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Introduction

Introduction ▌ Jared McEntaffer

As the first quarter of 2023 wraps up, we can look back at 2022 to see how the year ended and look forward to 2023. In some ways, 2022 ended as expected, but economics, contrary to popular opinion, is never dull. The latest data, which reported on Q4 2022, served up a few surprises for South Dakota and the nation.

From the macro perspective, we saw a national economy that rebounded in the second half of 2022. The US started the year with two quarters of negative real GDP growth, which led some commentators and pundits to start clamoring about recession. The labor market, on the other hand, showed no signs of recession. By the end of the year, both output and employment had fallen into sync, and the US economy demonstrated its resilience with 2.1% annual growth in real GDP and 4.2% growth in year-over-year employment. South Dakota did not close the year in the same manner, though, and it finished the year with only 0.5% real growth in state GDP.

Output and employment are only part of the picture, though, and this issue shows that inflation continues to erode incomes and stress budgets. Inflation-adjusted incomes fell through the first three quarters of 2022 and are forecasted to end the year between four and six percent lower than the previous year. Not all workers have been equally affected by high inflation and slow-growing incomes, though, and this issue of the Dakota Outlook also shows that earnings in the construction and manufacturing sectors outperformed. On the other hand, earnings in the farm and retail sectors, among others, fell behind. This issue also looks at inflation-adjusted income trends within the state and reports on earnings trends in the Sioux Falls and Rapid City metro areas compared to the state as a whole.

Perhaps the most talked about economic indicators in South Dakota over the past year have revolved around housing. This issue of the Dakota Outlook reports on significant trend reversals that took place in the fourth quarter of 2022. As we showed in our last issue, the national and state housing markets started to diverge in the first half of 2022. Home prices, new listings, and building permit activity were flashing red at the national level in early 2022. South Dakota's market, in contrast, kept pushing higher until the fourth quarter. The latest data hint at an abrupt slowdown in the activity of multiple indicators, aside from listing prices which continue to rise. Winter storms likely helped depress the housing market, but the data also show a 45.6% drop in building permits during the fourth quarter.

We wrap up this issue of the Dakota Outlook with our review of labor market conditions. In this issue, we are improving our reporting of employment growth and unemployment rates to better account for seasonal variations. We also share an important data revision from the Bureau of Labor Statistics that reveals South Dakota's unemployment rate over the last two years was even lower than expected. The new data imply that the state's labor market is even tighter than was initially thought and that hiring activity in the labor market is increasingly driven by job switching rather than new entrants to the employment pool.

National Economy Heats up While the State Economy Slows Down

Macroeconomy | Jared McEntaffer

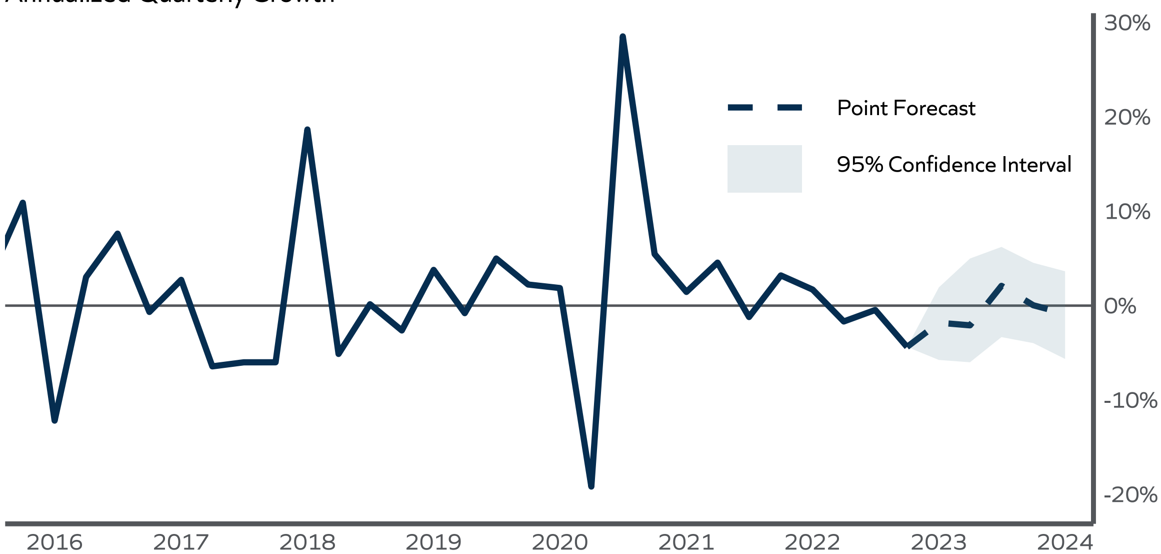
Looking back to our first issue in late 2022, we saw the national and state economies gaining strength and confidence, though the heady days of 2021 were unlikely to return soon. The newest data from the Bureau of Economic Analysis show that the national economy continued on the same path and the nation enjoyed strong growth in the fourth quarter. South Dakota, on the other hand, did not fare so well.

At the national level, the first two quarters of 2022 saw declines in real output, with growth coming in at -1.6% in the first quarter and -0.6% in the second. In contrast, Q3 posted a sharp reversal, and annualized growth in the third quarter was 3.2%. The latest Q4 GDP estimates were equally as strong, and BEA estimated that real GDP growth in the fourth quarter was 2.6%, which put overall real growth at 2.1% for the year.

South Dakota, in contrast, started the year strong, posting 1.7% real GDP growth in the first quarter. Rising inflation and national headwinds began to show their effects starting in the second quarter, though, and real growth slowed to -1.7% in Q2 and -0.5% in Q3. Growth seemed likely to return in the fourth quarter, but the latest BEA estimates have fourth-quarter growth at -4.3%. BEA may revise this estimate upward in later releases, but for now, the data show a marked slowdown in economic activity during the fourth quarter. Several severe winter storms in November and December likely contributed to this slowdown, but the data do not offer any clear causes at this time.

South Dakota Real GDP Growth Forecast

Annualized Quarterly Growth



Source: Dakota Institute, BEA

At the national level, growth in the second half of 2022 was unexpectedly robust. Lingering inflation, rising interest rates, and concerns about financial stability may yet slow the economy, but the prospects

Macroecomic Summary and Forecast										
	Actual									Forecast
	2018	2019	2020	2021	2022:Q1	2022:Q2	2022:Q3	2022:Q4	2022	2023
Real GDP Growth (%) [a,b]										
SD	1.1	0.8	1.6	4.5	1.7	-1.7	-0.5	-4.3	0.5	0.8
US	2.9	2.3	-2.8	5.9	-1.6	-0.6	3.2	2.6	2.1	1.1
Price Level (% YoY) [a]										
CPI	2.4	1.8	1.2	4.7	8.0	8.6	8.3	6.9	7.9	5.0
Core CPI	2.1	2.2	1.7	3.6	6.3	6.0	6.3	5.8	6.1	4.2
PPI (Final Demand)	2.9	1.7	0.0	7.0	10.8	11.1	8.9	7.2	9.5	4.0
Interest Rates (%) [a,c]										
Fed Funds Target	2.0	2.22	0.53	0.25	0.50	1.75	3.25	4.50	1.98	5.15
Mortgage Rate	4.54	3.94	3.11	2.95	4.67	5.70	6.70	6.42	5.47	5.82
10 Year Treasury	2.91	2.14	0.89	1.45	2.32	2.98	3.83	3.88	3.00	3.74

Source: Dakota Institute, Wells Fargo Economics, BEA

[a] Annual values are averages. [b] Quarterly values are annualized percent changes from the previous period. [c] Quarterly rates are end-of-period values.

for a soft landing are looking better than they did a year ago. Unsurprisingly, the weather will likely be a determinative factor in South Dakota's economic performance. Difficult winter conditions in January and February could depress activity in the first quarter, and wet fields could prevent farmers from getting crops into the ground, which would be another hit for the state economy. On the other side of the ledger, the sales tax cut, which goes into effect on July 1, could stimulate the economy. The magnitude of any tax effects is unknown, though. At this time, we are maintaining our 2023 growth forecasts and will monitor the above factors through the first half of the year for developments that could alter the forecast.

Turning to the inflation picture, year-end inflation rates paint an unpleasant picture, but the quarterly trends indicate inflation pressures were moving in the right direction. As measured by the CPI, prices rose by an average of 8.0% in 2022, even though CPI inflation in the fourth quarter had slowed to 6.9%. Core inflation (CPI less food and energy) finished the year even lower at 6.2%, once again higher than at any time since 1982. The inflation trend was moving in the right direction, though, and Core CPI inflation was down to 5.8% in the fourth quarter. Consequently, inflation rates will likely continue edging lower given the FED's vocal commitment to raising rates until inflation falls to more acceptable levels, officially 2% in the FED's public messaging.

In demonstration of its commitment, the FED continued to raise rates throughout 2022, and the FED's target rate closed the year at 4.5%. As expected, the FED has continued to raise rates in early 2023, raising its FED Funds target rate to 5.0% in March. Of note, the FED did not pause its pattern of rate increases even in the face of financial instability resulting from two high-profile bank failures. As a result, we expect the FED to continue on this path, at least through the first half of the year, when we see the potential for a small rate cut during the fourth quarter.

Mortgage rates rose considerably throughout 2022, rising from 3.5% in January 2022 to a peak of 7.1% in October before falling slightly to 6.4% by the end of the fourth quarter. The average 30-year mortgage rate for 2022 was 5.5% as a result, and we expect the average for 2023 to end up around 5.8%, only slightly higher than in 2022. FED rate increases will continue to press rates upward, but the slowing housing market will push rates in the opposite direction as consumer housing demand is expected to remain muted. The net effect of these two forces, among others, is unknown, but we do not expect rates to rise or fall much more than a point in either direction during 2023.

Inflation Continues to Erode Earnings

Income & Wages | David Sorenson

Workers in the private sector saw their average hourly earnings fall by $0.75 from December 2021 to December 2022 when controlling for inflation, according to recently released data from the Bureau of Labor Statistics (Current Employment Statistics survey). While nominal earnings increased by about one dollar on average, the effect of inflation more than cancelled out the gains, leading to a 2.6% decrease over the year. Average hourly earnings stood at $28.07 (adjusted to November 2022 dollars) in December 2022, lower than both the 2020 and 2021 December averages. The average value increased only 1.4% from December of 2018. Across the entire US, real average hourly earnings decreased by about $0.50.

The changes in earnings varied greatly across sectors. Taken as a group, goods-producing sectors saw a slight increase to $28.43, while service sectors lost more than a dollar in sliding to $27.97. In the U.S., both groupings fell. Mining/logging/construction increased about one dollar, more than recovering from a decline in 2021, and transportation/trade/utilities gained about half that amount. Hourly manufacturing hourly earnings increased slightly.

Workers in professional and business services experienced a double dose of decline with average nominal earnings dropping by a dollar in addition to the loss of purchasing power due to inflation. The 2022 real average earnings were exceeded in every other year back to and including 2013. Health/education services had flat nominal earnings which led to real average hourly earnings declining by almost two dollars. Leisure/hospitality, while still having the lowest average hourly earnings by far, remained steady from December 2021 to December 2022. The sector was most likely helped by the significant minimum wage increase in 2020, one which will be even larger in 2023. Both of South Dakota's metropolitan areas experienced a decline in average hourly earnings. The Sioux Falls average fell forty cents to $28.92. Rapid City fell more than eighty cents to $27.70, roughly the same level as 2018 and 2019. Sectoral detail is not provided for the metropolitan areas in the monthly survey.

Income Summary and Forecast

	Actual							Forecast	
	2018	2019	2020	2021	2022:Q1	2022:Q2	2022:Q3	2022	2023
Real Personal Income Growth (%) [a,b]									
SD	2.2	5.0	8.5	2.8	0.7	-2.0	-1.4	-4.1	1.0
US	2.5	3.2	5.3	2.6	-5.6	-5.1	-0.4	-5.6	0.1
Per-Capita Real Income [a,b]									
SD ($)	61,951	64,532	69,613	71,021	67,929	67,404	66,966	67,377	67,497
US ($)	63,900	65,635	68,891	70,661	67,208	66,302	66,183	66,494	66,336
SD (%)	1.6	4.1	8.0	1.9	-0.3	-3.1	-2.6	-5.1	0.2
US (%)	1.9	2.7	4.9	2.5	-5.8	-5.3	-0.7	-5.9	-0.2

Source: Dakota Institute, Wells Fargo Economics, BEA

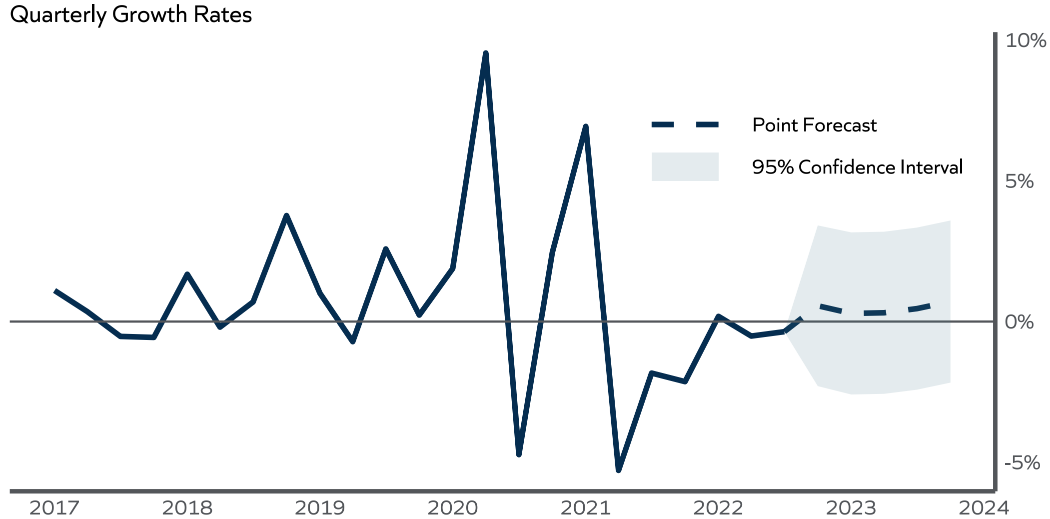
[a] Annual values are averages. [b] Quarterly growth rates are annualized percent change from the previous period.

Real income growth in Q3 2022 was similar to that of the second quarter, although the performance by sector changed significantly. Real personal income declined by 1.4% annualized rate, a slight improvement over the 2.0% decline reported by the updated Q2 data. Given continuing strong population growth, per capita income declined by 2.6%, again slightly better than the second quarter. The decline corresponds to a third-quarter per capita income of just under $67,000 (in November 2022 dollars), more than $400 less than the second quarter. The state remained above the national per capita income of $66,183. Real U.S. personal income continued to decline in the third quarter of 2022, but the decline was much smaller than the second quarter and less than the decline in South Dakota. South Dakota ranked 38th in state personal income growth from the second to third quarters and fell below the Plains Region growth rate by less than one percentage point.

The decline in earnings (0.8%) was lower than personal income, while transfer payments declined by more than five percent. Updated second quarter numbers revealed that earnings had actually declined in that period at a rate slightly above the third quarter loss. Real nonfarm earnings grew very slightly, which was a notable improvement over the 7.8% loss in the second quarter. However, farm earnings declined about nine percent following the rapid growth of the first and second quarters. Total, farm, and nonfarm earnings all grew less or declined more than the comparable national numbers.

South Dakota Real Personal Income Growth Forecast

Quarterly Growth Rates



Source: Dakota Institute, BEA

The largest nonfarm sectors all improved their performance from the second quarter of 2022. Construction, which had declined more than seven percent in the second quarter, rebounded with a gain of 2.6%. Manufacturing continued its rebound from a 15.4% decline in the first quarter to achieve a slight gain in the third quarter. Retail trade, which had declined by more than ten percent in the second quarter, declined only slightly in the third quarter. Finance and insurance sustained a loss of 5.4% in the third quarter, but this was less than half the decline in the second quarter. Healthcare rebounded from a loss of more than ten percent in the first quarter and a slight loss in the second quarter to post a gain of 3.1% in the third quarter.

Forecasts for personal income through the end of 2023 indicate a projected decline in real personal income in South Dakota of 4.1% in 2022 (annual average compared to 2021 annual average) to be followed by a gain of one percent in 2023. Assuming a continued increase in population of close to one percent per year, per capita income is expected to round out 2022 at an annual loss of about five percent compared to 2021. Per capita income is anticipated to rise a very modest 0.2% in 2023. While not an encouraging growth rate, both the personal income and per capita income growth projections slightly exceed those for the U.S. as a whole. The 2023 per capita income forecast represents a decline from the 2021 and 2022 values which were boosted by the pandemic stimulus payments, but it does exceed the 2019 per capita income by about five percent.

As Prices Persist, Affordability Takes a Hit

Housing | Aaron Scholl

While the housing market of 2022 will be remembered for its dramatic highs and lows on a national scale, these historic swings were amplified more so in distinct regional and local markets. The South Dakota market is a prime example where median listing prices more than doubled growth rates in national housing prices throughout 2022 – even after accounting for inflation effects, listing prices in South Dakota grew 17.4% annually, compared to 5.0% on the national level. This, paired with a staggering 100% increase in mortgage rates – from record lows of 3% in Q4 2021 to nearly 7% by the end of Q4 2022 – resulted in reduced affordability rates for South Dakota homebuyers for the first time since 2018, compared to 2021 at the national level. Highlighting the dynamics of Q4 2022 illustrate the extreme shifts in the housing market as we move into 2023.

The number of building permits issued is a critical indicator of housing affordability as it reflects the demand for new homes. Since the onset of the pandemic, coinciding with the rise in remote work, the number new building permits in South Dakota has grown at a faster rate than nationally. Year-to-year growth rates from the first three quarters of 2022 averaged 44.6%, compared to 0.8% at the national level. Rising interest rates were associated with an abrupt reversal in the fourth quarter, though and the number of building permits issued in the fourth quarter was -45.6% below that of Q4 2021. At the national level, incorporating Q4 2022 data was enough to entirely wipe out average gains made in the first three quarters of the year – an annual decline of 4.9% from 2021 to 2022.

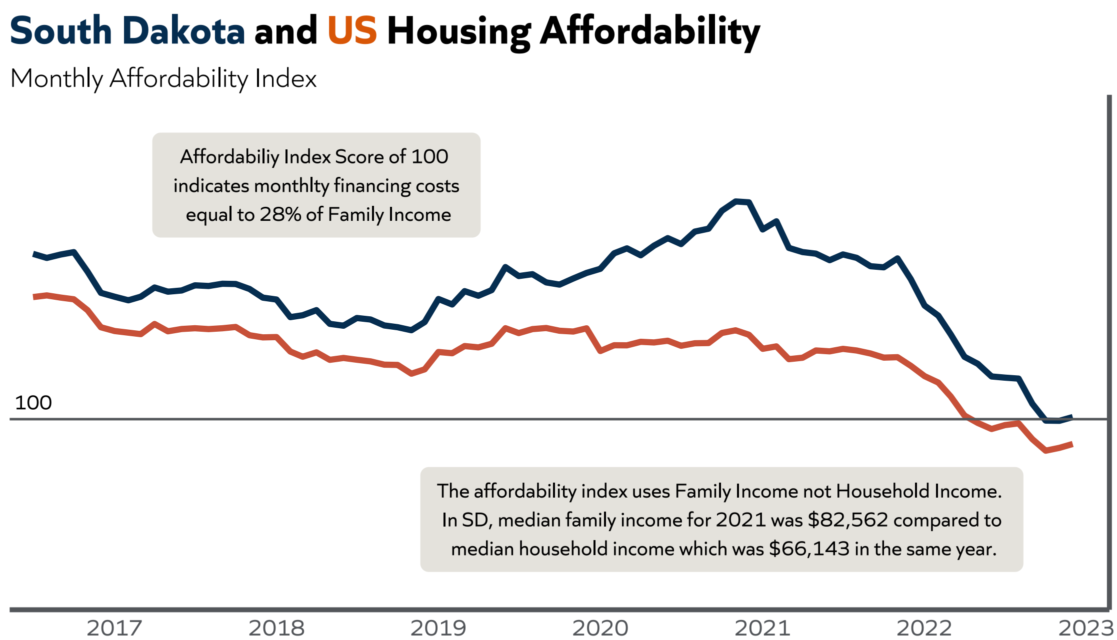
Housing Summary and Forecast

	Actual									Forecast
	2018	2019	2020	2021	2022:Q1	2022:Q2	2022:Q3	2022:Q4	2022	2023
Building Permits (% YoY) [a]										
SD	-13.5	-4.7	48.2	15.6	30.9	60.5	42.5	-45.6	24.8	-25.0
US	4.5	3.1	6.1	19.2	6.5	1.8	-5.9	-22.2	-4.9	-0.1
Median List Prices (% YoY) [a]										
SD	1.5	1.1	1.4	2.0	17.9	14.1	17.3	20.4	17.4	0.6
US	5.7	5.3	2.6	9.4	3.6	6.5	6.3	3.6	5.0	-0.6
New Listings (% YoY) [a]										
SD	0.7	4.3	-9.1	-5.5	-6.0	0.2	1.7	-10.4	-2.7	-2.8
US	-0.1	-1.7	-4.9	-1.0	-7.8	1.4	-9.8	-17.7	-7.8	0.1
Affordability Index [a,b]										
SD	60	180	210	199	160	132	119	100	128	83
US	36	149	147	139	120	98	94	83	99	65

Source: Dakota Institute, Census Bureau, Realtor.com, Freddie Mac, BLS
[a] Annual and quarterly values are averages. [b] Affordability index is calculated using the National Association of Realtors methodology.

The limited supply of existing housing – as measured by new home listings – in recent years has been one of several factors driving the recent increase in building permits. Prior to 2020, South Dakota saw modest gains in the supply of existing housing – 0.7% and 4.3% annual increases in 2018 and 2019, respectively, while the US, in general, has seen available housing decrease since 2017. Evaluating more recent housing supply constraints, from Q4 2021 to Q4 2022 new listings decreased 10.4%. To dissect the most recent data, November 2022 and December 2022 new listings were down 13.5% and 20.0%, respectively, from their numbers a year earlier while October 2022 was down only 2.0% — also where mortgage rates peaked (rates reached 7.1% October 27th). With the uncertainty surrounding interest rate hikes and as most homeowners hold mortgages with rates below 5%, do not expect the supply of existing housing to increase as we move through 2023.

Strong demand, as well as the fewer new listings, has continued to place upward pressure on listing prices throughout much of 2022. Most notably, median listing prices in SD were 17.3% higher in Q3 2022 than the year prior, and list prices in Q4 2022 were 20.4% higher than during the same period a year prior. Given the large increase in mortgage rates in Q4 2022. This growth illustrates the strength and resilience of the SD housing market. The monthly data from Q4 2022 provide additional evidence of resilience as well. Median listing prices initially fell 0.3% from September 2022 to November 2022, but median list prices ended up 2.1% higher year-over-year in December 2022 at record highs. Although mortgage rates have come down from their highs of 7.1% in October 2022 to 6.4% as of March 2023, listing prices will largely depend on whether the Federal Reserve follows through on announced rate hikes throughout 2023.



Source: Dakota Institute, Realtor.com, National Association of Realtors

Prices are often used as the most salient data point to evaluate affordability in the housing market. Others may rely on evaluating mortgage rates or even how wages are changing to make homeownership decisions. Affordability indices incorporate these measures to evaluate the individual components as a whole. A value of 100 in our Affordability Index indicates a monthly income large enough to satisfy the "28% rule" of mortgage lending. A value larger than 100 indicates housing is more affordable with respect to housing prices, mortgage rates, and income, while a value less than 100 indicates less affordable housing, or a riskier mortgage. Prior to 2022, single-family housing in South Dakota was becoming more affordable relative to the nation. But in the wake of the pandemic, SD saw record increases in housing prices and affordability fell dramatically from an annual index value of 199 in 2021 to an ending index of 128 for 2022; however, while SD has seen larger declines in terms of growth rates, we end the year with housing more affordable in SD relative to the national market. While prices remain steady, indicating potential homebuyers are ready and waiting, the largely uncertain feature will be the future path of mortgage rates.

New Data Shows a Tight Labor Market

Labor Force | Jared McEntaffer

This issue of the Dakota Outlook introduces two substantial revisions that affect data previously reported in the forecast table. The first revision reflects a change in our reporting practices, while the second stems from data revisions by the US Bureau of Labor Statistics (BLS). In the first issue of the Dakota Outlook, we reported employment growth and unemployment rates based on period-end values rather than averages for quarterly and annual data. Going forward, we will use average values to better control for seasonal variations.

This quarter's primary labor market story is the significant data revisions affecting the Local Area Unemployment Statistics (LAUS) produced by BLS. The updated LAUS data employed improved population controls and seasonal adjustment methods. As a result, the revised data should provide more accurate insights into labor market conditions for states, metro areas, and counties. Still, the required revisions affected the monthly data estimates as far back as January 2018.

Such data revisions are always interesting for an economist. This revision may be interesting to readers of the Dakota Outlook, as well, because it implies that the state's tight labor market in the wake of the pandemic was even tighter than expected. Unemployment rates for 2018 and 2019 remained unchanged, but 2020 through 2022 saw moderate changes. The unemployment rate in 2020 was revised down from 4.4% to 4.2%, and 2021's unemployment rate was revised from 3.1% to 2.6%. Finally, the average unemployment rate in 2022 decreased from 2.4% to 2.1%.

Labor Force Summary and Forecast

	Actual									Forecast
	2018	2019	2020	2021	2022:Q1	2022:Q2	2022:Q3	2022:Q4	2022	2023
Employment Growth (% YoY)										
SD	0.9	0.6	-3.3	3.2	1.9	2.0	2.2	2.2	2.4	1.0
US	1.6	1.3	-5.8	2.8	5.0	4.7	4.2	3.4	4.2	2.2
Unemployment Rate										
SD	2.8	2.8	4.2	2.6	1.9	2.0	2.2	2.2	2.1	2.4
US	3.9	3.7	8.1	5.4	3.8	3.6	3.6	3.6	3.6	4.5
SD Labor Market Indicators (1,000s)										
Job Openings	23.3	22.0	19.2	30.8	35.0	34.3	32.7	31.0	33.2	29.5
New Hires	18.2	17.3	17.2	20.2	19.3	19.0	21.0	20.3	19.9	19.0
Job Quits	10.5	10.6	8.92	11.8	13.0	12.0	11.3	13.0	12.3	10.8

Source: Dakota Institute, Wells Fargo Economics, BLS
[a] Annual and Quarterly values are averages.

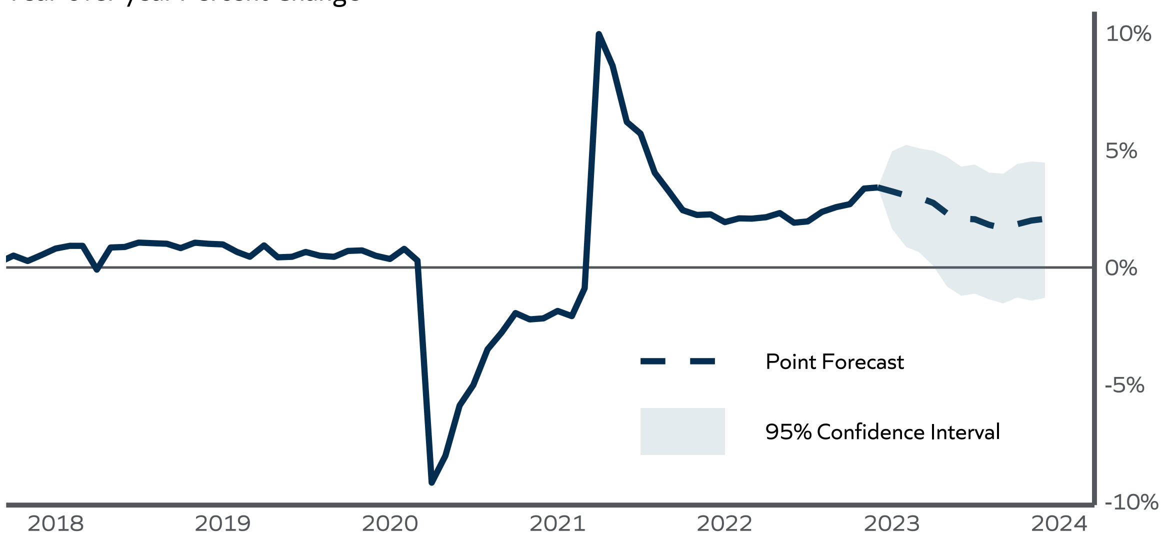
BLS did not revise its estimates for either employment or employment growth, so our understanding of job creation remains unchanged. The implications of these revisions are to reinforce what we already knew and to make the conclusions of the last Dakota Outlook even more salient. In short, South Dakota is suffering from a real labor shortage. The previous Dakota Outlook pointed out that unemployment was lower than at any time in the last fifty years, and now the data are saying that unemployment was even lower than we thought.

Perhaps owing to tighter-than-appreciated labor market conditions, employment growth at the state level failed to meet our growth expectations, coming in at 2.4% for 2022 compared to our forecast of 2.8%. Employment growth for the nation exceeded expectations, however, coming in at 4.2% for the year compared to the forecasted 3.1%.

In light of a more robust national labor market and a weaker one at the state level, we are revising our 2023 forecasts. We are raising our national employment growth forecast from flat to 2.2% and decreasing our South Dakota forecast from 1.2% growth to 1.0%. Similarly, we are lowering our 2023 unemployment rate forecast for the US from 4.9% to 4.5%. We are also lowering our South Dakota forecast from 2.8% to 2.4%. In this case, our revision is primarily a consequence of the BLS data revision than any expectation for a strong labor market to drive down unemployment.

South Dakota Monthly Employment Growth

Year-over-year Percent Change



Source: Dakota Institute, BLS

Turning to the BLS Job Openings and Labor Turnover Survey (JOLTS) data, we again had minor data revisions impacting the Q3 2022 data. The JOLTS data revisions reported here are commonplace, and the reader can expect frequent revisions to the most recent data from issue to issue. In the current case, the revised JOLTS data show the labor market was hotter in Q3 and Q4 than expected, which left our forecast for the year undershooting.

Job openings in the third quarter were revised upward by 9% from 28,900 to 32,700. Hiring was also revised upward by 600 hires from 20,400 to 21,000. Looking back at the second half of 2022, the JOLTS data show a labor market that is straining to effectively match workers and employers. For example, the average number of job openings per year doubled from 14,000 from 2001 to 2019, compared to 28,000 per year from 2020 through 2022. The data also show increased hiring, with 16,200 new hires annually before 2020 compared to 19,100 per year from 2020 to 2022. But the growing number of hires is closely following the rise in voluntary quits, which averaged 11,000 per year after 2020 compared to 8,400 per year before 2020. These data taken together indicate that increased job switching is driving the dynamics rather than organic growth.

Given the above considerations, we are revising our 2023 Labor Market Indicator forecasts. We had expected job openings to fall significantly in 2023. We now expect the drop in job openings to be more gradual and forecast job openings to average 29,500 per month for the year. Still, the severity of the Q4 economic slowdown and harsh winter conditions in Q1 2023 may impact this forecast. We also expect new hires and quits to come in slightly above our original 2023 forecast and have raised them from 18,400 to 19,000 and from 9,800 to 10,800, respectively.