May 11, 2020

MEMORANDUM TO: The Honorable Mike DeWine, Governor
The Honorable Jon Husted, Lt. Governor

FROM: Kimberly Murnieks, Director

SUBJECT: Monthly Financial Report

Report Overview:

Leading economic indicators fell sharply in March. The consensus among forecasters is for an unprecedented decrease in real GDP in the second quarter, followed by a strong recovery starting in the second half of the calendar year, but still leaving the economy approximately the same size at the end of 2021 as it was at the end of 2019.

U.S. nonfarm payroll employment decreased by a record 20.5 million jobs in April, about triple the number lost during the 2007-09 recession. The unemployment rate increased from 4.4 percent to 14.7 percent, the highest value seen since the Great Depression.

GRF non-auto sales and use tax collections in April totaled $680.5 million and were $146.2 million (-17.7%) below the estimate. There remain many questions whose resolution will shape the performance of the non-auto sales tax in the coming months, most revolving around how soon citizens adapt and create conditions to mitigate the spread of COVID-19, thereby returning to some semblance of "normal consumer activity".

Real GDP contracted at an annual rate of 4.8 percent in the first quarter – the first quarterly decrease since the 1.1 percent decrease in the first quarter of 2014 and the largest setback since the 8.4 percent decrease in the fourth quarter of 2008. The decline in real GDP in the first quarter is the eighth largest on record dating back to 1947, tied with the second quarter of 1975.

April GRF personal income tax receipts totaled $622.3 million and were $635.7 million (-50.5%) below the budgeted estimate. Year-to-date, personal income tax revenue is $675.7 million (-9.2%) below estimate. The remainder of fiscal year 2020 will continue to be impacted by the postponement of income tax filing due dates until

Economics of Epidemics and Pandemics

As Coronavirus spread around the world, economic activity around the globe, the nation and in Ohio declined rapidly. Fighting the disease is only half the battle. The other half is managing the economic effects of both the pandemic and our response to it. Given these unprecedented circumstances, this month's report opens with a special section providing a brief primer on the economic impacts of past pandemics.

Measuring the Cost of Diseases

Changes in gross domestic product (GDP) are a typical way to measure the economic impacts of historic events; however, the economic effects of an epidemic or pandemic cannot simply be measured by the reduction in GDP. Although it is a strong overall measure, there are two additional, broader types of costs that should be considered.

- The first type of costs are the actual disease-related costs. These include the direct costs of medical treatment such as medicines, doctors' visits, and hospitalizations. Also included here are indirect costs such as the loss of productivity due to illness and or death.

- Second are the economic losses due to mitigation and prevention of the disease. These include the costs incurred to avoid the disease, for example purchasing face masks; closing schools, restaurants, and retail stores; and, unemployment due to disease-related closures.

Economic Effects of Historic Epidemics and Pandemics

According to the Centers for Disease Control (CDC), the 2003 SARS outbreak infected just over 8,000 people in 26 countries, with 774 deaths[1]. Studies that only look at disease-related costs find that SARS had a minimal impact on the global economy. These studies demonstrated a reduction in GDP of approximately 0.6-0.7 percent in Taiwan and 1.1 percent in China and Singapore specifically related to SARS[2]. The SARS outbreak lasted for a relatively short period and there was a rapid return to normal after the perceived risk of the disease was reduced[3]; however, a World Bank study concluded that the economic losses during the SARS epidemic were disproportionate to the number of infected individuals[4]. While the economic costs drastically outweighed the disease-related costs, it is difficult to know what these costs would have been without the preventative measures.

In the mid-2000s, with rising concerns about the H5N1 Avian Flu epidemic, Australian researchers modeled the effects of four pandemic scenarios (mild, medium, severe, and ultra)[5]. The mild scenario was modeled after the Hong Kong flu of 1968-69; the moderate after the 1957 Asian flu; and the severe case is based on the 1918-19 Spanish flu. The ultra-scenario is modeled after the 1918-19

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[1] Centers for Disease Control. Fact Sheet: Basic Information about SARS, last modified December 6, 2017. https://www.cdc.gov/sars/about/fs-sars.html.

[2] Brahmbhatt, Milan, and Arindam Dutta. *On SARS type economic effects during infectious disease outbreaks*. The World Bank, 2008.

[3] Keogh-Brown, Marcus Richard, and Richard David Smith. "The economic impact of SARS: how does the reality match the predictions?." *Health policy* 88, no. 1 (2008): 110-120.

[4] Brahmbhatt, Milan, and Arindam Dutta. *On SARS type economic effects during infectious disease outbreaks*. The World Bank, 2008.

[5] McKibbin, Warwick J., and Alexandra Sidorenko. *Global macroeconomic consequences of pandemic influenza*. Sydney, Australia: Lowy Institute for International Policy, 2006.

Spanish flu, but simulated using higher morbidity in the older population and adding a severe economic slowdown. The authors modeled the effects of each scenario in 20 countries or regions and in six sectors of the economy. They conclude that even the "mild" scenario was estimated to cost 1.4 million lives and the global economy 0.8 percent GDP (approximately $330 billion in 2006 dollars). In the "ultra" scenario, 142.2 million lives would be lost worldwide, and the global economy would contract by 12.6 percent (approximately $4.4 trillion in 2006 dollars). The table below shows the results for the United States in each of the four scenarios.

Deaths and Changes in GDP in the U.S. under Four Simulated Pandemic Scenarios

	Mild	Moderate	Severe	Ultra
Approx. Number of Deaths	20,000	200,000	1.0 million	2.0 million
Estimated change of GDP in U.S.	-0.6%	-1.4%	-3.0%	-5.5%

Source: McKibbin, Warwick J., and Alexandra Sidorenko. *Global macroeconomic consequences of pandemic influenza*. Sydney, Australia: Lowy Institute for International Policy, 2006.

As of May 6, 2020, there have been over 70,000 deaths in the United States[6], 1,225 of whom were Ohio residents[7]. While the death toll in the United States suggests that Coronavirus may be following the "moderate" scenario, the anticipated reduction in GDP is more like that estimated by the "ultra" scenario. Much like the 2003 SARS outbreak, it appears that the economic costs of the COVID-19 will exceed the disease-related costs. By "flattening the curve" in the Ohio and the U.S. more broadly, we have saved lives and severely minimized the disease-related costs that would have been incurred without the strong prevention and mitigation efforts that were put in place.

Economic Outlook Improves with Social Distancing Measures

A new study by members of the Federal Reserve and faculty at Massachusetts Institute of Technology[8] demonstrated that the 1918 Influenza Pandemic lead to a sharp and persistent reduction in economic activity. The authors found evidence of negative effects on both economic supply and demand. However, cities that implemented rapid and aggressive non-pharmaceutical health interventions (e.g., wearing masks and implementing social distancing rules that closed sectors of the economy) experienced a relative increase in economic activity after the pandemic. Although it may be too soon to tell, the authors note that anecdotal evidence suggests parallels between the current pandemic and the results from the 1918 Influenza Pandemic. Taiwan has limited the number of new infections through strong social distancing measures, and at this time seems to have mitigated economic disruptions caused by the pandemic.

First Estimates of Economic Effects of COVID-19

While it will take many years to determine the true economic costs of the COVID-19 pandemic, the first estimates are starting to be published. In February 2020 (before the World Health Organization declared a pandemic, and before *any* stay-at-home orders were issued in the United States), the

[6] Centers for Disease Control, "Coronavirus Disease 2019 (COVID-19): Cases in the U.S." accessed May 6, 2020. https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html
[7] Ohio Department of Health. "Coronavirus (COVID-19) Dashboard" accessed May 6 2020. https://coronavirus.ohio.gov/wps/portal/gov/covid-19/dashboards.
[8] Correia, Sergio, Stephan Luck, and Emil Verner. "Pandemics depress the economy, public health interventions do not: Evidence from the 1918 flu." 2020. Available at SSRN: https://ssrn.com/abstract=3561560 or http://dx.doi.org/10.2139/ssrn.3561560.

European Parliament released a report that stated "[A]ccording to assumptions and estimates from rating agency S&P, COVID-19 could reduce the baseline GDP growth rate for 2020 for the world by 0.3 percentage point (ppt); for China by 0.7 ppt; for Asia-Pacific by 0.5 ppt; and for the USA and Europe by 0.1 to 0.2 ppt."[9] As we now know, the disease has progressed and so have the economic effects, as well as our response.

In the United States, economists are predicting significant reductions in GDP, and small businesses are likely to bear a substantial brunt of these costs. Researchers at the Harvard University and the University of Chicago[10] recently released results from a survey of 5,819 small business owners (business with fewer than 500 employees) in the United States. At the time of the survey, 43 percent of respondents' businesses were closed. This measure suggests a shock to the economy not seen since the Great Depression. The authors also found that many small businesses have little cash on hand to weather the storm. As of March 2020, 38 percent of the survey respondents thought it was "unlikely", or only "somewhat likely" that they would reopen before the end of the calendar year. Specifically, businesses in industries such as restaurants, tourism and personal services projected they will find it extremely difficult to reopen (if at all), if the crisis lasts more than four months. While federal economic relief policies may relieve some of the pressure on small businesses, it is unclear if it will be enough to sustain them through the crisis.

The Shape of Economic Recovery

Economists worldwide are debating many different scenarios of how the economy will recover. Most scenarios suggest a return to the pre-pandemic baseline; the question then becomes how long that return will take. The anticipated economic activity over time can be described by a letter or symbol for each scenario. There are numerous outcomes being discussed, but these are five of the most common predicted for the United States[11,12].

- In the "V-shaped" recovery scenario, economists presume that once stay-at-home orders are lifted, economic activity will quickly return to normal. Factories and services reopen smoothly, and unemployment recedes. There would be some economic losses that are not recoverable, for example from restaurant meals not eaten, and trips not taken are foregone rather than delayed. Otherwise the economy will bounce back to the pre-pandemic baseline relatively quickly.

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[9] Delivorias, Angelos and Nicole Scholz. "Economic impact of epidemics and pandemics." The European Parliament. 2020.

[10] Bartik, Alexander W., Marianne Bertrand, Zoë B. Cullen, Edward L. Glaeser, Michael Luca, and Christopher T. Stanton. *How are small businesses adjusting to COVID-19? Early evidence from a survey*. No. w26989. National Bureau of Economic Research, 2020.

[11] Sheiner, Louise and Kadija Yilla. "The ABCs of the post-COVID economic recovery." The Brookings Institute, last modified May 4, 2020. https://www.brookings.edu/blog/up-front/2020/05/04/the-abcs-of-the-post-covid-economic-recovery/.

[12] Kennedy, Simon and Michelle Jamriso. "V, L or 'Nike Swoosh"? Economists Debate Shape of Global Recovery." Bloomberg, last modified April 1, 2020. https://www.bloomberg.com/news/articles/2020-04-02/economists-debate-shape-of-a-global-recovery-after-coronavirus

- In a “U-shaped” recovery scenario, social distancing measures are prolonged. Manufacturing and other workplaces take their time to return to full capacity and not everyone gets their job back. As a result, consumers are slow to return to restaurants and shops. GDP remains low for a while but then recovers back to baseline.

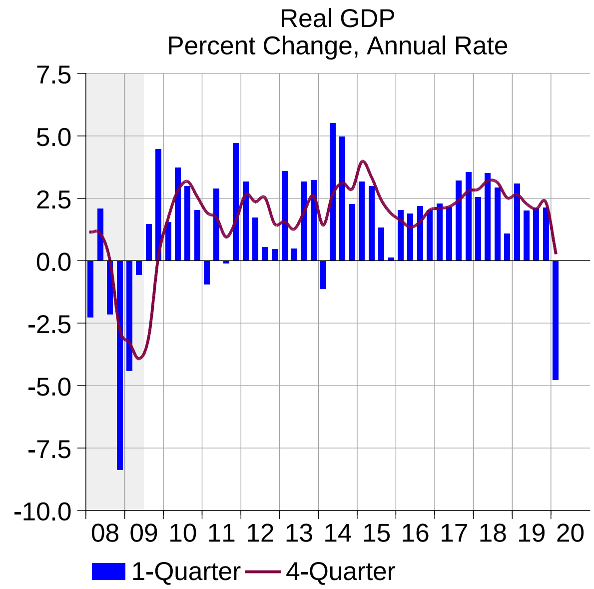
- In the “Nike swoosh” or “check mark” recovery scenario there are phases to recovery. As social distancing restrictions are lifted, economic activity increases sharply at first, but governments, businesses, and consumers are hesitant to spend, and it takes a longer time for the economy to reach its pre-pandemic state.

- There is also the possibility of a “W-shaped” recovery. This could occur if social distancing restrictions are loosened too quickly, resulting in a second surge of COVID-19 cases and then another round of business closures. In this case, the second reduction in economic activity would likely not be as severe as the initial one, but predictions of recovery are pushed further into the future.

- The “L-shaped” recovery is the most pessimistic, suggesting that the pandemic could have a permanent impact on the economy. After the sharp decline from COVID-19 related closures, the economy does not return to baseline, but rather growth parallels the pre-pandemic baseline at a lower level. People continue to cut spending services and travel and unemployment does not recover fully. Debts built up before and during the pandemic become hard to pay down, creating a spiral of bankruptcies. Although the federal government would potentially step in with additional policies to stimulate demand, it would be a long, slow recovery.

There are still too many unknowns about the coronavirus pandemic today to accurately predict the shape of the economic recovery. Without a vaccine or major improvements in the treatment, economic activity is unlikely to fully return to its pre-pandemic baseline quickly. Even after government restrictions are lifted, some business owners may delay reopening for a lack of personal protective equipment, and others will face delays as they innovate their business plans to allow for more space between workers, customers, or both. It is unclear how quickly consumers will return to shopping, dining out, and travelling. As Ohio begins Responsible Restart, more data will become available to inform our economic recovery. Ohio’s economy was strong going into the pandemic. As a result of pragmatic decisions to stay-at-home, we have already seen a flattening of the health curve. The evidence cited above suggests cautious optimism about Ohio’s economic recovery.

Economic Activity



Real GDP contracted at an annual rate of 4.8 percent in the first quarter – the first quarterly decrease since the 1.1 percent decrease in the first quarter of 2014 and the largest setback since the 8.4 percent decrease in the fourth quarter of 2008. The decline in real GDP in the first quarter is the eighth largest on record dating back to 1947, tied with the second quarter of 1975. The largest quarterly decline on record is 10.0 percent in the first quarter of 1958.

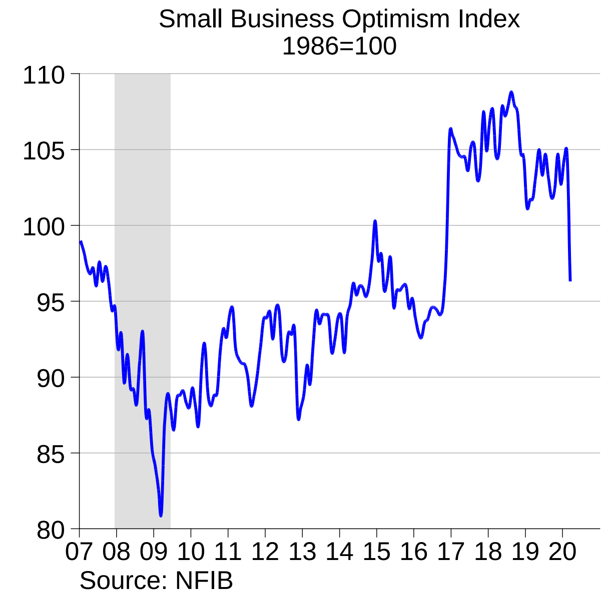
The first-quarter decrease in real GDP reflected negative contributions from personal consumption expenditures (-5.3%), nonresidential fixed investment (-1.2%), exports (-1.0%), and the change in private inventories (-0.5%). Partially offsetting these declines were positive contributions from residential fixed investment (0.7%), and government spending (0.1%). Imports, which are included in the above categories and then subtracted in a separate category, decreased, effectively adding to other categories by a total of 2.3 percent.

The steep contraction occurred largely in the second half of March, as patterns in monthly data had led to rising expectations for the quarter as late as mid-month. Aggregate demand weakened quickly and substantially as governments enacted measures to slow the spread of COVID-19. The effects of these measures on first-quarter real GDP cannot be quantified because they are internal to source data and therefore cannot be separately identified.

High-frequency data confirm that weakness continued into the second quarter. For example, after surging to the extraordinary level of approximately 10 million in March, national unemployment insurance claims doubled to roughly 20 million in April, although the week-to-week tally declined during the month. The total airline traveler count published by the TSA fell to about 95 percent below the year earlier level in March and remained at about that level into early May. Revenue per available hotel room in the last week of April was down 76.8 percent from a year earlier, up somewhat from 83.6 percent in mid-April but still depressed, according to STR, a provider of global hospitality sector data. Finally, movie box office revenue remained depressed through April, according to Box Office Mojo, a website that systematically tracks box office revenue.

Business confidence has understandably weakened. The Conference Board Measure of CEO Confidence decreased from 43 in the fourth quarter last year to 36 in the first quarter – a level last observed during the 2007-09 recession. A follow-up survey revealed a further decline to 34 in April. A reading below 50 reflects more negative than positive responses. The weakness in the index primarily reflected assessments of current conditions. Views of CEOs about the near-term outlook were less negative.

Sentiment among small business owners also has deteriorated, according to the Index of Small Business Optimism from the **National Federation of Independent Business (NFIB)**. The Optimism Index fell 8.1 points in March to 96.4, registering the largest month-to-month decrease in the history of the survey. Nine of the ten index components decreased, led by an increase of twelve points in the NFIB Uncertainty Index. Reports of expectations for better business conditions six months from now dropped 17 points to a net of 5 percent. Expectations of real sales over the next six months decreased by 31 points to -12 percent. Only 13 percent of firms said this is a good time to expand, half the number from a month earlier.



The Ohio economy contracted in March. The **Ohio coincident economic index** from the Philadelphia Federal Reserve decreased 2.2 percent for the first decline since April 2018 and the largest-ever dating back to 1979. The six-month smoothed rate of change fell from 2.1 percent in February to -2.3 percent in March. The index is a composite of four labor market indicators – nonfarm payroll employment, average hours worked in manufacturing, the unemployment rate, and real wage and salary disbursements.

The diffusion of **state-level coincident economic indexes** also deteriorated in March to recession levels. The level of the index was lower than the month before for thirty-four states, up from seven the month before and only one the month before that. Compared with three months earlier, the index was lower for twenty-nine states, up from four states the month before and none the month before that.

The Conference Board's composite **Leading Economic Index** (LEI) decreased 6.7 percent in March, the largest month-to-month decline in the 60-year history of the index. The decrease was broad-based among its components. The largest negative contributions came from initial jobless claims and stock prices. The sharp drop in March resulted from the sudden halt in business activity due to the COVID-19 pandemic and suggests that the contraction will be very deep.

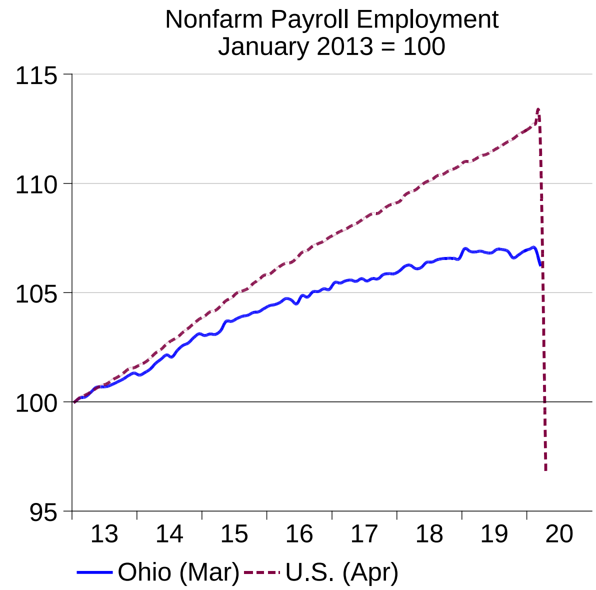
As shown in the table below, the **consensus among forecasters** is that real GDP growth is contracting at an unprecedented rate in the second quarter; however, predictions about the level of contraction vary widely.

The consensus is that the economy will begin to grow again in the third or fourth quarter of the calendar year at a rapid pace, with strong growth continuing through 2021. Even so, the consensus is for the economy to be approximately the same size at the end of 2021 as it was at the end of 2019.

Source	Date	2020-Q2 GDP Forecast
Atlanta FRB (GDPNow)	5/5/20	-17.6%
New York FRB (Nowcast)	5/1/20	-9.3%
Blue Chip	5/5/20	-28% (-18% to -37%)
IHS GDP Tracker	5/8/20	-37.5%

Employment

Nonfarm payrolls across the country decreased by a record 20.5 million jobs in April, about triple the number lost during the entire 2007-09 recession. Weakness was widespread, as only 7.2 percent of the 258 industries tracked reported higher employment than six months earlier, also a record in data back to 1991.



Sector job losses were greatest in leisure and hospitality, where a 7.7 million job decline represented 37 percent of the total. Restaurants and bars accounted for 5.5 million of lost jobs in the sector. Other concentrations of weakness included the education and health services sector, where 2.5 million jobs were lost, mainly in the ambulatory health care services (-1.2 million) and social assistance (-650,600) industries. Within the ambulatory health care services segment, employment fell at offices of physicians (-243,300) and offices of dentists (-503,300). Employment in the professional and business services sector declined by 2.1 million jobs, including an 841,900 job decline in temporary help services.

Retail trade employment fell by 2.1 million jobs with notable losses occurring at clothing and clothing accessories stores (-16,300), furniture and home furnishing stores (-739,600), auto dealers (-264,600), and furniture and home furnishing stores (-209,000). Interestingly, employment actually increased in the sub-category of general merchandise stores that includes warehouse clubs and supercenters (93,400).

Construction employment fell by 975,000 jobs, with weakness focused in specialty trade contractors (-690,500). Manufacturing employment fell by 1.3 million jobs, with losses in durable goods industries accounting for about two-thirds. Employment also declined in government (-980,000), financial activities (-262,000), and information (-254,000). Within government, employment increased by 1,000 at the federal level and fell at both the state (-180,000) and local (-801,000) levels. The decrease in local government employment occurred both inside and outside of education.

The **unemployment rate** jumped from 4.4 percent to a post-war record-high 14.7 percent in April, as **total employment** decreased by 22.4 million workers. The effect of unemployment could be much greater, considering that the rate would have been almost 5 percentage points higher if workers who were recorded as employed but absent from work due to "other reasons" had been classified as unemployed or on temporary layoff, according to the Bureau of Labor Statistics. The unemployment rate likely has continued to increase in May, judging from the still-elevated rate of initial jobless claims.

The **labor force participation rate** decreased by 2.5 percentage points to 60.2 percent, the lowest since January 1973 when it was 60.0 percent. The **employment-to-population** ratio fell by 8.7 percentage points to 51.3 percent, the largest monthly drop and the lowest level in the dataset extending back to 1948.

Total **number of hours worked** – a broad measure of labor input – fell by 14.9 percent in April, the largest decline in data through 1964. **Average hourly earnings** for all employees on private nonfarm payrolls increased by $1.34 to $30.01, reflecting the disproportionate number of layoffs among lower-paid positions.

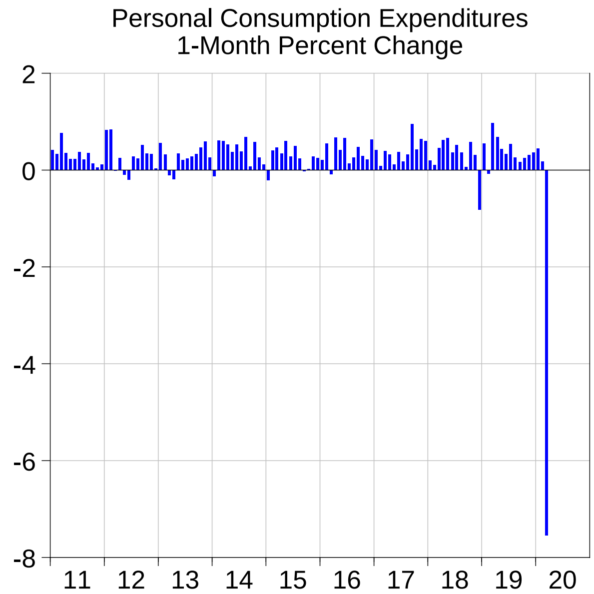
Ohio nonfarm payroll employment decreased by 39,700 jobs in March and the unemployment rate jumped from 4.1 percent, where it had stood for six months, to 5.5 percent. The sharp rise in claims for unemployment compensation during the last two weeks of March and the continued elevated level through April and into early May indicates that employment has continued to fall. Initial jobless claims have declined from their peak at the end of March (274,288) but remained much higher than normal at the end of April and start of May (61,046 vs. a normal below 10,000).

All sectors were negatively affected in March, led by Leisure and Hospitality (-27,000), Trade, Transportation, and Utilities (-4,400), and Education and Health Services (-2,200). No sector posted higher employment on the month. Compared with a year earlier, employment declines were led by Leisure and Hospitality (-19,500), Government (-6,600), and Manufacturing (-3,900). Employment was higher than a year earlier only in Educational and Health Services (7,500) and Construction (1,900).

Consumer Income and Consumption

The household sector took a sudden negative turn in March in response to measures implemented to address the COVID-19 pandemic. **Personal income** decreased 2.0 percent in the month, while **wage and salary disbursements**, which make up more than half of personal income, decreased 3.1 percent. The decline in wage and salary disbursements reflected a 1.1 percent decrease in aggregate hours worked that outweighed a 0.4 percent rise in average hourly earnings. The waterfall decline in employment during April is sure to have reduced income by a much larger amount.

Personal consumption expenditures (PCE) decreased by 7.5 percent in March, the largest monthly decline on record dating back to 1959. Spending on nondurable goods increased 3.1 percent in March due to a 19.8 percent increase in purchases of food for off-premises consumption, which was partially offset by a 15.2 percent decline in purchases of gasoline and other energy goods.



Spending on durable goods fell 15.1 percent, led by a 26.5 percent drop in motor vehicles and parts, accompanied by smaller declines in spending for furnishing and durable household equipment (-8.6%) and recreational goods and vehicles (-6.9%). Unit sales of **light motor vehicles** decreased from 16.7 million in February to 11.4 million in March. Sales fell further to an estimated 8.6 million in April, which would be the lowest on record dating back to 1976.

The bulk of the pullback in consumer spending in March occurred in purchases of services, which fell 9.5 percent, reflecting decreases in spending on health care (-16.1%), restaurants and hotels (-26.4%), recreation services (-29.5%), and transportation services (-25.5%), in order of largest to smallest dollar decline. The spending declines in these four areas accounted for nearly 90 percent of the overall decline in consumer spending in March.

Government stabilization programs will provide support to consumer spending in the months ahead, but some relief measures remain weeks away. In the meantime, **consumer attitudes** have deteriorated markedly. The Conference Board Consumer Confidence Index decreased by 31.9 points, or 26.9 percent, in April following a 13.8 point decline the month before. The April drop was the largest in a single month on record and is emblematic of the shift in consumer attitudes that have produced sweeping changes in behaviors.

A massive deterioration in assessments for current conditions was entirely responsible for the decline in the overall index, as expectations actually improved. The Present Situation Index fell by 90.3 points, or 54.2 percent, which is more than three times larger than the previously largest monthly decline on record. The Labor Index – the percentage of respondents characterizing jobs as plentiful minus the percentage saying jobs are hard to get – flipped from a positive 29.5 in March to a negative 13.6 in April.

The Expectations Index increased by 7.0 points, as consumers see much-improved conditions in six months. Even so, the share of respondents planning to purchase motor vehicles in the next half-year fell to 7.5 percent, the lowest in almost ten years. The share planning to make other large ticket purchases also fell to a long-time low.

Taken as a whole, the latest survey results indicate that consumers expect restrictions to ease and the economy to revive soon, creating both an opportunity and a risk to the outlook.

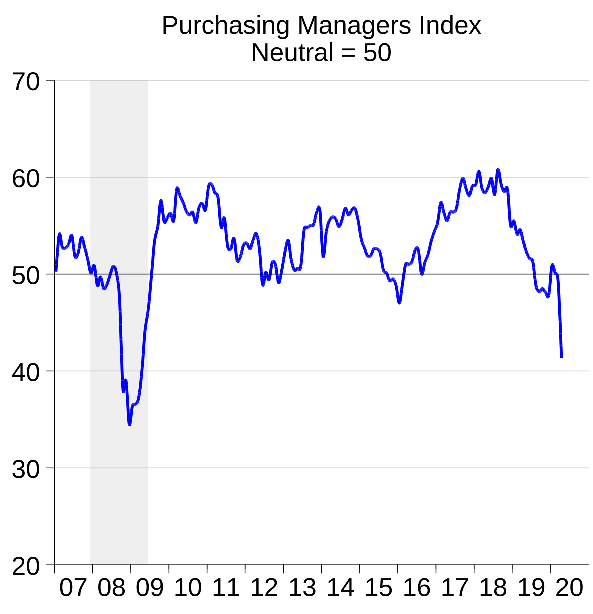
Industrial Activity

Total **industrial production** decreased 5.4 percent in March, as the pandemic started to hit. **Manufacturing** production decreased by 6.3 percent, the twelfth largest monthly decline in the more than 100-year record. Considering that factory closures started in mid-March and accumulated through April, another large decrease in industrial production, particularly in manufacturing, is expected for April.

Among the eleven monthly declines that have been larger, two occurred in the 1920 depression, five occurred during the 1930s great depression, and four occurred in 1945-46 as the economy started transitioning from war-time to peace-time production.

The durable goods sector was the source of the largest negative contribution. Within durable goods, which fell 9.1 percent, the motor vehicles and parts industry was the largest contributor, falling by 28.0 percent. Major declines of between 8 percent and 10 percent occurred in fabricated metal products, aerospace and miscellaneous transportation equipment, furniture and related products, and miscellaneous manufacturing. Production in the nondurable goods sector decreased 3.2 percent, with declines widespread across industries.

Among industries that account for large shares of manufacturing employment in Ohio – in addition to motor vehicles and parts – production fell 8.3 percent in fabricated metal products, 5.6 percent in machinery, and 2.8 percent in primary metals. All were notably lower than a year ago.



The **Purchasing Managers Index** (PMI) fell from just below the neutral level of 50 in March to 41.5 in April in the worst showing since the 2007-09 recession. The new orders index fell from 42.2 to 27.1 – the lowest level since December 2009, and the production index fell from 47.7 to 27.5 – the lowest level on record dating back to January 1948. The abrupt and substantial deterioration in assessments from purchasing managers in manufacturing is consistent with contraction not only of the manufacturing sector, but also of the economy at large.

Of the eighteen industries tracked by the Manufacturing ISM® *Report on Business*, two reported growth in the latest month (paper products and food, beverage, and tobacco products), down from ten in the previous month. Among industries with a major effect on Ohio manufacturing employment, transportation equipment, fabricated metal products, machinery, and primary metals reported contraction, in order of the breadth of the contraction.

A source in the transportation equipment industry reported that "COVID-19 has created a wave of activities, including vendors closing, vendors focusing only on the medical industry, employees not coming to work, [and] delayed shipments from overseas." A contact in the fabricated metals industry said that even though the construction industry has been hit less hard than others, weakness there is beginning to affect his company's business and create challenges.

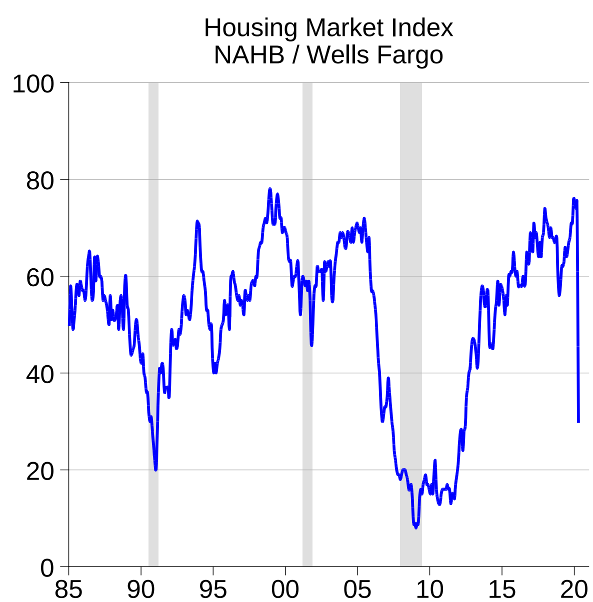
Construction

Construction put-in-place increased 0.9 percent in March, but the February change was revised lower from -1.3 percent to -2.5 percent. Private sector construction increased 0.7 percent after a 3.1 percent decline the month before. The increase resulted from a 2.3 percent rise in residential that followed a 4.8 percent drop the previous month, and a 1.3 percent decline innonresidential, which was the third in four months.

Within residential, increases in multi-family (2.0%) and improvements (10.2%) outweighed a 2.0 percent decline in single-family. The strength in residential in March might be misleading, because it came almost entirely from improvements, which had increased an unusual 17.9 percent in February and are known to be unreliable estimates. Within nonresidential, weakness was most pronounced in power and commercial, with no areas of strength.

Housing activity weakened in March as all aspects of the industry struggled. **Housing starts** decreased 8.0 percent in March on a three-month moving average basis, reflecting a 6.5 percent decline in single-family and a 10.8 percent drop in multi-family. Both categories had been gaining strength since the middle of 2019. Declines were large in the Midwest, with both single-family (-12.7%) and multi-family (-17.7%) pulling down total starts by 14.0 percent on a three-month moving average basis. The more-forward-looking permits data showed a similar, but not quite as weak, pattern.

New and existing **home sales** decreased in March, falling 1.6 percent and 4.3 percent, respectively. In the Midwest, sales of new homes edged down 0.3 percent and sales of existing homes fell by 1.9 percent. The loss of jobs, heightened un-certainty created by the pandemic, and the logistical obstacles to home search and purchase have begun to take a toll.



Not surprisingly considering the economic backdrop, homebuilders reported very steep declines in activity in April. The **Housing Market Index** (HMI) from the National Association of Homebuilders (NAHB) plunged from 72 in March to 30 in April. The index was lower in the 1990-91 and 2007-09 recessions, but the change from March to April was more than four times larger than the previous record. The HMI for the Midwest fell from 67 to 25.

REVENUES

The impact of the COVID-19 pandemic was evident in April tax revenues, particularly in the personal income and sales taxes. Non-auto sales tax also performed substantially below estimate while auto sales tax dropped by more than one-half from estimate and from the prior year. The personal income tax was dramatically impacted both by the economic downturn and by the postponement of the filing and payment dates for annual returns and the quarterly estimated tax returns. Even considering that much of the overall April shortfall was timing related (the reduced April revenue from changes of income tax payment dates will be mostly made up in early fiscal year 2021), the month's revenue decline was nonetheless historic in scale and sweep.

Even as the state begins to emerge from the stay-at-home phase of the pandemic response and economic activity ramps up, revenues will remain well below estimate during the remainder of this year. The remainder of fiscal year 2020 will also be impacted by the postponement of income tax filing due dates until July 2020. Accordingly, negative year-to-date performance of income tax will likely accumulate during the next several months. Non-auto sales tax and auto sales tax can also be expected to remain below estimate through the remainder of the fiscal year.

April GRF receipts totaled $2,322.6 million and were $867.5 million (-27.2%) below estimate, primarily due to GRF tax revenues. For the month, tax revenues were $866.5 million below estimate (-35.3%). Non-tax receipts and transfers, excluding Federal grants, were $7.4 million (14.3%) above estimate. Federal grants receipts were $8.4 million (-1.2%) below estimate.

For the year, total GRF revenues are $634.3 million (-2.3%) below estimate. After being above estimate through March, tax revenues are now $777.0 million (-4.0%) below estimate. More broadly, total non-federal revenues through April are $716.2 million (-3.6%) below estimate. Federal grants are $81.9 million (1.0%) above estimate.

Category	**Includes:**	**YTD Variance**	**% Variance**
Tax receipts	Sales & use, personal income, corporate franchise, financial institutions, commercial activity, natural gas distribution, public utility, kilowatt hour, foreign & domestic insurance, other business & property taxes, cigarette, alcoholic beverage, liquor gallonage, & estate	-$777.0	-4.0%
Non-tax receipts	Federal grants, earnings on investments, licenses & fees, other income, intrastate transfers	$134.1	1.6%
Transfers	Budget stabilization, liquor transfers, capital reserve, other	$8.5	12.4%
TOTAL REVENUE VARIANCE:		**-$634.3**	**-2.3%**
Non-federal revenue variance		**-$716.2**	**-3.6%**
Federal grants variance		**$81.9**	**1.0%**

For the month, the largest overage relative to estimate occurred with the cigarette and other tobacco products tax, at $14.3 million (20.5%). There were only two other material overages for the month: earnings on investments were $6.9 million (25.2%) above estimate, and licenses & fees exceeded estimate by $2.3 million (22.6%).

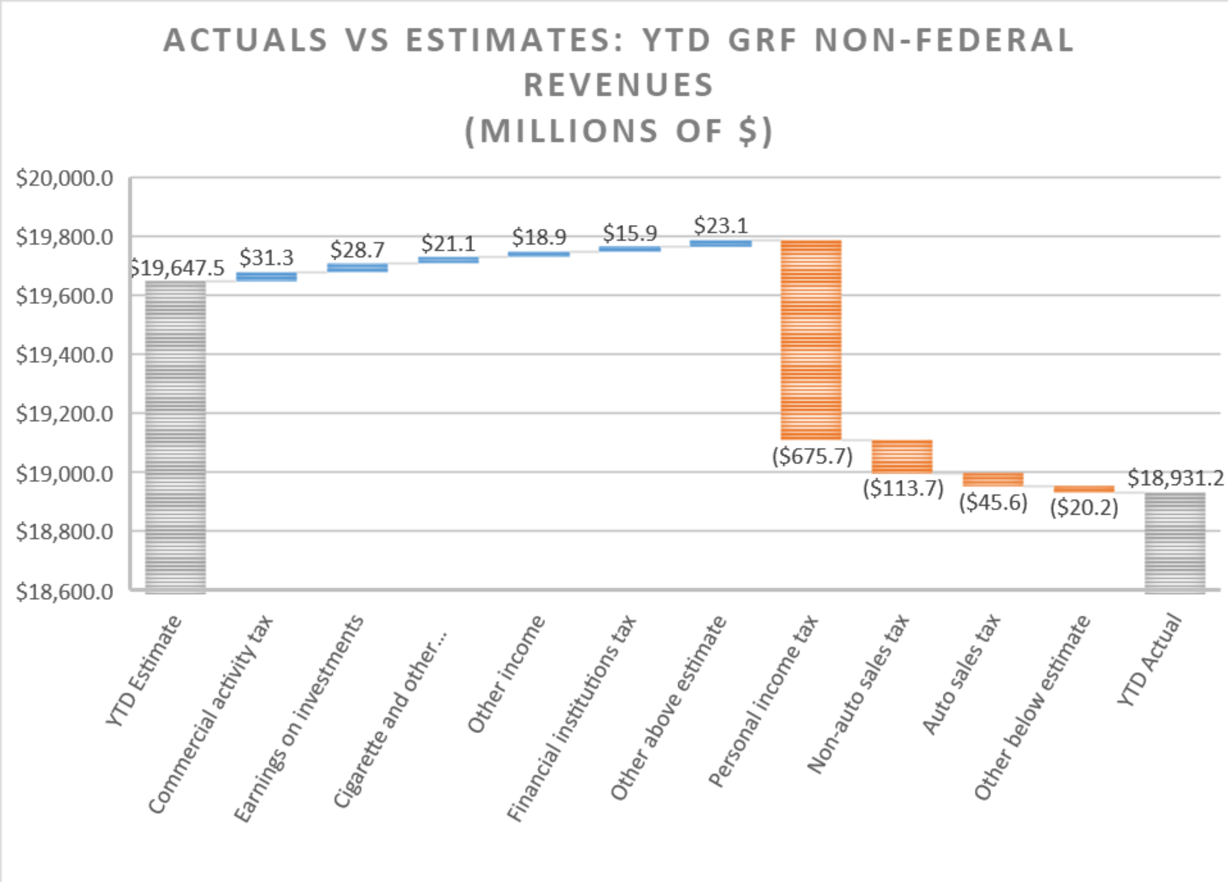
The personal income tax provided the largest shortfall from estimate in April, at $635.7 million (-50.5%), as elaborated on further below. The next largest negative deviation from forecast was for the non-auto sales tax at $146.2 million (-17.7%), followed by auto sales tax at $90.5 million (-57.3%), Federal grants at $8.4 million (-1.2%), and commercial activity tax at $7.8 million (-$11.1%).

The table below shows that sources underperforming relative to estimate (a variance totaling $893.5 million) in April far outweighed the size of revenue overperformers (an excess of $26.0 million), resulting in a $867.5 million net negative variance from estimate. Nearly three-quarters (73.3%) of the month's net revenue underperformance is attributable to the personal income tax.

GRF Revenue Sources Relative to Monthly Estimates – April 2020
($ in millions)

Individual Revenue Sources Above Estimate		**Individual Revenue Sources Below Estimate**	
Cigarette and other tobacco products tax	$14.3	Personal income tax	($635.7)
Earnings on investments	$6.9	Non-auto sales tax	($146.2)
Licenses and fees	$2.3	Auto sales tax	($90.5)
Other sources above estimate	$2.5	Federal grants	($8.4)
		Commercial activity tax	($7.8)
		Other sources below estimate	($4.9)
Total above	**$26.0**	**Total below**	**($893.5)**

(Note: Due to rounding of individual sources, the combined sum of sources above and below estimate may differ slightly from the total variance.)



The preceding chart displays the relative contributions of various revenue sources to the overall variation between actual and estimated non-federal revenues through April. It paints a starkly different picture from February and even from March, when auto and non-auto sales taxes were still above estimate and personal income tax was only slightly below estimate. This month's chart graphically depicts the major year-to-date shortfalls of three significant revenue sources, especially the outsized influence of personal income tax performance relative to estimate.

On a year-over-year basis, monthly receipts were $845.4 million (-26.7%) lower than in April of the previous fiscal year. The vast majority of the net decline was due to personal income tax revenue performance, which was $707.4 million (-53.2%) below last year. Other large declines occurred for non-auto sales tax which was $98.3 million (-12.6%) less than last April and auto sales tax which fell by $92.0 million (-57.7%). Cigarette and other tobacco products tax showed the only notable increase in revenue, at $11.0 million (15.1%).

For the year, total revenues are now $201.6 million (-0.7%) below last year, after being up $643.8 million through the previous month. The source with the highest growth is Federal grants at $298.1 million (3.7%). Non-auto sales tax remains above estimate despite the major decline in April, at $212.1 million (2.8%). Personal income tax revenue accounts for the largest decline at $773.0 million (-10.4%).

Non-Auto Sales Tax

GRF non-auto sales and use tax collections in April totaled $680.5 million and were $146.2 million (-17.7%) below the estimate. After being above estimate, year-to-date non-auto sales tax revenue is now below forecast by $113.7 million (-1.5%). In April, non-auto GRF sales tax revenue declined by $98.3 million (-12.6%) from the previous year; however, for the year-to-date non-auto sales tax revenue has grown by $212.1 million (2.8%) over last year.

Although March's non-auto sales tax performance (-9.7% from estimate) was the first indication of a decline in economic activity caused by COVID-19, April's performance was substantially worse. The more pronounced April decline was anticipated since it was known that April revenue would, for all intents and purposes, reflect an entire month's worth of reduced economic activity. More specifically, April non-auto sales tax revenue reflected a composite of March and April consumption. Approximately one-half of a given month's revenue emanates from anticipated activity in the current month (from those larger vendors required to make "accelerated" payments equal to 75 percent of their estimated sales tax liability for sales in the month of April); the other half is from activity occurring in the previous month (comprised of any remaining tax owed by accelerated vendors on their March activity, and the tax paid by smaller, non-accelerated vendors on their March sales).

Beginning in the middle of March, many segments of the consumer economy were substantially reduced or even closed in response to the stay-at-home order, business closure orders, and other actions taken to successfully "flatten the curve" of the COVID-19 pandemic in Ohio. The closure of restaurants and entertainment venues were among those most adversely affected by the orders, contributing to the economic contraction. Many other retailers and numerous service enterprises – among them, hotels, general merchandisers, clothing stores, and other discretionary durable and non-durable goods retailers (e.g., furniture stores) – were also closed, although delivery-only transactions (e.g., online sales) mitigated some of that economic loss. It should also be noted that some consumer spending shifted to other retail segments during March and April, most notably to online sales, grocery stores, and prepared food for take-out or delivery. However, Ohio does not tax food that is consumed off-premises, so there would have been only a modest gain in sales tax revenue from food-related establishments (i.e., on their taxable products whose sales benefited from increased foot traffic or heightened consumer demand).

There remain a myriad of questions whose resolution will shape non-auto sales tax performance for the foreseeable future. Most of those questions ultimately involve how soon citizens adapt and create conditions to mitigate the spread of COVID-19, thereby returning to some semblance of "normal consumer activity".

Auto Sales Tax

April auto sales tax revenues were $67.4 million, which is $90.5 million (-57.3%) below the estimate. Year-to-date auto sales tax revenues are now $45.6 million (-3.6%) below the estimate, overturning the overage that accumulated through March. April auto sales tax revenues were $92.0 million (-57.7%) below the prior year, and year-to-date revenues are $12.5 million (-1.0%) below the previous year.

Based on a seasonally adjusted annual rate (the amount of sales that occurred during the month after being adjusted for seasonal fluctuations and expressed as an annualized total), U.S. sales of new light vehicles in March are estimated at 8.3 to 9.1 million units. This constitutes a historically low level since such data has been tracked, close to the previous low attained in December 1981. For context, unit sales in February 2020 were 17.04 million, prior to the full onset of the pandemic in the U.S.

Ohio's performance conforms with April light vehicle sales estimates developed by industry analysts. Some accounts indicate that sales had begun to modestly recover in the latter half of April compared to the apparent trough reached in early April. Accordingly, it is reasonable to expect a less dramatic loss in May auto sales tax revenue relative to April. Nonetheless, OBM expects May performance to fall short of estimate and relative to the prior year.

Personal Income Tax

April GRF personal income tax receipts totaled $622.3 million and were $635.7 million (-50.5%) below the estimate. Year-to-date, personal income tax revenue is $675.7 million (-9.2%) below estimate. On a year-over-year basis, April income tax collections were $707.4 million (-53.2%) below April 2019 collections. Collections for the fiscal year-to-date are $773.0 million (-10.4%) below the previous year.

The fiscal year 2020-2021 budget bill (House Bill 166) enacted a four percent reduction in personal income tax rates effective with tax year 2019. Consistent with this rate cut, a four percent employer withholding rate reduction took effect in January 2020. The personal income tax revenue estimates for the last six months of fiscal year 2020 incorporate the expected effects of the rate changes as well as several other enacted personal income tax policy changes.

In April, the personal income tax exhibited historically low performance in terms of variance from forecast. Two distinctly different influences were at play. One pertains to the severe and unprecedented changes in labor market conditions that began in mid-March, most obviously the sudden, job losses and attendant increase in unemployment compensation claims. By the end of April, unemployment claims in Ohio had reached 1.1 million over the space of seven weeks. The other major influence on April revenue was the postponement of income tax filing and payment deadlines. Annual return payments normally required to be made by April 15 are now not required until July 15 and quarterly estimated income tax payments due on April 15 and June 15 are now extended to a July 15 due date.

Withholding tax payments fell short of estimate in April by $84.6 million (10.3%). Compared to last April, withholding was down $71.9 million (8.9%). Withholding is now $27.2 million (-0.3%) below estimate through April of this fiscal year. However, these figures reflect more than just employer withholding tax payments: they also include nonresident pass-through entity withholding tax payments (which are eligible for payment extension to July 15). If only employer withholding is considered, April collections are found to have declined by $57.8 (7.5%) relative to estimate, a smaller shortfall than if the wider "withholding" category is considered. Considering the scope of recent job losses, the size of the April employer withholding tax downturn is less severe than may have been otherwise expected.

The delay in the payment deadlines affected performance for nearly all other tax collection categories. Payments accompanying tax year 2019 annual returns or annual return extensions showed the largest decline from estimate, at $697.8 million (-84.9%). Since such payments are predominantly expected to be received in April, the month's performance means this payment category is $711.2 million (-68.5%) below estimate for the year-to-date. The other quite significant payment category for April entails quarterly estimated tax returns. Such payments were $80.9 million (-69.3%) below estimate for the month and are now $66.5 million (-9.5%) below the year-to-date estimate. Although many of the anticipated payments will instead occur in July, it is also recognized that the dramatic deterioration of the economy over the last two months will cause many estimated payment taxpayers to reduce those payments as they make downward revisions in their tax year 2020 income expectations.

The extension of filing deadlines did apparently create one dynamic that actually mitigated some of April's revenue reduction. Refund claims in April were much lower than expected, at $248.3 million (-47.8%). This puts refunds $149.5 million (7.4%) below estimate for the year. This also reverses the refund overage for the 2019 tax year filing season, which had been running ahead of estimate through March: for the January through April period, refunds are $186.1 million (-11.5%) below estimate. Again, this result is only temporary since it is expected that most of the refunds not claimed in April will instead be filed during the remaining months of fiscal year 2020 or in July 2020.

APRIL PERSONAL INCOME TAX RECEIPTS BY COMPONENT ($ in millions)

	Actual April	Estimate April	$ Var	Actual Apr-2020	Actual Apr-2019	$ Var Y-0ver-Y
Withholding	$734.3	$818.9	($84.6)	$734.3	$806.2	($71.9)
Quarterly Est.	$43.0	$123.9	($80.9)	$43.0	$126.5	($83.6)
Annual Returns & 40 P	$124.1	$821.9	($697.8)	$124.1	$869.2	($755.0)
Trust Payments	$6.7	$32.5	($25.8)	$6.7	$39.5	($32.8)
Other	$9.6	$8.9	$0.7	$9.6	$8.7	$0.9
Less: Refunds	($270.8)	($519.1)	$248.3	($270.8)	($495.1)	$224.2
Local Distr.	($24.7)	($29.0)	$4.3	($24.7)	($25.4)	$0.7
Net to GRF	$622.3	$1,258.0	($635.7)	$622.3	$1,329.7	($707.4)

(Note: The net totals and variance amounts may differ slightly from computations using the rounded actual and estimated figures provided in the table.)

Commercial Activity Tax (CAT)

The CAT was $7.8 million (-11.1%) below estimate in April. On a year-to-date basis, it is now $31.3 million (2.4%) above estimate. CAT tax filing and payment deadline is quarterly in nature, and May constitutes the next payment month. Since the month immediately preceding the due date is usually a good indicator of the performance in the following month, April's performance suggests that May revenue may fall short of estimate. This is not entirely unanticipated given the economic downturn. Although the bulk of CAT payments made during the final quarter of fiscal year 2020 should primarily reflect gross receipts activity that occurred prior to the pandemic, the severity of the economic crisis likely means that the CAT will bear at least some negative impact in this fiscal year.

Cigarette and Other Tobacco Products Tax

Cigarette excise tax was $14.3 million (20.5%) above estimate in April and $21.1 (3.1%) above estimate on a year-to-date basis. The substantial overage appears to be related to heightened consumption during the stay-at-home stage of the pandemic crisis. Anecdotal evidence suggests that consumers purchased more tobacco products as they were at home on an extended basis, or otherwise chose to stockpile their purchases. May revenue may return to a level closer to expectation, although there is also the possibility that revenues otherwise expected in May could have shifted into April.

GRF Non-Tax Receipts

GRF non-tax revenues in April totaled $735.8 million and were $1.6 million (-0.2%) below estimate. This variance was primarily attributable to the Federal Grants category, which was $8.4 million (-1.2%) below estimate. This negative variance is associated with federal share disbursements in the Medicaid program being below estimate for the month, as discussed in detail in the disbursement section of this report.

Partially offsetting the negative variance were the Earnings on Investments and License and Fees categories, which were $6.9 million (25.2%) and $2.3 million (22.6%) over estimate, respectively. Though the Earnings on Investment category is now over estimate for fiscal year by $28.7 million (34.7%), this overage is expected to be reduced in the fourth quarter due to the low interest environment.

5/5/2020

Table 1

GENERAL REVENUE FUND RECEIPTS
ACTUAL FY 2020 VS ESTIMATE FY 2020
($ in thousands)

REVENUE SOURCE	MONTH ACTUAL APRIL	MONTH ESTIMATE APRIL	MONTH $ VAR	MONTH % VAR	YEAR-TO-DATE ACTUAL Y-T-D	YEAR-TO-DATE ESTIMATE Y-T-D	YEAR-TO-DATE $ VAR	YEAR-TO-DATE % VAR
TAX RECEIPTS								
Non-Auto Sales & Use	680,476	826,700	(146,224)	-17.7%	7,691,165	7,804,900	(113,735)	-1.5%
Auto Sales & Use	67,421	157,900	(90,479)	-57.3%	1,225,629	1,271,200	(45,571)	-3.6%
Subtotal Sales & Use	747,897	984,600	(236,703)	-24.0%	8,916,794	9,076,100	(159,306)	-1.8%
Personal Income	622,255	1,258,000	(635,745)	-50.5%	6,629,138	7,304,800	(675,662)	-9.2%
Corporate Franchise	55	0	55	N/A	(310)	0	(310)	N/A
Financial Institutions Tax	25,173	25,800	(627)	-2.4%	153,270	137,400	15,870	11.6%
Commercial Activity Tax	62,315	70,100	(7,785)	-11.1%	1,320,734	1,289,400	31,334	2.4%
Petroleum Activity Tax	0	0	0	N/A	6,614	7,700	(1,086)	-14.1%
Public Utility	107	300	(193)	-64.2%	100,955	100,300	655	0.7%
Kilowatt Hour	30,947	30,800	147	0.5%	289,147	292,400	(3,253)	-1.1%
Natural Gas Distribution	3,523	4,300	(777)	-18.1%	32,584	44,300	(11,716)	-26.4%
Foreign Insurance	487	300	187	62.2%	336,417	331,300	5,117	1.5%
Domestic Insurance	0	800	(800)	N/A	1,685	1,000	685	68.5%
Other Business & Property	0	0	0	N/A	0	0	0	N/A
Cigarette and Other Tobacco	83,955	69,700	14,255	20.5%	701,042	679,900	21,142	3.1%
Alcoholic Beverage	4,477	3,600	877	24.4%	44,064	46,400	(2,336)	-5.0%
Liquor Gallonage	4,886	4,300	586	13.6%	43,936	42,100	1,836	4.4%
Estate	21	0	21	N/A	68	0	68	N/A
Total Tax Receipts	1,586,097	2,452,600	(866,503)	-35.3%	18,576,139	19,353,100	(776,961)	-4.0%
NON-TAX RECEIPTS								
Federal Grants	677,386	685,777	(8,391)	-1.2%	8,291,853	8,209,979	81,874	1.0%
Earnings on Investments	34,437	27,500	6,937	25.2%	111,168	82,500	28,668	34.7%
License & Fees	12,357	10,080	2,277	22.6%	63,499	57,254	6,245	10.9%
Other Income	167	920	(753)	-81.8%	91,706	72,835	18,871	25.9%
ISTV'S	11,496	13,200	(1,704)	-12.9%	11,680	13,200	(1,520)	-11.5%
Total Non-Tax Receipts	735,843	737,478	(1,635)	-0.2%	8,569,907	8,435,768	134,139	1.6%
TOTAL REVENUES	**2,321,940**	**3,190,078**	**(868,138)**	**-27.2%**	**27,146,046**	**27,788,868**	**(642,823)**	**-2.3%**
TRANSFERS								
Budget Stabilization	0	0	0	N/A	0	0	0	N/A
Transfers In - Other	614	0	614	N/A	77,045	68,570	8,476	12.4%
Temporary Transfers In	0	0	0	N/A	0	0	0	N/A
Total Transfers	614	0	614	N/A	77,045	68,570	8,476	12.4%
TOTAL SOURCES	**2,322,554**	**3,190,078**	**(867,524)**	**-27.2%**	**27,223,091**	**27,857,438**	**(634,347)**	**-2.3%**

5/5/2020

Table 2
GENERAL REVENUE FUND RECEIPTS
ACTUAL FY 2020 VS ACTUAL FY 2019
($ in thousands)

REVENUE SOURCE	MONTH APRIL FY 2020	MONTH APRIL FY 2019	MONTH $ VAR	MONTH % VAR	YEAR-TO-DATE ACTUAL FY 2020	YEAR-TO-DATE ACTUAL FY 2019	YEAR-TO-DATE $ VAR	YEAR-TO-DATE % VAR
TAX RECEIPTS								
Non-Auto Sales & Use	680,476	778,735	(98,260)	-12.6%	7,691,165	7,479,114	212,051	2.8%
Auto Sales & Use	67,421	159,379	(91,958)	-57.7%	1,225,629	1,238,103	(12,474)	-1.0%
Subtotal Sales & Use	747,897	938,115	(190,218)	-20.3%	8,916,794	8,717,217	199,577	2.3%
Personal Income	622,255	1,329,668	(707,413)	-53.2%	6,629,138	7,402,156	(773,017)	-10.4%
Corporate Franchise	55	96	(41)	-43.0%	(310)	1,551	(1,861)	-120.0%
Financial Institutions Tax	25,173	31,012	(5,839)	-18.8%	153,270	148,390	4,881	3.3%
Commercial Activity Tax	62,315	71,084	(8,769)	-12.3%	1,320,734	1,271,335	49,399	3.9%
Petroleum Activity Tax	0	0	0	N/A	6,614	8,400	(1,786)	-21.3%
Public Utility	107	229	(121)	-53.0%	100,955	104,428	(3,473)	-3.3%
Kilowatt Hour	30,947	32,288	(1,341)	-4.2%	289,147	305,211	(16,064)	-5.3%
Natural Gas Distribution	3,523	4,040	(517)	-12.8%	32,584	44,472	(11,888)	-26.7%
Foreign Insurance	487	150	336	223.9%	336,417	327,738	8,679	2.6%
Domestic Insurance	0	299	(299)	N/A	1,685	330	1,356	411.0%
Other Business & Property	0	0	0	N/A	0	0	0	N/A
Cigarette and Other Tobacco	83,955	72,922	11,033	15.1%	701,042	699,771	1,272	0.2%
Alcoholic Beverage	4,477	4,865	(388)	-8.0%	44,064	44,162	(98)	-0.2%
Liquor Gallonage	4,886	4,153	733	17.7%	43,936	41,810	2,125	5.1%
Estate	21	41	(20)	-49.8%	68	73	(5)	-6.9%
Total Tax Receipts	1,586,097	2,488,960	(902,864)	-36.3%	18,576,139	19,117,044	(540,905)	-2.8%
NON-TAX RECEIPTS								
Federal Grants	677,386	621,799	55,587	8.9%	8,291,853	7,993,772	298,081	3.7%
Earnings on Investments	34,437	27,418	7,019	25.6%	111,168	82,267	28,901	35.1%
License & Fee	12,357	10,935	1,421	13.0%	63,499	63,186	313	0.5%
Other Income	167	888	(721)	-81.2%	91,706	67,401	24,305	36.1%
ISTV'S	11,496	16,386	(4,890)	-29.8%	11,680	16,437	(4,757)	-28.9%
Total Non-Tax Receipts	735,843	677,426	58,417	8.6%	8,569,907	8,223,064	346,843	4.2%
TOTAL REVENUES	**2,321,940**	**3,166,387**	**(844,447)**	**-26.7%**	**27,146,046**	**27,340,107**	**(194,062)**	**-0.7%**
TRANSFERS								
Budget Stabilization	0	0	0	N/A	0	0	0	N/A
Transfers In - Other	614	1,550	(936)	-60.4%	77,045	84,588	(7,543)	-8.9%
Temporary Transfers In	0	0	0	N/A	0	0	0	N/A
Total Transfers	614	1,550	(936)	-60.4%	77,045	84,588	(7,543)	-8.9%
TOTAL SOURCES	**2,322,554**	**3,167,936**	**(845,383)**	**-26.7%**	**27,223,091**	**27,424,696**	**(201,605)**	**-0.7%**

DISBURSEMENTS

NOTE: In response to the COVID-19 pandemic, agencies across the state have deviated from their original disbursement plans. Some agencies have increased spending in targeted areas to mitigate the health and economic effects of Coronavirus. Simultaneously, all agencies are under orders to reduce spending through hiring and purchasing freezes and are subject to additional budgetary oversight from the Office of Budget and Management. These factors will continue to cause substantial variances from original disbursement plans for the remainder of the fiscal year as Governor DeWine recently ordered $775 million on General Revenue Fund reductions to balance the budget this fiscal year.

April GRF disbursements, across all uses, totaled $2,553.8 million and were $135.4 million (-5.0%) below estimate. This variance was primarily attributable to below estimate disbursements in the Health and Human Services category and was partially offset by expenditures that were above estimate in the Higher Education category. On a year-over-year basis, April total uses were $55.7 million (-2.1%) lower than those of the same month in the previous fiscal year, with a decrease in the Health and Human Services category largely responsible for the difference. Year-over-year variances from the estimate by category are provided in the table below.

Category	Description	Year-Over-Year Variance	% Variance
Expenditures and transfers between agencies (ISTVs)	State agency operations, subsidies, tax relief, debt service payments, and pending payroll (if applicable)	($55.6)	(2.1%)
Transfers	Temporary or permanent transfers out of the GRF that are not agency expenditures	($1.0)	(70.7%)
TOTAL DISBURSEMENTS VARIANCE:		**($55.7)**	**(2.1%)**

GRF disbursements are reported according to functional categories. This section contains information describing GRF spending and variances within each of these categories.

Primary and Secondary Education

This category contains GRF spending by the Ohio Department of Education. April disbursements for this category totaled $576.6 million and were $60.1 million (-9.4%) below estimate. This variance was primarily attributable to below estimate spending in the Early Childhood Education, Ohio Educational Computer Network, Educator Preparation, Nonpublic Administrative Cost Reimbursement, and Foundation Funding line items. Disbursements for the Early Childhood Education line item were below estimate as payments were shifted to a non-GRF funding source in April. The Ohio Educational Computer Network, Educator Preparation, and Nonpublic Administrative Cost Reimbursement line items were below estimate as subsidy payments were delayed pending budget reduction decisions in response to COVID-19. Disbursements for the Foundation Funding line item were below estimate due to most tuition adjustments occurring in March instead of April and March as estimated.

Expenditures for the school foundation program totaled $547.8 million and were $28.3 million (-4.9%) below estimate. Year-to-date disbursements were $6,967.8 million, which was $100.4 million (-1.4%) below estimate. On a year-over-year basis, disbursements in this category were $44.1 million (7.1%) lower than for the same month in the previous fiscal year while year-to-date expenditures were $16.3 million (0.2%) higher than the same point in fiscal year 2019.

Higher Education

April disbursements for the Higher Education category, which includes non-debt service GRF spending by the Department of Higher Education, totaled $234.2 million and were $42.3 million (22.0%) above the estimate. This variance was primarily attributable to disbursements in multiple program line items that were above estimate by $47.6 million because payments on Memorandums of Understanding anticipated to be completed and disbursed in previous quarters were made in April. The remaining monthly variance was due to disbursements in the War Orphans and Severely Disabled Veterans' Children Scholarship program line item, which was above estimates by $1.6 million as a result of higher than expected requests for reimbursement from higher education institutions. This variance was partially offset by spending in the Ohio College Opportunity Grant and the Choose Ohio First and National Guard Scholarship programs that were $6.1 million below estimate as a result of lower than expected requests for reimbursement from higher education institutions.

Year-to-date disbursements were $1,977.5 million, which was $30.1 million (-1.5%) below estimate. On a year-over-year basis, disbursements in this category were $50.0 million (27.2%) higher than for the same month in the previous fiscal year while year-to-date expenditures were $63.3 million (3.3%) higher than at the same point in fiscal year 2019.

Other Education

This category includes non-debt service GRF expenditures made by the Broadcast Educational Media Commission, the Ohio Facilities Construction Commission, the Ohio State School for the Blind, the Ohio School for the Deaf, as well as disbursements made to libraries, cultural, and arts organizations.

April disbursements in this category totaled $3.5 million and were $0.5 million (-12.1%) below estimate. Year-to-date disbursements were $74.7 million, which was $2.6 million (3.6%) above estimate. On a year-over-year basis, disbursements in this category were $0.3 million (-8.7%) lower than for the same month in the previous fiscal year while year-to-date expenditures were $10.4 million (16.2%) higher than at the same point in fiscal year 2019.

Medicaid

This category includes all Medicaid spending on services and program support by the following eight agencies: the Department of Medicaid, the Department of Mental Health and Addiction Services, the Department of Developmental Disabilities, the Department of Health, the Department of Job and Family Services, the Department of Aging, the Department of Education, and the State Board of Pharmacy.

Expenditures

April GRF disbursements for the Medicaid Program totaled $998.0 million and were $20.4 million (2.0%) below estimate and $16.4 million (1.7%) above disbursements for the same month in the previous fiscal year. Year-to-date GRF disbursements totaled $13.0 billion and were $116.4 million (0.9%) above estimate and $628.5 million (5.1%) above disbursements for the same point in the previous fiscal year.

April all-funds disbursements for the Medicaid Program totaled $2.3 billion and were $39.6 million (-1.7%) below estimate and $168.6 million (7.9%) above disbursements for the same month in the previous fiscal year. Year-to-date all-funds disbursements totaled $23.6 billion and were $64.5 million (-0.3%) below estimate and $1.3 billion (5.9%) above disbursements for the same point in the previous fiscal year.

The April all-funds variance was primarily attributable to below estimate spending in the managed care and fee-for-service programs. The managed care program was below estimate due primarily to adjustments within MyCare that caused below estimate spending for this category in April, making up for the above estimate spending last month. It is worth noting that while there was a significant increase in managed care enrollment during the month of April (100,000), much of the associated cost will occur within payments made in May due to timing. Despite this, for April the Community First Choice and Group VIII categories were above estimate by 2.3 percent and 8.9 percent respectively, illustrating the financial effects of COVID related enrollment increases in these categories. The fee-for-service program, both general Medicaid services and the Department of Developmental Disabilities services were below estimate due to COVID related reductions in utilization. Underspending in the areas noted above were enough to mask some COVID related effects in April, however, as enrollment continues to increase in future months, above estimate spending should be expected.

The year-to-date all-funds variance was primarily attributable to below estimate spending in the fee-for-service program, in administration related expenses, and in the premium assistance program. Underspending in the fee-for-service program was largely attributable to delayed payments, while the underspending in the premium assistance program was attributable to lower than anticipated enrollment and lower than expected premiums. Year-to-date administrative expenses were below estimate due primarily to lower than anticipated information technology expenses. These underages were partially offset by above estimate spending in the managed care program due to the quality assurance corrective payments made in December and January, higher managed care rates that took effect January 1st, and COVID related overages due to rising enrollment.

The chart below shows the current month's disbursement variance by funding source.

(in millions, totals may not add due to rounding)

	Apr. Actual	Apr. Projection	Variance	Variance %
GRF	$998.0	$1,018.4	$ (20.4)	-2.0%
Non-GRF	$1,295.4	$1,314.6	$(19.2)	-1.5%
All Funds	$2,293.4	$2,333.0	$ (39.6)	-1.7%

Enrollment

Total April enrollment was 2.92 million, which was 100,656 (3.6%) above estimate and 89,265 (3.1%) above enrollment for the same period last fiscal year. Year-to-date average monthly enrollment was 2.81 million and was essentially at estimate.

April enrollment by major eligibility category was: Covered Families and Children, 1.61 million; Aged, Blind and Disabled (ABD), 498,529; and Group VIII Expansion, 670,957.

**Please note that these data are subject to revision.*

Health and Human Services

This category includes non-debt service GRF expenditures by the following state agencies: Job and Family Services, Health, Aging, Developmental Disabilities, Mental Health and Addiction Services, and others. Examples of expenditures in this category include childcare, TANF, administration of the state's psychiatric hospitals, operating subsidies to county boards of developmental disabilities, various immunization programs, and Ohio's long-term care ombudsman program. To the extent that these agencies spend GRF to support Medicaid services, that spending is reflected in the Medicaid category.

April disbursements in this category totaled $78.1 million and were $74.5 million (-48.8%) below estimate. Year-to-date disbursements were $1.2 billion, which was $117.0 million (-9.0%) below estimate. On a year-over-year basis, disbursements in this category were $69.4 million (-47.0%) lower than for the same month in the previous fiscal year while year-to-date expenditures were $37.5 million (3.3%) higher than at the same point in fiscal year 2019.

Department of Developmental Disabilities
March disbursements for the Department of Developmental Disabilities totaled $4.9 million and were $1.3 million (30.0%) above estimate. This variance was primarily attributable to above estimate spending in the Early Intervention line item and makes up for below estimate spending in the previous month. The variance is mostly timing related precipitated by normal program fluctuations and some uncertainty regarding the COVID-19 pandemic.

Department of Health
April disbursements for the Department of Health totaled $8.8 million and were $1.3 million (17.0%) above estimate. This variance was primarily attributed to the Free Clinic Safety Net Services line item which was $1.1 million (100.0%) above estimate due to payments for November and February going out in April.

Department of Job and Family Services
April disbursements for the Department of Job and Family Services totaled $37.3 million and were $56.8 million (-60.3%) below estimate. This variance was primarily attributable to the Family and Children Services line item, which was $33.3 million below estimate during the month because counties received quarterly Public Children Services Allocation payments in March instead of April. The Early Care and Education line item was $17.0 million below estimate because weekly child care provider payments were made earlier in the year than anticipated. The Child Care State/Maintenance of Effort line item was $4.2 million below estimate because federal matching dollars were not available as anticipated. The Family Assistance Local line item was $2.6 million below estimate because counties requested less in County Income Maintenance payments than estimated after requesting more in prior months. The Program Operations line item was $1.8 million below estimate due to delayed invoices from various vendors. This variance was partially offset by the TANF State/Maintenance of Effort line item, which was $1.9 million above estimate due to an increase in the Ohio Works First caseload related to the COVID-19 pandemic.

Department of Mental Health and Addiction Services
April disbursements for the Department of Mental Health and Addiction Services totaled $23.7 million and were $17.9 million (-43.0%) below estimate. This variance was primarily attributable to disbursements in the Continuum of Care Services line item, which was $10.5 million (-73.6%) below estimate, the Criminal Justice Services line item, which was $3.9 million (-100.0%) below estimate, the Specialized Docket Support line item, which was $1.3 million (-100.0%) below estimate, and the Community Innovations line item which was $3.3 million (-99.5%) below estimate all due to payments not disbursed because of the onset of COVID-19. Payments are anticipated to be made over the next two months. This variance was partially offset by disbursements in the Hospital Services line item, which was $1.9 million (12.9%) above estimate, due to higher than expected payroll and operating costs related to COVID-19.

Justice and Public Protection

This category includes non-debt service GRF expenditures by the Department of Rehabilitation & Correction, the Department of Youth Services, the Attorney General, judicial agencies, and other justice-related entities.

April disbursements in this category totaled $209.8 million and were $20.3 million (-8.8%) below estimate. Year-to-date disbursements were $2.1 billion, which was $44.2 million (-2.1%) below estimate. On a year-over-year basis, disbursements in this category were $21.8 million (11.6%) higher than for the same month in the previous fiscal year while year-to-date expenditures were $140.9 million (7.4%) higher than at the same point in fiscal year 2019.

Department of Public Safety
April disbursements for the Department of Public Safety totaled $1.9 million and were $2.2 million (-115.8%) below estimate. This variance was primarily attributable to disbursements in the Local Disaster Assistance, Security Grants, and Security Grants - Personnel line items, which were $1.3 million below estimate due to the timing of subsidy payments. Additionally, the Recovery Ohio Law Enforcement line item was $0.6 million below estimate due to the timing of subsidy payments.

Department of Rehabilitation and Correction

April disbursements for the Department of Rehabilitation and Correction totaled $162.5 million and were $17.4 million (-9.7%) below estimate. This variance was primarily attributable to variances in the Halfway House line item, which was $16.6 million below estimate due to the timing of payments and offsetting an overage from March. The Institutional Medical Services line item was $6.1 million below estimate also due to timing of payments offsetting expenses from March. These variances were partially offset by disbursements in the Institutional Operations line item, which were $4.0 million above estimate due to increased spending on cleaning supplies and other COVID-19 related items as well as hazard pay expenses.

Public Defender Commission

April disbursements for the Public Defender Commission totaled $6.5 million and were $2.8 million (-29.7%) below estimate. This variance was primarily attributable to disbursements in the County Reimbursement line item, which was $2.9 million below estimate due to the timing of payments pending budget reduction decisions and decreased requests for reimbursement as court activity slows in response to COVID-19.

General Government

This category includes non-debt service GRF expenditures by the Department of Administrative Services, Department of Natural Resources, Development Services Agency, Department of Agriculture, Department of Taxation, Office of Budget and Management, non-judicial statewide elected officials, legislative agencies, and others.

April disbursements in this category totaled $52.7 million and were $6.2 million (13.3%) above estimate. Year-to-date disbursements were $386.0 million, which was $52.7 million (-12.0%) below estimate. On a year-over-year basis, disbursements in this category were $3.5 million (-6.2%) lower than for the same month in the previous fiscal year while year-to-date expenditures were $45.9 million (13.5%) higher than at the same point in fiscal year 2019.

Department of Transportation

April disbursements for the Department of Transportation totaled $19.4 million and were $10.7 million above estimate (121.5%). This variance was primarily attributable to the Public Transportation – State line item, which was $11.3 million above estimate due to program expenses being paid in April that were planned earlier in the year. This variance was partially offset by the Airport Improvements – State line item, which was $0.5 million below estimate due to the timing of project expenditures and payments to grantees.

Property Tax Reimbursements

Payments from the property tax reimbursement category are made to local governments and school districts to reimburse these entities for revenues foregone as a result of the 10.0 percent and 2.5 percent rollback, as well as the homestead exemption. Property tax reimbursements totaled $304.6 million in April and were $5.8 million (-1.9%) below estimate. Year-to-date expenses were $1.3 billion and were $100.5 million (-7.1%) below estimate. The monthly variance was the result of reimbursement requests being received from counties later in the fiscal year than anticipated.

Debt Service

April payments for debt service totaled $96.2 million and were $2.3 million (-2.3%) below estimate. Year-to-date expenses in this category total $1.4 billion and were $10.2 million (-0.7%) below estimate. The monthly variance is primarily attributable to the downward movement in interest rates that impact variable rate debt.

Transfers Out

April transfers out totaled $41 thousand though none were estimated. Year-to-date transfers totaled $668.2 million and were $1.8 million (-0.3%) below estimate. The monthly variance was caused by a corrective transfer moving interest earnings to the Deferred Prizes Trust Fund.

Preliminary

5/1/2020

Table 3

GENERAL REVENUE FUND DISBURSEMENTS
ACTUAL FY 2020 VS ESTIMATE FY 2020
($ in thousands)

Functional Reporting Categories Description	MONTH ACTUAL APRIL	MONTH ESTIMATED APRIL	MONTH $ VAR	MONTH % VAR	YEAR-TO-DATE YTD ACTUAL	YEAR-TO-DATE YTD ESTIMATE	YEAR-TO-DATE $ VAR	YEAR-TO-DATE % VAR
Primary and Secondary Education	576,621	636,732	(60,111)	-9.4%	6,967,795	7,068,180	(100,386)	-1.4%
Higher Education	234,190	191,903	42,287	22.0%	1,977,477	2,007,623	(30,146)	-1.5%
Other Education	3,505	3,986	(481)	-12.1%	74,746	72,154	2,592	3.6%
Medicaid	997,998	1,018,410	(20,413)	-2.0%	12,991,582	12,875,154	116,428	0.9%
Health and Human Services	78,129	152,659	(74,530)	-48.8%	1,184,683	1,301,637	(116,954)	-9.0%
Justice and Public Protection	209,772	230,065	(20,293)	-8.8%	2,052,511	2,096,664	(44,153)	-2.1%
General Government	52,693	46,503	6,189	13.3%	385,960	438,644	(52,685)	-12.0%
Property Tax Reimbursements	304,570	310,403	(5,833)	-1.9%	1,307,922	1,408,426	(100,504)	-7.1%
Debt Service	96,242	98,535	(2,294)	-2.3%	1,358,044	1,368,228	(10,184)	-0.7%
Total Expenditures & ISTV's	**2,553,719**	**2,689,197**	**(135,478)**	**-5.0%**	**28,300,721**	**28,636,712**	**(335,991)**	**-1.2%**
Transfers Out:								
BSF Transfer Out	0	0	0	N/A	0	0	0	N/A
Operating Transfer Out	41	0	41	N/A	668,161	669,975	(1,815)	-0.3%
Temporary Transfer Out	0	0	0	N/A	0	0	0	N/A
Total Transfers Out	**41**	**0**	**41**	**N/A**	**668,161**	**669,975**	**(1,815)**	**-0.3%**
Total Fund Uses	**2,553,760**	**2,689,197**	**(135,437)**	**-5.0%**	**28,968,882**	**29,306,687**	**(337,805)**	**-1.2%**

Preliminary
5/1/2020

Table 4
GENERAL REVENUE FUND DISBURSEMENTS
ACTUAL FY 2020 VS ACTUAL FY 2019
($ in thousands)

Functional Reporting Categories Description	MONTH APRIL FY 2020	MONTH APRIL FY 2019	MONTH $ VAR	MONTH % VAR	YEAR-TO-DATE ACTUAL FY 2020	YEAR-TO-DATE ACTUAL FY 2019	YEAR-TO-DATE $ VAR	YEAR-TO-DATE % VAR
Primary and Secondary Education	576,621	620,766	(44,145)	-7.1%	6,967,795	6,951,472	16,322	0.2%
Higher Education	234,190	184,164	50,027	27.2%	1,977,477	1,914,180	63,298	3.3%
Other Education	3,505	3,840	(335)	-8.7%	74,746	64,343	10,404	16.2%
Medicaid	997,998	981,598	16,400	1.7%	12,991,582	12,363,054	628,529	5.1%
Health and Human Services	78,129	147,505	(69,377)	-47.0%	1,184,683	1,147,197	37,486	3.3%
Justice and Public Protection	209,772	187,925	21,846	11.6%	2,052,511	1,911,571	140,940	7.4%
General Government	52,693	56,166	(3,473)	-6.2%	385,960	340,053	45,907	13.5%
Property Tax Reimbursements	304,570	354,789	(50,218)	-14.2%	1,307,922	1,446,709	(138,787)	-9.6%
Debt Service	96,242	72,568	23,674	32.6%	1,358,044	1,349,087	8,958	0.7%
Total Expenditures & ISTV's	**2,553,719**	**2,609,321**	**(55,601)**	**-2.1%**	**28,300,721**	**27,487,666**	**813,055**	**3.0%**
Transfers Out:								
BSF Transfer	0	0	0	N/A	0	657,503	(657,503)	N/A
Operating Transfer Out	41	140	(99)	-70.7%	668,161	101,714	566,447	556.9%
Temporary Transfer Out	0	0	0	N/A	0	0	0	N/A
Total Transfers Out	**41**	**140**	**(99)**	**-70.7%**	**668,161**	**759,217**	**(91,056)**	**-12.0%**
Total Fund Uses	**2,553,760**	**2,609,461**	**(55,700)**	**-2.1%**	**28,968,882**	**28,246,883**	**721,998**	**2.6%**

FUND BALANCE

Due to the actions taken by Governor DeWine to reduce agency spending by $775 million and balance the budget during the difficult economic circumstances caused by the COVID-19 pandemic, OBM is currently working on updating the fund balance numbers. These changes will be reflected in this section for the monthly financial report published in June.

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