# Selected U.S. and Kentucky Economic Variables IHS Markit: Control Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
OUTPUT							
US Real GDP (Bil 2012\$)	18,677	18,983	20,246	20,850	21,239	21,677	22,163
,	-1.1%	1.6%	6.7%	3.0%	1.9%	2.1%	2.2%
Industrial Production Index, Total	-5.4%	-0.1%	6.7%	2.5%	1.2%	1.4%	1.6%
Industrial Production Index, Durables	-3.6%	-0.2%	6.1%	2.2%	1.3%	1.3%	1.6%
INCOME							
KY Personal Income (Mil\$)	203,619	219,177	219,136	227,331	235,589	245,480	256,018
	5.9%	7.6%	0.0%	3.7%	3.6%	4.2%	4.3%
KY Wage & Salary Income (Mil\$)	95,812	101,041	108,895	113,842	117,940	122,335	126,734
, ,	0.8%	5.5%	7.8%	4.5%	3.6%	3.7%	3.6%
KY Supplements to W&S (Mil\$)	24,072	25,022	26,801	28,317	29,712	31,100	32,566
	0.9%	3.9%	7.1%	5.7%	4.9%	4.7%	4.7%
KY Proprietors' Income (Mil\$)	12,938	14,163	14,216	14,199	14,490	15,047	15,616
	4.6%	9.5%	0.4%	-0.1%	2.1%	3.8%	3.8%
KY Dividend, Interest, & Rent (Mil\$)	33,055	32,703	34,452	36,219	37,362	38,667	40,271
	0.1%	-1.1%	5.3%	5.1%	3.2%	3.5%	4.1%
KY Transfer Payments (Mil\$)	55,855	65,364	55,089	56,014	58,214	61,341	64,756
	21.5%	17.0%	-15.7%	1.7%	3.9%	5.4%	5.6%
KY Social Insurance (Mil\$)	15,692	16,625	17,814	18,714	19,540	20,379	21,248
	0.8%	5.9%	7.2%	5.1%	4.4%	4.3%	4.3%
US Personal Income (Bil\$)	19,192	20,623	20,853	21,743	22,644	23,682	24,835
• •	5.2%	7.5%	1.1%	4.3%	4.1%	4.6%	4.9%

### Selected U.S. and Kentucky Economic Variables IHS Markit: Control Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
<del>-</del>							
<b>EMPLOYMENT</b>							
KY Nonfarm Employment (Thous)	1,890.9	1,853.6	1,930.4	1,971.6	1,987.9	1,997.5	2,004.9
	-2.4%	-2.0%	4.1%	2.1%	0.8%	0.5%	0.4%
US Nonfarm Employment (Mil)	147.1	143.0	149.4	153.1	154.7	155.6	156.3
	-1.9%	-2.8%	4.5%	2.5%	1.0%	0.6%	0.5%
KY Manufacturing Employment (Thou)	242.5	240.4	249.9	252.9	252.6	252.6	252.5
	-3.9%	-0.8%	3.9%	1.2%	-0.1%	0.0%	-0.1%
US Manufacturing Employment (Mil)	12.5	12.2	12.5	12.6	12.5	12.4	12.3
	-2.1%	-2.5%	2.3%	0.8%	-0.3%	-1.2%	-1.1%
OTHER KEY MEASURES							
Consumer Sentiment Index (Michigan)	90.4	80.3	93.8	99.0	99.3	98.3	98.9
Rate of Inflation (%)	1.6%	2.2%	3.5%	2.0%	2.1%	2.1%	2.1%
US Retail Sales (%)	0.1%	12.8%	7.0%	2.3%	3.1%	3.9%	4.3%
US Corporate Profits(%)	-5.5%	20.7%	12.4%	3.1%	2.3%	4.7%	5.5%
Three-month Treasury Bills (%)	-46.8%	-94.1%	-17.6%	42.0%	252.5%	135.8%	66.5%
Oil Price, West Texas (\$/barrel)	46.72	51.83	65.40	62.12	62.10	62.52	63.19

MAK: Macromodel of Kentucky Governor's Office for Economic Analysis Office of State Budget Director

# Selected U.S. and Kentucky Economic Variables IHS Markit: Optimistic Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
OUTPUT							
US Real GDP (Bil 2012\$)	18,677	18,989	20,557	21,248	21,646	22,021	22,402
,	-1.1%	1.7%	8.3%	3.4%	1.9%	1.7%	1.7%
Industrial Production Index, Total	-5.4%	0.0%	8.3%	3.0%	1.3%	1.1%	1.1%
Industrial Production Index, Durables	-3.6%	-0.1%	8.1%	2.6%	1.2%	1.0%	1.1%
INCOME							
KY Personal Income (Mil\$)	203,619	219,197	221,216	230,394	239,306	249,218	259,776
,	5.9%	7.7%	0.9%	4.1%	3.9%	4.1%	4.2%
KY Wage & Salary Income (Mil\$)	95,812	101,046	109,891	114,869	119,267	123,705	128,228
, , , ,	0.8%	5.5%	8.8%	4.5%	3.8%	3.7%	3.7%
KY Supplements to W&S (Mil\$)	24,072	25,020	26,982	28,583	30,061	31,526	33,036
	0.9%	3.9%	7.8%	5.9%	5.2%	4.9%	4.8%
KY Proprietors' Income (Mil\$)	12,938	14,170	14,587	14,915	15,249	15,614	15,905
	4.6%	9.5%	2.9%	2.2%	2.2%	2.4%	1.9%
KY Dividend, Interest, & Rent (Mil\$)	33,055	32,710	35,014	37,164	38,484	39,819	41,517
	0.1%	-1.0%	7.0%	6.1%	3.6%	3.5%	4.3%
KY Transfer Payments (Mil\$)	55,855	65,368	55,195	56,302	58,616	61,836	65,325
	21.5%	17.0%	-15.6%	2.0%	4.1%	5.5%	5.6%
KY Social Insurance (Mil\$)	15,692	16,627	17,951	18,893	19,781	20,650	21,560
	0.8%	6.0%	8.0%	5.3%	4.7%	4.4%	4.4%
US Personal Income (Bil\$)	19,192	20,627	21,103	22,166	23,147	24,196	25,332
	5.2%	7.5%	2.3%	5.0%	4.4%	4.5%	4.7%

#### Selected U.S. and Kentucky Economic Variables IHS Markit: Optimistic Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
_							
EMPLOYMENT							
KY Nonfarm Employment (Thous)	1,890.9	1,853.8	1,943.5	1,978.9	1,994.9	2,001.4	2,006.6
	-2.4%	-2.0%	4.8%	1.8%	0.8%	0.3%	0.3%
US Nonfarm Employment (Mil)	147.1	143.0	150.3	153.5	155.0	155.8	156.4
	-1.9%	-2.8%	5.1%	2.1%	1.0%	0.5%	0.4%
KY Manufacturing Employment (Thou)	242.5	240.5	251.9	255.2	255.5	254.6	253.6
	-3.9%	-0.8%	4.7%	1.3%	0.1%	-0.3%	-0.4%
US Manufacturing Employment (Mil)	12.5	12.2	12.4	12.5	12.4	12.3	12.1
	-2.1%	-2.5%	2.0%	0.4%	-0.4%	-1.5%	-1.3%
OTHER KEY MEASURES							
Consumer Sentiment Index (Michigan)	90.4	80.3	97.4	102.0	101.6	100.5	101.2
Rate of Inflation (%)	1.6%	2.3%	3.7%	2.3%	2.2%	2.2%	2.2%
US Retail Sales (%)	0.1%	12.9%	9.2%	3.0%	3.1%	3.6%	3.9%
US Corporate Profits(%)	-5.5%	21.0%	18.9%	3.1%	0.9%	2.2%	2.6%
Three-month Treasury Bills (%)	-46.8%	-94.0%	149.5%	143.7%	81.0%	58.7%	36.8%
Oil Price, West Texas (\$/barrel)	46.72	51.83	67.15	63.76	63.52	63.92	64.57

MAK: Macromodel of Kentucky Governor's Office for Economic Analysis Office of State Budget Director

# Selected U.S. and Kentucky Economic Variables IHS Markit: Pessimistic Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
OUTPUT							
US Real GDP (Bil 2012\$)	18,677	18,979	20,029	20,698	21,175	21,607	22,046
,	-1.1%	1.6%	5.5%	3.3%	2.3%	2.0%	2.0%
Industrial Production Index, Total	-5.4%	-0.1%	5.4%	2.9%	1.6%	1.4%	1.2%
Industrial Production Index, Durables	-3.6%	-0.2%	4.5%	3.0%	2.0%	1.4%	1.3%
INCOME							
KY Personal Income (Mil\$)	203,619	219,115	217,116	223,567	230,147	238,434	247,683
,	5.9%	7.6%	-0.9%	3.0%	2.9%	3.6%	3.9%
KY Wage & Salary Income (Mil\$)	95,812	101,025	108,012	111,810	114,882	118,576	122,475
, , , ,	0.8%	5.4%	6.9%	3.5%	2.7%	3.2%	3.3%
KY Supplements to W&S (Mil\$)	24,072	25,014	26,539	27,660	28,699	29,839	31,150
	0.9%	3.9%	6.1%	4.2%	3.8%	4.0%	4.4%
KY Proprietors' Income (Mil\$)	12,938	14,131	13,863	13,895	14,287	14,862	15,404
	4.6%	9.2%	-1.9%	0.2%	2.8%	4.0%	3.6%
KY Dividend, Interest, & Rent (Mil\$)	33,055	32,695	33,948	35,720	36,862	37,938	39,259
	0.1%	-1.1%	3.8%	5.2%	3.2%	2.9%	3.5%
KY Transfer Payments (Mil\$)	55,855	65,363	54,902	55,329	56,913	59,434	62,430
	21.5%	17.0%	-16.0%	0.8%	2.9%	4.4%	5.0%
KY Social Insurance (Mil\$)	15,692	16,621	17,645	18,301	18,906	19,583	20,360
	0.8%	5.9%	6.2%	3.7%	3.3%	3.6%	4.0%
US Personal Income (Bil\$)	19,192	20,612	20,590	21,285	22,011	22,867	23,864
	5.2%	7.4%	-0.1%	3.4%	3.4%	3.9%	4.4%

#### Selected U.S. and Kentucky Economic Variables IHS Markit: Pessimistic Scenario July 2021

	FY20	FY21	FY22	FY23	FY24	FY25	FY26
<del>-</del>							
EMPLOYMENT							
KY Nonfarm Employment (Thous)	1,890.9	1,853.5	1,921.2	1,958.3	1,972.4	1,980.6	1,988.4
	-2.4%	-2.0%	3.7%	1.9%	0.7%	0.4%	0.4%
US Nonfarm Employment (Mil)	147.1	143.0	148.8	152.0	153.4	154.2	155.0
	-1.9%	-2.8%	4.1%	2.1%	0.9%	0.5%	0.5%
KY Manufacturing Employment (Thou)	242.5	240.3	248.6	250.5	249.8	250.0	250.1
	-3.9%	-0.9%	3.5%	0.7%	-0.3%	0.1%	0.0%
US Manufacturing Employment (Mil)	12.5	12.2	12.5	12.4	12.3	12.2	12.1
	-2.1%	-2.5%	2.6%	-0.9%	-1.0%	-1.0%	-0.3%
OTHER KEY MEASURES							
Consumer Sentiment Index (Michigan)	90.4	80.3	89.5	95.5	97.0	96.0	96.6
Rate of Inflation (%)	1.6%	2.2%	3.0%	0.9%	1.1%	1.4%	1.7%
US Retail Sales (%)	0.1%	12.7%	5.1%	1.8%	2.5%	3.0%	3.6%
US Corporate Profits(%)	-5.5%	20.8%	8.6%	3.0%	2.6%	3.4%	4.4%
Three-month Treasury Bills (%)	-46.8%	-94.0%	-8.6%	27.1%	6.2%	1.7%	4.6%
Oil Price, West Texas (\$/barrel)	46.72	51.69	64.61	61.65	61.87	62.56	63.56

MAK: Macromodel of Kentucky Governor's Office for Economic Analysis Office of State Budget Director

Selected U.S. and Kentucky Economic Variables
Forecast Comparison
July 2021

_	FY22	FY23	FY24	FY25	FY26	FY22	FY23	FY24	FY25	FY26	FY22	FY23	FY24	FY25	FY26
		IHS I	Markit: July	21			IHS I	larkit: July	21		IHS Markit: July 21				
			Control				(	Optimistic				P	essimistic		
US Real GDP (Bil 2012\$)	20,246	20,850	21,239	21,677	22,163	20,557	21,248	21,646	22,021	22,402	20,029	20,698	21,175	21,607	22,046
	6.7%	3.0%	1.9%	2.1%	2.2%	8.3%	3.4%	1.9%	1.7%	1.7%	5.5%	3.3%	2.3%	2.0%	2.0%
Industrial Production Index, Total	6.7%	2.5%	1.2%	1.4%	1.6%	8.3%	3.0%	1.3%	1.1%	1.1%	5.4%	2.9%	1.6%	1.4%	1.2%
Industrial Production, Durables	6.1%	2.2%	1.3%	1.3%	1.6%	8.1%	2.6%	1.2%	1.0%	1.1%	4.5%	3.0%	2.0%	1.4%	1.3%
KY Personal Income (Mil\$)	219,136	227,331	235,589	245,480	256,018	221,216	230,394	239,306	249,218	259,776	217,116	223,567	230,147	238,434	247,683
	0.0%	3.7%	3.6%	4.2%	4.3%	0.9%	4.1%	3.9%	4.1%	4.2%	-0.9%	3.0%	2.9%	3.6%	3.9%
KY Wage & Salary Income (Mil\$)	108,895	113,842	117,940	122,335	126,734	109,891	114,869	119,267	123,705	128,228	108,012	111,810	114,882	118,576	122,475
	7.8%	4.5%	3.6%	3.7%	3.6%	8.8%	4.5%	3.8%	3.7%	3.7%	6.9%	3.5%	2.7%	3.2%	3.3%
US Personal Income (Bil\$)	20,853	21,743	22,644	23,682	24,835	21,103	22,166	23,147	24,196	25,332	20,590	21,285	22,011	22,867	23,864
	1.1%	4.3%	4.1%	4.6%	4.9%	2.3%	5.0%	4.4%	4.5%	4.7%	-0.1%	3.4%	3.4%	3.9%	4.4%
KY Nonfarm Employment ('000)	1,930.4	1,971.6	1,987.9	1,997.5	2,004.9	1,943.5	1,978.9	1,994.9	2,001.4	2,006.6	1,921.2	1,958.3	1,972.4	1,980.6	1,988.4
	4.1%	2.1%	0.8%	0.5%	0.4%	4.8%	1.8%	0.8%	0.3%	0.3%	3.7%	1.9%	0.7%	0.4%	0.4%
US Nonfarm Employment (Mil)	149.4	153.1	154.7	155.6	156.3	150.3	153.5	155.0	155.8	156.4	148.8	152.0	153.4	154.2	155.0
	4.5%	2.5%	1.0%	0.6%	0.5%	5.1%	2.1%	1.0%	0.5%	0.4%	4.1%	2.1%	0.9%	0.5%	0.5%
CPI, Rate of Inflation	3.5%	2.0%	2.1%	2.1%	2.1%	3.7%	2.3%	2.2%	2.2%	2.2%	3.0%	0.9%	1.1%	1.4%	1.7%
US Retail Sales	7.0%	2.3%	3.1%	3.9%	4.3%	9.2%	3.0%	3.1%	3.6%	3.9%	5.1%	1.8%	2.5%	3.0%	3.6%
US Corporate Profits	12.4%	3.1%	2.3%	4.7%	5.5%	18.9%	3.1%	0.9%	2.2%	2.6%	8.6%	3.0%	2.6%	3.4%	4.4%
Oil Price, WTI (\$/barrel)	65.40	62.12	62.10	62.52	63.19	67.15	63.76	63.52	63.92	64.57	64.61	61.65	61.87	62.56	63.56

MAK2006: Macromodel of Kentucky Governor's Office for Economic Analysis Office of State Budget Director

Selected U.S. and Kentucky Economic Variables
Forecast Comparison
July 2021

-	FY20	FY21	FY22	FY20	FY21	FY22			
	Global	Insight: Ju	ly 21	Global Insight: Nov 20					
		Control			Control				
US Real GDP (Bil 2012\$)	18,677	18,983	20,246	18,677	18,787	19,198			
	-1.1%	1.6%	8.4%	-1.1%	0.6%	2.2%			
Industrial Production Index, Total	-5.4%	-0.1%	6.7%	-4.2%	-2.3%	1.5%			
Industrial Production, Durables	-3.6%	-0.2%	6.1%	-3.1%	-0.9%	1.1%			
KY Personal Income (Mil\$)	203,619	219,177	219,136	202,715	204,565	206,990			
	5.9%	7.6%	7.6%	5.4%	0.9%	1.2%			
KY Wage & Salary Income (Mil\$)	95,812	101,041	108,895	95,764	97,072	101,475			
	0.8%	5.5%	13.7%	0.8%	1.4%	4.5%			
US Personal Income (Bil\$)	19,192	20,623	20,853	19,176	19,419	19,667			
	5.2%	7.5%	8.7%	5.1%	1.3%	1.3%			
KY Nonfarm Employment ('000)	1,890.9	1,853.6	1,930.4	1,875.4	1,844.6	1,905.2			
	-2.4%	-2.0%	2.1%	-3.1%	-1.6%	3.3%			
US Nonfarm Employment (Mil)	147.1	143.0	149.4	147.1	144.2	149.6			
	-1.9%	-2.8%	1.6%	-1.9%	-2.0%	3.7%			
CPI, Rate of Inflation	1.6%	2.2%	3.5%	1.6%	1.7%	2.6%			
US Retail Sales	0.1%	12.8%	7.0%	0.3%	6.5%	3.1%			
US Corporate Profits	-5.5%	20.7%	12.4%	-5.5%	3.8%	-8.5%			
Oil Price, WTI (\$/barrel)	46.72	51.83	65.40	46.72	40.57	48.93			

MAK2006: Macromodel of Kentucky Governor's Office for Economic Analysis Office of State Budget Director