May 5, 2020

MEMORANDUM

TO:	Secretary Olivia Padilla-Jackson, Department of Finance and Administration Secretary Stephanie Schardin Clarke, Taxation and Revenue Department Director David Abbey, Legislative Finance Committee
FROM:	Staff Economists of the Legislative Finance Committee, Taxation and Revenue Department, Department of Finance and Administration, and Department of Transportation
SUBJECT:	**Consensus Revenue Estimating Group – 2020 Interim Review of Revenues**

The outbreak of the novel coronavirus that causes COVID-19, along with the global responses to contain the spread of the virus, places significant strain on New Mexico's finances. Given the severity of the circumstances, the Consensus Revenue Estimating Group (CREG) – comprised of economists from the Legislative Finance Committee (LFC), the Department of Finance and Administration (DFA), the Taxation and Revenue Department (TRD), and the Department of Transportation (DOT) – found it necessary to review the state's recurring revenue sources and inform leadership and policymakers of the potential fiscal implications.

This memorandum summarizes the work and conclusions of the CREG. The work contained herein is not a new consensus revenue forecast; however, it contains a preliminary review of New Mexico's fiscal and economic outlook amid the current public health crisis and describes a range of potential outcomes for state revenues.

For this exercise, the group examined two potential scenarios, assessing the impact on about 95 percent of general fund revenues. In the "U-Shaped Recovery" scenario, general fund revenues sharply contract in FY21 and begin a modest recovery into FY22. The alternative "L-Shaped Recovery" scenario considers the revenue effects of a prolonged and deeper economic contraction. Attached to this memo is a comparison chart of the underlying assumptions for each scenario.

December 2019 Consensus General Fund, **Recurring Revenue Outlook** (in millions)

FY20	FY21	FY22
$7,776.4	$7,882.5	$8,015.2

April 2020 Preliminary Review of Recurring Revenues,
Difference from December 2019 forecast (in millions)

	FY20	FY21	FY22
Scenario: "U-Shaped" Economic Recovery	($368)	($1,772)	($1,668)
Scenario: "L-Shaped" Economic Recovery	($483)	($2,399)	($2,506)

In both scenarios, widespread business closures and associated layoffs lead to significant declines in personal income tax and gross receipts tax (GRT) revenues. Low oil prices and declining production significantly reduce severance tax revenues, federal royalty payments, and GRT collections from drilling activity. Other revenues, including corporate income taxes, motor vehicle excise taxes, gaming receipts, and tribal revenue sharing, are also expected to decline.

The variance in the potential outcomes depends on a variety of factors: the epidemiological path of the virus, the strategies for reopening the New Mexico and U.S. economies, the time it takes consumer confidence to rebound, the effect of business closures on the long-term viability of New Mexico's businesses, the degree to which temporary layoffs become permanent, and the impact of global oil supply and demand on oil prices and the associated effect on the state's oil production.

Based on the group's preliminary review, recurring revenues for FY20 could decline about $370 million to $480 million below the December 2019 forecast. Given the extent of the anticipated revenue declines, the balance of the operating reserve – previously estimated to be $259 million at the end of FY20 – will likely be insufficient to cover total FY20 appropriations without changes to spending or authorization to utilize another reserve fund.

Additionally, the preliminary review shows reserve balances are likely insufficient to cover the extent of the projected revenue declines for FY21, and recurring revenues for FY22 could fall substantially below current FY21 recurring appropriations. Recurring revenue in FY21 could drop $1.8 billion to $2.4 billion below the forecast. Recurring revenue for FY22 stands to be 17 percent ($1.3 billion) to 28 percent ($2.1 billion) below the FY21 operating budget of $7.6 billion passed in the 2020 legislative session.

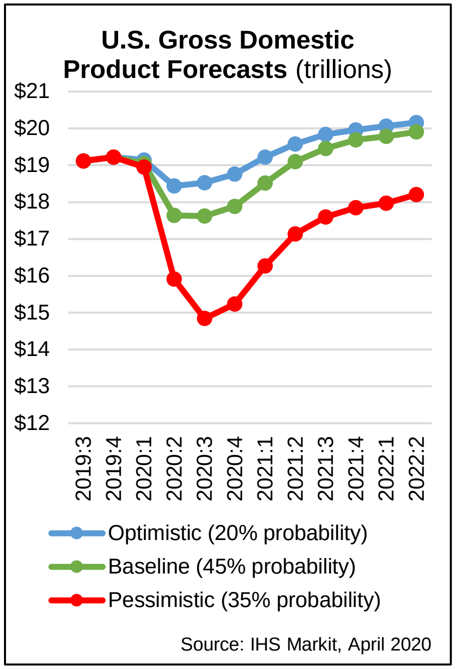
Assumptions and Inputs. The CREG modeled potential revenue impacts using the latest macroeconomic forecasts for the U.S. and New Mexico economies from IHS Markit, Moody's Analytics, and UNM's Bureau of Business and Economic Research (BBER). The group also consulted with experts at New Mexico State University and New Mexico Tech. A comparison chart of the economic indicators informing the projections is attached to this memo.

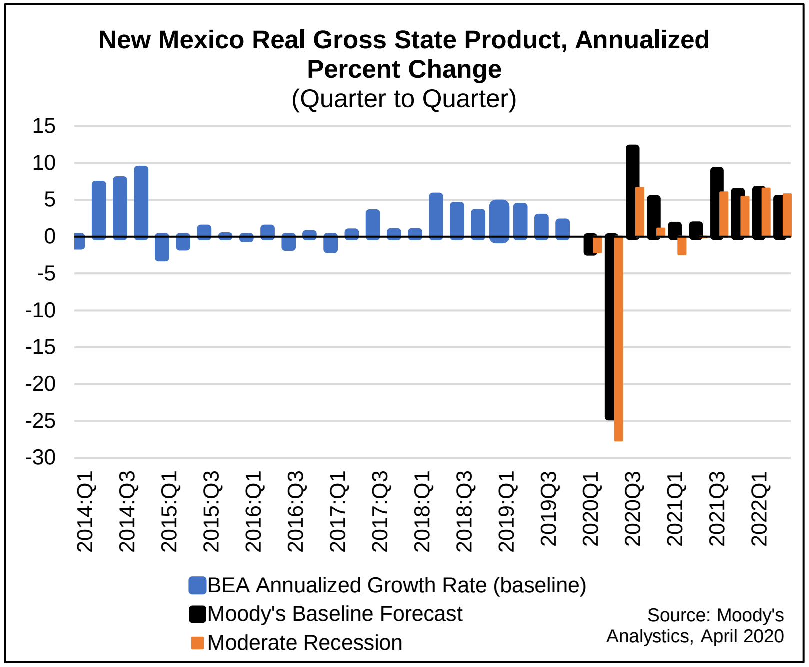
IHS and Moody's forecasts include a recession that began in the first quarter of 2020 as restaurants, theatres, resorts, airlines, retail outlets, personal services, home and vehicle sales, sporting events, and other activities began shutting down in March. Unlike most recessions, which are caused by either a demand or supply-side shock, national and state economies now face an unprecedented economic event causing supply and demand shocks simultaneously. Rapidly evolving economic conditions place significant uncertainty on the depth and duration of the decline.

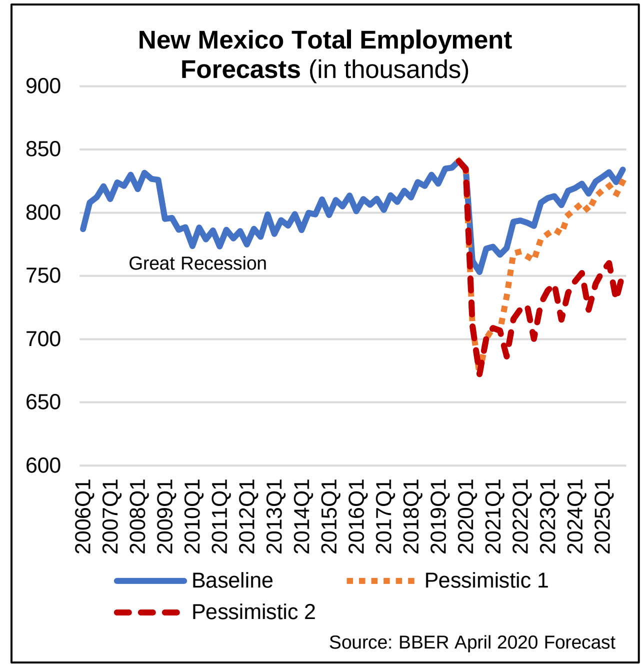
Exacerbating the issues, New Mexico is an energy-producing state with a high degree of sensitivity to changes in the oil and natural gas markets, which makes the forecast sensitive to changes in commodity prices and produced volumes that affect all of the state's major revenue sources, including severance taxes, federal royalty payments, gross receipts tax, and personal income tax. IHS and Moody's forecasts anticipate a prolonged period of very low oil prices that has already led Permian producers to drastically cut spending plans and shut-in wells. The effects will be particularly detrimental to general fund revenues. Nearly 70 percent of revenue growth from FY18 to FY19 was tied directly and indirectly to growth in the oil and gas industry, and current low prices and associated drilling and production declines stand to eliminate a significant portion of recurring revenue for years to come.

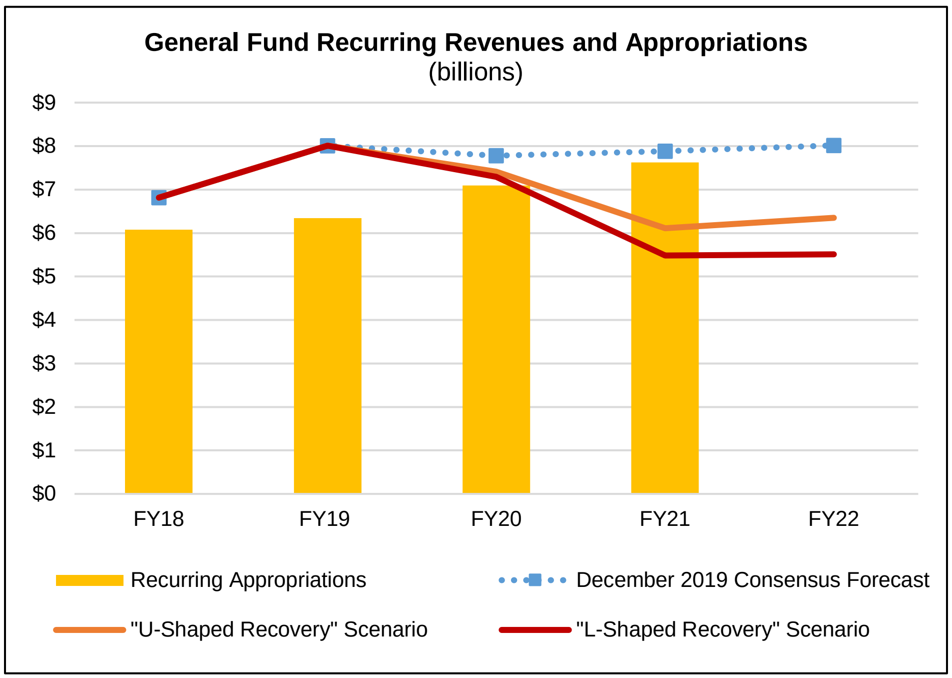
BBER's April 2020 New Mexico forecast includes large employment declines through the third quarter of 2020 – with unemployment projections ranging from 10 percent to 16 percent – then small gains through mid-2021 and stronger recovery through 2022. However, BBER's baseline forecast projects New Mexico's employment levels will not recover to pre-recession levels until 2025. In its lowest-case scenario, the state faces a slower rate of recovery similar to the "L-shaped" path the state experienced following the Great Recession.

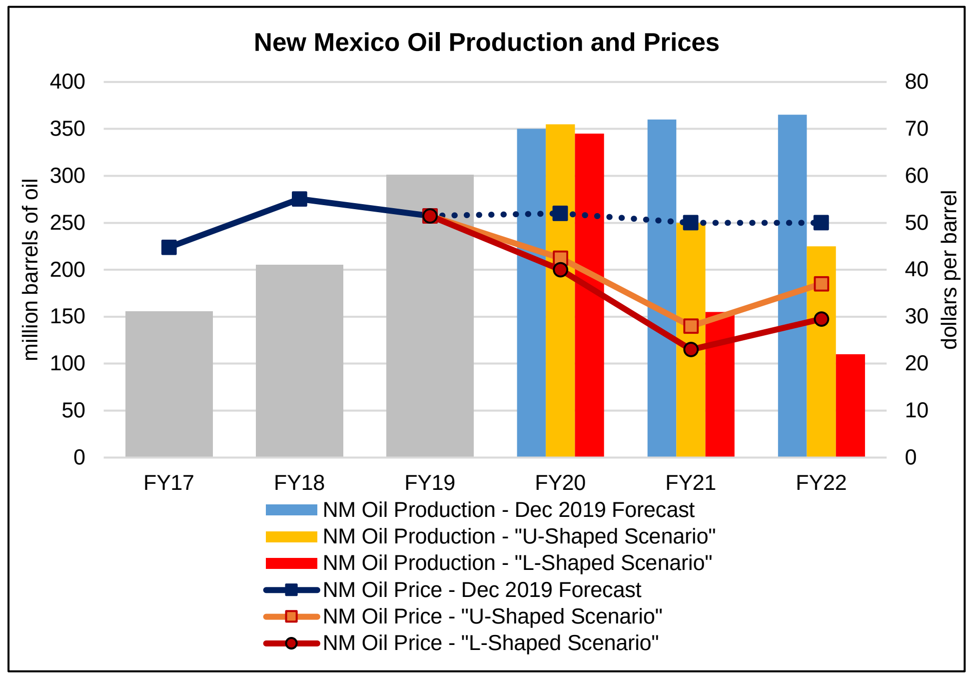
Revised forecasts from IHS and Moody's will be available in May and early June, and the Taxation and Revenue Department will provide GRT and personal income tax preliminary revenue reports by mid-May for the month of March and by mid-June for the month of April. While there is still a great deal of uncertainty, revised forecasts and preliminary actual revenue data for New Mexico would enable the CREG to generate a new consensus revenue estimate before the close of the current fiscal year.


U.S. Gross Domestic Product Forecasts (trillions)
$21
$20
$19
$18
$17
$16
$15
$14
$13
$12
2019:3
2019:4
2020:1
2020:2
2020:3
2020:4
2021:1
2021:2
2021:3
2021:4
2022:1
2022:2
Optimistic (20% probability)
Baseline (45% probability)
Pessimistic (35% probability)
Source: IHS Markit, April 2020


New Mexico Real Gross State Product, Annualized Percent Change
(Quarter to Quarter)
15
10
5
0
-5
-10
-15
-20
-25
-30
2014:Q1
2014:Q3
2015:Q1
2015:Q3
2016:Q1
2016:Q3
2017:Q1
2017:Q3
2018:Q1
2018:Q3
2019:Q1
2019Q3
2020Q1
2020Q3
2021Q1
2021Q3
2022Q1
BEA Annualized Growth Rate (baseline)
Moody's Baseline Forecast
Moderate Recession
Source: Moody's Analystics, April 2020


New Mexico Total Employment Forecasts (in thousands)
900
850
800
750
700
650
600
Great Recession
2006Q1
2007Q1
2008Q1
2009Q1
2010Q1
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
2016Q1
2017Q1
2018Q1
2019Q1
2020Q1
2021Q1
2022Q1
2023Q1
2024Q1
2025Q1
Baseline
Pessimistic 1
Pessimistic 2
Source: BBER April 2020 Forecast


General Fund Recurring Revenues and Appropriations
(billions)
$9
$8
$7
$6
$5
$4
$3
$2
$1
$0
FY18
FY19
FY20
FY21
FY22
Recurring Appropriations
December 2019 Consensus Forecast
"U-Shaped Recovery" Scenario
"L-Shaped Recovery" Scenario


New Mexico Oil Production and Prices
400
350
300
250
200
150
100
50
0
million barrels of oil
80
70
60
50
40
30
20
10
0
dollars per barrel
FY17
FY18
FY19
FY20
FY21
FY22
NM Oil Production - Dec 2019 Forecast
NM Oil Production - "U-Shaped Scenario"
NM Oil Production - "L-Shaped Scenario"
NM Oil Price - Dec 2019 Forecast
NM Oil Price - "U-Shaped Scenario"
NM Oil Price - "L-Shaped Scenario"

CREG Scenario Outcomes and Assumptions

	"U" Shaped Recovery Scenario	"L" Shaped Recovery Scenario
Potential Outcomes that Cause Scenario	New U.S. COVID-19 infections taper by third quarter, but consumer spending hard hit in second quarter. • Gradual lifting of restrictions on social gathering in second and third quarters; • Consumer spending declines at unprecedented rates but begins gradual rebound in 2020-Q3; • Fiscal stimulus prevents even steeper declines but does little to stimulate demand. • Monetary policy ensures normal functioning of financial markets. • National unemployment rate reaches 10 percent by 2020-Q4 and starts to fall in 2021.	COVID-19 causes an even larger, longer hit to production, employment, and income. • Even steeper contraction in consumer spending. • Takes longer to bring COVID-19 under control, delaying the start of the recovery in spending, reduces the vigor of the rebound, and delays laid-off workers getting back to work. • Federal fiscal and monetary policy fails to stimulate demand, and business fixed investment faces greater and more prolonged contraction. • Major industry impacts cause irreparable harm to businesses, hampering workforce recovery.
Oil:	• U.S. oil prices below \$30/bbl through end of 2020, oil prices remain in \$30s through 2021, recover to \$40s by early 2022. • Permian production begins declines in 2020-Q2; rig counts drop over 70 percent through end of 2020 before beginning to recover in 2021 • New Mexico oil production falls 30 percent in FY21; new drilling is unable to offset decline rates and production falls another 10 percent in FY22. • Declines in Permian oil production and shut-in of uneconomical wells leads to significant declines in associated natural gas production.	• U.S. oil prices below \$30/bbl through 2021. • Permian rig counts drop below lowest levels in 2016 downturn and remain low for longer. • Severe limitations on new drilling spurs New Mexico production to follow the natural rate of decline. • New Mexico oil production in FY21 falls to FY17 levels and continues declines into FY22. • Greater declines in associated natural gas production.
Employment:	• Unemployment reaches 10 percent by 2020-Q3, with jobs losses concentrated in retail, leisure & hospitality and administrative services. • Job recovery begins in the summer, but unemployment remains high throughout FY21, recovering to about 6 percent by FY22. • Total wages and salaries remain below peak levels through end of FY22.	• Similar to "U-shaped" in 2020-Q2 job losses, but with a weaker recovery. • Takes 5+ years for jobs to recover to pre-virus levels. • Recovery concentrated in low-wage sectors, taking 3-5 years for total wages and salaries to return to previous peaks.
NM Gross Receipts:	• Social distancing restrictions and low consumer spending have significant effects on 2020-Q2 gross receipts, leading to overall declines in FY20 receipts from Bernalillo and other counties excluding Eddy and Lea. • Dropoff in rig counts and drilling activity causes sizeable declines in gross receipts in Eddy and Lea counties and out-of-state receipts, which leads to reduced growth in FY20 and receipts falling to 2016 levels in FY21. • The state benefits from a bump in online sales, but it fails to offset declines in out-of-state receipts. • Slow recovery of consumer spending furthers declines in Bernalillo and the rest of the state in FY21 with a modest recovery in FY22 that is still below 2019 levels.	• Prolonged pullback in drilling activity leads to even greater declines in Eddy and Lea counties and out-of-state receipts. • Delayed recovery causes greater FY21 declines in receipts in the rest of New Mexico and limited recovery of gross receipts in FY22. • Total net GRT collections fall near FY16 levels by FY21, a drop of nearly a billion dollars below the December 2019 forecast.

U.S. and New Mexico Economic Indicators

5/4/2020

		FY20			FY21			FY22		
		Dec 19 Forecast	Apr 20 "U-Shaped" Scenario	Apr 20 "L-Shaped" Scenario	Dec 19 Forecast	Apr 20 "U-Shaped" Scenario	Apr 20 "L-Shaped" Scenario	Dec 19 Forecast	Apr 20 "U-Shaped" Scenario	Apr 20 "L- Shaped" Scenario
	National Economic Indicators									
IHS	US Real GDP Growth (annual avg.,% YOY)*	2.0	-0.6	-3.0	2.2	-2.6	-13.3	1.7	7.8	12.8
Moody's	US Real GDP Growth (annual avg. ,% YOY)*	2.0	-1.4	-1.7	1.5	-3.2	-6.6	2.9	5.6	3.5
IHS	US Inflation Rate (CPI-U, annual avg., % YOY)**	2.0	1.4	1.2	1.6	1.1	-0.5	2.2	2.4	2.9
Moody's	US Inflation Rate (CPI-U, annual avg., % YOY)**	1.8	1.5	1.4	2.3	1.0	-1.1	2.4	3.1	1.6
IHS	Federal Funds Rate (%)	1.8	1.3	1.3	1.8	0.1	0.1	2.3	0.1	0.1
Moody's	Federal Funds Rate (%)	1.8	1.3	1.3	1.4	0.1	0.1	2.0	0.1	0.1
	New Mexico Economic Indicators									
BBER	NM Non-Agricultural Employment Growth (%)	1.7	-1.0	-2.6	1.2	-6.4	-13.5	1.0	2.9	2.4
Moody's	NM Non-Agricultural Employment Growth (%)	1.9	-1.1	-1.3	0.1	-3.9	-5.8	0.4	2.1	0.2
BBER	NM Nominal Personal Income Growth (%)***	5.7	5.8	5.8	3.8	2.3	-3.2	4.5	0.0	-3.5
Moody's	NM Nominal Personal Income Growth (%)***	4.6	4.0	3.8	2.8	0.0	-3.3	3.6	3.5	1.1
BBER	NM Total Wages & Salaries Growth (%)	5.8	3.4	1.8	4.8	-5.4	-14.5	3.9	5.2	4.4
Moody's	NM Total Wages & Salaries Growth (%)	5.2	2.2	2.0	2.1	-3.7	-7.1	1.8	3.4	-0.2
BBER	NM Private Wages & Salaries Growth (%)	5.4	2.7	0.7	4.7	-7.9	-19.5	4.1	6.7	5.7
BBER	NM Real Gross State Product (% YOY)	1.9	-0.5	-0.5	1.2	-3.2	-9.9	1.3	7.4	6.2
Moody's	NM Real Gross State Product (% YOY)	3.4	0.9	0.6	1.9	-1.8	-5.1	2.7	5.3	3.4
CREG	NM Gross Oil Price ($/barrel)	$52.00	$42.50	$40.00	$50.00	$28.00	$23.00	$50.00	$37.00	$29.50
CREG	NM Net Oil Price ($/barrel)*****	$45.75	$37.32	$35.12	$44.00	$24.58	$20.19	$44.00	$32.49	$25.90
CREG	NM Taxable Oil Volumes (million barrels)	350.0	355.0	345.0	360.0	250.0	155.0	365.0	225.0	110.0
	NM Taxable Oil Volumes (%YOY growth)	16.5%	1.4%	-1.4%	2.9%	-29.6%	-55.1%	1.4%	-10.0%	-29.0%
CREG	NM Gross Gas Price ($ per thousand cubic feet)****	$2.10	$1.95	$1.90	$2.25	$2.15	$1.90	$2.50	$2.30	$2.15
CREG	NM Net Gas Price ($ per thousand cubic feet)*****	$1.26	$1.17	$1.14	$1.47	$1.41	$1.25	$1.67	$1.53	$1.43
CREG	NM Taxable Gas Volumes (billion cubic feet)	1,610	1,740	1,740	1,625	1,485	1,260	1,650	1,410	1,085
	NM Taxable Gas Volumes (%YOY growth)	3.1%	8.1%	8.1%	2.9%	-14.7%	-27.6%	1.4%	-5.1%	-13.9%

Notes
* Real GDP is BEA chained 2012 dollars, billions, annual rate
** CPI is all urban, BLS 1982-84=1.00 base
***Nominal Personal Income growth rates are for the calendar year in which each fiscal year begins
****The gross gas prices are estimated using a formula of NYMEX, EIA, and IHS Markit (November) future prices
*****The net oil and gas prices represent calculated prices based on taxable values of the product after deductions for transportation, processing, and royalties
Sources for "U-Shape": BBER - April 2020 FOR-UNM baseline. IHS Global Insight - April 2020 baseline.
Sources for "L-Shape": BBER - April 2020 FOR-UNM pessimistic. IHS Global Insight - April 2020 pessimistic.

DFA Notes
* Real GDP is BEA chained 2012 dollars, billions, annual rate
** CPI is all urban, BLS 1982-84=1.00 base.
***Nominal Personal Income growth rates are for the calendar year in which each fiscal year begins
****The gross gas prices are estimated using a formula of NYMEX, EIA, and Moodys January future prices
*****The net oil and gas prices represent calculated prices based on taxable values of the product after deductions for transportation, processing, and royalties
Sources for "U-Shape": April 2020 Moody's economy.com baseline scenario
Sources for "L-Shape": April 2020 Moody's economy.com moderate recession (S3) scenario