#### CC GOVERNANCE & LOCAL APPROPRIATIONS

Coordinating/	Same	Same	Coordination	Coordination	No state-level
governing	coordinating/	coordinating/	for CC	for CC	coordinating
board for	governing	governing	governance	governance	or governing
CCs separate	board as K-	board as 4-	falls under a	falls beneath	board (3)
from K-12 &	12 but	year (22)	P-20 board	a 4-year	
4-year. (19)	separate from		(1)	coordinating/	
	4-year (2)			governing	
				board (3)	
Alabama	Iowa	Arkansas	Idaho	Alaska	Arizona
California	Florida	Connecticut		Hawaii	Pennsylvania
Colorado		Indiana		New York	South Dakota
Delaware		Kansas			
Georgia		Massachusett			
Illinois		S			
Kentucky		Maryland			
Louisiana		Michigan			
Maine		Minnesota			
Mississippi		Missouri			
New		Montana			
Hampshire		Nebraska			
New Jersey		Nevada			
North		New Mexico			
Carolina		North Dakota			
South		Ohio			
Carolina		Oklahoma			
Virginia		Oregon			
Washington		Rhode Island			
West		Tennessee			
Virginia		Texas			
Wisconsin		Utah			
Wyoming		Vermont			

**Table 1.** Taxonomy of community college governance structures (2015)

Adapted from Fletcher and Friedel (2016). States that underwent a governance change at any point in our panel are bolded. Discrepancy in categorization existed in Fletcher and Friedel (2016) between survey results of state community college directors and document analysis. To remedy, we added a category for P-20 governing/coordinating structures and cross referenced Tollefeson, Garrett, and Ingram (1999) and state websites. Categorization necessitates a loss of nuance; however, we took many steps to ensure that our characterization of a state's governance structure is accurate.

#### CC GOVERNANCE & LOCAL APPROPRIATIONS

Coordinating/ governing board for CCs separate from K-12 & 4-year (21)Same coordinating/ governing board as K- 12 but separate from 4-year (21)Coordinating/ governing board as 4- year (20)Coordination for CC governance falls under a P-20 board (2)No state-level coordinating/ governing board as 4- P-20 board (2)AlabamaIowaArkansasIdahoAlaskaGeorgiaArizonaIndianaOregonHawaiiPennsylvaniaColoradoMassachusettNew YorkSouth DakotaColoradoMassachusettSouth DakotaCondecticutsDelawareMinnesotaBelawareMarylandNew YorkSouth DakotaIllinoisMinnesotaNew MexicoNewNew MexicoNew MexicoNewNewNew MexicoNorthOklahomaCarolinaTexasVirginiaUtahWeetVirginiaVirginiaUtahWestVirginiaWyomingVermont	Table 2. Taxon	omy of commun	ity college gover	rnance structures		
ArizonaIndianaOregonHawaiiPennsylvaniaCaliforniaKansasNew YorkSouth DakotaColoradoMassachusettSouth DakotaConnecticutsDelawareMarylandFloridaMichiganIllinoisKansouriIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMarineKentuckyMississippiNevadaKentuckyKentuckyNewNew MexicoKentuckyKentuckyHampshireNorth DakotaKentuckyNorthOklahomaKanseeCarolinaRhode IslandSouthSouthTennesseeKentuckyVirginiaUtahKentuckyWashingtonVermontWestVirginiaKentuckyVirginiaKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentuckyKestKentuckyKentucky </td <td>governing board for CCs separate from K-12 &amp;</td> <td>coordinating/ governing board as K- 12 but separate from</td> <td>coordinating/ governing board as 4-</td> <td>for CC governance falls under a P-20 board</td> <td>for CC governance falls beneath a 4-year coordinating/ governing</td> <td>or governing</td>	governing board for CCs separate from K-12 &	coordinating/ governing board as K- 12 but separate from	coordinating/ governing board as 4-	for CC governance falls under a P-20 board	for CC governance falls beneath a 4-year coordinating/ governing	or governing
CaliforniaKansasNew YorkSouth DakotaColoradoMassachusettConnecticutsDelawareMarylandFloridaMichiganIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaWisconsinVirginia		Iowa				U
ColoradoMassachusettConnecticutsDelawareMarylandFloridaMichiganIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNev AdaNewNew MexicoHampshireNorth DakotaNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaUtahWashingtonVermontWestVirginiaVirginiaUtah				Oregon		•
ConnecticutsDelawareMarylandFloridaMichiganIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaUtahWashingtonVermontWestVirginiaVirginiaUtah					New York	South Dakota
DelawareMarylandFloridaMichiganIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaUtahWashingtonVermontWestVermontWestVermontWisconsinVermont						
FloridaMichiganIllinoisMinnesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaWisconsinVisconsin						
IllinoisMinesotaKentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaWisconsinVisconsin			•			
KentuckyMissouriLouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaUtahVirginiaUtahWestVermontWestVirginiaWisconsinVermont			•			
LouisianaMontanaMaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWestVermontWestVirginiaVirginiaVermont						
MaineNebraskaMississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaJermontWisconsinNemont	•					
MississippiNevadaNewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaJermont						
NewNew MexicoHampshireNorth DakotaNew JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaWisconsinVirginia						
New JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaUsasWisconsinVermont						
New JerseyOhioNorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaUsasWisconsinVermont	Hampshire		North Dakota			
NorthOklahomaCarolinaRhode IslandSouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaJulahWisconsinVermont	-		Ohio			
SouthTennesseeCarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaVirginiaVirginia	•		Oklahoma			
CarolinaTexasVirginiaUtahWashingtonVermontWestVirginiaWisconsinVermont	Carolina		Rhode Island			
VirginiaUtahWashingtonVermontWestVirginiaWisconsinVermont						
WashingtonVermontWestVirginiaWisconsinVirginia						
West Virginia Wisconsin						
Virginia Wisconsin	U		Vermont			
Wisconsin						
	-					
wyoming						
	w yoming					

**Table 2.** Taxonomy of community college governance structures (2000)

Categorization is adapted from Fletcher and Friedel (2016) using Tollefeson, Garrett, and Ingram (1999) and state websites. Categorization necessitates a loss of nuance; however, we took many steps to ensure that our characterization of a state's governance structure is accurate.

## CC GOVERNANCE & LOCAL APPROPRIATIONS

 Table 3. Variable definitions

Variable Description Source

### **Organization & Policy Context**

	The variable was constructed utilizing prior typology research (Fletcher & Friedel, 2017; Tollefson, Garrett, & Ingram, 1999) and publicly available resources. A dichotomous variable for each governance category constructed by following the taxonomy outlined in Katsinas (1996) and further expanded upon by	Katsinas, 1996
Community College	Fletcher and Friedel (2017). To begin, we used Tollefson, Garrett, and Ingram's (1999) book of state community college governance	Fletcher & Friedel, 2016
Governing/ Coordinating Structure	summaries and compared it to Fletcher and Friedel's (2017) summary. In instances in which the governance structure changed between 1999 and 2015, we utilized online, publicly available	Education Commission of the States (ECS)
	resources to identify the year in which the change occurred and the type of governance change. To further ensure validity, we vetted the independent variable against internet searches for the name of each state's governing board and change and/or history.	Various state government websites
FTE Enrollment	The aggregate full-time equivalent (FTE) enrollment at all institutions in a state. This variable represents the total FTE enrollment for a given state.	Delta Cost Project
State Appropriations	The total aggregated amount of funds appropriated to institutions through acts of a state legislative body (except grants and contracts and capital appropriations). Funds reported in this category are for meeting current operating expenses, not for specific projects or programs.	Delta Cost Project
Share of Community College Students out of All Public Enrollees	The number of FTE enrollment of students in the two-year public sector out of all FTE enrollments in the public sector.	Delta Cost Project

**Politico-Institutional Context** 

3

State Citizen Ideology	Measurement of citizen ideology through the identification of ideological positions of Congress using interest group ratings, ideology scores for district incumbents, ideology scores for (real or hypothetical) challengers, and election results reflecting ideological divisions in electorate.	Richard Fording Dataverse (Berry, Ringquist, Fording, & Hanson, 2009)
Percent of the Legislature Identified as Democrat	Measure of state government ideology; the percent of democrats in the state legislature.	Klarner, C. (2013). State partisan balance data, 1937 - 2011. Retrieved from: <u>https://doi.org/10.7910/D</u> <u>VN/LZHMG3</u>
Governor Power Index	Gubernatorial Power Index Derived variable measuring relative gubernatorial power, calculated as the sum of the governor's constitutionally granted powers (between 0 and 4) divided by the highest power index attainable (maximum of 4).	Council of State Governments Book of the States
	Socioeconomic Context	
State Population	The total number of individuals residing within the state in a given year.	U.S. Census ACS
Income Inequality (Gini Coefficient)	An index measuring the concentration of wealth within the state, ranging from 0 to 1. A value of 0 indicates total equality (all households have equal wealth) and a value of 1 indicates total inequality (one household has all the wealth).	U.S. Census Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)
Unemployment Rate	The percent of persons unemployed as calculated by the Bureau of Labor Statistics from the Current Population Survey (CPS). According to the CPS, persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed. Receiving benefits from the Unemployment Insurance (UI) program has no bearing on whether a person is classified as unemployed.	Bureau of Labor Statistics

# Appendix A: Equations

### Fixed effects:

(1)  $LocalAppropsFTE_{it} = \alpha + \beta_1 CCg_{it} + \beta_2 PEC_{it} + \mu_i + \delta_i + \eta_t + \varepsilon_{it}$ 

$LocalAppropsFTE_{it}$ : state <i>i</i> in year <i>t</i>	Dollar amount of local appropriations per FTE for an individual
$\beta_1$ :	Regression coefficients corresponding to one of the two categorical variables created to represent state governance arrangements for community colleges
$\beta_2$ :	Regression coefficients corresponding to control variables from the policy ecology framework
$\mu_i$ :	Constant for the states
$\delta_i$ :	State effects term
η:	Time effects term
$\varepsilon_{it}$ :	A random error term for state <i>i</i> at time <i>t</i>

#### Fixed effects with interaction terms:

(2)  $LocalAppropsFTE_{it}$ 

$$= \alpha + \beta_1 CCg_{it} + \beta_2 PEC_{it} + \beta_3 CCg_{it} * PEC_{it} + \mu_i + \delta_i + \eta_t + \varepsilon_{it}$$

$LocalAppropsFTE_{it}$ : state <i>i</i> in year <i>t</i>	Dollar amount of local appropriations per FTE for an individual
$\beta_1$ :	Regression coefficients corresponding to one of the two categorical variables created to represent state governance arrangements for community colleges
$\beta_2$ :	Regression coefficients corresponding to control variables from the policy ecology framework
$\beta_3$ :	Regression coefficients corresponding to interaction terms between the governance variable and policy ecology controls
$\mu_i$ :	Constant for the states
$\delta_i$ :	State effects term
η:	Time effects term
$\varepsilon_{it}$ :	A random error term for state <i>i</i> at time <i>t</i>