Despite the largest federal stimulus package in history, the economic fallout from the COVID-19 pandemic has been significant. During the first half of 2020, Wisconsin GDP fell 11.4%. From mid-March through late-April, more than 440,000 Wisconsinites filed new unemployment claims. That number was 15.6% of those employed in February. The state’s official April unemployment rate was 13.6%, up from 3.5% in February and the highest it has been since the Great Depression.

Since May, the Wisconsin economy has rebounded, thanks in part to federal stimulus funds. The Coronavirus Aid, Relief, and Economic Security (CARES) Act injected nearly $20 billion into the state economy via $1,200 cash payments to individuals, $600 per week of additional unemployment benefits, and forgivable loans to small businesses designed to keep workers on the payroll. Without that federal help, Wisconsin’s total personal income would have declined significantly in the second quarter. Instead, it rose 8%.

The sharp economic decline was short-lived as employers began rehiring significant numbers of workers in May and June. However, the pace of job gains slowed during July through September and employment declined in October and November. As of November, the number of jobs in Wisconsin stood 7.6% below February employment. At that level, the state has a long road ahead before the economy returns to pre-pandemic levels.

The unemployment rate confirms the slowing of the recovery. By November, the rate had fallen to 5.0%. However, that was well above the 3.5% rate in February 2020.

While nearly all industries have been affected by the pandemic, the accommodation and food service industry and the arts and entertainment industry were hardest hit. As of November, employment was 25% below February levels in hotels, restaurants, and bars and 36% below February levels in the arts and entertainment industry.

Small business has been particularly hard hit. Figures from researchers at Harvard University show that in November, the number of small businesses open was 30% less than in January. A November survey showed that 37% of Wisconsin restaurant operators felt they would be out of business in six months without federal help.

Looking to 2021, there are reasons to be hopeful and reasons to be cautious. The recently passed federal stimulus bill may provide assistance for struggling businesses. The bill also funds an additional $300 per week of unemployment compensation through mid-March, helping the unemployed. Moreover, a rollout of a vaccine creates hope of a near-term return to normal.

However, recently discovered mutations of the COVID virus in Great Britain and South Africa are significantly more contagious than the original virus. In just under a month from the date the British strain was identified in mid-December, cases there more than tripled. Should those strains take hold in the United States, cases could spike in late winter or early spring and further stall economic recovery.
Since mid-March 2020, residents, businesses, and governments in Wisconsin and elsewhere have been dealing with the consequences of the COVID-19 pandemic. Social distancing protocols and government orders have significantly impacted both Wisconsin families and the state economy. This report explores the varied impacts in the nine months from March through November 2020.

Generally, the data show an economy that faced an unprecedented decline in April and part of May followed by a fairly rapid rebound. However, the pace of recovery slowed after August. The slowing recovery combined with surging COVID-19 cases in October and November were ominous indicators for the rest of the year and the first half of 2021.

However, declining infections in mid-December, the rollout of a vaccine, and a new federal stimulus package are all good news for both residents and businesses.

**COVID-19 Overview**

*Time Line and Geography of Outbreaks*

Before examining the economic impacts of the pandemic, it is helpful to lay out the time line and geography of the COVID-19 outbreak and the government responses. Looking at statewide infections, three periods of consistently rising COVID-19 cases appear, with each period worse than the previous period.

**March Through May.** Beginning in mid-March, the number of COVID-19 cases rose fairly steadily, reaching 733 cases on May 29. The 17,707 total cases during this period was 302 cases per 100,000 residents.

Because the three periods examined in this report differ in length, infection rates are adjusted to average weekly rates. During this first period, the weekly average was 28.2 per 100,000 residents.

Infections in this phase were mostly isolated to a few urban counties (see Figure 1 on page 4, top map). Four counties—Brown, Kenosha, Milwaukee, and Racine—are home to 27% of the state's population but accounted for 71% of the cases during this period.

**Late June Through Early August.** Daily cases generally declined through most of June but then entered a second phase of rising cases peaking in the first few days of August. During the 43 days, cases totaled more than 29,800, with a weekly case rate of 83 per 100,000 residents.

During this period, the spread was less localized. While four counties had weekly case rates above 50 per 100,000 residents in the first phase, 35 had such levels during the shorter second phase (see Figure 1 on page 4, middle map). Iron County had the highest weekly rate at 190 per 100,000 residents.

**September Through November.** New COVID-19 cases fell through most of August but then surged again during September, October, and November. During the last two weeks of November, Wisconsin averaged more than 5,000 COVID-19 cases per day. Unlike the first two phases, infections were widespread and average weekly rates were high. Statewide, the 312,000 cases reported during this three-month period were an average of 410 cases per 100,000 residents per week. That case rate was nearly five times the rate in the second phase.
Infection rates were high in all counties during this phase (see Figure 1, bottom map). In 20 counties, cases per 100,000 residents averaged more than 500 per week.

Although economic measures are only examined through November, COVID-19 cases through mid-December were available at press time. The seven-day average of cases peaked at 6,563 on November 18 and has trended lower since. By mid-December, the seven-day average was under 3,000 cases.

**Time Line of Government Actions**

On February 5, 2020, Wisconsin recorded its first case of COVID-19. A little over a month later, on March 11, the first major pre-emptive action was taken in the state. UW-Milwaukee announced it was extending its spring break to two weeks and that when students returned on March 30 classes would be taught virtually. UW-Green Bay and UW-Madison immediately followed with similar actions.

The first major state government response occurred one day later with Governor Evers declaring a public health emergency. On March 13, the state ordered all K-12 schools were to be closed by March 18. Gatherings of 50 or more people were prohibited (with some exceptions) on March 16th, and further tightened to 10 or fewer people the following day.

On March 24, the state issued the “Safer At Home” order requiring residents to stay home (again, with exceptions) and non-essential businesses to cease activities at their place of business. The order was effective until April 24.
In late April, the “Badger Bounce Back” plan effectively extended Safer At Home but also outlined criteria that needed to be met before the restrictions would be eased or ended. On May 13, that order was struck down by the Wisconsin Supreme Court.

Since then, some cities and counties have issued orders similar to Safer At Home or issued other public health orders.

**FEDERAL STIMULUS SOFTENS THE BLOW**

Before examining the economic data, it is important to understand the impact of federal stimulus, particularly the Coronavirus Aid, Relief, and Economic Security (CARES) Act. In a recession, federal spending is often used to lessen the downturn. At $1.8 billion, the size of the CARES Act was unprecedented, more than double the $831 billion American Recovery and Reinvestment Act passed during the Great Recession of 2008. Three provisions of the CARES Act provided most of the stimulus.

**Unemployment Boost**

Unemployment benefits are funded primarily at the state level. Benefits provide unemployed workers with a portion of what they were earning before they were laid off. In Wisconsin, weekly benefits range from $54 to $370 and last up to 26 weeks.

The CARES Act provided additional federal benefits of $600 per week through July. After that program expired at the end of July, additional payments of $300 per week were implemented, although payments in Wisconsin did not begin until October. The act also provided an additional 13 weeks of benefits to those who had exhausted their 26 weeks. According to the federal Department of Labor, Wisconsin residents received $2.7 billion in supplemental unemployment through the end of October.

**Economic Impact Payments**

The CARES Act also provided payments of up to $1,200 per adult ($2,400 for a married couple) and $500 for each qualifying child. Payments phased out for higher income individuals and families. Most of these payments were received by the end of May. Wisconsin residents received $5.1 billion in economic impact payments.

**Paycheck Protection Program**

The Paycheck Protection Program (PPP) was created to incent small businesses to keep workers on their payrolls. PPP loans could be forgiven if funds were used for payroll, mortgage payments or rent, or for utilities. Nearly 90,000 Wisconsin businesses received a total of $9.9 billion in loans from this program.

The macroeconomic effect of these programs is evident in the quarterly personal income numbers from the Bureau of Economic Analysis (BEA). Without federal help, Wisconsin personal income in the second quarter (April through June) of 2020 would have declined more than 3% from the first quarter (See Figure 2). However, the federal stimulus was so large that second quarter income was 8.0% higher than in the first quarter.

As will be seen below, the first two programs discussed above helped support consumer spending at least through July. Additionally, the Paycheck Protection Program helped limit job loss, at least temporarily.
After plunging 11.4% in the first half of 2020, Wisconsin GDP recovered about two-thirds of that decline in the third quarter and remains 3.6% below pre-pandemic levels.

GDP FALLS THEN REBOUNDS

One of the broadest measures of an economy is gross domestic product (GDP), or the value of all goods and services produced. During 2015-2019, annual increases in inflation-adjusted (real) Wisconsin GDP ranged from 1.0% to 3.3%.

The pandemic led to reductions in Wisconsin GDP in both the first and second quarters of 2020—a 2.3% drop in the first quarter followed by a 9.4% decline in the second quarter (See Figure 3). The total reduction of 11.4% was larger than the GDP declines in all but eight states.

Quarterly GDP declines during the 2007-09 recession provide context for the magnitude of this drop. During that economic downturn, the largest two-quarter decline was 4.4%. During the entirety of the recession, Wisconsin GDP fell less than 5%.

FIGURE 3: Wis. GDP Falls, Partially Recovers
Gross Domestic Product*, 1st Quarter 2018 to 3rd Quarter 2020, $ Billions

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*Quarterly GDP reported at annual rates and adjusted for inflation.

Declines by Industry

By far, the industries hardest hit were arts and entertainment (-50%) and accommodation and food service (-46%). This was unsurprising given social distancing and the two “stay at home” orders that were in effect during April and most of May.

Manufacturing output, which accounts for nearly a fifth of Wisconsin GDP, declined 13% in the first half of the year. The health care industry experienced a nearly 17% decline in output during the first half of 2020 as hospitals prepared for an unknown number of COVID-19 patients by putting a temporary hold on some surgeries and other medical procedures.

Second Half Rebound?

In the third quarter (July through September), national real GDP rose 7.1% from the second quarter. Wisconsin did slightly better, rising 8.8% from quarter two. The rebound brought the state two-thirds of the way back from where it was at the end of 2019, and near where it was in the fourth quarter of 2017.

Wisconsin is not expected to return to pre-pandemic levels in 2021. GDP would need to grow another 3.6% from third quarter levels to get there. At press time, forecasts from three Federal Reserve banks put expected fourth quarter growth near 1%, below the level needed for full recovery.

JOBS

While the federal Paycheck Protection Program was designed to keep workers employed during the early months of the pandemic, employment still fell significantly and unemployment spiked. Job numbers have rebounded since late spring, but they declined in both October and November.

Jobs Plunge, Then Partially Recover

The number of jobs in Wisconsin declined slightly in March and then fell more than 15% in April. Only 14 states had larger April employment declines, with the largest drops occurring in Michigan, Vermont, Hawaii, Nevada, and New York.

In the subsequent five months, the number of jobs in Wisconsin rebounded, though at slowing rates over time. Employment rose 2.8% in May and 3.9% in June, raising expectations for a sharp rebound to pre-COVID levels following the April plunge. However, monthly job gains were 1.3% or
less in July through September and employment fell slightly in both October and November. As of November, the number of jobs in Wisconsin stood at 7.6% below the number in February.

In its November economic forecast, the Wisconsin Department of Revenue (DOR) reported that it did not expect employment to return to pre-pandemic levels until early 2023.

By Industry
Like GDP, initial job declines were largest in arts and entertainment and in accommodation and food service (both down 56%). As of November, employment in arts and entertainment remained 36% below February levels while the number of accommodation and food service jobs was 25% below February (see Figure 4).

DOR expects employment in these two industries to still be about 10% below pre-pandemic levels in 2023.

Manufacturing employment dropped 8% in April and in November remained 3.5% below February employment. It is not expected to reach pre-pandemic levels until 2024.

Low-Wage Jobs Most Impacted
The two industries most impacted by the pandemic, the arts and entertainment industry and accommodation and food service, have a significant number of low wage jobs. Average annual pay in the accommodation and food service industry was $16,500 in 2019. In the arts and entertainment industry, it was $31,300. These average pay rates are well below the statewide average for all jobs in Wisconsin ($50,413).

While recessions typically are challenging for low-wage workers, this one has been particularly difficult. Figures from Opportunity Insights show that, as of mid-October, the number of low-wage jobs in Wisconsin was down 19.0% compared to February (see Figure 5 on page 8). The number of moderate-pay jobs had fallen 4.1%, while high-paying jobs were down less than one percent.

Small Businesses
The pandemic’s effect on businesses, particularly small businesses, will not be fully known for some time. However, estimates from Opportunity Insights provide an initial look at how small businesses have fared.

Their data show that in early April, small business revenue in Wisconsin was down over 50% from January levels. The driving factor behind the revenue drop was the fact that 45% of small businesses were closed at that time.

The situation improved through the rest of April and May so that by early June, the number of small businesses not operating was down to 25% and revenues were 21% below January levels. Since then, the situation has gradually worsened. By early December, the number of small busi-

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1 http://Tracktherecover.org. Based at Harvard University, Opportunity Insights is a group of researchers and policy analysts who analyze data to help local stakeholders make informed decisions.

2 Low-wage jobs average less than $27,000 per year, moderate-pay jobs average $27,000 to $60,000 per year, and high-wage jobs pay more than $60,000 per year.
Workers in low-wage jobs were hit hardest by the recession, with October employment down 19% from January. Employment in high-wage jobs changed little.

...nances open was 29% below January, while small business revenue was down by almost a third.

Another perspective on the impact of COVID-19 on small business comes from the Census Bureau's Small Business Pulse Survey, which has been conducted weekly (with a few exceptions) since late April. In the three surveys conducted in December, about 29% of small business respondents reported the pandemic having a large negative impact on their business. Another 42% reported a moderate negative impact.

In terms of operating capacity compared to 2019, about 14% reported capacity was down by more than half. Another 33% reported decreased capacity but less than 50% below 2019.

As mentioned above, the restaurant industry was among the hardest hit by the pandemic. A November 2020 survey conducted by the National Restaurant Association estimated that 110,000 restaurants nationally were closed permanently or long term. In Wisconsin, 37% of restaurant operators said they would likely be out of business in six months without federal help. Nearly half of respondents were considering closing their restaurants until the pandemic ends.

Many of these restaurants are small businesses, and one of the great challenges is that the owners generally are not eligible for regular unemployment insurance. Many owners were eligible for the new federal Pandemic Unemployment Assistance that provided temporary payments of $163 to $370 per week. That program was scheduled to end at the end of December 2020. However, the most recent federal pandemic relief bill extended the program through the middle of March.

New Businesses?

Since March 2020, there has been some unusual activity in terms of new business formation. According to the U.S. Census Bureau, from March 15 through May 16, new high-propensity business applications declined 26% from the same period in 2019. Much of that was likely due to the “stay-at-home” orders.

From May 17 through September 5, applications in 2020 were 46% higher than in 2019, and from September 6 to mid-December they were 19% higher. During the entire mid-March through mid-December period, applications were 17% higher than one year ago.

Figure 5: Low-Wage Workers Hit Hardest
Changes in Number of Jobs* Relative to January 2020 by Average Wage

*Source: Opportunity Insights (http://Tracktherecovery.org). Low-wage jobs average less than $27,000 per year, moderate-pay jobs average $27,000 to $60,000 per year, and high-wage jobs pay more than $60,000 per year.
National data through the first week of October show that about a third of the new business applications were for nonstore retailers (mostly online retailers). Just under a quarter were in three service industries: professional, scientific, and technical services; administrative and support services; and personal and laundry services. In other words, some individuals saw opportunities during the pandemic and created businesses to take advantage of them.

INDIVIDUALS AND FAMILIES
When businesses downsize, there are both financial and non-financial impacts on those who are laid off and on their households. This recession affected more individuals and families than any downturn since at least the Great Depression.

Unemployment
With the number of jobs plummeting in late March and April, the number of Wisconsin residents filing claims for unemployment insurance spiked. During the first 11 weeks of 2020, initial claims for unemployment insurance averaged about 6,800 per week and were in line with claims in 2019.

During mid-March through April, more than 440,000 Wisconsin workers, or 15.6% of those employed in February, filed new unemployment claims.

During the week ending March 21st they spiked to over 50,000, then topped 100,000 in each of the following two weeks and remained above 50,000 for three more weeks. In those six weeks, more than 440,000 Wisconsinites filed initial unemployment claims, or 15.6% of those employed in February. From mid-March through mid-December, more than 1.1 million initial unemployment claims had been filed.

By April, the state’s unemployment rate, as measured by a survey from the federal Bureau of Labor Statistics (BLS), was 13.6%, up from 3.5% in February. Both the number of unemployed and the unemployment rate declined steadily during the subsequent five months. In September, Wisconsin’s unemployment rate was 5.4%. The rate rose to 6.0% in October coinciding with the loss of jobs. However, despite job losses in November, the unemployment rate fell to 5.0%.

During the April-to-November period, Wisconsin’s unemployment rate averaged 8.0%, or 4.6 percentage points higher than the same period in 2019. Five counties were hit the hardest. In Douglas, Forest, Iron, Jackson, and Menominee, counties the average unemployment rate was at least seven percentage points above 2019 levels (see Figure 6).

While still impacted, five counties had average unemployment rates less than three percentage points higher than in 2019: Clark, Kewaunee, Lafayette, Rusk, and Taylor.

Poverty and FoodShare
With unemployment well above last year’s level, many families have lost income. The additional federal benefit of $600 per week helped signifi-
cantly, but it ended July 31st. The unusually large negative impact of the recession on low-income workers is showing up in poverty rates and in rising numbers of residents receiving FoodShare benefits (formerly called Food Stamps).

A study by economists from the University of Chicago, the University of Notre Dame, and Zhejiang University shows the national poverty rate fell during April through June due almost entirely to the $600 unemployment supplement but rose in each subsequent month from July through November. In November, it was 1.5 percentage points above the March rate.

State poverty rates for 2020 are not yet available, but rising FoodShare cases indicate a similar pattern in Wisconsin. Since 2013, monthly FoodShare cases steadily declined from 861,000 in August 2013 to 598,000 in February 2020. By May, the number of cases had risen almost 17% to 697,000 (see Figure 7) and continued to rise through August reaching 724,000, the most since November 2016. In the ensuing two months cases declined, falling to 703,000 in October. However, cases returned to near their August level, reaching 723,000 in November, 20.8% higher than the number of cases in February.

Growth in FoodShare cases varied widely by county. The smallest February to November increase was in Sawyer County where cases rose 10%. In Iowa, Iron, Menominee, and Iron counties, FoodShare enrollments rose between 13% and 15%.

In Jackson County, FoodShare cases rose 43% from February to November, the largest increase in the state. Cases rose between 30% and 36% in Buffalo, Clark, Columbia, Forest, Ozaukee, Pepin, Pierce, Trempealeau, Washington, and Waukesha counties.

SPENDING FALLS

Another glimpse into COVID-19’s impact on the economy comes from data on taxable spending (expenditures on goods or services subject to the state sales tax) from the Wisconsin Department of Revenue.

In the six months prior to the pandemic, taxable sales in Wisconsin were 6.1% higher than during the same period a year earlier. That changed in March as consumers retrenched and taxable sales were 8.4% less than in March 2019. As jobs were shed in late March and April, spending on taxable items weakened further. In both April (-13.2%) and May (-3.4%) taxable sales were below 2019 levels.

Spending rebounded over the next two months with sales 3.1% higher than in 2019. However, that was still half the sales growth the state was experiencing prior to COVID-19. During August through October, sales again weakened (1.1% less than in 2019) as federal stimulus faded.

Taxable sales from March through October 2020 were 2.5% less than during those same months in 2019. Since pre-pandemic sales were running more than 6% ahead of the prior year, the 2.5% fall is really a nearly 9% decline from what sales would likely have been without the pandemic.

There was also a shift in the mix of goods and services being purchased. From March through October, spending at hotels and motels was down 51% over 2019 (see Figure 8). Arts and entertainment businesses saw a sales drop of 35%, while...
spending at bars and restaurants declined 28%. Clothing and clothing accessory retailers saw business drop 24% during this period.

As residents patronized restaurants and bars less, they ate and drank at home more. Taxable sales at food and beverage stores rose 16% year over year. Many items that residents typically purchased in stores were purchased online. Nonstore retailer sales (online sales) rose 89% from 2019.

STATE AND COUNTY BUDGETS
The decline in taxable sales affects the finances of Wisconsin’s state government. It also affected some county governments. However, a shift in where purchases were made had a positive impact on many county governments.

The sales tax accounts for about one-third of state general fund taxes. It also helps fund operations in 68 of Wisconsin’s 72 counties. The decline in sales statewide resulted in fiscal year 2020 sales tax collections coming in $94 million under the amount forecasted in January 2020 and $41.1 million under the amount originally budgeted. A recent DOR report estimates fiscal year 2021 sales tax collections will be $90 million less than the amount forecasted in January 2020 and $40.5 million below the original budgeted amount.

From March through October 2020, taxable sales from restaurants, bars, hotels, and businesses in arts and recreation fell significantly.

The fiscal year for counties runs from January through December. While the total impact on county budgets was not known at press time, in 38 counties, activity from March through October was up at least 4% over 2019. This puts those counties in a good position to meet or exceed their budgeted sales tax. In 16 counties, activity was either less than in 2020 or up less than 1%, stressing local budgets.

March through October sales generally declined in more populous counties that are home to larger shopping malls. Sales declined 9.1% in Dane County, 8.2% in Milwaukee County, 5.0% in Eau Claire County, and 2.8% in Sheboygan County. The largest year over year decline was in Sauk County (-13.6%), which relies heavily on sales tax revenues from summer tourism.

Figure 8: Taxable Sales Fall in Some Industries, Rise in Others
March Through October Taxable Sales, 2020 vs. 2019
Several behavioral changes likely contributed to the wide variation in taxable sales. A surge in online purchases can shift sales from urban retail centers to rural counties. When a resident travels across county lines to make an everyday purchase, that sale is recorded in the county where it is purchased. Often, that is in a county with more and larger retail stores. When the item is purchased online, it is credited to the county where the buyer lives.

The large numbers of residents working from home may also have made a difference. If commuters from rural counties to urban counties are working from home, they are no longer making purchases in the urban county and may be making similar purchases nearer to home. Again, that shifts the sale from the urban county to the rural county, with the additional tax revenue benefiting the rural county’s budget.

**FINAL THOUGHTS**

Since mid-March 2020, Wisconsin residents, businesses, and governments have been dealing with the many impacts of COVID-19. The economic consequences documented here show significant damage to Wisconsin’s economy, particularly to the state’s hospitality, arts, and entertainment industries. The impact has been so severe that these industries may take years to fully recover.

The economic toll on individuals has been widespread, but it disproportionately harmed low-wage workers. Even by late October when the economy had rebounded from its spring plunge, low-wage jobs remained almost 20% below January levels. By contrast, high-wage jobs were largely unchanged.

Although not discussed in this report, the impacts of the pandemic reach far beyond the economy. More than 5,000 Wisconsin deaths have been attributed to the disease. Schools largely used virtual learning last spring and fall, and many are continuing that model this spring. This could have long-term effects on childhood education. And the isolation from social distancing and stay-at-home recommendations may be creating mental health challenges, increased substance abuse, and domestic violence.

However, as the calendar turns to 2021, there are reasons for hope. After much delay, a new federal stimulus package was enacted in late December. It was designed to provide help to struggling businesses and continues supplemental unemployment benefits for those who are out of work.

The approval and roll out of a vaccine is also good news. It brings hope that a return to normal is on the horizon.

However, there is a possible stumbling block ahead. New strains of the virus that are significantly more transmissible were recently identified in Great Britain and South Africa. In Great Britain, the strain was identified in mid-December.

From December 15, 2020 until January 11, 2021, the number of weekly cases in the U.K. nearly tripled from 138,000 to 405,000. During that same period, weekly cases in the U.S. rose less than 20%. Should the U.K. strain take hold here, the U.S. could face a doubling or tripling of already high numbers of daily cases and further delay economic recovery.