First Innovator States: An Ecological Analysis of Innovation and Diffusion of Policies to Address College Student Financial Insecurity in the American States.

by

Jonathan Todd Cellon

A dissertation submitted to the Graduate Faculty of

Auburn University

in partial fulfillment of the

requirements for the Degree of

Doctor of Philosophy

Auburn, Alabama
May 2, 2020

Keywords: Policy innovation, Diffusion, Policy attributes, Political Networks, Higher education policy, College student financial insecurity

Approved by

Kelly Krawczyk, Chair, Associate Professor, Department of Political Science, Auburn University
Jonathan Fisk, Assistant Professor, Department of Political Science, Auburn University
Bridgette King, Assistant Professor, Department of Political Science, Auburn University
Nicholas Howard, Assistant Professor, Department of Political Science and Public Administration, Auburn University – Montgomery

Abstract

The issue of college student financial insecurity has risen to the political agenda of post-secondary institutions and states since the Recession of 2007 – 2009. This need is driven by stark increases in the cost of college for students. As awareness to student financial need has increased, new programs and policies to address student need have been created by states. This research explores the actions of three states who were the first in the United States to advance a particular policy model by exploring the actions of networks made up of advocates, institutions, non-profits, and policymakers. Social network analysis is used to determine the actions, roles, strategies, and challenges that these innovative, multisector networks faced in creating new policies. In doing so, this analysis modifies Hale's (2011) taxonomy of *Information Positions of Networked Actors* and build a theory of multisector networks in higher education based on the critical and unique roles of champions, supporters, and outside allies in formulating and diffusing policy innovations. The diffusion process is explained by national organizations (who were outside allies in the original policy innovation) who serve as educators and advocates for policy models to secondary adopting states. Supporter and champion organizations help create reverse innovations, or complementary innovations at the local or institutional level that support the existence of an anchoring innovation. This study concludes with an exploratory analysis of the effects of five attributes of innovations (Rogers 2003) on the diffusion process and finds that compatibility has a positive, statistically significant effect on the rate of diffusion, whereas increases in relative advantage have negative, statistically significant effects on the rate of diffusion. Combined this analysis demonstrates how state networks can be sources of innovation and diffusion to local, state, and federal policy action. As such, it develops a theory and rationale for state level polydiffusion.

Acknowledgements

Many people contributed to the completion of this research. First, I would like to thank my Dissertation Chair, Dr. Kelly Krawczyk, for her guidance, support, and patience with my research. I also would like to thank the rest of my committee, Drs. King, Fisk, and Howard, for their research assistance and support in improving my analysis. Each of you have provided the needed autonomy, direction, and perspective to help me complete this project. Special thanks are also owed to my classmate, Zach Mehavza, for his friendship, guidance, and willingness to help improve my methods and analysis, and Dr. Hal Fulmer, who is my supervisor in my professional role at Troy University, for his mentorship, and encouragement.

Finally, thank you to my family for your constant patience, support, and love during this process. I owe special appreciation to my wife, Lindsay, for her sacrifices, tolerance, and endurance with this process. Finally, I owe gratitude to my children, Alice (11), Ada (8), and Will (6), who equally sacrificed for the completion of this process. These efforts are for each of you.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Introduction

The issue of college student financial insecurity has risen to the political agenda of post-secondary institutions and states since the Recession of 2007 – 2009, which caused stark increases in the cost of college for students. As awareness to student financial need has increased, new programs and policies to address student need have been created by states. This research explores the actions of three states who were the first in the United States to advance a particular policy model. More specifically, this analysis explores the actions of networks made up of advocates, institutions, non-profits, foundations, and policymakers to create innovative policies to address college student financial insecurity. Social network analysis is used to determine the actions, roles, strategies, and challenges that these innovative, multisector networks faced in creating new policies. This study also explores the diffusion process of the innovative policies to other states. To do this, attributes of the specific policies that were created in the three innovator states are analyzed. This analysis, combined with outcomes of the social network analysis, allows for a fuller picture of the diffusion process.

Study Purpose and Research Questions

There are two main purposes for this study. The first purpose of this study is to examine why first innovator states acted to address college student financial insecurity and to understand how networks and entrepreneurs affected what policy model these states adopted. The second purpose of this study is to advance research on how the dynamics of policy actions of first innovator states shape future adoptions by secondary adopting states. Thus, this study focuses on policy action of innovator states as explained by networks of actors, attributes of specific policy models chosen, and the internal / external ecosystem surrounding the innovator states. Out of these purposes, the main research questions for this study are:

RQ1 – How do the structure, participants, actions and arrangement of networks of actors affect the actions and choices of first innovator states in addressing college student financial insecurity?

RQ2 – How does the arrangement of networks of actors within innovator states affect the subsequent diffusion to secondary adopting states?

RQ3 – How do the attributes of this policy choice (relative advantage, compatibility, trialability, observability, and complexity) affect the rate of adoption amongst secondary adopting states?

Background of the Problem

The financial challenges and needs of college students are an emerging policy issue across the U.S. political landscape. Research reported by the National Conference of State Legislatures (Fillion 2016) indicates that college tuition at public institutions has outpaced inflation growth every year since 1980. Since 1990, this has resulted in an increase of tuition at public institutions by more than 160 percent after adjusting for inflation and a doubling of national average tuition costs at two-year institutions (State Higher Education Executive Officers Association 2016).

Simultaneously, the burden of college costs has shifted from states to students. This is due, in part, to higher education being a discretionary budget item for states, with no mandatory minimum spending, coupled with having a viable alternative revenue source to state funding in the form of tuition paid by students (Braxton, Doyle, Hartley III, Hirschy, Jones, and McLendon 2014). Research by the State Higher Education Executive Officers Association indicates that in 1991 states assumed nearly 75% of the portion of college costs, while students paid the remaining 25%. By 2014, that ratio had shifted to where states were bearing 55% of the burden, while students covered the remaining 45% (State Higher Education Executive Officers Association 2015). This rate of change accelerated after the Recession. As state coffers slowly recovered from the Recession, states provided on average 18 percent less funding per student than before the recession (Mitchell, Leachman, and Masterson 2016). Reduced state funding has resulted in tuition hikes, which have increased on average by 33 percent during this time (College Board 2017). Since 2017, hikes have leveled off as the economy has more fully recovered (State Higher Education Executive Officers Association 2019). However, while much variation exists in the rates of funding cuts and tuition increases across states, the general trend points to a shift in viewing higher education as a private good, rather than a public one (Hebel 2014; Fischer and Stripling 2014).

This combination of decreased allocations for higher education and the shift of the burden of paying for college from taxpayers to students and their families has made institutions more reliant on tuition dollars. In 1990 tuition accounted for 25% of total higher education revenue; however, by 2013 that proportion reached a high of 48 percent (State Higher Education Executive Officers Association 2015). To help offset the new reality of less money available at the state level, the U.S. federal government has increased its support of higher education through focused attention on expanding college access via Pell-Grants and federally sponsored student loans (Pew Charitable Trust 2015). While this has helped grow the number of low-income students attending college, it has not been successful in controlling the costs of college or the financial burden states face in funding higher education (Goldrick-Rab 2016). As the economy has strengthened, funding for higher education stabilized in 2017 – 2018 and funding increased at the rate of inflation during this time. This resulted in more state financial aid for students and a slowing of enrollment declines. However, when adjusted for inflation, education appropriations per student remain below the levels reported ten years ago (Mitchell, Leachman, and Saenz 2019).

All of this has occurred during a period when college education is increasingly important as the U.S. has moved to a knowledge-based economy and a college degree results in significant lifetime earning advantages over those with a high school diploma (Carnevale, Jayasundera, and Cheah 2012). This importance was exacerbated by the Recession, as 95% of jobs created after the Recession from 2010 to 2016 went to those with at least some college education. The resulting employment change post-Recession resulted in 8.6 million more jobs for those with a bachelor's degree or higher, 1.3 million more jobs for those with an associate's degree or some college, and 5.5 million less jobs for those with a high school diploma or less (Carnevale et al.).

Combined these trends point to the importance of higher education in today's society; however, state budgetary allocations for higher education have not kept up with demand. The downstream effect of decreased state support for higher education, increased tuition costs, and increased need for college have resulted in higher levels of student debt, which now exceed one trillion dollars nationally. This stands second only to home mortgages in aggregate consumer borrowing (Fillion 2016). This has created long-term concerns over an emerging student debt crisis (Hebel 2014; Goldrick-Rab 2016). Many advocates argue that this may prevent or discourage low- or moderate-income students from attempting to go to college, or from completing college at a time when the demand for and value of a college education has never been greater. The sheer cost and potential high debt load of attending college may make it cost prohibitive or increase the challenges for degree completion for current students.

For those that do still elect to attend college, another important concern has emerged: college student financial insecurity, which is defined as lacking the financial resources to adequately access higher education consistently or afford basic needs such as housing, food, transportation, and health. College student financial insecurity has risen post-Recession (Goldrick-Rab 2016). However, pre-Recession public opinion research indicates that in general the public does not support providing large amounts of assistance to students who are struggling (Immerwahr and Johnson 2010; Immerwahr and Foleno, 2000). Nevertheless, the increased financial burden on students has caused scholars and activists to focus on the increased costs of college attendance and the related financial issues many students face such as food and housing insecurity (Goldrick-Rab; Dubick, Mathews and Cady 2016; Goldrick-Rab, Richardson, and Hernandez 2017). Out of this research and activism, an ecosystem of local and national organizations, scholars, institutional and state level programs have emerged. This emergent ecosystem has produced both programmatic and policy innovations at the institutional and state level. These innovative ecosystems and the policy models they have produced are the focus of this study.

Case Selection

According to Rogers (2003), an innovation is an idea, practice, or object that is new to the entity adopting it. In the realm of public policy, policy innovations are policies/programs that are new to the government adopting it (Walker 1969). Borins (2014) adds to Walker's definition and posits that policy innovations help determine who gets what, when and how by structuring the rules of politics, and determining the legitimate aim and scope of government. In doing so, they can alter the existing costs and benefits of government programs. All public policy innovations are marked by three components: a program that is doing something new, agents who are responsible for implementing the innovation, and an organizational context within which the program is implemented (Borins). As such, a successful public-sector innovation process depends on an evolving interplay of interpersonal, organizational, political, social and economic variables (Steelman 2010). States in the U.S. federal system provide an excellent basis for studying public policy innovation because each state operates within a common political system, with common political structures, but with distinct resources, cultures and norms.

Given the climate described above, states are increasingly being forced to examine ways to control costs and extend support to current and prospective college students via policies that address college student financial insecurity. First innovator states are addressing the public issues generated by the current college affordability crisis stemming from the Great Recession in different ways. For the purpose of this study, first innovator states are defined as those who are the first to pioneer a particular policy model of state-wide legislation. Focus on first innovator states advances scholarship in understanding policy innovation, the impacts of networks of actors, and the role of first adopters on subsequent policy diffusions. This analysis focuses on enacted policy innovation by three first innovator states to explore the effects of political networks and attributes of policy innovations on the innovation and diffusion processes through case studies using social network and policy attribute analysis. Three first innovator states and their policy models are briefly detailed below. The three states and the organizational networks that produced the policy innovation are the focus of this study.

Case Study # 1: Tennessee.

In 2014, Tennessee lawmakers created the Tennessee Promise scholarship which provides last dollar funding for graduating high school students who choose to attend community and technical college. Last dollar funding fills any gap between available scholarships and grants a student receives and the total direct costs of college tuition (Association of Community College Trustees). Through the program and any existing grants or scholarships a student may receive, Tennessee students can attend community college tuition-free. Funding comes from the state lottery (Lobosco 2015). In 2017, lawmakers passed the Tennessee Reconnect Act, which extends last dollar funding to adults and is also supported by state lottery funds. Both scholarship efforts were driven by Governor Bill Haslam (R) and part of his Drive to 55 efforts which aim to grow the number of state residents with post-secondary degrees or training to 55 percent by 2025 (Hess 2017). Since 2014, the comprehensive free community college model has spread to sixteen other states (Powell 2018, Campaign for Free College Tuition 2019).

Case Study # 2: California.

California has been active in advancing legislation to address college student food insecurity. In 2014, the California State Legislature passed AB 1930, which created a workgroup to provide the state guidelines for access to the U.S. Supplemental Nutrition Assistance Program for college students. In September 2016 Governor Jerry Brown approved California AB – 1747 Food Assistance: Higher Education Students, which established the Public Higher Education Pantry Assistance Program Account (California State Legislature 2016). The account is funded through monies from the U.S. Department of Agriculture and voluntary tax contributions from California taxpayers. The program is designed to financially support community level food banks that manage on-campus food pantries and provide hunger relief efforts for college students. Additionally, California AB – 1747 expands SNAP access for college students and requires colleges and universities to coordinate with local food assistance programs. This was followed by AB 214 and 453 in 2017, AB 1894 in 2018, and SB 173 and AB 74 in 2019. Passed in 2017, AB 214 expanded the Restaurant Meal Program under SNAP, and clarifies Employment and Training eligibility for SNAP benefits (California State Legislature 2017a). AB 453 was not approved in the legislature because it was instead included in the Budget Act of 2017. AB 453 provided $2.5m to the three state higher education systems to create or expand meal sharing programs and campus food pantries (California State Legislature 2017b). Passed in 2018, AB 1894 allows California State University students who are homeless to use SNAP benefits at college campus cafeterias through the Restaurant Meals Program. SB 173 passed in 2019 and focuses on removing barriers for students to get subsidies under SNAP by streamlining the application process and eliminating barriers for receiving benefits for college students in the state (California State Legislature 2019b). California legislators also passed AB 74 in 2019, allocating $19M to address college student homelessness through rapid rehousing and case management services across the three higher education systems. $9M was allocated for the community college system, $6.5M for the CSU, and $3.5M for the UC system (California State Legislature 2019a). AB 612, which was passed in 2019, built on AB 1894 from 2018, and extended access to the Restaurant Meals Program to students in the California Community Colleges system. Collectively, the policy initiatives were promoted by a collection of food bank organizations, university officials, and research conducted by the state higher education systems and national non-profit and advocacy groups.

Case Study # 3: Washington.

In 2018, the state of Washington's legislature passed SB 6274 that established the Passport to Careers program to help more Washington students—specifically, those who have been in foster care or who have experienced homelessness—prepare for careers via post-secondary education. SB 6274 expanded the existing Passport to College Promise program, which previously provided college scholarships and support services for foster youth who have been dependents of the state. SB 6274 expanded foster care eligibility to include youth in federal and tribal foster care and made homeless youth eligible for the program. Additionally, it included workforce training programs such as apprenticeships as an eligible form of post-secondary education (Washington State Student Achievement Council). The same year, Washington lawmakers also considered a plan (HB 2854) to further help homeless college students already in college through case management, meal plans and stipends for essentials of daily living such as clothing, laundry and showers (McAvoy 2018). The bill was passed in the Higher Education committee but failed to make it out of Appropriations (Washington State Legislature 2018). In 2019, advocates again brought forward legislation to address issues concerning college student homelessness and the Washington State Legislature passed HB 1893 and SB 5800 (Washington State Legislature 2019a, Washington State Legislature 2019b). SB 5800 established pilot programs in the state to aid homeless students. Pilot programs could include access to laundry facilities, storage, lockers room and showers, access to meal plans or food provision, housing assistance or short-term housing, and case management services (Washington State Legislature 2019b). HB 1893 creates an emergency assistance grant program in the state to provide students of community and technical colleges monetary aid to assist students experiencing unforeseen emergencies or situations that affect the student's ability to attend classes (Washington State Legislature 2019a).

Significance of the Study

Existing research explored below indicates that innovativeness, or the degree to which an organization adopts new ideas earlier than other members of a system, is multidimensional and the collaborative dynamics of networked actors, along with the attributes of innovations selected influence the adoption and subsequent diffusion of a particular policy (Rogers 2003). As such, this study will examine why first innovator states acted to address college student financial insecurity and seeks to understand how networked actors affected which policy model these states adopted. Additionally, this study will focus on the effects of policy actions by first innovator states on future adoptions of secondary states. As such, this study seeks to strengthen our understanding of the impetuses for policy innovation; explore how networks and entrepreneurs affect what states do; and analyze the role of first innovators and the characteristics of the policies they innovate in sparking positive policy feedback cycles. Each is explored below.

Significance # 1: Strengthening Our Understanding of Policy Innovation – Why States Act.

Supreme Court Justice Louis Brandeis in *New State Ice Co. v. Liebmann* famously coined the phrase "laboratories of democracy" to describe how a "state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country" (Boushey 2010, 24). Given the rapid and recent expansion of policy action, research on policy innovations to address college student financial insecurity offers insight into how states act as laboratories of democracy to address a growing public issue.

Policy innovations across states are not fully explained by existing studies. Political scientists generally explain policy diffusion as incremental policy learning by state governments (Walker 1969, Gray 1973, Berry and Berry 1990). Government officials identify and emulate those policy innovations that present convenient or popular solutions to existing social or economic problems (Walker 1969; Shipan and Volden 2006). State policymakers are seen as identifying problems and goals, conducting a limited search for policy solutions, assessing and evaluating contending solutions, and selecting the best possible solution. Policy innovation and diffusion literature stresses internal determinants within states (political, economic and/or social characteristics) and external modeling of leader states as the principal explanations for why states adopt a new program (Berry and Berry 2014; Hale 2011; Mintrom 2000). However, Karch

(2007) asserts that these factors do not have a strong and consistent effect on the enactment process. Further, Boushey (2010) states that innovation research must begin to account for the important causes of policy variation, including the impacts of networks and policy entrepreneurs on variances of innovative policy models in first innovator states.

This research aims to account for these variations by focusing on the actions and effects of policy entrepreneurs and networks on the choices of state policymakers. In doing so, this research aims to address Walker's admonition "to develop explanations of these processes we must go beyond the search from demographic correlates of innovation and develop generalizations which refer to the behavior of those who actually make the choices in which we are interested" (1969, 887). Literature on policy entrepreneurs emphasizes the activities of individuals or groups to advance preferred policy ideas through the strategic mobilization of networks that seek to create windows for policy change through disruption of established political coalitions who maintain the status quo (Baumgartner and Jones, 2009; Mintrom 2000; Schneider, Teske, and Mintrom 1995; Mintrom and Vergari 1996; Roberts and King 1992; Kingdon 1995). Additionally, research on policy networks seeks to understand how patterns of horizontal and vertical actors coordinate interests to create and implement policy (Karch 2007; Agranoff 2007; Boushey 2010; Steelman 2010; Hale 2011). Central to this line of inquiry is how inter-organizational relationships of government and non-government actors emerge from interaction and shared interests, and how policy action is shaped by the mobilization, strength, and characteristics of policy networks. Integrating research on policy innovation, policy entrepreneurship, and the role of networks together offers a comprehensive view of policy innovation that more fully demonstrates why and how states act.

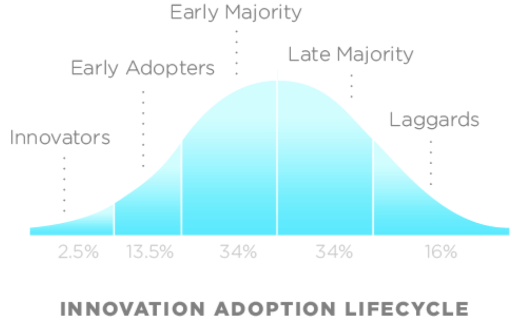
Significance # 2: Deepening the Understanding of Policy Actions – How Networks and Entrepreneurs Affect What States Do.

Understanding why states act though analysis of networks and entrepreneurs also allows researchers to identify how innovative policies are shaped by these actors and why they may vary across states. As devolution and fiscal constraints restrict governments, increasingly policymakers and government must rely on broad networks of actors to create and execute policy (Agranoff 2007; Hale 2011). Hale (2011) emphasized that relationships and information sharing within networks shape what policy action is taken and how policies are diffused. The arrangement of entrepreneurs, organizational stakeholders, missions, resources, commitment, interests and leadership varies across networks and affects policy outcomes. Policy entrepreneurs play a central role in coalition building and network formation (Mintrom 2000, Schneider, Teske and Mintrom 1995). Subsequently, inquiry on policy innovations and outcomes must include entrepreneurs and networks as part of the political landscape in which states act. The issue of policy innovations to address college student financial insecurity involves state and regional non-profits, individual entrepreneurs, national interest groups, sub-government action by state colleges and universities, and legislative champions. This political milieu offers a rich ecosystem to understand how resources, such as information, influence, policy models, funding, and personnel/expertise, etc. is exchanged in a network and how the nature of this exchange affects outcomes.

Significance # 3 – Understanding the Role of First Innovators and the Characteristics of the Policies they Innovate in Sparking Positive Policy Feedback Cycles.

The diffusion of policy innovation is commonly modeled as an S-shaped curve where policy innovations are marked by an increasing rate of adoption after first and early adopters receive positive feedback on their innovation actions. This leads others to embrace and adopt the innovation over time (Tarde 1903; Simmel 1955). Rogers (2003, 281 – 299) sorts innovation adopters into five categories based on the timing of a decision to adopt. *Innovators* are the first 2.5% of adopters that are the most risk-taking and have relatively more slack resources to devote to the trial of innovative policies. Innovators are connected and networked with *Early Adopters*, who model their actions off those of the innovator. To Rogers, early adopters are the next 13.5% of the population who adopts an innovation. Further, early adopters shape the diffusion process for the *Early Majority* (or the next 34% of the population to adopt an innovation) by demonstrating the capacities and shortcomings of a policy to meet its objectives and by establishing networks of interest groups to shape public opinion regarding innovation, select political venues and mount a diffusion campaign across states. The early majority may deliberate for some time before acting on an innovation. The actions of the early majority are then followed by those the *Late Majority* – or the next 34% of the population to adopt an innovation, which may have been initially skeptical, but choose to adopt based on rising peer pressure or system norms. *Laggards* constitute the last 16% of the population to adopt an innovation, if they do at all. Laggard tend to be traditional in their values, suspicious of innovations of change, or limited in their resources. These categories are presented as a bell-curve by Rogers in Figure 1-1 below (Interaction Design Foundation 2019).

Figure 1-1: Everett Rogers' Adopter Categories and Innovation Adoption Lifecycle



In a 50-state system such as in the U.S., Rogers' Adopter Categories and Innovation Adoption Lifecycle would roughly play out like Table 1-1.

Table 1-1: Rogers' Adopter Categories Applied to the U.S.

Category	Percentage	# of states
Innovators	2.5%	1
Early Adopters	13.5%	7
Early Majority	34%	17
Late Majority	34%	17
Laggards	16%	8

Examining the actions and choices of networked actors within first innovator states allows for insight into how network construction affects the diffusion process. Mintrom (2000) emphasizes that external networks formed out of innovations are most important for the spread of innovative ideas by providing validation of the policy innovation which helps them get onto the policy agenda of other states.

Significance # 4 – Increasing Our Understanding of Policy Diffusion

Lastly, this analysis advances scholarly understanding around the dynamics of policy diffusion. Specifically, the study addresses critical gaps in the understanding of policy attributes on the diffusion process. Rogers (2003) posits the specific characteristics of innovations, such as relative advantage, compatibility, trialability, observability, and complexity have important effects on the rate of diffusion to secondary actors. Rogers' research examines a variety of innovations, not just policy innovations, and posits that innovations that are less technically complex, hold relative advantage over others, have been experimented with before, have demonstrable results, and that are compatible with existing norms and structures are more likely to be adopted by others rapidly (Rogers 2003). However, limited research (Makse and Volden 2011) has extended his findings into political science to examine the effects of policy design choices by initial innovators on subsequent adopters. Makse and Volden studied the diffusion of criminal justice policies and found that higher levels of relative advantage and observability were associated with greater likelihood of adoption, while complexity was associated with less likelihood of diffusion. This research seeks to advance understanding about the effect of policy attributes by extending analysis into another policy domain.

Additionally, as will be explored in Chapters 4 – 6, this research posits that the diffusion literature takes an overly simplified approach to diffusion by too often analyzing it as a yes or no question entertained by horizontal actors looking to adopt replica policy models. Alternatively, this research finds and posits that diffusion is multidimensional, where actors above and below an innovator point source can adapt an innovative policy to their environments. In doing so, this research extends and amplifies Mossberger (2000) and Mossberger and Hale's (2002) theory of polydiffusion where experiences, information, and stimuli are shared in all directions across levels of government or intersectoral networks. Polydiffusion and the role of states in this process are further explored in the subsequent chapters.

Assumptions and Limitations

There are three primary limitations to this study. Relative to the first purpose of this study, which is to understand how multisector networks and entrepreneurs moved first innovator states to act, this analysis uses social network analysis. Social network analysis focuses on relationships between actors to explain outcomes, where as traditional social science focuses on the attributes of actors to predict individual outcomes. As such, network theory posits that flows of resources within networks are the key mechanism underlying outcomes (Borgatti 2016). As such, social network analysis relies heavily on understanding webs of relationships. This understanding is limited by the extent of participation among relevant actors in the network analyzed and is negatively affected by missing data (Borgatti, Everett, Johnson 2013). However, as described in Chapter 3, all efforts were made to ensure participation by relevant actors. The author takes personal responsibility for any missing or incomplete data that leads to inaccurate interpretations of social network data.

The second limitation is connected to the second purpose of this study, which is to advance understanding of how actions of networks within first innovator states and the attributes of specific policy models chosen shape future adoptions by secondary adopting states. Here again, the potential for missing data affecting results is possible. Further, this study analyzes three innovative policies relatively early in their diffusion process. Each original innovation was adopted as policy within the first innovator state in the 2014 – 2018 time period. As such, each has a different originating date. Combined with the fact that each policy is its infancy in terms of diffusion, using a traditional event history analysis to identify correlates for secondary state adoption is difficult. Instead, this research uses multiple regression to examine the early effects of policy attributes on the diffusion process. In doing so, it does not include state level characteristics that allow for a fuller picture of the variables affecting diffusion to take place. This is an area for future research as each policy matures and is more broadly diffused. Chapter 7 explores this more fully.

The final limitation is based on the research methodology and analysis of case studies of three innovative states who advanced policy innovations in access to higher education. This research advances understanding of policy innovation within a specific policy area using data from three innovator states and every effort is made to position research findings within the context of state policy innovation and diffusion literature. However, like any case study, the generalizability of these findings to other states or policy areas may be limited.

Conclusion and the Layout of the Dissertation

In conclusion, this study fills critical gaps in scholarship around the importance, roles, and dynamics of multisector networks and policy entrepreneurs to spark state policy innovation. This study further advances scholarship on the effects of network construction and attributes of policies on the diffusion process to secondary adopting states. As such, this analysis illuminates how the ecology of networks of actors, attributes of specific policy models chosen, and the internal / external ecosystem surrounding innovator states matter in the innovation and diffusion process.

Chapter 2 reviews relevant research regarding how networks and policy entrepreneurs can spark policy innovation and diffusion. The chapter also explores the factors that spark and limit innovation within higher education, and the relevant federal policies that influence higher education funding, programming, and practice. Further, it explores the issue of college student financial insecurity and how it has risen to be an area of focus for advocates, higher education leaders, and policy makers. Chapter 3 outlines the methods used in case study analysis of the actions of networks in Tennessee, California, and Washington to create policies to address college student financial insecurity in their state. The chapter details the methods of data collection, social network analysis, attribute analysis, and diffusion analysis, which undergird Chapters 4, 5, and 6. Chapter 4 is an analysis of the actions in Tennessee to expand college access through the Tennessee Promise and Reconnect policies. Chapter 5 analyzes the incremental actions and dynamic network of actors in California who have advanced multiple policies to first address college student financial insecurity, which have expanded to tackle student housing insecurity. Chapter 6 analyses the two networks in Washington state who have created policies and programs to address college student homelessness and housing insecurity. In doing so, the chapter explores the limitations and opportunities of federal housing policies in addressing college student housing insecurity, and details the challenges of coordination in multisector networks. Chapter 7 builds a theory of how multisector networks in higher education produce policy innovations. The chapter also specifies the importance of coordinated action and specific roles in the innovation and diffusion process. Finally, it explores the role of policy attributes in the diffusion process.

Chapter 2: Review of the Literature

Introduction and Theoretical Framework

Understanding the conditions under which states are the first to innovate a particular policy model and the role organizational networks and policy entrepreneurs play in this process highlights a number of contemporary research domains within political science. This include research on policy change, state policy innovations, the role of organizational networks, innovation within higher education, policy entrepreneurship within those networks, and diffusion to secondary adopting states. Research in these fields indicate that innovativeness is multidimensional and is borne out of the collaborative ecology of networked actors within a state. This dynamic, along with the attributes of innovations selected, influence innovation and adoption process, along with the subsequent diffusion of a particular policy to secondary states. Relevant existing research in these fields is explored below.

Review of Research

Understanding policy change

Policy innovation is created out of conditions that produce policy change. Policies are generally stable; however, policy change does occur when there are shifts in political subsystems. Political subsystems are constellations of actors that share interests, exchange information and resources, and seek to obtain and maintain preferred policies and power structures (Hamm 1983). As such, political subsystems are generally stable; however, windows for increased policy action do occur. Kingdon (1995) asserts that policy action is possible when participants push an issue on to the political agenda by reframing conditions as problems that deserve policy attention. This is done when there are changes in indicators, focusing events, and feedback is generated to officials from existing policies. Problem redefinition softens up the political environment for placing an issue on the political environment through changes to the public mood, interest group actions, or changes to the structure or outlay of decision makers. Consensus is built by bargaining over preferred policy alternatives and proposals. Often ideas appear, float around subsystems, and then fade. Both new and existing ideas confront one another and combine with others in various ways. Ideas that have technical feasibility and align with the values of the subsystem survive and are taken more seriously as possible policy choices. Kingdon asserts that a policy window opens when problems are redefined and policy alternatives for this redefined problem are identified within an accepting political environment that is being negotiated by policy entrepreneurs. This allows advocates to push their preferred solutions to being enacted.

Baumgartner and Jones (1991, 2009) build off of Kingdon's work and theorize that policy subsystems are generally stable but occasionally go through periods of rapid change when new actors enter the system and policies change dramatically. Stability is explained by subsystems that insulate themselves from new policy ideas and competitors to ensure the power balance between existing and legitimized actors in the political subsystem. However, instability and change can occur when forces outside of the subsystem mobilize and challenge the existing power arrangements. New ideas may successfully invade a subsystem and lead to policy punctuations that are dramatic policy changes that destroy and/or replace existing subsystems. This is done through the creation of a new problem or policy image stemming from research or a focusing event that leads to the redefinition of the conflict associated with a problem. Policy advocates and entrepreneurs are critical to this process, as they advance research, leverage critical events, generate media attention, and identify allies, which leads to expanded conflict within the existing political subsystem. This conflict creates the basis for mobilization of interests that seek to reshape institutional control and the political agenda, and advance preferred policy solutions that lead to punctuated policy choices by decision makers.

Baumgartner and Jones (2009) root their concepts of mobilization in the work of Anthony Downs (1972) and Elmer Schattschneider (1960). "Schattschneiderian" mobilization opposes an existing subsystem and, if successful, leads to the destruction of the old subsystem. "Downsian" mobilization occurs without a pre-existing subsystem in place and takes place when a wave of enthusiasm leads to the creation of a wholly new subsystem. This new subsystem institutionalizes the political impulses and enthusiasms that led to the mobilization. Both forms of mobilization lead to changes in the political agenda of issues to be addressed by government action. Differentiated responses are based on interest group strength and legitimacy (Cobb and Elder 1971), as well as political culture and strength of local networks (Scholz and Wang 2006).

Policy innovation

Policy innovations are created out of windows of policy change. Policy innovations such as state-level responses to college student financial insecurity can be explained by analyzing where and under what contexts adoption occurred. Policy innovations are policies/programs that are new to the government adopting it (Walker 1969); whereas diffusion is the process by which innovations spread through channels over time in a given system (Rogers 2003). Polsby (1984) posited that innovation occurs through the convergence of three forces: 1. The activity of interest groups; 2. The convictions of policymakers and experts; and 3. Comparative knowledge of the ways in which problems have been handled elsewhere. Policy entrepreneurs, who apply their expertise to elaborate and adapt knowledge to problems, are central to this process.

Decisions to pursue innovations are shaped by innovations themselves. Rogers (2003) states that policymakers consider attributes of innovations such as relative advantages compared to other policy models; compatibility with needs and existing programs, structures, and culture; the complexity in enacting and implementing the policy; the extent to which it has been tried by others, and the observability of results to others. In considering these factors, policymakers seek to limit uncertainty via a limited search of policy alternatives using cognitive heuristics provided to them by the actions of interest groups and policy entrepreneurs (Karch 2007). Makse and Volden (2011) find that higher levels of relative advantage and observability are associated with greater likelihood of adoption; whereas complexity is associated with lower likelihood of adoption.

Additionally, state context, interest groups, policy entrepreneurs and elected officials play a vital role in agenda setting, alternative selection and policy network development (Smith and Larimer 2013). Researchers have identified two primary explanations for innovation and diffusion – internal determinants and external pressures for change (Berry and Berry 2014). These factors are explored below.

Internal Determinants for State Innovation.

Internal determinants for state innovation include political, economic and social characteristics of a state. State political context can be measured by government ideology (Berry, Rinquist, Fording and Hanson 1998). Berry et al (1998) demonstrate that policy outcomes vary across states according to the political ideology of the state legislature, the governor, and elites. Schattschneider (1960) theorized that party competition creates policies that are beneficial to the economically disadvantaged due to the increased electoral incentive to extend public benefits. Barrilleaux (1997) extended Schattschneider’s theory and found that electoral competition leads to increased public policy liberalism. Further, greater public liberalism (as measured by the percentage of Democrats in state legislature) leads to the enactment of more liberal public policies. Shipan and Volden (2006) find that policy innovation is more likely when state legislatures are more professional. Carter and LaPlant (1997) assert that professional legislatures are more likely be able to handle complex policy issues over their less professionalized peers, who must rely on program analysis and learning generated from more innovative states. Derthick (1970) found that legislative professionalism is linked to early adoption and increased state spending in public assistance. Local policy adoptions make state action less likely when states lack legislative professionalism. Lastly, Boushey (2010) asserts that states with more frequent and longer legislative sessions should be expected to be more innovative.

Economic resources also contribute to the nature and shape of state policy action. States with abundant resources have means to take risks on unproven policy innovations; whereas states with limited means are constrained in their ability to pursue new policy ideas (Downs and Mohr 1976; Walker 1969). The economic resources of a state are contingent on the economic strength of a state as measured by educational attainment, unemployment, per capita income, and degree of industrialization / urbanization (Walker 1969). Several studies show that states that are rich, urban, liberal, and with competitive parties tend to provide greater welfare to needy citizens and more funding to education (Barrilleaux, Holbrook, and Langer 2002; Brown 1995; Tweedie 1994). Gray (1973) found that wealthier states were early adopters of policy innovations in civil rights, education and welfare policies. Building off this, Rogers (2003) asserts that innovations serve as levers that widen existing gaps between rich and poor states because initial innovators achieve greater, earlier profits that widen performance outcomes between innovator states and later adopting states.

Innovation is also driven by pressure within a state for change. Mintrom (2000) asserts that increased problem severity increases the likelihood that an issue reaches the policy agenda.

In other words, policymakers are more likely to act when demands on government increase due to the severity of a problem. Need and the associated policy image can be leveraged by policy entrepreneurs to reframe issues and alter political subsystems of actors (Mintrom 2000; Schneider, Teske and Mintrom 1995). As it relates to college student financial insecurity, severity can be measured by rates of food or housing insecurity, Pell Grant disbursement, student debt, default on student loans, and/or lack of persistence through completion of college due to financial burden (Goldrick-Rab 2016). Pressure can be increased via rates of political participation and voting by college aged youth as elected officials generally share an interest in being re-elected (Mayhew 1974). Pressure is also generated by interest groups, such as research organizations, alliances of higher education leaders, and student groups, which advance policy ideas, conduct research, and mobilize voters (Gray and Lowery 1996; Roberts and King 1996; Karch 2010). Karch (2010) and Hale (2011) also posit that interest groups and advocates who provide timely and accessible information are critical in the knowledge acquisition process for concerned policymakers.

External Pressures for Change.

Alternatively, policy choices of states can be influenced by external sources – including vertical sources, such as national policy initiatives and federal mandates, and horizontal causes such as nongovernmental actors, non-profits, and the choices in peer or neighboring states (Mintrom 2014; Hale 2011). Vertical influences such as national policy initiatives and positions taken by the President can shape state policy actions. Allen, Pettus and Haider-Markel (2004) explore the mechanisms and conditions under which the U.S. federal government influences state policymaking. Allen, et al. develop a general theory that the national government sends signals of preferred policy choices to state policymakers through actions such as incentives, sanctions, messages and mandates. If these signals are strong and clear, policy adoption by the states is more likely. When signals are mixed, states are more likely to act on their own, absent clear direction from the federal government. Related to college student financial insecurity, over the course of his two terms in office, President Obama advanced policy actions to regulate the financial burdens created by for-profit educational institutions, increased federal financial aid to low-income students, and called on states to control costs and increase graduation rates or risk losing federal financial aid. Eventually this evolved into a proposal for a comprehensive college-ratings system that aimed to tie federal financial aid to institutional affordability, graduation rates, and earnings of graduates (Lederman and Fain 2017). He also championed free college models similar to those in Tennessee. However, the impacts on these directives on specific state innovations is unknown. This is an area for further analysis.

Horizontal variables such as nongovernmental actors, non-profits, and the choices in peer or neighboring states can make states more likely to act (Berry and Berry 1990; Mintrom 1997; Shipan and Volden 2008). States are influenced by associated policy choices of other states through mechanisms such as learning, imitation, normative pressure, competition, and coercion through regional actors and networks (Brooks and Kurtz 2012; Berry and Berry 2014). Actions by neighboring states provide a cognitive heuristic that limits the search for policy solutions by policymakers (March and Olsen 1989; Tversky and Kahneman 2000). Building off this, Volden (2006) finds that policymakers tend to emulate policy adoptions of states with similar partisan and ideological orientations. Makse and Volden (2011) hypothesize that early adopters may act on the basis of potential policy impact; whereas later adopters act on the basis of actual policy impact that has been observed and learned from other states' experiences. These are factors to consider when looking at diffusion patterns stemming from first innovator states.

Critique of Existing Literature and Emerging Ideas on Policy Innovation

Existing policy innovation and diffusion literature underscores the critical role of state characteristics, and vertical and horizontal forces, on the innovation and diffusion. However, Walker (1969) and Karch (2007) caution against devoting so much focus on correlates of innovation that scholars neglect to consider the impact of individuals and networks that make up the policy context. This is in part because Karch finds lack of strong and consistent effects of national intervention, neighboring states, problem severity, state wealth, legislative professionalism and ideology on the enactment process across policy areas. As such, a broader analysis of the political ecology that considers the culture, structures, and individuals that shape policy innovation is needed (Karch 2007; Steelman 2010; Hale 2011; and Boushey 2014).

Boushey (2010, p. 5) cautions that “if states are truly the laboratory of democracy then diffusion research must begin to account for the important causes of variation in the contagion and virulence of innovations that lead to such different patterns of policy diffusion.” Here it is important to note that in public health terms viruses and contagions begin at a single point source and then spread to a broader population. This is shaped by both the characteristics of the virus, which is borne out of the context of the host site. The spread of the virus is then shaped by the ecological conditions of the population. However, political science research on innovation and diffusion has largely tracked the spread of innovation and state level conditions that shape the spread of policies rather than considering the point source of innovation and the characteristics of the innovative policy itself.

Steelman (2010) posits that culture entails the patterns of interaction between actors, how problems are defined, and what policy alternatives or organizations are deemed legitimate. Structures are embedded within state cultures and refer to the rules, incentives, resistance, and political openings that are driven by the organization of government. Individuals operate within structures and their behavior is shaped by cultural and structural norms, their own motivation, and the interplay between their level of congruence with dominant structural values and desires for harmony with others. Steelman posits that when individual, structural, and cultural categories are aligned and sustained then the probability of innovation increases. It is important to note that in these contexts the impetus for innovation can be top down or bottom up. Mossberger (2000) and Mossberger and Hale (2002) frame this as polydiffusion[1] where experiences, information, and stimuli are shared in all directions across levels of government or intersectoral networks.

Put together, these scholars assert that innovation does not derive from a single point source, but rather emerges from an ecology of culture, structures and individuals. This is the theoretical orientation of this analysis. As such, this research seeks to address gaps in the existing research on how the ecology of ecology of policy entrepreneurs, policy networks, and the culture and institutional influences around higher education, affect the innovation process. Consideration of the impacts of policy entrepreneurs, political networks, cultural and structural influences on higher education, and how the issue of college student financial insecurity is framed, is important in understanding variances of innovative policy models in first adopting states who are acting to address a common public issue.

The Role of Policy Entrepreneurs.

Hale (2011) demonstrates how networks of non-profits and nongovernmental actors can interconnect with the public sector to affect policy change. This is done through fundraising, civic engagement, advocacy, research and information generation. The information relationship created between networks of non-profits and government agencies enhances the capacity for

[1] Mossberger and Hale framed polydiffusion as one where federal agencies are in a central position within the network and share research, best practices, and evaluative information to subgovernments.

government to address public issues (Hale 2011). These resources can be leveraged by entrepreneurs and actors in networks to push for policy change (Schneider, Teske and Mintrom 1995; Roberts and King 1996; Mintrom 2000; Baumgartner and Jones 2009). These actors and processes, and the extent of their influence, offer an alternative explanation to innovation.

Policy entrepreneurs are individuals who seek to advance preferred policy ideas and promote dynamic policy change (Mintrom and Vergari 1996). They do so by identifying unfulfilled needs and innovative ways to solve them by being alert to opportunities (Kirzner 1973). Typically, this is done through activities that define policy problems in ways that attract the attention of decision makers and promote preferred policy responses (Schneider, Teske and Mintrom 1995; Mintrom 2000; Baumgartner and Jones 2009). In this regard, entrepreneurs are continually selling their ideas and seeking to mobilize networks of individuals and organizations to lobby, advocate, share resources, create programs, etc. (Mintrom and Vergari; King and Roberts 1992). Policy entrepreneurs can be within government, advancing legislation and policy through formal policy processes, within the bureaucracy, or outside of government in interest groups and community settings (Mintrom and Vergari; Mintrom 2000). Policy entrepreneurs amend interpretations of existing policies to meet preferred ends, advance preferred policy solutions (Mintrom and Vergari), change the use of public resources or create new public organizations (Mintrom 2000; Agranoff 2007). Related to this study of college student financial insecurity, King (1988) and Link and Link (2009) noted that policy entrepreneurs are often based in institutes of higher education, as these settings can be settings for innovation, intellectual freedom, and networked activity of university personnel, business and non-profit leaders.

Research on the effects of policy entrepreneurs in advancing preferred policy solutions indicates that they can often play a critical role in the policy process. Policy entrepreneurs were found to significantly raise the probability of legislative consideration and approval of school choice as a policy innovation (Mintrom 1997). Weissert (1991) found that expertise and persistence of legislative policy entrepreneurs matter in the success of efforts. Lieberman (2002) demonstrates that the use of strategy, relationships and mobilization of actors within networks affects the direction and success of proposed policy innovations. Contextual factors can also affect the success of policy entrepreneurs. Schneider and Teske (1992) identify several conditions that affect the probability that an entrepreneur will emerge in a local government, especially slack budgetary resources that the political entrepreneur can relocate, as well as population growth and increasing rates of diversity, which play a part in changing the political dynamics within a setting.

The Role of Networks

The above studies point to the critical role of policy entrepreneurs in policy innovation. However, much more needs to be learned about the strategies, conditions and contexts that influence the shape of policy innovation, how entrepreneurs use networks, and where individual and networked action fit within theories of the policy process (Roberts and King 1991; Baumgartner and Jones 2009; Mintrom and Vergari 1996; Mintrom 2000). Roberts and King (1991) posit that policy entrepreneurship can be both enabled and constrained by a political system and institutional context. Further, Schneider, Teske and Mintrom (1995) posit that policy entrepreneurs are socially embedded actors that are shaped by and born out of the proximate milieu in which they are based. Furthermore, they must rely on and leverage coalitions of networks to advance preferred policy. Put another way, an understanding of policy entrepreneurs is not complete without an understanding of the immediate networks in which they exist.

Networks are complex and emergent with shared interactions, values and goals built on the basis of self-organization (Caldarrelli and Catanzaro 2012). Political networks are emergent and dynamic relationships of government actors, national organizations, state and regional interest groups and non-profits, and individual citizens (Heclo 1978; O'Toole 1997). Agranoff (2007) posited the role of networks in governance, policy creation and administration in the 21st century is driven by devolution, the associated rise of non-profits, communications technology, and collaborative governance. As policymaking authority shifted from the federal government to the states during the late 20th century, state legislatures became more professionalized and increased their capacity to innovate (Hamm and Moncrief 2013, Karch 2007, Rosenthal 2009). Concurrently, reinvention of government efforts combined with the professionalization of associations and non-profits has further shifted provision of social services to the private sector or to local units of government (Gore 1993, Hale 2011, Skocpol 2003). Out of this ecosystem networks of advocates, government officials, legislators, and non-profits have emerged. As such, political network scholar Jennifer Victor (2018) has advised that to understand modern politics, scholars should focus on networks of groups.

Hale (2011) and Huckfedt and Sprague (1987) demonstrate that network dynamics shape political outcomes. Specifically, Hale's research indicates that the source and content of information shapes network action. Information such as best practices, policy templates and guiding principles all influence network action and policy outcomes. As such, networks exist as knowledge communities that shape information flow, create specialization, help overcome collective action problems through coordinated action, but also allow for bias to be accentuated by one actor's position within the network (Echeverria 2011, Huckfedt and Sprague 1987). Kirst and Meirster (1983) similarly demonstrate that the initiators of issues within networks shape political movement towards agenda setting and the eventual outcomes achieved. Further, network connections across geographical lines accelerate the spread of policy ideas (Mintrom and Vergari 1998; Hale 2011; Castells 2016).

Networks affect the adoption of coordinated policy solutions; however, diverse interests and incentives for individual actors can make coordinated action challenging (McCubbins, Paturi, Weller 2009). Hale (2011, 22 – 25) posits that actors within networks assume different roles based on their preferences and engagement. These roles include: *Champions* who serve as catalysts for change through sustained motivation and energy over time; *Supporters* who seek to advance their own organizational mission by aligning with the work of the policy innovation; *Challengers* who may define the policy problem in a different way than others in the network and may actively advocate against an innovation; *Bystanders* who are experts in the field but do not devote significant effort to support or oppose a policy innovation.

It is important to note that networks can exchange more than information on best practices and policy models. As it relates to college student financial insecurity, networks of local nonprofits, state and national interest groups, national organizations, higher education associations, state colleges and universities, and students and faculty exist. Actors within this network share research, personnel, expertise, program and policy models, and legislative influence. Agranoff (2007) asserts that trust amongst network participants is critical to the activities, patterns of sharing and outcomes of networks. Trust is built over time, through past and current interactions, and where a pattern of respect of others is demonstrated amongst network actors. The pattern of sharing of resources and trust in the network can shape innovation, and policy outcomes, and is a central focus of this study.

Innovation within higher education

As the above research has demonstrated, policy innovations are borne out an ecology of policy entrepreneurs and networks within the structural, economic and political contexts of states. In every state, contextual constraints set limits on the scope of actions that policymakers can take (Majone 1989). The budgetary weaknesses driven by the Recession created fragile state economies with a limited range of options available for policymakers to consider (Braxton, Doyle, Hartley III, Hirschy, Jones, and McClendon 2014). Braxton et al posits that this economic context provided no new funds for state efforts to improve completion rates. This also resulted in deep budget cuts to higher education, particularly as funds from the American Recovery and Reinvestment Act of 2009, which offered federal funds for workforce development efforts, ran out (State Higher Education Executive Officers Association 2012). Higher education is a discretionary budget item for states (Delaney and Doyle 2011). As such, it is not subject to mandatory minimum spending, as are K-12 education and healthcare in many states. Further, unlike K-12 education and other government services, higher education has an alternative source of revenue via student tuition rates. This means that in financially lean times, higher education funding is cut more than other government services. The financial burden of these cuts is then passed to students and families (Braxton et al 2014).

Research by Public Agenda (Johnson, Rochkind, Ott, and DuPont 2016) indicates that Americans continue to lose confidence in the importance of college education for success in the workplace. Further, public opinion on the importance of college completion indicates that there is little demand for policy changes aimed at increasing college completion (Immerwahr and Foleno 2000). Absent a political cue to innovate, state lawmakers should be expected to be reluctant to innovate (Karch 2007). Additionally, college attendance rates are often countercyclical to the economy. If the economy is doing well, college attendance lags as a tight labor market drives increased earnings. However, if the economy is performing poorly, college attendance rates increase as workers seek to earn credentials to stay competitive in a challenging labor market (Long 2014). This is especially true with younger adults (Bell and Blanchflower 2011). As previous research might predict, attendance levels increased during the Recession, particularly in states most affected by the economic downturn (Long 2014). Increased college attendance may restrict the impetus to innovate that decreased enrollment from budget cuts and increased tuition might otherwise force as administrators may not see the need to innovate to attract and retain students. However, a deeper analysis indicates that while attendance grew in the aggregate, full-time enrollment actually declined, while part-time enrollment increased. Further, enrollment growth was strongest amongst students of color and oriented towards vocational programs that take less than two years to complete (Long 2014). This indicates that the type of student attending college has changed in the aggregate, and with that change comes challenges to both the student pursuing higher education and the institutions and states serving those students.

Innovation may also be conditioned by the culture around higher education. Often higher education is seen as risk adverse and driven by self-protectionist faculty and administrators concerned for their own jobs, accreditation, tradition and culture (Morris-Olson 2017). Further, institutions of higher education can be seen as “organized anarchies” with semi-autonomous units and loose connections between structures, actions and results tied to a central mission (Cohen, March, and Olsen 1972; Manning 2017). Change or innovation in this environment can be difficult due to the ambiguity of mission, multiple bureaucratic structures, and inputs on the organization (Kezar 2001). Kezar identifies that higher education institutions can change through: *adaptation* or the evolution of organizational structures based on the external environment; *reforms* that are initiated and implemented via a top-down approach, or via intentional *innovation* of a new product or procedure aimed at addressing a defined problem. Brewer and Shirley (2017 p. 1) posit that innovation within higher education is linked to "creativity, risk taking, and experimentation at the institutional level", whereas Christensen and Eyring (2011) identify changes to the external environment and marketplace that institutions find themselves in as the driver for innovations. Forced to adapt to changes in the environment, institutions adapt in order to survive.

Understanding the Issue of College Student Financial Insecurity

The issue of college student financial insecurity is a product of the post-Recession environment of state budget cuts to higher education that produced steep increases to college tuition. Generally speaking, research and advocacy on the effects of increased tuition on students fall into two camps: access to basic needs for current students and access to higher education for prospective students.

Basic needs research and advocacy focuses on the economic and living conditions of current students currently enrolled in higher education. Researchers interested in understanding the issues around access to basic needs have explored rates of hunger and homelessness amongst college students. Much of this research has been driven by the former Wisconsin HOPE Lab that was founded in 2013 that evolved into the current Hope Center for College, Community, and Justice at Temple University, founded in 2018.[2] Both research centers were founded by sociologist Dr. Sara Goldrick-Rab. The research of the centers explores the issues of food and housing insecurity and seeks to improve institutional practice and policy. Through the work of

[2] The two centers will henceforth be referred to as the Hope Center.

Hope and regional scholars, multiple state and regional level studies have been conducted (see Crutchfield 2015; Martinez, Maynard and Ritchie, 2016; Maroto, Snelling and Linck 2015 for examples) and these studies consistently find higher rates of food and housing insecurity amongst college students than the general public. For example, Dubick, Cady and Mathews' (2016) study on college student food insecurity found that 48 percent of respondents reported being food insecure in the previous 30 days and 22 percent had very low levels of food security that qualify them as hungry. Other research has revealed that about half of community college students were housing insecure, and 13 to 14 percent were homeless (Goldrick-Rab, Richardson, Hernandez 2017 and Goldrick-Rab, Broton, Eisenberg 2015). This compares to 36 percent of university students being food insecure and 9 percent being homeless (Goldrick-Rab, Richardson, Schneider, Hernandez and Cady (2018). Dubick et al. find that basic needs insecurity occurs at both two- and four-year institutions; however, Goldrick-Rab, Richardson, and Hernandez (2017) and the above research point out that insecurity is more pronounced amongst community college students. Additionally, researchers have consistently found that food insecurity is more prevalent among students of color, students with children, former foster youth, and amongst first generation college students. Basic needs insecurity is associated with lower grades, retention and graduation rates (Johnson, Rochkind, Ott, and DuPont 2011). As such, basic needs access is a college completion issue.

Research and advocacy around college access is concerned with the personal and economic impacts of students not having or not being able to afford to pursue post-secondary education. Often this line of research and advocacy is framed in equity terms based on the race, gender, and/or geography of students; or in economic terms based on the personal financial impacts on students and broader state economic impacts of students not pursuing higher education (DeBaun and Warrick 2019, Carnevale and Smith 2012, The Institute for College Access and Success 2019). College access is seen as a pathway for economic development for communities and states and/or as a pathway out of poverty for marginalized students. Advocates for access push for removing financial and informational barriers for obtaining higher education through aid, outreach and mentorship, and for integrated pathways for students graduating high school and working adults without post-secondary credentials to pursue higher education.

How Federal Policy Shapes Higher Education

As discussed, this analysis focuses on the actions of states to improve access to higher education for low income students and/or steps states have taken to improve access to basic needs for financially insecure college students. However, federal policies regarding higher education shape the actions of states, and as will be seen the actions of states shape the action of Congress. These include the Higher Education Act and the College Cost Reduction and Access Act of 2007[3] which promotes access to higher education, the McKinney-Vento Act, and the Every Student Succeeds Act of 2015 (ESSA) which improve access to basic needs for financially insecure college students. Each is explored briefly below.

Related to access to college, the Higher Education Act (HEA) was first enacted in 1965 and is typically reauthorized every five years. HEA authorizes various federal aid programs within the Department of Education that support students pursuing a postsecondary education, including grant programs, such as Pell Grants, that seek to increase access for low-income and first-generation students. Additionally, HEA sets the eligibility requirements for institutions to receive Title IV federal student aid programs (Pell Grants, Federal Work Study, Perkins and Direct Loans, etc.) including the rules governing the accreditation process and demonstration of

[3] The College Cost Reduction and Access Act of 2007 also includes measures for access to services for financial insecure college students. These are explored below.

financial responsibility (American Council of Education 2008). In 2008, Congress reauthorized the HEA to include increased cost transparency requirements for institutions, including providing the average annual net price of attendance that would be shared on the U.S. Department of Education's College Navigator website, as a means to improve financial restraint for escalating tuition prices (Higher Education Act 2008). The Higher Education Act is due for reauthorization by the 116th Congress in 2019 or 2020 (Duffield, Lee, Hector, and Welton 2019).

The College Cost Reduction and Access Act (CCRA) of 2007 increased the maximum Pell Grant award and adjusted publicly funded student loans (such as Direct and Perkins Loans) from variable rates to fixed rates (U.S. Congress 2007). CCRA also required institutions to share their total estimated financial costs of attendance on their institutional website. Related to basic needs access, CCRA established that unaccompanied homeless youth (those living independently from their parents) qualify as for federal financial aid as independent students (National Center for Homeless Education).

The McKinney – Vento Homeless Assistance Act was first passed in 1987, but was most recently reauthorized in 2015. McKinney – Vento establishes the rights for families and students experiencing homelessness and seeks to remove administrative and policy barriers for homeless students through protections and services (Hallett, Crutchfield, and Maguire 2019). McKinney – Vento is directed at K-12 education, but has important definitional impacts on higher education related to eligibility for services and financial aid. ESSA was passed by Congress in 2015 and is primarily directed at K-12 education (U.S. Department of Education). However, it had a number of important provisions related to access to services for homeless students. First, ESSA reauthorized McKinney-Vento and required that homeless liaisons, mandated under McKinney – Vento, inform unaccompanied homeless youth about their independent student status when submitting the Free Application for Federal Student Aid (FAFSA) (Hallet et al.). Previously, unaccompanied homeless students would have to acquire family financial records in order to submit the FAFSA, which puts them at a systematic disadvantage as their parents are either absent or they are estranged from them. ESSA also established that housing status is protected under the Federal Educational Rights and Privacy Act (FERPA), and is thus protected, unless needed to be known for service provision. Finally, ESSA gave homeless students priority access to federal college access programs, such as TRIO.

Together these federal policies shape state level administrative actions and policies within higher education. As such, they affect the contexts and ecosystems that develop innovative policies to address college student financial insecurity. Each of the federal policies and the interplay of them on the innovative policies analyzed in this research is further explored going forward.

Conclusion

The cases that this study explores demonstrate that innovation within higher education is possible. However, little is known about how innovation in higher education policy is generated via multisector networks. Research and program models to address the issue of college student financial insecurity was used by policy entrepreneurs and networked actors in California, Washington, and Tennessee to advocate and secure policy change. In doing so, each state was the first in the U.S. to enact their particular policy model. However, not much is known on how the networks of actors that advanced these policies were formed, why and how a particular policy model was developed and selected, how existing federal policies affected the development of the innovations, and the actions each network took to successfully pass the legislation.

Further, little is known about how the characteristics of the network and the attributes of the innovations selected affected subsequent diffusion by secondary states.

As such, this analysis fills a critical gap in the literature by exploring the ecology (culture, structures, and individuals) that led first innovator states to create policies to address college student financial insecurity in their states. In doing so, this study advances understanding of how multisector networks and policy entrepreneurs in a specific policy context worked collaboratively to advance preferred policy solutions. This study contends that understanding of network construction and roles is incomplete. As such, this research examines the roles, strategies, and patterns of exchange within networks and advances knowledge on how to empirically analyze networks and the contributions of specific actors via social network analysis.

Lastly, this study advances understanding of how networks formed in first innovator states affect subsequent adoptions by secondary adopting states through analysis and delineation of the contributions of various members within networks. In doing so, the study posits that existing research on diffusion is overly simplified in its approach by conceiving diffusion as a yes or no question shaped by internal and external forces to states. Instead this research analyzes how innovators affect subsequent actions by secondary adopters, and posits and finds that diffusion is multidimensional and multidirectional. The study also evaluates the effect of the attributes of policy choices on the diffusion process, which has only been done by one other set of scholars within political science. As such, the study considers policy attributes a central variable in the rate of diffusion to secondary adopters,

Put together, the study amplifies understanding on how the structure, actions, and choices of multisector network lead to policy innovation and diffusion. The methodology relative to these aims is explored in the next chapter.

Chapter 3: Methodology

Introduction

This research uses case study analyses of network activities in Washington, Tennessee, and California that produced innovative public policy solutions to address college student financial insecurity that were then diffused to secondary states. According to Gerring (2004, 342) "case studies are intensive studies of a single unit for the purpose of understanding a larger class of similar units." Case studies of the ecological contexts (ecology of culture, structures and individuals) of first innovator states that addressed college student financial insecurity through innovative policy creation are useful in advancing understanding of the dynamics leading to state policy innovation within higher education.

As such, there are two purposes for this study. The first purpose of this study is to examine why first innovator states acted to address college student financial insecurity and to understand how networks and entrepreneurs affected what policy model these states adopted. The second purpose of this study is to advance research on how the dynamics of policy actions of first innovator states shape future adoptions by secondary adopting states. Thus, this study focuses on policy action of innovator states as explained by networks of actors, attributes of specific policy models chosen, and the internal / external ecosystem surrounding the innovator states.

Research Design

Relative to the first purpose, why did Washington, Tennessee, and California act to address a common issue but used different policy models to do so? Typically, innovation and diffusion research analyze the diffusion of a single policy innovation across an S-shaped curve where later adopters imitate actions of earlier adopters (Tarde 1903). Diffusion is often explained by horizontal and vertical factors explored above using event history analysis to identify predictive models for the occurrence of events (Berry and Berry 1990). Additionally, states are commonly rated on their innovativeness across policy areas (Walker 1969; Canon and Baum 1981; Nice 1994; Carter and LaPlant 1997; Boushey 2010). However, a scholarship gap exists relative to the impetus and actions of first innovator states in a specific policy context, how these actions are shaped by the presence and characteristics of policy alternatives, and the arrangement of entrepreneurs and networks within each state. This is the *innovator state level of analysis* for this study.

Combined, these elements shape the second purpose of this study which seeks to understand how the dynamics of policy actions of first innovator states shape future adoptions by secondary adopting states. Put another way, how did actions in first innovator states and the attributes of specific policy models spark diffusion to other states? Here, the focus is on the rate of diffusion to secondary states. This is the *diffusion level of analysis* for this study. The research design is summarized in Appendix 1.

Innovator State Level of Analysis.

The variation in the policy models used in Washington, Tennessee, and California is described in Chapter 1. Tennessee created a policy model that expanded access to higher education aimed at financially insecure students in the state. California created policies to expand services and access to basic needs for financially insecure college students. Washington expanded access to higher education and services for homeless students and those exiting the foster care system. The three states vary on Boushey's (2010) *State Receptivity to Innovation, 1960 – 2006.* States in this index are scored on the basis of proportion of the adoption period that remained when the states adopted reforms in governance, morality, regulation, licensing, and policies targeting children (Boushey 99). Scores closer to one indicate increased receptivity to innovation. The average state innovation score is 0.390. California is the most receptive state of innovation with an aggregate score of 0.6228. Washington ranks 7th with a score of 0.4540. Tennessee ranks 32nd with a score of 0.3895. This variance across first adopter states of policies to address college student financial insecurity suggests that state innovation is not a generalized trait that some states have and some do not. Rather it suggests that innovativeness is multidimensional and innovative action can be explained by other causal factors (Nice 1994).

Research Questions for Innovator State Level of Analysis

For research questions 1 and 2, a grounded theoretical approach of analysis is used to build a theory of how multisector networks develop and act to successfully pass legislation within first innovator states to address college student financial insecurity.

RQ1 – How do the structure, participants, actions and arrangement of networks of actors affect the actions and choices of first innovator states in addressing college student financial insecurity?

RQ2 – How does the structure of networks of actors within innovator states affect the subsequent diffusion to secondary adopting states?

The dependent variable for RQ1 is the policy model to address college student financial insecurity adopted by first innovator states. Whereas, the dependent variable for RQ2 is the rate of adoption of innovation. The rate of adoption is the "relative speed with which an innovation is adopted by members of a social system" (Rogers 2003, 221). Rate of adoption is measured by the number of states who adopt an innovation in a specific time period after the innovator state acted. This calculation serves as the numerical basis for the adoption curve of an innovation.

The independent variables at the innovator state level of analysis include the structure, participants, action and arrangement of networks of actors that advance policy change with each state. As the research reviewed above establishes, policy innovations are the product of ecological arrangements of state political context and the arrangement of individual actors, structures, organizations and networks. As such, the patterns of cohesion, roles, constraints, and resources of networked actors affect the strategy, choice, and success of specific policy pursuits. These patterns of roles and resources of networked actors within first innovator states is likewise a critical explanatory variable in the diffusion process to secondary states. Research at the innovator state level of analysis will specify network arrangements and their effects on the policy innovation process and diffusion to secondary states. This will lead to a theory of multisector networks in higher education.

Diffusion Level of Analysis.

At the *diffusion level of analysis* for this study, the dependent variable is the rate of adoption of innovation described above. Factors surrounding the innovations themselves influence the adoption of a particular policy model and are independent variables for RQ3. These include the relative advantage of the innovation over alternatives, prior trials of the policy model in the nonprofit or bureaucratic level, the compatibility of the policy model to existing state actions or programs, the complexity of the policy, and the degree to which the results of the innovation are observable to others (Rogers 2003). Moore and Benbaset (1991) added the degree to which the innovation enhances the status of the adopter of the policy (or image) as an attribute that may affect adoption. Rogers (1995) estimates that depending on innovation type 49 to 87 percent of the variance in the rate of adoption of innovations (all innovations, not just policy innovations) is explained by the original five characteristics. Investigating the acceptability of an initial offering of an innovation is useful for predicting the rate of adoption in the future (Rogers 2003).

Research question 3 analyzes how the attributes of the innovative policy affect subsequent diffusion to secondary states. Empirical data collected for participants within each first innovator state regarding the attributes of the policy choice will be used to test Hypothesis 3 (H3).

RQ3 – How do the attributes[4] of this policy choice (relative advantage, compatibility, trialability, observability, and complexity) affect the rate of diffusion amongst secondary adopting states?

H3 – The relative advantage, compatibility, observability, and trialability of a policy innovation will be positively associated with its rate of diffusion. The complexity of a policy innovation will be negatively associated with its rate of diffusion.

Data Collection and Analysis

To answer the research questions above, this study analyzes the policy actions to address college student financial insecurity advanced by networks of actors, organizations and entrepreneurs in California, Tennessee, and Washington. Social network inquiry and analysis of the political networks in each state measures network structure, strength and exchange of information and resources. Attributes of the specific policy models are evaluated by their respective network of actors in first innovator states. Lastly, the rate of diffusion is calculated for each policy model and compared to policy innovation attribute rating and network characteristics of its originating (first innovator) state.

Analysis of Innovator States.

[4] Moore and Benbaset (1991) developed a survey instrument to evaluate attributes of innovations. It included Rogers' five attributes and added "positive image effects" as a sixth attribute of innovation. However, Makse and Volden (2011) only used Rogers' original five attributes in exploring the effects of policy attributes on diffusion. The Attribute Analysis Survey used in this research included items that asked participants to rate their policy innovation's positive image effects. However, positive image effects were found to not have a statistically significant effect on the rate of policy diffusion and only served to weaken confidence in the regression model. As such, positive image effects were dropped from the model described in Chapter 7.

To address RQ1 and RQ2, state political context, network dynamics within innovator states, and the attributes of innovation are explored to determine why a particular policy model was adopted. To start, archival research of media, published research, conferences on the subject, and existing programs, identified the relevant actors within each first innovator state. From there, a basic architecture of the ecology of culture, structures and individuals within each state was determined. Archival research also identified a timeline for policy passage and the fundamental actions that organizations and individuals took to get particular legislation passed. Collectively this level of research set the stage for more in-depth analysis of the actions and attributes of political networks within first innovator states using social network analysis whereby individuals were interviewed and surveyed.

The Analysis of Innovator States continued with semi structured phone interviews and surveys of network participants. Social network analysis of the qualitative data from these interviews and quantitative data from surveys is used to identify the ties and links between nodes (actors) that create a connected network where variables such as cohesion, interaction and patterns of shared resources can be identified (Scott 2012). Traditionally, political science, as a social science, focuses on the attributes of actors (organizations, governments, individuals) to predict individual outcomes. However, social network analysis focuses on relationships between actors to explain outcomes. As such, network theory posits that flows of resources within networks are the key mechanism underlying outcomes (Borgatti 2016). Therefore, this level of analysis focuses on the relational states and events between actors that led to policy advocacy, passage, and implementation.

Qualitative data from the interviews produced useful information for analogical network analysis that details how advocates acted on common goals based on shared frames of meaning and context. Analogical network analysis is useful for highlighting the importance of context and interdependencies in the flow of information, resources and influence that produce particular policy outcomes (Ward, Stovel and Sacks 2011). Further, this analysis identified actors, roles, challenges, and strategies of the network as part of the narrative of networked activity within each state.

Semi structured interviews were collected using snowball sampling of network participants. Individuals who were initially identified using archival research were contacted via email and asked to participate in the study. At the conclusion of an interview, participants were asked to identify others who participated in the network and who should be interviewed. This was done until no new individuals were identified. Thirty-four individuals consented to being interviewed – 12 in California, 9 in Tennessee, 10 in Washington, and 3 from national advocacy groups connected to the diffusion of state efforts. State level participants were leaders of non-profits (8), members of state higher education systems (7), institutional faculty or staff (5), leaders of advocacy groups (4), members of gubernatorial staff (2), in other state government roles (2), in management of public housing authorities (1), or lobbyists (1). In chapters 4 – 8, participants are identified by their state and participant number (for example – AL P1) to ensure anonymity. Non-participant officials who were central actors referenced by those interviewed are identified in a similar way – by their state and official number (for example – AL O1). Participants from national organizations (non-state based) are identified in a similar fashion – using "NatlO" and a participant number) Non-gender identifying pronouns are used to further promote anonymity. See Table 3-1 for a breakdown of participants.

Table 3-1: Participants

	Total # of Semi-Structured Interview Participants	Total # of Social Network Analysis Survey Respondents	Total # of Respondents to Attributes of Innovation Scale	Professional Roles of Participants
California	12	7	6	Non-Profit – 3 Advocacy – 3 Institutional faculty/staff – 3 State higher education systems – 2 Other state government – 1
Tennessee	9	7	6	Non-profit – 2 State higher education systems – 4 Gubernatorial staff – 3
Washington	10	9	9[5]	Non-Profit – 3 Advocacy – 1 Institutional faculty/staff – 2 State higher education systems – 1 Other state government – 1 Lobbyists – 1 Housing Authority – 1
National Organizations	3	N/A	N/A	Policy Analysts – 3

At the end of each interview participants were asked for additional individuals to contact that were part of the network of individuals and organizations that developed and advocated for the policy innovation. This was done in each state until the list of participating individuals and organizations in the network was exhausted and no new potential contacts were identified by interview participants.

[5] Initially, seven interview participants responded to the Social Network and Attribute Analysis Survey from Washington. However, two discrete networks within Washington emerged through this analysis. This effectively split the data from the survey in two, and resulted in diminished reliability of the data. In order to increase the reliability of data, two additional survey responses were gathered in Washington from a team of advocates charged with implementing one of the policies at the center of this study. More details on this can be found in Chapter 6.

Interviews were transcribed and coded using Nvivo for central actors, themes, and challenges of policy network within the first innovator state. Interviews sought to determine how the networks worked to bring the innovation to reach the political agenda. Further, the interviews identified the source of the policy model, the tactics used by network participants, roles of individuals and groups within the network, types of obstacles faced, how these were overcome, ties to external groups for support or diffusion of the policy model, the time required to enact the policy, and other actions (previous or since) of the network. See Appendix 2 for the semi-structured interview questions. Follow up and probing questions were asked when specific points made by the participant needed clarification. Interviews were recorded, transcribed, and coded for central themes that emerged within states and their respective policy model.

A downside to analogical network analysis is the lack of specificity in quantifying exact configurations and variation of networks. Surveys of network participants fill this gap via quantitative data that will allow analysis of descriptive measures of key structural features of networks (Ward, Stovel and Sacks 2011). Descriptive network analysis quantifies the web of relationships of actors within first innovator states. Following being interviewed, network actors were emailed the Descriptive Social Network Analysis Survey (Appendix 3) and asked to complete the survey via Qualtrics. 23 of 31 state contacts[6] completed the survey for a response rate of 74.19%. (Individuals from national organizations were not asked to complete the survey due to being involved in advancing the diffusion of innovations, rather than involved in the creation of specific state innovation themselves).

Binary relational data is generated from the interviews and survey of officials within each state, along with conference presentations, and archival research. This data quantifies the

[6] See previous footnote. Two additional Social Network and Attribute Analysis Survey responses were gathered in Washington to increase the reliability of the data. This is detailed further in Chapter 6.

interaction and patterns of shared resources of network participants. Using descriptive network analysis, relational states and participation in relational events of the network can be modeled and analyzed using UCINET software (Borgatti, Everett, and Johnson 2013). Relational states ties refer to the continuously persistent relationships between nodes. Ties are conduits for resources within networks and are hard to create and maintain (Borgatti 2016). Relational events refer to discrete interactions and flows. Interactions are behaviors between nodes with respect to each other and flows are the outcomes of interactions. Flows may be intangible (influence, expertise) or tangible (funding, information, communication). Descriptive social network analysis allows for relational ties; roles; interactions; and flows (of information, influence, and resources) to be measured and modeled to explain the dynamics around policy outcomes (Borgatti, Everett, and Johnson).

The foundation of descriptive social network analysis is graph theory where the linkages between nodes are modeled and analyzed in an adjacency matrix. Adjacency matrixes are built with the range of nodes within the network on the horizontal and vertical axes. In network analysis, nodes are connected via *edges* (Scott 2012). When two nodes are joined together by an edge, nodes are referred to as *adjacent*, meaning they have a tie (Scott). For this analysis, non-valued, undirected adjacency is used, which assumes that relationships are symmetrical and indicates whether a relationship exists or not. The number of connections a node has is called *degree.* Nodes with greater degrees indicate that they are more centrally connected than those with lower degrees (Borgatti, Everett, and Johnson 2013).

Centrality measures can be used to identify the particular nodes of the network that are most highly connected, such as an individual who serves as a policy entrepreneur (Scott 2012). The simplest measure of centrality is degree – or the number of connections one node has. Node centrality is calculated as the number of degrees a node has divided by the total number of possible nodes in the network. A node with a high centrality is well positioned in the network to control the flow of resources within the network. However, node centrality is a relatively simple measurement of centrality that does not account for the centrality of the nodes that an actor is adjacent to. The measurement of each node's centrality proportional to the sum of centralities of the nodes it is adjacent to is called eigenvector centrality. Eigenvector centrality posits that a node is only as central as its network. Borgatti, Everett, and Johnson (2013 p. 168) posit that a node with a higher eigenvector centrality is connected to nodes who themselves are well connected. Therefore, they are more central to the network; whereas lower values indicate that actors are more peripheral. Eigenvector centrality can be used comparatively and is measured as:

$$e_i = \lambda \sum_{J} X_{ij} \, e_j$$

e_i is the eigenvector centrality score for actor *i*. λ is the proportionally constant eigenvalue. X_{ij} represents the *i, j* entry on the adjacency matrix. e_j is the eigenvector centrality score for actor j. Eigenvector scores are generated for each actor using UCINET.

Betweenness is an additional centrality measure used in this analysis. Betweenness measures the flow that each node experiences assuming a preference for taking the shortest path possible in an exchange amongst a set of nodes (Borgatti, Everett, and Johnson 2013, 179). Betweenness centrality posits that actors have positional advantage, or power, to the extent that they fall on the shortest (geodesic) pathway between other pairs of actors. Actors who are "between" other actors translate this broker role into power. As such, nodes with higher betweenness measures are more central to network cohesion and can be seen as gatekeepers with higher degrees of power due to their control over flows (Hanneman and Riddle 2005). As such, cohesion is highly dependent on them. Betweenness can be used comparatively and is measured as:

$$b_{k=\sum_{i,j}\frac{g_{ijk}}{g_{ij}}}$$

b_k is the share of geodesics (the shortest path between two nodes) between pairs of nodes that pass through node *k*. *gij* is the number of geodesic paths from *i* to *j*. *gikj* is the number of geodesics from *i* to *j* that pass through *k* (Borgatti 2016).

For analysis of the characteristics of any entire network centralization measures are used. The cohesion of a network is measured by its density, or "the probability that a tie exists between any pair of randomly chosen nodes" (Borgatti, Everett, and Johnson 2013, 150). It is calculated as: *n(n* – 1)/2, where *n* is the number of nodes. Higher density indicates more cohesion, exchange, and flow of resources across the network. Lower density indicates less cohesion, and suggests that network activity and/or outcomes are driven by more centralized actors. Further, the advantage of density is that it can be used in a comparative way, as it considers the number of nodes in a network. Betweeness scores are generated for each actor using UCINET. Combined with eigenvector values, this allows for roles within networks to be determined.

Next, network matrixes are generated using UCINET software that allow for the shape of the network to be modeled. Network matrixes allow comparison of variances between state policy networks and inferences to be made on the effects of network configuration on the policy model adopted and adoption window. Network matrixes are produced in Chapter 4, 5, and 6. For each state, separate relational matrixes are generated at different stages of the network history (for example – pre-passage, legislative passage, implementation). This was done to reflect how networks change over time and to demonstrate the dynamic nature of ongoing innovative networks that produce multiple policy innovations. Recall checks of interview data from participants were completed using archival analysis of media, scholarly research, and conference presentations. The following colors are used to indicate an actor's role within a network:

- <> Non-profit provider or advocacy group
- <> Government agency or policy maker
- <> Business or industry
- <> Higher education institution or system
- <> Individual actor

Hale's (2011) taxonomy of *Information Positions of Networked Actors* is modified due to no bystanders or challengers being present in the innovative states analyzed, and due to the presence of national organizations who were essential to the activities of state networks. *Champions* who served as catalysts for change through sustained motivation and energy over time are modeled as primary actors within the network (Hale 2011). *Supporters* who advanced their own organizational mission by aligning with the work of the policy innovation are modeled as secondary contributors to the network within the state (Hale 2011). *Outside allies* are organizations who provided expertise and research used by those within the first innovator state network in the activities that led to legislative passage, and/or helped diffused the innovative policy model to secondary states post-adoption.

Social network analysis measures allow actors to be assigned roles within Hale's (2011) modified taxonomy of *Information Positions of Networked Actors* based on their centrality, eigenvector, and betweenness scores relative to others in the network. Combined with their function within the network (described above), social network values allow for more accurate assignment of actors to roles. This is summarized in Table 3 – 2 below. Individuals and organizations with high degrees, eigenvector, and betweenness scores are considered *champions* who provide leadership to the network and help coalesce the disparate nodes together. Those with moderate to high degrees and eigenvector values, but with low betweenness scores are supporters. *Supporters* are internal to the state network and take a secondary role to those of champions in advancing the innovative legislation. *Outside allies* are external to the state network and are typified by having connections with a few organizations within the state to offer support, technical assistance, and research to the network. As such, they have low degrees, eigenvector, and betweenness scores.

Table 3-2: Assignment of Actors to Hale's (2011) Modified Taxonomy of *Information Positions of Networked Actors*

Information Position	Role	Degree value	Eigenvector value	Betweenness value
Champion	Catalyst. Policy entrepreneur. Central coordinator.	High	High	High
Supporter	Secondary contributor. Align organizational processes with policy innovation.	Moderate – High	Moderate – High	Low
Outside Ally	Provider of expertise, research, and technical assistance.	Low – Moderate	Low - Moderate	Low

***Values are relative to others in the network

Analysis of Diffusion to Secondary States

Analysis of Diffusion to Secondary States focuses on the effect of network connections between innovator states and secondary adopting states and the perceived attributes of an innovation on the rate of diffusion for a particular policy model. Attributes include the relative advantage, compatibility, trialability, observability, and complexity of the policy model (Rogers 2003; Moore and Benbaset 1991). Survey items were adapted from Moore and Benbaset's Attributes of Innovation Scale. A sample can be found in Appendix 3. Surveys of participants on their particular policy model were administered electronically to network participants along with the Descriptive Social Network Analysis Survey. 21 of 31 state contacts completed the Attributes of Innovation Scale Survey, which results in a 67.8% response rate to this portion of the survey. However, as described in Chapter 6 and Footnote 5 above, three respondents came from a distinct local network in Washington state that innovated a housing assistance program for college students in Tacoma that is limited in its diffusion to other states on the basis of its funding model. As such, eighteen responses, or six per state, were gathered from state level actors responsible for policy innovations that diffused to other states.

The results from the Attributes of Innovation Scale are used to determine the effects of policy attributes on the rate of diffusion. Rate of diffusion is calculated by the number of states who adopt an innovation in the time period from initial adoption by the innovator state to present. From there an adoption curve of an innovation is generated. The variances in the rate of diffusion is then calculated for each policy model. A multiple regression is then run in SPSS to determine the effects of innovation attributes on the subsequent diffusion of innovations.

Conclusion

The methods identified and described above seek to understand how networked actors and entrepreneurs within California, Tennessee, and Washington developed innovative legislation to address college student financial insecurity that was passed by their state legislature. This ecology is explored in the next three chapters. This study combines analogical and descriptive social network analyses for a fuller view of the arrangement, challenges, and actions of political networks. This is done via interviews and surveys of advocates that successfully pushed for passage of innovative policies to address college student financial insecurity. This study posits that policy action of innovator states can be explained via an ecological analysis of networks of actors. This allows for a theory of networks to be developed. Finally, this research analyzes the attributes of each innovation to understand how characteristics of each policy affect the nature of diffusion to secondary adopting states.

Chapter 4: Tennessee

Introduction

As discussed in Chapter 1, Tennessee lawmakers at the urging of Governor Bill Haslam passed the Tennessee Promise (TN Promise) scholarship in 2014 to provide last dollar funding for all graduating high school students who choose to attend community and technical college in the state. Through the combination of federal Pell grants, other scholarships that a student receives, and funds from the TN Promise program, all Tennessee students can attend community college tuition-free. The funding for TN Promise comes from the interest off of excess revenue for the state lottery, which was created in 2003 under the direction of Gov. Phil Bredesen to fund the Tennessee Education Lottery Scholarship, also known as the HOPE Scholarship. In 2003, Tennessee was the seventh broad-based scholarship program to be funded by state lottery revenues after Georgia created their HOPE scholarship in 1993. The Tennessee HOPE Scholarship is merit-based on the academic performance of graduating high school students. However, in passing the free community college legislation of TN Promise, Tennessee became the first state to offer comprehensive free community college tuition to any graduating high school student in the state.

A Local Program Model Emerges

Where policy models come from is a central focus for research on policy innovation. For TN Promise, the policy model started on a local level over a breakfast conversation in July 2008 between TN P1, a local business entrepreneur, and Knox County Mayor Mike Ragsdale on how to make the county more pet friendly. TN P1 is the founder and chairman of a manufacturing organization that produces pet products. TN P1 called the meeting to ask Mayor Ragsdale to help make Knoxville the most pet friendly city in America. Ragsdale agreed but in return wanted TN

P1’s help in creating a program to help every young person in Knox Co. go to a technical or community college for free.

Ragsdale’s motivation was direct; he sought to create a "world-class workforce" to meet 21st century workforce demands for the area, which had a strong professional base with the University of Tennessee in the county, but lacked both skilled jobs and a skilled workforce. Through workforce development efforts with the Knox County Chamber of Commerce, Ragsdale and TN P2, a staff member in his administration, identified that approximately one-third of Knox Co. students were graduating from high school and not pursuing any type of post-secondary training. From further research on the third of students not pursuing post-secondary education, Mayor Ragsdale and his staff identified that the majority of these students would be the first in their family to go to college, and the vast majority came from economically disadvantaged backgrounds. Additionally, TN P2 and Mayor Ragsdale identified a college access and success program in West Tennessee named the Ayers Foundation, which was founded in 1999 by banker, real estate developer, and financier Jim Ayers. Ayers founded the program due to his ties to West Tennessee and his firsthand experience being a first-generation college student in the 1960’s. From that experience, he understood the challenges and opportunity of attending college.

The Ayers Foundation serves nine high schools in rural Tennessee by providing each school a full-time college access advisor. Advisors start working with students in 8th grade and guide them all the way through post-secondary completion. At three high schools the Ayers Foundation also provides a last dollar scholarship of up to $4,000. Mayor Ragsdale and TN P2 also understood the challenges faced by students in affording college. Like Mr. Ayers, both were first-generation college students and were motivated to build a program that addressed the needs of those students while understanding that the financial component was significant for the family. As such, Mayor Ragsdale and TN P2 chose to use the last dollar funding model from the Ayers Program, but they also identified and understood that simply providing dollars without support would not lead to high levels of success. However, full-time counselors across the high schools in Knox Co. would tie up a lot of funds and there was no organizational infrastructure that existed in Knox Co. at that time to coordinate their employment. Instead, Mayor Ragsdale and TN P2 decided that the mentoring component of the program could be achieved via volunteers.

Mayor Ragsdale and TN P2 did initial research and conversations in the Spring of 2008. They then approached Mr. TN P1 over the breakfast in July 2008 and pitched him on the idea for every public high school student in Knox Co. to be able to go to community college tuition free. TN P1 had been an Eagle Scout, involved in Boy Scouts his whole life, and was also the first in his family to graduate college. As such, he strongly supported the idea but added that the students should be required to complete volunteer service to their community to be eligible. TN P1 agreed to be chairman and Knox Achieves was founded as a program which did three things: provided a last dollar scholarship to graduating high school seniors, made sure each student had a volunteer mentor, and required each student to engage in community service. The target of the program was all 12th grade high school students, especially those who didn't have the money to go and/or those who did not have the academic ability, to get free access to post-secondary education and training.

After the design phase, TN P1 became the chairman of Knox Achieves and his goal was to raise money to privately fund the program and scholarships. Within the first 30 minutes after the initial meeting, TN P1 had raised $2.3M from local business leaders and within the first 90 days the team of TN P1, Ragsdale and TN P2 had recruited 180 mentors. Knox Achieves was formally announced as an initiative on October 28, 2008; three months after the initial meeting with TN P1. In interviews TN P1 and TN P2 both stated that the universal eligibility concept was really difficult for some people in the beginning. However, TN P2 stated that it was really important for everyone who was involved with Knox Achieves to able to say that "this is an opportunity for every student" to avoid any stigma attached to the program. Additionally, if the program was truly going to reach its goal to boost the workforce development needs of the region, it would require boosting the achievement of poorer and lower performing students. This framing was important for securing external support. Building relationships with high school counselors was critical due to their connection with students who would best benefit from the program. The framing and relationships with school counselors would prove to be important long-term decisions relative to the success of the program.

In the first year (2009), Knox Achieves supported over 300 graduating high school students in going to college. In 2010, the program supported over 400 and two other counties were added. In 2011, over 600 youth were supported and six total counties had joined the program. During this initial phase, TN P1 and TN P2 determined that their cost projections were overestimated and that it cost less than expected to fund the program – only $734 / student per year, due largely to the number of Pell-grant eligible students participating. As such, the money raised went further than initially thought, which allowed for extended promotion and growth of the program. Further, the program generated tangible results – 65% of participating students were the first in their family to attend college. 75% came from an economically disadvantaged household.

Network Analysis of Knox Achieves Local Network

The creation of Knox Achieves is modeled using binary relational data generated from interviews of Tennessee officials, conference presentations, and archival research. The dataset is in Appendix 4 and presented in Figure 4-1. Centrality measures for each actor are presented in Table 4-1, along with network density in Table 4-2. Here, a dense network is seen, as one might expect in a local community. The Ragsdale Administration, in particular TN P2, is the most connected with a centrality measure of 1.0, an eigenvector value of 0.476 and betweenness measure of 12.167. This suggests that along with being highly connected in the network, the Ragsdale Administration, via TN P2, is the primary driver and connector in the network, who united business, education, government, and philanthropic efforts to support student access to college. Likewise, TN P1 was a primary contributor who generated the support of business and industry for the local scholarship program. TN P1 centrality, eigenvector and betweenness scores are undervalued as a composite list of all businesses and individuals that they connected with was not collected in this research. In the model below, TN P1 is connected to the singular "business community", which represents a multitude of actors that TN P1 connected to in order to raise funds for the launch of Knox Achieves; additionally, the Ragsdale Administration is connected to the singular "K-12 schools", which represents the 16 high schools in Knox Co. This underestimates the connectivity of these actors and is a limitation of the analysis. Applying Hale's modified taxonomy of *Information Positions of Networked Actors,* allows the Ragsdale Administration, along with TN P1, who had no functional alignment within their own organization relative to Knox Achieves, to be identified as the *champions* within this early network. Other elected officials, the Chamber of Commerce, along with the local community college, School Superintendent, K-12 schools, and the Knox County business community are primary *supporters* who were centrally connected, but held little coordinating power as measured by their eigenvector and betweenness scores. Nevertheless, these organizations provided valuable insight that shaped the program innovation while realigning their workflows and processes when the program was created. These groups also connected in secondary supporters such as the K-12 school system and local business community to the creation and implementation of Knox Achieves. The Ayers Foundation, with its expertise and best practices but minimal centrality to network activities, is an o*utside ally.*

Figure 4-1: Network Visualization for Knox Achieves

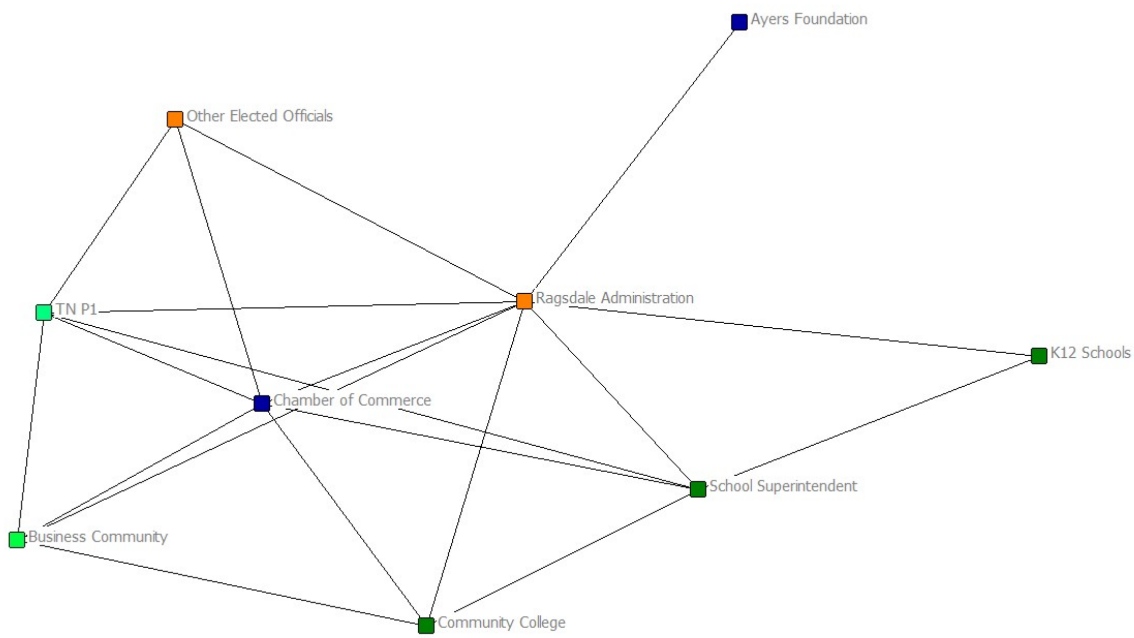


Table 4-1: Centrality Measures for Knox Achieves Network

Actor	Degree	Centrality	Eigenvector	Betweenness
Ragsdale Administration	8	1.0	0.476	12.167
Chamber of Commerce	6	0.75	.431	1.667
TN P1	5	0.625	0.376	0.917
School Superintendent	5	0.625	.360	1.750
Community College	4	0.5	.323	.250
Business Community	4	0.5	.326	.250
Other Elected Officials	3	0.375	.260	0
K-12 Schools	2	0.25	0.170	0
Ayers Foundation	1	0.125	0.097	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 8. Centrality values range from 0 to 1. Eigenvector mean average = 0.313. Betweenness mean average = 1.889.

Table 4-2: Density Measures for Knox Achieves Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	.528	38	0.499	4.22

***Density values range from 0 – 1.

A Local Program Model Expands

In 2010, the expansion of Knox Achieves beyond Knox Co accelerated. Mayor Ragsdale was term limited and could not seek office again. TN P2, who initially had half of their job Deputy Chief of Staff role for Mayor Ragsdale tied to this program, went on full time as the Executive Director for Knox Achieves, which was housed under TN P1's company. Also, in 2010, Knoxville (City) Mayor Bill Haslam, who was a founding board member for Knox Achieves, was elected governor of Tennessee. He publicly stated that he wanted to roll out Knox Achieves across the state. From the promotion and support of the governor, TN Achieves expanded into 27 of Tennessee's 95 counties, but those counties represented roughly half the state's population. In this growth period Knox Achieves was renamed Tennessee Achieves (TN Achieves). By 2013, TN Achieves was sending 5,000 students annually to college, and coordinating 2200 mentors through private donors and resources.

In the expansion to other counties, TN Achieves established a Local Advisory Council – typically the school superintendent, the Chamber of Commerce president, the County Mayor, and the local United Way Executive Director – in each county to come together at least once a year and have a conversation about that particular county's students. The initial meeting served as a benchmark of where the county's student academic performance was at. Later meetings were to discuss where the county had progressed or not progressed. The Local Advisory Council was also instrumental in finding volunteer mentors and funding, as TN P2 and the Achieves staff didn't know these communities and needed assistance helping spread the word about TN Achieves to students, donors, and mentors. Growth, while quick, was often conditioned on being able to raise money in counties. In their interview, TN P1 expressed regret that they were not able to get to the other 68 Tennessee counties not served by the program and only being able to serve students beginning in their senior year of high school. However, in 2013 pieces began to come together that would allow the vision of providing last dollar scholarships to community or technical college to all graduating high school students in the state.

Network Analysis of Tennessee Achieves Network

The network at this period of expansion is modeled in Figure 4-2. Centrality measures for each actor are presented in Table 4-3, along with network density in Table 4-4. The dataset is in Appendix 4. The creation of TN Achieves is modeled using binary relational data generated from interviews of Tennessee officials, conference presentations, and archival research. It is important to note here that this does not necessarily reflect all of the 27 counties that TN Achieves had expanded into; however, is meant to provide a visual understanding of the program model and roles that typically existed. Again, using the visualization along with qualitative data allows for roles to emerge with Hale's modified taxonomy of *Information Positions of Networked Actors.*

TN Achieves, along with the Local Advisory Council – County Mayor, United Way Director, School Superintendent, and Chamber of Commerce, are densely connected *champions*, central to the development and spread of the program model. Betweenness measures indicate the importance of TN Achieves in bridging these respective interests together. TN P2, now with TN Achieves, stated that county mayors were integral to the success or failure of the program and were charged with identifying the local network. From there, the School Superintendent, United Way Director, and Chamber of Commerce played important roles coordinated with their respective sectors within the community. TN P1 and Governor Haslam, despite medium centrality scores, can also be considered champions due to their primary contributions in expanding the program model and bridging it in to additional counties. The two raised needed funds and expanded the profile of the program through advocacy and political messaging. Like betweenness scores for TN P1 and the local school superintendent in the Knox Achieves modeling above, their centrality is likely undermeasured due to the lack of specification with regards to the "business community" and "K-12 schools" for each county. Treating it as a singular unit, rather than a multitude of organizations suppresses the centrality measures for those connected to these actors. The business community can be identified as primary *supporters* who were highly connected and provided valuable funds for program development inside a county and program expansion into other counties. The other actors – the local community college, K-12 school system, area non-profits, and mentors – were also supporters who provided valuable insight that shaped the program innovation while realigning their workflows and processes when the program was created. Other elected officials served in a support role – promoting the program within their communities to both students and potential mentors.

Figure 4-2: Network Visualization for Tennessee Achieves

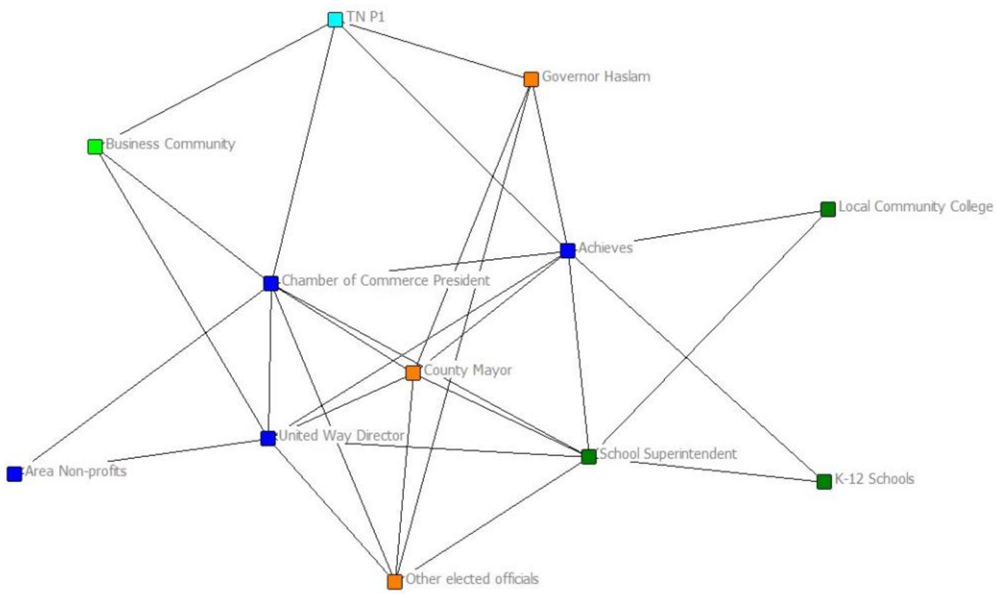


Table 4-3: Estimated Centrality Measure for TN Achieves Network

Actor	Degree	Centrality	Eigenvector	Betweenness
Achieves	8	0.727	0.384	12.069
Chamber of Commerce President	8	0.727	0.409	9.571
School Superintendent	7	0.636	0.364	7.5
United Way Director	7	0.636	0.377	6.762
TN P1	4	0.364	0.213	2.126
County Mayor	6	0.545	0.358	1.402
Other Elected Officials	5	0.455	0.301	1.202
Governor Haslam	4	0.364	0.219	1.033
Business Community	3	0.273	0.211	0.333
K-12 Schools	2	0.182	0.130	0
Local community college	2	0.182	0.130	0
Area non-profits	2	0.182	0.137	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 11. Centrality range from 0 to 1. Eigenvector mean average = 0.270. Betweenness mean average = 3.5.

Table 4-4: Density Measures for TN Achieves Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	0.439	58	0.496	4.833

***Density values range from 0 – 1.

A Local Program Model Diffuses to a State Policy

In July 2012, the Center on Education and the Workforce at Georgetown University released a report titled *A Decade Behind: Breaking Out of the Low-Skill Trap in the Southern Economy* that reviewed the low-skill/low-wage conditions of Southern U.S. economies (Carnevale, Jayasundera, and Cheah 2012). In the report, Carnevale et al. identify that by the year 2020, 55% of all jobs in Tennessee will require postsecondary education and training, however, only 33% of the population had some post-secondary credential (associates, bachelors, graduate degree). The *Decade Behind* report also indicated that the most needed skillsets in the state workforce were those produced by associate's degrees. This report caught the attention of Governor Haslam, who because of his ties to industry and workforce development in East Tennessee as Mayor of Knoxville, past involvement in Knox Achieves, a business leader himself, and now as governor, understood the importance of education in economic development. Prior to the report's release Governor Haslam hosted the Tennessee College Completion Academy on April 3, 2012 to convene a conversation with Tennessee higher education leaders about the future of postsecondary education and workforce development.

The report and College Completion Academy led to further conversations with business leaders across the state in 2012. In the conversations, Governor Haslam repeatedly heard some of the central themes of the *Decade Behind* report. Specifically, businesses wanted to stay in the state of Tennessee or come to the state but were worried about the quality of the workforce in the state. TN P3 served as a policy advisor to the Governor and was tasked with coordinating seven workforce development meetings across Tennessee for the Governor in the summer of 2012. Representatives from higher education, K-12, regional workforce development commissions, Chambers of Commerce, and key businesses typically attended. Participants interviewed who spoke about the workforce development meetings stated that two consistent themes emerged from the meetings – (1) that something needed to change around the training that students received coming out of K-12 into the workforce, and (2) that training pipelines needed to be further established for adults who lacked post-secondary education. Further, the roundtables often highlighted alignment challenges between K-12, post-secondary, and the workforce.

TN P3 summarized the workforce development roundtables this way: "I remember in Memphis, there was a community college and key businesses in the area at the table and they were talking with the governor in a roundtable format. One of the businesses stated that they really needed people with this key business skill and the community college said 'We can do that for you. We wish we had known.' It was interesting to see that it took the governor coming to their area for them to sit down and actually talk to one another. Later we had a moment of reflection around this issue and how to get past it so business, education, industries and communities were not so reliant on the governor coming for them to sit down and actually talk to one another. Those conversations between K-12, higher education, and the workforce are tough to create because there are so many lines between them. They all talk in such a different language. That was a big takeaway from 2012. Another key thing that I remember hearing on that tour multiple times was people asking the governor if he could do something to change the value of a community college degree. Across the nation, most people assume that a community college degree is less valuable than a four-year degree but multiple times I heard people expressing their desire for there to be a cultural shift around the value of that degree in particular. I think the same is true of a technical certificate. People see it as not as good, where we now realize that people exiting those programs tend to come out and get degrees more quickly than individuals with a bachelors and their starting salary can be significantly higher. Further, from the *Decade Behind* report we knew they were the degrees most needed."

Equipped with the *Decade Behind* report and input from regional and community leaders, Governor Haslam and his staff set out to create a signature education policy to address the issue of workforce readiness. The plan would be called the Drive to 55 – aptly named for the percentage of jobs in Tennessee that would require postsecondary education and training by 2020, and Interstate 55 that cuts through West Tennessee and the city of Memphis. To spearhead the nascent Drive to 55, Governor Haslam appointed TN P1 as an unpaid advisor in December 2012. Governor Haslam challenged TN P1 to think outside the box and identify things that the state could do to move the needle forward on post-secondary education. Additionally, the governor spent the year calling other higher education leaders around the country to identify best practices to promote post-secondary access.

Concurrently, the Haslam Administration was implementing the Complete College Tennessee Act (CCTA). Governor Haslam's predecessor Governor Phil Bredesen had led the passage of CCTA in 2010 right before the change in administrations that year. CCTA sought to improve college completion in Tennessee through cooperation between the public higher education systems in the state —Tennessee Board of Regents (TBR) system (the public two year and technical school system, and six regional universities) and University of Tennessee (UT) system (a public four-year college and university system with three institutions) (Tennessee Higher Education Commission). CCTA also changed higher education funding in the state to an outcomes-based funding formula focused on productivity as measured by degree production, student progression, transfer activity or research and service. As such, success and outcomes, including higher rates of degree completion, would matter more and this would incentivize institutions to attract and retain students to graduate. However, CCTA did little to affect the underlying supply issue influenced largely by access to higher education (or lack thereof) at the root of the workforce development needs. However, CCTA had driven home the mindset of the importance of educational attainment to lift the skill level of the state for economic growth which influenced the mindset of Gov. Haslam relative to policy and the state's role.

Concurrent with this realignment the Governor was also looking for other policy levers to push regarding access to post-secondary education. In calls to other governors, higher education leaders in other states, and national college access foundations such as Lumina, Gates, and Complete College America he struggled to find much in the way of innovative things relative to access, completion, adult students, and post-secondary connections to workforce development. Those pillars were central to the charge given to TN P1 in their role as Special Advisor for Higher Education. TN P1 spent the year working for Governor Haslam. However, TN P1's office was located in the Tennessee Higher Education Commission (THEC). THEC is the state agency that coordinates and provides guidance to the institutions in the UT and TBR systems, and the six locally-governed state universities. Additionally, THEC coordinates the Tennessee Student Achievement Commission (TSAC), which administers the state financial aid programs. TN P1 spent a year working alongside leaders of the respective higher education agencies and the business community to brainstorm ideas on how to improve student access and success.

In interviews for this analysis, leaders at THEC, TBR, and the Governor's Office all stated that TN P1 was a change agent who approached the work with big ideas that pushed the agencies to think innovatively. TN P1 regularly reminded agency officials of the goal to increase educational attainment levels and brought energy and passion to the work. However, often TN P1's innovative ideas built out of input from business and industry had to be amended to fit what would be possible politically or administratively with the state's higher education systems. At the time TN P4 was a senior administrator at THEC, who tasked others in the organization to help coalesce some of TN P1's ideas in to reality. TN P1 worked with TN O1, who served as Assistant Executive Director at THEC, and TN O2, who had been in former Governor Bredesen's administration, but had moved into consulting work. TN P1 paid TN O2 out of his own pocket to be an advisor. TN P1, TN O1, and TN O2 served as an "informal brain trust" to develop and refine ideas alongside THEC that they would then bring over to the Governor's office. In the Governor's office TN P1 would meet with TN P6, who played a central leadership role in the administration, and whose background included work in K-12 and higher education. TN P3 and other policy advisors would also participate in these meetings.

On September 4, 2013 Governor Haslam formally announced the Drive to 55. In the announcement, he indicated that there would be key efforts underneath the initiative to increase post-secondary attainment to 55 percent by 2025 including getting more students college ready, supporting them transitioning into school, making sure they are prepared for employment after graduation, and working on issues of alignment across higher education and industry. As the fall progressed, the Haslam administration began to prepare and finalize its legislative package. Central to that package and the Drive to 55 would be what would be called Tennessee Promise (TN Promise) – a last dollar scholarship for graduating high school seniors.

Even though not announced in September, the TN Achieves model of last dollar scholarships for all graduating high school was ever present in the Haslam Administration. TN P1 and Governor Haslam engaged in a search for innovative ideas but did not find many. However, the TN Achieves model was present, and both TN P1 and Governor Haslam had firsthand experience with it. Additionally, TN Achieves had measurable data demonstrating the effects of the program. Further, those within the administration had long expected TN P1 to bring something like TN Achieves up for consideration from the beginning of his tenure as Special Advisor. Those interviewed within the Haslam Administration and the state's higher education systems (n=7) all indicated that they did not spend a lot of time researching or thinking about other models. These findings support Karch's (2007) assertion that time and resource pressed officials are most likely to consider visible innovations and rely on resources that provide accessible, detailed information.

The challenge for scaling TN Achieves to a state level policy was determining how to pay for the existing Achieves model and determining if it would be for every student. For reduced administrative burden, simplified messaging and in order to truly change the culture within the state relative to post-secondary attainment, the brain trust of TN P1, TN O1, and TN O2 decided that it needed to be a promise to every student in the state. Again, lessons learned from Knox Achieves helped because TN P2 and TN P1 had evidence of how being able to state 'that this is an opportunity for every student' changed student behavior and family conversations. Although, as a Republican governor in a red state, tax increases to pay for the program was a non-starter for the administration. However, the Tennessee Education Lottery Scholarship had approximately $400m in reserves from excess revenue generated by the lottery. Officials in the state had long been interested in how to use those funds for a period of time but no viable alternative use had been identified yet. TN P1, TN O1, and TN O2 went to the drawing board and came back to the administration with a proposal to use the lottery reserve fund to establish an endowment. In their proposal, interest returns generated off of the endowment could be used to pay for the program. From there, TN Achieves data was used to do projections and it was determined that the endowment would not cover program expenses, at least not at the beginning when interest accruals had not added up much. Instead TN P1 and his team, along with the Administration, decided on a two-prong approach – creating an endowment off the lottery surplus and excess TSAC funds, and using the annual excess surplus off of the lottery reserves to fund the program. The financial elements of the program and scholarship would be administered by THEC, and a partnering organization, such as TN Achieves, would coordinate the mentorship and volunteer components.

Projections were key to this process both in terms of how much the program would cost and to determine the number of degrees that Tennessee would need to add by 2025 to reach the governors stated goal. TSAC oversaw the allocation of state lottery funds for the HOPE Scholarships and could crunch numbers based on the TN Achieves model and averages to determine if the excess lottery monies would allow the legislative promise to be made. NCHEMS, a private nonprofit who assists states, systems, institutions, and work-force development organizations in making data-informed decisions helped Tennessee leaders make calculations around the number of degrees they would need to add by 2025 to reach the goal and projected which institutions the state should expect to see growth. The state needed 494,000 additional credentials and leaders in Tennessee confessed that they knew high school students alone would not get them there. However, NCHEMS provided valuable projections and confirmed they also needed adults achieving post-secondary degrees and credentials to reach the stated goal. Further, NCHEMS projected how many students they would need in each category (adult vs. exiting high school). This provided a valuable benchmark to measure the effectiveness of TN Promise, and an important justification for further innovation going forward.

The plan for seeding the legislation was to shift $360m over from the Hope Lottery Scholarship into what is now called the TN Promise Endowment. The shifting of $360m from a fund initially designed for the HOPE Scholarships (which are merit based and typically go to students attending 4-year institutions) into an account for TN Promise with language in the legislation that stated that the money cannot be spent on anything else but TN Promise threatened the possibility of doing other things with regard to financial aid that would have benefitted the students attending 4-year institutions. That loss alone was a significant concern for the 4-year public higher education sector – as the interests off of those reserves were traditionally used to help increase the award amounts of the HOPE Scholarship or to expand pilot programs. Those options go away with a shift of this nature. Another piece of the TN Promise endowment was a shift of a smaller reserve account – $47m from TSAC to the Promise Endowment. That, however, would impact the Tennessee Student Assistance Award, which is need based aid for students in all of the institutions in Tennessee, both public and private. This would potentially hurt the 4-year sector, both public and private, downstream with decreased enrollments. The second prong of the funding model moved excess revenues above costs designated for the Hope Scholarship and swept them into the TN Promise reserve account. However, in putting it into statute, that would immediately cut off the prospect of any expansion of award amounts, program types, etc. that might help students attending 4-year institutions. The last time TN raised the Hope Scholarship award amount was in 2008. Consequently, the buying power of the scholarship had gone down significantly, particularly due to the Recession and the increased tuition that was enacted to offset decreased tax revenue. Together this opposition from the public 4-year institutions and the private institutions, which are organized through the Tennessee Independent Colleges and Universities Association (TICUA), would be the challenge to overcome in the design stage.

The Political and Legislative Process.

To overcome these challenges, Governor Haslam used his political will and administrative powers to advance the proposal before formally announcing it. At that time, Tennessee public higher education was a binary system – TBR oversaw technical schools, community colleges and six regional universities, and the UT System included three traditional 4-year institutions. The Governor was the Chairman of both governing boards and also appointed the members of each board. Due to allegiances alone, he had the political will and support of the boards. Additionally, the Haslam Administration was a consistent supporter of higher education. Other than one year of his administration, Haslam fully funded the outcomes formula the state had recently moved to. That meant new money for all of the universities and made the prospect of losing funding from the divergence of students more palatable to institutional leaders. It left the 4-year public institutions with mainly the argument about the damage to freshman recruitment options and the encumbrance of the Hope Lottery Scholarship. TN P7 who worked in legislative affairs for the UT System at the time, and who now works for THEC in the same role, stated that "Typically this resulted in softly played opposition to Promise framed in the question 'do we just want to give away financial aid to just anybody?' It was soft, but there, because you couldn't come outright and oppose it simply because of the political ramifications." TN P4, who served as a senior administrator at THEC stated he often heard from leaders at four-year schools stating "What about us?" However, officials advocating for TN Promise could point to the data from the *Decade Behind* report data that indicated that the type of skillsets needed were those produced by associate degrees and could rely on lessons learned from Knox and TN Achieves who faced similar challenges. TN P2 stated that throughout the creation of Achieves and Promise that "We continued to say that this is not a zero-sum game. We want new students in the pipeline – not to simply shuffle students who were attending your institutions away from you. This is about more kids going to college and finding the right fit for them. More students lead to more transfers."

Beyond the political will and messaging of Governor Haslam, the structure allowed for TN Promise to be created such that it received the internal support of the public higher education community. The structure of how a state organizes their higher education system dictates the autonomy, power, and influence that individual institutions have in the legislature. This structure both dictates and controls what innovations are possible, and how they are brought to legislative enactment. As TN P7 stated, "Tennessee's binary system of organization centralizes power and control, and once board executives decide on something, campus leadership is to carry it out." Gov. Haslam ensured that the Chancellors of THEC and TBR would be engaged in the effort by appointing TN P1 as a Special Advisor with an office located within THEC.[7] The Governor's broad popularity across the state and appointing power over the boards of both THEC and TBR meant he had their political will. Further, Gov. Haslam took the step to bring the university presidents together to inform and assuage their concerns. Here, how the policy was to be paid for matters, as the funding would not encumber funds directly coming from the state budget going to two-year schools at the expense of the four-year schools. This made the program more palatable.

TICUA and their institutions also had reservations about TN Promise because at private institutions tuition is generally higher and the buying power of students is lower. As such, they raised opposition to the proposal and were not politically beholden to the governor in the way that the public institutions were. Two Tennessee officials stated that TICUA and their institutions were a bit more vocal about their opposition. However, THEC and TICUA had

[7] Due to his position within the administration, TN P1's position within the network is modeled as part of the Haslam Administration.

always had a strong working relationship because TICUA students could receive Hope Scholarship funds. That past working relationship helped appease some concerns, as did the Haslam Administration engaging them prior to the rollout of TN Promise. Again, the Haslam Administration employed similar messaging used with the public four-year institutions about increasing the number of students engaged in higher education. Further, TN Promise would not preclude private schools from having associate degree programs (and some have developed them since). One THEC leader interviewed indicated that TICUA's participation helped alleviate any concerns the legislature might have about the policy damaging an existing cooperative relationship that exists on other financial aid fronts.

After engaging the two and four-year public systems, and bringing TICUA into the fold, the Governor settled on the policy for TN Promise late into the fall of 2013. The administration also engaged the Tennessee Business Roundtable – a key policy voice for the state's business community – to detail the policy model and its anticipated positive effects on economic development. From there the administration put together its legislative package in December. At this point, TN P1 handed off the leadership duties of TN Promise to the Administration to get the legislation passed. On February 3, 2014 Governor Haslam held his State of the State Address titled "Tennessee: America at its Best." The speech highlighted the administration's efforts in fiscal policy, economic development, education, and the Drive to 55. Haslam announced that the Drive to 55 initiative included five key goals: 1. Getting students ready; 2. Getting them into school; 3. Getting them out of school; 4. Finishing what we started with adult students; and 5. Tying education directly to workforce needs. As part of these goals. Haslam announced that "More Tennesseans have to believe that earning a certificate or degree beyond high school is not only possible but necessary." Before laying out the framework and impetus for Tennessee

Promise, he added that removing as many barriers as possible to post-secondary education is vital and necessary to the Drive to 55

In Tennessee the two leaders of the General Assembly - the Senate and the House – carry the bills for the governor. As such, State Senator Mark Norris (Republican) and State Representative Gerald McCormick (Republican) were the bill sponsors. In the General Assembly, the Republican held control of both houses. The Senate was made up of 26 Republicans and 7 Democrats. The House of Representatives was made up of 71 Republicans, 27 Democrats, and 1 Independent. Inside the Haslam Administration, the policy team along with TN O1 from THEC spearheaded the legislative push. In the House, the Education Committee immediately got behind the bill and moved it forward. However, more broadly, the legislation faced some risks. Convincing the legislature and leadership that Promise was the right mechanism was the first and biggest hurdle. Limiting the opportunity to expand allocations for HOPE Scholarships by shifting such a large surplus away from that program to TN Promise, which some conservative Republicans perceived as an entitlement, required clear messaging and demonstration of results from TN Achieves. Several legislators raised concerns that TN Promise should not be open to all students, students should have to have a strong GPA, or families should have to demonstrate financial need to qualify for the program.

The legislative team engaged TN P2 to bring in students who were participating in TN Achieves to testify on the merits of the program. They also tapped TN P8 at the Ayers Foundation to do the same. Together, the Haslam Administration could demonstrate the effects of the program on students and families, and its financial sustainability. Additionally, they consistently stated that in order to have the cultural impact required to reach the 55% post-secondary attainment that the state needs for continued economic development all students needed to be eligible to receive it. TN P3, summarized the work with the General Assembly on passing TN Promise in this way, “When we would go into offices in the legislature and try to explain what we were going to do and here is how much it is going to cost and here are the success rates we expect to achieve, it was super helpful to have examples of what TN Achieves had done in their communities. We are not just making up these numbers – these are real students…and all that graduate high school are eligible. There is something about the simplicity of that message that is going to change the culture in our state around higher education and the value of it. If we were to say ‘most students’ and then list the ones who can't, it just becomes more complicated and confusing.”

Again, the *Decade Behind* report recommendations helped, as did not having to put any new state dollars into making the policy work. The political will of the Governor and the institutional dynamics helped advance the policy. In Tennessee, there are 132 legislators – 33 State Senators and 99 State Representatives. With 40 technical or community colleges (many with multiple campuses), most legislators have an institution in their district. However, with just 11 four-year public institutions in the state, few legislators have a four-year institution in their district. Additionally, only two of 11 four-year schools are in rural communities, but 84 counties in the state are rural. As such, it creates conditions to which it become hard for legislators not to support policies that enhance two-year schools. On this note, TN P7 stated, “A community college that is imbedded in a town is an economic driver for that community. It is the reason why industry might move to a region because the community college nearby could pipeline workers. The impact and relevance of those institutions to a local community is often higher than what a university provides to a region, even though the economic impact in macro terms might be broader for a university. The legislature would be hard pressed to go against something that so obviously benefits the technical and community colleges financially."

Other than population concentrations in the major cities of Memphis, Nashville, Knoxville, and Chattanooga, Tennessee is generally a rural state. Thus, for most counties in the state, expanding access to post-secondary education would mean additional rural students pursuing higher education. This combined with the geographical ties to local two-year institutions, effectively put most legislators representing rural districts in a box where they had to protect their institutions and local high school students who would be graduating and would be eligible for the money. Further, Republican legislators did not want to be in a position of being opposed to the Republican governor's flagship political item. Again, like the four-year schools, Republican legislators who controlled both the houses of the General Assembly were in a bind to support it.

On April 14, 2014 the Tennessee State General Assembly passed SB2471 the "The Tennessee Promise Scholarship Act of 2014" by a vote of 30 to 1. On April 15, the Tennessee State House of Representatives passed the act by a vote of 87 to 8. On May, 12, 2014 Governor Bill Haslam signed the bill into law making Tennessee the first state to offer free community college to all exiting high school graduates. However, there was still much work to be done to launch the program statewide for the 2014 – 2015 academic year which would start in August. Administration officials realized quickly that there was much work to do to implement the program including coordinating with county mayoral administration, identifying partner organizations, recruiting and training the mentors, administering the scholarship, etc. Three participants interviewed who were most active in this stage of network activities indicated that the amount of work required on this stage was an oversight on the part of the network. Each stated that they had been so focused on program design and passing the legislation that they had not given much thought into how to launch the program to scale.

Network Analysis of TN Promise Network.

Participants were asked via the Social Network Analysis Survey to "identify all of the ways that your organization obtained information about the extent of college student financial insecurity in your state and policies/programs to address the issue." The responses from Tennessee participants are below in Table 4-5. Seven of nine interview participants responded to the survey. The findings confirm the general narrative chronicled above. Information about the problem and policy solutions for participants came from existing programs within the state (TN Achieves and the Ayers Foundation), personal contacts, meetings, and research. This suggests a dense network of allies who used local models to craft a state policy solution, while leveraging the presence, data and program model offered by the local programs.

Table 4-5: Information Sources for TN Officials in the Passage of TN Promise

Source of Information	Frequency	% Cited
Programs within State	7	100%
Personal Contacts	7	100%
Professional Meetings	6	85.7%
Research Publications	6	85.7%
National / Regional Conferences	5	71.4%
Advocates	5	71.4%
National Advocacy Groups	4	57.1%

n=7

In terms of contributions within the network, participants were asked to rate the contributions of organizations towards legislative passage of TN Promise. Primary organizations within the network are presented along with their contributions in Table 4-6. For each item presented, respondents were asked to evaluate the involvement and contribution of each organization, including their own, on a 5-point Likert-Scale. For involvement, the Likert-Scale ranged from “Critically Involved” to “Not Involved” and scored as follows:

- “Critically Involved” – 4
- “Moderately Involved” – 3
- “Intermittently Involved” – 2
- “Minimally Involved” – 1
- “Not Involved” – 1

For contributions the Likert-Scale ranged from “Did Not Provide” to “Core Provider of Resource” across seven domains – funding, legislative influence, research, information on best practices / policy models, expertise, advocacy, and communication to external stakeholders. Responses on the 5-point Likert-Scale were scored as follows:

- “Core Provider of Resource” – 4
- “Moderately Provided Along with Others” – 3
- “Intermittently Provided” – 2
- “Minimally Provided” – 1
- “Did Not Provide” – 0

In terms of legislative passage, THEC, the General Assembly, and the Haslam Administration were rated as critically involved by the network, while TBR and TN Achieves were rated as moderately involved. THEC and the Governor’s Office were rated as primary contributors of funding, legislative influence, information on policy models, and expertise. Further, THEC was relied upon for advocacy and communication to external stakeholders. Here, we can begin to quantify TN P1 and “the informal brain trust’s” role that bridged between THEC and the Haslam Administration. TBR also provided expertise and communication to external stakeholders on the legislation, its impacts on member schools, and how to craft the policy such that it was compatible with existing structures and institutions. The General Assembly was looked to for funding and legislative influence of its members towards passage of the TN Promise legislation. The scores given to TN Achieves, the Ayers Foundation, TICUA, and foundations (such as NCHEMS, Lumina, and the Gates Foundation) indicate their intermittent support of network activities during critical periods.

Table 4-6: Contributions to TN Promise Legislative Network

Organization	Frequency Cited	Overall Involvement	Funding	Legislative Influence	Research	Info on Policy Models / Best Practices	Expertise	Advocacy	Communication to External Constituents
THEC	6	**4**	3.5	3.75	**3.75**	**3.5**	**3.5**	**3.25**	**3.75**
General Assembly	5	**4**	3.6	3.8	0.6	0.8	0.6	2.4	1.6
Governor's Office	6	**4**	**3.83**	**3.83**	2.83	3	3	3.5	3.67
TBR	5	3.4	2.6	2.8	2.8	2.6	3	2.8	3
TN Achieves	4	2.75	1.5	1.25	2	2.5	2.25	2.5	1.75
Ayers Foundation	3	2	1	2	1.67	1.67	1.67	2.33	0.67
TICUA	2	2	1.5	2.5	2	1.5	3	2	2.5
Foundations	3	1.67	3	1	1.67	2.33	1.67	1.67	1

***Scores presented denote averages. Bolded scores are the highest for that item contributed.

This period of network activity towards legislative passage is modeled in Figure 4-3 below. The legislative passage of TN Promise is modeled using binary relational data generated from the Social Network Analysis survey, interviews of Tennessee officials, conference presentations, and archival research. The dataset is in Appendix 4 and presented in Figure 4-3. Using the visualization, centrality scores in Table 4-7 (below), along with qualitative data, allows for roles to emerge with Hale's modified taxonomy of *Information Positions of Networked Actors.* The Haslam Administration, THEC, and TBR are densely connected *champions*, central to the development and support of the policy model. The organizations, particularly the Haslam Administration and THEC (betweenness scores of 39.0 and 24.0 respectfully) worked together to bridge institutional, business, political, and administrative perspectives to develop the policy. TN Achieves, the Ayers Foundation, TICUA*,* the Tennessee Business Roundtable, and the various community colleges, TCAT schools, the UT System, and state universities coordinated through TBR, are *supporters* who provided insight that shaped the policy development, needed political backing, and realigned their workflows and processes once the policy was passed. However, as their betweenness scores (all 0) indicate, each did not sit at the intersections of the network and controlled little in the way of network activity. Foundations such NCHEMS, Lumina and Gates provided needed technical or financial assistance to scale the policy model and can be considered *outside allies.*

Figure 4-3: Network Visualization for Tennessee Promise

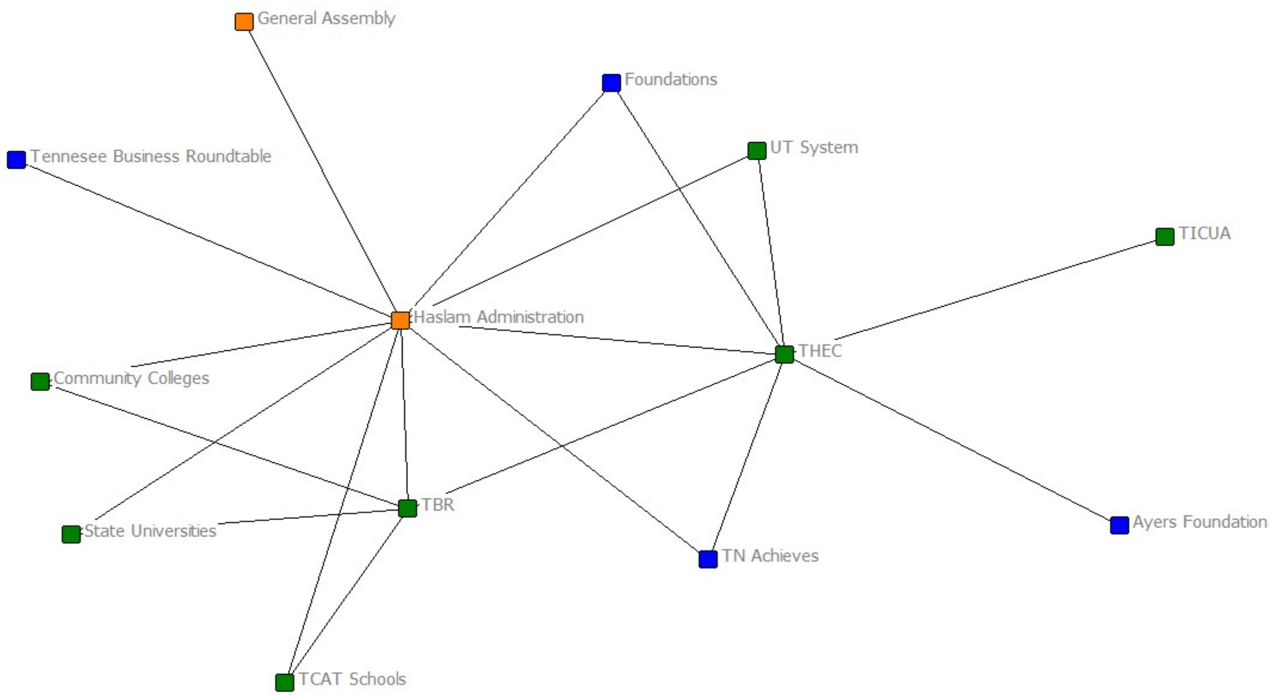


Table 4-7: Estimated Centrality Measures for TN Promise Network

Actor	Degree	Centrality	Eigenvector	Betweenness
Haslam Administration	10	0.833	0.562	39
THEC^	7	0.583	0.426	24
TBR^	5	0.417	0.383	6
TN Achieves^	2	0.167	0.230	0
TCAT Schools	2	0.167	0.220	0
UT System	2	0.167	0.230	0
Community Colleges	2	0.167	0.220	0
State Universities	2	0.167	0.220	0
Foundations	2	0.167	0.230	0
Tennessee Business Roundtable	1	0.083	0.220	0
TICUA	1	0.083	0.099	0
Ayers Foundation	1	0.083	0.099	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 12. Centrality values range from 0 to 1. Eigenvector mean average = 0.247. Betweenness mean average = 5.308. ^ These organizations indicated they interacted with the General Assembly. However, this was done through the legislative push coordinated through the Haslam Administration. It is modeled as such.

Table 4-8: Density Measures for TN Promise Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	0.244	38	0.429	2.923

***Density values range from 0 – 1.

Policy Implementation.

On May 21, 2014 Governor Haslam hired TN O1 from THEC to join his administration as the founding Executive Director of the Tennessee Promise and Drive to 55. In this role, TN O1 was to spearhead the launch of the program statewide. The first decision that needed to be made was around who was going to administer the program and how that was to be done. Additionally, programs such as TN Achieves and the Ayers Foundation existed and this policy would directly affect how their operations ran. Another program in southwest Tennessee named REDI – The Regional Economic Development Initiative – was also doing work around education and workforce development. The administration was obviously most familiar with TN Achieves but also did not want to make it a requirement that they be used in all counties because some already had an existing relationship with REDI or the Ayers Foundation that could administer the program. TN O1 and the administration organized meetings with REDI and Ayers to help them to understand what the administration was looking to do, the requirements of partnering organizations to work with county mayors, identify and train mentors, and go in to schools to recruit students, and to determine if they were willing to join the effort. Both organizations were interested in being the partnering organization for counties.

From there, TN O1 and the administration moved to a focus around engaging county mayors. County mayors would be who would make the decision on which partnering organization they were going to use – whether it be Ayers, Achieves, or REDI, and would be the ones responsible for establishing their local advisory council. Again, this would be built off the TN Achieves model of a county school superintendent, the Chamber of Commerce president, the

County Mayor, and the local United Way Executive Director. TN O1 and his team hit the road in the Summer of 2014 visiting every county mayor in each of the 95 counties in Tennessee to detail their duties, the choices they had for partnering organization, and to sell them on becoming advocates for the program. Additionally, he worked to market the program to community leaders and the K-12 community. TN Achieves was selected as the partnering organization by 90 of the 95 counties in TN. As such, TN P2 was heavily involved in helping communities establish the mechanics of making the program work – identifying mentors, articulating the application process, emphasizing FAFSA completion, detailing the volunteer requirement, etc. Additionally, this work needed be aligned with REDI and the Ayers Foundation to maintain consistency county to county. THEC also needed to determine how they would measure the success of the policy and program. Again, having a local and then regional program like TN Achieves that diffused, rather than a completely new policy innovation, helped to show what metrics mattered, how much each student awarded and enrolled would cost, and what to expect in terms of enrollment increases. Due to projected enrollment increases, further work was done through TBR to help individual institutions and their leadership get community and technical colleges ready for enrollments at the end of the 2014 – 2015 academic year.

Individual Roles

Interview participants were asked about roles that existed within the network. Combined the interviews and Social Network Analysis Survey allow for a picture to be developed relative the roles of particular individuals that existed within the organizations within the network. Participants identified TN P1 as the policy entrepreneur who provided the political and financial capital to launch Achieves and then brought it to scale with TN Promise. TN O2 and TN O1 supported TN P1's work and translated it into political and administrative reality. Governor

Haslam also provided the political capital and legislative influence as well. His administration, under the direction of TN P6 developed and operationalized a legislative plan that effectively navigated the political ecosystem within the state higher education systems and the General Assembly. TN P4 at THEC and TN P5 at TBR provided the coordinating piece that took the TN Achieves model and worked with TN P1 to operationalize within the contexts of state systems of higher education and funding. TN O1 who started in THEC, and then went to the Governor's administration to lead the implementation of Promise (and is now is a senior administrator within THEC), led the efforts in the implementation and program marketing space. This is explored more below. TN Achieves provided support on the technical expertise of identifying, supporting and tracking students. TN Achieves and the Ayers Foundation also supported legislative efforts by bringing in students to testify on the merits of the policy. In summary, TN P2 said this in regard to the network, "Promise really aligned all of us in a way that we had not been before. We all had specific roles that we all had to play. At the end of the day, I felt very strongly that all the credit came back to Governor Haslam. We were just making sure that the program was implemented and successful."

Challenges

Embedded in the narrative above were several challenges that the network in Tennessee had to overcome. These are quantified and summarized in Table 4-9, along with how they were overcome. Here the actions and contributions of the network participants are further made clear. Having available funding to make a policy of this cost and magnitude certainly enabled the legislation to be possible. However, TN Promise came to fruition due to the political powers and messaging of the Governor, who was supported by effective local programs that demonstrated

Table 4-9: Challenges Faced by the TN Promise Network

Challenge	# of References	Method for Overcoming
Concerns about TN Promise being an "entitlement program".	6	Political messaging and use of research/results from TN Achieves.
Potential loss of students at 4-year institutions.	5	Political powers of Governor and messaging by network.
Implementation statewide.	4	Half of state already being served by TN Achieves. Use of additional existing organizations in the state – Ayers Foundation and Redi, along with TN Achieves to serve as non-profit intermediary organizations. Work of THEC to develop local advisory councils.
Need to reach adults in order to obtain 55% post-secondary attainment.	4	Development and enactment of TN ReConnect program.
Challenges of being first. "Not knowing what you do not know."	4	Use of data and model from TN Achieves.
Getting students engaged in high school – communication, meeting service requirements, completing FAFSA.	4	Use of non-profit intermediary organizations (TN Achieves, Ayers Foundation and Redi) to manage student relations piece, and build relationships with schools and mentors.
Impacts of shifting excess lottery funds to Promise.	2	Research and projections in terms of impacts on enrollment and costs. Political powers of Governor.
Increased # of students at two-year institutions.	2	Administrative coordination via TBR and THEC.
Making accurate projections on enrollment shifts resulting from TN Promise.	2	Use of TN Achieves data and NCHEMS expertise.
Perceived value of technical and associate's degrees.	2	Messaging by Administration. Collaboration with Tennessee Business Roundtable.
Getting Local Advisory Councils developed and on board.	2	Efforts of Achieves and THEC staff.

the results of the policy model, research that galvanized the issue, and a political entrepreneur paired with administrative bodies that translated a private program model into a publicly funded state policy. The political prospects of the TN Promise legislation were further supported by the attributes of the innovation.

Attributes

As discussed in Chapter 2, attributes of innovation are a primary influence on the rate of diffusion to secondary adopters. The attributes include relative advantage, compatibility, trialability, observability, and complexity. As discussed previously, nine participants in Tennessee were interviewed. Seven respondents completed the follow up survey, but only six completed the portion of the survey pertaining to the attributes of TN Promise. For each item presented, respondents were asked to evaluate the attributes of the policy model based on a 5-point Likert-Scale that ranged from Strongly Agree to Strongly Disagree. For the purposes of this analysis, Strongly Agree responses were coded as a value of 5, whereas strongly disagree responses were coded as a value of 1. These results are presented in Table 4-10. Averages and standard deviations are presented for each item, and then averaged with other items for each attribute for a composite attribute average. Attributes of TN Promise are presented in cumulative form at the bottom of the Table, which allows for an aggregated comparison to the innovations in California and Washington. TN Promise had the highest attribute total of the three innovations studied, had the lowest standard deviation on three of the five attributes (six of eleven survey items), and had the lowest composite standard deviation of the states analyzed. Low opinion deviation is another indicator of network cohesiveness. Trialability (4.657), compatibility (4.583), and relative advantage (4.389) scored the highest, indicating that participants in

Tennessee are confident in their ability to explain TN Promise to others. Further, TN Promise is seen as relatively complex to manage, but compatible with existing structures, and as an effective policy to address financial insecurity in college students. The complete dataset is available in Appendix 5. In Chapter 7, the effect of the attributes of TN Promise on the rate of diffusion to secondary states will be explored and analyzed.

Table 4-10: Attribute Analysis of TN Promise

Attribute	Item	Item Average	Std. Deviation	Composite Attribute Average
Relative Advantage	The policy my state created to address college student financial insecurity improves the lives of financially insecure college students in my state.	4.83	0.408*	4.389
	The policy my state created to address college student financial insecurity improves the academic performance of financially insecure college students in my state.	3.667	0.516*	
	Overall, the policy is an effective instrument to address the negative effects felt by financially insecure college students in my state.	4.667	0.516*	
Compatibility	The policy my state created to address college student financial insecurity is compatible to the capabilities of institutions and organizations in my state.	4.667	0.516*	4.583
	The policy my state created to address college student financial insecurity is compatible with the needs of financially insecure college students in my state.	4.5	0.548*	
Complexity	It is easy for financially insecure college students to take advantage of this policy.	4	1.09	3.833
	It is easy for administrators and institutions to manage this policy / program.	3.667	0.816	
Trialability	I can easily explain the central features and benefits of this policy to others.	4.833	0.408*	4.667
	The effects of this policy to address college student financial insecurity are directly apparent to me.	4.5	0.837*	
Observability	I examined the effects of best practices of this policy model before advocating for legislative action.	4.167	1.169	4.333
	I have observed the effects of similar smaller scale programs at the community or institutional level on financially insecure college students.	4.5	0.837*	
	Attribute Total	48		

N=6. * indicates lowest standard deviation of three innovations studied.

Policy Expansion

The innovations in Tennessee around college access do not end with TN Promise. In the roll out, officials found that TN Promise was doing what it was intended to do – attract students to post-secondary education that otherwise would not have attended. Additionally, THEC officials had been accurate in their projections on cost and enrollment. Current THEC Administrator TN P9, who oversaw research for the system at the time stated, "We were within a few hundred students and few hundred dollars of their fiscal benchmarks. More importantly, in a very real way, we could tell (TN Promise) had in fact changed the conversation around dinner tables across the state." Further, officials at THEC and TBR could see other avenues for expanding post-secondary attainment.

In the rollout to the Drive to 55 in the 2014 State of the State Address, Governor Haslam articulated one of the five stated goals was around "finishing what we started with adult students." Additionally, he stated that "We have almost a million Tennesseans that have some college credit but didn't graduate with an associate's or a four-year degree. That is an amazing pool of untapped, unrealized potential. We're including money in this year's budget to help our state colleges and universities do a better job of identifying and recruiting adults that are most likely to return to college and complete their degree. This is going to take all of our schools – state and independent colleges – working together to get us where we need to be." In the 2014 budget that money would fund a program called Reconnect which initially was designed to send adults to TCAT school. This was also supported by a $350,000 grant from the Lumina Foundation (Lumina 2019). The state of Tennessee already had the Wilder-Naifeh Technical Skills Grant which allowed people to go to a TCAT schools for virtually no cost. In 2013, the total overall costs for TCAT tuition was $32M across the 27 TCAT schools. $29.5M of the

$32M came from the Wilder-Naifeh state funded scholarship. In other words, only $2.5M was paid for through tuition by students. TN P1 stated this when discussing the initial Reconnect, "The feeling at THEC was that it was almost free anyway, but there is a huge difference between almost free, and free. From a marketing and messaging point of view those are big differences. We got the Governor to agree to kick in the balance for the remaining $2.5m to make it all the way free. That was the initial Reconnect – it was for adults to TCAT." According to TN P1, the name came from a local program in California that aimed to serve adult students that he and Governor Haslam had become familiar with through a National Governors Association seminar.[8]

The Administration also rolled out a program in 2015 called Veterans Reconnect to provide institutions grants focused on improving the success of veteran students. Veterans Reconnect Grants fund campus services for student veterans and provided veteran-specific resources, such veteran centers, professional development for faculty and staff on veterans' needs, and the development of competency-based credit protocols. on the specific needs of students with military experience. The administration also launched smaller efforts aimed at adults and pulling them back in via support communities in various regions across the state. This was modeled after Graduate Philadelphia, a program in Pennsylvania which encourages students to go back to school and provides students with a case manager to help navigate the realities of college. However, this initial work in setting up this network for adults across the state did not gain much traction. THEC administrator, TN P9, stated that these efforts "…did not go particularly well because there were too many conditions to getting the grant that really boxed out a lot of people." However, they did allow for learning relative to program design and helped

[8] TN P1 stated that the naming of Reconnect was based on a short, informal conversation with California officials. However, TN P1 did not cite any other elements of TN Reconnect that were based on the California based local model.

officials to see how many students would actually return and how much it would cost. Additionally, the combined efforts served to build up the infrastructure to support returning adults at the institutions in the state.

Concurrently, families interested in having their children be eligible for TN Promise were required to attend a couple of mandatory meetings and to file the FAFSA. As such, both efforts involved outreach to parents via TSAC, which operates under THEC. In those efforts, it became clear to officials that there was an untapped market of adults who were working, but had no post-secondary credential. However, many were interested in going to college themselves. Further, many legislators and business leaders had been and were asking the Administration what they would be doing for adults related to college attainment. Officials knew from the NCHEMS projections that they would need adults to obtain credentials to reach the 55% attainment goal. TN P7, who had previously worked for TBR in the early 2000s, had been tasked at that time with exploring the number of adults in the state that were within a year of graduation. The state had the names and contact information for 100,000 individuals in the state who were within a semester or two of graduating, but for various reasons had not finished. TBR had made a couple of attempts to get Governor Bredesen's administration to fund a program to incentivize adult students to come back and finish, but the administration never put it on the political agenda. However, the original data existed and it included names and other identifying information. Further, officials knew the data still existed, and TBR's data system was now linked in with the Tennessee Department of Labor and Workforce Development to include K – 16 educational attainment data. THEC officials found that the state had almost 1,000,000 Tennesseans that had accrued some level of post-secondary hours but had never earned their credential. Additionally, they had their names and contact information, which would be useful for outreach. From the responses at the TN Promise interest sessions for children and parents, officials could see that an untapped market existed.

The initial pilot programs and the data gathered demonstrated to officials that there was both a further market of students that could be tapped and that further expansion of the program would be possible. Again, the same questions from TN Promise came into play – how to structure and pay for it? On the structure side, philosophically both programs would have the same aim, as each are last dollar scholarships design to expand access to post-secondary education. The initial pilot program with case management had demonstrated that too many requirements and restrictions did not work well with adult students. Adult students in Reconnect only need to be enrolled half-time – 6 credits or more each semester, but officials determined that the mentorship and community service aspects of TN Promise would not work for Reconnect students because working adults do not need to demonstrate a level of commitment the same way that a traditional age student does. To THEC and Haslam administration officials, commitment for adult students is demonstrated in that they are choosing to come back in the first place. Thus, with no need for mentorship and volunteering, there is no need for a partnering non-profit organization like TN Achieves, the Ayers Foundation, or REDI. In terms of paying for the policy, Reconnect would be similar to TN Promise in that it would be funded via lottery dollars. The endowment for Reconnect would be funded before the annual excess revenue sweep goes to Promise. This was chosen due to continuing strong years of lottery revenue with sufficient revenues to cover the two programs.

Politically, Reconnect was less of a coordinating and legislative push because institutions and legislators understood the policy and program model from having recent experience with TN Promise. Further, due to the initial connection to TCAT schools, the policy was viewed by many as a having a blue-collar orientation to it, which helped in the conservative state. Related to this, TN P6, who worked in the Haslam Administration stated “For our legislature and a lot of legislatures across the South they like that thought of being blue-collar. Connecting to our TCATs and specific programs like welding and plumbing are tangible. That was much easier to sell because people understood it.” In his January 30, 2017 State of the State Governor Haslam called on the legislature to “…become the first state in the nation to offer all adults access to community college free of tuition and fees. Just like the Tennessee Promise, Tennessee Reconnect will provide last-dollar scholarships for adult learners to attend one of our community colleges for free – and at no cost to the state’s General Fund. With the Reconnect Act, Tennessee would be the first in the nation to offer all citizens – both high school students and adults – access to a degree or certificate free of tuition and fees. No caps. No first come, first served. All. Just as we did with Tennessee Promise we’re making a clear statement to families with Reconnect: wherever you might fall on life’s path, education beyond high school is critical to the Tennessee we can be. We don’t want cost to be an obstacle anyone has to overcome as they pursue their own generational change for themselves and their families.” On May 9, 2017 the State Senate of the 110th General Assembly of Tennessee voted unanimously (33 – 0) to adopt HB0531 – the Tennessee Reconnect Act. On May 10, 2017, the House of Representative of General Assembly of Tennessee voted 81 to 3 to pass the Tennessee Reconnect Act. On June 1, 2017 Governor Bill Haslam signed it in to law.

The legislative push to enact TN Reconnect is modeled in Figure 4-4 using binary relational data generated from interviews of Tennessee officials, conference presentations, and archival research. Table 4-11 presents degrees of connection and centrality scores for organizations within the network. The dataset is in Appendix 4. The network for Tennessee

Reconnect is denser, as TN Achieves, TN P1, and the Ayers Foundation were not involved in Promise. Additionally, the pathway for TN Promise streamlined the process and, as such, not as many actors were involved.

Figure 4-4: Relational Network for TN Reconnect

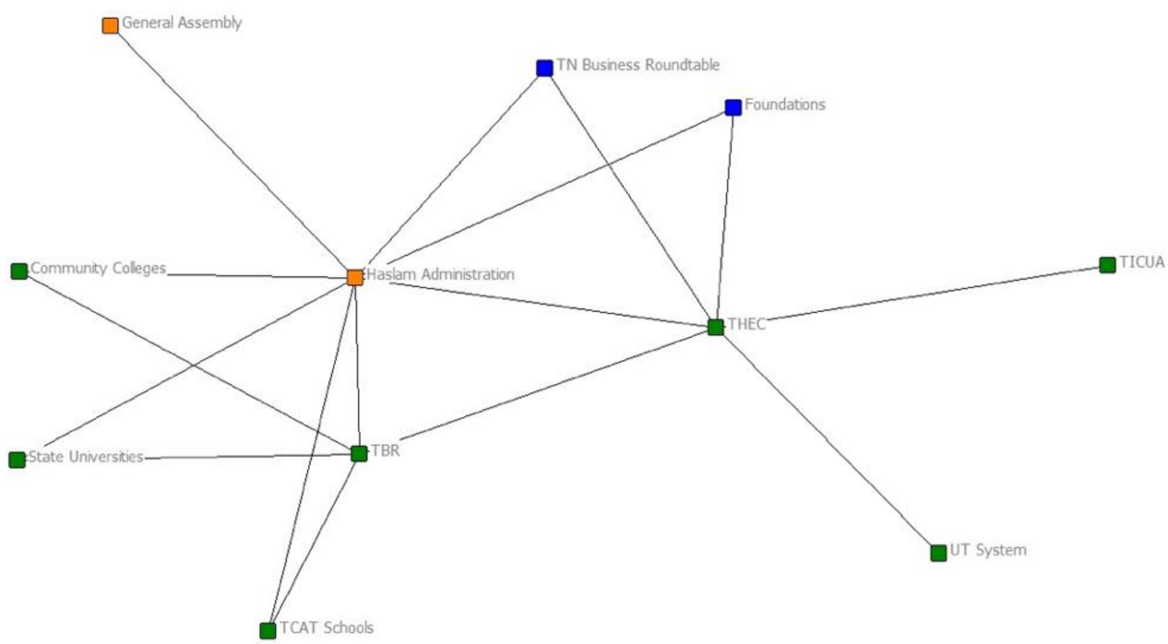


Table 4-11: Estimated Centrality Measures for TN Reconnect

Actor	Degree	Centrality	Eigenvector	Betweenness
Haslam Administration	8	0.889	0.560	22.5
THEC^	5	0.556	0.400	18.5
TBR^	5	0.556	0.434	6
TCAT Schools	2	0.222	0.251	0
UT System	2	0.222	0.243	0
Community Colleges	2	0.222	0.251	0
State Universities	2	0.222	0.251	0
Foundations	2	0.67	0.243	0
TICUA	1	0.111	0.101	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 9. Centrality measures range from 0 to 1. Eigenvector mean average = 0.288. Betweenness mean average = 4.273. ^ These organizations indicated they interacted with the General Assembly. However, this was done through the legislative push coordinated through the Haslam Administration. It is modeled as such.

Table 4-12: Density Measures for TN Reconnect Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree	Alpha
Value	0.333	30	0.471	3	0.833

***Density values range from 0 – 1.

Again, this visualization and analysis allows roles to emerge within Hale's modified taxonomy of *Information Positions of Networked Actors.* The Haslam Administration, THEC, and TBR are densely connected *champions*, central to the development and passage of the policy model. The three organizations, particularly the Haslam Administration and THEC, merged data and feedback from the pilot programs, input from business and political leaders, and existing information on the educational attainment of adults in the state to develop the policy model. This is reflected in their centrality, eigenvector, and betweenness scores. TICUA, and the various community colleges, TCAT schools, UT System, and state universities are *supporters* who were moderately connected within the network and provided insight that shaped the policy development, needed political backing, and realigned their workflows and processes once the policy was passed. However, like in the TN Promise network these organizations each had moderate centrality and eigenvector scores, with betweenness values of zero, indicating their support role within the network. Foundations, specifically the Lumina Foundation, are *outside allies* who provided financial assistance to scale the policy model, but did not sit in a centralized position within the network.

Reconnect has had much more substantial response from state residents than what Tennessee THEC officials anticipated. Due to the strong state economy at the time, THEC officials interviewed figured adults would not want to step away from their jobs to enroll in higher education. THEC estimated about 11,000 – 13,000 adults would apply and around 8,000 would actually enroll. However, around 40,000 people applied and the program was $10m over expected expenditures. TN P9, THEC Deputy Director framed it this way, “Oddly enough, our projections for Reconnect were about as off as our projections for Promise were on.” Due to the strong performance of the state lottery there are sufficient revenues to cover the excess. However, the increased enrollment has placed some strains on institutions in the state receiving the deluge of students (Smith 2018). THEC officials were interviewed during the initial academic year (2018 – 2019) of Reconnect, so hard figures had not been determined, however they have found that a large portion of students returning are the ones who are a semester or two from finishing. Officials expect a flattening downward as the populations that participate begin to align more with expected demand. Tennessee officials remain pleased in that the program is moving the needle on post-secondary attainment, however, they do worry about the sustainability of continual strong revenues from the lottery, and the implications of a bad year of lottery performance should it come.

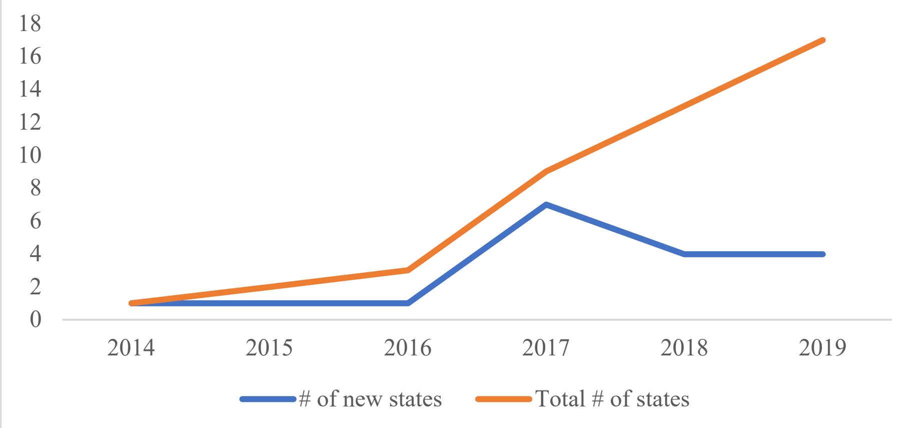
Diffusion

The innovation of TN Promise was possible through the confluence of a palatable policy that had been successfully modeled at a local level with available financial resources to take it statewide. This confirms Everett’s assertion that innovators tend to have control over substantial financial resources such that they can absorb possible losses from unprofitable innovations (Rogers 2003, p. 282). TN Promise diffused to other states and subgovernments after its passage in 2014. Since 2014, the comprehensive free community college for all model has spread to five other states (Powell 2018, Campaign for Free College Tuition 2019). Further, eleven states have passed modified versions that include reduced tuition, income caps, or merit-based requirements. An additional seven states have had some legislative activity related to creating a Promise program. It should be noted that the sheer expense of such programs makes passing them difficult. As such, there are more states with partial programs that extend merit or need-based aid than comprehensive programs like Tennessee's that extend community college to all graduating high school students. Related to this, one participant interviewed in Tennessee stated, "A lot of states have come in and talked about what they would like to do and I think one of the reasons that they end up with a partial free college program is simply that they don't have the funding mechanisms to drive a full model." Another stated, "I have seen a few states pass what they call Promise programs, however one state legislature allocated only $2M for that one year. If it is a one-year allocation from the general fund, I am not sure it is really a Promise and something that you can count on for perpetuity. As you look across the states that have adopted a similar program – how many other states have an endowment that make this a promise for perpetuity? I think it is a lot fewer than those who use the word 'Promise'."

Put together, it is hard to delineate in a precise way what has diffused directly from Tennessee's comprehensive model and what has not. There are also different numbers of states that have "free college" or Promise programs depending on what sources one selects and criteria (need vs. merit-based aid; comprehensive vs. selective aid; dual enrollment vs. graduating high school seniors vs. adults) used for analysis (see for example those listed in Powell 2018 versus Campaign for Free College Tuition 2019). However, this analysis includes any state level college financial aid program aimed at expanding college access through extension of free college tuition to students in their state that were enacted into law after the Recession. Table 4-13 presents the states that have enacted Promise programs, and the year that their legislation passed. Figure 4-5: Diffusion Curve of TN Promise closely mimics the beginning of a S-shaped curve where later adopters imitate actions of earlier adopters (Tarde's 1903). Using Table 1-1: Rogers' Adopter

Categories based on the Innovation Adoption Lifecycle (Figure 1-1), adopter categories have been ascribed to each state in Table 4-13.

Figure 4-5: Diffusion Curve of TN Promise Program



Note: DE, LA, MO, OK, WY had preexisting merit and/or need based aid programs that existed prior to the Recession. These are not comprehensive programs for all students.

Table 4-13: States with Comprehensive Promise Programs

Year	# of New States	Total # of States	States Added	Adopter Category	Notes
2014	1	1	TN*	Innovator	
2015	1	2	OR*+	Early Adopter	
2016	1	3	KY+	Early Adopter	
2017	7	9	AR+, CA*, HI+, IN^+, MT, NV*+, RI*+	Early Adopter	IN passed Workforce Ready Grant for working adults, and builds on existing merit based 21st Century Scholars program. MT's Promise Program is privately funded
2018	4	13	NY+, NC+, MD, MN	Early Majority	MN Reconnect program provides scholarships to returning adults
2019	4	17	NJ*, WV, WA	Early Majority	WA already had need based College Bound Scholarship (2007) but expanded to include Promise Program
			Avg. rate of adoption/ year	3.2	

* indicates comprehensive program. ^ indicates existing scholarship program was expanded. + indicates direct contact to TN Network. Avg. rate of adoptions/year does not include innovator state.

<u>Diffusion Sources</u>

Multiple sources have been identified through archival research and interviews with officials in Tennessee that enabled the diffusion of the TN Promise model. These include national foundations and interest groups, professional associations, the President of the United States, and popular press. Each is explored briefly below.

On January 9, 2015 U.S. President Barack Obama visited Pellissippi Community College in Knoxville, Tennessee to tout the TN Promise program. The visit was in advance of his 2015 State of the Union Address to the nation in which he again touted the efforts in Tennessee and framed free community college as a national workforce and economic development imperative. President Obama also proposed making community college free for all. His proposal, which had an estimated cost of $60 billion over 10 years, never passed the Republican-led Congress; but it sent a clear signal to states that these efforts were an imperative. He also helped launch the College Promise Campaign, a non-profit aimed at expansion of Promise programs (College Promise Campaign). The free college imperative was later picked up by other progressive Democratic presidential candidates in the 2016 and upcoming 2020 elections.

However, in interviews, six Tennessee participants indicated that the politicization of "free college" had become such that if Tennessee, which is a conservative state with a Republican controlled legislature and Governor, had not been the first to pass their Promise program that it likely would not have happened. One Tennessee participant stated this regarding the effect of innovating first, "…There were some benefits to being first. Free college has become politicized and a loaded term. Just look at Common Core as a standards program for K-12 and the statewide rollouts. The irony of ironies is that Common Core was developed from a group within the National Governor's Association that was chaired by a Republican governor. It rolled out because it was a strong set of standards but it was completely undermined because the Obama Administration jumped on board and the name switched from Common Core to Obama Core. If we had not innovated first, that could have happened here with Promise." An official within the Haslam Administration added this, "I think if we hadn't gone first then we probably couldn't have gotten it passed. This was our 3rd year in office, so it was early on, and we used capital. I think it would be extremely hard to pass it in Tennessee in the current climate because nationally it has become part of the conversation around the presidential election, on the Democratic side especially. I do think it would be extremely hard to pass it now. The Governor interacted and knew President Obama and liked him but we did not want President Obama coming to our state and advocating for this program. That wasn't helpful. We told Arne Duncan, who was the Secretary of Education at the time, ‘Hey, thank you all for supporting us, but support us behind the scenes. You are not helping us if you are advocating for us.’ That was the reality of it even then. I think it is even more hyper political now.”

Nevertheless, President Obama’s attention to TN Promise and his free community college proposal, although fundamentally different, raised the profile of the policy around the U.S. This is an area for continued research, and a continuation of Allen, Pettus and Haider-Markel (2004) study around the effect of signaling on the policy actions of states. Allen et al. found that fiscal incentives, along with strong, clear signals from the federal government, can prompt states to act. However, here the Obama Administration provided no financial incentives, and the politicization of the policy action by Democrats may have actually hurt diffusion to other Republican leaning states.

National foundations and interest groups were also cited several times by those interviewed. Eight of nine interview participants cited them as a potential source for diffusion. Activities with the foundations and interest groups include serving on boards, presenting at conferences, assisting in an advisory capacity, and hosting events. The number of references to each organization is listed below in Table 4-14. However, it should be noted that many participants struggled to remember all the organizations that they had been engaged in, because as one participant stated, “After we rolled out Promise, we were being pulled constantly into those conversations to help other states think about what we were doing.” Here you can see how the activities of intersectoral networks serve to assist in diffusion efforts.

Table 4-14: Organizations Cited by Network Participants as Sources in the Innovation and Diffusion Process of Tennessee Promise

Organization	Number of References	Notes
Lumina	5	Cited twice as having done previous work prior to Promise in the state of Tennessee. Sponsored event in Nashville in 2015 for other states to learn from TN Promise. Provided THEC $350,000 for Tennessee Reconnect Communities and the Tennessee Reconnect Community Network in 2015.
National Governors Association	4	Four participants cited that they presented at NGA events.
Complete College America	3	Two participants cited that they presented at CCA events.
Achieving the Dream	2	Two participants cited that they presented at ATD events.
Bill and Melinda Gates Foundation	2	Cited twice as having done previous work in the state of Tennessee. TN O2 played an active role as a consultant connected to the Gates Foundation.
Campaign for Free College	1	TN P2 serves on Advisory Board.
College Promise Campaign	1	TN P1 serves on Board of Directors.
Kresge Foundation	1	
Smith-Richardson Foundation	1	

That said, four participants stated that they felt that the diffusion process was relational in context. Three participants interviewed characterized the diffusion process as “organic” and shaped by the natural outflow of relational contacts within shared professional or political networks. Further, seven participants cited that direct contact from states was the primary mechanism for diffusion. Typically, contacts were made through legislators or state higher education systems via direct phone calls, or through relational networks. Table 4-15 presents the states that officials in Tennessee were contacted by, however any participants struggled to remember all the states that they had been contacted by.

Table 4-15: State Contacts Regarding Tennessee Promise

State	Number of References	Notes on Statewide Promise Program Adoption
Colorado	2	
Indiana*	2	Indiana's Workforce Ready Grant passed in 2017.
Oregon*	2	Oregon Promise passed in 2015.
Rhode Island*	2	Rhode Island Promise passed in 2017.
Alabama	1	
Arkansas*	1	Arkansas Future Grant passed in 2017 for certain fields of study.
Georgia	1	
Hawaii*	1	Passed Hawaii Promise in 2017 for qualifying low-income students.
Kentucky*	1	Work Ready Kentucky Scholarship was created in 2016 (Governor Bevin vetoed a previous version in 2016, and then signed an executive order to adopt a modified version of this program that same year).
New Mexico	1	
New York*	1	Excelsior Scholarship passed in 2018 for individuals with an income or family income of up to $125,000 per year are expected to qualify to attend college tuition-free at all CUNY and SUNY two- and four-year colleges in New York State.
Nevada*	1	Nevada Promise passed in 2017.
North Carolina*	1	NC Promise Tuition Plan passed in 2018 and reduced tuition to $500 at three state. universities. Additionally, the state passed College and Career Promise, which enables eligible high school students to work, tuition free, toward a two-or four-year degree, a certificate or diploma.
Minnesota	1	
Utah	1	

* Indicates Promise / similar scholarship was enacted within the state.

Local and Regional Diffusion.

The diffusion from Tennessee modifies Mossberger (2000) and Mossberger and Hale's (2002) theory of polydiffusion where experiences, information, and stimuli are shared in all directions across levels of government or intersectoral networks. The activities in Tennessee offer evidence for state level polydiffusion, or diffusion that emanates from a state network without federal agencies being in a central position. In political science, state to state diffusion is a common focus of analysis, and while this case study exhibits state to state diffusion, it also features local to state diffusion as Knox County was the point source of the innovation. That innovation diffused rapidly within the region before being enacted into law at the state level. Local networks that started in Knox County, and featured entrepreneurial and densely connected champions, allowed the policy to spread rapidly through the region of east Tennessee. These local networks helped provide the infrastructure for public and political support when the policy surfaced to the state level. Further, the local and regional diffusion process itself allowed for the attributes of the policy model to be seen by decision makers, for support to be generated, and for the public to understand the innovation. These attributes will be further explored below, but for now, it can be said that the local to state diffusion was enabled by the process which allowed the attributes of the innovation to be visible.

The TN Promise model has also been diffused back to local efforts, which makes sense given its history back to Knox Achieves. Other local efforts pre-date Knox Achieves, such Kalamazoo Promise, which was created in 2005, and is the first widely recognized community-based “Promise Initiative.” A review of Promise programs on the College Promise Campaign’s (2019) website indicates 166 different local Promise programs across 42 states. Most are tied to institutions, local government, or area non-profits or foundations. These efforts may enhance or hinder statewide policies from being enacted depending on the level of legislative professionalism in a state (Shipan and Volden 2006). States with a higher degree of legislative professionalism would be expected to adopt such statewide policies due to opportunity to learn from and network with local efforts and advocates. States with lower degrees of legislative professionalism are expected to not adopt such statewide policies, as local efforts relieve pressure for legislators to do so. This is an area for future research relative to this study.

Tennessee also exhibits *reverse innovation*[9] or the development of new, complementary innovations that support the existence of an anchoring innovation, such as TN Promise. After the state passed TN Promise, local programmatic efforts to complement the new program have been created in the cities of Nashville and Knoxville, at the University of Tennessee system, and within TN Achieves. The efforts in Nashville were announced in December 2018 and stem from the Mayor David Briley. Titled Nashville GRAD — or Getting Results by Advancing Degrees, the mayor's initiative targets non-tuition expenses, and helps students at one technical and one community college in the city (Chatlani 2018). TN P1, former Governor Haslam and TN P2 continue to be active in innovations around college access. Through seed money provided by TN P1, TN Achieves started local credit bearing programs to address summer learning loss and college readiness issues. TN Achieves launched the efforts, found success, and eventually secured funding from the state. TN P2 stated, "The way we sort of work now is that we will pilot something with private dollars and if it really does work, we will go to the state and ask for state funds to scale it for more students. Because I have such a strong relationship with (current) Governor Lee and obviously with the previous administration, they have always been really open to our thoughts on expansion while staying in our lane." In August 2018, TN Achieves launched an intrusive coaching model, funded by the state, for 0-EFC students – or students who are expected to have zero expected family contribution based off their financial status. Often these students tend to be the first to leave post-secondary. Achieves hired 9 coaches to work with this

[9] This is similar to Rogers' concept of *reinvention,* or the process of modifying an innovation in the process of adoption or implementation. However, the term *reverse innovation* indicates a direction of innovation within the subgovernments of U.S federalism.

cohort and are working to see the effects on retention. This program is 100% funded by the state. TN P2 added “We continue to innovate. Promise laid a solid foundation but what we have learned is that some students need more support than what it provides. So we have to figure out how to do more, while also doing more at scale which is really not easy, but certainly worthwhile.”

TN P1 now serves as a senior administrator within the University of Tennessee System. In March 2019, the system announced the creation of UT Promise which will cover tuition and fees for students with a household income of less than $50,000 a year at any of the three UT system institutions. UT Promise will be privately endowed and funded, similar to the initial Knox Achieves and TN Achieves programs. Additionally, in June 2019, officials in Knox County, Tennessee announced Knox Promise, which is a privately funded from a $6.2M donation from the Haslam Family Foundation. Knox Promise aims to complement TN Promise and increase the number of Knox County college graduates by providing need-based grants, a textbook stipend, a coach to support students in their college career and a summer support program. At least in Tennessee, reverse innovation is borne out of the continued efforts of policy entrepreneurs to further support and enhance initial policy advocacy and actions.

Federal Efforts

Although this did not come up specifically in data collection, it is important to note that federal action to reauthorize the Higher Education Act (HEA) and reformat the FAFSA is being led by Senator Lamar Alexander through his role as Chairman of the Senate Health, Education, Labor and Pensions Committee. Senator Alexander’s efforts have included the reauthorization of the HEA through the Student Aid Improvement Act of 2019, which seeks to simplify the FAFSA to make it easier for students to complete, expands Pell-Grants to incarcerated individuals and those pursuing eight-week technical training,[10] and requires standardization of financial aid offers (National Association of Student Financial Aid Administrators 2019, U.S. Congress 2019a). The extent of the connection with the efforts in Tennessee around TN Promise and Reconnect is unknown but it is important to note that the completion of the FAFSA is foundational to the last dollar scholarships offered by the two programs. The FAFSA is regularly cited as a complex document to complete and one that impedes access to students, particularly those of lower income or family academic achievement (Johnston 2019, National College Access Network 2019). Simplifying the FAFSA would serve to expand the effectiveness of last dollar Promise programs. However, critics such as Senator Patti Murray from Washington and organizations that promote higher education access have criticized that the Student Aid Improvement Act of 2019 does not go far enough in comprehensively reforming the Higher Education Act or expanding Pell Grant awards (Whistle 2019, Center for Law and Social Policy 2019, National Association of Student Financial Aid Administrators 2019). In late 2019, Sen. Alexander and Sen. Murray brokered a deal, called the FUTURE Act (Fostering Undergraduate Talent by Unlocking Resources for Education), to simplify the financial aid process with expanding funding to minority-serving schools (Douglas-Gabriel 2019). This is important evidence of polydiffusion which, as will be seen in the other states analyzed, is led by federal Congressional delegates from first innovator states. Further, it is an example of how state policy innovations can drive actions of the national government led by federal representatives.

[10] Currently Pell Grants are awarded to students who enroll in academic and technical programs as short as 15 weeks.

Conclusion

The efforts in Tennessee to expand college access through the TN Promise and Reconnect policies were made possible through the leadership and political will of Governor Haslam, higher education system officials in the state, local modeling from TN Achieves, and the enterprising and entrepreneurial efforts of TN P1. These efforts quickly diffused via college access foundations, which were outside allies in the formation of the policies in Tennessee and whom then served as messengers and connectors to advocates and policymakers in other states. Diffusion was additionally aided by the focus of President Obama, who lauded the policy model, and formed the College Promise Campaign, which promotes similar scholarship policies and programs in other states, institutions, and local communities. The local programs and advocates central to the creation of TN Promise and Reconnect helped spark reverse innovations designed to complement and amplify the effects of the scholarships in expanding college access. Federal legislation led by Tennessee Senator Lamar Alexander holds the potential of further expanding access through simplification of the FAFSA and extension of Pell grants to additional technical training programs. These recurrent themes of network construction, polydiffusion, reverse innovation, and federal supports of state efforts are explored further in California and Washington.

Chapter 5: California

Introduction

California has taken a leading role within the U.S. in advancing legislation to support access to basic needs amongst its college students. In 2017, through SB 108, California appropriated $7.5M to the Hunger Free Campus Initiative, to fund food assistance programs and case management services to California colleges and universities. This legislation received national attention in the media (Lobosco 2017; Thomas 2018). Later other states would model and adopt similar legislation. The analysis of California below focuses on the Hunger Free Campus Initiative legislation, how it was innovated, and how it has diffused. However, the legislative activities around college student financial insecurity in California are much more extensive than a single piece of legislation. Since 2014, more than 10 pieces of legislation have been advanced to support access to basic needs for college students. The ecosystem of networked organizations through which the Hunger Free Campus Initiative was developed and enacted, along with other legislative actions, is explored below.

An Issue Emerges

The Hunger Free Campus Initiative and the other innovative legislation explored in this analysis stem from legislation passed in 2014. AB 1930 was signed into law by California Governor Jerry Brown on September 28, 2014 (California State Asse2014). AB 1930 created a work group within the California Department of Social Services to identify what state or local training programs would exempt a college student from the Supplement Nutrition Assistance Program (SNAP or CalFresh in California), which provides federally funded food benefits to low-income individuals. This legislation was borne out of the work of CA P1, a policy advocate at the California based Western Center for Law and Social Policy (Western Center), and CA P2, a national organizer at MAZON: A Jewish Response to Hunger (MAZON), which is a national anti-hunger advocacy group based in California. Students experiencing hunger had come to the attention of CA P1 and CA P2 through their respective work around food security. In 2009, CA P1 was transitioning from the California Association of Food Banks (CAFB) to the Western Center, and understood firsthand SNAP policy and the roles of food banks to address hunger. While with CAFB during the Recession, more and more college students were requesting help from food banks due to their ineligibility for CalFresh benefits. In discussing the work at the time, CA P1 stated, "We noticed that people fell into two categories – either they were on SNAP, or attending college and working – meeting the requirements under the SNAP student rules. Then the recession came and they lost their jobs. And since they lost their jobs, they were told 'since you are not working you need to drop out of school or you will lose your benefits'…That seemed profoundly unjust to us." Likewise, in CA P2's organizing work, there were different, anecdotal stories emerging of students, particularly non-traditional college students, that were in school but having difficulty finding adequate food. From past experience in workforce development, CA P2 understood that the demographics of college were changing, while costs were rising. Additionally, CA P1 and CA P2 noticed food pantries were popping up around college campuses in the state.

Faced with a challenge of not knowing how to help beyond emergency food aid, CA P1, who was now at the Western Center, and CA P2 went to went to the federal guidelines on SNAP to see what, if any, exemptions existed for college students. Federal SNAP law denies eligibility to a student unless they are working at least 20 hours a week or are eligible for a rule exemption (Western Center 2018). Students must also be between the ages of 18 and 50 and enrolled at least half time in regular curriculum in an institute of higher education. A student is exempt from these rules if they are:

- Eligible for and anticipate working at a state or federal work-study job
- A full-time student with a child under the age of 12
- Receiving Temporary Aid for Needy Families (TANF) benefits
- Enrolled in a Food Stamp Employment and Training Program (FSET); or other state or local job training programs, as identified by the state and approved by the USDA.
- Does not intend to register for the next normal school term

However, while several exemptions existed, California had not implemented any and had not issued county DSS agencies guidance on how to verify exemptions. Students, otherwise eligible for CalFresh under an exemption, were simply told they were not eligible for benefits (Western Center 2018).

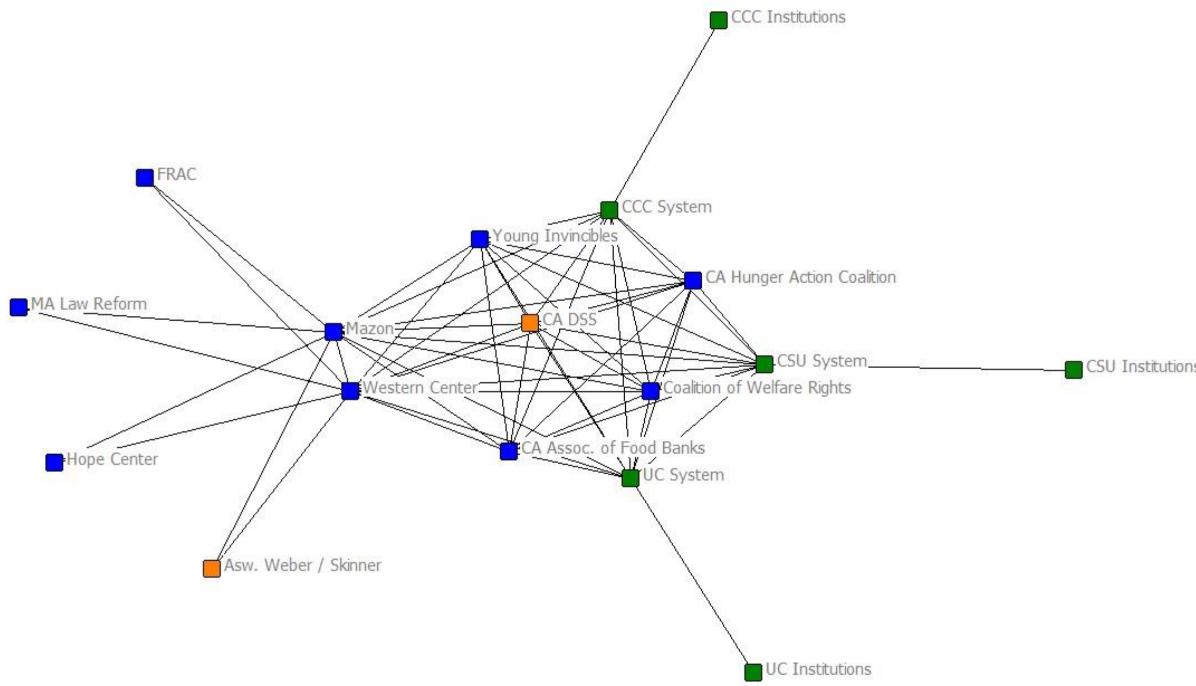
For the next three years, MAZON and the Western Center approached the CA Department of Social Services (CA DSS) for guidance on how to implement CalFresh policy related to college students. However, CA DSS never ruled. Instead, in 2013, the two advocacy organizations went to the legislature with proposed legislation that would require DSS to convene a work group and issue guidance on how the various potential exemptions, such as Employment and Training and Extended Opportunity Programs and Services through community colleges, apply to college students. CA P1 could not find a sponsor in the first year. However, in 2014, they found Assemblywoman Nancy Skinner, Chairwoman of the Budget Committee and a well-known SNAP advocate, who sponsored and helped pass AB 1930 (California State Legislature 2014). The Western Center helped co-write the legislation along with the Coalition of California Welfare Rights Organizations, which was supported by eight other organizations.

A Coalition Emerges

AB 1930 established a work group made up of representatives from the three public higher education systems in the state: The University of California (UC) with nine institutions, California State University system (CSU) with 23 institutions, and the California Community Colleges (CCC) systems with 114 institutions. The AB 1930 workgroup also included the Student Aid Commission, the Western Center, Young Invincibles, the CA Association of Food Banks, the CA Hunger Action Coalition, the Coalition of Welfare Rights Organization, and CA DSS to determine which "state or local job training programs" would exempt a college student from the student work rule (California State Legislature 2014). The network is visualized in Figure 5-1. In the model, the UC, CSU, and CSU systems, each with a multitude of schools that are not included in the model, are underestimated.[11] AB 1930 required DSS to issue guidance to counties about how to identify and verify participation in one of the training programs. CA P1 chaired the work group which convened in May 2015, and met for 1.5 years. The work group also issued guidance to county DSS offices about how to verify the other, non-job training exemptions and produced a checklist for advocates and county officials to assist in screening college students for exemptions. The efforts of this coalition in the work group would set the stage for later network efforts to address access to college student basic needs.

[11] This was done to simplify the model and due to the variances in participation of institutions within each system. This remains constant throughout the other network models for California.

Figure 5-1: California AB 1930 Workgroup



Concurrently, CA P2 became familiar with emerging research on issues of college student hunger from the Wisconsin HOPE Lab, under the direction of Sara Goldrick-Rab, along with institution level research that was coming out of Oregon State University and the University of Hawaii. From CA P2's past work organizing communities around issues of food security, they knew the importance of research and counting rates of hunger and food insecurity. Goldrick-Rab's research such as *Hungry to Learn* (Goldrick-Rab, Broton and Eisenberg 2015), which included analysis of food insecurity at three San Diego County Community College District institutions, and *Paying the Price* (Goldrick-Rab 2016), a full-length book that details the maze and retreat of public financial support for college attendance, were starting to get national attention via *The Chronicle of Higher Education* (Goldrick-Rab 2016b), *The New York Times* (Goldrick-Rab 2016c) and *The Washington Post* (Goldrick-Rab 2016d) among other national media outlets. Goldrick-Rab also convened a first of its kind national conference on college student financial insecurity in 2016 called #RealCollege. She also began use of the #RealCollege hashtag on social media to chronicle the research and innovative practices coming out of institutions, along with the harsh realities of financially insecure students. Research from the Wisconsin HOPE Lab came out in 2015 and 2016 that surveyed 18 California community colleges and found that 68% of students were food insecure, and 34% had the very lowest levels of food security. From their role at MAZON, CA P2 could help incentivize the growth of the work through funding and sponsoring events such as conferences and legislative town halls in Washington, DC. In discussing his outreach to Goldrick-Rab, CA P2 stated, "I literally made a deal with Sara – if you produce the research, I will make it actionable and essentially weaponize the numbers into legislation. That led to the early push."

California State University System.

Simultaneously, a network of scholars and practitioners was emerging in California in the CSU and UC systems around college student access to basic needs. In the spring of 2014, CA P3, a faculty member in social work at a CSU institution, presented on their dissertation focused on higher education access for youth who were experiencing homelessness at the President's Colloquium on Women. CA P3's research stemmed from their past professional role working as a social worker with issues of homelessness. Concurrently, a student at CSU Long Beach who was experiencing homeless and food insecurity, came to the attention of the CSU Chancellor Dr. Tim White. Dr. White had also heard about this issue from students that he interacted with as he visited CSU institutions. Chancellor White understood that this likely was not a one student issue and there were likely many students experiencing food and housing insecurity. However, there was no institutional or system-wide data that provided the scope of the issue. The Provost at CSU Long Beach State, Dr. David Dowell, heard CA P3 speak about college student homelessness at the 2014 President's Colloquium on Women and was interested in exploring it further on campus. Additionally, he knew of CSU Chancellor White's interest in exploring the topic, and linked CA P3 to the Chancellor's office. CA P3 was commissioned in February 2015 to analyze the prevalence of food insecurity and housing displacement at CSU Long Beach, along with campus responses to basic needs insecurity across the CSU System, in Phase I of the study. CA P3 found that rates of food insecurity and housing displacement were prevalent (24% and 12% respectively) at CSU Long Beach. CA P3 also identified campus level efforts to enroll students in CalFresh and establish food pantries.

As a result of the study, the CSU System hired CA P4 as the Director of Student Wellness and Basic Needs Initiatives in 2016. CA P4 launched the CSU Basic Needs Initiative in 2016 to advance research, and programmatic and policy solutions to address college financial insecurity. Additionally, the CSU Chancellor's Office hosted their first annual Housing and Food Instability Conference. Also, in 2016, CA P3 connected with CA O1, a social work faculty member at another CSU institution, whose research focuses on food insecurity. The two were then commissioned by the CSU Chancellor's Office for Phase II of the study to examine food and housing insecurity amongst the 23 institutions in the CSU system. Phase III of the study used data collected from Phase II to explore the utilization of support from on and off-campus services and barriers CSU students encounter to mitigate their basic need insecurities.

University of California System.

At the UC system, Chancellor Janet Napolitano launched the Global Food Initiative (GFI) in 2014 to encourage research, learning, policy and programs to address food and housing insecurity at the local, state, federal and global levels. Included in this charge was consideration of basic needs security amongst college students. GFI established campus food security working groups — including students, staff, faculty and community partners — tasked with coordinating campus food security efforts (University of California Office of the President Global Food Initiative 2017). Small grants were also made available to interested scholars and practitioners related to advancing the goals of the GFI. In 2015 (the first year of funding) two teams of researchers were funded for work around basic needs security. CA P5 served on a team that examined rates of food insecurity across the UC system via the Student Food Access and Security Survey (the nation's largest higher education study on basic needs insecurity at the time). The research found that 48 percent of the university's undergraduates and 25 percent of its graduate students experienced some level of food insecurity.

The researchers worked in tandem with the other research project, the Food Access and Security Study, that was led by CA O2 and CA O3, who work as administrators at two UC schools. CA O2 and CA O3 focused on what each campus in the UC System was doing programmatically to address basic needs. Also, in 2015, UC system President Napolitano allocated $75,000 per campus to support student food access and enhance existing food security projects. President Napolitano requested that each campus form a Food Security Working Group. CA O2, CA O3, and CA P5 leveraged the findings from the Student Food Access and Security Survey and what each campus was doing to put together a Food Access and Security Committee for the UC System. The committee included representatives from each campus to try to implement strategies across the system. At the same time, CA O2 and CA O3 were advocating in the California State Legislature in Sacramento for more funding and attended UC Regents' meetings to elevate the need to policymakers.

From these efforts, the GFI Food Access and Security Committee established and convened the California Higher Education Food Summit in 2015, which connected statewide leadership across the three higher education systems in the state to discuss strategies for improving food security and student success across California. This work connected the UC and CSU systems and enabled inclusion of the CCC system, which promoted alignment across the three systems. In 2016, UC President Napolitano increased funding for efforts to address college student financial insecurity to $3.3M over two years. This funding increase provided each UC institution $151,000 per year to tackle food insecurity across the system (Martinez, Maynard, and Ritchie 2016).

The California Community College System.

The California Community College System (CCC) was involved in the DSS CalFresh workgroup from AB 1930. Prior to the workgroup, CCC system leaders had been working with the Western Center and DSS since 2009 to establish a community college-based SNAP Employment and Training (SNAP E&T) program, called Fresh Success. Nationally, SNAP E&T helps SNAP participants gain skills, training, or work experience to increase their employability, which leads to economic self-sufficiency (U.S. Department of Agriculture). Additionally, SNAP E&T allows SNAP recipients to meet SNAP work requirements. Community college programs can become service providers that meet SNAP E&T vocational requirements. In return, direct program expenses (such as tuition and fees, case management, and job development activities) are fully covered by the U.S. Department of Agriculture (USDA). Further, USDA covers 50% of participant expenses, such as transportation, dependent care, books, or equipment and supplies related to training (U.S. Department of Agriculture). CA P6, who worked for the Foundation for California Community Colleges, spearheaded efforts to create SNAP E&T programs, through the CCC system. For CA P6, the goal was twofold: get students on CalFresh and then wrap around services allowable under SNAP E&T guidelines so they could get through their education in a timelier fashion. CA P6 initiated Fresh Success with the support of food security advocates, such as the Western Center, in California, and ultimately with the support of CA DSS which is the administering agency for SNAP E&T in CA. Fresh Success started with three community colleges and through 2 CBOs (Foundation of California Community Colleges).

From their work on the AB 1930 work group and on the Fresh Success, CA P6 transitioned into a position with the Chancellor's Office for the CCC in 2016, overseeing basic initiatives for the system. In 2016, CA P6 hosted eleven regional trainings for the 114 CCC system schools across the state and trained over 500 CCC faculty and staff on the CalFresh enrollment process. At many trainings, county DSS staff in charge of CalFresh enrollment attended, which allowed for networking between the two groups. When discussing this work CA P6 stated, “A lot of times, students get lost between applying with the help of the school and then being approved via the county program. At the front end, if colleges and counties are talking together about the process and eligibility, it just goes better. With 58 counties and 114 schools it can be a big mess. Yes, the rules are all the same but some students have a different experience depending on what county they are in regarding their eligibility determination.” As such, the trainings allowed advocates at CCC institutions to be identified, valuable connections made with county DSS administrators, and for the list of programs that would provide an exemption to students for the CalFresh 20-hour work rule to be unveiled to both parties. CCC also hosted a basic needs convening in April of 2017 with 300 students, faculty and staff in attendance. This allowed for a groundswell of advocacy in advance of the 2017 state legislative cycle.

In discussing their work, representatives for each of the three systems stated that the issue of college student financial insecurity emerged within their system first, independent of the other systems. The UC System prioritized food security. The CSU System prioritized addressing housing insecurity, more so than food. The CCC system lagged behind the other two systems, but developed a focus on food and housing security in partnership with the Hope Center. Additionally, once they each began their work they quickly found allies both within their own system and from others at the other two systems. CA P5 from the UC system stated this in regards to how the issue emerged, “There were a lot of different efforts going on at the same time, all happening at different campuses within the UC System. All of these voices, all of this data, all of this information was being used to inform policy at institutions and at the state level. However, these efforts were not just happening independently through the UCs. We also had our partners at the CSU and CCC systems, they were also working on the same issues that we were. They were uncovering and hearing the same story that we were. There was all of this information, data, and stories coming out and being pushed to the state capitol.” CA P3 from CSU Long Beach added this regarding issue emergence and alignment, “Our systems – the UC system, the CSU system, and the CCC system are very separate in terms of governance, but there are times when we are aligned in thinking. We were working very separately on these issues initially but found allies doing similar work on the same issues at the other systems. Our alignment made our work stronger and more fruitful.”

Collectively, this early multisector network is modeled in Figure 5-1 above. On the far right is the higher education sector and on the far left is the food security and social service sector. Network centrality measures are presented in Table 5-1: Network Centrality Measures for California AB 1930 Workgroup below. The dataset is available in Appendix 4.

Table 5-1: Network Centrality Measures for California AB 1930 Workgroup

	Degree	Centrality	Eigenvector	Betweenness
Western Center	13	0.813	0.33	25
MAZON	13	0.813	0.33	25
CSU System	10	0.625	0.306	15
UC System	10	0.625	0.306	15
CCC System	10	0.625	0.306	15
CA DSS	9	0.563	0.335	0
Young Invincibles	9	0.563	0.303	0
CA Assoc. Food Banks	9	0.563	0.303	0
CA Hunger Action Coalition	9	0.563	0.303	0
Coalition of Welfare Rights	9	0.563	0.303	0
CA DSS	9	0.563	0.335	0
Asw. Weber / Skinner	2	0.125	0.071	0
Hope Center	2	0.125	0.071	0
FRAC	2	0.125	0.071	0
MA Law Reform	2	0.125	0.071	0
CSU Institutions	1	0.063	0.033	0
UC Institutions	1	0.063	0.033	0
CCC Institutions	1	0.063	0.033	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 9. Centrality values range from 0 to 1. Eigenvector mean average = 0.206. Betweenness mean average = 5.58.

Table 5-2: Density Measures for CA AB 1930 Workgroup

Measure	Density	# of Ties	Std. Dev.	Avg. Degree	Alpha
Value	0.412	112	0.492	6.588	0.922

***Density values range from 0 – 1.

Visualization and analysis allow roles to emerge within Hale's modified taxonomy of *Information Positions of Networked Actors.* The Western Center, MAZON, and CCC, UC, and CSU systems are densely connected *champions*, central to the development and activities of the workgroup. The network at this time spans two sectors – social service (CalFresh) and higher education. As such, bridging between these two sectors is critical for network success. This is reflected in the high betweenness measures for these actors. MAZON and the Western Center were central to this activity, as were the post-secondary education systems who helped diffuse information and guidelines related to CalFresh access to their respective institutions. Each organization had their own entrepreneur who helped coordinate the activities for their system and who translated social service policy into the context of higher education policy. CA DSS, Young Invincibles, California Association of Food Banks, California Hunger Action Coalition, and Coalition of Welfare Rights are *supporters* who provided insight that shaped the policy development, needed political backing, and realigned their workflows and processes once the workgroup produced its guidelines for CalFresh access for college students. However, as their betweenness scores indicate, each organization contributed to, rather than coordinated, the flows with the network. Despite low centrality scores, Assemblywoman Weber can also be considered a supporter as she provided needed political backing to legitimize the issue politically. The Hope Center, FRAC, and the MA Law Reform can be considered *outside allies,* who provided needed research and technical assistance but were not central to the activities and product of the network. However, as will be explored below, these groups are also central to diffusion of the policy to other states.

Early Legislative Actions

The AB 1930 workgroup, developing efforts and research that chronicled college student food and housing insecurity at the three California public higher education systems, coupled with an emerging narrative on college student financial insecurity around the nation, created fertile ground for systematic and incremental administrative and legislative actions. CA P2 and CA P1 understood large sweeping legislative changes to address student hunger and housing insecurity would likely not prove fruitful. Instead, advocates in California identified Assemblywoman Dr. Shirley Weber, who replaced Assemblywoman Skinner as the budget chair in the CA General Assembly, as a legislative champion. Assemblywoman Weber is a professor of Africana Studies at San Diego State University – a CSU institution. Assemblywoman Weber also served as Chair on the Assembly Select Committee on Campus Climate, and convened a November 2016 meeting on how colleges and universities in the state could address student food and housing insecurity. From that meeting, Assemblywoman Weber introduced AB 1747 – The College Student Hunger Relief Act of 2016, which was also formally supported by the Western Center. AB 1747 took the recommendations of the AB 1930 work group and aimed to connect students with already available resources to help improve campus climate and a student's overall academic success (California State Legislature 2016). Specifically, AB 1747 sought to address student hunger by:

- Encouraging institutions to participate in their county's CalFresh Restaurant Meal Program (RMP) to prevent hunger among elderly, disabled & homeless students. (RMP permits food to be purchased by the listed populations at participating restaurants; AB1747 encourages outreach to campus-based restaurants.)
- Established a funding account to support collaboration between on-campus food pantries and CA DSS contracting food banks. However, while AB 1747 created the account, it did not provide funding for distribution.
- Codifies existing practices in the CalFresh Outreach Plan to include public institutions in the state. At the time, no public colleges participated in the CalFresh Outreach Plan; however, through participating, institutions are eligible for a 50% reimbursement for allowable and approved outreach activities.

To help with technical assistance and funding for the legislative push, CA P1 and the Western Center enlisted the Food Research and Action Center (FRAC), a leading national non-profit addressing hunger based in Washington, DC and the Massachusetts Law Reform Institute for advice and technical assistance with SNAP policy. The Western Center also relied on the AB 1930 work group to rally around AB 1747, which included Young Invincibles – an emerging national network of politically active young people that was founded in 2009 and who advocate for access to higher education and basic needs. There were 16 other organizations who supported AB 1747 including the CA Association of Food Banks, California Food Policy Advocates, California Hunger Action Coalition, the CSU System, and the UC Student Association. The higher education community provided needed research documenting college student hunger, along with insight into efforts already happening on campuses. Additionally, the CalFresh Director at CA DSS was supportive due to having been part of the AB 1930 workgroup. AB 1747 passed in the General Assembly by a vote of 67 to 13, and in the Senate by a vote of 30 to 7. On September 12, 2016 Governor Brown signed AB 1747 into law (California State Legislature 2016).

Incremental Legislation

With successful passage of AB 1747 under their belt, the Western Center and the AB 1930 workgroup sought additional incremental wins in the 2017 legislative cycle. Together, with Assemblywoman Weber, advocates created AB 214 – The Increased Access to CalFresh, EBT & Meals Act on 2017 (California State Legislature 2017a). AB 214 sought to address student hunger by:

- Requiring the California Student Aid Commission (CSAC) notify Cal Grant recipients about their potential eligibility for CalFresh. (Cal Grant is need-based financial aid in California similar to the federal Pell Grant).
- Clarifying definitions of "on campus food vendor" and "food facility" for the purpose of implementing the RMP on college campuses

- Defining “half-time enrollment”, and “anticipating participation” in work study.
    - Note – as described above regarding SNAP eligibility, students are eligible for SNAP if they are attending school “half-time or more.” However, California had not established the definition of “half-time” in law and instead county DSS agencies were relying on the “part-time” designation. Part-time is anything less than 12 semester hours; whereas half-time could be as few as 6 semester hours. This definitional difference resulted in an overreach that left approximately 4,000 low-income students ineligible for benefits they are entitled to. “Anticipating participation” would be verified with a letter from the college that they were eligible for work study (Western Center for Law and Policy 2018).
- Requiring that CA DSS maintain and regularly update a list of programs to increase employability and maintain and issue instructions for verifying an exemption to the student eligibility rule based on participation in such a program.
    - Note – the previous list developed in the AB 1930 workgroup was not codified into law as a requirement (State of California Health and Human Services Agency 2018).

In speaking to the incremental actions of the initial network, CA P7, a representative from Young Invicibles stated, “Assemblywoman Weber and CA P1 can be credited for using input and translating the conditions on the ground into policy. I work with policymakers a lot and will say that for better or worse they don't always know what is happening on the ground in the ways that are really needed. If you look at these (initial) bills, they are speaking to a very specific set of issues and there is no way that Dr. Weber and her staff, which are both great, would know how to write that if they hadn't heard from good people on the ground who are connected to anti-poverty measures. That demonstrates the importance of two-way communication between folks on the ground and folks in Sacramento. These early bills get at a real issue in real ways and that would not have happened without a strong network of folks and good advocates in Sacramento."

As a sign of a strengthening and perhaps emboldened coalition, AB 214 was sponsored by Assemblywoman Weber and (now) Senator Skinner, and co-written with the Western Center, Mazon, Young Invincibles, the CSU and UC Student Associations, the Student Senate for the CCC, and the Coalition of CA Welfare Rights Organizations. More than 30 other organizations offered support. Additionally, other legislation would be advanced in 2017 targeting student hunger.

Hunger Free Campus and Legislative Expansion

Concurrently, Assemblywoman Monique Limon, an educational administrator at UC Santa Barbara, reached out to CA P8 at Swipe Out Hunger regarding her interest in student hunger. Assemblywoman Limon also served on the Select Committee on Campus Climate, and had become familiar with Swipe Out Hunger, an organization founded in 2010 at the University of California Los Angeles by CA P8, who was a student at the time. Swipe Out Hunger is a meal sharing program where students with extra, unused dining hall meals (or swipes) can donate them to their peers. Swipe Out Hunger had since grown to a national non-profit with more than 30 participating schools at the time. From her experience as a higher education administrator, Assemblywoman Limon also knew the issue of student hunger firsthand and reached out to CA P8 via a cold call with an interest in taking Swipe Out Hunger statewide. CA P8 sent over ideas, including a meal sharing policy model that would extend the reach of Swipe Out Hunger, along with supporting food pantry work at community colleges which often do not have dining halls, that Assemblywoman Limon then funneled to the existing network of institutions and advocates from the AB 1930 bill. CA P8 also connected with CA O2 with the UC System who connected CA P8 to CA P1. CA P1 and CA O2 worked to bring CA P8 and Limon's work into the ongoing legislative efforts. CA P1 stated this in regard to the development of AB 453, "By that time, the groups of people who had been part of the AB 1930 work group had formed a pretty strong coalition of anti-hunger and student advocacy groups, who were working really well together. We were excited and looking for the next opportunity, but the initial language of AB 453 didn't really reflect where the work was going. It dealt mostly with food sharing and pantries but not with CalFresh – and CalFresh is the largest anti-hunger program in the state and it is absolutely needed to address college student hunger. So we came to Limon and said 'we would love to get behind this but we need more than what you have with the Hunger Free Campus initiative.' And they were completely open to that idea. We redrafted the language pretty dramatically and away we went."

At the system level, the proposal was met with an enthusiastic, but guarded response because requiring campuses with dining halls to adopt Swipe Out Hunger would require a lot of logistical coordination, and might interfere with efforts that already existed on campuses. Additionally, some campuses, particularly community colleges, do not have dining halls altogether. CA P8 and Assemblywoman Limon relied of CA P1 to fine tune the language into something amenable to all parties. Having prior working relationships and trust within the network, along with over 20 years of policy advocacy experience, enabled CA P1 to be successful. Additionally, similar to the efforts in Tennessee, AB 453 scaffolds up programmatic efforts that have been developed and refined at the local level, and marries it with available federal benefits.

AB 453: Hunger Free Campus Legislation of 2017 aimed to:

- Require the CSU Trustees, and encourage the UC Regents, to designate as a "hunger free campus" each of its respective campuses that have the following:
  - A campus employee designated to help students enroll in CalFresh;
  - A campus food pantry, with an employee designated as a point-of-contact to assist students
  - A program at the campus allowing students to donate their unused meal plans for students in need. Moneys from donated meal plans not used by students in need shall be donated to supply the campus pantry; and,
- Require the CCC Board of Governors to designate as a “hunger free campus” each of its campuses that have both of the following:
  - A campus employee designated to help students enroll in CalFresh
  - A campus food pantry.
- Each campus that receives a “hunger free campus” designation would get funding appropriated by their respective system (California State Legislature 2017).

Again, research from the UC and CSU systems was used for the legislative push, as was testimony from students involved with Young Invincibles and from the California State and University of California State Student Associations. Researchers, practitioners, and students from the respective institutional systems testified in committee on the bill. The 2017 Basic Needs Convening that the CCC System put on also gathered momentum for the bill within the system. Young Invincibles advocates engaged in a coordinated media advocacy campaign. Again, as a sign of growing coalition, registered support came from California Food Policy Advocates, Gavin Newsom – California Lieutenant Governor, Swipe Out Hunger (co-sponsor), the Western

Center (co-sponsor), and Young Invincibles (co-sponsor). AB 453 advanced in committee, before being put in the Education Budget that was adopted into the Budget Act of 2017 (SB 108). Each of the three higher education systems received $2.5M. This would increase in 2018, as $5M was appropriated for the CSU and UC systems, and $10M for the CCC system – again, showing the growing strength of the network.

Figure 5-2 models the network of advocates who helped advance the allocation of funding for the Hunger Free Campus initiative and Table 5-3 details the centrality measures for organizations in the network. Two sides are present representing the multisector network. On the far right is the food security and social service sector. On the far left is the higher education sector. As can be seen, bridging between these two sectors is critical for network success. Also, as described previously in this chapter, there are limitations to the model, as the centrality measures of the higher education systems are underestimated.

Figure 5-2: Hunger Free Campus Initiative Network

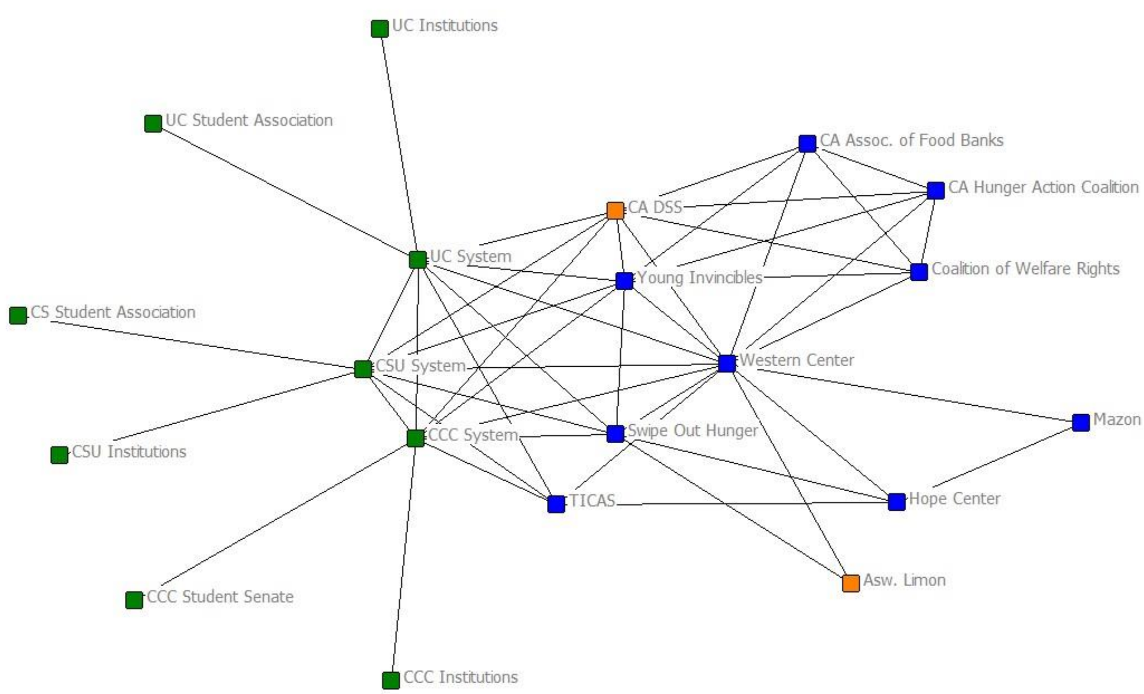


Table 5-3: Centrality Measures for Hunger Free Campus Initiative Network

	Degree	Centrality	Eigenvector	Betweenness
Western Center	13	0.684	0.412	48.4
CSU System	9	0.474	0.312	35.9
UC System	9	0.474	0.353	35.9
CCC System	9	0.474	0.312	35.9
Young Invincibles	9	0.474	0.353	10.7
CA DSS	8	0.4421	0.366	9.0
Swipe Out Hunger	7	0.368	0.260	3.0
TICAS	5	0.263	0.200	1.2
CA Assoc. of Food Banks	5	0.263	0.210	0
CA Hunger Action Coalition	5	0.263	0.210	0
Coalition of Welfare Rights	5	0.263	0.210	0
Hope Center	4	0.211	0.128	0
MAZON	2	0.105	0.073	0
Asw. Limon	2	0.105	0.091	0
CSU Institutions	1	0.0653	0.042	0
UC Institutions	1	0.053	0.042	0
CCC Institutions	1	0.053	0.042	0
CS Student Association	1	0.053	0.042	0
UC Student Association	1	0.053	0.042	0
CCC Student Senate	1	0.053	0.042	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 17. Centrality values range from 0 to 1. Eigenvector average = 0.185

Table 5-4: Density Measures for Hunger Free Campus Initiative Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	0.258	98	0.437	4.9

***Density values range from 0 – 1.

Roles within the Hunger Free Campus Initiative Network

Again, visualization and analysis allow roles to emerge within Hale's modified taxonomy of *Information Positions of Networked Actors.* As their centrality, eigenvector, and betweenness measures indicate, the Western Center, and the CCC, UC, and CSU systems are densely connected *champions*, central to the development and activities of the workgroup. CA P1 with the Western Center played a critical role of merging a philanthropic program model of meal sharing and food pantries, with social service policy (CalFresh), that would be executed within the context of higher education. Additionally, the post-secondary education systems helped diffuse information and guidelines related to the Hunger Free Campus Initiative to their respective institutions. Each post-secondary system had their own entrepreneur who helped coordinate the activities for their system and who translated the Hunger Free Campus Initiative into practice. Again, this bridging activity is critical for the success of multisector networks. This is further demonstrated in Tables 5-3 and 5-4, as the average degree, centrality, Eigenvector, and density scores have decreased from the AB 1930 workgroup; however, betweenness measures for the champion organizations have increased.[12] This is to be expected in networks that have expanded, but further emphasizes the critical role of densely connected champions and entrepreneurs who bring and hold the multisector network together.

CA DSS, Young Invincibles, TICAS, California Association of Food Banks, California Hunger Action Coalition, and Coalition of Welfare Rights are *supporters* who provided insight that shaped the policy development, needed political support and mobilization, and realigned their workflows and processes once the Hunger Free Campus Initiative was passed. Like Assemblywoman Weber in AB 1930, Assemblywoman Limon can also be considered a supporter as she provided needed political backing to legitimize the issue politically. The Hope Center and MAZON can be considered *outside allies,* who provided needed research, political guidance, and technical assistance but were not central to the activities (as measured by their centrality, eigenvector, and betweenness scores) and product of the network. However, these groups helped diffuse the policy model to other states via their national reach.

<u>Hunger Free Campus Implementation</u>

[12] The dataset is available in Appendix 4.

The funds allowed for further expansion and innovation of the work on campuses around California. However, since the legislation did not say how to specifically appropriate funds, systems leaders had to create their own rules for their system. The UC and CCC systems evenly distributed the funds across all their campuses. The UC system evenly divided their funds to their Food Security Working Group at each of their ten institutions. UC schools used the funds to create or expand food pantry and distribution services on each campus; open UC Basic Needs Hubs/Centers where centralized resources, services and events are coordinated and provided; establish or expand campus dining meal donations through Swipe Out Hunger; include basic needs security in campus crisis response teams; mobilize campus efforts and increase collaboration with county CA DSS offices to increase the number of students who have registered for CalFresh (University of California Global Food Initiative). Like Tennessee, reverse innovation occurred from the legislation. In 2017, the UC Board of Regents also allocated system funds for the creation of 14,000 affordable, below market value housing beds, and approved a one-time $27M allocation to address housing needs for students, staff and faculty (University of California Global Food Initiative).

The CCC System also evenly divided their funds amongst their 114 institutions. CA P6 with the CCC System worked with community colleges to get connected to their county CalFresh program and also to get them connected to local food banks, where MOUs were established to get low and no cost food from the local food banks in to their food pantry on campus. CA P6 leveraged their relationship with the CA Assoc. of Food Banks from the AB 1930 workgroup and Fresh Success initiative. In the 2018 academic year, the CCC distributed the $10M they received through the state budget based on the enrollment at each institution. Currently, 113 out of the 114 colleges provide either food pantry services or regular food distribution on campus. CA P6 stated that for the schools that did not have any existing infrastructure around food security, it has taken them a little longer than others to get up to scale, however, schools are developing solutions within their own contexts.

The CSU System decided to allocate Hunger Free Campus funds through Requests for Proposals (RFP). Campuses could request monies in three different areas. The first was required due to the language of the legislation and campuses could request up to $50,000 to support an employee designated to help students enroll in CalFresh, establish a campus food pantry, or establish a program to allow students to donate their unused meal plans for students in need. Additionally, campuses could request up to $50,000 for encouraged activities such as creating an on-campus task force, creating a basic needs website, or formalizing housing procedures for students who were in a crisis and needed emergency housing. The third area of funding provided $25,000 for innovative strategy development to determine what works best and had the most impact on their campus. According to CA P4 at the CSU System, this approach allowed for creativity and shared learning on what is working best, and how these activities are making an impact. The CSU system also hosted a series of 8 webinars to discuss topics related to the legislation, policies in higher education around hunger and homelessness, program evaluation, submitting proposals for external dollars, civic engagement and how to get students involved in the legislative process, marketing our programs, and best practices.

The CSU system also engaged in reverse innovation by adding a question on their common CSU admissions asking potential students if they are interested in receiving more information about CalFresh resources and seeing if they are eligible for SNAP. Of the 250,000 applications the system received for the 2018 academic year, and a little over 134,000 applicants indicated that they wanted to learn more about CalFresh. From there, the individual campuses are able to query a report and reach out to interested students. This data point along with coordinated financial aid allows institutions to do more targeted outreach to students with potential needs. Lastly, schools were required to complete a summative, comprehensive report that quantifies impacts for the CSU system.

Network and Policy Expansion

This scaffolding of training, program development and data collection by each of the three systems through the use and leveraging of the HFC funding served to further document the need and mobilize support for legislative actions. It also further enabled system leadership and innovation to emerge, and the network to expand. CA P1, at the Western Center, stated this when discussing how the network developed and expanded, "After 2014, we shared the champion role with the Global Food Initiative at the UC System and specifically CA O2. In terms of herding the cats for policy legislation – that is me at the Western Center. Writing the coalition letters and the legislation, and arranging the hearings - that's me. If it is ensuring conversations are going on continually – that is CA O2. If it is "let's think bigger, let's be bold, let's do training" – that is CA O2, who keeps the spirits and hopes up of all of us when we are exhausted. I'd also add to that – each of the Chancellors' offices. They've been able to come to the table and speak as one voice. CA P4 at the CSU is one. They are speaking for a lot of people and institutions (16). CA P6 at the CCC system is another (114 community colleges). When we talk about who has been doing the coalescing, it is a coalition of coalitions, each with their own leadership. For example, I am able to say when we come to the table that the hunger advocates say this because I am connected through the CA Hunger Action Coalition and we meet, have regular phone calls, and have lobby days of 500+ people. I am able to state things from the hunger community with confidence and unity. When CA P4 comes to the table and says that 'the CSUs need this' – they know what they need because they have been meeting with each other. CA P6 at the CCC's is the same way at the community colleges. CA O2 also has done their work with the UCs. When we all come together, it is a roll up of a lot of work, voices, participation, and energy. That is so important and leads to expanded actions and activities. This work has so much momentum because you have so many people working on it across the state and so many things are being done. It really is in the truest sense of the word 'a movement.' We don't all know each other. It is not a small band of people. It is actually a huge band of people. Anybody who says they can take credit for what is happening in California is lying because it really is a collective movement that is continuing to grow."

Along with securing additional funding for the Hunger Free Campus Initiative, advocates again approached the California State Legislature with policy proposals in 2018.[13] Specifically advocates again worked with Assemblywoman Weber to propose and pass AB-1894 which allowed for every CSU student who is homeless to use their CalFresh benefits at college campus cafeterias through the CalFresh Restaurant Meals Program (RMP) (California State Legislature 2018a). This legislation expanded RMP to all CSU locations regardless of whether or not their county had chosen to participate in RMP. (In California, counties are allowed to choose whether or not to participate in RMP). AB 1894 passed unanimously in each committee, and in the House and Senate of the California General Assembly. It was co-written with the Western Center, MAZON, and Young Invincibles. Seven other organizations, including the CSU System

[13] In 2017, the state of California passed AB 19 – The California College Promise which was a hybrid of the Tennessee Promise model (California State Legislature 2017c). Since 2014 more than 50 local Promise Programs have been launched in the state (Rauner 2018). AB 19 allows state funding to be combined with private dollars to support "first-time community college students who are enrolled full-time and complete a financial aid application." This legislation did not come up in interviews with individuals and officials in California interviewed for this analysis. However, AB 19 is important legislation, given that two million students attend a California community college. Although only 1 in 10 students attend fulltime (Guzman-Lopez 2019).

supported the legislation. Only the CSU system receiving the benefits of the legislation reflects the focus of the system on housing and food, which originates from having CA P3 lead the initial research. The UC System's focus had primarily been on food alone. CA P1 pointed out, "The research coming out of CSU allowed us to see how many students were homeless. We would have never thought of using the Restaurant Meal Program on campuses. With a broader, *basic needs* focus we discovered new gaps, opportunities and partners. The RMP seemed like a great option given that we knew that 10% of CSU students were homeless. The idea of using dining providers on college campuses as restaurants in the RMP was new. We made it up. We weren't sure if it would fly, but we knew we needed to try because the problem was so significant. We ended up proposing the legislation and the CSUs really wrapped themselves into it and said 'we can do this.' The UCs did not have as extensive research on rates of homelessness and their budget estimate was very high. The CSUs came in and had really done their homework and had really talked to everyone they needed to within their system and facilities. They saved that legislation. Think about that we were in an environment where the CSU Chancellor was saying 'hunger is my top priority' and used their governmental affairs person to get legislation passed that would require the CSU institutions to act. That was significant in the outcome of the bill. That would not have really happened without the prior year's work and the groundwork that we had done to get us to where we were. All of this was happening at the capitol at the same time that people on campuses were moving big pieces to implement the Hunger Free Campus Initiative via the checklist of things in the legislation. We had no idea how many colleges could or would take us up on the offer. During that year that we were trying to get the Restaurant Meal Program in and were trying to get additional funding for campuses, we start seeing the numbers come in from the college campuses and every CSU, every UC, and all but a couple dozen community colleges were all chasing to be designated as Hunger Free Campuses, and were doing the work that they needed to do to be designated and receive funding. That was momentous. That the work was being led by the Chancellors and by the institutions themselves showed that momentum was building." CA P1's quote further demonstrates the importance of the entrepreneurs within the champion organization, who translated the activities, research, and advocacy of the multi-sector network, into the political realities of their own systems.

Advocates also advanced SB 1275 – The Plan to End College Hunger Act of 2018, which was sponsored by State Senator Henry Stern. SB 1275 sought to create a fund that may be used to award a college meal plan for 10 meals / week to all public college and university students CalGrant recipients (California State Legislature 2018). SB 1275 was estimated to cost $480M annually. SB 1275 was formally supported by the Western Center, Young Invincibles, and MAZON, along with three additional advocacy groups. Additionally, the Institute for College Access and Success (TICAS) and the Hope Center publicly endorsed the plan. It passed both the Senate Education and Appropriation Committees unanimously, but was not considered in the House. When discussing SB 1275, CA P1 admitted that it was a significant request of the legislature and a litmus test for the strength of the network, which had largely worked incrementally before. CA P1 also framed the legislation as a messaging bill that symbolically signifies what is possible within policy, and that can be used in other legislation, or advanced again in the future.

Expanding from Hunger to Basic Needs Legislation

The legislative loss of SB 1275 did not deter advocates from continuing to advance legislation aimed at incremental gains in basic needs security in 2019. Building off the successes of the Hunger Free Campus Initiative and related incremental policies, systems continued to work together on shared policy solutions. Advocates also formally named themselves the CA Higher Education Basic Needs Alliance in early 2019. Members of the Alliance include – the CSU System and Cal State Student Association, the UC System and University of California Student Association, and the CCC System and the Student Senate for California Community Colleges, along with the Western Center, TICAS, and the California Homeless Youth Project. This was done as a next step for the network, which had been meeting quarterly for the previous two years. The network expanded to include housing and other holistic supports through the inclusion of new organizations and policy pushes. Additionally, the CCC System started to go on their own for specific legislation related to supporting basic needs security.

In the shared policy space, California advocates pushed for continued incremental solutions related to food insecurity. This took the form of SB 173: CalFresh: Postsecondary Student Eligibility: Workstudy which requires state institutions to notify any student accepted into a work-study program of their CalFresh eligibility and that a streamlined process for applicants be created by CA DSS (California State Legislature 2019a). SB 173 was sponsored by State Senator Bill Dodd and supported by the Western Center, the CCC System, and the California Coalition of California Welfare Rights Organizations, along with 7 other institutions. SB 173 passed out of committee, the House, and Senate unanimously, and was signed into law by Governor Newsom on July 30, 2019.

Going beyond hunger, advocates also pushed for solutions for housing insecurity. As such, new advocates such as the California Homeless Youth Project (which had assisted with AB 1894), along with John Burton Advocates for Youth, and the Jovenes Foundation were brought into the network to advance policy solutions aimed at student homelessness. The California Homeless Youth Project and John Burton Advocates for Youth had worked together in the past on legislation on AB 1228 (2015) requiring that public institutions give homeless students priority access to residence halls and develop a plan to house these students during academic breaks (California State Legislature 2015). The legislation was supported by the California State Student Association and the University of California Student Association, along with eleven other organizations. The California Homeless Youth Project also advanced and passed AB 801 – The Homeless Youth Success in Higher Education Act in 2016 which required the designation of a homeless liaison at each institution to inform students about financial aid and to connect students to resources (California State Legislature 2016a). AB 801 also allows homeless students to have priority registration for classes. Also, in 2016, California Homeless Youth Project helped pass AB 1995 that enables homeless students to have access to shower facilities on their college campus (California State Legislature 2016b).

Merging these organizations into the network expanded the alliance in size and focus. Together, advocates advanced SB 568: Reducing Homelessness Among California's College Students Act of 2019, which was adopted into SB74: The Budget Act of 2019 that was signed in to law on July 1, 2019 (John Burton Advocates for Youth 2019, California State Legislature 2019b). SB 74 allocated $19M to address college student homelessness through rapid rehousing and case management services across the three higher education systems. $9M was allocated for the community college system, $6.5M for the CSU, and $3.5M for the UC system (California State Legislature 2019b). John Burton Advocates for Youth is based in the Bay Area of California and advanced the policy model based off their past work administering the California College Pathways program, which aims to improve educational outcomes for foster youth, and the Homeless Youth Capacity Building Project, that linked homeless youth providers to other homeless services. Through those efforts John Burton Advocates for Youth connected the

Jovenes Foundation, which is a youth-serving organization providing shelter, transitional and long-term housing, and support services for young adults between the ages of 18 and 25 in Los Angeles, into the network. Funds for this initiative would be used at the discretion of the post-secondary system but could be used to fund case management services for homeless or housing insecure students, support emergency housing provisions, or contract with housing providers who have experience delivering services to homeless individuals to help them identify and remain in market rate housing with subsidies.

Due to the original legislation (SB 568) being pulled into the broader budget bill (SB 74), there were less specifics in how to implement and execute the provisions of the funding. As such, similar to the challenges faced with the Hunger Free Campus Initiative, there is much to figure out in implementation. Due to their past work, John Burton Advocates for Youth, with the assistance of the Jovenes Foundation, will help the post-secondary systems assist with the implementation. CA P9, from John Burton Advocates for Youth Stated this regarding the challenge, "What that means is that there is a lot to figure out in implementation – so each system will take this intent language and figure out what that looks like on the ground. I have had the most conversations with this with the community college system, but I don't know what exactly it is going to look like. I will say that there is not enough funding to support doing this at every campus - not even close in my estimation because housing supports are so expensive. My guess is that, at least at the community colleges, there will be an RFP or something to see who would be interested in piloting a program like this."

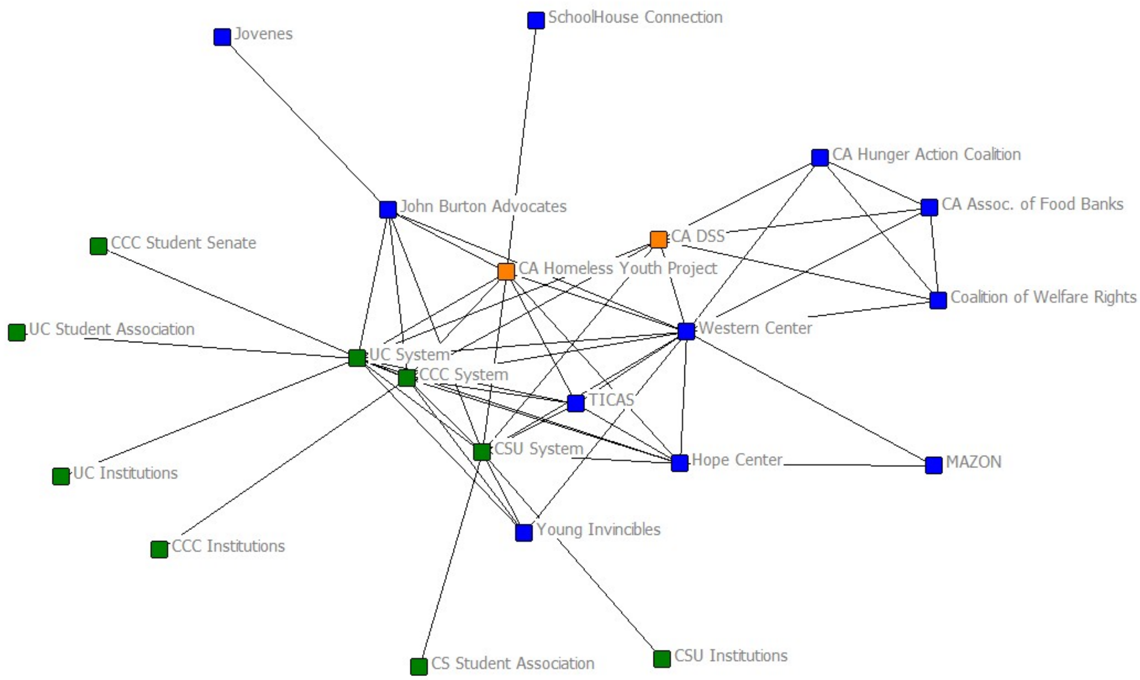
Network Analysis of Basic Needs Network

The multisector California network for basic needs access in 2019 is modeled in Figure 5-3 below. The dataset is available in Appendix 4. Centrality and density measures are presented in Tables 5-5 and 5-6. Each sector is clearly defined in Figure 5-3, which is a marked change from the original network construction for AB 1930, where all central actors (with the exemption of specific institutions and allies outside the state) were densely connected. Like in the Hunger Free Campus Initiative, the basic needs network is more organized by issue or sector, and leadership has emerged within each area,

On the far right are hunger and food security advocates and organizations, who advanced such policies such as SB 1275 and 173, with inputs and assistance from the higher education systems, and young adult advocates such as Young Invincibles. The Western Center plays a central role in modulating and translating between these two sides of the network (food security and higher education) as reflected by its high betweenness score. In the top center are homeless and housing security advocacy groups, such as the CA Homeless Youth Project, John Burton Advocates, and Jovenes, which interface with the post-secondary systems through the Basic Needs Alliance with the CA Higher Education Basic Needs Alliance. Tables 5-5 and 5-6 outline the central features of the California Higher Education Basic Needs Alliance. Data in these tables further demonstrate the necessity of bridging within the network, as the mean average degree, centrality, eigenvector, and density scores have decreased from the network which advanced the Hunger Free Campus Initiative and the AB 1930 workgroup. However, again betweenness scores have increased for the champion organizations. As housing insecurity has been added to the original network, and its mission expanded to be inclusive of basic needs, the critical role of densely connected champions and entrepreneurs has expanded and become more essential.

For this part of the network, the CA Homeless Youth Project, plays a critical, *champion,* role of bridging and translation between the two sides of the network (housing security and higher education). Together the Western Center, CA Homeless Youth Project, and the three post-secondary education systems must coalesce regarding which collective policies to advance. Applying Hale's modified taxonomy of *Information Positions of Networked Actors*, each can be considered a *champion* within the network. This classification is again reflected in high centrality, eigenvector, and betweenness values for these organizations. CA P10, who is the director of the California Homeless Youth Project and was homeless as a youth, said this in regard to this fusion across networks, "My expertise is the housing and homelessness piece, which tends to be a little underrepresented generally in the movement around basic needs for college students. Generally, the food piece gets a lot more bandwidth in the conversation and is lower hanging fruit to address – so programs and policies tend to start there. Housing insecurity is much more difficult and there are less people who have expertise in the housing space. It is also much more expensive. All these characteristics lead to less active policy work on the issue. However, that voice is what we try to bring to the space… and while I still think there is disproportionate share on the conversation and initiatives focused on food security, I applaud the higher education community for coming together to address these issues. On the Higher Education Alliance there is one of us, (CA P1 at the Western Center) working on the food security side and one us, me, working on the housing security piece – so there is equal representation of the issues on the alliance. Collectively with the higher education systems we are able to come together and reinforce one another's work, and bring appropriate partnering organizations to the space. We try to assist each other's efforts wherever and whenever we can."

Figure 5-3: California Higher Education Basic Needs Alliance (2019)



Under Hale's modified taxonomy of *Information Positions of Networked Actors,* John Burton Advocates for Youth and Jovenes can be considered *supporters* in the homelessness and housing security space. Both brought program models, research and best practices to the network, and supported the legislative advancement of AB. 568. In the hunger and food security space, Young Invincibles, CA DSS, the Coalition of Welfare Rights, CA Association of Food Banks, and CA Hunger Action Coalition can also be considered *supporters* who provided needed political support and/or technical assistance to policy measures addressing food security. In the higher education sector, the individual institutions and student groups within the three systems, TICAS, and Young Invincibles can also be considered *supporters,* who generated research, program models, and political mobilization for the various legislative policies. These organizations have varying centrality and eigenvector values, but each has a low betweenness score. School House Connection, MAZON, and the Hope Center are national groups who can be considered *outside allies,* and who provided the network research, advice, technical assistance and helped diffuse the policy models to other states.

Table 5-5: Centrality Measures for California Higher Education Basic Needs Alliance (2019)

	Degree	Centrality	Eigenvector	Betweenness
Western Center	13	0.619	0.398	51.55
CSU System	11	0.524	0.359	43.05
UC System	11	0.524	0.359	43.05
CCC System	11	0.524	0.359	43.05
CA Homeless Youth Project	8	0.381	0.381	20.8
CA DSS	7	0.333	0.238	13.5
Hope Center	7	0.333	0.280	6
TICAS	6	0.286	0.200	0
John Burton Advocates	6	0.286	0.237	20
Young Invincibles	4	0.190	0.194	0
CA Assoc. of Food Banks	4	0.190	0.113	0
CA Hunger Action Coalition	4	0.190	0.113	0
Coalition of Welfare Rights	4	0.190	0.113	0
MAZON	2	0.095	0.089	0
School House Connections	1	0.048	0.040	0
CSU Institutions	1	0.048	0.047	0
UC Institutions	1	0.048	0.047	0
CCC Institutions	1	0.048	0.047	0
CS Student Association	1	0.048	0.047	0
UC Student Association	1	0.048	0.047	0
CCC Student Senate	1	0.048	0.047	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 22. Centrality values range from 0 to 1. Eigenvector mean average = 0.172. Betweenness mean average = 10.955.

Table 5-6: Density Measures for California Higher Education Basic Needs Alliance (2019)

Measure	**Density**	**# of Ties**	**Std. Dev.**	**Avg. Degree**
Value	0.229	106	0.420	4.818

***Density values range from 0 – 1.

After interviews, participants were asked to complete the Social Network Analysis Survey. Of the twelve participants interviewed in California, only 7 completed the survey. The findings demonstrate a broad network that is relatively cohesive at their core, but that has expansive reach across the state. Results are likely conditioned based on the large number of legislative activities spread out over six years (2014 – present) and the comings and goings of some individuals and organizations in the network. For example, the Western Center and MAZON led the early push for the AB 1930 workgroup. Swipe out Hunger entered the network in its mid-point for the Hunger Free Campus legislation. Later groups such as John Burton Advocates for Youth and the California Homeless Youth Project entered the network as its legislative focus expanded. Further, the results are hurt by the lack of response to the Social Network Analysis Survey by key respondents to the network.

First, respondents were asked to "identify all of the ways that your organization obtained information about the extent of college student financial insecurity in your state and policies/programs to address the issue." The responses from California participants are presented in Table 5-7 below. Information about the problem and policy solutions for participants came from research conducted by those within the state at the CSU and UC Systems, and by research on the students in the CCC system by the Hope Center. National and regional conferences, programmatic efforts, efforts by advocates, and personal contacts within an individual's network also were prevalent sources of information.

Table 5-7: Information Sources for CA Participants in the Passage of Basic Needs Legislation

Source of information	Frequency	% Cited
Research Publications	7	100%
National / Regional Conferences	6	85.7%
Programs within State	6	85.7%
Advocates	6	85.7%
Personal Contacts	6	85.7%
Professional Meetings	5	71.4%
National Advocacy Groups	4	57.1%

n=7

In terms of contributions within the network, participants were asked to rate the contributions of organizations towards legislative passage of policies to address college student financial insecurity in California. Originally, the primary focus of this analysis was the Hunger Free Campus legislation because it has been most widely diffused; however, given the multitude of legislative activities, the breadth of the network, and the length of time between HFC passage and present, the results below are for the aggregated network of actors from AB 1930 to present. This is a weakness of the analysis, as organizations were more active at certain points than others. However, while aggregated across the expanse of the network, specific organizations that were active at specific points along with their contributions can still be identified. Similar to the analysis for Tennessee, respondents were asked to evaluate the involvement and contribution of each organization for each item presented, including their own, on a 5-point Likert-Scale.

John Burton Advocates for Youth and the Western Center were identified as the strongest legislative champions. This reflects the changes in the network, as the Western Center served in this role when the focus of the network was on strengthening food security amongst college students. As the network shifted to focus on housing security, John Burton Advocates for Youth and the CA Homeless Youth Project assumed more prominent roles. Centrality measures in Table 5-5 demonstrated that the CA Homeless Youth Project played a particularly important role in translating policies addressing homelessness from John Burton Advocates for Youth and Jovenes when the focus was on housing security to the higher education community in concert with the three higher education systems. Similarly, philanthropic models from Swipe Out Hunger, and programmatic efforts at the three post-secondary systems, were relied upon in the Hunger Free Campus Initiative legislation. Policy models and programmatic best practices, were joined with policies clarifying and expanding CalFresh eligibility by the CA P1 at the Western

Center. Research from the Hope Center, CSU and UC Systems, was used throughout the legislative process to advance legislation. Finally, several organizations – the Western Center, CSU and UC systems, SchoolHouse Connections, Swipe Out Hunger, Young Invincibles, and the Hope Center – were identified as sources of communication to external stakeholders. The Western Center, CSU and UC systems, were instrumental in internal to the state diffusion of communication, best practices, and legislative updates. SchoolHouse Connections, Swipe Out Hunger, Young Invincibles, and the Hope Center were instrumental in the diffusion of the policy models to other states. This is further explored below in Table 5-8. Like Tennessee, a pattern of state level polydiffusion is evident where policy diffusion occurs via multiple pathways to programmatic and policy efforts in other states.

Table 5-8: Contributions to CA Basic Needs Legislative Network

Organization	Frequency Cited	Overall Involvement	Funding	Legislative Influence	Research	Info on Policy Models / Best Practices	Expertise	Advocacy	Communication to External Constituents
John Burton Advocates	5	**4**	0.8	**4**	2.2	3.8	3.8	3.8	3.6
Western Center	4	3.75	1.33	**4**	3	3.67	**4**	**4**	**4**
CSU System	4	3.5	1.25	2.75	3.25	**4**	**4**	3	**4**
CCC System	4	3	1.75	2.75	2.5	2.5	2.75	1.75	2.75
UC System	3	3.33	**3.33**	3	3.67	3.67	3.67	3.67	3.67
CA Homeless Youth Project	3	3.33	0	3.33	3	3	2.33	3.33	2.67
Hope Center	3	3.67	0.5	1.5	**4**	3.5	2.5	2.5	3.5
Asw. Weber	2	**4**	0	**4**	0.5	1	3	3.5	2.5
CA DSS	2	3	1	1	1.5	1.5	3.5	0.5	2
SchoolHouse Connections	1	3.5	0	3	2	3.5	4	3.5	**4**
Swipe Out Hunger	1	3	2	2	4	4	4	4	**4**
Young Invincibles	1	**4**	0	**4**	2	4	4	4	**4**
Jovenes	1	2	0	1	1	3	3	3	2
TICAS	1	**4**	1	**4**	4	4	4	4	**4**

***Scores presented denote averages. Bolded scores are the highest for that item contributed.

Challenges

The challenges that the network of actors faced is presented in Table 5-9. Given the diversity of the network of researchers, advocates, non-profits, and post-secondary system administrators, there were a variety of challenges defined by those within the multi-sectoral network. Many, such as the “language of policy proposals working for all parties”, “being at the table before legislation is developed”, “tension between practitioners and post-secondary system bureaucracy”, “equitable funding”, and “language of work reflecting more than just a focus on hunger” point to the *intersectoral challenges* of broad networks with different values, perspectives, needs, constraints, and approaches. Other items such as “competing priorities that demand post-secondary systems attention”, “limits of professional role to do professional advocacy”, and “getting decision-makers to see the issue of college student financial insecurity as an issue deserving of attention or within the role of institutions to address” demonstrate the *contextual challenges* individuals faced within their settings to raise the issue to one deserving attention. However, items such as “having a plan for implementation”, “getting county DSS eligibility workers to understand nuances of student eligibility” and “SNAP E&T eligibility for institutions being a heavy administrative lift” point to the *technical* nature of policy work of this nature. The method for overcoming each issue is briefly summarized.

Table 5-9: Challenges Faced by CA Basic Needs Legislative Network

Type of Challenge	Frequency	Method for Overcoming
Language of legislation working for all parties in the network.	4	Policy entrepreneurs who helped bridge sectors together.
Getting decision makers (within post-secondary institutions / systems, legislators) to see issue of college student financial insecurity as an issue deserving attention or within the role of institutions to address.	4	Policy entrepreneurs and researchers within each post-secondary system who brought issue of college student financial insecurity to the forefront of priorities for their system.
Limits of professional role to do advocacy.	3	Use of research to demonstrate the extent of student need. Elevating the voice of students to advocate for policy actions.
Competing priorities that demand post-secondary systems attention.	3	Incremental approach to policy activity. Continued network interactions, mobilization and advocacy.
Difficulty / complexity of causes and solutions to homelessness.	3	Leveraging existing federal program (SNAP RMP) to serve homeless college students. Scaffolding of Jovenes, a local program in Los Angeles, to guide state policy.
Having a plan for implementation.	3	Work of representative at the three state higher education systems, in consultation with advocates in the network.
Tension between practitioners and post-secondary system bureaucracy.	2	Connecting work done by central policy entrepreneurs to coalesce network.
Seeing pantries / other charitable responses as solutions to college student financial insecurity.	2	Inclusion of CalFresh expansion and promotion, along with case management services, in Hunger Free Campus Initiative legislation.
Language of work reflecting more than just a focus on hunger. Moving to "basic needs" approach.	2	Incremental network activity towards that goal. Inclusion of additional partners.
Getting county DSS eligibility workers to understand nuances of student eligibility.	2	Work of CCC System's Coordinator of Basic Needs, Western Center, other hunger advocates, and CA DSS.
SNAP E&T eligibility for institutions being a heavy administrative lift.	2	Work of CCC System's Coordinator of Basic Needs, and one CSU institution who is a CalFresh Outreach Site.
Equitable funding for three post-secondary systems. Effects of Proposition 98 on community colleges.	2	Increased legislative activity by the CCC system with varying results. (See below).
Being at the table before legislation is developed.	2	Policy entrepreneurs who helped bridge sectors together. Development of California Higher Education Basic Needs Alliance to increase and intra-segmental and inter-segmental coordination.

Attributes

As discussed in Chapter 2, attributes of innovation are a primary influence on the rate of diffusion to secondary adopters. As discussed previously, twelve participants in California were interviewed. Six respondents completed the follow up survey, but only five completed the portion of the survey pertaining to the attributes of the Hunger Free Campus Initiative. For each item presented, respondents were asked to evaluate the attributes of the policy model based on a 5-point Likert-Scale that ranged from Strongly Agree to Strongly Disagree. Values were coded the same as they were for Tennessee: strongly agree responses were coded as a value of 5, whereas strongly disagree responses were coded as a value of 1. These results are presented in Table 5-10. The complete dataset is available in Appendix 5. Averages and standard deviations are presented for each item, and then averaged with other items for each attribute for a composite attribute average[14]. California has the least standard deviation on two of the five attributes (three of eleven items). The Total Attribute rating (39.833) is the second highest of the three innovations analyzed in this study. Attribute averages for California are lower across the board for each item than Tennessee; however similar to Tennessee, trialability (3.833), observability (3.833) and relative advantage (3.722) were rated highest of the attributes among California participants.[15] In total, these results suggest participants in California feel confident in the policy tool, are able to explain HFC to others, and feel that its impact is observable. However, HFC is seen as relatively complex to manage (3.083). This is lowest of the three state innovations analyzed and indicates the challenges of congruence / clarification of SNAP policies

[14] A difference of means test was run via an One-Way ANOVA in SPSS to determine if a statistical difference exists in the attribute means of the three states analyzed in this study. Only compatibility was found to have a statistical difference (at $p < 0.10$) amongst the attributes between the state innovation. However, this analysis is limited by the limited number of participants. This is further explored in Chapter 7.
[15] There is an average attribute rate of difference of 0.7668, and an Attribute Total difference of 8.167 between TN and CA

that are administered at a local level and that require coordination across three higher education systems. In Chapter 7 the effect of the attributes of the HFC legislation on the rate of diffusion will be explored and analyzed.

Table 5-10: Attribute Analysis of Basic Needs Legislation in CA

Attribute	Item	Item Average	Standard Deviation	Attribute Average
Relative Advantage	The policy my state created to address college student financial insecurity improves the lives of financially insecure college students in my state.	3.833	0.753	3.722
	The policy my state created to address college student financial insecurity improves the academic performance of financially insecure college students in my state.	3.667	0.816	
	Overall, the policy is an effective instrument to address the negative effects felt by financially insecure college students in my state.	3.667	0.816	
Compatibility	The policy my state created to address college student financial insecurity is compatible to the capabilities of institutions and organizations in my state.	3.5	0.548	3.583
	The policy my state created to address college student financial insecurity is compatible with the needs of financially insecure college students in my state.	3.667	1.033	
Complexity	It is easy for financially insecure college students to take advantage of this policy.	3	0.632*	3.083
	It is easy for administrators and institutions to manage this policy / program.	3.167	0.408*	
Trialability	I can easily explain the central features and benefits of this policy to others.	3.833	0.753	3.833
	The effects of this policy to address college student financial insecurity are directly apparent to me.	3.833	0.983	
Observability	I examined the effects of best practices of this policy model before advocating for legislative action.	3.833	0.983*	3.833
	I have observed the effects of similar smaller scale programs at the community or institutional level on financially insecure college students.	3.833	0.983	
	Attribute Total	39.833		

N=6. * indicates lowest standard deviation of three innovations studied

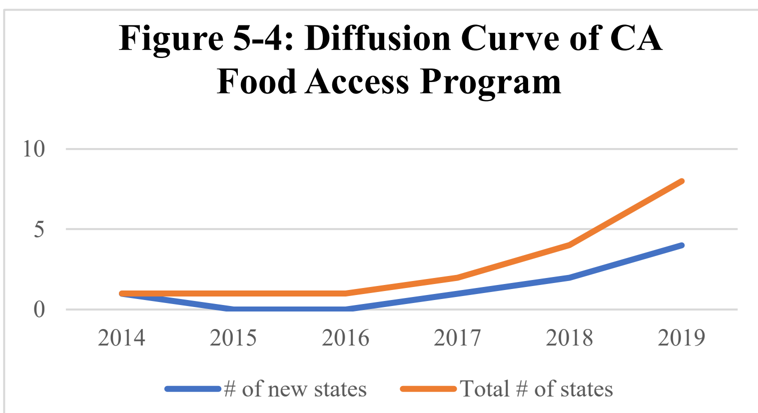
Diffusion

Tracking the diffusion of the legislative efforts in California around food and housing insecurity in California is difficult due to high number of incremental bills passed by the state. As stated previously, this research was originally focused on the Hunger Free Campus Legislation passed in 2017; however, much occurred prior to and after that legislation. Incrementalism was built into the ethos of the network. CA P2 at MAZON said this regarding the approach of the network to innovation, “We did not all do this at once. We also could not completely say every higher system will do it all at once. Seeing it as an incremental process and one where we move pieces around allows us to make changes, push for them and try them at different levels before we roll them out statewide.” He also added this in regards to the diffusion of efforts in California, of which MAZON has played a leading role, “I keep telling other states that when they do Hunger Free Campus legislation that it is not meant to be this comprehensive policy… You also need administrative work that clarifies SNAP policy for college students. The sequence of policies may be different depending on the state budget, public opinion, and the timing, etc. It also depends on who you target to work with at a state level – in some places it is the legislature, sometimes it is administrative work within the state department of human services… It is just a matter of seeing and crafting the right set of steps that build political support, exposing the depth and scope of the problem, but also gets incremental policy changes that are winnable at any given time. California has unique challenges and advantages – there are few states that can make an appropriation for these efforts. California has the money to put in the budget and say that we are going to create this incentive for college campuses to act, but that is not going to fly for the majority of states in the country right now who are fighting over deficits and budgets. The way that we have to work is that the strategy stays the same. You find opportunities to build public awareness and support. You find champions within the pockets of folks doing work. And then you craft winnable policies or administrative steps and those are going to be different in every place. There are going to be places where we have done things administratively to have students access SNAP that we never publicize and would never publicize because it does not work well in states where the public may be more hostile to public benefits to start with."

CA P2's comments raise two important points. First, like in Tennessee, they offer support of Everett's assertion that innovators tend to have control over substantial financial resources such that they can absorb possible losses from unprofitable innovations (Rogers 2003, p. 282). California possesses the world's 5th largest economy and has financial resources that allow it to do many things that other states are not able to (Associated Press 2018). This offers support for Downs and Mohr's (1976), and Walker's (1969) research that found that states with abundant resources have means to financially support innovations; whereas states with limited means are constrained in their ability to pursue new policy ideas.

Second, CA P2's comments also point out that innovations often diffuse administratively or programmatically, rather than solely legislatively. Eight states administer TANF and SNAP at the county level (Hahn, Kassabian, Breslav and Lamb, 2015) and regional offices within the USDA and Department of Health and Human Services often interpret policy differently (Walizer 2019). Campus food pantries and programs have expanded significantly nationwide, with 790 colleges and universities having a food pantry registered with the College and University Food Bank Alliance (2019). This number is up from just 15 schools in 2012 (Huber 2019). Like with the expansion of local Promise Programs, as food pantries on campuses increase, these efforts may enhance or hinder statewide policies from being enacted depending on the level of legislative professionalism in a state (Shipan and Volden 2006). States with a higher degree of legislative professionalism would be expected to adopt such statewide policies due to opportunity to learn from and network with local efforts and advocates. Conversely, states with lower degrees of legislative professionalism are expected to not adopt such statewide policies, as local efforts relieve pressure for legislators to do so. This is an area for future research relative to this study. However, the fact that local efforts exist and may hinder policy adoption in some states creates challenges in tracking state policy diffusions over time.

That said, Table 5-11 presents a list of states where known efforts around basic needs security has diffused. This list was created from information collected in interviews and archival research[16]. Figure 5-4 models the diffusion curve for higher education food access programs. Again, the early formation of an S-shaped diffusion curve is starting to form (Tarde's 1903), which suggests future policy actions by other states can be expected in the near future. However, the rate of diffusion (as measured by the average number of states adopting the policy / year) is slightly less than that of California.



[16] The Center for Law and Social Policy (CLASP) was mentioned by CA P1 as an organization active in this policy space. Additionally, one participant listed the organization as intermittently active in the policy space when they completed the Social Network Analysis Survey, but no contributions for the organization were provided by the respondent. A representative from CLASP was interviewed as a non-state level actor for this research, as they indicated that they did not have a central role in creating the policies in California. Therefore, they were not included in California network modeling. However, the CLASP representative did indicate that the organization was active in spreading the policy innovations from California to other states. Information gleaned from that interview is included in Table 5-11.

Table 5-11: Diffusion of CA Food Access Programs

Year	# of New States	Total # of States	States Added	Adopter Category	Notes
2014	1	1	CA	Innovator	
2017	1	2	MA^	Early adopter	Expanded SNAP college student eligibility to recipients of MASS Grant financial aid. Continued other SNAP administrative changes to promote access for college students. ^MAZON and Western Center cited that they have worked with organizations in state.
2018	2	4	NY^	Early adopter	Governor Andrew Cuomo announced in August 2018 that all NY State public colleges (SUNY and CUNY) will have a food pantry. ^Young Invincibles cited that they have worked with SUNY and CUNY officials.
			PA^/^^	Early adopter	Pennsylvania's Department of Human Services adapted SNAP guidelines to expand benefits eligibility to community college students struggling to pay for food. ^MAZON cited that they have worked with officials and advocates in state. ^^Hope Center is based at Temple University in Philadelphia and has been active in SNAP and higher education policy in state.
2019	4	8	NJ^^	Early adopter	^^Worked with Swipe Out Hunger to create Hunger Free Campus Act to provide funding for SNAP outreach, meal sharing programs, and food pantries.
			MN*	Early adopter	Advanced Hunger Free Campus legislation that would provide funding for campus food pantries. Did not make it out of Higher Education Finance and Policy Committee.
			CO^/^^	Early adopter	^^CLASP worked with state to provide technical assistance around administrative and policy changes through income and work supports (TANF, SNAP, SNAP E&T) to support basic needs access for college students.
			RI^/^^	Early adopter	^^CLASP worked with state to provide technical assistance around administrative and policy changes through income and work supports (TANF, SNAP, SNAP E&T) to support basic needs access for college students.
			LA^/^^	Early adopter	^MAZON cited that they have worked with officials and advocates in state. ^^CLASP worked with state to provide technical assistance around administrative and policy changes through income and work supports (TANF, SNAP, SNAP E&T) to support basic needs access for college students.
			Avg. Rate of Adoptions/Year	2.33	

* Indicates legislation was advanced but failed. State was not counted in total # of states. ^Indicates administrative changes were being advanced at point of interview. The extent to changes is not known. ^^ Indicates direct contact from member of network to officials in the state. Avg. rate of adoptions/year does not include innovator state.

National foundations, academic organizations, and interest groups were also cited several times by those interviewed. Nine of twelve interview participants cited them as a potential source for diffusion. Activities with foundations and interest groups include serving on boards, serving on advisory councils, and presenting at conferences. The number of references to each organization is listed below in Table 5-12. Like participants in Tennessee, many participants struggled to remember all the organizations that they had been engaged in. However, the actions and role of the Hope Center in helping to advance policy and programmatic solutions is evident. MAZON, the Center for Law and Social Policy (CLASP), the Food Research and Action Center (FRAC), and Young Invincibles have also played prominent roles. Again, the activities of intersectoral networks serve to assist in diffusion efforts, which (unlike TN Promise) have not leveled off to date. This is an area for continued research regarding influences (such as policy cost, politicization of policy aims, or other factors) that may shape the maturation of the diffusion process to later adopters.

Table 5-12: Organizations Cited by Network Participants as Sources in the Innovation and Diffusion Process of California's Basic Needs Access Programs

Organization	# of references	Notes
Hope Center	7	Cited as a source of research and as organization shaping the national dialogue around student financial insecurity. Five participants cited presenting at Hope Center national conference. Two other officials referenced in the analysis (who were not interviewed) have also presented at this conference.
MAZON	3	Cited by three network participants as helping to guide and support national dialogue and efforts within other states. CA P2, a MAZON policy director and participant in this study, stated that the organization has worked with officials and advocates in LA, PA, and MA.
Young Invincibles	3	Cited by three participants as promoting the work nationally. CA P7, former Young Invincibles policy advocate and participant in this study, stated that the organization has worked with officials and advocates in IL, DC, NY, and TX.
Food Research and Action Center	3	Cited by two participants as providing technical assistance and advice on SNAP. Two participants cited that they presented at FRAC/Feeding America conference on college student hunger.
Massachusetts Law Reform	2	Cited by two participants as providing technical assistance and advice on SNAP. Both participants cited the administrative work that they are leading in MA.
Center for Law and Social Policy	2	Cited by two participants as providing technical assistance and advice on SNAP. One participant cited that they presented at CLASP gathering.
Government Accountability Office	2	Two participants cited the importance of the GAO report on SNAP usage by college students and that they presented at GAO report release.
Feeding America	2	Two participants cited that they presented at FRAC/Feeding America conference on student hunger.
Lumina Foundation	1	One participant cited that they presented at Lumina gathering.
Society for Human Nutrition Education and Behavior	1	One participant from the UC System published work on prevalence of student food insecurity in Journal of Society for Human Nutrition Education and Behavior.
National Association of Student Personnel Administrators	1	One participant from the CSU System presented at a NASPA gathering.
National Public Health Association	1	One participant from the UC System presented at a NPHA gathering.
SxSW	1	One participant presented on student food insecurity at SxSW national gathering.
Council of Social Work Education	1	One participant from the CSU System presented at a CSWE gathering.
Society for Social Work and Research	1	One participant from the CSU System presented at a SSWR gathering.
The Association of Baccalaureate Social Work Program Director	1	One participant from the CSU System presented at a BPD gathering.
National Association of Latino Elected Officials	1	One participant from the CSU System presented at a NALEO gathering.
National Association for College Admissions Counseling	1	One participant from the CSU System presented at a NACAC gathering.
National Alliance to End Homelessness	1	One participant from Jovenes presented at NAEH gathering.

Ongoing Efforts in California and Across the U.S.

California participants interviewed for this research continue to advance policy solutions to college student financial insecurity through their network activities. Campuses within the three systems are continuing to use their Hunger Free Campus Initiative funding to launch and grow services and programs to support student basic needs. The California Higher Education Basic Needs Alliance is planning a Basic Needs Security Conference for February 2020. Additionally, in interviews and conference presentations several mentioned the prospect of bringing up failed legislation for reconsideration by the California State Legislature. Advocates are also working with CA DSS through the original AB 1930 original work group, which is being reinstituted, to develop a universal form for CalFresh enrollment to verify student eligibility for the 20-hr work rule waiver.

Federal Efforts

Additionally, many advocates are active on the federal legislation front. This includes MAZON and the Hope Center which were central actors in getting the U.S. Government Accountability Organization to issue a comprehensive report in January 2019 on SNAP usage by college students, which further documented college student financial and food insecurity. This study also found that 5.5M low-income students had at least one additional risk factor for food insecurity, and among potentially SNAP eligible low-income students with at least one additional factor for food insecurity, 57 percent did not report participating in SNAP in 2016. The report further recommends strategies for addressing low levels of SNAP usage by college students, such as clarifying rules around SNAP exemptions for college students and improved information sharing with state agencies regarding SNAP. Since the GAO report, there have been nine bills in Congress addressing college student basic needs insecurity. To date, none have passed. However, California participants in this research project reported that they consider many of these policy proposals to be marker bills, which along with the GAO report, are designed to shape the national policy conversation and inform the next reauthorizations of the Farm Bill and Higher Education Act. California legislative members – Rep. Jesse Gomez, Rep. Adam Schiff, and Sen. Kamala Harris, have each drafted legislation regarding college student basic needs insecurity (Duffield, Lee, Hector, and Welton 2019) which demonstrates how state policies serve to inform federal legislation in the U.S. federal system.

Independent Efforts of the CCC System

Additionally, the CCC system was also independently very active in the legislative space around basic needs in 2019. In doing so, it achieved multiple legislative wins, but also some losses. Here we see how sub-sectoral policy advancements and reverse innovations in an intersegmental network are both possible and limited by the structural context of the CCC system. Much of these efforts were supported by continued research that came out in 2019 indicating the extent of college student financial insecurity in the state, particularly amongst community college students, and based on the structural context the CCC is in within state government.

On March 7, 2019, The Hope Center released the findings of their California Community Colleges #RealCollege Survey, which surveyed just under 40,000 students across 57 CCC System Institutions (Goldrick-Rab, Baker-Smith, Coca, Looker 2019). It found that 50% of respondents were food insecure in the prior 30 days, 60% of respondents were housing insecure in the previous year, and 19% of respondents were homeless in the previous year. This research was used by the network of basic needs advocates to advance legislation.

As noted above, the structure of the CCC System affects its approach to legislation and the California State Legislature. The CCC system is made up of 114 colleges that are overseen by 72 districts with local boards and trustees. Local boards and trustees have a fair degree of autonomy to respond to their local contexts. This means that policy and funding allocations are legislated or statutorily required by the state legislature, rather than administratively controlled within the CCC System. However, the UCs and CSUs are more centrally organized, with Chancellors and Boards of Regents having greater degree of centralized power and authority. Further, California passed Proposition 98 in November of 1988, which constitutionally mandated rules for calculating a minimum annual funding level for K-14 education (Legislative Analyst's Office 2017). Put otherwise, there is a guaranteed minimum percentage of the total state budget for K-12 and community colleges. This provides a minimum guarantee of funding. However, as CA P9 stated in her interview, the downside is that Proposition 98 is often seen by the legislature as a cap. For the CSU and UC Systems, funding for basic needs initiatives and policies come out of the general fund, on top of the money that they already get for their other operations. However, for the CCC System, Proposition 98 means that K-12 and community colleges are essentially seen as having a cap with a fixed amount of dollars, which means that in order to receive funding for basic needs initiatives something else has to be reduced in the CCC system budget. Advocates continue to make the case that the basic needs funding should not actually be included in the Proposition 98 allocation and that it should come out of general fund money, but to date have not been successful. What this means is that in order to get funding for basic needs initiatives (or any others) priorities within the budget must be rearranged, or the budget request for the new initiative must be tempered.

California legislators passed AB 612 which is modeled after AB 1894 (2018) to allow any of the 114 colleges in the CCC system to enter into an agreement with CA DSS to establish a CalFresh Restaurant Meal Program (California State Legislature 2019c). The legislation was estimated to cost the state $750,000 per year to implement. AB 612 was sponsored by Assemblywoman Weber, and co-written by the Community College League of California. The California Community Colleges Chancellor's Office and ten community college districts, along with other advocacy groups offered support. AB 612 passed out of committee, the House, and the Senate unanimously, and was signed into law by Governor Newsom on October 12, 2019.

California Community College advocates also advanced AB 943: Community Colleges: Student Equity and Achievement Program Funds, which allows California community college districts to use up to $25,000 funding from the Student Equity and Achievement Program for emergency grants for students who face unforeseen challenges, such as a need for shelter or food (California State Legislature 2019d). The Student Equity and Achievement Program is a grant program from the state that funds services for underrepresented students. Here the effects of Proposition 98 can be seen, as AB 943 does not include new state money. It allows $25,000 of Student Equity and Achievement Program to be used to support basic needs efforts. AB 943, like other basic needs legislation that passed in the state, passed out of committee, the House, and the Senate unanimously, and was signed into law by Governor Newsom on October 4, 2019.

Advocates also pushed AB 302, which would allow homeless students sleep overnight in community college parking lots (California State Legislature 2019e. The bill was modeled after efforts such as Safe Parking LA – a non-profit that provides safe parking and access to restroom services for homeless individuals in Los Angeles (Safe Parking LA). Assemblyman Marc Berman, who chairs the Select Committee for the Master Plan for Higher Education in

California, introduced the bill in the General Assembly. AB 302 was somewhat controversial in that it had 25 organizations that supported it – including the Student Senate for California Community Colleges (which helped author the bill), the Faculty Association of California Community Colleges, and the Western Center. However, 31 organizations opposed the bill, including the Association of Community College Administrators, the Community College Faculty Coalition, the Community College League of California, and 14 community college districts. The CCC System took no official policy towards the legislation. Opposition was based on concerns about the cost of securing and cleaning the lots, and the effect on colleges' relationships with neighboring residents and businesses (Mello 2019). AB 302 passed out of the Assembly's Higher Education and Appropriations committees before passing by a vote of 60 to 8 on House floor. It was on a similar track in the Senate. It passed out of the Education and Judiciary committees, however the Senate Appropriations Committee added amendments that delayed implementation until 2021, made it easier for colleges to opt out, and exempted colleges within 250 feet of an elementary school. After the amendments were added, Assemblyman Berman pulled the bill, with the plan to reintroduce it in the 2020 legislative cycle (Mello 2019).

Much of the attention of the CCC System was on SB 291 in 2019, which sought to create the California Community College Student Financial Aid Program, which was estimated to cost the state up to $1.5B annually (California State Legislature 2019f). If passed SB 191 would have been phased in over the upcoming five years. The program would provide aid to community college students to cover the total cost of attending college, including living costs, books and transportation. The program would cover the full cost of attendance minus expected family and student (through other aid or scholarships) contribution. Students would be eligible as long as they are California residents, attend a California community college, and make satisfactory academic progress. SB 291 also aimed to address inequities in financial aid for public post-secondary students in the state. In a January 2019 report The Institute for College Access and Success (2019), found that low-income students and families actually pay less to attend UC or CSU System schools than they do at CCC System colleges based on how financial aid is calculated and awarded, despite much lower tuition costs at community colleges. California awards financial aid based on tuition, rather than on the total cost of attendance. Community college students face similar living expenses and receive substantially less financial aid. This results in UC students receive three times the amount of grant aid. SB 291 was passed out of committee in the Senate Education and Appropriations Committees, and passed 31 to 5 on the Senate Floor. Despite more than 50 organizations formally supporting it – including the California Community Colleges Board of Governors and California Community Colleges Chancellor's Office who helped author the bill, it failed to be considered in committee in the House. However, California legislators did pass AB 2: California College Promise, which expanded the eligibility for tuition-free college to students with disabilities even if they take fewer than 12 credits (California State Legislature 2019g).

Collectively, these activities demonstrate the capabilities and limitations of the higher education systems to work independently from one another. Much of the activities of the CCC system is attributable to their student demographics, which tend to be older students, who take classes part-time, and have greater financial need. Like in Tennessee, the structure of how a state organizes their systems of higher education dictates the autonomy, power, and pathways for policy in the legislature. The structure of the CCC System both dictates and controls what innovations are possible, and how they are brought to legislative enactment. How structure affects reverse innovations that support the existence of an anchoring innovation within the context of multisectoral networks is an area for future research.

Conclusion

Put together, the spread of innovative policy solutions, research, and advocacy that stem from California and disperse within and from the state show evidence of state level polydiffusion. Experience, information, stimuli, research, influence, and policy models are shared within and across the network through internal champions who translated language, systems, and frameworks between sectors in a multisectoral network. This sharing, translation and mobilization also enables independent actions of central actors (like the CCC System) that lead to reverse innovations in the network that further support and enhance initial policy advocacy and actions. Like Tennessee, federal actions around the foundational elements of the state policy innovations have been advanced by Congressional delegates from California and national advocacy organizations. Further, external entrepreneurs have enabled the diffusion of policy models developed in California through organizing, research and advocacy roles within the state network. These efforts and the learning that they produce are then shared across other networks in other states and levels of government. These innovative dynamics are explored next in Washington.

Chapter 6: Washington State

Introduction

Washington state has been a hotbed of innovative policy and programs to address college student homelessness and housing insecurity. The efforts in the state span three fronts that are made up of loosely connected advocates. These include state efforts to reduce the barriers to higher education for students exiting foster care or who have experienced homelessness, pilot initiatives to support housing insecure students attaining access to basic needs, and a local housing program to support housing insecure students in the Tacoma region. This broad network and the policy activities they have advanced is explored in this chapter.

A Local Housing Initiative in Tacoma

In 2014, the Tacoma Housing Authority (THA) launched The College Housing Assistance Program (CHAP) as part of its ongoing focus on education. CHAP is a housing assistance program for homeless or near homeless students that started in 2014 at Tacoma Community College (TCC). It expanded to include students at the University of Washington-Tacoma (UWT) in the 2017-2018 academic year. CHAP provides housing vouchers that cover roughly 50% of rental costs to be used at THA public housing facilities or at participating private housing complexes by qualifying students.

THA is one of 3,400 housing authorities in the U.S. maintained by the Department of Housing and Urban Development (U.S. Department of Housing and Urban Development | Moving to Work Demonstration Program). Housing authorities provide families and individuals with low-cost housing through public housing facilities or through a voucher program with participating private housing complexes (U.S. Department of Housing and Urban Development | Office of Policy Development and Research 1995). In 1996, Congress approved the Moving to

Work (MTW) designation for public housing authorities. MTW is a demonstration program for public housing authorities that provides an opportunity to design and test innovative, locally designed strategies to assist participants towards self-sufficiency (U.S. Department of Housing and Urban Development | Moving to Work Demonstration Program). MTW designation provides public housing authorities with flexibility in how they use their federal funds to allow for innovative policy interventions to be tested, developed, and subsequently rolled out to the rest of the public housing authorities in the U.S. Currently, there are 39 MTW public housing authorities in the U.S. and HUD plans to expand the program to an additional 100 PHAs by 2022. THA received MTW designation in 2010 (Tacoma Housing Authority).

Using MTW funding flexibility, THA started their partnership with TCC in 2014 as a pilot program with 25 vouchers for qualifying individuals pursuing higher education (Tacoma Housing Authority). THA was interested in the partnership because the organization viewed education as a pathway out of poverty for many of its residents. Further, THA manages partnerships with area elementary schools, has many clients who were parents looking for a means to economic empowerment, and offers college saving accounts for children of its residents. THA's efforts were led by WA P1, in conjunction with WA P2 at TCC. WA P2 managed the SNAP E&T program for TCC, so was a natural advocate and ally for assisting housing insecure students.

Early outcomes from the pilot showed that students that received housing support were twice as likely to stay in school, earn a higher GPA, and graduate than similar students who did not receive the voucher. In 2016, TCC participated in the Hope Lab's survey of basic needs as part of their survey of community colleges across the country (Goldrick-Rab, Richardson, and Hernandez 2017). The survey identified that the national homelessness rate among community college students was 14%, however the rate at TCC was 27%. The rate shocked representatives at both the THA and TCC, and combined with positive results from the initial pilot program, led to a desire to expand CHAP to more students. Advocates were able to use the research and program results to secure funding for expansion from the Kresge Foundation. The Hope Lab additionally partnered with the expansion to do a two-year evaluation of the program.

Housing assistance from CHAP comes in the form of a voucher where homeless or near homeless students can secure housing on the private rental market for up to 3 years or until graduation, whichever comes first. WA P1 at THA stated this in regards to the design of CHAP, "We designed the program with the goal of leveraging our housing dollars for education because education is the pathway for sustainability and independence from assistance, and their children to not rely on our assistance. We invest in education by the relationship with TCC. We provide the housing dollar and they provide the education service. They operate the program, screen folks, and provide resource navigation for students. They are in charge of informing us about student compliance. We see ourselves as the housing dollar here – being able to leverage our investment to encourage the school to put some dollars towards the investment. The school has to provide staff to operate the program and some capital." TCC provides case management and "completion coaches" to support students through college.

CHAP is not without its challenges. Only 50% of students who complete the steps to qualify for a voucher actually secure a place to live because landlords can be selective in the tight Tacoma housing market. Further, students may lack adequate rental history, moving fees, or security deposits. They may have a criminal background, or lack the requisite follow through to utilize the voucher in the 30-day window before it expires. Landlords may also discriminate against students using the voucher. THA has intervened in a number of ways to address these issues such as updating screening requirements and advocating for changes in state law that made it illegal to refuse public housing vouchers or discriminate against someone based on their source of income. THA has also bought properties near THA and engaged in partnerships with privately owned properties to buy down the affordability of a number of units. TCC expanded their outreach and services to eligible students, and has a fund of $30,000 a year to help CHAP students pay security deposits. Additionally, the TCC expanded a partnership with a local women's correctional facility where incarcerated students take classes. As the students are released from incarceration, WA P2 works with them to transition their studies to campus, secure the housing voucher, and help the student find a rental property. However, because many locations will not rent to formerly incarcerated students due to their recent criminal record, this remains an ongoing challenge for WA P2.

In 2016, UWT created the Office of Student Advocacy and Support to aid students confronting financial insecurity. Like in California, on-campus efforts leading to innovation were driven by faculty and staff who identified that increasing numbers of students were confronting barriers that were preventing them from finishing and staying in school. Faculty led research on issues of basic needs access and determined that roughly 14% of UWT students were homeless. The Chancellor of UWT, Dr. Mark Pagano, identified that in order to retain students, the university needed to provide students navigational help to access on campus and off campus resources. WA P3, who manages the Office of Student Advocacy and Support at UWT, participated in this study. WA P3 cited that research on rates of basic needs insecurity led by faculty at the university was vital in legitimizing the issue institutionally.

In 2017, UWT began partnering with THA on the basis of student leadership at the university. Several students ran for Student Government on a platform of increasing housing affordability and access to other basic needs for students. Once elected, the new student leaders connected with the THA, who leveraged CHAP funding to pay down the rent on privately owned market value apartments near the university. THA then provided those apartments at a lower cost to qualifying students. However, processes at the institutional level at UWT were not developed for how students would participate in this program or qualify for the subsidized units. WA P3 said of this challenge, “We had this developer on our campus advertising to our students these low-income apartments and asking for me for referrals. I had to reign in our student leadership and put some protocols and processes to the referral process. In that initial effort, we did not have an official relationship with the THA, but were benefactors of the CHAP program. We had to come up with a process, and meet the requirements of THA for participants to receive case management services. We decided that could be my office, so we do not have to have our students go through a non-profit organization that may or may not be very connected to the university and the issues of college students. We do the interviews with the students who self-identify as homeless or housing insecure, and refer them to the developer, and they then walk the student through the application process with the THA. What it allows, via all this partnership and collaboration, is for the student to use financial aid as a source of income, so they don't have to provide pay stubs for a year. If the student does not have an application fee or security deposit, they can apply to the university emergency assistance funds…All this seems so easy in retrospect, but none of it was in place. THA works a lot of faster than UWT, and we sort of had to catch up. There is a lot of high-level work that must be approved above me.”

In 2019, advocates at the THA, TCC, and UWT developed transfer agreements which would allow students to matriculate from TCC to UWT without losing their waiver. One of the primary challenges in developing the agreement was the requirements for student data sharing.

TCC had not had an issue with providing things like grades, test scores, persistence to THA – who was interested in demonstrating to HUD that because of housing, students are making academic progress and being persistent. However, UWT was less eager to share information. Further, changes to public housing regulations have to go through a period of public comment and be approved by the board of directors for THA. Again, these processes require shepherding by leaders on each side of the network. Collectively, the parties agreed to a MOU, and UWT was added as an official CHAP participant.

Social Network Analysis of the Tacoma Housing Authority CHAP Model

The network that created the CHAP program is displayed in Figure 6:1. The dataset is available in Appendix 4. Centrality measures are presented in Table 6-1 and network density is exhibited in Table 6-2, which displays a dense local network reinforced with financial and research support from two national organizations. THA, with a betweenness measure ten times that of any other organization, plays a central role in managing relationships with HUD, the local private housing developer, the local institution, and the national organizations (Kresge Foundation and Hope Center) which provide needed financial support and research to the network.

Figure 6-1: Tacoma Housing Authority CHAP Program Network

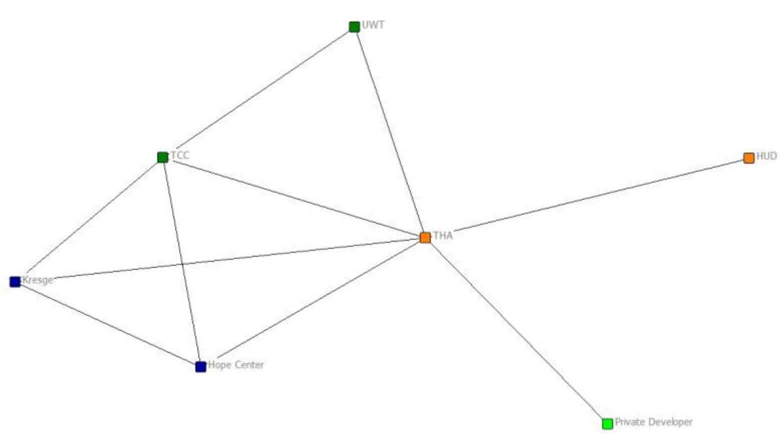


Table 6-1: Centrality Measures for Tacoma Housing Authority CHAP Program Network

	Degree	Centrality	Eigenvector	Betweenness
Tacoma Housing Authority (THA)	6	1.0	0.547	10
Tacoma Community College (TCC)	4	0.667	0.477	1
Hope Center	3	0.50	0.411	0
Kresge Foundation	3	0.50	0.411	0
Univ. of Washington Tacoma (UWT)	2	0.333	0.293	0
Private Developer	1	0.167	0.157	0
U.S. Housing and Urban Development (HUD)	1	0.167	0.157	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 6. Centrality values range from 0 to 1. Eigenvector mean average = 0.350. Betweenness mean average = 1.571

Table 6-2: Density Measures for Tacoma Housing Authority CHAP Program Network

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	0.476	20	0.499	2.857

***Density values range from 0 – 1.

In sum, CHAP, like the other networks analyzed in this research, was successful due to the contributions of participants. The THA is a centralized *champion* who created, developed, piloted, and expanded programmatic policy solutions to meet the needs of housing insecure students. THA, as reflected in its high betweenness score, bridged the differing needs, values, processes, and language of business, higher education, philanthropy, and public housing sectors. TCC and UWT are supporters who aligned their operations with the housing authority to advance services to its students. The private housing developers are also *supporters* of the network, who amended their business model to support the development of the innovative initiative. The Kresge Foundation and Hope Center are *outside allies,* who provided expertise, funding and research used by those within the network to expand CHAP, and helped diffuse the innovative policy model to secondary states post-adoption.

The Kresge Foundation in particular has been active in supporting innovative practices of public housing authorities through partnership with the Council of Large Public Housing

Authorities, which is made up of the largest housing authorities in the U.S. A May 2019 report entitled *Eliminating Barriers to Postsecondary Success* elevated the work of multiple public housing authorities and their support of college students. These include: the Chicago Housing Authority[17] who, like THA, is using its MTW designation to partner with local community colleges to provide financial support for residents and housing insecure college students; The Housing Authority of the City of Los Angeles who provides assistance to young adult residents in applying to college; and the Columbus Metropolitan Housing Authority and the Louisville Metropolitan Housing Authority who support young parents with housing assistance so they can pursue higher education. Additionally, THA and Chicago Housing Authority officials have presented at the #RealCollege Higher Education Basic Needs Conference that the Hope Center hosts. However, diffusion of the CHAP model is likely conditioned on the MTW designation, which provides flexible funding to serve identified populations with unique characteristics. As mentioned above, the MTW Program is expanding and the potential exists for diffusion to occur to other public housing authorities across the U.S. National organizations, such as the Hope Center and Kresge Foundation, play a central role in the spread of this program model. However, at this time, no direct diffusion was identified by network participants. Therefore, diffusion is not explored or modeled for this innovation.

Information Sources

Only three participants were interviewed for the analysis of the Tacoma Housing Authority CHAP Program – one each at the TCC, THA, and UWT. The low number of

[17] The Chicago Housing Authority (CHA) launched their Partners in Education Program in 2013 to include case management, last dollar scholarships, and tuition, book and fee vouchers for students attending City Colleges of Chicago. Additionally, CHA offers merit-based scholarships for residents to attend two- and four-year colleges. These services are supported by a Chicago area initiative named One Million Degrees, which receives support from the Kresge Foundation. Recent expansion of the program will be evaluated by the Hope Center.

participants negatively affects the reliability of the data below but is explained by a dense local network of local organizational champions. After interviews, each participant was asked via the Social Network Analysis Survey to "identify all of the ways that your organization obtained information about the extent of college student financial insecurity in your state and policies/programs to address the issue." The responses from CHAP Program participants are below in Table 6-3. The findings confirm the general narrative chronicled above. Advocates, personal contacts, and national advocacy groups were cited by all participants. This suggests a dense network of local allies who were connected to national organizations that advanced the development of the work.

Table 6-3: Information Sources for Tacoma Officials for CHAP Program

Source of Information	Frequency	% Cited
Advocates	3	100%
Personal Contacts	3	100%
National Advocacy Groups	3	100%
Research Publications	2	67%
National / Regional Conferences	2	67%
Advocates	2	67%
Professional Meetings	2	67%

n=3

In terms of contributions within the network, participants were asked to rate the contributions of organizations towards creation of the CHAP program. Only one of the three participants responses included other organizations besides their own. Therefore, the data in Table 6-4, is self-reported, with the exception of THA which was cited by one other participant. This, along with the low number of participants, hurts the reliability of the findings, but again is partially explained by the dense local network of primary participants. Data presented also confirms the general narrative and social network data above.

For each item presented, respondents were asked to evaluate the involvement and contribution of each organization, including their own, on a 5-point Likert-Scale. Legislative influence was removed for this analysis, as the CHAP model did not require legislative approval. For involvement, the Likert-Scale ranged from "Critically Involved" to "Not Involved" and scored as follows:

- "Critically Involved" – 4
- "Moderately Involved" – 3
- "Intermittently Involved" – 2
- "Minimally Involved" – 1
- "Not Involved" – 1

For contributions the Likert-Scale ranged from "Did Not Provide" to "Core Provider of Resource" across seven domains– funding, legislative influence, research, information on best practices / policy models, expertise, advocacy, and communication to external stakeholders. Responses on the 5-point Likert-Scale were scored as follows:

- "Core Provider of Resource" – 4
- "Moderately Provided Along with Others" – 3
- "Intermittently Provided" – 2
- "Minimally Provided" – 1
- "Did Not Provide" – 0

Table 6-4: Contributions to Tacoma Housing Authority CHAP Network

Organization	Frequency Cited	Overall Involvement	Funding	Research	Info on Policy Models / Best Practices	Expertise	Advocacy	Communication to External Constituents
UWT	1	2		0		0	0	
THA	2	**2.5**	**2**	3	**3.5**	**3.5**	**3.5**	**3**
TCC	1	2	0	**4**	2	2	2	2

***Scores presented denote averages. Bolded scores are the highest for that item contributed.

In terms of the creation of the CHAP program, THA is the most critically involved actor from which the policy model, funding, expertise, advocacy and communication stem. This again points to the critical role of entrepreneurial organizations that coordinate the actions of champions and generate assistance from supporter organizations and outside allies. TCC, which has a longer relationship with the THA and participated in the Hope Lab research scored itself relatively higher than UWT, which is just embarking on the CHAP partnership.

Challenges

The narrative above presented some of the challenges facing the network of actors administering CHAP. These are further presented in Table 6-5. One item that was cited as a challenge by WA P1, but indicated as a feature of the network by others, is that of being disconnected to other legislative efforts in the state. This is partially explained by the CHAP program being a local initiative that is made possible through federal funding, but also means that the CHAP network has to work from behind regarding other legislation advanced at the state level. This is an important network feature that is later explored in this chapter.

Table 6-5: Challenges faced by Tacoma Housing Authority CHAP Network

Type of Challenge	Frequency	Method for Overcoming
Tight housing market in Tacoma, which allows for private housing complexes to charge high prices and be discriminating in who is selected to live in their complexes.	3	THA entering into partnerships with local housing complexes and leasing up properties as a means to drive down rental costs for CHAP students and eliminate the challenges with managing a housing voucher.
Challenges with CHAP voucher utilization.	3	THA partnerships with private housing complexes described above. Intrusive outreach to CHAP eligible students.
Housing barriers for students – rental history, follow through, criminal record, etc.	3	THA entering into partnerships with local housing complexes to avoid complexities with housing voucher. THA identifying housing complexes willing to rent to those with a past criminal record. Intrusive advising and outreach to students by UWT and TCC.
CHAP participants cannot transfer from TCC to UWT.	2	MOU agreement to formalize the relationship between THA and UWT.
Pulled in multiple directions with student needs.	2	Use of student interns and faculty at institutional level. Partnerships with existing community organizations.
Need for data.	2	Initial partnership with Hope Center for initial data on rates of student housing insecurity and homelessness, which was used to expand CHAP program with assistance of Kresge Foundation. Ongoing partnership with Hope Center for evaluation of CHAP.
THA works faster than institution.	1	Work of UWT staff to get in front of activities of on campus student advocates. MOU agreement to formalize the relationship between THA and UWT.
Data sharing requirements for CHAP.	1	MOU agreement to formalize the relationship between THA and UWT.
Cannot engage in advocacy work as an institutional employee.	1	Use of research, collaboration, and partnerships to inform policy and practice.
Not connected to legislative efforts in state. *	1	Outreach and clarification after legislation is passed.

N=3.

* These participants indicated that they were not connected to other legislative efforts around college student housing insecurity in the state. Only one indicated that it affects their work in a challenging way.

Attributes

The attributes of the Tacoma Housing Authority CHAP program are presented in Table 6-6. Of the three network participants interviewed in Tacoma, only two completed this portion of the survey. Again, this hurts the reliability of the findings. For each item presented, respondents were asked to evaluate the attributes of the policy model based on a 5-point Likert-Scale that ranged from Strongly Agree to Strongly Disagree. Values were coded the same as they were for Tennessee and California. Strongly Agree responses were coded as a value of 5, whereas Strongly Disagree responses were coded as a value of 1. These results are presented in Table 6-6. Averages are presented for each item, and then averaged with other items for each attribute so for a composite attribute average. Averages for the CHAP program are generally high. Relative advantage was rated highest. Relative advantage is likely rated highly because of the scaling of the CHAP program from an initial pilot of 25 students to 150 students currently. Early results for the pilot indicated that CHAP allows students to close opportunity gaps. However, CHAP is seen as relatively complex to manage (3.5) with few visible effects (3.25). The former affects the successful participation of students within the program, and may also dissuade other housing authorities from adopting a similar program model. The latter is potentially explained by the fact that the CHAP model was truly innovated without evidence or examples from similar types of programs in other communities or institutions.

Table 6-6: Attributes of Tacoma Housing Authority CHAP Program

Attribute	Item	Item Average	Std. Deviation	Attribute Average
Relative Advantage	The policy my state created to address college student financial insecurity improves the lives of financially insecure college students in my state.	4.5	0.707	4.33
	The policy my state created to address college student financial insecurity improves the academic performance of financially insecure college students in my state.	4.5	0.707	
	Overall, the policy is an effective instrument to address the negative effects felt by financially insecure college students in my state.	4	0	
Compatibility	The policy my state created to address college student financial insecurity is compatible to the capabilities of institutions and organizations in my state.	4	0	4
	The policy my state created to address college student financial insecurity is compatible with the needs of financially insecure college students in my state.	4	0	
Complexity	It is easy for financially insecure college students to take advantage of this policy.	3.5	0.707	3.5
	It is easy for administrators and institutions to manage this policy / program.	3.5	0.707	
Trialability	I can easily explain the central features and benefits of this policy to others.	4.5	0.707	4.25
	The effects of this policy to address college student financial insecurity are directly apparent to me.	4	0	
Observability	I examined the effects of best practices of this policy model before advocating for legislative action.	3	0	3.25
	I have observed the effects of similar smaller scale programs at the community or institutional level on financially insecure college students.	3.5	0.707	
	Attribute Total	43		

n=2

The Ecosystem of Support for Homeless Students in Washington

Beyond the efforts in Tacoma, Washington has been active in innovating state policy solutions to homelessness and housing insecurity in college students. This has been led by the actions and advocacy of agencies connected to associated and overlapping issues of K-12 students who are experiencing homelessness, young adult homelessness, foster youth, and higher education. The network formed organically through the convergence of independent activities across the advocacy communities. Each element is explored briefly below.

Homeless K-12 Students

In 2011, WA P4, an attorney at Columbia Legal Services, a legal service firm that focuses on the needs of low-income individuals and broad scale instances of discrimination and mistreatment of large groups of people, was responsible for elevating the needs of K-12 students experiencing homelessness. This was done largely through ensuring the compliance of K-12 systems in the state with McKinney-Vento, which is the federal law that requires identification and support of students experiencing homelessness (National Center for Homeless Education). At the time, WA State was reporting 26,000 students experiencing homelessness across its 295 school districts; however, WA P4 discovered a systematic disincentive to report homeless students due to funding for McKinney-Vento.

In 2011 Washington received approximately $850,000 a year to support the 26,000 students experiencing homelessness. However, only 10% of school districts were receiving McKinney – Vento funding. Funding is allocated via a 3-year competitive grant process. Funding is based on the number of the students who have been identified and the size of the school district. School districts with 55,000 or more total students enrolled qualify for more funding; however, funding for any school district was capped at $45,000. According to WA P4, "This meant that larger school districts, with larger numbers of homeless students, had a disincentive to identify students experiencing homelessness because they are not being supported in that work. For example, Seattle Public Schools was identifying approximately 1,000 students and spending almost $1M dollars transporting students to and from their school of origin and providing other services but only receiving around $45,000 to implement McKinney - Vento…Through this we determined we needed to figure out how to bring resources to the table to start incentivizing supporting students. We also knew we did not have a lot of data except the number of homeless students that schools had identified, which they were required to report under the law. However, we did not know anything about educational outcomes."

WA P4 and Columbia Legal Services, along with the McKinney-Vento Program Supervisor in the WA Office of Superintendent of Public Instruction (WA OSPI), successfully advocated for the passage of SB 6074 Homeless Children Education Act that was signed into law on April 3, 2014 (Washington State Legislature 2014). SB 6074 requires WA OSPI to collect demographic data and educational outcomes for homeless students in the K-12 public school system including dropout and graduation rates. SB 6074 encouraged school districts to provide training. Further, it led to increased documentation of the number of homeless students in the state. During the 2015-2016 academic year, Washington school districts identified 39,671 K-12 students as experiencing homelessness. This translates in to 1 in 27 students in Washington experiencing homeless (Schoolhouse Washington 2017). This early data collection would prove to be important for subsequent innovations that the state adopted in the future.

From the data collected, Washington administrators and advocates discovered that students experiencing homelessness had the second lowest graduation rates of any other student group, second only to students in foster care. However, while those two groups often face many of the same challenges, students in foster care have public supports and structures in place for them, but there was no state entity in Washington responsible for students experiencing homelessness. Therefore, WA P4 along with other advocates used the data to make the case for HB 1682 – The Homeless Student Stability and Opportunity Gap Act in 2016 (Washington State Legislature 2016), which created the Homeless Student Stability Program (HSSP). HSSP ensured that students experiencing homelessness can continue attending the same schools and promoted academic achievement through competitive grants managed by the WA Department of Commerce and OSPI, aimed at improving access to in-school support. HSSP was advanced via a partnership titled Schoolhouse Washington between Building Changes – a non-profit homeless advocacy group in the state, and Columbia Legal Services. WA P4 joined Building Changes in 2016 to manage the Schoolhouse Washington partnership, which focuses on early childhood education and post-secondary attainment as means of supporting homeless youth entering or exiting the K-12 system.

Foster Youth

Three organizations in Washington, Treehouse, the College Success Foundation, and the Mockingbird Society, have been particularly active in programmatic service and political advocacy around supporting children and youth in foster care. Each organization and their activities leading to legislation to address higher education access for youth in foster care and homeless youth is briefly explored below.

Treehouse was created in 1988 by a group of social workers to offer academic and developmental supports through case management to children in foster care in Washington. Treehouse manages the Graduation Success Program, which seeks to improve educational outcomes for youth through intensive coaching and mentoring, along with financial assistance leading to graduation from high school (Treehouse). The College Success Foundation (CSF) was created in 2000, out of the former Washington Governor Gary Locke's 2020 Commission of the Future of Post-Secondary Education, which recommended the establishment of an independent, nonprofit organization to advance post-secondary educational attainment for Washington's youth (College Success Foundation). CSF serves underserved students, including foster youth, through academic, financial, and developmental supports and scholarships that begin in middle school and continue through post-secondary attainment into young adulthood.

In 2000 advocates in Washington created the Mockingbird Society to advocate for improvements to the state's foster care system (The Mockingbird Society-a). In 2013, Mockingbird's advocacy expanded to include youth homelessness. This was borne out of the organization's realization that there is significant overlap in the two populations, which stemmed from the research of Columbia Legal Services and Schoolhouse Washington referenced above. Youth who exit the foster care system are disproportionately likely to experience homelessness and face many of the same issues around access to education and employment as youth experiencing homelessness. Mockingbird's organizational ethos is built around engaging young people who have lived experience in either of those systems to identify the challenges and potential solutions to the issues they have faced. Mockingbird then advocates to implement these solutions through program development, agency collaboration, and political engagement. Mockingbird was a lead advocate in the creation of the Office of Homeless Youth (OHY) and has convened the Coalition for Homeless Youth Advocacy and the Child Welfare Advocacy Coalition (The Mockingbird Society-b and The Mockingbird Society 2019).

State Actions to Assist Homeless and Foster Youth

In 2007, Reuven Carlyle[18], a citizen activist for foster youth and member of the Washington State Board for Community and Technical Colleges (SBTC), developed legislation for the Passport to College Promise Scholarship. Passport to College Promise provided college scholarships to students exiting the state foster care system,[19] and incentivized wrap around support for students by postsecondary institutions. Mockingbird Society and Treehouse were central advocates who helped advance the legislation, identify eligible students, and assist in bridging the transition for students into higher education. Since 2008, the program has provided scholarships ($4,500 annually to each student since 2013) to an average of 345 students exiting the state foster care system annually (Washington Student Achievement Council).[20] Passport to College Promise is operated by the Washington Student Achievement Council (WSAC), a state agency who administers the Washington's financial aid programs and collaborates with post-secondary institutions and non-profits to advance educational outcomes. Treehouse served as agency convener to coordinate the development and implementation of Passport to College Promise.

In 2015, Governor Inslee, by request of the Washington State Legislature established OHY via SB 5404 out of the advocacy of community partners, providers, and philanthropy in the state (Washington State Legislature 2015). OHY leads statewide efforts to reduce and prevent homelessness for youth and young adults ages 13 – 24 (Washington State Department of

[18] Mr. Carlyle ran for the state legislature in 2008, and was an elected member of the Washington House of Representatives from 2009 through 2016. He was subsequently elected to the Washington Senate in 2016 where he currently serves.
[19] Students exiting Native American Tribal Foster Care providers or students taking part in the state's foster care system via an interstate compact were not eligible for Passport to College Promise.
[20] Passport to College Promise only served students exiting the state foster care system. It did not serve students in the Federal Unaccompanied Refugee Minors Program, Interstate Compact Program, and Tribal Foster Care System, and unaccompanied homeless youth.

Commerce). According to WA P5, an administrator in OHY, “Inslee recognized that there was no state-level agency for addressing the needs of that population. We have a child welfare agency focused on youth who are removed from the home. We have the McKinney-Vento Program Supervisor in WA OSPI that supports students in the K-12 system. We have an agency that is focused on the housing needs of the broader population. However, we have no focused effort on the needs of unaccompanied homeless youth, or homeless youth who are living independent of their parents/guardian. That was the intention of creating our office and situating it in the Department of Commerce alongside the states resources and policy function related to addressing homelessness for all populations and the development of affordable housing.” The statutory charge of the OHY is to direct policy, funding, and practice solutions to address youth and young adult homelessness across five domains: stable housing; permanent connections with peers and adults; family reconciliation when it is safe and appropriate; education and employment; and social and emotional well-being (Washington State Department of Commerce).

In 2017, OHY issued a report from the Interagency Workgroup on Youth Homelessness that made policy recommendations for state leaders to consider relative to improving outcomes for homeless youth (Washington State Department of Commerce 2017). Most recommendations were directed towards housing, education and foster youth populations, however, the work group also recommended that work be done with higher education institutions to develop a process to identify homeless students who are registered at their post-secondary institution and then connect them to existing resources and track outcomes. It further recommended increased supports for students to attend college and apply for financial aid. These recommendations would serve as a guide for future legislation.

In 2015, Governor Inslee also established the Washington State Blue Ribbon Commission on Delivery of Services to Children and Families (Washington Governor Jay Inslee). The executive order directed the newly established commission to recommend the organizational structure for a new department focused solely on children and families, which had been delivered across four primary divisions within the Department of Social and Health Services (WA DSHS). The purpose of creating a new agency and organizational structure was to align state policy and resources towards improving outcomes and reducing barriers for improving services for children and families. Modeling Indiana, New Jersey, New York City, Tennessee, Georgia, and Wisconsin, the commission's work resulted in the creation of the Washington State Department of Children, Youth, and Families (WA DCYF). WA DCYF is a cabinet level agency that coordinates state-funded services that support children and families including juvenile rehabilitation, foster care, and child welfare services (Washington Governor Jay Inslee).

However, as one Washington participant pointed out, "WA DCYF is a new state agency now responsible for youth in foster care and juvenile justice involved youth and tangentially homeless students because those two populations move in and out of homelessness. But they are not directly involved with homeless youth because they don't oversee housing programs. Together, we (non-profit providers and DCYF) have been trying to figure how to align provision of services to what that student needs are regardless of what their eligibility criteria states. We are trying to be agnostic to what brought them to our attention or service. This is an emerging conversation. For example, McKinney Vento which is federal legislation that protects homeless students, that level of protection is not available to youth in foster care. Further, HUD uses a different, more narrow definition of homelessness than McKinney-Vento provides in education.

In Washington, there is a lot more support and resources for students in foster care largely because Treehouse and the College Success Foundation exist. We receive both state dollars and a lot of private dollars to provide a whole infrastructure of programmatic supports and funding that does not exist for homeless students, even though schools have a greater legal responsibility for the students. The challenge is to create the legal infrastructure for foster care and the programmatic infrastructure for students experiencing homelessness." These challenges would serve as the impetus, and as an ongoing challenge, for collective action work by advocates.

Collective Action Leading to State Policy Expansion

Along with the coalitions led by the Mockingbird Society focused on child welfare and homeless youth described above, advocates formed a collective impact effort named Project Education Impact (PEI) in October 2017. The efforts around PEI were led by Treehouse and initially focused on foster youth, however as advocates gathered the aim expanded to include homeless youth. This resulted in definitional and language challenges, and required a professional facilitator to convene the group. PEI aimed to connect 5 state agencies (WA DCYF, OSPI, OHY, WSAC, and DSHS) and 5 statewide non-profits (Building Changes, College Success Foundation, Mockingbird Society, Treehouse, and the Equity in Education Coalition) to improve education outcomes from Pre-K through post-secondary for students in foster care and those experiencing homelessness. A 2018 budget proviso (SB 6032) codified their charge to develop a plan to improve educational equity for youth experiencing foster care and homelessness and close the disparities between racial and ethnic groups by 2027 (Washington State Legislature 2018a).

Concurrent with this effort, efforts to expand Passport to College Promise started through the work of the Mockingbird Society to engage youth in surfacing needs and advocating for policies. A foster youth, who was being served by a Native American tribal foster care provider and the Mockingbird Society, discovered that he was ineligible for Passport to College Promise due to his status in Tribal Foster Care. The Mockingbird Society began reaching out to partners and legislators in July 2017 to explore exemptions, other supports, or possible changes to legislation. In doing so, Washington State Senator Kevin Ranker, who was the newly appointed chair for the Senate Committee on Higher Education and Workforce Development, reached out with interest in learning more about post-secondary opportunities for foster youth and those experiencing homelessness. The Mockingbird Society set up a call in November 2017 with Sen. Ranker and the College Success Foundation, Treehouse, and Building Changes.

WA P6, who works for the Mockingbird Society stated this regarding the call, "The College Success Foundation mentioned off hand the college support program in California and how it is open to all young people in foster care and then somebody else mentioned how there was no state program related to homeless students. Senator Ranker then said 'let's see if we can serve both' and away we went." Sen. Ranker took these ideas to the drawing board and in January 2018 Sen. Ranker held a Senate Committee on Higher Education and Workforce Development work session. The Mockingbird Society coordinated youth in tribal foster care and homeless students to testify on their experiences. WA P6 stated "One of our young people met with Sen. Ranker afterwards along with a couple of other advocates. Sen. Ranker had already started working on a Passports expansion for foster students to include the previously excluded groups, and based off that interaction he added homeless students to the scope of the bill." Mockingbird Society, Building Changes, the College Success Foundation, Treehouse, and WSAC worked closely over the legislative session to determine the scope, scale and definitions for the expanded Passport scholarship program. In this process, Building Changes was instrumental in scaling back the scope of the bill to include only unaccompanied homeless youth, or those living independent of their parents, due in part to their relationship with OSPI, past research on the size of the population in the state, and the educational obstacles this group. WA P4 stated this in regard to this effort, “Those students are often the focus of the work because if we were to include all homeless students then 1. Colleges probably would not have the capacity to support that right now and 2. If the student had a parent that could be listed on their FAFSA then the financial aid amount would adequately reflect the need to the best of its ability.” Sen. Ranker also expanded the scholarship to include support for workforce training programs through apprenticeships, and renamed the program Passport to Careers.

Two advocates interviewed stated that this was a rare instance where a legislator was ahead of advocates, which created its own set of challenges. One stated, “How do you build a network while flying the plane?” regarding this work. Another posed that identifying homeless students would be particularly difficult because they are such a shifting population. They stated, “There are two federal definitions for homelessness – which do we use? How do have ways of identifying the students, particularly if they are unaccompanied? How do we make it consistent? How many homeless students are there really? Our goal was to make all of this as consistent as possible with existing programs so that we weren't creating new eligibility categories and criteria. We tried to align with the FAFSA and how they define unaccompanied students who have foster care and/or homelessness criteria. All that happened over the course of a month or so because the session was over by the middle of March. It is a 60-day session so we had 60 days to take a germ of an idea and get it to a final bill, which was pretty fast. Again, it was unusual for a bill of this magnitude.” WSAC was critical in this regard because of their experience coordinating the original Passport program. Using data from the state and agency partners in the

EIP workgroup WSAC could preliminarily project the impacts and costs to the expansion. The Mockingbird Society and other advocates provided political mobilization around the legislation. On March 6, SB 6274 passed in the Washington State Legislature and was signed into law on March 22, 2019 by Governor Inslee (Washington State Legislature 2018 – b).

Implementation of Passports

Implementation of the Passport to Careers program began in June 2018 through the Passport Leadership Team (PLT), which is led by WSAC and the College Success Foundation. Due to the original Passport program model being in place, Passport to Careers implementation largely resulted in expansion of existing infrastructure. Expanded eligibility is being phased in between June 2018 and July 2020 while WSAC and other state officials determine the demand, full cost of the program, and impact on campus resources (Washington Student Achievement Council). Post-secondary institutions are required to provide support services to students who are eligible for Passport. Forty-five colleges throughout Washington have committed to developing a viable plan for providing support services to students who are eligible for Passport. This includes a designation support staff member to assist Passport students. However, as one Washington participant pointed out "Often the person who does that is responsible for a lot of similar kind of programs and supports, so the degree to which they can provide anything other than advising is challenging to determine. There are some really exemplary examples of campuses that are leading the way in terms of what is working; however, there are also some questions on how consistent the services are campus to campus." The College Success Foundation through PLT continues to provide student intervention, campus support through training of Passport Navigators, and community integration services. PLT[21] is a 30-member

[21] Member organizations of PLT include: YouthNet, Volunteers of America, Department of Social & Health Services, and various state higher education institutions, some of which are listed in Table 6-10.

advisory organization of schools, non-profits, and state agencies that assists WSAC in implementation. PLT provides technical assistance, training, regional coordination groups, and assists in scaling best practices of student support services.

A Campus Advocate Advances Legislation

The 2018 Washington state legislative cycle also included policy advocacy by WA P8, a student at one of the state's public colleges. WA P8 is a politically active student who was homeless through middle and high school. In college, WA P8 became a student lobbyist for their institution. Due to firsthand experience with the issue of homelessness and from seeing the lack of institutional support in college, WA P8 became politically active around the issue of student homelessness through a prior connection with State Representative Lillian Ortiz-Self, who served as WA P8's high school counselor and had connected WA P8 to needed services, including Kids in Transition and the homeless shelter that WA P8 lived at for two years. Kids in Transition is a statewide program that partners with social workers within schools to provide access to basic needs for homeless students. Ms. Ortiz-Self, who was a counselor at the time she assisted WA P8, was elected to the Washington State Legislature in 2013.

Once WA P8 assumed the role as student lobbyist in October 2016, Rep. Ortiz-Self and WA P8 connected again through their mutual work at the state capitol. WA P8 stated, "I met with her as part of my lobbying duties, and because she was wondering how I was doing. We started talking about the things we do for homeless and foster care students in K-12 in the state that we don't do for students in college, and the fact that we drop the ball when we get these kids to college. We can't expect that just because kids get to college that they will be able to make it through college without the supports like they received in K-12… We wanted to take the already existing model from Kids in Transition that is in every school district and implement what is successful at the college level."

WA P8 then connected with Rep. Mike Sells, who represents the WA P8's district, and who serves on the Washington House of Representatives College and Workforce Development Committee. Rep. Sells and WA P8 met in November 2017. WA P8 stated this in regards to the meeting, "We were catching up and I mentioned the issues that I had faced and were still facing due to my status and he said: 'Well, let's do something about this.' So we got a bill together and filed it and started working it." WA P8 along with Rep. Sells developed HB 2854 to further help homeless college students already in college through case management, meal plans and stipends for essentials of daily living such as clothing, laundry and showers through pilot programs established at campuses across the state (McAvoy 2018). According to WA P8, HB 2854 was closely connected to the expansion of Passport to Careers. WA P8 stated, "There is significant amount of overlap between the two programs. Passport aimed at supporting existing homeless and foster care students exiting high school into college through scholarships and access to support services. We were pushing for wraparound supports and the pilot program for both students who were homeless in high school and those who become homeless in college. Passport only addresses the former - those who were homeless or in foster youth in high school - as they transition into college. It excludes the latter - those who become homeless in college. Part of the pilot is to establish what are the overlaps, where we can collaborate to serve all students, how we can pool resources to be able to be effective, and where are the areas that our service obligations are separate and not necessarily the same thing." HB 2854 was supported by the Washington Student Association, College Success Foundation, Building Changes, and Mockingbird Society, along with the State Board of Community and Technical Colleges. However, all participants interviewed stated that the bill was primarily championed by WA P8. The bill was passed in the Higher Education committee but failed to make it out of Appropriations (Washington State Legislature 2018c).

In 2019, advocates again brought forward legislation to address issues concerning college student homelessness and the Washington State Legislature passed HB 1893 and SB 5800 (Washington State Legislature 2019a, Washington State Legislature 2019b).[22] SB 5800, was the Senate version of 2018 HB 2854, established pilot programs in the state to aid homeless students. Pilot programs could include access to laundry facilities, storage, locker room and showers, access to meal plans or food provision, housing assistance or short-term housing, and case management services. Under the legislation, WSAC will select 2 four-year institutions to participate in the pilot program to aid students experiencing homelessness or who were in the foster care system when they graduated high school. The legislation also directs the SBCTC to select four college districts, two on each side of the Cascade mountain range, in the pilot programs described above. WSAC received $104,000 in FY 2020 and $174,000 in FY 2021 to implement the grant program for the four-year institutions required under SB 5800. SBTC received $200,000 in FY 2020 and $348,000 in FY 2021 to implement the grant program for the community and technical colleges (Washington State Legislature 2019b).

WA P8, and Representative Sells, also advanced HB 1278 in 2019 that would require public higher education institutions that offer housing to provide one year of on-campus housing to first-year College Bound Scholarship[23] students who are homeless (Washington State

[22] Also, in 2019, the Washington State Legislature passed HB 1893, which creates an emergency assistance grant program in the state to provide students of community and technical colleges monetary aid to assist those experiencing unforeseen emergencies or situations that affect the student's ability to attend classes (Washington State Legislature 2019a). No advocates interviewed for this research mentioned HB 1893.
[23] The College Board Scholarship provides four-year tuition to students from low-income families whose income does not exceed 65% of the state’s median income. Students must sign up in the 7th grade and graduate having met

Legislature 2019c). WA P8 largely advanced this legislation independent of the other advocates. HB 1278 also had an indeterminate fiscal impact on the state. Combined these two factors likely limited its prospect of success. The bill made it out of committee in the House and Senate Committees on College and Workforce Development; however, no action was taken in the Senate Committee on Ways and Means.

Analysis of the Legislative Efforts in Washington

The network of actors who advanced the expanded Passport to Careers legislation and pilot programs to assist homeless college students is modeled below in Figure 6-2. The dataset is available in Appendix 5. Overall the network in Washington is dense, with a concentrated core of highly connected actors. As such, the degree, centrality, and eigenvector values of the various actors are generally high and there is less variability of these scores amongst the actors in the network. This means betweenness is a more valuable measure for assigning actors to roles in Hale's modified taxonomy of *Information Positions of Networked Actors.* There are two sides to the network in Figure 6-2. On the left side, WA P8 is positioned as the network *champion*, who led the effort to advance the creation of the pilot programs. In doing so, WA P8[24] navigated the needs and desires of the homeless and foster youth communities (Building Changes, the Mockingbird Society, College Success Foundation), along with the higher education community (WSAC, the Washington Student Association, and SBTC). As such, WA P8 is a densely connected, lead policy entrepreneur, who coordinated much of the activities of this sub-network independently. Rep. Sells is the legislative champion who helped WA P8 bring the policy to reality, and whose connectivity to other members in the legislature is not specified in the

scholarship requirements. Recipients receive a last dollar scholarship (minus any state-funded grant, scholarship, or waiver assistance) to cover the cost of tuition and fees, plus $500 for books and materials.

24 Note that for HB 1278, WA P8 was independent of these groups, and as such his network centrality measures are significantly reduced.

modeling. Rep. Ortiz-Self, WSAC and the SBTC are primary *supporters* who provided needed political and administrative support. Building Changes, Mockingbird, and College Success Foundation also provided advocacy support. Each organization's centrality and eigenvector scores vary from low to medium depending on their network activity, but their betweenness values are all low reflecting their supporter role within the network. Kids in Transition was not active in the legislative activity around the creation of the pilot programs, but was a programmatic model on which the legislation was based. As such, it can be considered an *outside ally.*

On the right, the College Success Foundation, WSAC, Building Changes, and Senator Ranker are chief *champions* that are highly connected within the network to expand Passport to Careers.[25] This classification is again reflected in high centrality, eigenvector, and betweenness values for these organizations. Senator Ranker's connectivity to other members in the legislature is not specified in the modeling, which lowers his centrality and betweenness scores. WSAC and College Success Foundation played an integral role in the initial Passport to College program, and through their expertise and relational context were vital for the success of the expansion. College Success Foundation was also able to mobilize their network of Passport Navigators – the on-campus success support staff that assist Passport students. Passport Navigators lent insight and expertise to, and advocated for, the possible expansion. College Success Foundation and WSAC are also responsible for implementation of the expansion through PLT. Building Changes brought expertise related to homeless students, which was critical in scaling down the expansion to only unaccompanied homeless students, as Passport to College did not serve this population. Additionally, Building Changes was connected to Schoolhouse Connection - a national

[25] College Success Foundation, WSAC, Building Changes, and Senator Ranker are also densely connected to the efforts of WA P8 to create pilot programs and thus sit at the intersection of the two sides of the network.

organization connected to Schoolhouse Washington that was founded at the end of 2016, and who is a central organization in the diffusion of policy models to address college student homelessness. Other advocates, such as Equity in Education, Treehouse, and the Mockingbird Society, are core *supporters* of the legislative expansion. Each provided needed political support and adjusted their programmatic structures to align with the legislation. State agencies such as OHY, DSHS, DCFY, and OSPI are also supporters who provide critical services to homeless and foster youth, have data on numbers and outcomes of the population, and changed their operations as a result of the legislation. The connection between champions and supporters was enabled through the Project Education Impact workgroup. However, as the betweenness measures in Table 6-7 indicate, supporters did not sit at a critical intersection within the network. The only *outside ally* is Schoolhouse Connection.

Figure 6-2: Network of Washington Passport Expansion and Pilot Program Creation

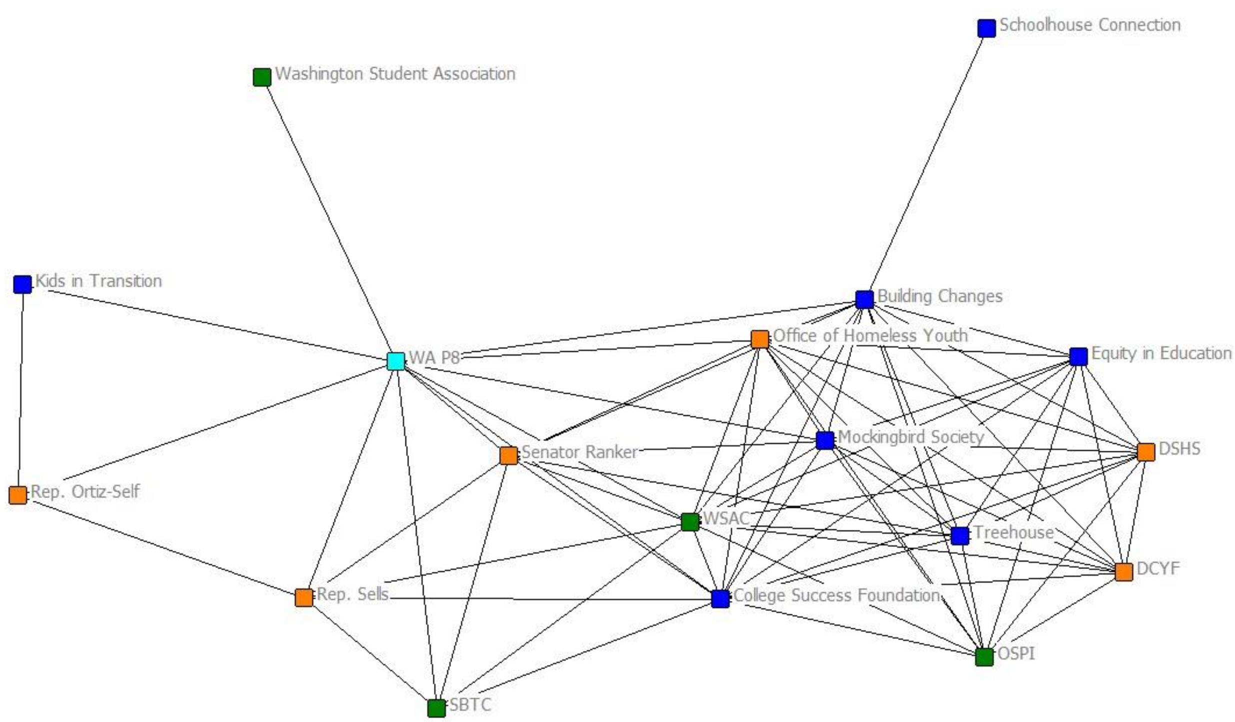


Table 6-7: Centrality Measures for Washington Passport Expansion and Pilot Program Creation

	Degree	Centrality	Eigenvector	Betweenness
WA P8	11	0.647	0.234	41.024
Building Changes	12	0.706	0.3	20.249
College Success Foundation	13	0.765	0.351	11.598
WSAC	13	0.765	0.32	11.598
Mockingbird Society	11	0.647	0.297	4.249
OHY	9	0.529	0.326	4.249
Rep. Sells	6	0.353	0.128	3.476
Senator Ranker	9	0.529	0.252	3.389
Treehouse	10	0.588	0.277	0.667
Rep. Ortiz-Self	3	0.176	0.042	0.5
Equity in Education	9	0.529	0.255	0
OSPI	9	0.529	0.255	0
DCYF	9	0.529	0.255	0
DSHS	9	0.529	0.255	0
SBTC	5	0.294	0.124	0
Kids in Transition	2	0.118	0.027	0
Schoolhouse Connection	1	0.059	0.029	0
Washington Student Association	1	0.059	0.023	0

*** Table is arranged in descending order of betweenness score. Degree values range from 1 – 17. Centrality values range from 0 to 1. Eigenvector average = 2.08
# Agencies and schools only active in the implementation of Passport to Careers though the PLT are not listed here, as the primary focus of this analysis is policy innovation through legislative advancement.

Table 6-8: Density Measures for Washington Passport Expansion and Pilot Program Creation

Measure	Density	# of Ties	Std. Dev.	Avg. Degree
Value	.471	144	0.499	8

***Density values range from 0 – 1.

Information Sources

Six participants of the Washington Passport Expansion and Pilot Program Creation network responded to the Social Network Analysis Survey. However, only four of these were interviewed. Two responses came from members of the Passport Leadership Team who are responsible for implementing and overseeing the Passport to Careers Scholarship. The low number of participants in the legislative network negatively affects the reliability of the data below. Additionally, Building Changes was not identified by survey respondents, despite their high betweenness score, which suggests it may be overestimated. After interviews, each participant was asked via the Social Network Analysis Survey to “identify all of the ways that your organization obtained information about the extent of college student financial insecurity in your state and policies/programs to address the issue.” The responses from Washington participants are below in Table 6-9. Personal contacts, professional meetings, and advocates were central to information sharing within the network. Programs within the state of Washington were relied upon for policy models, while national advocacy groups were relied upon for research and technical assistance.

Table 6-9: Information Sources for Washington Passport Expansion and Pilot Program Creation

Source of Information	Frequency	% Cited
Personal Contacts	6	100%
Advocates	6	100%
Programs within your State	6	100%
National Advocacy Groups	6	100%
Professional Meetings	6	100%
Research Publications	5	83.3%
National / Regional Conferences	4	66.67%

n=3

In terms of contributions within the network, participants were asked to rate the contributions of organizations towards creation of the Washington Passport expansion and pilot program creation. Data presented in Table 6-10 confirms the general narrative and social network data above. For each item presented, respondents were asked to evaluate the involvement and contribution of each organization, including their own, on a 5-point Likert-

Scale. For involvement, the Likert-Scale ranged from “Critically Involved” to “Not Involved” and scored as follows:

- “Critically Involved” – 4
- “Moderately Involved” – 3
- “Intermittently Involved” – 2
- “Minimally Involved” – 1
- “Not Involved” – 1

For contributions the Likert-Scale ranged from “Did Not Provide” to “Core Provider of Resource” across seven domains: funding, legislative influence, research, information on best practices / policy models, expertise, advocacy, and communication to external stakeholders. Responses on the 5-point Likert-Scale were scored as follows:

- “Core Provider of Resource” – 4
- “Moderately Provided Along with Others” – 3
- “Intermittently Provided” – 2
- “Minimally Provided” – 1
- “Did Not Provide” – 0

For the pilot program innovation, WA P8 was a central actor who advocated and shepherded the legislation to successful passage, while relying on Rep. Sells and Sen. Ranker for expertise, influence, communication, and advocacy. The SBTC also provided legislative influence and advocacy by testifying in support of the bill. For the Passport expansion, WSAC and College Success Foundation provided expertise on the how the previous policy model could be extended to include unaccompanied homeless students and those from Native American tribal foster care systems. This was supported through legislative advocacy by the Mockingbird

Society, Treehouse and Building Changes. OHY provided insight on the language of the legislation and their Interagency Workgroup served as broad guide posts for legislative action.

One participant (from a champion organization) summarized the roles and contributions of the network in this way, "Building Changes was extremely critical in the support around students experiencing homelessness because they have the expertise, knew how many young people we were talking about, and the types of supports that would be most appropriate. There was a core team of folks lobbying on this, including Building Changes, College Success and Mockingbird. Treehouse is an agency that provides supports to youth in foster care and they also got in the effort and were helpful as well…College Success and Building Changes were the closest interface with the legislature, who was Senator Ranker."

Table 6-10: Contributions to the Washington Passport Expansion and Pilot Program Network

Organization	Frequency Cited	Overall Involvement	Funding	Legislative Influence	Research	Info on Policy Models / Best Practices	Expertise	Advocacy	Communication to External Constituents
WA P8	1	**4**	1	**4**	1	2	2	**4**	2
Rep. Sells / Sen. Ranker	1	**4**	2	**4**	4	**4**	**4**	**4**	**4**
SBTC	1	**4**	**4**	**4**	3	3	3	4	2
Department of Social & Health Services	2	2.5	2	1.5	1.5	3	2.5	2.5	1
Department of Children, Youth, and Families	1	3	0	1	1	3	3	3	0
Office of Superintendent of Public Instruction	1	3	0	1	1	3	3	3	0
Office of Homeless Youth	2	2	0	1	1.5	2	2.5	1.5	0.5
Treehouse	1	3	0	1	1	3	3	3	0
Equity in Education*	1	3	0	1	1	3	3	3	0
Building Changes	1	1	0	1	1	2	1	1	0
College Success Foundation	4	3.5	3.25	3.25	2.667	3.333	3.75	3.5	3.25
WSAC	4	3.75	3.333	3.25	3.25	3.5	3.5	3.5	2.5
Mockingbird Society	3	3.33	1.333	3.333	1	1.667	2.667	3.333	3.333
Volunteers of America*	1	3	0	3	0	0	2	3	3
Spokane Community College*	1	2	3	1	1	2	2	3	1
Spokane Falls Community College*	1	1	3	1	1	2	2	3	1
WA State University*	1	2	2	2	2	2	2	**4**	2
Eastern WA Univ.*	1	2	2	2	2	2	2	3	2
Youthnet*	1	2	0	1	0	3	2	3	3

***Scores presented denote averages. Highlighted scores are the highest for that item contributed. * Indicates that the organization's primary role was in the implementation of Passport to Careers as part of the Passport Leadership Team.

Challenges

The success of the efforts in Washington does not mean that there were not challenges. In fact, whereas Tennessee and California both indicated how the network overcame its challenges, the network in Washington seemed to still be working through their challenges. This could possibly be explained by the relative newness of the network in terms of working on legislation, although several overlapping coalitions exist. Table 6-11 presents the challenges identified by the network where a couple of broad themes stand out. First, there are two related but distinct populations present in the legislative network: foster youth and homeless youth. Each also has their own sub-groupings. For example, foster youth is divided by those served by the state versus those served by the tribal foster care system. Homeless youth are similarly divided into unaccompanied homeless youth, accompanied homeless youth, and those who become homeless while in college. Further, each of these subgroupings are not discrete. The multitude of populations, each with their own service providers, philosophies, and coalitions, make policy coordination difficult. This points out the complexity of addressing homelessness.

Additionally, all (7) participants indicated that not having a clear, coordinated effort or a cohesive strategy to address homelessness in higher education was a detriment to network success and cohesion. One participant summarized these challenges this way "I think when we launched in to the Passport legislation we realized that there was not a coordinated advocacy community around higher education and homelessness in Washington. It really was like – 'I guess we are it'." Additionally, three participants indicated that the higher education community was not fully represented at the table. For example, WSAC administers financial aid programs but does not operate at an institutional level. The College Success Foundation works at an institutional level by training student service coordinators for Passport, but is not an institution.

The Washington Student Association is connected on the fringes of the network and while it represents the institutions of the state, the organization is made up of students, which had limited political or administrative influence. WA P8 is a student lobbyist but cannot speak fully on behalf of the institution. Related to this, one participant stated, "It seems like a lot of it is on the fringes of higher education by agencies or individuals but that is not actually involving the higher education sector. When we are working with individuals that intersect different systems (homeless, housing, community support, higher education) – you really need all at the table…but too often higher education is not at the table in those conversations." Another participant added, "There seems to be two avenues – administrators, students, faculty and institutions coming to these problems and trying do something about them, while eventually recognizing that other institutions are facing the same things and perhaps they can work together. The other is service providers and advocates who work with individuals, some of which are students, that are experiencing these issues and are trying to help them identify and navigate their supports, some of which can be at an institutional level. Those seems to be the two pathways but I don't think we have figured out how to bridge or coalesce the two." Higher education institutions have since become involved in the implementation of the Passport to Careers Scholarship through the Passport Leadership Team. Lastly, five of the seven participants identified that they were aware of the efforts in Tacoma, and three of the seven participants cited that they were connected to efforts at specific institutions, however, largely the perspective of these efforts was not integrated into the network.[26]

WA P8's pilot legislation was aimed at supporting students who became homeless in college; however, it was developed by WA P8 before consultation with other members of the

[26] One institution did provide support for SB 5800 in the Washington State Legislature.

network, who often openly questioned how it interacted with the Passport legislation. Related to this, one member of the network stated, “when you are only working on your own, you are not hearing the pros and cons of a policy, or how to strengthen it, or the unintended consequences - that is my frustration with pet projects. I mean, I get it. Sometimes that is the only way to get something through…but, I still maintain, that a comprehensive strategy is most effective and right now we don't have one.” Three network members indicated that they had to reach out to WA P8 to discuss a strategy on how the pilot legislation fits into the larger context. However, whereas CA P1 at the Western Center was the clear legislative champion and entrepreneur for the California network at the time of the Hunger Free Campus legislation and the one who could broker compromise between the advocates and post-secondary systems to addressing student hunger, the Washington Passport for Career legislative network was made up of several champion organizations each with their own primary service community. This further highlights the challenges of multisector networks, and the importance of entrepreneurial leadership that can effectively weave the network together over time.

These challenges were likely heightened by the assertive timeline that the Passport to Careers legislation was under, which was driven by Senator Ranker being ahead of advocates in the state related to policy change. Advocates not being prepared for such a request created challenges in determining how many students would be served by the legislation and how much funding would be required. One participant summarized the challenges this way, “With Passport, the main obstacle was financial and that is why you see a phase-in for the legislation. There is also a logistical challenge. The original Passport only served about 500 students, with the expansion the universe to be served is several thousand, if not more. There is a natural logistical question around how does that implementation happen? How quickly can the program scale?

How quickly can information get out? That has informed the conversation around timing, phase-in, populations served, budget, etc. With the addition of homeless students, there is not as much precedent in terms of what the enrollment rate may be for the program. We faced a lot of those types of questions and didn't have as reliable data as we did for the foster youth. We had to make our most educated guesses on what our numbers may be and what guard rails might be needed for the policy. We are still working through the next steps on that. I expect that we will have to go back and ask for additional funding." Another participant added, "That again is a reason why we need to have a coordinated effort around this. Before we entered the conversation, Ranker wanted to expand it to all homeless students. Our response was 'do you know how many homeless students would qualify for this scholarship?' It is not that we don't want to help all homeless students, I just don't want to give students or families false hope that they're going to qualify for something and then there is not funding to support it. That is why the best strategy at the time was to narrow it down to unaccompanied homeless youth."

Lastly, Senator Ranker departed the state legislature in January of 2019, after revelations of improper behavior and a three-month investigation (Associated Press 2019). This affected the progress of the pilot program legislation, the housing supports legislation of HB 1278, and will likely further shape the prospect of legislation in Washington around supports for homeless college students in the future. One participant stated this regarding the effect of his resignation on the efforts of the network, "The timing of the revelations was not great for anything with his name on it being passed. Last year he was Higher Education Committee chair. The Democrats also took back control of the legislature last year. Ranker took the Chairman role and was excited to work on issues around homelessness in his chairmanship. That is why we saw so much come out of that committee last year which is unusual for a short session. There were a lot of policy ideas that came out last year through the process. His departure early this year (2019) was a reorganizing moment for us on how to move forward. That was a particularly hard thing for CA P8 and his bills because Ranker had been working pretty hard on them. It ended up being collateral damage in the fallout."

Table 6-11: Challenges Faced by Network of Washington Passport Expansion and Pilot Program Creation

Challenge	Frequency	Method for Overcoming
Not having a clear, coordinated effort.	7	Ongoing effort through various coalitions. Work of advocates to better coordinate policy advancements with WA P8.
Not have a coherent strategy on how the legislative efforts fit together.	7	Ongoing effort through various coalitions. Work of advocates to better coordinate policy advancements with WA P8.
Not having exact numbers of homeless students.	4	Projections from College Success Foundations, Building Changes and WSAC. Phasing in of legislation to reach full population now covered by Passport. Restriction on Passport to Career to only include unaccompanied homeless youth.
Capacity, logistical, and funding challenges.	4	Phasing in of legislation to reach full population now covered by Passport. Work of CSF to train student support on institutional level. Expansion of Treehouse into serving former foster students in higher education. Returning to legislature to request additional funding.
Complexity of issue / multiple populations.	4	Ongoing effort through network and various coalitions.
Individuals advancing legislation on own without first coordinating with fellow advocates.	3	Work of advocates to better coordinate policy advancements with WA P8.
Not involving higher education institutions.	3	Not yet overcome.
Multiple actors – each with their own philosophies.	3	Ongoing effort through network and various coalitions.
Fast timeline of Passport to Careers legislation.	3	Efforts of advocates and WSAC administrators to fill in knowledge gaps related to number of students who would be eligible for Passport, the anticipated cost of the program, etc.
Constraints of position to do advocacy.	2	Use of research, collaboration, and partnerships by administrators to inform policy and practice.
Revelations of improper behavior by Senator Ranker.	2	Bringing pilot program legislation back to the legislature for a second year. Still ongoing.
Not connected to national efforts collectively.	2	Not yet overcome.

Attributes

The attributes of the Washington legislation to address student homelessness is presented in Table 6-12. The complete dataset is available in Appendix 5. Five participants responded to this portion of the survey. Three were active in the legislative network, while two are active on the Passport Leadership Team. For each item presented, respondents were asked to evaluate the attributes of the policy model based on a 5-point Likert-Scale that ranged from Strongly Agree to Strongly Disagree. Values were coded the same as they were for Tennessee and California. Strongly Agree responses were coded as a value of 5, whereas strongly disagree responses were coded as a value of 1. Averages are presented for each item, and then averaged with other items for each attribute for a composite attribute average.

Participants rated the Washington innovations as having strong trialability (3.917) and relative advantage (3.889). The innovations were rated relatively lower in complexity (3.167) and observability (3.334). Complexity is likely lower due to the challenges in identifying and verifying homelessness and the lack of past modeling of the Passport model with homeless students. Washington's total attribute rating (39.504) is the lowest of those analyzed. Further, Washington has the highest degree of standard deviation for ten of the eleven attribute measures. This is another indication of opinion volatility within the network. In Chapter 7, the effect of the attributes of the Passport expansion and pilot programs on the rate of diffusion will be explored and analyzed.

Table 6-12: Attribute Analysis of Washington Passport Expansion and Pilot Program Creation

Attribute	Item	Item Average	Std. Deviation	Attribute Average
Relative Advantage	The policy my state created to address college student financial insecurity improves the lives of financially insecure college students in my state.	4.33	1.211	3.89
	The policy my state created to address college student financial insecurity improves the academic performance of financially insecure college students in my state.	3.67	1.211	
	Overall, the policy is an effective instrument to address the negative effects felt by financially insecure college students in my state.	3.67	1.505	
Compatibility	The policy my state created to address college student financial insecurity is compatible to the capabilities of institutions and organizations in my state.	3.167	1.1169	3.334
	The policy my state created to address college student financial insecurity is compatible with the needs of financially insecure college students in my state.	3.5	1.505	
Complexity	It is easy for financially insecure college students to take advantage of this policy.	3.5	1.049	3.167
	It is easy for administrators and institutions to manage this policy / program.	2.833	1.581	
Trialability	I can easily explain the central features and benefits of this policy to others.	3.667	1.517	3.917
	The effects of this policy to address college student financial insecurity are directly apparent to me.	4.167	1.169	
Observability	I examined the effects of best practices of this policy model before advocating for legislative action.	3.167	1.329	3.5
	I have observed the effects of similar smaller scale programs at the community or institutional level on financially insecure college students.	3.833	0.753^	
	Attribute Total	39.504		

n=6. ^ indicates lowest standard deviation of three states analyzed.

Diffusion

Each participant interviewed in Washington indicated that they were not connected to other states. However, as in California (and Tennessee to some extent), the diffusion of efforts to address homelessness amongst college students has been driven by the presence of national organizations. Schoolhouse Connection is the only national organization actively connected to the network, although several referenced the importance of the work of the Hope Center. Schoolhouse Washington is affiliated with the Schoolhouse Connection. According to their website, Schoolhouse Connection "engages in state policy advocacy in partnership with local child and youth advocates, McKinney-Vento liaisons and State Coordinators, homeless service providers, colleges and universities, and civic organizations" (Schoolhouse Connection).

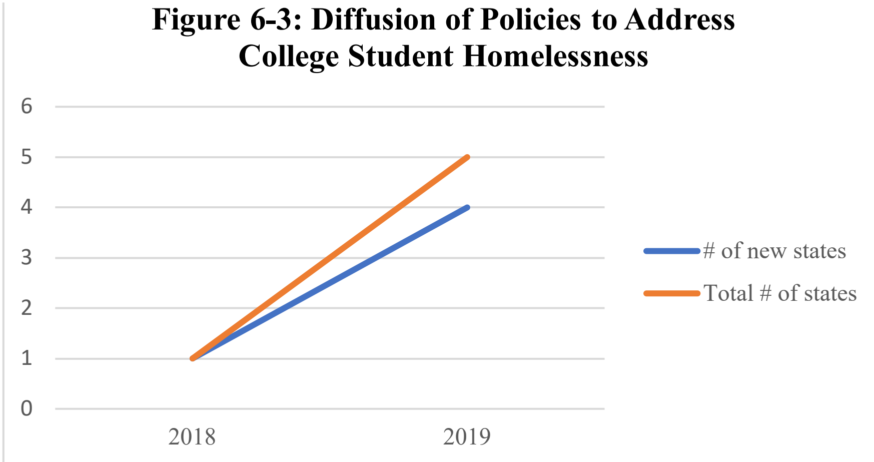
NatlO1, who was interviewed for this research, stated that Schoolhouse Connection aims to "…see what is working at institutions that are coming up with their own solutions. We can learn from what steps they took, what has worked, what hasn't…It is taking things that we have seen work at institutions and saying 'hey, we want everyone to do this because we have seen that it has been working really well.'…We want to eliminate barriers and have a designated liaison for students experiencing homelessness. That exists at a public-school level. Some institutions have done this and found that it works so well that they need a full-time person, or more than one. Other institutions may have someone with multiple roles where it is something that they're interested in and passionate about. It can be everything from a giant full-blown program with a full staff to just a person who takes an interest in the issue and makes sure that people on campus are thinking about it."

The diffusion of legislation to address college student homelessness is presented in Table 6-13. The diffusion curve of this legislation is presented in Figure 6-3.

Table 6-13: Diffusion of Washington Legislation to Address College Student Homelessness

Year	# of New States	Total # of States	States Added	Adopter Category	Notes
2018	1	1	Washington	Innovator	Washington also passed SB 5800 in 2019, which created funding to support pilot programs to support homeless students.
2019	4	5	California	Early Adopter	Proposed SB 568: Reducing Homelessness Among California's College Students Act of 2019 was adopted into SB 74: The Budget Act of 2019. SB 74 allocated $19M to address college student homelessness through rapid rehousing and case management services across the three higher education systems in CA. CA also passed AB 806^ that provides priority class enrollment for college students experiencing homelessness.
			Maine^	Early Adopter	Passed LD 866 which requires institutions of higher education to designate a homeless student liaison, and prioritize access to existing on-campus housing for homeless students. LD 866 also expanded the tuition waiver for state postsecondary educational institutions to include students experiencing homelessness.
			Nevada	Early Adopter	Passed AB 451 which created a Post-Secondary Education Homeless Liaison and Office in the Nevada System of Higher Education. Legislation also allows for waivers of registration fees and laboratory fees for homeless or unaccompanied students.
			Tennessee	Early Adopter	Passed HB 1000 which requires postsecondary institutions to designate a Homeless Student Liaison. HB 1000 also gives students experiencing homelessness priority access to on-campus housing, including housing that remains open the most days of the year.
			Avg. # of Adoptions / Year	**2**	

^ indicates that Schoolhouse Connection led advocacy work, along with local supporters, to advance the legislation.
***TX and IN also considered legislation to address issues of homeless college students; however, these bills did not pass.
Avg. rate of adoptions/year does not include innovator state.



Federal Efforts

Federal efforts around college student homelessness and foster supports have been led by Washington's U.S. Senator Patty Murray. Senator Murray preceded Lamar Alexander as the Chairwoman for the Senate Health, Education, Labor, and Pensions Committee. She currently serves at the committee's ranking member. Six of ten officials interviewed in Washington directly cited the work Senator Murray has done to assemble non-profit agencies, higher education institutions, and school district officials in Washington to learn from advocates regarding the financial and other support needs of students in higher education. To those interviewed, Murray is seen as a champion, who is advancing the work done in Washington around college access for homeless and foster youth to federal policy. The collective impact efforts started in the summer of 2018 and have consisted of intermittent meetings that Senator Murray has used to inform her efforts to reauthorize the HEA via expansion of Pell Grants and other financial aid tools. Additionally, she has advanced the Higher Education Access and Success for Homeless and Foster Youth Act of 2019 (HEASHFY), along with Senator Rob Portman (R-OH). HEASHFY amends the HEA to streamline eligibility for federal financial aid and improve resources, programs, and policies for homeless and foster youth (U.S. Congress 2019b). The legislation seeks to simplify the documentation process for unaccompanied homeless and foster youth in securing access to financial aid and by requiring institutions to have designated liaisons to assists these students. HEASHFY is an amalgamation of many of the organizations active in Washington and California in that it is endorsed by SchoolHouse Connection, Young Invincibles, the Center for Law and Social Policy, John Burton Advocates for Youth, the Hope Center, along with more than 50 other national, state, and local organizations (SchoolHouse Connection 2019). To date, HEASHFY remains in the Senate Health, Education, Labor, and Pensions Committee. Nevertheless, like in Tennessee and California, Senator Murray's efforts demonstrate the capacity for state efforts to be "laboratories of democracy" that inform federal policy.

Conclusion

Put together, the spread of innovative policy solutions in Washington is unique from the other states analyzed in this research. Whereas Tennessee and California showed evidence of polydiffision and reverse innovation across multisector networks, Washington's efforts span two networks on three policy fronts of loosely connected advocates. The policy context of the Tacoma Housing Authority CHAP program demonstrates the capacity to innovate locally related to housing insecurity, and the potential and limitations to diffusion of innovations borne out of HUD's Moving to Work program. The efforts to reduce the barriers to higher education for students exiting foster care or who have experienced homelessness and the creation of pilot programs to serve students who are homeless in college demonstrate the capacity for innovation (and potential for reinvention) and the challenges of alignment across networks. The networks were successful but challenges remain between the compatibility of the two policies. Many of the challenges were attributable to the speed with which the Passport to Careers legislation moved, and the role of WA P8 – who passionately championed the pilot programs based on personal experience, but did so largely by themselves and separate from those working on the Passport to Careers expansion. Here, we also see the impact of a single outside ally on the diffusion of policy models to secondary adopting states and the role of federal Congressional representatives in advancing federal policy that was first modeled at the state level.

The efforts in Washington also point out the challenges and opportunities of multisector networks in higher education to address the challenges of homelessness. Extending local efforts in Tacoma to the state level, or to other communities or states, is limited due to the funding mechanism undergirding the CHAP program. Numerous statewide work groups and organizations exist to address homelessness issues in K-12 education, foster youth, and amongst young adults. Additionally, independent advocates such as, WA P8 are actively working on creating policy solutions. Such efforts created an opportunity for policy extension of the Passport to College Promise program to be extended to include unaccompanied homeless students, and for the local programmatic efforts of Kids in Transition to be extended to a statewide pilot program for current homeless college students. However, much of the policy efforts have been led by policy advocates outside of higher education and were further complicated by a legislator being ahead of where the network was. This has compounded the need for bridging entrepreneurs and champions within the network, which has only intermittently occurred. As such, Washington has the most opinion volatility of the networks analyzed. However, like Tennessee and California the presence of an outside ally organization is driving the spread of the policy innovation to other states. Additionally, a committed member of Congress is helping to advance similar federal policy solutions.

Next, the policy innovations in Tennessee, California, and Washington are summarized and a theory of multisector, innovative policy networks in higher education is constructed in

Chapter 7. The chapter explores the commonalities and differences amongst the states, and also identifies the contributions of specific roles in the innovation and diffusion process. Lastly, it explores the effect of policy attributes on the diffusion process.

Chapter 7: Conclusions, Discussion, and Suggestions for Future Research

Introduction

The innovations explored and analyzed in Tennessee, California, and Washington demonstrate that innovation to address college student financial insecurity is produced by intersectoral networks made up of advocates, researchers, policy makers, college and university officials, and non-profit providers. From the data analyzed in Chapters 4, 5, and 6, this concluding chapter constructs a theory of intersectoral networks in higher education policy that produces innovative policies to address college student financial insecurity. In doing so, the first half of this chapter seeks to respond to Walker's (1969) encouragement to researchers "to develop explanations of these processes we must go beyond the search for demographic correlates of innovation and develop generalizations which refer to the behavior of those who actually make the choices in which we are interested." As such, this chapter initially considers the first research question of this study (RQ1) that examines network activities within innovator states: How do the structure, participants, actions, and arrangement of networks of actors affect the actions and choices of first innovator states in addressing college student financial insecurity?

The second half of this chapter examines the next two research questions which examine the diffusion of the innovative policies to address college student financial insecurity to secondary states. In doing so, this analysis seeks to address early diffusion researcher Gabriel Tarde's (1903) seminal question: "Why given one hundred different innovations conceived at the same time…ten will spread abroad, while ninety will be forgotten?" As such, the analysis will seek to answer: (RQ2) How does the structure of networks of actors within innovator states affect the subsequent diffusion to secondary adopting states? and (RQ3) How do the attributes of this policy choice (relative advantage, compatibility, trialability, observability, positive image effects, and complexity) affect the rate of adoption within the innovator state and amongst secondary adopting states? Research findings and their implications on existing scholarly literature are explored in the sections below and in Table 7-4 at the end of the chapter.

Theory Construction – Intersectoral Networks in Higher Education Policy to Address College Student Financial Insecurity

To respond to RQ1, Table 7-1 recaps the networks and policy innovations within Tennessee, California, and Washington to address barriers caused by college student financial insecurity. In each state, intersectoral networks were analyzed for their patterns of interaction, structure, methods, constraints, and challenges. Each state varied in their construction and policy aims; however, common themes emerged across each of the case studies. Each network advanced policy solutions successfully by leveraging research on the prevalence of needs within their state and by using best practices and insights from localized programs at the community, institutional, or state level. Champion organization and individuals were critical to these multisectoral networks as they entrepreneurially led via their power positions at the intersections of the network. This role and position allowed them to control the flow of information and activities, exert leadership, while generating cohesion across actors and sectors in the network. These actors were assisted by support organizations and outside allies who brought provided technical assistance, research, programmatic best practices, and political support to the networks. Together, these elements allowed the networks to successfully advance legislation to address college student financial insecurity. Each element is explored below.

Table 7-1: State Policy Innovations to Address College Student Financial Insecurity

State	Policy Type	Network Type	Description	Legislative Efforts Led By:	Multiple Policies Passed?	# of Secondary Adopting States	Yearly Rate of Diffusion	Federal policy efforts by innovator state's Congressional representative(s)?
Tennessee	Expanded to access to higher education.	Multisector – higher education, business/industry, and non-profit.	Last dollar scholarship for all graduating high school students in state.	Governor and State Higher Education Systems.	Yes	16	3.2	Yes
California	Expanded access to basic needs.	Multisector – higher education, food and housing insecurity social service.	Assistance programs for food insecure college students.	Advocates and State Higher Education Systems.	Yes	7	2.33	Yes
Washington*	Expanded access to higher education for homeless students and those exiting foster care. Expanded access to basic needs for existing homeless college students.	Multisector – higher education, and housing insecurity government and non-profit social service.	Scholarships for homeless students and assistance programs for housing insecure students in state.	Advocates and Legislators.	Yes	4	2	Yes

* Efforts in Washington also included the Tacoma Housing Authority's CHAP program

Research

Hale (2012) demonstrated the effects of information and information sharing in the diffusion of state innovations. Likewise, the analysis of policy innovations in Tennessee, California, and Tennessee demonstrates how research can be the impetus for network formation and collective action that leads to policy creation. Research was central to the development and advancement of each policy analyzed in Chapters 4 – 6, as analysis of the effects of college student financial insecurity justified programmatic and policy solutions to be formed to address the newly identified need. In Tennessee, the Haslam Administration leveraged research from the Center on Education and the Workforce at Georgetown University to demonstrate the need for expanded access to higher education. This research was central to the legislative push for the Drive to 55 and the advancement of TN Promise and Reconnect. Additionally, research on the early effects of TN Achieves demonstrated the effectiveness of the policy solution. In California, advocates used research internally created by researchers in the UC and CSU Systems, along with data from the Hope Center on CCC System students, to advance policy solutions to food and housing security. In Washington, the Tacoma Housing Authority and Tacoma Community College also used Hope Center research to expand the CHAP housing assistance program for students. Additionally, Building Changes produced research on the educational outcomes of homeless and foster youth that was used to advance initial policies addressing inequities in K-12 policies, and was later used to justify and provide scope to the expansion of the Passport to Careers legislation.

This generally supports Hale's (2012) assertion that extensive engagement with information related to a social problem leads to increased policy innovation. In Rogers' (2003) Innovation – Decision Process, knowledge of needs leads to a search by advocates for innovations or solutions to address those needs. Absent those, advocates either innovate or disregard the need from being a priority to be addressed. In the cases analyzed, proximate solutions created and tested at a smaller scale by localized programs allowed decision makers to acquire knowledge on best practices and functional principles on how an innovation works (Karch 2007). This is explored further below.

Additionally, the cases studied in this analysis demonstrate how research is critical for ensuring political support for expanding or enacting policies to address college student financial insecurity. Advocates used research on the problem severity within their state to frame conditions as problems that deserved policy attention. Coupled with purposeful messaging and mobilization, advocates, and policy entrepreneurs were successful in redefining problems and softening the political environment such that state policy action to address the problem was possible. This offers support for theories such as Kingdon's Multiple Streams Approach, Baumgartner and Jones' Punctuated Equilibrium Theory, and Mintrom's Theory of Policy Entrepreneurs.

Local Programs

As mentioned above, local programs created by institutional and community advocates and organizations were critical for the successful legislation to address college student financial insecurity. The cases analyzed in Tennessee, California, and Washington demonstrate how subgovernments can be "democratic laboratories" for policy innovation that allow for the attributes and mechanics of each innovation to be tested, refined, and results demonstrated to the public and decision makers. Program modeling by institutions, non-profits, and local government allowed complex elements of a policy to be streamlined and compatibility of the policy model to existing complementary structures and systems to be developed. Although the ratings of these attributes varied across the states studied, local programming was an important tool for justifying policy expansion of efforts across the state. Collectively local modeling created information about the mechanics of a policy innovation, how it can be tailored to specific needs, audiences, or contexts, and the evaluative information about advantages, disadvantages, and opportunities of the innovation. This information was used by advocates as the basis for statewide policy expansion. This offers support for Rogers' (1995) assertion that initial innovations serve as "hardware" (information on the policy mechanics) and "software" (information on how to use, apply, or implement the policy) for future actions that are carried forward into subsequent adoptions by other actors. It also demonstrates how this is used by others to "customize" the policy to their specific contexts (Boushey 2010). The local programming efforts within each state are briefly recapped below.

In Tennessee, TN Promise started as a local public-private partnership in a single county that was based on another local effort (the Ayers Foundation) within the state. The local program that started in Knox County (named Knox Achieves) quickly expanded regionally within the state (and was renamed TN Achieves). These smaller scale efforts to expand access to post-secondary education for graduating high school students were developed by a core group of actors who had access to increasing levels of political capital as Bill Haslam rose from being the Mayor of Knoxville to the Governor of Tennessee. Haslam's familiarity and support of the program model enabled intrastate diffusion, which eventually provided the basis for statewide adoption. Similarly, TN Reconnect started as a pilot program aiming to serve adults returning to college that was based largely on the model of TN Promise. The pilot allowed for refinement of the program model to be developed relative to the adult audience that Reconnect serves. This effort served as the basis for a statewide policy model to be developed. The local modeling of the two programs allowed for the costs of the last dollar scholarship for free community and technical college to be determined. Additionally, modeling allowed for experimentation to occur to identify the best strategies for recruiting students and mentors to the program, along with what programmatic supports each audience needed. The local modeling also allowed alignment to happen with coordinating organizations, which made implementation of both policies easier. This was particularly important given the quick rollout of TN Promise. Put together, the effects of local modeling were critical for the success of the sweeping legislation. The effects of local modeling are reflected in the relatively high Attributes of Innovation scores for the Tennessee policies. Local modeling continues in Tennessee through reverse innovation efforts of the TN Achieves organization, along with local governments and institutions, that further support financially insecure college students.

In California, the initial efforts by the AB 1930 workgroup were not driven by modeling by local programs; however, the exchanges produced by a collective network aiming to clarify the applicability of SNAP to college students allowed institutional and non-profit efforts (such as campus food pantries, meal sharing programs, case management services, and homeless student support) to be uncovered and brought to scale through incremental legislation. This was made possible through the efforts of densely connected organizations, such as the Western Center, the CA Homeless Youth Project, the UC, CSU and CCC systems, that sat at the intersections of the expansive network. Legislation such as AB 568 (which provides funding for pilot housing support programs based in part on the local model developed by Jovenes and John Burton Advocates for Youth) and the Hunger Free Campus Initiative (which provides funding for services including campus meal sharing programs such as Swipe Out Hunger and food pantries) were based on modeling and expanding existing efforts at the institutional level across the state higher education systems. Like in Tennessee, local modeling predating the legislation allowed for the innovations to be tested and refined at an institutional and community level, customized within the network for broad applicability, and then scaled effectively across the state through legislation. The policies also created conditions for reinvention by providing funds for institutions to experiment, develop, and refine best practices on their campuses that hold the potential of serving as models for future legislation.

Efforts in Washington demonstrate a similar pattern. The Tacoma Housing Authority used the flexibility allowed under the U.S. Department of Housing and Urban Development to pilot and then expand a housing support program for financial insecure college students. The initial pilot of 25 students demonstrated the effectiveness of the program in increasing the academic and personal achievement of students on the program, which allowed THA to secure additional funding through the Kresge Foundation to scale the program. The expansion of the Passport to Career Scholarship to include a broader array of foster and homeless youth was enabled by the modeling of the previous Passport to College Promise Scholarship and existing workgroups of advocates and agencies in the state. Like in Tennessee, the modeling of the scholarship program allowed for costs to be determined, compatibility with support organizations to be built, and for the results of the program to be observed. Prior research by Building Changes determined the size of the homeless K-12 student population in the state and this information was critical for determining the scope of who the expanded scholarship program would serve. On the other side of the network, WA P8, along with Reps. Sells and Ortiz-Self, used a local program (Kids in Transition) serving homeless K-12 youth that they had first-hand experience with as a basis for extended supports for college students. Those supports, which will be in the form of pilot programs, will allow for potential further incremental advancement of policy responses for this population.

The effects of local modeling are also evident in the federal legislation addressing college student financial insecurity advanced by Congressional members from Tennessee, California, and Washington state. Here the “laboratories of democracy” metaphor is seen again with local programs that inform state policies that inform federal legislation. Additionally, the case studies demonstrate state level polydiffusion where state policy models lead to actions by institutions, other states, and the federal government. This is conditioned on effective policy and relational networks that connect policymakers at higher levels of government to efforts at lower levels. State policy actions to address college student financial insecurity that inform federal policy actions were not an initial focus of this research; however, the connection of state efforts advanced at the federal level by representatives from the innovating state was present in each state analyzed for this research. The spread of policy innovations is often explained as a function of learning and proximate location of a secondary actor to a prior innovator; however, the focus is typically on governmental bodies (e.g. cities, states, nations), not individual policymakers. As such, exploring the conditions that allow for the spread of policy innovations to other levels of government is an area of future research.

Network Construction and Operation

The efforts analyzed in Tennessee, California, and Washington were driven by multisector networks of advocates, policymakers, administrative professionals in higher education and state government, and business leaders. However, each network was constructed differently based on the organizational and cultural landscape of the state and the policy model selected. As was seen in each state analyzed, each state organizes their higher education system differently, which affects the autonomy, power, and influence that individual institutions, organizations, and state higher education systems have. These differences manifested distinctive pathways and challenges leading to successful legislation. However, similar roles emerged within each. These are explored below.

The efforts in Tennessee were led by the Haslam Administration, especially TN P1. Compared to the other states analyzed, the efforts in Tennessee were the largest in terms of cost, and the most administratively controlled by those within government. Armed with the administrative powers and political will of the governor, and effective local modeling from TN Achieves, Tennessee officials were able to navigate institutional and political pressures of the state legislature, business, and higher education. This required entrepreneurial champions, such as TN P1, Governor Haslam, and THEC officials, who sat at the intersection of the network that could effectively craft and message the legislation through use of research, local modeling, and input from college access foundations. These champions also built support within the state higher education systems, and leveraged non-profit efforts such as TN Achieves and the Ayers Foundation to generate support of the business community. Governor Haslam also used the administrative and political structure of the state higher education systems to defuse opposition from specific institutions and legislators who had objections to the legislation. Combined the efforts of the scaffolded network of champions, supporters, and outside allies allowed the sweeping legislation of TN Promise to be possible, which in turn created a pathway for TN Reconnect to follow two years later.

Efforts in California were much more incremental, and based on the efforts of a broader network, compared to Tennessee. Initial efforts of CA P1 and the Western Center, along with MAZON, sought clarification on SNAP policy as it relates to college students. This eventually allowed a workgroup of hunger advocates, CA DSS officials, and higher education system leaders to form. At the same time, efforts to address student financial insecurity within institutions were emerging that demonstrated the rates of student food and housing insecurity, promising programmatic practices, and expanded the network of support organizations. This enabled philanthropic efforts such as Swipe Out Hunger to emerge, and be combined by CA P1 at the Western Center and other champions at the UC, CSU, and CCC systems into the incremental legislative efforts of the network. As housing insecurity efforts reached the agenda of the network, organizations such as the CA Homeless Youth Project and John Burton Advocates for Youth were added to the expanding network. This addition required adaptation from champions and supporters, but enabled the network to pursue new legislative fronts such as AB 568. Collectively the efforts in California have occurred over the longest time span of the three networks analyzed. This is in part due to the consistency of central actors, the amenability of champions to expand and coalesce the network, the existence of high profile outside allies such as the Hope Center, and the work of leaders at the post-secondary systems to coordinate the efforts of their institutions. Incremental action has led to larger legislative and financial requests that to date have yet to be successful. This has also required champions to keep the network together. The network models analyzed over time in California were increasingly larger and less cohesive, which required greater degree of coordination, gatekeeping, and leadership by the entrepreneurial champions.

The networked efforts in Washington are the least developed and most recent of the three states analyzed. Additionally, two distinct networks exist – one local and one statewide. The separation of the two networks is largely based on the administrative structure of the Tacoma Housing Authority's CHAP program, which is made possible due to flexible funding afforded to only selected housing authorities under HUD's Moving to Work designation. The designation allows for local innovation but stymies diffusion due to the limited number of Moving to Work sites. This again demonstrates how organizational structure affects pathways for innovation and diffusion.

The network of advocates in Washington was made up of non-profits, government agencies, individuals, and state legislators that worked on two different fronts. One front was focused on expanding college access for unaccompanied homeless youth and those exiting foster care. These efforts were led by an ambitious state legislator who was ahead of advocates in terms of advancing legislation. This led to downstream challenges in terms of determining the scope of the legislation and how the network would coordinate its actions. The fast timeline to legislative success created challenges in terms of coordinating with the higher education community, which at that point had not been engaged, and with other organizations that were in support roles. Organizations such as WSAC and the College Success Foundation had to fill this void, that only expanded in implementation after Senator Ranker left office. Challenges were further compounded by the actions of WA P8, who individually acted through a supportive legislator to advance legislation to create pilot support programs for housing insecure college students. WA P8 worked in loose coordination with other advocates; however, many of these organizations questioned how the legislation fit programmatically and strategically with the legislation that expanded the Passport to Careers scholarship. Collectively, while successful in policy creation, the efforts of Washington point out the challenges of coordinating state policy in multisector networks.

Put together, a theory of multisector networks in higher education policy innovation emerges. Analyzing network structure and the patterns of cohesion, roles, constraints, and resources of networked actors by using Hale's modified taxonomy of *Information Positions of Networked Actors* combined with centrality measures using Social Network Analysis allows actors to be assigned roles based on their measured positionality to one another. As such, the cases analyzed demonstrate how multisector policy networks within higher education are reliant on densely connected entrepreneurial champions to successfully navigate passage of innovative legislation. Central to this navigation is the ability of champion organizations and individuals to coalesce the various needs, language, timelines, definitions, and desires of connected actors towards collective and coordinated action, which were commonly cited as challenges in the state networks studied. These individuals and organizations were able to overcome these common challenges through their positionality at the intersections of their networks. Beyond being deeply connected (with high degree and eigenvector values), entrepreneurs were bridges between disparate actors in a network (with high betweenness scores). As such, they provided critical weaving that fused the various sectors in the multisector network together. The location of the entrepreneur within the network was conditioned on the structural, cultural, and political contexts within a state, and on the activities, experience, and skills of the entrepreneur to organize others, leverage research, and guide learning from local programs. This extended and expanded into implementation, as each innovative policy experienced challenges such as role determination, assertive rollout schedules, ambiguous guidelines and structures, and coordination with intermediary organizations. Here, select champion organizations within each network carried forward their role as arbitrator, coordinator, and leader of the implementation of their innovative policy.

This study amplifies existing research on policy entrepreneurship by demonstrating the essential skills and requirements for effective advocacy within in multisector networks. Beyond being passionate and motivated actors that are socially embedded and leverage coalitions of networks to advance preferred policy, this analysis demonstrates the essential strategic qualities and skills that effective entrepreneurs must have in building, maintaining and reconciling factions within multisector networks. This demonstrates Schneider, Teske, and Mintrom's (1995) assertion that policy entrepreneurs possess skills in arbitrage and adaptation of disparate programs and policy ideas. It also validates and amplifies Kingdon's (1984) concept of brokerage, or the act of negotiating different views, styles, and approaches to make critical connections between actors. Multiple organizational champions and entrepreneurs existed in Tennessee, California, and Washington, and network success was contingent on them working cooperatively. However, as the analysis in Washington demonstrates, this does not always mean they necessarily work in complete unison with one another. These tests of network strength are only overcome when entrepreneurial champions within the network are able to reconcile factions back to the network.

Further, this analysis demonstrated the importance of champions, supporters, and outside allies to network success and subsequent polydiffusion to other states and levels of government. Supporter organizations were internal to their states and were densely connected within the multisector networks studied. Each had a secondary role in shaping the policy within their state and adjusting their workflows and processes to it as it was implemented. Further, they provided vital legitimacy through advocacy efforts, endorsements, and political mobilization, which increased political momentum and pressures on policymakers to act. This was especially important in California and Washington, which, unlike Tennessee, lacked the political will of the Governor. Champions paired with supporters to become conduits of reverse innovation back to local programs to develop, test, and refine new programs. This circular dynamic establishes conditions to which new innovations have the potential to be brought to scale at a statewide level. This is an area of continued future research.

Outside allies were also critical across the three states. In Tennessee, national foundations, such as NCHEMS, Lumina and the Gates Foundation, provided technical expertise, funding, and research on the need for degree attainment in the state. In California and Washington, the Hope Center provided critical research on the prevalence of food and housing insecurity that was used by network champions. FRAC, MAZON, Schoolhouse Connections, and the Massachusetts Law Reform Institute provided valuable technical assistance, information on best practices, and needed political legitimacy to the efforts to scale local programs into state policy. Although these organizations were not densely connected or central to the exchanges within the network, outside allies provided needed research and information on best practices, and provided legitimacy to efforts within first innovator states. Outside allies also played a critical role in the diffusion process by linking champion organizations to efforts outside the state. This is explored further below.

Understanding the Impact of Outside Allies and Policy Attributes on Diffusion

Beyond an initial focus on how innovations were created in first innovator states, RQ2 and RQ3 examine the conditions that affected the diffusion of innovations to secondary states. RQ2 analyzes network factors within first innovator states that affect subsequent diffusion to to secondary adopting states. Diffusion is often modeled within political science literature as a linear spread of a single innovation from one actor to another actor at the same level (e.g. state-to-state, nation-to-nation). However, this analysis demonstrates support for a modified state level theory of polydiffusion where multiple policy models were developed that spread in all directions across levels of government (Mossberger and Hale 2002). Promise programs, like those developed in Tennessee, have spread to local institutions, cities, regions and states. Food and housing support programs, such as those developed in California and Washington, have spread to other states, as well as institutions and non-profits. This is an important finding and subsequent research on the diffusion of innovations should consider how elements of state level polydiffusion are present in the spread of innovations from one actor to another.

The Effect of Outside Allies on Diffusion

This analysis demonstrates the critical role of outside allies in diffusion of the policy innovation to other states. As mentioned above, diffusion is often explained as a function of learning and proximate location of a secondary actor to a prior innovator. The latter is a function of geographic closeness of one secondary state to a state who previously innovated where learning, competition, and modeling occur with less transaction costs. As such, geographic proximity is often an explanatory variable for diffusion. However, Tennessee is the only state analyzed that demonstrates some effect of geography on subsequent diffusion by secondary states.[27] As such, the innovations analyzed show early evidence of being spread through learning.[28]

Outside allies were identified by participants in Tennessee, California, and Washington as primary sources of diffusion, who helped spread policy models through assisting interested officials in other states to learn about the functional elements and effects of policy innovations on college student financial insecurity. This was done through research, conferences, publications, technical assistance, and endorsements of legislation connecting interested states to innovative states. Outside allies also served as valuable connectors and conveners of gatherings,

27 Three of the 16 secondary adopting states neighbor Tennessee – Arkansas, North Carolina, and Kentucky.
28 This can be further tested via an event history analysis, which can be conducted once the policies studied here are further diffused.

trainings, consultation, and meetings between officials in first innovator states and secondary adopting states. As such, outside allies allowed championing individuals and organizations a mechanism to advance innovations to other policy venues.

Collectively, the complementary action of national organizations with networks within first innovator states both assisted advocates in developing their innovation and helped diffuse the policy model once it was developed. This supports Mossberger and Hale's (2002) assertion that associations and national organizations serve as opinion leaders that offer expertise and technical assistance. It also supports Mintrom's (2000) claim that external networks formed out of innovations are critical to the spread of innovative policies. This analysis further demonstrates how outside allies provide important validation of a policy innovation, which signals policymakers and advocates in other states, as well as federal leaders, to place the policy model onto the policy agenda. In doing so, outside allies effectively diminished the transaction costs associated with learning by being messengers, advocates, and teachers of particular policy innovations that address underlying student needs. This further legitimizes the outside ally and their importance to the national policy community (Mossberger and Hale 2002).

The effects of outside allies in the diffusion of the policy models analyzed to other states is hard to specifically determine; however, evidence in each state demonstrates how outside allies played a critical pivot role of contributing to the innovations of networks within first innovator states and translating the policy model and lessons learned from the policy innovation process to secondary states. Representatives from organizations such as MAZON, CLASP, and SchoolHouse Connection were interviewed as part of this research and described their specific approach of working with states and institutions to develop policies to address college student financial insecurity. Each described a process that typically involves research on the extent of need, a policy needs assessment, and stakeholder meetings that lead to the creation of a policy agenda. Each varies in the formality of forming a partnership with states – from requesting an formal application from state officials to informal conversations that lead to collective meetings of advocates. Additionally, each organization supports the work of specific institutions and organizations. Further, representatives described a coincidental network of national organizations who came to the work as awareness to issues of college student financial insecurity increased, which was largely driven by the research of the Hope Center and early research from the CSU and UC systems. The work of this network of outside allies is loosely but increasingly coordinated. Additionally, it is supported by other national foundations such as the Lumina and Kresge Foundations. As such, the network is a source for both supporting innovation and state level polydiffusion. This dynamic of networked activity amongst outside allies is an area for future research.

The Effect of the Attributes of Innovation on Diffusion

RQ3 seeks to determine how the attributes of this policy choice (relative advantage, compatibility, trialability, observability, positive image effects, and complexity) affect the rate of adoption amongst secondary adopting states. To examine this, an ordinary least squares (OLS) multiple regression is used to determine the effects of the policy attributes, as measured by actors in their respective state networks, on the rate of diffusion (or number of states adopting a similar policy model / year after the initial adoption of the innovation). OLS is used to produce efficient estimates (with minimized total squared errors) that account for data (attribute ratings) that are potentially continuous. Averages for the six policy attributes for each state presented in Appendix 5 are used for the multiple regression analysis. Full results of the regression are presented in Appendix 6. The equation predicting the rate of diffusion is as follows:

$$
\begin{aligned}
Rate\ of\ Diffusion \\
&= \beta\_0 + \beta\_ObservabilityX\_Observability \\
&+ \beta\_RelativeAdvantageX\_RelativeAdvantage \\
&+ \beta\_TrialiabiltyX\_Trialability + \beta\_ComplexityX\_Complexity \\
&+ \beta\_CompatabilityX\_Compatability
\end{aligned}
$$

A multiple regression that examines the five attributes of innovation is used rather than an event history analysis due to the relative newness of the three policy innovations. As such, this analysis does not factor in state characteristics of size, education spending, neighboring effects, etc. on the rate of diffusion. However, due to only 18 responses (6 for each state) this analysis should be considered exploratory. The model summary is presented in Table 7-2 below. The R^2 for the model is 0.495, which indicates that the model is able to explain half of the variance observed. This is consistent with Rogers' (1995) assertion that between 49 and 87% of the variance of in the rate of diffusion is explained by the attributes of the innovation.[29] The adjusted R^2 of 0.285 is likely an indication of the effects of the small sample size (18 total or 6 per state)[30] relative to the number of variables (5). This also negatively affects the faith in the model. One option to increase faith in the model is to reduce the number of attributes in the multiple regression; however, doing so would come at the expense of Rogers' (2003) theory, which is articulated in H3.

Table 7-2: Model Summary of Multiple Regression of Attributes of Innovation on Rate of Diffusion

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.704	0.495	0.285	0.443792

29 Rogers was referring to all innovations, not just political ones.
30 See Table 3-1 and description of participants in Chapter 3 for more details on the response rate for the surveys used in this analysis.

Table 7-3 presents the effects of the individual attributes' innovations on the rate of diffusion. The results indicate that H3 cannot be fully accepted, as only compatibility (at $p < 0.05$) and relative advantage (at $p < 0.10$) had a statistically significant effect on the rate of the diffusion. Here it is important to note that policies are compatible only when they are made to be so, which further indicates the importance of entrepreneurs in developing policies that fit the structural and cultural realities of their contexts. This work in turn has important downstream effects (via learning and signaling) to other states who consider adopting the policy.

Increases in relative advantage have negative, statistically significant effects on the rate of diffusion. This contradicts the findings of Makse and Volden (2011), which found that higher levels of relative advantage and observability are associated with greater likelihood of diffusion. The other attributes are not statistically significant. Trialability has a positive effect on the rate of diffusion and barely misses the threshold for being statistically significant (at $p < 0.10$). Complexity has the expected negative effect on the rate of diffusion; however, it is also not statistically significant. Observability has an unexpectedly negative, but not statistically significant, effect on the rate of the rate of diffusion.

Table 7-3: Coefficients of Multiple Regression of Attributes of Innovation on Rate of Diffusion

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**β**	**Std. Error**	**β**	**t**	**Significance**
Constant	1.470	0.541		2.717	0.019
Relative Advantage	-0.702	0.347	-1.112	-2.023	.066*
Compatibility	0.733	0.265	1.351	2.761	0.017**
Complexity	-0.189	0.200	-0.326	-0.945	0.363
Trialability	0.421	0.241	0.750	1.742	0.107
Observability	-0.032	0.189	-0.058	-0.167	0.870

n=18. Dependent Variable: Rate of Diffusion. ** is significant at $p < 0.05$. * is significant at $p < 0.10$.

This exploratory analysis indicates that there is still more to be learned relative to the effects of the attributes of innovation on the rate of diffusion. Simply put, more analysis is also needed on the innovations studied in this research. The relatively low numbers of responses and states who have adopted the innovations mean that minor changes can have major effects. For example, all of the innovations analyzed in this study are relatively new and thus some attributes may not have had time to be adequately demonstrated or assessed. Further, none of the attributes analyzed were diffused to secondary states in gubernatorial election years. When all of the policies are less than five years old, this can have significant influence on the rate of diffusion. Also, many programmatic examples on the local or institutional level exist. For example, in regard to California's food security innovations changes to practice at the institutional or administrative language (rather than policy) are possible in other states. These characteristics and actions may delay or impede policy adoption. Time is needed to allow for more diffusion to occur and to more comprehensively assess the diffusion of these innovations across an array of outcomes that also consider state level factors that may influence diffusion.

Table 7-4: Summary of Research Findings and Connections to Existing Literature

Research Question	Findings	Connection to Literature
RQ1 – How do the structure, participants, actions and arrangement of networks of actors affect the actions and choices of first innovator states in addressing college student financial insecurity?	Advocates used research on extent of college student financial insecurity as an impetus for local programming and state policy creation. Coupled with purposeful messaging and mobilization, advocates and policy entrepreneurs used research to successfully redefining problems and softening the political environment such that state policy action to address the problem was possible.	Findings supports Hale's (2012) assertion that extensive engagement with information related to a social problem leads to increased policy innovation. Analysis supports Rogers' (2003) assertion that knowledge of needs leads to a search by advocates for innovations or solutions to address those needs. Findings demonstrate how research is critical for political framing and issue redefinition that contributes to policy activity.
	Advocates used local programming as models for policy innovations. Local modeling was also the impetus for reverse innovations that produce new local models that hold the potential for future legislative development.	Findings offer support for Karch's (2007) assertion that solutions created and tested at a smaller scale by localized programs allow decision makers to acquire knowledge on how an innovation works. Circular pattern of reverse innovations and the conditions that create, sustain, or cease policy creation is an area of future research.
	Multisector networks of champions, supporters, and outside allies successfully advanced specific policies based on research and modeling of local programming. Champions leveraged local models and connected actors towards collective and coordinated action. Supporter organizations provided political support and adjusted their workflows to innovation as it was implemented. Outside allies provided funding for local programming, information on best practices, technical assistance for policy creation, and political legitimacy to the efforts to scale local programs into state policy. This scaffolded structure led to polydiffusion and reverse innovations.	Amplifies and amends Hale's (2012) taxonomy of *Information Positions of Networked Actors* by demonstrating how social network analysis can be used to determine roles within policy networks. Findings supports Schneider, Teske, and Mintrom's (1995) assertion that policy champions possess skills in arbitrage and adaptation of disparate programs and policy ideas. Findings amplifies Kingdon's (1984) concept of brokerage, or the act of negotiating differences amongst networked actors. Analysis supports Mossberger and Hale's (2002) assertion that associations and national organizations serve as opinion leaders that offer expertise and technical assistance.
RQ2 – How does the structure of networks of actors within innovator states affect the subsequent diffusion to secondary adopting states?	Outside allies are primary sources of diffusion who helped spread policy models to other states and federal policy initiatives by assisting interested officials to learn about the functional elements and effects of policy innovations on college student financial insecurity. Supporters are critical in polydiffusion to local and institutional levels.	Analysis supports a modified state level theory of polydiffusion (Mossberger and Hale 2002) where multiple policy models were developed that spread in all directions across levels of government. Evidence supports Mintrom's (2000) claim that external networks formed out of innovations help duffusion of innovative policies.
RQ3 – How do the attributes of a policy choice affect the rate of diffusion to secondary adopting states?	Exploratory analysis found that compatibility (at $p < 0.05$) had a statistically significant positive effect on the rate of the diffusion. Increases in relative advantage have a negative, statistically significant effect (at $p < .10$) on the rate of diffusion.	Contradicts the findings of Makse and Volden (2011). Exploratory analysis indicates that there is still more to be learned relative to the effects of the attributes of innovation on the rate of diffusion.

Strengths and Limitations of this Research

This research examines policy innovations in higher education from their point source of creation to understand how multisector networks of advocates, non-profits, institutions, and post-secondary systems advanced legislation to address college student financial insecurity. In doing so, this research posits that relationships are a causal factor in political outcomes such as innovation and diffusion. As such, this study uses social network analysis of recent state policy innovations to address an emerging policy issue to quantitatively model network construction and determine roles within networks. In doing so, this research advances and modifies past research such as Hale's (2012) taxonomy of *Information Positions of Networked Actors* by assigning actors to roles based on empirical data from network participants, which is modeled in graphs and assessed in terms of the centrality of actors to network activities. This has important implications for understanding political outcomes, such as policy innovations and subsequent diffusion to secondary actors.

Using Hale's modified taxonomy, this research has shown the important contributions of champions, supporters, and outside allies in new ways. Champion organizations were central to legislative advances and network coordination, but required entrepreneurial individuals who sat at the intersection of multisector networks and coalesced disparate groups and interests into a coordinated policy agenda. Supporters offered critical political legitimacy and realigned workflows to support the advancement and implementation of the legislation. Outside allies offered the network research, technical assistance, and legitimacy, and were central conduits to the diffusion of the policy model.

This research has also illuminated central facets of the diffusion process, including that of state level polydiffusion, which places state policy actions and the networks that created them at the center of the spread of policy and programs to other states, institutions, communities, and the federal government. This research also highlights the importance of the specific policy innovations and their attributes to the rate of diffusion. Makse and Volden (2011), in studying the diffusion of criminal justice policies, found that higher levels of relative advantage and observability were associated with greater likelihood of adoption, while complexity was associated with less likelihood of diffusion. However, compatibility and trialability were not found to be statistically significant. Additionally, state level factors such as size, rates of diversity, and level of education were found to significantly increase the likelihood of diffusion. This research does not find results that are consistent with Makse and Volden's findings regarding policy attributes, which indicates more research on the effects of policy attributes on the rate of diffusion is needed.

A primary limitation of this research is its use of case studies of multisector networks connected to higher education policy. A common critique of case studies is the applicability and generalizability to other policy domains. While these concerns remain, this research has implications for scholarship and understanding of multisector networks, innovation, diffusion, and policy entrepreneurship. Another weakness of this study is the limited participants, particularly with the Social Network and Attribute Analysis Survey. The limited participation in the overall study is addressed by a snowball sampling technique that asked early participants for recommendations on who to contact next. This was done until all active organizations were exhausted. In total, 31 state level participants were interviewed, but only 23 responded to the survey, which leads to relatively robust response rate of 74.19%. However, due to some surveys not being fully completed, only 21 responses for the attribute analysis portion of the survey were collected. Three of these responses came from THA's CHAP program in Washington, which means that the actual total used for the multiple regression was 18 (six from each state). These low numbers hurt the reliability of the analysis of policy attributes on the diffusion process. The relatively low numbers of responses and states who have adopted the innovations mean that minor changes can have major effects. In order to generate higher numbers of responses Makse and Volden relied on the attribute ratings of experts in the field of criminal justice but still faced challenges with low numbers of responses affecting confidence in their models. This research relied on responses from advocates central to the innovation process who should know the attributes of their policies more intimately. However, this population is relatively small and defined, meaning that increased numbers of responses is not possible.

Lastly, all of the innovations analyzed in this study are relatively new and thus some policy attributes may not have had time to be adequately demonstrated or assessed. Further, none of the attributes analyzed were diffused to secondary states in gubernatorial election years. When all of the policies are less than five years old, this fact can have significant influence on the rate of diffusion. Also, many programmatic examples on the local or institutional level exist, and, in the case of California's food security measures and SNAP, changes to interpretation of existing statute and practice (rather than policy) are possible. These characteristics and actions may delay or impede policy adoption. Time is needed to allow for more diffusion to occur and to more comprehensively assess the diffusion of these innovations across an array of outcomes that also consider state level factors that may influence diffusion. As such, an event history analysis cannot be done to determine how state level factors influence secondary state adoption of the policy innovations.

Suggestions for Future Research

There are multiple avenues of future research from this study. These have been noted throughout the study and are summarized in Table 7-4 above. First, this analysis demonstrated how state policy innovations that are based on local modeling can be the impetus for reverse innovations that produce new local models that hold the potential for future legislative development. This circular pattern of reverse innovations and the conditions that create, sustain, or cease policy creation it is an important area of future research. This research demonstrated how "laboratories of democracy" exist at the institutional, local and state level. Future research should consider how networks and roles within them adapt to sustain this activity. Research should further consider the role that this scaffolded innovation development has on the attributes of innovations produced (and their subsequent diffusion).

This study also demonstrated the dynamics of state level polydiffusion where policy models developed at the state level spread in all directions from the point source – horizontally to other states, down-vertically to local and institutional efforts, and up-vertically to federal legislation. In the cases analyzed, networks within states, professional networks that exist outside of states, and outside allies that bridge across states and to Congress are critical to polydiffusion. This amends Mossberger and Hale's theory of polydiffusion by placing states and national advocacy and research organizations, rather than federal agencies, at the intersection of these activities. Further research is needed that includes an array of different policy types, communities, and networks to determine and refine how, and under what conditions, state level polydiffusion occurs.

Lastly, future research of policy innovations should consider the role that policy attributes have on diffusion. This research should include event history analysis that consider state level factors than may promote or impede policy adoption, and should include other policy types than those studied here. Further, research on policy attributes should consider who is evaluating the policies and ways to increase the number of responses. Combining attribute ratings from policy experts and network participants is one way to generate higher number of responses. Collectively these steps will allow for a more reliable and generalizable theory on the effects of the attributes of policy innovations on diffusion.

Conclusion

In conclusion, research findings and their implications on existing literature are summarized in Table 7-4 above. This study on state innovations to address college student financial insecurity fills critical gaps in scholarship around the importance, roles, and dynamics of multisector networks and policy entrepreneurs to spark state policy innovation. This study has demonstrated how policy innovations are possible within higher education through multisector networks on champions, supporters and outside allies who are coalesced by policy entrepreneurs who coordinate the actions of the network in developing compatible policies based off of local modeling and research. The cases analyzed also demonstrated state level polydiffusion, where innovations spread in all directions across levels of government via intersectoral networks. Collective network arrangements allow for state level polydiffusion to occur, where by supporter organizations served as catalysts for reverse innovations and outside allies, who are messengers and translators of innovations, serve as connectors across states and policy venues. The early analysis around the effects of the attributes of policy innovations on the rate of diffusion has limited utility but demonstrates the importance of policy compatibility with student needs, and the capabilities of institutional and organizational structures, on diffusion. For policies to be compatible, entrepreneurs must craft, coalesce, and develop policies that are compatible with the structural and cultural realities of their contexts. This analysis demonstrates how this work is often done in coordination with supporters and outside allies who later help diffuse the policies to other states or organizations seeking to address college student financial security.

References

Agranoff, Robert. 2007. *Managing within Networks: Adding Value to Public Organizations.* Washington, D.C.: Georgetown University Press.

Allen, Mahalley, Carrie Pettus, and Donald P. Haider-Markel. 2004. “Making the National Local: Specifying the Conditions for National Government Influence on State Policymaking. *State Politics and Policy Quarterly* 4(3): 318 – 344.

American Council Education. 2008. “ACE Analysis of Higher Education Act Reauthorization.” https://www.acenet.edu/Documents/ACE-Analysis-of-2008-Higher-Education-Act-Reauthorization.pdf (Accessed November 4, 2019).

Association of Community College Trustees. n.d. “First-Dollar vs. Last-Dollar Promise Models.” https://www.acct.org/page/first-dollar-vs-last-dollar-promise-models (Accessed March 11, 2018).

Associated Press. “California Now has the World's 5th Largest Economy.” *CBS News*, May 4, 2004. November 10, 2019. https://www.cbsnews.com/news/california-now-has-the-worlds-5th-largest-economy/

Associated Press. “Washington State Sen. Kevin Ranker Resigns Amid Misconduct Accusations.” *Seattle Times*, January 12, 2019. https://www.seattletimes.com /seattle-news/politics/washington-state-sen-kevin-ranker-resigns-as-misconduct-investigation-continues/ (accessed October 30, 2019).

Barrilleaux, Charles. 1997. “A Test of the Independent Influences of Electoral Competition and Party Strength in a Model of State Policy-Making.” *American Journal of Political Science,* 41(4): 1462-1466.

Barrilleaux, Charles, Thomas Holbrook and Laura Langer. 2002. “Electoral Competition, Legislative Balance, and American State Welfare Policy.” *American Journal of Political Science*, 46, 415–427.

Baumgartner, Frank R. and Bryan D. Jones. 2009. *Agendas and Instability in American Politics.* Chicago: The University of Chicago Press.

Bell, David N. and David G. Blanchflower. 2011. “Young People and the Great Recession.” *Oxford Review of Economic Policy* 27 (2): 241 – 67.

Berry, Frances Stokes and William D. Berry. 1990. “State Lottery Adoptions as Policy Innovations: An Event History Analysis.” *American Political Science Review* 84: 395 – 415.

Berry, Frances Stokes and William D. Berry. 2014. “Innovation and Diffusion Models in Policy Research.” In *Theories of the Policy Process – 3rd ed.,* ed. Paul A. Sabatier and Christopher M. Weible. Boulder, CO: Westview Press, 307 – 359.

Berry, William D., Evan J. Rinquist, Richard C. Fording, and Russell L. Hanson. 1998. Measuring Citizen and Government Ideology in the American States, 1960 – 1993. *American Journal of Political Science* 41(4): 327 – 48.

Borgatti, Stephen F. 2016. “Centrality.” Presented at Sunbelt UCINET Conference, Newport Beach. https://sites.google.com/site/borgattiandeverettworkshops/sunbelt/newport-beach-2016

Borgatti, Stephen F., Martin G. Everett, and L.C. Freeman. 2002. *UCINET 6 for Windows: Software for Social Network Analysis.* Harvard, MA: Analytic Technologies.

Borgatti, Stephen F., Martin G. Everett, and Jeffrey C. Johnson. 2013. *Analyzing Social Networks.* Los Angeles: Sage.

Borins, Sandford. 2014. *The Persistence of Innovation in Government.* Washington, D.C.: Brookings Institute Press.

Boushey, Graeme. 2010. *Policy Diffusion Dynamics in America.* Cambridge: Cambridge University Press.

Braxton, John M., William R. Doyle, Harold V. Hartley III, Amy S. Hirschy, Willis A. Jones, and Michael K. McLendon. 2014. *Rethinking College Student Retention.* San Francisco, CA: Jossey-Bass.

Brewer, Dominic J. and Maurice Shirley. 2017. "Federal Policy to Promote Innovation in US Higher Education." *The Urban Institute.* Washington, DC.

Brooks, Sarah H. and Marcus J. Kurtz. 2012. "Paths to Financial Policy Diffusion: Statist Legacies in Latin America's Globalization." *International Organization* 66(1): 95 – 128.

Brown, Robert D. 1995. "Party Cleavages and Welfare Effort in the American States." *American Political Science Review*, 89:23-33.

Calderelli, Guido and Michele Catanzaro. 2012. *Networks – A Very Short Introduction.* Oxford, UK: Oxford University Press.

California State Legislature. 2014. Assembly Bill No. 1930. http://www.leginfo.ca.gov/pub/13-14/bill/asm/ab_1901-1950/ab_1930_bill_20140928_chaptered.pdf (accessed March 2, 2019).

California State Legislature. 2015. Assembly Bill No. 1228. http://www.legislature.ca.gov/cgi-bin/portpostquery?bill_number=ab_1228&sess=CUR&house=B&author=gipson_%3Cgipson%3E

California State Legislature. 2016. Assembly Bill No. 1747. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1747 (accessed March 2, 2019).

California State Legislature. 2016b. Assembly Bill 801. http://www.legislature.ca.gov/cgi-bin/port-postquery?bill_number=ab_801&sess=CUR&house=B&author=bloom_ %3Cbloom%3E (Accessed May 4, 2019).

California State Legislature. 2016c. Assembly Bill 1995. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB1995 (accessed May 4, 2019).

California State Legislature 2017a. Assembly Bill No. 214. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB214 (access November 2, 2018).

California State Legislature 2017b. Assembly Bill No. 453. http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB453 (accessed November 2, 2018).

California State Legislature. 2018a. Assembly Bill No. 1894. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB1894 (accessed March 14, 2019).

California State Legislature. 2018b. Senate Bill No. 1275. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB1275 (accessed March 14, 2019).

California State Legislature. 2018c. Assembly Bill No. 19. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB19 (accessed June 1, 2019).

California State Legislature. 2019a. Assembly Bill No. 74. http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB74 (accessed August 1, 2019).

California State Legislature. 2019b. Senate Bill No. 173. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB173 (accessed August 1, 2019).

California State Legislature. 2019c. Assembly Bill No. 612. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB612 (accessed October 13, 2019)

California State Legislature. 2019d. Assembly Bill No. 943. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB943 (accessed October 13, 2019).

California State Legislature. 2019e. Assembly Bill No. 302. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB302 (accessed October10, 2019).

California State Legislature. 2019f. Senate Bill No. 291. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB291 (accessed October 8, 2019).

California State Legislature. 2019g. Assembly Bill No. 2. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB2 (accessed October 12, 2019).

Campaign for Free College Tuition. 2019. Promise Programs: Our Momentum. https://www.freecollegenow.org/#momentum (accessed July 2, 2019).

Canon, Bradley C. and Lawrence Baum. 1981. Patterns of Adoption of Tort Law Innovations: An Application of Diffusion Theory to Judicial Doctrines. *The American Political Science Review* 75(4): 975 – 987.

Carnevale, Anthony P. and Nicole Smith. 2012. "A Decade Behind: Breaking Out of the Low-Skill Tap in the Southern Economy." *Georgetown Public Policy Institute: Center on Education and the Workforce.* Washington, DC.

Carnevale, Anthony P., Tamara Jayasundera, and Ban Cheah. 2012. "The College Advantage: Weathering the Economic Storm." *Georgetown Public Policy Institute: Center on Education and the Workforce.* Washington, DC.

Carter, Larry E. and James T. LaPlant. 1997. "Diffusion of Health Care Policy Innovation in the United States." *State and Local Government Review* 29(1): 17-26.

Center for Law and Social Policy. 2019, September 26. "Senator Lamar Alexander Higher Education Proposal Overlooks Postsecondary Students Who Most Need Support." https://www.clasp.org/press-room/press-releases/senator-lamar-alexander-higher-education-proposal-overlooks-postsecondary (Accessed October 4, 2019).

Christensen, Clayton and Henry J. Eyring. "The Innovative University: Changing the DNA of Higher Education." *Forum for the Future of Higher Education.*

Cobb, Roger W. and Charles D. Elder. 1971. “The Politics of Agenda-Building: An Alternative Perspective for Modern Democratic Theory.” *Journal of Politics.* 33(4): 892 – 915.

Cohen, Michael D., James G. March and Johan P. Olsen. 1972. “A Garbage Can Model of Organizational Choice.” *Administrative Science Quarterly.* 17(1). 1 – 25.

Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian Gregory, and Anita Sing. 2015. “Household Food Security in the United States in 2014.” *United States Department of Agriculture – Economic Research Service: Economic Research Report No. (ERR-194).*

College Board. 2017. “Tuition and Fees and Room and Board over Time, 1976-77 to 2016-17, Selected Years.” https://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-and-room-and-board-over-time-1976-77_2016-17-selected-years (Accessed June 14, 2017).

College Promise Campaign. 2019. “Bring the promise of affordable college to your community.” http://collegepromise.org/advanced-search/ (Accessed June 30, 2019).

College Success Foundation. n.d. “Our Story.” https://www.collegesuccessfound ation.org/ wa/our-story (Accessed July 7, 2019)

Crutchfield, Rashida. 2015. “Serving Displaced and Food Insecure Students in the CSU.” Long Beach, California: California State University.

DeBaun, Bill and Carrie Warrick. 2019. “The Growing Gap: Public Higher Education’s Declining Affordability for Low- Income Students.” *National College Access Network.* Washington, DC.

Delaney, J.A. and W.R. Doyle. 2011. “State Spending on Higher Education: Testing the Balance Wheel Over Time.” *Journal of Education Finance 36*(4): 343 – 368.

Derthick, Martha. 1970. *The Influence of Federal Grants: Public Assistance in Massachusetts.* Cambridge: Harvard University Press.

Douglas-Gabriel, Danielle. “Bipartisan Bill to Fund Minority-Serving Colleges, Streamline Student Aid Signed into Law. *The Washington Post,* 19 December, 2019. https://www.washingtonpost.com/education/2019/12/19/bipartisan-bill-fund-minority-serving-colleges-streamline-student-aid-signed-into-law/?fbclid=IwAR0fKLO4gxbpDgjy7Nymh26uedXHIzq3DAkPj4uKUupZQXCHCRENRLv1C4k&utm_campaign=buffer&utm_content=buffer17010&utm_medium=social&utm_source=facebook.com (accessed December 19, 2019).

Downs, Anthony. 1972. “Up and Down with Ecology: The Issue Attention Cycle.” *Public Interest* 28: 38 – 50.

Downs, George W., Jr. and Lawrence B. Mohr. 1976. “Conceptual Issues in the Study of Innovation.” *Administrative Science Quarterly* 21(4): 700-714.

Dubick, James, Brandon Mathews and Clare Cady. 2016. “Hunger on Campus: The Challenge of Food Insecurity for College Students.” *HOPE Lab*. Madison: WI: University of Wisconsin.

Duffield, Barbara, Jee Hang Lee, Mary-Pat Hector, Carrie Welton. 2019. “Federal Policy to Address Students’ Basic Needs.” Presented at #RealCollege Conference, Houston.

Echeverria, Javier. 2011. “Epistemopolis: From Knowledge Communities to Knowledge Cities.” In *Knowledge Communities.* Ed. Juan Echeverria, Andoni Alonso, and Pedro J. Oiarzabal

Fillion, Roger. 2016. Tackling Tuition. *National Conference on State Legislatures*. March.

Fischer, Karen and Jack Stripling. “An Era of Neglect: How public colleges were Crowded Out, Beaten Up, and Failed to Fight Back,” *The Chronicle of Higher Education,* 2 March, 2014. http://www.chronicle.com/article/An-Era-of-Neglect/145045/ (accessed July 17, 2017)

Foundation of California Community Colleges. n.d. “Fresh Success.” https://foundationccc.org/What-We-Do/Student-Services/FreshSuccess (accessed April 1, 2019)

Freidman, Matt. “N.J. College Students Would No Longer Be Required to Buy Meal Plans Under Bill Passed by Assembly,” *NJ.com,* 13 November, 2014. http://www.nj.com/politics/index.ssf/2014/11/nj_bill_to_stop_colleges_from_requiring_students_to_buy_meal_plans_passes_assembly.html (accessed July 15, 2017)

Garcia Mathewson, Tara. “Here's Why Food Is So Insanely Expensive at College.” *Time,* 08 January, 2017. http://time.com/money/4636628/why-food-college-expensive/ (accessed July 15, 2017).

Goldrick-Rab, Sara. 2016. *Paying the Price: College Costs, Financial Aid, and the Betrayal of the American Dream.* Chicago: The University of Chicago Press.

Goldrick-Rab, Sara. “What Colleges Can Do Right Now to Help Low-Income Students.” *The Chronicle of Higher Education,* 28 August, 20016b. https://www.chronicle.com/article/What-Colleges-Can-Do-Right-Now/237589 *(*accessed July 18, 2019).

Goldrick-Rab, Sara. “Public Higher Education Should be Universal and Free. *The New York Times,* 20 January, 2016c. https://www.nytimes.com/roomfordebate/2016/01/20/should-college-be-free/public-higher-education-should-be-universal-and-free (accessed July 18, 2019).

Goldrick-Rab, Sara. “This is #RealCollege: Some Students Struggle to Pay for Food, Housing. *The Washington Post,* 10 May, 2016d. https://www.washingtonpost.com/news/grade-point/wp/2016/05/10/this-is-realcollege-students-facing-food-and-housing-insecurity/ (accessed July 18, 2019).

Goldrick-Rab, Sara, Katherine Broton, and Daniel Eisenberg. 2015. “Hungry to Learn: Addressing Food and Housing Insecurity Among Undergraduates.” *HOPE Lab*. Madison: WI: University of Wisconsin.

Goldrick-Rab, Sara, Jed Richardson, and Anthony Hernandez. 2017. “Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education.” *HOPE Lab*. Madison: WI: University of Wisconsin. http://www.wihopelab.com/publications/Hungry-and-homeless-in-college-college-report.pdf (accessed July 20, 2017)

Goldrick-Rab, Sara, Jed Richardson, Joel Schneider, Anthony Hernandez, and Clare Cady. 2018. “Still Hungry and Homeless in College” *Hope Center for College, Community and Justice,* Philadelphia: Temple University. https://hope4college.com/wp-content/uploads/2018/09/Wisconsin-HOPE-Lab-Still-Hungry-and-Homeless.pdf (accessed July 8, 2019).

Goldrick-Rab, Sara, Christy Baker-Smith, Vanessa Coca, and Elizabeth Looker. 2019, March 7. “California Community Colleges #RealCollege Survey.” *The Hope Center for College, Community, and Justice,* Philadelphia: Temple University. https://hope4college.com/california-community-colleges-realcollege-survey/ (accessed April 1, 2019).

Gore, Al. 1993. *National Performance Review.* Washington, DC: US Government Printing Office.

Gray, Virginia. 1973. “Innovation in the States: A Diffusion Study.” *American Political Science Review* 67: 1174-1185.

Gray, Virginia and David Lowery. 1996. "A Niche Theory of Interest Representation." *Journal of Politics* 58(1): 91 – 111.

Guzman-Lopez, Adolfo. "California Lawmakers Tried To Cut The Cost Of College. Here's What They Did and Didn't Accomplish." *LAist,* 13 September 2019. https://laist.com/2019/09/13/california-higher-education-bills.php (accessed October 10, 2019).

Hahn, Heather, David Kasabian, Lina Breslav, and Yvette Lamb. "A Descriptive Study of County-Versus State-Administered Temporary Assistance for Needy Families Programs." *Urban Institute.* https://www.acf.hhs.gov/sites/default/files/opre/county_tanf_final_report_submitted_to_acf_b508.pdf (accessed October 27, 2019).

Hale, Kathleen. 2011. *How Information Matters: Networks and Public Policy Innovation.* Washington, D.C.: Georgetown University Press.

Hallet, Ronald E., Rashida M. Crutchfield, and Jennifer J. Maguire. *Addressing Homelessness and Housing Insecurity in Higher Education.* New York: Teachers College Press.

Hamm, Keith E., and Gary F. Moncrief. 2013. "Legislative Politics in the States." In *Politics in the American States – A Comparative Analysis,* eds. Virginia Gray, Russell L. Hanson, and Thad Kousser. Washington, DC: CQ Press, 163 – 207.

Hanneman, Robert and Mark Riddle. 2005. *Introduction to Social Network Methods.* University of California – Riverside. https://faculty.ucr.edu/~hanneman/nettext/

Hebel, Sarah. "From Public Good to Private Good: How Higher Education Got to a Tipping Point." *The Chronicle of Higher Education,* 02 March, 2014. http://www.chronicle.com/article/From-Public-Good-to-Private/145061?cid=rclink (accessed July 15, 2017)

Heclo, Hugh. 1978. "Issue Networks and the Executive Establishment." In *The New American Politcal System.* Ed. Anthony King. Washington, D.C.: American Enterprise Institute.

Hess, Abigail. “Tennessee is the First State to Offer Free Community College. *CNBC.com,* 20 June 2017. htttp://www.cnbc.com/2017/06/19/Tennessee-is-the-first-state-to-offer-free-community-college.html (accessed March 13, 2018)

Huckfeldt, Robert and John Sprague. 1987. “Networks in Context: The Social Flow of Political Information.” *The American Political Science Review* 58(4): 1197 – 1216.

Interaction Design Foundation. 2019. “Understanding Early Adopters and Customer Adoption Patterns.” https://www.interaction-design.org/literature/article/understanding-early-adopters-and-customer-adoption-patterns (accessed November 5, 2019).

Immerwahr, John and Foleno, Thomas. 2000. *Great Expectations: How the Public and Parents White, African American and Hispanic View Higher Education.* San Jose, CA: The National Center for Public Policy and Higher Education.

John Burton Advocates for Youth. March 2019. “SB 568: Reducing Homelessness Among California’s College Students.” https://www.jbaforyouth.org/wp-content/uploads/ 2019/03/SB-568-FAQ.pdf (accessed Jun 24, 2019)

Johnson, Jean, Jon Rochkind, Amber N. Ott and Samantha DuPont. 2016. “With Their Whole Lives Ahead of Them: With Their Whole Lives Ahead of Them”. *Public Agenda.* New York, NY.

Johnston, Andy. “One Surprising Barrier to College Success: Dense Higher Education Lingo.” *The Hechinger Report,* 14 June, 2019. https://hechingerreport.org/one-surprising-barrier-to-success-in-college-understanding-higher-education-lingo/ (accessed October 4, 2019).

Karch, Andrew. 2007. *Democratic Labratories: Policy Diffusion among the American States.* Ann Arbor: The University of Michigan Press.

Kezar, Adrianna. 2001. *Understanding and Facilitating Organizational Change in the 21st Century: Recent Research and Conceptualizations.* ASHE-ERIC Higher Education Report (28) 4. San Francisco, CA: Jossey-Bass Higher and Adult Education Series.

King, Paula J. 1988. "Policy Entrepreneurs: Catalysts in the Policy Innovation Process." Ph.D. diss. University of Minnesota.

Kingdon, John W. 1995. *Agenda, Alternatives and Public Policies – 2nd ed.* New York: HarperCollins College Publishers.

Kirzner, Israel. 1973. *Competition and Entrepreneurship.* Chicago: University of Chicago Press.

Lederman, Doug and Paul Fain. "The Higher Education President." *Inside Higher Ed,* 19 January 2017. https://www.insidehighered.com/news/2017/01/19/assessing-president-obamas-far-reaching-impact-higher-education (accessed March 2, 2018)

Legislative Analyst's Office. 2017, January 18. "A Historical Review of Proposition 98." https://lao.ca.gov/Publications/Report/3526 (accessed June 15, 2019).

Lieberman, J.M. 2002. "Three Streams and Four Policy Entrepreneurs Converge – A Policy Window Opens. *Education and Urban Society*, 34(4), 438 – 450.

Link, Albert N. and Jamie R. Link. 2009. *Government as Entrepreneur.* Oxford: Oxford University Press.

Lobosco, Katie. "Tennessee is Picking Up the Tab for Community College Students. *CNN Money,* 8 September 2015. http://www.money.com/2015/09/18/pf/college/free-community-college-tennessee/?id=EL (accessed March 14, 2018)

Lobosco, Katie. “She’s on a Mission to Make America’s Colleges ‘Hunger Free’.” *CNN Money,* 12 June 2017. https://money.cnn.com/2017/06/12/pf/college/college-swipe-out-hunger/index.html (accessed October 27, 2019).

Long, Bridgit Terry. 2014. “The Financial Crisis and College Enrollment: How Have Students and their Families Responded? In *How the Financial Crisis and Great Recession Affected Higher Education,* ed. Jeffrey Brown and Caroline Hoxby. Chicago: University of Chicago Press, 2019 - 233.

Lowi, Theodore J. 1972. “Four Systems of Policy, Politics, and Choice.” *Public Administration Review*, 32(4), 298-310.

Lumina Foundation. 2019. “Grants Database: Tennessee Higher Education Commission.” https://www.luminafoundation.org/grantsdatabase/search/?q=Tennessee+Higher+Education+Commission (accessed August 7, 2019).

Majone, Giandomenico. 1989. *Evidence, Argument, and Persuasion in the Policy Process.* New Haven, CT: Yale University Press.

Makse, Todd and Craig Volden. 2011. “The Role of Policy Attributes in the Diffusion of Innovations.” *The Journal of Politics,* 73(1), 108 – 124.

Manning, Kathleen. 2017. *Organizational Theory in Higher Education, 2nd ed.* New York: Routledge.

Martinez, Suzanna, Katie Maynard and Lorrene D. Ritchie. 2016. *Student Food Access and Security Study.* Oakland, CA: University of California (UC) Office of the President Global Food Initiatives.

Mayhew, David R. 1974. *Congress: The Electoral Connection.* New Haven: Yale University Press.

McAvoy, Taylor. "Lawmakers Consider a Plan to Help Homeless College Students. *The Kent Reporter,* 8 February, 2018. http://kentreporter.com/northwest/lawmakers-consider-a-plan-to-help-homeless-college-students/ (accessed March 14, 2018)

McCubbins, Matthew D., Ramamohan Paturi, and Nicholas Weller. 2009. "Connected Coordination: Network Structure and Group Coordination." American Politics Research 37(5) 899 – 920.

Mello, Felicia. "Parking lots stay off-limits overnight for homeless community college students." *Cal Matters,* 5 September, 2019. https://calmatters.org/education/higher-education/2019/09/homeless-students-parking-lots-community-college-california/ (accessed October 10, 2019).

Mintrom, Michael. 1997. "Policy Entrepreneurs and the Diffusion of Innovation." *American Journal of Political Science,* 41(3), 738 – 770.

Mintrom, Michael. 2000. *Policy Entrepreneurs and School Choice.* Washington, D.C.: Georgetown University Press.

Mintrom, Michael and Phillipa Norman. 2003. "Policy Entrepreneurship and Policy Change." *The Policy Studies Journal,* 37(4), 649 – 667.

Mintrom, Michael and Sandra Vergari. 1996. "Advocacy Coalitions, Policy Entrepreneurs, and Policy Change." *Policy Studies Journal,* 24(3), 420 – 434.

Mitchell, Michael, Michael Leachman, and Kathleen Masterson. "Funding Up, Tuition Down: State Cuts to Higher Education Threaten Quality and Affordability at Public Colleges." *Center on Budget and Policy Priorities*, 16, August 2016. http://cbpp.org/research/state-budget-and-tax\funding-down-tuition-up (accessed June 20, 2017)

Mitchell, Michael, Michael Leachman, and Matt Saenz. “State Higher Education Funding Cuts Have Pushed Costs to Students, Worsened Inequality.” 24 October, 2019. *Center on Budget and Policy Priorities*. August 15. https://www.cbpp.org/research/state-budget-and-tax/state-higher-education-funding-cuts-have-pushed-costs-to-students (accessed October 27, 2019).

Moore, Gary C. and Benbaset, Izak. 1991. “Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation.” *Information Systems Research* 2(3) 192 – 222.

Morriss-Olson, Melissa. “The 10 Barriers to Innovation in Higher Education**.”** *Academic Impressions,* 9 March, 2017. https://www.academicimpressions.com/blog/the-10-barriers-to-innovation-in-higher-education/ (accessed July 23, 2019).

Maroto, Maya E., Snelling, Anastasia, and Linck, Henry. 2015. “Food Insecurity among Community College Students: Prevalence and Association with Grade Point Average.” *Community College Journal of Research and Practice* 39(6), 515-526.

Mossberger, Karen. 2000. *The Politics of Ideas and the Spread of Enterprise Zones.* Washington, D.C.: Georgetown University Press.

National Association of Student Financial Aid Administrators. 2019, September 26. “Senator Alexander Proposes Scaled Back HEA.” https://www.nasfaa.org/news-item/19581/Senator_Alexander_Proposes_Scaled_Back_HEA (accessed October 4, 2019).

National Center for Homeless Education. N.d. “The McKinney-Vento Homeless Assistance Act.” https://nche.ed.gov/mckinney-vento/ (accessed October 28, 2019).

National College Access Network. N.d. “FAFSA Tracker.” https://formyourfuture.org /fafsa-tracker/ (accessed October 4, 2019).

Nice, David C. 1994. *Policy Innovation in State Government.* Ames: Iowa State University Press.

O'Toole, Lawrence. 1997. "Treating Networks Seriously: Practical and Research Based Agendas in Public Administration." *Public Administration Review* 57(1) 45 – 52.

Pew Charitable Trust. 2017. "Federal and State Funding of Higher Education – A Changing Landscape." http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education (accessed June 24, 2017).

Polsby, Nelson W. 1984. *Political Innovation in America – The Politics of Policy Initiation.* New Haven: Yale University Press.

Powell, Farran. "These States Offer Tuition-Free College Programs." *U.S. News and World Report*, 1 February, 2018. http://www.usnews.com/education/best-colleges/paying-for-college/articles/2018-02-01/these-states-offer-tuition-free-college-programs (accessed February 18, 2018)

Rauner, Mary. "College Promise in California: Community-Wide Efforts to Support Student Success." *Forbes,* 9 October, 2018. https://www.forbes.com/sites/civicnation/2018/10/09/college-promise-in-california-community-wide-efforts-to-support-student-success/#4d80f48513eb (accessed October 21, 2019).

Roberts, Nancy C. and Paula J. King. 1992. *Transforming Public Policy: Dynamics of Policy Entrepreneurship and Innovation.* San Francisco: Jossey-Bass Publishers.

Rogers, Everett. 1995. *Diffusion of Innovations – Fourth Edition.* New York: Free Press.

Rogers, Everett. 2003. *Diffusion of Innovations – Fifth Edition.* New York: Free Press.

Safe Parking Los Angeles. n.d. https://www.safeparkingla.org/about

Saul, Stephanie. “Meal Plan Costs Tick Upward as Students Pay for More Than Food,” *The New York Times,* 6 December, 2016. https://www.nytimes.com/2015/12/06/us/meal-plan-costs-tick-upward-as-students-pay-for-more-than-food.html (accessed June 21, 2017)

Schattschneider, Elmer E. 1960. *The Semisovereign People: A Realist’s View of Democracy in America.* New York: Holt, Rinehart, and Winston.

Schneider, Mark, Paul Teske, and Michael Mintrom. 1995. *Public Entrepreneurs: Agents for Change in American Government.* Princeton: Princeton University Press.

SchoolHouse Connections. 2019, March 13. “Higher Education Legislation for Homeless and Foster Youth Introduced.” https://www.schoolhouseconnection.org/higher-education-legislation-for-homeless-and-foster-youth-introduced/ (accessed November 13, 2019).

Scott, John. 2012. *What is Social Network Analysis?* London: Bloomsbury Academic.

Schattschneider, Elmer Eric. 1960. *The Semi-Sovereign People.* New York: Holt, Rinehart, and Winston.

Schoolhouse Washington. 2017, March. "The Homeless Student Stability & Opportunity Gap Act – Stabilizing Homeless Students in the School and Communities. https://schoolhousewa.org/wp-content/uploads/2017/03/HSSAbrief.pdf (accessed July 7, 2019

Shipan, Charles R. and Craig Volden. 2006. “The Diffusion of Antismoking Policies from U.S. Cities to States.” *American Journal of Political Science* 50(4): 825-843.

Shipan, Charles R. and Craig Volden. 2008. “The Mechanisms of Policy Diffusion.” *American Journal of Political Science* 52(4): 840-857.

Simmel, Georg. 1955. *The Web of Group Affiliations, trans. by Richard Reinhard Bendix.* New York: Free Press.

Skocpol, Theda. *Diminished Democracy – From Membership to Management in American Civic Life.* Norman, OK: University of Oklahoma Press.

Smith, Ashley A. “Tens of Thousands of Adults Line Up for Free College in Tennessee,” *Inside Higher Ed,* 24 August, 2018. *https://www.insidehighered.com/news/2018/08 /24/tennessee-sees- thousands-apply-tuition-free-adult-plan* (Accessed August 28, 2019).

Smith, Kevin B., and Christopher W. Larimer. 2013. *The Public Policy Theory Primer. 2nd ed.* Boulder, CO: Westview Press.

State Higher Education Executive Officers Association. 2015. “State Higher Education Finance: FY 2014.” https://files.eric.ed.gov/fulltext/ED562021.pdf (accessed August 2, 2019)

State Higher Education Executive Officers Association. 2016. “State Higher Education Finance: FY 2015.” https://www.luminafoundation.org/files/resources/state-higher-ed-finance-fy2015.pdf (accessed August 2, 2019).

State Higher Education Executive Officers Association. 2019. “State Higher Education Finance: FY 2018.” https://sheeo.org/project/state-higher-education-finance/ (accessed August 2, 2019).

State of California Health and Human Services Agency: Department of Social Services. 2018, April 2. “All County Letter NO. 18-27. https://www.cdss.ca.gov/Portals/9/ACL/2018/18-27.pdf (accessed August 6, 2019).

Steelman, Toddi. A. 2010. *Implementing Innovation: Fostering Enduring Change in Environmental and Natural Resource Governance.* Washington, D.C.: Georgetown University Press.

Tacoma Housing Authority. n.d. “College Housing Assistance Program: A Summary.” https://www.tacomahousing.net/content/tacoma-community-college-housing-assistance-program (accessed March 26, 2019).

Tarde, Gabriel. 1903. *The Laws of Imitation, trans. By Elise Clews Parsons.* New York: Holt.

Tennessee Higher Education Commission. N.d. “Complete College Tennessee.” http://thec.ppr.tn.gov/THECSIS/CompleteCollegeTN/Default.aspx (accessed May 4, 2019)

The Institute for College Access & Success. 2019, January. “What College Costs for Low-Income Californians.” https://ticas.org/wp-content/uploads/legacy-files/pub_files/what_college_ costs_for_low-income_californians_0.pdf (accessed October 11, 2019).

The Institute for College Access & Success. 2019, May. “Inequitable Funding, Inequitable Results: Racial Disparities at Public College.” https://ticas.org/wp-content/uploads/2019/07/inequitable-funding-inequitable-results.pdf (accessed August 2, 2019)

The Mockingbird Society – a. N.d. “About Us.” https://www.mockingbirdsociety.org/about-us (accessed April 1, 2019.

The Mockingbird Society – b. N.d. “Child Welfare Advocacy Coalition.” https://www.mockingbirdsociety.org/coalitions/cwac (accessed April 1, 2019).

The Mockingbird Society. 2019. “WA Coalition for Homeless Youth Advocacy” https://www.mockingbirdsociety.org/coalitions/wachya (accessed April 1, 2019).

Thomas, Kei-Sygh. “Enough to Eat: Inside the Campaign to Help Feed Hungry College Student. *The 74 Million,* 9 January, 2018. https://www.the74million.org/article/when-1-in-10-

kids-on-campus-dont-have-enough-to-eat-inside-the-campaign-to-help-feed-hungry-college-students/ (accessed October 27, 2019).

Treehouse. n.d. "Graduation Success." https://www.treehouseforkids.org/our-services/graduation-success/ (accessed August 14, 2019).

Tversky, Amos and Daniel Kahneman. 2000. *Choices, Values and Frames.* Cambridge: Cambridge University Press.

Tweedie, Jack. 1994. "Resources Rather Than Needs: A State-Centered Model of Welfare Policymaking." *American Journal of Political Science*, *38*, 651–672.

University of California Global Food Initiative. n.d. "UC Efforts to Address Student Food and Housing Security." https://www.ucop.edu/global-food-initiative/_files/addressing-food-housing-security.pdf (accessed March 4, 2019)

U.S. Congress. House. *College Cost Reduction and Access Act (H.R. 2669).* 110th U.S. Congress. https://www.congress.gov/bill/110th-congress/house-bill/2669/text (accessed November 10, 2019).

U.S. Congress. *Higher Education Opportunity Act of 2008 (H.R. 4137).* 110th U.S. Congress. https://www.congress.gov/bill/110th-congress/house-bill/4137 (accessed November 10, 2019).

U.S. Congress. Senate. *Student Aid Improvement Act.* 116th Cong., 2nd sess. Introduced in Senate September 26, 2019. https://www.nasfaa.org/uploads/documents/Student_Aid_Improvement_Act_2019.pdf

U.S. Congress. Senate. *Higher Education Access and Success for Homeless and Foster Youth Act of 2019 (S. 789/H.R. 1724).* 116th Cong., 2nd sess. Introduced in Senate March 13, 2019. https://www.congress.gov/bill/116th-congress/senate-bill/789/text

U.S. Department of Agriculture | Food and Nutrition Service. “Supplemental Nutrition and Assistance Program: Employment and Training.” https://www.fns.usda.gov/snap/et (accessed July 7, 2019).

U.S. Department of Education. 2015. “Every Student Succeeds Act.” https://www.ed.gov/essa?src=rn (accessed November 4, 2019).

U.S. Department of Housing and Urban Development | Office of Policy Development and Research. 1995. “Public Housing: Image Versus Facts.” https://www.huduser.gov/periodicals/ushmc/spring95/spring95.html (accessed March 26, 2019)

U.S. Department of Housing and Urban Development | Office of Policy Development and Research. 2015. “Insights into Housing and Community Policy Development. Barriers to Success: Housing Insecurity for US College Students.” http://www.hudser.gov/portal/periodicals/insight/insight_2.pdf (accessed March 14, 2019)

U.S. Department of Housing and Urban Development | Moving to Work Demonstration Program. 2019, August 20. “Moving to Work Demonstration Program.” https://www.hud.gov/mtw (accessed March 26, 2019)

Victor, Jennifer. “To Understand modern politics, focus on groups, not individuals.” *Oxford University Press's Academic Insights for the Thinking World,* 20 December, 2018. https://blog.oup.com/2017/12/understand-politics-networks-groups-individuals/ (accessed March 16, 2018).

Walker, Jack. 1969. “The Diffusion of Innovations Among the American States.” *American Political Science Review* 63: 880-899.

Ward, Michael D., Katherine Stovel, and Audrey Sacks. 2011. “Network Analysis in Political Science.” *Annual Review of Political Science*, 14, 245 – 264.

Washington Governor Jay Inslee. N.d. “Blue Ribbon Commission on Children and Families.” https://www.governor.wa.gov/issues/issues/health-care-human-services/blue-ribbon-commission-children-and-families (accessed August 14, 2019).

Washington State Department of Commerce. N.d. “The Office of Homeless Youth.” https://www.commerce.wa.gov/serving-communities/homelessness/office-of-youth-homelessness/ (accessed August 14, 2019).

Washington State Department of Commerce. 2017. “Interagency Work Group on Youth Homelessness – 2017 Report.” https://www.commerce.wa.gov/serving-communities/homelessness/office-of-youth-homelessness/ (accessed August 14, 2019).

Washington State Legislature Bill Information. 2014. SB 6074: Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=6074&Initiative=false&Year=2013 (accessed June 12, 2019).

Washington State Legislature Bill Information. 2015. SB 5404. Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=5404&Initiative=false&Year=2015 (accessed August 14, 2019).

Washington State Legislature Bill Information. 2016. HB 1682. Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=1682&Initiative=false&Year=2015 (accessed June 12, 2019).

Washington State Legislature Bill Information. 2018a. HB 6032: Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=6032&Initiative=false&Year=2017 (accessed June 12, 2019)

Washington State Legislature Bill Information. 2018b. HB 2854: Bill Status at a Glance. http://www.apps2.leg.wa.gov/billsummary?BillNumber=2854&Year=2017&Bill Number+2854&Year=2017 (accessed June 12, 2019)

Washington State Legislature Bill Information. 2019a. HB 1893: Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=1893&Initiative=false&Year=2019 (accessed June 12, 2019)

Washington State Legislature Bill Information. 2019b. SB 5800: Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=5800&Initiative=false&Year=2019 (accessed June 12, 2019)

Washington State Legislature Bill Information. 2019c. HB 1278: Bill Status at a Glance. https://app.leg.wa.gov/billsummary?BillNumber=1278&Year=2019&Initiative=False (accessed June 12, 2019)

Washington State Student Achievement Council. Passports to Careers. https://www.wsac.wa.gov/passport-to-careers (accessed June 17, 2019).

Western Center for Law and Policy. 2018. "Responding to the College Hunger Crisis." https://wclp.org/wp-content/uploads/2018/03/College_Student_Hunger_NAHC2018_WCLP.pdf (accessed May 3, 2019).

Weissert, Carol S. 1991. "Policy Entrepreneurs, Policy Opportunists, and Legislative Effectiveness." *American Politics Quarterly,* 19(2), 262 – 274.

Whistle, Wesley. 2019, September 26. "Senator Alexander's Missed Opportunity to Improve Higher Education." *Forbes.* https://www.forbes.com/sites/wesleywhistle/2019/09/26/ senator-alexanders-missed-opportunity-to-improve-higher-education/#79c13bf2e667 (accessed October 4, 2019).

Appendix 1: Research Design

Research Question	Hypothesis	Level of Analysis	Unit of analysis	Independent Variables	Dependent Variables	Data collection
How do the structure, participants, actions and arrangement of networks of actors affect the actions and choices of first innovator states in addressing college student financial insecurity?	The patterns of cohesion, roles, constraints, and resources of networked actors affect the strategy, choice, and success of specific policy pursuits.	Innovator State	Political networks within first innovator state	Structure, participants, action and arrangement of networked actors	Policy model	Archival research; Semi Structured Interviews with Network Participants; Descriptive Social Network Analysis Survey
How does the structure of networks of actors within innovator states affect the subsequent diffusion to secondary adopting states?	The pattern of roles and resources of networked actors within first innovator states that led to policy innovation is likewise a critical explanatory variable in the diffusion process to secondary states.	Innovator State	Political networks within first innovator state	Structure, participants, action and arrangement of networked actors	Rate of adoption of innovation to secondary states	Archival research; Semi Structured Interviews with Network Participants; Descriptive Social Network Analysis Survey
How do the attributes of this policy choice affect the rate of diffusion amongst secondary adopting states?	The relative advantage, compatibility, observability, and trialability of a policy innovation will be positively associated with its rate of diffusion. The complexity of a policy innovation will be negatively associated with its rate of diffusion.	Diffusion to secondary states	Policy attributes of innovation	Policy attributes	Rate of adoption of innovation to secondary states	Attributes of Innovation Scale

Appendix 2: Semi Structured Verbal Interview Questions for Network Actors

First Innovator States: An Ecological Analysis of Innovation and Diffusion of Policies to Address College Student Financial Insecurity in the American States.

Jonathan Cellon
Dept. of Political Science – Public Administration and Public Policy
Auburn University

1. How has your organization been involved with addressing college student financial insecurity?
2. What led to your organization's involvement?
3. How long have you been involved in this policy space?
4. What factors led your state to adopt this particular policy model to address college student financial insecurity?
5. Who were the other participants in the network? (Organizations, individuals)
6. What roles emerged within the network among participants?
7. Did your network have an individual who acted as a policy entrepreneur?
8. If so, what actions did this individual take?
9. What source provided the policy model?
10. Did the network rely on external actors such national interest groups or non-profits? If so, how?
11. What tactics did the network use to enact the policy?
12. What types of obstacles did your network face in advancing the policy to pass?
13. How were these obstacles overcome?
14. How long did you, your organization or network work to enact the policy? (number of months / years).
15. What other initiatives has this network of actors worked on previous to or since the enactment of this legislation?
16. Have you or the network presented on the policy model or actions of the network at regional or national conferences? If so, where?
17. Have you or the network been contacted by groups in other states interested in adopting the policy model? If yes, which states?

Appendix 3: Social Network Analysis and Attribute Analysis Survey

First Innovator States: An Ecological Analysis of Innovation and Diffusion of Policies to Address College Student Financial Insecurity in the American States.
*** Adapted from Qualtrics***

This survey is designed to assess the network contributions of agencies and organizations towards the creation of policy to address college student financial insecurity in your state. To begin, please provide some basic information on your organization.

What is the name of your organization? ___________________________________

What state are you located in? ____________________

What sector is your agency/organization in?
- ☐ Government
- ☐ Non-profit
- ☐ Business

What is the primary function of your agency/organization?
- ☐ Research
- ☐ Advocacy
- ☐ Education
- ☐ Foundation / Philanthropy
- ☐ Service provision
- ☐ Membership group
- ☐ Legislative
- ☐ Other: ___________

Approximately how long has your organization been in existence?

0	10	20	30	40	50	60	70	80	90	100+

# of years

Approximately how many years has your organization been working on issues related to college affordability and/or college student financial insecurity?

0	10	20	30	40	50	60	70	80	90	100+

# of years

Approximately how many employees work at your organization?

0	20	40	60	80	100	120	140	160	180	200+

Identify all of the ways that your organization obtained information about college student financial insecurity in your state and policies/programs to address the issue.

- ☐ National / regional conferences
- ☐ Professional meetings
- ☐ Research publications
- ☐ National advocacy groups
- ☐ Advocates
- ☐ Personal contacts with your professional network

Rate your own agency/organization's level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Indicate your organization's contribution to the network of actors that passed legislation to address college student financial insecurity.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):___________					

The next series of questions focus on the network contributions of other agencies and organizations towards the creation of state policy to address college student financial insecurity in your state. As such, you will be asked to provide insight into the roles and participation that various groups played towards successful policy adoption.

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please identify the organizations your agency worked with and how often you interacted with each. Example groups could include state legislators, advocacy groups, government programs / services, college or universities, foundations, etc.

	Never	Very infrequently	Somewhat infrequently	Somewhat frequently	Very frequently
Organization 1:					
Organization 2:					
Organization 3:					
Organization 4:					
Organization 5:					
Organization 6:					
Organization 7:					
Organization 8:					
Organization 9:					
Organization 10:					

Please rate Organization 1: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 1: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 2: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 2: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 3: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 3: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 4: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 4: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 5: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 5: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 6: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 6: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 7: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 7: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 8: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 8: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 9: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 9: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

Please rate Organization 10: _______________ in terms of their level of participation towards passage of policy in your state to address college student financial insecurity.

- ☐ Not involved
- ☐ Minimally involved
- ☐ Intermittently involved
- ☐ Moderately involved
- ☐ Critically involved

Relative to network activities towards successful passage of policy in your state to address college student financial insecurity, please indicate the contributions of Organization 10: _______________.

	Did not provide	Minimally provided	Intermittently provided	Provided along with others	Core provider of resource
Funding for network activities					
Legislative influence					
Research functions					
Information on potential policy models /best practices					
Expertise					
Advocacy					
Communication to external stakeholders					
Other (please specify): ______					
Other (please specify):__________					

The last series of questions ask you to evaluate specific attributes of the policy model your state adopted to address college student financial insecurity.

The policy my state created to address college student financial insecurity improves the lives of financially insecure college students in my state.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

The policy my state created to address college student financial insecurity improves the academic performance of financially insecure college students in my state.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

Overall, the policy is an effective instrument to address the negative effects felt by financially insecure college students in my state.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

The policy my state created to address college student financial insecurity is compatible to the capabilities of institutions and organizations in my state.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

The policy my state created to address college student financial insecurity is compatible with the needs of financially insecure college students in my state.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

Having this policy to address college student financial insecurity improves the image of my state amongst its citizens.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

Having this policy improves the image of my state amongst its college students.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

Having this policy to address college student financial insecurity improves the image of my state across the United States.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

It is easy for financially insecure college students to take advantage of this policy.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

It is easy for administrators and institutions to manage this policy / program.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

I can easily explain the central features and benefits of this policy to others.

- Strongly disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Strongly agree

The effects of this policy to address college student financial insecurity are directly apparent to me.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Strongly agree

I examined the effects of best practices of this policy model before advocating for legislative action.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Strongly agree

I have observed the effects of similar smaller scale programs at the community or institutional level on financially insecure college students.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Strongly agree

Thank you for your participation in this survey. Your responses and time are greatly appreciated.

Appendix 4: Social Network Datasets

Chapter 4: Knox Achieves Network

	Ragsdale Administration	TN P1	School Superintendent	K-12 Schools	Community College	Other Elected Officials	Chamber of Commerce	Business Community	Ayers Foundation
Ragsdale Administration	0	1	1	1	1	1	1	1	1
TN P1	1	0	1	0	0	1	1	1	0
School Superintendent	1	1	0	1	1	0	1	0	0
K-12 Schools	1	0	1	0	0	0	0	0	0
Community College	1	0	1	0	0	0	1	1	0
Other Elected Officials	1	1	0	0	0	0	1	0	0
Chamber of Commerce	1	1	1	0	1	1	0	1	0
Business Community	1	1	0	0	1	0	1	0	0
Ayers Foundation	1	0	0	0	0	0	0	0	0

Appendix 4 (continued): Social Network Datasets

Chapter 4: TN Achieves Network

	Achieves	County Mayor	United Way Director	Chamber of Commerce President	School Superintendent	TN P1	Business Community	Area Non-Profits	K-12 Schools	Governor Haslam	Other Elected Officials	Local Community College
Achieves	0	1	1	1	1	1	0	0	1	1	0	1
County Mayor	1	0	1	1	1	0	0	0	0	1	1	0
United Way Director	1	1	0	1	1	0	1	1	0	0	1	0
Chamber of Commerce President	1	1	1	0	1	1	1	1	0	0	1	0
School Superintendent	1	1	1	1	0	0	0	0	1	0	1	1
TN P1	1	0	0	1	0	0	1	0	0	1	0	0
Business Community	0	0	1	1	0	1	1	0	0	0	0	0
Area Non-profits	0	0	1	1	0	0	0	0	0	0	0	0
K-12 Schools	1	0	0	0	1	0	0	0	0	0	0	0
Governor Haslam	1	1	0	0	0	1	0	0	0	0	1	0
Other elected officials	0	1	1	1	1	0	0	0	0	1	0	0
Local Community College	1	0	0	0	1	0	0	0	0	0	0	0

Appendix 4 (continued): Social Network Datasets

Chapter 4: TN Promise Network

	THEC	General Assembly	Haslam Administration	TBR	TN Achieves	Ayers Foundation	Foundations	TICUA	TCAT Schools	UT System	Community Colleges	State Universities	Tennessee Business Roundtable
THEC	0	0	1	1	1	1	1	1	0	1	0	0	0
General Assembly	0	0	1	0	0	0	0	0	0	0	0	0	0
Haslam Administration	1	1	0	1	1	0	1	0	1	1	1	1	1
TBR	1	0	1	0	0	0	0	0	1	0	1	1	0
TN Achieves	1	0	1	0	0	0	0	0	0	0	0	0	0
Ayers Foundation	1	0	0	0	0	0	0	0	0	0	0	0	0
Foundations	1	0	1	0	0	0	0	0	0	0	0	0	0
TICUA	1	0	0	0	0	0	0	0	0	0	0	0	0
TCAT Schools	0	0	1	1	0	0	0	0	0	0	0	0	0
UT System	1	0	1	0	0	0	0	0	0	0	0	0	0
Community Colleges	0	0	1	1	0	0	0	0	0	0	0	0	0
State Universities	0	0	1	1	0	0	0	0	0	0	0	0	0
Tennessee Business Roundtable	0	0	1	0	0	0	0	0	0	0	0	0	0

Appendix 4 (continued): Social Network Datasets

Chapter 5: AB 1930 Workgroup

	Western Center	Mazon	Asw. Weber / Skinner	Young Invincibles	CSU System	UC System	CCC System	CA DSS	Hope Center	CA Assoc. of Food Banks	CA Hunger Action Coalition	Coalition of Welfare Rights	UC Institutions	CSU Institutions	CCC Institutions	FRAC	MA Law Reform
Western Center	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1
Mazon	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1
Asw. Weber / Skinner	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Young Invincibles	1	1	0	0	1	1	1	1	0	1	1	1	0	0	0	0	0
CSU System	1	1	0	1	0	1	1	1	0	1	1	1	0	1	0	0	0
UC System	1	1	0	1	1	0	1	1	0	1	1	1	1	0	0	0	0
CCC System	1	1	0	1	1	1	0	1	0	1	1	1	0	0	1	0	0
CA DSS	1	1	0	1	1	1	1	1	0	1	1	1	0	0	0	0	0
Hope Center	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CA Assoc. of Food Banks	1	1	0	1	1	1	1	1	0	0	1	1	0	0	0	0	0
CA Hunger Action Coalition	1	1	0	1	1	1	1	1	0	1	0	1	0	0	0	0	0
Coalition of Welfare Rights	1	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0
UC Insts.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
CSU Insts.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CCC Insts.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
FRAC	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MA Law Reform	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 4 (continued): Social Network Datasets

Chapter 5: Hunger Free Campus Initiative Network

	Western Center	Mazon	Swipe Out Hunger	Asw. Limon	Young Invincibles	CSU System	UC System	CCC System	CA DSS	Hope Center	TICAS	CA Assoc. of Food Banks	CA Hunger Action Coalition	Coalition of Welfare Rights	UC Institutions	CSU Institutions	CCC Institutions	CS Student Assoc.	UC Student Assoc.	CCC Student Senate
Western Center	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Mazon	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Swipe Out Hunger	1	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0
Asw. Limon	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Young Invincibles	1	0	1	0	0	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0
CSU System	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	1	0	1	0	0
UC System	1	0	1	0	1	1	0	1	1	0	1	0	0	0	1	0	0	0	1	0
CCC System	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	1	0	0	1
CA DSS	1	0	0	0	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0
Hope Center	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
TICAS	1	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0
CA Assoc. of Food Banks	1	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
CA Hunger Action Coalition	1	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0
Coalition of Welfare Rights	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0
UC Insts.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CSU Insts.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCC Insts.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CS Student Association	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UC Student Association	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CCC Student Senate	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

Chapter 5: California Basic Needs Alliance Network

	WC	CHYP	JBA	Jovenes	YI	CSUS	UCS	CCCS	CA DSS	HC	TICAS	CWR	CAFB	CHAC	UC Inst.	CSU Inst.	CCC Inst.	CSSA	UCSA	CCCSA	SHC	MAZON
WC	0	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1
CHYP	1	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0
JBA	1	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jovenes	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YI	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSUS	1	1	1	0	1	0	1	1	1	1	1	0	0	0	0	1	0	1	0	0	0	0
UCS	1	1	1	0	1	1	0	1	1	1	1	0	0	0	1	0	0	0	1	0	0	0
CCCS	1	1	1	0	1	1	1	0	1	1	1	0	0	0	0	0	1	0	0	1	0	0
CA DSS	1	0	0	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0
HC	1	1	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TICAS	1	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CWR	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
CAFB	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
CHAC	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0
UC Inst,	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSU Inst.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCC Inst.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSSA	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UCSA	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCCSS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHC	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAZON	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

*** Abbreviation Key.
WC = Western Center. CHYP = California Homeless Youth Project. JBA = John Burton Advocates. YI = Young Invincibles. CSUS = California State University System.
UCS = University of California System. CCCS = California Community College System. CA DSS = California Department of Social Services
HC = Hope Center. CWR = Coalition of Welfare Rights. CAFB = California Association of Food Banks. CHAC = California Hunger Action Coalition
UC Inst. = University of California Institutions. CSU Inst. = California State University Institutions. CCC Inst. = California Community College Institutions
CCSA = California State Student Association. UCSA = University of California Student Association. CCCSS = California Community College Student Senate
SHC = SchoolHouse Connection

Appendix 4 (continued): Social Network Datasets

Chapter 6: Tacoma Housing Authority CHAP Program Network

	THA	TCC	UWT	Hope Center	Private Housing Developer	Kresge Foundation	HUD
THA	0	1	1	1	1	1	1
TCC	1	0	1	1	0	0	0
UWT	1	1	0	0	0	0	0
Hope Center	1	1	0	0	0	1	0
Private Housing Developer	1	0	0	0	0	0	0
Kresge	1	1	0	1	0	0	0
HUD	1	0	0	0	0	0	0

Appendix 4 (continued): Social Network Datasets

Chapter 6: Washington Passport to Career and Pilot Programs Network

	Building Changes	Treehouse	Mockingbird Society	Equity in Education	College Success Foundation	OSPI	OHY	WSAC	DCYF	DSHS	Sen. Ranker	WA P8	SBTC	Rep. Sells	Rep. Ortiz-Self	Kids in Transition	Schoolhouse Connection	WA Student Assoc.
Building Changes	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0
Treehouse	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Mockingbird Society	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Equity in Education	1	1	1		1	1	1		1	1								
College Success Foundation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
OSPI	1	1	1	1	1		1		1	1								
OHY	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
WSAC	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0
DCYF	1	1	1	1	1	1	1	1		1	0	0	0	0	0	0	0	0
DSHS	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	
Sen. Ranker	1	1	1	0	1	0	1	1	0	0	1	1	1	1	0	0	0	0
WA P8	1	0	1	0	1	0	1	1	0	0	1	1	1	1	1	1	0	1
SBTC	0	0	0	0	1	0	0	1	0	0	1	1	0	1	0	0	0	0
Rep. Sells	0	0	0	0	1	0	0	1	0	0	1	1	1	0	1	0	0	0
Rep. Ortiz-Self	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0
Kids in Transition	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Schoolhouse Connection	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WA Student Assoc.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Appendix 5: Attribute Analysis Dataset

		RA1	RA2	RA3	RA#	C1	C2	C#	CX1	CX2	CX#	TRL1	TRL2	TRL#	Obs1	Obs2	Obs#	Total
CA	Mean	3.833	3.667	3.667	3.722	3.5	3.667	3.583	3	3.167	3.083	3.833	3.833	3.833	3.833	3.833	3.833	39.833
N=6	SD	0.753	0.816	0.816	0.795	0.548	1.033	0.790	0.632	0.408	0.52	0.753	0.983	0.868	0.983	0.983	0.983	8.709
TN	Mean	4.833	3.667	4.667	4.389	4.667	4.5	4.583	4	3.667	3.833	4.833	4.500	4.667	4.167	4.5	4.333	48
N=6	SD	0.408	0.516	0.516	0.480	0.516	0.548	0.532	1.095	0.816	0.956	0.408	0.837	0.622	1.169	0.837	1.003	7.668
WA	Mean	4.330	3.670	3.670	3.890	3.167	3.500	3.334	3.5	2.833	3.167	3.667	4.167	3.917	3.167	3.833	3.5	39.504
N=6	SD	1.211	1.211	1.505	1.309	1.169	1.505	1.337	1.049	1.581	1.315	1.517	1.169	1.343	1.329	0.753	1.041	13.99

Attribute averages denoted with #. Standard Deviation Totals (on far right) do not include attribute averages.

Appendix 6: Multiple Regression of Attributes of Innovation

on Rate of Diffusion

Model Summary of Multiple Regression of Attributes of Innovation on Rate of Diffusion

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.0704	0.495	0.285	0.443792

ANOVA of Multiple Regression of Attributes of Innovation on Rate of Diffusion

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.317	5	0.463	2.352	0.104
Residual	2.363	12	0.197		
Total	4.680	17			

Appendix 6: Coefficients of Multiple Regression of Attributes of Innovation on Rate of Diffusion (continued)

	Unstandardized Coefficients		Standardized Coefficients		
Model	**β**	**Std. Error**	**β**	**t**	**Significance**
Constant	1.470	0.541		2.717	0.019
Relative Advantage	-0.702	0.347	-1.112	-2.023	.066***
Compatibility	0.733	0.265	1.351	2.761	0.017**
Complexity	-0.189	0.200	-0.326	-0.945	0.363
Trialability	0.421	0.241	0.750	1.742	0.107
Observability	-0.032	0.189	-0.058	-0.167	0.870

Dependent Variable: Rate of Diffusion. ** is significant at $p < 0.05$. * is significant at $p < 0.10$.