CONSTRUCTING WINNERS AND LOSERS:
AN ANALYSIS OF HIGHER EDUCATION PERFORMANCE FUNDING POLICY
DESIGNS IN COLORADO AND TEXAS
by
DENISA GANDARA
(Under the Direction of Erik C. Ness)

ABSTRACT

In recent years, numerous state-level policies intended to improve the efficiency and effectiveness of higher education have emerged and, in some cases, re-emerged. One such policy that has gained traction in states is performance-based funding—a method of tying state funding for public higher education institutions directly to institutions’ performance on pre-specified metrics. This approach represents a departure from the traditional, input-based method of allocating state funds to public colleges and universities, which has historically relied on enrollment counts.

Grounded in a theory of policy design that draws attention to the value-laden elements of the policy process, this study examined performance funding policy design, both policy design content and process, in two states: Colorado and Texas. For the analysis, this study employed a multiple case study research design and drew on interviews with 34 policy actors, over a dozen observations of legislative and state higher education agency proceedings, and over 300 documents.
Findings from this study indicate that performance funding model designs are overwhelmingly a function of higher education institutions’ self-interest, particularly in contexts where institutional representatives have substantial authority over the model design process. The social construction of certain students (e.g., ethnic minority students) as deserving or undeserving of policy benefits also contributes to model designs. Finally, institutional representatives’ political power resources are directly associated with the distribution of benefits or burdens to their institution.

By deconstructing performance funding policy designs to their constituent parts, this study focused on how and why, given myriad options for performance funding policy designs, certain policy elements were chosen instead of others. This analysis of designs is especially critical given evidence that costly failures in some instances of performance funding may be attributed to poor design, including the use of inappropriate metrics. Moreover, by drawing on a theory of policy design previously unintroduced to the higher education literature and extending the performance funding research base, this study made a number of conceptual and practical contributions, including identifying important considerations for performance funding policy evaluations and for funding model design.

CONSTRUCTING “WINNERS AND LOSERS:”
AN ANALYSIS OF HIGHER EDUCATION PERFORMANCE FUNDING POLICY DESIGNS IN COLORADO AND TEXAS

by

DENISA GANDARA

B.A., The University of Texas at Austin, 2011

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2016
CONSTRUCTING “WINNERS AND LOSERS:”
AN ANALYSIS OF HIGHER EDUCATION PERFORMANCE FUNDING POLICY
DESIGNS IN COLORADO AND TEXAS

by

DENISA GANDARA

Major Professor: Erik C. Ness
Committee: James C. Hearn
Sheila Slaughter
Manuel González Canché

Electronic Version Approved:
Suzanne Barbour
Dean of the Graduate School
The University of Georgia
May 2016
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction .............................................................................. 1</td>
</tr>
<tr>
<td>2</td>
<td>Literature and Conceptual Framework ........................................... 11</td>
</tr>
<tr>
<td></td>
<td>What Are the Origins of Performance Funding? .............................. 12</td>
</tr>
<tr>
<td></td>
<td>How Did Performance Funding Policies Evolve? ............................. 16</td>
</tr>
<tr>
<td></td>
<td>Why Do Policymakers Adopt Performance Funding Policies? ............... 19</td>
</tr>
<tr>
<td></td>
<td>Does Performance Funding Work? ................................................. 24</td>
</tr>
<tr>
<td></td>
<td>How Would Performance Funding Work? ........................................ 28</td>
</tr>
<tr>
<td></td>
<td>Void in the Literature .................................................................. 29</td>
</tr>
<tr>
<td></td>
<td>Theoretical Approach .................................................................... 32</td>
</tr>
<tr>
<td>3</td>
<td>Research Design and Methodology ................................................ 60</td>
</tr>
<tr>
<td></td>
<td>Statement of Purpose and Objectives ........................................... 61</td>
</tr>
<tr>
<td></td>
<td>Research Design ........................................................................... 62</td>
</tr>
<tr>
<td></td>
<td>Case Selection ............................................................................... 64</td>
</tr>
<tr>
<td></td>
<td>Data Collection and Sources ....................................................... 66</td>
</tr>
<tr>
<td></td>
<td>Data Analysis ................................................................................ 73</td>
</tr>
<tr>
<td></td>
<td>Validity and Reliability .................................................................. 75</td>
</tr>
<tr>
<td>4</td>
<td>Colorado ....................................................................................... 77</td>
</tr>
<tr>
<td></td>
<td>Higher Education Governance ....................................................... 77</td>
</tr>
<tr>
<td></td>
<td>Higher Education Funding .............................................................. 81</td>
</tr>
</tbody>
</table>
C  House Bill 14-1319, Colorado General Assembly...........................................228
D  House Bill 9, 81st Legislature in Texas.................................................................260
E  Weighting Matrix for I&O Funding for General Academic Institutions in Texas ....268
Chapter 1: Introduction

According to a 2011 poll conducted by the Pew Research Center, three-fourths of Americans believe that college is too expensive, and more than half believe that it does not provide good value (Taylor et al., 2011). In addition, a significant proportion of Americans (26 percent) indicated in a more recent poll that colleges have a negative effect on the country (The Pew Research Center, 2012). Guided by views relating to the lack of college affordability, low graduation rates, and higher education institutions’ inefficiencies, distrust of colleges and universities is widespread. These sentiments, coupled with declining state support for higher education, have re-invigorated higher education “reform” activity in the United States (Harnisch, 2011).

As part of this movement, numerous state-level policies intended to improve the efficiency and effectiveness of higher education have emerged (Snyder, 2015) and, in some cases, re-emerged (e.g., McLendon & Hearn, 2013). This trend is reflective of a shift, resembling the move in K-12 education policy (Elmore, Ladd, Abelmann, & Fuhrman, 1997), from input- and process-based accountability mechanisms to those based on outcomes, such as student performance. One such policy that has gained traction in states is performance-based funding—a method of tying state funding for public higher education institutions directly to institutions’ performance on pre-specified metrics (Burke, 2002). This approach represents a departure from the traditional, input-based method of allocating state funds to public colleges and universities, which has historically relied on enrollment counts.
Proponents of performance-based funding for higher education argue that funding models should incentivize institutions to improve student outcomes, which traditional (enrollment-based) formulas fail to do. Supporters of this funding tool also contend that performance funding formulas can help clarify institutional missions and enhance the transparency of campuses’ performance, ultimately leading to better outcomes. Some performance funding advocates also propose that performance funding can incent colleges and universities to increase their cost-efficiency by producing more degrees with less state support (Albright, 2011; Harnisch, 2011).

Drawn to these rationales, policymakers across the states have increasingly taken an interest in performance-based funding. In early 2016, all but five states were engaged in some level of activity (ranging from policy consideration to implementation) related to performance funding (Author’s calculations\(^1\); Friedel, Thornton, D’Amico, & Katsinas, 2013; National Conference of State Legislatures, 2014; Jones, 2014). The only states without any activity around performance funding included Delaware, Idaho, Nebraska, New Hampshire, and South Dakota.

Strong policy advocacy and support from governmental and non-governmental individuals and groups, including governors, legislators, national policy organizations, national educational groups, and philanthropic foundations have bolstered the momentum surrounding this policy instrument’s resurgence (Dougherty, Natow, Jones, Lahr, Pheatt, & Reddy, 2014). In fact, numerous organizations have identified performance funding as a top policy issue for higher education. These include state policy organizations such as the National Conference of State Legislatures (2014) and educational organizations, such as the American Association of State

\(^1\) As described in detail in Chapter 3, I tracked news articles relating to performance funding since November of 2013 using “Google Alerts,” a feature provided by the Google search engine. The Alerts sent me an e-mail notification when an article that mentioned some version of performance- or outcomes-based funding appeared on the internet.
Colleges and Universities (Harnisch, 2014). The Southern Regional Education Board also identified performance funding as one of two major tools to improve college completion in 2012.

Signaling the policy’s revived popularity and rapid diffusion, in 2015, ten states were in the process of developing a new performance-funding model. Notably, this diffusion has occurred in the absence of conclusive evidence of performance funding’s success in effecting intended outcomes, particularly degrees awarded and retention rates (Dougherty, Jones, Lahr, Natow, & Pheatt, 2014; Dougherty & Reddy, 2013; Hillman, Tandberg, & Gross, 2014; Hillman, Tandberg, & Hicklin-Fryar, 2015; Sanford & Hunter, 2011; Shin & Milton, 2004; Tandberg & Hillman, 2014; Tandberg, Hillman, & Barakat, 2014). Despite the dearth in evidence of performance funding’s effectiveness, many scholars caution against concluding that the policy is ineffective. According to these researchers and to other observers, the findings could be attributed to premature analyses (Dougherty et al., 2014; Complete College America, 2015). That is, the policies’ effects may be delayed, and researchers may be evaluating the policies before their impacts are manifest in the data on measured outcomes. Another contributing factor to the bleak findings on performance funding policies’ impacts might be that the variation across policy designs is not adequately captured in the multi-state studies. In other words, studies generally fail to consider the myriad differences in the performance funding policy tools across states.

While it is possible that the research designs for these impact studies might have overlooked more promising evidence of performance funding’s effectiveness, it is also conceivable that performance funding policies may not be living up to their fullest potential due to poor policy designs. For instance, South Carolina’s performance funding policy failure can be attributed to the policy’s complexity (i.e., 37 performance indicators), broad scope (100 percent of appropriations tied to performance), and unattainable and unrealistic goals (Gorbunov, 2013).
These factors – complexity, scope, and goals – are only a few of myriad dimensions across which performance funding policies vary. These include, for instance, the metrics that are used to measure performance (e.g., graduation rates, retention rates), scales or weights that differentially value metrics, and the percentage of funding that is tied to performance (i.e., from less than one percent in Illinois to 100 percent in Tennessee).

This variation is significant since different policy design elements are associated with varying stakes for institutions and their students. For instance, policies that focus on outcomes such as graduation rates and do not differentiate by campus missions might unfairly disadvantage institutions that serve students with lower levels of preparation for college or with circumstances hindering their ability to graduate “on-time.” On the other hand, a policy that assigns a “premium” to higher education institutions for underrepresented students’ completions is presumably less likely to result in decreased access for this population.

Furthermore, researchers have found that policy design is a contributing factor to policy discontinuation (Albright, 2011; Dougherty, Natow, & Vega, 2012; Zumeta, 2001), as in South Carolina’s case (Gorbunov, 2013). As another example, Dougherty and his colleagues (2012) examined three states that discontinued performance funding and contrasted it to Tennessee, which has had a longstanding program. The authors found that program demise in the three states that discontinued their programs could be attributed to the use of performance indicators that colleges and universities found invalid. In that study, not only was the policy content important for determining policy continuation, but also elements of the policy design process, including stakeholder input and support. Indeed, inadequate higher education representation (or “buy-in”) during the design of performance funding policies also contributes to policy abandonment (Burke, 2005; Dougherty & Reddy, 2013). In their analysis of eight states—six with performance
funding and two without it—Dougherty and colleagues (2013) note that “that the political origins of programs affect their later success and sustainability” and suggest that the presence or absence of certain actors (including those focused on equity) during the policy formulation process is instrumental for policy success.

Given the evidence of the impact of policy design content and processes on policy effectiveness and continuation, it is surprising that the performance funding literature is void of an analysis of performance funding policy designs. In light of the grand variation across policy designs, how do policy actors choose what elements to include or exclude from the policies? For instance, how did Pennsylvania decision-makers arrive at an indicator measuring (and rewarding) faculty diversity, which is unique among performance funding policies? And what led policy designers in Florida to select a metric measuring graduates’ wages? What were the processes leading up to these metrics’ inclusions in performance-funding models?

The nascent but growing performance funding literature fully disregards the factors that yield variation across policy designs. Despite growing attention to political processes leading to the dichotomous choice of adopting or not adopting a policy, scholars have neglected to explore how, with myriad options for policy content, decision-makers choose between policy elements. Furthermore, we know little about who gets to make decisions regarding policy content. Representation of various actors (e.g., community college representatives, flagship university officials, members of the business community, and representatives from equity-focused groups) in design deliberations might have significant implications for policy content and policy impact. Not only is formal representation—like formula development committee membership—worth examining, but also informal engagement. Moreover, what role do non-governmental actors, including leaders from educational and political organizations, play?
Given the prominence of performance funding policies across the states, the heterogeneity in policy designs, and these policies’ potential implications, this study examines an overlooked aspect of performance funding policies: their designs. In particular, this analysis explores both the contents of performance funding policy designs, or their architecture (Bobrow & Dryzek, 1987), as well as the policy design process. Grounded in a theory of policy design that draws attention to the value-laden elements of the policy process (Schneider & Ingram, 1993, 1997), this study of performance funding policy design pays particular attention to policy actors’ social constructions and their political power resources.

To examine these phenomena, this analysis employs a multiple case study research design and focuses on two states: Colorado and Texas. These cases exhibited substantial variation in their proposed policy content, which facilitated an analysis of factors, such as political power, that might explain variation across policy designs. Specifically, this study, which draws on interviews with 34 policy actors, over a dozen observations of legislative and state higher education agency proceedings, and a rich set of archival data, addresses the following research questions:

1. What populations (e.g., certain types of higher education institutions or students) are targeted through performance funding policy designs?

2. How are burdens and benefits distributed to various target populations through performance funding policy designs?

3. How is the policy problem defined and how does the policy design intend to address the stated problem?

4. To what extent do the following factors explain performance funding policy design decisions:
a. target populations’ social constructions (as deserving or undeserving of policy benefits or burdens),

b. target populations’ relative levels of political power resources, and

c. the role of knowledge and information in the policy design process?

By deconstructing performance funding policy designs to their constituent parts, the study focuses on how and why, given myriad options for performance funding policy designs, certain policy elements are chosen instead of others. This study also examines the factors leading to distinct outcomes in the policy design process in the two states. Specifically, it examines why the proposed funding formula in Colorado was approved while Texas’s proposed formula was rejected. These polar outcomes are also the subject of this inquiry.

Higher education policy actors and observers, including representatives from national organizations, have expressed interest in performance funding policy designs and have advocated for incorporating certain elements—like provisions to avoid significant losses in the first years of implementation—in these policies (e.g., Center for American Progress, 2012; Cavanaugh & Garland, 2012; Dougherty, Natow, Hare, Jones, & Vega, 2013; Hillman, Kelchen, & Goldrick-Rab, 2013; Jenkins, Wachen, Moore, & Shulock, 2012; Jones, 2013; Jones, 2014; SRI International, 2012). Some of this interest is due to equity considerations, since some actors worry that performance funding might have a disproportionately negative impact on institutions that serve students who have been traditionally underrepresented in higher education (e.g., Gasman, Samayoa, & Nguyen; Jones, 2014; Kahlenberg, 2015). Other performance funding policy observers have concerns regarding the efficacy of these policies in changing institutional behaviors to produce desired outcomes.
Recognizing this interest and the void in the performance funding literature, this study sheds light on performance funding policy designs. This study’s contribution extends beyond the performance funding policy literature. In fact, studies of policy design are virtually absent in the study of higher education policy, where research has focused overwhelmingly on policy adoption and policy impacts and evaluation. One exception is an analysis of the process of formulating undocumented student policies in two states; this study was published in a political science journal (Reich & Barth, 2010). Further, most studies of higher education policy have focused on the macro, examining states as units of analysis. This study extends that literature by zooming in and examining individual actors and their decision-making processes.

In addition to its focus on policy design, this study makes a significant contribution to the higher education policy literature by tuning in to the role of values in higher education policymaking. Drawing insights from the theory of policy design and social construction (Schneider & Ingram, 1993), this study explores the rationales underlying performance funding policies and proposals, and the assumptions that are made (e.g., about causal impacts) in design decisions. The theory that grounds this study also calls attention to problem definitions that lead to certain policy designs. It encourages asking, for example, if performance funding is proposed as a mechanism for addressing accountability concerns or as a tool to justify cuts to higher education institutions. Or is it a response to a variety of problems, as defined by the policy champions?

An understanding of the various problem definitions is instrumental to appropriately evaluating policies. To date, performance funding impact studies have generally searched for evidence of progress toward the goal stated in the legislative statute (e.g., increases in degrees awarded). But the written purpose may not be the actual or only goal of the policy. A deeper dive
into the process of designing performance funding policies will shed light on the actual problem definitions and how problems are addressed through performance funding. In a sense, this study takes us back to the beginning of the performance funding policy cycle to examine the mechanisms by which these policies are developed, in order to illuminate their potential implications. This analysis of designs is especially critical given evidence that costly failures in some instances of performance funding may be attributed to poor design, including the use of inappropriate metrics (Dougherty & Reddy, 2013; Gorbunov, 2013).

Moreover, this study of performance-based funding policy design, which evaluates who gains and who loses from certain policy designs, sheds light on what public higher education policy actors in the states value and prioritize. These priorities include goals for higher education and its perceived objectives (e.g., reducing inequality or enhancing human capital). In addition, some policy components and their respective weights might suggest that college completion is valued more highly than college access, which dominated higher education policy agendas in past years. Further, performance funding policy designs reveal the types of institutions that are privileged in the funding model (i.e., the “winners”), and an examination of the design process will reveal the reasons for their advantaged status.

This dissertation is structured as follows. Chapter 2 is presented in two parts. The first section reviews the literature on performance funding, outlining the evolution of this policy, the factors related to its adoption, and the evidence of its impacts. The second section of Chapter 2 presents the theoretical framework that grounds this study—the theory of policy design and social construction—which seeks to explain why certain policy designs are chosen in certain contexts, by linking the policy formulation process to policy design features. The discussion of
the theory highlights the nine elements of policies identified by Schneider and Ingram (1988, 1993), and the influence of social constructions and political power resources on policy designs.

Chapter 3 presents the research design. Specifically, this section explains case selection and describes the data sources and the data collection process. This chapter also includes a discussion of the qualitative techniques used to analyze the data, as well as methods used to enhance the study’s validity and reliability. Chapters 4 and 5 include the findings for Colorado and Texas, respectively. Each of these chapters begins by setting the context for performance funding in each of the states, outlining the higher education funding history at the state level and relevant organizational characteristics. The background section in each chapter is followed by descriptive findings relating to policy design, including the various elements that constitute policies. Each chapter concludes with a description of the process leading to the chosen policy designs. Finally, Chapter 6 presents a theoretical analysis of performance funding policy designs in Colorado Texas. The dissertation concludes with a discussion of the study’s theoretical and practical implications and recommendations for future research.
Chapter 2: Literature and Conceptual Framework

Traditionally, state-level policymakers have employed one of two primary methods for funding colleges and universities: base-plus and formula funding. The first method that was used to determine state allocations for higher education institutions, the base-plus method, is still used in many states today. This method is incremental—it consists of starting with previous-year allocations and making adjustments (e.g., for inflationary increases) (McKeown, 1989). The primary criticisms of this system of funding colleges and universities are that it: (1) disregards state-level policy priorities and thus is not strategic, and (2) is disconnected from the changing circumstances of the higher education institutions. Since the base-plus method is overwhelmingly characterized by across-the-board, untargeted increments, this funding mechanism does not address the conditions of particular institutions (e.g., enrollment hikes). Further, under the base-plus funding model, funding determinations are highly vulnerable to political influences (Hearn, 2015; McKeown-Moak, 1989, 1999).

The second method of funding colleges and universities was implemented in some states in an effort to address some of the aforementioned weaknesses of the base-plus model and in response to substantial rises in enrollments following World War II (Hearn, 2015). This second method involves using formulas, which consist of metrics and sometimes weights or scales, to determine funding. Most formula metrics are based on enrollment counts, which makes this funding model more sensitive to volume and to institutions’ costs. Other advantages of this funding method include increased transparency of the rationales for funding decisions and enhanced predictability across funding cycles.
According to McKeown-Moak (1999), if designed well, funding formulas have the potential to buffer against political influence over funding decisions. On the other hand, funding formulas, though purportedly more objective than the base-plus method, are developed within political processes and laden with values. Hence, they are not necessarily immune from lobbying and political influence. These funding methods are also more complex and expensive than base-plus funding since they require additional administrative tasks and data collection. Additionally, the early formulas were criticized for not being strategic (i.e., not tying funding to state priorities and goals) and for incentivizing enrollment while neglecting student progress and success. Starting in the late 1970s, state policymakers have attempted to address this last criticism by incorporating performance accountability in their funding decisions.

While the base-plus method and funding formulas are understood to be the primary methods used by state actors to allocate funds to colleges and universities, in some states, policymakers use more discretionary approaches. Sometimes, for instance, allocations are based on legislative priorities. Many states use a combination of formulas, base-plus, and discretionary tools to determine funding for public colleges and universities. Notably, both of these methods had been entirely input- or process-based (i.e., driven primarily by enrollments and costs)—that is, until the emergence of performance funding (Lingenfelter, 2008).

What Are the Origins of Performance Funding?

In 1979, Tennessee became the first state to integrate performance metrics—like student learning outcomes—in the formula that policymakers used to determine funding for public higher education institutions. This significant policy change took place after almost five years of deliberations (Banta, Rudolph, Van Dyke, & Fisher, 1996; Dumont, 1980). The new method, performance-based funding (or performance funding), consisted of formulaically tying a specific
amount of state funds directly to public higher education institutions’ performance on pre-
specified measures (Dumont, 1980). In particular, Tennessee’s policy granted colleges and
universities an opportunity to earn an additional two percent of instructional funds for
accrediting eligible programs and for assessing student learning (Banta et al., 1996; Borden &
Banta, 1994). Tennessee’s focus quickly evolved beyond accreditation and student learning
outcomes to include incentives for evaluation planning and improvement (1981), placement rates
for 2-year institutions (1983), and persistence to graduation for all students (1993). The 1993
version of performance funding also measured success metrics for minority students specifically.

Performance funding for higher education emerged in the context of a national cultural
transition in management in the 1980s known as New Public Management (Ferlie, Ashburner,
and streamline processes in the public sector by decentralizing governance structures and
introducing alternative methods of service delivery. Moreover, the new regime was characterized
by a focus on performance for results. Pollitt (1993) notes the impact of New Public
Management on higher education in the 1990s, characterized by an increased emphasis on higher
education institutions’ performance outcomes.

This time period also coincides with a political and ideological shift in the United States,
with Republicans gaining control of both chambers of Congress for the first time in 40 years.
This shift may be associated with an increased acceptance of market-driven principles in the
public sector, including in public education and higher education (Rich, 2004). At the same time,
due to a recession, competition for scarce resources among public services was augmented. Due
to higher education’s discretionary nature on public budgets, it became the target of cuts
(Delaney & Doyle, 2011). Additionally, during starting in the 1980s, policymakers began to
scrutinize higher education institutions more intensely. In particular, state leaders, especially governors, began to criticize colleges and universities’ graduation rates and called for studies of institutions’ performance (National Governors Association, 1986). The higher education accountability movement also appears to have followed K-12 state-level assessment programs, resulting in the adoption of some K-12-“flavored” reforms, like student achievement tests (Ewell, 1993; Serban & Burke, 1998).

Preceding these performance accountability systems, state policymakers had been focused on ensuring that higher education institutions accounted for their expenditures and complied with rules and regulations (Burke & Minassians, 2002; McLendon & Hearn, 2013). McLendon & Hearn (2013) describe the paradigm shift as going from striking a balance between state oversight and campus autonomy to focusing on performance results.

Numerous states followed Tennessee’s lead in requiring institutions to report their performance on metrics like those included in Tennessee’s early performance funding program. By 1997, 13 states had adopted performance funding (Burke & Serban, 1998). New performance-funding models also included other measures of performance, such as, most commonly, graduation rates.

Performance funding is the strongest of three performance accountability tools that emerged in the 1990s and 2000s (Burke & Minassians, 2001; Burke & Minassians, 2003). Performance funding and the other two—performance budgeting and performance reporting—are distinguished by the extent to which each method ties institutions’ performance to state funding decisions (from most directly to least directly, respectively). By 2003, all but four states had a performance reporting system (Serban & Burke, 1998).
Indeed, performance reporting was the most common higher education accountability device employed in the 1990s and early 2000s. This accountability tool does not link performance to funding; it only requires public higher education institutions to report on their performance (Burke & Minassians, 2001; Burke & Minassians, 2002; Burke & Minassians, 2003). This method became increasingly popular following the publication of state-level “Report Cards” by the National Center for Public Policy in Higher Education, which evaluated states on metrics related to college preparation, participation, affordability, completion, societal benefits contributed by college graduates, and learning outcomes (Burke & Minassians, 2001).

Under performance reporting systems, policymakers assess statewide goals and determine performance indicators. Higher education institutions are then required to report on their performance on those indicators. This method relies on the publicity of information—encouraging comparisons and competition between institutions—rather than on budget allocations, to encourage improvements in institutional performance.

The second performance accountability tool, which loosely connects funding to performance, is performance-based budgeting. This method consists of state government officials announcing that they will consider performance as one of multiple factors used to determine budget allocations (Burke & Minassians, 2003). Under this performance accountability system, policymakers do not formulaically link performance measures to funding. By 2003, 35 states had adopted a performance budgeting program (Burke, 2005). Many of these states also employed performance reporting. In performance budgeting and performance reporting, the same performance indicators may be used as in performance funding systems. The difference is that in the former two methods, policymakers are not committed to tying funding to performance (Burke & Minnasians, 2003).
Finally, performance-based funding involves direct ties, usually through a funding formula, between state allocations for colleges and universities and these institutions’ performance on pre-selected metrics. It is important to note that, while performance funding is an accountability policy, it is also a funding policy. And performance funding was employed both to draw attention to institutions performance and to create more efficiencies in public funding and justify decreased support (Ashworth, 1994). As such, policymakers were faced with alternatives to the accountability policy (i.e., performance reporting or performance budgeting) as well as to methods of budgeting. Specifically, other budgeting tools that were considered and used in some cases are management by objectives, zero-based budgeting, program planning budgeting systems, and total quality management (Ashworth, 1994).

The duality in goals (i.e., accountability and efficiency in funding) makes performance funding a unique type of policy instrument. While the process of determining funds for higher education institutions is recurrent and relatively consistent, the adoption of an accountability policy is considered a policy innovation—“a policy or program that is new to the states adopting it” (Walker, 1969, p. 881). The process of adopting an innovation might invite new policy actors to a table traditionally occupied by familiar faces. This feature of performance funding is important for understanding performance funding policy design.

**How Did Performance Funding Policies Evolve?**

Due to a combination of accountability pressures and declines in state funding for higher education, performance funding policies gained traction in the 1990s. As previously noted, in 1997, 13 states had adopted performance funding (Burke & Serban, 1998); the policy had spread to 18 states by 2002 (Burke & Minassians, 2002). Since Tennessee’s adoption, over half of the United States (as well as other countries), have adopted some version of a performance funding
program (Dougherty, Natow, Hare, Jones, & Vega, 2011; Jones, 2013; McLendon, Hearn, & Deaton, 2006; Snyder, 2015). According to Dougherty and colleagues’ estimates, in mid-2014, 26 states were operating a performance funding program. As of early 2016, at least 30 states were implementing some form of the performance funding for either two- or four-year institutions, or both, according to data from Google Alerts and numerous reports (Friedel, Thornton, D’Amico, & Katsinas, 2013; National Conference of State Legislatures, 2014; Jones, 2014). All but five states had some level of policy activity around performance funding (from policy consideration to implementation).

Despite this popularity, approximately half of the early programs were short-lived due to opposition from higher education institutions, decreases in state funding for higher education, and policymaker turnover resulting in the loss of performance funding policy champions (Dougherty, Natow, & Vega, 2012; El-Khawas, 2005). Some other challenges to effective implementation, which led to policy abandonment, include inadequate data availability (Dougherty & Reddy, 2013; McLendon & Hearn, 2013), uneven knowledge about the formula on campuses, and insufficient capacity for organizational learning (Dougherty, Natow, & Vega, 2012; Dougherty & Reddy, 2013). Following the discontinuation of many early programs, in recent years, state higher education decision-makers have expressed a renewed interest in this funding approach. This new wave of adoptions began in 2007 (Dougherty et al., 2014). Notably, the prominence of renewed interest in performance funding models may be overstated. Organizations like the National Conference for State Legislatures (NCSL) report not only on states that have implemented performance funding, but also on those that occupy a space

---

2 Many of those states have since readopted a new performance funding policy.
between formally discussing the policy and implementing it. Some states—like Georgia—have expressed interest in performance funding but are not actively pursuing it. Since, according to NCSL and other organizations, these states are considered to be in transition, the counts of states moving toward performance funding may be inflated.

Some of these “second wave” policies are different from the original models in that they place a stronger focus on degree production and workforce needs. Many of the newer policies also connect institutional missions to metrics and outcomes. Common performance metrics used in these newer programs include graduation and retention rates. Some call this new era “Performance Funding 2.0” or outcomes-based funding policies (Lederman, 2008).

Despite widespread use of this nomenclature, little agreement exists regarding the distinction between 1.0 and 2.0 policies. Snyder (2013) posits that earlier programs were too complicated, did not adequately account for mission differentiation, and were contrary to the access mission. Dougherty and colleagues (2012) associate performance funding 2.0 with policies that incorporate performance indicators within existing funding mechanisms (as opposed to add-on funding). Albright (2011) defines this new iteration as one in which the funding formulas focus on degree and course completion, as opposed to student satisfaction and process metrics. Similarly, according to McLendon and Hearn (2013), this new round of programs is characterized by a stronger focus on degree production and attention to workforce needs.

These latter definitions align with what Jones (2013) refers to as the preferred term for these policies: “outcomes-based” funding. He posits that the change in nomenclature is

---

3 The distinction between base and add-on funds is not always clear. In this case, the state was adding funds to the higher education budget, which is partly why the policy was approved. In other cases, performance funding may be “add-on,” but are coupled with budget cuts. The cuts might bring the overall state funding to the same or lower levels as without performance funding. Thus, because performance funding decisions are often related to overall budget increases or decreases, the distinction between “base” or “add-on” funds is not always a meaningful one.
significant, since “performance” can refer to anything, including growing enrollments and institutional attention to ranking “schemes,” but what states should reward are outcomes, especially increased degree production. A more critical interpretation of the semantic distinction is that it is a fabricated way to justify the re-adoption of what have largely been viewed as policy failures. Although some recently-adopted policy designs are regarded as exhibiting increased power, many new performance funding policies take on a 1.0 flavor. For example, various new adoptions involve the distribution of additional money for higher education institutions that perform well on certain metrics, a characteristic that is commonly associated with earlier models of performance funding (Snyder, 2015). Given this variation in nomenclature, this study refers to the policies that are the subject of this inquiry as “performance funding” or “performance-based funding” policies.

To date, the performance funding literature has followed two primary tracks—policy adoption (e.g., Dougherty, Natow, Hare, Jones, & Vega, 2013; McLendon et al., 2006) and policy evaluation and analysis (e.g., Dougherty & Reddy, 2013; Hillman, Tandberg, & Gross, 2014; Hillman, Tandberg & Hicklin-Fryar, 2015; Sanford & Hunter, 2011; Tandberg, Hillman, & Barakat, 2013) —and has overwhelmingly disregarded the state-level processes leading to performance funding policy designs. To situate this study in the growing body of literature on performance funding, the following sections review the current literature on the factors associated with the adoption of performance funding policies and the evidence of performance funding policy impacts.

**Why Do Policymakers Adopt Performance Funding Policies?**

Researchers have examined state-level factors associated with performance funding policies both quantitatively and qualitatively. McLendon, Heller, and Young (2005) conducted
one of the earliest analyses of performance funding adoptions. In particular, the authors employed an event history analysis to examine influences on states’ adoptions of finance and accountability innovations. McLendon and colleagues categorized three types of policies as “accountability” tools: performance funding, performance budgeting, and assessment policies. They then examines the variables that accounted for the adoption of these policies in the aggregate. The variables they included in the model comprised: state population, median state income, state higher education enrollment and changes in enrollment, higher education governance structure, diffusion from geographically proximal states, and political influences. Specifically, the political variables in the model were unified party control, legislative professionalism, governor’s power, interparty competition, and whether the policy was adopted in the same year as a gubernatorial election. The authors found that, out of their hypothesized variables, only state median income is associated with the adoption of accountability policies, including performance budgeting and funding.

A subsequent study by McLendon, Hearn, and Deaton (2006) explored the variables associated with performance funding, performance budgeting, and performance reporting policies adopted between 1979 and 2002. In contrast to the McLendon et al., (2005) study, this analysis focused on performance accountability policies exclusively and employed separate models for the two funding methods (i.e., performance funding and performance budgeting). Notably, the authors failed to find statistical significance associated with any of the predictors included in their models on the adoption of performance reporting, the weakest of the three performance accountability regimes.

The authors did find that two factors were associated with changes in likelihoods of adopting both performance funding and performance budgeting: the percentage of Republican
legislators and whether a consolidated governing board served as the state higher education governance structure (as opposed to a coordinating board). Specifically, McLendon, Hearn, and Deaton found that stronger Republican representation in legislatures was associated with an increased likelihood of adopting a performance funding policy. On the other hand, weaker Republican representation (or higher percentage of Democrats) increased the likelihood of adopting a performance budgeting policy. Regarding higher education governance structures, states with consolidated governing boards were less likely to adopt performance-based funding since they tend to protect the interests of institutions and would “avoid rigorous performance regimes that would firmly hold constituent campuses to account” (p. 19). Regional diffusion effects and demographic, economic, structural, and other political or ideological characteristics were not significant predictors of the adoption of performance funding programs.

Like McLendon and colleagues (2006), the most recent quantitative study on the predictors of performance funding policy adoption also finds that the presence of a coordinating board and stronger Republican representation are associated with an increased likelihood of adopting performance funding (Gorbunov, 2013). Gorbunov’s analysis distinguishes between weak and strong coordinating boards and finds that both are related to performance funding policy adoption. Extending the knowledge base relating to performance funding policy adoptions, Gorbunov’s study also indicates that increases in enrollment at public colleges and universities are associated with significant increases in the probability of performance funding policy adoptions. Finally, Gorbunov (2013) finds some evidence of one type of policy diffusion. In particular, states that are geographically close to states with successful (i.e., long-standing operational) policies are more likely to adopt performance funding. However, through further
analysis, he finds that a small number of states were driving this finding and that the estimates are imprecise.

A number of qualitative studies complement these important quantitative examinations of performance funding policy adoptions, both confirming and extending previous findings. For instance, in a study of performance funding adoption in six states, the authors examine influences on performance funding policy adoptions during the first wave of implementation (Dougherty et al., 2013). The initial findings relate to the actors involved in the policy agenda-setting and adoption process. First, consistent with McLendon and colleagues (2006) and Gorbunov’s (2013) findings, the authors find that state higher education coordinating board officials were key drivers behind performance funding policy adoption. In three of the six states, coordinating board representatives were the primary policy champions. The main rationale for supporting performance funding among members of this coalition was to secure additional funds for higher education institutions (rather than to increase their accountability).

Other major proponents of these policies were state officials, including governors, business leaders, and legislators. Consistent with Gorbunov (2013) and McLendon, Hearn, and Deaton’s (2006) findings, Republican legislators were especially supportive of performance funding (Dougherty et al., 2013). In most states, the business community was influential in framing the political debate around efficiencies in public higher education institutions. State policy organizations (i.e., the Southern Regional Education Board and the National Conference of State Legislatures) played a role in performance funding policy adoption in two of the six states, and outside experts were influential in all but one state (Dougherty et al., 2013).

Most of the resistance to performance funding came from campus leaders. Higher education officials had mixed attitudes, however. In one state, the higher education community
was supportive of performance funding because the program would bring new money to the institutions. In two states, higher education officials supported the policies in an effort to preempt what they perceived to be harsher accountability policies (e.g., tying a greater percentage of funding to performance). Some higher education officials viewed the new policies as an excuse for cutting funding or felt that the policies were infringing upon campus autonomy.

In addition to the actors involved in agenda-setting and policy adoption, Dougherty and colleagues (2013) examined contextual factors that facilitated the consideration and ultimate adoption of performance funding during the first wave of implementation. Through their analysis, they found that in all but one state included in the study, a change in government control was associated with the consideration of performance funding. In most of these states, the change was from a Democratic to a Republican legislature or governor. Further, anti-tax sentiment in four of the six states (i.e., Florida, Missouri, Tennessee, and Washington) was also associated with the consideration of performance funding.

In a subsequent study, Dougherty and colleagues (2014) examined the newer policies in Tennessee, Ohio, and Indiana. The authors conceptualize these versions as “Wave 2” and 2.0 policies, given their emphasis on outcomes metrics and the relatively larger proportion of funding tied to performance. In this study, the authors find that the Great Recession of 2007 and 2009 was an important contextual factor in the consideration of these newer versions of performance funding. The distinct role of coordinating boards in this second wave of policies is also notable. While coordinating boards were associated with performance funding policy adoption in both iterations of performance funding, as previously noted, their rationales and objectives were distinct between the two waves. In the early programs, coordinating board representatives supported performance funding to secure additional funds for colleges and
universities. In Wave 2, however, coordinating board officials were motivated by an effort to incentivize better performance from higher education institutions, particularly in light of growing pressures from policymakers to become more efficient and to increase degree production.

In further contrast to the first wave of implementations, governors played a much more prominent role in the consideration and adoption of these three newer policies (i.e., Indiana, Ohio, and Tennessee’s policies). Another distinction that the authors identify between policies in the first wave and those in Tennessee, Ohio, and Indiana’s newer versions is the role of outside actors. In particular, national policy and philanthropic organizations, including Complete College America and the Lumina Foundation for Education, were more active in this second round of adoptions (Dougherty et al., 2014).

**Does Performance Funding Work?**

The present research evaluating performance funding has found the relationship between these policies and improved intended outcomes (i.e., graduation and retention rates) unsubstantiated (e.g., Dougherty & Reddy, 2013; Hall, 2000; Jenkins, Ellwein, & Boswell, 2009; Sanford & Hunter, 2011; Shin & Milton, 2001). In 2013, Dougherty and Reddy published an extensive literature review on the effect of performance funding programs. In particular, they examined immediate, intermediate, ultimate, and unintended impacts of performance funding policies. The authors concluded that there is not enough evidence that the programs improve “ultimate” or intended outcomes, such as retention and completion.

With respect to immediate impacts, the authors reported evidence of changes in funding, increased awareness of state goals and of institutional performance, and increased status competition between institutions in states with performance funding. Intermediate effects included increased capacity for institutional learning, increased use of data, and changes in
structures and in programs and policies to improve student outcomes. For example, at the University of Tennessee at Knoxville, the College of Education restructured departments into smaller, faculty-designated units in response to the adoption of the state’s early performance funding policy (Hall, 2000). Another group of scholars found evidence of increased emphasis on developmental education in community colleges in Washington (Jenkins et al., 2009).

Concerning ultimate impacts, Dougherty and Hong (2006) found improvements in completion in Florida, Ohio, and Washington following performance funding implementation in the states. In Florida, enrollments increased at a significantly slower rate than the completion increases. However, in all three cases, other potential explanations for increases in completions were not accounted for, and the authors warn against concluding a causal relationship between the performance funding systems and the improvements. In fact, numerous multivariate quantitative studies have found no such impact (Sanford & Hunter, 2011; Shin, 2010; Shin & Milton, 2001; Volkwein & Tandberg, 2008).

A handful of recent quasi-experimental studies using difference-in-differences designs have found, on aggregate, no significant positive effects of performance funding policies on completion (Hillman, Tandberg, & Gross, 2014; Hillman, Tandberg, & Hicklin-Fryar, 2015; Tandberg & Hillman, 2014; Tandberg, Hillman, & Barakat, 2014). In the Hillman and colleagues’ (2014) study, the authors compared Pennsylvania State System of Higher Education (PASSHE) campuses to similar colleges in other states and to colleges in neighboring states. Although they found modest improvements in completion rates when compared to institutions in

---

4 This early policy involved tying approximately 5 percent of funding (add-on) to performance. Since then, the state’s policy has changed significantly, tying nearly 100 percent of base funding to performance. The metrics used to measure performance also have changed significantly with an increased emphasis on outcomes, such as graduation and retention, in the newest version.
neighboring states, they conclude that Pennsylvania’s 2000 performance funding policy was not effective in increasing completion rates since it did not increase completions relative to similar campuses that were not affected by a performance funding policy.

Another study that also employed a difference-in-differences quasi-experimental design examined the impact of performance funding on two-year institutions (Tandberg, Hillman, & Barakat, 2014). In that study, the findings of performance funding policies’ effect were mixed. The authors found improvements in completion rates in four of 19 states, only one of which still had a performance funding program in place at the time of the study (i.e., Washington). In nine states, the patterns were inconclusive, and in six states, performance funding policies were actually associated with a decline in completion rates.

While most of the research on performance funding finds little to no causal relationship between this policy and improvements on proposed outcomes, two recent studies suggest some potential for these policies to drive increases in attainment rates. In particular, these analyses reveal improvements in degrees awarded for some policies that have been operational for longer periods of time are. Specifically, Hillman, Tandberg, and Hicklin-Fryar (2015) find that performance funding in Washington State produced greater numbers of short-term certificates. While this is promising, the policy was also associated with fewer long-term credentials (Hillman et al., 2015).

Similarly, a study by Tandberg and Hillman (2014) examined the impact of numerous performance funding programs since 1990 on bachelor’s degree completions. While the authors found, on aggregate, no positive effect of performance funding policies on completions, they found small increases in degrees awarded in states with performance funding programs that had been operational for over seven years. The authors concluded that the findings may not
not necessarily suggest that performance funding does not work. They noted that it is possible that, with adequate policy design and implementation and sufficient duration of programs, these policies may improve college completion rates in four-year higher education institutions. However, more research is needed, particularly with attention to policy design elements, since “it is difficult to advocate for (and to sustain) a program solely on the potential of generating positive benefits several years down the road; especially with so little evidence linking performance funding to positive outcomes” (Tandberg & Hillman, 2014, p.240).

The evidence of policy impact also points to some negative unintended consequences of performance funding policies. Recent studies have shown, for instance, that some institutions find mechanisms for “gaming the system,” such as by lowering standards or by creating new credentials that would “count” for additional funding (Dougherty et al., 2013; Lahr et al., 2015; Ness, Deupree, & Gándara, 2014). This finding indicating that campuses create new credentials—some of which may not hold value in the labor market—is troubling and may partly explain Hillman, Tandberg, and Hicklin-Fryar’s (2015) findings of increases in short-term certificates in Washington.

In a study of both potential and actual unintended consequences of performance funding, Lahr and colleagues find that the most common unintended impacts of performance funding policies are: (1) increased selectivity of colleges, and (2) weakening of academic standards. Indeed, restricting admissions is one of the major concerns with performance funding advanced by equity-oriented groups. Institutions have the ability to become more selective either by explicitly altering admissions requirements or through implicit mechanisms, such as limiting certain types of financial aid (e.g., need based), creating programs within institutions that are more selective, or limiting the geographic scope of their recruitment efforts.
Other consequences that were not overtly anticipated or intended by performance funding policy designers include the costs of compliance, reduced institutional cooperation, weakening of shared academic governance, and changes in institutional morale. In an evaluation of four campuses’ responses to Tennessee’s 2010 outcomes-based funding policy, Ness, Deupree, and Gándara (2015) also find that the new state funding policy resulted in declines in morale, particularly at the institutions that lost funding under the new model. Other studies have also found evidence of performance funding programs’ negative unintended consequences and shed light on some policy designs’ perverse incentives. In a Florida community college, for instance, numerous faculty members advised students to take courses that they did not need because that would result in increased funding for the institution (Bell, 2005). Also in Florida, institutions removed obstacles to graduation, including hard-to-pass course requirements, to maximize their funding under the new model.

How Would Performance Funding Work?

Only one study in higher education has examined the tools that are employed through performance funding policies (Dougherty, Jones, Lahr, Natow, Pheatt, & Reddy, 2014). In particular, the study by Dougherty and colleagues examined performance funding policies in three states—Indiana, Ohio, and Tennessee—and found that the primary mechanism used to incentivize changes in behavior are financial inducements. In other words, policymakers assume that campus actors will improve their performance (in ways desired by the state) in an effort to earn the funds that are tied to performance metrics.

The study also identifies policy instruments that accompany performance accountability policies in K-12, but that are overwhelmingly absent from performance funding policy designs in Indiana, Ohio, and Tennessee. Specifically, these other instruments include building up
institutions’ capacity to engage in organizational learning, and providing resources, including information, that would help institutions achieve the policies’ goals. The authors note that these instruments’ absence in higher education performance funding policies might account for their failure to achieve intended outcomes.

**Void in the Literature**

In a 1994 editorial piece published in Change, the commissioner of the Texas Higher Education Coordinating Board at the time observed:

Some of those promoting the performance-based approach are hoping to find an ideal mathematical algorithm into which all of the data can be fed and out of which will come a perfect, formularized distribution of resources. This number crunching ideally would be ‘market-driven,’ would be objective, and would provide self-evident answers that no one could dispute… and that would be politically acceptable to all parties. But…uniform agreements on the values that would have to be cranked into such a formula do not exist…” (Ashworth, 1994, p. 11).

This quote, published in the early days of performance funding, beautifully captures the discrepancies between the hopes for performance funding and the implementation realities. Further, Ashworth anticipates the challenges in performance funding policy design, given the myriad possibilities, for policy elements.

Despite the importance of policy design, to which the performance funding literature alludes, an examination of policy designs remains conspicuously absent from the growing literature around this salient policy. In essence, we lack insights regarding how and why certain performance metrics and other policy design elements are chosen instead of others. Furthermore, we know little about who makes decisions regarding performance funding policy designs.

**The importance of policy design.** Many performance funding programs have been costly failures and some have had unintended consequences. Dougherty and his colleagues (2011) estimate that at least two-thirds of states that have had performance funding programs
have abandoned these programs. On the other hand, there is some evidence of positive, intended immediate and intermediate impacts (like enhancing advising services for students and drawing attention to performance outcomes within institutions) in some states with performance funding (Dougherty & Reddy, 2013; Ness, Deupree, & Gándara, 2015). As previously noted, poor design might also result in unintended consequences, including restricting admission to higher education institutions for students who may not have other postsecondary options, and diluting the quality of higher education. Policy success or failure can be attributed to poor design, including the performance metrics used, the formula’s simplicity or complexity, the portion of funding connected to performance, and the recognition of varying institutional missions (Albright, 2011; Dougherty et al., 2011).

**Policy design options.** Indicators used to measure performance include, most commonly, retention and completion metrics, including various types of degrees and certificates awarded. Other examples of performance metrics include job placement rates, wages of graduates, premiums for STEM degrees, faculty productivity, external research funding, transfers, and learning outcomes. Formulas can be simple, such as Arizona’s, which weighs each of its three metrics by 33 percent, or more complex, like South Carolina’s policy, which included over 30 metrics.

Policies also vary in the portion of funding that is based on performance. Tennessee’s first performance funding formula, for instance, tied only two percent of funding to performance, a relatively small amount which eventually increased to 5.45%. Tennessee is the ultimate example of how some formulas have changed over time, since Tennessee now allocates about 85 percent of funding for public higher education institutions based on performance metrics, weights and scales. In contrast, Illinois ties less than one percent of funding to performance.
Notably, most states that are implementing performance funding link less than five percent of funding to performance (Snyder, 2015).

The funding tied to performance can also be distributed in different ways. Some performance funding programs are “add-on.” In this scenario, higher education institutions still receive base funding according to the mechanism they have for determining allocations (e.g., enrollment-based formula or “base plus”), but are eligible to receive additional funding based on their performance on pre-specified indicators. In other formulas, the performance-based portion is contingent upon additional funding in states, again not penalizing institutions. In more extreme cases, like in Tennessee, almost all of the funding allocated to public colleges and universities is tied to performance.

Other policy design considerations include premiums for priorities identified by policy designers. For instance, some policies include premiums for underrepresented populations (e.g., low-income students, adult students, ethnic minorities, “at-risk” students) to address the concern that performance funding policies will limit access to higher education, particularly for certain target populations. Other premiums are designed to target highly-desirable areas of study, such as Science, Technology, Education and Math (STEM) fields or nursing. Other decisions to be made in performance funding policy design include what data points to use (e.g., single-year statistics or multi-year averages) and whether to employ stop-loss, hold harmless, or phase-in provisions to shield higher education institutions from drastic losses, particularly in the initial years of program implementation. Moreover, some programs include quality assurance components, including Tennessee’s original performance funding program, in an effort to avoid diluting the quality of education. Numerous states use different formulas for different sectors and
some—like Washington and Massachusetts—only have a performance funding program in one sector.

Indeed, performance funding policies, which constitute both funding policies and accountability tools, are complex, and their design can consist of infinite possible combinations of policy elements. Varying design components (e.g., the percent tied to performance metrics) can have vastly distinct consequences. Thus, the process of making decisions about these elements is critical. The presence of certain actors and the absence of others, the rationales used to justify policy components, and the extent to which various sources of information are used or unused in this process, can have profound differential impacts on institutions and the students that they serve.

Highlighting the importance of policy design in early performance funding programs, Zumeta (2001, p. 172), noted that “…the choice of specific indicators, success thresholds, and weights in allocating state dollars has proved difficult and controversial. This is hardly surprising. The goals and priorities of various stakeholders differ significantly, and the stakes are large and tangible…” Indeed, Zumeta had identified, early on, the role of personal values and interests in performance funding policy formulation and the importance of stakeholder representation in the process. Recognizing the significance of these elements and the substantial void in the performance funding literature, this study examines performance funding policy design in Colorado and Texas. In particular, the theory of policy design and social construction, described in the following section, ground this examination.

**Theoretical Approach**

In a paper commissioned by the Lumina Foundation for Education, Hearn evaluated the promise of funding formulas relative to incremental base-plus approaches:
The formulas could help buttress equity across institutions and systems by removing rationally inexplicable discrepancies in funding levels, but any formula in the end reflects political choice. That is, despite efforts to tie subsidies to costs, formulas inevitably require putting subjective judgments in mathematical terms” (2015, p. 6).

As articulated by Hearn, funding formula considerations, despite their promise of increased objectivity, are inherently value-laden and developed through political processes. The theoretical framework used to ground this study recognizes the role of values in the policy process, including the subjectivity in judgments that, as Hearn (2015) suggests, are translated into data points in funding formulas. This framework is especially useful for examining performance funding policies, which can take on numerous forms. The implications of varying performance funding policy designs are substantial, since funding formulas with different components can have diverse impacts on outcomes. Specific policy designs can also foster or inhibit certain unintended consequences, including ones outlined in the previous chapter. Not only do distinct formulas have the potential to incent different behaviors, but also, by allocating resources differently, they will send messages about what is valued in higher education within a particular state.

To study the factors that lead to certain performance funding policy designs, this study draws on one particular theory of policy design: policy design and social construction theory (Schneider & Ingram, 1993), on which the authors expound in a book titled Policy Design for Democracy (1997). This chapter introduces policy design frameworks and summarizes the trajectory of the policy design literature. It then presents a rationale for selecting the theory of policy design and social construction, in lieu of other policy design and policy process frameworks, to anchor this study. The last and most extensive section in this chapter outlines the chosen theory’s objective, its key elements and propositions, and its application to this study.
Conceptual approaches to the study of policy design. This dissertation, which asks how performance funding policies are designed in two states, is grounded primarily in conceptual approaches to the study of policy design (Howlett, Ramesh & Perl, 1995; Linder & Peters, 1988; Schneider & Ingram, 1997). Policy design refers to both policy content—or policy design as a noun—and the policy design process, or policy design as a verb (May, 2003). Howlett and Lejano (2012) also distinguish between these two aspects of policy design (i.e., the substantive and procedural components). The substantive component of policy design comprises “a set of alternative arrangements potentially capable of addressing some aspect of a policy problem” (Howlett & Lejano, 2012, p. 360). Schneider and Ingram define policy content as “the structural logic of public policy” (1988, p. 63). Conceptual frameworks for studying policy design recognize that policies contain an “architecture,” part of which is the policy text (Bobrow & Dryzek, 1987). The other element of a policy’s architecture, according to Bobrow and Dryzek (1987), is the set of practices surrounding the policy.

The policy design process consists of the activities leading to the selection of certain policy designs (Howlett & Lejano, 2012). Drawing on Bobrow (2006) and Bobrow and Dryzek (1987), Howlett and Lejano define the policy design process as:

the effort to more or less systematically develop efficient and effective policies through the application of knowledge about policy means gained from experience, and reason, to the development and adoption of courses of action that are likely to succeed in attaining their desired goals or aims” (2012, p. 359).

Policy design work assumes bounded rationality (Simon, 1982), a concept that proposes that humans have limits to their cognition and thus cannot consider all possible approaches in making decisions. Given this reality and the fact that decisions are framed by ideological, cultural, and other factors, humans do not make purely rational choices. The policy design
framework posits that policymakers will focus on some aspect of a policy problem and not others and will not have access to all possible solutions.

Policy design occurs during various stages of the policy process, most notably during policy formulation and policy implementation (Howlett & Lejano, 2012; Howlett, Ramesh, & Perl, 2009). Formulation refers to the process of “identifying and/or crafting set of policy alternatives to address a problem, and narrowing set of solutions in preparation for policy decision” (Sidney, 2009, p. 79). Relative to earlier phases of the policy process, including agenda-setting, policy formulation tends to take place privately, including in bureaucracies, special taskforce meetings, and think tanks (Dye, 2002).

Implementation is the process of carrying out a policy decision (Sabatier & Mazmanian, 1980) or, put another way, is the “value added to design” (Schneider & Ingram, 1997, p. 89). According to Cerych and Sabatier (1986), programs are assigned to an organization for implementation following policy adoption. Implementation in higher education usually takes place in two stages, distinguished by the primary actors involved in each phase. The first stage of implementation typically involves fleshing out a policy in a bureaucratic agency, usually the state’s higher education agency (Cerych & Sabatier, 1986; Gornitzka et al., 2005). The second phase involves day-to-day applications of the policy or program, and is usually executed by the service providers (e.g., colleges and universities).

In the case of higher education performance funding policies, generally, the state legislature charges the state higher education agency with developing a performance-based funding formula. As such, policy design takes place both in legislative proceedings (during the development of legislative statute) and, subsequently, in the state higher education agency or group charged with designing the new funding formula. In higher education, policies often
continue to be shaped during the implementation phase (Cerych & Sabatier, 1986). As such, this study focuses on the two phases of the policy process during which performance funding policies are designed: (1) policy formulation (at the legislative level), and (2) the first stage of policy implementation—that during which the state higher education agency undertakes the legislature’s charge to develop a performance-based funding model.

Although the focus is on these two stages, through extensive archival analysis, this study also draws on data from proceedings related to performance funding that fall outside these formal stages of the policy process. This fluid approach follows Sidney’s suggestion to look beyond traditional, linear stages: “if researchers conceive of policy formulation as a function rather than as a stage that begins and ends in certain sequences of stages, they are likely to search the empirical record of particular policy arenas more broadly.” (2009, p. 85).

The study of policy design involves linking policy content to process by revealing how decision-makers choose between options for policy content (Schneider & Sidney, 2009). Early studies of policy design focused on the strengths and weaknesses of specific policy instruments (e.g., Anderson, 1971; Hood, 1986; Lowi, 1972). Two decades after its ascendance, the study of policy design waned (Howlett and Lejano, 2012). In an article titled “Tales from the crypt: The rise and fall (and rebirth?) of policy design,” Howlett and Lejano (2012) argue that this decline occurred following the emergence of a trend in studies of governance. Specifically, much of the governance literature suggested that the role of governmental actors had weakened in light of denser policy networks and the increasingly prominent roles of non-governmental actors (e.g., Bevir, Rhodes, & Weller, 2007). Further, macro-level studies of governance suggested that policy change had become more deterministic and susceptible to broader trends, including those brought about by globalization (e.g., Moran, 2002).
These research trends notwithstanding, in recent years, policy design studies have re-emerged, partly fueled by Schneider and Ingram’s comprehensive theory of policy design and social construction (Pierce, Siddiki, Jones, Schumacher, Pattison, & Peterson, 2014). For instance, at least 17 studies using this theory were published in 2012 alone, according to a 2014 review of papers that utilize this theory (Pierce et al., 2014). As Pierce and his colleagues note, the inclusion of Schneider and Ingram’s (1993, 1997) policy design framework in one of the most cited books on the policy process—Sabatier’s (2007) *Theories of the Policy Process*—may have contributed to this renewed interest in policy design and in the social construction framework in particular.

Unlike most theories of the policy process, policy design connects multiple stages of policymaking. Another key element of the design approach is that the focus is on micro elements of the process—the details. By bounding analyses temporally and geographically, policy design studies attend to the roles of individual actors, their choices, and the reasons for their choices. Another strength of the policy design orientation is that it draws attention to the role of bureaucracies, which are often neglected in policy studies (Meier, 2009), with the exception of those that examine implementation. Even so, implementation studies are sparse, particularly in the higher education literature.

Finally, the focus on policy design is instrumental because varying designs can have disproportional impacts on the groups to which policies apply and can also “shape institutions and the broader culture through both instrumental (resource) effects of policy… and rhetorical/symbolic…effects” (Ingram, Schneider, & deLeon, 2007, p. 97). This study, thus, makes important contributions due to its attention to bureaucracy, to the implementation stage of the policy process, and to policy design.
**Theory of policy design and social construction.** According to Sidney (2009), the most recent advance in the study of policy formulation and policy tools is Schneider and Ingram’s (1988, 1993) policy design framework. While the policy design framework directly addresses questions of the policy formulation phase, it also provides guidance on implementation. Indeed, this theory of the policy process is the best-developed and most comprehensive of all of the policy design frameworks. As mentioned earlier, its inclusion in Sabatier’s widely cited *Theories of the Policy Process* in 2007 (and again in the 2014 edition with Weible) greatly enhanced its visibility and may have served to further legitimize this theory (Pierce et al., 2014). The inclusion of this theory in one of the most cited books on the policy process (i.e., over 1800 citations on the most recent version as of this writing, per Google Scholar), is especially notable given the theory’s amenability to constructivist approaches, which had been overwhelmingly absent from mainstream policy studies.

Also speaking to the valuable contributions of Schneider and Ingram’s theory, Howlett and Lejano declare that, with their nonconventional use of constructionist and behavioral approaches to the study of the policy process, Schneider and Ingram “advanced discussion and understanding of the subject well beyond its early formulation in Laswell and Lowi’s pioneering works” (2012, p. 364). Prior to Schneider and Ingram’s theory, design studies focused on the rational and logical elements of policies, neglecting rationales and other important design components (Linder & Peters, 1984). The key contribution of this theory, then, which assumes that policies are not rational, is its attention to value-laden elements of the policy process, including social constructions, rationales, and underlying assumptions.

Despite these contributions, this theory remains unused in the higher education literature. Only one study that addresses higher education policy has drawn insights from this framework.
Specifically, the study, conducted by Reich and Barth (2010), examines the process of developing policies relating to undocumented students in Kansas and Arkansas. Notably, this publication appears in a political science journal. The theory’s absence from the higher education literature might be attributed to the fact that higher education policymaking tends to be less contentious than other policy areas (like immigration), which might suggest that social constructions and values play a less significant role. One might argue that this is a similar limitation to the applicability of the advocacy coalition framework to higher education studies (Sabatier, 1988; Sabatier & Jenkins-Smith, 1994, 1999). This latter framework relies on the presence competing coalitions, which are not always evident in higher education policymaking.

Despite the relative uncontested nature of higher education policies (compared to other policy areas, like immigration), values, preferences, interests, and subjective judgments, are inherently present in all policy-making processes. Formula funding decisions, as others that entail the distribution of resources, clearly and empirically assign more value to some populations than to others. As such, the policy design and social construction theory is the most appropriate framework to assess the distribution of benefits and burdens through policy design. In particular, this theory ground this study because of its attention to values, because it is the most comprehensive theory of policy design, and because it seeks to address the Lasswellian (1936) question of who gets what, when, and how through policy (Sidney, 2007).

**Theory objectives.** The policy design and social construction theory seeks to explain policy design both as an independent variable and as a dependent variable. Specifically, the theory addresses the question of why certain policies are chosen in certain contexts. In this study, policy design is treated as an outcome or a dependent variable, considering factors such as actors’ political resources and contextual influences.
The theory also seeks to explain the consequences of certain policy designs. According to Schneider and Ingram, the study of policy design, which links policy content to process, illuminates how the combination of the stated goals of a policy, target populations (i.e., persons or groups affected by a policy), rules, and incentives can structure outcomes. In the examination of the consequences of policy design, policy design is the independent variable. As noted in a literature review of the application of the theory of social constructions and policy designs, “either policy design is a function of social construction and power creating a proposition of target populations, or social construction and power is a function of policy design creating a proposition of feed-forward impacts” (Pierce, Siddiki, Jones, Schumacher, Pattison, & Peterson, 2014, p.6). Because this study seeks to examine the factors influencing the creation of a particular design, this study focuses on the former treatment of policy design (i.e., as an outcome).

This theory makes a number of assumptions about the model of the individual (i.e., the decision-maker), of power, and of the political environment (Pierce et al., 2014). Of the nine assumptions outlined by Pierce and colleagues, six are most relevant to this study of influences on policy design. The first assumption relates to bounded rationality (Simon, 1991): actors are unable to process all of the relevant information and thus take shortcuts to arrive at decisions. Secondly, decisions are filtered by actors’ predispositions. According to this theory, policymakers have choices between substitutable policy components (Schneider & Ingram, 1997). The choices they consider and ultimately make are guided by historic trends, national context and local knowledge, and social values. As a result, decision-makers accept information that confirms their biases, and reject that which challenges them.
The third and fourth assumptions, which are central to this theory of policy design, are: that people use social constructions in making evaluations and that “individuals perceive generalizable patterns of social constructions within objective conditions” (Pierce et al., 2014, p. 4). Fifth, the theory assumes that power is unequally distributed within a policy subsystem. Finally, the policy design and social construction theory assumes that policies are developed in the context of political uncertainty.

Studies of policy design using the social construction theory reveal how individuals and groups choose among various options for policy elements (Schneider & Ingram, 1988, 1997). Specifically, actors are faced with choices, including those concerning which target populations and policy tools are pertinent to certain policy designs. For example, in performance funding policies, specific types of higher education institutions might be directly targeted by the policy (e.g., only four- or two-year institutions). More indirectly, target populations can consist of groups that are advantaged or disadvantaged within funding formulas (e.g., Pell grant recipients or students studying science, technology, engineering, or mathematics [STEM]). Social and political processes lead to the inclusion of some policy components in ultimate policy designs and the exclusion of others (Schneider & Ingram, 1997).

Given its focus on target populations and on the distribution of burdens and benefits through policy, the theory of social constructions and policy design seeks to explain why some groups are privileged in policymaking (Schneider & Ingram, 1993, 1997). This framework sheds light on why certain populations, in this case, higher education institutions and, perhaps less directly, students, are targeted to receive benefits and burdens through performance funding policies.
**Policy elements.** According to Schneider and Ingram’s (1993, 1997) theory, most policy designs consist of nine primary elements: (1) problem definitions and goals, (2) target populations, (3) benefits and burdens to be distributed to target populations through policy design, (4) implementation structures, (5) assumptions, (6) rationales, (7) tools, (8) rules, and (9) social constructions (Schneider & Ingram, 1997). First, policy designs contain *problem definitions and goals*, which are sometimes multiple and competing. For example, in performance funding, goals might include enhancing colleges’ efficiency and effectiveness or increasing success rates for students from historically underserved groups. Goals might also be directly connected to the needs of the state (e.g., to increase educational attainment levels to meet workforce demands).

Policy designs also consist of *target populations* (e.g., all public higher education institutions or only two-year colleges), and *benefits and burdens* that are distributed through the policy (e.g., state appropriations). Target populations are the persons or groups affected by a policy. According to this framework, target groups “are chosen not just for their instrumental ability to serve policy purposes and not just because of their political power, but also because of the value-laden, emotional, and powerful positive and negative social constructions with which they are associated” (Schneider, Ingram, & deLeon, 2014).

In the case of performance funding policies, the most evident target populations are the various public higher education institutions in the state. Other groups may also be considered target populations, though perhaps less directly. These include students and members of the business community, which also are impacted by these policies. This study examines the extent to which policy development discourse directly refers to these populations. In other words, the target populations are not assumed but empirically observed and identified.
Additionally, policy designs include the *burdens and benefits* that are to be distributed to target populations through policy. For example, a tax on wealthy individuals would constitute a burden on this target population. In performance funding, benefits to higher education institutions might consist of increases in funding, while burdens could be, either increased accountability or losses in funding. Subpopulations of students (e.g., low-income students) are also eligible to receive benefits or burdens through performance funding, albeit indirectly. For example, a policy that assigns a premium for low-income students strives to incentivize higher education institutions to focus on these students and ensure their success. As such, this type of premium would allocate indirect benefits to low-income students.

Policy designs also include *implementation structures* and agents expected to carry them out. This element is a key link between various stages of the policy process and between policy agents. In particular, implementing agents must work within the framework produced by earlier stages in the policy process (e.g., language in statute) but may also create a new framework (e.g., by creating rules to be followed in future stages of the process). Frameworks, or policy directives, can emerge from any link in the policy chain (e.g., the executive and legislative branches, the state higher education agency, multi-campus higher education systems, and individual institutions, which are the direct serviceproviders). Policy directives might include the state-level constitutions, higher education agency rules, and discretion at the campus level.

During implementation, agents might alter the original design (e.g., in statute) or produce rules for the service delivery intended through the policy. The relationship between implementing agents and statute, and to an extent, policy success, varies according to statutory design, which might be top-down or bottom-up, participatory or closed, simple or complex, and,
most importantly, filled with mandates or allowing for flexibility (Ingram & Schneider, 1990; Schneider & Ingram, 1997; Schneider & Sidney, 2009).

Policies also include assumptions, which can be normative (e.g., colleges should produce more STEM graduates), technical, or behavioral. Assumptions can relate to causal logic, goals, and the capacities and roles of individuals to fulfill certain tasks. For example, most performance funding policies assume that institutions will change their behavior if a certain amount of money is tied to specified performance metrics. This assumption may not hold if institutions perceive the allocation that is tied to performance to be trivial. Campus officials may calculate that growing enrollments (which are accompanied with tuition revenue) may be more worthy of their efforts than altering student success programs and policies or restricting admissions to improve their outcomes.

Another element in policy designs are rationales. The rationales used to justify performance funding policies also often assume that the purpose of higher education is to fulfill workforce needs and, ultimately, to make the United States more competitive globally. Rationales for performance funding might differ from ones where access to college for all individuals was central to higher education policy discussions. This study also examines the rationales behind the inclusion of critical fields, like STEM degrees, which are prioritized in many of the formulas.

In addition to these elements, policy designs include the policy tools themselves—the elements that are intended to incentivize actors to act in a particular way. According to Schneider and Ingram’s (1990) typology, tools can be classified into five categories: authority tools, which derive power exclusively from authority; inducements, which seek to entice certain behaviors using positive or negative incentives; capacity-building tools, which provide resources, including
technical assistance and training, to aid policy targets in meeting certain outcomes desired through policy; hortatory or symbolic tools which involve rhetoric and images in order to persuade; and finally, learning tools, which include research and pilot programs, encourage action through knowledge-building, and do not seek to prescribe the process that should be followed to achieve policy goals.

The tool that policymakers selected in Colorado and Texas that I examine in this study is performance-based funding. Policymakers in these states could have instead chosen other courses of action, depending on whether they intended to change funding or accountability policy, or both. Options for policy action relating to funding include calling for voluntary restraint in spending from institutions (to promote efficiency), cutting or increasing funding (incrementally or substantially), employing other funding tools like zero-based budgeting, or not changing funding at all. Alternative accountability options include learning outcomes assessments—like those required by early higher education accountability programs (Banta et al., 1996; Borden & Banta, 1994)—performance-based reporting or performance-based budgeting.

The chosen tool, performance-based funding, can be broken down into its own constituent parts, which are themselves tools. These include the metrics used to measure performance; premiums included in formulas (e.g., additional funding for STEM majors or Pell-eligible students); and mechanisms, if any, for differentiating by campus missions. Performance funding policies vary in their classification as tools. Most are inducements, however, since they focus on financial incentives to achieve desired outcomes (Dougherty et al., 2014). Capacity-building and learning tools are overwhelmingly absent from performance funding policy designs (Dougherty et al., 2014).
Another major element in policy designs are the rules, which specify how a policy should be executed and who is included and excluded from this process. Rules also include timing considerations, including deadlines for implementation. In performance funding policy design, important rules include those that specify who has decision-making authority (e.g., regarding formula metrics), how much time is allotted for formula development, and whether periodic revisions of the policy are required.

**Social constructions.** The final element in policy designs consists of social constructions of target populations, which the theory’s authors define as “the cultural characterizations or popular images of the persons or groups whose behavior and well-being are affected by public policy” (Schneider & Ingram, 1993, p. 334). This framing of individuals or groups contains a value judgment; positive or negative portrayal of target populations is achieved through symbols, images, metaphors, and stories. We generally take social constructions for granted (Edelman, 1988; Yanow, 1996).

According to the policy design theory, social phenomena are not simply objective realities that can be observed. Rather, they also consist of world-making or meaning-making by individuals. Individual constructions can emerge from different experiences or belief systems. Social constructions can “help explain why public policy, which can have a positive effect on society, sometimes… fails in its nominal purposes…” (Schneider, Ingram, & deLeon, 2014, p. 105). Thus, an adequate examination of the policy process requires attention to the social constructions that exist in society at large and among policy actors, the actors who construct policy issues, and the way realities are constructed by actors with particular preferences.

In an effort to enhance the policy design framework, Schneider & Sidney (2009) suggest that more work should be done to examine, empirically and theoretically, the link between the
social constructions of target populations (i.e., potential and actual recipients of policy burdens and policy benefits) and policy components. In performance funding policies, multiple components can be examined, particularly as they relate to populations on which they may have an effect (e.g., sector or institution differentiation, premiums for certain populations, specific metrics used to measure performance, and inclusion or exclusion of quality enhancement elements). As previously mentioned, STEM majors might be socially constructed more positively in performance funding policy design. Similarly, certain institutions or institution types (e.g., community colleges) might have positive or negative social constructions. These constructions might be driven by different rationales such as community colleges’ cost-efficiency or accessibility.

The flagship university in a given state, particularly a more selective flagship, might be viewed favorably because of its higher graduation rates and national prominence. Land grant universities might also be constructed positively due to their access-oriented mission and their applied work in service of the state. However, the construction of different types of institutions might vary by state. For instance, while in Colorado, community colleges and open-access institutions are framed positively, in other states, they may be viewed as underperforming, given their lower graduation rates.

Furthermore, social constructions of target populations might vary not only by context but also by the individual or group responsible for the social construction, the perceiver. For instance, while legislators in a given state might construct the state’s flagship(s) more positively, intermediaries, such as Complete College America, might paint community colleges in a more favorable light, given the perception that they are more affordable. These distinctions by perceiver are critical in examining the determinants of policy content and the policy development
processes in the two states examined in this study. Finally, the public higher education sector more broadly might be framed either positively or negatively in a given state. The recent poll mentioned in Chapter 1, for instance, illustrates negative perceptions of higher education broadly, particularly due to perceived unaffordability (Taylor et al., 2011; The Pew Research Center, 2013).

As Schneider and Ingram acknowledge, social constructions are neither necessarily unitary nor do they have to span across policy arenas (1993, 1997, 2005). In other words, within a policy subsystem, groups can be viewed both positively and negatively, and while groups may be viewed positively in one subsystem, they may be viewed negatively in another (Newton, 2005; Ingram, Schneider, & deLeon, 2007). In the case of performance funding policies, for instance, community colleges may be positively socially constructed by one group or in one context due to their affordability relative to other types of institutions, but negatively constructed in another because of their lower graduation rates. Further, not all target groups have a social construction (positive or negative), according to Schneider and Ingram (1997), and some groups’ social constructions are fluid. For instance, as evidenced by polls regarding gay marriage, the construction of people who identify as gay and lesbian has become increasingly positive over time. Indeed, acknowledging the power of social constructions, policy actors and advocates work strategically to change perceptions of certain groups (in a positive or negative direction).

How are social constructions of target populations associated with policy design? According to the theory, policymakers have choices between “substitutable” policy components (Schneider & Ingram, 2005). Further, "policies emerge from a complex and often chaotic environment involving social constructions of knowledge, the social construction of social groups, power relationships, entrepreneurial leadership, and the rules of policy-making
This policy design theory posits that constructing certain groups as deserving or undeserving of policy benefits or burdens is related to the eventual distribution of these benefits and burdens in policy contents. Thus, an adequate examination of the policy process demands attention to the social constructions that exist in society at large and among policy actors.

This study does not assume that social constructions exist or are important determinants of policy design, but rather examines these propositions empirically. Furthermore, it explicitly analyzes the influence on performance funding policy development of social constructions of target populations (if any) relative to other forms of information or knowledge, including empirical evidence of performance funding policies’ effectiveness. This study thus reveals the presence or absence of social constructions of target populations in higher education policymaking, which to date has not been empirically examined.

Knowledge and expertise. Since decision-makers have limited resources, especially time, and most state-level policy actors have limited experience with higher education funding formulas, performance funding design processes are filled with shortcuts. Determinations about what policy tools to choose (i.e., performance funding) and decisions about funding formula content (e.g., metrics, weights and scaling, and “smoothing” provisions, like stop-loss tools) are usually beyond the scope of decision-makers’ prior knowledge. These decisions, then, might be based upon personal beliefs about what is important or upon proactive research, such as on best practices according to previous models of the policy. Indeed, policy development processes require that policymakers retrieve various forms of information. Of particular interest to policy design studies are the choices about what information to use and the extent to which information outside the memory is sought (Schneider & Ingram, 2005).
The social construction theory of policy design posits that knowledge is also socially constructed. In particular, the theory directs attention to the role of experts and the characterization of certain individuals as experts. According to the theory, some sources (e.g., national policy organizations) will be viewed as more legitimate than others, since knowledge is connected to power. The theory also proposes that some types of knowledge will be considered more relevant and legitimate than others. For example, technical information, like data, might be received more favorably than anecdotal facts (or vice versa). According to Schneider and Sidney (2009), the knowledge component of policy design theory has been understudied.

Further, according to the theory’s authors, in some policymaking contexts, knowledge is more likely to drive decisions than in others, where social constructions of groups might dominate decision-making, particularly when these constructions are deeply embedded and prevalent in policy discourse (Schneider & Ingram, 1997). This proposition is in line with May’s (1991) assertion that policies without publics (i.e., those that do not have identifiable stakeholders) are more amenable to models of learning.

Schneider and Ingram (1997) acknowledge that social constructions of target populations are not characteristic of all policymaking contexts. In particular, they posit that there are two major types of policymaking contexts: professionalized and degenerative (Schneider & Ingram, 1997). In professionalized contexts, expertise and reasoning will guide the framing of policy issues and their design. These contexts usually do not have clear cut social constructions and science and expertise are more likely to be influential. On the other hand, degenerative policy contexts are ones in which social constructions are easily identified, as in the case of welfare reform. The extent to which social constructions or expertise drive policy design has important implications.
At first glance, performance funding policy design processes seem to be situated in a professionalized rather than a degenerative context. Nonetheless, as previously described, certain types of institutions and students are targets of more positive or negative constructions. This study examines the extent to which social constructions are present in the performance funding policy context and whether they are influential in policy design. Specific policy components in this study allow for an analysis of policy aspects that might result from social constructions. For instance, premiums for the production of STEM degrees might be influenced by the positive social construction of STEM degrees or by empirical evidence of the need for more STEM majors to fill jobs in these fields.

In addition to drawing on the policy design and social construction theory’s treatment of knowledge, this study garners insights from the research utilization literature, especially Carol Weiss’s (1979) typology of the ways in which policy actors use research. Specifically, she extracts seven “meanings” of research use from the extant literature. The first three are used most commonly. First, instrumental use of information involves using research to inform the solution to a pre-specified problem. This is how we originally and most commonly think about applying research to policy (Weiss, 1979). According to Weiss’s (1979) typology, information can also be used politically, as “ammunition” (p. 429) to bolster pre-determined positions.

The third most commonly studied model of research use is the conceptual meaning, through which concepts that have emanated from research over time inform the policy process. Oftentimes, when policymakers use information conceptually, they are unable to identify the original source of the information.

The typology also proposes four other models of research use. In the knowledge-driven model, basic research uncovers an opportunity for conducting applied research. This type of use
is most prominent in the natural sciences, where the applied research leads to development and application. The interactive model of research use consists of using research as only one component of a complex decision-making process. The tactical use of information involves using the research process rather than the content of research itself for practical purposes (e.g., to delay action on a decision). Finally, in the final model research as a process interacting with policy, not only does research influence policy, but policy influences research and what is researched.

Davies and Nutley (2008) also identify the misuse of information, which they refer to as tactical use. Studies of research use in incentivist policies in K-12 (e.g., vouchers, merit pay for teachers, and pay-for-performance for students) have found evidence of the misuse of research evidence. In particular, a handful of studies are repeatedly cited among advocates of incentivist policies, progressively foregoing the nuances in the original studies. The authors refer to this phenomenon as an “echo chamber” (Lubienski & Garn, 2010).

An analysis of the performance funding policy development process warrants examining the role of research evidence and other forms of information in policymaking. Previous literature has shown that in state legislatures, instrumental use of information (to inform a specific policy decision) is not common (Mooney, 1991; Webber, 1987). However, given the highly technical nature of performance-funding models, instrumental use of information may be more likely to occur.

Following James and Jorgensen’s (2009) propositions for incorporating research utilization in the study of policy design and Ness’s (2010) call for examining information use in higher education policymaking, this study explores the ways in which information is used. Of specific relevance to this study are James and Jorgensen’s (2009) recommendations to attend to:
(1) the type of information user—elected official, analyst, bureaucrat, etc.; (2) the policy stage, since different types of information are important for different types of decisions (Mooney, 1991); and, (3) the policy domain.

This study also draws on Ness’s (2010) discussion of the potential of applying the policy process frameworks to studies of research use in higher education policymaking. In his discussion of incorporating information use in studies of diffusion, Ness (2010) recognizes four critical elements of information flow that might influence whether a policy diffuses: the “type” of information (e.g., policy brief, testimony, etc.), the source of the information, the timing of information supply, and, from potential acquirers or users of information, the perceived credibility of the source of the information. This latter factor aligns with Schneider and Ingram’s proposition that knowledge sources are socially constructed. This study examines these important factors in the information supply and demand dynamics in performance funding policy development in Colorado and Texas.

Ness (2010) also advocates for applying research use frameworks to analyze the role of empirical research evidence on policy diffusion. For example, how does evidence of unintended consequences impact the spread of policy? As noted in the introduction, a growing literature, including Dougherty and Reddy’s (2013) extensive review, examines the impact of certain performance funding policies. Much of this evidence points to meager, if any, effects of these policies in improving college completion rates (e.g., Tandberg & Hillman, 2014). Drawing on Ness’s recommendation, this study examines the extent to which policymakers and implementers are aware of this empirical evidence, how they come to acquire this information, and what role the information plays in specific decisions pertaining to policy development. This study also explores the extent to which experts play a role in performance funding formula development.
As such, this analysis contributes to the literature on the demand of research, including the types of information that are preferred and the ways information is used (Weiss, 1979).

**Theoretical propositions.** According to the policy design and social construction theory, policy design is a function of problem definitions, political and social values, and contextual influences like historical precedent, national policy trends, and local knowledge. Through policy design, some groups are advantaged while others are disadvantaged. To explain why certain policy designs are chosen over others, the theory’s authors propose that the distribution of benefits and burdens to target populations is primarily contingent upon two factors: the target groups’ levels of political power resources and their positive or negative social constructions (Ingram, Schneider, & DeLeon, 2007).

The first element, the level of political power resources, might include the group’s size, particularly if members are eligible to vote, their ability to mobilize, financial resources, and access to policymakers. Schneider and Ingram (2005) contend that placing burdens on populations with high levels of political power may be almost impossible. Often, this results in the development of weak policy tools when a policy is inevitable. An example of this is a policy calling for voluntary compliance with the law. It may be the case that groups with higher levels of political power that are targeted by performance funding policies (e.g., the flagships) receive policy burdens that are effectively weak, as was the case with early attempts to implement performance funding in Texas (Ashworth, 1994).

Social constructions, as previously outlined, refer to the extent to which groups are viewed as deserving or undeserving of public benefits. Schneider and Ingram (1993) propose a matrix (presented in Table 1) with each of these elements (political power resources and social constructions) on one axis.
Table 1 Matrix of Social Construction and Political Power Resources

<table>
<thead>
<tr>
<th></th>
<th>High Political Resources</th>
<th>Low Political Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>More positive social construction</td>
<td>Advantaged</td>
<td>Dependent</td>
</tr>
<tr>
<td>More negative social construction</td>
<td>Contender</td>
<td>Deviant</td>
</tr>
</tbody>
</table>

It is important to note that the model is dynamic, and that groups can shift from one quadrant to another. In fact, changes from one target population category to another (e.g., from deviant to contender) are reported with a relatively high rate of frequency according to a recent review of the literature using the policy design and social construction theory (Pierce et al., 2014). Further, within cells, groups exist along a fluid spectrum. Some advantaged groups have higher social constructions than others. As previously noted, social constructions are also contested, and thus not universal, even within policy subsystems.

The following sections describe each quadrant of the policy design matrix (i.e., advantaged, contender, dependent, and deviant). Each section includes propositions about how target populations in each group are expected to be treated through policy design. These propositions are built upon the premise by public choice theory (Buchanan, 2003; Buchanan & Tollison, 1984) that elected politicians are driven by their interests in re-election. Responding to these incentives, they seek to please organized interests with political resources; they also strive to publicly benefit groups with positive social constructions and punish those that are socially constructed negatively. Indeed, according to the theory, policymakers are more likely to focus their energy and time on the groups that are at the extreme ends—benefiting the advantaged groups and burdening the deviants—because this will gain them more political capital.
Furthermore, through these actions, policymakers respond to and help preserve the social constructions of target groups (Schneider & Ingram, 1997).

**Advantaged.** According to the theory, groups with high political power and a positive social construction are “advantaged.” For example, the middle class and small business owners are considered advantaged target populations, since they are viewed favorably and enjoy political power (Camou, 2005). Advantaged groups are likely to receive policy benefits. According to the theory, policymakers usually gain political capital from publicly benefiting these groups, which are seen as contributing to society’s benefit, especially economic (such as by creating jobs). The theory hypothesizes that the distribution of burdens and benefits will recalibrate. Specifically, when burdens are imposed on advantaged groups, challenges and counter-mobilization will result (Schneider & Ingram, 1997). In performance funding policy designs, advantaged groups might include the business community and, in higher education, STEM majors.

**Contenders.** Groups that have a more negative social construction but high levels of political power are labeled “contenders” in this typology. Contenders are generally perceived as morally or ethically suspect and sometimes as selfish or untrustworthy. Policymakers might benefit these groups through policy, but usually sub-rosa (i.e., under the table), since the public would be critical of such a move. Examples of contenders include highly affluent individuals (Gollust & Lynch, 2011) and pharmaceutical companies (Donovan, 1993), both of which are widely viewed as greedy and self-interested.

In higher education, for-profit institutions might be considered contenders. While they have faced increased scrutiny due to some campuses’ dubious recruitment practices and questionable reports of graduates’ labor market outcomes, they also have high levels of political power (i.e., an extensive lobbying enterprise and some legislators’ support). Furthermore, in
some states and according to some groups, research institutions might be characterized as contenders. Given increased attention to college affordability and to the framing of students as consumers, these institutions may be negatively constructed due to rising tuitions and perceptions that they are more focused on prestige maximization and on research than on student success. While this is a possibility, it is also conceivable that research institutions, especially the state land-grant institutions, are likely constructed more positively due to their public missions.

Dependents. In the quadrant that is diagonal to contenders are dependents: groups with low political power but positive social constructions. Examples of dependents include preschool-aged children (Bushouse, 2009), members of the working class (Gollust & Lynch, 2011), and unrecognized Native Americans (Corntassel, 2009). Students, particularly those who cannot yet vote, might also fall under this category. Because they lack political power, they are less likely to receive benefits although they are generally viewed as deserving of positive treatment through policy. The theory hypothesizes that policymakers will calculate that these groups are less worthy of investment, including finances, time, and effort, since the allocation of benefits to these groups will yield few, if any, electoral benefits. These groups are most vulnerable to changes in budgets; they are more likely to lose benefits in times of budget declines and the last to receive them during more favorable financial times. The benefits these groups receive also are characterized more by rhetoric than by substance (Schneider & Ingram, 1997).

In performance funding policy designs, dependent groups might include low-income and adult students. However, although these groups have little political power themselves, it is possible that they have strong advocacy from groups like the Lumina Foundation for Education and Complete College America. Thus, they may be more similar to advantaged groups in this context. These nuances in the categorization of target populations are explored in this study.
**Deviants.** Deviants also have low levels of political resources but, unlike contenders, they are negatively socially constructed. Deviants include African American criminals (Miller, 2012) and, sometimes, undocumented immigrants (Newton, 2008; Reich & Barth, 2010; Short & Magana, 2002) and the families of obese children (Hawkins & Linvill, 2010). Deviants receive a disproportionate share of burdens partly because policymakers stand to gain political capital from punishing them and because they have few groups willing to advocate for them. In higher education, the for-profit institutions that lack political power (e.g., have a weak lobby) might be classified as deviants.

Drawing on this framework, this study examines the ways in which groups are socially constructed in the higher education policy domain. The focus on social constructions is a critical contribution of this study, since social constructions have traditionally been overlooked in the higher education policy literature. Further, grounded in this theory, this study examines institutions’ relative political power and resources, and how this translates to the consideration and determination of certain performance funding policy components.

Referring to the sustainability of performance funding policies, Zumeta predicted that: “Given higher education’s still considerable clout in most states…implementation difficulties could undermine the performance-funding regime over time, if a sufficient number of influential oxen are gored as resources are allocated based on the measures…” (Zumeta, 2001, p. 172). In Zumeta’s dire prediction, he attributes the forecast of performance funding’s demise to colleges and universities’ “clout”. This clout could be interpreted as the positive light in which higher education institutions are perceived by policymakers or the public (i.e., their social construction) or as their levels of political influence. Other theories of the policy process do not distinguish between the two characteristics that may influence how a group is affected by a policy design:
the group’s political power on one hand and their social construction on the other. According to this theory, someone with high political power can have low social standing and such a group could receive policy benefits, but not publicly.

Anchored in the policy design and social construction theory, this study examines target populations, their levels of political resources, their social constructions, and how these and other factors, shape policy design. Since policy design spans multiple stages of the policy process and consists of analyses of both content and process, this study draws on multiple sources of data. In particular, policies are studied as texts, as process, and as discourse (Jones, 2013). Studying each of these elements in isolation is limiting (Jones, 2013). Policy as text, for example, does not capture power dynamics and target populations are hardly visible (Jones, 2013). As such, this study also conceptualizes policy as process through an analysis of policy design (Jones, 2013; Prunty, 1984). The following chapter outlines the research design, including data sources and analytic techniques used to analyze performance funding policy design in two states: Colorado and Texas.
Chapter 3: Research Design and Methodology

The study of policy design links policy content to process, uncovering how decision-makers choose between options for policy content (Schneider & Sidney, 2009). Guided by Schneider and Ingram’s theory, this study examines both policy content and the design process. Specifically, consistent with Jones’s (2013) proposition about the varying orientations of policy (i.e., policy as text, policy as process, and policy as discursive), this study draws on multiple sources of data to examine both design content and process. Because policy design occurs primarily in the formulation and implementation phases of the policy process (Howlett & Lejano, 2012; Howlett, Ramesh, & Perl, 2009), in this study I examine both of these stages.

Drawing on the interpretivist orientation that undergirds the policy design theory employed in this study, I question the instrumental rationality that is typically assumed to exist in policy designs. As Yanow (1996) notes “[w]e cannot know for certain...that the patterns we are seeing retrospectively in policy actions ‘actually’ resided in them.” For this reason, I examine the policy process in addition to policy content. I also pay particular attention to the communication and interpretation of meaning and to artifacts, including language, objects, and acts that convey values and beliefs (Yanow, 1996).

I begin this chapter by restating the purpose of the study and summarizing the objectives that guide this inquiry. Subsequent sections outline the rationales for the research design and case selection, the data sources, and the data collection methods. This discussion is followed by the logic linking the data to the findings (Yin, 2014). I conclude by describing the methods used to improve the validity and reliability of this study.
Statement of Purpose and Objectives

This study illuminates how performance funding policies were designed in Colorado and Texas, focusing on how and why certain policy elements were chosen and not others. I examine policy elements in both the legislative statutes calling for the development of performance funding formulas and in the proposed (and, in Colorado’s case, approved) funding formulas. As such, this study analyzes both: (1) performance funding policy elements that were determined by the legislature (e.g., the percent of funding that was to be tied to performance), and (2) the state higher education agencies’ decisions regarding elements that were not pre-determined in statute (e.g., what metrics to use to measure performance). I also analyze the factors leading to the distinct outcomes of the policy design process in the two states (i.e., approval of the proposed funding formula in Colorado, but not in Texas). Drawing on the theory of policy design and social construction, this study has three major objectives, which I describe in turn.

The first objective of this analysis is to examine the policy design elements found in both performance funding bills (i.e., statute) and proposed performance-funding models in Colorado and Texas. The social construction and policy design theory, which draws on Ingram and Schneider (1990) and Schneider and Ingram’s (1990) earlier typologies of policy instruments, proposes that policy designs have nine elements, including stated goals and problem definitions, implementation structures, rules, tools, assumptions, rationales, target populations, burdens and benefits to be distributed to target populations, and social constructions (Schneider & Ingram, 1993, 1997). In this study, I deconstruct performance funding policy designs (in statute and proposed and approved formulas) in Colorado and Texas. I examine, for example, what kinds of tools (e.g., authoritative or inducements) are employed as well as whom the policies are targeting and the distribution of benefits and burdens to the target populations.
The theory’s more analytic objectives are also drawn from the theory of policy design and social construction. Specifically, this study examines *policy design as a function of two primary variables:* target populations’ social constructions and their political power resources. The theory suggests that policy designs and the distribution of benefits and burdens will depend on: (1) whether the target populations are positively or negatively socially constructed, and (2) their levels of political power resources. This study examines the extent to which social constructions of target populations and political power resources explain policy designs.

Finally, the policy design theory in which this study is grounded proposes that the *use of information and expertise* will vary depending on whether the policy context is “professionalized” (Schneider & Ingram, 1997, p. 7) or “degenerative” (p. 5). In particular, policy contexts that are professionalized (i.e., characterized by an absence of clear social constructs) will be more open to the use of expertise and models of learning. Degenerative contexts, on the other hand, will be dominated by discourse related to social constructions and will be less amenable to expertise and other forms of information. As such, this analysis will explore the degenerative or professionalized nature of the performance funding policy context. In particular, it will examine the influence of knowledge and expertise over policy designs—especially relative to the role of social constructions of target populations.

**Research Design**

In this study, I employ a multiple case study research design to examine how policymakers design performance funding policies in two states: Colorado and Texas. I utilize case studies to bind this analysis, since they allow for elaborate, deep examinations of bounded phenomena within a specific, relevant context (Yin, 2009). With respect to policy design studies in particular, Howlett urges scholars to employ case study designs by noting that “… detailed
case studies are necessary for policy design studies to advance beyond some of the strictures placed…by the reification of, and over-emphasis upon, only a few of the many possible kinds of policy designs identified by the 1990s and early 2000s literature” (2014, p. 187).

Case studies are also ideal for this study, given that the research questions address the mechanisms by which a complex process occurs. This study also seeks to illuminate individual-level processes, especially the perceptions, rationales, knowledge, and values that lead actors to make certain decisions relating to policy design. Because the study addresses “what,” “how,” and “why” questions, analyzes phenomena that cannot be controlled, and focuses on contemporary events, a case study design is most apt (Yin, 2009, 2014). Furthermore, by employing a case study design, I bound this study geographically, temporally, and topically, which allows for a richer understanding of the context in which the policy design process is embedded. Finally, bounding this analysis at the case level facilitates the direct collection of data and minimizes reliance on secondary sources.

Drawing on Stake’s (2005) classification of case studies, this study employs a collective case study design, which is used to draw on multiple cases to garner insights into a particular issue—state-level performance funding policy design—or theory (i.e., the theory of policy design in social construction). I selected to study two cases rather than a single case because multiple case studies tend to yield more robust, precise, stable, and valid findings (Herriott & Firestone, 1983; Miles & Huberman, 1994; Yin, 2014). With respect to performance funding studies, Dougherty and Reddy (2013) note after their comprehensive review of literature that one major limitation of the performance funding literature is the strong reliance on single case studies, which do not allow for the examination of the influence of state differences on policy impact. Finally, more cases enhance analytic generalizability (i.e., transferability or
generalizability of a theory), particularly if the researcher documents the research methods thoroughly, and if the findings in multiple cases are connected to previously developed theory (Becker, 1990; Yin, 2009).

**Case Selection**

Following Yin (2014), my case selection was informed by an analysis of initial archival data. Specifically, I reviewed news articles produced by Google Alerts, which, at my request, sent e-mail notifications when the following terms appeared in a news article: “performance funding,” “performance-based funding,” or “outcomes-based funding” in conjunction with “higher education,” “postsecondary education,” or “college.” The alerts were active from November 2013 through the conclusion of the study. From the articles produced by the alerts, I identified states that had approved (through statute), but not implemented, a performance funding policy in mid-2014. Of the available states that emerged from my review of news coverage, I selected Colorado and Texas.

I selected these cases because, in addition to granting the opportunity to study policy design in real time, Colorado and Texas constitute “contrasting cases” (Miles & Huberman, 1994). In particular, the statutes relating to performance funding in each state (i.e., HB 9 in Texas and HB 14-1319 in Colorado), were considerably different. In both of these states the legislation charged the state higher education agency (a coordinating board in both cases) with developing a performance funding policy. However, while Texas’s policy allowed for significant discretion in the policy design, Colorado’s policy was much more prescriptive (outlining specific elements that should be included in the formula). Thus, given the statutory language, the Colorado and Texas design processes constitute two distinct cases.
Numerous aspects of the statutes that were unrelated to implementation structures were also different across these two states. Colorado’s proposed policy, for example, emphasized the access mission of higher education institutions and privileged open-access institutions. In fact, early news articles revealed that, in Colorado, the policy proposal garnered opposition primarily from the more selective institutions in the state. Texas’s statute, on the other hand, took a more traditional performance funding approach, focusing on completion and retention rates.

The outcomes of the two policy design processes, of which I was not aware when I began data collection, turned out to be starkly distinct. While Colorado created and approved a performance-based funding model within six months of the policy charge, Texas’s proposed formula had not been approved at the conclusion of this study. The considerable differences in both the substantive and procedural elements of design in Texas and Colorado enabled me to explore the influences on the variation in policy designs, including the inclusion of certain policy components and the exclusion of others.

On a more practical note, studying cases in real-time afforded at least two advantages. First, recall error among interview participants was minimized, which improved informant accuracy (Bernard, Killworth, Kronenfeld, & Sailer, 1984). Secondly, I had access to richer data, including participation in legislative and higher education agency proceedings. Furthermore, these two states also have open meeting requirements. In particular, meetings held by public agencies, including the Texas Higher Education Coordinating Board and the Colorado Commission on Higher Education, must be announced in advance and made open to the public. With a few exceptions, the open meetings rules apply to meetings over the telephone and, in Colorado, to electronic communications that relate to pending items from meetings. In Texas, all meetings must be recorded and made available to the public in an online archive. As discussed in
the next section, this transparency allowed me to collect a wealth of data, including official communications regarding performance funding in Colorado and archived data, including videos of legislative and administrative proceedings, in Texas.

One distinction between the policies examined in Texas and Colorado is notable. In Texas, this study only examines four-year universities, which are called general academic institutions in that state. I chose to focus on this sector because the four higher education sectors in the state (i.e., general academic institutions, Lamar State colleges, the technical college system, and the community college system) undergo separate and distinct allocation processes. Indeed, the two-year sector has approved a separate performance-funding model. The two-year institutions’ performance funding policy process is not the subject of this study.

Because Texas is such a large state, among the four-year institutions in Texas, there is a comparable number of institutions as in Colorado (i.e., 38 general academic institutions in Texas and 31 total institutions in Colorado). Furthermore, variation between institution types is also analogous across the two states. In other words, the missions and other campus characteristics across the 38 four-year schools in Texas are—like the 31 colleges and universities in Colorado—substantially diverse. This variation across institutions is an important feature for this analysis of the distribution of burdens and benefits to various target populations.

Data Collection and Sources

According to Yanow (2006), within an interpretivist framework, which informs the policy design and social construction theory, the study of policy design requires the close examination of texts, along with numerical data. Yanow (1996) also calls for attention to artifacts, which are the concrete symbols that represent unobservable concepts like values and beliefs. Symbols are manifested in language, objects, and acts. Building on these
recommendations, this study uses multiple forms of data. In particular, the data include: (1) semi-structured interviews with key actors in each state, (2) observations of relevant events (e.g., formula development committee meetings and legislative hearings in each of the three states), and (3) documents. I also examine numerical data, in particular the proposed and actual allocations of funding through the formula in Colorado and the proposed allocations in Texas.

Because this study focuses on both the policy formulation and implementation phases, data, including documents and event observations, correspond to both of these stages. The interviews address both the process leading up to the adoption of performance funding policies and the process that ensued (i.e., implementation in the higher education agencies). The following sections expound on each of the primary sources of data.

**Observations.** Given that policymakers’ public positions are important to understanding social constructions, official rhetoric is an important source of data. For this reason, I observe events in which elected officials and others involved in the policy design process articulate their preferences. I identified events for observation by examining documents and online records and by asking interview participants for recommendations. In total, I observed 15 events, most of which were video-archived or took place over the phone. In Colorado, I observed a total of seven events. Specifically, I listened in on two meetings of the Funding Allocation Model Expert Team (FAMET) and one meeting of the Executive Advisory Group (EAG). All of the FAMET and EAG meetings were announced publicly. I was notified about them through e-mail via the Project 1319 official listserv. In November of 2014, I attended one FAMET meeting in person. These four meetings were led by the Colorado Department of Higher Education (CDHE) and took place during the implementation phase of policy design. To understand the formulation process, I also watched, online, three legislative proceedings. The first two were House
Education Committee hearings, where the performance funding bill (HB 14-1319) was discussed; the other was a Senate Education Committee hearing.

In Texas, I watched video archives of a total of eight events. Two events were House Higher Education Committee hearings on HB 9, the performance funding bill. I also observed two Senate Higher Education Committee hearings on this bill. The last four events took place during the implementation phase. These were proceedings by the General Academic Institution Formula Advisory Committee (GAIFAC) within the Texas Higher Education Coordinating Board. The GAIFAC is a group of campus representatives that meets regularly and is charged with developing higher education funding recommendations.

I transcribed and coded the videos of the legislative hearings in Colorado to capture individual policymakers’ preferences. In Texas, I also coded the videos of the legislative hearings. Because I was unable to download the video files from the Texas Legislature’s website, I did not transcribe these videos. Instead, I used the video coding function in NVivo, a qualitative data analysis software.

**Documents.** The *archival data collection* process was iterative. In total, I reviewed 79 documents from Texas and 144 documents from Colorado. The most common sources of information across both states were news articles published online. I captured most of these articles through the aforementioned Google Alerts function. I imported the articles from Texas and Colorado into NVivo for review. Of the 52 news articles, exactly half (26) were from each state. Most of the news articles were published by the *Texas Tribune* and the *Houston Chronicle* in Texas and by *Chalkbeat* and the *Denver Post* in Colorado.

Most of Colorado’s documents (37 out of the 144) were e-mail communications that I received from the project director who was leading the implementation of HB1319 in Colorado.
Anyone who expressed interest in Project 1319 was added to a listserv and sent official communications relating to the project. These e-mails included decisions that were made in meetings, including votes on policy elements; pending items; notifications about scheduled and cancelled meetings; and materials provided by one of the vendors (i.e., the National Center for Higher Education Management Systems).

For both states, other documents include presentations from national organizations that served as consultants, including WICHE, NCHEMS, and the National Governors Association; legislative testimony; campus and system meeting materials and support letters; and blogs, including one by the chief financial officer (CFO) of Adams State University in Colorado. In this blog, the CFO chronicles his involvement in the development of the funding formula. I also collected and analyzed various versions of proposed bills, including the adopted versions. Finally I reviewed administrative documents, including higher education agency meeting minutes, agendas, and presentation materials (including PowerPoint slides) to provide a holistic picture of performance funding policy design.

**Interviews.** The final source of data consists of interviews with 34 policy actors involved in performance funding policy design: 19 in Colorado and 15 in Texas. Table 2 lists the interview participants from each state, using pseudonyms for most participants, at their request. Participants include: state higher education agency officials, state legislators and their staffers, governing board officials, state executive office staff members, faculty members, campus and multi-campus system officials, community representatives, and national education organizations officials.

Because of this study’s focus on the policy actors involved in the process, I employed a snowball sampling technique to identify interview participants (Goodman, 1961). This method
asks an initial group of actors to list other relevant players in a network. Specifically, I began with a list of participants, whom I asked to recommend additional participants based on their level of involvement in performance funding policy design. I then contacted recommended participants and made a similar request. As illustrated by the participant list, stakeholder input during the performance funding policy design process varied significantly in the two states. Texas participants—in this study and in the performance funding policy design process—are overwhelmingly campus officials; Colorado, on the other hand, exhibits a greater assortment of actors involved in this process. Furthermore, the participant list resembles the relative quantity of actors involved in policy development in each of the two states. Because fewer actors were involved in the process in Texas, fewer were identified through document analysis and through snowball sampling as potential participants. Since the process was more complex in Colorado, a slightly higher number of interviews were required in that state to reach saturation.

The majority of key actors during policy design, as identified by document analysis and by interview participants, were interviewed for this study. These include both state governmental actors and intermediary officials across the two. The most notable exception was Lieutenant Governor Joe Garcia in Colorado, who was also the executive director of the CDHE at the time of data collection. He was intimately involved in performance funding policy design and initially opposed the performance funding bill; however, he was not interviewed for this study. I partly captured his perspectives as they were expressed in legislative hearings and as they were articulated by other interview participants in Colorado (all of whom mentioned him).
Table 2 Interview Participants, Listed by Title, in Colorado and Texas

<table>
<thead>
<tr>
<th>Colorado Participants</th>
<th>Texas Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDHE Official 1</td>
<td>Emerging Research University Chief Financial Officer</td>
</tr>
<tr>
<td>CDHE Official 2</td>
<td>Emerging Research University Provost 1</td>
</tr>
<tr>
<td>CDHE Official 3</td>
<td>Emerging Research University Provost 2</td>
</tr>
<tr>
<td>CDHE Official 4</td>
<td>National Intermediary Official (in Texas)</td>
</tr>
<tr>
<td>CDHE Official 5</td>
<td>Flagship System Representative</td>
</tr>
<tr>
<td>Commissioner 1</td>
<td>Legislative Aide</td>
</tr>
<tr>
<td>Commissioner 2</td>
<td>Regional University President</td>
</tr>
<tr>
<td>Community College Representative</td>
<td>Regional University President 2</td>
</tr>
<tr>
<td>Governor’s Office Representative</td>
<td>Regional University Provost</td>
</tr>
<tr>
<td>Faculty Member, Access University</td>
<td>Regional, Urban University Representative</td>
</tr>
<tr>
<td>Faculty Member, Community College</td>
<td>State Representative Dan Branch</td>
</tr>
<tr>
<td>National Intermediary Official 1 (in Colorado)</td>
<td>THECB Official 1</td>
</tr>
<tr>
<td>National Intermediary Official 2 (in Colorado)</td>
<td>THECB Official 2</td>
</tr>
<tr>
<td>Nonprofit Representative</td>
<td>THECB Official 3</td>
</tr>
<tr>
<td>Research University Representative</td>
<td>University System Representative</td>
</tr>
<tr>
<td>Rural University President</td>
<td></td>
</tr>
<tr>
<td>Speaker Ferrandino</td>
<td></td>
</tr>
<tr>
<td>State Representative</td>
<td></td>
</tr>
<tr>
<td>State Senator</td>
<td></td>
</tr>
</tbody>
</table>

Of the 34 interviews, 27 were recorded and transcribed. Of the interviews that were not recorded, one was with a college president and one was with a non-profit representative in Colorado. Two of these interviews were with intermediary officials, and one was with a flagship system representative in Texas, all of whom asked not to be recorded. Two other interviews were not recorded due to technical difficulties; they were both with higher education agency officials in Colorado. During these unrecorded interviews, I took thorough notes of participants’
responses on the paper protocols that I used to guide the interviews. This method allowed me to keep responses organized and to align important comments with each question asked. Seven interviews were conducted over the phone (four with a variety of participants in Colorado, two with campus representatives from Texas, and one with a national intermediary official). All other interviews took place in person. Interview length ranged from approximately 25 minutes to 65 minutes.

I used semi-structured protocols to ask open-ended questions about the decision-making process surrounding performance funding policy components. A sample protocol appears in Appendix A. The interview questions were informed by preliminary archival data analysis, primarily the legislation that called for the development of performance-funding models in Colorado and Texas. The interview protocol included questions about both policy formulation and policy implementation. In particular, I asked participants to discuss their perceptions of the purpose of adopting performance funding (e.g., to tie funding to state goals, to clarify how funding is allocated, or to hold institutions accountable) and to comment on the impetus for such an approach. These questions were intended to capture problem definitions, rationales, and assumptions about performance funding. They also elicited perceptions of the populations that were targeted by the policy.

Regarding policy tools and rules, I asked about any guiding principles that framed the process (e.g., simplicity, equity, data availability, or ultimate approval by the legislature). I also asked about specific formula elements that were most discussed or contested. Within this discussion, the participants were prompted to discuss their perceptions, drawing on their knowledge, of what elements should be chosen for inclusion in the formula.
Finally, the protocol included questions about the actors who were involved in the process, including governmental and nongovernmental actors and their roles in the process. In this section of the protocol, I asked about “experts” and the sources of information on which the participants relied throughout the policy design process.

During interviews, some respondents had speculated that legislators’ connections to certain institutions (e.g., having campuses in their district or having graduated from a particular institution) might influence their discussions and decisions regarding higher education appropriations. As such, following initial data analysis, I created a matrix of connections between legislators and higher education institutions in an effort to explore policy actors’ political power resources, as suggested by their social ties. I describe this process in greater detail in the data analysis section.

Taken together, the various sources included in this analysis yield a holistic and in-depth picture of performance funding policy design, including the implementation process, which is usually difficult to gauge since the process is often characterized by “back-room” deals (Dye, 2002; Sidney, 2007).

**Data Analysis**

For the analysis of the qualitative data, I used NVivo, a qualitative software program. After importing the raw data, I categorized the sources, including documents, videos, audio files, and interview transcripts using the “Classifications” and “Attributes” functions provided by the software program. In particular, I classified the sources as either “Person” or “Organization.” For each classification, I applied numerous attributes. In particular, the person cases were classified according to the respondent’s sex, sector (i.e., campus/system, state higher education agency, business, education intermediary, policy intermediary, press, and other), and state (i.e. Colorado,
Texas, and other). For legislators, I included classifications for their political party and their connection to a public institution in the state (i.e., legislator’s alma mater, institution in the district, and other connection like institution at which they taught as adjunct professors).

I classified organizations according to their sector and state. For campuses, I also categorized them as: rural or urban (only in Colorado since this was a key factor in performance funding deliberations there); access institution; and research institution. In the final attribute for campuses, I captured the institution leaders’ political affiliations. I constructed this last attribute using a matrix of connections between campus leaders and the legislative and executive branches, including the state higher education agency (which, in Colorado, falls under the executive branch). In particular, I searched for campus presidents and chief financial officers’ connections to state-level politics. I chose chief financial officers in addition to presidents because these are the individuals on campuses who are most involved in funding discussions at the state level. Further, most of the campus actors that served in the formal formula funding committees in both states were chief financial officers.

The analysis followed both inductive and deductive strategies. As a deductive approach, I built a coding scheme based on (1) constructs from the policy design and social construction theory, (2) perspectives held by interview participants, and (3) descriptive categorizations (Bogdan & Biklen, 1992). This coding scheme was revised, including by combining categories, throughout the data analysis process.

Theory-based elements of the coding scheme include codes for target populations, including rural institutions, research institutions, flagships, and different groups of students. I also included codes for contextual influences on policy design (e.g., state organizational characteristics and history of funding policy). Furthermore, the coding scheme included
categories for policy elements. In particular, I included codes for goals and rationales along with specific performance funding policy elements (e.g., graduation rates, underserved populations, scaling, and mission differentiation). I also included separate codes for support and opposition, which I “double-coded” with specific policy elements. The initial coding scheme also included codes for specific actors, including some legislators and coordinating board officials. I have excluded most individuals’ names from the appendix for purposes of anonymity. Finally, I included a theme for knowledge and the use of research.

In addition to coding for a priori themes, I allowed for emergent codes (Creswell, 2009), some of which fell under the broader themes identified a priori. For example, I identified policy goals (like reducing lobbying power) that I had not initially anticipated. I also created a code to distinguish between rural and urban campuses in Colorado and a “volume-based” theme, which referred to the emphasis on enrollment in Colorado’s policy design. During data analysis, I added codes for actors that I had not initially identified, including individual institutions, legislators, and legislative bodies (like the Joint Budget Committee in Colorado). Some themes that were not sub-codes to anticipated themes include: uncertainty about the future, design principles (e.g., simplicity and data availability), differential impact to institutions, temporary support, tedious process, and uncertainty about the future. I also added a code for principal-agent relationship, which captured campus representatives’ objections to performance funding (particularly in Texas) and claims that the policy would be ineffective. Appendix B presents the list of codes used for this analysis.

**Validity and Reliability**

To ensure internal validity, I triangulated the data by using a variety of data sources: over 15 interviews in each state, 15 total observations, and hundreds of documents. Further,
throughout the data collection and analysis processes, I considered competing explanations for the phenomenon as recommended by Yin (2009). For example, I considered that the distribution of resources is driven primarily by legislators’ preferences, irrespective of social constructions or political power resources or that the funding allocation process is more instrumentally rational—drawing upon logic rather than constructions of certain groups as more deserving than others.

Throughout the analysis, I also employed a pattern-matching technique (Campbell, 1966; Miles & Huberman, 1994) to match theoretical patterns that were anticipated from the theory of policy design to patterns emerging from the data. To enhance external validity, which would allow for the replication of the study, I documented my procedures comprehensively, establishing a chain of evidence (Yin, 2009). Furthermore, I created numerous memos, both procedural and analytical. Procedural memos documented the data analysis process, including text searches and the creation of new codes, and contained a list of “to do” items. Analytic memos captured reflections before formal data analysis, preliminary findings (e.g., institutions different types of resources), and questions. During data analysis, I adhered to the codes and carefully and constantly compared data with codes and memos (Gibbs, 2007).

The following two chapters present the findings from this analysis of performance funding policy design. Specifically, Chapter 4 presents the findings from Colorado and Chapter 5 presents Texas. Each chapter begins by setting the stage for performance funding in the state, outlining relevant contextual and historical characteristics. This introduction in each chapter is followed by a description of the products of the policy design process—namely, the performance funding bill and proposed performance-funding model in each state—followed by the decision-making processes that led to the inclusion and exclusion of certain policy components.
Chapter 4: Colorado

The first part of this chapter sets the stage for performance funding policy design in Colorado. Before presenting the findings, I describe the features of the setting that are most relevant for understanding this case (Stake, 1995). This chapter opens with an outline of higher education governance and the higher education funding structure in Colorado. These characteristics are critical for understanding the actors involved in the policy design process and the decisions made regarding the new funding model. This section is followed by a summary of the history leading up to HB 14-1319, the performance funding bill in Colorado. The second part of this chapter presents the findings of the policy formulation and implementation design processes and concludes with key themes that emerged from the analysis of this case.

Higher Education Governance

There are a total of 31 public higher education institutions in Colorado. Specifically, Colorado has 13 four-year institutions, six of which are defined as research institutions by statute. Two of the 15 two-year institutions in the state are classified as local district junior colleges (LDJC); they receive regional property tax revenues in addition to state funding. Three of the 15 two-year schools are considered area vocational colleges.

The higher education governance system in Colorado is relatively decentralized, consistent with a local-control ethos that is salient in the state. There are ten governing boards in Colorado, and they each have significant authority over the management of individual institutions. In particular, each governing board makes policy and budget decisions for all institutions within the system. They also hire presidents, prepare campus-level master plans, set
tuition and fee levels, and establish academic programs. The boards also provide administrative support for the colleges and universities within their jurisdiction. In Colorado (as in Texas), most governing board members are appointed by the governor with the consent of the Senate. Only governing board members of the University of Colorado (CU) are elected.

The governing boards oversee the following systems: Adams State University, Mesa State University, Metropolitan State University-Denver, Western State Colorado University, Colorado State University (CSU) System, Fort Lewis College, the CU System, Colorado School of Mines, University of Northern Colorado, and the Colorado Community College System. All boards, with the exception of CSU, CU, and the Community College System oversee one institution each.\(^5\)

All fifteen of the two-year institutions are governed by a single governing board—the Colorado State Board for Community Colleges and Occupational Education. This feature is significant in the context of funding determinations since a sole system is tasked with lobbying for diverse interests. More so than in other governing boards, institutions within this board vary significantly. For example, enrollments in 2013-2014 ranged from about 1,000 (in Lamar) to over 12,000 (in Front Range).

The story of performance funding policy design in Colorado begins with the state higher education agency—the Colorado Commission on Higher Education (CCHE)—and its administrative arm, the Colorado Department of Higher Education (CDHE). The CCHE is a coordinating board consisting of 11 members, who are appointed by the governor with the Senate’s approval. Notably, when this study took place, the executive director of the CCHE, Joe

---

5 The CSU and CU system oversee three universities each. The CU system also oversees the Anschutz medical campus. The community college system includes 13 colleges.
Garcia, was also the lieutenant governor. Toward the conclusion of this study, it was announced that Lieutenant Governor Garcia would become the next president of the Western Interstate Commission on Higher Education, a regional higher education compact.

The CCHE’s activities include coordinating with higher education governing boards to implement legislation and to develop annual budget requests. The Colorado Department of Higher Education (CDHE or DHE) falls under the CCHE’s oversight and provides professional, administrative, and technical support to the commissioners. Under the CCHE’s authority, the CDHE determines state funding and financial aid distributions for colleges and universities, oversees and allocates funding for vocational and occupational programs, and regulates private schools. The department also oversees statewide college savings and loan programs, develops reports as needed by the General Assembly, allocates grants to nonprofits to increase financial aid, and administers grant-funded programs.

Finally, the department has the authority to establish policy and coordinate centrally (under the authority of the CCHE). These responsibilities include ensuring that academic programs are consistent with the missions of the institutions in which they are offered and establishing statewide standards for enrollment and admission. Pursuant to House Bill 14-1319, which the legislature passed in 2014, the CDHE was charged with developing a performance funding formula.

Based on the legislature’s directives, the CCHE, with support from the CDHE, also distributes funding to governing boards and is tasked with preparing master plans, as required by the legislature. The two most recent master plans set the stage for the performance funding policy that is the subject of this study.
First, in 2010—four years before the adoption of HB 14-1319—a committee of higher education and community representatives produced a strategic plan for higher education in Colorado at then-Governor Bill Ritter’s behest. The report, entitled, *The Degree Dividend, Building Our Economy and Preserving our Quality of Life: Colorado Must Decide*, highlights the incongruity between the state’s educational attainment aspirations and the current delivery of higher education. The three primary problems in the way higher education was being supplied that the report identified were: (1) low public investment, (2) a large attainment gap, and (3) a leaking education pipeline.

Two years after the Degree Dividend report, the CCHE published a new master plan for higher education entitled *Colorado Competes: A Completion Agenda for Higher Education*. In it, those involved in developing the document identified one primary goal: “to increase the number of Coloradans aged 25-34 who hold high-quality postsecondary credentials—certificates and degrees—to 66% by 2025” (CCHE, 2012, p. 3). Invoking the Degree Dividend report from 2010, the commission proposed four goals: increasing the production of postsecondary credentials, improving postsecondary outcomes, enhancing access, and increasing state funding to colleges and universities.

The new master plan was created in response to a legislative mandate from SB 11-052. In addition to charging the CCHE with developing a new master plan, the policy, adopted in 2011, required that the CCHE negotiate performance contracts for each institution with their corresponding governing boards. The CCHE, with support from the CDHE, was required to measure institutions’ performance in meeting the goals identified in the contracts.

Finally, the bill included a performance funding element. In particular, SB 11-052 declared that after the goals were created, after necessary data was collected, and after state
general fund money to higher education was restored to its peak levels of $706 million (and no sooner than 2016-17), the CCHE should implement a system of performance funding. The specific amount that would be tied to performance according to the bill was 25% of the amount by which appropriations exceeded $650 million (again, after funding reached $706 million).

**Higher Education Funding**

Appropriations for higher education in Colorado are among the lowest in the country. Specifically, according to a 2014 report by the State Higher Education Executive Officers (SHEEO), Colorado ranked second lowest in the nation for higher education support per capita and had the third lowest appropriations per full-time equivalent student in 2014.

**Trends in higher education finance.** Between 2009 and 2014, Colorado decreased state support for public higher education by over 30 percent, ranking fourth in the country for state disinvestment in higher education (SHEEO, 2014). These cuts were consistent with declines in state support in other sectors. Further, the share of costs has shifted considerably towards students. Whereas students covered 32% of higher education costs in 2000, by 2010, their share of the burden had reached 68%, with the state covering only 32%. Colorado was among the top 10 states in the nation to increase net tuition revenue between 2009 and 2014 (SHEEO, 2014). As a result of tuition increases, the total revenue that institutions received (from state appropriations and tuition) actually increased by 14.8% since the recession. In contrast, the average total revenue for institutions across the United States decreased by 2%.

In fiscal year 2014-2015, the state began to restore funding by investing an additional $102.9 million in higher education. In the 2014-2015 budget cycle, funding was allocated uniformly across the governing boards and constituted an 11% increase in funding.
Over time, policymakers in Colorado have used a variety of methods to allocate funding to public higher education institutions. Before 1990, detailed line item decisions were used to determine funding for each institution. This practice changed in the early 1990s, when the state began making block allocations to governing boards within single line items. The CCHE and the legislature continued to make adjustments for institutions based on a cost model. In particular, the governing boards analyzed campus-level cost and revenue components, on which the CCHE based their funding decisions.

In the mid-1990s, a classic base-plus model, which makes incremental adjustments to previous years’ allocations, was adopted. Governing boards received increases based on inflation and increases in enrollment. Additional adjustments were made through decision items or separate legislation.

**COF.** Immediately preceding HB 14-1319, the policy that guided appropriations decisions for public colleges and universities was SB 04-189, the College Opportunity Fund (COF) bill. The COF, adopted in 2004, constitutes the first voucher system for higher education in the nation. One of the primary, albeit less trumpeted, reasons for supporting the policy was to circumvent the limits placed on higher education institutions (and other public sectors) by the 1992 Taxpayer’s Bill of Rights (Prescott, 2010). This constitutional amendment, commonly known as TABOR, placed limits on the state’s ability to generate and spend revenue. Under the TABOR, tuition revenues were considered state revenue and subject to the limits imposed by the amendment. The COF allowed public colleges and universities to be exempt from these restrictions by classifying these institutions as “enterprises” under the TABOR.

Pursuant to the COF bill, allocations for public higher education institutions consisted of two parts: COF (the student stipends or vouchers) and fee-for-service contracts. For COF
allocations, the legislature apportioned money to a fund that provides stipends for eligible undergraduate students to attend a public institution of their choosing.

According to the policy, the amount remaining after the stipend funds were allocated was to be used for “fee-for-service” contracts. The contracts, established between the CCHE and governing boards, were meant to support services and costs not accounted for in the student stipends (like specialty programs and graduate education). Thus, according to the COF bill, state support provided to each institution was to be the sum of fee-for-service (FFS) contracts and stipends. This COF-plus-FFS funding structure remains in place and constitutes an important framework for the formulation and implementation of the state’s performance-funding model.

The COF bill was never fully implemented, in part due to budget reductions at a time of increased enrollments. Budget requests have focused on institutions’ total budget requests rather than on changes in student needs for stipends or on institutions’ needs for fee-for-service adjustments. As a result, the stipend amounts (for students) have been much lower than anticipated. After the COF’s adoption, budget requests continued to follow institutions’ requests for total funding. Thus, allocations were not directly connected to changes in students’ needs for stipends or to institutions’ needs for adjustment according to fee-for-service contracts.

Tuition. In 2010, the General Assembly, Colorado’s legislative body, adopted a new tuition policy (i.e., SB 10-003). In this policy, which expired in 2015-2016, governing boards were granted the power to set tuitions. Tuition increases could not exceed 9% over the previous year’s rates. Institutions could be exempt from this “soft cap” if they submitted to the CCHE a financial and accountability plan, which the commission had to approve. A stricter tuition policy was adopted in 2014.
Specifically, the General Assembly also approved a 6% cap on tuition for resident undergraduate students. As described previously, prior to this policy, governing boards had the authority to set tuition as long as they fell within a 9% “soft cap,” which could be lifted if the CCHE approved five-year fiscal and accountability plans. This provision is important since affordability was an integral part of the discourse around the performance funding bill. In some ways, the performance funding policy was framed as a mechanism for keeping college affordable; however, as a future section describes, the policy had little to do with affordability.

Funding changes in Colorado have recently been characterized by uniform increases or decreases in funding. HB 14-1319, the performance funding policy in Colorado, sought to change things.

Policy Formulation

On March 14, 2014, the Speaker of the House in Colorado, Mark Ferrandino, presented an early draft of the performance funding bill to a meeting of the higher education commissioners. Speaker Ferrandino explained what happened next:

I dropped the bill. Everyone went crazy… and everything blew up…Which I knew was going to happen. Everyone was all upset. Everyone wanted to see what it meant to them…

A faculty member also describes the disruption that the speaker’s announcement produced:

I took this job back in April. I asked my successor, what’s going on here? And he said oh, not much. [CCHE] finished the master plan. Things are quiet. So we go to the [CCHE] meeting and I notice the Speaker of the House is on the agenda, and he proceeds to simply throw up all over the commission, figuratively speaking, by saying your strategic plan doesn’t have meaning… you have to put resources towards your goals…to say that it really pissed off a number of the commissioners is an understatement.

Speaker Ferrandino, the policy champion for HB 14-1319, had been interested in revamping the higher education funding system for years. As he recalled in our interview, he had
attended a conference hosted by the Lumina Foundation for Education sometime between 2010 and 2011. At that point, he was already interested in higher education finance and thought that metrics should be included in funding models. He learned about performance funding and what other states do in this regard at the Lumina meeting. He promoted the idea to other members of the legislature, but it did not gain traction. Until he became speaker. Indeed, Ferrandino acknowledges the importance of holding this position in his ability to pass HB 14-1319:

I mean, it’s good to be the speaker. I think everyone knew when I put my back to it and we had everyone behind it that it was going to pass…No one really opposed it. They kind of did, but no one really full-out opposed it. They just wanted tweaks to it, which some of them gutted the bill, and so I was just like, no, we’re not doing that, was able to hold those off, mostly CU.

“The way it was done.” In his second year as speaker, the Speaker proposed to Lieutenant Governor Garcia, who was also the executive director of the CDHE, that they change the higher education funding formula. As he puts it, “they were interested but not so interested. I think they were going down their own path,” referring to the performance funding proposal in SB 11-052, which was contingent upon a variety of variables (including restoration of peak state funding levels).

To ensure the passage of the bill, Speaker Ferrandino secured support from colleagues across the aisle. In particular, Representative Chris Holbert, a legislator who aligns with the Tea Party, co-sponsored the legislation in the House. In the Senate, Nancy Todd and Kent Lambert—a Democrat and a Republican, respectively—also served as bill sponsors.

When Speaker Ferrandino presented the bill to the commission, there were eight weeks remaining in the legislative session to get it approved. As illustrated in retellings of the commissioners’ reactions, many were displeased with the timing and the mechanism by which the speaker introduced the bill. One commissioner, for example, expressed his initial irritation
with the speaker’s approach, particularly given inadequate opportunities for stakeholder input in the early stages of the policy formulation process:

I didn’t like the way it was done… The Speaker was holding it in his hip pocket until late in the session, didn’t tell anybody outside of a few people that may have known including some higher officials in the state. And for it to come to us in the commission late in the session with not a long time to vet this and supply an ample amount of input and have a robust debate about its merits, it got rushed, and I didn’t appreciate that.

Also commenting on stakeholder input, a CDHE representative noted that the “department was shut out” of early conversations.

On the other hand, a legislator argues for the merits of the speaker’s approach with this bill, particularly given tendencies by bill opponents to delay action on policies they dislike:

I think the institutions, the stakeholders, I understand that they felt like it was rushed. It’s very common here… if someone doesn’t like a bill, [they] say well, can we just hold this over and talk about it over the summer and come back next year and do it right?

“Sausagemaking:” negotiating the tools and rules. HB 14-1319 (presented in Appendix C) charges the CDHE and the CCHE with developing a new funding model that incorporates outcomes-based metrics, like degrees awarded. The bill includes various detailed provisions regarding the elements that are required in the funding formula (the “shall” provisions) and elements that are suggested (the “may” provisions).

Institutional representatives attempted to kill the bill or to weaken it to the extent that it would be rendered ineffective. Specifically, CU’s lobbyist tried to include a provision to prevent the bill from going into effect until funding was restored to 2007 levels. Others wanted performance funding to only apply to add-on funds, not base funding.

Although they did not kill the bill, institutional representatives ultimately altered the proposed bill substantially to arrive at the one that passed. As Ferrandino put it: “…the final bill I passed was a compromise. The institutions...made it less prescriptive, more up to [CDHE] and
the committee…which I was fine with as long as there were the guiding principles.” An article in Chalkbeat, a Colorado newspaper that called HB 14-1319 “[a] pet project of outgoing House Speaker Mark Ferrandino” posits that “… the bill easily passed both houses, but not until after the Denver Democrat made significant changes to the measure after pushback from the Colorado Commission on Higher Education (CCHE) and college leaders.” (Engdahl, 2014, p. 6).

**Quantifying COF.** The most contested negotiating point during policy formulation pertained to the percentage that was to be allocated for COF. The new model keeps the COF stipend and fee-for-service (FFS) structure, with some modifications. The bill stipulates that the COF stipend must make up at least 52.5% of the total appropriation to the higher education sector. As such, the model that was to be approved by CCHE was to be mostly volume or enrollment-based.

The percent share of total state appropriations that is allocated through COF stipends has varied over the years. According to a COF policy audit, in the past six years, it has ranged from 56% in 2007 to 45% in 2011. For Metropolitan State University, a high-enrollment institution, COF constituted 78% of its revenue from the state in 2011. In contrast, only 22% of the lowest enrollment institution’s—Adam State University’s—funds are allocated through COF (Sjoberg Evashenk Consulting, 2012). Through the use of fee-for-service contracts, the commission has shielded low-enrollment institutions from significant funding declines that would have resulted from a purely enrollment-driven funding structure.

The COF element is crucial since the higher this percentage, the more enrollment-driven the formula becomes. A campus representative described the importance of the COF determination for low-enrollment institutions:
…if you’re a [low-enrollment] college like Western, Adams, or Mines, you take a disproportionate cut not based on any policy outcome, just based on your blend of funding, so that’s…I would say one of the fundamental cores of 1319…how much you can move the policy needle just by sticking a dollar in or out of that COF stipend.

He goes on to describe the evolution of the COF decision, noting that before arriving at the 52.5% minimum law, the amounts that were considered were 59 and 57. Further, he suggests that the CDHE wanted to get rid of the minimum altogether, but:

The advocate for the bill said this is one of my lines in the sand – I can’t find the consensus with you unless it’s above 52.5 percent and that’s as low as I can go. So you saw kind of that like sausage making result in 52.5 percent for no real policy reason, but it sounds good to say that I’m giving a majority of my funding to students, which is true, but there’s like three other chapters…to really explain what the ramifications of that are.

The other half of the model. In addition to COF, the new model included a fee-for-service component. Fee-for-service contracts had to comprise two major elements: (1) role and mission, and (2) performance. The bill required that these two parts of the fee-for-service section be fairly balanced.

Within the role and mission component of the new model, an institutional mission factor had to be included. This factor had to consider an institution’s selectivity, number of campuses, rural or urban location, and enrollment. Further, the bill stipulates that the new model should account for high-cost programs (like law, business, and STEM, and remediation), graduate programs, and research.

The issue of providing premiums for certain fields of study was contested. A legislator opposed rewarding certain fields because, in his view, it is a form of “social engineering.” He noted that:

…every year someone wants to measure …where do we need people trained… and guide students into those career paths. From my side of the…aisle, maybe a Tea Party… perspective, that’s very negatively received. That is social engineering, pure and simple… the idea that we would identify where the jobs are and take these units of
human life and say… you go get these degrees and then go get those jobs, that’s really contrary to the concept of individual freedom and liberty… students can make informed decisions.

The Bell Policy Center, a progressive think tank in the state, also objected to valuing certain fields more highly than others, but for different reasons. During official legislative testimony, a representative from this think tank mentioned that the state should avoid:

starting down the slippery slope of placing different values on varying subjects and credentials…Colorado must take care not to undercut the message that all levels and types of post-secondary attainment are key to individual success and our state’s economic competitiveness.

A public CU report lists the inclusion of the high-cost programs provision as a “University of Colorado ‘wins,’” suggesting that CU lobbied for this element.

In addition to the institutional mission factor, the role and mission component had to include a premium for Pell-eligible students served by the institution. The bill also allowed for the inclusion of factors for underserved and first-generation students. While the Pell premium was required, these latter factors were optional.

Two primary factors influenced the definition of underserved populations: institutions’ self-interest in maximizing their funding and policymakers’ social constructions of particular groups. During policy formulation, the University of Northern Colorado (UNC), with support from CU, lobbied for broadening the definition of underserved students (beyond low-income and URM students). Both of these institutions have relatively low shares of Pell-eligible and URM students. When the speaker mentioned this amendment in a House hearing, Representative Murray opposed this approach. However, her resistance was primarily to the idea of adding a premium for underserved students since “the bill sort of already gives more money to access institutions, as they’re called. So aren’t they already getting additional money to the detriment of
other institutions, so now we’re adding on to that?” Despite this opposition, per UNC’s request, the adopted bill left it up to the commissioners, in consultation with institutions, to define underserved.

In addition to the institutional mission factor, the bill allowed for the creation of two additional role and mission factors, which had to be different from the others required in the bill. Other factors that are suggested but not required in the model include: affordability, cost studies, technology transfer, and career and technical programs.

The second major element of the fee-for-service portion of the new model, as prescribed by HB 14-1319, is the performance component. Two metrics are required under this section: completion, including transfer for community college students, and retention. For completions, the bill requires the CCHE to include a premium for Pell-eligible students and allows (but does not require) the commissioners to include a premium for first-generation and underserved students. The bill allows for the creation of four additional performance metrics, as long as they reflect goals from the 2012 master plan. Recommended metrics include: workforce placement, closing the achievement gap, limiting student loan debt, and controlling institutional administrative costs.

Finally, the bill specifies stop-loss provisions or “guardrails” to avoid abrupt changes in funding. The guardrails ensure that, from 2015-2016 through 2019-2020, appropriations to a given governing board do not change by more than five percentage points relative to the percentage change in the total state appropriation from the preceding fiscal year. Further, per the CDHE’s request, the bill stipulates that if the model results in financial instability of an institution, the CDHE may recommend that institutions be treated as specialty education programs and subject to exemptions from the new funding model. This amendment was made to
protect rural institutions from closing. Following these deliberations and negotiations, 90% of legislators voted in support of the amended version of the bill.

**Nonresident students.** Specifically, after substantial debate, the EAG voted to include nonresident students in all parts of the model with the exception of the Pell-eligible and URM counts in role and mission. Prior to this legislation, nonresident students were not directly funded through state allocations (since they do not qualify for COF). The inclusion of nonresident students is noteworthy because nonresident students are concentrated in certain institutions, particularly research institutions. Specifically, they make up large portions of the student population in Fort Lewis, CU, Colorado School of Mines, and CSU. A higher proportion of CU-Boulder’s funding comes from out-of-state students than in-state students. As such, the major proponents of including nonresident students were the research institutions (i.e., CU, Mines, and CSU). On the other hand, access institutions were strongly opposed. The Faculty Senate at Metro State issued a resolution in November titled “A Resolution in Support of Equitable Higher Education Funding in the State of Colorado,” where they state: “…limited state resources should be tied to participation and performance of Colorado resident students, not out-of-state students, for whom institutions can set nonresident tuition at the level deemed necessary…”

In response to concerns, CDHE staff members highlighted the fact that the funding would not be tied to any individual students. Instead, the funding would “help support in-state students and keep resident tuition affordable.” This distancing from student-centered funding is notable since one of the narratives around HB 14-1319—particularly from proponents like Metro State’s president and Representative Holbert—was that more funds would follow students.

Finally, the department evoked research evidence to support the decision to include nonresident students in the model:
A close examination of the Pell-eligible credit hour data shows that the ratio of resident to nonresident students is less than 10 percent statewide, with campuses near the border of the state having a larger concentration…The data further indicates that at least 30 percent of the nonresident students remain in Colorado following graduation and contribute to our economy.

Notably, in the first claim, the sample that they examine (i.e., Pell-eligible students) is a narrow one, and one for which the percentage of nonresident students is lower than for the broader student population. Furthermore, respondents’ perceptions of the extent to which nonresident students contributed to the economy varied. The 30% data point (of nonresident students staying in the state) was framed as significant by some and as weak by others.

**Implementation structure and rules for inclusion.** One of the most notable elements of HB 14-1319 is the aggressive timeline it set out, essentially allowing six months for the development of a new funding model. Further, HB 14-1319 specifies the groups of actors that must be included in the process of developing the performance funding formula: governing boards, campus administrators, higher education advocates, students, faculty, nonprofit education organizations, and members of the business community. The bill also specifies that the Joint Budget Committee (JBC), the legislative body tasked with making statewide appropriations recommendations, is required to use the metrics and factors that the CCHE approves. However, the JBC is allowed to assign different weights to the metrics. Finally, HB 14-1319 mandates that prior to submitting the model to the JBC, the CCHE had to ensure that each factor and metric included in it was: (1) tied to the goals of the 2012 Master Plan and those established by the legislature, and (2) transparent and measurable. The following section describes the decisions that were made—within the framework afforded by HB 14-1319—to include or exclude certain elements from the funding model that the CCHE ultimately approved.
Policy Implementation

At the time [of implementation] there was a framework of concepts and a lot of unknowns so… you couldn’t really say if it was going to be good or bad… and you can build that framework in all sorts of different ways to benefit different factions in higher ed… but… it was rigged to pay for institutions that had a large number of units… It’s kind of set up so going in, you have losers out of the gate. –Research University Official

As described by the campus representative quoted above, there were myriad opportunities during policy implementation to make decisions that would benefit some institutions over others, but the “framework” from HB 14-1319 automatically advantaged high-enrollment institutions.

The process of developing a funding model that the CCHE ultimately approved and sent to the legislature, informally called “the 1319 Project,” was highly structured. The project was broken up into four “expert” teams, which comprised commissioners, a governor’s office representative, institution representatives, legislators, and business officials. The three stakeholder groups included the Cost Driver Analysis Team, the Funding Allocation Model Executive Team (FAMET), and the Outreach Expert Team. The Cost Driver Analysis group was tasked with researching and addressing questions about the cost of higher education and appropriate levels of funding and tuition. The Cost Driver Analysis Team deferred action on their charges due to demands of the FAMET, since some members of this team (e.g., chief financial officers) also served on FAMET.

The FAMET team was most intimately involved with the intricacies of developing the new funding model. The team consisted mostly of chief financial officers for institutions or systems. In addition, NCHEMS was the vendor chosen to help develop the model and was integral to the FAMET process.

The final stakeholder group was the Outreach Expert Team. This group was charged with gathering information about priorities across the state and educating the public about the value of
higher education. This group facilitated 16 meetings throughout the state, which drew 425 attendees, including students, parents, business leaders, elected officials, higher education faculty, administrators, and staff, and others interested in higher education in Colorado. In addition to the meetings, an online outreach tool solicited input and received responses from 135 students. Meeting participants identified four major priorities for higher education: (1) more completions; (2) serving low-income, first generation, and underserved students; (3) affordability; and (4) access to higher education in all geographic areas. A representative on the FAMET described the outreach team’s efforts as legitimate but the noted inapplicability of some of the findings (e.g., affordability) to HB 14-1319’s implementation.

The Executive Advisory Group (EAG) took the stakeholder groups’ decisions and made ultimate recommendations regarding the model to the CCHE. Finally, a project manager oversaw the work of the various teams and ensured that the groups were on track to meet the deadlines. She was also responsible for disseminating most of the communications about the project.

Model overview. Pursuant to HB 14-1319, the CCHE approved the new model to allocate state funds to public higher education institutions in Colorado on December 4, 2014. The model was bounded by the prescriptions included in HB 14-1319, including a minimum weight for COF allocations (i.e., 52.5% of the total state appropriation for public higher education). Figure 1 presents the process surrounding the development of the new funding model.

The CCHE-approved model was coupled with a budget recommendation. Specifically, the budget request called for a 10% increase in funding for higher education for 2015-2016. Figure 2 presents an overview of the funding recommendation that came out of the final report from the CCHE, the group with the authority to approve the funding model before sending it to
the legislature. Specifically, Figure 2 illustrates the request for increasing the budget (by 10 percent) and the various components of total appropriations for higher education.

![HB 14-1319 Funding Allocation Model Process](image)

Figure 1 HB 14-1319 Funding Allocation Model Process

As presented in Figure 2, of the total appropriations for higher education, a portion is allotted to specialty education programs (including the medical school at CU and the veterinary school at CSU). In addition to specialty programs, funding for Local District Junior College (LDJC) and Area Vocational Schools (AVS) is carved out of total state allocations. The amount remaining after these carve-outs constitutes total state appropriations. The new funding model only applies to these funds (i.e., $526,300,815, from Figure 2).

---

6 Figures 1 and 2 are taken from pages 15 and 34, respectively, of the Colorado Commission on Higher Education’s HB14-1319 Funding Allocation Model Report. The report was retrieved from [https://highered.colorado.gov/Publications/General/1319/FinalReport.pdf](https://highered.colorado.gov/Publications/General/1319/FinalReport.pdf)
Specialty programs. The decision to exclude specialty programs from the model was highly contested. The bill did not initially provide clarity regarding these programs’ inclusion in the model. The question was one of defining “Total State Appropriations.” After much deliberation, the CDHE determined that Total State Appropriations is different from total state allocations, and the former is what remains after the exemptions are carved out.

These carve-outs make up a large proportion of total state funding for public higher education. Specifically, the specialty programs themselves constitute over 17% of total state funding for higher education—more than the share allocated to performance outcomes under the new model. The three carve-outs (specialty programs, vocational schools, and junior districts),
make up 21% of the total allocation for public higher education. As such, the starting point for this model is 79% of the total state funding for higher education.

Stephen Jordan, the president of Metropolitan State University, was markedly opposed to excluding specialty programs from the model. Another college president described him as “apoplectic” when he learned about the possibility of exemptions. To assuage concerns regarding the legality of excluding specialty programs, the CDHE invited representatives from the Office of Legislative Legal Services, the Joint Budget Committee, and the governor’s Office of State Planning and Budgeting to clarify the issue to members of the EAG. According to a bi-weekly update, these groups “firmly asserted that [Total State Appropriations] does not include specialty education programs…” As one campus representative described the decision to exclude specialty programs: “It was one of the things that was negotiated through the process, and it – somebody got something there, and somebody conceded some percentage points on the stipend or something…that resulted in that outcome.”

**COF.** Consistent with the intent of HB 14-1319, the COF stipend amount constitutes the greater part of the proposed funding model. The CCHE-approved model sets the COF proportion at 56% of total state appropriations, 3.5% higher than the minimum required by HB 14-1319. That is, of the total funding that the state awards to institutions, 56% is allocated through COF stipends; the remainder is subject to FFS allocations as determined by the role and mission and performance elements of the model. While COF constitutes 56% of the amount appropriated by the state, the COF-stipend share of each institution’s funding from the state varies considerably. Specifically, for higher enrollment institutions, a higher proportion of their state funding comes from COF, while a smaller share is appropriated through FFS.
Since many opponents of the legislation lobbied to decrease the COF minimum or remove it from the legislation altogether, it is notable that the agreed-upon amount (56 percent) is higher than the minimum set by the bill (52.5 percent). The COF stipend rate, the amount to be distributed to institutions for each student, was set at $75 per credit hour. The stipend amount has fluctuated over time—from a high of $89 per credit hour in 2009 to a low of $44 in 2010. In 2012, the stipend amount was set at $62.

As noted in a previous section, the COF allocation is one portion of the two-pronged funding structure enacted through SB 04-189, the College Opportunity Fund Act. The second part constitutes the fee-for-service contracts. HB 14-1319 requires that the fee-for-service allocation be split into two major components: a role and mission element and a performance-based section. As illustrated in the last section in Figure 2, the split between role and mission on one hand and performance on the other is 60/40, corresponding to the bill’s requirement that these two elements be “fairly balanced.”

In fulfillment of the bill’s requirements related to role and mission, the proposed model includes a factor that counts completed student credit hours. The credit hours are weighted differently by discipline (e.g., an engineering major was weighted more heavily than an education major). Furthermore, pursuant to HB 14-1319, the new model adds a Pell component. In particular, under this model, institutions receive 10% of the COF stipend (i.e., $7.50 per the CCHE-approved model) for each Pell student. This is the minimum amount required by HB 14-1319. Furthermore, the model approved by CCHE includes a 5% premium for under-represented minorities (URM).

**TSF.** The role and mission portion of the model also includes a Tuition Stability Factor—“a flat dollar amount to help institutional affordability.” This element was originally called the
economic maintenance/viability factor, signaling its purpose, which was to prevent institutional closure. In accordance with HB 14-1319, the new model weights degrees awarded differentially, according to the award level. Awards are indexed to a Bachelor’s degree (which has a weight of 1). Similar to performance funding policies in other states, Associate’s degrees are weighted at 0.5, and certificates (including graduate certificates) and transfers at 0.25. Master’s and specialist degrees are weighted at 1.25, with doctoral awards at 1.75.

Weights are also applied according to Pell-eligibility, underserved classification, and “high-priority” fields. All three types of premiums (i.e., Pell, underserved, and high-priority) are weighted at 1.5. This 50% premium is in addition to weights for award levels for all awards except certificates and transfers. Premiums are not mutually exclusive; a student can “count” as both Pell-eligible and STEM.

As previously discussed, HB 14-1319 granted policy designers discretion to define underserved within the performance side of the model. The actors involved in policy design decided to define the underserved category as underrepresented minorities (URMs). However, they did not refer to them as URMs explicitly in discussing the performance side of the model, using instead the “underserved” label.

In addition to degrees awarded, the performance section of the model awards retention. The retention metric captures each student’s progression through the 25th, 50th, and 75th percent markers of a typical degree program. The measures correspond to the 30, 60, and 90 credit hour threshold at four-year institutions and 15, 30, and 45 at two-year colleges. Different weights are assigned to these markers. The 25% mark (30 hours at four years and 15 at two years) is weighted at 0.25, while the 50% mark is weighted at 0.5; the 75% mark is weighted at 0.75.
The CCHE-approved model includes one metric in addition to those required in the bill: a volume-adjusted performance metric. This measure was included to recognize an institution’s performance relative to its size and to allow smaller institutions to compete for funding within the performance portion of the model. Specifically, the volume-adjusted performance metric takes an institution’s weighted degree total (adjusted according to award level, high-priority status, and Pell or URM) and divides this by student full-time equivalent. This number is then indexed to the state’s average. This measure is a substantial part of the model; it constitutes 40% of the performance portion of the model. The degrees awarded and retention metrics comprise 60% of performance. Of the 60 percent, the degrees awarded metric is worth 85% and retention is worth 15 percent.

**Transition tools.** In addition to the guardrails, which ensure that an institutions’ funding does not change by more than 5% of the change in the previous year’s allocation, the CCHE request includes an additional $15 million in transition funds for Fiscal Year 2015-2016 to ensure that funding for all institutions increased by at least 10 percent. Before smoothing, funding changes ranged from a 2.9% increase (at UNC) to a 16.4% increase (at Metro State). These rates were adjusted to approximately 5 to 15 percent. The additional $15 million that CCHE requested was to be used to bring each institution up to at least a 10% increase. Thus, UNC’s increase would jump from 2.9% increase to 5% with the guardrail, to 10% with the transition funds.

**Who wins and who loses?** Because of the guardrails and the additional $15 million requested in transition funds, all institutions gain funding (relative to the previous year’s allocations) under the CCHE-approved funding model. In particular, all institutions gain at least an additional 10% in funding in Fiscal Year 2015-16 relative to 2014-2015. However, some
institutions win more than others. The model, if continued and unchanged, would result in winners and losers as predicted by the distributions in the CCHE-approved model. This section briefly outlines who benefits the most and the least from the CCHE-approved model.

First, the institution that gains the most (in terms of percent changes) from the new model is Metropolitan State University. With the guardrails in place, the percent change in allocations between Fiscal Year 2014-2015 and 2015-2016 is 14.87 percent. This large gain explains Metro State’s opposition to the restriction of the guardrails. Had they been eliminated, the institution could have increased their funding by almost 15% instead of 5%. The jump for Metro is overwhelmingly attributed to the fact that the previous funding model was not volume-based and that Metro State is the institution with the highest enrollments. Thus, they experience a significant jump through this volume-based adjustment. If the specialty education programs (SEP) were not excluded from the model, Metro State would gain 16.05% (instead of 14.87).

The next highest gains (12.81 percent) go to Fort Lewis. One possible explanation for this increase is that this model does not take into account state funds that this institution receives for a Native American Tuition Waiver program. The previous funding model probably considered this additional source of revenue in determining allocations for Fort Lewis. This would have resulted in lower per-student funding. The new model would adjust for that and result in this large jump in funding. The Community College System, which also has high enrollments (concentrated in certain institutions) gains 11.45% over the previous year’s allocations.

The University of Northern Colorado (UNC) clearly gains the least under this new model and, without the guardrails, would eventually lose if all of the factors remain unchanged. This is likely because when enrollments began to decline at this institution, the proportion of funding that they received from the state (relative to other systems) did not reflect this drop. In other
words, UNC (and some rural institutions) were held harmless. This new model, which is volume-based removes the hold-harmless provision, resulting in losses for these institutions.

In terms of total dollars appropriated to each system, the clear winners are the governing boards with the highest enrollments: the Community College System and the CU System. When funding for specialty education programs is considered, CSU joins the list of winners. Specifically, CSU jumps from a little under $80,000,000 from the model to over $133,000,000 when funding for their veterinary school is included. Indeed, the specialty program funding makes up 40% of total state allocations to the CSU System.

As illustrated in Figure 3, the following institutions gain the most from the COF stipends, which is purely volume-driven: community colleges, Metro State, and Colorado Mesa University. Specifically, 72% of community colleges’ funding under the new model is directly tied to COF. For Metro State, the percentage is 63 and for Mesa, it is 60. On the other hand, of each low-enrollment institutions’ funding, a significantly lower percentage is connected to COF, as illustrated in Figure 3. For example, of the total funding that Adams receives from the state, only 22% is tied to the COF stipends. Most of the funding for Mines, UNC, Adams, and Western comes from the role and mission component, which includes the flexible TSF.

Notably, the three institutions that gain most of their funding from performance—Adams State, Western, and Fort Lewis—are also the three lowest enrollment institutions. Because these institutions do not have the highest retention or graduation rates in the state, this allocation is likely due to the volume-adjusted metric, which constitutes 40% of the performance portion of the model. On the other hand, the institutions with the highest graduation and retention rates—Colorado School of Mines, CU, and CSU—have a relatively small percentage of their total funding awarded through the performance component in the model.
In summary, the winner under the new model is Metropolitan State University, since it receives the largest percent increase in funding. Fort Lewis also wins under this new model, especially since this institution receives additional funding from the state for its Native American Tuition Waiver Program. The community college system also experiences significant gains given its high enrollments. Finally, CU and CSU are also winners in this new model. Although they have high levels of performance, this does not account for their gains. Instead, one main reason for their success under the new model is the exclusion of the specialty programs from the model.

---

7 Figure 3 is taken from page 3 of Colorado Joint Budget Committee’s FY 2015-16 Staff Budget Briefing: Department of Higher Education.
Thematic Findings

Three major themes emerged from this analysis of the performance funding policy design process in Colorado. First, numerous rationales were presented in support of performance funding, yet the policy’s design did not align with most of these stated reasons. As such, the policy’s design did not represent solutions to the problems defined through the policy formulation process. Secondly, policy proponents revealed divergent views regarding the role of HB 14-1319 in extending benefits to underserved students, primarily racial/ethnic minority students. Some supporters advocated for the bill because it would address historical inequities in funding for underserved groups; others explicitly avoided extending benefits to this population through policy design. The latter group had more power over the policy design process, which ensured that the premium for URMs was ultimately abandoned.

The final theme that materialized in this case is that higher education institutions’ and students’ political power resources (e.g., access to policymakers and financial resources) had greater influence over policy design than their social constructions. The benefits and burdens that each population received through policy design was more dependent upon their political power than their framing in public discourse. In the following section, these three themes are discussed in turn.

Theme 1: Misalignment between stated rationales and policy design. The first theme that materialized in this study is that while HB 14-1319’s policy design addresses some of the rationales articulated during policy formulation, it overwhelmingly neglects others. In fact, HB 14-1319 proponents identified at least seven purposes for the policy, which resulted in strong support for the policy, given its broad appeal. Yet, the policy’s most touted goal—to fund institutions based on outcomes—constitutes only a minor portion of the policy’s design.
**Access.** First, the bill language declares that all students should have access to higher education. The Bell Policy Center successfully advocated for including “age” and “academic preparation” in the legislative declaration as key characteristics to be considered in ensuring access and affordability to all students. Prior to this addition, the bill only stated “income,” “race,” “gender,” and “geography.” The bill also specifies that it is critical to increase the rate of low-income and minority college graduates. To address access and success for these students, the bill and resulting model include premiums for some underserved populations. As described in a subsequent theme, however, members of one target group, underrepresented minority students, do not directly benefit through the adopted model as the bill intended.

**State support.** A faculty member identified, in an interview for this study, another rationale for performance funding: by being held accountable, higher education institutions might garner additional state support for higher education. Specifically he notes: “So I think…what the hope is, is that if the funding becomes more stable, then…what [legislators are] saying is there will be more funding if you give us more control. I think that’s the message.”

**Student-centered funding.** Some actors, most notably Representative Holbert, supported the bill because it was “student-centered.” Commenting on student accountability, he simulated an exchange with students: “Are you making the right choice about where you’re going? Because if you do and you stay there, and you complete your degree, you are going to get more money potentially each year, and that institution is going to get more money…” Notably, HB 14-1319 does not directly hold students accountable. The amount of funding that students receive (via COF) is not related to their persistence. Similarly, the Speaker mentioned the value of “giving students the incentives and the resources to move around and make their own financial
decisions on where they’re going to go to higher education.” HB 14-1319 does not increase students’ autonomy to choose an institution (as the COF policy, in theory, was intended to do).

Reduced lobbying influence. Another goal for performance funding, mentioned only by legislators, was to minimize the influence of institutional lobbying. The discourse around this rationale for performance funding contained rich examples to depict the primary target populations, public higher education institutions (and their lobbyists). For example, one state representative reduced campus lobbyists to school colors:

… The CU lobbyists, guess where they graduated? They like to wear the black and gold, and they take a lot of pride…and the CSU folks come in or whoever, Colorado Mesa University or whatever, Western State…so it’s a little bit like going to a football game. When they go to the capitol, you can see their colors, and you know who they are.

Also targeting highly-resourced institutions and their lobbying teams, one legislator viewed the new policy as “more about per student measure than who has the largest campus, who has the most brick and mortar, and who has the most powerful lobby.”

Respondents had varying perspectives on whether the bill exacerbated or mitigated lobbying. For example, President Foster from Colorado Mesa stated that HB 14-1319 created an “open invitation for intense lobbying.” A newspaper article also suggests that “The idea — and mandate — for a new funding formula has put a lot of hands in the cookie jar since the legislation was passed in May, with every college and university in the state working to figure out potential impacts” (Silvy, 2014, p. 19).

On the other hand, many legislators that supported HB 14-1319 did so because this type of model would minimize institutions’ lobbying influence. One senator reconciles these opposing views. While he acknowledges that “you cannot take politics and lobbying out of any of these types of things,” he observes that through a policy like HB 14-1319, “you can at least set the
field in a way that is fairer than just a free for all…the bill is setting those parameters and guide posts on the field. And then they can fight within it, but they can’t get out of those guide posts unless they changed the law, which they might try some day.

**Transparency and rationality.** Part two of the legislative declaration states an additional rationale for the policy: that higher education funding should be more transparent. Another prominent narrative surrounding HB 14-1319 was conveyed often by the speaker: the lack of rationality or logic in the current funding structure. As the speaker frames it, this narrative is related to inequities in funding and the inability of the current funding model to incentivize higher education institutions to improve their outcomes:

…the current funding system isn’t working. The fact that we’re doing 11 percent across the board increase and that all we ever talk about… is the delta, the change from year to year and not the underlying funding and the allocation of that funding, and there’s no rationale…this is what I’ve always been asking, if someone can prove to me there’s a rationale…then I’ll walk away... But no one can come up with that rationale because there is no rationale.

**Accountability.** The bill language specifically posits that, given limited resources, funding should be applied in a way that incentivizes institutions to achieve state goals. The aforementioned faculty member suggested that one policy goal was to encourage institutions to produce more college graduates, simultaneously proposing that financial incentives have to be strong to drive changes in behavior.

I have a nine year old daughter. If I tell her, if you get your room clean today before guests show up for dinner, I’m going to give you a penny. She may be like – What’s that worth to me? And maybe [she thinks]… I’ve got a new Percy Jackson book that I want to read, and she may decide to forgo the penny. If I say to her I’ve got a $2 bill or a $5 bill, and then she may say, ding, I’m going to do what you want me to do, dad…I could be wrong, but it seemed to me that that is what the Speaker was arguing… [that] unless you have some real money that’s going to go to the folks that are doing this, it may be bureaucratic ritualism.

Similarly, Speaker Ferrandino invoked this rationale in his presentation of the bill to the General Assembly. In this discussion, however, he constructs institutions more negatively, indicating the
need to hold them accountable. Specifically, he declares that instead of giving institutions money and letting “them do what they want to do:”

we could say, with limited resources, we actually have to even be more strategic and that’s what this bill tries to do... For too long, our focus has been as a legislature on what the institutions need and not what the state and the students need, and this bill tries to move that to looking at what our policy goals are, funding based on those policy goals...

Notably, while most policy actors used the educational attainment narrative in support of HB 14-1319, funding through the proposed model was not substantially tied to performance. More than half (56 percent) of the final model is based entirely on enrollments. Other components in the model, with the exception of the volume-adjusted performance metric and the tuition stability factor, are also enrollment-based. Numerous stakeholders, particularly policy opponents, perceived the policy to be primarily enrollment-based. For instance, Lieutenant Governor Garcia alluded to the dearth of performance incentives in the proposed funding model:

I want to be very clear in stating that – and I don’t think the Speaker would completely disagree with this – that this funding model is based predominantly on enrollment and it features some outcome based elements…I also want to be clear that when we look at what this bill would do and what it says in the legislative declaration, there are some internal inconsistencies… some contradiction in that it leads us away from funding outcomes and focuses more on funding enrollments.

A college president also referred to the idea that the new model was performance-based as “a fallacy; there’s no performance in it… the bill was instigated by Metro under the guise of performance funding.” A campus representative held a similar view:

…the model’s kind of flawed…It sets winners and losers based on the characteristics of a college rather than [its] performance…so it will consistently redistribute the base if we’re cutting or flat just based on how that institution’s role and mission… so they’re not doing anything special, the model just happens to really speak to their role and mission.”

Indeed, acknowledging the minimal focus on outcomes in the approved model, a JBC report on the CCHE-approved model claimed that:
The key contribution of the model may be its message, rather than the details of weights and values as they apply this year. The model alone is unlikely to transform institutional behavior. However, it provides one more incentive to institutions to align their efforts with the state’s goals.

**The ultimate goal.** Despite not being an official goal, all interview respondents mentioned the distribution of funding as one of the purposes for pursuing HB 14-1319. While the faculty member and supporters of the policy generally framed the goal as “addressing funding inequalities,” others, particularly opponents of the bill, referred to it as redistributing funds.

Indeed, a question underlying varying perspectives on HB 14-1319 and how the policy should be designed was—what is equitable funding? As one professor describes it:

> …any time you’re engaged in the redistribution of resources, I mean, to me, that’s the very definition of politics. The distribution of resources is political in nature. So if at the end of the day you’re talking about equality and there are some that are receiving more and others that are receiving less, if you move up funding here, that’s going to be very liberating. If you move funding down here, that’s oppressive.

The Lieutenant Governor expressed, critically, what he viewed as the latent and manifest intentions of HB 14-1319.

We all agree that we want to grow degree production, but we have to recognize the other implications of changing the funding model… It also will move money – and this may not be an unintended consequence, so let’s be candid about that – it will move money away from small and rural institutions to large, access institutions. In an interview, the speaker describes his response to claims that the model was intended to benefit high-enrollment institutions. Specifically, when asked to react to propositions that HB 14-1319 was meant to benefit Metro (a high-enrollment, access institution in Denver, where he is an adjunct professor), he replied:

Metro benefited from it, but no matter how you did the formula, Metro was underfunded and UNC was over funded. No matter how you changed the variables, it was always the case. And yes, Metro… When I’m thinking of what my need is or what I think the public policy should be, Metro is exactly aligned to where I think public dollars should go. So yes, did Metro benefit? Sure, but because I think that’s what the public policy is.
According to proponents of the bill, including, most prominently, Speaker Ferrandino and representatives from Metro State, the pre-HB 14-1319 method for allocating funds to public higher education institutions in Colorado was inequitable. The inequitable funding rationale was bolstered by data illustrating that per-student funding for certain institutions, including Metro, lags significantly behind that of other institutions.

Further, many supporters of HB 14-1319 pointed out that Metro and other access institutions serve students who have historically been underserved in higher education. This observation also fueled the perception of inequitable funding for these institutions. For example, Speaker Ferrandino mentioned, referring to Metro:

They need to focus on those students more than they have to focus on the students at CU…. CU is great. But most kids who can go to CU…have the resources themselves. I mean, there’s a lot of other opportunities at CU that a kid trying to go to Metro just to get into some kind of degree doesn’t have those opportunities.

**Theme 2: Differing perceptions of 1319’s goals.** The second theme that emerged from this analysis, like the first, relates to varying problem definitions and rationales. In particular, this second theme captures conflicting views held by two camps of performance funding policy proponents. The two parties differed on the extent to which they viewed 1319 as a way to distribute policy benefits to underrepresented minority students.

On one hand, some supporters of HB 14-1319 viewed the policy as a mechanism for addressing historical funding inequities that they viewed as discriminatory. In particular, these 1319 proponents highlighted the fact that students who are traditionally underserved in higher education, including minority students, are concentrated in the institutions with the lowest levels of per-student funding (like Metro and the community colleges). For example, the faculty senate at Metro State passed a resolution stating: “We…encourage the Colorado State Assembly and
CCHE to seek additional mechanisms to reduce the gap in per-student funding between MSU-Denver and all other public Colorado institutions… to remedy its disparate impact on students of color and low-income Coloradoans.”

Similarly, a number of organizations that advocate for the rights of ethnic minorities (e.g., Brotherhood USA, the Colorado Latino Forum, and the Colorado Black Roundtable) actively promoted the idea that HB 14-1319 could address racial inequalities by increasing funding for institutions like Metro. Some of these groups, including the Colorado Black Roundtable, the Colorado Latino Leadership, Advocacy and Research Organization (CLLARO), and the Colorado Latino Forum discussed HB 14-1319 at their own meetings.

A representative from CLLARO also testified in a legislative hearing that HB 14-1319 “is reconstituting the funding for higher education that benefits the low income and the minority population, and …impacts those institutions on the Auraria campus that we were also most interested in supporting.” Furthermore, she describes the students that attend these lower resourced campuses, who “don’t have the income stream…to always attend institutions that they would prefer, and this bill will help alleviate some of the pressures on that population.”

Finally, a number of groups advocating for ethnic minorities hosted a press conference at the state capitol, articulating the importance of HB 14-1319 in reducing inequality. A flyer promoting the gathering is presented in Figure 4. In particular, the event was entitled “Colorado’s African American and Latino Communities Press Conference.” In the flyer, representatives from a number of advocacy groups include two facts: one references the low educational attainment levels for underrepresented minority students in Colorado and the other indicates the magnitude of the gap in educational achievement between minority residents and
those classified as White. The purpose of the gathering, as indicated in the flyer, is to learn whether HB 14-1319 has potential to “correct the low educational credential attainment.”

![Figure 4 Colorado’s African American and Latino Communities Press Conference Flyer](image)

While the aforementioned groups supported HB 14-1319 because, in their view, it would benefit traditionally underserved populations, including ethnic minorities, other performance funding proponents explicitly rejected the idea that 1319 would distribute policy benefits to these populations.

A number of policy designers were opposed to distributing policy benefits to any underserved population, despite the fact that HB 14-1319 and the CCHE’s Master Plan
unequivocally targeted certain populations. As an example of this preference for avoiding targeting certain populations through policy, one state representative noted:

> We hear a lot serving on the education committee that minority communities are underserved…Rather than come up with a program that’s specifically designed for a minority group, I would rather treat each student equally, and if the student has an equal opportunity to have this funding, to…succeed or fail on his or her own, I like that…So treating students equally, really important… Sometimes people on my side of the aisle, I think it’s easy to assume that we don’t care about those things. I do.

Most policy designers supported extending policy benefits to some target populations, but many avoided allocating benefits to minority students. While URMs were not overtly negatively socially constructed, policy designers during both formulation and implementation evaded discussions of this population. One senator described his relief at not having to debate in the Senate the question of whether to allocate a premium for minority students in model. He noted how legislators “kind of danced around these sort of debates that sound a lot like affirmative action debates… [and] managed to avoid the politics of it.” This reaction was in response to the chairman of the JBC’s attempt to pass legislation to make the model “race, ethnicity neutral.” Other senators ultimately killed this separate bill, which the institutions also opposed.

Those who opposed including URMs in the model, particularly members of the EAG, argued that it constituted “double-counting.” Indeed, institutions would be eligible for double premiums for each student that was classified as both low-income and URM. However, Commissioner Rodriguez and a staff member at the CDHE cautioned, the two populations should not be conflated. The lieutenant governor and the CDHE supported the inclusion of URMs in the model. The chairman of the JBC, who served on the EAG, led the opposition to the URM metric, arguing that the model should instead count Pell students (and not both).
In recognition of the opposition to including URMs, particularly in the EAG, the CDHE created an issue brief addressing opponents’ concerns. In the brief, CDHE staff members cite research from the Georgetown Center for Education and the Workforce that indicates that “race matters,” in educational attainment, even after “controlling for readiness” and “controlling for income.” The brief also invokes the CCHE master plan, which explicitly addresses educational achievement gaps by race and ethnicity. Finally, the brief articulates the premium for Pell (10 percent) and for URM (5 percent). Considering that the brief did not otherwise discuss the Pell premium, the inclusion of this fact at the end of the brief suggests that the authors were attempting to highlight the disparity in premiums for the two populations—10% for the less contentious element and only half for that which garnered opposition. As mentioned previously, in the end, the JBC dropped the URM premium altogether, ensuring that HB 14-1319 would not directly distribute policy benefits to this population.

Since the adoption of the CCHE-approved model, the CDHE has been working on a revised version: “Performance Funding 2.0,” as they are calling it. CDHE staff members have renewed their attempts to encourage institutions to better serve ethnic minorities through the funding model; the new strategy involves avoiding explicitly targeting minorities. In particular, the CDHE’s new plan is to:

put [ethnic minorities] into the allocation model where it’s not clearly just being called out on certain racial and ethnic tones that we can sit there and say well here, no, here’s what it’s doing, and anyone can be in this mix. So that’s hopefully where we’re going to get to and be able to bring it back in.

Theme 3: Political power trumps social constructions during implementation. The final theme that emerged from the analysis of performance funding policy design in Colorado is most explicitly tied to the theoretical framework in which this study is grounded. In particular,
the findings indicate that, during policy implementation, political power resources are generally more influential in performance funding policy design than social constructions. The only exception is with respect to underrepresented minority students, who, as previously noted, ultimately do not receive benefits under the model.

First, it is important to note that some target groups are winners in one stage of the policy process and losers in the other. Access institutions are technically winners during both policy formulation and implementation. On the other hand, research and rural institutions alike are burdened during formulation (through bill language). Research institutions, however, emerge as relative winners during implementation by successfully repelling some burdens intended through HB 14-1319. They are able to do so by ensuring the exclusion of specialty programs and the inclusion of non-resident students in the new funding model. Underrepresented minority students are winners under HB 14-1319, which indicates in multiple sections that this group should receive policy benefits. Yet, during policy implementation, URMs emerge as losers.

Despite the important role of URMs’ social constructions, during policy implementation, institutions’ political power resources are most influential on policy design. This influence might be attributed to the fact that many of the negotiations take place behind the scene. As such, social constructions are generally absent from discussion. Illustrating the hidden negotiations that transpire, a state senator described the lobbying process that takes place at the commission, before it reaches the legislature: “I think all of their jockeying for position… a lot of fighting and the scrapping for crumbs at the table is going to happen over at CCHE, and by the time it comes to us, it’s going to have a nice pretty ribbon on it and it’ll be all tied up in a package.”

Similarly, a senator noted his impression that, “for the most part everybody…cuts their deal with CCHE before they ever come to the legislature and then they all march in lock step,
and they all sign in blood that they [are] going to support the compromise...” One campus representative described the distinction between what outsiders observe and how decisions are actually made by analogizing the campus lobbying process to a duck wading in the water:

…if you were to go sit in a [legislative] committee…you don’t typically see fireworks, because they’re all going on behind the scenes, and it’s like a duck. A duck is kind of cruising along on the surface of the water, and you’re like well that’s a duck going by, but underneath the surface there’s a ton of stuff going on, like the legs are kicking, there’s algae getting kicked up, there’s a fish that moved out of the way, all of that stuff was going on in the midst of those meetings.

While all institutions had a seat at the table, not all institutions had an equal voice at the table. Given the project’s infrastructure and the CDHE’s role as a buffer, it appeared as though all institutions were given an equal opportunity to share their suggestions and concerns. Yet, the design process exposed clear disparities in institutions’ levels of influence. The findings reveal that these distinctions can be attributed to three primary factors: personalities, political access, and financial resources.

**Personalities.** The differences in personalities between institutional leaders and lobbyists emerged as one primary factor affecting individual institutions’ influence over the HB 14-1319 implementation process. For example, a CDHE representative acknowledged the CU lobbyist’s prominence among other representatives sitting around the FAMET table.

Will some institutions say … maybe that CU ran the show? I could see someone having an opinion like that because Todd [CU’s CFO and lobbyist] could be very outspoken, not shy…People always have impressions about someone else getting more or less than them.

Indeed, the CU lobbyist’s role in this process was mentioned by several respondents. A CDHE representative acknowledged that they talked to the CU representatives outside of FAMET meetings “quite a lot.” In a meeting I observed, CU’s CFO suggested that the group disregard HB 14-1319 altogether and advocate for 10 percent across-the-board budget increases. One
respondent who expressed frustration with this suggestion, described the CFO’s strategic personality: “Todd doesn’t comb his hair in the morning without a purpose that’s 10 chess moves down the road.”

On the other end of the spectrum, UNC’s lobbyist was notably less active during FAMET meetings. As a CDHE member describes it “even though they are looking to be hurt the most by the model, they have been surprisingly quiet.” Another FAMET member noted: “UNC, the big loser, right? Not a word. Not even a word at the table. What’s going to be done for us, they didn’t even say anything. I mean, they didn’t even say anything.”

One rare instance during which UNC’s voice was heard was in their comment in a newspaper article. First, the article describes UNC’s reaction: “For their part, UNC officials seemed resigned to the fact that this year’s formula wouldn’t be beneficial. They do expect tweaks to the formula in the future.” Then, it includes the UNC president’s comment: “We’re in it not to win the short game, but for the long game of what is the right thing to do and how do we leverage the state’s investment for the most benefit to Coloradans” (Silvy, 2014, p. 24).

Another campus representative had a different explanation for what was viewed as UNC’s lack of involvement in the process: that they calculated that it was not worth the fight: “So they could have kicked and screamed and burned a ton of political good will…to get a little bit more, but at the end of the day they still would have been poorly treated through this model.” Further, he notes that, “because they had this kind of insulation thing going on where they had a pretty even amount, …they didn’t really have to engage…So that may have trained them to be like, well, we can be passive and it’ll be okay.”

Another institution that had lower levels of engagement is the Colorado School of Mines. A CDHE representative attributed this disengagement to their culture noting that they were “one
of those institutions that we’re having a hard time providing the right funding for....They should probably be recognized as a specialty program. And they’ve been involved…they could be more but I think that’s their culture… the culture is very much the same as the people that work there.’’

Relatedly, several respondents referred to an institutions’ culture or their leadership as a major factor in level of involvement during this process. One respondent, for example, indicated that personality is related to leadership. In this observation, she suggests that some institutions that may have a loud voice choose to work behind the scenes:

It’s funny, there’s like personalities to all of the schools, and that personality to the school is informed by their leadership, and some of them are smaller and have a bigger bullhorn to voice their opinion and advocate for their institution, and others have big bullhorns but they choose to work behind the scenes.

One “big bullhorn” school that chose to work behind the scenes was Colorado State University, which Speaker Ferrandino described as “quiet. I think they knew it was going to pass, and they just kind of played the game here and there. They were happy the vet school was out.” Similarly, a campus representative related campus leadership to levels of engagement:

…it at the end of the day, the willingness or desire for a college to engage is determined by … leadership, whether that’s their CFO or their president or however they run their shop, and they chose to kind of be more passive and…let the… chips fall where they may.

Campus leaders’ behaviors might be driven by their perceptions of their institutions’ social construction. For example, CSU chose to work behind the scenes, potentially so as not to be viewed as greedy, in the way that some campus leaders view CU and its lobbyists.

**Political and social capital.** In addition to personalities and institutional culture, political and social capital emerged as important factors during both policy formulation and policy implementation. For example, a senator noted that geography, political sophistication, and access to policymakers are related and critical factors in being able to exert influence over the process:
We’ve got a school that’s a seven hour drive from Denver to get to Fort Lewis College ... And so they have lobbyists here, but their lobbyists just do what they’re told, and they’re not really policy experts. They’re not the CFO. They’re not the people that – And I think they were all on conference calls. I think they were participating pretty heavily, but not all the institutions had the same level of political sophistication or the access.

While geography is a factor, other variables may carry more weight, as this example illustrates:

Some of the ones that are far away, like Mesa State University in Grand Junction, their president was the majority leader in the House of Representatives for like six or eight years. And he’s extremely political and connected, and very, very good at manipulating the process. Not all the schools have that.

Similarly, another legislator commented on UNC getting the “short end of the stick” even though they are “just an hour away.”

The institutions that do not have political access are at a disadvantage; those that do, benefit in the process. At CU for example, the aforementioned lobbyist was a member of the joint budget committee and then the governor’s budget director. As one current legislator describes it:

and now he’s over there [at CU], and don’t think he didn’t have his thumb on the scale of every single thing that FAMET did because he did, and he has that kind of sophistication and that kind of access that I think gave CU a lot of advantage in the process, although truth be told, the model actually asks CU to probably sacrifice more than most of the other institutions, I believe… but just because they have a good person with a lot of experience and a lot of connections and relationships, they had more access to that process than a lot of the other schools did.

Social capital, independent of political resources, also proved valuable in the performance funding policy design process in Colorado. In particular, respondents described the resources gained by teaming up with other institutions. One campus representative indicated that alliances are “not uncommon in any policy thing that goes on at the commission,” but they are usually temporary:

…it’s very similar to like a tribal clan…where…if you had a bunch of… Native American tribes or American Indian tribes that you would like align with a couple
because you had mutual interests on a specific issue. You’d be like yeah, we’ll play nice with you on this issue, but it doesn’t mean that we’re like on the same team.

A commissioner also described how positive relationships with other, more highly resourced institutions can partly compensate for lower financial resources:

…then there’s [institutions] who are kind of affiliated with those folks, and they’re all friends, and they can talk about it in concept probably without seeing the model, and then there is the smaller institutions who are doing it on a piece of paper and a pencil and saying, I can see this clear as day just doing the math, that if there aren’t protections or adjustments for us, we’re going to lose a lot…and then the word of mouth through the FAMET discussions in particular…So even if one of these smaller institutions doesn’t have a staff, they’re hearing what’s going on, and they’ve got friends in these larger institutions that say, hey, I don’t know…

**Financial resources.** Indeed, institutions’ varying levels of financial resources also contributed to their distinct levels of involvement and influence over the implementation process. A CDHE representative, for example, noted:

I mean, the larger institutions have more resources at their disposal, and… some of our smaller institutions are having to attend these meetings, figure out how to represent their institution, and at the same time figure out how are they going to replace a boiler at that same exact meeting… there are differences in the amount of time that they could dedicate.

Respondents also related the levels of financial resources available to institutions to their capacity to understand the model. Referring to lower-resourced institutions, a CDHE representative observed that “as far as being able to…in that compressed time frame, to have…the full time to really dive in and understand all the nuances of the funding model, they probably were disadvantaged on that level.” A campus representative described his own institution’s lower levels of financial resources:

it’s just me basically, there’s not a whole staff of folks who can go and do that modeling, we’re trying to do the best …to sort of muddle through and figure out… how it’d work, but weren’t able to plug in the data…We’re pretty lean, so it’s very different than CU having four or five people…It’s just a different environment…
Notably, when asked if that made a difference in the extent to which different institutions had a say in the development of the formula, he had a mixed response: “I think in terms of the gaming and strategizing around some of that stuff, yes, but the parameters were such that it’s pretty obvious, and some of the things are pretty obvious.” CU on the other hand, did have models although they did not have the most current data, as one campus representative described it “depending on what it was, we’d get an average, or we took the last year’s snapshot of data, and…built our own models, so we basically knew where we needed to plant stakes in the ground to make sure that we…didn’t end up on the wrong side of the allocation.” A commissioner also described the disproportionate resources available to different campuses:

They’re all smart people, but there’s the bigger institutions that have a whole office full of business people and they’re very, very smart, and so they’ve already modeled this. They kind of know what’s going to happen. They’re listening in on the FAMET to see how the models get each week, and then they can go back and put it on a screen, so you’ve got that group, and that would be a handful of institutions.
Chapter 5: Texas

In Texas, performance funding for four-year institutions has yet to arrive. Although the performance-funding bill was signed by the governor after passing with overwhelming support in the legislature, the appropriators in the Legislative Budget Board (LBB) ultimately dismissed the model proposed by the coordinating board. This chapter chronicles the evolution of the ongoing performance-funding proposal, which started with House Bill 9 (HB 9) and presents the key themes that emerged from this analysis.

In addition to exploring the policy formulation process that resulted in HB 9, this analysis focuses on the first performance-funding model that was approved by the coordinating board and rejected by the LBB. Pursuant to HB 9, the coordinating board has continued to work with public four-year universities in Texas to develop performance-funding models. Before presenting the findings from this analysis, this chapter opens with a description of the state-level characteristics that are most relevant for understanding the case of performance funding in Texas.

Demographic Features

In terms of population, Texas is the second largest and fastest growing state in the country. Indeed, Texas’s growth rate relative to that of other states is striking: between 2010 and 2014, the population increased by over seven percent, compared to an average of 3.3 percent growth nationwide (United States Census Bureau, 2015). In higher education, growth has also been substantial. Between 2008 and 2014, full-time enrollments in public higher education institutions in Texas have increased by almost 24 percent, compared to an average increase of 8.6 percent nationwide (SHEEO, 2014).
Another important feature of Texas’s demographics is that the state contains three of the ten largest metropolitan areas in the United States: Houston, San Antonio, and Dallas (Murdock et al., 2014). Interestingly, according to state policymakers, including former Governor Rick Perry, each of these areas lacks a major research university. This characteristic is significant to higher education policy in the state. In recent years, a number of policies and financial resources have been dedicated to creating more nationally prominent research universities in Texas, including in these densely populated areas. According to Texas policymakers, currently, only the state’s two flagships—The University of Texas (UT) at Austin and Texas A&M University (in College Station)—are nationally perceived as top research universities. In 2009, the legislature passed a policy to encourage institutions to pursue “Tier One” research university status.\(^8\) Signaling the value assigned to the goal of increasing the number of nationally recognized research institutions in Texas, a hefty amount of funds (i.e., $750 million over five years) accompanied this charge. Currently, eight institutions are considered emerging research universities in Texas and thus eligible for Tier One funds: Texas State University, Texas Tech University, University of North Texas, University of Houston, UT at Arlington, UT at Dallas, UT at El Paso, and UT at San Antonio.

Another important element of the Texas context is the racial and ethnic composition of the state and its associated trends. Texas ranks second and third in the nation in the number of Hispanic and Black residents, respectively. Moreover, in 2010, Texas was one of only four states

\(^8\) The Tier One classification is loosely defined; according to the Texas Tribune, which has a website dedicated to universities’ Tier-One status pursuits, “schools that receive at least $100 million each year in research grants, have selective admissions and low student-faculty ratios and competitive faculty salaries are typically considered tier-one universities” (The Texas Tribune, 2014, p. 2).
classified as a “majority-minority” state, meaning that there was a higher percentage of residents classified as non-White than those who are White living in the state (Murdock et al., 2014).

Despite this diverse ethnic and racial representation in Texas, educational attainment for traditionally underserved populations lags in the state. In light of demographic changes in Texas and the substantial discrepancies between the state’s aspirational and actual levels of educational attainment, policymakers have closely monitored differences in participation and attainment by various racial and ethnic groups for over a decade. Partly in recognition of these demographic changes, many of which were identified by then-state demographer, Steve Murdock, the state’s 2000 master plan for higher education focused on closing the educational attainment gaps between demographic groups.

The comprehensive statewide master plan, *Closing the Gaps*, guided statewide higher education planning for fifteen years. The plan’s primary focus was to increase participation in higher education in the state. The plan included three other objectives: ensuring student success, enhancing institutions’ national prominence, and promoting high-quality research. The master plan expired in 2015, when a new plan, 60x30TX, was adopted. The 2015 plan focuses more closely on completion and educational attainment. Specifically, the new plan calls for 60 percent of Texas residents to hold postsecondary credentials by the year 2030—a 22 percent increase over the current figure. The new plan also includes goals for reducing student debt and for promoting the attainment of marketable skills.

**Higher Education Landscape**

Texas houses over 100 public higher education institutions, including fifty community and junior college districts, one technical college system, nine health-related institutions, and
three lower-division state colleges. The institutions only offer lower-division coursework and thus are distinguished from the group of institutions that constitute the focus of this study: general academic institutions (GAIs). This final category of institutions, as defined by the THECB, includes Bachelor’s degree-granting institutions and law schools (and excludes the lower-division Lamar state colleges). In sum, there are 38 GAIs in Texas.

The GAIs vary significantly, including in geographic location, size, selectivity, and student characteristics. For example, West Texas A&M University in the northwestern part of the state is 761 miles away from The University of Texas Rio Grande Valley in south Texas, and 613 miles away from the University of Houston in the eastern part of the state. In comparison, the distance between Athens, Georgia and Washington, D.C. is just 573 miles. Enrollments range from about 1,000 students at Sul Ross State University Rio Grande College to over 50,000 at UT-Austin and Texas A&M University. These latter universities were established by the Texas constitution and are the flagship universities in the state.

The GAIs in Texas are governed by 10 university systems. Six systems oversee more than one institution. These include: The University of Texas, Texas A&M University, Texas State University, University of Houston, University of North Texas, and Texas Tech University. Additionally, there are four independent public university systems, which govern a single institution each: Midwestern State University, Texas Women’s University, Stephen F. Austin State University, and Texas Southern University.

The Texas Higher Education Coordinating Board (THECB) is the statutory agency charged with planning and coordinating postsecondary education in Texas. Unlike in Colorado,

---

9 Lower-division state colleges constitute public two-year institutions within the Texas State University System. They used to belong to the Lamar University System, which was abolished in 1995.
the THECB does not function as a cabinet agency. Established in 1965, the board comprises nine members whom the governor appoints with the senate’s confirmation. Board members serve staggered six-year terms.

The coordinating board oversees the statewide master plan for higher education in the state in addition to providing leadership and coordination for the numerous higher education institutions in the state. As part of its charges, the coordinating board assesses the system of higher education and develops recommendations for improvements to the governor, the legislature, and institutions. The board also reviews and recommends changes in the funding formula to ensure the effective use of resources. The coordinating board oversees 12 formal advisory committees. One of these committees, the General Academic Institutions Formula Advisory Committee (GAIFAC) is formally charged with developing funding formula recommendations. Thus, the charge to design a performance-based model that was generated by HB 9 fell primarily upon the GAIFAC.

Higher Education Funding

The GAIFAC, with leadership and facilitation from the coordinating board, recommends funding to the governor and to the Legislative Budget Board (LBB). The LBB, much like the Joint Budget Committee (JBC) in Colorado, makes final recommendations regarding higher education appropriations to the legislature. Specifically, the JBC drafts the General Appropriations Bill, and)—after state representatives and senators revise the bill in the House and Senate separately)—reconciles the two chambers’ versions. Because the Texas Legislature meets every two years, the General Appropriations Act (i.e., the adopted version of the General Appropriations Bill), makes appropriations decisions for the two years—or the biennium—following each legislative session. Thus, the General Appropriations Act (GAA) adopted in 2013
stipulated state appropriations for the 2014-2015 biennium. As such, like in Colorado, performance funding originated in the legislature, was developed in the coordinating board, and returned to the legislature (first to the LBB, in Texas’s case) for final approval.

Relative to other states, Texas funds public higher education institutions generously. In 2014, Texas ranked sixth of the 50 states in per-student state appropriations for public colleges and universities (SHEEO, 2014). Although not as drastically as in Colorado, state funding for public higher education institutions in Texas has declined in recent years. Specifically, between 2008 and 2014, public higher education appropriations have dropped by 14.8 percent; this figure is lower than the national average of 18.9 percent (SHEEO, 2014).

Since 2009, tuition in Texas has increased by 13.3 percent, which is significantly lower than the national average of 26.7 percent and about a third of Colorado’s increase (38.5 percent). This relatively modest rise in tuition is notable given that the state has not regulated tuition (i.e., placed any formal caps on rates or increases) for over a decade. Because of declining state support and mild tuition increases, total revenue for public higher education institutions (which is calculated as the sum of state appropriations and tuition), declined by 8.1 percent between 2008 and 2014, compared to a 2.0 percent drop nationwide.

In Texas, funding for higher education institutions is determined primarily through higher education funding formulas. In fact, Texas was the first states to use formula funding for higher education (McKeown-Moak, 2013). One of the prominent features of Texas’s formula is that it incorporates weights for expenditures corresponding to different degree programs and levels. The data used for these weights are frequently updated.

The GAIIs in Texas receive funding through direct and indirect appropriations. Direct appropriations are made through two funding formulas—an Instruction and Operations (I&O)
formula and an Infrastructure formula—and two supplements (one to incentivize the use of tenure-track and tenured faculty and another to account for reduced economies of scale). The formula is based on weighted semester credit hours during a three-semester period. Weights are based on program (e.g., engineering or liberal arts) and level (e.g., lower-division undergraduate or Master’s). A matrix with weights is included in Appendix E.

The Infrastructure formula is based on predicted square feet and allocates funding for physical plant support and utilities. The Infrastructure formula represents a small portion of funding compared to the I&O funds (i.e., less than 20 percent of funds provided through the formulas).

In addition to formula funds and supplements, direct appropriations include special items for projects not funded specifically through the formula but identified by the legislature as needing support. Indirect appropriations are not made directly to an institution in the appropriations bill, but are used to cover costs related to staff (e.g., for retirement benefits).

Finally, other indirect funds include those stipulated in the Texas Constitution. For example, the constitution granted over a million acres of land to The University of Texas and Texas A&M University Systems. Only the oldest institutions within these systems are eligible to draw funding from this pool. The Permanent University Fund (PUF) comprises revenue from taxation of the land and from investments. For the institutions in the two systems that are eligible to draw from this pool, the Permanent University Fund (PUF), is a substantial source of revenue. In the 2014-2015 biennium, Texas A&M received almost half a billion dollars from PUF, while the UT system received approximately $890 million.

The constitution also created the Higher Education Fund (HEF), which benefits institutions that are not eligible to draw from the PUF. These funds are only a fraction of what
the PUF makes available to the flagships. Approximately $330 million from HEF were distributed in the 2014-2015 biennium across all institutions not eligible for PUF.

Other indirect funds have also become available at various times, including the Texas Competitive Knowledge Fund, which is restricted to certain institutions and used to support faculty for the purpose of instructional excellence and research. Only the flagships and the emerging research universities (with the exception of the University of North Texas) are eligible for these funds, which totaled about $160 million in 2014-2015. Finally, the Texas Research Incentive Program (TRIP), which also exists to promote more Tier One universities, awarded about $35 million in 2014-2015. In sum, there are substantial sources of funding outside of the funding formulas for which the flagships and emerging research universities are eligible.

In addition to the aforementioned alternative sources of revenue, Texas has a defunct performance-based funding program, which was created to afford institutions the opportunity to earn additional funds. The legislature adopted the program, entitled the Performance Incentive Initiative (PII), in 2009. The program, though still in statute, was defunded in 2012-2013. The PII was established “for the improvement of teaching and educational excellence at general academic institutions in Texas.” The bill, HB51, was the outcome of a taskforce created by then-Governor Rick Perry. The purpose of the taskforce, as articulated in a press release, was to “change the paradigm from funding institutions solely based on students enrolled to funding based more on the quality of students produced” (Fikac, 2008). Thus, both Colorado and Texas had a version of performance funding in statute—and both were ineffective—before the performance charges that came from HB 9 in Texas and HB 14-1319 in Colorado.

It is important to note that Texas has a functioning performance funding program for two-year institutions. Further, since 2013, the Texas State Technical College System—a separate
system from the community colleges—has been funded through a “value-added” methodology. Because funding mechanisms for the various sectors are substantially different, the focus of this analysis is on the GAIs, for which the GAIFAC makes funding recommendations.

The following section outlines the policy formulation and implementation processes surrounding HB 9, the bill that charged the coordinating board in Texas with creating a performance-based model for GAIs. As with the presentation of Colorado’s case, to organize the remainder of this chapter, I focus on both policy content and policy process, drawing on the theory of policy design and social construction. First, I describe the process that led to this bill’s design. The second half of this chapter presents the performance-based model that was recommended by the coordinating board, with institutions’ input, and describes the process that culminated in the recommended model.

**Policy Formulation**

Like Speaker Ferrandino in Colorado, Representative Branch, the policy champion for HB 9, was in his second term when he decided to pursue performance funding. Both Representative Branch and Speaker Ferrandino had leadership roles, albeit with different scopes. While Ferrandino was the Speaker of the House in Colorado, Branch was the chairman of the House Higher Education Committee. This afforded him power within the committee and, to a certain extent, within the House. His influence within the House notwithstanding, Chairman Branch had limited control over what happened once the bill passed. In fact, the proposal’s demise at the Legislative Budget Board (LBB)—described in greater detail in a subsequent section—came as a surprise, particularly since the chair of the LBB had co-sponsored HB 9.

Like Ferrandino, Branch also learned about performance funding at a meeting held by a national group focused on educational attainment—Complete College America (which is
supported by the Lumina Foundation, from which Ferrandino learned about performance funding). Upon Chairman Branch’s return from the convening, he met with institutional leaders and coordinating board officials to pursue a performance-based approach to funding higher education. Referring to campus leaders’ reactions to his proposal, Representative Branch recalls:

I always thought that there was an acknowledgment that the completion rates were not…something they were proud of. I remember one college president admitting that they were horrible, that his rates were deplorable…but…I also got the sense that we were moving someone’s cheese… and that that was creating some discomfort…

Furthermore, Chairman Branch emphasized that declines in timely graduation, including at more selective institutions, were part of the problem. In particular, he noted that:

The other…big issue [was that] when you sort of look at your barn and say what…do I need to fix to make a difference? Our graduation rates were horrible, and we had tier one universities or emerging tier one universities whose presidents admitted sometimes only privately, but sometimes publicly, that their graduation rates were abysmal. Others would say my university is different and so hold me accountable only to a six or eight year graduation rate, because I’m not designed to do four years.

**Problem definition and rationale.** As described in these quotes, in Texas, the pursuit of performance funding emerged from a belief that college completion rates in the state were inadequate. Proponents of performance funding alluded to the need for a paradigm shift from funding institutions based on enrollments to funding them on outcomes. According to Branch,

One of the outgrowths of …looking at [the data was] that we weren’t completing people, and we weren’t completing people fast enough in order to improve retention and improve completion… The colleges and universities need to focus more on the … utilization of tax payer money and scholarships, public dollars … We’re funding the front end, therefore we’re incentivizing enrollment in higher education, but we don’t have an incentive for completing higher education….

Similarly, a member a business leader in the state suggested that institutions are not incentivized to ensure student success because they “get money on the kid sitting in a classroom
The transition toward focusing funding on performance (rather than enrollments) aligns with a discourse surrounding policy formulation in Texas that accentuated “success” over “access.” One regional university representative described the “change from… the emphasis on access to success as the most significant policy change… [And] that change is still something that is being absorbed [by institutions].” Indeed, while the coordinating board expressed an interest in continuing to provide access, the state agenda for higher education, as outlined in the new master plan, places a much greater emphasis on completion. This shift in focus is a key distinction between Speaker Ferrandino’s intentions with 1319, which were largely grounded in an effort to enhance access and affordability, and those that buttressed Branch’s pursuit—and business leaders and other policymakers’ support—of performance funding.

Business leaders in the state aggressively touted the need to hold higher education institutions accountable, suggesting that colleges and universities could and should improve their performance. For example, one representative from the Texas Association of Business supported the bill by noting that:

"HB 9 provides a framework to say to the institutions of higher education: come on now, you can and should do better…and I think the best way to get them to respond is to dangle some dollars in front of them. That’s how you get their attention. I think they’re perfectly capable of meeting these goals, which are very minimal. If I were in charge, I would have a higher percentage of the money associated with successful completion.

Members of the business community also highlighted the economic imperative of increasing educational attainment rates and, like Chairman Branch, often referenced taxpayer dollars. For example, in a Senate hearing, a business representative testified that:
Jobs of the future will require a postsecondary degree of some sort. In these... conservative times, I think it’s right and appropriate for the legislature to demand that all institutions be more productive... give a higher rate of return on the taxpayer’s dollars. What it’s all about is kids walking across the stage with a diploma that means something.

The language in House Bill 9 codifies the aforementioned rationales. The bill’s declarative statement invokes higher education accountability, stating that the purpose of the bill “is to ensure that institutions of higher education produce student outcomes that are directly aligned with the state’s education goals and economic development needs.” According to the bill, the obligation for student success falls on institutions.

Furthermore, like Colorado’s bill, HB 9 alludes heavily to education’s role in the state’s economic vitality. The declarative statement specifically articulates that a funding policy that is based on outcomes is critical for national and global competitiveness and for maintaining the state’s general welfare. The two primary differences between Colorado’s declaration of intent and Texas’s are: (1) Colorado’s 1319’s heavy focus on access (for all students) and on underserved students is absent from Texas’s bill; (2) Texas’s bill emphasizes higher education accountability more heavily than Colorado’s; and (3) Colorado’s bill, unlike Texas’s, highlights the need to improve transparency and rationality of funding. This last distinction can be attributed to Texas’s long history with funding formulas (McKeown-Moak, 2013) and Colorado’s lack of experience with this funding mechanism.

**Stakeholder input.** During the public HB 9 formulation process, four-year higher education institutions were noticeably absent. For example, at the four legislative hearings for the bill (two in the House Higher Education Committee and two in the Senate Higher Education Committee), only one representative from a four-year university system—and none from a four-year campus—testified. Specifically, a Texas A&M University System vice chancellor testified
on the bill, formally taking a neutral position. In addition, a representative from the Texas Faculty Association spoke, first, in opposition to the bill, and then, neutrally, on the bill. The other stakeholders’ lack of involvement at this stage might be attributed to institutional representatives’ confidence that the design process would resume within their jurisdiction (in the formula advisory committee on which they serve).

Because HB 9 also addressed community colleges, a number of community college representatives spoke against the bill. Opposition to HB 9 also came from representatives from the National Association for the Advancement of Colored People (NAACP) and from the League of United Latin American Citizens (LULAC). A representative from the Mexican American Legal Defense Education Fund (MALDEF) spoke neutrally on the bill; like some opponents, he made some suggestions for improving the bill.

Illustrative of the distinct goals of HB 9 and HB 14-1319, minority advocates’ position on performance funding (i.e., opposing the policy) stands in contrast to those of groups that advocated for minority rights in Colorado. These differences notwithstanding, opposition to HB 9 was not strong; it primarily consisted of making recommendations to avoid unintended consequences like restricted access for students who have been historically underserved by higher education institutions. Specifically, some legislators, the Texas Faculty Association representative, and the MALDEF and NAACP representatives, all noted their concern that institutions might become more selective and, as the NAACP representative described it, hesitate to admit a student “who may be viewed as a bigger gamble to securing state funds.” In response to this concern, the THECB’s commissioner asserted that the at-risk metric in the model would

---

10 In Texas, legislative committee witnesses are able to register for, against, or on a bill. The latter designation indicates a neutral position on a bill.
protect against that unintended impact. In support of this claim, the commissioner described an instance when “[in] the early stages… [THECB representatives] met with boards of regents and one … regent said… maybe we’ll just admit highly qualified students. They’ll be disproportionately Anglo and then we don’t have to worry about any of the performance metrics.” Coordinating board officials then decided to include an at-risk metric in the model.

In addition to concerns about limiting access, a few others mentioned the risk of lowering educational quality by focusing on outcomes. Representative Donna Howard, who had proposed a different version of performance funding, raised the possibility of this unintended consequence. The faculty member representing the Texas Faculty Association also testified on this concern, which she had also articulated in an interview with Inside Higher Ed:

I guarantee you [that] the minute that they start talking about funding being tied to graduation rates, there will be tremendous pressure placed on faculty to pass people … I’ve sat in meetings with deans who’ve told me, “You will pass 65 percent of your students…” They weren’t even doing [performance-based funding] then, and that was still happening. If they start trying to fund completion, everyone knows what the outcomes will be. It’ll lower all our standards.” (Moltz, 2010)

In addition to concerns with access and quality, some performance funding skeptics worried about the implications of incentivizing certain academic fields. For instance, Representative Castro asked Dennis Jones—from the National Center for Higher Education Management Systems (NCHEMS)—during his testimony, whether the critical-fields designation would provide a disincentive to graduating students in the liberal arts, humanities, and social sciences. Jones replied, “the answer to that is yes.” He indicated, however, that this is not an unintended consequence of the policy and states should incentivize graduations in fields that align with the state’s economy. Others also mentioned this prioritization of certain fields as a
concern, including the NAACP and a faculty representative. The NAACP representative addressed legislators when he remarked, regarding non-STEM majors:

we know who takes these classes, they’re your staff…We need to make sure to develop our arts, fine arts—everybody likes music, entertainment and good discourse—that makes the state stronger when you have a good balance… and good thinkers as well… The thinkers will run the state and balance everybody out.

Another major concern that came up regarding critical fields is that campus leaders would receive no warranty that the critical fields, which the state currently values more highly, would not change. Representative Johnson asked whether there were any guarantees that if an institution invests in a “critical field,” that field will not become deprioritized in the future. Indeed, as described in a subsequent section, a college president remarked that because of this uncertainty about the future, he disregards the state’s periodic priorities.

In addition to Dennis Jones (from NCHEMS), business representatives were strong proponents of performance funding. In fact, at least one representative from business organizations—including the Texas Association of Business, the Governor’s Business Council, the Greater Austin Chamber of Commerce, and Americans for Prosperity-Texas, an organization supported by the Koch Industries—testified in favor of the bill in each of the four hearings.

Like in Colorado, the performance funding bill in Texas was not overtly partisan. Indeed, while the conservative Americans for Prosperity organization supported the bill, the progressive Center for Public Policy Priorities (CPPP) also favored HB 9. The CPPP, however, did not testify on the bill and was not significantly involved in the performance funding policy design process. This stands in contrast to the active role played by the Bell Policy Center, a progressive think tank in Colorado, in that state’s policy design process.
In Texas, the major ideological differences were in the rationales for performance funding. Conservative groups, including the various business representatives, highlighted the need to hold higher education institutions accountable and suggested that institutions were not making efficient use of taxpayer dollars. On the other hand, the more progressive groups did not challenge the need for more accountability, but were instead focused on the most careful way to implement such a model so as to minimize unintended consequences. As one legislative aide described it, the progressive groups’ approach was “let’s think of the smartest way to get this done.” Like in Colorado, both Democrats and Republicans alike sponsored the performance funding bill. While Dan Branch is a Republican, Senator Zaffirini, who sponsored the bill in the Senate and chaired the Senate Higher Education Committee at the time, is a Democrat. A legislative aide from another member’s office remarked that “Zaffirini…never would have let it out of committee had … she thought it … would have had a bad effect on poor kids.”

Policy design rules. Both Colorado’s and Texas’s performance funding bills refer to the new models as “outcomes-based funding models.” However, the two bills are distinct in many respects, primarily in relation to their specificity and, relatedly, to the prescriptiveness of the laws. In particular, Texas’s HB 9 is much less prescriptive and more flexible than Colorado’s HB 14-1319, a feature that accounts for the substantial variation in performance funding policy design—both content and process—in the two states. For example, all of the performance metrics mentioned in HB 9 are suggestions, not requirements. Additionally, the requirement to incorporate measures in funding recommendations is highly qualified. In particular, the bill states that the THECB should consider performance metrics “in the manner and to the extent the board considers appropriate and in consultation with [affected] institutions.”
Indeed, the performance funding model itself became a recommendation (and not a requirement) in a revised version of HB 9. Specifically, a Senate committee substitute gave the LBB additional discretion to decide whether to: 1) implement performance funding at all, 2) make it part of the base formula, or 3) make a separate allocation based on performance outcomes. This revision granted more authority to the LBB, and effectively weakened the performance funding charge. Acknowledging the concerns that legislators received from various stakeholders (i.e., campus officials) prior to this change, in a committee hearing, Chairwoman Zaffirini indicated that in the notes that her staff member had prepared for her, the word *recommendations* appeared in bold print.

The committee substitute also recommended that the LBB incorporate the success measures that were to be determined by the coordinating board into the distribution of an existing incentive program, including the Performance Incentive Initiative. This addition essentially provided an option to avoid making substantive changes to funding for higher education institutions, since the coordinating board or the LBB could decide that the Performance Incentive Initiative would function as the performance-funding model that HB 9 called for (rather than changing the funding formula or creating another incentive fund).

Recognizing these changes, which shifted power away from the coordinating board and toward the LBB, the coordinating board’s commissioner noted in his testimony to the Senate that “the legislature still maintains complete autonomy to accept, reject, or develop the recommendations.” He later reiterated that “the legislature maintains autonomy and control of the process” and that “as Senator Zaffirini pointed out, the term ‘recommendations’ is in bold print. The coordinating board would only make *recommendations* to the legislature.”
The commissioner also identified, during a hearing, another “control” for the LBB that appears in the revised version of the bill—a cap on the amount of funds that the THECB can recommend to be placed into this outcomes-based funding pool. The introduced version of HB 9 had not specified a cap on the percent of funds that could be tied to performance metrics. Finally, at the request of some research institutions in the state, a revised version of HB 9 clarified that performance funding would not negatively impact funding for graduate education. A copy of the adopted version of House Bill 9 appears in Appendix D.

As a result of the ample flexibility in the bill and of the discretion granted for policy implementation, it was entirely unclear during policy formulation which institutions would win and lose under the new model. This is a major distinction from the process in Colorado, where most stakeholders understood that, because the new formula was volume-based, higher enrollment campuses would fare more favorably. In Texas, some stakeholders seemed to think that it would help selective institutions; others worried that it would hurt these institutions.

In a hearing, for instance, Senator Wentworth asked Commissioner Paredes if the revised version of the bill addressed the fact that the Texas A&M System and the UT System would lose 10 percent of their funding respectively (compared to the previous biennium) under the new model. The primary concern, he noted, was that the “at-risk” metric automatically disadvantages more selective institutions, including the flagships and Texas Tech. The commissioner replied that the enrollment-based method that was currently used to allocate funds actually disadvantages institutions like UT, which has essentially capped enrollments. Further, he contended that the new performance-based model would actually grant institutions more opportunities to increase their funding.
On the other hand, regarding non-selective institutions, the representative from the Texas Faculty Association was quoted on Inside Higher Ed saying:

I think this is horrible. We have students who are very poor, especially if you get into the lower Rio Grande valley. This competitive funding will hurt them and their institutions. They may go to school for a semester and then have to take off to go to work and then come back, in and out multiple times. Whether you talk about students graduating in four years or six years, many of our students don’t do that not because they’re remiss but because they’re poor (Moltz, 2010, p. 9).

Similarly, Representative Gallegos opposed the performance funding bill because he viewed it as detrimental to institutions with students who take longer to graduate. His impression was that these institutions, which are less selective, would be hurt under the new model. On the House floor, he noted his concerns with “the more nontraditional students… [like] a single mother with kids who is working and trying to provide for her family and at the same time going to school.” He further expressed his concern that the bill “punishes those people who are taking longer, because they are struggling to get by. The person…who’s trying to go back to school and get a degree to try and improve their life.” Illustrating the ambivalence of the model’s differential impact on institution types, in response to Representative Gallegos’ inquiry, Representative Branch noted that he actually thought the model would help those institutions. Representative Gallegos was unconvinced and proceeded to vote against the bill.

Policy design tools. Like HB 14-1319 in Colorado, HB 9 in Texas charges the coordinating board with developing a performance-funding model for public higher education institutions. Performance funding was an interim charge (i.e., an issue to be considered and researched between sessions) after the 81st legislative session (in 2009). Specifically, the charge required the House Higher Education and Appropriations committees to “examine… the impact of shifting the basis of the formula funding methodologies from attempted to completed hours.”
During the interim (between 2009 and 2011), a committee composed of coordinating board officials, college presidents, and legislative staff members, met to build a performance-funding model. The first major proposal that was considered in this committee was to base funding on completed courses rather than attempted semester credit hours. This idea was discarded after one institutional representative illustrated on a graph that some institutions have high course completions but low graduation rates, which committee members interpreted as a weak correlation between completions and graduation rates.

Instead, coordinating board officials, campus representatives, and legislative staff members decided to change the metrics to degrees awarded. Some respondents indicated that this shift was in response to legislators’ requests to base funding on the actual outcome of interest: completions. In particular, those involved in designing the model decided to pursue a model that was similar to the existing, but defunded, Performance Incentive Initiative, which rewarded degrees awarded (including ones for at-risk students and critical fields). One metric was added: predicted graduation rate. The purpose of this metric was to address some schools’ concerns about differences in levels of academic preparation among incoming students. Chairman Branch translated this proposal into legislation, namely, the introduced version of HB 9.

Following the interim committee’s recommendations, the performance metrics identified in Texas’s HB 9 include: (1) total number of bachelor’s degrees awarded; (2) degrees awarded in critical fields; and (3) degrees awarded for students who are considered at-risk; and (4) predicted six-year graduation rate based on student composition.

The bill defines “at-risk” students as: Pell Grant recipients, adult students, students with relatively low scores on college entrance exams (e.g., ACT and SAT), part-time students, and students entering college without a high school diploma (e.g., GED-certified students). In
comparison, of the aforementioned populations, Colorado’s bill only includes Pell students. Two target populations that are identified in Colorado’s bill but are absent from Texas’s are underrepresented minority students (URMs) and first-generation students.

In regard to critical fields, the bill lists: engineering, computer science, math, physical science, allied health, nursing, and teaching certification in the fields of science or math. In contrast, Colorado’s bill does not specify fields that are “critical” to Colorado’s economy. It does, however, include a provision charging policy designers to consider “high-cost” programs, including those in STEM, business, and law.

According to the bill, a maximum of 10 percent of the total amount of general revenue appropriations for undergraduate students could be based on student success measures. The bill does not specify whether performance funding should constitute “add-on” funds (in addition to those appropriated through the funding formulas), or whether the model should be integrated in the current Instruction and Operations (I&O) formula. Rather, the bill calls for a comparison between using these two approaches. Finally, the bill charges the coordinating board, in consultation with affected institutions, with reviewing the model every two years.

Rules for inclusion and exclusion. Like Colorado’s performance funding bill, Texas’s HB 9 specifies rules for inclusion and exclusion in the model development process. Specifically, the bill requires representation from “a cross-section of institutions representing each of the institutional groupings under the board’s accountability system.” The commissioner of higher education, who heads the coordinating board, is charged with soliciting recommendations for committee membership from system heads and, for the single-institutions boards, from campus presidents. As such, only coordinating board officials and those representatives from the institutions to which performance funding will apply are required (and invited) to have a seat at
the table during policy design. This limited representation requirement stands in contrast to that in Colorado’s bill, which called for the inclusion of higher education advocates, students, faculty, and members of the business community.

After the bill passed the House committee, HB 9 was held on the legislative calendar for a month a half (and not brought to a vote)—that is, until, according to one legislator, Governor Perry said he would refuse to approve a budget until HB 9 passed. According to this legislator, the governor thought HB 9 would mandate a performance-funding model. The bill passed with overwhelming support in both the House and the Senate.

**Policy Implementation**

Contrary to Governor Perry and others’ perceptions of HB 9, the bill only called for a performance-funding model to be designed and recommended; it did not require its use by the appropriations committee. In addition to failing to prescribe performance funding, the bill was remarkably flexible, as described in the previous section. Much of the decision-making was deferred to the implementation phase, where the coordinating board and higher education institutions would have absolute authority over the model’s design.

Indeed, campus representatives and THECB officials were virtually the only parties involved in the performance funding model’s design. In contrast to Colorado’s high-profile policy design process—which was atypical of performance funding in states—Texas’s development of a performance-funding model was rather insular. While in Colorado, input was sought from a variety of “interested parties,” including students, faculty members, and community representatives, in Texas, there were few other actors participating in the process or actively seeking involvement. Coordinating board staff members requested insights from a representative from Tennessee (in September of 2011), from someone at RAND Corporation (on
a couple of occasions), and from NCHEMS. Furthermore, Stan Jones, from Complete College America gave a press conference in August of 2011, where he alluded to outcomes-based funding. The engagement of these external actors notwithstanding, overwhelmingly, institutional representatives dominated the performance funding policy design process with guidance and support from the coordinating board.

Two groups were almost exclusively involved with the development of a performance-funding model: higher education institutional officials (for both campuses and systems) and coordinating board representatives. In particular, institutional representatives served on the General Academic Institution Formula Advisory Committee (GAIFAC), a subcommittee at the coordinating board that existed prior to the adoption of HB 9. Though this committee has a number of charges every session, their main charge is to recommend formula funding for public four-year institutions in Texas. GAIFAC members serve for two biennia in staggered terms. The group meets regularly (usually monthly) starting in August of odd years.

GAIFAC committee members rotate periodically. Like in Colorado, system heads are required to recommend GAIFAC members to the commissioner, who selects members based on these recommendations. On the GAIFAC that met following HB 9’s adoption, members included six chief financial officers, five chief academic officers, and five presidents. The committee comprised representatives from all multi-campus systems and three of the four campuses that do not belong to a system. Only Midwestern State University was not represented on this formula advisory committee (although they were represented on previous committees). The UT System had three representatives on the committee—one from the system office, one from the flagship (i.e., UT-Austin), and one from UT-El Paso. The A&M and University of North Texas (UNT)
systems had two representatives each. The chief financial officer at Texas A&M served as the chair of the committee; the chief financial officer at UNT served as vice chair.

Campus leaders characterized the coordinating board’s role as one of facilitator. One campus representative noted how coordinating board staffers “would listen and take notes and come back with approaches.” Like in Colorado’s formula advisory team, in this portrayal, institutions were leading the charge, while the agency coordinated and provided support.

Some institutional representatives were less generous in their discussion of the coordinating board’s role, because they viewed this agency as partly responsible for imposing the new performance model on institutions. When asked about the impetus for performance funding, one representative noted that:

The primary reason…we were talking about it [is] because the legislature said we had to… I think the coordinating board probably is interested in this…but the coordinating board and the staff would have been insufficient to get us to do this without the legislature asking for it.

While the legislature was considering HB 9, in the spring of 2011, the coordinating board was actively attempting to garner support from GAIFAC members for a new performance-based model. In March of 2011, the coordinating board hosted a gathering with institutional representatives to discuss a proposed model. As revealed in an archived video, institutions overwhelmingly resisted the THECB-proposed model.

In the meeting, staff from the coordinating board described the model they were considering at that point. As a staff member described it, the model was identical to the Performance Incentive Initiative (which institutions generally accepted), with three exceptions. In particular, the new proposed model: (1) only applied to undergraduate degrees, (2) weighted
degrees in critical fields doubly, and (3) added one additional factor. This additional factor, which mirrored the fourth metric included in HB 9, was the most controversial.

“It’s just too complicated.” The fourth metric, which was called the “above/below predicted degree metric,” effectively compared an institution’s graduation rate to their predicted graduation rate, which was determined through multivariate regression analysis. The regression model included only two independent variables to predict institution-level graduation rates across the state: percentage of the student body that was eligible for the Pell Grant and percentage of incoming students who were in the top 10 percent of their high school graduating classes. According to the THECB representative who presented the model during the training, staff members had considered approximately 36 metrics before arriving at the Pell and top 10 percent metrics, which, in tandem, explained 82 percent of the variance in graduation rates for GAIs across the state. Staff members recognized that a college readiness metric would have been a strong predictor in the model but had to exclude it due to data limitations.

This model sought to address variation in institutions’ performance based on student characteristics. As such, the metric would identify the institutions that were over- and under-performing given the composition of their student body. Admittedly, the name given to the metric and its explanation were unintuitive. In response to requests for clarification of the metric, a presenter invoked variance, least squares, and other technical terms. Those who spoke up during this presentation expressed confusion with this fourth metric. To ameliorate concerns with this metric, coordinating board representatives indicated that only 1.3 percent of the 10 percent of undergraduate funding in the model was connected to this last metric. This clarification, however, was not enough to garner support for the fourth metric.
One campus representative recalled that “some of the performance-based funding…models got so convoluted that…it takes you 20 minutes to dig into it and figure out what’s going on.” Similarly, at the training where the metric was presented, UT-Austin, Texas A&M, and Texas Tech opposed it, claiming that it was too complicated. One institutional representative later described the “calculation for expected graduation rate that was very complicated. So that was the first thing to do is… to get rid of that. It’s just too complicated…”

In an interview, a UT system representative expressed his opposition to that metric for different reasons. In particular, he stated that selective institutions like UT-Austin did not have much control over their student composition because of the top 10 percent rule in Texas.11

Another primary concern with the fourth metric was that institutions that were “high performers” lost funds under this model. This was a similar concern to one heard in Colorado. However, in Colorado, the new model sought to adjust per-student funding levels, which had been lower for high-enrollment institutions due to hold harmless provisions. In Texas, the disproportionate impact on more selective institutions was likely a result of the model’s prediction that they should have higher graduation rates given their student demographics (and because they had fewer at-risk students, which is also a metric rewarded in the model).

Indeed, another respondent attributed the abandonment of the controversial fourth metric to the flagships’ displeasure with the metric, since it would have negatively affected them. He suggested that the claims about the metric’s complexity masked the true source of the opposition:

11This rule, established by HB 588 in 1997, requires public higher education institutions in Texas to accept all students who graduate in the top 10 percent of their high school class. UT now has a cap on the students that it is required to admit from the top 10 percent pool. Specifically, pursuant to SB 175, adopted in 2009, UT can reserve 25 percent of their incoming undergraduate class for non-top 10 percent students.
So the representatives of some of the institutions that would have been hurt by this, the flagships, they said oh, that’s—I don’t get that, that’s too complicated. What are you actually doing here? … I honestly think it was killed because…the stakeholders who didn’t want it to happen called it out as too complicated.

In response to concerns with the complexity of the fourth metric, a consultant proposed an alternative that also accounted for expected graduation rate, but did not require a regression model. The presumption was that “the flagships [wouldn’t be able to] kill it based on it being too complicated… but it gets to the same issue, maybe not ideal, but that’s what the…policy development process leads to…second best.” This simpler approach was also rejected.

**Undermining graduate education.** Another major reservation with this model, particularly by the flagships and emerging research institutions, was that it would separate graduate education from undergraduate education. Specifically, the proposed performance-funding model would only apply to undergraduate funding and would entirely exclude graduate education, as articulated in HB 9. Notably, representatives from research institutions had lobbied for this distinction, which appeared in a Senate committee substitute of HB 9. During the training, a flagship representative recognized that he had been mistaken when he had advocated for a distinction between graduate and undergraduate education at the legislature.

Indeed, at the training, representatives from research institutions articulated their concern that this separation could lead policymakers to deprioritize graduate education. One campus official remarked that this distinction might present to policymakers a choice between funding undergraduate education (particularly the outcomes-based funding model) or graduate education. The assumption among research university representatives was that, given the state’s focus on degree attainment, policymakers would choose the former.
As displayed in Appendix E, graduate education is weighted much more heavily than undergraduate education currently. Excluding graduate education from the new performance-based model might draw attention to these discrepancies in weights and cause legislators to re-evaluate them. In an interview, a representative from a non-research institution described her perception that

the current formula in the state of Texas rewards graduate education very heavily, and … the cost structures… are such that…from a stability standpoint, [warrant] it, yet one of the biggest issues we’ve got in the state is undergraduate, putting more undergraduates through the pipeline…and so we have to look at that and go… how do we look at performance funding that does this, but doesn’t undermine the stability of the other [graduate education].

Defining at-risk. One other contested element of the performance funding model was the at-risk metric. At-risk students were generally constructed positively during the performance funding implementation process. Like in Colorado, much of the discourse around these students was about what they could do for the state. One institutional representative justified the premium for at-risk students “because we know that to get to the number of degrees or certificates that we need in the state of Texas, it’s going to have to be educating more of those students that would fall under that risk criteria.”

Like in Colorado, respondents generally perceived that at-risk criteria were strongly correlated. One representative observed that

…whether it’s Pell Grants or not, I remember a few people would roll an eye occasionally when they had two or three measures that really measured the same thing. If you’re a Pell Grant person or you’re… first in family to go to college, and if you put income level in, those three things… would correlate at a 90% level or higher.

Another respondent highlighted the need for graduating at-risk students while suggesting that being an adult student probably translates to a lower SAT score: “The biggest thing would be if we get…a large percentage of people above 25 returning to college…So it might be that
somebody that started and stopped out is still going to have that below national average SAT, which is probably what drove them out to begin with…”

On the other hand, some respondents noted that not all at-risk metrics are created equally. In one response, a campus representative observed that a lower level of academic preparation is a different type of “at-risk” than low income. Further, he speculated that the at-risk students at “the University of Texas and the Texas A&Ms, where they’re only admitting the very top 5% from the state,” are “probably not so much an at-risk student from an SAT or entrance exam scores [perspective].” On the other hand, there are some institutions like “the border schools” that will “have a high percentage of the low income, Pell-Grant eligible as well as the lower end of the spectrum on the SAT or entrance exam scores.”

Furthermore, the at-risk definition was so broad that over half of students were considered at-risk. One consultant noted that “by being this inclusive in… [this definition], at-risk graduates end up being the same thing as number of graduates…so it practically doesn’t have any [differentiating] effect.” Similarly, a campus representative identified the extensive reach of the Pell-grant metric for at-risk. In particular, he noted that

a lot of middle class…or upper middle class students can show financial need, so it’s not a sufficiently fine index of [different] kinds of students…because…it’s really not just the economic backgrounds of the students; it’s their college readiness that they bring to the table, and if you…were able to define that, then you would be better able to look at value added as opposed to just assuming that the students are more or less the same.

The model approved by the coordinating board contained the broad definition of at-risk proposed in the GAIFAC (i.e., Pell-eligible, lower scores on the SAT or ACT, part-time students, students who earned a GED, and adult students).

At the conclusion of this tense implementation process, the coordinating board accepted the recommendations made by the formula advisory committee. The recommended model makes
only incremental adjustments to previous funding methods. First, commensurate with the bill, the model caps the percent that is to be tied to performance metrics at 10 percent of the undergraduate formula funding (or about six percent of all I&O funding for institutions). The maximum amount tied to performance through this model constitutes about 5.2 percent of institutions’ total funding from general appropriations. To minimize the impact of abrupt changes in performance or enrollment, the model calls for three-year averages to be used to calculate outcomes. The new model also includes a provision to hold institutions harmless so as to avoid drastic changes in funding.

The model approved by the coordinating board consists of seven metrics. The first metric, total undergraduate degrees, includes all Bachelor’s and Associate of Applied Science (AAS) degrees awarded by GAIs. All metrics are equally weighted with the exception of the critical fields metric, which is doubly weighted. The critical fields that are included in the model are those that appeared in the bill. Heavily focused on STEM, the fields identified in the model include computer science, engineering, math, physical sciences, nursing, allied health, and teaching certificates for math and science.

Additionally, the model accounts for the varying costs that institutions incur for offering different types of degrees. Undergraduate degrees are weighted using relative weights similar to those used in the I&O formula (see Appendix E). The progression metrics reward institutions for each student who passes the threshold for 30, 60, and 90 semester credit hours at their current institution. In addition to these count metrics, the model includes a metric to adjust for volume (similar to volume-adjusted metric used in Colorado). The final metric takes total undergraduate

12 Two general academic institutions—Midwestern State University and Tarleton State University—offer associate’s degree programs (i.e., in radiography, histotechnology, and medical laboratory technology.
degrees and multiplies this count by an institutions’ six-year graduation rate. This last metric is intended to incentivize institutions to encourage students to graduate in a timely manner.

Notably, in their final funding formula recommendation report, the THECB indicated that nineteen states had implemented or were implementing an outcomes-based funding model for higher education. To further legitimize the outcomes-based approach—and the specific model that the GAIFAC and the coordinating board constructed—the report included a graphic illustrating the model’s alignment with NCHEMS principles. The table is presented in Figure 5.

![Figure 5 Alignment between THECB-Proposed Model and NCHEMS Principles](image)

“Crawfishing.” The ultimate product of the policy implementation process was the LBB’s dismissal of the performance-funding model for general academic institutions. As a result of higher education institutions’ resistance and the great latitude afforded by the bill, the appropriators ultimately disregarded the coordinating board-approved model. One business representative who supported the bill, evoked the crawfish’s tendency to retreat when threatened

152
to explain how among “the four years, all five chancellors said ‘yes,’ and then they killed it…You know, what we call crawfishing. They crawfished on us and killed the deal and we weren’t able to get it done.”

Chairman Branch noted that “there was probably some quiet pushback going on…. Even though… [w]e had letters from all the chancellors and presidents saying they were for it.” One campus representative confirmed this perception, remarking that “when push came to shove, the institutions got to their state reps and their senators and said, ‘We’re not happy. We’re concerned about this.’ So it wasn’t taken up.” Another campus official observed that:

any time a senator or a representative sees that their school is going to lose a lot of money with a particular model, they’re not going to support it and they’re going to work against it, and I think that’s been a big part of the problem… because schools are immediately going to start lobbying – Well, by statute we can’t lobby, but we can advise… the conversations will be such that this is not good for the university in our district…

Furthermore, a campus representative observed that many policymakers like the idea of performance funding, as indicated by the overwhelming support for HB 9, but individual interests (i.e., legislators’ advocacy for the universities with which they are affiliated) trump the accountability principle that appeals to them. The general perception was that it was the non-flagship institutions that lobbied against performance funding. As one legislator described it “the institutions that have a high number of at-risk or disadvantaged students were the ones that were most nervous about the outcomes-based formula…and so I think those presidents are the ones that probably had the biggest impact.”

Specifically, at the beginning of the 2013 session, when the budget was released, the LBB presented two options: one without performance funding and one with 10 percent of funds going to performance funding. The first base budget did not include performance funding. As one legislator described it “…they were following House Bill 9. And then ultimately…the
appropriations chairman, Chairman Pitts [who co-sponsored HB 9] decided to file the base budget without the 10%. There probably had been some internal lobbying to the appropriations committee against that.” Chairman Branch speculated that the LBB may have viewed the performance-funding model as an incursion on their discretion to allocate funds. As he stated:

When you’re an appropriator, you like the latitude. When you’re chair of the policy committee, you want the budget chairs to fund based on good policy…I was a former appropriator telling the appropriators now to put a paradigm in place that pushed the outcomes…so there’s an institutional resistance to that…they like having discretion…

Further Chairman Branch indicated that they considered the possibility of “baking [performance funding] into general law,” requiring the LBB to employ it, but that most likely, the appropriations or finance committee would have blocked it.

Notably, because HB 9 asked the coordinating board to continue exploring outcomes-based models every biennium, the process was repeated in 2013. The coordinating board, in consultation with the institutions, developed a new model, which was also ultimately ignored by the legislature. The new model differed from the earlier one in that it granted even more discretion to higher education institutions. In particular, it allowed institutions to assign weights to each of a number of pre-determined metrics based on their institutional missions. One campus representative described the process as “frustrating…it’s frustrating in the committee because it’s when you get all the schools in a room and everybody is trying to make sure they don’t drop too far backwards with funding, that’s one frustration, but then to see all this time and effort and not even a clue of whether it’s ever discussed, that’s frustrating too.”

Thematic Findings

This analysis of the failed performance funding policy proposal in Texas uncovered three major themes. The first theme captures the relationship between stakeholder involvement in
policy design and the ultimate policy content. Because campus representatives, who resisted performance funding, were almost exclusively empowered to design the performance funding model, the final model was weak. The second theme relates to unequal representation in policy design and highlights the flagships’ disproportionate influence over this process. The last theme that emerged from this case suggests that campus representatives do not view performance funding as an effective policy tool. In the next section, these three themes are discussed in turn.

**Theme 1: “Statistical convenience more than a policy statement.”** The first major theme that emerged from this analysis is the relative unimportance of the funding model components during the policy formulation and implementation process in Texas. The virtual irrelevance of the model’s design was a function of institutional representatives’ substantial control over the design process coupled with their primary motivations: maximizing funding for their institutions and resisting re-distributional measures.

In contrast to Colorado’s policy development process, in Texas, the performance funding legislation was weak and flexible, and the coordinating board had limited formal and informal influence over the process. As such, institutions’ self-interests reigned in the process, resulting in a less consequential performance-funding model. One institutional representative remarked on the influence of institutions’ bottom line over sound model design; regarding the metrics, he said “all of them were fine. It was how they worked together to create the final amount.”

Another campus representative demonstrated the complicated dynamic of having institutional representatives charged with designing an accountability model whilst protecting their own interests. Specifically, he described his perceptions that “the university would probably throw” out an institutional representative who did not defend institutional interests “unless they were faculty.” As he described it, “when it comes down to it, no matter how good the ideas are…
everybody has got to look at how it affects them…If I'd have said…I think this really does a
good job, but we lose $500,000, that wouldn't have worked.”

Similarly a different campus official described the “mixture of both intellectual curiosity
and debate …but also understanding, we're talking real dollars and real people here…Sometimes
people are very worried about dollars, but they may camouflage that with, well, an intellectual
question about an issue.” Ultimately, as one institutional representative noted, “no one is in there
just simply as an abstract analyst. They're there representing institutions.” More bluntly, another
GAIFAC member remarked that he “never even looked at” the metrics. Instead, he “just …heard
the discussion… but it was only going to matter once they got around close to the end where they
would just be tweaking it…”

Reflecting on the dynamic of having campus representatives—who are primarily
interested in maximizing their institution’s funding—almost exclusively in charge of the funding
model, one observer of this process remarked that it:

… kind of leads to some internal conflict…because all these institutions are in the
room. They're trying to come up with the metrics to assess themselves, and if all they
want is a model …that's as weak as possible and allocates funds basically as they would
have been under the traditional semester credit hour base model… and I think in the end
[coordinating board officials] want something that the institutions will agree to, so they're
willing – they end up compromising.

Indeed, to maximize funding for their institutions, campus representatives articulated
their preference for an add-on funding model—one that would allocate funds in addition to those
distributed through the I&O and Infrastructure formulas—if a performance funding model was to
be imposed upon them. The Texas A&M representative on the GAIFAC reiterated in a meeting
that what institutions need is “some predictability and stability. And when [the Performance
Incentive Initiative] was outside the formula and supplemental to the formula, we still had our
that was predictable.” Further, she described the discretionary nature of add-on funds, noting that they “look at that as soft money that can come and go.” A college president also observed that “there is such an interest in maintaining that operating formula for base operations that anything…that's going to be performance based is going to be something that's an add on.”

Another institutional representative articulated some campus representatives’ hesitation to accept even an add-on performance-funding program, since the model could eventually be tied to base funding: “if we all thought, well, this is just splitting up the icing when we had the cake, we wouldn't have probably been as concerned about it. The belief was it could well be the top layer of the cake, part of the top layer of the cake. And so that affected people's reaction to it.” Referring to RAND’s role in the performance funding policy process, a provost at a research university observed that “they had some influence, but probably not to the degree they might have wished” because, “reading between the lines,” their suggestion was that it should be a full outcomes-based model, “where a huge percentage of the base funding, specific metrics tied to the state goals etc., and what we proposed was this add-on, on top.”

In addition to resisting any modifications to the base funding model, campus representatives sought to minimize the redistribution of funds to the extent possible. This “guiding principle,” as one institutional representative dubbed it, overshadowed any motivations for sound model design and diluted its strength. On the GAIFAC, campus and system representatives worked backwards—starting with the current distribution of funds—to select metrics that would be least disruptive. Specifically, he noted, GAIFAC members wanted “a starting point that was as close to the current funding levels as possible.” One institutional representative described the outcome of his attempt to propose a metric that would result in a large redistribution:
That's one thing about most of the people on this committee—they’re not inclined to go along with any proposal that has a dramatic movement of funds from one institution to another over one year, because it would cause undue hardship on that institution.

Similarly, one campus representative highlighted the importance of stability without disagreeing with the principles of performance funding:

Each of us I think…had two trains of thought going on, and one was to do the right thing. And so performance-based funding sounds good, and it's probably useful, get people to think about number of graduates getting …students through. So the conversation is okay, and having some – the dollars put in that area is okay... but dramatically changing funding in institutions, generally speaking, is not okay, because it is too random…

Further depicting this resistance to shifting institutions’ shares of funds, in the GAIFAC’s 2010 report, committee members described their opposition to the proposal to fund completed semester credit hours (SCH), instead of attempted credit hours. Their rationale was that “…a significant redistribution of formula funding would occur if completed SCH were substituted in lieu of attempted SCH.” Additionally, they pointed out that some higher achieving institutions would lose under the proposed shift to completed SCH, while an institution “in the bottom third of graduation rates” would gain dramatically. In conclusion, the committee referred to the change as “disruptive” and “counterproductive.” In sum, because GAIFAC members had almost exclusive influence over the design process and were motivated by self-interests, the funding model’s design was virtually inconsequential.

**Theme 2: “Unequals among equals.”** The second theme that materialized in this analysis is that, while all systems and campuses had an opportunity to be represented on the GAIFAC, campus officials had varying levels of influence over the process. In particular, according to non-flagship campus officials, the flagships—especially UT—were most influential over performance funding policy design. Generally, campus representatives agreed that every institution had influence at the table, even the single-campus systems. On the other hand, as one
respondent described it, there were “unequals among equals,” and there was general consensus that the flagships were the most advantaged in this process.

Campus representatives indicated that UT and A&M had significant influence over policy design. For example, one respondent observed that although flagships may not be more vocal than other campuses on the committee, they do have more influence

…in the knowledge that [non-flagship representatives] have, that if this had a dramatic impact on the UT system or the A&M system, that that's probably not an appropriate path to go down, because ultimately it would have difficulty in getting through the legislature. So it's…sort of the unspoken understanding …

While recognizing that any campus representative can have influence on the committee if they are well-informed and “can make a good case,” another university official observed that there are limits. In particular, UT is to be protected. According to this respondent,

…there is the understanding that we probably should not come forward with recommendations…and this is true in other areas as well…that's going to have a very real and dramatic impact on the UT system. I always want to know what they're going to do, what decision the system of UT has -- What will be their position…we definitely want to know where they stand on issues…before we necessarily take a position, if possible.

Similarly, a different representative noted that “Everybody understood that you just couldn't put numbers up there that would drop [UT] Austin 4% and expect it to go through, and you might even think it's not fair, but you knew it wasn't viable.” Furthermore, describing the many models that were run, another representative noted that “in every case, we had to go back to the drawing boards when A&M or [UT] Austin had significant deviations from what they would have gotten otherwise.” A respondent described a scenario when he advocated for increasing the weights assigned to a sophomore in a senior course. But, as he noted, “that little change would have represented millions lost at UT.” Ultimately, he withdrew his proposal.
Another non-flagship representative described the imbalance in influence over the process and, referring to the flagships, that “one of those important institutions would make an impassioned plea [about] some issue…somewhat veiled but still always we came back to something where those institutions wouldn't lose but 1% or a half a percent or something.”

Not only are the flagships viewed as having power over the GAIFAC, but also over the legislature. Indeed, a non-flagship official described the alternative course that these institutions have at their disposal if they do not fare as positively in the GAIFAC:

…of course they would immediately go to the legislature if that happened and come up with a different way of funding to make up for that. That's why we have the -- what was it, the [Competitive Knowledge] fund or something like that that only A&M and Austin participated in a few years ago… those two institutions really weren't growing…so they came up with the…knowledge fund to have a second way to get through funding from the legislature, and that kind of took care of it for a couple of sessions.

Furthermore, one chief financial officer at another institution speculated that UT was behind the push for performance funding. In this quote, he reveals his perception of the social construction of institutions like the one he represents, which have lower graduation rates:

I know that we're not making performance funding a priority for our legislative agenda, nor are the other schools that usually come out losing [in] the formulas, so …UT is the one who is saying look at what a great job we are doing at graduating students. We should be rewarded for that instead of these guys that are over there that can't even get out of school in eight years...So I'm sure they're the ones that are influencing their senators or representatives.

Campus officials and other observers cited numerous reasons for the flagships’ influence over legislators and the coordinating board. First, the UT system has significant political clout because they have campuses in several legislators’ districts, given the sheer size of the system.

As one campus representative described it:

…think A&M. They have extension offices in nearly every county of the state. Because you know it's not just –It's the extension of service. So A&M, it's a powerful entity politically for sure, as is the UT system…it's a very influential system, obviously.
Another reason given for the flagships’ influence, especially UT’s, is the affiliation between legislators and the institutions. As one consultant observed:

…the flagships, particularly UT, but also A&M, have a lot of times as much or more influence over the legislature, probably more than the coordinating board itself. And it's because… a lot of the…legislators…got their degrees from those institutions, their constituents are from those institutions, their donors are from those institutions, and so they really, they don't want performance funding.

In describing the flagships’ influence with the coordinating board, one campus representative (not from a flagship) alluded to geographic location, while describing his perception of Commissioner Paredes’s position: “I'm sure being in Austin he has much more political pressure from the UTs – of course UT and A&M with their history and their schools, their very influential alumni, whether it's in the legislature, Senate, or just in the business community for the others.” When another respondent was asked about his perception of whether the coordinating board was influenced by the flagships, he replied “Of course. Who wouldn't? You want to incur the wrath of UT-Austin? Come on. It's automatic.”

Some respondents remarked on the implications of the disproportionate influence of the flagships and institutions with higher potential for increased funding (e.g., emerging research institutions) on higher education funding models. One senior administrator at a lower resourced institution called it “a classic have and have-not situation.” Specifically, he claimed that metrics that focus on graduation rates are designed for “the haves.” For “the have nots,” he noted, “those metrics just made them look bad consistently….” He also described the situation institutions like his are faced with:

The graduating high school students are coming in unprepared …Supporting them so that they can get up to speed is very expensive, and the state has never paid those “have not” universities money to help with advising, to help with tutoring, help with all the kinds of interventions that are best practices in the country.
In an interview, he urged me to “think about that table... everybody is there, but if you really get... down to what's needed...the ‘have nots’ feel more money needs to come disproportionately to those institutions if we're really going to make the ‘have not’ students successful.”

Another representative from a non-selective institution argued that some of the proposed models were inequitable in that they were “just pushing more money to UT and A&M and a couple of other high achievers and taking it from those [institutions] that were [accepting] students coming in with lower expectations...” Similarly, he noted that while high-achieving institutions should not be punished for their graduation rates, “there should be some recognition that...the people who need more funding to reach six year graduation rates are those that are taking on the biggest challenges...” Another campus leader was less generous in reference to UT-Austin’s graduation rates indicating that “UT can brag like crazy, [but] they take the top 8%. Why shouldn't they be successful? In fact, they should be 100% successful. They should just hope they don't screw up.”

Like in Colorado, some institutional representatives, particularly from urban, access campuses worried that campuses that serve more ethnic minority students were being disproportionately hurt. In Colorado, however, the perception was that they were hurt under the old model and that the new one would adjust for that perceived inequity. In Texas, some institutional representatives viewed the performance-funding model as detrimental to institutions that serve high-minority students.

So I have to say that the battle that goes on, which I think is sort of class –Which also is race warfare, I mean, the racism involved in this is part of the class warfare...It's just that you have at the table two interest groups...So if you put graduation rate...on a community college or a new up-and-coming regional university...the dynamics of what works... are so different than what happens to a private university or a research public, a flagship public.
One chief academic officer ran a proposed model to look at “the percentage of Black students, Mexican-American, and then just total minority.” As he recalled it, there was not one institution that “was 50% or more minority that didn't lose money …the results indicated that it was racially biased…Obviously it wasn't intentional, but the outcome was, regardless how you spun it.” In recognition of the importance of student body characteristics, the representative of a small institution articulated the need, to:

have a differentiation between missions, and … to recognize that [a commuter university] is not a UT-Austin, that the difference in their mission is very significant, and…you have to… look at it from the point of view of what will improve [a commuter university] but at the same time what will make UT-Austin better.

Theme 3: “It’s just white noise.” The final major theme from this case is that many institutional representatives in Texas did not subscribe to the idea that the new model would incite the changes intended by state policymakers through HB 9. Illustrating campus officials’ skepticism over the effectiveness of a performance-funding model, one institutional representative publicly asked Commissioner Paredes in the spring of 2011, “Can you just explain what behavior you’re trying to encourage with this model?” In particular, respondents gave three major reasons for their perception of performance funding’s ineffectiveness in Texas: (1) the state’s funding priorities were unpredictable and vacillating; (2) the level of funding tied to performance was relatively low; and (3) the causal link between performance funding and improved outcomes was dubious, particularly given empirical evidence of other states’ experiences with performance funding schemes.

“A moving target.” Campus officials cited campuses’ limited ability to keep up with shifting funding structures as a primary reason for the perceived ineffectiveness of performance
funding. One campus president, for instance, described the state funding process as “white noise, meaning that [legislators] would want to put more money in nursing one year, and then one year it'd be gosh, we don't have enough engineers, and then another year it would…be performance based funding…They play this game.” Further, referring to performance funding in particular, one campus official declared:

Would I make great changes based on that? No, because I know that the next Senate finance committee or the next House appropriations committee or the next lieutenant governor could significantly change how it's done, whether it's done. The weights could change…such that I should be careful about trying to … eliminate history, and eliminate physics, and add something in order to get additional funding that way, but if the weights change, I will have made the wrong decision.

A campus representative further described a scenario in which the state’s priorities did drive their behavior, but “not in the way [legislators] think:”

For example, when we wanted a Tuition Revenue Bond allocation for a building, we said we were going to build …a STEM building, but that was all talk. Now we needed a business building. That was our high growth area. Since they happened to have some departments labeled technology and they have computer science in there too… we fit the business building in as a STEM building…. The point is, we do look at…what they're talking about and what they're doing, but not in the way you're talking about and not in the way they think…

Furthermore, describing the implications of changing state priorities, institutional representatives also described, in GAIFAC meetings and in interviews, the realities that they face on campuses. One college president noted that performance funding is “a dangerous game to play” because there are real financial obligations, like “debt to pay… [a] building to pay down… faculty salaries.” As he puts it, the new model is “supposed to drive you in some sort of behavior or way” but “all it does, at least in the short term, is just create problems for you.” Similarly, an institutional president, noted in a GAIFAC meeting that

…to fund some of the necessary infrastructure to dramatically alter the outcomes at some institutions is a hell of a gamble you’re asking [campus officials] to take… I’m looking at
a 20% reduction in my funding...and you’re asking me to invest 5, 10 million dollars into academic support programs, mentoring programs, smaller classes, because sometime in the future I may get some of that money back, but two years from now we don’t know what the pool’s [going to] be, we don’t know what the growth of other institutions [is] going to be... it’s a moving target... there’s just a lot of anxiety.

“Tier one wanna-be fund” and heftier sources of revenue. Respondents also noted that the weak incentive provided by performance funding was a function of the availability of other, more substantial, funding sources. One representative noted that “the funding formula committee actually argued that until you can restore full funding, performance funding just really doesn’t make any sense. There’s no incentive, particularly if you’re only going to make it 10%.” Another representative remarked that what he has found is that, when it comes to performance-funding models, “the bragging is more than the substance in terms of actual distribution of funds...”

The funding provided through the proposed performance model is negligible compared to other available sources of revenue, particularly for research and emerging research institutions. As described in an earlier section, millions of dollars are available outside of the I&O formula, which allocates about $3.2 billion across all 38 GAIs for graduate and undergraduate education. In contrast, the proposed performance-funding pool would have allocated approximately $160 million across all GAIs over two years. This amount is less than half of what the UT system alone receives in one year from the PUF (the constitutional funds for the flagships).

One campus official alluded to the various sources of funding in defense of his claim that performance funding would be ineffective:

We've got these two other pots for other sets of universities, but there are so many elements, and each one can change in dramatic fashion, as I think I've just shown, such that it doesn't matter. So we do not respond – We don't do anything based on what they pay us.
Remarking on the flagships’ political power, one representative noted that, for these institutions, the legislature creates new funding opportunities when the funding formula does not favor them:

...of course they would immediately go to the legislature... and come up with a different way of funding to make up for that. That's why we have the – what was it, the [Competitive Knowledge] fund or something like that that only A&M and Austin participated in a few years ago... those two institutions really weren't growing...so they came up with the...knowledge fund to have a second way to get through funding from the legislature, and that kind of took care of it for a couple of sessions.

He also described a pot for “the tier one wanna-bes [who] ... said...there are five, six, seven of us... and we want a separate funding mechanism, so you had the tier-one funding then.” He further noted how some institutions are disadvantaged by this funding system, which consists of:

...formula funding, the competitive knowledge funds, and the tier one wanna-be fund. And then that left only institutions like...Stephen F. Austin... who couldn't get in that second group....so that has more to do with how much funding you had than any of the discussions about performance-based funding.

As illustrated in this quote, some institutions are more dependent on outcomes-based funds than others. That is, while the flagships and emerging research institutions have access to other state funds, for the remaining institutions, the outcomes-based funding pool is a significant source of funding. This is especially true for the non-emerging research institutions, which do not have access to the Research Development Fund or the Texas Competitive Knowledge Fund. For general academic institutions in the aggregate, however, other funding sources dwarf the relatively miniscule performance funding pool that was proposed.

Unconvincing evidence of performance funding’s effectiveness. Finally, throughout this study, campus officials expressed that they were unconvinced of the causal link between outcomes-based funding and student success. A few cited empirical evidence to this effect.

One campus official, for instance, observed that “everybody is still waiting, [since]... outcomes-based funding so far hasn't shown a lot of progress, so everybody is wondering if this
is not just the latest thing from the legislature or from administrators.” Further, a university provost alluded to South Carolina’s performance funding failure and unintended consequences.

One representative made reference to unsubstantiated claims of performance funding’s effectiveness by observing that “the true outcome [of performance funding] is…did the graduation rates go up? And I don't know. I think there's a bit of distance between the cup and the lip…” Similarly, another campus representative noted that the open question is whether performance funding will “ultimately have an impact on the actual outcomes and that we don't know at all. I do know that's a fact. So we shall see.”

Unexpectedly, a GAIFAC member referenced (and showed me) Kevin Dougherty and Vikash Reddy’s (2013) academic book on performance funding. This campus official, a college president, described the takeaways from the book, including that performance funding “has been going on for a long time, and almost none of it worked well. So I read that and went, okay, this doesn't give me optimism for what we're going to do…”

As illustrated in these examples, several campus representatives in Texas appeared to be familiar with some of the performance funding literature. Specifically, most of them understood, generally, the limited evidence of performance funding’s effectiveness. Notably, while campus officials alluded to empirical literature, legislators evidenced stronger acquaintance with intermediaries’—like Lumina’s and Complete College America’s—discussions of performance funding, which are generally more positive and optimistic. Importantly, institutional representatives’ awareness of this evidence bolstered their resistance to performance funding and their incredulousness of the model’s potential for improving student outcomes.
Chapter 6: Discussion and Conclusion

This study examined performance funding policy designs in Colorado and Texas. In particular, this dissertation deconstructed the two policies’ design content—including the legislation that called for performance funding and the models that were created in and approved by the state higher education agencies. This study also analyzed the distribution of burdens and benefits through performance funding policy designs, and identified the winners and losers from this process. Furthermore, this analysis explored the policy design process in these two states, and drew connections between the policy content and process. As such, this analysis revealed how and why, faced with myriad options for performance funding policy design elements, decision-makers selected particular performance funding policy components, like a premium for low-income students, and not others (e.g., a premium for underrepresented minorities). In particular, this study asked, relating to policy content:

1. What populations are targeted through performance funding policy designs?
2. How are burdens and benefits distributed to target populations through performance funding policy designs?
3. How is the policy problem defined and how does the policy design intend to address the stated problem?

This study also addressed the policy design process, examining the extent to which policy designs are a function of: (1) target populations’ social constructions as deserving or undeserving of policy benefits, (2) target populations’ relative levels of political power resources, and (3) the role of knowledge in the policy design process.

168
This chapter is structured as follows. First, I delineate how the primary findings from this study align with the theory of social construction and policy design, which grounds this analysis. Following the discussion of the findings in relation to the theoretical framework, I present this study’s practical and theoretical significance. Recognizing the continued interest in performance funding policies across the states and drawing on this analysis, I conclude this dissertation by offering practical recommendations for performance funding policy design.

**Target Populations**

Performance funding policy designs in Colorado and Texas targeted numerous populations, the most apparent of which is the public higher education institutional sector. In both states, the performance funding policy was geared toward public colleges and universities. In Texas, this analysis focused on four-year institutions (i.e., general academic institutions), but, like in Colorado, the policy targeted all public higher education institutions in the state.

In addition to public higher education institutions broadly, policy designs identified subpopulations that received burdens and benefits through the policies. In Colorado, three primary institutional groups emerged: (1) research universities, (2) rural institutions, and (3) access institutions. In Texas, on the other hand, of the general academic institutions that the model targeted, only a binary distinction materialized: flagships and non-flagships.

In addition to institutions, certain types of students were targeted by the performance funding policy content and design process in Colorado and Texas. Akin to the institutions’ categorizations, both the broader category of students and subpopulations of students emerged as target populations in this analysis. In particular, the student subcategories are: (1) underrepresented minorities, (2) low-income students, (3) students in certain fields (i.e., “critical” or “high-priority” fields), and (4) academically under-prepared students.
Benefits and Burdens

In the context of performance funding policies, burdens for higher education institutions include increased accountability and losses in funding, while benefits comprise increases in funding. For students, benefits are mostly indirect, although in Colorado, increases in COF stipend amounts constitute direct benefits. Indirect benefits typically consist of premiums, through the funding formulas, to institutions for serving certain types of students. Indeed, the stated intent of performance funding in both states was to extend benefits to students (i.e., by incentivizing colleges and universities to improve student success).

While performance funding policies do not directly burden students (e.g., by increasing students’ accountability directly), they may burden students indirectly. Specifically, by incentivizing colleges and universities to improve their outcomes, performance-funding models might discourage institutions from admitting those whom they perceive as having a lower probability of completing their degree. As such, burdens may be disproportionately concentrated on those students who have traditionally been underserved by higher education institutions.

Furthermore, a strong focus on outcomes could incentivize college officials to encourage “at-risk” students to drop out. An extreme case of a reaction to performance accountability was recently illustrated by an e-mail leak in Mount St. Mary’s University, where the president expressed his goal to “have 20-25” students drop out. In particular, he sought to report lower student enrollment numbers to “boost…retention 4-5 percent” (Jaschik, 2016, p. 7). Notably, this occurred at a private institution—one that did not receive funding based on performance. Presumably, the incentives for this behavior are greater when an institution’s resource allocations are contingent upon performance outcomes.
Finally, by incentivizing timely completion, performance-based models might place burdens on students interested in engaging in activities that might delay their graduation. For example, these models might incentivize campus employees to discourage students from working while enrolled or in the summers, which, for some students—like those helping to support their families—might be critical. Under performance funding, students may also be dissuaded from pursuing experiential learning experiences (e.g., internships, co-ops, or study-abroad), that would delay their graduation.

Social Constructions and Political Power Influences

The theory used in this study posits that target populations’ social constructions and political power account for the distribution of benefits and burdens these groups receive through policy design. The following section describes, first, each target population’s social constructions, political power, and benefits and burdens. The relationship between these elements is presented in Table 3. The subsequent section discusses other influences—aside from social constructions and political power resources—on the distribution of benefits and burdens to target populations through performance funding policy design.

Public higher education institutions. Public higher education institutions in Colorado were primarily framed positively during the policy design process. Specifically, they were constructed as providing a valuable service to students and to the state (i.e., to fill workforce needs). While higher education institutions, especially universities, were perceived as increasingly unaffordable, the general consensus was that declining state support was primarily responsible for tuition hikes.

In contrast, public higher education institutions in Texas were generally framed negatively. Because the policy focus in Texas was on higher education accountability, colleges
and universities were depicted as underperforming. Policymakers, coordinating board officials, and business leaders signaled public higher education institutions’ low completion rates, including by citing data from Complete College America. Further, legislators and business leaders indicated that these institutions were making inefficient use of taxpayer dollars.

In both Colorado and Texas, public higher education institutions had significant political power resources. In both states, the flagships had higher levels of political power than the other institutions. In Texas, all universities, particularly those belonging to a multi-campus system were highly influential with legislators. In Colorado, on the other hand, some institutions were politically powerful; others, like rural colleges and universities, were lacking in political capital.

In Colorado, public colleges and universities in the aggregate generally benefited from HB 14-1319, which was accompanied by overall funding increases. Although there was a hint of accountability in the adopted model, only a small percentage of funds was tied to performance. The overall increases in funding for all institutions in Colorado outweighed the slight accountability burden. Not all institutions were pleased with the outcome, however, since it resulted in lower shares of funding for low-enrollment institutions.

In Texas, institutions were not ultimately affected by HB 9. As previously noted, public higher education institutions in Texas have remarkable levels of political power. As anticipated by the theory of policy design and social construction, these universities, whose leaders overwhelmingly opposed performance funding (with the exception of the flagships), were able to resist having burdens placed on them. In this case, these institutions’ political power resources trumped their social construction, thus enabling them to avoid policy burdens.
Table 3 Social Constructions, Political Resources, and Burdens and Benefits to Higher Education Institutions through Performance Funding Policy Designs in Colorado and Texas

<table>
<thead>
<tr>
<th>Target Population</th>
<th>State</th>
<th>Classification</th>
<th>Social Construction</th>
<th>Political Resources</th>
<th>Benefits/Burdens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Higher Education Institutions</td>
<td>CO</td>
<td>Advantaged</td>
<td>+</td>
<td>+</td>
<td>Mostly Benefit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Extra funds for all (benefit), some accountability (burden)</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>Mostly Contenders</td>
<td>-</td>
<td>+</td>
<td>None (ultimately)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Burden (in the proposed model) Accountability</td>
</tr>
<tr>
<td>Research Institutions</td>
<td>CO</td>
<td>Mostly Contenders</td>
<td>Mostly -13</td>
<td>+</td>
<td>Mostly Benefit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Slightly lower share of funds through the formula, but specialty programs protected</td>
</tr>
<tr>
<td>Rural Institutions</td>
<td>CO</td>
<td>Mostly Dependents</td>
<td>Mostly +14</td>
<td>-15</td>
<td>Burden</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower share of funds through the formula</td>
</tr>
<tr>
<td>Access Institutions</td>
<td>CO</td>
<td>Mostly Dependents</td>
<td>+</td>
<td>Neutral16</td>
<td>Benefit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Higher share of funds through the formula</td>
</tr>
<tr>
<td>Flagships</td>
<td>TX</td>
<td>Mostly Contenders</td>
<td>Mostly -17</td>
<td>+</td>
<td>None (ultimately)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mostly Benefit18 (in proposed model) Counts instead of rates, no predictive metric, broad definition of “at-risk”</td>
</tr>
<tr>
<td>Non-Flagships</td>
<td>TX</td>
<td>Mostly Contenders</td>
<td>Mostly -19</td>
<td>+</td>
<td>None (ultimately)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mostly Burden19 (in the proposed model) Accountability</td>
</tr>
</tbody>
</table>

*None (ultimately) means that no burdens or benefits were ultimately distributed since the model was not enacted (in Texas).
13 During formulation, the focus was on access and affordability—neither of which these institutions provide.
14 Overall, rural institutions were viewed as valuable, particularly by legislators, since they provide access to students in remote areas. Because they had been held harmless, some non-rural campus representatives constructed them negatively (as complacent and privileged).
15 Despite support from a couple of legislators, rural institutions had very limited political influence.
16 Generally, access institutions are politically disadvantaged. However, the Speaker’s relationship with Metro is significant.
17 Some business officials and policymakers noted that the selective institutions were underperforming given the caliber of the students they accept. On the other hand, because of their higher graduation rates, some described flagships as “not the problem.”
18 Flagships would have been held accountable under the new model, but, given higher graduation rates at these institutions, they would not have been burdened.
19 During formulation, the focus was on completion and these institutions have the lowest rates. Although some policymakers, advocacy groups, and campus representatives emphasized their important mission in serving underserved students, given the focus on accountability in this state, the non-flagships’ construction is mostly negative.
Research institutions (CO). Turning to the three categories of institutions in Colorado, the research universities were primarily constructed negatively. While some HB 14-1319 opponents—like Lieutenant Governor Garcia—highlighted these institutions’ higher completion rates and the value of their research enterprises, the bill’s proponents suggested that these institutions were privileged. Speaker Ferrandino argued that the state should focus on students at access institutions and not research institutions, suggesting that students served by the research universities were less deserving of policy benefits. Because the discourse during this policy process was focused on access and affordability, research institutions, which do not provide broad access, and are not affordable, were framed negatively overall. Furthermore, some policymakers viewed the research institutions’ lobbying efforts, particularly those of CU-Boulder, as aggressive. Also framing research institutions negatively, some campus leaders pointed to research institutions’ numerous sources of revenue.

The performance funding policy in Colorado, as originally designed, would have hurt research institutions. Yet, CU and CSU’s relative funding levels were ultimately protected in the final appropriation. This outcome was a function of these research universities’ political power. Through vocal requests on CU’s part and back-door appeals from CSU representatives, these institutions were able to secure the inclusion of nonresident students in the model and the exclusion of specialty education programs from the new formula. These successes were possible because of the extensive access that research university officials had to legislators, given the campus leaders’ backgrounds in politics and legislators’ connections to these institutions. In tandem, these victories ensured that the research institutions were unharmed by the new model.
The specialty program exemption, which came as a surprise to many non-research campus officials, is an example of a sub-rosa benefit to these institutions, which generally had negative social constructions during this policy process but high levels of political resources.

**Rural institutions (CO).** Rural institutions, particularly low-enrollment campuses, in Colorado, were generally framed positively during the policy design process. However, they were not mentioned often. Illustrating their underprivileged position in discussions pertaining to performance funding, the lieutenant governor referred to them as “that third group of institutions” that are often forgotten. Indeed, as previously mentioned, the Speaker framed the funding debate as a question between benefiting privileged research institutions or underprivileged access institutions through the funding model.

To the extent that policymakers mentioned these institutions during policy formulation, they referenced the important role that they play in providing access to higher education to students in remote areas of the state. Indeed, the performance funding bill in Colorado specifically mentions geographic access in rural locations as a priority for the state. In addition to their value to the state, rural institutions were framed in relation to their “risk” under the new, enrollment-based model. Mentions of rural institutions, both during policy formulation and policy implementation, were often accompanied by a charge to “protect” these “vulnerable” campuses. The one negative construction of these institutions relates to their privileged status under previous hold-harmless policies. In particular, some non-rural institutional officials viewed rural campus leaders as complacent with the previous funding system, which, from a per-student funding perspective, advantaged rural institutions.

While these institutions were generally viewed favorably, they were lacking in political power resources, which partly explains why they were generally neglected during policy
formulation. During legislative hearings, two legislators, including one who claimed that his middle name was “Rural,” inquired about HB 14-1319’s effect on rural institutions. This legislative support notwithstanding, lobbyists from these campuses had limited access to policymakers or other resources to make a case for their institutions. Furthermore, as one respondent speculated, these institutions may not have had the knowledge to lobby, since they had not engaged in advocacy previously, presumably because they had historically been shielded from losses in their share of funding. According to some, they were not only lacking in resources but also in will, to advocate for their institutions through this new funding process.

During policy implementation, these low-enrollment institutions were automatically disadvantaged by the intent of the policy, which was to equalize per-student funding. Presumably, officials at these campuses calculated that HB 14-1319 was not a battle worth fighting. Because these institutions had been held harmless over time and had enjoyed relatively high levels of per-student funding, they received the overwhelming share of the burden distributed by the new performance-funding model. Their losses, however, were tempered by the department’s role as buffer. For example, the Volume-Adjusted Metric and Tuition Stability Factor (i.e., “the plug”), were included in the model to mitigate rural institutions’ losses. Overall, though, because of rural institutional leaders’ inability (or unwillingness) to repel or significantly alter the policy, they emerged as the “losers” under the new funding model.

This outcome aligns with the theory of social construction and policy design’s prediction that “dependents”—those target populations that have positive constructions but limited political resources—will receive benefits through discourse but not finances. Indeed, HB 14-1319 mentioned the service provided by these institutions but did not extend any financial benefits.
through policy. Instead, it sought to advantage the groups that had been historically disadvantaged through state funding: access institutions.

**Access institutions (CO).** Access institutions in Colorado were overwhelmingly constructed positively. Discourse around these institutions often included a mention of their disadvantaged status, since they had traditionally received significantly lower levels of per-student funding relative to other institutions in the state. Furthermore, Speaker Ferrandino was successful in depicting these institutions as providing affordable access to all types of students. The only negative construction of these institutions came from the lieutenant governor, who drew attention to the fact that access institutions have relatively low graduation rates. However, in this instance, he immediately acknowledged that there is good reason for those performance levels since they serve different kinds of students.

Speaker Ferrandino was an adjunct faculty member at Metro and witnessed what he viewed as funding inequities for institutions like Metro. While the Speaker’s relationship with Metro was significant, beyond this connection, access institutions did not have substantial political power resources. These institutions had fewer financial resources, and thus limited capacity for lobbying and internal modeling (to anticipate models’ impacts on their institutions).

The substantial distribution of benefits to access institutions that resulted from HB 14-1319 cannot be attributed to political power resources or social constructions alone. First, Speaker Ferrandino, who was uninterested in re-election (since he was term-limited) took on the cause. He was a persistent policy champion with significant political clout, largely due to his leadership role in the General Assembly. Furthermore, the distribution of benefits through HB 14-1319 can be attributed to the Speaker’s success in persuasively arguing for the need to redesign the state’s higher education funding mechanism. His numerous rationales appealed to
diverse interests. In particular, by alluding to the need for increased educational attainment levels—and enhanced affordability to achieve them—both of which, notably, the model did not directly address—he was especially convincing. Furthermore, by arguing for higher COF amounts, those interested in student-centered funding found the new model appealing.

Finally, the Speaker garnered support from those who advocated for groups traditionally underserved in higher education by indicating that the institutions that served these students had lower levels of per-student funding. The social construction and policy design theory, through its focus on social constructions and political power resources, fails to fully account for the policy design outcome in Colorado. The broad and diverse appeal of the policy—which resulted in legislators supporting the policy for different reasons—rather than any unitary social construction, resulted in the benefits allocated to access institutions in Colorado.

**Flagship institutions (TX).** The flagship institutions in Texas were not referenced often during policy formulation; they were essentially absent from public discourse. In interviews, however, some performance funding proponents noted that even the flagships were underperforming, especially given their selectivity. Although they were not targeted often in public rhetoric, flagship institutions were mentioned frequently during interviews with non-flagship campus officials. Specifically, these institutional representatives signaled the flagships’ privileged status, particularly given the higher levels of academic achievement of the students they accept. As such, flagships institutions were primarily framed negatively, although this construction was not pronounced, especially publicly.

The flagship institutions in Texas have remarkably high levels of political resources. As a result, they were able to successfully challenge the controversial metric that would have compared actual graduation rates to those predicted by a regression model. If the proposed model
had been enacted, the flagships would have mostly received benefits. First, because the proposed funding model overwhelmingly used counts (instead of rates or percent improvement measures), the flagships would have emerged as winners, given their high enrollments. Furthermore, the flagships have significantly higher achievement rates, as measured in the performance-funding model, than other institutions and thus accountability would not have been a burden for them.

**Non-flagship institutions (TX).** Non-flagship institutions, on the other hand, received significant criticism for their inadequate graduation rates. Three parties were overwhelmingly responsible for these constructions: members of the business community; some legislators, including Representative Dan Branch; and, less aggressively or publicly, coordinating board officials. If the proposed model had passed, they would have primarily received burdens (accountability). Although an “at-risk” metric was included in the proposed model and these institutions serve the majority of students who are at-risk, the classification that was ultimately used was broad and accounted for the majority of students in public higher education institutions in the state. As such, this metric did not substantively distinguish, for example, minority-serving institutions, from others, like the flagships.

The non-flagship institutions’ potential losses notwithstanding, all higher education institutions in Texas have high levels of political resources, including the non-flagships. That reality, coupled with the facts that (1) the performance funding bill was relatively weak, and (2) most institutions opposed the policy, ultimately resulted in the demise of the performance funding proposal at the LBB’s hands. Indeed, as predicted by theory of social construction and policy design, the state failed to impose burdens on powerful people (i.e., all public general academic institutions in Texas). This result aligns with Zumeta’s prediction regarding the sustainability of accountability regimes:
Given higher education’s still considerable clout in most states, these implementation difficulties could undermine the performance-funding regime over time, if a sufficient number of influential oxen are gored as resources are allocated based on the measures… (2001, p. 172)

These powerful institutions’ political resources trumped their negative social construction, enabling them to avoid having this accountability burden imposed on them.

The second major category of target populations in the performance funding policy design process are students. Table 4 depicts students—and subgroups of students—as target populations. The table also outlines each target populations’ social construction, political power resources, and the benefits and burdens they receive through policy design.

**Students.** Students are framed positively in both states. On numerous occasions, they were constructed as victims of student debt. This depiction was especially prevalent in Colorado, where college affordability was a major theme during the formulation of HB 14-1319. One legislator in Colorado and one in Texas invoked the need to hold students accountable for their choices and for taking longer to graduate. However, in both states, institutions were overwhelmingly held liable for subpar student performance.

Students have low levels of political power resources. Although some students were present during the policy formulation process in Colorado (and were positively received by legislators), and others participated in outreach meetings, students did not have significant influence over the design process. In Texas, where performance funding was more narrowly discussed, students were absent from public discourse around this policy. Their limited influence notwithstanding, students benefited from the advocacy of intermediary organizations that advocated for a funding model that would benefit students generally.
Despite their low levels of direct political power, students received benefits through policy design in Colorado. Specifically, the new model included an increase in the COF stipend/voucher amount. If the model had been implemented by the LBB in Texas, students would have also received indirect benefits. The purpose of performance funding in both states was to increase student success. Students received (intended) benefits because of their positive social construction and because of their value to the state. While the policies did not intend to distribute burdens to students, as previously described, the increased focus on institutions’ accountability may have the indirect effect of placing burdens on students—particularly those who have been traditionally underserved in higher education.

**Ethnic minority students.** In both states, ethnic minority students were publicly framed positively. Most mentions of minority students appealed to these students’ value in meeting the states’ workforce and economic needs. Because both Colorado and Texas have large educational attainment gaps by ethnic groups, respondents recognized the need to promote educational attainment for these students.

This discourse surrounding minority students supports what critical race scholars have characterized as interest convergence—the necessity of identifying benefits for white individuals to encourage the promotion of benefits for minorities (Bell, 1980). In the context of higher education participation, Gándara (1986) described this phenomenon and utilized it to advocate for extending educational opportunities to Mexican Americans. Specifically, she drew on what she calls “the politics of self-interest” to argue that:

Chicanos would be obvious beneficiaries in a redistribution of educational opportunity. Perhaps less obvious are the benefits that would accrue to the average taxpayers who shoulder the burden of supporting the public universities to which most are denied access. Business…also benefits when educational opportunities are expanded… (Gándara, 1986, p. 264).
Table 4 Social Constructions, Political Resources, and Benefits and Burdens to Students through Performance Funding Policy Design in Colorado and Texas

<table>
<thead>
<tr>
<th>Target Population</th>
<th>State</th>
<th>Classification</th>
<th>Social Construction</th>
<th>Political Resources</th>
<th>Benefits/Burdens(^\text{20})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>CO</td>
<td>Dependents</td>
<td>+</td>
<td>-</td>
<td>Benefit / Burden Higher COF stipend ($75)</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>Dependents</td>
<td>+</td>
<td>-</td>
<td>None (ultimately)* Benefit (in the proposed model) Indirect: Incent institutions to ensure student success</td>
</tr>
<tr>
<td>Underrepresented Minority Students</td>
<td>CO</td>
<td>Mostly Dependents</td>
<td>+/-(^\text{21})</td>
<td>-(^\text{22})</td>
<td>Burden Exclusion from model by the JBC Benefit (in the proposed model) Indirect: 5% premium for URM students(^\text{23})</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>Mostly Dependents</td>
<td>+/-</td>
<td>-</td>
<td>None (ultimately) Benefit (in the proposed model) Indirect: metric for “at-risk,” including minority</td>
</tr>
</tbody>
</table>

\(^{20}\)None (ultimately) means that no burdens or benefits were ultimately distributed since the model was not enacted (in Texas).

\(^{21}\)Through an increased focus on accountability, all students may receive indirect burdens through performance funding. For example the policy might incentivize campus officials to (1) increase their selectivity in admissions, (2) encourage students to drop out, and (3) dissuade students from engaging in activities that may delay their graduation.

\(^{22}\)Discourse about URM students was overtly avoided by policy actors. CDHE officials faced opposition in their efforts to extend benefits to these students. Low-income was a more palatable construction of underserved students.

\(^{23}\)Despite advocacy from numerous groups, minority students have limited political power resources.

\(^{23}\)URM means underrepresented minority
| Low-Income Students | CO | Dependents | + | - | **Benefit**
|--------------------|----|------------|---|---|-----------------------------------
|                    | TX | Dependents | + | - | None (ultimately)* Benefit (in the proposed model) Indirect: metric for “at-risk,” including Pell |
| Students in “Critical/ High Priority” Fields | TX | Dependents | + | - | None (ultimately)* Benefit (in the proposed model) Indirect: doubly-weighted metric |
|                    | CO | Dependents | + | - | Benefit Indirect: 50 % premium in model |
| Academically Underprepared Students | TX | Mostly Deviants | Mostly -24 | - | None (ultimately)* Benefit (in the proposed model) Indirect: metric for “at-risk,” including low SAT/ACT scores |
|                    | CO | Dependents | + | - | None |

24 These students were rarely mentioned but framed negatively during HB 9 discussions and numerous mentions to support a merit-based aid policy.
While some policy actors advocated for minority’s benefits for the sake of equality of opportunity, in both Colorado and Texas, the public positive construction of these students was predominantly bolstered by an appeal to these students’ value to the states’ economies.

Groups that advocated for ethnic minority rights were active in Colorado and Texas, but they were not advocating, in either state, for the inclusion of premiums for minorities in the funding models. In Texas, representatives from the NAACP and MALDEF, for instance, expressed their concerns with unintended consequences, like restricting access to groups that have been historically underserved in higher education. Other campus officials, including one provost and one chief financial officer, explicitly indicated that proposed funding models were racially biased. In Colorado, ethnic minority advocates sought to ensure that open-access institutions, which serve the large majority of minority students, reaped the most benefits from the new model—and indeed, they did. However, this success was primarily due to Ferrandino’s strategy to garner support for HB 14-1319 through his various rationales.

As mentioned previously, ethnic minority students were not publicly constructed negatively in Colorado. Yet some policy actors’ overt avoidance of “the politics of it,” may suggest a latent negative social construction for this group. In fact, in reaction to objections to the proposed inclusion of URMs in the model, the CDHE released an “issue brief” citing research from the Georgetown Center for Education and the Workforce to justify the inclusion of a premium for this group.

Notably, in the CCHE-approved model, ethnic minority students received a five percent premium, contrasted to a 10 percent bonus for Pell-eligible students. This distinction was included in the URM issue brief, although the brief did not otherwise reference the Pell metric. By inserting this contrast in the brief and emphasizing that the URM premium was only half of
that for Pell, CDHE staff members may have been attempting to assuage concerns about benefiting ethnic minorities through the new funding model. Similarly, recognizing ethnic minority students’ less positive construction, the CDHE’s strategy for performance funding 2.0, as described by a staff member, was to avoid mentioning ethnic minorities explicitly in the new model but to target this group implicitly. This rationale may also have led to the use of the underserved label, rather than URM, under the role and mission side of the model.25

In Colorado, ethnic minorities would have received benefits through the model, but the premium for URMs was eventually abandoned by the JBC. The JBC’s exclusion of the benefit for this group, as one of the few changes the appropriators made to the CCHE-approved model, also signals the perception, held by some, that these students are undeserving of policy benefits.

**Low-income students.** Pell-eligibility, on the other hand, was a more palatable construction of underserved students. Pell-eligible students were constructed positively and referenced often. Policymakers indicated that these students were lacking in opportunities. Ultimately, the decisions relating to ethnic minorities in the funding models can be explained by the relative strength and prominence of social constructions. In Colorado’s case, while all students were publicly framed positively, some were constructed more positively than others. Further, ethnic minority students were implicitly framed negatively by some actors.

Low-income students in Colorado and Texas were discussed more directly and were framed as more deserving of policy benefits. Especially in a “zero-sum” context—like the distribution of limited resources in the case of performance funding—the construction of some populations relative to others, resulted in benefits for some populations at the expense of others.

---

25 The underserved metric in role and mission captured underrepresented minority students (just like the URM measure on the performance side of the model).
Indeed, it was both the latent negative construction of ethnic minority students (by some) and the availability of a less contentious “alternative”—a premium for low-income students—that resulted in the omission of URMs in Colorado’s model.

In Texas, ethnic minority constituted just one of numerous definitions of “at-risk.” Like in Colorado, ethnic minorities were not discussed as often as low-income students. The broad definition used in Texas’s model ultimately had the effect of minimally differentiating by institution types. Further, in both Colorado and Texas, by not including a separate premium for minority students, the models failed to provide a clear directive to institutions to improve their service to ethnic minority students. These students have unique experiences in higher education; their retention depends on different factors than those of white students (Rendón, Jalomo, & Nora, 2000; Tierney, 1999) and varies among ethnic minority groups (Museus, 2008).

**Critical/high priority fields.** Students in critical fields, like STEM and health-related fields, were constructed positively in both states. Policymakers in Texas touted the importance of “producing” graduates that would meet the state’s workforce needs. Dennis Jones, from NCHEMS, also indicated that states should incentivize the production of degrees in fields identified as critical to the state. The students in these majors received indirect benefits through policy design, despite their lack of political power resources. In Colorado, the model included a 50 percent premium for students in high-priority fields. In Texas’s proposed model (which was not implemented), these fields were not only counted separately but also weighted doubly (i.e. two counts, compared to one count for a bachelor’s degree in a non-critical field).

The recognition of these fields through policy design might have implications beyond institutions’ funding allocations. As proposed by the theory of policy design and social construction, policies send messages about what is valued by the state and may have feed-
forward effects. For example, aspiring college students in Texas might recognize, through this policy or others that distribute benefits to “critical fields,” that the state values these majors more highly than others. This perception could influence their choice of major. While this may be one of the policy’s intentions, one potential concern is that the state’s priorities might change—a fear articulated by some campus officials. Furthermore, performance-funding policies might burden students in non-critical fields, as was suggested by the Texas NAACP representative who testified against HB 9 in Texas. In particular, he expressed his concern that HB 9 might lead to decreases in institutional support for the humanities, social sciences, liberal arts, and fine arts.

**Academically underprepared.** Finally, academically underprepared students were also targeted, though less overtly than other groups, by performance funding policy design. Although academically underprepared students were seldom mentioned during the policy design process, they were identified in Colorado’s HB 14-1319 and in Texas’s proposed model. In Colorado, these students were generally framed positively, particularly by the progressive Bell Policy Center. The assumption made by Bell representatives (i.e., in arguing for an explicit mention of this group of students in the bill) was that these students had been afforded fewer opportunities through their K-12 schools. In Texas, on the other hand, academically underprepared students were framed more negatively, particularly by a business leader who suggested that higher education institutions should not admit these students, who have, in his estimation, a negligible probability of completing their degrees.

This rationale was prominent in Texas, particularly in relation to the TEXAS Grants Priority Model, which legislators adopted in the same legislative session as the performance funding bill. The Priority Model is a mechanism for using merit-based criteria to distribute need-based aid. The assumption supporting this bill is that the state would make more efficient use of
taxpayer dollars by investing in students who are more likely to succeed. By prioritizing more highly prepared students, the model resulted in a disinvestment in the students that need the greatest support. As such, the policy placed burdens on students who have been disadvantaged through the K-12 system to which they had access.

**Other Influences on Policy Design**

As previously described, during policy implementation social constructions were primarily dormant. Instead, seven factors were most influential in decision-making at this stage: (1) institutional self-interest; (2) individual institution’s relative levels of political power; (3) statutory requirements (i.e., stipulations in HB 9 and HB 14-1319); (4) the goal of achieving consensus; (5) the need for legislative consent, especially in Colorado; (6) the shared objective to minimize the redistribution of funds; and (7) the role of knowledge. This section describes each of these elements in turn.

Overwhelmingly, the most influential factor in the performance funding policy design process that took place at the coordinating board level was *institutional self-interest*. The goal to maximize funding for their institutions guided GAIFAC and FAMET members’ decisions. Furthermore, individual institutions’ relative levels of *political power resources* factored into campus and system representatives’ ability to advocate for their interests. Political power was a function of: (1) access to policymakers, (2) financial resources (i.e., to finance a strong lobbying enterprise and to build internal models and anticipate the impact of proposed models), and (3) personalities, particularly campus representatives’ willingness to advocate for their institution either publicly or through back-door deals.

A number of factors attenuated the influence of institutional self-interest and political power over the policy design process: statutory requirements, the goal of obtaining consensus
among institutions, and the need for legislative consent. In Colorado, *statutory requirements* substantively limited policy designers’ discretion over the performance-funding model. Indeed, institutional and coordinating board representatives were working within a rather strict framework. On the other hand, in Texas, HB 9 afforded significant flexibility and discretion to policy designers.

Furthermore, institutions were bounded by the need to *achieve consensus* through policy design. Because of this limitation, more politically powerful institutions were unable to dominate the process overtly. Indeed, the FAMET and GAIFAC meetings were remarkably collegial (with the exception of tensions between the THECB and institutions). Institutional representatives were not overtly selfish; when they advocated for their interests, they did so in “camouflaged” ways that suggested that their recommendation was either the most rational or one that would benefit all institutions. That is, given the need for near-unanimous approval of the model, the powerful stakeholders were unable to exert significant influence over the process unless their rationales or social constructions were sufficiently strong to bring consensus.

The influence of institutional self-interest and power was also tempered by the *need for legislative consent* (and in Colorado’s case, for commissioners’ and the EAG’s approval). Not only did policy designers have to work within the frameworks afforded by the bills calling for performance funding, but they also had to ensure that they abided by the spirit of the law. Ultimately, legislators would have to sign off on the coordinating board-approved models. One caveat to this factor is that, in Texas’s case, most institutions pursued the opposite objective—to discourage legislators from accepting the model. Specifically by recommending add-on funds rather than embedding the performance-funding model within the I&O formula, campus leaders may have intentionally increased the likelihood that legislators would reject the proposed model.
A related factor that influenced the policy implementation phase of performance funding policy design was institutions’ shared goal to minimize the redistribution of funds. As such, institutional representatives strived to design the model that was least disruptive. In Colorado’s case, the coordinating board shared that objective and attempted to mitigate the distributional impact on individual institutions, especially rural and research institutions, which were most burdened by HB 14-1319. In Texas, coordinating board officials would have preferred a larger performance-based allocation but ultimately chose to support a model that would be acceptable to institutions—one that minimized both the redistribution of funds and losses to the flagships.

One additional factor was influential during policy implementation—expertise and other forms of information. The primary source of information that policy designers used in both Colorado and Texas was internal data. Specifically, because institutional self-interest was the driving factor during this process, campus and system officials were most interested in seeing how various models would affect the institutions that they represented. Some campus officials (i.e., those with higher levels of financial resources) built internal models to anticipate the impact of various model designs. However, overwhelmingly, the coordinating board provided these data. Per Weiss’s (1979) typology, this primary source of information was used instrumentally; it was directly utilized to inform a decision.

In addition to internal data, information on best practices and on what other states were doing was prominent during policy design in both states. For example, both states looked to Tennessee’s performance-funding model for guidance. In Texas, coordinating board officials invited representatives from the Tennessee Higher Education Commission to speak to campus and system leaders. In addition to the resources provided by the coordinating board, members of the model development teams were familiar with information on other states’ experiences with
performance funding. GAIFAC members in Texas, for example, mentioned South Carolina and Ohio’s models—the first as a failure and the other as a unique example. Campus representatives in Texas were rather informed about other states’ experiences with performance funding. Several respondents mentioned the limited evidence of effectiveness for this funding mechanism. Information on other states’ experiences was primarily used conceptually (Weiss, 1979); in other words, it was not directly applied to any particular decision.

The coordinating boards in both states were the primary suppliers of information, particularly internal data. In Colorado, institutional representatives cited a number of national intermediary organizations, many of which are located in Colorado, as sources of information. In particular, NCHEMS played a central role in performance-funding model development in that state as the vendor charged with building the model. Additionally, the National Governors Association, the Education Commission of the States, HCM Strategists, and Lumina were involved in Colorado’s performance funding policy design process. These organizations were primarily active in early discussions—after HB 9 was passed and before the model development process began. While NCHEMS’ expertise was used instrumentally—to make specific decisions about policy design—the information provided by the other groups in early stages of the design process was used conceptually (Weiss, 1979).

During policy formulation and policy implementation, the Bell Policy Center, a progressive think tank in Colorado, was highly engaged. Furthermore, in legislative hearings, they were treated as “experts” to whom legislators asked questions about research. Additionally, members of the public—including those involved in outreach meetings and the groups that advocate for minority’s rights—served as information sources in Colorado. As suggested by the theory of policy design and social construction, the aforementioned actors—national
intermediaries and the Bell Policy Center—were perceived as “experts.” Other suppliers of information, including members of the public and students who testified in legislative hearings, served to bolster social constructions (e.g., of college students’ disadvantaged status).

Relative to Colorado, Texas had a narrower constellation of information suppliers. In particular, in addition to the coordinating board, only a few actors provided information regarding model design. Representatives from RAND presented on two occasions. Coordinating board officials intended for RAND’s information to be used instrumentally—like NCHEMS’s role in Colorado. However, given the perceived complexity of RAND’s proposed models, the expertise provided by this group was not applied to any particular decision. Indeed, the information was explicitly rejected or ignored. Additionally, representatives from Tennessee and NCHEMS provided insights that were used conceptually. As previously noted, institutional representatives in Texas drew on individual knowledge of performance funding—outside of the sources provided by intermediaries or the coordinating board.

In addition to the aforementioned examples of instrumental and conceptual use of information, policy designers frequently used information politically, according to Weiss’s (1979) typology. For example, in Colorado, the CDHE used research and data to justify the inclusion of nonresidents in the performance-funding model. Similarly, to legitimize the inclusion a premium for underrepresented minorities, they drew on research by the Georgetown Center for Education and the Workforce.

In both Colorado and Texas, policy champions alluded to data on educational attainment gaps to bolster their argument for a performance funding policy. Additionally, to support his argument for including a premium for low-income students, Speaker Ferrandino cited the statistic that Pell-eligible students have a graduation rate that is 30 percent lower than that for
non-Pell students. Similarly, a representative from the Hispanic Chamber of Commerce in Denver cited a National Center for Public Policy in Higher Education study that suggested that educating more minority students in Colorado would result in an increase of $967 in tax revenue for the state.

As illustrated by this example, intermediary organizations were framed as experts to legitimize certain decisions. To justify the cost matrix used in the revised Role and Mission side of the model, the CDHE alluded to a “robust methodology” to assuage concerns that the model was developed for Nevada. In Texas, the commissioner used intermediaries to validate the adoption of performance funding. Furthermore, coordinating board officials demonstrated, in a chart, how the models’ elements aligned with NCHEMS’s proposed best practices for performance-funding model designs. While in Texas, information provided by NCHEMS and other intermediaries was used politically to justify the THECB’s preferred positions, in Colorado, NCHEMS provided technical assistance; as such the CDHE and various policy designers used the information provided by NCHEMS instrumentally (Weiss, 1979).

**An Assessment of the Theory of Social Construction and Policy Design**

The theory of social construction and policy design had significant academic purchase in this analysis of performance funding policy designs in two states. Although this study revealed that social constructions are not as strongly pronounced as in degenerative policy contexts (Schneider & Ingram, 1997)—like those surrounding welfare policy—in Colorado and Texas, numerous populations were targeted and socially constructed through the performance funding policy design. As predicted by the social construction theory, the less politically powerful institutions (i.e., the rural campuses in Colorado), received the largest share of burdens through policy design. Also as anticipated by the theory, the research institutions in Colorado received
sub-rosa (i.e., under-the-table) benefits (i.e., exclusion of the specialty programs), given their generally negative social construction but high levels of political power. In Texas, higher education institutions, which have high levels of political power, were able to resist the imposition of a strong policy instrument by avoiding performance funding altogether.

While social construction were largely responsible for policy champions’ success in passing the performance funding bills, political power resources were more influential over the burdens and benefits placed on individual types of institutions. Research institutions in Colorado, for example, were able to avoid being harmed by HB 14-1319 despite their generally negative social constructions. Rural institutions, on the other hand, had a positive construction but low levels of political power. Their low levels of political power led to burdens through policy design, despite their positive constructions.

The analysis of students’ social constructions reveals that relative social constructions are also important for understanding the distribution of benefits and burdens through policy design. In Colorado’s case, ethnic minority students were publicly framed positively but had a latent negative construction, particularly among some policy actors. Low-income students, on the other hand, in both Colorado and Texas, were discussed more directly and were framed as more deserving of policy benefits. In Colorado, ethnic minorities were ultimately denied benefits through policy due to their latent negative construction and the availability of a more positively constructed “alternative:” low-income students.

Social constructions contributed to some of the outcomes of performance funding policy design in the two states, yet there are a number of other factors that accounted for the bills passed and models proposed in the two states. For example, in both states, during policy implementation, institutions’ self-interest guided most individual decisions regarding
performance-funding model components. This self-interest was attenuated by a number of factors including the goals to minimize the redistribution of funds and the recognition that the model ultimately needed unanimous or near-unanimous support. The implementation process was also driven by preconceptions of “deservedness” of certain institutions.

Furthermore, the social constructions framework does not fully capture the policy formulation process in Colorado. HB 14-1319 was a product of varying perceptions of what the bill intended to do. Indeed, the access and affordability rationale was appealing to many, and thus the framing of institutions like Metro as deserving of a higher proportion of higher education appropriations was effective and significant. But many policy actors supported the policy for different reasons, including increased accountability for institutions and “student-centered” funding. Thus, while the social construction of access institutions as deserving was instrumental, other factors were also important in the product of policy formulation in Colorado (i.e., HB 14-1319). Indeed, rather than creating one social construction, the approach taken by the policy champion in Colorado was to appeal to many by varying rationales—a strategy that is not captured by the theory of policy design and social constructions.

Despite its limitations, the theory of social construction and policy design, by drawing attention to value-laden elements of the policy process, had significant academic purchase for this analysis. Furthermore, through its focus on policy design—both as content and process—this theory promises to make significant contributions to the higher education policy literature. The theory should be applied to explore the distribution of burdens and benefits—and the process that led to them—in other higher education policies. For example, it can be employed to examine how states determine to shift financial aid from students with “need” to those with “merit.”
This theory can also be used to analyze how states come to adopt or abandon affirmative action policies and how the targets of such policies are framed in those contexts. Further, this theory would guide scholars to examine what “alternative” targets (e.g., low-income students) are introduced in affirmative action design processes and what the rationales for benefiting one target over another through policy design is. Furthermore, the second part of the theory—policy design as an independent variable—should be applied to examine the full consequences of certain policy designs. As such, the effects of policy design, including of the prioritization of critical fields through policy on student’s choices, can be addressed through this framework.

**Implications for Performance Funding Policy Evaluations**

In addition to its theoretical contributions, this study advances the performance funding literature in numerous ways and has direct implications for studies that evaluate performance funding policies’ impacts. First, while most evaluation studies examine performance funding policies’ stated goals, this study reveals that these policies are manifestations of varying goals. For example, in Colorado, the performance funding policy was, in large part, intended to effect “equitable funding”—the performance component constituted only a fraction of the funding formula. In Texas, the policy placed a strong emphasis on critical fields. Evaluation studies should pay particular attention to the manifest and latent goals of the policies they examine.

As illustrated in this study, performance funding policies constitute both accountability mechanisms and funding tools. In Texas, the performance funding policy was more accountability focused, while in Colorado, it was primarily employed to re-design Colorado’s higher education funding structure in a more rational and equitable way. Evaluation studies should consider both of these broader objectives of performance funding policies. While most studies focus on the “accountability” side of these policies (i.e., by examining improved
performance on intended outcomes) performance funding studies have failed to examine how policies actually redistribute funds. To what extent, for example, do institutions’ performance (or improvements in performance) predict increases in a given institution’s funding (or share of state funding) under performance-based funding models?

These evaluations should provide not only descriptive analyses of funding impacts but also examine the equitability of the new funding regimes. For example, these examinations should explore the distribution of funds to institutions that serve students that have been traditionally underserved in higher education institutions. The principles of horizontal or vertical equity could also prove useful in these analyses. While horizontal equity calls for the equal treatment of equals, vertical equity calls for the unequal treatment of unequals. The latter, as such, focuses on effective inequality. During performance funding policy design debates in this study, various actors alluded to different forms of equity. For example, a state representative appealed to the equal treatment of all students, including ethnic minority students, in his opposition to including a premium in the formula that specifically targeted these students. In this instance, the legislator was alluding to horizontal equity, although the minority students that he was referencing are effectively unequal, in that they have been traditionally underserved by higher education institutions. Future studies should examine how the principles of vertical and horizontal equity influence policy design and how the impacts of models based on horizontal equity compare to those founded on principles of vertical equity.

The content of performance funding policies should also be closely examined in policy assessments. In addition to accounting for the actual metrics used to measure performance and the relative weight of the funds tied to performance, evaluation studies should take into account how meaningful the metrics are. In this study, policy designers in both states selected metrics
because they were “statistical conveniences.” In some states, metrics may be driven by statistical conveniences more than in others. Texas attempted to introduce a “meaningful” metric (the controversial predictive metric), which was ultimately rejected as being too complicated and having an undesirable impact. The extent to which metrics are chosen for their substance as opposed to statistical convenience might have important implications for policy impacts.

While an analysis of performance funding policies and their impacts is critical, it is of equal importance to analyze the context in which these policies are adopted. In Texas, for example, a funding pool was created to address flagship institutions’ funding losses through the enrollment formula. As this study depicts, institutional representatives may calculate that performance funding is not where they should allocate their resources, particularly when there are alternative sources of revenue available. Evaluations of performance funding policies should consider competing priorities, both for institutions and for the state. A recent study in Tennessee, for instance, revealed that despite the state’s strong performance funding charge, at the state’s flagship, the primary goal was to become a Top 25 research university (Ness, Deupree, Gándara, 2015). In Texas, the state has invested heavily in promoting the ascension of “Tier 1 Research Universities.” The funds allocated to this goal were much larger than the proposed pool of performance-based funds. In this context, would institutional representatives choose to expend their limited resources on research endeavors, undergraduate success, or both?

Without examining these contextual features, studies of performance funding policies’ impact will fail to fully capture the policies’ effectiveness (or lack thereof). To examine these factors in the aggregate, a “2.0” version of the Burke and colleagues’ surveys may be useful, particularly given the renewed prominence of these policy tools. Finally, while this policy
focused on the first link in the policy causal chain—how state distribute funds to systems—future work should examine how multi-campus systems allocate funds among their campuses.

**Implications for Performance Funding Policy Design**

In addition to its contributions to the performance funding literature and to our understanding of performance funding policies’ effectiveness and unintended impacts, this study offers a number of practical considerations for performance funding policy design. First, by examining policy design during two stages of the policy process, this analysis explored the relationship between statutes and the implementation process, as well as the effect of this relationship on policy design. Colorado and Texas illustrate polar opposites in the prescriptiveness of performance funding statute and in the policy actors that were invited to take part in the policy design process. In Texas, the performance funding policy did not go into effect. This was partly a result of the low levels of prescriptiveness in statute and the ultimate authority granted to higher education institutions to drive the model’s design. If the policy had gone into effect, it would have been a weak tool for the same reasons. On the other hand, in Colorado, policy designers felt that the policy was excessively prescriptive. However, the policy formulation process afforded opportunities to shape the bill before its adoption.

Furthermore, diverse stakeholders should be involved throughout the policy development process. Policy designers in Colorado recognized the possibility that appropriators (i.e. JBC members) would eventually disapprove of the model. To minimize the likelihood of “crawfishing,” which was evidence in Texas, in Colorado, policy designers invited the chairman of the JBC to participate on the EAG and vetted the model with legislators throughout the policy design process. Those involved in policy design should strive to elicit stakeholder input but also
clearly delineate the state’s goals and boundaries for policy development in statute, particularly in states where higher education institution have high levels of political power.

This study also identifies a number of important considerations for achieving equitable funding. While higher education funding is usually described in “per student” terms, a number of other factors should be taken into account, including economies of scale, the types of students an institutions serves, and the cost of certain programs. In addition, performance funding policy designers should strive to include meaningful metrics in policy design—ones that are identified as such by institutional leaders and not merely as “statistical convenience[s].”

Instead of selecting metrics that will minimize the redistribution of funds, regardless of their actual substance, to mitigate the short-term impacts of new funding models on institutions, policy designers should minimize the redistribution of funds initially through transition mechanisms like stop-loss provisions. This might avoid adopting model components that are mere “statistical conveniences,” such as “the plug” in Colorado and doubly-weighted critical fields in Texas. Attention to creating meaningful metrics might avoid what a faculty member in Colorado dubbed “bureaucratic ritualism” and ultimately ineffective funding models.

Finally, institutions should address unintended consequences through policy design. Like Lahr and colleagues (2014), this study reveals that the two major concerns with unintended consequences were increased selectivity and diminution in quality. To avoid incentivizing institutions to become more selective, policy designs should reward institutions for serving students who are academically underprepared or traditionally underserved by higher education institutions.

As illustrated in this study, the definition of these students in policy design is crucial but often contentious. Policy designers should consider the costs and benefits of more targeted
definitions of these students or more universalist ones. On one hand, universalist definitions could fail to differentiate between different types of institutions (that serve different student bodies). For example, when more than half of students in a state are eligible for Pell Grants, and this is the definition included in statute, the funds associated with underserved students will fail to substantially travel to the institutions that serve most of these students. This problem becomes exacerbated when multiple definitions of underserved students are used; this distributes these funds for underserved students more thinly and may not have the desired effect of protecting institutions—particularly those that serve these students—against becoming more selective. Indeed, these institutions may calculate that the cost of serving these students, particularly those who are academically underprepared (and require remediation) and those that may require addition institutional aid, could be mitigated by accepting “less costly” students.

On the other hand, more targeted policies can be more politically challenging, as illustrated in Colorado’s case. Some scholars believe that more targeted policies in general are less sustainable over time (Skopcol, 1995, 2002; Wilson, 1987), particularly the ones that benefit contenders or deviants. Wilson argues that “the hidden agenda for liberal policymakers is to improve the life chances of the truly disadvantaged by emphasizing programs to which the more advantaged groups of all races and class backgrounds can relate” (1987, p. 155). Indeed, this appears to illustrate the strategy used by the Colorado Department of Higher Education to address ethnic minorities in the 2.0 version of the model. On the other hand, Greenstein (1991) draws attention to the various federal programs that are targeted and longstanding, including Medicaid, Social Security Insurance, and the Women, Infants, and Children (WIC) program. Policy designers should weigh the costs and benefits of more targeted or universalist metrics, given the state context, particularly in addressing underserved students through policy design.
Conclusion

In the subject line of an email sent out through the Complete College America listserv, the organization’s president remarked that “Performance Funding Is Here to Stay.” Indeed, indicative of the policy’s prominence, 10 of the 50 states were developing a performance-funding model in 2015. Furthermore, a Forbes article published in early 2016 also predicted the continued expansion of the performance-funding regime, noting that we should “look out for ‘performance funding 2.0’ during 2016 legislative sessions as institutional leaders use big data to make the case for public investment” (Burns, 2016, p. 5). This policy’s momentum appears to be unhindered by limited evidence of effectiveness. As this study revealed, some policymakers are aware of the performance funding literature but most policy champions are informed by intermediaries’ (e.g., the Lumina Foundation for Education and Complete College America’s) more positive (and optimistic) impressions of performance-based funding. This optimism may be attributed to the perceived potential of such policies; indeed, the limited evidence of performance funding policy’s effectiveness could be due to poor design or to policy unsustainability, which could be a function of the design process (e.g., limited stakeholder input or “buy-in”).

Despite these policies’ rapid diffusion and the implications of policy design, the higher education literature has overwhelmingly neglected both the content of performance funding policies—effectively treating them all equally—and how policy actors arrived at decisions regarding policy content. This void is especially troubling considering the great variation in performance funding policy designs across states (Hearn, 2015). These distinct policy designs and design processes could lead to very disparate impacts on individual institutions and the students they serve. Furthermore, different designs could have varying potentials for achieving the policy’s intended goals and for attenuating negative unintended impacts. In this context of
rapid performance funding policy diffusion, including transitions to 2.0 versions of existing policies, this study examined how performance funding policies were designed in two states, which recently underwent the process of developing such policies. Further, by drawing on a theory of policy design previously unintroduced to the higher education literature and extending the performance funding research base, this study made a number of conceptual and practical contributions, including identifying important considerations for policy evaluations and for policy design.
References


http://doi.org/10.1111/1467-9299.00334


Dougherty, K. J., Natow, R. S., Hare, R. J., Jones, S. M., & Vega, B. E. (2013). Accounting for higher education accountability: Political origins of state performance funding for higher education. *Teachers College Record, 115*(1).


221


Appendix A

Interview Protocol for Campus / System Representatives

1. To start off, could you please share your general impressions of your experiences on the [GAIFAC / FAMET]? 

Rationales for Performance Funding

2. In your view, what was the primary reason for adopting a performance funding policy in this state?

Policy Development Principles

3. What were the team’s guiding principles during model development? For example, did you, as a team, strive to: keep the formula simple, make it equitable, minimize the re-distribution of funds, maximize the likelihood that the legislature would approve the model, etc.? 
   a. Were there discrepancies in guiding principles (or how they were prioritized) among team members?

Policy Tools

4. Various model components were discussed in formula development meetings. In addition to performance metrics, you discussed [e.g., transition tools, data sources, premiums, weights, mission differentiation, exceptions for certain institutions, etc.]. Of the various formula components that were considered, which would you say were the most contentious? 
   a. Who opposed / supported each and why?
5. Are there any formula components that you expect the legislature to challenge? Why?

Representation / Inclusion in Formulation Process

1. Who were the primary actors involved in formula development?

---

26 Different versions of this semi-structured interview protocol were used with campus representatives who were members of the General Academic Institutions Formula Advisory Committee (GAIFAC) in Texas and the Funding Allocation Model Expert Team (FAMET) in Colorado.
2. Could you comment on the coordinating board’s role throughout this process?
3. In addition to campus and system representatives and coordinating board officials, who else exerted influence over this process?

Political Power Resources

4. One of the things I am interested in is each institution or system’s relative levels of influence over model development. Although everyone technically has a seat at the table, I wonder if there are differences in levels of engagement or influence. Could you share your impressions of relative levels of influence over this process?
   a. To what extent do you observe varying levels of influence with legislators?
   b. Do any institutions / systems stand out as being the least engaged / influential throughout this process?

Knowledge / Expertise

5. In addition to your knowledge of higher education finance, did you draw on any other sources of information throughout this process (e.g., internal data, performance funding white papers, academic research)?
   a. What types of information did the coordinating board provide?
      i. To what extent did you use it?
   b. Did you (personally or as a team) consult with any outside experts?
      i. What were their contributions to the funding model?
      ii. How were they received by [GAIFAC / FAMET] members?
## Appendix B

### Coding Scheme

#### People and Cases

<table>
<thead>
<tr>
<th>External actors</th>
<th>Internal actors</th>
<th>Internal actors (cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business groups/representatives</td>
<td>Campus and System</td>
<td>Texas Campus/System</td>
</tr>
<tr>
<td>Latino Organization-Denver</td>
<td>Colorado Campus/System</td>
<td>Midwestern State University</td>
</tr>
<tr>
<td>National Education Groups</td>
<td>2-year</td>
<td>Texas Southern University</td>
</tr>
<tr>
<td>Complete College America</td>
<td>4-year</td>
<td>Stephen F. Austin University</td>
</tr>
<tr>
<td>Education Commission of the States</td>
<td>Adams State University</td>
<td>Texas A&amp;M University</td>
</tr>
<tr>
<td>HCM Strategists</td>
<td>Colorado Mesa University</td>
<td>Texas Southern University</td>
</tr>
<tr>
<td>Lumina Foundation for Education</td>
<td>Colorado School of Mines</td>
<td>Texas State University System</td>
</tr>
<tr>
<td>NCHEMS</td>
<td>Colorado State University</td>
<td>Sam Houston State University</td>
</tr>
<tr>
<td>NCPPHE</td>
<td>Fort Lewis College</td>
<td>Texas Tech University</td>
</tr>
<tr>
<td>WICHE</td>
<td>Metropolitan State University</td>
<td>Angelo State University</td>
</tr>
<tr>
<td>National Policy Groups</td>
<td>University of Colorado</td>
<td>Texas Woman's University</td>
</tr>
<tr>
<td>National Conference of State Legislatures</td>
<td>University of Colorado-Denver</td>
<td>University of Houston</td>
</tr>
<tr>
<td>National Governors Association</td>
<td>University of Northern Colorado</td>
<td>University of Houston-Downtown</td>
</tr>
<tr>
<td>RAND Corporation</td>
<td>Western State Colorado University</td>
<td>University of North Texas</td>
</tr>
<tr>
<td>Other states</td>
<td>Faculty</td>
<td>The University of Texas</td>
</tr>
<tr>
<td>Nevada</td>
<td>Lobbyists</td>
<td>UT-Austin</td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
<td>UT-Dallas</td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td>UT-EI Paso</td>
</tr>
<tr>
<td>Tennessee</td>
<td></td>
<td>Executive</td>
</tr>
<tr>
<td>Washington</td>
<td></td>
<td>State higher education agency</td>
</tr>
<tr>
<td>Press</td>
<td></td>
<td>Colorado Department of Higher Education</td>
</tr>
<tr>
<td>State-level Think Tanks</td>
<td></td>
<td>Executive Advisory Group</td>
</tr>
<tr>
<td>Texas Public Policy Foundation</td>
<td></td>
<td>Funding Allocation Model Executive Team</td>
</tr>
<tr>
<td>Bell Policy Center</td>
<td></td>
<td>Commissioners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas Higher Education Coordinating Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GAIFAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colorado Legislature/General Assembly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joint Budget Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mark Ferrandino</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Statute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas Legislature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dan Branch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislative Budget Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students, parents, family</td>
</tr>
<tr>
<td>Campus Characteristics</td>
<td>Policy elements</td>
<td>Representation</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Culture/Leadership</td>
<td>Amount or percent; base v. add-on</td>
<td>Self-interest</td>
</tr>
<tr>
<td>Campus Demographics</td>
<td>Complexity</td>
<td>Social Construction</td>
</tr>
<tr>
<td>Enrollment Levels</td>
<td>Count or percent increase</td>
<td>State characteristics</td>
</tr>
<tr>
<td>Rural, low-enrollment</td>
<td>Guardrails, stop-loss provisions</td>
<td>Demographics</td>
</tr>
<tr>
<td>Expenditures</td>
<td>High-demand fields, like STEM</td>
<td>Economic</td>
</tr>
<tr>
<td>Geographic location</td>
<td>Level of award</td>
<td>Educational attainment levels</td>
</tr>
<tr>
<td>Lobbying Capacity</td>
<td>Mission differentiation</td>
<td>Higher education governance</td>
</tr>
<tr>
<td>Open-access</td>
<td>Exemptions to the funding formula</td>
<td>Political, partisanship</td>
</tr>
<tr>
<td>Research</td>
<td>Performance metrics</td>
<td>Support</td>
</tr>
<tr>
<td>Resources (generally)</td>
<td>Completion and graduation</td>
<td>Tedious process</td>
</tr>
<tr>
<td>Revenue sources</td>
<td>Remedial and developmental education</td>
<td>Timing</td>
</tr>
<tr>
<td>Policy Design Principles</td>
<td>Retention and persistence</td>
<td>Uncertainty about future funding/priorities</td>
</tr>
<tr>
<td>Accountability, performance, outcomes</td>
<td>Transfers</td>
<td>Use of research</td>
</tr>
<tr>
<td>Affordability and access</td>
<td>Workforce outcomes</td>
<td></td>
</tr>
<tr>
<td>Align with state master plan</td>
<td>Research funding and graduate education</td>
<td></td>
</tr>
<tr>
<td>Avoid cuts</td>
<td>Scaling and weights</td>
<td></td>
</tr>
<tr>
<td>Data availability, accuracy, comparability</td>
<td>Student residency status</td>
<td></td>
</tr>
<tr>
<td>Enough funds to incentivize</td>
<td>Tuition / price</td>
<td></td>
</tr>
<tr>
<td>Equitable</td>
<td>Underserved populations</td>
<td></td>
</tr>
<tr>
<td>Minimize redistribution of funds</td>
<td>Adults</td>
<td></td>
</tr>
<tr>
<td>Minimize unintended consequences</td>
<td>Academic preparation</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>Ethnic minorities</td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td>First-generation</td>
<td></td>
</tr>
<tr>
<td>Phase-in</td>
<td>Pell and low-income</td>
<td></td>
</tr>
<tr>
<td>Simplicity</td>
<td>Volume-based</td>
<td></td>
</tr>
<tr>
<td>Stakeholder input</td>
<td>Principal-agent relationship</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>Purpose for performance funding</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td>Access</td>
<td></td>
</tr>
<tr>
<td>Differential impact (to institutions)</td>
<td>Accountability</td>
<td></td>
</tr>
<tr>
<td>Double-counting</td>
<td>Clarity / rationality in funding model</td>
<td></td>
</tr>
<tr>
<td>Future revisions/support for model temporary</td>
<td>Convey higher ed value to policymakers</td>
<td></td>
</tr>
<tr>
<td>Good quotes</td>
<td>Efficient use of limited funds</td>
<td></td>
</tr>
<tr>
<td>History of funding and funding policy</td>
<td>Predictability in funding, stability</td>
<td></td>
</tr>
<tr>
<td>Impose burden on powerful</td>
<td>Re-distribution of funds</td>
<td></td>
</tr>
<tr>
<td>Inevitability</td>
<td>Reduce lobbying and lobbying power</td>
<td></td>
</tr>
<tr>
<td>Institutional allies</td>
<td>Student-centered funding</td>
<td></td>
</tr>
<tr>
<td>Knowledge about formula</td>
<td>Tie funding to state goals</td>
<td></td>
</tr>
<tr>
<td>Legislative motions</td>
<td>Increase degrees / timely graduation</td>
<td></td>
</tr>
<tr>
<td>Level of involvement (for people/organizations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opposition (to policy elements)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opposition to performance funding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C
House Bill 14-1319, Colorado General Assembly

NOTE: The governor signed this measure on 5/9/2014.

An Act

HOUSE BILL 14-1319
BY REPRESENTATIVE(S) Ferrandino and Holbert, Garcia, Szabo, Buckner, Coram, Court, Duran, Fields, Hamner, Humphrey, Joshi, Landgraf, Lawrence, Moreno, Murray, Navarro, Pettersen, Rankin, Salazar, Schafer, Scott, Sonnenberg, Wright, Wilson, Ginal, Kraft-Tharp, Lebsock, McLachlan, Mitsch Bush, Rosenthal, Ryden, Tyler, Vigil, Young, Hullinghorst, Kagan, Lee;
also SENATOR(S) Lambert and Todd, Aguilar, Cadman, Crowder, Grantham, Guzman, Herpin, Johnston, Lundberg, Marble, Newell, Renfroe, Rivera, Scheffel, Tochtrop, Ulibarri, Kefalas, Kerr, Steadman.
CONCERNING THE CREATION OF AN OUTCOMES-BASED FUNDING MODEL
FOR HIGHER EDUCATION, AND, IN CONNECTION THERewith, MAKING
AND REDUCING APPROPRIATIONS.

Be it enacted by the General Assembly of the State of Colorado:
SECTION 1. In Colorado Revised Statutes, add part 3 to article 18 of title 23 as follows:

PART 3

HIGHER EDUCATION FUNDING

23-18-301. Legislative declaration. (1) THE GENERAL ASSEMBLY

FINDS AND DECLARES THAT:

(a) HIGHER EDUCATION IS AN ECONOMIC ENGINE FOR COLORADO, HELPS TO CREATE AN INFORMED CITIZENRY, AND CONTRIBUTES SIGNIFICANTLY TO COLORADO'S SUPERIOR QUALITY OF LIFE;

(b) IN ORDER TO ENSURE THE STATE'S ONGOING SOCIAL, CULTURAL, AND ECONOMIC VIBRANCY, FUNDING FOR HIGHER EDUCATION SHOULD BE BASED ON THE NEEDS OF THE STATE, THE PEOPLE OF COLORADO, AND THE STUDENTS;

(c) COLORADO CURRENTLY RANKS THIRD IN THE UNITED STATES IN THE PERCENTAGE OF ITS CITIZENS BETWEEN THE AGES OF TWENTY-FIVE AND SIXTY-FOUR WITH A COLLEGE DEGREE, LARGELY DUE TO THE MIGRATION OF COLLEGE-EDUCATED ADULTS FROM OTHER STATES AND COUNTRIES;

(d) IN ORDER TO ENSURE THAT COLORADO STUDENTS HAVE ACCESS TO A POSTSECONDARY EDUCATION THAT WILL ALLOW THEM TO COMPETE FOR JOBS IN COLORADO'S INCREASINGLY HIGH-TECH ECONOMY AND THE GLOBAL ECONOMY, IT IS ESSENTIAL THAT COLORADO MAKE WISE USE OF ITS INVESTMENT IN HIGHER EDUCATION TO INCREASE THE NUMBER OF COLORADANS WHO HAVE EARNED A HIGH-QUALITY POSTSECONDARY CREDENTIAL;

(e) IT IS IMPORTANT THAT THE STATE OF COLORADO ENSURES THAT ALL COLORADANS HAVE ACCESS TO AFFORDABLE HIGHER EDUCATION,
REGARDLESS OF INCOME, RACE, GENDER, AGE, OR ACADEMIC
PREPARATION, AND THAT HIGHER EDUCATION SERVICES ARE AVAILABLE
IN ALL GEOGRAPHIC AREAS OF THE STATE, INCLUDING RURAL AREAS,
HISTORICALLY UNDERSERVED AREAS, AND AREAS WITH LOW
EDUCATIONAL ATTAINMENT;

(f) IN PARTICULAR, IT IS CRITICAL THAT THE RATE OF
POSTSECONDARY PARTICIPATION BY LOW-INCOME COLORADANS AND
MINORITIES, WHO ARE CURRENTLY UNDER-REPRESENTED, BE INCREASED
AT COLORADO’S INSTITUTIONS OF HIGHER EDUCATION; AND

(g) COLORADO’S LIMITED STATE RESOURCES MUST BE USED IN A
WAY THAT PROVIDES INCENTIVES FOR STATE INSTITUTIONS OF HIGHER
EDUCATION TO ACHIEVE THE POLICY GOALS ADOPTED BY THE GENERAL
ASSEMBLY AND THE COLORADO COMMISSION ON HIGHER EDUCATION.

(2) THE GENERAL ASSEMBLY FURTHER FINDS AND DECLARES THAT:

(a) IN ORDER FOR THE GENERAL ASSEMBLY TO PERFORM ITS
DUTY TO EXERCISE OVERSIGHT AND ENSURE THAT TAX DOLLARS ARE BEING
USED TO ACHIEVE STATED POLICY GOALS, HIGHER EDUCATION MUST BE
FUNDED IN A MANNER THAT IS TRANSPARENT AND UNDERSTANDABLE;

(b) THESE GOALS CAN BE ACCOMPLISHED BY THE GENERAL
ASSEMBLY ESTABLISHING PERFORMANCE METRICS THAT ARE CONSISTENT
AND PREDICTABLE BUT THAT MAY BE AMENDED, AS APPROPRIATE, TO
REFLECT THE CHANGING GOALS OF THE STATE AND OF INSTITUTIONS;

(c) WITH A CONSISTENT AND PREDICTABLE FUNDING MODEL FOR
HIGHER EDUCATION, STATE INSTITUTIONS OF HIGHER EDUCATION WILL BE
ABLE TO ENGAGE IN LONG-TERM FINANCIAL PLANNING THAT WILL BENEFIT
STUDENTS THROUGH MORE PREDICTABLE TUITION AND FEES; AND

(d) IF HIGHER EDUCATION IS FUNDED IN A MANNER THAT IS
TRANSPARENT AND UNDERSTANDABLE, COLORADANS, AND ESPECIALLY
COLORADO TAXPayers, WILL MORE EASILY UNDERSTAND THE BENEFIT
REALIZED FROM COLORADO'S INVESTMENT IN ITS HIGHER EDUCATION SYSTEM.

23-18-302. Definitions. AS USED IN THIS PART 3, UNLESS THE CONTEXT OTHERWISE REQUIRES:

(1) "AREA VOCATIONAL SCHOOL" HAS THE SAME MEANING AS PROVIDED IN SECTION 23-60-103 (1).

(2) "COMMISSION" MEANS THE COLORADO COMMISSION ON HIGHER EDUCATION ESTABLISHED PURSUANT TO SECTION 23-1-102.

(3) "COMMUNITY COLLEGE" MEANS A COMMUNITY AND TECHNICAL COLLEGE DESCRIBED IN SECTION 23-60-205 THAT IS GOVERNED BY THE STATE BOARD FOR COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION OR THE BOARD OF TRUSTEES FOR COLORADO MESA UNIVERSITY.

(4) "DEPARTMENT" MEANS THE COLORADO DEPARTMENT OF HIGHER EDUCATION ESTABLISHED PURSUANT TO SECTION 24-1-114, C.R.S.

(5) "LOCAL DISTRICT JUNIOR COLLEGE" MEANS A JUNIOR COLLEGE OPERATING PURSUANT TO ARTICLE 71 OF THIS TITLE.

(6) "MASTER PLAN" MEANS THE MASTER PLAN CREATED PURSUANT TO SECTION 23-1-108.

(7) "PELL-ELIGIBLE STUDENT" MEANS AN UNDERGRADUATE STUDENT WHO QUALIFIES FOR THE FEDERAL PELL GRANT OR FOR A GRANT THROUGH A SUCCESSOR PROGRAM.

(8) "STATE INSTITUTION OF HIGHER EDUCATION" OR "INSTITUTION" HAS THE SAME MEANING AS DEFINED IN SECTION 23-18-102 (10).

(9) "TOTAL GOVERNING BOARD APPROPRIATION" MEANS, FOR A FISCAL YEAR, THE SUM OF THE AMOUNT APPROPRIATED TO THE GOVERNING BOARD OF A STATE INSTITUTION OF HIGHER EDUCATION FOR A FEE-FOR-SERVICE CONTRACT NEGOTIATED PURSUANT TO SECTION 23-18-303 AND THE AMOUNT STATED AS REAPPROPRIATED SPENDING.
AUTHORITY IN THE GENERAL APPROPRIATIONS ACT FOR THE GOVERNING BOARD TO EXPEND STIPENDS RECEIVED PURSUANT TO SECTION 23-18-202 ON BEHALF OF ELIGIBLE UNDERGRADUATE STUDENTS.


(2) EACH FEE-FOR-SERVICE CONTRACT MUST INCLUDE INSTITUTIONAL ROLE AND MISSION FUNDING AS DESCRIBED IN SUBSECTION (3) OF THIS SECTION AND INSTITUTIONAL PERFORMANCE FUNDING AS DESCRIBED IN SUBSECTION (4) OF THIS SECTION. IT IS THE INTENT OF THE GENERAL ASSEMBLY THAT THE COMPONENTS OF THE FEE-FOR-SERVICE CONTRACTS DEVELOPED BY THE COMMISSION BE FAIRLY
BALANCED BETWEEN ROLE AND MISSION FACTORS AND PERFORMANCE METRICS.

(3) **Role and mission funding.** The institutional role and mission component of the fee-for-service contract is based on the following factors, as determined by the commission pursuant to section 23-18-306:

(a) **Institutional mission.** Role and mission funding must include an amount for each governing board to offset the costs incurred in providing undergraduate programs at each institution. In establishing the components of this factor, the commission shall include, at a minimum:

(I) **The selectivity of the institution;**

(II) **The number of campuses of the institution;**

(III) **The rural or urban location of the institution;**

(IV) **Low student enrollment at an institution or a campus of an institution that affects the ability of the institution or campus to meet operational costs;**

(V) **Undergraduate or certificate programs that have a high cost per student; and**

(VI) **Whether the institution conducts research.**

(b) **Support services for Pell-eligible, first-generation, and underserved undergraduate students.** Role and mission funding must include an amount for each governing board to offset the costs incurred in providing additional support services to Pell-eligible undergraduate students enrolled in the institution.
THE AMOUNT OF FUNDING FOR SUPPORT SERVICES FOR EACH PELL-ELIGIBLE UNDERGRADUATE STUDENT ENROLLED IN THE INSTITUTION MUST BE AT LEAST EQUAL TO TEN PERCENT OF THE AMOUNT OF THE COLLEGE OPPORTUNITY FUND STIPEND, AS SET BY THE GENERAL ASSEMBLY PURSUANT TO SECTION 23-18-202, FOR THE APPLICABLE STATE FISCAL YEAR. THE COMMISSION MAY INCLUDE AN AMOUNT FOR EACH GOVERNING BOARD TO OFFSET THE COSTS INCURRED IN PROVIDING SUPPORT SERVICES TO FIRST-GENERATION UNDERGRADUATE STUDENTS ENROLLED IN THE INSTITUTION AFTER THE COMMISSION ESTABLISHES IN CONSULTATION WITH THE INSTITUTIONS A CONSISTENT DEFINITION AND DATA COLLECTION METHOD FOR IDENTIFYING THIS STUDENT POPULATION. THE COMMISSION MAY ALSO INCLUDE AN AMOUNT FOR EACH GOVERNING BOARD TO OFFSET THE COSTS INCURRED IN PROVIDING SUPPORT SERVICES TO UNDERGRADUATE STUDENTS WHO ARE IDENTIFIED AS UNDERSERVED AFTER THE COMMISSION ESTABLISHES IN CONSULTATION WITH THE INSTITUTIONS A CONSISTENT DEFINITION AND DATA COLLECTION METHOD FOR IDENTIFYING UNDERSERVED STUDENTS.

(c) Graduate programs. Role and mission funding must include an amount for each eligible governing board to offset the costs incurred in providing graduate programs at institutions that are authorized to provide graduate programs. In establishing the components of this factor, the commission
SHALL INCLUDE, AT A MINIMUM, AN AMOUNT FOR EACH GRADUATE STUDENT ENROLLED IN AN INSTITUTION, WHICH AMOUNT SHALL BE BASED ON THE SUBJECT AND LEVEL OF THE GRADUATE PROGRAM. IN DETERMINING THE AMOUNT OF FUNDING, THE COMMISSION SHALL CONSIDER PROGRAMS THAT HAVE A HIGH COST PER STUDENT, INCLUDING BUT NOT LIMITED TO PROGRAMS IN THE FIELDS OF LAW, BUSINESS, SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS.

(d) Remediation. Role and mission funding must include an amount for each eligible governing board to offset the costs incurred in providing effective basic skills courses for students enrolled at an institution that is authorized to provide basic skills courses and the costs incurred in providing approved supplemental academic instruction pursuant to Section 23-1-113 (1.5) (a) (II). In establishing the components of this factor, the commission shall determine how to measure successful remediation, which measure may include a student's successful completion of a first-level college course in the area of remediation, including English or math. The commission may also include components relating to the speed of a student's remediation and the cost of remediation to the student.

(e) Additional role and mission factors. The commission may
ESTABLISH UP TO TWO ADDITIONAL FACTORS RELATING TO ROLE AND MISSION FUNDING. THE FACTORS MUST BE DISTINGUISHABLE FROM EACH OTHER AND FROM THE FACTORS DESCRIBED IN PARAGRAPHS (a) TO (d) OF THIS SUBSECTION (3). THE ADDITIONAL FACTORS THE COMMISSION MAY CONSIDER INCLUDE, BUT NEED NOT BE LIMITED TO, INSTITUTION AFFORDABILITY, COST STUDIES, TECHNOLOGY TRANSFER, AND PROVISION OF CAREER AND TECHNICAL PROGRAMS.

(4) **Performance funding.** The institutional performance funding component of the fee-for-service contract is based on the following metrics, as determined by the commission pursuant to section 23-18-306:

(a) **Completion.** Performance funding must include an amount for each governing board for each certificate or degree awarded by the institution, and, for the governing board of an institution with a community college role and mission, an amount for each community college student who transfers from a community college to another institution after completion of a certain number of credit hours. The commission shall establish the amount awarded for each type of credential based on the subject and level of the credential and, for transfers from community colleges, and the amount awarded and, in
CONSULTATION WITH THE INSTITUTIONS, THE NUMBER OF CREDIT HOURS TO BE COMPLETED PRIOR TO TRANSFER. THE COMMISSION SHALL INCREASE THE VALUE OF EACH CREDENTIAL EARNED BY OR TRANSFER COMPLETED BY A PELL-ELIGIBLE UNDERGRADUATE STUDENT AND MAY INCREASE THE VALUE OF EACH CREDENTIAL EARNED OR TRANSFER COMPLETED BY A FIRST-GENERATION OR UNDERSERVED UNDERGRADUATE STUDENT IF THE COMMISSION IMPLEMENTS INCREASED FUNDING FOR THESE STUDENT POPULATIONS PURSUANT TO PARAGRAPH (b) OF SUBSECTION (3) OF THIS SECTION.

(b) **Retention.** PERFORMANCE FUNDING MUST INCLUDE AN AMOUNT FOR EACH GOVERNING BOARD BASED ON THE NUMBER OF STUDENTS ENROLLED IN AN INSTITUTION WHO MAKE ACADEMIC PROGRESS BY COMPLETING THIRTY CREDIT HOURS, SIXTY CREDIT HOURS, OR NINETY CREDIT HOURS. IN ESTABLISHING THE COMPONENTS OF THIS METRIC, THE COMMISSION MAY INCLUDE A COMPONENT RELATED TO AN INCREASE IN THE INSTITUTION'S RETENTION RATE. A COMMUNITY COLLEGE THAT RECEIVES A COMPLETION INCENTIVE FOR A TRANSFERRING STUDENT IS NOT ELIGIBLE FOR A RETENTION BONUS FOR THAT STUDENT IN THE SAME YEAR.

(c) **Additional performance metrics.** THE COMMISSION MAY ESTABLISH UP TO FOUR ADDITIONAL PERFORMANCE FUNDING METRICS THAT REFLECT AND SUPPORT THE POLICY GOALS ADOPTED BY THE
COMMISSION IN THE MASTER PLAN. THE METRICS MUST BE
DISTINGUISHABLE FROM EACH OTHER AND FROM THE METRICS DESCRIBED
IN PARAGRAPHS (a) AND (b) OF THIS SUBSECTION (4). THE ADDITIONAL
PERFORMANCE METRICS THE COMMISSION MAY CONSIDER INCLUDE, BUT
NEED NOT BE LIMITED TO, WORKFORCE PLACEMENT, CLOSING THE
ACHIEVEMENT GAP, LIMITING STUDENT LOAN DEBT, AND CONTROLLING
INSTITUTIONAL ADMINISTRATIVE COSTS.

(5) THE BOARD OF TRUSTEES OF THE COLORADO SCHOOL OF
MINES MAY STUDY AND RECOMMEND TO THE GENERAL ASSEMBLY A
DIFFERENT FUNDING STRUCTURE, INCLUDING BUT NOT LIMITED TO A
SPECIAL PURPOSE AUTHORITY AS DEFINED IN SECTION 24-77-102 (15), C.R.S.,
THAT STRENGTHENS THE INSTITUTION AND ITS SPECIALIZED EDUCATIONAL
PROGRAMS WHILE ENSURING ACADEMIC QUALITY AND CONTINUED
OPPORTUNITIES FOR RESIDENT STUDENTS WHO MEET THE ADMISSIONS
CRITERIA OF THE INSTITUTION.

(6) NOTWITHSTANDING ANY PROVISION OF THIS SECTION TO THE
CONTRARY, EACH FEE-FOR-SERVICE CONTRACT NEGOTIATED PURSUANT TO
THIS SECTION IS SUBJECT TO THE PROVISIONS OF SECTION 23-18-305.

(7) IT IS THE INTENT OF THE GENERAL ASSEMBLY THAT A STATE
INSTITUTION OF HIGHER EDUCATION THAT ENTERS INTO A FEE-FOR-SERVICE
CONTRACT THAT INCLUDES BASIC SKILLS COURSES SHALL NOT CHARGE A
STUDENT MORE PER CREDIT HOUR FOR A BASIC SKILLS COURSE THAN THE
STUDENT WOULD PAY PER CREDIT HOUR FOR A GENERAL EDUCATION
COURSE.

(8) (a) NOTWITHSTANDING ANY PROVISION OF LAW TO THE
CONTRARY, AN INSTITUTION MAY USE FUNDING PROVIDED PURSUANT TO
THIS SECTION AS FINANCIAL ASSISTANCE FOR IN-STATE STUDENTS TO

(b) For an institution that uses funding received pursuant to this section to provide financial assistance for in-state students, "Student's share of in-state tuition", for purposes of parts 1 and 2 of this article, has the same meaning as set forth in section 23-18-102, less the amount of any financial assistance awarded to the student pursuant to paragraph (a) of this subsection (8).

23-18-304. Funding for specialty education programs - area vocational schools - local district junior colleges. (1) (a) (I) For the 2015-16 state fiscal year and each fiscal year thereafter, the board of regents of the university of Colorado may annually negotiate a fee-for-service contract with the department for the delivery of specialty education services provided by the health sciences center campus of the university of Colorado, established pursuant to section 23-20-101. For the 2015-16 state fiscal year and each fiscal year thereafter, the board of governors of the Colorado state university system may annually negotiate fee-for-service contracts with the department for the delivery of specialty education services pursuant to part 3 and parts 5 to 8
OF ARTICLE 31 OF THIS TITLE, AND THE VETERINARY MEDICINE PROGRAM
AT COLORADO STATE UNIVERSITY, ESTABLISHED PURSUANT TO SECTION
23-31-101. THE AMOUNT OF EACH FEE-FOR-SERVICE CONTRACT
NEGOTIATED PURSUANT TO THIS SECTION MUST BE EQUAL TO THE
AMOUNT OF THE FEE-FOR-SERVICE CONTRACT FOR THE CAMPUS, SERVICE,
OR PROGRAM FOR THE PRECEDING STATE FISCAL YEAR, INCREASED OR
DECREASED BY A PERCENTAGE EQUAL TO THE PERCENTAGE CHANGE IN
THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE STATE FISCAL
YEAR FROM THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE
FISCAL YEAR.

(II) NOTWITHSTANDING THE PROVISIONS OF SUBPARAGRAPH (I) OF THIS
PARAGRAPH (a) TO THE CONTRARY, THE FEE-FOR-SERVICE CONTRACT
FOR THE HEALTH SCIENCES CENTER CAMPUS OF THE UNIVERSITY OF
COLORADO AND THE VETERINARY MEDICINE PROGRAM AT COLORADO
STATE UNIVERSITY MAY INCREASE BY A PERCENTAGE THAT IS GREATER
THAN THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR
THE APPLICABLE FISCAL YEAR FROM THE TOTAL STATE APPROPRIATION
FOR THE PRECEDING STATE FISCAL YEAR AND MAY DECREASE BY A
PERCENTAGE THAT IS LESS THAN THE PERCENTAGE CHANGE IN THE TOTAL
STATE APPROPRIATION FOR THE APPLICABLE FISCAL YEAR FROM THE
TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR. IN
DETERMINING THE AMOUNT OF THE FEE-FOR-SERVICE CONTRACTS, THE
DEPARTMENT SHALL TAKE INTO ACCOUNT THE FACT THAT THE HEALTH SCIENCES CENTER CAMPUS AT THE UNIVERSITY OF COLORADO AND THE VETERINARY MEDICINE PROGRAM AT COLORADO STATE UNIVERSITY ARE HIGH-COST, LOW-ENROLLMENT PROGRAMS.

(b) IF, UPON THE RECOMMENDATION OF THE COMMISSION AND THE DEPARTMENT, THE JOINT BUDGET COMMITTEE DETERMINES THAT AN EDUCATIONAL PROGRAM THAT IS NOT INCLUDED IN PARAGRAPH (a) OF THIS SUBSECTION (1) SHOULD RECEIVE FUNDING AS A SPECIALTY EDUCATION PROGRAM PURSUANT TO THIS SECTION, THE JOINT BUDGET COMMITTEE MAY INTRODUCE LEGISLATION THAT DESIGNATES THE PROGRAM AS A SPECIALTY EDUCATION PROGRAM FUNDED PURSUANT TO THIS SECTION.

(2) (a) EXCEPT AS PROVIDED IN PARAGRAPH (b) OF THIS SUBSECTION (2), FOR THE 2015-16 STATE FISCAL YEAR AND EACH FISCAL YEAR THEREAFTER, THE DIRECT GRANTS MADE TO ELIGIBLE AREA VOCATIONAL SCHOOLS PURSUANT TO PART 3 OF ARTICLE 71 OF THIS TITLE FOR A STATE FISCAL YEAR MUST BE EQUAL TO THE AMOUNT OF THE GRANTS MADE IN THE PRECEDING STATE FISCAL YEAR, INCREASED OR DECREASED BY A PERCENTAGE EQUAL TO THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE STATE FISCAL YEAR FROM THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR.
(b) AFTER CONSIDERING THE STATUS OF THE PERFORMANCE CONTRACTS WITH THE AREA VOCATIONAL SCHOOLS PURSUANT TO SECTION 23-5-129, THE COMMISSION MAY RECOMMEND AS PART OF ITS BUDGET REQUEST THAT DIRECT GRANTS TO AREA VOCATIONAL SCHOOLS INCREASE BY A PERCENTAGE THAT IS GREATER THAN THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR OR DECREASE BY A PERCENTAGE THAT IS LESS THAN THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE FISCAL YEAR FROM THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR.

(3) (a) EXCEPT AS PROVIDED IN PARAGRAPH (b) OF THIS SUBSECTION (3), FOR THE 2015-16 STATE FISCAL YEAR AND EACH FISCAL YEAR THEREAFTER, THE DIRECT GRANTS MADE TO ELIGIBLE JUNIOR COLLEGE DISTRICTS PURSUANT TO PART 3 OF ARTICLE 71 OF THIS TITLE FOR A STATE FISCAL YEAR MUST BE EQUAL TO THE AMOUNT OF THE GRANTS MADE IN THE PRECEDING STATE FISCAL YEAR, INCREASED OR DECREASED BY A PERCENTAGE EQUAL TO THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE STATE FISCAL YEAR FROM THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR.

(b) AFTER CONSIDERING THE STATUS OF THE PERFORMANCE CONTRACTS WITH THE LOCAL DISTRICT JUNIOR COLLEGES PURSUANT TO SECTION 23-5-129, THE COMMISSION MAY RECOMMEND AS PART OF ITS BUDGET REQUEST THAT DIRECT GRANTS TO LOCAL DISTRICT JUNIOR COLLEGES INCREASE BY A PERCENTAGE THAT IS GREATER THAN THE
PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR OR DECREASE BY A PERCENTAGE THAT IS LESS THAN THE PERCENTAGE CHANGE IN THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE FISCAL YEAR FROM THE TOTAL STATE APPROPRIATION FOR THE PRECEDING STATE FISCAL YEAR.

(c) COLORADO MOUNTAIN COLLEGE MAY ELECT TO PARTICIPATE IN THE FUNDING PROVISIONS SPECIFIED IN SECTION 23-18-303 IN LIEU OF THE FUNDING PROVISIONS SPECIFIED IN PARAGRAPHS (a) AND (b) OF THIS SUBSECTION (3). COLORADO MOUNTAIN COLLEGE MUST NOTIFY THE COMMISSION BY AUGUST 1 OF ITS INTENTION TO PARTICIPATE IN THE FUNDING PROVISIONS SPECIFIED IN SECTION 23-18-303 FOR THE FOLLOWING STATE FISCAL YEAR. IF COLORADO MOUNTAIN COLLEGE ELECTS TO PARTICIPATE IN THE FUNDING PROVISIONS OF SECTION 23-18-303, THE DEPARTMENT SHALL APPLY THE FUNDING PROVISIONS OF SECTION 23-18-303 TO COLORADO MOUNTAIN COLLEGE IN THE SAME MANNER AS THEY ARE APPLIED TO ALL OTHER INSTITUTIONS, AND COLORADO MOUNTAIN COLLEGE MUST RECEIVE LEVELS OF FUNDING THAT ARE COMPARABLE TO THE FUNDING RECEIVED BY THE GOVERNING BOARDS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 23-18-303.

(4) THE GOVERNING BOARDS OF INSTITUTIONS WITH SPECIALTY EDUCATION PROGRAMS, THE AREA VOCATIONAL SCHOOLS, THE LOCAL DISTRICT JUNIOR COLLEGES, AND THE COMMISSION ARE ENCOURAGED TO DEVELOP FUNDING MODELS THAT INCLUDE SPECIFIC PERFORMANCE METRICS TO ENSURE THAT THESE PROGRAMS AND INSTITUTIONS ARE MEETING THE POLICY GOALS ESTABLISHED BY THE GENERAL ASSEMBLY AND ADOPTED BY THE COMMISSION IN ITS MASTER PLAN.
23-18-305. Total appropriations - adjustments - fiscal emergency - resolution - financial hardship. (1) (a) For the 2015-16 state fiscal year through the 2019-20 state fiscal year, the total governing board appropriation for a governing board for a fiscal year shall not change from the preceding fiscal year by a percentage that is more than five percentage points less than or five percentage points greater than the percentage change in the total state appropriation from the preceding fiscal year. Notwithstanding any provision of this part 3 to the contrary, the general assembly in the annual general appropriations bill shall adjust the total governing board appropriation for each governing board as necessary to comply with this section.

(b) Beginning with the 2020-21 state fiscal year, in any fiscal year that the department determines that it is appropriate to adjust total governing board appropriations as provided in paragraph (a) of this subsection (1), the department may recommend that the joint budget committee adjust the total governing board appropriations for each governing board as necessary to comply with the provisions of paragraph (a) of this subsection (1).

(2) (a) Except as provided in paragraph (b) of this subsection (2), for the 2015-16 state fiscal year and each fiscal year
THEREAFTER, THE TOTAL ANNUAL APPROPRIATION IN TRUST FOR ELIGIBLE UNDERGRADUATE STUDENTS TO THE COLLEGE OPPORTUNITY FUND PURSUANT TO SECTION 23-18-202 MUST BE AN AMOUNT EQUAL TO AT LEAST FIFTY-TWO AND FIVE-TENTHS PERCENT OF THE TOTAL STATE APPROPRIATION FOR THE APPLICABLE STATE FISCAL YEAR; EXCEPT THAT THE PERCENTAGE MAY BE LESS THAN FIFTY-TWO AND FIVE-TENTHS PERCENT AS A RESULT OF ADJUSTMENTS FOR ACTUAL ENROLLMENT MADE PURSUANT TO SECTION 23-18-202 (1) (c).

(b) (I) IF, DUE TO AN ECONOMIC DOWNTURN, THE DEPARTMENT AND THE COMMISSION DETERMINE THAT COMPLYING WITH THE COLLEGE OPPORTUNITY FUND STIPEND ALLOCATION REQUIREMENT SET FORTH IN PARAGRAPH (a) OF THIS SUBSECTION (2) RESULTS IN AN UNDUE BURDEN TO THE INSTITUTIONS, THE DEPARTMENT MAY SUBMIT AN ADDITIONAL BUDGET REQUEST THAT DOES NOT COMPLY WITH THE COLLEGE OPPORTUNITY FUND STIPEND ALLOCATION REQUIREMENT. TO APPROVE THE DEPARTMENT'S BUDGET REQUEST WAIVING THE COLLEGE OPPORTUNITY FUND STIPEND ALLOCATION REQUIREMENT, THE GENERAL ASSEMBLY MUST ADOPT A JOINT RESOLUTION BY SIMPLE MAJORITY IN BOTH CHAMBERS THAT DECLARES A FISCAL EMERGENCY.

(II) THE COLLEGE OPPORTUNITY FUND STIPEND ALLOCATION REQUIREMENT SET FORTH IN PARAGRAPH (a) OF THIS SUBSECTION (2) DOES

245
NOT APPLY IN ANY STATE FISCAL YEAR FOR WHICH THE REVENUE
ESTIMATE PREPARED BY THE LEGISLATIVE COUNCIL STAFF IN MARCH OF
THE FISCAL YEAR PRIOR TO THE NEXT FISCAL YEAR INDICATES THAT
THERE ARE EXCESS STATE REVENUES OF AT LEAST FIFTY MILLION
DOLLARS THAT ARE REQUIRED TO BE REFUNDED PURSUANT TO SECTION 20
OF ARTICLE X OF THE STATE CONSTITUTION.

(3) IF AFTER APPLYING THE COLLEGE OPPORTUNITY FUND STIPEND
ALLOCATION REQUIREMENT SET FORTH IN PARAGRAPH (a) OF SUBSECTION
(2) OF THIS SECTION AND THE FEE-FOR-SERVICE PROVISIONS OF SECTION
23-18-303 THE DEPARTMENT DETERMINES THAT THIS HAS RESULTED IN
FINANCIAL INSTABILITY FOR AND THE POTENTIAL CLOSURE OF AN
INSTITUTION, THE DEPARTMENT MAY RECOMMEND TO THE JOINT BUDGET
COMMITTEE THAT THE INSTITUTION BE TREATED AS A SPECIALTY
EDUCATION PROGRAM PURSUANT TO THE PROVISIONS OF SECTION 23-18-
304. THE JOINT BUDGET COMMITTEE MAY INTRODUCE LEGISLATION
DESIGNATING THE INSTITUTION AS A SPECIALTY EDUCATION PROGRAM
SUBJECT TO THE PROVISIONS OF SECTION 23-18-304 AND EXEMPTING THE
INSTITUTION FROM ANY PROVISIONS OF THIS PART 3 FOR A SPECIFIED
PERIOD OF TIME. AN INSTITUTION THAT RECEIVES AN EXEMPTION
PURSUANT TO THIS SUBSECTION (3) SHALL, IN CONSULTATION WITH THE
DEPARTMENT AND THE COMMISSION, SUBMIT A PLAN FOR ACHIEVING
FINANCIAL STABILITY TO THE JOINT BUDGET COMMITTEE AND TO THE
EDUCATION COMMITTEES OF THE HOUSE OF REPRESENTATIVES AND OF THE SENATE, OR ANY SUCCESSOR COMMITTEES.

(4) NOTWITHSTANDING ANY PROVISION OF THIS PART 3 TO THE CONTRARY, IN A FISCAL YEAR IN WHICH THE PROVISIONS OF SECTION 23-1-108 (1.9) APPLY, PERFORMANCE-BASED FUNDING THAT A GOVERNING BOARD RECEIVES IS IN ADDITION TO ANY AMOUNTS THE GOVERNING BOARD RECEIVES PURSUANT TO A FEE-FOR-SERVICE CONTRACT PURSUANT TO SECTIONS 23-18-303 AND 23-1-304, A DIRECT GRANT THE GOVERNING BOARD RECEIVES PURSUANT TO SECTION 23-18-304 AND PART 3 OF ARTICLE 71 OF THIS TITLE, OR AMOUNTS THAT THE GOVERNING BOARD IS AUTHORIZED TO EXPEND PURSUANT TO THE COLLEGE OPPORTUNITY FUND PROGRAM CREATED IN PART 2 OF THIS ARTICLE.

23-18-306. Duties and powers of the commission - department - role and mission factors and performance metrics - consultation with interested parties - facilitator. (1) AS USED IN THIS SECTION, "INTERESTED PARTIES" INCLUDES BUT IS NOT LIMITED TO THE GOVERNING BOARDS OF INSTITUTIONS, INSTITUTION ADMINISTRATORS, HIGHER EDUCATION ADVOCATES, STUDENTS, FACULTY, NONPROFIT EDUCATION ORGANIZATIONS, AND MEMBERS OF THE BUSINESS COMMUNITY.

(2) (a) PURSUANT TO SECTION 23-18-303, NO LATER THAN JANUARY 1, 2015, THE COMMISSION SHALL DETERMINE, IN CONSULTATION WITH INTERESTED PARTIES, THE ROLE AND MISSION FACTORS AND PERFORMANCE FUNDING
METRICS FOR FEE-FOR-SERVICE CONTRACTS ENTERED INTO PURSUANT TO SECTION 23-18-303. THE COMMISSION SHALL ESTABLISH THE COMPONENTS OF EACH FACTOR RELATING TO ROLE AND MISSION FUNDING, INCLUDING THE WEIGHT ASSOCIATED WITH EACH FACTOR, AND THE COMPONENTS OF EACH PERFORMANCE METRIC RELATING TO PERFORMANCE FUNDING, INCLUDING THE COMPONENTS OF EACH METRIC AND THE WEIGHT ASSOCIATED WITH EACH METRIC.

(b) THE COMMISSION SHALL DETERMINE, AND THE DEPARTMENT SHALL APPLY AND IMPLEMENT EACH ROLE AND MISSION FACTOR AND PERFORMANCE FUNDING METRIC PURSUANT TO THE FOLLOWING GUIDELINES:

(I) EACH ROLE AND MISSION FACTOR AND PERFORMANCE FUNDING METRIC MUST BE TIED TO THE POLICY GOALS ESTABLISHED BY THE GENERAL ASSEMBLY AND BY THE COMMISSION IN ITS MASTER PLAN;

(II) EACH ROLE AND MISSION FACTOR AND PERFORMANCE FUNDING METRIC MUST BE TRANSPARENT AND MEASURABLE;

(III) EACH ROLE AND MISSION FACTOR MAY BE APPLIED DIFFERENTLY TO INSTITUTIONS, BUT TO THE EXTENT POSSIBLE, SIMILAR INSTITUTIONS MUST BE TREATED SIMILARLY; AND

(IV) EACH PERFORMANCE FUNDING METRIC MUST BE APPLIED UNIFORMLY TO ALL GOVERNING BOARDS. FOR EXAMPLE, THE PERFORMANCE FUNDING METRIC FOR RETENTION MUST BE MEASURED AND APPLIED TO A COMMUNITY COLLEGE IN THE SAME MANNER THAT IT IS MEASURED AND APPLIED TO A FOUR-YEAR INSTITUTION.
(3) (a) From May 2014 through December 2014, the Commission shall convene a series of meetings with interested parties to develop the role and mission factors and performance funding metrics for fee-for-service contracts pursuant to subsection (2) of this section.

(b) The Commission shall retain a facilitator to attend meetings and facilitate the work of the Commission. The Department shall provide any additional necessary staff support to the Commission.

(c) The Commission may organize its work in the manner it chooses, including convening committees of interested persons to focus on specific role and mission factors or performance funding metrics.

(d) After determining the initial role and mission factors and performance funding metrics and the weights assigned to each factor or metric, the Commission may continue to meet with interested parties to review the implementation of the fee-for-service model and to make recommendations to the Joint Budget Committee and to the Education Committees of the House of Representatives and the Senate concerning changes to the fee-for-service model or other provisions of this Part 3.

(4) Because the implementation of this Part 3 may have unanticipated results, on July 1, 2016, and each July 1 thereafter through July 1, 2020, the Commission shall submit a written report to the Joint Budget Committee and to the Education Committees of the House of Representatives and the Senate concerning the status of the implementation of this Part 3, and may recommend changes to the provisions of this Part 3.

(5) The General Assembly finds and declares that it is vital that Colorado's higher education system is accessible and affordable for all Coloradans. The institutions' tuition policies are an important component of ensuring both the affordability and sustainability of Colorado's higher education system. With

(6) THE COMMISSION SHALL ADOPT ANY POLICIES OR PROCEDURES NECESSARY FOR THE UNIFORM APPLICATION AND IMPLEMENTATION OF THIS PART 3.

(7) THE DEPARTMENT SHALL COMPLY WITH THE REQUIREMENTS OF THIS PART 3 IN SUBMITTING ITS BUDGET REQUEST PURSUANT TO THE BUDGET PROCEDURES SPECIFIED IN PART 3 OF ARTICLE 37 OF TITLE 24, C.R.S.

THAT THE COMMISSION IS CONSIDERING PURSUANT TO SECTION 23-18-306.

(2) (a) BY NOVEMBER 1, 2014, THE DEPARTMENT AND THE
COMMISSION SHALL SUBMIT A BUDGET REQUEST THAT INCLUDES THE
TOTAL AMOUNT OF FUNDING REQUESTED FOR HIGHER EDUCATION FOR
THE 2015-16 STATE FISCAL YEAR AND A DRAFT OF THE FACTORS AND
METRICS, WITH THEIR WEIGHTS, THAT THE COMMISSION IS CONSIDERING
PURSUANT TO SECTION 23-18-306 BUT THAT DOES NOT INCLUDE THE
SPECIFIC ALLOCATION TO EACH GOVERNING BOARD.

(b) BY JANUARY 15, 2015, THE DEPARTMENT AND THE COMMISSION SHALL
SUBMIT AN UPDATED BUDGET REQUEST THAT INCLUDES:

(I) A DETAILED DESCRIPTION OF THE FEE-FOR-SERVICE
CONTRACT ROLE AND MISSION FUNDING FACTORS AND THE PERFORMANCE
FUNDING METRICS AND THE VALUES ASSIGNED TO EACH FACTOR AND METRIC; AND

(II) THE FEE-FOR-SERVICE CONTRACT PROVISIONS OF SECTION 23-
18-303 AS APPLIED TO EACH INSTITUTION, INCLUDING DETAILS OF THE
FUNDING REQUESTED FOR EACH INSTITUTION FOR EACH ROLE AND MISSION
FUNDING FACTOR AND EACH PERFORMANCE FUNDING METRIC.

(3) FOR THE 2016-17 STATE FISCAL YEAR AND EACH FISCAL YEAR
THEREAFTER, THE DEPARTMENT AND THE COMMISSION SHALL SUBMIT A
BUDGET REQUEST BY NOVEMBER 1 OF EACH YEAR THAT INCLUDES:

(a) A DETAILED DESCRIPTION OF THE FEE-FOR-SERVICE
CONTRACT ROLE AND MISSION FUNDING FACTORS AND THE PERFORMANCE
FUNDING METRICS AND THE VALUES ASSIGNED TO EACH FACTOR AND METRIC; AND
(b) THE FEE-FOR-SERVICE CONTRACT PROVISIONS OF SECTION 23-18-303 AS APPLIED TO EACH INSTITUTION, INCLUDING DETAILS OF THE FUNDING REQUESTED FOR EACH INSTITUTION FOR EACH ROLE AND MISSION FUNDING FACTOR AND EACH PERFORMANCE FUNDING METRIC.


SECTION 2. In Colorado Revised Statutes, amend 23-1-109.7 as follows:

23-1-109.7. Duties and powers of the commission with regard to the provision of educational services. (1) Beginning July 1, 2005, the commission shall be responsible for ensuring the provision of specific postsecondary educational services in the state. These educational services shall include but need not be limited to:

(a) Educational services in rural areas or communities in which the cost of delivering such services is not sustained by the amount received in student tuition;

(b) to (d) Repealed.

(e) Educational services required of the commission to meet its obligations under reciprocal agreements pursuant to section 23-1-112;

(f) Graduate school services;

(g) Educational services that may increase economic development opportunities in the state, including courses to assist students in career development and retraining; and
(h) Specialized educational services and professional degrees, including but not limited to the areas of dentistry, medicine, veterinary medicine, nursing, law, forestry, and engineering and programs that address identified state or national priorities.

(2) Beginning July 1, 2005, the Commission is responsible for ensuring the provision of postsecondary educational services pursuant to Part 3 of Article 18 of this title. The department of higher education on behalf of the commission shall annually enter into fee-for-service contracts with one or more governing boards of institutions of higher education pursuant to Section 23-18-303 to provide the higher education services specified in subsection (1) of this section 23-18-301. The department of higher education may contract with a governing board of an institution of higher education only to the extent that the contract remains consistent with any contract entered into pursuant to section 23-5-129 with the governing board.

(3) The commission shall make annual funding recommendations to the general assembly and the governor regarding the funding necessary for the department of higher education to contract on the commission's behalf for the provision of higher education services in the state, including but not limited to the services specified in subsection (1) of this section sections 23-18-301 and 23-18-303. The general assembly shall annually appropriate to the commission an amount of general fund moneys to carry out the purposes of this section.


SECTION 4. In Colorado Revised Statutes, 23-18-202, amend (1) (c), (2) (c), and (9) as follows:

23-18-202. College opportunity fund - appropriations - payment of stipends - reimbursement - repeal. (1) If there are moneys remaining in the college opportunity fund or if there are insufficient moneys in the college opportunity fund after the final census date of the last academic term of each state fiscal year, as determined in accordance with this section, the department may transfer up to three ten percent of the amount annually authorized as cash spending authority in the general appropriations act for a governing board to expend stipends received on behalf of eligible undergraduate students. Stipends received on behalf of eligible undergraduate students may be expended by the same governing board for postsecondary educational services purchased by the department if authorized through a fee-for-service contract entered into pursuant to sections 23-1-109.7 and 23-5-130. The department may transfer an equivalent amount in general fund spending authority from stipends to fee-for-service contracts.
to fulfill its fee-for-service contract obligations to a governing board pursuant to this paragraph (c) and section 23-5-130


(2) (c) The commission shall forward to the general assembly and governor, by November 1 of each year, a list of institutions eligible to receive stipends on behalf of eligible undergraduate students under the program. The commission shall annually request that the general assembly adjust the amount appropriated to the Colorado student loan program for the stipends, to WHICH AMOUNT MAY reflect at least inflation and enrollment growth in the state institutions of higher education.

(9) It is the intent of the general assembly that the college opportunity fund and fee-for-service contracts authorized pursuant to section 23-5-130 23-18-303 be fully funded for enrollment growth.

SECTION 5. In Colorado Revised Statutes, 23-18-102, amend (12) as follows:

23-18-102. Definitions. As used in this article, unless the context otherwise requires:

(12) "Student's share of in-state tuition" means, EXCEPT AS PROVIDED IN SECTION 23-18-303 (8), the amount of total in-state tuition, less any amount paid on behalf of the student as a stipend.

SECTION 6. In Colorado Revised Statutes, 23-20-112, add (3) as follows:

23-20-112. General powers of the board - repeal. (3) (a) NOTWITHSTANDING ANY PROVISION OF LAW TO THE CONTRARY, AN INSTITUTION GOVERNED BY THE BOARD OF REGENTS MAY USE FUNDING PROVIDED PURSUANT TO SECTION 23-18-303 AS FINANCIAL ASSISTANCE FOR IN-STATE STUDENTS TO REDUCE THE STUDENT'S SHARE OF IN-STATE TUITION, AS DEFINED IN SECTION 23-18-102.
(b) FOR PURPOSES OF PARTS 1 AND 2 OF ARTICLE 18 OF THIS TITLE, FOR AN INSTITUTION GOVERNED BY THE BOARD OF REGENTS, "STUDENT'S SHARE OF IN-STATE TUITION" HAS THE SAME MEANING AS SET FORTH IN SECTION 23-18-102 LESS THE AMOUNT OF ANY FINANCIAL ASSISTANCE AWARDED TO THE STUDENT PURSUANT TO PARAGRAPH (a) OF THIS SUBSECTION (3).

SECTION 7. In Colorado Revised Statutes, 23-71-301, amend (1) (a) as follows:
23-71-301. Direct grants to junior college districts occupational courses. (1) (a) Any junior college district operating or organized and operating as such during the entire school year in which a grant is made shall be entitled to a direct grant, from funds appropriated for this purpose, in an amount specified annually by the general assembly PURSUANT TO SECTION 23-18-304. Procedures for the certification by junior college districts to the state board for community colleges and occupational education, referred to in this part 3 as the "board", of the numbers of students and the quarter or semester hours for which students are registered shall be prescribed by regulation of the board. No moneys shall be distributed under this section for any students other than those enrolled in postsecondary courses for credit in degree and certificate programs.

SECTION 8. In Colorado Revised Statutes, 23-71-303, amend (1) as follows:
23-71-303. Distributions to area vocational schools. (1) Any area vocational school operating or organized and operating as such during the entire school year may be reimbursed by the state in an amount specified annually by the general assembly PURSUANT TO SECTION 23-18-304. In no instance shall such reimbursement exceed the total direct cost of the vocational program per FTE.

SECTION 9. In Colorado Revised Statutes, 23-1-104, amend (1) (a) (I), (1) (b) (I), (1) (c) introductory portion, and (2) as follows:
23-1-104. Financing the system of postsecondary education report - repeal. (1) (a) (I) For fiscal years 2011-12 through 2015-16, the general assembly shall make annual appropriations of moneys that are estimated to be received by an institution, under the direction and control of the governing board, as stipends, as defined in section 23-18-102, and through fee-for-service contracts, as authorized in sections 23-1-109.7 and 23-5-130 23-18-303, as a single line item to each governing board for the operation of its campuses; except that, if the general assembly appropriates moneys, as described in paragraph (c) of this subsection (1), to the Colorado state forest service, the agricultural experiment station department of the Colorado state university, or the Colorado state university cooperative extension service, such
moneys shall not be included within the single line item appropriations described in this paragraph (a).

(b) (I) For the 2010-11 fiscal year and for fiscal years beginning on or after July 1, 2016, the general assembly shall make annual appropriations of general fund moneys, of cash funds received from tuition income, and of moneys that are estimated to be received by an institution, under the direction and control of the governing board, as stipends, as defined in section 23-18-102, and through fee-for-service contracts, as authorized in sections 23-1-109.7 and 23-5-130, as a single line item to each governing board for the operation of its campuses; except that, if the general assembly appropriates moneys, as described in paragraph (c) of this subsection (1), to the Colorado state forest service, the agricultural experiment station department of the Colorado state university, or the Colorado state university cooperative extension service, such moneys shall not be included within the single line item appropriations described in this paragraph (b).

(c) In addition to any appropriations made pursuant to paragraph (a) or (b) of this subsection (1), the general assembly may make annual appropriations of general fund moneys and of moneys received pursuant to a fee-for-service contract negotiated by the board of governors of the Colorado state university system and the department of higher education, as described in section 23-5-130, as separate line items to:

(2) Notwithstanding any provision of this section to the contrary, beginning in the 2011-12 fiscal year and for each fiscal year thereafter through the 2020-21 fiscal year, the general assembly shall appropriate moneys to the governing board of the Colorado school of mines in accordance with section 23-41-104.7, through fee-for-service contracts, as authorized in sections 23-1-109.7 and 23-5-130, and as stipends, as defined in section 23-18-102, as a single line item to said governing board.

SECTION 10. In Colorado Revised Statutes, 23-1-108, amend (1.9) (a) (II) as follows:

23-1-108. Duties and powers of the commission with regard to systemwide planning.

(1.9) (a) (II) The commission's performance-based funding plan shall specifically address the manner in which the appropriation of performance-based funding will affect the college opportunity fund stipends authorized in section 23-18-202 and the fee-for-service contracts authorized in sections 23-1-109.7 and 23-5-130. In fulfilling the requirements of subparagraph (I) of this paragraph (a), the commission shall analyze the effect of modifying the college opportunity fund stipend amounts for purposes of improving student retention, facilitating the success of transfers between institutions and between degree programs, and providing incentives for the timely completion of academic degrees. The modifications may include, but need not be limited to, differentiating stipend amounts based on each student's status as a freshman, sophomore,
junior, or senior. In addition, the commission shall analyze the effect of limiting the amount of funding for credit hours earned in excess of one hundred forty credits for a baccalaureate degree, or seventy hours for an associate degree.

SECTION 11. In Colorado Revised Statutes, **amend 23-18-101** as follows:

**23-18-101. Short title.** PARTS 1 AND 2 OF this article shall be known and may be cited as the "College Opportunity Fund Act".

SECTION 12. In Colorado Revised Statutes, 23-18-102, **amend** the introductory portion as follows:

**23-18-102. Definitions.** As used in PARTS 1 AND 2 OF this article, unless the context otherwise requires:

SECTION 13. In Colorado Revised Statutes, 23-20-138, **amend** (6) as follows:

**23-20-138. Health sciences center - definitions - accountable student program - creation.** (6) The fee-for-service contract negotiated between the board and the department of higher education pursuant to section 23-5-130 23-18-303 shall specify the amount of funding for educational services provided to graduate students by the state of Colorado. A graduate student receiving educational services paid for by the state of Colorado is not eligible to be an accountable student.

SECTION 14. In Colorado Revised Statutes, 23-41-104.7, **amend** (1) as follows:

**23-41-104.7. Funding.** (1) Beginning in the 2011-12 fiscal year, Colorado school of mines shall use a portion of its fee-for-service funding negotiated pursuant to section 23-5-130 23-18-303 to provide merit-based scholarships, need-based financial aid, and graduate student support to assist students with in-state classification to attend the institution, and shall increase said portion to ensure that, no later than the 2020-21 fiscal year and for each fiscal year thereafter, all said funding shall be used for said purposes, except as otherwise provided in paragraph (b) of subsection (2) of this section.

SECTION 15. In Colorado Revised Statutes, 24-1-114, **amend** (5) (b) as follows:

**24-1-114. Department of higher education - creation.** (5) (b) With respect to the Colorado commission on higher education and the universities, colleges, and boards specified in subsection (4) of this section, the executive director shall have only those powers, duties, and functions prescribed in article 1 of title 23, C.R.S.; except that the executive director of the Colorado commission on higher education is authorized to negotiate, implement, and monitor contracts, as described in sections 23-5-129 and 23-5-130 23-18-303, C.R.S., with universities, colleges, and boards, in consultation with the Colorado commission on higher education.

SECTION 16. In Colorado Revised Statutes, 24-36-120, **amend** (4) (g) as follows:

**24-36-120. Authority to assess transaction fees.** (4) The state treasurer shall not assess a fee for an eligible transaction involving any of the following funds:

(g) The college opportunity fund created in article 18 of title 23-SECTION 23-18-202, C.R.S.
SECTION 17. In Colorado Revised Statutes, 24-77-104.5, amend (4) (a) (III) and (4) (a) (IV) as follows:

24-77-104.5. General fund exempt account - appropriations to critical needs fund - specification of uses for health care and education - definitions. (4) (a) Funding for the benefit of students attending community colleges and other institutions of higher education, as used in subparagraph (III) of paragraph (b) of subsection (1) of this section, shall be limited to funding for:

(III) The college opportunity fund program created in PARTS 1 AND 2 OF article 18 of title 23, C.R.S.;

(IV) Fee-for-service contracts authorized pursuant to section 23-5-130 23-18-303, C.R.S.; and

SECTION 18. Appropriation. In addition to any other appropriation, there is hereby appropriated, out of any moneys in the general fund not otherwise appropriated, to the department of higher education, for the fiscal year beginning July 1, 2013, the sum of $45,207, or so much thereof as may be necessary, for allocation to the Colorado commission for higher education for administration costs related to the implementation of this act.

SECTION 19. Appropriation - adjustments to the 2014 long bill. (1) For the implementation of this act, the general fund appropriation made in the annual general appropriation act to the controlled maintenance trust fund created in section 24-75-302.5 (2) (a) Colorado Revised Statutes, for the fiscal year beginning July 1, 2014, is decreased by $772,133.

(2) In addition to any other appropriation, there is hereby appropriated, out of any moneys in the general fund not otherwise appropriated, to the department of higher education, for the fiscal year beginning July 1, 2014, the sum of $804,986 and 3.0 FTE, or so much thereof as may be necessary, to be allocated for the implementation of this act as follows:

(a) $786,770 and 3.0 FTE for Colorado commission on higher education administration; and

(b) $18,216 for legal services.

(3) In addition to any other appropriation, there is hereby appropriated to the department of law, for the fiscal year beginning July 1, 2014, the sum of $18,216, or so much thereof as may be necessary, for the provision of legal services for the department of higher education related to the implementation of this act. Said sum is from reappropriated funds received from the department of higher education out of the appropriation made in paragraph (b) of subsection (2) of this section.

SECTION 20. Safety clause. The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.
Mark Ferrandino Morgan Carroll SPEAKER OF THE HOUSE  PRESIDENT OF
OF REPRESENTATIVES  THE SENATE

Marilyn Eddins  Cindi L. Markwell
CHIEF CLERK OF THE HOUSE  SECRETARY
OF REPRESENTATIVES  OF THE SENATE
APPROVED

John W. Hickenlooper
GOVERNOR OF THE STATE OF COLORADO
AN ACT
relating to student success-based funding for and reporting regarding public institutions of higher education.

BE IT ENacted BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. This Act shall be known as the Higher Education Outcomes-Based Funding Act.

SECTION 2. Section 61.059, Education Code, is amended by amending Subsections (a) and (c) and adding Subsection (b-1) to read as follows:

(a) To finance a system of higher education and to secure an equitable distribution of state funds deemed to be available for higher education, the board shall perform the functions described in this section. Funding policies shall:

(1) allocate resources efficiently and provide incentives for programs of superior quality and for institutional diversity;

(2) provide incentives for supporting the five-year master plan developed and revised under Section 61.051; and

(3) discourage unnecessary duplication of course offerings between institutions and unnecessary construction on any campus; and
(4) emphasize an alignment with education goals established by the board.

(b-1) A committee under Subsection (b) must be composed of representatives of a cross-section of institutions representing each of the institutional groupings under the board's accountability system. The commissioner of higher education shall solicit recommendations for the committee's membership from the chancellor of each university system and from the president of each institution of higher education that is not a component of a university system. The chancellor of a university system shall recommend to the commissioner at least one institutional representative for each institutional grouping to which a component of the university system is assigned. The president of an institution of higher education that is not a component of a university system shall recommend to the commissioner at least one institutional representative for the institutional grouping to which the institution is assigned.

(c) Formulas for basic funding shall:

(1) reflect the role and mission of each institution;

(2) emphasize funding elements that directly support faculty;

(3) reflect both fixed and variable elements of cost; and

(4) incorporate, as the board considers appropriate, goals identified in the board's long-range statewide plan developed under Section 61.051.

SECTION 3. Subchapter C, Chapter 61, Education Code, is amended by adding Section 61.0593 to read as follows:

Sec. 61.0593. STUDENT SUCCESS-BASED FUNDING RECOMMENDATIONS. (a) The legislature finds that it is in the state's highest public interest to evaluate student achievement at institutions of higher education and to develop higher education funding policy based on that evaluation. Funding policies that promote postsecondary educational success based on objective
indicators of relative performance, such as degree completion rates, are critical to maintaining the state's competitiveness in the national and global economy and supporting the general welfare of this state. Therefore, the purpose of this section is to ensure that institutions of higher education produce student outcomes that are directly aligned with the state's education goals and economic development needs.

(b) In this section:

(1) "At-risk student" means an undergraduate student of an institution of higher education:

(A) who has been awarded a grant under the federal Pell Grant program; or

(B) who, on the date the student initially enrolled in the institution:

(i) was 20 years of age or older;

(ii) had a score on the Scholastic Assessment Test (SAT) or the American College Test (ACT) that was less than the national mean score for students taking that test;

(iii) was enrolled as a part-time student; or

(iv) had not received a high school diploma but had received a high school equivalency certificate within the last six years.

(2) "Critical field" means a field of study designated as a critical field under Subsection (c).

(c) Except as otherwise provided under Subdivision (2), the fields of engineering, computer science, mathematics, physical science, allied health, nursing, and teaching certification in the field of science or mathematics are critical fields. Beginning September 1, 2012, the board, based on the board's determination of those fields of study in which the support and development
of postsecondary education programs at the bachelor’s degree level are most critically necessary for serving the needs of this state, by rule may:

(1) designate as a critical field a field of study that is not currently designated by this subsection or by the board as a critical field; or

(2) remove a field of study from the list of fields currently designated by this subsection or by the board as critical fields.

(d) This subsection applies only to a general academic teaching institution other than a public state college. In devising its funding formulas and making its recommendations to the legislature relating to institutional appropriations of funds under Section 61.059 for institutions to which this subsection applies, the board, in the manner and to the extent the board considers appropriate and in consultation with those institutions, shall incorporate the consideration of undergraduate student success measures achieved during the preceding state fiscal biennium by each of the institutions. At the time the board makes those recommendations, the board shall also make recommendations for incorporating the success measures, to the extent the board considers appropriate in consultation with those institutions, into the distribution of any incentive funds available for those institutions, including performance incentive funds under Subchapter D, Chapter 62. The board’s recommendations must provide alternative approaches for applying the success measures and must compare the effects on funding of applying the success measures within the formula for base funding to applying the success measures as a separate formula. The success measures considered by the board under this subsection may include:

(1) the total number of bachelor's degrees awarded by the institution;

(2) the total number of bachelor's degrees in critical fields awarded by the institution;
(3) the total number of bachelor's degrees awarded by the institution to at-risk students; and

(4) as determined by the board, the six-year graduation rate of undergraduate students of the institution who initially enrolled in the institution in the fall semester immediately following their graduation from a public high school in this state as compared to the six-year graduation rate predicted for those students based on the composition of the institution's student body.

(e) Notwithstanding Subsection (d):

(1) not more than 10 percent of the total amount of general revenue appropriations of base funds for undergraduate education recommended by the board for all institutions to which Subsection (d) applies for a state fiscal biennium may be based on student success measures; and

(2) the board's recommendation for base funding for undergraduate education based on student success measures does not reduce or otherwise affect funding recommendations for graduate education.

(f) This subsection applies only to public junior colleges, public state colleges, and public technical institutes. In devising its funding formulas and making its recommendations to the legislature relating to institutional appropriations of incentive funds for institutions to which this subsection applies, the board, in the manner and to the extent the board considers appropriate and in consultation with those institutions, shall incorporate the consideration of the undergraduate student success measures achieved during the preceding state fiscal biennium by each of the institutions. The success measures considered by the board under this subsection may include:

(1) the following academic progress measures achieved by students at the institution:
(A) successful completion of:

(i) developmental education in mathematics;

(ii) developmental education in English;

(iii) the first college-level mathematics course with a grade of "C" or higher;

(iv) the first college-level English course with a grade of "C" or higher; and

(v) the first 30 semester credit hours at the institution; and

(B) transfer to a four-year college or university after successful completion of at least 15 semester credit hours at the institution; and

(2) the total number of the following awarded by the institution:

(A) associate's degrees;

(B) bachelor's degrees under Section 130.0012; and

(C) certificates identified by the board for purposes of this section as effective measures of student success.

(g) Biennially, the board, in consultation with institutions to which Subsections (d) and (f) apply, shall review the student success measures considered by the board under those subsections.

(h) The board shall include in its findings and recommendations to the legislature under Section 61.059:

(1) an evaluation of the effectiveness of the student success measures described by this section in achieving the purpose of this section during the preceding state fiscal biennium; and

(2) any related recommendations the board considers appropriate.
(i) The board shall adopt rules for the administration of this section, including rules requiring each institution of higher education to submit to the board any student data or other information the board considers necessary for the board to carry out its duties under this section.

SECTION 4. Subchapter C, Chapter 61, Education Code, is amended by adding Section 61.0905 to read as follows:

Sec. 61.0905. REPORTS TO JOINT OVERSIGHT COMMITTEE. (a) Not later than September 30, 2011, and subsequently not later than July 1, 2012, the board shall submit to the Joint Oversight Committee on Higher Education Governance, Excellence, and Transparency a written report reviewing, comparing, and highlighting national and global best practices on:

(1) improving student outcomes, including student retention, graduations, and graduation rates; and

(2) higher education governance, administration, and transparency.

(b) This section expires August 31, 2013.

SECTION 5. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2011.

__________________________________________

__________________________________________

President of the Senate                           Speaker of the House
I certify that H.B. No. 9 was passed by the House on May 13, 2011, by the following vote: Yeas 118, Nays 22, 1 present, not voting; and that the House concurred in Senate amendments to H.B. No. 9 on May 27, 2011, by the following vote: Yeas 127, Nays 14, 2 present, not voting.

______________________________
Chief Clerk of the House

I certify that H.B. No. 9 was passed by the Senate, with amendments, on May 24, 2011, by the following vote: Yeas 30, Nays 0.

______________________________
Secretary of the Senate

APPROVED: ____________________

Date

______________________________
Governor
Appendix E

Weighting Matrix for I&O Funding for General Academic Institutions in Texas

<table>
<thead>
<tr>
<th></th>
<th>Lower Div</th>
<th>Upper Div</th>
<th>Masters</th>
<th>Doctoral</th>
<th>Special Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>1.00</td>
<td>1.71</td>
<td>3.87</td>
<td>9.72</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>1.78</td>
<td>3.02</td>
<td>7.59</td>
<td>21.82</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>1.45</td>
<td>2.43</td>
<td>5.55</td>
<td>7.64</td>
<td></td>
</tr>
<tr>
<td>Teacher Ed</td>
<td>1.53</td>
<td>1.89</td>
<td>2.43</td>
<td>7.95</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.08</td>
<td>2.66</td>
<td>7.71</td>
<td>10.42</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>2.46</td>
<td>3.58</td>
<td>7.66</td>
<td>17.34</td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td>1.03</td>
<td>1.65</td>
<td>3.09</td>
<td>8.37</td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td></td>
<td></td>
<td>4.81</td>
<td></td>
</tr>
<tr>
<td>Social Services</td>
<td>1.77</td>
<td>2.16</td>
<td>3.07</td>
<td>15.76</td>
<td></td>
</tr>
<tr>
<td>Library Science</td>
<td>1.52</td>
<td>1.36</td>
<td>3.16</td>
<td>12.74</td>
<td></td>
</tr>
<tr>
<td>Vocational Training</td>
<td>1.46</td>
<td>2.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Training</td>
<td>1.37</td>
<td>1.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Services</td>
<td>1.09</td>
<td>1.73</td>
<td>2.96</td>
<td>9.75</td>
<td>2.72</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>1.45</td>
<td>5.71</td>
<td>22.60</td>
<td>38.52</td>
<td>4.20</td>
</tr>
<tr>
<td>Business Admin</td>
<td>1.17</td>
<td>1.81</td>
<td>3.25</td>
<td>23.21</td>
<td></td>
</tr>
<tr>
<td>Optometry</td>
<td></td>
<td></td>
<td>34.48</td>
<td>50.88</td>
<td>5.98</td>
</tr>
<tr>
<td>Teacher Ed Practice</td>
<td>2.00</td>
<td>1.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>2.35</td>
<td>2.46</td>
<td>3.86</td>
<td>3.85</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>1.88</td>
<td>2.01</td>
<td>3.52</td>
<td>8.60</td>
<td></td>
</tr>
<tr>
<td>Developmental Ed</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.15</td>
</tr>
</tbody>
</table>