the beginning of 2019. Gains slow going into 2021, when 153.5 million jobs are expected, and then another million are created to enter into 2022.



Inflation and Monetary Policy: The Federal Reserve (Fed) has a dual mandate: stable prices and maximum employment. Since 2012 when the Fed adopted the 2% inflation target as measured by core personal consumption expenditures (core PCE), stable pricing has meant that prices rise modestly and predictably. In the interim, inflation has persistently been below that target. The Fed has traditionally viewed low unemployment as an inflationary pressure. That view is weakening and it appears that the Fed is becoming more concerned with

anchoring inflation symmetrically around 2%, not just below 2%. IHS had been forecasting that inflation would overshoot the 2% target. In this forecast, the firm no longer anticipates any overshoot.

The Federal Reserve's Open Market Committee (FOMC) targets the federal funds rate in order to achieve its dual mandate. With unemployment very low by historical standards, the FOMC had been adjusting rates upwards in 2018 to slow anticipated inflationary pressures. This process paused beginning in 2019. In the June forecast IHS extended that pause till 2023. Earlier forecasts had another rate increase in 2019. It appears that maximum employment is for the moment the greater concern for the FOMC. Remarks by the Fed Chairman Jay Powell indicate that the benefits of lowering unemployment among traditionally marginalized sectors of the labor market are increasingly important

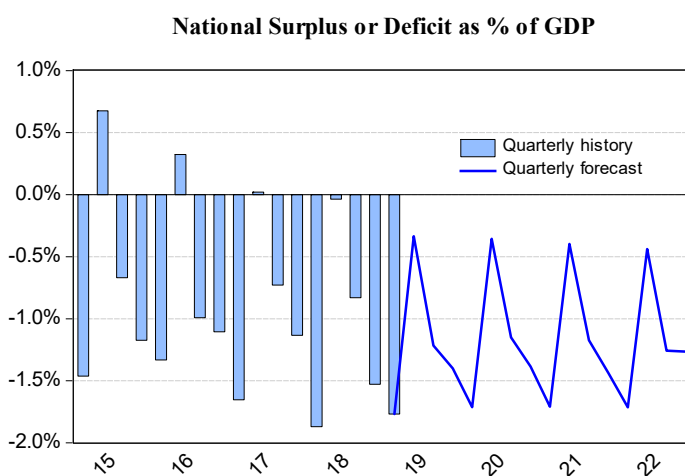
in his view. While the committee targets interest rates by committee consensus, that view is similar to views held by other FOMC participants. The FOMC will release its latest interest rate decision July 31. One reason overly high inflation is of lesser concern is the inflation outlook as measured by bond yields suggests that 2% is a well-anchored longer-term expectation. Other taming forces are moderate wage growth coupled with improving productivity, that is, lower per-unit labor costs. A drop in oil prices in late 2018 and a strong dollar have also countered the general upward drift in prices. IHS estimates tariffs will increase PCE prices by 0.1 percentage points.

Bond yields have fallen considerably in the past six months. The previous *Idaho Economic Forecast* was published just after a mild yield-curve inversion, when three-month treasury yields exceeded 10-year treasury yields. This situation often portends a weaker economy in 12–18 months. That inversion then was righted, and upon inspection of IHS’s forecast, which is published with quarterly data, no further inversion of the yield curve was anticipated. Subsequently the yield curve has again inverted, much less moderately, and much more persistently. This inversion indicates that the bond market expects the FOMC to cut rates, and significantly, by the end of 2019. In the words of the June IHS forecast narrative, “we believe such expectations are to some extent premature.” The July conference call by the firm continued to express that sentiment, though the firm has indicated it will predict one 25-basis point reduction to the federal funds rate, to be reversed later in 2020 in future forecasts. As mentioned earlier, the firm continues to see the rate cut as not fully needed given the outstanding macroeconomic picture.

Energy: US energy production has increased significantly due to the newer drilling technique called horizontal fracturing, or fracking for short. As for the Bakken field in North Dakota, where trains have been needed to carry oil to market, the Permian Basin in Texas has been hampered by lack of pipeline infrastructure. Pipelines to relieve pressure in the Permian oilfield are approaching completion. One, the Cactus II pipeline, will start operations in the third quarter of this year. Eventually it will handle 670,000 barrels of oil a day. Another pipeline, called EPIC, will eventually bring another 900,000 barrels per day of capacity, with its start beginning in the fourth quarter. There is also a natural gas pipeline shortage in the Permian Basin. That has led to negative pricing in natural gas, meaning producers are paying others to take the gas. That constraint will take a bit longer to relieve. New gas pipelines are expected to be online in 2020. The pipeline constraints have kept energy prices low in these fields, but with expanded transport capacity, pricing is expected to converge towards international standards. There has been a \$6 dollar per barrel discount to West Texas Intermediate oil in comparison to Brent crude oil. That is expected to narrow to \$4 per barrel by 2022.

On other energy fronts, the normal temperatures of spring actually kept energy production near seasonal averages. The electric grid uses natural gas fired turbines as peaking power plants. These handle the extra load needed to run air conditioning units, particularly in the early evening as workers return home. With mild temperatures in spring, the natural gas sector was able to produce enough to bring natural gas storage back near five-year averages. Prices fell from \$2.75 per million Btu to \$2.50. In its June publication, IHS noted that utility output was now near its weather-neutral level.

Fiscal Policy: Economic stimulation through federal, state, and local policy is expected to peak this year at the level of 1.0 percentage points in direct effect towards real GDP growth. Next year this contribution is predicted to recede, to 0.5 percentage points. At the state and local level, IHS sees elevated spending on road work as a frustrated response to the slow pace of progress towards a federal infrastructure package. Just ahead of the congressional recess, there is a bicameral deal to raise spending caps at the federal level. IHS had warned that if the Budget Control Act from 2011 were to control future spending, a 10% cut to spending would be forced. This downside risk to the forecast seems to be averted.



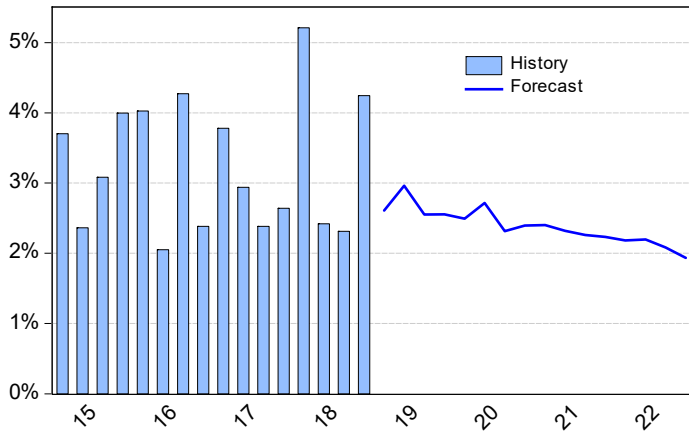
International: The United Kingdom has a new prime minister: Boris Johnson replaced Theresa May. IHS views the likelihood of a hard Brexit as increasing. The military and other skirmishes in the Persian Gulf have not dramatically affected the pricing of oil, something that IHS recognized in its June forecast. Heightened tariffs between the US and China are included in the forecast. Real net exports are expected to be a drag on GDP growth across the short-term forecast. Net exports of petroleum are expected to turn positive by the end of 2020.

Consumers: In the just released BEA publication for GDP, the rate of growth of personal consumption expenditures for the second quarter was 4.3%, after a 1.1% expansion in the first quarter of 2019. The figure in IHS's forecast was for 3.1% expansion following the earlier reading of 1.6% for the first quarter. The firm is forecasting full-year growth at 2.4%, with 2.2% in 2020, and 2.5% in both 2021 and 2022. Post tax income growth is forecast at 2.1% in 2019, to be followed by 2.5% in both 2020 and 2021, with 2.3% expected growth in 2022. In the fresh BEA release, real disposable personal income growth ran at the 4.4% rate in the first quarter and at 2.5% in the second quarter. The IHS prediction for the University of Michigan's consumer confidence index is: 98.4 (a historical reading) for 2018, 96.4 for 2019, and 95.7 for 2020, with further mild declines going forward. The index has been in the mid-90 to 100 ranges since late 2016.

IDAHO FORECAST DESCRIPTION

The Forecast Period is the Second Quarter of 2019 through the Fourth Quarter of 2022

Annualized Nonfarm Jobs Growth in Idaho



Total nonfarm employment in Idaho reached 747,500 at the end of 2018, having added over 16,000 jobs within the calendar year. This puts the growth rate around 2.1% per annum. Overall, nonfarm employment is expected to be up 9.5% by 2022 from 2018. The US Bureau of Economic Analysis has released the monetary figures for the first quarter of 2019. These place personal income at the yearly rate of \$78.7 billion, with the first quarter of 2018 showing the yearly rate of \$74.5 billion. This puts the growth rate for personal income around 5.6% in the past year, and personal income is expected to

grow by 20.9% by the end of 2022 when compared with 2018.

Growth in personal income comes not just from greater jobs numbers. Two other large drivers of personal income are rising wages and a larger population receiving income, including transfer payments. In the most recently available four quarters, the average wage in Idaho increased by 2.55%. Roughly four-fifths of the growth in personal income is explained by combining this with expanding employment. Mitigating the effect of rising personal income is inflation. Recent Consumer Price Index (CPI) inflation, which is the inflation rate most commonly referenced, ran 2.45%. Personal Consumption Expenditure inflation (PCE) inflation ran 1.35%. Together, these reinforce the perception that inflation is running just a bit under 2%. This leaves mid-3% for growth in Idaho's economy as measured by inflation-adjusted total personal income.

Let us tie a few of the income concepts of this report together. Wage and salary payments growth across 2019 is forecast for 6.1% this year. With total nonfarm employment growth predicted at 2.9% for this year, those wage and salary payments are spread across more jobs, leading to smaller figures for average annual wage gains, in this case 3.1%. For a quick approximation, reducing the wage and salary growth by the employment growth gives a rough estimate of average wage growth. Similar considerations tie the concepts of personal income, real personal income, and per capita real personal income: reduce the growth rate of total personal income by the inflation rate to roughly calculate the rate of real personal income growth, and further reduce that by the rate of population growth to approximate the rate of real per capita personal income growth. Thus, while Idaho's personal income growth rate of 5.6% in 2018 outpaced the national rate of 4.4%, the state's value settles down to a 1.4% real per capita personal income expansion rate, which is quite comparable with the national figure of 1.6%. Idaho maintains larger family sizes on average: 2.53 people per household for the nation versus 2.67 for Idaho.

Among the largest sectors of employment in Idaho, construction grew most rapidly in the past four quarters, at a rate near 9%. There are 50,000 jobs in construction. Hospitality and leisure, which includes

restaurant work, grew 5.6%; employment there is just above 80,000 jobs in Idaho. Health care and private education grew 4.8% and its payroll counts over 103,000. Private education includes BYU-Idaho, College of Idaho, and Northwest Nazarene University, whereas charter schools are public educational institutions. Finance and real-estate employ over 37,000 Idahoans, having grown by 4.2% in the past year. Title companies have been busy as homes are selling quickly in the cities. Comparison with the respective 2018 and 2022 values, construction employment is expected to be up by 21%, finance should expand by 10.2%, healthcare and private education by 16.5%, and hospitality and leisure by 8.5%.

Retail work supplies 87,000 jobs in the state, but it has grown under 1% in the past year. Wholesale trade, one step back from the retail front, grew at 3.1%. Its employee count is over 30,000 in the state. Transportation and warehousing also depend quite directly upon the retail sector. The corresponding sector employs over 25,500 in the state, and jobs there grew by 4.2% over the year. The retail outlook at the national level dims the view for retail within Idaho, and that in turn dims the employment outlook for these sectors. At the end of the forecast in 2022, wholesale trade is expected to be 5.9% larger than its footprint at the close of 2018, while transportation, warehousing, and utilities expands 7.2%, and retail expands by just 4.0%.

The pace of construction for single family homes that occurred at the transition from 2017 to 2018 is likely to continue across the next year. Concurrently, multi-family housing had a burst of activity, and that elevated level is expected to return in a sustained manner by the end of the forecast. While falling mortgage rates since late 2018 provide a bit more room for housing activity, high prices counter that. Housing development is quite concentrated within the state. Many towns in the state see very little to no housing addition within one or even several years. Meridian, by contrast, has been among the fastest growing cities according to US Census estimates. For total housing starts, by the end of 2021, the activity level should sustainably achieve nearly an 18,000 unit level of the first quarter of 2018, and by the end of 2022, an additional 1,200 units per year above that pace is expected.

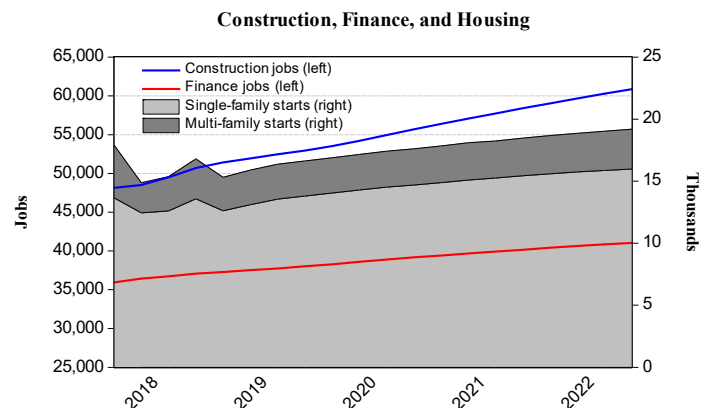
Within the national forecast description, both the headline and the broad unemployment rates for the nation are indicators of the health of the economy. The Bureau of Labor Statistics does provide state specific measures, using four-quarter averages. The recent figures are for the second quarter of 2018 through the first quarter of 2019. For Idaho, the headline number was 3.1%, with the broad measure being 6.3%. For the nation, the corresponding values were 3.8% and 7.6%. One year prior, Idaho's headline number was also 3.1%, but the broad measure was 6.8%. The decline in the broader measure does indicate a tightening labor market in Idaho. For the nation, the corresponding numbers were 4.2% and 8.3%. While the *Idaho Economic Forecast* does not project unemployment rates in the state—so these figures do not provide a direct comparison between the previous publication and this one—the changes described here do help to contextualize the evolving labor market.

Housing: Falling mortgage rates translate into greater single-family housing starts according to the estimation equation in the Idaho Economic Model. For multi-family housing starts, a break in the behavior of the market is estimated within the model. Prior to the housing bust, mortgage rates and labor costs affected housing starts in one way, and subsequent to the crash, when interest rates have been exceedingly low for over a decade, the reverse effects have held. The single-family housing starts

equation also has a contribution from the recent change in the housing stock within the state. This primarily reflects new housing as demolition or conversion of housing into other uses remains a small part of the market. That term of the equation partly sustains recent momentum in home building through the forecast. Finally, population growth reflects on starts as well. It is possible that changing family structure is altering the effect of population growth on single-family housing starts. However, thus far the data shows that more population growth still means steadily more single-family housing starts.

Corey Barton Homes is one of the top-100 builders of homes in the US yet all of its building has been in Idaho, primarily within the Treasure Valley. Last year it built almost 1,350 homes; this year it expects to reach 1,500. For perspective, in Ada County, 6,500 lots were approved for residences in 2018, up substantially from the 3,600 approved in 2017. About 10% of the Treasure Valley housing market transactions are to institutional investors such as American Homes 4 Rent, which owns over 500 homes in the market. Reporting from the *Wall Street Journal* indicates that the percentage is similar to the national trend, but the *Journal* further indicates that for the lowest-priced third of the market, the actual concentration of investor activity is twice as high, at one in five transactions rather than one in ten. Outside of investors, there is some evidence of housing difficulties. The Federal Housing Administration indicates that more than one in eight of its borrowers uses some form of federal down payment assistance. There is a plethora of such options. This is an increase from the one in ten proportion common to 2013–2016 according to Freddie Mac. Both it and Fannie Mae are working to make manufactured homes as easy to purchase via mortgage as stick-built housing. Manufactured houses are one-tenth of the new construction activity by count across the nation, and represent slightly less of the stock within Idaho, though the data for this is a bit dated as it comes from the previous census.

At the end of 2018, housing starts were running at the per-year rates of 13,600 for single-family starts and 3,200 for multi-family. At the beginning of this year, these had dropped to 12,600 and 2,700, respectively. While the absolute change in multi-family housing starts is numerically smaller, it is larger as a percentage. Multi-family housing is a much smaller market in Idaho, and our economic model estimates its trajectory with greater uncertainty. By the end of 2020 housing starts are projected to be at 14,700 (single-family) and 2,900 (multi-family), and by the end of 2022, they are expected to reach 16,000 and 3,200.



Food Processing: Amy’s Kitchen, Fresca Foods, Glambia, Chobani, Litehouse, and Budweiser, are well-known companies turning Idaho crops into food which may ship around the world. Litehouse, which makes salad dressings, just acquired a company in Virginia with 50 employees, and it may expand that headcount to 160 in order to market their products along the eastern seaboard more effectively; the acquisition brings additional salad dressings and condiments to the company.

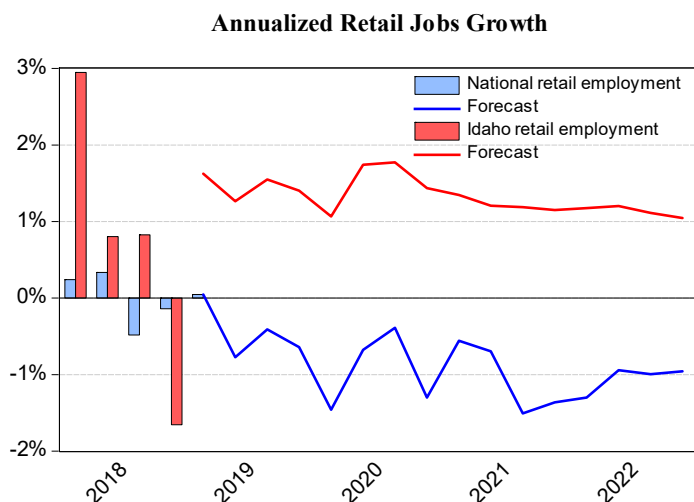
Meat processing illustrates how input pricing for the commodity may be of secondary importance as far as food processing employment is concerned. With abundant hay supply, and a large dairy industry,

there is a broad market of cattle in the state. There is naturally a lot of turn-over of cattle due to duration of lifetime as well as market preferences. Further, the associated commodity does not store well or inexpensively prior to processing. Several new processors have been established in the past few years. Ida-Beef in Burly has 48 employees and handles 100 head per day. Dairy products are similar. The 20 plants in Idaho export as finished products over 2 million pounds milk per day, and a new plant in Nampa will add incrementally to that total when its 2.4 million pounds yearly comes online.

A persistent and abundant supply of materials, or the perception that there would be such a supply once a market was established, illustrate why food processing companies set up shop in Idaho. Access to water, largely due to the Snake River and its aquifer, and inexpensive and reliable electricity capacity are part of the decision to establish or expand operations in Idaho or to contract with Idaho growers. Simplot, Lamb Weston, McCain's, and OreIda are all well-known manufacturers associated with potato processing in Idaho. McCain's just finished adding a \$200 million third line to its Burley plant, and was able to bring on 180 new employees. The Magic Valley is a very tight labor market, making the achievement more remarkable. The unemployment rate there is below 2.5%. NewCold is a recent addition to the area from The Netherlands; it works in tight conjunction with McCain's. Commentary from Simplot, which has 2,400 Idaho employees, has flagged the tariff war as a danger to long-term customers.

Exchange rates are an input to the food processing equation in the Idaho economic model, and IHS predicts continued strength in the dollar this and next year. Commodity pricing indirectly enters the equation, through an industrial production index forecast supplied by IHS. Overall, food processing employment is expected to have traversed the 19,000 count so far this year, to approach the 20,000 mark by 2020, and to add another 1,000 employees by the end of 2022, bringing the total to just over 21,000 jobs.

Trade: Retail employment is geographically pervasive but often is not dominant. Winco is a grocer based in Boise. It has 126 stores across the nation, and it employs 18,000 people. Each of its newer stores is around 85,000 square feet, and each employs about 150 workers. Stinker Stores has 65 of its over 100 gasoline and convenience stores in Idaho, and it employs 1,000 people overall. Maverik is opening a new location on Fairview in Meridian; the new store and infrastructure cost \$2.3 million.



Costco is opening a store in Idaho Falls with employment expected to settle around 100 jobs.

The national outlook for retail trade is for slight contraction each year of the forecast. This process began in 2018 with a 0.1% dip following no growth in 2017. This year is forecast for a 0.3% dip. Idaho bucked that with 1.4% growth in 2017, 1.0% growth in 2018, and is projected to have retail employment expand by 0.8% this year. This discrepancy between the national outlook and Idaho's persists through the forecast. One contributor to this is the positive

correlation between retail employment and population growth coupled with Idaho's more rapid population growth rate. The change accumulated through several years amounts to significant jobs numbers. Whereas the nation is projected to have half of a million fewer retail trade jobs in 2022 than in 2016, Idaho is projected to have over 6,000 more jobs in 2022 than it did in 2016.

That is one context for retail trade. Another comes via comparison with similarly sized industries within the state. Professional and business services had employment 1,000 jobs above retail in 2016. By 2022, professional services is expected to have grown to 107,000 jobs, whereas retail trade is expected to only have grown to 92,000 jobs. Comparing with hospitality and leisure, which includes hotel work and restaurant work, total growth across 2016–2022 there amounts to 20.4% whereas it is 10.7% for retail trade across that same timeframe.

Retail provides opportunities in allied fields. Walmart is remodeling both its Moscow and Idaho Falls stores, as is the Family Dollar in Parma, providing construction work. Freight, too, takes cues from retail. Old Dominion freight lines is planning a large addition to its terminal just south of Gowen Road, adding over 50 bays. Truckstop.com added 22 positions to its Boise operations in May. Overall Idaho trade employment including wholesale trade is expected to increase by 1.2–1.4% each year of the forecast.

Government: Many costs associated with local government come with sticky prices, meaning that inflation catch-ups are sporadic. Here are examples. Valley Ride Transit, which provides bus service in the Treasure Valley, is considering fare increases. Its prior increases were in 2003 for Ada County and 2008 for Canyon County, otherwise fare costs have been constant. On the other side of the state, funding difficulties catalyzed by the federal government shutdown earlier this year lead to Targhee Regional Public Transit Authority being closed at the end of April, affecting Bonneville and surrounding counties.

Some initiatives are free to the public, but there is government work and funding behind them. At the state level, Idaho Fish and Game has entered an agreement with PotlatchDeltic for access to the majority of its timberland. The agency will pay \$1 per acre per year for public access for the next three years, and the agency is attempting to reach agreements with other major timber holding companies. Fish and Game also has bought over 1,500 acres near Idaho Falls and over 200 acres near the Boise River wildlife management area. Funding for these comes from Bonneville Power Administration monies the agency receives.

Finally, significant funding from the federal government assists Idaho projects. Private land donated in Post Falls will be used for a new veteran's home. Federal aid is expected to provide \$28 million, with another \$15 million coming from the Idaho Division of Veterans Services. There is a large veterans population (17,000 in the region) which the facility would serve. Road projects often receive federal support, and they are often planned well in advance. Idaho Transportation Department (ITD) intends to redo the Main Street bridge in Inkom in a few years. A federal-state split of ten-to-one is expected for the project. The airport in McCall is a beneficiary of federal dollars. A Federal Aviation Administration grant of \$10.7 million will be used to construct more separated runways. The land acquisition for this construction came through an earlier grant for \$1.8 million. Local matching is expected to be \$300,000.

These and many other projects in the state come about through the efforts of government employees, at the city, county, state, and federal level. While administrative projects were discussed here, about half of the governmental workforce in the state is educational. Overall employment in government within the state is projected to grow only modestly from 113,000 to 116,000 across the forecast. There is a bit of a blip in federal governmental employment for the 2020 Census; employment will be elevated for a quarter or two, which will lead to some larger annualized percentage rate changes in quarterly employment figures.

Business Investment and Infrastructure: Slower business investment at the national level is immediately apparent in the IHS forecast. Slowdowns in auto manufacturing, aeronautics, and in farm equipment are adding to the slowing due to more deliberative investments in oil shale regions. Intellectual property investment is also quite a bit slower in this IHS forecasts than in prior ones. Idaho does not have a lot of concentration in these industries, and Micron and ON Semiconductor are among the few Idaho firms well known for intellectual property development. Although all firms have some investment in intellectual property, prototypical industries which rely on intellectual property are pharmaceuticals, software, and entertainment.

Idaho's business investment seems quite steady, and well diversified when viewed through expansions or new openings. Caldwell has been adding to business investment in Idaho through Price Pump Manufacturing Company, which brought 20 workers from California and hired an additional 10 in Idaho, and through American Foods Equipment Company, which opened in 2017 with 75,000 square feet and is looking to expand by 60,000 more. The original 100 employees could be increased by 50 new hires. Harmony Hills assisted living is also building in Caldwell. Idaho Central Credit Union is building in Nampa. Burley based D.L. Evans bank opened a branch in Fruitland. Coeur d'Alene Bancorp just expanded to four branches with its addition in Post Falls. SJX Jet Boats of Orofino and StanCraft in Coeur d'Alene see opportunities for expansion. For SJX it would be consolidation of operations. This could help reduce backlogs which are four months or more. For StanCraft, operating refueling services at the Coeur d'Alene airport is an attractive expansion.

Real estate transactions are one marker of business investment. Major building transactions include the Allstate call center in Chubbuck (bought by Alturas) and the US Bank building and most of the Clearwater building in downtown Boise (acquired by Laird Norton). The Downtowner hotel in Boise will be renovated, at total cost of \$50,000 per room, and there are 182 rooms currently. It was part of a 2018 sale by the Red Lion hotel chain. The renewed hotel will be called Delta. These major investments could take years to realize their full value. Alternative Power Development, which built the 80 mW solar facility near Grand View, is seeking to build a 120 mW solar field in Twin Falls County. Power plants have decades-long horizons. A major investment by Clearwater Paper at its digester was completed last year. The company has received an award for energy efficiency. It saves the power equivalent of 740 homes per year.

A few infrastructure investments will have national or at least regional implications. INL is looking to build a dedicated power line for testing the power grid for resiliency both against natural disaster as well as to intentional attack. The Boise Airport is seeking to add a parking garage (four stories) and an

additional concourse. Pocatello's airport is seeking certification for DC-10 flights, primarily as a launching point for fire suppression activities.

The Cole and Victory intersection will be redeveloped in the Thru-U intersection style similar to the State and Veteran's Parkway intersection, with the cost estimated at \$8.4 million, and the Northside interchange should get a single-point urban interchange within the next year similar to the Vista and Ten Mile interchanges. Demand for upgrades in these vicinities can be seen through nearby traffic. Caldwell to Karcher Boulevard traffic has increased by 20% in the past five years, and Flying-Y traffic is up similarly. The Idaho Transportation Department (ITD) also has seven projects planned for I-15 in eastern Idaho. ITD plans its work with rough guides of 20 years for roads, 50 years for bridges, and 5–10 year maintenance cycles. Individual projects often have time horizons of seven years from planning through completion.

Road work often overshadows the remainder of infrastructure investment, but the public and businesses rely upon other investments for everyday interactions. Ammon and Emmett are investing in their public fiberoptic internet networks, and Kootenai County is seeing increased investment by TDS Metrocom for its internet service. The federal Bureau of Reclamation is undertaking reconstruction work on American Falls Dam in 2020–2021. Boise coordinated maintenance work on its geothermal network with Ada County Highway District (ACHD) repaving efforts in downtown Boise this summer, and the city has begun work on its Lander Street wastewater treatment plant. This is a three-year project. Nampa is also upgrading its wastewater treatment facilities. Its work could extend till 2025.

Overall, investment by businesses and government is expected to assist Idaho in reaching 800,000 nonfarm jobs as the year 2022 begins, where the current value is near 760,000. Recent years have seen Idaho employment outpace the nation by 1.6, 1.5, and 1.4 percentage points in terms of nonfarm jobs growth. This year is predicted at 1.3 percentage points above the national level. IHS forecasts a dramatic slowing for national employment growth, from 1.6% this year to 0.6% in 2022. The Idaho forecast is for slowing, but from 2.9% this year to just 2.2% in 2022.

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IDAHO ECONOMIC FORECAST
FORECASTS COMPARISON
DIFFERENCES BETWEEN
JULY 2019 vs. APRIL 2019 FORECASTS

	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)								
Current \$	0	0	0	-7	-48	-129	-171	-186
% Difference	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.6%	-0.7%	-0.8%
2009 Chain-Weighted	0	0	0	-5	12	-52	-62	-47
% Difference	0.0%	0.0%	0.0%	0.0%	0.1%	-0.3%	-0.3%	-0.2%
PERSONAL INCOME - CURR \$								
Idaho (Millions)	0	0	0	146	139	304	275	360
% Difference	0.0%	0.0%	0.0%	0.2%	0.2%	0.4%	0.3%	0.4%
U.S. (Billions)	0	0	0	-12	-73	-52	-37	-32
% Difference	0.0%	0.0%	0.0%	-0.1%	-0.4%	-0.3%	-0.2%	-0.2%
PERSONAL INCOME - 2009 \$								
Idaho (Millions)	0	0	0	133	300	498	662	943
% Difference	0.0%	0.0%	0.0%	0.2%	0.4%	0.7%	0.9%	1.2%
U.S. (Billions)	0	0	0	-11	-26	5	62	115
% Difference	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.0%	0.4%	0.6%
TOTAL NONFARM EMPLOYMENT								
Idaho	0	0	0	0	81	3,792	5,907	7,827
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.7%	1.0%
U.S. (Thousands)	0	0	0	0	-81	-10	166	300
% Difference	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.2%
GOODS PRODUCING SECTOR								
Idaho	0	0	0	0	-46	762	1,544	1,985
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	1.2%	1.5%
U.S. (Thousands)	0	0	0	-1	-39	11	-90	-233
% Difference	0.0%	0.0%	0.0%	0.0%	-0.2%	0.1%	-0.4%	-1.1%
NONGOODS PRODUCING SECTOR								
Idaho	0	0	0	0	127	3,030	4,363	5,843
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.7%	0.9%
U.S. (Thousands)	0	0	0	1	-42	-21	255	533
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%
SELECTED INTEREST RATES								
Federal Funds Rate	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.5%	-0.5%	-0.5%
Bank Prime Rate	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.4%	-0.5%	-0.5%
Existing Home Mortgage Rate	0.0%	0.0%	0.0%	0.0%	-0.4%	-0.6%	-0.4%	-0.4%
INFLATION								
GDP Price Deflator	0.000	0.000	0.000	-0.007	-0.319	-0.354	-0.498	-0.646
Personal Cons Deflator	0.000	0.000	0.000	0.002	-0.262	-0.339	-0.623	-0.933
Consumer Price Index	0.000	0.000	0.000	0.000	0.000	-0.003	-0.011	-0.018

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

FORECAST COMPARISON

Changes in the projected values of statistics such as oil prices, interest rates, and national housing starts can affect Idaho's economy, so this *Idaho Economic Forecast* uses the June 2019 IHS forecast of the US economy. Specific expansions or contractions in Idaho operations are also considered and incorporated.

The comparison table shows how several Idaho and national economic series have changed since the April 2019 *Idaho Economic Forecast*. The April publication was based on March's IHS baseline US macroeconomic forecast.

Real GDP growth is little revised between the recent IHS forecasts. Fiscal stimulus is a little more concentrated in 2019 than previously thought, and growth in the years 2020–2022 is predicted to be a little weaker. Business investment hesitancy, partly due to uncertainties related to trade—from tariffs and exchange rates to foreign growth and domestic demand—is a visible difference. Last month, The Wall Street Journal reported that US Steel is idling mills due to lower demand. Housing starts are revised lower in this forecast, dropping 2.1% overall in 2019, with a slightly steeper drop for single-family construction. The cut persists and deepens in 2020 and 2021, before somewhat shrinking in 2022. Overall, the difference is expected to amount to a 5.3% cut, and again, the preponderance of this is for single-family starts. Multi-family starts are expected to be just 0.1% less than was forecast earlier.

Nationally, farm proprietors' income is significantly revised down. IHS is aware of the effects of flooding in the Midwest. Corn and soybean plantings were delayed or abandoned. Dairy prices continue to be low. The fate for farm proprietors' income is in stark contrast with other proprietors' incomes. The revision to the forecast for this group is under 1% compared with the previous IHS forecast.

Manufacturing employment this year is revised downward by IHS. Farm equipment sales are suppressed by trade uncertainties and poor crop outlooks. Automobile manufacturing is entering union negotiations and is dealing with flat demand as well as rising costs. Drilling activity is muted as companies become more conscious of costs and as they await pipeline capacity to come online later this year and in 2020. However, the outlook in 2020 is revised upwards by a slight amount, 0.1%. That then gathers momentum when a 0.5% better outlook takes hold in 2021.

The much larger service sector of the economy is revised upwards by increasing amounts each year of the forecast, gaining by 0.8% by 2022. Private education, healthcare, leisure and hospitality, and other services drive that growth. By 2022 employment projections for each are revised upwards by at least 1%. This contrasts with trade, which suffers in the national outlook, with retail trade's downward revision hitting 1.2% in both 2020 and 2021. Wholesale trade follows, but much more gently.

Revisions to the key metrics of the economy show inflation little changed in this forecast, but interest rates (including the Federal Funds rate, the prime rate, and existing home mortgages) are significantly revised downwards, by around 0.5 percentage points. For Idaho, new data is available for 2018 births and deaths, leading to lower estimates for each going forward. Revisions to housing projections are similar in scope for single-family housing to the national trend. Personal income is revised upwards in

this forecast, but the overall effect is moderate, amounting to \$304 million dollars in 2020 when overall personal income is expected to be over \$84.6 billion dollars.

Employment in Idaho is generally revised upwards. Much of this is due to stronger construction activity, which also raises the financial sector. Healthcare mirrors the national outlook, which is revised upwards. The hospitality and leisure sectors also benefit under the current forecast, but to a greater extent than the national counterpart. Retail trade employment in Idaho is expected to take a more moderate trajectory than that of the nation's retailers. This year it is revised downwards, but the remainder of the forecast are more upbeat for Idaho's retailers. None of the revisions, though, is particularly large in percentage terms (at most 1%) for Idaho's retail employment. Finally, federal government employment in Idaho is expected to follow a revision upwards by IHS to national federal government employment.

Overall, nonfarm employment in Idaho for 2019 is essentially unchanged in this forecast, but 2020 sees 0.5% greater employment, which then grows to 1.0% by 2022. That amounts to almost 8,000 additional jobs in 2022. Wage and salary payments are revised upwards by 1.1–1.5% across the forecast. In its revision to 2018 figures, the Bureau of Economic Analysis revised upwards Idaho wage and salary payments by 0.4% but revised downwards the national figure by 0.2%. The direction of those revisions persist. In conjunction with the expanded employment figures, average annual wages are expected to be higher by 0.5–1.1%, with the larger revision occurring earlier in the forecast.

**IDAHO ECONOMIC FORECAST
BASELINE AND ALTERNATIVE FORECASTS
JULY 2019**

	BASELINE					OPTIMISTIC					PESSIMISTIC				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)															
Current \$	20,494	21,365	22,236	23,150	24,111	20,494	21,371	22,358	23,462	24,588	20,494	21,331	21,664	22,126	23,009
% Ch	5.2%	4.2%	4.1%	4.1%	4.1%	5.2%	4.3%	4.6%	4.9%	4.8%	5.2%	4.1%	1.6%	2.1%	4.0%
2009 Chain-Weighted	18,566	19,024	19,361	19,697	20,044	18,566	19,044	19,535	20,086	20,626	18,566	19,013	18,953	18,977	19,360
% Ch	2.9%	2.5%	1.8%	1.7%	1.8%	2.9%	2.6%	2.6%	2.8%	2.7%	2.9%	2.4%	-0.3%	0.1%	2.0%
PERSONAL INCOME - CURR \$															
Idaho (Millions)	75,849	80,142	84,634	88,954	93,225	75,849	79,929	84,847	89,566	94,287	75,849	79,942	84,172	87,042	90,887
% Ch	5.6%	5.7%	5.6%	5.1%	4.8%	5.6%	5.4%	6.2%	5.6%	5.3%	5.6%	5.4%	5.3%	3.4%	4.4%
U.S. (Billions)	17,570	18,261	19,096	19,950	20,820	17,570	18,290	19,276	20,317	21,372	17,570	18,241	18,775	19,133	19,902
% Ch	4.4%	3.9%	4.6%	4.5%	4.4%	4.4%	4.1%	5.4%	5.4%	5.2%	4.4%	3.8%	2.9%	1.9%	4.0%
PERSONAL INCOME - 2009 \$															
Idaho (Millions)	70,077	72,883	75,475	77,837	80,006	70,077	72,753	75,925	78,852	81,658	70,077	72,759	75,365	76,657	78,753
% Ch	3.5%	4.0%	3.6%	3.1%	2.8%	3.5%	3.8%	4.4%	3.9%	3.6%	3.5%	3.8%	3.6%	1.7%	2.7%
U.S. (Billions)	16,233	16,608	17,030	17,456	17,868	16,233	16,648	17,249	17,887	18,510	16,233	16,602	16,811	16,850	17,245
% Ch	2.3%	2.3%	2.5%	2.5%	2.4%	2.3%	2.6%	3.6%	3.7%	3.5%	2.3%	2.3%	1.3%	0.2%	2.3%
TOTAL NONFARM EMPLOYMENT															
Idaho	738,647	760,215	779,628	798,073	815,510	738,647	759,524	779,797	800,692	821,139	738,647	759,557	778,864	792,518	808,626
% Ch	3.3%	2.9%	2.6%	2.4%	2.2%	3.3%	2.8%	2.7%	2.7%	2.6%	3.3%	2.8%	3.6%	1.8%	2.0%
U.S. (Thousands)	149,064	151,485	153,103	153,975	154,825	149,064	151,362	152,723	153,982	155,165	149,064	151,337	150,911	149,703	150,740
% Ch	1.7%	1.6%	1.1%	0.6%	0.6%	1.7%	1.5%	0.9%	0.8%	0.8%	1.7%	1.5%	-0.3%	-0.8%	0.7%
GOODS-PRODUCING SECTOR															
Idaho	121,163	126,225	129,684	133,254	137,063	121,163	126,155	128,989	132,458	136,332	121,163	126,189	129,231	132,327	137,277
% Ch	5.5%	4.2%	2.7%	2.8%	2.9%	5.5%	4.1%	2.2%	2.7%	2.9%	5.5%	4.1%	2.4%	2.4%	3.7%
U.S. (Thousands)	20,708	21,106	21,133	21,021	21,037	20,708	21,093	21,155	21,074	21,063	20,708	21,093	20,799	19,958	20,224
% Ch	3.1%	1.9%	0.1%	-0.5%	0.1%	3.1%	1.9%	0.3%	-0.4%	-0.1%	3.1%	1.9%	-1.4%	-4.0%	1.3%
NONGOODS-PRODUCING SECTOR															
Idaho	617,485	633,990	649,944	664,819	678,447	617,485	633,369	650,808	668,234	684,807	617,485	633,368	649,633	660,191	671,348
% Ch	2.9%	2.7%	2.5%	2.3%	2.0%	2.9%	2.6%	2.8%	2.7%	2.5%	2.9%	2.6%	2.6%	1.6%	1.7%
U.S. (Thousands)	128,356	130,379	131,970	132,954	133,788	128,356	130,269	131,567	132,908	134,102	128,356	130,244	130,112	129,745	130,516
% Ch	1.4%	1.6%	1.2%	0.7%	0.6%	1.4%	1.5%	1.0%	1.0%	0.9%	1.4%	1.5%	-0.1%	-0.3%	0.6%
SELECTED INTEREST RATES															
Federal Funds	1.8%	2.4%	2.4%	2.4%	2.4%	1.8%	2.4%	2.9%	3.1%	3.1%	1.8%	2.3%	0.9%	0.1%	0.4%
Bank Prime	4.9%	5.5%	5.5%	5.5%	5.5%	4.9%	5.5%	6.0%	6.3%	6.2%	4.9%	5.4%	3.5%	2.3%	3.0%
Existing Home Mortgage	4.7%	4.4%	4.5%	4.7%	4.8%	4.7%	4.7%	5.0%	5.2%	5.2%	4.7%	4.4%	4.5%	4.3%	4.3%
INFLATION															
GDP Price Deflator	2.2%	1.8%	2.3%	2.3%	2.3%	2.2%	1.7%	2.0%	2.1%	2.1%	2.2%	1.7%	1.9%	2.0%	1.9%
Personal Cons Deflator	2.0%	1.6%	2.0%	1.9%	2.0%	2.0%	1.5%	1.7%	1.6%	1.7%	2.0%	1.5%	1.7%	1.7%	1.6%
Consumer Price Index	2.4%	2.0%	2.1%	2.0%	2.2%	2.4%	1.7%	1.9%	1.8%	1.9%	2.4%	1.9%	1.7%	2.0%	2.1%

ALTERNATIVE FORECAST

IHS places the likelihood of its June 2019 *Optimistic Scenario* at 10% and its *Pessimistic Scenario* at 35%. This leaves the baseline forecast at 55% likely.

A snapshot of the national *Baseline Scenario* using annual rates across 2019–2022 is:

- Real GDP growth is expected to be 2.0% this year, then 1.8%, and 1.7% thereafter.
- Nonfarm payrolls grow 1.6%, 1.1% in 2020, with 0.6% in both 2021 and 2022.
- Headline (U-3) unemployment rate averages 3.6%, 3.7%, 3.9%, and 4.0%.
- CPI inflation is forecast at 2.3%, 1.7%, 2.2%, and again 2.2%.
- The federal unified budget deficit is -\$1.01 trillion (t), -\$1.02 t, -\$1.09 t, -\$1.13 t.

A snapshot of the Idaho economy under the *Baseline Scenario* is:

- Nonfarm payrolls grow 2.9%, then 2.6%, followed by 2.4% and 2.2%.
- Nominal personal income averages 5.3% growth annually across the forecast.

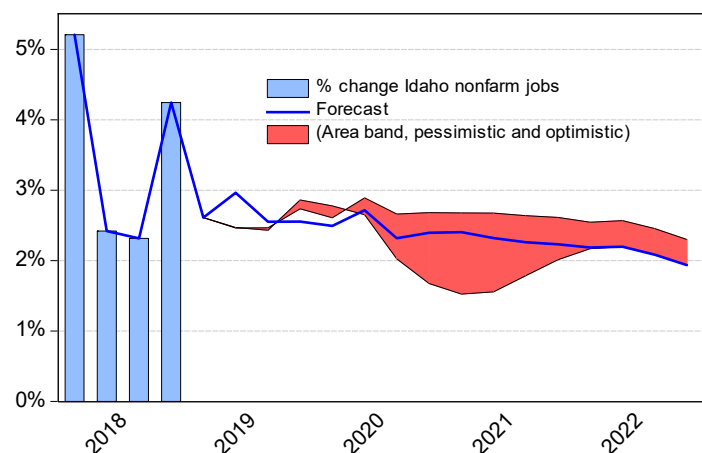
PESSIMISTIC SCENARIO

IHS has increased the likelihood of a pessimistic future to 35%, up five percentage points from earlier this spring, and the firm is increasingly considering the range between the baseline forecast and such a pessimistic outlook. While this suggests that planning for a more difficult economy may be necessary, it is important to have in mind the magnitude of the pessimism which seems plausible. One key indicator, unemployment, is forecast to rise only to the 6% level. While this may appear as a steep climb from the 3.7% currently registered, it would be quite similar to the employment situation following the Dot-com bust, when unemployment rose from just under 4% to just over 6%.

Two other aspects to a recession besides its depth are its duration and its proximity. IHS views a recession lasting three-quarters of a year and beginning in the middle of 2020 as probable, but the first intimations of it could begin appearing later this year as the unemployment rate begins to climb. The real acceleration occurs within 2020, as the stock market drops nearly 10% and housing starts fall 30% below the baseline rate. The Federal Reserve is expected to lower interest rates to counter the malaise, but with little room to do so, as rates are currently low by historical standards, the effect is muted and the recovery is another slow one.

Idaho's employment outcome under the pessimistic outlook is still one of growth. Nonfarm employment expands by 2.8%, 2.5%, 1.8% and 2.0% across 2019–2022. These are slower than in the baseline, but markedly better than the 0.8% contractions in 2020 and 2021 for the nation as a whole. Personal income also grows throughout the forecast in this scenario. There is a slowing to 3.4% growth in 2021, but the earlier years are above 5% growth and the final year in 2022 shows 4.4% growth. Housing

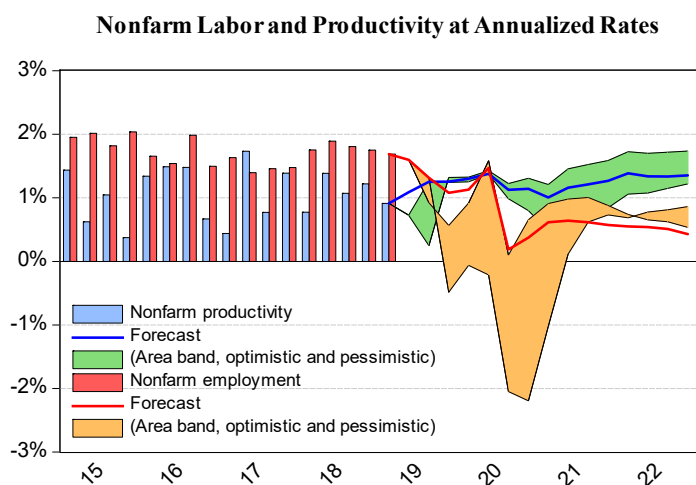
Idaho Nonfarm Jobs Growth Scenarios



starts are also resilient to the nation's difficulties. Total starts are most often within 100 units of the baseline forecast.

OPTIMISTIC SCENARIO

For the optimistic outcome, IHS assigns a 10% likelihood. Despite its lower probability, some of its triggers are familiar from recent news. One is a lower nonaccelerating inflation rate of unemployment (abbreviated NAIRU, this is often called the natural rate of unemployment, and it reflects, in part, that people will always switch jobs, and hence be temporarily unemployed). This concept has been revised lower as the recovery has persisted. In this scenario, it is viewed as 4.0% rather than 4.6%, meaning that the current unemployment is less of an undershoot of this value than otherwise thought. NAIRU had been as high as 4.9% as late as 2014.



Another prominent trigger for this case is higher productivity. It is possible that this rises to as much as one percentage point above the baseline forecast. This allows wages to grow more quickly without stoking inflation, and consumer confidence rises as does household formation. That spurs construction, lifting housing starts by 100,000 compared to the baseline by the end of 2022.

Nonfarm employment in Idaho finds another 5,600 jobs filled by 2022 in the optimistic case when compared with the baseline. This

improvement and higher wages help to raise personal income by a bit over \$1 billion to \$94.3 that year. In both this and the pessimistic case, inflation runs a bit slower than in the baseline. However, just in the optimistic case, that helps to make the personal income gains even more significant: real personal income grows more quickly than what was seen in 2018 throughout this scenario. Despite the aids to the economy afforded in the *Optimistic Scenario*, housing starts are quite closely bound to the values forecast for the baseline. Interestingly, they are a bit lower initially in the forecast, likely due to a higher estimate of the federal funds rate, which flows through to the 10-year treasury market and on to average mortgage rates. The largest discrepancy is around 450 units, and it is projected in mid-2019. Thereafter the discrepancy dwindles and then reverses to a small surplus (100–200 units) when compared with the baseline by early 2022.

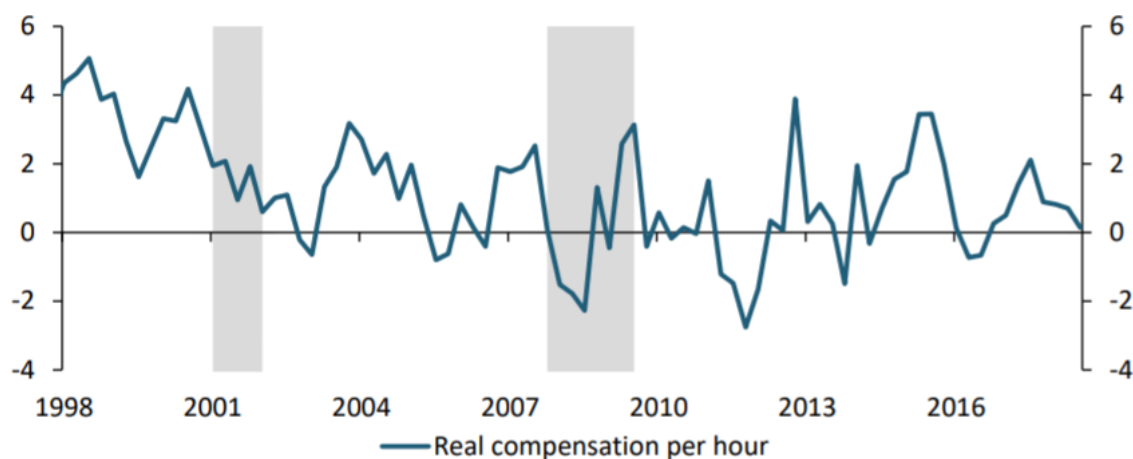
Why Is Wage Growth So Low?

Jun Nie¹

Real wage growth has been low in recent years despite continued improvement in labor market conditions. Chart 1 shows that real compensation per hour in the business sector, a commonly used measure of real wage growth, grew about 0.7 percent per year in the last two years compared with an average level of 1.5 percent per year during the pre-crisis period of 2000–07.

Chart 1: Real Wage Growth

Year-over-year percent change, seasonally adjusted



Note: Gray bars denote National Bureau of Economic Research (NBER)-defined recessions.

Sources: Bureau of Labor Statistics (Haver Analytics) and NBER (Haver Analytics).

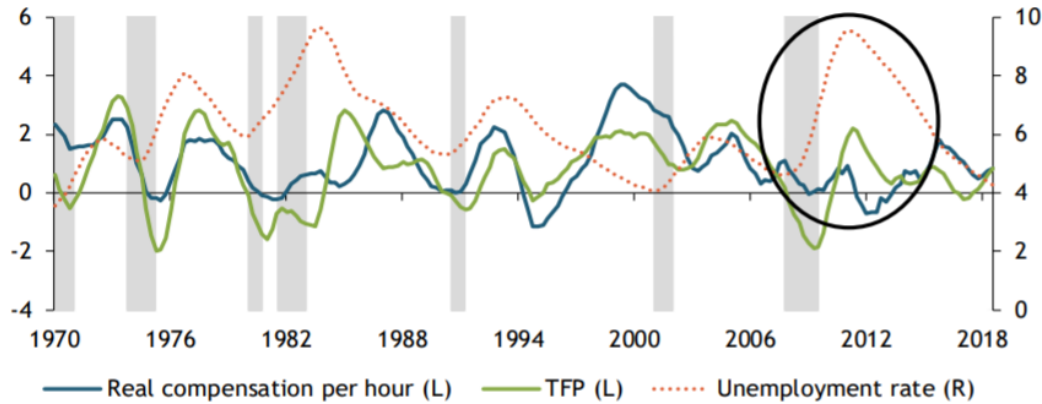
One explanation for the recent period of low wage growth could be low productivity growth. Real wage growth and productivity growth, measured by growth in utilization-adjusted total factor productivity (TFP), tend to move together, as shown by the blue and green lines in Chart 2.² However, this positive relationship between wage growth and productivity growth seems to be influenced by the unemployment rate, a core measure of labor market conditions. For example, around 2000, when the unemployment rate was low, wage growth was unusually strong relative to the improvement in productivity growth. Furthermore, during the 2010–12 period (circled in Chart 2), when the unemployment rate was high, wage growth remained low despite a significant increase in productivity growth. These observations suggest wage growth is influenced not only by productivity growth but also by the condition of the labor market.

¹This article originally appeared in the December 21, 2018, The Macro Bulletin from the Kansas City Fed. Opinions expressed in this article are those of the authors and do not necessarily reflect the views of the management of the Federal Reserve Bank of Kansas City or of the Board of Governors of the Federal Reserve System.

² Utilization-adjusted TFP is a common measure of productivity in research and policy analysis. For more information about this measure, see Fernald (2012). Using other productivity measures, such as non-utilization-adjusted TFP, does not qualitatively change this Bulletin's main results.

Chart 2: Real Wage Growth, Productivity Growth, and Unemployment

Year-over-year percent change, eight-quarter moving average, seasonally adjusted



Note: Gray bars denote NBER-defined recessions.

Sources: Bureau of Labor Statistics, Federal Reserve Bank of San Francisco, and NBER. All data sources accessed through Haver Analytics.

To quantify how labor market conditions influence the relationship between productivity growth and wage growth, I conduct a statistical analysis that accounts for the interaction between productivity growth and labor market conditions.³ The analysis shows that a 1 percentage point increase in productivity growth is associated with a 0.75 percentage point increase in wage growth when the unemployment rate stays at its long-run level (Table 1, column 1).⁴

However, when the unemployment rate is higher than its long-run level, the associated increase in wage growth is smaller. For example, when the unemployment rate is 1 percentage point higher than its long-run level, a 1 percentage point increase in productivity growth contributes only 0.64 percentage point to wage growth. Similarly, if the unemployment rate is lower than its long-run level, the associated increase in wage growth is larger than 0.75 percentage point. These relationships hold even when using alternative measures of productivity growth and wage growth (as shown in Table 1).

³ I use the following regression model: $\Delta w_t = \gamma + \alpha \Delta TFP_t + \beta \Delta TFP_t (u_t - u^*)$. In the benchmark regression, I use real compensation as the measure of real wages and the utilization-adjusted TFP from the Federal Reserve Bank of San Francisco as the measure of productivity. As robustness checks, I also use real hourly earnings as an alternative measure of real wages and real gross domestic product per worker in the business sector as an alternative measure of productivity.

⁴ For the long-run level of the unemployment rate (u^*), I use 4.5 percent, the Federal Open Market Committee (FOMC)'s current median projection in September 2018.

Table 1: Real Wage Growth Regressions

	Baseline (1)	Lagged unemployment (2)	Long-run trend TFP (12-quarter moving average) (3)	Alternate productivity growth (4)	Alternate wage growth (5)
Productivity growth	0.75***	0.73***	0.80***	0.60***	0.42***
Productivity growth × unemployment gap	−0.11***	−0.10***	−0.16*	−0.12***	−0.08*
Constant	0.48***	0.47***	0.47***	0.36**	−0.15

* Significant at the 10 percent level

** Significant at the 5 percent level

*** Significant at the 1 percent level

Sources: Bureau of Labor Statistics (Haver Analytics), Federal Reserve Bank of San Francisco (Haver Analytics), and author's calculations.

To further understand the effects of unemployment on the relationship between productivity and wage growth, I use the baseline regression to decompose wage growth into the contributions from productivity growth and the contributions from the interaction between productivity and the unemployment rate. Table 2 shows the results of this decomposition. For example, from 2009 to 2010, productivity growth averaged 1.63 percentage points but contributed only 0.33 percentage point to wage growth because the unemployment rate was nearly 5 percentage points above its long-run level. The small contribution from productivity growth largely accounts for the low wage growth during that period. In contrast, since 2017, productivity growth has averaged only 0.85 percent, half of its 2009–10 level—however, productivity growth contributed 0.64 percentage points to wage growth, a larger contribution than in 2009–10, because the unemployment rate was below its long-run level.

To further emphasize the importance of the unemployment rate in influencing the relationship between productivity growth and wage growth, column 1 in Table 2 shows results from 1999–2000, a period in which productivity growth was strong and the unemployment rate was low. During this period, productivity growth contributed strongly to wage growth.

Table 2: Decomposing Wage Growth in Different Periods

	1999:Q1–2000:Q4 High productivity Low unemployment	2009:Q1–2010:Q4 Medium productivity High unemployment	2017:Q1–2018:Q3 Low productivity Low unemployment
Real wage growth (percent)	3.07	0.67	0.94
Productivity growth (percent)	2.40	1.63	0.85
Unemployment rate (percent)	4.09	9.45	4.18
Total TFP contribution	1.86	0.33	0.64
<i>Normal contribution from productivity growth: ΔTFP</i>	1.75	1.19	0.62
<i>Additional contribution from $\Delta TFP \cdot (u - u^*)$</i>	0.11	−0.86	0.02
Other factors	1.21	0.34	0.30

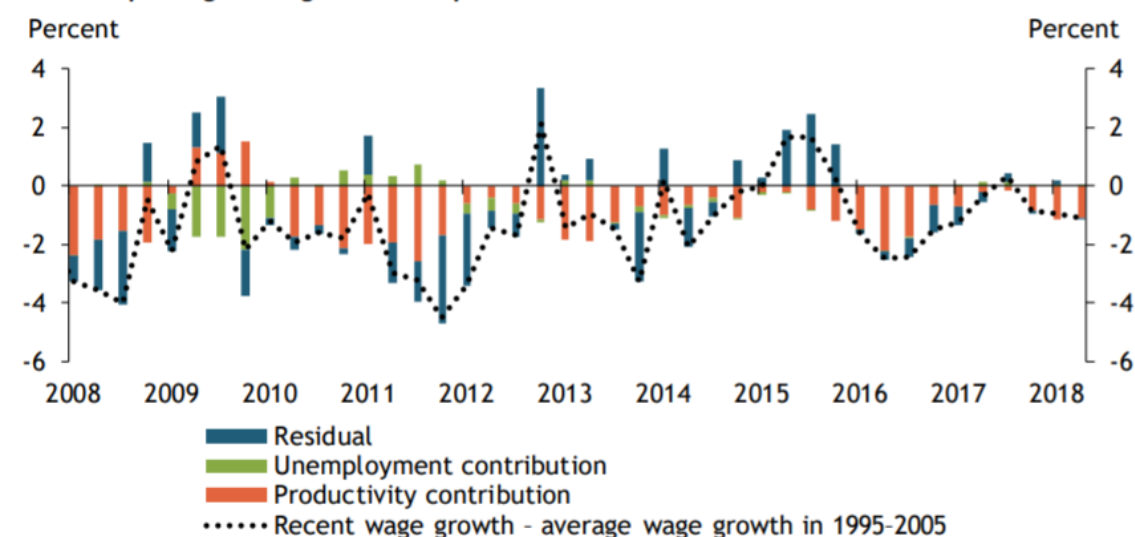
Sources: Bureau of Labor Statistics (Haver Analytics), Federal Reserve Bank of San Francisco (Haver Analytics), and author's calculations.

Why has wage growth been weak recently? To answer that question, I compare the 2017–18 period with the period from 1995 through 2005 in which real wage growth was 1.75 percent and productivity growth was 1.87 percent. With some simple re-arrangement, I decompose the difference in wage growth

between the two periods into its two contributors: the difference between productivity growth and its average and the difference between the unemployment rate and its average (interacted with productivity growth).⁵ The dotted line in Chart 3 shows the gap in wage growth between the two periods, the orange bars show the contribution from the difference in productivity growth, and the green bars show the contribution from the difference in the unemployment rates.

The chart illustrates two findings. First, low productivity growth in recent years largely accounts for the lower wage growth (as shown by the negative orange bars in the chart). Second, there are significant residuals that cannot be explained (as shown by the blue bars), as wage growth can be volatile quarter to quarter. However, the residuals have been minimal in the last few quarters, suggesting that the decomposition has accurately captured the sources of the wage-growth gap—and that low productivity growth largely accounts for the gap.

Chart 3: Explaining the Wage Growth Gap



Source: Author's calculations.

Overall, the analysis emphasizes the importance of both productivity growth and labor market conditions in determining wage growth. Specifically, the analysis shows that current low wage growth is mainly associated with low productivity growth. As the unemployment rate is currently almost 1 percentage point below its long-run level, an improvement in productivity growth would likely provide a greater than usual boost to wage growth.

References

Fernald, John. 2012. “[A Quarterly, Utilization-Adjusted Series on Total Factor Productivity.](https://www.frbsf.org/economic-research/files/wp12-19bk.pdf)” Federal Reserve Bank of San Francisco, Working Paper no. 2012-19, April. Available at: <https://www.frbsf.org/economic-research/files/wp12-19bk.pdf>

⁵ Specifically, the equation is as follows: $\Delta w_t - \text{avg}(\Delta w) = 0.68(\Delta TFP_t - \text{avg}[\Delta TFP]) - 0.11\text{avg}(\Delta TFP)(u_t - \text{avg}[u])$, where Δw is the average wage growth from 1995–2005 (1.75 percent), $\text{avg}(\Delta TFP)$ is the average TFP growth (1.87 percent), and $\text{avg}(u)$ is the average unemployment rate (5.07 percent) in 1995–2005.

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IDAHO ECONOMIC FORECAST

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FORECAST DETAIL

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Reporting Conventions

Units of measurement are presented in the individual reports.

The percentage change numbers given in the annual reports are simple period-to-period percent changes. Since the periods are years, they are thus simple annual changes. The percentage changes given in the quarterly report are period-to-period changes at compounded annual rates, following standard practice. A large change in a given quarter can seem to be exaggerated since the calculation assumes the change is compounded over an entire year.

Data Sources

National forecast data is provided by IHS Economics, as well as the Food and Agricultural Policy Research Institute (FAPRI). Historical data for the models are obtained from the following agencies: Bureau of the Census (demographic and housing), Bureau of Economic Analysis (income), Bureau of Labor Statistics (employment), Federal Reserve Board of Governors (production), and US Department of Agriculture (farm).

Idaho historical data is obtained from the Department of Labor (employment and hourly earnings), Bureau of Vital Statistics (births and deaths), Division of Financial Management (migration), and the Bureau of Economic Analysis (income).

The Idaho average annual wage is calculated by the Division of Financial Management from Bureau of Economic Analysis and Idaho Department of Labor data. Because of the different methodology used and data available, this figure may not match those published by other sources.

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

DEMOGRAPHICS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
POPULATION									
Idaho (Thousands)	1,428.2	1,468.7	1,505.1	1,534.3	1,554.4	1,570.8	1,583.8	1,595.4	1,611.5
% Ch	2.6%	2.8%	2.5%	1.9%	1.3%	1.1%	0.8%	0.7%	1.0%
National (Millions)	296.460	299.282	302.227	304.948	307.580	310.091	312.386	314.657	316.882
% Ch	0.9%	1.0%	1.0%	0.9%	0.9%	0.8%	0.7%	0.7%	0.7%
BIRTHS									
Idaho (Thousands)	23.064	24.185	25.023	25.156	23.726	23.202	22.311	22.941	22.348
% Ch	2.4%	4.9%	3.5%	0.5%	-5.7%	-2.2%	-3.8%	2.8%	-2.6%
National (Thousands)	4,152	4,279	4,330	4,260	4,141	4,009	3,964	3,963	3,942
% Ch	0.6%	3.1%	1.2%	-1.6%	-2.8%	-3.2%	-1.1%	0.0%	-0.5%
DEATHS									
Idaho (Thousands)	10.513	10.556	10.742	10.927	11.065	11.411	11.990	11.993	12.426
% Ch	5.0%	0.4%	1.8%	1.7%	1.3%	3.1%	5.1%	0.0%	3.6%
National (Thousands)	2,456	2,434	2,432	2,479	2,444	2,475	2,522	2,550	2,604
% Ch	2.1%	-0.9%	-0.1%	1.9%	-1.4%	1.3%	1.9%	1.1%	2.1%
NET MIGRATION									
Idaho (Thousands)	23.888	26.799	22.155	14.986	7.458	4.543	2.734	0.665	6.167
HOUSING									
HOUSING STARTS									
Idaho	23,408	19,533	14,345	7,979	5,733	5,186	4,560	7,124	9,053
% Ch	25.3%	-16.6%	-26.6%	-44.4%	-28.2%	-9.5%	-12.1%	56.2%	27.1%
National (Millions)	2.073	1.812	1.342	0.900	0.554	0.586	0.612	0.784	0.928
% Ch	6.3%	-12.6%	-25.9%	-32.9%	-38.4%	5.7%	4.5%	28.1%	18.4%
SINGLE UNITS									
Idaho	20,939	17,521	12,014	7,132	4,951	4,648	3,956	6,021	7,717
% Ch	29.5%	-16.3%	-31.4%	-40.6%	-30.6%	-6.1%	-14.9%	52.2%	28.2%
National (Millions)	1.719	1.474	1.036	0.616	0.442	0.471	0.434	0.537	0.619
% Ch	7.1%	-14.3%	-29.7%	-40.5%	-28.2%	6.6%	-7.9%	23.6%	15.3%
MULTIPLE UNITS									
Idaho	2,470	2,012	2,331	847	782	538	604	1,103	1,337
% Ch	-1.6%	-18.5%	15.9%	-63.7%	-7.6%	-31.2%	12.3%	82.5%	21.2%
National (Millions)	0.354	0.338	0.306	0.284	0.112	0.114	0.178	0.247	0.309
% Ch	2.6%	-4.5%	-9.5%	-7.3%	-60.7%	2.2%	55.7%	38.9%	25.2%
HOUSING STOCK									
Idaho (Thousands)	494.4	514.8	529.3	537.9	542.3	546.4	549.2	553.7	560.3
% Ch	4.3%	4.1%	2.8%	1.6%	0.8%	0.8%	0.5%	0.8%	1.2%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

DEMOGRAPHICS

	2014	2015	2016	2017	2018	2019	2020	2021	2022
POPULATION									
Idaho (Thousands)	1,631.5	1,651.5	1,682.9	1,718.9	1,754.2	1,785.2	1,813.9	1,842.0	1,869.8
% Ch	1.2%	1.2%	1.9%	2.1%	2.1%	1.8%	1.6%	1.6%	1.5%
National (Millions)	319.252	321.622	323.961	326.275	328.592	330.987	333.336	335.673	337.996
% Ch	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
BIRTHS									
Idaho (Thousands)	22.888	22.832	22.463	22.159	21.397	21.643	22.031	22.405	22.769
% Ch	2.4%	-0.2%	-1.6%	-1.4%	-3.4%	1.1%	1.8%	1.7%	1.6%
National (Thousands)	3,999	3,989	3,957	3,869	4,084	4,104	4,121	4,134	4,145
% Ch	1.4%	-0.2%	-0.8%	-2.2%	5.6%	0.5%	0.4%	0.3%	0.3%
DEATHS									
Idaho (Thousands)	12.610	13.031	13.370	14.007	14.263	14.570	14.893	15.223	15.559
% Ch	1.5%	3.3%	2.6%	4.8%	1.8%	2.2%	2.2%	2.2%	2.2%
National (Thousands)	2,634	2,720	2,752	2,823	2,702	2,730	2,758	2,787	2,816
% Ch	1.1%	3.3%	1.2%	2.6%	-4.3%	1.0%	1.0%	1.0%	1.1%
NET MIGRATION									
Idaho (Thousands)	9.671	10.243	22.314	27.822	28.170	23.946	21.501	20.955	20.579
HOUSING									
HOUSING STARTS									
Idaho	9,807	10,273	12,412	14,039	16,234	16,048	17,264	18,161	18,938
% Ch	8.3%	4.8%	20.8%	13.1%	15.6%	-1.1%	7.6%	5.2%	4.3%
National (Millions)	1.000	1.107	1.178	1.209	1.250	1.204	1.216	1.238	1.281
% Ch	7.8%	10.7%	6.4%	2.6%	3.4%	-3.6%	1.0%	1.8%	3.4%
SINGLE UNITS									
Idaho	7,330	8,237	10,010	11,278	13,073	13,263	14,384	15,171	15,798
% Ch	-5.0%	12.4%	21.5%	12.7%	15.9%	1.5%	8.4%	5.5%	4.1%
National (Millions)	0.646	0.713	0.786	0.852	0.873	0.841	0.845	0.859	0.889
% Ch	4.4%	10.3%	10.2%	8.5%	2.4%	-3.6%	0.4%	1.7%	3.5%
MULTIPLE UNITS									
Idaho	2,477	2,037	2,401	2,761	3,161	2,785	2,881	2,990	3,140
% Ch	85.3%	-17.8%	17.9%	15.0%	14.5%	-11.9%	3.4%	3.8%	5.0%
National (Millions)	0.354	0.395	0.392	0.357	0.377	0.363	0.371	0.379	0.392
% Ch	14.6%	11.4%	-0.5%	-9.1%	5.6%	-3.7%	2.3%	2.0%	3.4%
HOUSING STOCK									
Idaho (Thousands)	568.3	576.7	586.6	597.8	611.9	626.0	640.9	656.8	673.5
% Ch	1.4%	1.5%	1.7%	1.9%	2.4%	2.3%	2.4%	2.5%	2.5%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019

OUTPUT, INCOME, & WAGES

	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S. GROSS DOM. PRODUCT (Billions)									
Current Dollars	13,037	13,815	14,452	14,713	14,449	14,992	15,543	16,197	16,785
% Ch	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%
2009 Chain-Weighted	14,913	15,338	15,626	15,605	15,209	15,599	15,841	16,197	16,495
% Ch	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%
 PERSONAL INCOME - CURR \$									
Idaho (Millions)	41,761	46,002	48,997	50,089	48,409	50,144	53,041	56,112	58,236
% Ch	6.4%	10.2%	6.5%	2.2%	-3.4%	3.6%	5.8%	5.8%	3.8%
Idaho Nonfarm (Millions)	40,608	44,943	47,397	48,511	47,467	48,786	51,055	54,107	55,951
% Ch	7.1%	10.7%	5.5%	2.3%	-2.2%	2.8%	4.7%	6.0%	3.4%
National (Billions)	10,598	11,382	12,008	12,442	12,059	12,552	13,327	14,010	14,181
% Ch	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%
 PERSONAL INCOME - 2009 \$									
Idaho (Millions)	48,099	51,584	53,586	53,185	51,450	52,393	54,051	56,108	57,461
% Ch	3.4%	7.2%	3.9%	-0.7%	-3.3%	1.8%	3.2%	3.8%	2.4%
Idaho Nonfarm (Millions)	46,770	50,396	51,836	51,509	50,450	50,973	52,026	54,103	55,206
% Ch	4.1%	7.8%	2.9%	-0.6%	-2.1%	1.0%	2.1%	4.0%	2.0%
National (Billions)	12,207	12,763	13,132	13,211	12,816	13,114	13,580	14,009	13,992
% Ch	2.7%	4.6%	2.9%	0.6%	-3.0%	2.3%	3.6%	3.2%	-0.1%
 PER CAPITA PERS INC - CURR \$									
Idaho	29,236	31,320	32,554	32,647	31,143	31,922	33,489	35,169	36,136
% Ch	3.7%	7.1%	3.9%	0.3%	-4.6%	2.5%	4.9%	5.0%	2.8%
National	35,748	38,029	39,730	40,801	39,206	40,476	42,661	44,524	44,751
% Ch	4.6%	6.4%	4.5%	2.7%	-3.9%	3.2%	5.4%	4.4%	0.5%
 PER CAPITA PERS INC - 2009 \$									
Idaho	33,676	35,122	35,604	34,666	33,100	33,354	34,127	35,167	35,655
% Ch	0.8%	4.3%	1.4%	-2.6%	-4.5%	0.8%	2.3%	3.0%	1.4%
National	41,176	42,645	43,451	43,324	41,669	42,291	43,473	44,522	44,156
% Ch	1.8%	3.6%	1.9%	-0.3%	-3.8%	1.5%	2.8%	2.4%	-0.8%
 AVERAGE ANNUAL WAGE									
Idaho	32,466	34,326	35,256	35,615	35,861	36,614	37,078	37,406	38,111
% Ch	3.0%	5.7%	2.7%	1.0%	0.7%	2.1%	1.3%	0.9%	1.9%
National	42,462	44,388	46,355	47,614	47,594	48,882	50,220	51,629	52,159
% Ch	3.2%	4.5%	4.4%	2.7%	0.0%	2.7%	2.7%	2.8%	1.0%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

OUTPUT, INCOME, & WAGES

	2014	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GROSS DOM. PRODUCT (Billions)									
Current Dollars	17,522	18,219	18,707	19,485	20,494	21,365	22,236	23,150	24,111
% Ch	4.4%	4.0%	2.7%	4.2%	5.2%	4.2%	4.1%	4.1%	4.1%
2009 Chain-Weighted	16,900	17,387	17,659	18,051	18,566	19,024	19,361	19,697	20,044
% Ch	2.5%	2.9%	1.6%	2.2%	2.9%	2.5%	1.8%	1.7%	1.8%
 PERSONAL INCOME - CURR \$									
Idaho (Millions)	61,616	65,611	68,055	71,813	75,849	80,142	84,634	88,954	93,225
% Ch	5.8%	6.5%	3.7%	5.5%	5.6%	5.7%	5.6%	5.1%	4.8%
Idaho Nonfarm (Millions)	59,244	63,385	66,110	69,836	74,066	78,347	82,772	86,952	91,139
% Ch	5.9%	7.0%	4.3%	5.6%	6.1%	5.8%	5.6%	5.0%	4.8%
National (Billions)	14,992	15,720	16,125	16,831	17,570	18,261	19,096	19,950	20,820
% Ch	5.7%	4.9%	2.6%	4.4%	4.4%	3.9%	4.6%	4.5%	4.4%
 PERSONAL INCOME - 2009 \$									
Idaho (Millions)	59,896	63,620	65,288	67,698	70,077	72,883	75,475	77,837	80,006
% Ch	4.2%	6.2%	2.6%	3.7%	3.5%	4.0%	3.6%	3.1%	2.8%
Idaho Nonfarm (Millions)	57,590	61,462	63,422	65,833	68,429	71,251	73,815	76,085	78,216
% Ch	4.3%	6.7%	3.2%	3.8%	3.9%	4.1%	3.6%	3.1%	2.8%
National (Billions)	14,573	15,243	15,470	15,867	16,233	16,608	17,030	17,456	17,868
% Ch	4.2%	4.6%	1.5%	2.6%	2.3%	2.3%	2.5%	2.5%	2.4%
 PER CAPITA PERS INC - CURR \$									
Idaho	37,765	39,726	40,437	41,776	43,236	44,890	46,657	48,290	49,857
% Ch	4.5%	5.2%	1.8%	3.3%	3.5%	3.8%	3.9%	3.5%	3.2%
National	46,958	48,875	49,774	51,584	53,468	55,171	57,286	59,430	61,598
% Ch	4.9%	4.1%	1.8%	3.6%	3.7%	3.2%	3.8%	3.7%	3.6%
 PER CAPITA PERS INC - 2009 \$									
Idaho	36,711	38,521	38,795	39,383	39,947	40,825	41,609	42,256	42,788
% Ch	3.0%	4.9%	0.7%	1.5%	1.4%	2.2%	1.9%	1.6%	1.3%
National	45,647	47,393	47,752	48,630	49,401	50,175	51,088	52,004	52,864
% Ch	3.4%	3.8%	0.8%	1.8%	1.6%	1.6%	1.8%	1.8%	1.7%
 AVERAGE ANNUAL WAGE									
Idaho	39,288	40,273	41,055	42,651	44,065	45,445	46,816	48,132	49,445
% Ch	3.1%	2.5%	1.9%	3.9%	3.3%	3.1%	3.0%	2.8%	2.7%
National	53,785	55,379	55,979	57,660	59,176	60,508	62,556	64,867	67,389
% Ch	3.1%	3.0%	1.1%	3.0%	2.6%	2.3%	3.4%	3.7%	3.9%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019

PERSONAL INCOME--CURRENT \$\$

	2005	2006	2007	2008	2009	2010	2011	2012	2013
WAGE AND SALARY PAYMENTS									
Idaho (Millions)	20,654	22,715	24,023	23,953	22,800	22,945	23,461	24,151	25,254
% Ch	7.3%	10.0%	5.8%	-0.3%	-4.8%	0.6%	2.2%	2.9%	4.6%
National (Billions)	5,692	6,057	6,397	6,534	6,249	6,372	6,626	6,927	7,113
% Ch	5.0%	6.4%	5.6%	2.1%	-4.4%	2.0%	4.0%	4.6%	2.7%
FARM PROPRIETORS INCOME									
Idaho (Millions)	655	567	1,010	1,029	329	822	1,447	1,389	1,603
% Ch	-28.2%	-13.5%	78.2%	2.0%	-68.0%	149.8%	76.1%	-4.0%	15.4%
National (Billions)	47	33	40	40	28	39	65	61	88
% Ch	-9.2%	-29.3%	21.7%	-0.1%	-30.2%	38.8%	66.5%	-6.1%	45.0%
NONFARM PROPRIETORS INCOME									
Idaho (Millions)	3,752	4,147	3,938	3,687	4,224	4,291	4,404	4,909	5,573
% Ch	2.7%	10.5%	-5.0%	-6.4%	14.6%	1.6%	2.6%	11.5%	13.5%
National (Billions)	931	1,017	954	921	910	1,070	1,164	1,286	1,315
% Ch	2.3%	9.2%	-6.2%	-3.5%	-1.1%	17.5%	8.8%	10.5%	2.2%
DIVIDENDS, RENT & INTEREST									
Idaho (Millions)	8,508	9,691	10,463	10,608	9,399	9,450	10,656	12,246	12,043
% Ch	9.0%	13.9%	8.0%	1.4%	-11.4%	0.5%	12.8%	14.9%	-1.7%
National (Billions)	1,910	2,161	2,368	2,458	2,180	2,177	2,430	2,684	2,623
% Ch	8.5%	13.1%	9.6%	3.8%	-11.3%	-0.1%	11.6%	10.5%	-2.2%
OTHER LABOR INCOME									
Idaho (Millions)	5,090	5,685	5,965	5,998	5,812	5,980	5,855	5,933	6,527
% Ch	8.0%	11.7%	4.9%	0.5%	-3.1%	2.9%	-2.1%	1.3%	10.0%
National (Billions)	947	976	1,020	1,051	1,052	1,084	1,107	1,126	1,195
% Ch	6.4%	3.1%	4.6%	3.0%	0.0%	3.0%	2.2%	1.7%	6.1%
GOVT. TRANSFERS TO INDIV.									
Idaho (Millions)	6,178	6,707	7,282	8,477	9,324	10,249	10,294	10,430	10,774
% Ch	8.0%	8.6%	8.6%	16.4%	10.0%	9.9%	0.4%	1.3%	3.3%
National (Billions)	1,517	1,614	1,728	1,955	2,147	2,325	2,359	2,363	2,424
% Ch	6.7%	6.4%	7.1%	13.1%	9.8%	8.3%	1.4%	0.2%	2.6%
CONTRIB. FOR SOCIAL INSUR.									
Idaho (Millions)	3,589	3,997	4,194	4,225	4,135	4,317	3,945	4,045	4,668
% Ch	8.4%	11.4%	4.9%	0.8%	-2.2%	4.4%	-8.6%	2.5%	15.4%
National (Billions)	873	923	961	988	964	984	917	951	1,104
% Ch	5.3%	5.6%	4.2%	2.8%	-2.4%	2.0%	-6.8%	3.7%	16.2%
RESIDENCE ADJUSTMENT									
Idaho (Millions)	513	489	510	562	655	724	870	1,098	1,131
% Ch	-1.3%	-4.7%	4.4%	10.0%	16.6%	10.6%	20.1%	26.2%	2.9%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

PERSONAL INCOME--CURRENT \$\$

	2014	2015	2016	2017	2018	2019	2020	2021	2022
WAGE AND SALARY PAYMENTS									
Idaho (Millions)	26,648	27,869	29,413	31,444	33,521	35,563	37,549	39,488	41,416
% Ch	5.5%	4.6%	5.5%	6.9%	6.6%	6.1%	5.6%	5.2%	4.9%
National (Billions)	7,473	7,854	8,081	8,454	8,821	9,166	9,578	9,988	10,434
% Ch	5.1%	5.1%	2.9%	4.6%	4.3%	3.9%	4.5%	4.3%	4.5%
FARM PROPRIETORS INCOME									
Idaho (Millions)	1,671	1,660	1,299	1,319	1,099	1,122	1,185	1,309	1,380
% Ch	4.2%	-0.6%	-21.8%	1.6%	-16.7%	2.1%	5.6%	10.5%	5.4%
National (Billions)	70	56	37	39	37	27	38	66	68
% Ch	-20.7%	-19.6%	-33.5%	3.8%	-4.9%	-27.0%	42.2%	73.3%	2.1%
NONFARM PROPRIETORS INCOME									
Idaho (Millions)	6,157	6,585	6,450	6,617	7,062	7,279	7,371	7,476	7,615
% Ch	10.5%	6.9%	-2.0%	2.6%	6.7%	3.1%	1.3%	1.4%	1.9%
National (Billions)	1,378	1,365	1,382	1,462	1,542	1,573	1,579	1,596	1,622
% Ch	4.7%	-0.9%	1.2%	5.8%	5.5%	2.0%	0.3%	1.1%	1.6%
DIVIDENDS, RENT & INTEREST									
Idaho (Millions)	13,138	14,499	15,072	15,887	16,778	17,475	18,766	19,859	20,814
% Ch	9.1%	10.4%	4.0%	5.4%	5.6%	4.2%	7.4%	5.8%	4.8%
National (Billions)	2,910	3,123	3,211	3,362	3,528	3,626	3,837	4,036	4,229
% Ch	10.9%	7.3%	2.8%	4.7%	4.9%	2.8%	5.8%	5.2%	4.8%
OTHER LABOR INCOME									
Idaho (Millions)	6,380	7,012	7,516	7,935	8,350	8,832	9,301	9,662	10,120
% Ch	-2.2%	9.9%	7.2%	5.6%	5.2%	5.8%	5.3%	3.9%	4.7%
National (Billions)	1,228	1,273	1,294	1,348	1,390	1,429	1,488	1,552	1,621
% Ch	2.8%	3.6%	1.7%	4.2%	3.1%	2.9%	4.1%	4.3%	4.5%
GOVT. TRANSFERS TO INDIV.									
Idaho (Millions)	11,243	11,860	12,373	12,932	13,644	14,781	15,591	16,512	17,464
% Ch	4.4%	5.5%	4.3%	4.5%	5.5%	8.3%	5.5%	5.9%	5.8%
National (Billions)	2,540	2,683	2,778	2,860	2,981	3,200	3,367	3,532	3,702
% Ch	4.8%	5.6%	3.5%	2.9%	4.2%	7.4%	5.2%	4.9%	4.8%
CONTRIB. FOR SOCIAL INSUR.									
Idaho (Millions)	4,857	5,072	5,319	5,646	6,024	6,420	6,750	7,070	7,398
% Ch	4.1%	4.4%	4.9%	6.1%	6.7%	6.6%	5.1%	4.8%	4.6%
National (Billions)	1,154	1,205	1,240	1,299	1,359	1,414	1,468	1,525	1,589
% Ch	4.5%	4.5%	2.9%	4.7%	4.7%	4.0%	3.9%	3.8%	4.2%
RESIDENCE ADJUSTMENT									
Idaho (Millions)	1,236	1,198	1,251	1,325	1,418	1,511	1,621	1,717	1,813
% Ch	9.3%	-3.1%	4.4%	5.9%	7.1%	6.5%	7.3%	5.9%	5.6%

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

EMPLOYMENT

	2005	2006	2007	2008	2009	2010	2011	2012	2013
TOTAL NONFARM EMPLOYMENT									
Idaho	611,686	638,844	656,232	648,356	609,395	602,952	609,936	621,235	637,025
% Ch	4.0%	4.4%	2.7%	-1.2%	-6.0%	-1.1%	1.2%	1.9%	2.5%
National (Thousands)	134,040	136,451	137,995	137,242	131,306	130,354	131,939	134,174	136,374
% Ch	1.7%	1.8%	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%
GOODS PRODUCING SECTOR									
Idaho	112,319	122,255	123,324	112,123	92,350	87,962	88,940	92,342	97,291
% Ch	6.5%	8.8%	0.9%	-9.1%	-17.6%	-4.8%	1.1%	3.8%	5.4%
National (Thousands)	22,186	22,530	22,229	21,331	18,559	17,752	18,045	18,420	18,739
% Ch	1.4%	1.6%	-1.3%	-4.0%	-13.0%	-4.3%	1.7%	2.1%	1.7%
MANUFACTURING									
Idaho	65,032	67,839	68,066	64,362	55,806	54,371	55,956	58,131	61,019
% Ch	2.1%	4.3%	0.3%	-5.4%	-13.3%	-2.6%	2.9%	3.9%	5.0%
National (Thousands)	14,291	14,221	13,938	13,460	11,898	11,579	11,776	11,978	12,071
% Ch	-0.6%	-0.5%	-2.0%	-3.4%	-11.6%	-2.7%	1.7%	1.7%	0.8%
DURABLE MANUFACTURING									
Idaho	42,105	44,605	44,205	39,779	32,172	31,111	32,592	34,113	35,763
% Ch	3.8%	5.9%	-0.9%	-10.0%	-19.1%	-3.3%	4.8%	4.7%	4.8%
National (Thousands)	9,020	9,046	8,868	8,519	7,335	7,114	7,322	7,520	7,598
% Ch	0.3%	0.3%	-2.0%	-3.9%	-13.9%	-3.0%	2.9%	2.7%	1.0%
LOGGING & WOOD PRODUCTS									
Idaho	9,619	10,037	9,589	7,975	5,867	5,732	6,120	6,408	7,034
% Ch	3.5%	4.4%	-4.5%	-16.8%	-26.4%	-2.3%	6.8%	4.7%	9.8%
National (Thousands)	626	625	577	514	411	392	386	390	405
% Ch	1.1%	-0.2%	-7.7%	-10.9%	-20.1%	-4.6%	-1.6%	1.1%	3.9%
METAL FABRICATION									
Idaho	3,905	4,376	4,659	4,676	4,376	4,443	4,593	4,859	5,417
% Ch	7.4%	12.1%	6.5%	0.4%	-6.4%	1.5%	3.4%	5.8%	11.5%
National (Thousands)	1,522	1,553	1,562	1,527	1,312	1,282	1,348	1,410	1,432
% Ch	1.7%	2.0%	0.6%	-2.2%	-14.1%	-2.3%	5.2%	4.5%	1.6%
MACHINERY									
Idaho	2,606	2,864	2,992	3,133	2,717	2,501	2,567	2,717	2,935
% Ch	1.4%	9.9%	4.5%	4.7%	-13.3%	-8.0%	2.7%	5.9%	8.0%
National (Thousands)	1,164	1,183	1,187	1,187	1,029	996	1,056	1,098	1,105
% Ch	1.7%	1.6%	0.3%	0.0%	-13.3%	-3.2%	6.0%	4.1%	0.6%
COMPUTER & ELECTRONICS									
Idaho	16,181	16,663	16,216	14,305	11,098	10,574	11,191	11,625	11,267
% Ch	-0.6%	3.0%	-2.7%	-11.8%	-22.4%	-4.7%	5.8%	3.9%	-3.1%
National (Thousands)	1,316	1,308	1,272	1,244	1,137	1,094	1,103	1,089	1,066
% Ch	-0.5%	-0.7%	-2.7%	-2.2%	-8.6%	-3.7%	0.8%	-1.3%	-2.1%
OTHER DURABLES									
Idaho	9,794	10,664	10,749	9,689	8,113	7,861	8,120	8,503	9,111
% Ch	11.8%	8.9%	0.8%	-9.9%	-16.3%	-3.1%	3.3%	4.7%	7.1%
National (Thousands)	4,391	4,378	4,269	4,046	3,446	3,349	3,430	3,533	3,592
% Ch	-0.4%	-0.3%	-2.5%	-5.2%	-14.8%	-2.8%	2.4%	3.0%	1.6%

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**IDAHO ECONOMIC FORECAST
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EMPLOYMENT

	2014	2015	2016	2017	2018	2019	2020	2021	2022
TOTAL NONFARM EMPLOYMENT									
Idaho	653,292	671,399	693,910	715,180	738,647	760,215	779,628	798,073	815,510
% Ch	2.6%	2.8%	3.4%	3.1%	3.3%	2.9%	2.6%	2.4%	2.2%
National (Thousands)	138,941	141,826	144,348	146,611	149,064	151,485	153,103	153,975	154,825
% Ch	1.9%	2.1%	1.8%	1.6%	1.7%	1.6%	1.1%	0.6%	0.6%
GOODS PRODUCING SECTOR									
Idaho	99,974	104,328	109,885	114,899	121,163	126,225	129,684	133,254	137,063
% Ch	2.8%	4.4%	5.3%	4.6%	5.5%	4.2%	2.7%	2.8%	2.9%
National (Thousands)	19,226	19,608	19,747	20,080	20,708	21,106	21,133	21,021	21,037
% Ch	2.6%	2.0%	0.7%	1.7%	3.1%	1.9%	0.1%	-0.5%	0.1%
MANUFACTURING									
Idaho	61,592	63,615	65,784	67,692	69,701	71,677	72,768	73,595	74,889
% Ch	0.9%	3.3%	3.4%	2.9%	3.0%	2.8%	1.5%	1.1%	1.8%
National (Thousands)	12,236	12,388	12,404	12,489	12,737	12,887	12,832	12,652	12,558
% Ch	1.4%	1.2%	0.1%	0.7%	2.0%	1.2%	-0.4%	-1.4%	-0.7%
DURABLE MANUFACTURING									
Idaho	36,061	37,493	38,676	39,582	41,078	42,258	42,879	43,288	43,977
% Ch	0.8%	4.0%	3.2%	2.3%	3.8%	2.9%	1.5%	1.0%	1.6%
National (Thousands)	7,726	7,818	7,764	7,789	7,993	8,112	8,095	7,958	7,876
% Ch	1.7%	1.2%	-0.7%	0.3%	2.6%	1.5%	-0.2%	-1.7%	-1.0%
LOGGING & WOOD PRODUCTS									
Idaho	7,048	7,331	7,698	7,854	8,141	8,360	8,464	8,425	8,422
% Ch	0.2%	4.0%	5.0%	2.0%	3.7%	2.7%	1.2%	-0.5%	0.0%
National (Thousands)	424	435	444	447	455	459	475	482	496
% Ch	4.6%	2.6%	2.1%	0.6%	1.9%	0.9%	3.3%	1.6%	2.8%
METAL FABRICATION									
Idaho	5,500	5,650	5,895	5,939	5,871	5,893	5,973	6,059	6,167
% Ch	1.5%	2.7%	4.4%	0.7%	-1.1%	0.4%	1.4%	1.4%	1.8%
National (Thousands)	1,454	1,458	1,422	1,424	1,466	1,488	1,491	1,464	1,467
% Ch	1.6%	0.3%	-2.5%	0.2%	2.9%	1.5%	0.2%	-1.8%	0.2%
MACHINERY									
Idaho	2,993	3,034	3,093	3,185	3,353	3,519	3,593	3,643	3,735
% Ch	2.0%	1.4%	2.0%	3.0%	5.3%	4.9%	2.1%	1.4%	2.5%
National (Thousands)	1,127	1,121	1,076	1,079	1,120	1,149	1,166	1,151	1,154
% Ch	2.1%	-0.6%	-4.0%	0.2%	3.8%	2.6%	1.5%	-1.3%	0.2%
COMPUTER & ELECTRONICS									
Idaho	11,426	11,901	12,126	12,234	12,730	13,120	13,401	13,647	13,892
% Ch	1.4%	4.2%	1.9%	0.9%	4.0%	3.1%	2.1%	1.8%	1.8%
National (Thousands)	1,049	1,053	1,048	1,039	1,055	1,078	1,078	1,075	1,080
% Ch	-1.6%	0.4%	-0.5%	-0.9%	1.6%	2.1%	0.0%	-0.3%	0.5%
OTHER DURABLES									
Idaho	9,094	9,577	9,864	10,370	10,984	11,367	11,448	11,513	11,760
% Ch	-0.2%	5.3%	3.0%	5.1%	5.9%	3.5%	0.7%	0.6%	2.1%
National (Thousands)	3,671	3,751	3,774	3,800	3,897	3,938	3,886	3,786	3,680
% Ch	2.2%	2.2%	0.6%	0.7%	2.5%	1.1%	-1.3%	-2.6%	-2.8%

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EMPLOYMENT

MANUFACTURING (continued)	2005	2006	2007	2008	2009	2010	2011	2012	2013
NONDURABLE MANUFACTURING									
Idaho	22,927	23,234	23,861	24,583	23,634	23,261	23,364	24,019	25,256
% Ch	-0.9%	1.3%	2.7%	3.0%	-3.9%	-1.6%	0.4%	2.8%	5.2%
National (Thousands)	5,271	5,175	5,070	4,941	4,563	4,465	4,454	4,458	4,473
% Ch	-2.2%	-1.8%	-2.0%	-2.6%	-7.6%	-2.2%	-0.2%	0.1%	0.3%
FOOD PROCESSING									
Idaho	14,714	14,700	15,094	15,835	15,642	15,443	15,355	15,661	16,397
% Ch	-1.9%	-0.1%	2.7%	4.9%	-1.2%	-1.3%	-0.6%	2.0%	4.7%
National (Thousands)	1,478	1,479	1,484	1,480	1,457	1,451	1,459	1,469	1,474
% Ch	-1.1%	0.1%	0.3%	-0.2%	-1.6%	-0.4%	0.6%	0.7%	0.3%
PRINTING									
Idaho	1,899	1,907	1,891	1,807	1,433	1,283	1,232	1,209	1,217
% Ch	-1.2%	0.4%	-0.8%	-4.4%	-20.7%	-10.5%	-3.9%	-1.9%	0.7%
National (Thousands)	646	634	622	594	522	488	472	462	452
% Ch	-2.5%	-1.9%	-1.9%	-4.5%	-12.2%	-6.5%	-3.3%	-2.1%	-2.1%
CHEMICALS									
Idaho	1,938	2,117	2,267	2,367	2,275	2,200	2,375	2,541	2,599
% Ch	3.2%	9.2%	7.1%	4.4%	-3.9%	-3.3%	8.0%	7.0%	2.3%
National (Thousands)	872	866	861	847	804	786	783	784	793
% Ch	-1.7%	-0.7%	-0.6%	-1.7%	-5.1%	-2.2%	-0.4%	0.0%	1.2%
OTHER NONDURABLES									
Idaho	4,376	4,511	4,610	4,573	4,284	4,336	4,402	4,609	5,043
% Ch	1.0%	3.1%	2.2%	-0.8%	-6.3%	1.2%	1.5%	4.7%	9.4%
National (Thousands)	2,275	2,195	2,104	2,020	1,781	1,740	1,739	1,743	1,754
% Ch	-3.0%	-3.5%	-4.2%	-4.0%	-11.8%	-2.3%	0.0%	0.2%	0.6%
MINING									
Idaho	2,160	2,373	2,666	2,751	2,139	2,294	2,623	2,779	2,629
% Ch	11.8%	9.9%	12.4%	3.2%	-22.2%	7.2%	14.3%	5.9%	-5.4%
National (Thousands)	562	620	663	709	643	655	739	797	811
% Ch	7.5%	10.3%	7.0%	6.9%	-9.3%	1.8%	12.9%	7.7%	1.8%
CONSTRUCTION									
Idaho	45,127	52,043	52,591	45,010	34,404	31,297	30,361	31,431	33,644
% Ch	13.3%	15.3%	1.1%	-14.4%	-23.6%	-9.0%	-3.0%	3.5%	7.0%
National (Thousands)	7,333	7,690	7,627	7,162	6,017	5,518	5,530	5,646	5,857
% Ch	5.2%	4.9%	-0.8%	-6.1%	-16.0%	-8.3%	0.2%	2.1%	3.7%
NONGOODS PRODUCING									
Idaho	499,367	516,589	532,908	536,234	517,046	514,990	520,996	528,893	539,733
% Ch	3.5%	3.4%	3.2%	0.6%	-3.6%	-0.4%	1.2%	1.5%	2.0%
National (Thousands)	111,853	113,921	115,766	115,910	112,747	112,602	113,894	115,754	117,635
% Ch	1.8%	1.8%	1.6%	0.1%	-2.7%	-0.1%	1.1%	1.6%	1.6%
SERVICES									
Idaho	280,745	292,716	304,463	307,960	296,471	296,759	303,156	308,056	316,180
% Ch	4.4%	4.3%	4.0%	1.1%	-3.7%	0.1%	2.2%	1.6%	2.6%
National (Thousands)	69,059	70,745	72,076	72,242	70,144	70,275	71,651	73,394	75,049
% Ch	2.2%	2.4%	1.9%	0.2%	-2.9%	0.2%	2.0%	2.4%	2.3%
INFORMATION									
Idaho	11,073	10,592	10,913	11,028	10,012	9,625	9,464	9,364	9,288
% Ch	11.4%	-4.3%	3.0%	1.1%	-9.2%	-3.9%	-1.7%	-1.1%	-0.8%
National (Thousands)	3,061	3,038	3,031	2,983	2,804	2,707	2,673	2,675	2,705
% Ch	-1.8%	-0.8%	-0.2%	-1.6%	-6.0%	-3.4%	-1.3%	0.1%	1.1%
FINANCIAL ACTIVITIES									
Idaho	29,653	31,744	32,529	31,659	29,622	29,169	29,871	30,330	31,180
% Ch	6.1%	7.1%	2.5%	-2.7%	-6.4%	-1.5%	2.4%	1.5%	2.8%
National (Thousands)	8,197	8,366	8,347	8,204	7,838	7,695	7,696	7,783	7,886
% Ch	1.1%	2.1%	-0.2%	-1.7%	-4.5%	-1.8%	0.0%	1.1%	1.3%

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EMPLOYMENT

MANUFACTURING (continued)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
NONDURABLE MANUFACTURING									
Idaho	25,531	26,122	27,107	28,110	28,623	29,418	29,889	30,307	30,912
% Ch	1.1%	2.3%	3.8%	3.7%	1.8%	2.8%	1.6%	1.4%	2.0%
National (Thousands)	4,511	4,570	4,640	4,700	4,743	4,775	4,737	4,694	4,682
% Ch	0.9%	1.3%	1.5%	1.3%	0.9%	0.7%	-0.8%	-0.9%	-0.2%
FOOD PROCESSING									
Idaho	16,507	16,839	17,482	18,223	18,848	19,541	19,949	20,292	20,799
% Ch	0.7%	2.0%	3.8%	4.2%	3.4%	3.7%	2.1%	1.7%	2.5%
National (Thousands)	1,485	1,512	1,557	1,599	1,620	1,640	1,659	1,675	1,703
% Ch	0.7%	1.8%	3.0%	2.7%	1.3%	1.2%	1.1%	1.0%	1.6%
PRINTING									
Idaho	1,175	1,124	1,230	1,300	1,252	1,261	1,235	1,216	1,208
% Ch	-3.4%	-4.3%	9.4%	5.6%	-3.7%	0.7%	-2.0%	-1.6%	-0.7%
National (Thousands)	454	450	447	440	431	419	409	405	406
% Ch	0.3%	-0.7%	-0.6%	-1.6%	-2.1%	-2.7%	-2.3%	-1.1%	0.2%
CHEMICALS									
Idaho	2,533	2,551	2,712	2,944	2,993	2,969	2,914	2,879	2,889
% Ch	-2.6%	0.7%	6.3%	8.6%	1.7%	-0.8%	-1.8%	-1.2%	0.3%
National (Thousands)	803	807	812	824	838	858	851	835	821
% Ch	1.2%	0.6%	0.6%	1.5%	1.7%	2.4%	-0.8%	-1.9%	-1.7%
OTHER NONDURABLES									
Idaho	5,316	5,608	5,683	5,643	5,530	5,648	5,791	5,920	6,016
% Ch	5.4%	5.5%	1.3%	-0.7%	-2.0%	2.1%	2.5%	2.2%	1.6%
National (Thousands)	1,770	1,801	1,823	1,837	1,855	1,857	1,818	1,778	1,753
% Ch	0.9%	1.7%	1.2%	0.8%	1.0%	0.2%	-2.1%	-2.2%	-1.4%
MINING									
Idaho	2,519	2,451	2,468	2,216	2,248	2,357	2,325	2,262	2,208
% Ch	-4.2%	-2.7%	0.7%	-10.2%	1.5%	4.8%	-1.4%	-2.7%	-2.4%
National (Thousands)	838	760	617	626	683	709	720	722	734
% Ch	3.4%	-9.3%	-18.9%	1.5%	9.1%	3.8%	1.6%	0.3%	1.7%
CONSTRUCTION									
Idaho	35,862	38,262	41,634	44,991	49,213	52,191	54,591	57,398	59,967
% Ch	6.6%	6.7%	8.8%	8.1%	9.4%	6.1%	4.6%	5.1%	4.5%
National (Thousands)	6,151	6,460	6,726	6,966	7,289	7,510	7,581	7,647	7,745
% Ch	5.0%	5.0%	4.1%	3.6%	4.6%	3.0%	0.9%	0.9%	1.3%
NONGOODS PRODUCING									
Idaho	553,318	567,071	584,024	600,281	617,485	633,990	649,944	664,819	678,447
% Ch	2.5%	2.5%	3.0%	2.8%	2.9%	2.7%	2.5%	2.3%	2.0%
National (Thousands)	119,715	122,218	124,601	126,531	128,356	130,379	131,970	132,954	133,788
% Ch	1.8%	2.1%	1.9%	1.5%	1.4%	1.6%	1.2%	0.7%	0.6%
SERVICES									
Idaho	326,719	336,150	348,748	361,473	375,454	388,955	401,812	414,159	425,088
% Ch	3.3%	2.9%	3.7%	3.6%	3.9%	3.6%	3.3%	3.1%	2.6%
National (Thousands)	76,735	78,796	80,747	82,527	84,231	86,085	87,494	88,561	89,411
% Ch	2.2%	2.7%	2.5%	2.2%	2.1%	2.2%	1.6%	1.2%	1.0%
INFORMATION									
Idaho	9,322	9,256	9,049	9,012	8,916	8,694	8,847	8,978	9,267
% Ch	0.4%	-0.7%	-2.2%	-0.4%	-1.1%	-2.5%	1.8%	1.5%	3.2%
National (Thousands)	2,726	2,751	2,794	2,812	2,826	2,806	2,763	2,798	2,779
% Ch	0.8%	0.9%	1.6%	0.7%	0.5%	-0.7%	-1.5%	1.3%	-0.7%
FINANCIAL ACTIVITIES									
Idaho	32,678	33,301	33,956	35,221	36,546	37,647	38,737	39,786	40,738
% Ch	4.8%	1.9%	2.0%	3.7%	3.8%	3.0%	2.9%	2.7%	2.4%
National (Thousands)	7,977	8,123	8,286	8,450	8,569	8,664	8,689	8,761	8,809
% Ch	1.1%	1.8%	2.0%	2.0%	1.4%	1.1%	0.3%	0.8%	0.5%

**National Variables Forecast by IHS Economics
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IDAHO ECONOMIC FORECAST
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EMPLOYMENT

SERVICES (Continued)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
TRANS., WAREHOUSING, UTILITIES									
Idaho	19,294	20,242	21,032	21,723	20,690	20,689	21,184	21,510	21,509
% Ch	1.8%	4.9%	3.9%	3.3%	-4.8%	0.0%	2.4%	1.5%	0.0%
National (Thousands)	4,921	5,022	5,100	5,072	4,802	4,749	4,862	4,974	5,055
% Ch	2.1%	2.0%	1.6%	-0.5%	-5.3%	-1.1%	2.4%	2.3%	1.6%
PROFESSIONAL & BUSINESS									
Idaho	76,904	81,351	83,193	81,908	75,880	75,146	76,391	76,745	78,760
% Ch	5.1%	5.8%	2.3%	-1.5%	-7.4%	-1.0%	1.7%	0.5%	2.6%
National (Thousands)	16,997	17,620	18,001	17,798	16,633	16,778	17,386	17,992	18,579
% Ch	3.4%	3.7%	2.2%	-1.1%	-6.5%	0.9%	3.6%	3.5%	3.3%
EDUCATION & HEALTH									
Idaho	67,995	70,117	74,071	77,287	80,429	83,134	85,770	87,410	89,954
% Ch	4.3%	3.1%	5.6%	4.3%	4.1%	3.4%	3.2%	1.9%	2.9%
National (Thousands)	17,674	18,152	18,676	19,228	19,628	19,973	20,322	20,769	21,085
% Ch	2.6%	2.7%	2.9%	3.0%	2.1%	1.8%	1.7%	2.2%	1.5%
LEISURE & HOSPITALITY									
Idaho	57,347	59,650	63,257	63,201	58,666	57,949	59,299	61,178	63,511
% Ch	3.2%	4.0%	6.0%	-0.1%	-7.2%	-1.2%	2.3%	3.2%	3.8%
National (Thousands)	12,813	13,109	13,428	13,441	13,074	13,042	13,352	13,770	14,255
% Ch	2.6%	2.3%	2.4%	0.1%	-2.7%	-0.2%	2.4%	3.1%	3.5%
OTHER SERVICES									
Idaho	18,479	19,021	19,469	21,155	21,174	21,047	21,177	21,519	21,978
% Ch	1.1%	2.9%	2.4%	8.7%	0.1%	-0.6%	0.6%	1.6%	2.1%
National (Thousands)	5,395	5,438	5,493	5,515	5,366	5,331	5,361	5,430	5,483
% Ch	-0.3%	0.8%	1.0%	0.4%	-2.7%	-0.7%	0.6%	1.3%	1.0%
TRADE									
Idaho	103,672	107,463	111,650	109,087	101,080	99,639	100,622	103,622	106,152
% Ch	4.6%	3.7%	3.9%	-2.3%	-7.3%	-1.4%	1.0%	3.0%	2.4%
National (Thousands)	20,991	21,200	21,470	21,165	20,049	19,837	20,149	20,441	20,739
% Ch	1.5%	1.0%	1.3%	-1.4%	-5.3%	-1.1%	1.6%	1.4%	1.5%
RETAIL TRADE									
Idaho	76,801	80,514	83,552	82,614	76,283	74,836	75,202	77,125	78,740
% Ch	4.2%	4.8%	3.8%	-1.1%	-7.7%	-1.9%	0.5%	2.6%	2.1%
National (Thousands)	15,286	15,359	15,522	15,291	14,529	14,450	14,675	14,845	15,078
% Ch	1.5%	0.5%	1.1%	-1.5%	-5.0%	-0.5%	1.6%	1.2%	1.6%
WHOLESALE TRADE									
Idaho	26,872	26,949	28,098	26,473	24,796	24,803	25,421	26,496	27,413
% Ch	5.8%	0.3%	4.3%	-5.8%	-6.3%	0.0%	2.5%	4.2%	3.5%
National (Thousands)	5,705	5,841	5,948	5,875	5,521	5,387	5,474	5,596	5,661
% Ch	1.7%	2.4%	1.8%	-1.2%	-6.0%	-2.4%	1.6%	2.2%	1.2%
STATE & LOCAL GOVERNMENT									
Idaho	101,867	103,531	103,975	105,986	105,999	104,900	104,563	104,575	104,990
% Ch	0.7%	1.6%	0.4%	1.9%	0.0%	-1.0%	-0.3%	0.0%	0.4%
National (Thousands)	18,820	18,887	19,073	19,742	19,484	19,742	19,722	19,513	19,233
% Ch	0.4%	0.4%	1.0%	1.3%	-1.3%	1.3%	-0.1%	-1.1%	-1.4%
EDUCATION									
Idaho	51,306	52,652	53,021	53,609	54,615	53,924	54,005	53,966	54,354
% Ch	1.0%	2.6%	0.7%	1.1%	1.9%	-1.3%	0.1%	-0.1%	0.7%
NONEDUCATION									
Idaho	50,560	50,878	50,954	52,376	51,384	50,976	50,558	50,609	50,636
% Ch	0.5%	0.6%	0.1%	2.8%	-1.9%	-0.8%	-0.8%	0.1%	0.1%
FEDERAL GOVERNMENT									
Idaho	13,084	12,879	12,820	13,200	13,496	13,691	12,654	12,640	12,411
% Ch	-1.7%	-1.6%	-0.5%	3.0%	2.2%	1.4%	-7.6%	-0.1%	-1.8%
National (Thousands)	2,732	2,733	2,735	2,761	2,831	2,976	2,860	2,822	2,770
% Ch	0.0%	0.0%	0.1%	0.9%	2.5%	5.1%	-3.9%	-1.3%	-1.8%

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**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

EMPLOYMENT

SERVICES (Continued)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
TRANS., WAREHOUSING, UTILITIES									
Idaho	22,423	23,628	23,665	24,188	25,421	25,888	26,424	26,922	27,366
% Ch	4.2%	5.4%	0.2%	2.2%	5.1%	1.8%	2.1%	1.9%	1.6%
National (Thousands)	5,216	5,431	5,575	5,749	5,974	6,123	6,104	6,069	6,023
% Ch	3.2%	4.1%	2.6%	3.1%	3.9%	2.5%	-0.3%	-0.6%	-0.8%
PROFESSIONAL & BUSINESS									
Idaho	80,794	81,887	86,476	90,459	93,867	97,319	100,944	104,512	107,582
% Ch	2.6%	1.4%	5.6%	4.6%	3.8%	3.7%	3.7%	3.5%	2.9%
National (Thousands)	19,123	19,690	20,107	20,506	20,998	21,546	22,458	23,069	23,490
% Ch	2.9%	3.0%	2.1%	2.0%	2.4%	2.6%	4.2%	2.7%	1.8%
EDUCATION & HEALTH									
Idaho	92,983	96,233	99,038	102,373	106,081	111,220	115,943	120,579	124,599
% Ch	3.4%	3.5%	2.9%	3.4%	3.6%	4.8%	4.2%	4.0%	3.3%
National (Thousands)	21,436	22,026	22,640	23,188	23,668	24,207	24,413	24,716	24,935
% Ch	1.7%	2.8%	2.8%	2.4%	2.1%	2.3%	0.9%	1.2%	0.9%
LEISURE & HOSPITALITY									
Idaho	65,899	68,403	72,349	75,391	79,105	81,782	83,763	85,588	87,115
% Ch	3.8%	3.8%	5.8%	4.2%	4.9%	3.4%	2.4%	2.2%	1.8%
National (Thousands)	14,691	15,154	15,656	16,053	16,352	16,809	17,182	17,295	17,565
% Ch	3.1%	3.2%	3.3%	2.5%	1.9%	2.8%	2.2%	0.7%	1.6%
OTHER SERVICES									
Idaho	22,621	23,442	24,215	24,829	25,519	26,406	27,156	27,793	28,421
% Ch	2.9%	3.6%	3.3%	2.5%	2.8%	3.5%	2.8%	2.3%	2.3%
National (Thousands)	5,567	5,621	5,691	5,769	5,844	5,930	5,885	5,854	5,810
% Ch	1.5%	1.0%	1.2%	1.4%	1.3%	1.5%	-0.8%	-0.5%	-0.7%
TRADE									
Idaho	108,411	111,719	114,146	115,710	117,203	118,573	120,268	121,953	123,383
% Ch	2.1%	3.1%	2.2%	1.4%	1.3%	1.2%	1.4%	1.4%	1.2%
National (Thousands)	21,106	21,395	21,623	21,652	21,677	21,724	21,617	21,493	21,311
% Ch	1.8%	1.4%	1.1%	0.1%	0.1%	0.2%	-0.5%	-0.6%	-0.8%
RETAIL TRADE									
Idaho	80,575	83,635	85,439	86,633	87,524	88,190	89,460	90,697	91,751
% Ch	2.3%	3.8%	2.2%	1.4%	1.0%	0.8%	1.4%	1.4%	1.2%
National (Thousands)	15,366	15,614	15,836	15,839	15,825	15,778	15,645	15,508	15,326
% Ch	1.9%	1.6%	1.4%	0.0%	-0.1%	-0.3%	-0.8%	-0.9%	-1.2%
WHOLESALE TRADE									
Idaho	27,836	28,084	28,707	29,077	29,678	30,383	30,808	31,257	31,632
% Ch	1.5%	0.9%	2.2%	1.3%	2.1%	2.4%	1.4%	1.5%	1.2%
National (Thousands)	5,739	5,780	5,787	5,813	5,852	5,945	5,972	5,985	5,985
% Ch	1.4%	0.7%	0.1%	0.5%	0.7%	1.6%	0.4%	0.2%	0.0%
STATE & LOCAL GOVERNMENT									
Idaho	105,851	106,619	108,299	110,125	111,750	113,131	114,282	115,422	116,529
% Ch	0.8%	0.7%	1.6%	1.7%	1.5%	1.2%	1.0%	1.0%	1.0%
National (Thousands)	19,142	19,271	19,437	19,547	19,653	19,762	19,923	20,089	20,256
% Ch	0.3%	0.7%	0.9%	0.6%	0.5%	0.6%	0.8%	0.8%	0.8%
EDUCATION									
Idaho	54,897	55,672	56,648	57,495	58,397	59,188	60,044	60,857	61,619
% Ch	1.0%	1.4%	1.8%	1.5%	1.6%	1.4%	1.4%	1.4%	1.3%
NONEDUCATION									
Idaho	50,954	50,947	51,651	52,630	53,353	53,943	54,239	54,565	54,910
% Ch	0.6%	0.0%	1.4%	1.9%	1.4%	1.1%	0.5%	0.6%	0.6%
FEDERAL GOVERNMENT									
Idaho	12,337	12,583	12,831	12,974	13,078	13,331	13,581	13,285	13,447
% Ch	-0.6%	2.0%	2.0%	1.1%	0.8%	1.9%	1.9%	-2.2%	1.2%
National (Thousands)	2,733	2,757	2,795	2,805	2,796	2,808	2,936	2,811	2,811
% Ch	-1.3%	0.9%	1.4%	0.4%	-0.3%	0.5%	4.5%	-4.2%	0.0%

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**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JULY 2019**

MISCELLANEOUS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
SELECTED CHAIN-WEIGHTED DEFL.									
Gross Domestic Product	87.407	90.074	92.498	94.264	94.999	96.109	98.112	100.000	101.773
% Ch	3.1%	3.1%	2.7%	1.9%	0.8%	1.2%	2.1%	1.9%	1.8%
Consumption Expenditures	86.813	89.175	91.438	94.180	94.094	95.705	98.131	100.000	101.346
% Ch	2.8%	2.7%	2.5%	3.0%	-0.1%	1.7%	2.5%	1.9%	1.3%
Durable Goods	112.309	110.388	108.038	106.012	104.020	102.107	101.280	100.000	97.968
% Ch	-1.0%	-1.7%	-2.1%	-1.9%	-1.9%	-1.8%	-0.8%	-1.3%	-2.0%
Nondurable Goods	81.998	84.553	87.041	91.904	89.467	92.182	97.653	100.000	100.082
% Ch	3.8%	3.1%	2.9%	5.6%	-2.7%	3.0%	5.9%	2.4%	0.1%
Services	84.674	87.616	90.517	93.235	94.231	95.957	97.815	100.000	102.316
% Ch	3.3%	3.5%	3.3%	3.0%	1.1%	1.8%	1.9%	2.2%	2.3%
Consumer Price Index (1982-84=1.000)	1.953	2.016	2.073	2.153	2.146	2.181	2.249	2.296	2.330
% Ch	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%
SELECTED INTEREST RATES									
Federal Funds	3.2%	5.0%	5.0%	1.9%	0.2%	0.2%	0.1%	0.1%	0.1%
NY Fed Discount	4.2%	6.0%	5.9%	2.4%	0.5%	0.7%	0.8%	0.8%	0.8%
Prime	6.2%	8.0%	8.1%	5.1%	3.3%	3.3%	3.3%	3.3%	3.3%
Existing Home Mortgage	5.9%	6.6%	6.5%	6.2%	5.1%	4.9%	4.7%	3.8%	4.0%
U.S. Govt. 3-Month Bills	3.1%	4.7%	4.4%	1.4%	0.2%	0.1%	0.1%	0.1%	0.1%
U.S. Govt. 6-Month Bills	3.4%	4.8%	4.4%	1.6%	0.3%	0.2%	0.1%	0.1%	0.1%
U.S. Govt. 5-Year Notes	4.0%	4.7%	4.4%	2.8%	2.2%	1.9%	1.5%	0.8%	1.2%
U.S. Govt. 10-Year Notes	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%
EXCHANGE RATES (2009=1.000)									
Major Currency Trading Partners	1.126	1.099	1.029	0.975	1.052	1.047	0.964	1.000	1.045
% Ch	-2.1%	-2.4%	-6.4%	-5.3%	7.9%	-0.5%	-7.9%	3.8%	4.5%
Other Important Trading Partners	1.369	1.299	1.203	1.089	1.157	1.097	1.006	1.000	0.988
% Ch	-6.1%	-5.1%	-7.4%	-9.5%	6.3%	-5.2%	-8.3%	-0.6%	-1.2%
SELECTED US PRODUCTION INDICES									
Wood Products	147.7	148.9	139.2	119.0	90.9	94.1	94.3	100.0	105.8
% Ch	6.7%	0.8%	-6.5%	-14.6%	-23.6%	3.6%	0.2%	6.0%	5.8%
Computers & Electronic Products	59.7	68.0	78.4	84.8	75.6	85.6	92.6	100.0	103.2
% Ch	13.7%	14.0%	15.3%	8.1%	-10.8%	13.3%	8.1%	8.0%	3.2%
Food	100.5	101.3	101.9	100.6	100.0	100.4	100.2	100.0	102.0
% Ch	3.1%	0.9%	0.5%	-1.3%	-0.6%	0.5%	-0.2%	-0.2%	2.0%
Agricultural Chemicals	102.6	107.0	98.5	85.2	89.7	93.5	88.5	100.0	116.1
% Ch	3.8%	4.2%	-7.9%	-13.5%	5.2%	4.3%	-5.4%	13.0%	16.1%
Metal Ore Mining	102.0	103.8	101.2	104.4	91.3	97.1	98.9	100.0	101.7
% Ch	7.2%	1.7%	-2.5%	3.2%	-12.6%	6.4%	1.9%	1.1%	1.7%

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ANNUAL DETAIL
JULY 2019**

MISCELLANEOUS

	2014	2015	2016	2017	2018	2019	2020	2021	2022
SELECTED CHAIN-WEIGHTED DEFL.									
Gross Domestic Product	103.688	104.757	105.899	107.932	110.331	112.307	114.845	117.525	120.285
% Ch	1.9%	1.0%	1.1%	1.9%	2.2%	1.8%	2.3%	2.3%	2.3%
Consumption Expenditures	102.868	103.126	104.235	106.073	108.231	109.954	112.130	114.278	116.519
% Ch	1.5%	0.3%	1.1%	1.8%	2.0%	1.6%	2.0%	1.9%	2.0%
Durable Goods	95.496	93.365	91.184	89.136	87.641	86.477	85.269	83.720	82.177
% Ch	-2.5%	-2.2%	-2.3%	-2.2%	-1.7%	-1.3%	-1.4%	-1.8%	-1.8%
Nondurable Goods	100.595	97.079	95.867	97.437	99.301	99.750	101.036	102.383	104.094
% Ch	0.5%	-3.5%	-1.2%	1.6%	1.9%	0.5%	1.3%	1.3%	1.7%
Services	104.853	106.823	109.325	111.984	114.955	117.691	120.853	124.036	127.255
% Ch	2.5%	1.9%	2.3%	2.4%	2.7%	2.4%	2.7%	2.6%	2.6%
Consumer Price Index (1982-84=100)	2.367	2.370	2.400	2.451	2.511	2.560	2.613	2.666	2.724
% Ch	1.6%	0.1%	1.3%	2.1%	2.4%	2.0%	2.1%	2.0%	2.2%
SELECTED INTEREST RATES									
Federal Funds	0.1%	0.1%	0.4%	1.0%	1.8%	2.4%	2.4%	2.4%	2.4%
NY Fed Discount	0.8%	0.8%	1.0%	1.6%	2.4%	3.0%	3.0%	3.0%	3.0%
Prime	3.3%	3.3%	3.5%	4.1%	4.9%	5.5%	5.5%	5.5%	5.5%
Existing Home Mortgage	4.3%	4.0%	3.9%	4.2%	4.7%	4.4%	4.5%	4.7%	4.8%
U.S. Govt. 3-Month Bills	0.0%	0.1%	0.3%	0.9%	1.9%	2.4%	2.2%	2.2%	2.1%
U.S. Govt. 6-Month Bills	0.1%	0.2%	0.5%	1.0%	2.1%	2.4%	2.5%	2.5%	2.5%
U.S. Govt. 5-Year Notes	1.6%	1.5%	1.3%	1.9%	2.7%	2.2%	2.5%	2.7%	2.8%
U.S. Govt. 10-Year Notes	2.5%	2.1%	1.8%	2.3%	2.9%	2.4%	2.6%	3.0%	3.2%
EXCHANGE RATES (2009=1.000)									
Major Currency Trading Partners	1.093	1.310	1.367	1.354	1.314	1.353	1.347	1.370	1.370
% Ch	4.6%	19.8%	4.4%	-0.9%	-3.0%	3.0%	-0.5%	1.7%	0.0%
Other Important Trading Partners	1.009	1.128	1.236	1.224	1.223	1.247	1.253	1.266	1.276
% Ch	2.1%	11.7%	9.6%	-1.0%	-0.1%	2.0%	0.5%	1.0%	0.8%
SELECTED US PRODUCTION INDICES									
Wood Products	108.4	112.7	116.9	124.1	127.1	122.8	123.0	124.2	125.9
% Ch	2.5%	4.0%	3.8%	6.1%	2.5%	-3.4%	0.1%	1.0%	1.3%
Computers & Electronic Products	107.4	108.1	110.4	115.2	120.9	124.9	128.4	131.0	134.4
% Ch	4.1%	0.6%	2.1%	4.4%	4.9%	3.4%	2.8%	2.0%	2.5%
Food	102.9	104.4	106.6	110.8	113.9	115.8	117.8	120.0	122.3
% Ch	0.9%	1.5%	2.1%	4.0%	2.8%	1.6%	1.7%	1.9%	1.9%
Agricultural Chemicals	108.1	94.5	96.5	117.4	122.7	116.7	117.4	120.2	122.3
% Ch	-6.9%	-12.6%	2.1%	21.7%	4.5%	-4.9%	0.7%	2.3%	1.8%
Metal Ore Mining	104.9	99.9	100.3	98.0	93.2	95.8	94.4	93.5	93.1
% Ch	3.2%	-4.7%	0.3%	-2.3%	-4.8%	2.8%	-1.5%	-0.9%	-0.5%

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

DEMOGRAPHICS

	Q1	2017 Q2	Q3	Q4	Q1	2018 Q2	Q3	Q4	Q1	2019 Q2	Q3	Q4
POPULATION												
Idaho (Thousands)	1,705.2	1,714.3	1,723.5	1,732.6	1,741.8	1,750.4	1,758.5	1,766.1	1,774.2	1,781.6	1,789.0	1,796.1
% Ch	2.2%	2.2%	2.1%	2.1%	2.1%	2.0%	1.9%	1.7%	1.9%	1.7%	1.7%	1.6%
National (Millions)	325.357	325.939	326.613	327.191	327.671	328.253	328.927	329.516	330.105	330.693	331.282	331.870
% Ch	0.6%	0.7%	0.8%	0.7%	0.6%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%
BIRTHS												
Idaho (Thousands)	22.345	22.261	22.117	21.913	21.650	21.444	21.294	21.200	21.490	21.592	21.696	21.792
% Ch	-0.4%	-1.5%	-2.6%	-3.6%	-4.7%	-3.8%	-2.8%	-1.7%	5.6%	1.9%	1.9%	1.8%
National (Thousands)	3,857	3,840	3,861	3,918	4,011	4,077	4,118	4,129	4,113	4,102	4,099	4,102
% Ch	-5.5%	-1.8%	2.2%	6.0%	9.8%	6.8%	4.0%	1.1%	-1.6%	-1.0%	-0.4%	0.3%
DEATHS												
Idaho (Thousands)	13.806	13.974	14.091	14.156	14.171	14.213	14.284	14.384	14.448	14.529	14.611	14.691
% Ch	6.6%	5.0%	3.4%	1.9%	0.4%	1.2%	2.0%	2.8%	1.8%	2.3%	2.3%	2.2%
National (Thousands)	2,824	2,840	2,832	2,798	2,739	2,700	2,683	2,685	2,708	2,726	2,739	2,747
% Ch	5.8%	2.3%	-1.1%	-4.7%	-8.2%	-5.5%	-2.5%	0.3%	3.4%	2.7%	1.9%	1.2%
NET MIGRATION												
Idaho (Thousands)	26.790	27.569	28.211	28.718	29.088	28.869	28.060	26.663	25.407	24.092	23.364	22.922
HOUSING												
HOUSING STARTS												
Idaho	11,542	13,717	14,693	16,205	17,899	14,879	15,366	16,793	15,300	15,895	16,372	16,624
% Ch	-19.5%	99.5%	31.6%	48.0%	48.8%	-52.2%	13.7%	42.7%	-31.1%	16.5%	12.5%	6.3%
National (Millions)	1.231	1.169	1.175	1.260	1.321	1.260	1.233	1.185	1.203	1.209	1.201	1.204
% Ch	-7.2%	-18.5%	2.1%	31.9%	20.8%	-17.2%	-8.2%	-14.7%	6.1%	2.1%	-2.7%	1.1%
SINGLE UNITS												
Idaho	9,481	11,019	11,655	12,958	13,669	12,453	12,595	13,575	12,610	13,097	13,552	13,794
% Ch	-24.7%	82.5%	25.1%	52.8%	23.8%	-31.1%	4.6%	34.9%	-25.6%	16.4%	14.6%	7.4%
National (Millions)	0.836	0.825	0.851	0.896	0.893	0.894	0.876	0.828	0.854	0.839	0.835	0.837
% Ch	-1.7%	-5.2%	13.4%	23.1%	-1.6%	0.7%	-7.8%	-20.4%	13.3%	-6.8%	-2.0%	0.9%
MULTIPLE UNITS												
Idaho	2,061	2,698	3,038	3,247	4,230	2,426	2,771	3,218	2,690	2,799	2,820	2,829
% Ch	10.5%	193.5%	60.8%	30.4%	188.0%	-89.2%	70.1%	82.0%	-51.1%	17.1%	3.1%	1.3%
National (Millions)	0.395	0.345	0.324	0.363	0.428	0.365	0.357	0.357	0.349	0.370	0.366	0.367
% Ch	-17.7%	-42.0%	-21.6%	57.5%	92.6%	-46.9%	-9.2%	0.7%	-9.4%	26.8%	-4.2%	1.6%
HOUSING STOCK												
Idaho (Thousands)	593.0	596.0	599.2	602.8	606.8	610.1	613.5	617.2	620.6	624.1	627.7	631.4
% Ch	1.7%	2.0%	2.2%	2.4%	2.7%	2.2%	2.2%	2.5%	2.2%	2.3%	2.3%	2.4%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

DEMOGRAPHICS

	Q1	2020 Q2	Q3	Q4	Q1	2021 Q2	Q3	Q4	Q1	2022 Q2	Q3	Q4
POPULATION												
Idaho (Thousands)	1,803.2	1,810.3	1,817.4	1,824.5	1,831.5	1,838.5	1,845.5	1,852.5	1,859.4	1,866.4	1,873.3	1,880.1
% Ch	1.6%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
National (Millions)	332.457	333.043	333.629	334.214	334.799	335.382	335.965	336.547	337.128	337.707	338.286	338.862
% Ch	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
BIRTHS												
Idaho (Thousands)	21.889	21.984	22.079	22.173	22.267	22.359	22.451	22.543	22.634	22.725	22.815	22.903
% Ch	1.8%	1.8%	1.7%	1.7%	1.7%	1.7%	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%
National (Thousands)	4,111	4,119	4,124	4,128	4,131	4,133	4,135	4,138	4,141	4,144	4,146	4,149
% Ch	0.9%	0.7%	0.6%	0.4%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.2%	0.2%
DEATHS												
Idaho (Thousands)	14.771	14.852	14.934	15.015	15.098	15.181	15.264	15.348	15.432	15.516	15.601	15.686
% Ch	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
National (Thousands)	2,750	2,754	2,760	2,767	2,775	2,783	2,791	2,798	2,805	2,812	2,820	2,828
% Ch	0.4%	0.6%	0.8%	1.0%	1.2%	1.1%	1.1%	1.1%	1.0%	1.1%	1.1%	1.2%
NET MIGRATION												
	21.888	21.629	21.291	21.197	21.108	20.992	20.904	20.815	20.702	20.635	20.546	20.434
HOUSING												
HOUSING STARTS												
Idaho	16,888	17,154	17,410	17,606	17,841	18,094	18,245	18,465	18,675	18,859	19,029	19,190
% Ch	6.5%	6.5%	6.1%	4.6%	5.5%	5.8%	3.4%	4.9%	4.6%	4.0%	3.7%	3.4%
National (Millions)	1.209	1.206	1.218	1.231	1.216	1.228	1.246	1.264	1.283	1.283	1.280	1.277
% Ch	1.6%	-0.9%	3.9%	4.4%	-5.0%	4.0%	6.1%	6.1%	6.1%	0.1%	-1.0%	-0.9%
SINGLE UNITS												
Idaho	14,044	14,283	14,519	14,689	14,886	15,098	15,258	15,443	15,601	15,740	15,870	15,983
% Ch	7.4%	7.0%	6.8%	4.8%	5.5%	5.8%	4.3%	5.0%	4.1%	3.6%	3.3%	2.9%
National (Millions)	0.840	0.838	0.846	0.855	0.844	0.852	0.865	0.877	0.891	0.891	0.889	0.887
% Ch	1.6%	-0.8%	3.8%	4.2%	-5.1%	3.9%	6.1%	6.1%	6.1%	0.1%	-0.9%	-0.9%
MULTIPLE UNITS												
Idaho	2,844	2,871	2,891	2,916	2,955	2,996	2,987	3,022	3,074	3,119	3,159	3,207
% Ch	2.1%	3.9%	2.7%	3.6%	5.4%	5.7%	-1.1%	4.7%	7.2%	5.9%	5.3%	6.3%
National (Millions)	0.369	0.368	0.372	0.376	0.372	0.376	0.381	0.387	0.392	0.392	0.391	0.390
% Ch	1.7%	-1.1%	4.3%	5.0%	-4.8%	4.1%	6.1%	6.0%	6.0%	0.0%	-1.1%	-1.0%
HOUSING STOCK												
Idaho (Thousands)	635.2	639.0	642.8	646.8	650.7	654.8	658.8	663.0	667.1	671.3	675.6	679.9
% Ch	2.4%	2.4%	2.4%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.6%	2.6%	2.6%

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IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019

OUTPUT, INCOME, & WAGES

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GROSS DOM. PRODUCT (Billions)												
Current Dollars	19,163	19,359	19,588	19,832	20,041	20,412	20,658	20,865	21,049	21,246	21,478	21,685
% Ch	3.9%	4.2%	4.8%	5.1%	4.3%	7.6%	4.9%	4.1%	3.6%	3.8%	4.4%	3.9%
2009 Chain-Weighted	17,863	17,995	18,121	18,224	18,324	18,512	18,665	18,765	18,908	18,979	19,059	19,148
% Ch	1.8%	3.0%	2.8%	2.3%	2.2%	4.2%	3.4%	2.2%	3.1%	1.5%	1.7%	1.9%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	70,304	71,359	72,019	73,569	74,495	75,282	75,861	77,757	78,693	79,600	80,577	81,698
% Ch	8.3%	6.1%	3.8%	8.9%	5.1%	4.3%	3.1%	10.4%	4.9%	4.7%	5.0%	5.7%
Idaho Nonfarm (Millions)	68,274	69,299	70,104	71,666	72,633	73,412	74,234	75,985	76,740	77,877	78,838	79,935
% Ch	6.6%	6.1%	4.7%	9.2%	5.5%	4.4%	4.6%	9.8%	4.0%	6.1%	5.0%	5.7%
National (Billions)	16,604	16,721	16,895	17,103	17,319	17,467	17,657	17,835	17,979	18,166	18,350	18,550
% Ch	6.3%	2.8%	4.2%	5.0%	5.2%	3.5%	4.4%	4.1%	3.3%	4.2%	4.1%	4.4%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	66,621	67,489	67,843	68,838	69,282	69,672	69,934	71,419	72,211	72,600	73,038	73,685
% Ch	6.1%	5.3%	2.1%	6.0%	2.6%	2.3%	1.5%	8.8%	4.5%	2.2%	2.4%	3.6%
Idaho Nonfarm (Millions)	64,697	65,540	66,039	67,057	67,551	67,941	68,435	69,791	70,418	71,028	71,461	72,095
% Ch	4.5%	5.3%	3.1%	6.3%	3.0%	2.3%	2.9%	8.2%	3.6%	3.5%	2.5%	3.6%
National (Billions)	15,735	15,814	15,915	16,003	16,107	16,165	16,278	16,381	16,498	16,569	16,633	16,730
% Ch	4.2%	2.0%	2.6%	2.2%	2.6%	1.4%	2.8%	2.6%	2.9%	1.7%	1.6%	2.4%
PER CAPITA PERS INC - CURR \$												
Idaho	41,229	41,625	41,788	42,462	42,769	43,008	43,139	44,028	44,353	44,679	45,041	45,486
% Ch	6.0%	3.9%	1.6%	6.6%	2.9%	2.3%	1.2%	8.5%	3.0%	3.0%	3.3%	4.0%
National	51,034	51,301	51,728	52,272	52,855	53,211	53,681	54,125	54,464	54,934	55,391	55,895
% Ch	5.7%	2.1%	3.4%	4.3%	4.5%	2.7%	3.6%	3.3%	2.5%	3.5%	3.4%	3.7%
PER CAPITA PERS INC - 2009 \$												
Idaho	39,069	39,367	39,364	39,731	39,777	39,803	39,769	40,439	40,700	40,750	40,827	41,025
% Ch	3.9%	3.1%	0.0%	3.8%	0.5%	0.3%	-0.3%	6.9%	2.6%	0.5%	0.7%	2.0%
National	48,361	48,519	48,728	48,911	49,157	49,246	49,488	49,713	49,977	50,103	50,209	50,413
% Ch	3.6%	1.3%	1.7%	1.5%	2.0%	0.7%	2.0%	1.8%	2.1%	1.0%	0.8%	1.6%
AVERAGE ANNUAL WAGE												
Idaho	41,638	42,417	42,808	43,739	43,592	43,832	43,983	44,853	44,944	45,258	45,612	45,968
% Ch	2.1%	7.7%	3.7%	9.0%	-1.3%	2.2%	1.4%	8.2%	0.8%	2.8%	3.2%	3.2%
National	57,086	57,372	57,920	58,261	58,837	58,966	59,429	59,473	59,801	60,218	60,746	61,267
% Ch	4.0%	2.0%	3.9%	2.4%	4.0%	0.9%	3.2%	0.3%	2.2%	2.8%	3.6%	3.5%

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**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

OUTPUT, INCOME, & WAGES

	2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GROSS DOM. PRODUCT (Billions)												
Current Dollars	21,905	22,127	22,346	22,566	22,805	23,032	23,262	23,501	23,744	23,990	24,235	24,473
% Ch	4.1%	4.1%	4.0%	4.0%	4.3%	4.1%	4.0%	4.2%	4.2%	4.2%	4.1%	4.0%
2009 Chain-Weighted	19,236	19,322	19,403	19,485	19,572	19,654	19,738	19,825	19,913	20,003	20,090	20,170
% Ch	1.8%	1.8%	1.7%	1.7%	1.8%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%	1.6%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	82,887	84,066	85,231	86,350	87,341	88,410	89,503	90,562	91,685	92,746	93,752	94,717
% Ch	6.0%	5.8%	5.7%	5.4%	4.7%	5.0%	5.0%	4.8%	5.1%	4.7%	4.4%	4.2%
Idaho Nonfarm (Millions)	81,112	82,248	83,346	84,383	85,408	86,423	87,473	88,503	89,621	90,669	91,660	92,606
% Ch	6.0%	5.7%	5.4%	5.1%	4.9%	4.8%	4.9%	4.8%	5.2%	4.8%	4.4%	4.2%
National (Billions)	18,775	18,996	19,206	19,406	19,635	19,844	20,052	20,267	20,499	20,714	20,927	21,140
% Ch	5.0%	4.8%	4.5%	4.2%	4.8%	4.3%	4.3%	4.3%	4.7%	4.3%	4.2%	4.1%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	74,406	75,148	75,831	76,514	76,988	77,544	78,137	78,678	79,267	79,792	80,266	80,698
% Ch	4.0%	4.0%	3.7%	3.7%	2.5%	2.9%	3.1%	2.8%	3.0%	2.7%	2.4%	2.2%
Idaho Nonfarm (Millions)	72,812	73,523	74,153	74,770	75,284	75,801	76,365	76,889	77,482	78,005	78,476	78,900
% Ch	4.0%	4.0%	3.5%	3.4%	2.8%	2.8%	3.0%	2.8%	3.1%	2.7%	2.4%	2.2%
National (Billions)	16,854	16,981	17,087	17,195	17,308	17,405	17,506	17,607	17,723	17,821	17,917	18,011
% Ch	3.0%	3.0%	2.5%	2.6%	2.6%	2.3%	2.3%	2.3%	2.7%	2.2%	2.2%	2.1%
PER CAPITA PERS INC - CURR \$												
Idaho	45,966	46,436	46,897	47,329	47,688	48,088	48,498	48,887	49,308	49,694	50,047	50,378
% Ch	4.3%	4.2%	4.0%	3.7%	3.1%	3.4%	3.5%	3.2%	3.5%	3.2%	2.9%	2.7%
National	56,475	57,039	57,565	58,065	58,648	59,168	59,686	60,219	60,806	61,338	61,863	62,386
% Ch	4.2%	4.1%	3.7%	3.5%	4.1%	3.6%	3.6%	3.6%	4.0%	3.5%	3.5%	3.4%
PER CAPITA PERS INC - 2009 \$												
Idaho	41,263	41,510	41,724	41,938	42,035	42,178	42,339	42,472	42,630	42,753	42,848	42,921
% Ch	2.3%	2.4%	2.1%	2.1%	0.9%	1.4%	1.5%	1.3%	1.5%	1.2%	0.9%	0.7%
National	50,696	50,988	51,216	51,450	51,696	51,896	52,107	52,317	52,570	52,771	52,964	53,152
% Ch	2.3%	2.3%	1.8%	1.8%	1.9%	1.6%	1.6%	1.6%	1.9%	1.5%	1.5%	1.4%
AVERAGE ANNUAL WAGE												
Idaho	46,324	46,653	46,986	47,301	47,626	47,952	48,304	48,645	48,982	49,311	49,608	49,877
% Ch	3.1%	2.9%	2.9%	2.7%	2.8%	2.8%	3.0%	2.9%	2.8%	2.7%	2.4%	2.2%
National	61,767	62,247	62,819	63,390	63,977	64,562	65,156	65,772	66,413	67,056	67,711	68,375
% Ch	3.3%	3.1%	3.7%	3.7%	3.8%	3.7%	3.7%	3.8%	4.0%	3.9%	4.0%	4.0%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

PERSONAL INCOME -- CURR \$\$

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WAGE AND SALARY PAYMENTS												
Idaho (Millions)	30,415	31,185	31,648	32,527	32,831	33,203	33,522	34,528	34,820	35,312	35,808	36,312
% Ch	5.8%	10.5%	6.1%	11.6%	3.8%	4.6%	3.9%	12.6%	3.4%	5.8%	5.7%	5.7%
National (Billions)	8,325	8,396	8,507	8,588	8,711	8,771	8,879	8,924	9,011	9,110	9,220	9,324
% Ch	5.7%	3.4%	5.4%	3.9%	5.8%	2.8%	5.0%	2.1%	3.9%	4.5%	4.9%	4.6%
FARM PROPRIETORS INCOME												
Idaho (Millions)	1,376	1,405	1,257	1,239	1,193	1,196	939	1,070	1,237	1,072	1,082	1,099
% Ch	169.7%	8.8%	-35.9%	-5.5%	-14.2%	1.2%	-62.1%	69.0%	78.7%	-43.7%	3.8%	6.6%
National (Billions)	42	42	36	35	35	37	28	48	36	25	23	24
% Ch	245.1%	-6.8%	-41.2%	-10.0%	-2.2%	21.4%	-67.5%	762.8%	-69.7%	-76.2%	-22.1%	19.1%
NONFARM PROPRIETORS INCOME												
Idaho (Millions)	6,448	6,599	6,706	6,715	6,898	6,969	7,104	7,278	7,213	7,224	7,336	7,342
% Ch	-0.1%	9.7%	6.7%	0.5%	11.3%	4.2%	8.0%	10.2%	-3.5%	0.6%	6.4%	0.3%
National (Billions)	1,433	1,453	1,471	1,491	1,515	1,531	1,552	1,569	1,571	1,574	1,578	1,571
% Ch	7.4%	5.9%	4.9%	5.4%	6.6%	4.5%	5.5%	4.4%	0.4%	0.8%	1.2%	-1.7%
DIVIDENDS, RENT & INTEREST												
Idaho (Millions)	15,695	15,748	15,808	16,296	16,462	16,644	16,845	17,160	16,967	17,390	17,605	17,937
% Ch	10.6%	1.4%	1.5%	12.9%	4.1%	4.5%	4.9%	7.7%	-4.4%	10.3%	5.0%	7.8%
National (Billions)	3,326	3,335	3,347	3,438	3,469	3,502	3,540	3,602	3,563	3,606	3,639	3,697
% Ch	9.2%	1.1%	1.4%	11.3%	3.6%	3.9%	4.4%	7.3%	-4.3%	4.9%	3.7%	6.6%
OTHER LABOR INCOME												
Idaho (Millions)	7,705	7,908	7,957	8,170	8,199	8,308	8,336	8,557	8,616	8,816	8,887	9,007
% Ch	2.8%	11.0%	2.5%	11.2%	1.4%	5.5%	1.3%	11.0%	2.8%	9.7%	3.3%	5.5%
National (Billions)	1,327	1,343	1,356	1,366	1,376	1,385	1,395	1,403	1,413	1,423	1,433	1,449
% Ch	5.5%	4.7%	3.9%	3.2%	2.9%	2.6%	2.8%	2.5%	2.8%	2.9%	2.6%	4.6%
GOVT. TRANSFERS TO INDIV.												
Idaho (Millions)	12,844	12,804	12,979	13,101	13,423	13,528	13,700	13,924	14,660	14,679	14,799	14,985
% Ch	9.4%	-1.2%	5.6%	3.8%	10.2%	3.2%	5.2%	6.7%	22.9%	0.5%	3.3%	5.1%
National (Billions)	2,834	2,842	2,875	2,888	2,934	2,966	2,997	3,026	3,137	3,186	3,223	3,256
% Ch	3.9%	1.1%	4.8%	1.7%	6.6%	4.4%	4.3%	3.9%	15.5%	6.5%	4.7%	4.2%
CONTRIB. FOR SOCIAL INSUR.												
Idaho (Millions)	5,482	5,606	5,674	5,820	5,908	5,972	6,023	6,191	6,274	6,389	6,474	6,544
% Ch	6.6%	9.4%	4.9%	10.7%	6.2%	4.4%	3.5%	11.6%	5.5%	7.5%	5.4%	4.4%
National (Billions)	1,281	1,291	1,306	1,317	1,344	1,352	1,367	1,374	1,394	1,406	1,422	1,433
% Ch	7.5%	3.2%	4.8%	3.5%	8.2%	2.7%	4.5%	1.9%	6.0%	3.6%	4.5%	3.2%
RESIDENCE ADJUSTMENT												
Idaho (Millions)	1,304	1,317	1,338	1,341	1,399	1,405	1,439	1,431	1,454	1,497	1,534	1,559
% Ch	7.1%	4.1%	6.6%	0.9%	18.5%	1.8%	9.9%	-2.2%	6.8%	12.1%	10.3%	6.7%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

PERSONAL INCOME -- CURR \$\$

	2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WAGE AND SALARY PAYMENTS												
Idaho (Millions)	36,814	37,318	37,795	38,268	38,754	39,235	39,735	40,229	40,718	41,206	41,661	42,081
% Ch	5.7%	5.6%	5.2%	5.1%	5.2%	5.1%	5.2%	5.1%	4.9%	4.9%	4.5%	4.1%
National (Billions)	9,427	9,534	9,626	9,723	9,828	9,934	10,041	10,150	10,263	10,376	10,491	10,605
% Ch	4.5%	4.7%	3.9%	4.1%	4.4%	4.4%	4.4%	4.4%	4.5%	4.5%	4.5%	4.4%
FARM PROPRIETORS INCOME												
Idaho (Millions)	1,106	1,144	1,206	1,284	1,245	1,296	1,335	1,361	1,364	1,374	1,384	1,399
% Ch	2.4%	14.5%	23.5%	28.6%	-11.7%	17.5%	12.7%	7.9%	1.0%	2.9%	3.1%	4.3%
National (Billions)	28	34	41	50	59	65	70	72	71	69	67	64
% Ch	76.5%	112.9%	124.4%	111.9%	87.3%	56.5%	30.9%	11.2%	-2.4%	-10.8%	-14.9%	-15.8%
NONFARM PROPRIETORS INCOME												
Idaho (Millions)	7,346	7,359	7,379	7,400	7,433	7,461	7,491	7,521	7,561	7,602	7,632	7,666
% Ch	0.2%	0.7%	1.1%	1.1%	1.8%	1.5%	1.6%	1.6%	2.1%	2.2%	1.6%	1.8%
National (Billions)	1,573	1,575	1,581	1,585	1,591	1,593	1,596	1,603	1,609	1,618	1,626	1,634
% Ch	0.4%	0.4%	1.6%	1.1%	1.4%	0.5%	0.8%	1.6%	1.5%	2.3%	2.1%	1.8%
DIVIDENDS, RENT & INTEREST												
Idaho (Millions)	18,266	18,616	18,953	19,230	19,499	19,737	19,985	20,215	20,450	20,699	20,939	21,166
% Ch	7.5%	7.9%	7.4%	6.0%	5.7%	5.0%	5.1%	4.7%	5.0%	5.0%	4.7%	4.4%
National (Billions)	3,751	3,811	3,870	3,916	3,964	4,012	4,060	4,110	4,158	4,206	4,252	4,300
% Ch	6.0%	6.5%	6.3%	4.9%	4.9%	5.0%	4.9%	5.0%	4.8%	4.7%	4.5%	4.6%
OTHER LABOR INCOME												
Idaho (Millions)	9,127	9,246	9,360	9,472	9,488	9,602	9,721	9,838	9,954	10,070	10,179	10,278
% Ch	5.4%	5.3%	5.0%	4.9%	0.7%	4.9%	5.0%	4.9%	4.8%	4.7%	4.4%	4.0%
National (Billions)	1,465	1,481	1,496	1,511	1,527	1,543	1,560	1,577	1,595	1,612	1,630	1,648
% Ch	4.5%	4.7%	3.9%	4.1%	4.4%	4.4%	4.4%	4.4%	4.5%	4.5%	4.5%	4.4%
GOVT. TRANSFERS TO INDIV.												
Idaho (Millions)	15,288	15,489	15,690	15,895	16,202	16,406	16,615	16,827	17,151	17,359	17,568	17,780
% Ch	8.3%	5.3%	5.3%	5.3%	8.0%	5.1%	5.2%	5.2%	7.9%	4.9%	4.9%	4.9%
National (Billions)	3,313	3,349	3,384	3,420	3,478	3,514	3,550	3,588	3,648	3,684	3,720	3,757
% Ch	7.2%	4.4%	4.3%	4.3%	6.9%	4.2%	4.2%	4.3%	6.9%	4.0%	4.0%	4.0%
CONTRIB. FOR SOCIAL INSUR.												
Idaho (Millions)	6,644	6,715	6,785	6,855	6,959	7,031	7,108	7,184	7,291	7,366	7,436	7,500
% Ch	6.3%	4.4%	4.2%	4.2%	6.2%	4.2%	4.4%	4.3%	6.1%	4.2%	3.8%	3.5%
National (Billions)	1,451	1,463	1,474	1,485	1,505	1,518	1,531	1,545	1,567	1,581	1,596	1,611
% Ch	5.0%	3.4%	2.9%	3.1%	5.3%	3.5%	3.6%	3.7%	5.6%	3.8%	3.8%	3.8%
RESIDENCE ADJUSTMENT												
Idaho (Millions)	1,584	1,609	1,633	1,657	1,681	1,705	1,729	1,754	1,778	1,802	1,825	1,846
% Ch	6.7%	6.5%	6.1%	5.9%	5.9%	5.8%	6.0%	5.8%	5.7%	5.6%	5.1%	4.7%

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

EMPLOYMENT

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TOTAL NONFARM EMPLOYMENT												
Idaho	708,038	713,188	717,402	722,093	731,318	735,702	739,920	747,650	752,480	757,993	762,781	767,605
% Ch	3.8%	2.9%	2.4%	2.6%	5.2%	2.4%	2.3%	4.2%	2.6%	3.0%	2.6%	2.6%
National (Thousands)	145,831	146,338	146,868	147,407	148,048	148,742	149,409	150,058	150,687	151,285	151,780	152,187
% Ch	1.6%	1.4%	1.5%	1.5%	1.8%	1.9%	1.8%	1.7%	1.7%	1.6%	1.3%	1.1%
GOODS PRODUCING SECTOR												
Idaho	112,801	114,276	115,547	116,972	119,481	120,128	121,339	123,704	124,827	125,843	126,697	127,534
% Ch	6.2%	5.3%	4.5%	5.0%	8.9%	2.2%	4.1%	8.0%	3.7%	3.3%	2.7%	2.7%
National (Thousands)	19,921	20,018	20,114	20,266	20,470	20,647	20,790	20,925	21,035	21,087	21,116	21,184
% Ch	2.4%	2.0%	1.9%	3.1%	4.1%	3.5%	2.8%	2.6%	2.1%	1.0%	0.5%	1.3%
MANUFACTURING												
Idaho	66,919	67,458	68,103	68,288	69,157	69,425	69,617	70,606	71,075	71,542	71,858	72,232
% Ch	6.0%	3.3%	3.9%	1.1%	5.2%	1.6%	1.1%	5.8%	2.7%	2.7%	1.8%	2.1%
National (Thousands)	12,433	12,459	12,497	12,566	12,639	12,708	12,766	12,834	12,878	12,883	12,874	12,911
% Ch	1.2%	0.9%	1.2%	2.2%	2.3%	2.2%	1.8%	2.1%	1.4%	0.2%	-0.3%	1.1%
DURABLE MANUFACTURING												
Idaho	39,009	39,439	39,806	40,074	40,738	40,881	41,049	41,647	41,901	42,166	42,389	42,578
% Ch	2.4%	4.5%	3.8%	2.7%	6.8%	1.4%	1.7%	6.0%	2.5%	2.6%	2.1%	1.8%
National (Thousands)	7,752	7,765	7,792	7,846	7,913	7,971	8,022	8,068	8,104	8,102	8,102	8,140
% Ch	0.6%	0.7%	1.4%	2.8%	3.5%	2.9%	2.6%	2.3%	1.8%	-0.1%	0.0%	1.9%
LOGGING & WOOD PRODUCTS												
Idaho	7,771	7,817	7,875	7,953	7,995	8,035	8,237	8,295	8,302	8,331	8,374	8,434
% Ch	0.5%	2.4%	3.0%	4.0%	2.2%	2.0%	10.5%	2.8%	0.3%	1.4%	2.1%	2.9%
National (Thousands)	448	447	445	447	454	456	456	455	457	456	459	466
% Ch	1.0%	-1.3%	-1.6%	2.3%	6.4%	1.2%	0.2%	-0.7%	1.4%	-0.2%	2.2%	6.0%
METAL FABRICATION												
Idaho	6,017	6,002	5,868	5,870	5,905	5,894	5,852	5,834	5,861	5,882	5,904	5,924
% Ch	1.0%	-0.9%	-8.6%	0.1%	2.4%	-0.7%	-2.9%	-1.2%	1.9%	1.4%	1.5%	1.4%
National (Thousands)	1,416	1,419	1,426	1,437	1,450	1,463	1,474	1,478	1,485	1,485	1,484	1,498
% Ch	1.0%	0.7%	2.0%	3.2%	3.6%	3.7%	3.1%	0.9%	1.8%	0.1%	-0.3%	3.8%
MACHINERY												
Idaho	3,093	3,168	3,250	3,229	3,290	3,300	3,379	3,443	3,467	3,502	3,542	3,563
% Ch	-2.9%	10.1%	10.8%	-2.6%	7.9%	1.2%	9.9%	7.9%	2.8%	4.2%	4.6%	2.4%
National (Thousands)	1,069	1,074	1,082	1,090	1,102	1,117	1,126	1,134	1,141	1,140	1,147	1,169
% Ch	1.0%	2.0%	3.1%	3.0%	4.3%	5.5%	3.5%	2.7%	2.4%	-0.3%	2.5%	8.0%
COMPUTER & ELECTRONICS												
Idaho	11,997	12,141	12,379	12,421	12,665	12,706	12,671	12,876	13,003	13,099	13,145	13,233
% Ch	-0.4%	4.9%	8.1%	1.4%	8.1%	1.3%	-1.1%	6.6%	4.0%	3.0%	1.4%	2.7%
National (Thousands)	1,037	1,037	1,037	1,045	1,048	1,053	1,058	1,064	1,073	1,076	1,081	1,082
% Ch	-1.4%	-0.2%	0.3%	2.8%	1.2%	1.9%	1.9%	2.2%	3.6%	1.1%	1.8%	0.3%
OTHER DURABLES												
Idaho	10,132	10,310	10,434	10,602	10,882	10,946	10,910	11,198	11,268	11,351	11,424	11,424
% Ch	10.0%	7.2%	4.9%	6.6%	11.0%	2.4%	-1.3%	11.0%	2.5%	3.0%	2.6%	0.0%
National (Thousands)	3,782	3,789	3,801	3,827	3,859	3,882	3,907	3,938	3,949	3,945	3,932	3,926
% Ch	0.8%	0.8%	1.3%	2.7%	3.4%	2.4%	2.6%	3.2%	1.1%	-0.3%	-1.4%	-0.6%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

EMPLOYMENT

	Q1	2020 Q2	Q3	Q4	Q1	2021 Q2	Q3	Q4	Q1	2022 Q2	Q3	Q4
TOTAL NONFARM EMPLOYMENT												
Idaho	772,341	777,533	781,998	786,641	791,324	795,874	800,333	804,761	809,120	813,527	817,731	821,661
% Ch	2.5%	2.7%	2.3%	2.4%	2.4%	2.3%	2.3%	2.2%	2.2%	2.2%	2.1%	1.9%
National (Thousands)	152,615	153,171	153,243	153,384	153,619	153,864	154,100	154,319	154,530	154,738	154,933	155,099
% Ch	1.1%	1.5%	0.2%	0.4%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.4%
GOODS PRODUCING SECTOR												
Idaho	128,428	129,244	130,122	130,943	131,818	132,781	133,728	134,691	135,632	136,618	137,559	138,444
% Ch	2.8%	2.6%	2.7%	2.5%	2.7%	3.0%	2.9%	2.9%	2.8%	2.9%	2.8%	2.6%
National (Thousands)	21,214	21,162	21,095	21,060	21,034	21,020	21,017	21,015	21,021	21,029	21,042	21,056
% Ch	0.6%	-1.0%	-1.3%	-0.7%	-0.5%	-0.3%	0.0%	0.0%	0.1%	0.2%	0.2%	0.3%
MANUFACTURING												
Idaho	72,552	72,691	72,862	72,967	73,150	73,439	73,735	74,056	74,366	74,736	75,075	75,376
% Ch	1.8%	0.8%	0.9%	0.6%	1.0%	1.6%	1.6%	1.8%	1.7%	2.0%	1.8%	1.6%
National (Thousands)	12,932	12,869	12,792	12,735	12,690	12,663	12,642	12,614	12,586	12,563	12,547	12,535
% Ch	0.7%	-1.9%	-2.4%	-1.8%	-1.4%	-0.8%	-0.6%	-0.9%	-0.9%	-0.7%	-0.5%	-0.4%
DURABLE MANUFACTURING												
Idaho	42,730	42,862	42,943	42,982	43,056	43,193	43,356	43,549	43,725	43,903	44,067	44,212
% Ch	1.4%	1.2%	0.8%	0.4%	0.7%	1.3%	1.5%	1.8%	1.6%	1.6%	1.5%	1.3%
National (Thousands)	8,169	8,123	8,064	8,025	7,989	7,969	7,951	7,925	7,901	7,880	7,865	7,856
% Ch	1.4%	-2.2%	-2.9%	-1.9%	-1.8%	-1.0%	-0.9%	-1.3%	-1.2%	-1.0%	-0.8%	-0.5%
LOGGING & WOOD PRODUCTS												
Idaho	8,462	8,469	8,481	8,444	8,412	8,422	8,423	8,443	8,454	8,449	8,419	8,367
% Ch	1.3%	0.4%	0.6%	-1.8%	-1.5%	0.5%	0.0%	0.9%	0.5%	-0.2%	-1.4%	-2.5%
National (Thousands)	473	475	475	476	478	481	484	486	490	494	498	501
% Ch	6.6%	1.4%	0.1%	0.9%	1.5%	2.6%	2.6%	2.0%	3.1%	3.3%	3.1%	3.0%
METAL FABRICATION												
Idaho	5,942	5,963	5,983	6,003	6,023	6,046	6,070	6,098	6,128	6,155	6,181	6,205
% Ch	1.3%	1.4%	1.4%	1.3%	1.3%	1.5%	1.6%	1.9%	2.0%	1.8%	1.7%	1.6%
National (Thousands)	1,505	1,496	1,486	1,478	1,470	1,464	1,462	1,460	1,460	1,463	1,468	1,474
% Ch	1.8%	-2.4%	-2.6%	-2.2%	-2.2%	-1.4%	-0.8%	-0.5%	0.1%	0.9%	1.3%	1.6%
MACHINERY												
Idaho	3,573	3,592	3,600	3,608	3,620	3,633	3,650	3,670	3,694	3,720	3,748	3,778
% Ch	1.2%	2.1%	0.9%	0.9%	1.3%	1.5%	1.8%	2.2%	2.6%	2.8%	3.1%	3.3%
National (Thousands)	1,180	1,170	1,159	1,155	1,151	1,151	1,151	1,151	1,152	1,152	1,154	1,157
% Ch	3.7%	-3.4%	-3.6%	-1.5%	-1.2%	-0.2%	0.2%	0.0%	0.1%	0.3%	0.4%	1.0%
COMPUTER & ELECTRONICS												
Idaho	13,310	13,380	13,427	13,486	13,557	13,617	13,677	13,736	13,789	13,855	13,925	14,000
% Ch	2.3%	2.1%	1.4%	1.8%	2.1%	1.8%	1.8%	1.7%	1.6%	1.9%	2.0%	2.2%
National (Thousands)	1,082	1,078	1,076	1,075	1,074	1,074	1,075	1,077	1,079	1,079	1,080	1,081
% Ch	0.1%	-1.5%	-0.7%	-0.5%	-0.3%	0.0%	0.4%	0.6%	0.8%	0.2%	0.3%	0.4%
OTHER DURABLES												
Idaho	11,442	11,458	11,451	11,440	11,442	11,475	11,536	11,601	11,661	11,724	11,795	11,863
% Ch	0.6%	0.6%	-0.2%	-0.4%	0.1%	1.1%	2.1%	2.3%	2.1%	2.2%	2.4%	2.3%
National (Thousands)	3,929	3,905	3,868	3,842	3,816	3,799	3,779	3,751	3,720	3,691	3,666	3,643
% Ch	0.4%	-2.4%	-3.8%	-2.6%	-2.6%	-1.8%	-2.1%	-2.9%	-3.2%	-3.1%	-2.7%	-2.5%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

EMPLOYMENT

MANUFACTURING (continued)

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NONDURABLE MANUFACTURING												
Idaho	27,910	28,019	28,297	28,214	28,419	28,544	28,569	28,959	29,175	29,376	29,469	29,653
% Ch	11.3%	1.6%	4.0%	-1.2%	2.9%	1.8%	0.3%	5.6%	3.0%	2.8%	1.3%	2.5%
National (Thousands)	4,681	4,694	4,705	4,719	4,725	4,737	4,745	4,765	4,775	4,781	4,772	4,771
% Ch	2.2%	1.1%	0.9%	1.2%	0.5%	1.0%	0.6%	1.8%	0.8%	0.5%	-0.7%	-0.1%
FOOD PROCESSING												
Idaho	18,019	18,198	18,446	18,230	18,665	18,727	18,815	19,185	19,342	19,506	19,574	19,741
% Ch	13.2%	4.0%	5.6%	-4.6%	9.9%	1.3%	1.9%	8.1%	3.3%	3.4%	1.4%	3.5%
National (Thousands)	1,587	1,598	1,603	1,607	1,612	1,617	1,620	1,630	1,633	1,637	1,637	1,651
% Ch	4.3%	2.8%	1.4%	1.0%	1.1%	1.5%	0.6%	2.5%	0.8%	1.0%	0.0%	3.3%
PRINTING												
Idaho	1,227	1,255	1,267	1,448	1,252	1,246	1,247	1,262	1,261	1,265	1,263	1,254
% Ch	0.2%	9.4%	3.8%	70.6%	-44.2%	-1.7%	0.0%	4.9%	-0.1%	1.2%	-0.5%	-2.9%
National (Thousands)	443	441	440	437	434	431	430	427	423	420	418	416
% Ch	-1.1%	-2.5%	-0.6%	-2.9%	-2.1%	-2.9%	-0.9%	-2.8%	-3.8%	-2.8%	-2.2%	-1.9%
CHEMICALS												
Idaho	2,930	2,937	2,946	2,963	3,008	3,041	2,973	2,951	2,972	2,978	2,968	2,956
% Ch	19.4%	1.0%	1.2%	2.3%	6.3%	4.4%	-8.6%	-2.9%	2.9%	0.8%	-1.4%	-1.5%
National (Thousands)	817	822	825	832	831	834	839	847	855	860	860	857
% Ch	2.3%	2.6%	1.3%	3.2%	-0.4%	1.8%	2.5%	3.8%	3.8%	2.2%	0.0%	-1.1%
OTHER NONDURABLES												
Idaho	5,733	5,629	5,638	5,573	5,494	5,530	5,533	5,561	5,599	5,627	5,664	5,702
% Ch	4.1%	-7.1%	0.6%	-4.5%	-5.5%	2.7%	0.2%	2.0%	2.7%	2.0%	2.7%	2.7%
National (Thousands)	1,834	1,834	1,837	1,844	1,849	1,854	1,855	1,861	1,863	1,863	1,857	1,847
% Ch	1.3%	-0.1%	0.8%	1.5%	1.0%	1.2%	0.2%	1.2%	0.5%	0.1%	-1.4%	-2.2%
MINING												
Idaho	2,339	2,181	2,180	2,164	2,189	2,197	2,219	2,390	2,344	2,358	2,365	2,363
% Ch	-16.0%	-24.3%	-0.3%	-2.9%	4.6%	1.5%	4.1%	34.7%	-7.5%	2.3%	1.2%	-0.3%
National (Thousands)	605	623	635	641	656	679	693	703	709	705	708	712
% Ch	6.3%	12.8%	7.3%	4.2%	9.7%	14.7%	8.2%	6.3%	3.6%	-2.5%	1.5%	2.5%
CONSTRUCTION												
Idaho	43,543	44,637	45,264	46,520	48,135	48,506	49,503	50,709	51,407	51,943	52,474	52,939
% Ch	8.0%	10.4%	5.7%	11.6%	14.6%	3.1%	8.5%	10.1%	5.6%	4.2%	4.2%	3.6%
National (Thousands)	6,884	6,935	6,983	7,060	7,175	7,260	7,331	7,388	7,447	7,499	7,534	7,562
% Ch	4.3%	3.0%	2.8%	4.4%	6.7%	4.8%	4.0%	3.1%	3.3%	2.8%	1.9%	1.5%
NONGOODS PRODUCING												
Idaho	595,236	598,912	601,855	605,121	611,837	615,574	618,581	623,946	627,653	632,151	636,084	640,072
% Ch	3.3%	2.5%	2.0%	2.2%	4.5%	2.5%	2.0%	3.5%	2.4%	2.9%	2.5%	2.5%
National (Thousands)	125,910	126,319	126,753	127,140	127,577	128,094	128,619	129,133	129,652	130,198	130,664	131,003
% Ch	1.5%	1.3%	1.4%	1.2%	1.4%	1.6%	1.6%	1.6%	1.6%	1.7%	1.4%	1.0%
SERVICES												
Idaho	357,506	360,517	362,580	365,287	370,829	373,985	375,912	381,091	383,716	387,518	390,681	393,905
% Ch	4.2%	3.4%	2.3%	3.0%	6.2%	3.4%	2.1%	5.6%	2.8%	4.0%	3.3%	3.3%
National (Thousands)	81,888	82,337	82,764	83,120	83,529	83,994	84,455	84,946	85,408	85,919	86,349	86,662
% Ch	2.1%	2.2%	2.1%	1.7%	2.0%	2.2%	2.2%	2.3%	2.2%	2.4%	2.0%	1.5%
INFORMATION												
Idaho	9,113	9,008	9,023	8,904	9,011	8,978	8,887	8,788	8,672	8,679	8,699	8,727
% Ch	-0.5%	-4.6%	0.7%	-5.1%	4.9%	-1.4%	-4.0%	-4.4%	-5.2%	0.3%	1.0%	1.3%
National (Thousands)	2,813	2,806	2,814	2,817	2,816	2,830	2,827	2,829	2,813	2,814	2,810	2,786
% Ch	0.0%	-1.1%	1.2%	0.4%	-0.1%	2.1%	-0.5%	0.4%	-2.3%	0.2%	-0.6%	-3.4%
FINANCIAL ACTIVITIES												
Idaho	34,866	35,127	35,315	35,576	35,948	36,428	36,735	37,073	37,285	37,532	37,747	38,023
% Ch	3.6%	3.0%	2.2%	3.0%	4.3%	5.5%	3.4%	3.7%	2.3%	2.7%	2.3%	3.0%
National (Thousands)	8,401	8,435	8,471	8,493	8,522	8,555	8,584	8,613	8,629	8,661	8,691	8,677
% Ch	2.6%	1.6%	1.7%	1.0%	1.4%	1.5%	1.4%	1.4%	0.7%	1.5%	1.4%	-0.6%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

EMPLOYMENT

MANUFACTURING (continued)

	2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NONDURABLE MANUFACTURING												
Idaho	29,823	29,829	29,919	29,985	30,094	30,246	30,379	30,507	30,641	30,833	31,008	31,164
% Ch	2.3%	0.1%	1.2%	0.9%	1.5%	2.0%	1.8%	1.7%	1.8%	2.5%	2.3%	2.0%
National (Thousands)	4,763	4,746	4,728	4,710	4,701	4,694	4,692	4,688	4,685	4,683	4,682	4,679
% Ch	-0.6%	-1.5%	-1.5%	-1.5%	-0.8%	-0.6%	-0.2%	-0.3%	-0.2%	-0.2%	-0.1%	-0.2%
FOOD PROCESSING												
Idaho	19,901	19,896	19,973	20,025	20,114	20,244	20,353	20,457	20,569	20,735	20,882	21,009
% Ch	3.3%	-0.1%	1.6%	1.1%	1.8%	2.6%	2.2%	2.1%	2.2%	3.3%	2.9%	2.5%
National (Thousands)	1,658	1,659	1,659	1,659	1,665	1,671	1,679	1,686	1,693	1,699	1,706	1,712
% Ch	1.6%	0.3%	0.0%	0.0%	1.6%	1.4%	1.9%	1.7%	1.6%	1.6%	1.6%	1.5%
PRINTING												
Idaho	1,244	1,238	1,232	1,228	1,223	1,218	1,214	1,210	1,209	1,208	1,208	1,208
% Ch	-3.1%	-2.1%	-1.7%	-1.5%	-1.5%	-1.6%	-1.5%	-1.1%	-0.5%	-0.2%	0.0%	0.1%
National (Thousands)	413	410	408	406	405	405	405	405	405	406	406	406
% Ch	-2.5%	-2.8%	-2.3%	-1.5%	-1.0%	-0.3%	0.0%	0.2%	0.3%	0.3%	0.4%	0.3%
CHEMICALS												
Idaho	2,939	2,922	2,906	2,890	2,881	2,877	2,878	2,879	2,880	2,885	2,891	2,899
% Ch	-2.3%	-2.4%	-2.2%	-2.2%	-1.1%	-0.6%	0.1%	0.2%	0.2%	0.6%	0.9%	1.1%
National (Thousands)	856	853	849	845	841	837	833	830	826	822	819	815
% Ch	-0.5%	-1.4%	-1.8%	-2.1%	-2.0%	-1.8%	-1.8%	-1.7%	-1.7%	-1.8%	-1.7%	-1.7%
OTHER NONDURABLES												
Idaho	5,738	5,774	5,809	5,842	5,875	5,907	5,935	5,961	5,984	6,006	6,027	6,048
% Ch	2.6%	2.5%	2.4%	2.3%	2.3%	2.1%	2.0%	1.7%	1.5%	1.5%	1.4%	1.4%
National (Thousands)	1,836	1,824	1,812	1,800	1,790	1,781	1,774	1,768	1,761	1,756	1,751	1,745
% Ch	-2.2%	-2.8%	-2.5%	-2.6%	-2.3%	-1.9%	-1.5%	-1.5%	-1.4%	-1.3%	-1.1%	-1.2%
MINING												
Idaho	2,347	2,332	2,320	2,302	2,287	2,271	2,253	2,237	2,225	2,214	2,202	2,190
% Ch	-2.7%	-2.5%	-2.0%	-3.1%	-2.6%	-2.7%	-3.2%	-2.8%	-2.1%	-2.0%	-2.2%	-2.1%
National (Thousands)	716	720	722	721	719	720	723	727	730	733	736	738
% Ch	2.1%	2.5%	1.1%	-0.6%	-1.0%	0.2%	2.0%	2.2%	1.5%	1.8%	1.6%	1.1%
CONSTRUCTION												
Idaho	53,529	54,221	54,940	55,675	56,381	57,072	57,740	58,399	59,041	59,668	60,282	60,878
% Ch	4.5%	5.3%	5.4%	5.5%	5.2%	5.0%	4.8%	4.6%	4.5%	4.3%	4.2%	4.0%
National (Thousands)	7,566	7,573	7,582	7,603	7,625	7,637	7,652	7,675	7,704	7,733	7,759	7,782
% Ch	0.2%	0.4%	0.5%	1.2%	1.1%	0.6%	0.8%	1.2%	1.6%	1.5%	1.3%	1.2%
NONGOODS PRODUCING												
Idaho	643,913	648,290	651,876	655,698	659,506	663,093	666,605	670,070	673,488	676,909	680,173	683,217
% Ch	2.4%	2.7%	2.2%	2.4%	2.3%	2.2%	2.1%	2.1%	2.1%	2.0%	1.9%	1.8%
National (Thousands)	131,401	132,008	132,147	132,325	132,585	132,844	133,083	133,304	133,509	133,709	133,891	134,043
% Ch	1.2%	1.9%	0.4%	0.5%	0.8%	0.8%	0.7%	0.7%	0.6%	0.6%	0.5%	0.5%
SERVICES												
Idaho	396,919	400,148	403,462	406,721	409,865	412,765	415,611	418,394	421,113	423,822	426,461	428,956
% Ch	3.1%	3.3%	3.4%	3.3%	3.1%	2.9%	2.8%	2.7%	2.6%	2.6%	2.5%	2.4%
National (Thousands)	87,021	87,315	87,682	87,958	88,194	88,437	88,690	88,923	89,135	89,331	89,512	89,663
% Ch	1.7%	1.4%	1.7%	1.3%	1.1%	1.1%	1.1%	1.1%	1.0%	0.9%	0.8%	0.7%
INFORMATION												
Idaho	8,786	8,834	8,874	8,892	8,903	8,940	9,002	9,068	9,133	9,211	9,309	9,413
% Ch	2.7%	2.2%	1.8%	0.8%	0.5%	1.6%	2.8%	3.0%	2.9%	3.5%	4.3%	4.5%
National (Thousands)	2,770	2,761	2,765	2,755	2,787	2,806	2,805	2,794	2,783	2,780	2,778	2,777
% Ch	-2.2%	-1.4%	0.6%	-1.4%	4.7%	2.8%	-0.1%	-1.7%	-1.5%	-0.4%	-0.3%	-0.1%
FINANCIAL ACTIVITIES												
Idaho	38,271	38,602	38,894	39,179	39,419	39,661	39,916	40,150	40,412	40,644	40,853	41,044
% Ch	2.6%	3.5%	3.1%	3.0%	2.5%	2.5%	2.6%	2.4%	2.6%	2.3%	2.1%	1.9%
National (Thousands)	8,676	8,676	8,691	8,714	8,732	8,746	8,771	8,794	8,811	8,809	8,806	8,808
% Ch	-0.1%	0.0%	0.7%	1.1%	0.8%	0.6%	1.1%	1.0%	0.8%	-0.1%	-0.1%	0.1%

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IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019

EMPLOYMENT

SERVICES (Continued)

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TRANS., WAREHOUSING, UTILITIES												
Idaho	23,789	24,231	24,258	24,476	25,066	25,376	25,696	25,548	25,723	25,825	25,956	26,047
% Ch	0.4%	7.7%	0.4%	3.6%	10.0%	5.0%	5.1%	-2.3%	2.8%	1.6%	2.0%	1.4%
National (Thousands)	5,673	5,721	5,770	5,833	5,896	5,947	5,994	6,059	6,092	6,111	6,148	6,139
% Ch	2.3%	3.4%	3.5%	4.5%	4.4%	3.5%	3.2%	4.4%	2.2%	1.3%	2.4%	-0.6%
PROFESSIONAL & BUSINESS												
Idaho	89,409	90,217	90,682	91,526	92,852	93,664	94,239	94,711	95,590	96,879	97,878	98,929
% Ch	6.1%	3.7%	2.1%	3.8%	5.9%	3.5%	2.5%	2.0%	3.8%	5.5%	4.2%	4.4%
National (Thousands)	20,350	20,449	20,565	20,661	20,773	20,929	21,073	21,218	21,303	21,463	21,573	21,844
% Ch	1.9%	2.0%	2.3%	1.9%	2.2%	3.0%	2.8%	2.8%	1.6%	3.0%	2.1%	5.1%
EDUCATION & HEALTH												
Idaho	101,616	102,087	102,673	103,115	104,794	105,517	105,935	108,076	109,382	110,766	111,830	112,902
% Ch	6.2%	1.9%	2.3%	1.7%	6.7%	2.8%	1.6%	8.3%	4.9%	5.2%	3.9%	3.9%
National (Thousands)	22,998	23,133	23,271	23,351	23,481	23,590	23,742	23,858	24,016	24,180	24,300	24,333
% Ch	2.2%	2.4%	2.4%	1.4%	2.3%	1.9%	2.6%	2.0%	2.7%	2.8%	2.0%	0.6%
LEISURE & HOSPITALITY												
Idaho	74,179	75,035	75,716	76,632	77,909	78,649	78,913	80,948	81,029	81,552	82,026	82,520
% Ch	2.5%	4.7%	3.7%	4.9%	6.8%	3.9%	1.4%	10.7%	0.4%	2.6%	2.3%	2.4%
National (Thousands)	15,914	16,033	16,095	16,168	16,228	16,302	16,381	16,498	16,659	16,756	16,870	16,953
% Ch	2.6%	3.0%	1.5%	1.8%	1.5%	1.8%	2.0%	2.9%	4.0%	2.4%	2.8%	2.0%
OTHER SERVICES												
Idaho	24,534	24,811	24,915	25,058	25,248	25,372	25,508	25,947	26,035	26,286	26,545	26,758
% Ch	1.6%	4.6%	1.7%	2.3%	3.1%	2.2%	2.0%	7.1%	1.4%	3.9%	4.0%	3.2%
National (Thousands)	5,738	5,761	5,778	5,799	5,811	5,842	5,853	5,871	5,897	5,934	5,958	5,929
% Ch	1.4%	1.6%	1.2%	1.4%	0.8%	2.2%	0.8%	1.2%	1.8%	2.5%	1.6%	-2.0%
TRADE												
Idaho	115,481	115,528	115,825	116,004	116,724	117,021	117,538	117,528	117,992	118,341	118,777	119,181
% Ch	1.9%	0.2%	1.0%	0.6%	2.5%	1.0%	1.8%	0.0%	1.6%	1.2%	1.5%	1.4%
National (Thousands)	21,702	21,642	21,624	21,638	21,654	21,667	21,683	21,703	21,733	21,722	21,728	21,712
% Ch	0.4%	-1.1%	-0.3%	0.3%	0.3%	0.2%	0.3%	0.4%	0.6%	-0.2%	0.1%	-0.3%
RETAIL TRADE												
Idaho	86,624	86,383	86,762	86,763	87,395	87,569	87,750	87,384	87,737	88,013	88,352	88,660
% Ch	2.4%	-1.1%	1.8%	0.0%	2.9%	0.8%	0.8%	-1.7%	1.6%	1.3%	1.5%	1.4%
National (Thousands)	15,897	15,831	15,812	15,816	15,826	15,839	15,820	15,814	15,816	15,785	15,769	15,744
% Ch	0.3%	-1.7%	-0.5%	0.1%	0.2%	0.3%	-0.5%	-0.1%	0.0%	-0.8%	-0.4%	-0.6%
WHOLESALE TRADE												
Idaho	28,857	29,145	29,063	29,241	29,329	29,451	29,788	30,144	30,255	30,328	30,426	30,521
% Ch	0.3%	4.1%	-1.1%	2.5%	1.2%	1.7%	4.7%	4.9%	1.5%	1.0%	1.3%	1.3%
National (Thousands)	5,805	5,811	5,813	5,822	5,829	5,828	5,863	5,889	5,917	5,936	5,959	5,968
% Ch	0.5%	0.4%	0.1%	0.6%	0.5%	-0.1%	2.4%	1.8%	1.9%	1.3%	1.5%	0.6%
STATE & LOCAL GOVERNMENT												
Idaho	109,389	109,941	110,398	110,772	111,139	111,567	112,138	112,156	112,744	112,986	113,248	113,546
% Ch	2.4%	2.0%	1.7%	1.4%	1.3%	1.6%	2.1%	0.1%	2.1%	0.9%	0.9%	1.1%
National (Thousands)	19,509	19,535	19,561	19,583	19,601	19,640	19,686	19,684	19,710	19,746	19,776	19,818
% Ch	0.5%	0.5%	0.5%	0.5%	0.4%	0.8%	0.9%	0.0%	0.5%	0.7%	0.6%	0.9%
EDUCATION												
Idaho	57,120	57,226	57,836	57,799	58,146	58,098	58,887	58,457	58,894	59,074	59,283	59,500
% Ch	2.0%	0.7%	4.3%	-0.3%	2.4%	-0.3%	5.5%	-2.9%	3.0%	1.2%	1.4%	1.5%
NONEDUCATION												
Idaho	52,269	52,715	52,562	52,973	52,992	53,470	53,251	53,698	53,851	53,912	53,965	54,045
% Ch	2.8%	3.5%	-1.2%	3.2%	0.1%	3.7%	-1.6%	3.4%	1.1%	0.5%	0.4%	0.6%
FEDERAL GOVERNMENT												
Idaho	12,861	12,926	13,052	13,058	13,145	13,002	12,993	13,171	13,200	13,306	13,378	13,440
% Ch	-0.5%	2.0%	3.9%	0.2%	2.7%	-4.3%	-0.3%	5.6%	0.9%	3.2%	2.2%	1.9%
National (Thousands)	2,811	2,806	2,803	2,799	2,793	2,794	2,796	2,800	2,800	2,811	2,811	2,811
% Ch	0.5%	-0.7%	-0.3%	-0.7%	-0.8%	0.1%	0.4%	0.5%	0.0%	1.5%	0.0%	0.0%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

EMPLOYMENT

SERVICES (Continued)												
	2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TRANS., WAREHOUSING, UTILITIES												
Idaho	26,190	26,344	26,502	26,659	26,771	26,856	26,969	27,094	27,204	27,317	27,425	27,518
% Ch	2.2%	2.4%	2.4%	2.4%	1.7%	1.3%	1.7%	1.9%	1.6%	1.7%	1.6%	1.4%
National (Thousands)	6,120	6,107	6,098	6,089	6,082	6,074	6,065	6,053	6,043	6,029	6,016	6,002
% Ch	-1.3%	-0.8%	-0.6%	-0.6%	-0.4%	-0.5%	-0.6%	-0.8%	-0.7%	-0.9%	-0.9%	-1.0%
PROFESSIONAL & BUSINESS												
Idaho	99,697	100,455	101,331	102,292	103,257	104,132	104,940	105,718	106,447	107,216	107,973	108,691
% Ch	3.1%	3.1%	3.5%	3.8%	3.8%	3.4%	3.1%	3.0%	2.8%	2.9%	2.9%	2.7%
National (Thousands)	22,159	22,377	22,559	22,738	22,912	23,025	23,122	23,216	23,332	23,444	23,549	23,636
% Ch	5.9%	4.0%	3.3%	3.2%	3.1%	2.0%	1.7%	1.6%	2.0%	1.9%	1.8%	1.5%
EDUCATION & HEALTH												
Idaho	114,070	115,331	116,570	117,801	119,007	120,089	121,100	122,122	123,138	124,125	125,102	126,030
% Ch	4.2%	4.5%	4.4%	4.3%	4.2%	3.7%	3.4%	3.4%	3.4%	3.2%	3.2%	3.0%
National (Thousands)	24,347	24,354	24,431	24,520	24,614	24,684	24,757	24,809	24,870	24,914	24,959	24,995
% Ch	0.2%	0.1%	1.3%	1.5%	1.5%	1.1%	1.2%	0.8%	1.0%	0.7%	0.7%	0.6%
LEISURE & HOSPITALITY												
Idaho	82,962	83,494	84,061	84,534	84,962	85,373	85,806	86,211	86,588	86,960	87,298	87,615
% Ch	2.2%	2.6%	2.7%	2.3%	2.0%	2.0%	1.9%	1.8%	1.7%	1.7%	1.6%	1.5%
National (Thousands)	17,044	17,154	17,260	17,272	17,200	17,242	17,319	17,420	17,467	17,537	17,600	17,654
% Ch	2.2%	2.6%	2.5%	0.3%	-1.6%	1.0%	1.8%	2.3%	1.1%	1.6%	1.4%	1.3%
OTHER SERVICES												
Idaho	26,943	27,088	27,229	27,363	27,545	27,715	27,877	28,033	28,192	28,350	28,500	28,643
% Ch	2.8%	2.2%	2.1%	2.0%	2.7%	2.5%	2.4%	2.3%	2.3%	2.3%	2.1%	2.0%
National (Thousands)	5,904	5,887	5,879	5,870	5,867	5,860	5,850	5,838	5,829	5,817	5,805	5,791
% Ch	-1.7%	-1.1%	-0.6%	-0.6%	-0.2%	-0.5%	-0.7%	-0.8%	-0.6%	-0.8%	-0.9%	-0.9%
TRADE												
Idaho	119,501	120,021	120,555	120,996	121,403	121,773	122,139	122,498	122,866	123,234	123,565	123,868
% Ch	1.1%	1.8%	1.8%	1.5%	1.4%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.0%
National (Thousands)	21,656	21,627	21,617	21,570	21,553	21,528	21,472	21,419	21,370	21,331	21,291	21,250
% Ch	-1.0%	-0.5%	-0.2%	-0.9%	-0.3%	-0.5%	-1.0%	-1.0%	-0.9%	-0.7%	-0.7%	-0.8%
RETAIL TRADE												
Idaho	88,895	89,280	89,673	89,993	90,294	90,566	90,833	91,093	91,360	91,633	91,886	92,126
% Ch	1.1%	1.7%	1.8%	1.4%	1.3%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.0%
National (Thousands)	15,686	15,659	15,644	15,593	15,571	15,544	15,485	15,432	15,381	15,345	15,307	15,270
% Ch	-1.5%	-0.7%	-0.4%	-1.3%	-0.6%	-0.7%	-1.5%	-1.4%	-1.3%	-0.9%	-1.0%	-1.0%
WHOLESALE TRADE												
Idaho	30,606	30,741	30,882	31,003	31,109	31,207	31,306	31,405	31,506	31,601	31,678	31,743
% Ch	1.1%	1.8%	1.8%	1.6%	1.4%	1.3%	1.3%	1.3%	1.3%	1.2%	1.0%	0.8%
National (Thousands)	5,970	5,968	5,973	5,977	5,982	5,984	5,987	5,987	5,988	5,986	5,985	5,980
% Ch	0.1%	-0.1%	0.4%	0.3%	0.3%	0.2%	0.2%	0.0%	0.1%	-0.1%	-0.1%	-0.3%
STATE & LOCAL GOVERNMENT												
Idaho	113,829	114,134	114,451	114,717	114,972	115,266	115,574	115,875	116,147	116,413	116,662	116,893
% Ch	1.0%	1.1%	1.1%	0.9%	0.9%	1.0%	1.1%	1.0%	0.9%	0.9%	0.9%	0.8%
National (Thousands)	19,860	19,902	19,944	19,985	20,027	20,069	20,110	20,152	20,193	20,235	20,277	20,319
% Ch	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
EDUCATION												
Idaho	59,710	59,936	60,156	60,374	60,553	60,755	60,961	61,158	61,343	61,533	61,714	61,886
% Ch	1.4%	1.5%	1.5%	1.5%	1.2%	1.3%	1.4%	1.3%	1.2%	1.2%	1.2%	1.1%
NONEDUCATION												
Idaho	54,119	54,198	54,295	54,343	54,419	54,510	54,613	54,718	54,805	54,880	54,948	55,007
% Ch	0.5%	0.6%	0.7%	0.4%	0.6%	0.7%	0.8%	0.8%	0.6%	0.5%	0.5%	0.4%
FEDERAL GOVERNMENT												
Idaho	13,664	13,988	13,409	13,263	13,267	13,289	13,281	13,302	13,362	13,439	13,485	13,500
% Ch	6.8%	9.8%	-15.6%	-4.3%	0.1%	0.7%	-0.2%	0.6%	1.8%	2.3%	1.4%	0.4%
National (Thousands)	2,864	3,164	2,904	2,811	2,811	2,811	2,811	2,811	2,811	2,811	2,811	2,811
% Ch	7.8%	48.9%	-29.0%	-12.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

National Variables Forecast by IHS Economics
Forecast Begins the First Quarter of 2019

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

MISCELLANEOUS

	Q1	2017 Q2	Q3	Q4	Q1	2018 Q2	Q3	Q4	Q1	2019 Q2	Q3	Q4
SELECTED CHAIN-WEIGHTED DEFL.												
Gross Domestic Product	107.233	107.553	108.134	108.807	109.348	110.172	110.669	111.134	111.345	111.945	112.692	113.248
% Ch	2.0%	1.2%	2.2%	2.5%	2.0%	3.0%	1.8%	1.7%	0.8%	2.2%	2.7%	2.0%
Consumption Expenditures	105.528	105.735	106.156	106.873	107.524	108.052	108.474	108.875	108.977	109.642	110.322	110.875
% Ch	2.1%	0.8%	1.6%	2.7%	2.5%	2.0%	1.6%	1.5%	0.4%	2.5%	2.5%	2.0%
Durable Goods	90.055	89.349	88.819	88.321	88.085	87.738	87.531	87.210	87.096	86.241	86.372	86.198
% Ch	0.2%	-3.1%	-2.4%	-2.2%	-1.1%	-1.6%	-0.9%	-1.5%	-0.5%	-3.9%	0.6%	-0.8%
Nondurable Goods	97.438	96.797	97.348	98.164	99.115	99.453	99.441	99.194	98.604	99.518	100.267	100.611
% Ch	3.3%	-2.6%	2.3%	3.4%	3.9%	1.4%	0.0%	-1.0%	-2.4%	3.8%	3.0%	1.4%
Services	110.972	111.644	112.201	113.120	113.840	114.606	115.302	116.070	116.456	117.338	118.101	118.870
% Ch	2.0%	2.4%	2.0%	3.3%	2.6%	2.7%	2.5%	2.7%	1.3%	3.1%	2.6%	2.6%
Consumer Price Index	2.438	2.441	2.454	2.473	2.493	2.506	2.518	2.528	2.533	2.553	2.571	2.585
% Ch	2.8%	0.4%	2.2%	3.1%	3.2%	2.1%	2.0%	1.5%	0.9%	3.1%	2.9%	2.2%
SELECTED INTEREST RATES												
Federal Funds	0.7%	1.0%	1.2%	1.2%	1.4%	1.7%	1.9%	2.2%	2.4%	2.4%	2.4%	2.4%
NY Fed Discount	1.3%	1.5%	1.8%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%	3.0%	3.0%	3.0%
Prime	3.8%	4.0%	4.3%	4.3%	4.5%	4.8%	5.0%	5.3%	5.5%	5.5%	5.5%	5.5%
Existing Home Mortgage	4.4%	4.1%	4.2%	4.2%	4.4%	4.7%	4.8%	5.0%	4.6%	4.3%	4.3%	4.3%
U.S. Govt. 3-Month Bills	0.6%	0.9%	1.0%	1.2%	1.6%	1.8%	2.0%	2.3%	2.4%	2.4%	2.4%	2.3%
U.S. Govt. 6-Month Bills	0.7%	1.0%	1.1%	1.4%	1.7%	2.0%	2.2%	2.4%	2.4%	2.4%	2.4%	2.4%
U.S. Govt. 5-Year Notes	1.9%	1.8%	1.8%	2.1%	2.5%	2.8%	2.8%	2.9%	2.5%	2.2%	2.1%	2.2%
U.S. Govt. 10-Year Notes	2.4%	2.3%	2.2%	2.4%	2.8%	2.9%	2.9%	3.0%	2.7%	2.4%	2.3%	2.3%
EXCHANGE RATES (2009=1.000)												
Major Currency Trading Partners	1.409	1.382	1.310	1.317	1.276	1.305	1.328	1.347	1.350	1.361	1.355	1.348
% Ch	0.8%	-7.6%	-19.3%	2.3%	-12.0%	9.5%	7.1%	5.8%	1.0%	3.2%	-1.7%	-2.0%
Other Important Trading Partners	1.269	1.232	1.197	1.198	1.177	1.204	1.244	1.267	1.237	1.243	1.254	1.255
% Ch	0.5%	-11.2%	-10.8%	0.3%	-6.9%	9.6%	13.8%	7.5%	-8.9%	1.7%	3.6%	0.5%
SELECTED US PRODUCTION INDICES												
Wood Products	122.8	122.3	124.4	126.7	127.8	127.4	127.7	125.6	124.5	122.4	122.2	122.3
% Ch	8.7%	-1.6%	7.1%	7.7%	3.4%	-1.2%	0.9%	-6.6%	-3.4%	-6.5%	-0.8%	0.5%
Computers & Electronic Products	113.6	115.3	115.0	117.0	118.7	120.2	122.4	122.2	123.3	124.4	125.5	126.5
% Ch	1.8%	6.0%	-1.0%	7.3%	5.8%	5.1%	7.5%	-0.7%	3.8%	3.6%	3.5%	3.1%
Food	109.2	110.2	111.7	112.3	113.3	114.3	114.9	113.2	115.1	115.6	116.1	116.5
% Ch	8.3%	3.9%	5.4%	2.3%	3.8%	3.6%	1.8%	-5.6%	6.8%	1.7%	1.7%	1.6%
Agricultural Chemicals	108.3	115.8	121.1	124.6	121.8	122.8	124.1	122.3	118.5	116.2	115.9	116.1
% Ch	31.9%	30.8%	19.5%	12.0%	-8.5%	3.1%	4.4%	-5.6%	-12.0%	-7.5%	-1.0%	0.8%
Metal Ore Mining	98.6	101.9	94.8	96.6	91.0	93.7	92.8	95.5	96.2	96.3	95.6	95.2
% Ch	-7.7%	14.3%	-25.3%	7.8%	-21.1%	12.4%	-3.7%	11.9%	3.2%	0.4%	-2.8%	-1.6%

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**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JULY 2019**

MISCELLANEOUS

	Q1	2020 Q2	Q3	Q4	Q1	2021 Q2	Q3	Q4	Q1	2022 Q2	Q3	Q4
SELECTED CHAIN-WEIGHTED DEFL.												
Gross Domestic Product	113.879	114.519	115.170	115.813	116.516	117.187	117.854	118.545	119.240	119.936	120.632	121.331
% Ch	2.2%	2.3%	2.3%	2.2%	2.4%	2.3%	2.3%	2.4%	2.4%	2.4%	2.3%	2.3%
Consumption Expenditures	111.398	111.867	112.397	112.856	113.448	114.013	114.546	115.105	115.666	116.235	116.801	117.372
% Ch	1.9%	1.7%	1.9%	1.6%	2.1%	2.0%	1.9%	2.0%	2.0%	2.0%	2.0%	2.0%
Durable Goods	85.828	85.464	85.085	84.700	84.308	83.907	83.518	83.148	82.754	82.366	81.979	81.608
% Ch	-1.7%	-1.7%	-1.8%	-1.8%	-1.8%	-1.9%	-1.8%	-1.8%	-1.9%	-1.9%	-1.9%	-1.8%
Nondurable Goods	100.871	100.898	101.207	101.170	101.703	102.204	102.604	103.023	103.442	103.877	104.314	104.741
% Ch	1.0%	0.1%	1.2%	-0.1%	2.1%	2.0%	1.6%	1.6%	1.6%	1.7%	1.7%	1.6%
Services	119.665	120.454	121.245	122.048	122.861	123.647	124.418	125.219	126.030	126.846	127.660	128.482
% Ch	2.7%	2.7%	2.7%	2.7%	2.7%	2.6%	2.5%	2.6%	2.6%	2.6%	2.6%	2.6%
Consumer Price Index	2.597	2.607	2.620	2.628	2.644	2.660	2.673	2.687	2.702	2.716	2.731	2.745
% Ch	1.9%	1.5%	2.0%	1.4%	2.5%	2.3%	2.0%	2.1%	2.2%	2.2%	2.2%	2.2%
SELECTED INTEREST RATES												
Federal Funds	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
NY Fed Discount	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Prime	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Existing Home Mortgage	4.4%	4.4%	4.5%	4.6%	4.6%	4.6%	4.7%	4.7%	4.8%	4.8%	4.8%	4.8%
U.S. Govt. 3-Month Bills	2.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.1%	2.1%	2.1%	2.1%
U.S. Govt. 6-Month Bills	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.4%	2.4%	2.5%	2.5%
U.S. Govt. 5-Year Notes	2.3%	2.4%	2.5%	2.6%	2.6%	2.7%	2.7%	2.8%	2.8%	2.8%	2.9%	2.9%
U.S. Govt. 10-Year Notes	2.4%	2.6%	2.7%	2.8%	2.8%	2.9%	3.0%	3.1%	3.1%	3.2%	3.2%	3.2%
EXCHANGE RATES (2009=1.000)												
Major Currency Trading Partners	1.338	1.339	1.348	1.363	1.366	1.368	1.370	1.375	1.373	1.371	1.369	1.367
% Ch	-2.9%	0.3%	2.7%	4.5%	0.9%	0.7%	0.5%	1.5%	-0.6%	-0.7%	-0.6%	-0.6%
Other Important Trading Partners	1.250	1.253	1.255	1.256	1.260	1.264	1.269	1.270	1.273	1.276	1.278	1.279
% Ch	-1.8%	1.0%	0.6%	0.3%	1.4%	1.3%	1.4%	0.4%	0.8%	1.1%	0.7%	0.1%
SELECTED US PRODUCTION INDICES												
Wood Products	122.6	122.8	123.1	123.5	123.8	124.0	124.3	124.7	125.2	125.7	126.1	126.4
% Ch	0.8%	0.7%	1.0%	1.2%	1.1%	0.8%	1.0%	1.2%	1.7%	1.4%	1.3%	1.0%
Computers & Electronic Products	127.3	128.1	128.8	129.5	130.1	130.6	131.3	132.1	132.9	133.9	134.8	135.8
% Ch	2.6%	2.5%	2.4%	2.1%	1.9%	1.7%	2.0%	2.4%	2.6%	2.9%	2.9%	3.0%
Food	117.0	117.5	118.0	118.6	119.1	119.7	120.3	120.9	121.5	122.1	122.6	123.1
% Ch	1.7%	1.7%	1.8%	1.9%	1.8%	1.9%	2.2%	2.1%	1.9%	1.8%	1.7%	1.6%
Agricultural Chemicals	116.6	117.1	117.7	118.4	119.2	119.9	120.5	121.1	121.6	122.1	122.5	123.0
% Ch	1.7%	1.6%	2.0%	2.5%	2.6%	2.4%	2.2%	2.4%	1.7%	1.5%	1.4%	1.5%
Metal Ore Mining	94.9	94.6	94.3	94.0	93.8	93.6	93.4	93.3	93.2	93.1	93.0	93.1
% Ch	-1.5%	-1.4%	-1.1%	-1.0%	-0.9%	-0.8%	-0.8%	-0.6%	-0.5%	-0.5%	-0.2%	0.2%

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APPENDIX

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THE IHS ECONOMIC US MACROECONOMIC MODEL

IHS Economic Macroeconomic Model is a multiple-equation model of the US economy. Consisting of over 1,200 equations, the model is solved iteratively to generate the results of different policy and forecast scenarios. The model incorporates the best insights of many theoretical schools of thought to depict the economic decision processes and interactions of households, businesses, and governments.

The IHS Economic model is divided into the following eight major sectors:

- I Private Domestic Spending**
- II Production and Income**
- III Taxes**
- IV International Transactions**
- V Financial**
- VI Inflation**
- VII Supply**
- VIII Expectations**

- I. **Private Domestic Spending.** Major aggregate demand components include consumption, investment, and government. Consumer purchases are divided among three categories: durable goods, nondurable goods, and services. In nearly all cases, real expenditures are influenced by real income and the relative price of consumer goods. Durable and semi-durable goods are also sensitive to household net worth, current finance costs, and consumer sentiment.

IHS Economic divides investment into two general categories: fixed investment and inventories. The former is driven by utilization rates, capital stock, relative prices, financial market conditions, financial balance sheet conditions, and government policies. Inventory investment is heavily influenced by such factors as past and present sales levels, vendor performance, and utilization rates.

The government sector is divided into federal government and state and local government. Most of the federal expenditure side is exogenous. Federal receipts are endogenous and divided into personal taxes, corporate taxes, indirect business taxes, and contributions for social insurance. State and local sector receipts depend primarily on federal grants and various tax rates and bases. State and local government spending is driven by legal requirements (i.e., balanced budgets), the level of federal grants (due to the matching requirements of many programs), population growth, and trend increases in personal income.

- II. **Production and Income.** The industrial production sector includes 74 standard industrial classifications. Production is a function of various cyclical and trend variables and a generated output term, i.e., the input-output (I-O) relationship between the producing industry and both intermediate industries and final demand. The cyclical and trend variables correct for changes in I-O coefficients that are implied by the changing relationship between buyers and sellers.

Pre-tax income categories include private and government wages, corporate profits, interest rate, and entrepreneurial returns. Each of these categories, except corporate profits, is determined by some combination of wages, prices, interest rates, debt levels, capacity utilization rate, and unemployment rate. Corporate profits are calculated as the residual of total national income less the nonprofit components of income mentioned above.

- III. **Taxes.** The model tracks personal, corporate, payroll, and excise taxes separately. Tax revenues are simultaneously forecast as the product of the rate and the associated pre-tax income components. The model automatically adjusts the effective average personal tax rate for variations in inflation and income per household, and the effective average corporate rate for credits earned on equipment, utility structures, and R&D. State taxes are fully endogenous, except for corporate profits and social insurance tax rates.
- IV. **International.** The international sector can either add or divert strength from the central flow of domestic income and spending. Imports' ability to capture varying shares of domestic demand depends on the prices of foreign output, the US exchange rate, and competing domestic prices. Exports' portion of domestic spending depends on similar variables and the level of world gross domestic product. The exchange rate itself responds to international differences in inflation, interest rates, trade deficits, and capital flows between the US and its competitors. Investment income flows are also explicitly modeled.
- V. **Financial.** The IHS Economic model includes a highly detailed financial sector. Several short- and long-term interest rates are covered in this model, and they are the key output of this sector. The short-term rates depend upon the balance between the demand and supply of reserves in the banking system. The supply of reserves is the primary exogenous monetary policy lever within the model, reflecting the Federal Reserve's open market purchases or sales of Treasury securities. Longer-term interest rates are driven by shorter-term rates as well as factors affecting the slope of the yield curve. These factors include inflation expectations, government borrowing requirements, and corporate finance needs.
- VI. **Inflation.** Inflation is modeled as a controlled, interactive process involving wages, prices, and market conditions. The principal domestic cost influences are labor compensation, nonfarm productivity, and foreign input costs that later are driven by the exchange rate, the price of oil, and foreign wholesale price inflation. This set of cost influences drives each of the industry-specific producer price indexes, in combination with a demand pressure indicator and appropriately weighted composites of the other producer price indexes.
- VII. **Supply.** In this model, aggregate supply (or potential GNP), is estimated by a Cobb-Douglas production function that combines factor input growth and improvements to total factor productivity. Factor input equals a weighted average of labor, business fixed capital, and energy. Factor supplies are defined by estimates of the full employment labor force, the full employment capital stock net of pollution abatement equipment, the domestic production of petroleum and natural gas, and the stock of infrastructure. Total factor productivity depends upon the stock of research and development capital and trend technological change.
- VIII. **Expectations.** Expectations impact several expenditure categories in the model, but the principal nuance relates to the entire spectrum of interest rates. Shifts in price expectations or the expected government capital needs influences are captured directly in this model through price expectations and budget deficit terms. The former impacts all interest rates and the latter impacts intermediate- and long-term rates. On the expenditure side, inflationary expectations impact consumption via consumer sentiment, while growth expectations affect business investment.

THE IDAHO ECONOMIC MODEL

The Idaho Economic Model (IEM) is an income and employment based model of Idaho's economy. The Model consists of a simultaneous system of linear regression equations, which are estimated using quarterly data. The primary exogenous variables are obtained from the IHS Economics US Macroeconomic Model. Endogenous variables are forecast at the statewide level of aggregation.

The focal point of the IEM is Idaho personal income, which is given by the identity:

**personal income = wage and salary payments + other labor
income + farm proprietors' income + nonfarm proprietors'
income + property income + transfer payments - contributions
for social insurance + residence adjustment.**

With the exception of farm proprietors' income and wage and salary payments, each of the components of personal income is estimated stochastically by a single equation. Farm proprietors' income and wage and salary payments each comprise submodels containing a system of stochastic equations and identities.

The farm proprietor sector is estimated using a highly-aggregated submodel consisting of equations for crop marketing receipts, livestock marketing receipts, production expenses, inventory changes, imputed rent income, corporate farm income, and government payments to farmers. Farm proprietors' income includes inventory changes and imputed rent, but this component is netted out of the tax base.

At the heart of the IEM is the wage and salary sector, which includes stochastic employment equations for 23 North American Industry Classification System employment categories. Conceptually, the employment equations are divided into basic and domestic activities. The basic employment equations are specified primarily as functions of national demand and supply variables. Domestic employment equations are specified primarily as functions of state-specific demand variables. Average annual wages are estimated for several broad employment categories and are combined with employment to arrive at aggregate wage and salary payments.

The demographic component of the model is used to forecast components of population change and housing starts. Resident population, births, and deaths are modeled stochastically. Net migration is calculated residually from the estimates for those variables. Housing starts are divided into single and multiple units. Each equation is functionally related to economic and population variables.

The output of the IEM (i.e., the forecast values of the endogenous variables) is determined by the parameters of the equations and the values of exogenous variables over the forecast period. The values of equation parameters are determined by the historic values of both the exogenous and endogenous variables. IEM equation parameters are estimated using the technique of ordinary least squares. Model equations are occasionally respecified in response to the dynamic nature of the Idaho and national economies. Parameter values for a particular equation (given the same specification) may change as a result of revisions in the historic data or a change in the time interval of the estimation. In general, parameter values should remain relatively constant over time, with changes reflecting changing structural relationships.

While the equation parameters are determined by structural relationships and remain relatively fixed, the forecast period exogenous variable values are more volatile determinants of the forecast values of endogenous variables. They are more often subject to change as expectations regarding future economic behavior change, and they are more likely to give rise to debate over appropriate values. As mentioned

above, the forecast period values of exogenous variables are primarily obtained from IHS Economics US macroeconomic model.

Since the output of the IEM depends in large part upon the output of the IHS Economics model, an understanding of the IHS Economics model, its input assumptions, and its output is useful in evaluating the results of the IEM's forecast. The assumptions and output of the IHS Economics model are discussed in the National Forecast section.

IDAHO ECONOMIC MODEL

Equations

$$\begin{aligned} \text{EEA_ID_2300} = & -15856.459 + 295.283*\text{ID0HSPRS1_A} + 253.099*\text{ID0HSPRS1_A}(-1) \\ & + 210.916*\text{ID0HSPRS1_A}(-2) + 168.733*\text{ID0HSPRS1_A}(-3) + \\ & 126.550*\text{ID0HSPRS1_A}(-4) + 84.366*\text{ID0HSPRS1_A}(-5) + 42.183*\text{ID0HSPRS1_A}(-6) \\ & + 0.140*\text{EEA_ID_44_45} + 0.120*\text{EEA_ID_44_45}(-1) + 0.100*\text{EEA_ID_44_45}(-2) \\ & + 0.080*\text{EEA_ID_44_45}(-3) + 0.060*\text{EEA_ID_44_45}(-4) + \\ & 0.040*\text{EEA_ID_44_45}(-5) + 0.020*\text{EEA_ID_44_45}(-6) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3230} = & 1093.678 + 17.627*@\text{MOVAV}(\text{IPSG323},4) - \\ & 7.757*@\text{MOVAV}((\text{IPSG323}/\text{EMN323}),8) + 47.424*@\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3110} = & 27169.319 + 256.521*@\text{MOVAV}(\text{IPSG311}(-1),4) - \\ & 621.178*@\text{MOVAV}((\text{IPSG311}/\text{EMN311}),6) - \\ & 1692.818*@\text{MOVAV}(\text{JEXCHOITPREAL}(-1),2) + 42.477*@\text{TREND} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3250} = & 2625.217 + 15.218*@\text{MOVAV}(\text{IPSG3253}(-1),8) - \\ & 1807.992*\text{DUM951ON} + 7.436*@\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3320} = & -850.516 + 16.527*@\text{MOVAV}(\text{IPSG332},2) + 26.312*@\text{TREND} - \\ & 258.977*@\text{MOVAV}(\text{JEXCHOITPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3330} = & -908.025 + 0.136*@\text{MOVAV}(\text{IPSG3332},8)*@\text{TREND} + \\ & 3.895*@\text{TREND} + 612.775*@\text{MOVAV}(\text{JEXCHOITPREAL}(-1),4) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3340} = & @\text{BEFORE}("2009Q1")*(61675.135 + 76.814*\text{IPSG334}(-3) + \\ & 54.858*\text{IPSG3342} - 629.890*\text{JPC}(-2)) + @\text{AFTER}("2009Q1")*(1401.590 + \\ & 39.445*\text{IPSG334}(-3) - 23.600*\text{IPSG3342} + 88.300*\text{JPC}(-2)) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_4200} = & @\text{BEFORE}("2012Q2")*(8522.110 + 0.228*\text{EEA_ID_44_45}) + \\ & @\text{AFTER}("2012Q2")*(7773.203 + 0.247*\text{EEA_ID_44_45}) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_44_45} = & 42494.030 + 55.952*@\text{MOVAV}(\text{YPADJ_ID},4)/@\text{MOVAV}(\text{JPC},4) + \\ & 3229.687*@\text{PCY}(\text{ID0NPT}_0) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_48_49_22} = & -5808.202 + 0.552*@\text{MOVAV}(\text{EEA_ID_4200},2) + \\ & 8235.789*@\text{MOVAV}(\text{ID0NPT}(-1),8) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_5100} = & -10734.461 + 50.307*@\text{MOVAV}(\text{IPSG51111},4) + 102.817*@\text{TREND} \\ & - 2803.395*@\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_52_53} = & 8647.571 + 36.045*\text{YPADJ_ID}/\text{JPC} + \\ & 153.877*@\text{MOVAV}(\text{ID0HSPR}(-1),4) \end{aligned}$$

$$\text{EEA_ID_54_55_56} = 1701.691 + 1.344*@\text{MOVAV}(\text{ID0YP}(-1),4)$$

$$EEA_ID_61_62 = -39405.006 + 57676.595 * @MOVAV(ID0NPT,4) + 0.625 * @MOVAV(ID0YP\$(-1),2)$$

$$EEA_ID_71_72 = -15218.730 + 2.011 * @MOVAV((ID0YP/ID0NPT),2) + 0.453 * @TREND * JPC$$

$$EEA_ID_8100 = 5549.723 + 27.904 * @MOVAV(YPADJ_ID,4) / @MOVAV(JPC,4)$$

$$EEA_ID_GVF = -4414.061 + 189.774 * GFOCWSS - 0.586 * GFOCWSS * @TREND + 284.242 * DUMCENSUS$$

$$EEA_ID_GVSLAD = @BEFORE("2005Q1") * (-3416.760 + 33311.369 * @MOVAV(ID0NPT,4) + 0.232 * @MOVAV(ID0YPTXB(-4),4)) + @AFTER("2005Q1") * (50258.463 - 6899.526 * @MOVAV(ID0NPT,4) + 0.292 * @MOVAV(ID0YPTXB(-4),4))$$

$$EEA_ID_GVSLED = -5914.413 + 165953.097 * ID0NPT * ((N - N16A) / N) + 0.133 * ID0YPTXB$$

$$EEA_ID_MFDNEC = 5325.195 - 103.532 * @MOVAV(IPSG339,2) + 107.817 * @MOVAV(IPSG335,2) + 3169.234 * @MOVAV(JEXCHMTPREAL(-3),2)$$

$$EEA_ID_MFNNEC = -83.313 + 17.420 * @MOVAV(IPSG322,2) + 19.131 * @TREND$$

$$EEA_ID_WOOD = 16343.229 + 49.480 * @MOVAV(IPSG321,2) - 18230.351 * JECIWSP / WPI08 - 13.666 * IPSG321 / EMD321 - 234.015 * @MOVAV(JEXCHOITPREAL(-1),2) - 1.040 * @TREND$$

$$ID0AHEMF = 3.112 + 13.268 * EEA_ID_DMANU(-1) / EEA_ID_MANU(-1) * @MOVAV(JECIWSP(-1),4) + 13.062 * EEA_ID_NMANU(-1) / EEA_ID_MANU(-1) * @MOVAV(JECIWSP(-1),4)$$

$$ID0CRCROP = 185.861 + 1.34e-05 * CRCROP + 1.873 * @TREND$$

$$ID0CRLVSTK = -1993.481 + 3.11e-05 * CRCATCVS + 5.54e-05 * CRDAIRY + 13.285 * @TREND$$

$$ID0EXFP = -353.125 + 222.453 * WPI01 + 2.966 * @TREND + 0.000 * EXPUS$$$

$$ID0HSPRS1_A = -549.228 - 1.782 * (RMMTGEXIST(-1) - @MOVAV(RMMTGEXIST(-1),4)) + 544.169 * ID0KHU1(-1) / ID0KHU1(-4) + 0.025 * @TREND * @MOVAV(ID0NPT(-4),4)$$

$$ID0HSPRS2A_A = @BEFORE("2013Q4") * (-0.594 - 0.490 * RMMTGEXIST + 730.956 * IPSG321 / @MOVAV(ID0WRWCC$(-1),2) + 0.018 * @MOVAV(IPSN32732T9(-1),2)) + @AFTER("2013Q4") * (-1.295 + 0.418 * RMMTGEXIST - 486.295 * IPSG321 / @MOVAV(ID0WRWCC$(-1),2) + 0.029 * @MOVAV(IPSN32732T9(-1),2))$$

$$ID0NB = -3.759 + 28.709*ID0NPT - 0.108*@TREND$$

$$ID0ND = 6.584 - 0.306*ID0NPT + 0.0002*@TREND^2$$

$$ID0NPT = 0.437 + 3.56e-07*@MOVAV(EA_ID,4) + 0.005*@TREND$$

$$ID0WBBF\$ = -81.977 + 329.958*WPI02$$

$$ID0WBBMIL\$ = @BEFORE("2010Q2")*12.166 + @AFTER("2010Q2")* - 55.344 - 30.716*(ID0NPT/N)*GFMLCWSS - 0.045*D(GFML) + 0.340*GF$$

$$ID0WRWCC\$ = 15869.559 + 1167.134*ID0AHEMF$$

$$ID0WRWMF\$ = 10701.282 + 2066.595*ID0AHEMF$$

$$ID0WRWOTH\$ = 1063.275 + 203.758*@TREND + 502.745*D(ID0AHEMF)$$

$$ID0YDIR\$ = -11.553 + 1.072*(YPAINT + ZADIV + YPRENTADJ)*@MOVAV(ID0YP\$(-1),4)/@MOVAV(YP(-1),4)$$

$$ID0YFC\$ = -1.345 + 0.788*ID0YFC\$(-1) + 0.331*@TREND$$

$$ID0YINV_R\$ = -7.001 + 0.796*YPPROPADJF + 0.539*ID0YINV_R\$(-1) + 0.739*@TREND$$

$$ID0YPRF\$ = 0.002 + 1000.006*(ID0CRCROP + ID0CRLVSTK + ID0YTRF\$ + ID0YINV_R\$ - ID0YFC\$ - ID0EXFP)/1000 - 5.05e-05*@TREND$$

$$ID0YPRNF\$ = -446.846 + 4.716*YPPROPADJNF$$

$$ID0YRA\$ = -324.832 + 0.050*ID0WBB\$$$

$$ID0YSI\$ = -22.698 + 1.181*TXSIDOM*ID0WBB\$/YPCOMPWSD$$

$$ID0YSUP\$ = 79.770 + 1.529*YPCOMPSUPPAI*(ID0WBB\$/YPCOMPWSD)$$

$$ID0YTR\$ = -91.729 + 884.082*(YPTRFGF + YPTRFGSL)*(ID0NPT/N)$$

$$ID0YTRF\$ = 23.758 + 9.65e-06*TRF\$US$$

$$EA_ID_2100 = 3304.926 + 14.505*@MOVAV(ID0IP2122_2123(-1),4) - 1720.399*JECIWSP/WPI10 - 1244.786*@MOVAV(JEXCHOITPREAL(-1),2)$$

Identities

$$ID0YPTXB = (ID0yp\$ - ID0Ysi\$ - ID0Ytr\$) / JPC * 100$$

$$ID0NMG = (ID0NPT - ID0NPT(-4)) - ((ID0NB - ID0ND) / 1000)$$

$$\text{ID0WBBOTH\$} = \text{ID0WRWOTH\$} * (\text{EEA_ID} - \text{EEA_ID_2300} - \text{EEA_ID_MANU}) / 1000000$$

$$\text{ID0YPNF} = \text{ID0YPNF\$} / \text{JPC} * 100$$

$$\text{ID0YP} = \text{ID0YP\$} / \text{JPC} * 100$$

$$\text{ID0YPNFPC} = \text{ID0YPNF\$} / \text{JPC} * 100 / \text{ID0NPT}$$

$$\text{YPADJ_ID} = \text{ID0YPNF\$} + @\text{MOVAV}(\text{ID0YPRF\$}, 4) + @\text{MOVAV}(\text{ID0WBBF\$}, 4)$$

$$\text{IDWAGE} = (\text{ID0WBB\$} - \text{ID0WBBF\$} - \text{ID0WBBMIL\$}) / \text{EEA_ID} * 1000000$$

$$\text{ID0YPPC} = \text{ID0YP} / \text{ID0NPT}$$

$$\text{ID0YP\$PC} = \text{ID0YP\$} / \text{ID0NPT}$$

$$\text{eea_id_gvsl} = \text{eea_id_gvslad} + \text{eea_id_gvslcd}$$

$$\text{eea_id_gv} = \text{eea_id_gvsl} + \text{eea_id_gvf}$$

$$\text{eea_id_sv} = \text{eea_id_48_49_22} + \text{eea_id_5100} + \text{eea_id_52_53} + \text{eea_id_54_55_56} + \text{eea_id_61_62} + \text{eea_id_71_72} + \text{eea_id_8100}$$

$$\text{eea_id_nongoods} = \text{eea_id_sv} + \text{eea_id_4200} + \text{eea_id_44_45} + \text{eea_id_gv}$$

$$\text{eea_id_dmanu} = \text{eea_id_wood} + \text{eea_id_3320} + \text{eea_id_3330} + \text{eea_id_3340} + \text{eea_id_mfdnec}$$

$$\text{eea_id_nmanu} = \text{eea_id_3110} + \text{eea_id_3230} + \text{eea_id_3250} + \text{eea_id_mfnec}$$

$$\text{eea_id_manu} = \text{eea_id_dmanu} + \text{eea_id_nmanu}$$

$$\text{eea_id_goods} = \text{eea_id_manu} + \text{eea_id_2300} + \text{eea_id_2100}$$

$$\text{eea_id} = \text{eea_id_goods} + \text{eea_id_nongoods}$$

$$\text{ID0HSPR} = \text{ID0HSPRS1_A} + \text{ID0HSPRS2A_A}$$

$$\text{ID0WBB\$} = \text{ID0WBBMF\$} + \text{ID0WBBOTH\$} + \text{ID0WBBCC\$} + \text{ID0WBBF\$} + \text{ID0WBBMIL\$}$$

$$\text{ID0WBBCC\$} = (\text{ID0WRWCC\$} * \text{EEA_ID_2300}) / 1000000$$

$$\text{ID0WBBMF\$} = (\text{ID0WRWMF\$} * \text{EEA_ID_MANU}) / 1000000$$

$$\text{ID0YP\$} = \text{ID0WBB\$} + \text{ID0YSUP\$} + \text{ID0YDIR\$} + \text{ID0YPRNF\$} + \text{ID0YPRF\$} + \text{ID0YTR\$} + \text{ID0YRA\$} - \text{ID0YSIS\$}$$

$$\text{ID0YPNF\$} = \text{ID0YP\$} - \text{ID0YPRF\$} - \text{ID0WBBF\$}$$

$$\text{ID0KHU1} = ((0.997)^{0.25}) * \text{ID0KHU1}(-1) + \text{ID0HSPRS1_A} / 4$$

$$\text{ID0KHU2A} = ((0.997)^{0.25}) * \text{ID0KHU2A}(-1) + \text{ID0HSPRS2A_A} / 4$$

$$\text{ID0KHU} = \text{ID0KHU1} + \text{ID0KHU2A}$$

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IDAHO ENDOGENOUS VARIABLES

EEA_ID	Employment on nonagricultural payrolls, total
EEA_ID_2100	Employment in mining
EEA_ID_2300	Employment in construction
EEA_ID_3110	Employment in food processing
EEA_ID_3230	Employment in printing
EEA_ID_3250	Employment in chemicals
EEA_ID_3320	Employment in fabricated metal products
EEA_ID_3330	Employment in machinery
EEA_ID_3340	Employment in computers and electronic products
EEA_ID_4200	Employment in wholesale trade
EEA_ID_44_45	Employment in retail trade
EEA_ID_48_49_22	Employment transportation, warehousing, and utilities
EEA_ID_5100	Employment in information
EEA_ID_52_53	Employment in finance, insurance, and real estate
EEA_ID_54_55_56	Employment in professional, scientific, and technical services
EEA_ID_61_62	Employment in health care and educational services
EEA_ID_71_72	Employment in leisure and hospitality
EEA_ID_8100	Employment in other services
EEA_ID_DMANU	Employment in durable goods manufacturing
EEA_ID_GOODS	Employment in goods producing
EEA_ID_GV	Employment in government
EEA_ID_GVF	Employment in federal government
EEA_ID_GVSL	Employment in state and local government
EEA_ID_GVSLAD	Employment in state and local government, administration
EEA_ID_GVSLED	Employment in state and local government, education
EEA_ID_MANU	Employment in manufacturing
EEA_ID_MFDNEC	Employment in other durable manufacturing
EEA_ID_MFNNEC	Employment in other nondurable manufacturing
EEA_ID_NMANU	Employment in nondurable manufacturing
EEA_ID_NONGOODS	Employment in nongoods producing
EEA_ID_SV	Employment in services
EEA_ID_WOOD	Employment in wood products and logging
ID0AHEMF	Average hourly earnings in manufacturing
ID0CRCROP	Cash receipts, crops
ID0CRLVSTK	Cash receipts, livestock
ID0EXFP	Farm production expenses
ID0HSPR	Housing starts, total
ID0HSPRS1_A	Housing starts, single units
ID0HSPRS2A_A	Housing starts, multiple units
ID0KHU	Housing stock, total
ID0KHU1	Housing stock, single units
ID0KHU2A	Housing stock, multiple units
ID0NB	Number of births
ID0ND	Number of deaths
ID0NMG	Net in-migration of persons
ID0NPT	Resident population
ID0WBBS\$	Wage and salary disbursements

ID0WBBCC\$	Wage and salary disbursements, construction
ID0WBBF\$	Wage and salary disbursements, farm
ID0WBBMF\$	Wage and salary disbursements, manufacturing
ID0WBBMIL\$	Wage and salary disbursements, military
ID0WBBOTH\$	Wage and salary disbursements, except farm, manufacturing, military, and construction
ID0WRWCC\$	Average annual wage, construction
ID0WRWMF\$	Average annual wage, manufacturing
ID0WRWOTH\$	Average annual wage, except farm, manufacturing, military, and construction
ID0YDIR\$	Dividend, interest, and rent income
ID0YFC\$	Corporate farm income
ID0YINV_RS	Farm inventory value changes, imputed rent, and income
ID0YP	Total real personal income, 2005 dollars
ID0YP\$	Total personal income
ID0YP\$PC	Per capita personal income
ID0YPNF	Nonfarm personal income, 2005 dollars
ID0YPNF\$	Nonfarm personal income
ID0YPNFPC	Per capita nonfarm income, 2005 dollars
ID0YPPC	Real per capita personal income, 2005 dollars
ID0YPRF\$	Net farm proprietors' income
ID0YPRNF\$	Nonfarm proprietors' income
ID0YPTXB	Tax base, 2005 dollars
ID0YRA\$	Residence adjustment, personal income
ID0YSI\$	Contributions for social insurance
ID0YSUP\$	Other labor income
ID0YTR\$	Transfer payments to individuals
ID0YTRF\$	Government payments to Idaho farmers
IDWAGE	Idaho average annual wage
YPADJ_ID	Adjusted total personal income

NATIONAL EXOGENOUS VARIABLES

CRCATCVS	Cash receipts, US cattle and calves
CRCROP	Cash receipts, US crops
CRDAIRY	Cash receipts, US dairy
DUM911062	These are dummy variables used in regression equations to capture the impacts of discrete economic or noneconomic events such as strikes, plant opening or closures, unusual weather conditions, etc.
DUM951ON	
DUM981ON	
DUM991ON	
DUMCENSUS	
EMD321	Employment in wood products
EMD334	Employment in computer and electronic products
EMN311	Employment in food manufacturing
EMN323	Employment in printing and related support activities
EXPUS\$	Agricultural production expenses, US
GF	Federal purchases of goods and services
GFML	Federal defense purchases of goods and services
GFMLCWSS	Federal government defense personnel outlays
GFOCWSS	Federal government nondefense personnel outlays
ID0IP2122_2123	Industrial production index, metal and nonmetal ore mining, 2012=100.0
IPSG311	Industrial production index, food, 2012=100.0
IPSG321	Industrial production index, wood products, 2012=100.0
IPSG322	Industrial production index, paper, 2012=100.0
IPSG323	Industrial production index, printing, 2012=100.0
IPSG3253	Industrial production index, agricultural chemicals, 2012=100.0
IPSG332	Industrial production index, fabricated metal products, 2012=100.0
IPSG3332	Industrial production index, industrial machinery, 2012=100.0
IPSG334	Industrial production index, computer and electronic products, 2012=100.0
IPSG335	Industrial production index, electrical equipment, appliances, and components, 2012=100.0
IPSG339	Industrial production index, miscellaneous manufacturers, 2012=100.0
IPSG51111	Industrial production index, newspaper publishing, 2012=100.0
IPSN32732T9	Industrial production index, concrete and cement products, 2012=100.0
JECIWSP	Employment cost index—private sector wages and salaries, December 2005=1.00
JEXCHMTPREAL	Real US trade-weighted exchange rate with major currency trading partners, 2005=1.00
JEXCHOITPREAL	Real US trade-weighted exchange rate with other important trading partners, 2009=1.00
JPC	Implicit price deflator, personal consumption, 2009=100.0, chain weighted
N	Population, US
N16A	Population, US, aged 16 and older
RMMTGEXIST	Effective conventional mortgage rate, existing homes, combined lenders
TRF\$US	Government payments to US farms
TXSIDOM	Domestic social security tax receipts
WPI01	Producer price index, farm products, 1982=1.0
WPI02	Producer price index, processed foods and feeds, 1982=1.0
WPI08	Producer price index, lumber and wood products, 1982=1.0
WPI10	Producer price index, metals and metal products, 1982=1.0
YP	Personal income

YPAIN	Personal interest income
YPCOMPSUPPAI	Other labor income, US
YPCOMPWSD	Wage and salary disbursements
YPPROPADJNF	Nonfarm proprietors' income (with inventory valuation and capital consumption adjustments)
YPRENTADJ	Rental income of persons with capital consumption adjustment
YPTRFGF	Federal transfer payments to individuals
YPTRFGSL	State and local transfer payments to individuals
ZADIV	Dividends