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

	FY20	FY21	FY22	FY23	FY24
OUTPUT					
US Real GDP (Bil 2012\$)	18,631	18,938	19,803	20,547	21,082
	-0.9%	1.6%	4.6%	3.8%	2.6%
Industrial Production Index, Total	-5.4%	0.0%	4.7%	4.1%	2.4%
Industrial Production Index, Durables	-3.6%	0.1%	4.6%	3.5%	2.4%
INCOME					
KY Personal Income (Mil\$)	206,076	220,346	219,865	227,661	237,334
, ,	7.2%	6.9%	-0.2%	3.5%	4.2%
KY Wage & Salary Income (Mil\$)	96,491	100,760	108,376	114,830	119,789
3 , , , , ,	1.4%	4.4%	7.6%	6.0%	4.3%
KY Supplements to W&S (Mil\$)	24,462	25,805	27,271	28,938	30,440
, ,	2.5%	5.5%	5.7%	6.1%	5.2%
KY Proprietors' Income (Mil\$)	13,310	14,675	14,640	14,780	15,130
	6.2%	10.3%	-0.2%	1.0%	2.4%
KY Dividend, Interest, & Rent (Mil\$)	33,102	32,728	33,570	34,586	35,904
	1.2%	-1.1%	2.6%	3.0%	3.8%
KY Transfer Payments (Mil\$)	57,279	66,559	57,026	56,625	59,078
	24.7%	16.2%	-14.3%	-0.7%	4.3%
KY Social Insurance (Mil\$)	15,941	17,247	18,516	19,553	20,419
	3.3%	8.2%	7.4%	5.6%	4.4%
US Personal Income (Bil\$)	19,076	20,440	20,706	21,639	22,725
•	5.4%	7.2%	1.3%	4.5%	5.0%

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

	FY20	FY21	FY22	FY23	FY24
EMPLOYMENT					
KY Nonfarm Employment (Thous)	1,890.9	1,850.1	1,917.4	1,973.4	1,988.9
Ter Normann Employment (Thous)	-2.4%	-2.2%	3.6%	2.9%	0.8%
US Nonfarm Employment (Mil)	147.1	143.0	149.4	153.7	155.5
	-1.9%	-2.8%	4.5%	2.9%	1.2%
KY Manufacturing Employment (Thou)	242.5	240.4	249.0	255.0	257.4
	-3.9%	-0.9%	3.6%	2.4%	0.9%
US Manufacturing Employment (Mil)	12.5	12.2	12.5	12.5	12.6
	-2.1%	-2.5%	2.6%	0.1%	0.2%
OTHER KEY MEASURES					
Consumer Sentiment Index (Michigan)	90.4	80.3	80.6	95.1	94.8
Rate of Inflation (%)	1.6%	2.3%	5.0%	2.2%	2.2%
US Retail Sales (%)	0.1%	13.2%	9.6%	0.3%	2.5%
US Corporate Profits(%)	-8.9%	30.0%	4.7%	0.9%	5.4%
Three-month Treasury Bills (%)	-46.8%	-94.1%	-20.7%	153.8%	298.2%
Oil Price, West Texas (\$/barrel)	46.72	51.83	75.06	70.91	65.85

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 December 2021

	FY20	FY21	FY22	FY23	FY24
·					
OUTPUT					
US Real GDP (Bil 2012\$)	18,631	18,938	19,986	20,951	21,564
	-0.9%	1.6%	5.5%	4.8%	2.9%
Industrial Production Index, Total	-5.4%	0.0%	5.4%	5.4%	2.7%
Industrial Production Index, Durables	-3.6%	0.1%	5.5%	5.0%	2.8%
INCOME					
KY Personal Income (Mil\$)	206,076	220,346	221,072	230,720	241,532
` ,	7.2%	6.9%	0.3%	4.4%	4.7%
KY Wage & Salary Income (Mil\$)	96,491	100,760	109,077	116,051	121,306
	1.4%	4.4%	8.3%	6.4%	4.5%
KY Supplements to W&S (Mil\$)	24,462	25,805	27,427	29,285	30,889
	2.5%	5.5%	6.3%	6.8%	5.5%
KY Proprietors' Income (Mil\$)	13,310	14,675	14,822	15,492	16,181
	6.2%	10.3%	1.0%	4.5%	4.5%
KY Dividend, Interest, & Rent (Mil\$)	33,102	32,728	33,827	35,381	37,017
	1.2%	-1.1%	3.4%	4.6%	4.6%
KY Transfer Payments (Mil\$)	57,279	66,559	57,043	56,830	59,417
	24.7%	16.2%	-14.3%	-0.4%	4.6%
KY Social Insurance (Mil\$)	15,941	17,247	18,621	19,774	20,689
	3.3%	8.2%	8.0%	6.2%	4.6%
US Personal Income (Bil\$)	19,076	20,440	20,842	22,044	23,285
	5.4%	7.2%	2.0%	5.8%	5.6%

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

	FY20	FY21	FY22	FY23	FY24
EMPLOYMENT					
EMPLOYMENT					
KY Nonfarm Employment (Thous)	1,890.9	1,850.1	1,924.3	1,982.6	1,996.3
	-2.4%	-2.2%	4.0%	3.0%	0.7%
US Nonfarm Employment (Mil)	147.1	143.0	149.9	154.3	155.8
. , , ,	-1.9%	-2.8%	4.9%	2.9%	1.0%
KY Manufacturing Employment (Thou)	242.5	240.4	250.1	257.3	259.7
	-3.9%	-0.9%	4.1%	2.9%	0.9%
US Manufacturing Employment (Mil)	12.5	12.2	12.6	12.5	12.5
	-2.1%	-2.5%	2.8%	-0.2%	-0.5%
OTHER KEY MEASURES					
Consumer Sentiment Index (Michigan)	90.4	80.3	83.3	96.7	96.0
Rate of Inflation (%)	1.6%	2.3%	5.1%	2.5%	2.3%
US Retail Sales (%)	0.1%	13.2%	10.9%	2.2%	3.1%
, ,					
US Corporate Profits(%)	-8.9%	30.0%	8.3%	3.9%	4.9%
Three-month Treasury Bills (%)	-46.8%	-94.1%	62.5%	226.6%	107.4%
Oil Price, West Texas (\$/barrel)	46.72	51.83	76.57	72.82	67.30

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 December 2021

	FY20	FY21	FY22	FY23	FY24
OUTPUT					
US Real GDP (Bil 2012\$)	18,631	18,938	19,639	20,270	20,863
	-0.9%	1.6%	3.7%	3.2%	2.9%
Industrial Production Index, Total	-5.4%	0.0%	3.7%	4.0%	3.0%
Industrial Production Index, Durables	-3.6%	0.1%	3.5%	3.2%	3.2%
INCOME					
KY Personal Income (Mil\$)	206,076	220,346	218,802	224,310	232,233
	7.2%	6.9%	-0.7%	2.5%	3.5%
KY Wage & Salary Income (Mil\$)	96,491	100,760	107,898	113,240	117,174
	1.4%	4.4%	7.1%	5.0%	3.5%
KY Supplements to W&S (Mil\$)	24,462	25,805	27,134	28,414	29,596
	2.5%	5.5%	5.1%	4.7%	4.2%
KY Proprietors' Income (Mil\$)	13,310	14,675	14,408	14,365	14,846
	6.2%	10.3%	-1.8%	-0.3%	3.3%
KY Dividend, Interest, & Rent (Mil\$)	33,102	32,728	33,257	33,738	35,002
	1.2%	-1.1%	1.6%	1.4%	3.7%
KY Transfer Payments (Mil\$)	57,279	66,559	57,014	56,268	58,044
	24.7%	16.2%	-14.3%	-1.3%	3.2%
KY Social Insurance (Mil\$)	15,941	17,247	18,406	19,170	19,839
	3.3%	8.2%	6.7%	4.2%	3.5%
US Personal Income (Bil\$)	19,076	20,440	20,554	21,178	22,091
, <i>,</i>	5.4%	7.2%	0.6%	3.0%	4.3%

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

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-	FY20	FY21	FY22	FY23	FY24
EMPLOYMENT					
KY Nonfarm Employment (Thous)	1,890.9	1,850.1	1,912.6	1,960.4	1,974.5
	-2.4%	-2.2%	3.4%	2.5%	0.7%
US Nonfarm Employment (Mil)	147.1	143.0	149.2	152.7	154.3
	-1.9%	-2.8%	4.3%	2.4%	1.0%
KY Manufacturing Employment (Thou)	242.5	240.4	247.8	251.2	253.2
3 1 3 1 (11)	-3.9%	-0.9%	3.1%	1.4%	0.8%
US Manufacturing Employment (Mil)	12.5	12.2	12.6	12.4	12.4
	-2.1%	-2.5%	2.9%	-1.2%	-0.5%
OTHER KEY MEASURES					
Consumer Sentiment Index (Michigan)	90.4	80.3	77.4	91.9	93.8
Rate of Inflation (%)	1.6%	2.3%	4.8%	1.4%	1.1%
US Retail Sales (%)	0.1%	13.2%	8.1%	-0.2%	1.7%
US Corporate Profits(%)	-8.9%	30.0%	1.7%	0.0%	3.8%
Three-month Treasury Bills (%)	-46.8%	-94.1%	-12.8%	34.6%	6.3%
Oil Price, West Texas (\$/barrel)	46.72	51.83	75.43	71.58	66.83

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

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

	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	
	Globa	l Insight: De	ec 21		Insight: De	ec 21		Global Insight: Dec 21		•		Global Insight: Oct 21		Global Insight: Oct 21		ct 21	Global Insight: Oct 21		ct 21
		Control			Optimistic			essimistic			Control			Optimistic			essimistic		
US Real GDP (Bil 2012\$)	19,803	20,547	21,082	19,986	20,951	21,564	19,639	20,270	20,863	19,911	20,591	21,154	20,203	21,106	21,719	19,641	20,208	20,828	
	4.6%	3.8%	2.6%	5.5%	4.8%	2.9%	3.7%	3.2%	2.9%	5.1%	3.4%	2.7%	6.7%	4.5%	2.9%	3.7%	2.9%	3.1%	
Industrial Production Index, Total	4.7%	4.1%	2.4%	5.4%	5.4%	2.7%	3.7%	4.0%	3.0%	5.1%	3.6%	2.4%	6.7%	4.3%	2.5%	3.8%	4.0%	2.9%	
Industrial Production, Durables	4.6%	3.5%	2.4%	5.5%	5.0%	2.8%	3.5%	3.2%	3.2%	5.2%	3.2%	2.4%	7.3%	4.2%	2.4%	3.5%	3.4%	3.1%	
KY Personal Income (Mil\$)	219,865	227.661	237,334	221,072	230,720	241,532	218,802	224,310	232,233	219,526	227,276	236,797	221,205	230.211	240,624	217,747	223,494	231,416	
, ,,	-0.2%	3.5%	4.2%	0.3%	4.4%	4.7%	-0.7%	2.5%	3.5%	0.3%	3.5%	4.2%	1.0%	4.1%	4.5%	-0.5%	2.6%	3.5%	
KY Wage & Salary Income (Mil\$)	108,376	114.830	119.789	109.077	116.051	121.306	107.898	113.240	117.174	109,335	115.048	119.707	110.172	116.017	121,077	108,472	112.963	116,620	
TTT Trage a calary moome (may)	7.6%	6.0%	4.3%	8.3%	6.4%	4.5%	7.1%	5.0%	3.5%	8.3%	5.2%	4.1%	9.1%	5.3%	4.4%	7.4%	4.1%	3.2%	
US Personal Income (Bil\$)	20.706	21.639	22.725	20.842	22.044	23.285	20.554	21.178	22,091	20.608	21.506	22.602	20.797	21.906	23.100	20.389	21,058	21,993	
03 reisonal income (Bila)	1.3%	4.5%	5.0%	20,842	5.8%	5.6%	0.6%	3.0%	4.3%	0.8%	4.4%	5.1%	1.8%	5.3%	5.5%	-0.2%	3.3%	4.4%	
KY Nonfarm Employment ('000)	1,917.4	1,973.4	1,988.9	1,924.3	1,982.6	1,996.3	1,912.6	1,960.4	1,974.5	1,922.1	1,964.4	1,985.1	1,934.1	1,972.5	1,992.9	1,915.4	1,951.7	1,970.7	
	3.6%	2.9%	0.8%	4.0%	3.0%	0.7%	3.4%	2.5%	0.7%	3.9%	2.2%	1.1%	4.5%	2.0%	1.0%	3.5%	1.9%	1.0%	
US Nonfarm Employment (Mil)	149.4	153.7	155.5	149.9	154.3	155.8	149.2	152.7	154.3	149.0	152.6	154.7	149.8	153.1	155.0	148.6	151.6	153.4	
	4.5%	2.9%	1.2%	4.9%	2.9%	1.0%	4.3%	2.4%	1.0%	4.2%	2.5%	1.3%	4.8%	2.2%	1.2%	3.9%	2.0%	1.2%	
CPI, Rate of Inflation	5.0%	2.2%	2.2%	5.1%	2.5%	2.3%	4.8%	1.4%	1.1%	4.2%	1.6%	2.0%	4.4%	1.9%	2.1%	3.9%	0.6%	0.9%	
US Retail Sales	9.6%	0.3%	2.5%	10.9%	2.2%	3.1%	8.1%	-0.2%	1.7%	7.3%	0.6%	3.0%	9.5%	2.0%	3.2%	5.1%	-0.9%	2.3%	
US Corporate Profits	4.7%	0.9%	5.4%	8.3%	3.9%	4.9%	1.7%	0.0%	3.8%	5.9%	1.8%	5.4%	12.2%	6.0%	4.9%	-0.4%	-3.0%	4.4%	
Oil Price, WTI (\$/barrel)	75.06	70.91	65.85	76.57	72.82	67.30	75.43	71.58	66.83	65.34	62.08	62.00	66.88	63.81	63.43	66.31	63.10	63.33	

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