Outsiders at the Helm:
When Institutional Outsiderness Helps or Hurts Public Leaders' Crisis Management Performance

Supplementary Materials

Appendix A. The Number of Public Crises that Threatened Pubic Health in U.S. States between 2005 and 2024

Year	Number of Public Health Emergencies Faced by States
2005	13
2006	0
2007	1
2008	5
2009	52
2010	51
2011	4
2012	3
2013	1
2014	0
2015	0
2016	51
2017	110
2018	59
2019	58
2020	104
2021	103
2022	155
2023	105
2024	109

Note: Data came from the U.S. Department of Health and Human Services, based on their declarations of public health emergencies. Using that data, we counted the number of emergencies faced by U.S. states. When an emergency occurred at the national level (e.g., the COVID-19 pandemic), we coded it as one occurrence for each state.

Appendix B. PPML Regressions for Predicting Daily New Cases (Using a Binary Measure of Institutional Outsiderness)

Variables	Model1	Model2	Model 3
Population mobility and State			
ln(Daily interstate inflows)$_{t-14}$	0.11	0.04	−0.15†
	(0.12)	(0.11)	(0.08)
ln(Daily intrastate mobility)$_{t-14}$	0.73***	0.84***	1.02***
	(0.12)	(0.12)	(0.11)
Daily mask usage$_{t-14}$	0.07	0.09	−0.11
	(0.14)	(0.14)	(0.15)
State population density	−0.02	−0.05	−0.08
	(0.08)	(0.08)	(0.05)
State land area	0.05	0.07	0.15
	(0.11)	(0.10)	(0.10)
State GDP per capita	0.01	0.06	0.37***
	(0.09)	(0.08)	(0.10)
State population above 65	−0.04	−.005	0.07
	(0.07)	(0.06)	(0.05)
State healthcare infrastructure	0.19	0.15	−0.02
	(0.12)	(0.11)	(0.10)
State political ideology	0.61***	0.54**	0.64***
	(0.17)	(0.17)	(0.13)
State political ideology polarization	0.03	0.04	−0.04
	(0.06)	(0.06)	(0.06)
State government unified	0.09	0.07	−0.17
	(0.14)	(0.13)	(0.14)
State legislative oversight	0.03	0.01	−0.07
	(0.06)	(0.06)	(0.05)
Governor			
Political affiliation	−0.08	−0.07	−0.14
	(0.12)	(0.11)	(0.10)
Term tenure$_t$	−0.05	.002	0.03
	(0.05)	(0.05)	(0.04)
Reelection eligibility	0.17	0.23*	−0.13
	(0.11)	(0.12)	(0.12)
Domain experience	−0.20	−0.27†	−0.46***
	(0.15)	(0.16)	(0.11)
Education level	0.07	0.06	−0.21
	(0.15)	(0.14)	(0.14)
Age$_t$	−0.05	0.01	0.09
	(0.05)	(0.05)	(0.06)
Gender	−0.01	−0.12	−.001
	(0.13)	(0.14)	(0.08)
Main Variables			
Institutional outsiderness		0.23†	0.31*
		(0.13)	(0.12)
Institutionalization			−0.06
			(0.10)
Relevant crisis management experience			−0.04
			(0.04)
Pre-crisis social approval			0.12*
			(0.05)
Institutional outsiderness × Institutionalization			0.66**
			(0.23)
Institutional outsiderness × Relevant crisis management experience			−0.32***
			(0.07)
Institutional outsiderness × Pre-crisis social approval			−0.33***
			(0.07)
Constant	6.53***	6.49***	7.13***
	(0.24)	(0.23)	(0.19)
Time effect	(Yes)	(Yes)	(Yes)
Pseudo R^2	0.757	0.760	0.776
Observations	13,970	13,970	13,970

Notes: All predictors, except for categorical variables, were standardized for the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix C. PPML Regressions for Predicting Daily New Deaths

Variables	Model1	Model2	Model 3
Population mobility and State			
ln(Daily interstate inflows)$_{t-14}$	0.20†	0.16	0.02
	(0.11)	(0.13)	(0.14)
ln(Daily intrastate mobility)$_{t-14}$	0.55***	0.62***	0.76***
	(0.13)	(0.16)	(0.20)
Daily mask usage$_{t-14}$	0.83***	0.80***	0.62*
	(0.17)	(0.19)	(0.25)
State population density	0.16*	0.15*	0.15*
	(0.07)	(0.06)	(0.08)
State land area	0.07	0.08	0.13
	(0.09)	(0.08)	(0.11)
State GDP per capita	0.47***	0.53***	0.69***
	(0.10)	(0.10)	(0.19)
State population above 65	0.10	0.12†	0.22**
	(0.07)	(0.07)	(0.08)
State healthcare infrastructure	− 0.26*	− 0.31*	− 0.36†
	(0.13)	(0.13)	(0.20)
State political ideology	0.73***	0.67***	0.83***
	(0.17)	(0.19)	(0.16)
State political ideology polarization	− 0.12†	− 0.14†	− 0.16
	(0.07)	(0.07)	(0.10)
State government unified	0.18	0.15	0.04
	(0.12)	(0.12)	(0.18)
State legislative oversight	− 0.03	− 0.05	− 0.13*
	(0.06)	(0.06)	(0.06)
Governor			
Political affiliation	0.07	0.11	− 0.01
	(0.11)	(0.11)	(0.21)
Term tenure$_{t}$	− 0.09*	− 0.08	− 0.07
	(0.05)	(0.05)	(0.05)
Reelection eligibility	0.06	0.09	− 0.12
	(0.10)	(0.11)	(0.13)
Domain experience	− 0.02	− 0.07	− 0.28†
	(0.14)	(0.15)	(0.15)
Education level	0.15	0.14	0.0004
	(0.14)	(0.14)	(0.17)
Age$_{t}$	− 0.12*	− 0.07	− 0.06
	(0.05)	(0.06)	(0.08)
Gender	− 0.06	− 0.12	0.11
	(0.13)	(0.13)	(0.13)
Main variables			
Institutional outsiderness		0.08	0.04
		(0.07)	(0.07)
Institutionalization			0.13
			(0.16)
Relevant crisis management experience			− 0.13*
			(0.06)
Pre-crisis social approval			− 0.02
			(0.08)
Institutional outsiderness × Institutionalization			0.08
			(0.12)
Institutional outsiderness × Relevant crisis management experience			− 0.10*
			(0.05)
Institutional outsiderness × Pre-crisis social approval			− 0.13**
			(0.05)
Constant	1.94***	2.01***	2.18***
	(0.22)	(0.25)	(0.26)
Time effect	(Yes)	(Yes)	(Yes)
Pseudo R^2	0.585	0.586	0.591
Observations	13,460	13,460	13,460

Notes: All predictors, except for categorical variables, were standardized before being entered into the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix D. PPML Regressions for Predicting Daily New Cases Using 8-day and 5-day Lags

Variables	8-day lag			5-day lag		
	Model1	Model2	Model 3	Model4	Model5	Model 6
Population mobility and State						
ln(Daily interstate inflows)$_{t-j}$	0.11	0.03	−0.15†	0.10	0.02	−0.17†
	(0.12)	(0.10)	(0.08)	(0.12)	(0.10)	(0.10)
ln(Daily intrastate mobility)$_{t-j}$	0.71***	0.83***	1.00***	0.70***	0.82***	0.99***
	(0.12)	(0.12)	(0.11)	(0.12)	(0.12)	(0.12)
Daily mask usage$_{t-j}$	0.23†	0.21	0.03	0.31*	0.29†	0.12
	(0.14)	(0.15)	(0.16)	(0.14)	(0.15)	(0.16)
State population density	−0.02	−0.03	−0.03	−0.02	−0.03	−0.02
	(0.08)	(0.07)	(0.05)	(0.08)	(0.07)	(0.05)
State land area	0.06	0.09	0.20*	0.06	0.09	0.21*
	(0.11)	(0.09)	(0.10)	(0.11)	(0.09)	(0.10)
State GDP per capita	0.02	0.10	0.38***	0.02	0.10	0.39***
	(0.08)	(0.07)	(0.10)	(0.09)	(0.07)	(0.10)
State population above 65	−0.04	−0.01	0.08†	−0.04	−0.01	0.08†
	(0.07)	(0.06)	(0.04)	(0.07)	(0.06)	(0.04)
State healthcare infrastructure	0.18	0.09	−0.04	0.18†	0.09	−0.05
	(0.11)	(0.11)	(0.12)	(0.11)	(0.11)	(0.12)
State political ideology	0.65***	0.55**	0.74***	0.67***	0.57**	0.75***
	(0.17)	(0.18)	(0.16)	(0.17)	(0.18)	(0.16)
State political ideology polarization	0.03	0.002	−0.02	0.03	0.003	−0.02
	(0.06)	(0.07)	(0.06)	(0.06)	(0.07)	(0.07)
State government unified	0.10	0.05	−0.14	0.11	0.06	−0.15
	(0.14)	(0.11)	(0.11)	(0.14)	(0.11)	(0.11)
State legislative oversight	0.03	0.02	−0.08†	0.03	0.02	−0.08†
	(0.06)	(0.06)	(0.05)	(0.06)	(0.06)	(0.05)
Governor						
Political affiliation	−0.06	−0.01	−0.03	−0.06	−0.002	−0.01
	(0.11)	(0.10)	(0.12)	(0.11)	(0.10)	(0.13)
Term tenure$_{t}$	−0.05	−0.02	0.03	−0.05	−0.02	0.02
	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)	(0.04)
Reelection eligibility	0.17†	0.23*	−0.07	0.18†	0.23*	−0.06
	(0.10)	(0.11)	(0.11)	(0.10)	(0.11)	(0.11)
Domain experience	−0.18	−0.26†	−0.42***	−0.17	−0.24†	−0.40***
	(0.15)	(0.14)	(0.10)	(0.15)	(0.14)	(0.10)
Education level	0.07	0.06	−0.11	0.07	0.06	−0.11
	(0.15)	(0.12)	(0.09)	(0.15)	(0.12)	(0.09)
Age$_{t}$	−0.05	0.05	0.12*	−0.05	0.05	0.12*
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Gender	−0.01	−0.13	0.09	−.003	−0.13	0.09
	(0.13)	(0.13)	(0.08)	(0.13)	(0.13)	(0.08)
Main variables						
Institutional outsiderness		0.16*	0.14**		0.16*	0.15**
		(0.07)	(0.05)		(0.06)	(0.05)
Institutionalization			0.21*			0.23*
			(0.09)			(0.10)
Relevant crisis management experience			−0.19***			−0.19***
			(0.04)			(0.04)
Pre-crisis social approval			−0.06			−0.06
			(0.06)			(0.06)
Institutional outsiderness × Institutionalization			0.29***			0.29**
			(0.09)			(0.09)
Institutional outsiderness × Relevant crisis management experience			−0.13***			−0.13***
			(0.04)			(0.04)
Institutional outsiderness × Pre-crisis social approval			−0.15***			−0.14***
			(0.03)			(0.03)
Constant	6.39***	6.53***	6.86***	6.32***	6.46***	6.79***
	(0.25)	(0.25)	(0.19)	(0.25)	(0.25)	(0.20)
Time effect	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)
Pseudo R^2	0.756	0.762	0.776	0.757	0.763	0.776
Observations	13,970	13,970	13,970	14,017	14,017	14,017

Notes: All predictors, except for categorical variables, were standardized before being entered into the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix E. PPML Regressions for Predicting Daily New Cases (Texas included)

Variables	Model1	Model2	Model 3
Population mobility and State			
ln(Daily interstate inflows)$_{t-14}$	0.09	0.003	−0.16†
	(0.12)	(0.10)	(0.08)
ln(Daily intrastate mobility)$_{t-14}$	0.76***	0.89***	1.08***
	(0.11)	(0.10)	(0.09)
Daily mask usage$_{t-14}$	0.07	0.05	−0.16
	(0.15)	(0.15)	(0.15)
State population density	−0.03	−0.05	−0.05†
	(0.07)	(0.06)	(0.03)
State land area	0.01	0.02	0.15*
	(0.06)	(0.05)	(0.07)
State GDP per capita	0.01	0.09	0.35***
	(0.08)	(0.06)	(0.07)
State population above 65	−0.03	0.01	0.09*
	(0.07)	(0.06)	(0.04)
State healthcare infrastructure	0.20*	0.12	0.03
	(0.10)	(0.10)	(0.08)
State political ideology	0.61***	0.50**	0.72***
	(0.17)	(0.18)	(0.15)
State political ideology polarization	0.04	0.02	0.03
	(0.05)	(0.05)	(0.04)
State government unified	0.10	0.06	−0.10
	(0.14)	(0.12)	(0.09)
State legislative oversight	0.03	0.01	−0.07†
	(0.06)	(0.06)	(0.04)
Governor			
Political affiliation	−0.13	−0.09	−0.12
	(0.09)	(0.08)	(0.09)
Term tenure$_{t}$	−0.05	−0.01	0.04
	(0.05)	(0.05)	(0.04)
Reelection eligibility	0.16	0.21†	−0.10
	(0.11)	(0.11)	(0.10)
Domain experience	−0.20	−0.28†	−0.44***
	(0.16)	(0.15)	(0.09)
Education level	0.03	−0.003	−0.14†
	(0.15)	(0.11)	(0.08)
Age$_{t}$	−0.04	0.05	0.11*
	(0.05)	(0.05)	(0.05)
Gender	.002	−0.12	0.08
	(0.12)	(0.13)	(0.08)
Main variables			
Institutional outsiderness		0.16*	0.13**
		(0.07)	(0.04)
Institutionalization			0.15**
			(0.05)
Relevant crisis management experience			−0.20***
			(0.03)
Pre-crisis social approval			−0.05
			(0.05)
Institutional outsiderness × Institutionalization			0.32***
			(0.09)
Institutional outsiderness × Relevant crisis management experience			−0.11**
			(0.03)
Institutional outsiderness × Pre-crisis social approval			−0.16***
			(0.03)
Constant	6.56***	6.72***	7.02***
	(0.23)	(0.22)	(0.17)
Time effect	(Yes)	(Yes)	(Yes)
Pseudo R^2	0.770	0.775	0.789
Observations	14,268	14,268	14,268

Notes: All predictors, except for categorical variables, were standardized before being entered into the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix F. Governors' Relevant Crisis Management Experience Prior to the 2008 Financial Crisis

State	Governor	Crisis management experience	Sources
Alabama	Bob Riley	1. State fiscal crisis in 2003 2. Hurricane Katrina in 2005	1. https://www.gadsdentimes.com 2. US Department of Health & Human Services
Delaware	Ruth Ann Minner	9/11 attack in 2001	https://www.delawareonline.com
Georgia	Sonny Perdue	Hurricane Katrina in 2005	US Department of Health & Human Services
Mississippi	Haley Barbour	Hurricane Katrina in 2005	US Department of Health & Human Services
Missouri	Matt Blunt	State fiscal crisis in 2005	https://www.mobudget.org
North Carolina	Michael F. Easley	1. 9/11 attack in 2001 2. Hurricane Katrina in 2005	1. https://digital.ncdcr.gov 2. US Department of Health & Human Services
Oklahoma	Brad Henry	Hurricane Katrina in 2005	US Department of Health & Human Services
Oregon	Ted Kulongoski	State budget deficit and high unemployment in 2003	https://www.nytimes.com
Tennessee	Phil Bredesen	1. Hurricane Katrina in 2005 2. State fiscal crisis in 2003	1. US Department of Health & Human Services 2. Wikipedia
Texas	Rick Perry	1. Hurricane Katrina in 2005 2. Hurricane Dean in 2007	US Department of Health & Human Services
Utah	Jon Huntsman	Hurricane Katrina in 2005	US Department of Health & Human Services
West Virginia	Joe Manchin III	Hurricane Katrina in 2005	US Department of Health & Human Services

Appendix G. Regressions for Predicting State Quarterly Real GDP in the 2008 Financial Crisis (Using a Binary Measure of Institutional Outsiderness)

Variables	DV: *ln*(Quarterly real GDP)		
	Model1	Model2	Model 3
State			
Pre-crisis real GDP	0.89***	0.89***	0.87***
	(0.10)	(0.10)	(0.08)
Financial services in GDP	− 0.08	− 0.08	− 0.05
	(0.06)	(0.06)	(0.04)
Housing in GDP	− 0.04	− 0.04	− 0.01
	(0.07)	(0.07)	(0.06)
State population density	0.08	0.09	0.20*
	(0.08)	(0.09)	(0.08)
State land area	− 0.17**	− 0.16**	− 0.12*
	(0.05)	(0.05)	(0.05)
State political ideology	0.57**	0.58**	0.63***
	(0.17)	(0.19)	(0.18)
State political ideology polarization	− 0.34***	− 0.34***	− 0.28**
	(0.09)	(0.09)	(0.09)
State government unified	− 0.04	− 0.04	− 0.08
	(0.14)	(0.15)	(0.12)
State legislative oversight	0.05	0.05	0.05
	(0.07)	(0.07)	(0.06)
Governor			
Political affiliation	− 0.33*	− 0.32*	− 0.12
	(0.15)	(0.15)	(0.16)
Term tenure$_t$	− 0.05	− 0.04	− 0.04
	(0.06)	(0.06)	(0.06)
Reelection eligibility	0.42*	0.42*	0.31†
	(0.19)	(0.19)	(0.17)
Domain experience	0.66***	0.66***	0.37†
	(0.16)	(0.16)	(0.20)
Education level	0.09	0.09	0.36†
	(0.21)	(0.21)	(0.20)
Age$_t$	− 0.09	− 0.10	− 0.12*
	(0.06)	(0.07)	(0.05)
Gender	− 0.53**	− 0.52**	− 0.48**
	(0.18)	(0.18)	(0.15)
Main variables			
Institutional outsiderness		− 0.02	− 0.14
		(0.14)	(0.11)
Institutionalization			0.16†
			(0.09)
Relevant crisis management experience			0.05
			(0.09)
Pre-crisis social approval			− 0.15*
			(0.06)
Institutional outsiderness × Institutionalization			− 0.23*
			(0.11)
Institutional outsiderness × Relevant crisis management experience			0.29*
			(0.12)
Institutional outsiderness × Pre-crisis social approval			0.11
			(0.17)
Constant	11.70***	11.70***	11.65***
	(0.20)	(0.20)	(0.16)
Time effect	(Yes)	(Yes)	(Yes)
R^2	0.861	0.861	0.916
Adjusted R^2	0.849	0.848	0.905
Observations	241	241	241

Notes: All predictors, except for categorical variables, were standardized for the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix H. Regressions for Predicting State Quarterly Real GDP in the 2008 Financial Crisis (Texas included)

Variables	DV: *ln*(Quarterly real GDP)		
	Model1	Model2	Model 3
State			
Pre-crisis real GDP	0.93***	0.93***	0.90***
	(0.09)	(0.09)	(0.06)
Financial services in GDP	− 0.09	− 0.09	− 0.02
	(0.06)	(0.06)	(0.05)
Housing in GDP	− 0.06	− 0.05	0.02
	(0.07)	(0.07)	(0.06)
State population density	0.08	0.10	0.20*
	(0.08)	(0.09)	(0.07)
State land area	− 0.17**	− 0.16**	− 0.11*
	(0.05)	(0.05)	(0.05)
State political ideology	0.58**	0.59**	0.59***
	(0.17)	(0.17)	(0.16)
State political ideology polarization	− 0.33***	− 0.32***	− 0.28***
	(0.09)	(0.08)	(0.08)
State government unified	− 0.02	− 0.03	− 0.09
	(0.14)	(0.16)	(0.11)
State legislative oversight	0.02	0.03	0.07
	(0.07)	(0.07)	(0.05)
Governor			
Political affiliation	− 0.34*	− 0.31*	− 0.17
	(0.15)	(0.15)	(0.12)
Term tenure$_t$	− 0.05	− 0.03	0.01
	(0.06)	(0.06)	(0.06)
Reelection eligibility	0.46*	0.43*	0.26†
	(0.19)	(0.17)	(0.14)
Domain experience	0.64***	0.62***	0.46**
	(0.16)	(0.16)	(0.16)
Education level	0.06	0.07	0.37†
	(0.20)	(0.20)	(0.20)
Age$_t$	− 0.09	− 0.11	− 0.15*
	(0.06)	(0.08)	(0.05)
Gender	− 0.55**	− 0.51**	− 0.43**
	(0.18)	(0.19)	(0.15)
Main variables			
Institutional outsiderness		− 0.04	− 0.09†
		(0.08)	(0.05)
Institutionalization			− 0.01
			(0.05)
Relevant crisis management experience			0.20**
			(0.07)
Pre-crisis social approval			− 0.10
			(0.08)
Institutional outsiderness × Institutionalization			− 0.15*
			(0.06)
Institutional outsiderness × Relevant crisis management experience			0.21**
			(0.06)
Institutional outsiderness × Pre-crisis social approval			− 0.02
			(0.06)
Constant	11.73***	11.70***	11.57***
	(0.19)	(0.20)	(0.16)
Time effect	(Yes)	(Yes)	(Yes)
R^2	0.868	0.869	0.924
Adjusted R^2	0.857	0.857	0.915
Observations	246	246	246

Notes: All predictors, except for categorical variables, were standardized for the analysis to allow for easier comparisons of effect sizes. State-clustered robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix I. Comparing mandate propensity and mandate announcement speed for containing COVID-19 between high and low institutional outsiderness governors using T-tests

Group[a]		**Mandate propensity score**[b]			**Average speed of announcing mandates**[c]		
	Obs.	mean	s.e.	s.d.	mean	s.e.	s.d.
Total	48	0.48	0.03	0.23	4.90	0.17	1.14
Low institutional outsiderness	24	0.57	0.05	0.24	5.20	0.15	0.75
High institutional outsiderness	24	0.39	0.04	0.20	4.61	0.28	1.39
difference		0.19	0.06		0.59[d]	0.32	
difference>0		p = 0.002			p = 0.036		

Notes:

a. The grouping method was based on the mean-split: those with *institutional outsiderness* above mean belong to the "high" group and the rest belong to the "low" group. All 48 contiguous U.S. states are included in this analysis.

b. The mandate propensity, a summary measure describing a state's usage of physical distancing and mask mandates, was collected from Bollyky et al. (2023). Bollyky et al. calculated mandate propensity score for each state as the first component of a principal component analysis of the following mandates: stay at home orders, mask mandates, gathering restrictions, bar closures, restaurant closures, primary school closures, higher education closures, and gym closures. Each mandate was computed as the proportion of days that the mandate was in effect during their analysis period.

c. We computed mandate announcement speed based on the time it took for each state to announce any of the four major policy mandates: stay-home order, mask mandate, gathering restrictions, and restaurant /bar closure. The speed for each mandate was calculated as the inverted time lag (measured in year) between the start of pandemic on Jan 22, 2020 and each mandate announcement date in 2020, so that the longer it took the lower the speed. The speed was set to zero if a mandate was never announced during our study period. The announcement date of these issued mandates in each state were collected from NGA website (https://www.nga.org/coronavirus-state-actions-all/) and Ballot Pedia (https://ballotpedia.org/States_that_issued_lockdown_and_stay-at-home_orders_in_response_to_the_coronavirus_(COVID-19)_pandemic,_2020 ; https://ballotpedia.org/State-level_mask_requirements_in_response_to_the_coronavirus_(COVID-19)_pandemic,_2020-2022)

d. This difference represents an 8.98-day lag, with "high *institutional outsiderness*" governors announcing mandates, on average, 8.98 days later than "low *institutional outsiderness*" governors.

Appendix J. Examples of Governors and their Actions Taken to Contain COVID in 2020

Governor	Institutional outsiderness[a]	Mandate propensity[b]	Number of actions[c]	Action Summary
Doug Burgum North Dakota (Republican)	High	0.11	59	Burgum declared a state of emergency on March 13, 2020, and Baker did so on March 10, 2020. Burgum did not issue a state-wide Stay-at-Home order in 2020, and Baker issued the order on March 23, 2020. In addition: **Burgum's representative actions:** • Unveiled a child care initiative on March 26. • Issued executive orders aimed at shoring up the pandemic impacts on school districts, agribusiness, fuel retailers and others in North Dakota. • Released protocols for businesses resuming or continuing operations on April 28, 2020 and reopening guideline for K-12 school districts on July 14, 2020. **Baker's representative actions:** • Filed a supplementary appropriations bill to address unanticipated costs related to communicable diseases on February 3, 2020. • Activated the Massachusetts National Guard with up to 2,000 members to support requests from state agencies on March 19. • Emphasized a data-driven approach for his "Stop the Spread" initiatives. • Launched a new text-based notification system to deliver important information about the Commonwealth's COVID-19 response to Massachusetts residents and a new online portal for donation. • Set up a partnership with the Massachusetts Medical Society to match volunteers with communities and health care providers based on skillsets and need. • Distributed tremendous funding to local communities for controlling the virus spread as well as financial support to small business recovery. • Adopted a four-phased approach to reopen the economy, allowing counties to transition back to normalcy based on public health data and criteria.
Charlie Baker Massachusetts (Republican)	Low	0.75	80	
Tony Evers Wisconsin (Democrat)	High	0.28	61	Evers declared a public health emergency on March 12, 2020, and Inslee did so on February 29, 2020. Evers issued statewide Stay-at-Home order on March 24, 2020, and Inslee did so on March 23, 2020. In addition: **Evers' representative actions:** • Announced a $1 billion statewide effort to support COVID-19 testing, contact tracing, acquisition of supplies, emergency operations, and resources for local communities on May 19, 2020. **Inslee's representative actions:** • Actively communicated with the President Trump multiple times, such as requesting the president declare a federal major disaster in WA and dispatch U.S.S. Mercy to Puget Sound to support health care capacity, urging Trump administration office to expand unemployment benefits and to implement a national aviation screening system for passengers. • Announced the Western State Pact in April to guide a coordinated approach to reopening. • Sent a letter to Vice President Pence calling for a federal response to address the shortage of PPE on June 10. • Sent a memo to local governments explaining the states Safe Start Reopening Guide on June 25. • To sum up, Inslee had active communication with the federal to mobilize resources as well as maintained a collaborative approach to addressing the pandemic both within Washington and through regional partnership.
Jay Inslee Washington (Democrat)	Low	1.01	152	

Notes: a. High outsider scores were above the mean value, whereas low outsider scores were below the mean. b. The mandate propensity was calculated by Bollyky et al. (2023). c. Number of actions (e.g., announcements, mandate orders, etc.) taken by the state governors and the related departments from February to July, 2020. These actions were listed on NGA website: https://www.nga.org/coronavirus-state-actions-all/