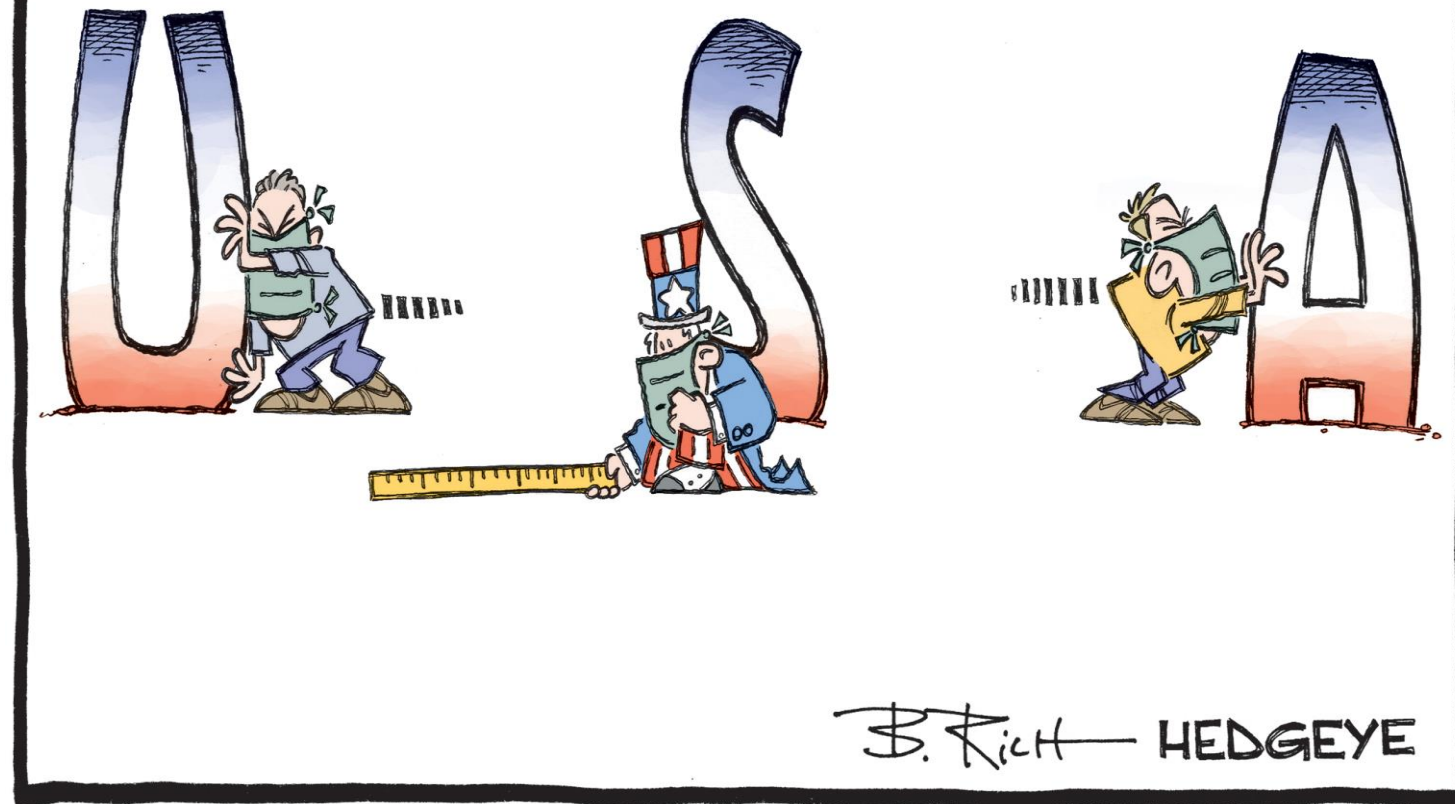


HEDGEYE

COVID-19 Metro Tracker Update

Urban v Rural; Do More Tests Mean Lower Positives; Population Model and State Plan

April 29, 2020



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Please submit questions* to
qa@hedgeye.com

*Answered at the end of the call

General Features of Phased “Opening” Plans

Gating Criteria

- Most states are electing to adopt some gating criteria such as those recommended by the White House Task Force
- Other states are moving onto phased “re-opening” without meeting specific requirements

Phase I

- Open restaurants and non-essential businesses with reduced occupant load and hygiene practices
- Open daycare centers and schools with social distancing and hygiene best practices in place
- Require voluntary self-isolation after travel to high prevalence areas
- Allow elective procedures to proceed on outpatient basis and determined by PPE availability
- Post-secondary education and bars remain closed.
- Aggressive testing and tracing
- Gatherings of no more than 10 people
- Strict limits on visits to nursing homes/assisted living centers

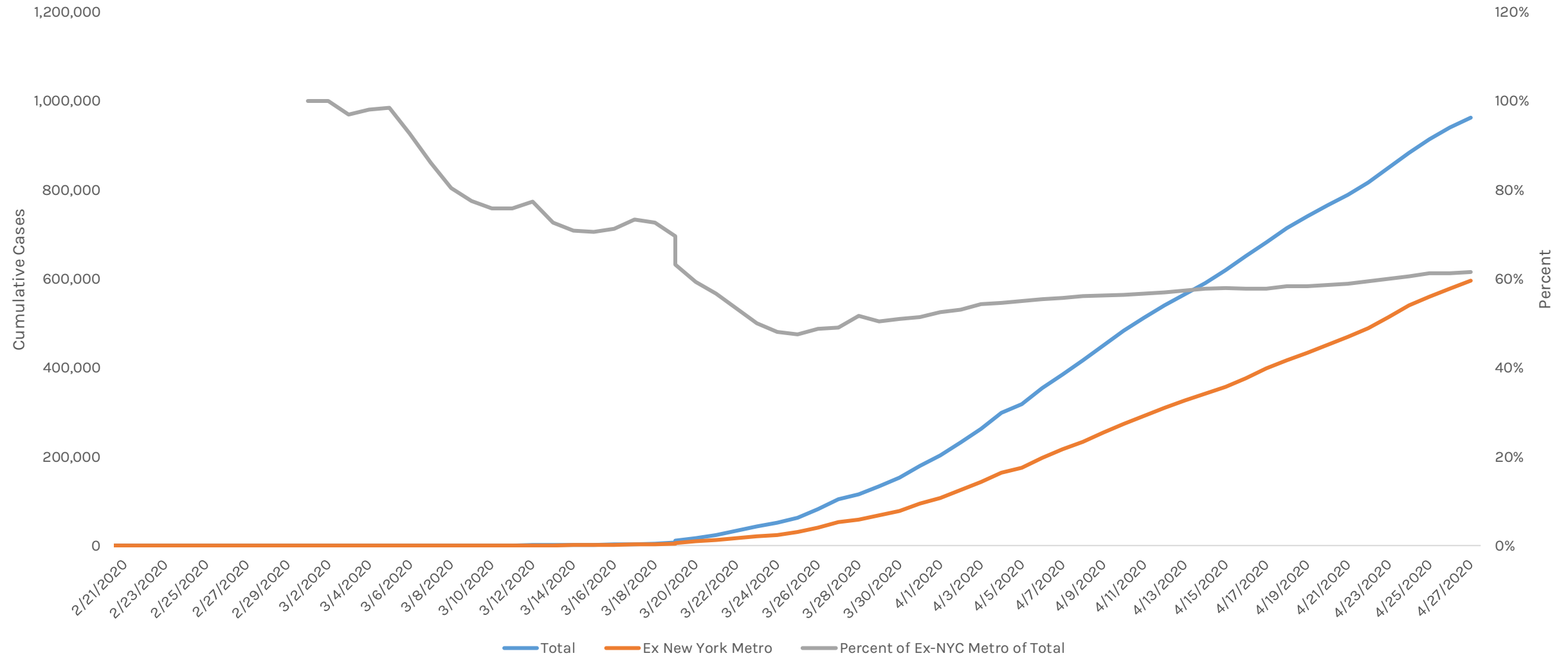
Phase II

- Increase occupant load for restaurants and non-essential businesses; maintain other best practices
- Open bars with best practice such as no standing room and required social distancing
- Allow elective procedures to proceed on outpatient and inpatient basis
- Consider re-opening post-secondary educational institutions
- Aggressive testing and tracing
- Gatherings of no more than 50 people
- Strict limits on nursing homes/assisted living centers

Phase III

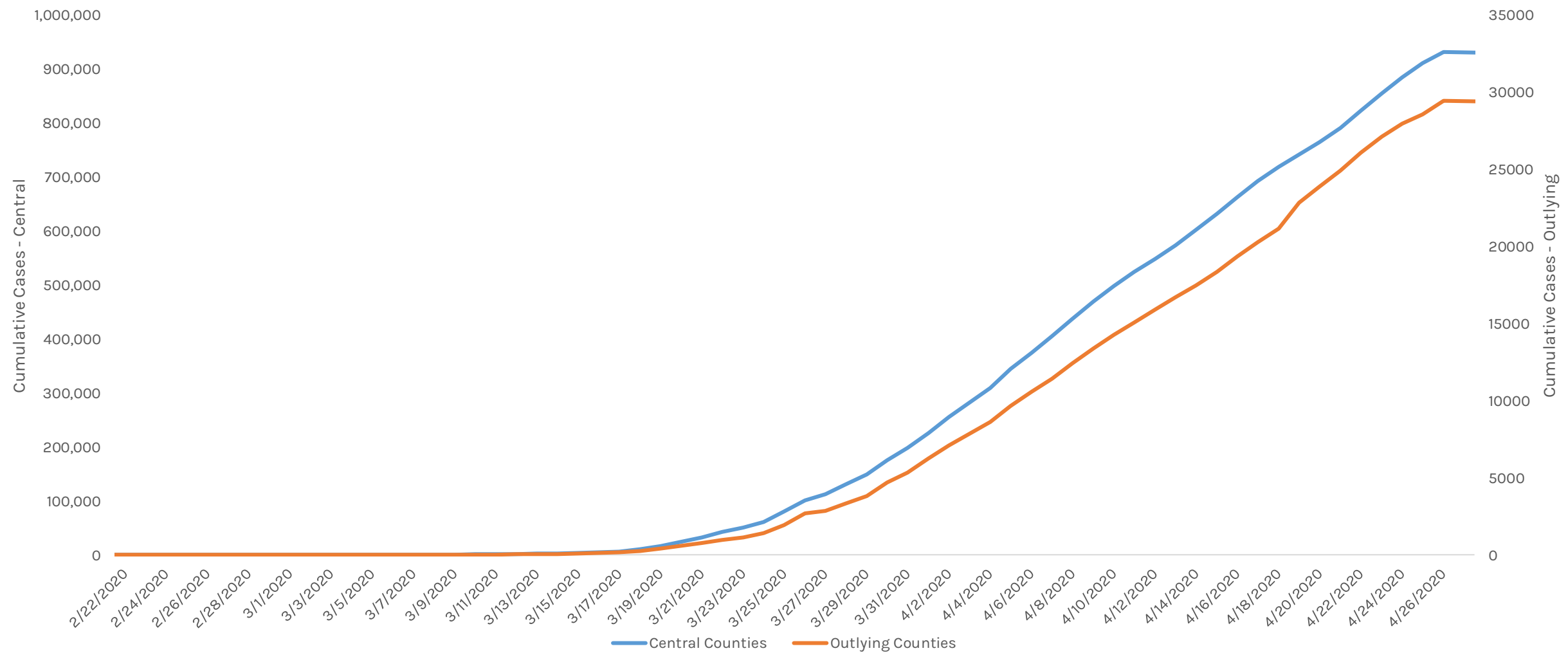
- All businesses and schools are open with requirements for social distancing and extreme hygiene
- Gatherings and events can proceed

Slowing Down Nationally, Not Just NYC



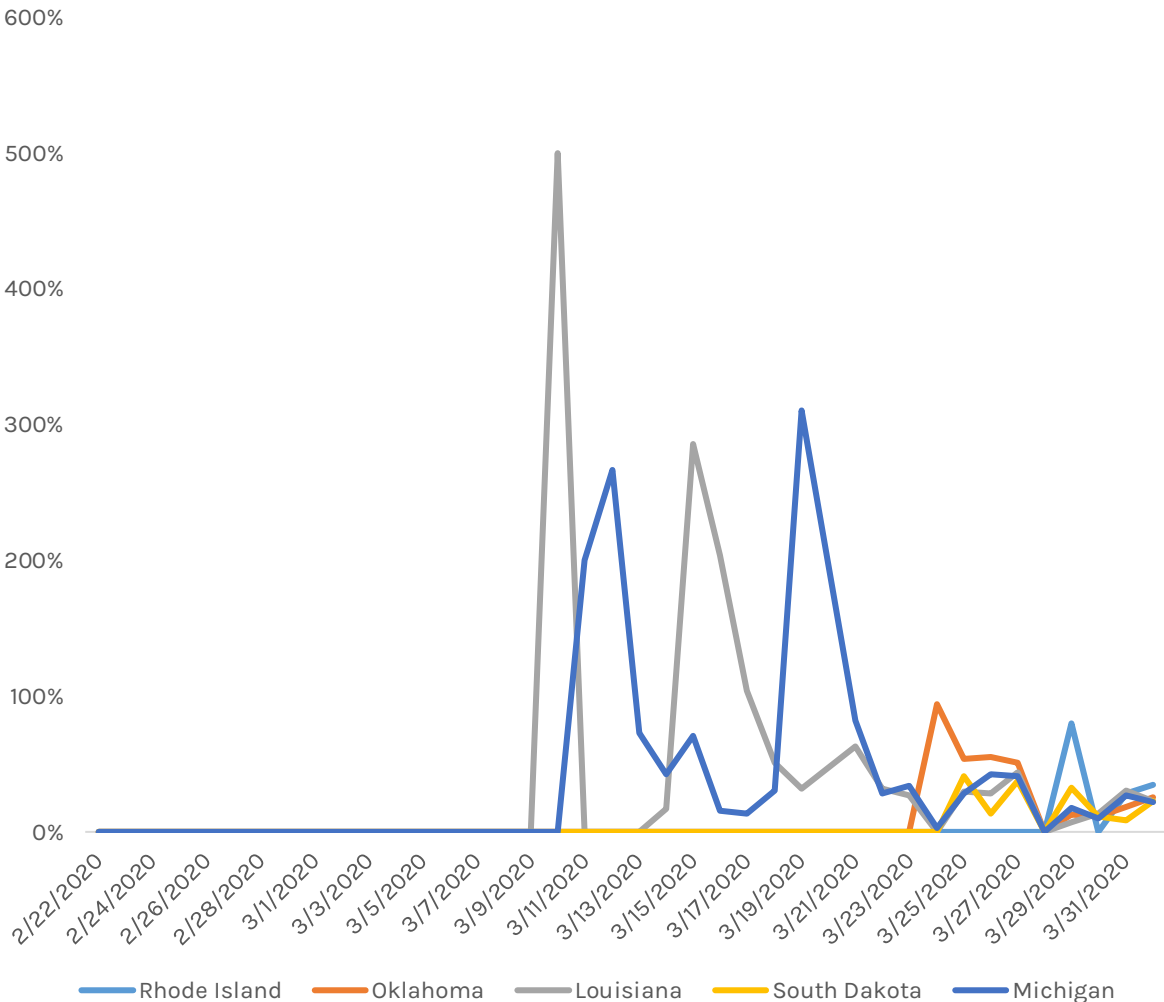
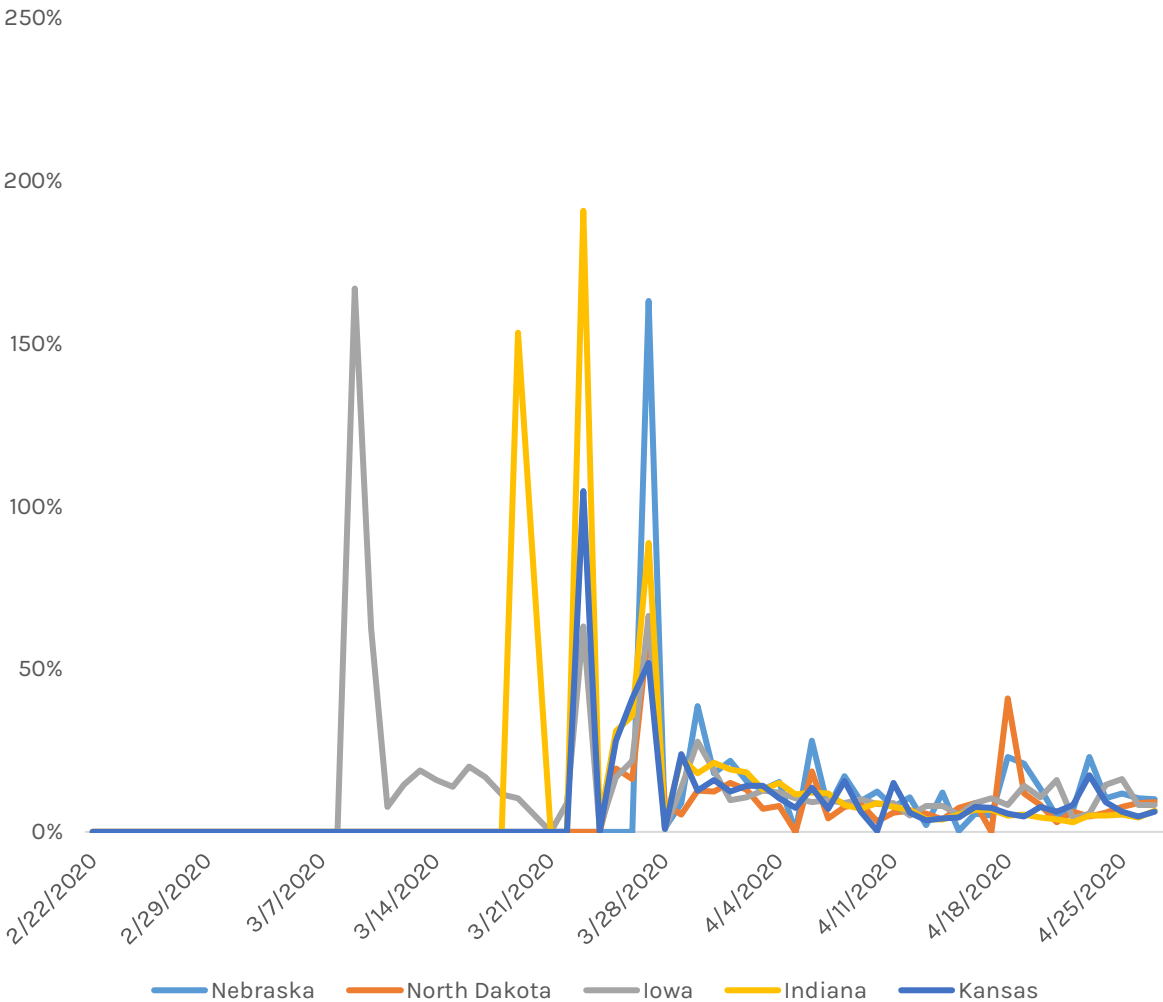
Rural v Urban Counties

Following same trajectory after uptick in prison and meat processing tests



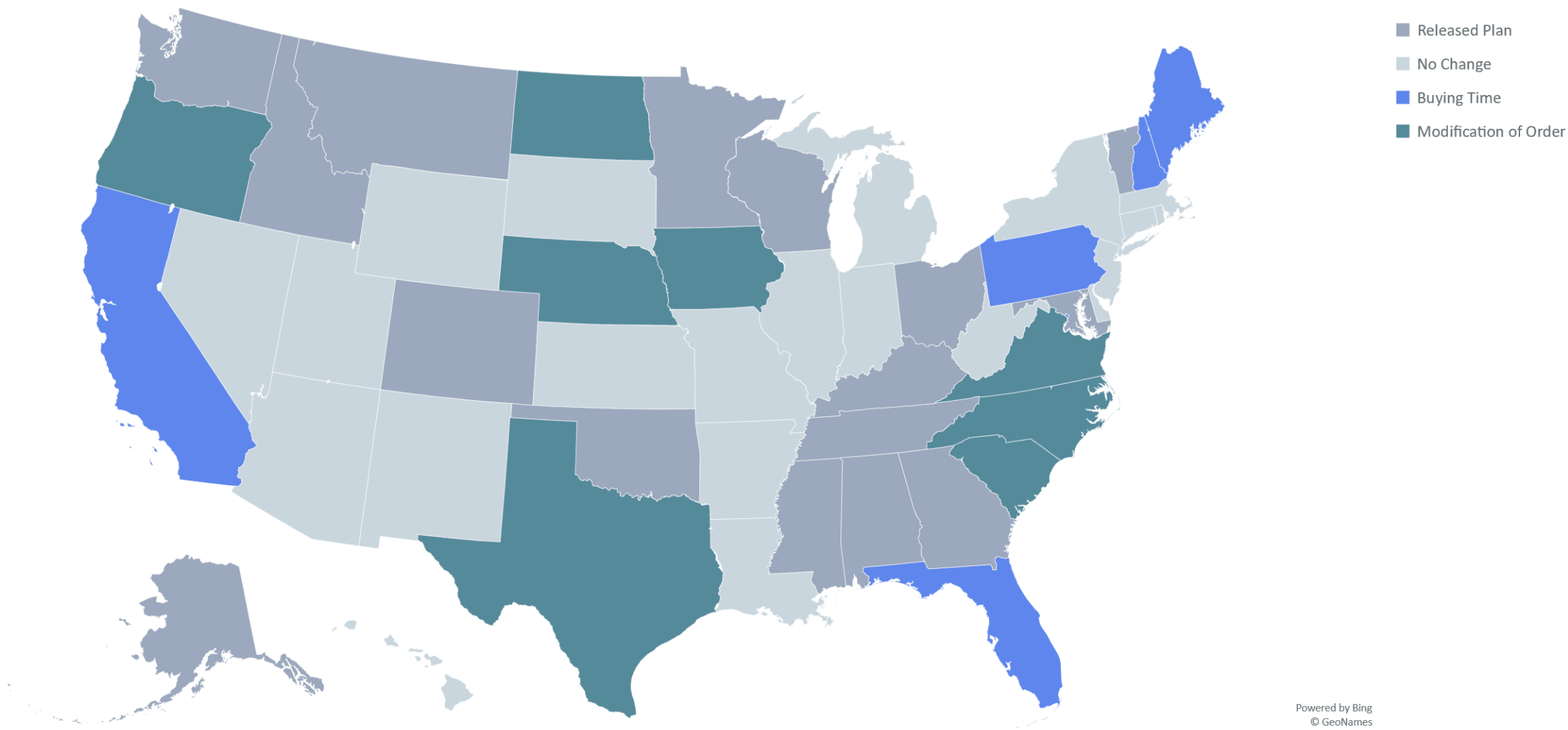
Highest Rate of Change Monday v Month Ago

Spikes in rural states from meat processing industry, nursing homes and prisons abating



State Planning For End/Modification To Executive Orders

Mid-Atlantic and Northeast will lag behind rest of country

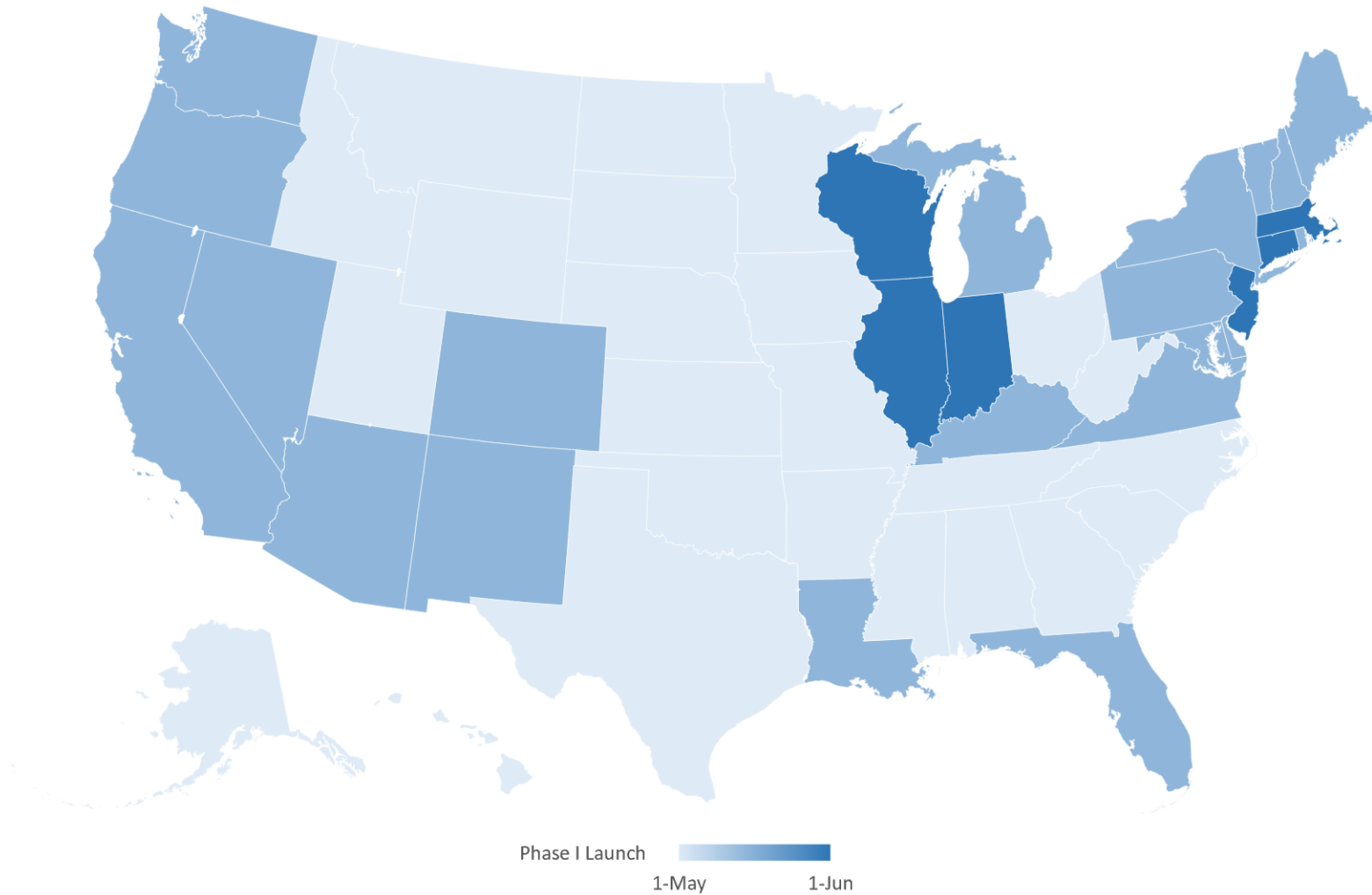


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Launch of Phase I Relaxation

Politics playing a role as western states coordinate

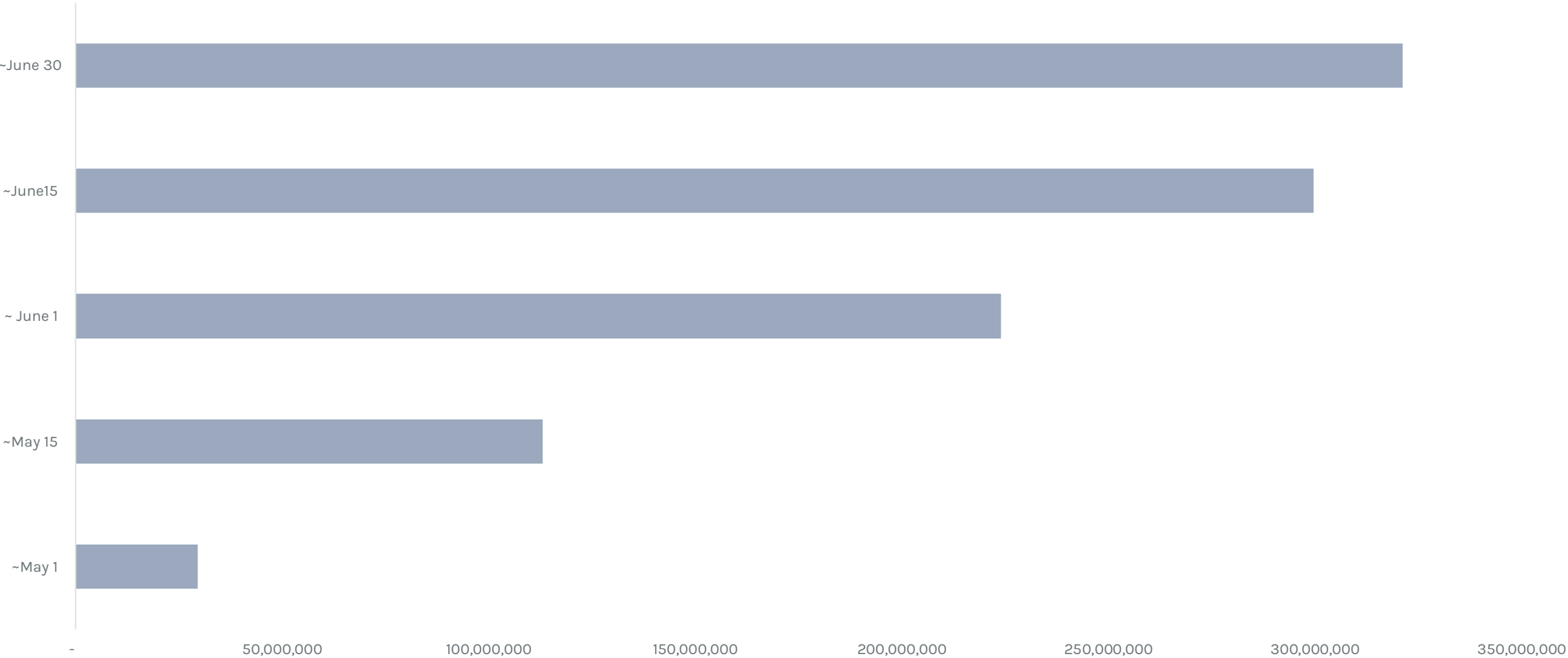
Phase Launch	Percent of Population
1-May	9%
15-May	25%
1-Jun	34%
15-Jun	23%
30-Jun	7%



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Moving US Through Phased Opening

Should get to the halfway point in about one month



Percentage Of Population Experiencing Relaxed Stay-At-Home Guidelines, By State

MODELING ASSUMPTIONS (courtesy of Hedgeye Healthcare Policy Sector Head Emily Evans):

- Anchors on the “phased approach” plan outlined by each Governor
- In the absence of a plan, relies on Hedgeye Healthcare’s Preparedness Score to estimate when restrictions are relaxed
- Heavily weighted to Phases II and III because Phase I in most plans involves limited things like curbside retail business, etc.
- The plan is also probably a bit optimistic because most schools are unlikely to return to their normal patterns until fall; moreover, these projections do not account for potential setbacks that may arise along the way

	Checkpoint: 1-May 15-May 1-Jun 15-Jun 30-Jun						Checkpoint: 1-May 15-May 1-Jun 15-Jun 30-Jun				
Alabama	25%	63%	100%			Montana	25%	63%	100%		
Alaska	100%					Nebraska	25%	63%	100%		
Arizona	0%	25%	63%	100%		Nevada	0%	25%	63%	100%	
Arkansas	25%	50%	88%	100%		New Hampshire	0%	25%	63%	100%	
California	0%	25%	58%	100%		New Jersey	0%	0%	25%	63%	100%
Colorado	0%	33%	71%	100%		New Mexico	0%	25%	63%	100%	
Connecticut	0%	0%	25%	63%	100%	New York	0%	25%	50%	75%	100%
Delaware	0%	25%	63%	100%		North Carolina	25%	63%	100%		
District Of Columbia	0%	25%	63%	100%		North Dakota	25%	63%	100%		
Florida	0%	25%	63%	100%		Ohio	25%	63%	100%		
Georgia	25%	63%	100%			Oklahoma	25%	63%	100%		
Hawaii	25%	63%	100%			Oregon	0%	25%	63%	100%	
Idaho	25%	63%	100%			Pennsylvania	0%	25%	63%	100%	
Illinois	0%	0%	25%	63%	100%	Rhode Island	0%	25%	63%	100%	
Indiana	0%	0%	25%	63%	100%	South Carolina	25%	63%	100%		
Iowa	25%	50%	75%	100%		South Dakota	25%	63%	100%		
Kansas	25%	63%	100%			Tennessee	25%	63%	100%		
Kentucky	0%	25%	63%	100%		Texas	25%	63%	100%		
Louisiana	0%	25%	63%	100%		Utah	25%	63%	100%		
Maine	0%	25%	63%	100%		Vermont	0%	25%	63%	100%	
Maryland	0%	25%	63%	100%		Virginia	0%	25%	63%	100%	
Massachusetts	0%	0%	25%	63%	100%	Washington	0%	25%	63%	100%	
Michigan	0%	25%	63%	100%		West Virginia	25%	63%	100%		
Minnesota	25%	63%	100%			Wisconsin	0%	0%	25%	63%	100%
Mississippi	25%	63%	100%			Wyoming	25%	63%	100%		
Missouri	25%	63%	100%			TOTAL	9%	35%	70%	93%	100%

GDP-Weighted Relaxation Timeline

MODELING ASSUMPTIONS (courtesy of Hedgeye Healthcare Policy Sector Head Emily Evans):

- Anchors on the “phased approach” plan outlined by each Governor
- In the absence of a plan, relies on Hedgeye Healthcare’s Preparedness Score to estimate when restrictions are relaxed
- Heavily weighted to Phases II and III because Phase I in most plans involves limited things like curbside retail business, etc.
- The plan is also probably a bit optimistic because most schools are unlikely to return to their normal patterns until fall; moreover, these projections do not account for potential setbacks that may arise along the way

	Checkpoint: 1-May	15-May	1-Jun	15-Jun	30-Jun		Checkpoint: 1-May	15-May	1-Jun	15-Jun	30-Jun
Alabama	0.3%	0.4%	0.4%			Montana	0.1%	0.1%	0.1%		
Alaska	0.3%					Nebraska	0.1%	0.2%	0.2%		
Arizona	0.0%	0.4%	0.6%	0.6%		Nevada	0.0%	0.2%	0.3%	0.3%	
Arkansas	0.2%	0.2%	0.2%	0.1%		New Hampshire	0.0%	0.1%	0.2%	0.2%	
California	0.0%	3.6%	4.8%	6.0%		New Jersey	0.0%	0.0%	0.7%	1.1%	1.1%
Colorado	0.0%	0.6%	0.7%	0.5%		New Mexico	0.0%	0.1%	0.2%	0.2%	
Connecticut	0.0%	0.0%	0.3%	0.5%	0.5%	New York	0.0%	2.0%	2.0%	2.0%	2.0%
Delaware	0.0%	0.1%	0.1%	0.1%		North Carolina	0.7%	1.0%	1.0%		
District Of Columbia	0.0%	0.6%	0.8%	0.8%		North Dakota	0.1%	0.1%	0.1%		
Florida	0.0%	1.3%	1.9%	1.9%		Ohio	0.8%	1.2%	1.2%		
Georgia	0.7%	1.1%	1.1%			Oklahoma	0.2%	0.4%	0.4%		
Hawaii	0.1%	0.2%	0.2%			Oregon	0.0%	0.3%	0.4%	0.4%	
Idaho	0.1%	0.1%	0.1%			Pennsylvania	0.0%	0.9%	1.4%	1.4%	
Illinois	0.0%	0.0%	1.0%	1.6%	1.6%	Rhode Island	0.0%	0.1%	0.1%	0.1%	
Indiana	0.0%	0.0%	0.4%	0.7%	0.7%	South Carolina	0.3%	0.4%	0.4%		
Iowa	0.2%	0.2%	0.2%	0.2%		South Dakota	0.1%	0.1%	0.1%		
Kansas	0.2%	0.3%	0.3%			Tennessee	0.4%	0.7%	0.7%		
Kentucky	0.0%	0.2%	0.4%	0.4%		Texas	2.2%	3.3%	3.3%		
Louisiana	0.0%	0.3%	0.5%	0.5%		Utah	0.2%	0.3%	0.3%		
Maine	0.0%	0.1%	0.1%	0.1%		Vermont	0.0%	0.0%	0.1%	0.1%	
Maryland	0.0%	0.5%	0.7%	0.7%		Virginia	0.0%	0.6%	1.0%	1.0%	
Massachusetts	0.0%	0.0%	0.7%	1.0%	1.0%	Washington	0.0%	0.7%	1.0%	1.0%	
Michigan	0.0%	0.6%	0.9%	0.9%		West Virginia	0.1%	0.1%	0.1%		
Minnesota	0.4%	0.7%	0.7%			Wisconsin	0.0%	0.0%	0.4%	0.6%	0.6%
Mississippi	0.1%	0.2%	0.2%			Wyoming	0.0%	0.1%	0.1%		
Missouri	0.4%	0.6%	0.6%			TOTAL	8.3%	25.3%	33.9%	25.1%	7.5%

Hedgeye Preparedness Score

COVID-19 Cases

- Uses flu week units
- Four week-over-week increases in confirmed cases = 1
- Two week-over-week increases in confirmed cases = 2
- Two week-over-week decreases in confirmed cases = 3
- Four week-over-week decreases = 4

Influenza-like Cases

- Uses flu week units
- Four week-over-week increases in confirmed cases = 1
- Two week-over-week increases in confirmed cases = 2
- Two week-over-week decreases in confirmed cases = 3
- Four week-over-week decreases = 4

Positive Test Rate

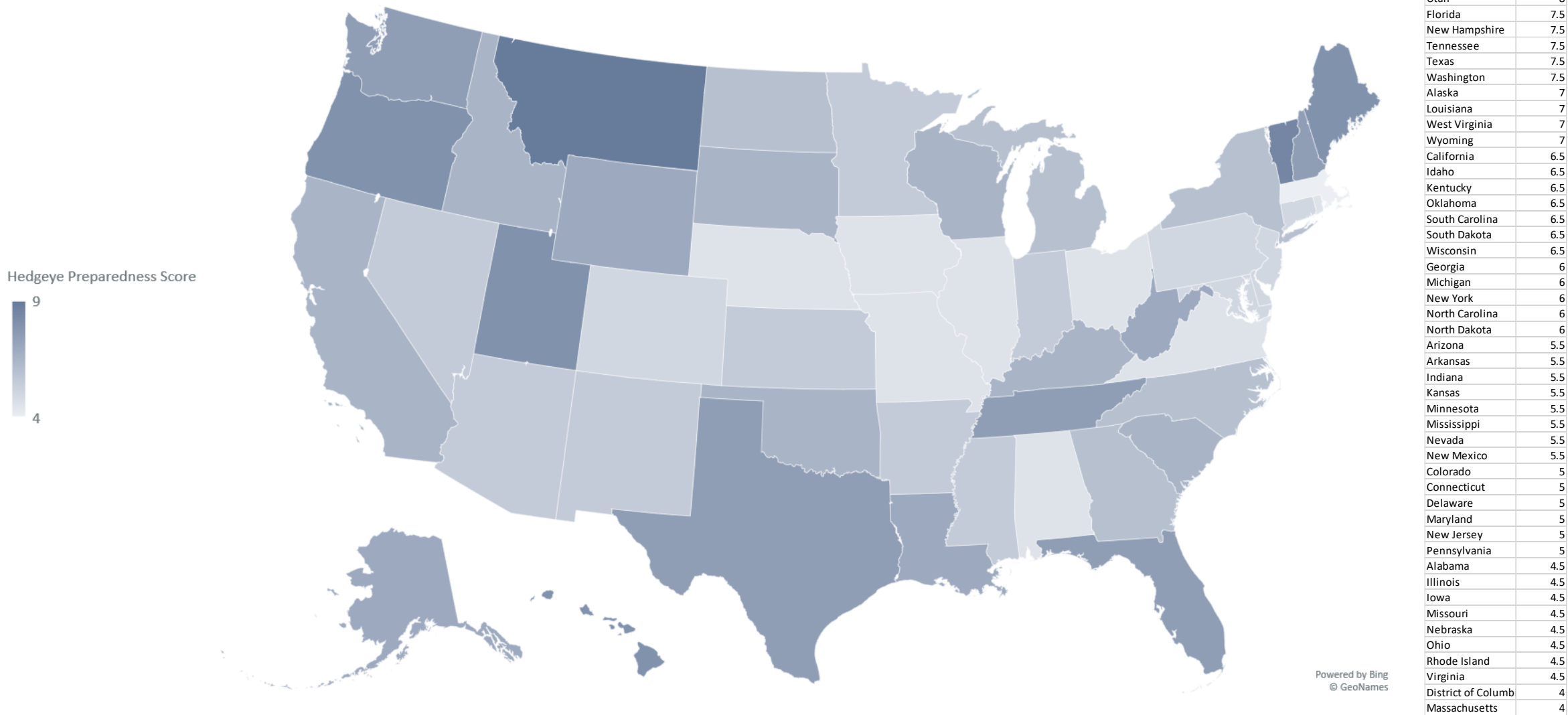
- Assumed flat to increasing test volumes
- Positive test rate below 5% = +1
- Positive test rate 5-10% = +1/2
- Positive test rate 10-15% = -1/2
- Positive test rate over 15% = -1

TBD

- COVID-like Illness when uniformly available at state level
- Hospital data on available beds, ICU beds and ventilators

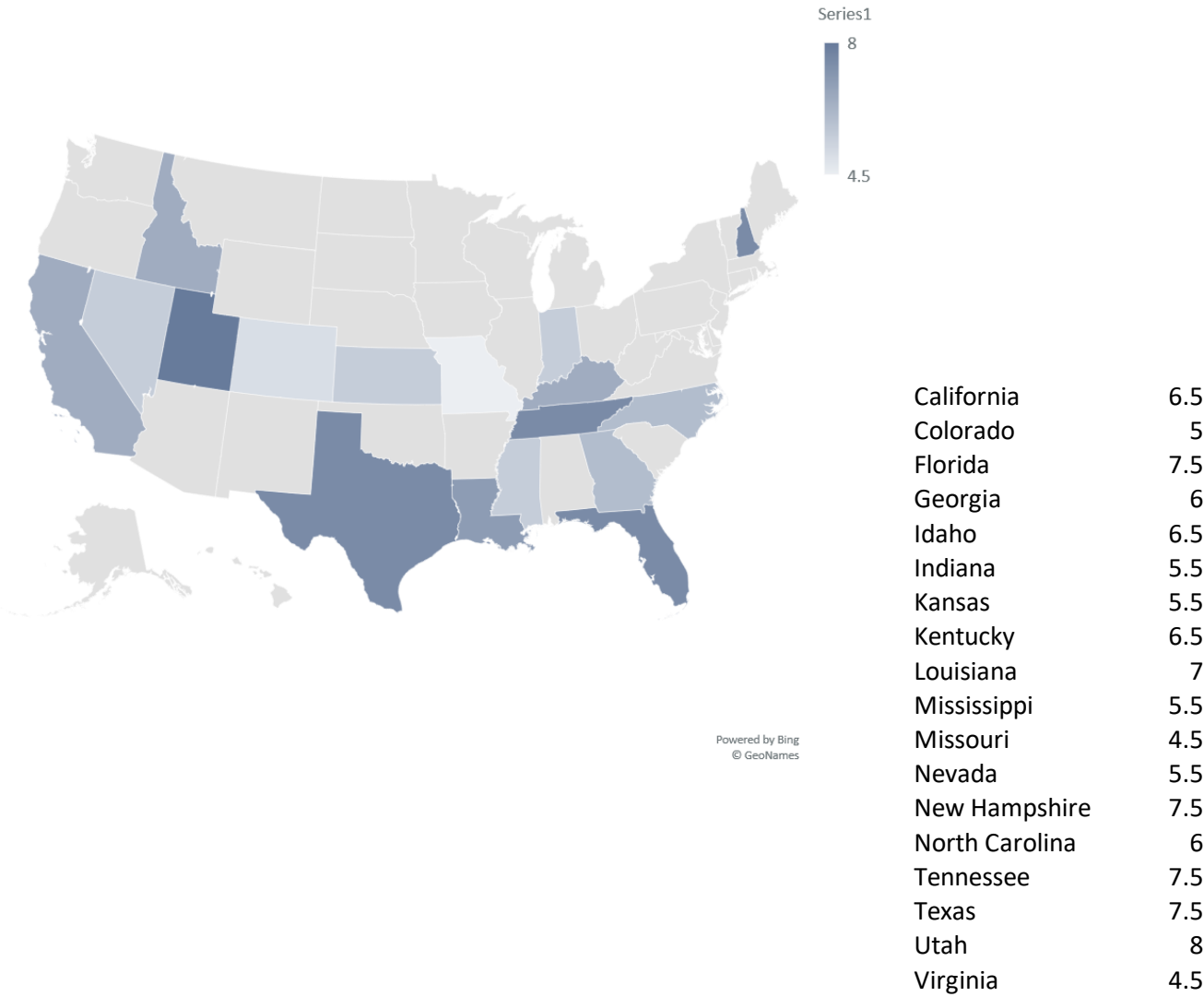
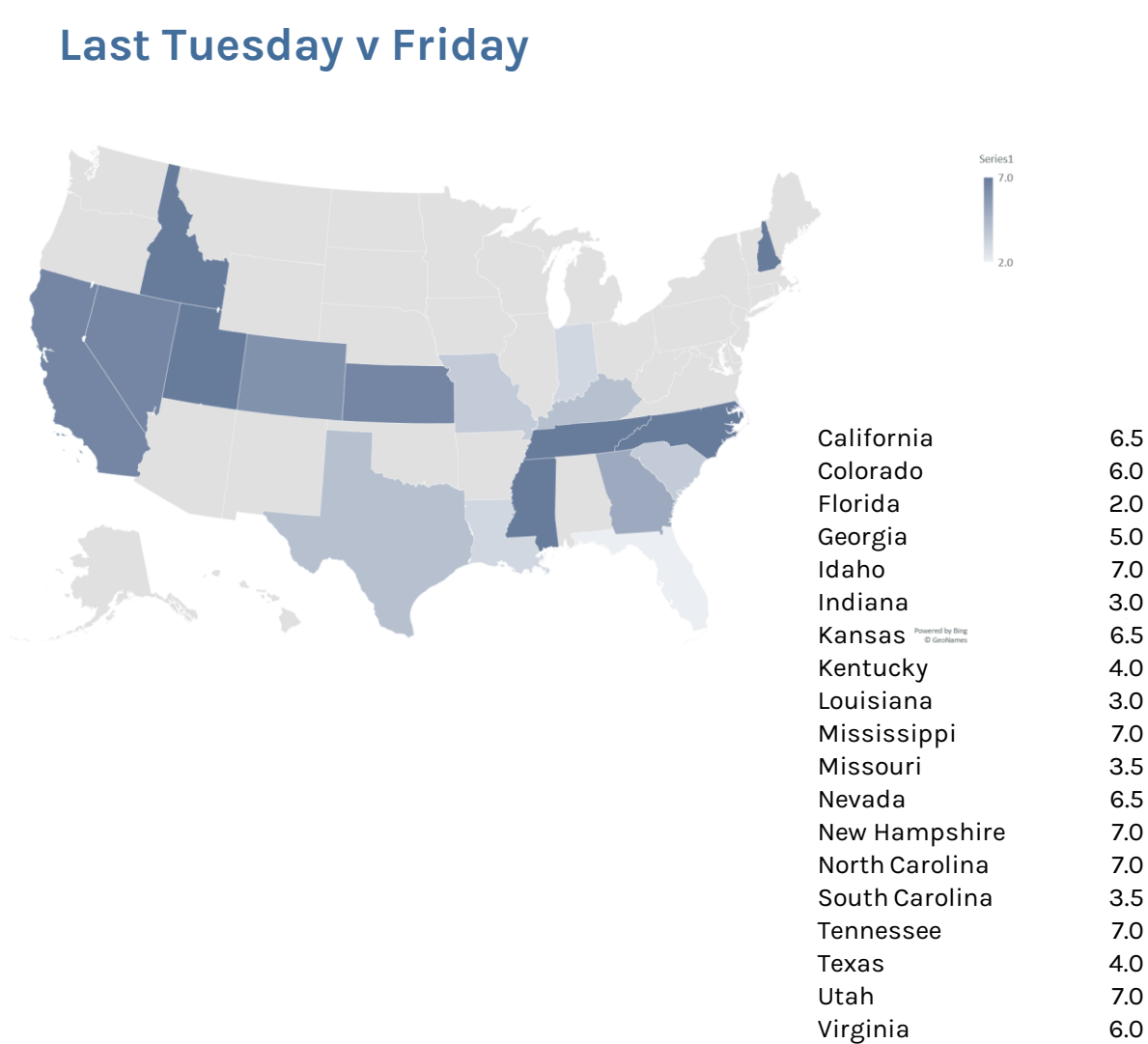
Hedgeye Preparedness Score

Most States Moving Forward Are Close to Meeting Gating Criteria



HCA Inpatient Beds/ASC ORs in Affected States

Last Tuesday v Friday





Phase II Texas Restaurant Guidelines

[1] For Customers

- Parties maintain distance of six feet from one another
- Tables of no more than six
- Tables must remain clear of all traditional tabletop items when unoccupied; no condiments, silverware, glasses
- Menus and condiments should be single use
- Contactless payment where possible

[2] For Employees

- Train all employees on disinfection, hand hygiene and cleaning
- Screen employees upon entering restaurant
- Prohibit employees from coming to work with COVID-19 symptoms and returning to work until fever free for 3 days and 7 days post-onset
- Sanitize hands before entering restaurant and after each interaction with customers
- Require social distancing between employees and masks when it cannot be maintained

[3] For Facilities

- Assign an employee to open door for customers or install automatic door openers
- Frequently clean and disinfect regularly touched surfaces
- Disinfect all items that come in contact with customers
- Make hand sanitizer readily available for customers and employees
- Disinfect area used for dining – tables chairs, banquettes – after each customer
- Clean and disinfect area regularly
- Post signage reminding employees and customers of good hygiene



Phase II Texas Retail Guidelines

[1] For Customers

- Encouraged to set aside certain hours for at-risk populations to shop
- Alternatively, deliver goods to at-risk employees or provide curbside service
- Monitor surfaces customers touch and disinfect when customer leaves
- Provide contactless payment whenever possible; minimize contact when not possible
- Customers should wash hands after payment process
- Customers should maintain six-foot distance from people not in the same household and wear face masks when not possible

[2] For Employees

- Train all employees on disinfection, hand hygiene and cleaning
- Screen employees upon entering store
- Prohibit employees from coming to work with COVID-19 symptoms and returning to work until fever free for 3 days and 7 days post-onset
- Sanitize hands before entering store and after each interaction with customers
- Require social distancing between employees and masks when it cannot be maintained

[3] For Facilities

- Assign an employee to open door for customers or install automatic door openers
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- Clean and disinfect area regularly
- Post signage reminding employees and customers of good hygiene

The DoJ Provides Additional Incentives

Stay-at-Home Order do have some constitutional issues beyond a point



Office of the Attorney General
Washington, D. C. 20530

April 27, 2020

MEMORANDUM FOR THE ASSISTANT ATTORNEY GENERAL FOR CIVIL RIGHTS AND
ALL UNITED STATES ATTORNEYS

FROM:

THE ATTORNEY GENERAL

A handwritten signature in black ink, appearing to read "WP Barr", is written over the printed name of the Attorney General.

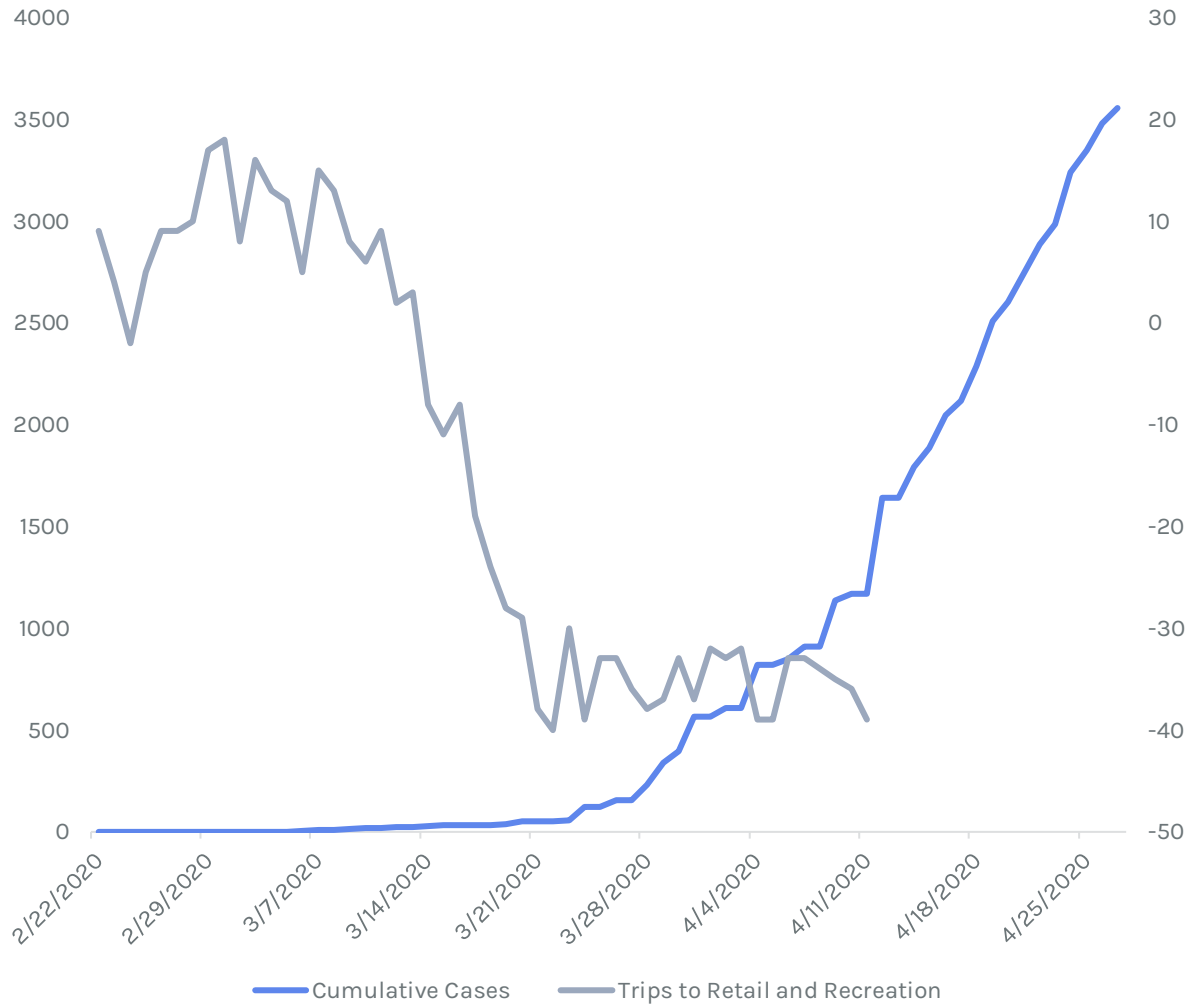
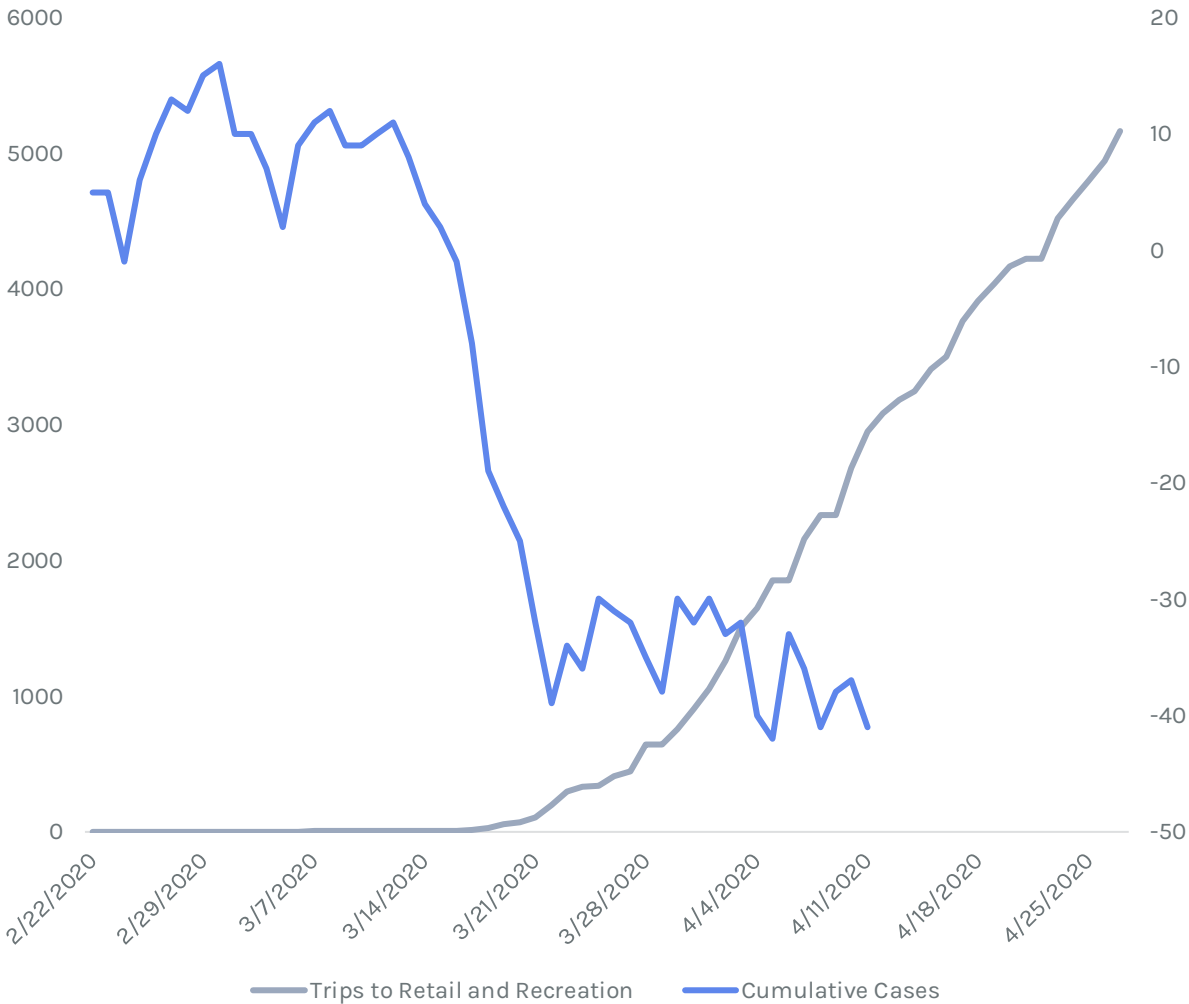
SUBJECT:

Balancing Public Safety with the Preservation of Civil Rights

The current national crisis related to COVID-19 has required the imposition of extraordinary restrictions on all of our daily lives. Millions of Americans across the nation have been ordered to stay in their homes, leaving only for essential and necessary reasons, while countless businesses and other gathering places have been ordered to close their doors indefinitely. These kinds of restrictions have been necessary in order to stop the spread of a deadly disease—

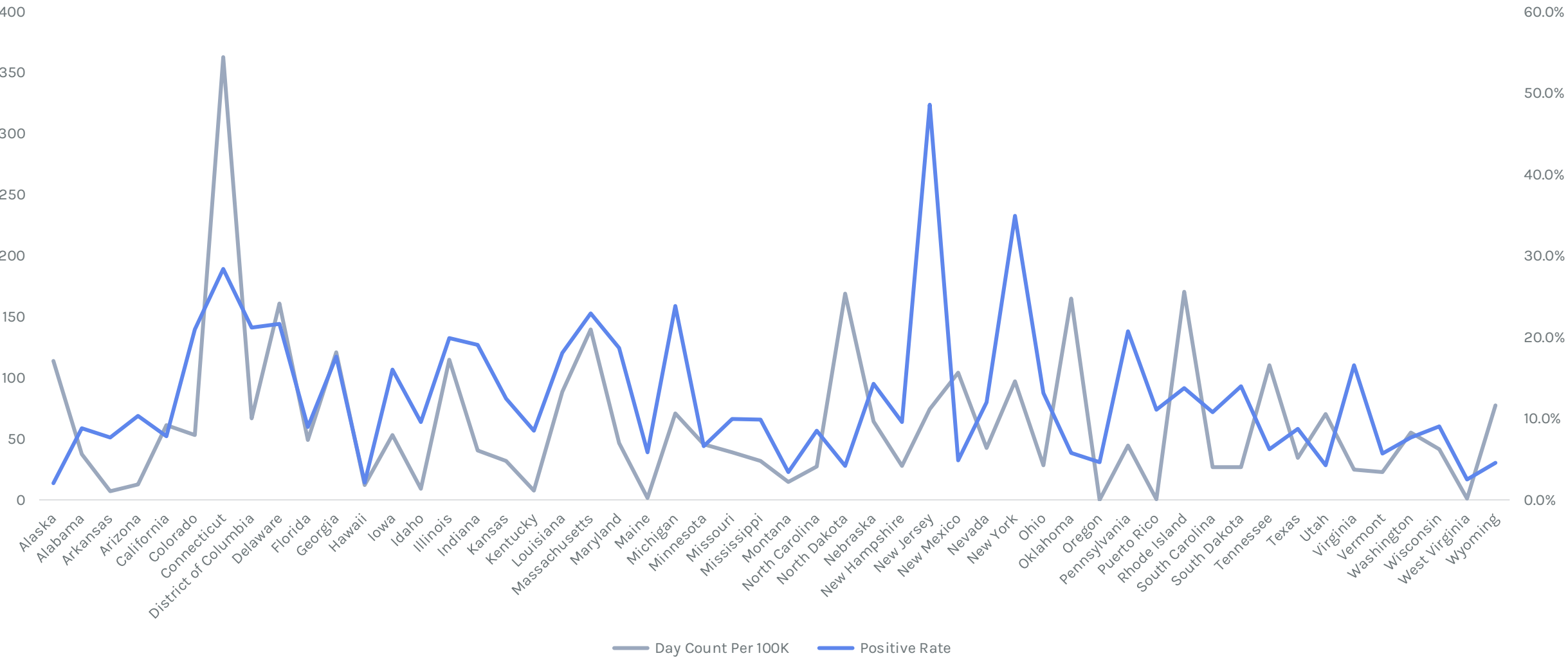
Kentucky v South Carolina

People don't need a stay-at-home order to do just that



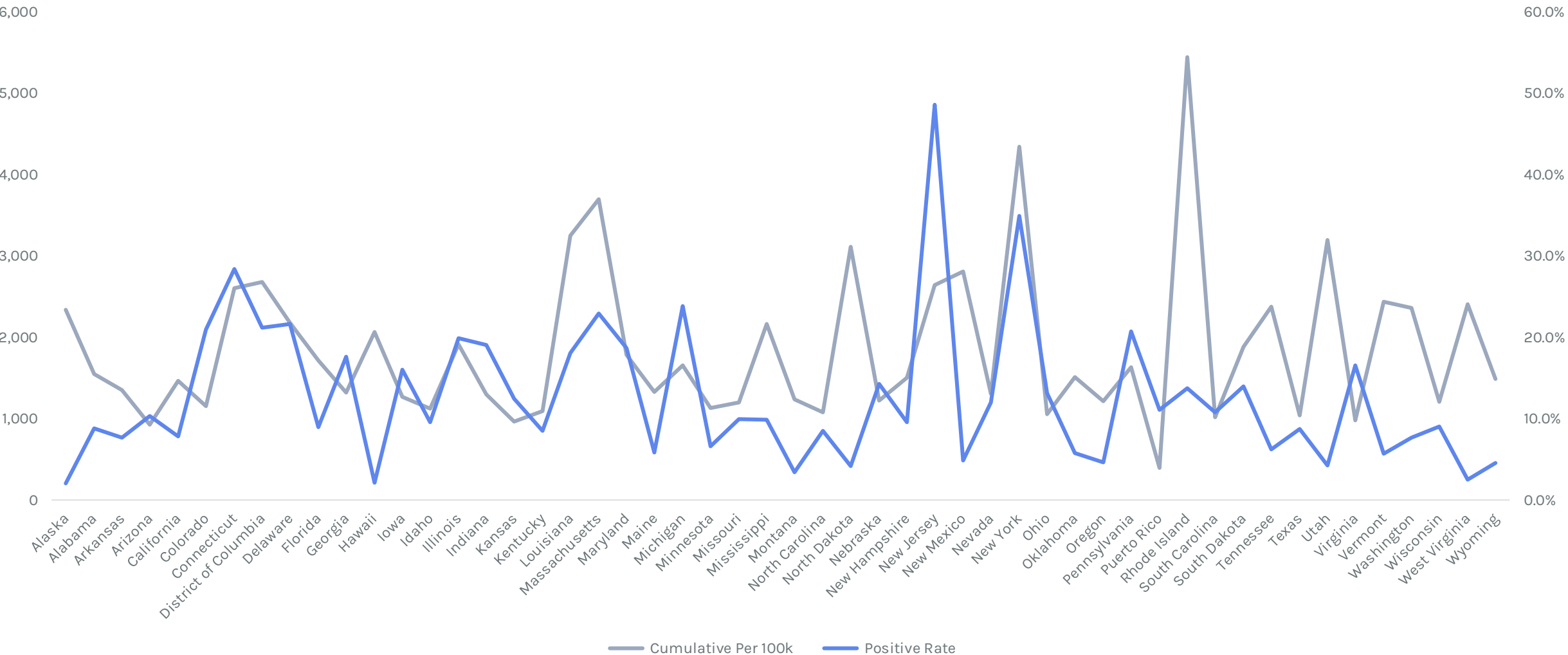
Daily Testing Volumes and Rates on April 28

More testing does not always = lower positive rate



Cumulative Testing Volumes and Rates, April 28

More testing does not always = lower positive rate



Themes – A Few Ideas

Influence of >65

- How interested are boomers going to be in nursing homes and assisted living centers?
- Will their considerable political influence wane as a result of not being fully engaged in public life, limiting political support for changes to Medicare system?
- Acceleration of remote monitoring, telemedicine
- Changes or an end to post acute system?

Power Vacuum

- Boomers get sidelined, Gen X moves in, but their size is nothing compared to Millennials. To keep their spot do they cease mimicking boomer priorities and take up millennials'?
- Medicare for All becomes more viable not less?
- Support for traditional Medicare silos erodes?
- Skepticism of globalization drives certain parts of the supply chain home?

Different View Of HC

- Distrust of pharma and other medical interventions
- The GOOP culture
- Emphasis on diet, exercise and other things that keep people away from system

Comfort w/Threat

- Does everyone just get comfortable living with threat as we did in 1950s?
- Living with threat makes authoritative government and regulation more attractive so health care offers more limited choices?

For more information, contact us at:

sales@hedgeye.com
(203) 562-6500