Commonwealth of Kentucky

Quarterly Economic & Revenue Report

Third Quarter Fiscal Year

2020

Governor's Office for Economic Analysis
Office of State Budget Director

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Andy Beshear
Governor

John T. Hicks
State Budget Director

Governor's Office for Policy and Management
Governor's Office for Economic Analysis
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April 30, 2020

The Honorable Andy Beshear
Governor
Commonwealth of Kentucky
State Capitol Building
Frankfort, Kentucky 40601

Mr. Jay Hartz
Director
Legislative Research Commission
Room 300, State Capitol
Frankfort, Kentucky 40601

Ms. Laurie Dudgeon
Administrative Office of the Courts
1001 Vandalay Drive
Frankfort, Kentucky 40601

Dear Governor Beshear, Mr. Hartz and Ms. Dudgeon:

In accordance with KRS 48.400(2), the Office of State Budget Director is directed to continuously monitor the financial situation of the Commonwealth. To that end the Office submits this *Quarterly Economic and Revenue Report* for the third quarter of fiscal year 2020 (FY20). This report includes a forecast of receipts for the next three fiscal quarters, which includes an unofficial estimate of receipts for all of FY 20 that shows a potential General Fund revenue shortfall of $318.7 to $495.7 million. The report also provides updates on the national and Kentucky economic landscapes.

The revenue outlook has changed dramatically due to the COVID-19 pandemic. While General Fund revenue growth was 3.9 percent through the first three quarters of FY20, a large drop in revenues is projected in the fourth quarter. This would be the first annual General Fund decline since FY10.

TEAM KENTUCKY

This report includes two revenue projection scenarios based on the timing of the peak of COVID-19 cases and the relaxation of social distancing mandates.

This Office will continue to closely monitor Kentucky's economic and revenue conditions during this turbulent time, and provide updates at the appropriate times.

Sincerely,

John T. Hicks
State Budget Director

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EXECUTIVE SUMMARY

In accordance with KRS 48.400(2), the Office of State Budget Director (OSBD) is directed to continuously monitor the financial situation of the Commonwealth. To that end the Office submits this *Quarterly Economic and Revenue Report* for the third quarter of fiscal year 2020 (FY20). This report includes the actual revenue receipts for the third quarter and the first nine months of FY20, as well as a forecast of receipts for the next three fiscal quarters, which includes an unofficial estimate of receipts for all of FY20. The report also provides updates on the national and Kentucky economic landscapes.

The United States government declared a public health emergency as of January 27, 2020 for the novel coronavirus (COVID-19). Subsequently, the Centers for Disease Control and Prevention identified the public health threat as high and person-to-person spread will continue in the United States. On March 6, 2020, Governor Andy Beshear declared that a state of emergency existed in the Commonwealth. To prevent the spread of the COVID-19 virus in Kentucky, Governor Beshear issued a series of orders directing mitigation efforts to "flatten the curve" of the number and rate of infections. Those actions and similar ones taken by other Governors and throughout the world have dramatically affected state, national, and global economies. The depth and duration of the resulting economic recession will depend primarily on the capacity and execution of further mitigation, testing, and containment actions sufficient to re-open businesses and phase-in an economic recovery.

With such economic uncertainty, this report includes two revenue forecast scenarios, a "control" and a "pessimistic" forecast. The duration of COVID-19 cases and the national economic assumptions behind them are based on forecasts provided by IHS Markit, a global economic forecasting firm. The control forecast assumes that the COVID-19 cases will peak in the current quarter (April-June), with new cases dwindling to low enough numbers by early in the next quarter (July-September) to permit a limited relaxation of social distancing mandates. The pessimistic forecast assumes that it will take much longer to bring COVID-19 under control, extending the peak slightly beyond the second calendar quarter of 2020 with a concomitant increase in the period of social distancing. The pessimistic forecast estimates steeper declines in many economic components, such as personal income, consumer spending, and output.

FY20 Revenue Shortfall and First Two Quarters of FY21

The General Fund revenue shortfall for FY20 is projected to range from $318.7 to $495.7 million. These figures reflect a 3.8 to 4.7 percent revenue shortfall compared to the official estimate of $11,448.2 million. Fourth quarter General Fund receipts are estimated to range from 18.2 to 23.7 percent less than fourth quarter receipts in

FY19. The Road Fund revenue shortfall is projected to range from $116.4 to $194.6 million, reflecting a 7.5 to 12.5 percent revenue shortfall compared to the official estimate of $1,551.8 million. Fourth quarter Road Fund receipts are estimated to range from 36.8 to 55.2 percent less than the prior year. The projected downturn in revenues is remarkable in the overall magnitude, but equally so in the swiftness in which it will impact the General Fund and Road Fund.

General Fund growth through the first three quarters of FY20 was a solid 3.9 percent, with growth rates increasing in each quarter. The third quarter growth rate may have been tempered by a few accounts which were already experiencing a decline due to depressed economic activity in March. For most tax accounts, however, April collections reflect March economic activity. The declining economic activity which began in March will appear in April receipts. Receipts are expected to soften in the month of April before getting dramatically worse in May and June.

General Fund revenues in the first half of FY21 are expected to fall another 10.5 to 17.2 percent. In the control scenario, nearly all major accounts are expected to decline in the first two quarters of FY21. The two largest percentage declines are in the sales and use account, which is expected to fall 13.8 percent, and the business taxes, with an expected decline of 43.3 percent. The pessimistic scenario has deeper declines in these two accounts, but it also contains a projected loss of 18.6 percent in the individual income tax.

The most recent observations in the state and national economy show some weakness. According to the U.S. Labor Department, over 500,000 Kentuckians have filed for unemployment benefits in the past five weeks. To put that in perspective, roughly 25 percent of Kentucky's workforce is currently without employment. Real Gross Domestic Production (real GDP) rose by 0.7 percent in the third quarter of FY20. This is a significant reduction in growth compared to the last six quarters, where quarter-compared-to-same-quarter-last-year growth was over 2.1 percent per quarter. On an adjacent-quarter basis, real GDP fell by 0.9 percent compared to the second quarter.

Nationally, both the control and pessimistic forecasts assume a three quarter recession, starting in the third quarter of FY20. Additionally, the forecast assumes consumers are more reticent to bounce back to normal consumption patterns. Year-over-year GDP growth in the pessimistic scenario is anticipated to drop to 16.4 percent in the fourth quarter of FY20, and decline by 21.6 percent in the first and second quarters of FY21. By historical standards these rates of decline are quite severe.

REVENUE & ECONOMIC OUTLOOK

GENERAL FUND

The revenue forecasts presented in the following tables were prepared using the April 2020 economic forecasts from both IHS Markit and the Kentucky MAK model. Given the unprecedented COVID-19 public health crisis, the economic and revenue forecasts contain significant uncertainty. The duration of COVID-19 cases and the national economic assumptions behind them are based on forecasts provided by IHS Markit, a global economic forecasting firm. The control forecast assumes that the COVID-19 cases will peak in the current quarter (April-June), with new cases dwindling to low enough numbers by early in the next quarter (July-September) to permit a limited relaxation of social distancing mandates. The pessimistic forecast assumes that it will take much longer to bring COVID-19 under control, extending the peak slightly beyond the second calendar quarter of 2020 with a concomitant increase in the period of social distancing.

Projected General Fund revenues for the next three quarters are shown in Tables 1A and 1B. As Table 1A indicates, the General Fund is expected to decline in the fourth quarter of FY20 at a rate of 18.2 percent compared to the fourth quarter of FY19 in the control scenario. Growth through the first nine months of FY20 was 3.9 percent. Revenues for the entire FY20 are projected to be $11,129.5 million, a 2.3 percent annual decline. Compared to the recently enacted General Fund estimate of $11,448.2 million, FY20 projected revenues will fall $318.7 million short of the estimate. General Fund revenues in the first half of FY21 are expected to fall another 10.5 percent.

In the pessimistic scenario, Table 1B, the revenue shortfalls are deeper than the control forecast. The General Fund is expected to decline 23.7 percent in the fourth quarter of FY20 compared to the fourth quarter of FY19, leading to a potential revenue shortfall of $495.7 million in FY20. Following the pessimistic scenario into the first two quarters of FY21, General Fund revenues in FY21 are expected to fall another 17.2 percent.

Table 1A
General Fund Interim Forecast: Control
$ millions

	FY20						FY20		FY21	
	Q1 - Q3		Q4		Full Year		Official Enacted		Q1 & Q2	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff	Estimate	% Chg
Individual Income	3,355.0	5.2	1,290.2	-4.8	4,645.3	2.2	4,664.4	-19.1	2,112.1	-5.2
Sales & Use	3,086.6	6.7	856.4	-18.1	3,943.0	0.1	4,129.8	-186.8	1,799.4	-13.8
Corp. Inc. & LLET	371.4	-15.9	101.9	-68.2	473.3	-37.9	581.1	-107.8	192.8	-43.3
Property	594.7	3.5	62.2	-14.4	656.9	1.5	657.1	-0.2	392.9	-9.0
Lottery	201.4	9.6	54.0	-32.8	255.4	-3.3	271.0	-15.6	119.0	-13.7
Cigarettes	268.0	2.8	89.9	-3.0	357.9	1.3	344.9	13.0	173.6	-3.4
Coal Severance	48.1	-27.0	14.6	-45.9	62.7	-32.5	55.9	6.8	28.3	-12.7
Other	593.2	-0.1	141.8	-28.0	735.0	-7.0	744.0	-9.0	324.7	3.9
General Fund	**8,518.3**	**3.9**	**2,611.1**	**-18.2**	**11,129.5**	**-2.3**	**11,448.2**	**-318.7**	**5,142.7**	**-10.5**

Table 1B
General Fund Interim Forecast: Pessmistic
$ millions

	FY20						FY20		FY21	
	Q1 - Q3		Q4		Full Year		Official Enacted		Q1 & Q2	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff	Estimate	% Chg
Individual Income	3,355.0	5.2	1,179.6	-13.0	4,534.6	-0.2	4,664.4	-129.8	1,812.8	-18.6
Sales & Use	3,086.6	6.7	832.6	-20.4	3,919.1	-0.5	4,129.8	-210.7	1,744.3	-16.4
Corp. Inc. & LLET	371.4	-15.9	67.0	-79.1	438.4	-42.5	581.1	-142.7	175.4	-48.4
Property	594.7	3.5	54.7	-24.8	649.4	0.4	657.1	-7.7	390.6	-9.6
Lottery	201.4	9.6	54.0	-32.8	255.4	-3.3	271.0	-15.6	119.0	-13.7
Cigarettes	268.0	2.8	89.9	-3.0	357.9	1.3	344.9	13.0	171.2	-4.8
Coal Severance	48.1	-27.0	14.6	-45.9	62.7	-32.5	55.9	6.8	27.4	-15.5
Other	593.2	-0.1	141.8	-28.0	735.0	-7.0	744.0	-9.0	319.8	2.3
General Fund	**8,518.3**	**3.9**	**2,434.2**	**-23.7**	**10,952.5**	**-3.9**	**11,448.2**	**-495.7**	**4,760.4**	**-17.2**

Every major category of taxes is expected to decline in the fourth quarter. The largest General Fund revenue source, the individual income tax, is expected to decline 4.8 percent in the fourth quarter of FY20. The downturn is expected to plunge further in FY21, with an anticipated 5.2 percent rate of decline in the first half of FY21. In the pessimistic scenario, the fourth quarter decline deepens to 13.0 percent followed by an 18.6 percent decline in first two quarters of FY21. The sharp rates of decline in the individual income tax emanate primarily from the Kentucky MAK model forecast for wages and salaries in the Commonwealth (see Tables 4A and 4B). In the control scenario, Kentucky wage and salary income falls 11.7 percent in the first half of FY21 with a much steeper decline of 37.4 percent in the pessimistic scenario.

In addition to falling withholding due to the declines in Kentucky wages and salaries, the fourth quarter of FY20 will endure some monthly timing changes within the quarter for the other components of the individual income tax. The due dates for both final returns and estimated payments will shift from April to July pursuant to a proclamation from Governor Beshear on March 20, 2020, which was later codified by the General Assembly in SB 150. This order shifts the estimated payments normally due on April 15th and June 15th to July 15th. Despite the shift in the due dates, the receipts will be recorded as FY20 receipts. The same deadline change applies to final returns from Tax Year 2019 that were previously due on April 15th.

Since the expansion of the tax base to include more services and remote sales in 2018 and 2019, the sales and use tax has been a main contributor to General Fund growth in Kentucky. This revenue source climbed 9.2 percent in FY19 and was up another 6.7 percent through the first nine months of FY20. However, appropriately strict social distancing mandates due to the COVID-19 virus has suppressed consumer spending, the epicenter of sales tax activity. The forecast calls for sales and use taxes to decline 18.1 percent in the fourth quarter of FY20 followed by a 13.8 percent decline in the first half of FY21. If the economy tracks the pessimistic course, then the fourth quarter decline would escalate to 20.4 percent with an additional 16.4 percent drop in the first two quarters of FY21. In terms of variations from the official enacted estimates, the sales tax is expected to fall short by $186.8 to $210.7 million for FY20.

Beginning July 1, 2019, online sales platforms are now required to collect and remit Kentucky sales tax on transactions they facilitate for sales into the Commonwealth from third party sellers. Collection requirements apply based upon on the same economic standard as remote retailers ($100,000 in gross receipts or 200 or more separate transactions from sales into Kentucky annually). While this additional source of revenue picks up some of the loss in sales tax revenues from main street retailers, the fall in demand for consumer expenditures creates a larger wave than can be stemmed by the marketplace provider language.

Aside from a temporary timing issue, property tax revenues are expected to end FY20 with growth of 1.5 percent in the control scenario and 0.4 percent in the pessimistic scenario. Compared to the enacted estimate for FY20, property taxes are expected to fall short of the mark by between $0.2 million and $7.7 million in the pessimistic scenario. The timing issue involves collections of the motor vehicle property tax, which is one of the main sources of property tax revenues in the fourth quarter of FY20. Due to the closure of most county clerks offices across the Commonwealth, there could be some temporary delays in receiving a portion of the motor vehicle property tax. In general, however, the property tax category of receipts are relatively immune from the effects of the public health crisis since overall valuations of real and tangible property will be largely insulated from its economic effects.

Business taxes, on the other hand, will be greatly impacted in the fourth quarter of FY20 as well as the first half of FY21. The corporation income tax and the limited liability entity tax (LLET) are estimated in combination due to the interplay between the payment of the LLET and the associated credit against the income tax liability. Year-to-date business tax receipts have fallen 15.9 percent through the first three quarters of FY20, primarily due to larger than normal refund activity. Business tax activity in the fourth quarter of each fiscal year is dominated by the estimated payments that are usually due in the months of April and June for calendar year filers. These estimated payments are forward looking; meant as prepayments for taxable income for tax year 2020. Taxable business income in 2020 is expected to be greatly impacted by the current economic recession, as witnessed by the sizable drop in projected corporate profits. Projected fourth-quarter rates of decline range from 68.2 percent in the control scenario to 79.1 percent for the pessimistic outlook. These declines correspond to variations from the enacted estimate between $107.8 million and $142.7 million in FY20. Corporate profits are expected to remain depressed through the forecasting horizon in FY21.

The official enacted estimate for lottery collections is $271.0 million for FY20, but fourth quarter dividends are expected to fall short of expectations due to declining sales because of social distancing and reduced retail activity. Both estimate scenarios call for $255.4 million in FY20, a mark $15.6 million short of the official estimate. In FY21, continued social distancing and consumer reticence is expected to yield a lottery dividend of $119.0 million for the first half of FY21, representing a 13.7 percent decline in General Fund receipts.

Cigarette tax receipts in FY19 were profoundly impacted by the change in the rate of taxation from $0.60 per pack to $1.10 per pack. Tax receipts swelled to $353.5 million in FY19 for growth of 66.9 percent. Year-to-date collections in the cigarette tax are up 2.8 percent. Receipts are expected to retreat by 3.0 percent in the final quarter of FY20 to end the year at $357.9 million. In FY21, the downward trend in smoking is expected to continue, with rates of decline ranging from 3.4 percent in the control forecast to 4.8 percent in the pessimistic scenario. Both cigarette and alcohol taxes are expected to show some resilience in the face of the COVID-19 pandemic.

Year-to-date coal severance receipts have fallen 27.0 percent through the first nine months of FY20. Collections are anticipated to fall an additional 45.9 percent in the fourth quarter of FY20 and end the year at $62.7 million, a sum that is $6.8 million higher than the enacted estimate of $55.9 million. The coal severance tax is expected to further decline by 12.7 percent to 15.5 percent in first half of FY21. Coal severance receipts have fallen from an all-time high of $298.3 million in FY12 to a projected $62.7 million in FY20, an all-time low.

The Other category contains dozens of miscellaneous accounts, which make up the remainder of the General Fund. Insurance premium tax, bank franchise tax, and the telecommunication tax are the three largest accounts in the Other category. The Other category of taxes is expected to fall 28.0 percent during the final quarter of FY20, leading to a current year shortfall of $9.0 million. The largest declining account in the fourth quarter is abandoned property, which saw extremely high growth in FY19 due to the sale of abandoned securities. Notwithstanding the expected decline in FY20, growth is expected to be between 2.3 percent and 3.9 percent through the forecasting horizon in FY21. Many of the taxes in this collection of accounts will be countercyclical, meaning that tax receipts will go up as the general level of economic activity wanes. Two such taxes are alcoholic beverage taxes and the telecommunications tax, which now includes streaming video services due to the tax law change in 2019.

ROAD FUND

Much like the General Fund, the outlook for the Road Fund is highly correlated with the public health emergency. Therefore, just as with the General Fund, a control and pessimistic forecast was performed in FY20 and the first half of FY21 for the Road Fund. Please refer to Tables 2A and 2B for the details.

Both forecasts follow the same general pattern. Revenues will decline sharply in the fourth quarter of FY20 and decline less sharply in the first half of FY21. While the revenue situation in the first six months of FY21 will be an improvement relative to FY20 fourth quarter, collections will still decline compared to the first half of FY20. The difference between the two economic forecasts is that under the pessimistic scenario, the revenue situation will be worse than in the control for the entirety of the forecast horizon.

After growing 2.2 percent through the first nine months of the fiscal year, Road Fund revenues are expected to drop precipitously in the fourth quarter of FY20. The decline is projected to be 36.8 to 55.2 percent, as the impact from the economic downturn will be felt across all components of the Road Fund. Looking ahead, the two forecasts begin to converge as the rate of growth in revenue is much the same under both forecasts. Growth rates for the first three quarters of FY20 have been 1.1 percent, 1.1 percent, and 4.6 percent, respectively. The fourth quarter revenue decline will result in a budget shortfall of between $116.4 million and $194.6 million for FY20.

Motor fuels tax collections exhibit a lag as receipts in a particular month reflect economic activity from the prior month. Therefore, the receipts impact of COVID-19 will first show up in May receipts which will limit the fourth quarter drop in revenue. Collections are forecasted to decline from 33.6 to 52.1 percent over the final quarter of FY20. Receipts will decline modestly over the first two quarters of FY21 as the effects of COVID-19 abate and the recovery begins to take hold.

Motor vehicle usage tax collections are close to contemporaneous as monthly receipts generally reflect economic activity from the same time period. Collections in this account have grown 6.2 percent in the first three quarters of the fiscal year but are expected to decrease 52.5 percent to 72.1 percent in the fourth quarter. Looking ahead to FY21, revenues will decline but at a much more tempered rate. Receipts are forecasted to drop between 5.7 percent and 7.6 percent in the first half of FY21.

To estimate the growth of all other components of the Road Fund, officials of the Kentucky Transportation Cabinet and staff of the Governor's Office for Economic Analysis together assessed recent growth patterns as well as administrative and statutory factors.

Another aspect of Kentucky's response to COVID-19, an executive order extended the renewal dates for drivers' licenses, license plates, registration renewals, handicap parking permits and the like for 90 days. For forecasting purposes, this means that some revenue that normally would have been collected in FY20 will spill over into FY21. Determining a spillover amount is difficult as taxpayers have the option of renewing licenses online instead of waiting for the appropriate offices to reopen.

Motor vehicle license taxes are forecasted to fall approximately 10 percent to 17 percent in the final quarter of FY20 before increasing in the first half of FY21 under both economic scenarios. Motor vehicle operators' licenses are projected to follow a similar path to motor vehicle license collections with revenue decreases over the remainder of the fiscal year before increasing in the first two quarters of FY21.

Weight distance tax revenue is expected to fall approximately 26 percent to 60 percent in the final quarter of the fiscal year. Collections in this account are expected to continue to decline through the second quarter of FY21.

Income on investments is expected to drop significantly, as the sharp declines in revenue will reduce investible balances to extremely low levels.

All Other revenues have decreased 13.9 percent during the first three quarters of the current fiscal year. Receipts in this revenue category are expected to decrease 20 percent to approximately 35 percent in the final quarter of the year but increase anywhere from 3.0 percent to 4.6 percent over the remainder of the forecast horizon.

Table 2A
Road Fund Interim Forecast: Control
$ millions

	FY20						FY20		FY21	
	Q1 - Q3		Q4		Full Year		Official Enacted		Q1 - Q2	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff	Estimate	% Chg
Motor Fuels	581.3	1.0	131.5	-33.6	712.8	-7.8	773.2	-60.4	377.8	-5.1
Motor Vehicle Usage	399.6	6.2	65.6	-52.5	465.2	-9.6	518.6	-53.4	252.5	-5.7
Motor Vehicle License	77.3	-0.7	38.8	-9.9	116.1	-4.0	115.4	0.7	43.1	3.2
Motor Vehicle Operators	12.0	-2.7	3.7	-14.0	15.7	-5.6	17.1	-1.4	8.4	2.6
Weight Distance	65.5	3.6	15.2	-25.9	80.7	-3.6	83.8	-3.1	37.0	-13.4
Income on Investments	5.7	-13.6	1.3	-76.1	7.0	-41.3	3.7	3.3	2.5	-2.6
Other	25.4	-13.9	12.5	-20.0	37.9	-16.0	40.0	-2.1	19.4	4.6
Road Fund	**1,166.9**	**2.2**	**268.5**	**-36.8**	**1,435.4**	**-8.3**	**1,551.8**	**-116.4**	**740.7**	**-5.0**

Table 2B
Road Fund Interim Forecast: Pessimistic
$ millions

	FY20						FY20		FY21	
	Q1 - Q3		Q4		Full Year		Official Enacted		Q1 - Q2	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff	Estimate	% Chg
Motor Fuels	581.3	1.0	94.9	-52.1	676.2	-12.6	773.2	-97.0	368.7	-7.4
Motor Vehicle Usage	399.6	6.2	38.5	-72.1	438.1	-14.9	518.6	-80.5	247.4	-7.6
Motor Vehicle License	77.3	-0.7	35.6	-17.3	112.9	-6.6	115.4	-2.5	42.9	2.8
Motor Vehicle Operators	12.0	-2.7	2.0	-53.9	14.0	-15.8	17.1	-3.1	8.3	1.4
Weight Distance	65.5	3.6	8.4	-59.1	73.9	-11.7	83.8	-9.9	36.8	-13.9
Income on Investments	5.7	-13.6	0.8	-85.5	6.5	-45.5	3.7	2.8	2.0	-22.1
Other	25.4	-13.9	10.2	-34.8	35.6	-21.1	40.0	-4.4	19.1	3.0
Road Fund	**1,166.9**	**2.2**	**190.3**	**-55.2**	**1,357.2**	**-13.3**	**1,551.8**	**-194.6**	**725.2**	**-7.0**

NATIONAL OUTLOOK

The national economic outlook for the third quarterly report of FY20 is undoubtedly the most abrupt quarterly change ever encountered. The United States government declared a public health emergency as of January 27, 2020 for the novel coronavirus (COVID-19). The most significant threat presented by the COVID-19 pandemic is the health risks it poses due to its ease of transmission and fatality rate. For the purposes of this report, however, concentration is centered on the economic effects that lie in the wake of the pandemic.

To flatten the curve and disrupt the accelerated spread of the coronavirus, social distancing mandates have been widely enforced by federal and state officials, including mandated shutdowns of nonessential businesses. A negative shock to personal consumption expenditures is one example of the severe disruptions to economic activity, abruptly ending the longest economic expansion on record. The contraction in the US and global economies has proven to significantly dampen growth, dramatically increase initial claims for unemployment insurance, and tip the economy into a recession. Approximately 26,000,000 Americans have filed for unemployment insurance in a five-week span, as reported on April 23, 2020.

The differences between the control and pessimistic scenarios largely concern the depth of the forecasted recession. Both scenarios outline a three-quarter recession. The differences in the scenarios can easily be seen in real consumption, real investment, industrial production, and the unemployment rate. See Tables 3A and 3B. IHS Markit has assigned a weight of 45 percent to the control forecast scenario and a weight of 35 percent to the pessimistic scenario. These 'weights' are not determined by an econometric model and are not meant to be precise measurements but rather rough judgments about the probabilities of each scenario.

Near-term cyclical growth in the baseline forecast projections are primarily driven by the pandemic's course. In the control forecast, the number of new COVID-19 cases will peak in the fourth quarter of FY20 (April through June). In the first quarter

FY21, a low enough number of reported new cases is expected to permit a gradual softening in social distancing mandates. Based on the deceleration in percentage terms of key economic measures in the control scenario, the US economy is on pace for a “U-shaped” recovery.

The most devastating hit to growth over the outlook horizon is expected to occur in the fourth quarter of FY20, as IHS Markit’s projections call for consumer spending to plunge significantly. The negative shock to personal consumption expenditures is dominated by a steep contraction to durable goods, expected to shrink by 51.4 percent to close FY20. An immediate rebound in durables spending is forecasted in the first quarter of FY21, with growth projected of 30.1 percent and 21.0 percent in the second quarter. Real consumption expenditures, the epicenter of consumer demand, is forecasted to decline 9.2 percent in the fourth quarter of FY20, on pace to drop an additional 6.2 percentage points for the first and second quarters of FY21. In combination with declines in housing starts, business fixed investment, and soaring unemployment rates, real GDP is expected to fall 7.3 percent in the final quarter of FY20, and sink 15.8 percent in the first half of FY21.

Both the control and pessimistic forecasts assume a three quarter recession, starting in the third quarter of FY20. However, the pessimistic forecast assumes a far much more severe decline in consumer spending than that of the control forecast. The key assumption behind the steeper contraction in consumer spending is the additional time it will take to reach the peak in the number of active COVID-19 cases.

In the pessimistic scenario, the peak in cases extends later into the summer with a concomitant extension of social distancing mandates. Additionally, consumers are more reticent to bounce back to normal consumption patterns. Year-over-year GDP change in the pessimistic scenario is anticipated to drop to 16.4 percent in the fourth quarter of FY20, and then decline by 21.6 percent in the first and second quarters of FY21. By historical standards these rates of decline are quite severe.

If demand proves sustainable moving forward, industries will respond with an increase to production. Increased production output is achievable through increased utilization of labor, equipment and investment spending, or increases in factor productivity. Improvements to the labor sector are at the end of the process, therefore relief for employment and personal income will lag behind production recovery. To provide a buffer, the Coronavirus Aid, Relief, and Economic Security (CARES) Act, injected an estimated $292 billion in direct recovery rebates to individuals, as well as expanding and extending unemployment benefits. The payments to individuals are expected to stabilize real disposable personal income in the final quarter of FY20.

Table 3A
US Economic Outlook: Control
FY20 Q4 and first half of FY21

	Q4			Full Year		Q1 & Q2	
	FY20	FY19	% Chg	FY20	% Chg	FY21	% Chg
Real GDP	17,637.7	19,021.9	-7.3	18,757.8	-0.6	17,750.5	-15.8
Real Consumption	12,024.9	13,250.0	-9.2	13,011.2	-0.8	12,455.2	-15.4
Real Investment	2,915.4	3,424.7	-14.9	3,248.7	-5.4	2,439.9	-33.6
Real Govt. Expenditures	3,348.0	3,296.6	1.6	3,333.4	2.3	3,370.0	-1.9
Real Exports	2,387.8	2,517.5	-5.2	2,487.8	-1.7	2,405.9	-22.5
Real Imports	3,033.0	3,498.2	-13.3	3,335.4	-4.6	2,872.6	-24.4
CPI all goods (% chg)	-0.2	1.8	NA	1.4	NA	0.4	NA
CPI Food (% chg)	1.1	1.9	NA	1.6	NA	1.2	NA
CPI Energy (% chg)	-21.6	-0.7	NA	-6.1	NA	-13.4	NA
CPI Core (% chg)	2.1	2.1	NA	2.3	NA	1.7	NA
Industrial Production Index (% chg)	-11.7	1.2	NA	-3.6	NA	-17.5	NA
Unemployment Rate (%)	8.4	3.6	NA	4.8	NA	10.1	NA

Table 3B
US Economic Outlook: Pessimistic
FY20 Q4 and first half of FY21

	Q4			Full Year		Q1 & Q2	
	FY20	FY19	% Chg	FY20	% Chg	FY21	% Chg
Real GDP	15,910.6	19,021.9	-16.4	18,301.0	-3.0	15,039.7	-21.6
Real Consumption	10,420.2	13,250.0	-21.4	12,581.7	-4.0	10,226.9	-23.6
Real Investment	2,551.0	3,424.7	-25.5	3,152.9	-8.2	1,301.8	-61.6
Real Govt. Expenditures	3,342.0	3,296.6	1.4	3,332.3	2.3	3,374.3	1.6
Real Exports	2,411.3	2,517.5	-4.2	2,496.9	-1.3	2,400.0	-5.1
Real Imports	2,809.4	3,498.2	-19.7	3,274.5	-6.4	2,135.3	-38.6
CPI all goods (% chg)	-0.7	1.8	NA	1.2	NA	-1.2	NA
CPI Food (% chg)	0.8	1.9	NA	1.6	NA	0.5	NA
CPI Energy (% chg)	-25.9	-0.7	NA	-7.9	NA	-23.8	NA
CPI Core (% chg)	2.0	2.1	NA	2.2	NA	1.1	NA
Industrial Production Index (% chg)	-18.8	1.2	NA	-5.4	NA	-32.2	NA
Unemployment Rate (%)	15.8	3.6	NA	6.7	NA	21.3	NA

KENTUCKY OUTLOOK

The economic outlook for the forecast horizon is bleak. In comparison to the second quarter Quarterly Economic and Revenue Report published in January 2020, Kentucky employment and personal income projections have taken a turn for the worse due to the necessity to mitigate the spread of the COVID-19 virus through social distancing and the closure of many private businesses. All states are anticipating a particularly large disruption to growth over the forecast horizon. Even with the most up to date national variables factored in the outlook, a significant degree of uncertainty looms over Kentucky's forecast horizon as economic outcomes will heavily depend on the rate of COVID-19 cases.

Wages and salaries is the largest component of personal income. In the control forecast, Kentucky wages and salaries income is expected to decline 5.8 percent in the fourth quarter of FY20 and is forecast to plummet 11.7 percent in the first half of FY21. In the pessimistic forecast, Kentucky wages and salaries income is expected to plunge 24.3 percent in the fourth quarter of FY20 and drop a staggering 37.4 percent in the first half of FY21. These large losses to wages and salaries income will dramatically affect the withholding component of the individual income tax. The losses to wages and salaries will cause a significant decline in consumer demand, which will directly affect sales and use tax receipts as well.

According to the U.S. Labor Department, over 500,000 Kentuckians have filed for unemployment benefits in the past five weeks. To put that in perspective, roughly 25 percent of Kentucky's workforce is currently without employment. Unprecedented job loss, declining wages, and social distancing mandates are expected to cripple consumer spending and real disposable income in the short-term, which in turn will negatively influence the overall economic climate of the Commonwealth.

The three-quarter employment outlook reveals widespread weakness in the baseline scenario. Total non-farm payroll employment is anticipated to contract by 84,900 jobs by June 2020 and fall 149,200 by December 2020. Employment in the goods-producing sectors are expected to decrease by 6.3 percent in the fourth quarter of FY20 and by 10.3 percent in the first half of FY21.

The pessimistic forecast assumes a deeper contraction in total non-farm payroll employment than in the baseline forecast. The heightened job loss between the two scenarios is due to the extended duration of time that is anticipated for the number of new COVID-19 cases to peak. The pessimistic scenario anticipates total non-farm payroll employment to reduce 209,400 jobs by June 2020 and fall a staggering 373,100 jobs by December 2020. In percentage terms, nonfarm employment is expected to decrease by 10.8 percent in the fourth quarter of FY20 and 19.0 percent in the first half of FY21.

Manufacturing employment, which accounts for approximately 72 percent of the goods-producing sectors, is expected to decline by 31,600 jobs over the outlook periods in the control forecast and by 63,400 jobs in the pessimistic forecast. In an effort to protect the health and safety of its workers, key stakeholders, and communities, manufacturing giants such as Toyota Motor Manufacturing of Kentucky and Ford elected to suspend production in its northern American plants. The decision to halt production was also in part a response to the significant market decline the manufacturing industry was experiencing pre-pandemic. Automakers have faced additional disruptions to production, particularly those of the supply chain as part imports from China have become increasingly difficult to obtain. The deep reduction in manufacturing activities will position manufacturing inventories on a downward slope in the months to come.

In the control forecast, employment in the service-providing sectors decrease by 5.1 percent in the fourth quarter of FY20 and by 8.5 percent in the first half of FY21. The trade, transportation and utilities services sector is expected to decline 9.1 percent over the fourth quarter and a staggering decline of 12.3 percent over the first and second quarters of FY21. In contrast, the pessimistic forecast anticipates employment in the service-providing sectors to decrease by 14.1 percent in the fourth quarter of FY20 and sink 23.7 percent in the first two quarters of FY21. The trade, transportation and utilities employment is also expected to dramatically decline in the pessimistic scenario. Trade, transportation, and utilities employment is expected to decline by 22.3 percent in the fourth quarter pessimistic scenario and fall by 32.4 percent in the first half of FY21. Weakness in personal income growth on a state and national level is expected to dampen aggregate demand and employment in wholesale and retail trade.

The leisure and hospitality employment sector will incur the greatest impact in percentage terms of the economic downturn in the control scenario. Leisure and hospitality employment is expected to decline 15.3 percent in the fourth quarter of FY20 and decline 7.4 percent in the first half of FY21. Most restaurants, tourism, and entertainment businesses have been closed down entirely or have had their transactions limited severely. The Governor has been appropriately proactive in his response to the directives of the Center for Disease Control and Prevention by limiting group setting exposure and by restricting business operations to essential-service only. In nominal terms, the leisure and hospitality services supersector anticipated job loss is 30,900 in the fourth quarter of FY20 and 46,500 jobs in the first and second quarters of FY21. These job losses correspond to percentage declines of 15.3 and 7.4 percent, respectively. The delay to recovery spending in the pessimistic scenario assumes a steeper contraction to leisure and hospitality services employment, which is expected to decrease by 18.1 percent in the fourth quarter of FY20 and fall 21.8 percent in the first two quarters of FY21.

Extreme efforts are being made to soften the domestic shocks of the coronavirus pandemic. Even with the rapid monetary responses, policy enactments, and anticipation of the relaxation of social distancing mandates, Kentucky's economy is expected to fall further in fourth quarter FY20 and first quarter FY21 before recovery can gain traction in the second quarter of FY21. The exact timing and degree of recovery is unknown in the short-term.

Table 4A
Kentucky Economic Outlook: Control
FY20 Q4 and first half of FY21

	Q4			Full Year		Q1 & Q2	
	FY20	FY19	% Chg	FY20	% Chg	FY21	% Chg
Personal Income ($ millions)	203,799.8	195,630.5	4.2	200,598.7	3.9	199,205.7	0.4
Wages and Salaries ($ millions)	90,596.1	96,138.8	-5.8	96,157.1	1.3	85,961.6	-11.7
Non-farm Employment (thousands)	1,853.4	1,938.3	-4.4	1,919.6	-0.8	1,798.6	-7.3
Goods-producing	321.1	342.6	-6.3	335.4	-1.9	306.5	-10.3
Construction	79.0	80.1	-1.4	80.2	1.3	76.6	-4.8
Mining	8.8	10.2	-14.1	9.2	-11.7	9.1	-3.7
Manufacturing	233.3	252.3	-7.5	245.9	-2.5	220.7	-12.2
Service-providing	1,218.3	1,284.3	-5.1	1,272.1	-0.7	1,179.4	-8.5
Trade, Transportation & Utilities	367.0	403.8	-9.1	393.0	-2.8	352.9	-12.3
Information	21.1	21.7	-2.7	21.3	-2.4	21.0	-1.8
Finance	93.0	93.4	-0.4	93.5	0.1	87.0	-7.0
Business Services	217.2	215.4	0.9	218.1	1.1	189.6	-12.9
Educational Services	283.5	282.4	0.4	284.9	1.6	280.6	-1.4
Leisure and Hospitality Services	171.1	202.0	-15.3	195.4	-2.4	187.6	-7.4
Other Services	65.3	65.5	-0.4	65.9	0.4	60.6	-8.3
Government	314.0	311.4	0.8	312.1	0.2	312.8	0.5

Table 4B
Kentucky Economic Outlook: Pessimistic
FY20 Q4 and first half of FY21

	Q4			Full Year		Q1 & Q2	
	FY20	FY19	% Chg	FY20	% Chg	FY21	% Chg
Personal Income ($ millions)	184,069.0	195,630.5	-5.9	195,468.8	1.3	169,432.1	-14.6
Wages and Salaries ($ millions)	72,795.5	96,138.8	-24.3	91,548.3	-3.5	60,969.9	-37.4
Non-farm Employment (thousands)	1,728.9	1,938.3	-10.8	1,887.6	-2.4	1,572.1	-19.0
Goods-producing	311.9	342.6	-9.0	333.0	-2.6	275.9	-19.2
Construction	78.6	80.1	-1.9	80.1	1.2	75.0	-6.8
Mining	8.7	10.2	-15.2	9.2	-12.0	9.1	-4.0
Manufacturing	224.6	252.3	-11.0	243.7	-3.4	191.8	-23.7
Service-providing	1,103.0	1,284.3	-14.1	1,242.5	-3.0	983.2	-23.7
Trade, Transportation & Utilities	313.8	403.8	-22.3	379.4	-6.2	271.9	-32.4
Information	21.1	21.7	-2.7	21.3	-2.4	21.2	-1.1
Finance	93.0	93.4	-0.4	93.4	0.1	82.4	-11.9
Business Services	183.1	215.4	-15.0	209.4	-3.0	140.6	-35.4
Educational Services	261.5	282.4	-7.4	279.2	-0.4	253.4	-11.0
Leisure and Hospitality Services	165.5	202.0	-18.1	194.0	-3.1	158.4	-21.8
Other Services	65.1	65.5	-0.7	65.8	0.2	55.3	-16.3
Government	314.0	311.4	0.8	312.1	0.2	312.9	0.6

REVENUE RECEIPTS

GENERAL FUND
Third Quarter FY20

General Fund receipts totaled $2,769.8 million in the third quarter of FY20. Receipts in the same quarter of FY19 were $2,604.1 million. This is an increase of $165.8 million or 6.4 percent over the third quarter of FY19. The official estimate enacted by the 2020 Regular Session of the General Assembly is $11,448.2 million. The estimate outlined in this report calls for a decline of 18.2 to 23.7 percent. The abrupt decline in the fourth quarter of FY20 is a direct consequence of the COVID-19 crisis. Since the majority of social distancing policies were not adopted until mid-to-late March, third quarter receipts were not materially impacted by the outbreak. For the most part, tax receipts in a given month reflect economic activity from the prior month given the due dates for most taxes. Therefore, the temporary business closures and associated losses in employment and consumer spending will have a profound effect on monthly tax receipts beginning in April. The impact will likely get worse in May and June, lasting until the economy is back to the new normal.

Table 5
Summary General Fund Receipts
$ millions

	FY20 Q3	FY19 Q3	Diff $	Diff %
Individual Income	1,128.1	1,005.2	122.9	12.2
Sales & Use	999.2	928.2	71.0	7.6
Corp. Inc. & LLET	31.7	74.9	-43.2	-57.7
Property	162.7	143.5	19.3	13.4
Lottery	63.5	61.0	2.5	4.1
Cigarettes	88.2	83.7	4.5	5.4
Coal Severance	15.8	26.2	-10.4	-39.7
Other	280.7	281.4	-0.7	-0.2
Total	**2,769.8**	**2,604.1**	**165.8**	**6.4**

The individual income tax grew 12.2 percent in the third quarter of FY20. Receipts totaled $1,128.1 million compared to receipts of $1,005.2 million in the third quarter of FY19. The individual income tax was the second-fastest growing tax account in the third quarter. It grew in large part due to extremely high growth in the withholding component of the individual income tax, which grew by 7.5 percent in the third quarter. Net returns, which is the sum of pays and refund return payments, also improved by $31.3 million. All four components of the individual income tax improved in the third quarter. The individual income tax is the largest tax account in the Commonwealth, and made up just over 40 percent of total General Fund receipts in the third quarter.

The sales and use tax receipts were also strong in the third quarter, growing 7.6 percent over the third quarter of FY19. Growth in the sales and use tax has been strong for the last 10 consecutive quarters. This is largely a result of tax law changes that added remote retailers, some select service industry sales, and marketplace providers to the sales tax base. The tax law changes were implemented July 1, 2018 and July 1, 2019, respectively. These additions to the tax base have continued to spur solid growth in sales tax receipts.

Corporate income tax receipts decreased by $41.2 million compared to receipts in the third quarter of FY19. Meanwhile, the limited liability entity tax (LLET) fell by 3.7 percent in the third quarter, losing $2.0 million over FY19. Corporate income tax and LLET tax accounts are intermingled to a degree that prevents meaningful distinction. Therefore, it is appropriate to talk about these two accounts as a combined account. Corporate and LLET combined fell by 57.7 percent in the third quarter. The combined account has fallen in each of the last three quarters, losing 10.5, 3.9, and 57.7 percent, respectively. Year-to-date, the combined account has fallen 15.9 percent. The combined account was also weak, but positive, for the three years prior to this large decline. Despite vibrant economic conditions, annual growth over the last three years was just 1.8, 0.9, and 1.8 percent, respectively.

The property tax rose by 13.4 percent in the third quarter of FY20. This is largely an issue of timing. Property taxes can be affected from month to month and even quarter to quarter by the timing of bills and payments. Regardless of the variation in the timing, the large majority of the payments are usually received by the end of March. Some valuations and protest resolutions came later this year, which caused a small delay in the receipt of payments. The third quarter growth is not reflective of real activity in property tax liabilities, but rather it is a reflection of a shift in receipts from an earlier quarter to the third quarter. This can be seen clearly by examining the year-to-date receipts. Year-to-date receipts are $594.7 million, which is 3.5 percent greater than the same period in FY19. This is a normal amount of growth in property taxes.

Lottery receipts increased by 4.1 percent in the third quarter. Thus far in FY20, lottery dividend payments are running ahead of the projected schedule due to a release of retained earnings in the second quarter of FY20. Dividend payments are forecasted to drop sharply in the fourth quarter due to the decreased economic activity and a downward revision to projected lottery sales. Year-to-date lottery receipts are $201.4 million, which is 9.6 percent greater than the same period last year.

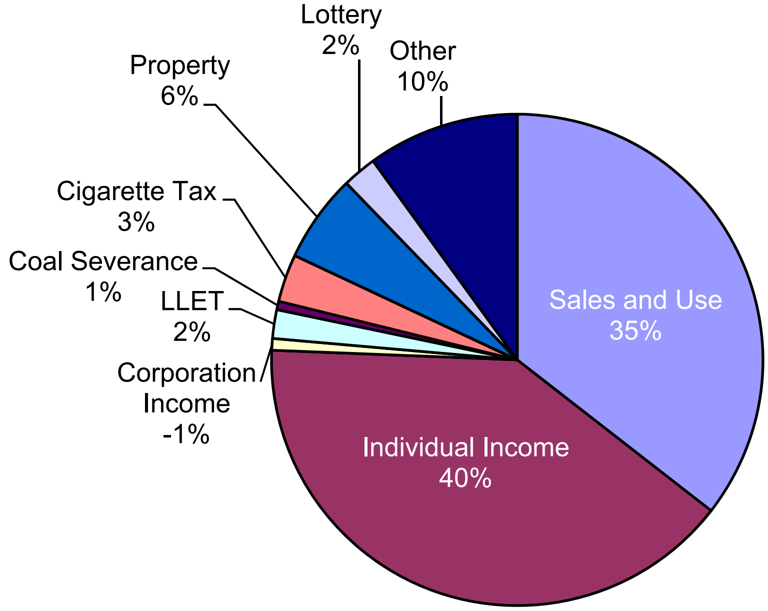
Cigarette tax receipts grew by 5.4 percent in the third quarter of FY20. Nationally and also in the Commonwealth of Kentucky cigarette usage has been declining. However, even with the tax increase to $1.10 per pack in 2018, Kentucky continues to maintain a price advantage relative to many other states. Kentucky is a net exporter of cigarettes to other states. The increased sales due to this price disparity is greater than the decreased sales by Kentuckians who have decreased smoking. This has resulted in increased cigarette tax receipts for the Commonwealth thus far in FY20. Cigarette tax receipts have increased by 2.8 percent year-to-date.

Coal severance tax receipts totaled $15.8 million for the third quarter of FY20. This is $10.4 million less, or 39.7 percent less than the third quarter of FY19. Coal sales are largely a function of the coal demanded by power plants in Kentucky and in power plants nearby Kentucky which utilize Kentucky coal. As power plants shut down nationwide, the demand for Kentucky coal continues to decline. Coal tax receipts have declined in six of the last seven years. Coal receipts would have declined in FY19, had it not been for arrears payments made by taxpayers who were making tax payments for tax liabilities that occurred before tax year 2019. Year-to-date, coal receipts have declined by 27.0 percent.

The Other category, which is composed of 68 tax accounts, declined 0.2 percent in the third quarter of FY20. Third quarter receipts were $280.7 million. This is $0.7 million less than was received in the same quarter of FY19. The largest tax accounts in the Other category are the insurance premium tax, the bank franchise tax, and the telecommunications tax. The bank franchise tax increased by 4.3 percent in the third quarter. The telecommunications tax rose by 30.2 percent in the third quarter. Combined, these two accounts rose by $9.3 million. The remaining accounts were either flat or slightly declining.

Figure 1 shows the composition of General Fund revenues by tax type for the third quarter of FY20. Individual income tax and sales and use tax made up 75 percent of General Fund tax receipts. The Other category made up 10 percent of receipts in the third quarter. The next largest source of revenue is the property tax, which made up six percent of total receipts. Cigarettes made up three percent of total receipts. The lottery dividend made up two percent of the General Fund receipts. Corporate and LLET combined made up one percent of receipts. The coal severance tax also made up one percent of total receipts.

Figure 1
Composition of Third Quarter FY20
General Fund Revenues



ROAD FUND
Third Quarter FY20

Total Road Fund receipts increased 4.6 percent during the third quarter of FY20, after growing 1.1 percent in each of the first two quarters of the fiscal year. Receipts in the quarter were largely immune from the impacts of COVID-19. Total receipts received in the third quarter were $387.2 million, which exceeded last year's third quarter total by $17.2 million. Motor fuels and motor vehicle usage tax receipts accounted for the majority of the quarterly gains, growing $14.0 million compared to FY19 totals. The remaining accounts collectively grew $3.2 million. Year-to-date collections have grown 2.2 percent.

Due to an expected decrease of 52.5 percent to 72.1 percent in the fourth quarter, the estimate outlined in this report calls for a decline of 7.5 to 12.5 percent in Road Fund receipts in FY20. Summary data are contained in Table 6 and detailed data are shown in the Appendix.

Table 6
Summary Road Fund Receipts
$ millions

	FY20 Q3	FY19 Q3	Diff $	Diff %
Motor Fuels	189.0	179.7	9.3	5.2
Motor Vehicle Usage	125.9	121.2	4.7	3.9
Motor Vehicle License	35.6	32.4	3.2	9.7
Motor Vehicle Operators	3.8	4.0	-0.2	-3.9
Weight Distance	20.8	21.0	-0.2	-0.8
Income on Investments	3.2	2.8	0.3	11.7
Other	8.9	8.9	0.0	0.1
Total	**387.2**	**370.0**	**17.2**	**4.6**

Motor fuels tax receipts grew 5.2 percent, or $9.3 million, during the third quarter. Growth in this account has been somewhat constrained since the fourth quarter of FY15 as the tax rate has been unchanged since that time and consumption has been relatively stable. Because collections in the current month reflect activity from the prior month, any impact from COVID-19 will not appear in the data until the fourth quarter of FY20. Receipts were $189.0 million as compared to $179.7 million collected during the third quarter of last year. Year-to-date collections have increased 1.0 percent.

Motor vehicle usage tax receipts have continued to increase above forecasted levels, growing 3.9 percent in the third quarter. Receipts in this account have increased 5.9 percent, 3.9 percent and 3.9 percent for the three quarters this year. Revenues in the third quarter were $125.9 million compared to $121.2 million last year. Revenues in this account have now increased 6.2 percent through the first nine months of FY20. Unlike motor fuels, motor vehicle usage tax revenue is generally contemporaneous but there is little to no impact from the COVID-19 virus in these numbers. An executive order was issued on March 25 closing all non-life-sustaining businesses, including auto dealerships, by close-of-business March 26.

Motor vehicle license tax receipts grew $3.2 million, or 9.7 percent in the third quarter after falling in both of the first two quarters. Year-to-date revenues have declined 0.7 percent.

Motor vehicle operator's tax receipts were $3.8 million in the third quarter of FY20, a 3.9 percent decrease compared to collections a year ago. Receipts have fallen 2.7 percent for the year.

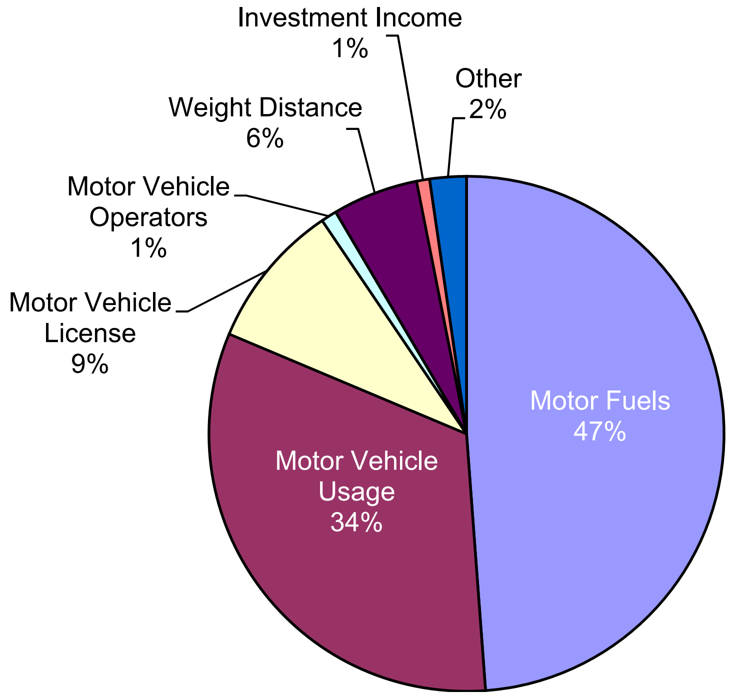
Weight distance tax receipts were $20.8 million in the quarter which represent a 0.8 percent decrease compared to receipts collected during the third quarter of FY19. The weight distance tax has some significance as a leading indicator of economic activity, as it is a rough proxy for goods in transit over Kentucky highways. Year-to-date collections in this account have increased 0.5 percent.

Income on investments totaled $3.2 million in the quarter, an increase of 11.7 percent. For the year, collections are $5.7 million.

The remainder of the accounts in the Road Fund are grouped in the Other category and consist primarily of fines, fees and miscellaneous receipts. These funds combined to total $8.9 million, which is unchanged from FY19 levels.

Figure 2 shows the composition of Road Fund revenues by tax type in the second quarter. The motor fuels tax and the motor vehicle usage tax are by far the largest components of the Road Fund. Together, they combined for 81 percent of Road Fund revenues in the third quarter. The next largest source of revenue was motor vehicle licenses at nine percent, followed by weight distance taxes with six percent. The Other category accounted for two percent, while motor vehicle operators and income on investments each accounted for one percent.

Figure 2
Composition of Third Quarter FY20
Road Fund Revenues



THE ECONOMY
THIRD QUARTER FY20

NATIONAL ECONOMY

Real Gross Domestic Product (real GDP) rose by 0.7 percent in the third quarter of FY20. This is a significant reduction in growth compared to the last 11 quarters, where quarter-compared-to-same-quarter-last-year growth was over 2.1 percent per quarter. On an adjacent-quarter basis, real GDP fell by 0.9 percent relative to the second quarter. This is a significant departure from recent history. Adjacent-quarter growth has been solid for a long time; ranging between 0.3 percent and 0.9 percent for the last 16 consecutive quarters. Adjacent-quarter growth was 0.5 percent in each quarter from the fourth quarter of FY19 to the second quarter of FY20. Incidentally, the average adjacent-quarter growth since the end of the 2007 recession is also 0.5 percent.

In the month of March, the governors of many states have implemented stay-at-home orders for their states to mitigate the spread of the contagious COVID-19 virus. These restrictions have caused significant reductions in employment and closed many businesses. As this only affected a small portion of the quarter, it is unclear how much of those actions affected the full third quarter values. Many of the components, like imports and exports for instance, were already experiencing weakness before any governor implemented a stay-at-home order. So it is difficult to separate out the pre-existing economic weaknesses from the effects of the governors' orders.

Real consumption grew 1.1 percent in the third quarter of FY20. Adjacent-quarter growth was -1.2 percent in the third quarter of FY20. This is an extreme reversal of recent growth. Adjacent-quarter growth for the previous three quarters was 1.1, 0.8, and 0.5 percent, respectively. This large drop moves real consumption back to the same level as in the fourth quarter of FY19. By comparison the largest drop during the 2007 recession was a 0.9 percent decline which occurred in the second quarter of FY09. Real consumption did not drop a single quarter during the 2001 recession. That recession was driven more by investment changes and a decrease in global import demand for goods, than it was about domestic goods' demand. Real consumption made up 69.6 percent of real GDP in the third quarter of FY20.

Real investment fell 5.2 percent in the third quarter of FY20. On an adjacent-quarter basis, real investment declined by 1.9 percent. The troubles for real investment continue in the third quarter. Real investment has now declined on an adjacent-quarter basis in five of the last eight quarters. The largest decline in real investment in the last two decades was an 11.6 percent drop which occurred in the third quarter of FY09. Real investment has declined on an adjacent-quarter basis for the last four consecutive quarters, -1.6, -0.2, -1.5, and -1.9 percent, respectively. This is a net decline of $181.3 billion, or 5.2 percent loss to real investment in the last four quarters. Real investment made up 17.3 percent of real GDP in the third quarter of FY20.

Real government expenditures grew by 2.6 percent in the third quarter of FY20. On an adjacent-quarter basis, we can see that while real government expenditures are still growing, they are now growing at a slower rate than they were five quarters ago. The last five adjacent-quarter growth rates are 0.7, 1.2, 0.4, 0.6, and 0.4 percent, respectively. One of the top 10 largest federal expenditure items is Medicare. Medicare was the fastest growing outlay in the third quarter, growing 7.8 percent in the third quarter of FY20. That is a net increase of $60.7 billion over the third quarter of FY19. Medicare has been growing rapidly for the last six quarters. Year-over-year growth for the last six quarters was 7.6, 9.1, 9.9, 9.9, 9.0, and 7.8 percent, respectively. Real government expenditures made up 17.6 percent of real GDP in the third quarter of FY20.

Real exports declined by 2.0 percent in the third quarter of FY20. On an adjacent-quarter basis, real exports declined by 1.3 percent in the third quarter. Real exports have declined three times in the last seven quarters. However, those three declines were significant. Those three recent adjacent-quarter declines were 1.6, 1.4, and 1.3 percent, respectively. These three losses were greater than the gains in the other four quarters. Real exports declined by a net $56.3 billion during that time. Real exports made up 13.1 percent of real GDP in the third quarter of FY20.

Real imports declined by 4.0 percent in the third quarter of FY20. Real imports have been distressed for some time. Real imports have only grown once on an adjacent-quarter basis in the last five quarters. The last five adjacent-quarter growth rates are -0.4, -0.005, 0.4, -2.2, and -2.3 percent, respectively. Real imports are a deduction from real GDP, therefore all declines result in an improvement to real GDP growth. Despite the identity improvement in real GDP, a decline in real imports could still be cause for concern for the US. If the decline in imports is caused by some production trouble in the foreign countries, then the US supply lines could suffer in the long run. For instance, Mexico produces many parts that go into the production of US automobiles. If the import of those parts falls, then the production of US automobiles could be affected. That would then have deeper implications than just a small change in real GDP. It is not yet clear if this import decline is widespread across multiple countries or just an ephemeral shock. Real imports (a deduction from real GDP) made up 17.6 percent of real GDP in the third quarter of FY20.

Table 7
Summary of US Economic Series
Third Quarter FY20 & FY19

	Third Quarter			
	FY20	**FY19**	**Chg**	**% Chg**
Real GDP	19,050.3	18,927.3	123.0	0.7
Real Consumption	13,252.8	13,103.3	149.5	1.1
Real Investment	3,299.8	3,481.1	-181.3	-5.2
Real Govt. Expenditures	3,344.1	3,258.1	86.0	2.6
Real Exports	2,503.6	2,554.4	-50.7	-2.0
Real Imports	3,357.9	3,498.3	-140.4	-4.0
CPI all goods (% chg)	2.2	1.6	NA	NA
CPI Food (% chg)	1.8	1.9	NA	NA
CPI Energy (% chg)	1.4	-3.6	NA	NA
CPI Core (% chg)	2.3	2.1	NA	NA
Industrial Production Index (% chg)	-2.1	2.9	NA	NA
Working Population[1] (millions)	259.6	258.4	1.2	0.5
Civilian Labor Force[2]	163.4	162.6	0.8	0.5
Employed[3]	156.7	155.9	0.9	0.6
Unemployed[4]	6.7	6.7	0.0	-0.3
Not in Labor Force[5]	96.2	95.8	0.4	0.4
Labor Force Participation Rate[6] (%)	63.2	63.1	NA	NA
Unemployment Rate (%)	3.6	3.9	NA	NA

Table 8
US Federal Outlays
$ billions, AR

	Third Quarter			
	FY20	**FY19**	**Chg**	**% Chg**
Federal Outlays excl. Gross Investment	4,919.4	4,699.6	219.8	4.7
Social Security	1,070.3	1,022.9	47.4	4.6
Medicare	835.6	774.9	60.7	7.8
National Defense	698.1	666.6	31.6	4.7
Interest on Debt	571.4	543.4	28.1	5.2
Medicaid	417.9	410.3	7.6	1.9
Non-Medicaid Grants to S&L Govts	194.4	190.2	4.2	2.2
Subsidies	76.1	72.0	4.1	5.8
Aid to Foreign Governments	54.2	61.8	-7.6	-12.3

US non-farm employment rose by 1.6 percent in the third quarter of FY20. Adjacent-quarter growth has improved over the last six quarters. Adjacent-quarter growth for the last six quarters was 0.3, 0.3, 0.3, 0.4, 0.4, and 0.5 percent, respectively. Educational services employment gained the most jobs in absolute terms and in percentage terms. Educational services employment rose by 700,000 non-seasonally adjusted jobs, or 2.8 percent, in the third quarter of FY20. Mining employment was the only employment sector which lost jobs in the third quarter. Mining employment lost 3.7 percent, a loss of 27,000 non-seasonally jobs nationwide.

US personal income grew by 3.6 percent in the third quarter of FY20. This is still solid growth, but it has tapered some over the last seven quarters. Growth for the last seven quarters was 5.9, 4.9, 4.6, 4.7, 4.2, 4.1, and 3.6 percent, respectively. Proprietor's income was the fastest growing income category, growing 6.6 percent over the third quarter of FY19. Wages and salaries contributed the largest amount in absolute terms, growing $292 billion compared to the third quarter of FY19. All five contributing categories performed well in the third quarter.

KENTUCKY ECONOMY

Kentucky non-farm employment grew by 0.2 percent in the third quarter of FY20. Adjacent-quarter growth was also 0.2 percent. Kentucky employment growth has been weak for some time, but it has been pronounced over the last four quarters. Adjacent-quarter growth over the last four quarters was -0.01, 0.2, -0.1, and 0.2 percent, respectively. That weakness is widespread across all 11 employment supersectors.

The best growth for the quarter occurred in business services employment, which grew 2.3 percent for the quarter. Business services employment has only recently started improving. It was performing poorly for several years. During the period from the third quarter of FY15 to the third quarter of FY19, business services employment was declining. Business services employment declined in nine of those 17 quarters. Business services employment lost 2,200 net jobs during that period, a 1.0 percent loss. During the last four quarters, business services employment has greatly improved and gained a net 4,900 jobs, a 2.3 percent net increase. Business services employment is the fifth largest supersector, and made up 11.3 percent of total non-farm employment in the third quarter of FY20.

Four employment supersectors lost jobs in the third quarter. See Table 10. Mining employment fell the fastest in the third quarter, dropping 14.8 percent in the third quarter. Mining employment is the smallest of the 11 employment supersectors. Mining employment lost 1,600 jobs in the third quarter. In absolute terms, manufacturing employment lost the most jobs in the third quarter, losing 5,400 jobs, a 2.1 percent drop. On an adjacent-quarter basis, manufacturing employment has declined in three of the last four quarters. Manufacturing employment is the fourth largest employment supersector in Kentucky and made up 12.7 percent of total non-farm employment in the third quarter.

Kentucky personal income grew by 3.9 percent in the third quarter of FY20. Kentucky personal income growth has been solid and steady for the last 13 quarters, averaging 1.0 percent adjacent-quarter growth during that time. Kentucky personal income grew 1.3 percent in the third quarter on an adjacent-quarter basis.

Proprietor's income was the fastest growing component of personal income in the third quarter, gaining 6.9 percent over the previous year. Proprietor's income has been very strong for the last three quarters. Adjacent-quarter growth for the last three quarters is 5.2, 1.0, and 1.5 percent, respectively. Proprietor's income is the smallest of the five contributing income components, and made up 6.6 percent of total personal income in the third quarter of FY20.

Dividends, interest, and rents income was the slowest growing component of personal income in the third quarter, growing 1.7 percent. Growth in dividends, interest, and rents has slowly considerably in the last five quarters. Average adjacent-quarter growth in the five quarters between the second quarter of FY18 to the second quarter of FY19 was 1.9 percent. Average adjacent-quarter growth during the most recent five quarters was 0.2 percent. Average adjacent-quarter growth in the third quarter of FY20 was 0.1 percent. Dividends, interest, and rents income growth has essentially stalled. Dividends, interest, and rents income is the third largest component of the five contributing income components. It made up 16.9 percent of total personal income in the third quarter of FY20.

Table 9
Personal Income
$ billions, SAAR

	Third Quarter			
	FY20	**FY19**	**$ Diff**	**% Diff**
United States	19,022	18,355	667	4
Personal Income	1,453	1,408	46	3.2
Social Insurance	0	0	0	424.0
Residence Adjustments	3,788	3,722	66	1.8
Dividends, Interest and Rents	3,282	3,113	169	5.4
Transfer Receipts	9,504	9,212	292	3.2
Wages & Salaries	2,173	2,095	78	3.7
Supplements to W&S	1,729	1,621	107	6.6
Proprietor's Income				
Kentucky	202	194	8	3.9
Personal Income	16	16	1	3.6
Social Insurance	-3	-3	0	6.8
Residence Adjustments	34	33	1	1.7
Dividends, Interest and Rents	49	47	2	5.1
Transfer Receipts	99	96	3	3.6
Wages & Salaries	25	24	1	4.5
Supplements to W&S	13	12	1	6.9
Proprietor's Income				

Table 10
Summary of US & KY Employment
Third Quarter FY20 & FY19

	US Q3 (millions)			KY Q3 (thousands)		
	FY20	**FY19**	**% Chg**	**FY20**	**FY19**	**% Chg**
Non-farm Employment	152.6	150.2	1.6	1,942.9	1,938.5	0.2
Goods-producing	21.2	21.0	0.9	337.6	343.9	-1.8
Construction	7.6	7.4	2.7	80.9	80.2	0.9
Mining	0.7	0.7	-3.7	9.2	10.8	-14.8
Manufacturing	12.9	12.8	0.2	247.5	252.9	-2.1
Service-providing	108.6	106.7	1.8	1,293.2	1,283.4	0.8
Trade, Transportation & Utilities	27.8	27.7	0.4	400.0	405.3	-1.3
Information	2.9	2.8	1.7	21.2	21.8	-2.8
Finance	8.8	8.7	1.8	93.8	93.4	0.4
Business Services	21.6	21.2	2.1	219.9	215.1	2.3
Educational Services	24.6	23.9	2.8	286.8	281.1	2.0
Leisure and Hospitality Services	16.9	16.5	2.3	205.2	201.0	2.1
Other Services	5.9	5.9	1.4	66.2	65.7	0.7
Government	22.8	22.5	1.2	312.2	311.3	0.3

APPENDIX

General Fund and Road Fund Revenue Receipts

THIRD QUARTER FY20

KENTUCKY STATE GOVERNMENT – GENERAL FUND REVENUE

	Third Quarter FY 2020	Third Quarter FY 2019	% Chg	Year-To-Date FY 2020	Year-To-Date FY 2019	% Chg
TOTAL GENERAL FUND	**$2,769,848,255**	**$2,604,073,072**	**6.4%**	**$8,518,334,909**	**$8,201,199,038**	**3.9%**
Tax Receipts	**$2,699,273,668**	**$2,527,436,958**	**6.8%**	**$8,233,015,124**	**$7,929,426,090**	**3.8%**
Sales and Gross Receipts	$1,215,829,572	$1,135,110,776	7.1%	$3,666,816,639	$3,461,818,897	5.9%
Beer Consumption	1,366,048	1,040,955	31.2%	4,634,541	4,372,074	6.0%
Beer Wholesale	12,774,317	12,417,393	2.9%	45,788,725	42,376,185	8.1%
Cigarette	88,223,224	83,678,702	5.4%	267,966,387	260,725,641	2.8%
Distilled Spirits Case Sales	42,891	45,759	-6.3%	132,295	120,852	9.5%
Distilled Spirits Consumption	3,766,648	4,073,012	-7.5%	11,634,210	10,929,370	6.4%
Distilled Spirits Wholesale	13,085,108	13,391,596	-2.3%	39,846,325	36,107,867	10.4%
Insurance Premium	62,849,308	62,623,531	0.4%	112,964,611	110,597,693	2.1%
Pari-Mutuel	5,895,272	4,503,761	30.9%	14,874,930	9,321,728	59.6%
Race Track Admission	27,613	0	---	143,685	153,276	-6.3%
Sales and Use	999,176,033	928,182,108	7.6%	3,086,554,887	2,891,652,946	6.7%
Wine Consumption	815,795	929,632	-12.2%	2,381,356	2,386,194	-0.2%
Wine Wholesale	4,463,732	5,079,664	-12.1%	13,194,183	13,067,179	1.0%
Telecommunications Tax	18,065,359	13,872,822	30.2%	50,332,980	42,162,408	19.4%
Other Tobacco Products	5,268,384	5,202,003	1.3%	16,320,610	16,585,706	-1.6%
Floor Stock Tax	9,840	69,839	-85.9%	46,915	21,259,778	-99.8%
License and Privilege	**$124,254,163**	**$118,627,084**	**4.7%**	**$123,955,165**	**$118,544,545**	**4.6%**
Alc. Bev. License Suspension	76,750	58,500	31.2%	232,750	238,757	-2.5%
Corporation License	155	14,812	-99.0%	37,653	61,256	-38.5%
Corporation Organization	27,782	204,047	-86.4%	56,332	311,087	-81.9%
Occupational Licenses	14,576	33,986	-57.1%	101,981	89,701	13.7%
Race Track License	67,225	0	---	242,717	218,375	11.1%
Bank Franchise Tax	123,280,604	118,165,129	4.3%	122,101,983	117,116,261	4.3%
Driver License Fees	787,071	150,609	422.6%	1,181,748	509,110	132.1%
Natural Resources	**$21,534,943**	**$33,895,041**	**-36.5%**	**$70,718,261**	**$92,516,406**	**-23.6%**
Coal Severance	15,763,094	26,153,762	-39.7%	48,140,127	65,912,996	-27.0%
Oil Production	1,361,767	1,268,975	7.3%	4,133,034	4,445,442	-7.0%
Minerals Severance	3,357,707	3,398,751	-1.2%	14,849,577	14,222,319	4.4%
Natural Gas Severance	1,052,375	3,073,554	-65.8%	3,595,523	7,935,649	-54.7%
Income	**$1,159,737,215**	**$1,080,108,994**	**7.4%**	**$3,726,448,277**	**$3,631,413,323**	**2.6%**
Corporation	(21,522,550)	19,664,284	---	219,624,374	308,502,040	-28.8%
Individual	1,128,080,471	1,005,226,710	12.2%	3,355,033,983	3,189,536,080	5.2%
Limited Liability Entity	53,179,294	55,218,000	-3.7%	151,789,920	133,375,204	13.8%
Property	**$162,748,298**	**$143,496,908**	**13.4%**	**$594,682,440**	**$574,311,891**	**3.5%**
Building & Loan Association	150,908	(1,251)	---	(192,854)	256,328	
General - Real	78,979,038	71,741,831	10.1%	298,283,279	287,948,315	3.6%
General - Tangible	64,504,415	56,244,668	14.7%	213,564,152	204,213,050	4.6%
Omitted & Delinquent	2,472,073	5,474,770	-54.8%	13,106,478	18,006,028	-27.2%
Public Service	15,712,710	9,046,222	73.7%	67,679,148	61,888,579	9.4%
Other	929,153	990,666	-6.2%	2,242,237	1,999,590	12.1%
Inheritance Tax	**$9,094,742**	**$10,137,217**	**-10.3%**	**$35,579,384**	**$34,721,117**	**2.5%**
Miscellaneous	**$6,074,735**	**$6,060,939**	**0.2%**	**$14,814,958**	**$16,099,911**	**-8.0%**
Legal Process	3,385,803	3,230,323	4.8%	9,878,267	9,663,602	2.2%
T. V. A. In Lieu Payments	2,496,643	2,824,676	-11.6%	4,160,480	6,426,574	-35.3%
Other	192,289	5,940	3137.2%	776,211	9,735	7873.4%
Nontax Receipts	**$69,814,430**	**$70,175,150**	**-0.5%**	**$268,124,625**	**$262,901,159**	**2.0%**
Departmental Fees	3,820,489	3,871,089	-1.3%	9,930,972	10,254,607	-3.2%
PSC Assessment Fee	54	2,498	-97.9%	13,071,422	16,142,107	-19.0%
Fines & Forfeitures	4,344,266	4,455,755	-2.5%	13,084,717	14,845,962	-11.9%
Income on Investments	(1,315,882)	(3,292,246)	---	(6,104,771)	(9,230,814)	---
Lottery	63,500,000	61,000,000	4.1%	201,363,344	183,646,017	9.6%
Miscellaneous	(534,497)	4,138,055	---	36,778,941	47,243,281	-22.1%
Redeposit of State Funds	**$760,157**	**$6,460,964**	**-88.2%**	**$17,195,160**	**$8,871,788**	**93.8%**

KENTUCKY STATE GOVERNMENT – ROAD FUND REVENUE

	Third Quarter FY 2020	Third Quarter FY 2019	% Chg	Year-To-Date FY 2020	Year-To-Date FY 2019	% Chg
TOTAL ROAD FUND	**$387,180,670**	**$369,995,054**	**4.6%**	**$1,166,911,821**	**$1,141,313,640**	**2.2%**
Tax Receipts-	**$378,013,239**	**$361,578,057**	**4.5%**	**$1,141,088,667**	**$1,116,627,452**	**2.2%**
Sales and Gross Receipts	**$314,918,360**	**$300,902,934**	**4.7%**	**$980,856,048**	**$951,661,939**	**3.1%**
Motor Fuels Taxes	183,131,432	179,714,854	1.9%	581,297,030	575,308,792	1.0%
Motor Vehicle Usage	131,786,928	121,188,080	8.7%	399,559,018	376,353,146	6.2%
License and Privilege	**$63,094,879**	**$60,675,123**	**4.0%**	**$160,232,619**	**$164,965,513**	**-2.9%**
Motor Vehicles	35,581,529	32,430,499	9.7%	77,331,171	77,869,191	-0.7%
Motor Vehicle Operators	3,849,499	4,005,035	-3.9%	12,038,891	12,373,464	-2.7%
Weight Distance	20,796,284	20,964,313	-0.8%	63,536,420	63,249,363	0.5%
Truck Decal Fees	703	17,170	-95.9%	19,780	44,836	-55.9%
Other Special Fees	2,866,863	3,258,105	-12.0%	7,306,356	11,428,659	-36.1%
Nontax Receipts	**$9,661,890**	**$7,880,187**	**22.6%**	**$25,363,827**	**$23,166,016**	**9.5%**
Departmental Fees	4,919,270	3,914,797	25.7%	15,914,148	13,402,395	18.7%
In Lieu of Traffic Fines	84,525	135,106	-37.4%	251,137	315,209	-20.3%
Income on Investments	3,166,723	2,834,785	11.7%	5,734,708	6,634,017	-13.6%
Miscellaneous	1,491,373	995,499	49.8%	3,463,834	2,814,395	23.1%
Redeposit of State Funds	**($494,458)**	**$536,809**	**---**	**$459,328**	**$1,520,171**	**-69.8%**

Glossary

Adjacent-quarter	A growth rate computed as the current quarter relative to the previous quarter.
AR	Annual Rate is the quantity of a series that would occur for the entire year, if the current period's growth were to continue for the entire year.
Civilian Labor Force	A subset of the working population who are currently employed or are actively looking for employment.
Employed	In the context of working population and civilian laborforce data, Employed is a subset of the civilian labor force who are employed regardless of industry or profession. This is therefore different than non-farm employment, which explicitly does not include those persons employed in the agricultural sector.
Growth rate	Unless otherwise stipulated, a growth rate is computed as the current quarter relative to the same quarter of the previous year.
Labor Force Participation Rate	The Civilian Labor Force divided by the Working Population.
Not in Labor Force	A subset of the working population who have decided not to be employed nor seek employment.
SA	Seasonally-Adjusted
SAAR	Seasonally-Adjusted Annual Rate
Unemployed	In the context of working population and civilian laborforce data, Unemployed is a subset of the civilian labor force who are not currently employed but are actively seeking employment.
Working population	The group of persons who are 16 years or older, non-institutionalized, not in prison, not in an old-age home, and not engaged in active military duty. It is meant to capture those persons who are capable of working and could work if suitable employment were found. Working population figures are listed in millions.

Tables Notes

Table 3

Not Seasonally Adjusted. Real series are annual rate, billions of chained 2000 dollars.
Components do not sum to GDP because they are annualized independently.
Data for FY20 Q2 are April 2020 estimates.
Source: IHS Markit - Economics & Country Risk, April 7, 2020 data release.

[1] Working population is the group of persons who are 16 years or older, non-institutionalized, not in prison, not in an old-age home and not engaged in active military duty. It is meant to capture those persons who are capable of working and could work if suitable employment were found. Working population figures are listed in millions.
[2] Civilian Labor Force is a subset of the working population who are currently employed or are actively looking for employment.
[3] Employed is a subset of the civilian labor force who are employed regardless of industry or profession. This is therefore different than non-farm employment, which explicitly does not include those persons employed in the agricultural sector.
[4] Unemployed is a subset of the civilian labor force who are not currently employed but are actively seeking employment.
[5] Not in Labor Force is a subset of the working population who have decided not to be employed nor seek employment.
[6] Labor Force Participation Rate is computed as the Civilian Labor Force divided by the Working Population.

Table 4

Not Seasonally Adjusted. Data for FY20 Q2 are April 2020 estimates.
Source: IHS Markit - Economics & Country Risk, April 7, 2020 data release.

Table 6

Not Seasonally Adjusted. Data for FY20 Q2 are April 2020 estimates.
Source: IHS Markit - Economics & Country Risk, April 7, 2020 data release.

Table 9

Not Seasonally Adjusted. Real series are annual rate, billions of chained 2000 dollars.
Components do not sum to GDP because they are annualized independently.
Source: IHS Markit - Economics & Country Risk, April 7, 2020 data release.

Table 10

Not Seasonally Adjusted.
Source: IHS Global Insight, Inc. and the Kentucky Governor's Office for Economic Analysis and MAK model, April 2020.