

## STATES THAT RE-OPENED EARLY ARE “TRENDING POORLY”

by **William M. Rodgers III**, SCEPA Senior Fellow and Professor of Public Policy and Chief Economist, Heldrich Center for Workforce Development, Rutgers University

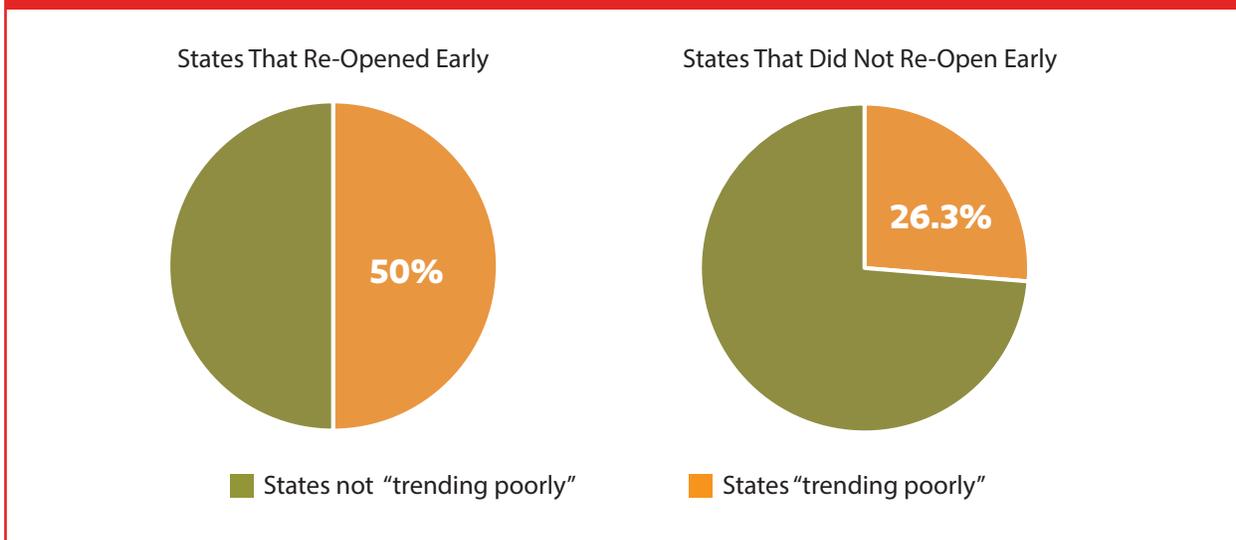
### ELEVATOR PITCH

States have many reasons to reopen - low rates of sickness, great economic harm, political reasons. I find that states which lean or are solid Republican re-opened sooner than Democrat states, and their testing and infection data are “trending poorly.”

### KEY FINDINGS

- In states that re-opened in early May, almost two-thirds were led by a Republican governor.
- Over two-thirds of states that re-opened early May had party affiliations that either leaned Republican or were solid Republican.
- Economic and public health information explains very little of the decision to re-open.
- States that re-opened in late April/early May have percent testing targets that are lower than states that were not open as of May 11th.
- One-half of the states that re-opened early are “trending poorly,” compared to 26.3 percent of states that were not open.

**Figure 1: States That Re-Opened Early Are More Likely To “Trend Poorly”**



Notes: Author’s calculations from <https://www.covidexitstrategy.org/> The data comes from the COVID Tracking Project, specifically, COVIDTracking.com.

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## THE POLITICS OF STATES RE-OPENING

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Starting with his April 17th tweets, President Trump began to pressure state and local policy makers to “re-open” their economies. He urged residents in Michigan and Virginia to “liberate” their communities. These tweets resonated with his Republican supporters. Republican members of Congress joined in the urging.<sup>1</sup> Representative Biggs of Arizona said to the White House and Republican leadership, “It should have happened yesterday.” Representative Trey Hollingsworth of Indiana said during a local radio interview that legislators should put on their “big boy and big girl pants and say it is the lesser of these two evils.” Since the decision to “re-open” largely lies in the hands of state and local officials, they bear the brunt of the pressure and the source of this pressure ultimately comes from their constituents. In fact, supporters in these and other states responded and held demonstrations.

Two weeks later, on May 4th, twenty-seven states had re-opened their economies and one week later, 32 states had taken steps to re-open their economies. To date, all states have now begun to re-open their economies. The decisions to re-open have been pursued even though public

health officials have cautioned elected officials to do so. For example, Dr. Anthony Fauci, the head of the National Institute of Allergy and Infectious Diseases expressed concern that, “more suffering and death could occur if states rush to re-open businesses too fast.”<sup>2</sup> In fact, the President shelved the CDC’s guidelines for re-opening states, and issued his less stringent guidelines.<sup>3</sup>

As of May 11th, most states that re-opened did not even meet the President’s “benchmarks” or criteria. The caseload and share of positive tests still exceeded the end of April levels. Over the same period, the average daily growth in these states accelerated and states that chose to re-open had a higher average share of positive test results. The number of test in these states is also lower than the recommended level.<sup>4</sup> There is growing concern that politics is trumping science in determining when and how states should re-open their economies.<sup>5</sup> The nation’s Republican leadership is pursuing faster re-opening strategies, which is placing not only their constituents’ physical health at greater risk, but the health of all Americans.<sup>6</sup>

## THE ECONOMICS OF STATES RE-OPENING

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Another explanation for the rush to re-open is economic and business related. States with the worst economic conditions were more likely to re-open sooner because residents need to earn paychecks. Unemployment Insurance benefit checks, the one-time \$1,200/\$2,400 checks, and other financial resources have been slow to arrive to their communities.<sup>7</sup> If they had arrived, the support was not large enough to plug family budget holes.<sup>8</sup> Funds from the Paycheck Protection Program (PPP) have not only been slow to enter the economy, but also poorly targeted. “Main street” types of businesses did

not receive much support and assistance in the first round of funds.

The opposite could be true. States that were the least effected economically re-opened quicker because their number of cases and deaths has been smaller than states that were slower to re-open. States that re-opened have unemployment rates that are lower than those that were severely impacted by the public health crisis. The growth in Initial Unemployment Insurance claims is smaller in states that re-opened in early May.

## RESULTS: POLITICAL PRESSURE FROM REPUBLICAN CONSTITUENTS

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This paper sorts out the importance of these political, public health and economics explanations. The chief finding is that on May 11th, states with Republican governors were much more likely to have re-opened their economies than state’s led by Democrat governors. In states that re-opened, almost two-thirds were led by a Republican governor.<sup>9</sup> Even more important is the party affiliation of a

state’s residents. States that lean Republican or are solid Republican were quicker to pursue re-opening strategies. Over two-thirds of states that re-opened on or before May 11th had party affiliations that either leaned Republican or were solid Republican. This estimate takes into account a host of economic and public health information.

To date, no states fulfill the CDC's guidelines. Most states do not meet the White House guidelines for re-opening.<sup>10</sup> The evidence is consistent with a narrative that elected officials in these states bowed to political pressure from their Republican constituents, and have chosen to place the health of their residents at greater risks. Most disturbing, states that re-opened in late April/early May have percent testing targets that are lower than states that were not open as of May 11th. One-half of the states that re-opened early are "trending poorly", compared to 26.3 percent of states that were not open. The 14 Day COVID-19 positive indicator shows a similar result.

Over the next few weeks, public health

researchers must closely monitor these 32 states for new outbreaks of the virus. Hopefully, to mitigate the increased risks of a relapse, they are doing the following:

- Urging residents to stay vigilant with practicing social distancing.
- Using health indicators to set the pace at which they "re-open" (e.g., open up non-essential commerce) their economies.
- Built their testing, tracking, and isolation infrastructure.
- Obtained the needed amounts of workplace PPE.

## THE EVIDENCE

Table 1 lists the "Re-Opening" status of the 50 states plus the District of Columbia as of May 4th and 11th. The data comes from the New York Times. Hawaii, New Hampshire, Nevada, South Dakota and Washington opened during the week following May 4th.<sup>11</sup> This measure only captures whether the state "re-opened," but it is important to note that there is variation in what "re-opening" means. The Times designates a state "re-opening" when its stay-at-home order lifts, or at least one major sector (restaurants, retail stores, personal care businesses) is opened, or a combination of smaller sectors are allowed to open. The Times identifies a state as a "regional reopening" if the state's governor allows certain counties or regions to open while others remain closed.

Table 2 reports summary statistics. As of May 11th, 32 states had taken action to re-open their economies. The entries show that 65.6 percent of state's that re-opened have Republican governors compared to only 26.3 percent of states that remained "closed." The party affiliation of voters in states that re-opened leans heavily toward Republican. The average Republican party affiliation in states that re-open is 44.1 percent compared to 33.9 percent in states that remained "closed."

The health measures suggest that state leaders are following the science to base "re-opening"

on recommendations by public health officials. Table 2 reveals that states which "re-opened" have lower Covid-19 cases than states that are "closed." The average number of cases and deaths per 100,000 people is 239.3 and 8.8 in states that re-opened. The average number of cases and deaths in states that are closed is more than double. The average number of total positive Covid-19 tests is 153,000 in re-opening states, less than half the number of positive tests in closed states. The share of test with positive Covid-19 outcomes is also lower in states that have re-opened.

The economic measures are split in their support of whether re-opening economies have healthier economies. The average unemployment rates (level and change) are quite similar between the two statuses. However, states that have chosen to re-open have initial unemployment insurance claims that are approximately 60 percent less than claims in states that remain closed.

To summarize, the basic relationships in Table 2 indicate that political, health and economic explanations explain why states chose to re-open sooner than others. It is largely political driven by Republican elected officials and their supporters because their states had fewer Covid-19 cases, and their economic downturn was not as severe as in states that remained closed.

**Table 1: States By Re-Opening Status**

State	Re-Opening Status as of:	
	May 4th	May 11th
AK	Open	Open
AL	Open	Open
AR	Open	Open
AZ	Closed	Closed
CA	Closed	Closed
CO	Open	Open
CT	Closed	Closed
DC	Closed	Closed
DE	Closed	Closed
FL	Open	Open
GA	Open	Open
HI	Closed	Open
IA	Open	Open
ID	Open	Open
IL	Closed	Closed
IN	Open	Open
KS	Open	Open
KY	Closed	Closed
LA	Closed	Closed
MA	Closed	Closed
MD	Closed	Closed
ME	Open	Open
MI	Closed	Closed
MN	Open	Open
MO	Open	Open

State	Re-Opening Status as of:	
	May 4th	May 11th
MS	Open	Open
MT	Open	Open
NC	Open	Open
ND	Open	Open
NE	Open	Open
NH	Closed	Open
NJ	Closed	Closed
NM	Closed	Closed
NV	Closed	Open
NY	Closed	Closed
OH	Closed	Closed
OK	Open	Open
OR	Closed	Closed
PA	Open	Open
RI	Open	Open
SC	Open	Open
SD	Closed	Open
TN	Open	Open
TX	Open	Open
UT	Open	Open
VA	Closed	Closed
VT	Closed	Closed
WA	Closed	Open
WI	Closed	Closed
WV	Open	Open
WY	Open	Open

**Notes:** The state's status variables are as of May 4th and 11th. They come from The New York Times, <https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html>.

**Table 2: Summary Statistics By Whether State Economy Is Open As Of May**

Political Variables	Party Affiliation of Governor		May 11th Re-Open Status	
	Democrat	Republican	Closed	Open
Republican Governor = 1	44.0%	80.8%	26.3%	65.6%
Percent Democrat Party Affiliation	46.7	38.6	48.6	39.0
Percent Republican Party Affiliation	35.8	44.6	33.9	44.1
Democrat – Republican Affiliation	10.9	-6.0	14.7	-5.1
State's Party Affiliation Competitive = 1	24.0%	34.6%	26.3%	31.3%
State's Party Affiliation Republican = 1	8.0%	53.8%	0.0%	50.0%
Health Variables				
Log(Covid-19 Cases)	9.5	8.9	9.9	8.7
Log(Covid-19 Deaths)	6.4	5.4	7.0	5.3
Log(Total Positive Covid-19 Test)	11.9	11.6	12.2	11.5
Covid-19 Cases per 100k	473.8	259.0	574.8	239.3
Covid-19 Deaths per 100k	27.9	10.4	36.2	8.8
Covid-19 Positive Test per 1,000	37.3	33.9	39.9	33.0
Total Positive COVID-19 Tests	262,723	172,973	325,411	152,580
Percent Positive Covid-19 Test Missing = 1	8.0%	7.7%	5.3%	9.4%
Share of Test w/ Positive Covid-19 Results	11.5%	8.0%	13.9%	7.2%
Economic Variables				
Log(Initial UI Claims since March 14th)	13.0	12.5	13.1	12.5
Change in Unemployment Rate	18.9	14.5	16.4	16.8
Unemployment Rate as of May 2nd	23.1	18.1	20.6	20.5
Sample Size	25	26	19	32

**Notes:** The data are for the 50 states plus the District of Columbia. The state's status variable is as of May 11th and comes from the New York Times, <https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html>. The state party affiliation data comes from <https://news.gallup.com/poll/226643/2017-party-affiliation-state.aspx>. The state's cases and death statistics come from the NY Times and were accessed May 11th: <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html#states>. The initial UI Claims data come from [www.bls.gov](http://www.bls.gov). The state unemployment rates and their changes are constructed as described in <https://tcf.org/content/commentary/new-data-show-true-march-jobless-rate-near-20-percent/>.

COVID-19 Testing data uploaded from The Henry J. Kaiser Family Foundation on 5/17/2020 at 3:45PM. US total includes territories. Pending test results are not included in total. Only states that have an A+, A, or B grade rating for data quality are included in the share of tests with positive results. Source: The COVID Tracking Project (<https://covidtracking.com/data/>). The 2019 Population data come from Annual Population Estimates by State, U.S. Census Bureau; available at <http://www.census.gov/popest/>.

Table 3 reports results from a linear probability model whose goal is to simultaneously test which explanations best explain why state's chose to re-open in early May.<sup>12</sup> The goal of the inquiry is to identify the independent effect that the political, economic, and health explanations have on a state's decision to "re-open". The entries measure the difference or change in the probability of a

state "re-opening" for a particular measure. For example, column (1) indicates that the re-opening rate for states with Republican governors is 45.3 percent higher than states that are "closed." The two stars indicate that this difference is measured with precision at the 1 percent level of significance.

**Table 3: Determinants Of Whether A State Re-Opened Its Economy As Of May 11th**

Variables	1	2	3	4	5	6	7	8	9	10
Repub. Governor = 1	0.453** (0.169)	0.008 (0.148)	0.001 (0.178)	-0.012 (0.178)	-0.015 (0.213)	0.022 (0.202)	-0.012 (0.200)	0.013 (0.204)	-0.015 (0.209)	0.013 (0.197)
State is Competitive = 1		0.587*** (0.160)	0.531** (0.188)	0.536** (0.184)	0.516* (0.203)	0.494* (0.207)	0.523* (0.200)	0.498* (0.202)	0.510* (0.199)	0.493* (0.196)
State is Re-pub. = 1		0.779*** (0.147)	0.684*** (0.185)	0.652** (0.187)	0.651** (0.199)	0.640** (0.210)	0.677*** (0.186)	0.643** (0.182)	0.652** (0.197)	
Log(Num-ber of Cases)			-0.043 (0.054)		0.093 (0.179)				0.096 (0.181)	
Percent Positive Covid-19 Test Missing = 1			0.012 (0.264)	0.037 (0.271)	-0.218 (0.398)	-0.171 (0.345)	-0.041 (0.295)	0.109 (0.364)	-0.232 (0.399)	0.103 (0.365)
Share of Test with Positive Results			-0.3 (1.560)	0.01 (1.586)	-1.97 (2.522)	-2.111 (3.029)	-0.324 (2.116)	0.663 (2.348)	-2.058 (2.538)	0.634 (2.338)
Positive Test per 1,000			-0.007 (0.006)	-0.007 (0.006)	-0.008 (0.006)	-0.01 (0.006)	-0.006 (0.006)	-0.007 (0.006)	-0.008 (0.006)	-0.006 (0.006)
Log(Deaths)				-0.057 (0.050)				-0.115 (0.136)		-0.117 (0.134)
Log(Total Initial UI Claims since 3/14)					-0.15 (0.219)	-0.055 (0.070)	-0.045 (0.066)	0.078 (0.173)	-0.15 (0.221)	0.083 (0.170)
Unemployment Rate as May 2nd					0.003 (0.010)	0.002 (0.011)	0.003 (0.011)	0.003 (0.011)		
Change in Unemployment Rate									0.004 (0.010)	0.004 (0.010)
Constant	0.367* (0.142)	0.214 (0.119)	0.915 (0.558)	0.859* (0.402)	1.777 (1.701)	1.373 (1.159)	1.089 (1.053)	0.054 (1.789)	1.754 (1.684)	0.001 (1.720)

**Notes:** The data are for the 50 states plus the District of Columbia. The state's status variable is as of May 11th and comes from the New York Times, <https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html>. The state party affiliation data comes from <https://news.gallup.com/poll/226643/2017-party-affiliation-state.aspx>. The state's cases and death statistics come from the NY Times and were accessed May 11th: <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html#states>. The initial UI Claims data come from [www.bls.gov](http://www.bls.gov). The state unemployment rates and their changes are constructed as described in <https://tcf.org/content/commentary/new-data-show-true-march-jobless-rate-near-20-percent/>. Estimates come from a linear probability model where the observations have been weighted by a state's civilian population. Standards are robust.

As we move from models 1 to 10, political, economic and health characteristics are added. Model 2 adds dummy variables that describe the state's political party affiliation: Democrat, Competitive, or Republican. The Democrat dummy variable is the reference or comparison

group, meaning the estimated effects are relative to states that are solid or leaning Democrat. The estimates in Model 2 indicate that states which lean or are heavily Republican have a 78 percent higher likelihood of "re-opening" than a state that leans or is heavily Democrat. Entering these

measures causes the effect of the Republican governor to fall to zero, suggesting public opinion, which was stoked by the President really drove the “re-opening” decisions of governors.

Models 3 and 4 introduce a state’s health measures. Cases and deaths have negative signs which means states with higher cases and deaths are less likely to “re-open”. However, the estimates are not measured with much precision. States with more positive Covid-19 tests also have a lower likelihood of re-opening. They too, have little precision and are small in magnitude. Models 5 to 10 include the economic measures: initial Unemployment Insurance claims,

unemployment as of May 2nd, and the change in the unemployment rate from mid-March to early May. The total number of initial Unemployment Insurance claims filed from March 14th to May 2nd is associated with a lower likelihood of re-opening. A higher current unemployment rate and the growth in the jobs rate are associated with a higher probability of re-opening. These estimates are small and have no statistical precision. The fact that the political measures only explain the decision to re-open is consistent with the explanation that support and aid were slow in arriving, leaving residents with no other choice but to demand their economies re-open so they could earn a pay check.

### IMPLICATIONS

The evidence suggests that as of May 11th, a state’s decision to “re-open” is primarily based on Republican voters putting pressure on their elected Republican officials. These officials bowed to political pressure even though their states had not achieved the CDC’s guidelines and the infection rates in their states had not peaked at that time. They have placed their residents, especially the elderly in nursing homes and senior facilities and others with “higher” risks of sickness in danger. Hopefully, to mitigate the increased risks of a relapse, they are doing the following:

- Urging residents to stay vigilant with practicing social distancing.

- Using health indicators to set the pace at which they “re-open” (e.g., open up non-essential commerce) their economies.
- Built their testing, tracking, and isolation infrastructure.
- Obtained the needed amounts of workplace PPE.

If not, all states, especially those that pursued faster re-openings will witness a resurgence in the virus. Unfortunately, it looks like early re-openers such as Alabama, which lifted its stay-at-home orders at the end of April are experiencing a resurgence in the virus.<sup>13</sup> To quantify this relationship, Table 4 reports several measures that capture a state’s trend in testing and infections.

**Table 4: Current Gating Criteria, Testing And 14-Day Trend Of COVID-19 By Re-Opened Status**

Variable	Closed	Re-Opened
Percent of Testing Target	76.3%	64.3%
Gating Criteria Test		
Red (Trending Poorly)	26.3%	50.0%
Yellow (Making Progress)	57.9%	50.0%
Green (Trending Better)	15.8%	0.0%
14-Day Trend of COVID19		
Low Case Count	0.0%	9.4%
Decreasing or Flat	73.7%	40.6%
Increasing	26.3%	50.0%
Sample Size	19	32

**Notes:** Author’s calculations from <https://www.covidexitstrategy.org/> The data comes from the COVID Tracking Project, specifically, COVIDTracking.com. The Percent of Testing Target measures a state’s closeness to its testing target where the target is based on a 500K per day goal. The Gating Criteria Test is an index based on the following indicators: 14-day trend, ICU capacity, and a state’s COVID positive rate. A state receives either a Red, Yellow and Green rating based on whether their 14-day trend is increasing (Red), flat (Yellow), or decreasing (Green). ICU capacity greater than 90% (Red), greater than 70% (yellow), less than 70% (Green). The state’s COVID-19 positive rate is Red if it is greater than 15%, Yellow if greater than 5%, and Green if less than 5%. The COVID-19 positive rate is the ratio of positive cases and total cases.

The percent of Testing Target measures a state's closeness to its testing target where the target is based on a 500K per day goal. The Gating Criteria Test is an index based on the following indicators: 14-day trend, ICU capacity, and a state's COVID positive rate. A state receives either a Red, Yellow and Green rating based on whether their 14-day trend is increasing, flat, or decreasing. ICU capacity receives a Red, Yellow and Green rating if it is greater than 90%, greater than 70%, and less than 70%. The state's COVID-19 positive rate is Red if it is greater than

15%, Yellow if greater than 5%, and Green if less than 5%. The COVID-19 positive rate is the ratio of positive cases and total cases.

The table clearly shows that re-opening states have percent testing targets that are lower than states that were not open as of May 11th. The Gating Criteria Index shows that one-half of the states that have re-opened are "trending poorly", compared to 26.3 percent of states that were not open. The 14 Day COVID-19 positive indicator shows a similar result.

## **POLICY RECOMMENDATIONS**

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Based on this evidence, the elected officials in these states that re-opened late April/early May need to immediately shift to a "re-opening" decision-making process based on a comprehensive set of health and safety indicators. Re-opening must be based on improvements in a community's public health and its capacity to safeguard the health of its residents. Data on the following should be used to make re-opening decisions.<sup>14</sup>

- Health indicators: new cases; patients in hospital, in ICU, on ventilators.
- Testing and contact tracing capacity.
- Healthcare system resiliency (beds, ventilators, PPE, workforce).
- Safeguarding of workplaces.
- Safeguarding and capacity of child care, schools, transit.
- Compliance of individuals and employers with guidance.

## APPENDIX: DATA AND METHODOLOGY

The data are for the 50 states plus the District of Columbia. The state's status variable is as of May 4th and May 11th and comes from the New York Times, <https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html>. This measure only captures whether the state "re-opened", but it is important to note that there is variation in what "re-opening" means. The Times designates a state "re-opening" when its stay-at-home order lifts, or at least one major sector (restaurants, retail stores, personal care businesses) is opened, or a combination of smaller sectors are allowed to open. The Times identifies a state as "regional re-opening" if the governor allows certain counties or regions to open while others remain closed.

The state party affiliation data comes from <https://news.gallup.com/poll/226643/2017-party-affiliation-state.aspx>. The state's cases and death statistics come from the New York Times and were accessed May 11th: <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html#states>. The initial UI Claims data comes from [www.bls.gov](http://www.bls.gov). The state unemployment rates and their changes are constructed as described in <https://tcf.org/content/commentary/new-data-show-true-march-jobless-rate-near-20-percent/>.

The reported estimates come from linear probability models. The dependent variable

equals 1 if the state "re-opened," and 0 if the state was closed as of May 11th. The estimates for the Republican and party affiliation measures reported in Table 3 capture the difference in "re-opening" status between the groups (e.g., states with Republican versus states with Democrat governors). The other measures, such as the unemployment rate, capture the change in the odds of "re-opening" for a one percentage point increase in the jobless rate. Each state's observations are weighted by their civilian population. Robust standard errors are reported.

The data used to make Table 4 comes from the COVID Tracking Project, specifically, [COVIDTracking.com](https://www.covidtracking.com). The Percent of Testing Target measures a state's closeness to its testing target where the target is based on a 500K per day goal. The Gating Criteria Test is an index based on the following indicators: 14-day trend, ICU capacity, and a state's COVID positive rate. A state receives either a Red, Yellow and Green rating based on whether their 14-day trend is increasing (Red), flat (Yellow), or decreasing (Green). ICU capacity greater than 90% (Red), greater than 70% (yellow), less than 70% (Green). The state's COVID-19 positive rate is Red if it is greater than 15%, Yellow if greater than 5%, and Green if less than 5%. The COVID-19 positive rate is the ratio of positive cases and total cases.

## ENDNOTES

- <https://www.politico.com/newsletters/huddle/2020/04/15/republicans-crank-up-the-pressure-on-trump-to-open-the-economy-488925>
- <https://www.cnbc.com/2020/05/12/dr-anthony-fauci-warns-senators-of-suffering-and-death-if-states-reopen-too-early.html>
- For the CDC guidelines go to <https://www.documentcloud.org/documents/6883734-CDC-Business-Plans.html>.
- <https://www.nytimes.com/interactive/2020/05/07/us/coronavirus-states-reopen-criteria.html>
- Under the condition of anonymity, one CDC employee expressed concerns "that the agency's scientific work is taking a back seat to politics." <https://www.cnn.com/2020/05/20/politics/coronavirus-travel-alert-cdc-white-house-tensions-invs/index.html>
- <https://www.nbcnews.com/politics/politics-news/republicans-are-reopening-why-democratic-gov-polis-doing-same-colorado-n1193681>
- <https://www.cnbc.com/2020/04/27/those-600-unemployment-checks-delayed-in-some-states.html> and <https://abcnews.go.com/Business/unemployment-checks-late-mays-bills/story?id=70410619>.
- <https://www.forbes.com/sites/dimawilliams/2020/04/30/if-you-live-in-these-states-covid-19-unemployment-benefits-are-not-enough-to-fully-cover-rent-and-mortgage-payments/#3b5b789f3d9c>.
- This is consistent with evidence reported in the media.
- <https://www.nytimes.com/interactive/2020/05/07/us/coronavirus-states-reopen-criteria.html>

11. For a detailed description of the definitions of “re-opening” see <https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html>.

12. The linear probability model is a common econometric tool to estimate the impact of measures when the outcome or dependent variable is binary. In this case, the dependent variable equals 1 if the state “re-opened”, 0 if

the state remains “closed”. Probit models also generated similar results.

13. <https://www.cnn.com/2020/05/26/health/us-coronavirus-tuesday/index.html>.

14. Many states have developed stages or steps for re-opening. This approach comes from the state of New Jersey. <https://www.nj.gov/governor/news/news/562020/approved/20200518a.shtml>.

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